

# Schema documentation for spase-2\_3\_1.xsd

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## Namespace: "http://www.spase-group.org/data/schema"

### Schema(s)

#### Main schema spase-2\_3\_1.xsd

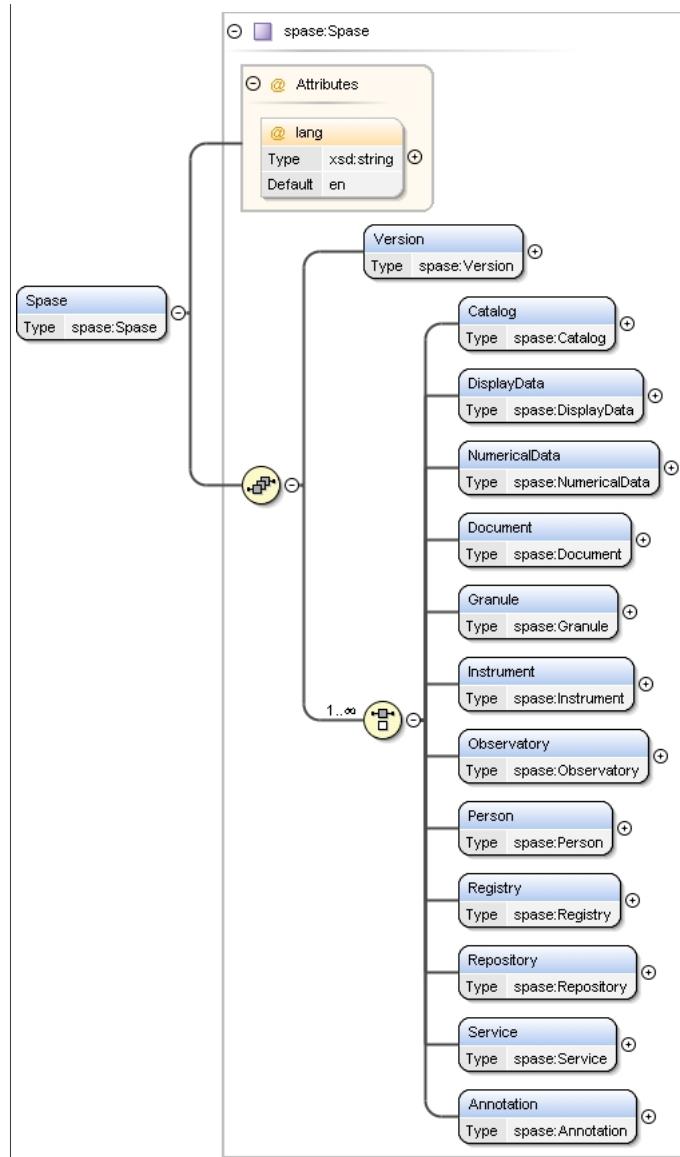
Namespace	http://www.spase-group.org/data/schema
Properties	attribute form default: unqualified
	element form default: qualified
	version: 2.3.1
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element(s)

#### Element spase:Spase

Namespace	http://www.spase-group.org/data/schema
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## Diagram



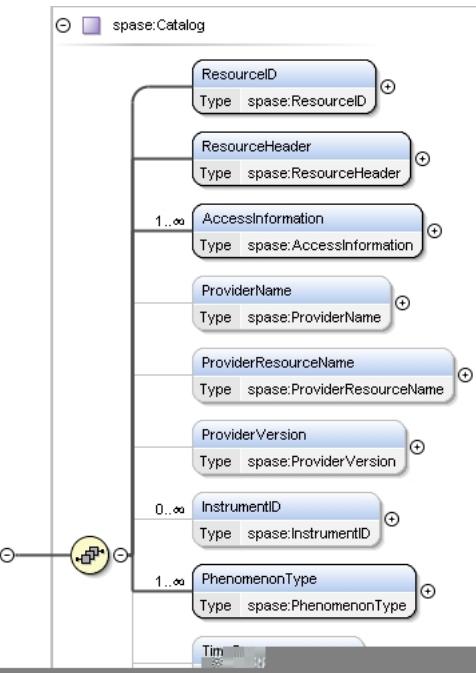
Type	spase:Spase								
Properties	content: complex								
Model	spase:Version , (spase:Catalog   spase:DisplayData   spase:NumericalData   spase:Document   spase:Granule   spase:Instrument   spase:Observatory   spase:Person   spase:Registry   spase:Repository   spase:Service   spase:Annotation)								
Children	spase:Annotation, spase:Catalog, spase:DisplayData, spase:Document, spase:Granule, spase:Instrument, spase:NumericalData, spase:Observatory, spase:Person, spase:Registry, spase:Repository, spase:Service, spase:Version								
Instance	<pre> &lt;spase:Spase lang="en" xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Version&gt;{1,1}&lt;/spase:Version&gt;   &lt;spase:Catalog&gt;{1,1}&lt;/spase:Catalog&gt;   &lt;spase:DisplayData&gt;{1,1}&lt;/spase:DisplayData&gt;   &lt;spase:NumericalData&gt;{1,1}&lt;/spase:NumericalData&gt;   &lt;spase:Document&gt;{1,1}&lt;/spase:Document&gt;   &lt;spase:Granule&gt;{1,1}&lt;/spase:Granule&gt;   &lt;spase:Instrument&gt;{1,1}&lt;/spase:Instrument&gt;   &lt;spase:Observatory&gt;{1,1}&lt;/spase:Observatory&gt;   &lt;spase:Person&gt;{1,1}&lt;/spase:Person&gt;   &lt;spase:Registry&gt;{1,1}&lt;/spase:Registry&gt;   &lt;spase:Repository&gt;{1,1}&lt;/spase:Repository&gt;   &lt;spase:Service&gt;{1,1}&lt;/spase:Service&gt;   &lt;spase:Annotation&gt;{1,1}&lt;/spase:Annotation&gt; &lt;/spase:Spase&gt;   </pre>								
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>lang</td> <td>xsd:string</td> <td>en</td> <td>optional</td> </tr> </tbody> </table>	QName	Type	Default	Use	lang	xsd:string	en	optional
QName	Type	Default	Use						
lang	xsd:string	en	optional						
Source	<xsd:element name="Spase" type="spase:Spase" />								

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:Spase / spase:Version

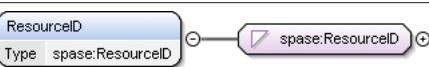
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Version						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Facets	enumeration 2 . 3 . 1						
Source	<xsd:element name="Version" type="spase:Version" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Spase / spase:Catalog

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Catalog
Properties	content: complex

Model	spase:ResourceID , spase:ResourceHeader , spase:AccessInformation+ , spase:ProviderName{0,1} , spase:ProviderResourceName{0,1} , spase:ProviderVersion{0,1} , spase:InstrumentID* , spase:PhenomenonType+ , spase:TimeSpan{0,1} , spase:Caveats{0,1} , spase:Keyword* , spase:InputResourceID* , spase:Parameter* , spase:Extension*
Children	spase:AccessInformation, spase:Caveats, spase:Extension, spase:InputResourceID, spase:InstrumentID, spase:Keyword, spase:Parameter, spase:PhenomenonType, spase:ProviderName, spase:ProviderResourceName, spase:ProviderVersion, spase:ResourceHeader, spase:ResourceID, spase:TimeSpan
Instance	<pre>&lt;spase:Catalog xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;   &lt;spase:AccessInformation&gt;{1,unbounded}&lt;/spase:AccessInformation&gt;   &lt;spase:ProviderName&gt;{0,1}&lt;/spase:ProviderName&gt;   &lt;spase:ProviderResourceName&gt;{0,1}&lt;/spase:ProviderResourceName&gt;   &lt;spase:ProviderVersion&gt;{0,1}&lt;/spase:ProviderVersion&gt;   &lt;spase:InstrumentID&gt;{0,unbounded}&lt;/spase:InstrumentID&gt;   &lt;spase:PhenomenonType&gt;{1,unbounded}&lt;/spase:PhenomenonType&gt;   &lt;spase:TimeSpan&gt;{0,1}&lt;/spase:TimeSpan&gt;   &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt;   &lt;spase:Keyword&gt;{0,unbounded}&lt;/spase:Keyword&gt;   &lt;spase:InputResourceID&gt;{0,unbounded}&lt;/spase:InputResourceID&gt;   &lt;spase:Parameter&gt;{0,unbounded}&lt;/spase:Parameter&gt;   &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Catalog&gt;</pre>
Source	<code>&lt;xsd:element name="Catalog" type="spase:Catalog"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

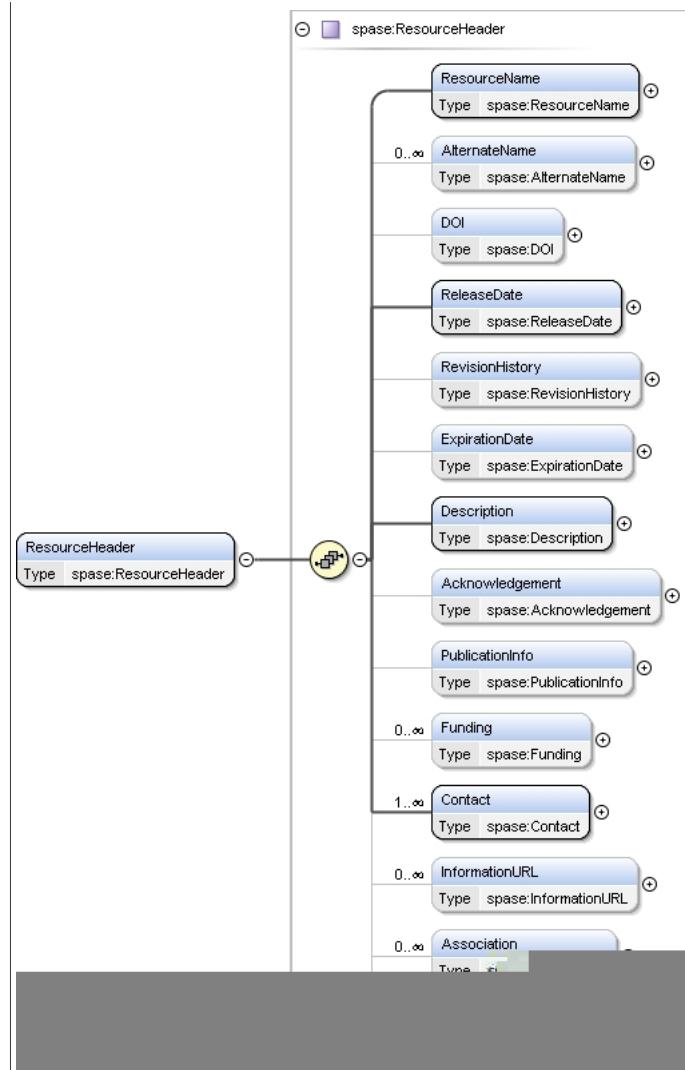
## Element spase:Catalog / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ResourceID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Catalog / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:ResourceHeader</code>						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	<code>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</code>						
Children	<code>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</code>						
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>						
Source	<code>&lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;</code>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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**Element spase:ResourceHeader / spase:ResourceName**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ResourceName
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ResourceName" type="spase:ResourceName" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:AlternateName**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:AlternateName
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="AlternateName" type="spase:AlternateName" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:DOI**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:DOI
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="DOI" type="spase:DOI" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:ReleaseDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ReleaseDate
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:RevisionHistory**

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class RevisionHistory {         &lt;&lt;spase:RevisionHistory&gt;&gt;     }     class RevisionEvent {         &lt;&lt;spase:RevisionEvent&gt;&gt;     }     RevisionHistory "1..&gt;" RevisionEvent     RevisionEvent &lt; -- PrimaryKey   </pre>
Type	spase:RevisionHistory
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Model	spase:RevisionEvent+
Children	spase:RevisionEvent
Instance	<spase:RevisionHistory xmlns:spase="http://www.spase-group.org/data/schema">   <spase:RevisionEvent>{1,unbounded}</spase:RevisionEvent> </spase:RevisionHistory>
Source	<xsd:element name="RevisionHistory" type="spase:RevisionHistory" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

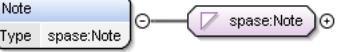
**Element spase:RevisionHistory / spase:RevisionEvent**

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class RevisionEvent {         &lt;&lt;spase:RevisionEvent&gt;&gt;     }     class ReleaseDate {         &lt;&lt;spase:ReleaseDate&gt;&gt;     }     class Note {         &lt;&lt;spase&gt;Note&gt;&gt;     }     RevisionEvent "1..&gt;" ReleaseDate     RevisionEvent "1..&gt;" Note     ReleaseDate &lt; -- PrimaryKey     Note &lt; -- PrimaryKey   </pre>
Type	spase:RevisionEvent
Properties	<p>content: complex</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>
Model	spase:ReleaseDate , spase:Note
Children	spase:Note, spase:ReleaseDate
Instance	<spase:RevisionEvent xmlns:spase="http://www.spase-group.org/data/schema">   <spase:ReleaseDate>{1,1}</spase:ReleaseDate>   <spase:Note>{1,1}</spase:Note> </spase:RevisionEvent>
Source	<xsd:element name="RevisionEvent" type="spase:RevisionEvent" minOccurs="1" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

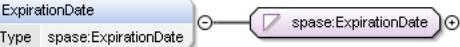
**Element spase:RevisionEvent / spase:ReleaseDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class ReleaseDate {         &lt;&lt;spase:ReleaseDate&gt;&gt;     }     ReleaseDate "1..&gt;" ReleaseDate     ReleaseDate &lt; -- PrimaryKey   </pre>
Type	spase:ReleaseDate
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

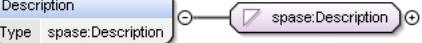
**Element spase:RevisionEvent / spase:Note**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Note
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xsd:element name="Note" type="spase:Note" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:ExpirationDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ExpirationDate
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="ExpirationDate" type="spase:ExpirationDate" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:Description**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Description
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xsd:element name="Description" type="spase:Description" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:Acknowledgement**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Acknowledgement
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="Acknowledgement" type="spase:Acknowledgement" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:ResourceHeader / spase:PublicationInfo**

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class PublicationInfo {         &lt;&lt;spase:PublicationInfo&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#PublicationInfo&gt;&gt;     }     class Authors {         &lt;&lt;spase:Authors&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#Authors&gt;&gt;     }     class PublicationDate {         &lt;&lt;spase:PublicationDate&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#PublicationDate&gt;&gt;     }     class PublishedBy {         &lt;&lt;spase:PublishedBy&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#PublishedBy&gt;&gt;     }      PublicationInfo "1..1" *-- "*" Authors     PublicationInfo "1..1" *-- "*" PublicationDate     PublicationInfo "1..1" *-- "*" PublishedBy   </pre>						
Type	spase:PublicationInfo						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:Authors , spase:PublicationDate , spase:PublishedBy						
Children	spase:Authors, spase:PublicationDate, spase:PublishedBy						
Instance	<spase:PublicationInfo xmlns:spase="http://www.spase-group.org/data/schema">   <spase:Authors>{1,1}</spase:Authors>   <spase:PublicationDate>{1,1}</spase:PublicationDate>   <spase:PublishedBy>{1,1}</spase:PublishedBy> </spase:PublicationInfo>						
Source	<xsd:element name="PublicationInfo" type="spase:PublicationInfo" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:PublicationInfo / spase:Authors**

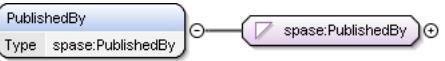
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Authors {         &lt;&lt;spase:Authors&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#Authors&gt;&gt;     }     class PublicationInfo {         &lt;&lt;spase:PublicationInfo&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#PublicationInfo&gt;&gt;     }      Authors *-- "*" PublicationInfo   </pre>						
Type	spase:Authors						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="Authors" type="spase:Authors" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:PublicationInfo / spase:PublicationDate**

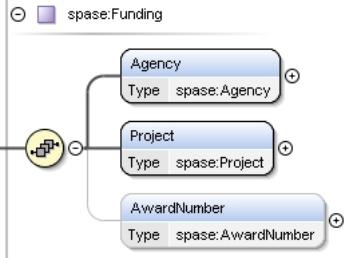
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class PublicationDate {         &lt;&lt;spase:PublicationDate&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#PublicationDate&gt;&gt;     }     class PublicationInfo {         &lt;&lt;spase:PublicationInfo&gt;&gt;         &lt;&lt;http://www.spase-group.org/data/schema#PublicationInfo&gt;&gt;     }      PublicationDate *-- "*" PublicationInfo   </pre>						
Type	spase:PublicationDate						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="PublicationDate" type="spase:PublicationDate" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:PublicationInfo / spase:PublishedBy**

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:PublishedBy
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="PublishedBy" type="spase:PublishedBy" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:ResourceHeader / spase:Funding

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Funding
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:Agency , spase:Project , spase:AwardNumber{0,1}
Children	spase:Agency, spase:AwardNumber, spase:Project
Instance	<spase:Funding xmlns:spase="http://www.spase-group.org/data/schema"> <spase:Agency>{1,1}</spase:Agency> <spase:Project>{1,1}</spase:Project> <spase:AwardNumber>{0,1}</spase:AwardNumber> </spase:Funding>
Source	<xsd:element name="Funding" type="spase:Funding" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Funding / spase:Agency

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Agency
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Agency" type="spase:Agency" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Funding / spase:Project

Namespace	http://www.spase-group.org/data/schema
Diagram	

Type	spase:Project
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Project" type="spase:Project" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Funding / spase:AwardNumber

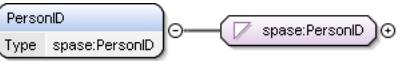
Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram fragment. On the left, there is a blue-bordered box labeled "AwardNumber" with "Type spase:AwardNumber". A line connects it to a purple-bordered box labeled "spase:AwardNumber" with a plus sign (+) at the end. There are also minus (-) and circle (⊖) symbols near the connection.
Type	spase:AwardNumber
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="AwardNumber" type="spase:AwardNumber" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:ResourceHeader / spase:Contact

Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram fragment. On the left, there is a blue-bordered box labeled "Contact" with "Type spase:Contact". A line connects it to a larger, rounded rectangle representing a complex type. Inside this rectangle, there are five components: "PersonID" (Type spase:PersonID), "Role" (Type spase:Role with multiplicity 1..∞), "StartDate" (Type spase:StartDate), "StopDate" (Type spase:StopDate), and "Note" (Type spase>Note). Lines connect "Contact" to each of these components. There are also minus (-) and circle (⊖) symbols near the connections.
Type	spase:Contact
Properties	<p>content: complex</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>
Model	spase:PersonID , spase:Role+ , spase:StartDate{0,1} , spase:StopDate{0,1} , spase:Note{0,1}
Children	spase:Note, spase:PersonID, spase:Role, spase:StartDate, spase:StopDate
Instance	<pre>&lt;spase:Contact xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:PersonID&gt;{1,1}&lt;/spase:PersonID&gt;   &lt;spase:Role&gt;{1,unbounded}&lt;/spase:Role&gt;   &lt;spase:StartDate&gt;{0,1}&lt;/spase:StartDate&gt;   &lt;spase:StopDate&gt;{0,1}&lt;/spase:StopDate&gt;   &lt;spase:Note&gt;{0,1}&lt;/spase:Note&gt; &lt;/spase:Contact&gt;</pre>
Source	<xsd:element name="Contact" type="spase:Contact" minOccurs="1" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Contact / spase:PersonID

Namespace	http://www.spase-group.org/data/schema
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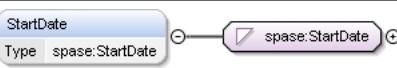
Diagram	
Type	spase:PersonID
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xsd:element name="PersonID" type="spase:PersonID" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Contact / spase:Role

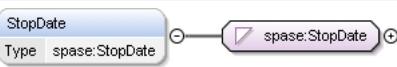
Namespace	http://www.spase-group.org/data/schema	
Diagram		
Type	spase:Role	
Properties	content: simple minOccurs: 1 maxOccurs: unbounded	
Facets	enumeration	ArchiveSpecialist An individual who is an expert on a collection of resources and may also be knowledgeable of the phenomenon and related physics represented by the resources. This includes librarians, curators, archive scientists and other experts.
	enumeration	CoInvestigator An individual who is a scientific peer and major participant in an investigation.
	enumeration	CoPI An individual who is peer of a principal investigator and is an administrative and scientific lead for an investigation.
	enumeration	Contributor An entity responsible for making contributions to the content of the resource.
	enumeration	DataProducer An individual who generated the resource and is familiar with its provenance.
	enumeration	DeputyPI An individual who is an administrative or scientific leader for an investigation operating under the supervision of a Principal Investigator.
	enumeration	Developer The developer of a system to imitate a situation or process.
	enumeration	FormerPI An individual who had served as the administrative and scientific lead for an investigation, but no longer assumes that role.
	enumeration	GeneralContact An individual who can provide information on a range of subjects or who can direct you to a domain expert.
	enumeration	HostContact An individual who can provide specific information with regard the hosting of a resource or supporting software.
	enumeration	MetadataContact An individual who can affect a change in the metadata describing a resource.
	enumeration	PrincipalInvestigator An individual who is the administrative and scientific lead for an investigation.
	enumeration	ProjectEngineer An engineer tasked with the full suite of responsibilities as a project transitions through requirements derivation and preliminary design into controlled hardware development, assembly and environmental testing. The Project Engineer manages a team while developing the cadence of hardware manufacturing and assembly until instrument deployment and through the

		end of the mission.
enumeration	ProjectManager	An individual whose major task entails direction of project team members such that the full organization achieves the objectives and goals of the mission. The Project Manager is expected to provide clear guidance and resolve conflicts and issues while maintaining focus on achieving mission success.
enumeration	ProjectScientist	An individual who is an expert in the phenomenon and related physics explored by the project. A project scientist may also have a managerial role within the project.
enumeration	Publisher	An individual, organization, institution or government department responsible for the production and dissemination of a document.
enumeration	Scientist	An individual who is an expert in the phenomenon and related physics represented by the resource.
enumeration	TeamLeader	An individual who is the designated leader of an investigation.
enumeration	TeamMember	An individual who is a major participant in an investigation.
enumeration	TechnicalContact	An individual who can provide specific information with regard to the resource or supporting software.
enumeration	User	An individual who utilizes a resource or service.
Source	<xsd:element name="Role" type="spase:Role" minOccurs="1" maxOccurs="unbounded"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Contact / spase:StartDate

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:StartDate						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="StartDate" type="spase:StartDate" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Contact / spase:StopDate

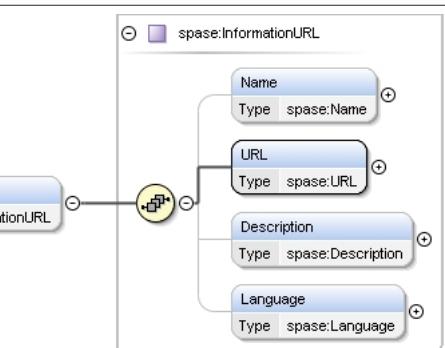
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:StopDate						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="StopDate" type="spase:StopDate" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Contact / spase:Note

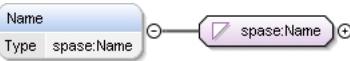
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Note
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:ResourceHeader / spase:InformationURL

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:InformationURL
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:Name{0,1} , spase:URL , spase:Description{0,1} , spase:Language{0,1}
Children	spase:Description, spase:Language, spase:Name, spase:URL
Instance	<spase:InformationURL xmlns:spase="http://www.spase-group.org/data/schema"> <spase:Name>{0,1}</spase:Name> <spase:URL>{1,1}</spase:URL> <spase:Description>{0,1}</spase:Description> <spase:Language>{0,1}</spase:Language> </spase:InformationURL>
Source	<xsd:element name="InformationURL" type="spase:InformationURL" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:InformationURL / spase:Name

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Name
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Name" type="spase:Name" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:InformationURL / spase:URL

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:URL
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="URL" type="spase:URL" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

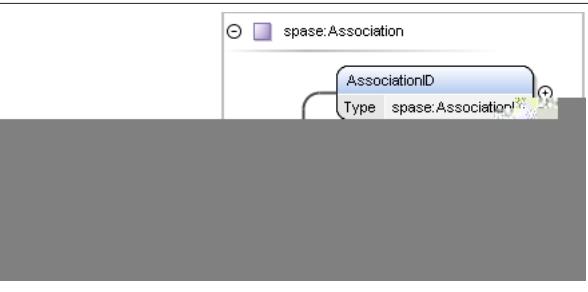
### Element spase:InformationURL / spase:Description

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Description
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:InformationURL / spase:Language

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Language
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Language" type="spase:Language" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:ResourceHeader / spase:Association

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Association
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:AssociationID , spase:AssociationType , spase>Note{0,1}

Children	spase:AssociationID, spase:AssociationType, spase:Note
Instance	<pre>&lt;spase:Association xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:AssociationID&gt;{1,1}&lt;/spase:AssociationID&gt;   &lt;spase:AssociationType&gt;{1,1}&lt;/spase:AssociationType&gt;   &lt;spase:Note&gt;{0,1}&lt;/spase:Note&gt; &lt;/spase:Association&gt;</pre>
Source	<code>&lt;xsd:element name="Association" type="spase:Association" minOccurs="0" maxOccurs="unbounded" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Association / spase:AssociationID

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class AssociationID {         &lt;&lt;AssociationID&gt;&gt;         &lt;&lt;Type&gt;&gt;     }     class spase:AssociationID {         &lt;&lt;spase:AssociationID&gt;&gt;     }     AssociationID &lt; -- spase:AssociationID   </pre>						
Type	spase:AssociationID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="AssociationID" type="spase:AssociationID" minOccurs="1" maxOccurs="1" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Association / spase:AssociationType

Namespace	http://www.spase-group.org/data/schema																		
Diagram	<pre> classDiagram     class AssociationType {         &lt;&lt;AssociationType&gt;&gt;         &lt;&lt;Type&gt;&gt;     }     class spase:AssociationType {         &lt;&lt;spase:AssociationType&gt;&gt;     }     AssociationType &lt; -- spase:AssociationType   </pre>																		
Type	spase:AssociationType																		
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1												
content:	simple																		
minOccurs:	1																		
maxOccurs:	1																		
Facets	<table border="1"> <tr> <td>enumeration</td> <td>ChildEventOf</td> <td>A descendant or caused by another resource.</td> </tr> <tr> <td>enumeration</td> <td>DerivedFrom</td> <td>A transformed or altered version of a resource instance.</td> </tr> <tr> <td>enumeration</td> <td>ObservedBy</td> <td>Detected or originating from another resource.</td> </tr> <tr> <td>enumeration</td> <td>Other</td> <td>Not classified with more specific terms. The context of its usage may be described in related text.</td> </tr> <tr> <td>enumeration</td> <td>PartOf</td> <td>A portion of a larger resource.</td> </tr> <tr> <td>enumeration</td> <td>RevisionOf</td> <td>A modified version of a resource instance.</td> </tr> </table>	enumeration	ChildEventOf	A descendant or caused by another resource.	enumeration	DerivedFrom	A transformed or altered version of a resource instance.	enumeration	ObservedBy	Detected or originating from another resource.	enumeration	Other	Not classified with more specific terms. The context of its usage may be described in related text.	enumeration	PartOf	A portion of a larger resource.	enumeration	RevisionOf	A modified version of a resource instance.
enumeration	ChildEventOf	A descendant or caused by another resource.																	
enumeration	DerivedFrom	A transformed or altered version of a resource instance.																	
enumeration	ObservedBy	Detected or originating from another resource.																	
enumeration	Other	Not classified with more specific terms. The context of its usage may be described in related text.																	
enumeration	PartOf	A portion of a larger resource.																	
enumeration	RevisionOf	A modified version of a resource instance.																	
Source	<code>&lt;xsd:element name="AssociationType" type="spase:AssociationType" minOccurs="1" maxOccurs="1" /&gt;</code>																		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd																		

### Element spase:Association / spase:Note

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Note {         &lt;&lt;Note&gt;&gt;         &lt;&lt;Type&gt;&gt;     }     class spase:Note {         &lt;&lt;spase:Note&gt;&gt;     }     Note &lt; -- spase:Note   </pre>						
Type	spase:Note						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="1" /&gt;</code>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:ResourceHeader / spase:PriorID

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ResourceHeader {         &lt;&lt;spase:ResourceHeader&gt;&gt;     }     class PriorID {         &lt;&lt;spase:PriorID&gt;&gt;     }     ResourceHeader "1" -- "0..1" PriorID : Type   </pre>						
Type	spase:PriorID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="PriorID" type="spase:PriorID" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Catalog / spase:AccessInformation

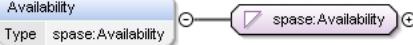
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class AccessInformation {         &lt;&lt;spase:AccessInformation&gt;&gt;     }     class RepositoryID {         &lt;&lt;spase:RepositoryID&gt;&gt;     }     class Availability {         &lt;&lt;spase:Availability&gt;&gt;     }     class AccessRights {         &lt;&lt;spase:AccessRights&gt;&gt;     }     class AccessURL {         &lt;&lt;spase:AccessURL&gt;&gt;     }     class Format {         &lt;&lt;spase:Format&gt;&gt;     }     class Encoding {         &lt;&lt;spase:Encoding&gt;&gt;     }      AccessInformation "1..&gt;" -- "1..&gt;" RepositoryID : Type     AccessInformation "1..&gt;" -- "1..&gt;" Availability : Type     AccessInformation "1..&gt;" -- "1..&gt;" AccessRights : Type     AccessInformation "1..&gt;" -- "1..&gt;" AccessURL : Type     AccessInformation "1..&gt;" -- "1..&gt;" Format : Type     AccessInformation "1..&gt;" -- "1..&gt;" Encoding : Type   </pre>						
Type	spase:AccessInformation						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	spase:RepositoryID , spase:Availability{0,1} , spase:AccessRights{0,1} , spase:AccessURL+ , spase:Format , spase:Encoding{0,1} , spase:DataExtent{0,1} , spase:Acknowledgement{0,1}						
Children	spase:AccessRights, spase:AccessURL, spase:Acknowledgement, spase:Availability, spase:DataExtent, spase:Encoding, spase:Format, spase:RepositoryID						
Instance	<pre> &lt;spase:AccessInformation xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:RepositoryID&gt;{1,1}&lt;/spase:RepositoryID&gt;   &lt;spase:Availability&gt;{0,1}&lt;/spase:Availability&gt;   &lt;spase:AccessRights&gt;{0,1}&lt;/spase:AccessRights&gt;   &lt;spase:AccessURL&gt;{1,unbounded}&lt;/spase:AccessURL&gt;   &lt;spase:Format&gt;{1,1}&lt;/spase:Format&gt;   &lt;spase:Encoding&gt;{0,1}&lt;/spase:Encoding&gt;   &lt;spase:DataExtent&gt;{0,1}&lt;/spase:DataExtent&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt; &lt;/spase:AccessInformation&gt;   </pre>						
Source	<xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1" maxOccurs="unbounded"/>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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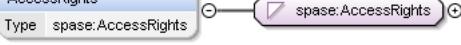
**Element spase:AccessInformation / spase:RepositoryID**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:RepositoryID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="RepositoryID" type="spase:RepositoryID" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:AccessInformation / spase:Availability**

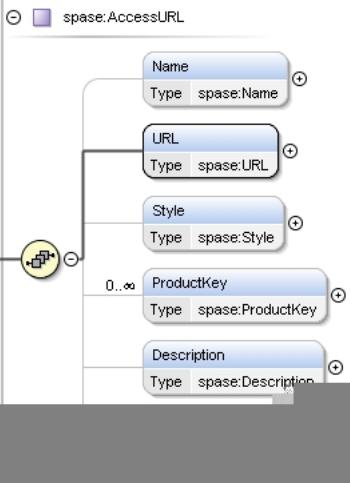
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Availability						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Facets	<table> <tr> <td>enumeration</td> <td>Offline</td> <td>Not directly accessible electronically. This includes resources which may move to an on-line status in response to a given request.</td> </tr> <tr> <td>enumeration</td> <td>Online</td> <td>Directly accessible electronically.</td> </tr> </table>	enumeration	Offline	Not directly accessible electronically. This includes resources which may move to an on-line status in response to a given request.	enumeration	Online	Directly accessible electronically.
enumeration	Offline	Not directly accessible electronically. This includes resources which may move to an on-line status in response to a given request.					
enumeration	Online	Directly accessible electronically.					
Source	<xsd:element name="Availability" type="spase:Availability" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:AccessInformation / spase:AccessRights**

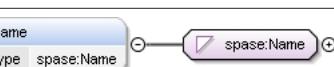
Namespace	http://www.spase-group.org/data/schema									
Diagram										
Type	spase:AccessRights									
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1			
content:	simple									
minOccurs:	0									
maxOccurs:	1									
Facets	<table> <tr> <td>enumeration</td> <td>Open</td> <td>Access is granted to everyone.</td> </tr> <tr> <td>enumeration</td> <td>PartiallyRestricted</td> <td>Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.</td> </tr> <tr> <td>enumeration</td> <td>Restricted</td> <td>Access to the product is regulated and requires some form of identification.</td> </tr> </table>	enumeration	Open	Access is granted to everyone.	enumeration	PartiallyRestricted	Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.	enumeration	Restricted	Access to the product is regulated and requires some form of identification.
enumeration	Open	Access is granted to everyone.								
enumeration	PartiallyRestricted	Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.								
enumeration	Restricted	Access to the product is regulated and requires some form of identification.								
Source	<xsd:element name="AccessRights" type="spase:AccessRights" minOccurs="0" maxOccurs="1"/>									
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd									

**Element spase:AccessInformation / spase:AccessURL**

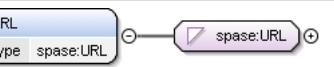
Namespace	http://www.spase-group.org/data/schema
-----------	--

Diagram							
Type	spase:AccessURL						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	spase:Name{0,1} , spase:URL , spase:Style{0,1} , spase:ProductKey* , spase:Description{0,1} , spase:Language{0,1}						
Children	spase:Description, spase:Language, spase:Name, spase:ProductKey, spase:Style, spase:URL						
Instance	<pre>&lt;spase:AccessURL xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Name&gt;{0,1}&lt;/spase:Name&gt;   &lt;spase:URL&gt;{1,1}&lt;/spase:URL&gt;   &lt;spase:Style&gt;{0,1}&lt;/spase:Style&gt;   &lt;spase:ProductKey&gt;{0,unbounded}&lt;/spase:ProductKey&gt;   &lt;spase:Description&gt;{0,1}&lt;/spase:Description&gt;   &lt;spase:Language&gt;{0,1}&lt;/spase:Language&gt; &lt;/spase:AccessURL&gt;</pre>						
Source	<code>&lt;xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="unbounded" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:AccessURL / spase:Name

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Name						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="Name" type="spase:Name" minOccurs="0" maxOccurs="1" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:AccessURL / spase:URL

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:URL						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						

Source	<code>&lt;xsd:element name="URL" type="spase:URL" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:AccessURL / spase:Style

Namespace	http://www.spase-group.org/data/schema																						
Diagram	<pre> classDiagram     class Style     class spase:Style     Style "1" -- "1" spase:Style   </pre>																						
Type	spase:Style																						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1															
content:	simple																						
minOccurs:	0																						
maxOccurs:	1																						
Facets	<table> <tr> <td>enumeration</td> <td>File</td> <td>Access to a file containing the data.</td> </tr> <tr> <td>enumeration</td> <td>HAPI</td> <td>A Heliophysics Application Programmer Interface (HAPI) specification compliant access point.</td> </tr> <tr> <td>enumeration</td> <td>Listing</td> <td>A listing of files - either through FTP or HTTP.</td> </tr> <tr> <td>enumeration</td> <td>Overview</td> <td>A web page that provides an overview of available data and links.</td> </tr> <tr> <td>enumeration</td> <td>Search</td> <td>A web search interface that requires additional input.</td> </tr> <tr> <td>enumeration</td> <td>Template</td> <td>A URI template that contains special fields as defined in URI Template specification &lt;<a href="http://tsds.org/uri_templates">http://tsds.org/uri_templates</a>&gt;.</td> </tr> <tr> <td>enumeration</td> <td>WebService</td> <td>A Web-based service that uses SOAP, WSDL or UDDI open standards.</td> </tr> </table>		enumeration	File	Access to a file containing the data.	enumeration	HAPI	A Heliophysics Application Programmer Interface (HAPI) specification compliant access point.	enumeration	Listing	A listing of files - either through FTP or HTTP.	enumeration	Overview	A web page that provides an overview of available data and links.	enumeration	Search	A web search interface that requires additional input.	enumeration	Template	A URI template that contains special fields as defined in URI Template specification < <a href="http://tsds.org/uri_templates">http://tsds.org/uri_templates</a> >.	enumeration	WebService	A Web-based service that uses SOAP, WSDL or UDDI open standards.
enumeration	File	Access to a file containing the data.																					
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enumeration	Overview	A web page that provides an overview of available data and links.																					
enumeration	Search	A web search interface that requires additional input.																					
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enumeration	WebService	A Web-based service that uses SOAP, WSDL or UDDI open standards.																					
Source	<code>&lt;xsd:element name="Style" type="spase:Style" minOccurs="0" maxOccurs="1"/&gt;</code>																						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd																						

### Element spase:AccessURL / spase:ProductKey

Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class ProductKey     class spase:ProductKey     ProductKey "1" -- "1" spase:ProductKey   </pre>							
Type	spase:ProductKey							
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple							
minOccurs:	0							
maxOccurs:	unbounded							
Source	<code>&lt;xsd:element name="ProductKey" type="spase:ProductKey" minOccurs="0" maxOccurs="unbounded"/&gt;</code>							
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd							

### Element spase:AccessURL / spase:Description

Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class Description     class spase:Description     Description "1" -- "1" spase:Description   </pre>							
Type	spase:Description							
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple							
minOccurs:	0							
maxOccurs:	1							
Source	<code>&lt;xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/&gt;</code>							

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:AccessURL / spase:Language

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Language     class spase::Language     Language &lt; -- spase::Language   </pre>						
Type	spase:Language						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="Language" type="spase:Language" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:AccessInformation / spase:Format

Namespace	http://www.spase-group.org/data/schema																														
Diagram	<pre> classDiagram     class Format     class spase::Format     Format &lt; -- spase::Format   </pre>																														
Type	spase:Format																														
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1																								
content:	simple																														
minOccurs:	1																														
maxOccurs:	1																														
Facets	<table border="1"> <tr> <td>enumeration</td> <td>AVI</td> <td>Audio Video Interleave (AVI) a digital format for movies that conforms to the Microsoft Windows Resource Interchange File Format (RIFF).</td> </tr> <tr> <td>enumeration</td> <td>Binary</td> <td>A direct representation of the bits which may be stored in memory on a computer.</td> </tr> <tr> <td>enumeration</td> <td>CDF</td> <td>Common Data Format (CDF). A binary storage format developed at Goddard Space Flight Center (GSFC).</td> </tr> <tr> <td>enumeration</td> <td>CEF</td> <td>Cluster Exchange Format (CEF) is a self-documenting ASCII format designed for the exchange of data. There are two versions of CEF which are not totally compatible.</td> </tr> <tr> <td>enumeration</td> <td>CEF1</td> <td>Cluster Exchange Format (CEF), version 1, is a self-documenting ASCII format designed for the exchange of data. The metadata contains information compatible with the ISTP recommendations for CDF.</td> </tr> <tr> <td>enumeration</td> <td>CEF2</td> <td>Cluster Exchange Format (CEF), version 2, is a self-documenting ASCII format designed for the exchange of data and introduced for Cluster Active Archive. Compared to version 1, the metadata description of vectors and tensors is different.</td> </tr> <tr> <td>enumeration</td> <td>CSV</td> <td>Comma Separated Value - A data exchange format defined by RFC 4180.</td> </tr> <tr> <td>enumeration</td> <td>Excel</td> <td>A Microsoft spreadsheet format used to hold a variety of data in tables which can include calculations.</td> </tr> <tr> <td>enumeration</td> <td>FITS</td> <td>Flexible Image Transport System (FITS) is a digital format primarily designed to store scientific data sets consisting of multi-dimensional arrays (1-D spectra, 2-D images or 3-D data cubes) and 2-dimensional tables containing rows and columns of data.</td> </tr> <tr> <td>enumeration</td> <td>GIF</td> <td>Graphic Interchange Format (GIF) first introduced</td> </tr> </table>	enumeration	AVI	Audio Video Interleave (AVI) a digital format for movies that conforms to the Microsoft Windows Resource Interchange File Format (RIFF).	enumeration	Binary	A direct representation of the bits which may be stored in memory on a computer.	enumeration	CDF	Common Data Format (CDF). A binary storage format developed at Goddard Space Flight Center (GSFC).	enumeration	CEF	Cluster Exchange Format (CEF) is a self-documenting ASCII format designed for the exchange of data. There are two versions of CEF which are not totally compatible.	enumeration	CEF1	Cluster Exchange Format (CEF), version 1, is a self-documenting ASCII format designed for the exchange of data. The metadata contains information compatible with the ISTP recommendations for CDF.	enumeration	CEF2	Cluster Exchange Format (CEF), version 2, is a self-documenting ASCII format designed for the exchange of data and introduced for Cluster Active Archive. Compared to version 1, the metadata description of vectors and tensors is different.	enumeration	CSV	Comma Separated Value - A data exchange format defined by RFC 4180.	enumeration	Excel	A Microsoft spreadsheet format used to hold a variety of data in tables which can include calculations.	enumeration	FITS	Flexible Image Transport System (FITS) is a digital format primarily designed to store scientific data sets consisting of multi-dimensional arrays (1-D spectra, 2-D images or 3-D data cubes) and 2-dimensional tables containing rows and columns of data.	enumeration	GIF	Graphic Interchange Format (GIF) first introduced
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enumeration	GIF	Graphic Interchange Format (GIF) first introduced																													

		and images are limited to 256 colours.
enumeration	HDF	Hierarchical Data Format
enumeration	HDF4	Hierarchical Data Format, Version 4
enumeration	HDF5	Hierarchical Data Format, Version 5
enumeration	HTML	A text file containing structured information represented in the HyperText Mark-up Language (HTML). See < <a href="http://www.w3.org/MarkUp/">http://www.w3.org/MarkUp/</a> >
enumeration	Hardcopy	A permanent reproduction, or copy in the form of a physical object, of any media suitable for direct use by a person.
enumeration	Hardcopy.Film	An image recording medium on which usually a "negative" analog image is registered. A "positive" image can be recovered or reproduced from film, which is usually made of flexible materials for ease of storage and transportation.
enumeration	Hardcopy.Microfiche	A sheet of microfilm on which many pages of material have been photographed; a magnification system is used to read the material.
enumeration	Hardcopy.Microfilm	Film rolls on which materials are photographed at greatly reduced size; a magnification system is used to read the material.
enumeration	Hardcopy.Photograph	An image (positive or negative) registered on a piece of photo-sensitive paper
enumeration	Hardcopy.PhotographicPlate	A rigid (typically glass) medium that functions like film. Its rigidity is for guarding against image distortion due to medium deformation (caused by heat and humidity). Photographic plates are often used for astronomical photography.
enumeration	Hardcopy.Print	A sheet of any written or printed material which may include notes or graphics. Multiple printed pages may be bound into a manuscript or book.
enumeration	IDFS	Instrument Data File Set (IDFS) is a set of files written in a prescribed format which contain data, timing data, and meta-data. IDFS was developed at Southwest Research Institute (SwRI).
enumeration	IDL	Interactive Data Language (IDL) save set. IDL is a proprietary format.
enumeration	JPEG	A binary format for still images defined by the Joint Photographic Experts Group
enumeration	JSON	Javascript Object Notation - A lightweight data-interchange format.
enumeration	MATLAB_4	MATLAB Workspace save set, version 4. MAT-files are double-precision, binary, MATLAB format files. MATLAB is a proprietary product of The MathWorks.
enumeration	MATLAB_6	MATLAB Workspace save set, version 6. MAT-files are double-precision, binary, MATLAB format files. MATLAB is a proprietary product of The MathWorks.
enumeration	MATLAB_7	MATLAB Workspace save set, version 7. MAT-files are double-precision, binary, MATLAB format files. Version 7 includes data compression and Unicode encoding. MATLAB is a proprietary product of The MathWorks.
enumeration	MPEG	A digital format for movies defined by the Motion Picture Experts Group
enumeration	NCAR	The National Center for Atmospheric Research (NCAR) format. A complete description of that standard is given in appendix C of the "Report on Establishment & Operation of the Incoherent-Scatter Data Base", dated August 23, 1984, obtainable from NCAR, P.O. Box 3000 Boulder, Colorado 80307-3000.
enumeration	NetCDF	Unidata Program Center's Network Common Data Form (NetCDF). A self-describing portable data format for array-oriented data access.

		See < <a href="http://my.unidata.ucar.edu/content/software/netcdf/">http://my.unidata.ucar.edu/content/software/netcdf/</a> >
enumeration	PDF	A document expressed in the Portable Document Format (PDF) as defined by Adobe.
enumeration	PNG	A digital format for still images. Portable Network Graphics (PNG)
enumeration	Postscript	A page description programming language created by Adobe Systems Inc. that is a device-independent industry standard for representing text and graphics.
enumeration	QuickTime	A format for digital movies, as defined by Apple Computer. See < <a href="http://developer.apple.com/quicktime/">http://developer.apple.com/quicktime/</a> >
enumeration	TIFF	A binary format for still pictures. Tagged Image Format File (TIFF). Originally developed by Aldus and now controlled by Adobe.
enumeration	Text	A sequence of characters which may have an imposed structure or organization.
enumeration	Text.ASCII	A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.
enumeration	Text.Unicode	Text in multi-byte Unicode format.
enumeration	UDF	Universal Data Format (UDF). The Optical Technology Storage Association's Universal Disk Format, based on ISO 13346. See < <a href="http://www.osta.org/specs/index.htm">http://www.osta.org/specs/index.htm</a> >
enumeration	VOTable	A proposed IVOA standard designed as a flexible storage and exchange format for tabular data.
enumeration	XML	eXtensible Mark-up Language (XML). A structured format for representing information. See < <a href="http://www.w3.org/XML/">http://www.w3.org/XML/</a> >
Source	<xsd:element name="Format" type="spase:Format" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

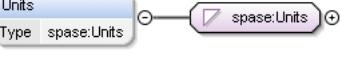
## Element spase:AccessInformation / spase:Encoding

Namespace	<a href="http://www.spase-group.org/data/schema">http://www.spase-group.org/data/schema</a>													
Diagram	<pre> classDiagram     Encoding "1" -- "0..1" spase:Encoding     Encoding &lt; -- spase:Encoding   </pre>													
Type	spase:Encoding													
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1						
content:	simple													
minOccurs:	0													
maxOccurs:	1													
Facets	<table border="1"> <tr> <td>enumeration</td> <td>ASCII</td> <td>A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.</td> </tr> <tr> <td>enumeration</td> <td>BZIP2</td> <td>An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See &lt;<a href="http://www.bzip.org/">http://www.bzip.org/</a>&gt;</td> </tr> <tr> <td>enumeration</td> <td>Base64</td> <td>A data encoding scheme whereby binary-encoded data is converted to printable ASCII characters. It is defined as a MIME content transfer encoding for use in Internet e-mail. The only characters used are the upper- and lower-case Roman alphabet characters (A-Z, a-z), the numerals (0-9), and the "+" and "/" symbols, with the "=" symbol as a special suffix (padding) code.</td> </tr> <tr> <td>enumeration</td> <td>GZIP</td> <td>An open standard algorithm distributed by GNU based on LZ77 and Huffman coding. See &lt;<a href="http://www.gnu.org/software/gzip/gzip.html">http://www.gnu.org/software/gzip/gzip.html</a>&gt; or &lt;<a href="http://www.gzip.org/">http://www.gzip.org/</a>&gt;</td> </tr> </table>		enumeration	ASCII	A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.	enumeration	BZIP2	An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See < <a href="http://www.bzip.org/">http://www.bzip.org/</a> >	enumeration	Base64	A data encoding scheme whereby binary-encoded data is converted to printable ASCII characters. It is defined as a MIME content transfer encoding for use in Internet e-mail. The only characters used are the upper- and lower-case Roman alphabet characters (A-Z, a-z), the numerals (0-9), and the "+" and "/" symbols, with the "=" symbol as a special suffix (padding) code.	enumeration	GZIP	An open standard algorithm distributed by GNU based on LZ77 and Huffman coding. See < <a href="http://www.gnu.org/software/gzip/gzip.html">http://www.gnu.org/software/gzip/gzip.html</a> > or < <a href="http://www.gzip.org/">http://www.gzip.org/</a> >
enumeration	ASCII	A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.												
enumeration	BZIP2	An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See < <a href="http://www.bzip.org/">http://www.bzip.org/</a> >												
enumeration	Base64	A data encoding scheme whereby binary-encoded data is converted to printable ASCII characters. It is defined as a MIME content transfer encoding for use in Internet e-mail. The only characters used are the upper- and lower-case Roman alphabet characters (A-Z, a-z), the numerals (0-9), and the "+" and "/" symbols, with the "=" symbol as a special suffix (padding) code.												
enumeration	GZIP	An open standard algorithm distributed by GNU based on LZ77 and Huffman coding. See < <a href="http://www.gnu.org/software/gzip/gzip.html">http://www.gnu.org/software/gzip/gzip.html</a> > or < <a href="http://www.gzip.org/">http://www.gzip.org/</a> >												

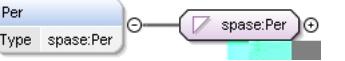
	enumeration	None	A lack or absence of anything.
	enumeration	S3_BUCKET	A container of objects that comply with the Amazon Simple Storage Service (S3) specifications. A bucket has a unique, user-assigned key (name). A bucket can contain any number of objects with an aggregate size of 5 gigabytes. A bucket may be accompanied by up to 2 kilobytes of metadata.
	enumeration	TAR	A file format used to collate collections of files into one larger file, for distribution or archiving, while preserving file system information such as user and group permissions, dates, and directory structures. The format was standardized by POSIX.1-1988 and later POSIX.1-2001.
	enumeration	Unicode	Text in multi-byte Unicode format.
	enumeration	ZIP	An open standard for compression which is a variation of the LZW method and was originally used in the PKZIP utility.
Source	<xsd:element name="Encoding" type="spase:Encoding" minOccurs="0" maxOccurs="1"/>		
Sch is	"Encoding" (EncodingType) is a complex type defined in the "spase.xsd" schema. It contains the following elements:		

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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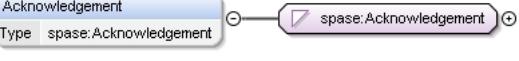
**Element spase:DataExtent / spase:Units**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

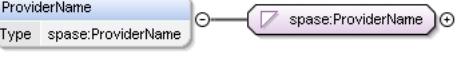
**Element spase:DataExtent / spase:Per**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Per
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Per" type="spase:Per" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

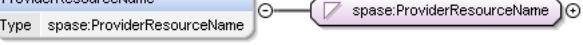
**Element spase:AccessInformation / spase:Acknowledgement**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Acknowledgement
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Acknowledgement" type="spase:Acknowledgement" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

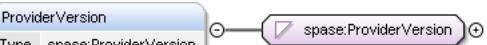
**Element spase:Catalog / spase:ProviderName**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ProviderName
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ProviderName" type="spase:ProviderName" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

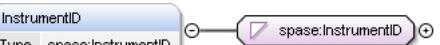
**Element spase:Catalog / spase:ProviderResourceName**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ProviderResourceName						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="ProviderResourceName" type="spase:ProviderResourceName" minOccurs="0" maxOccurs="1" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

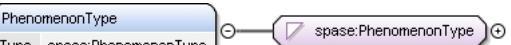
**Element spase:Catalog / spase:ProviderVersion**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ProviderVersion						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="ProviderVersion" type="spase:ProviderVersion" minOccurs="0" maxOccurs="1" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Catalog / spase:InstrumentID**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:InstrumentID						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="InstrumentID" type="spase:InstrumentID" minOccurs="0" maxOccurs="unbounded" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Catalog / spase:PhenomenonType**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:PhenomenonType						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	unbounded
content:	simple						
minOccurs:	1						
maxOccurs:	unbounded						
Facets	enumeration	ActiveRegion	A localized, transient volume of the solar atmosphere in which PLAGEs, SUNSPOTS, FACULAE, FLAREs, etc. may be observed.				
	enumeration	Aurora	An atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force.				

enumeration	BowShockCrossing	A crossing of the boundary between the undisturbed (except for foreshock effects) solar wind and the shocked, decelerated solar wind of the magnetosheath.
enumeration	CoronalHole	An extended region of the corona, exceptionally low in density and associated with unipolar photospheric regions. A coronal hole can be an "open" magnetic field in the corona and (perhaps) inner heliosphere which has a faster than average outflow (wind); A region of lower than "quiet" ion and electron density in the corona; or a region of lower peak electron temperature in the corona than in the "quiet" corona.
enumeration	CoronalMassEjection	A solar event (CME) that involves a burst of plasma ejected into the interplanetary medium. CME's may be observed remotely relatively near the sun or in situ in the interplanetary medium. The latter type of observations are often referred to as Interplanetary CME's (ICME's).
enumeration	EITWave	A wave in the corona of the Sun which produce shock waves on the Sun's chromosphere (Moreton Waves). EIT Waves are produced by large solar flare and expand outward at about 1,000 km/s. It usually appears as a slowly moving diffuse arc of brightening in H-alpha, and may travel for several hundred thousand km.
enumeration	EnergeticSolarParticleEvent	An enhancement of interplanetary fluxes of energetic ions accelerated by interplanetary shocks and/or solar flares.
enumeration	ForbushDecrease	A rapid decrease in the observed galactic cosmic ray intensity following the passage of an outwardly convecting interplanetary magnetic field disturbance, such as those associated with large CME's, that sweep some galactic cosmic rays away from Earth.
enumeration	GeomagneticStorm	A magnetospheric disturbance typically defined by variations in the horizontal component of the Earth's surface magnetic field. The variation typically starts with a field enhancement associated with a solar wind pressure pulse and continues with a field depression associated with an enhancement of the diamagnetic magnetospheric ring current.
enumeration	InterplanetaryShock	A shock propagating generally anti-sunward through the slower solar wind, often seen in front of CME-associated plasma clouds.
enumeration	MagneticCloud	A transient event observed in the solar wind characterized as a region of enhanced magnetic field strength, smooth rotation of the magnetic field vector and low proton density and temperature.
enumeration	MagnetopauseCrossing	A crossing of the interface between the shocked solar wind in the magnetosheath and the magnetic field and plasma in the magnetosphere.
enumeration	RadioBurst	Emissions of the sun in radio wavelengths from centimeters to dekameters, under both quiet and disturbed conditions. Radio Bursts can be "Type I" consisting of many short, narrow-band bursts in the metric range (300 - 50 MHz); "Type II" consisting of narrow-band emission that begins in the meter range (300 MHz) and sweeps slowly (tens of minutes) toward dekameter wavelengths (10 MHz); "Type III" consisting of narrow-band bursts that sweep rapidly (seconds) from decimeter to dekameter wavelengths (500 - 0.5 MHz); and "Type IV" consisting of a smooth continuum of broad-band bursts primarily in the meter range (300 - 30 MHz).
enumeration	SectorBoundaryCrossing	A sector boundary crossing is a transit by a spacecraft across the heliospheric current

		<p>sheet separating the dominantly outward (away-from-the-sun) interplanetary magnetic field of one hemisphere of the heliosphere from the dominantly inward (toward-the-sun) polarity of the other hemisphere.</p> <p>Such crossings have multi-day intervals of opposite IMF dominant polarities on either side.</p>
enumeration	SolarFlare	An explosive event in the Sun's atmosphere which produces electromagnetic radiation across the electromagnetic spectrum at multiple wavelengths from long-wave radio to the shortest wavelength gamma rays.
enumeration	SolarWindExtreme	Intervals of unusually large or small values of solar wind attributes such as flow speed and ion density.
enumeration	StreamInteractionRegion	The region (SIR) where two solar wind streams, typically having differing characteristics and solar sources, abut up against (and possibly partially interpenetrate) each other.
enumeration	Substorm	A process by which plasma in the magnetotail becomes energized at a fast rate.
Source		<xsd:element name="PhenomenonType" type="spase:PhenomenonType" minOccurs="1" maxOccurs="unbounded" />
Schema location		file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Catalog / spase:TimeSpan

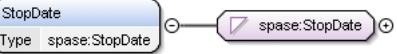
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class TimeSpan {         StartDate : spase:StartDate         StopDate : spase:StopDate         RelativeStopDate : spase:RelativeStopDate         Note : spase&gt;Note * (0..)     }     TimeSpan &lt; -- spase:TimeSpan   </pre>						
Type	spase:TimeSpan						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:StartDate , (spase:StopDate   spase:RelativeStopDate) , spase:Note*						
Children	spase:Note, spase:RelativeStopDate, spase:StartDate, spase:StopDate						
Instance	<pre> &lt;spase:TimeSpan xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:StartDate&gt;{1,1}&lt;/spase:StartDate&gt;   &lt;spase:StopDate&gt;{1,1}&lt;/spase:StopDate&gt;   &lt;spase:RelativeStopDate&gt;{1,1}&lt;/spase:RelativeStopDate&gt;   &lt;spase:Note&gt;{0,unbounded}&lt;/spase:Note&gt; &lt;/spase:TimeSpan&gt;   </pre>						
Source	<xsd:element name="TimeSpan" type="spase:TimeSpan" minOccurs="0" maxOccurs="1" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:TimeSpan / spase:StartDate

Namespace	http://www.spase-group.org/data/schema
Diagram	

Type	spase:StartDate
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="StartDate" type="spase:StartDate" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

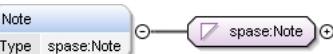
### Element spase:TimeSpan / spase:StopDate

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:StopDate
Properties	content: simple
Source	<xsd:element name="StopDate" type="spase:StopDate"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:TimeSpan / spase:RelativeStopDate

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:RelativeStopDate
Properties	content: simple
Source	<xsd:element name="RelativeStopDate" type="spase:RelativeStopDate"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:TimeSpan / spase:Note

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Note
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Catalog / spase:Caveats

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Caveats
Properties	content: simple

	minOccurs:	0
	maxOccurs:	1
Source	<xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Catalog / spase:Keyword

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Keyword						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Catalog / spase:InputResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:InputResourceID						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Catalog / spase:Parameter

Namespace	http://www.spase-group.org/data/schema
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## Diagram

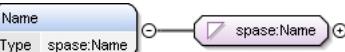


Type	<code>spase:Parameter</code>
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Properties	content: complex
	minOccurs: 0
	maxOccurs: unbounded

Model	spase:Name , spase:Set* , spase:ParameterKey{0,1} , spase:Description{0,1} , spase:UCD{0,1} , spase:Caveats{0,1} , spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Units{0,1} , spase:UnitsConversion{0,1} , spase:CoordinateSystem{0,1} , spase:RenderingHints* , spase:Structure{0,1} , spase:ValidMin{0,1} , spase:ValidMax{0,1} , spase:FillValue{0,1} , (spase:Field   spase:Particle   spase:Wave   spase:Mixed   spase:Support)
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Caveats, spase:CoordinateSystem, spase:Description, spase:Field, spase:FillValue, spase:Mixed, spase:Name, spase:ParameterKey, spase:Particle, spase:RenderingHints, spase:Set, spase:Structure, spase:Support, spase:UCD, spase:Units, spase:UnitsConversion, spase:ValidMax, spase:ValidMin, spase:Wave
Instance	<pre>&lt;spase:Parameter xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Name&gt;{1,1}&lt;/spase:Name&gt;   &lt;spase:Set&gt;{0,unbounded}&lt;/spase:Set&gt;   &lt;spase:ParameterKey&gt;{0,1}&lt;/spase:ParameterKey&gt;   &lt;spase:Description&gt;{0,1}&lt;/spase:Description&gt;   &lt;spase:UCD&gt;{0,1}&lt;/spase:UCD&gt;   &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt;   &lt;spase:Cadence&gt;{0,1}&lt;/spase:Cadence&gt;   &lt;spase:CadenceMin&gt;{0,1}&lt;/spase:CadenceMin&gt;   &lt;spase:CadenceMax&gt;{0,1}&lt;/spase:CadenceMax&gt;   &lt;spase:Units&gt;{0,1}&lt;/spase:Units&gt;   &lt;spase:UnitsConversion&gt;{0,1}&lt;/spase:UnitsConversion&gt;   &lt;spase:CoordinateSystem&gt;{0,1}&lt;/spase:CoordinateSystem&gt;   &lt;spase:RenderingHints&gt;{0,unbounded}&lt;/spase:RenderingHints&gt;   &lt;spase:Structure&gt;{0,1}&lt;/spase:Structure&gt;   &lt;spase:ValidMin&gt;{0,1}&lt;/spase:ValidMin&gt;   &lt;spase:ValidMax&gt;{0,1}&lt;/spase:ValidMax&gt;   &lt;spase:FillValue&gt;{0,1}&lt;/spase:FillValue&gt;   &lt;spase:Field&gt;{1,1}&lt;/spase:Field&gt;   &lt;spase:Particle&gt;{1,1}&lt;/spase:Particle&gt;   &lt;spase:Wave&gt;{1,1}&lt;/spase:Wave&gt;   &lt;spase:Mixed&gt;{1,1}&lt;/spase:Mixed&gt;   &lt;spase:Support&gt;{1,1}&lt;/spase:Support&gt; &lt;/spase:Parameter&gt;</pre>
Source	<code>&lt;xsd:element name="Parameter" type="spase:Parameter" minOccurs="0" maxOccurs="unbounded" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:Name

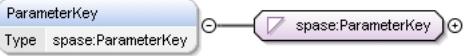
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Name						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="Name" type="spase:Name" minOccurs="1" maxOccurs="1" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Parameter / spase:Set

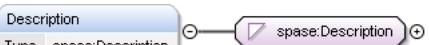
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Set						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<code>&lt;xsd:element name="Set" type="spase:Set" minOccurs="0" maxOccurs="unbounded" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Parameter / spase:ParameterKey

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:ParameterKey
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ParameterKey" type="spase:ParameterKey" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

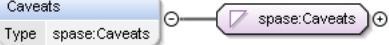
### Element spase:Parameter / spase:Description

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Description
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:UCD

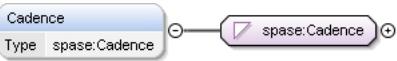
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:UCD
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="UCD" type="spase:UCD" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:Caveats

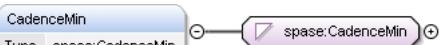
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Caveats
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:Cadence

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Cadence
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Cadence" type="spase:Cadence" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

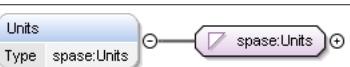
### Element spase:Parameter / spase:CadenceMin

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:CadenceMin
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="CadenceMin" type="spase:CadenceMin" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:CadenceMax

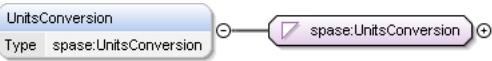
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:CadenceMax
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="CadenceMax" type="spase:CadenceMax" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:Units

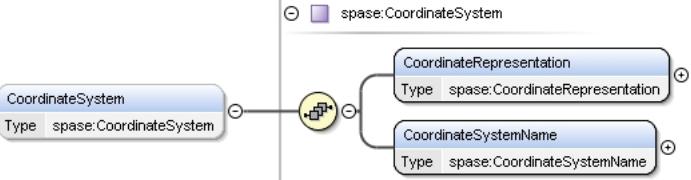
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:UnitsConversion

Namespace	http://www.spase-group.org/data/schema
-----------	--

Diagram	
Type	spase:UnitsConversion
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="UnitsConversion" type="spase:UnitsConversion" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:CoordinateSystem

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:CoordinateSystem
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Model	spase:CoordinateRepresentation , spase:CoordinateSystemName
Children	spase:CoordinateRepresentation, spase:CoordinateSystemName
Instance	<spase:CoordinateSystem xmlns:spase="http://www.spase-group.org/data/schema"><spase:CoordinateRepresentation>{1,1}</spase:CoordinateRepresentation><spase:CoordinateSystemName>{1,1}</spase:CoordinateSystemName></spase:CoordinateSystem>
Source	<xsd:element name="CoordinateSystem" type="spase:CoordinateSystem" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:CoordinateSystem / spase:CoordinateRepresentation

Namespace	http://www.spase-group.org/data/schema									
Diagram										
Type	spase:CoordinateRepresentation									
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>									
Facets	<table> <tr> <td>enumeration</td> <td>Cartesian</td> <td>A representation in which a position vector or a measured vector (e.g., field or flow) is specified by its components along the base axes of the coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Cylindrical</td> <td>A coordinate representation of a position vector or measured vector (field or flow) by its k-component, the magnitude of its projection into the i-j plane, and the azimuthal angle of the i-j plane projection.</td> </tr> <tr> <td>enumeration</td> <td>Spherical</td> <td>A coordinate representation of a position vector or of a measured vector by its magnitude and two direction angles. The angles are relative to the base axes of the coordinate system used. Typically the angles are phi [azimuth angle, =arctan (j/i)] and theta, where theta</td> </tr> </table>	enumeration	Cartesian	A representation in which a position vector or a measured vector (e.g., field or flow) is specified by its components along the base axes of the coordinate system.	enumeration	Cylindrical	A coordinate representation of a position vector or measured vector (field or flow) by its k-component, the magnitude of its projection into the i-j plane, and the azimuthal angle of the i-j plane projection.	enumeration	Spherical	A coordinate representation of a position vector or of a measured vector by its magnitude and two direction angles. The angles are relative to the base axes of the coordinate system used. Typically the angles are phi [azimuth angle, =arctan (j/i)] and theta, where theta
enumeration	Cartesian	A representation in which a position vector or a measured vector (e.g., field or flow) is specified by its components along the base axes of the coordinate system.								
enumeration	Cylindrical	A coordinate representation of a position vector or measured vector (field or flow) by its k-component, the magnitude of its projection into the i-j plane, and the azimuthal angle of the i-j plane projection.								
enumeration	Spherical	A coordinate representation of a position vector or of a measured vector by its magnitude and two direction angles. The angles are relative to the base axes of the coordinate system used. Typically the angles are phi [azimuth angle, =arctan (j/i)] and theta, where theta								

	may be a polar angle, $\arctan \{[\text{SQRT}(i^2+j^2)]/k\}$ , or an elevation angle, $\arctan [k/\text{SQRT } (i^2+j^2)]$ .
Source	<code>&lt;xsd:element name="CoordinateRepresentation" type="spase:CoordinateRepresentation" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:CoordinateSystem / spase:CoordinateSystemName

Namespace	http://www.spase-group.org/data/schema	
Diagram		
Type	spase:CoordinateSystemName	
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>	
Facets	enumeration	CGM  Corrected Geomagnetic - A coordinate system from a spatial point with GEO radial distance and geomagnetic latitude and longitude, follow the epoch-appropriate IGRF/DGRF model field vector through to the point where the field line crosses the geomagnetic dipole equatorial plane. Then trace the dipole magnetic field vector Earthward from that point on the equatorial plane, in the same hemisphere as the original point, until the initial radial distance is reached. Designate the dipole latitude and longitude at that point as the CGM latitude and longitude of the original point. See < <a href="http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html">http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html</a> >
	enumeration	CSO  Corrected Solar Orbital - A coordinate system related to Earth where X is anti-sunward, Y along the orbital velocity direction.
	enumeration	Carrington  A coordinate system which is centered at the Sun and is "fixed" with respect to the synodic rotation rate; the mean synodic value is about 27.2753 days. The Astronomical Almanac gives a value for Carrington longitude of 349.03 degrees at 0000 UT on 1 January 1995.
	enumeration	DM  Dipole Meridian - A coordinate system centered at the observation point. Z axis is parallel to the Earth's dipole axis, positive northward. X is in the plane defined by Z and the line linking the observation point with the Earth's center. Y is positive eastward. See < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
	enumeration	ECD  Eccentric Dipole (ECD) coordinate system that aligns with a dipole whose origin and orientation may be different from the physical center and spin axis of the containing body. The IGRF-12 coefficients for 2015 are used to determine the origin for the earth. The 2015 positions are North dip pole: latitude: 86.29, longitude -160.06. South dip pole latitude: -64.28, longitude: 136.59, North geometric pole latitude: 80.37, longitude: -72.63, South geomagnetic pole latitude: -80.37, longitude: 107.37 ECD is defined in doi:10.1186/s40623-015-0228-9.
	enumeration	ECEF  The Earth-Centered, Earth-Fixed (ECEF) coordinate system has point (0,0,0) defined as the center of mass of the Earth. Its axes are aligned with the International Reference Pole (IRP) and International Reference Meridian (IRM). The x-axis intersects the sphere of the Earth at 0 degree latitude (Equator) and 0 degree longitude (Greenwich). The z-axis points north. The y-axis completes the right handed coordinate system.
	enumeration	ENP  ENP (also called PEN) - The P vector component points northward, perpendicular to orbit plane

		which for a zero degree inclination orbit is parallel to Earth's spin axis. The E vector component is perpendicular to P and N and points earthward. The N component is perpendicular to P and E and is positive eastward.
enumeration	GEI	GEI Geocentric Equatorial Inertial - A coordinate system where the Z axis is along Earth's spin vector, positive northward. X axis points towards the first point of Aries (from the Earth towards the Sun at the vernal equinox). See Russell, 1971. When the X axis is the direction of the mean vernal equinox of J2000, the coordinate system is also called GCI. Then the Z axis is also defined as being normal to the mean Earth equator of J2000.
enumeration	GEO	Geographic - geocentric corotating - A coordinate system where the Z axis is along Earth's spin vector, positive northward. X axis lies in Greenwich meridian, positive towards Greenwich. See Russell, 1971.
enumeration	GPHIO	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	GSE	Geocentric Solar Ecliptic - A coordinate system where the X axis is from Earth to Sun. Z axis is normal to the ecliptic, positive northward. See Russell, 1971.
enumeration	GSEQ	Geocentric Solar Equatorial - A coordinate system where the X axis is from Earth to Sun. Y axis is parallel to solar equatorial plane. Z axis is positive northward. See Russell, 1971
enumeration	GSM	Geocentric Solar Magnetospheric - A coordinate system where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the geomagnetic dipole axis. See Russell, 1971
enumeration	HAE	Heliocentric Aries Ecliptic - A coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as SE below. See Hapgood, 1992.
enumeration	HCC	Heliocentric Cartesian - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's x and y values, expressed either as physical distances or as fractions of the solar disk radius.
enumeration	HCI	Heliographic Carrington Inertial.
enumeration	HCR	Heliocentric Radial - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's distance rho from the Z axis [Rho = SQRT(x**2 + y**2)] and its phase angle psi measured counterclockwise from the +Y axis [psi = arctan (-y/x)]
enumeration	HEE	Heliocentric Earth Ecliptic - A coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis points from Sun to Earth. See Hapgood, 1992
enumeration	HEEQ	Heliocentric Earth Equatorial - A coordinate

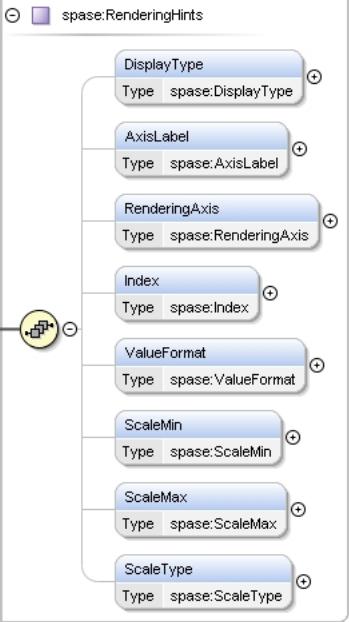
		system where the Z axis is normal to the solar equatorial plane, positive northward. X axis is generally Earthward in the plane defined by the Z axis and the Sun-Earth direction. See Hapgood, 1992.
enumeration	HERTN	Helio-Ecliptic Radial Tangential Normal coordinate system. Typically centered at a spacecraft. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the ecliptic rotational axis which is perpendicular to the primary axis. The Y axis (Normal) is defined as Z cross X.
enumeration	HG	Heliographic - A heliocentric rotating coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X, Y axes rotate with a 25.38 day period. The zero longitude (X axis) is defined as the longitude that passed through the ascending node of the solar equator on the ecliptic plane on 1 January, 1854 at 12 UT. See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	HGI	Heliographic Inertial - A heliocentric coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X axis is along the intersection line between solar equatorial and ecliptic planes. The X axis was positive at SE longitude of 74.367 deg on Jan 1, 1900. (See SE below.) See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	HGRTN	Heliocentric Radial Tangential Normal coordinate system (aka RTN). Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.
enumeration	HPC	Helio-projective Cartesian = A 3-D orthonormal (left-handed) coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the observer and the center of the solar disk, the standard representation of an (x,y) point on the solar disk is via the point's longitude angle [ $\arctan(x/d)$ ] and latitude angle [ $\arctan(y/d)$ ].
enumeration	HPR	Helio-projective Radial - A 3-D orthonormal (left-handed) coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the observer and the center of the solar disk, the standard representation for this system of an (x,y) point on the solar disk is via the point's latitude angle theta [= $\arctan(\sqrt{x^2 + y^2}/d)$ ] or equivalent declination parameter delta (= theta - 90 deg), and its phase angle psi as measured counter-clockwise from the +Y axis [psi = $\arctan(-y/x)$ ].
enumeration	HSM	Heliospheric Solar Magnetospheric - A coordinate system where the X axis is from Earth to Sun, Z axis is northward in a plane containing

		the X axis and the geomagnetic dipole axis.
enumeration	J2000	An astronomical coordinate system which uses the mean equator and equinox of Julian date 2451545.0 TT (Terrestrial Time), or January 1, 2000, noon TT. (aka J2000) to define a celestial reference frame.
enumeration	JSM	Jovian Solar Magnetospheric - A coordinate system related to Jupiter where the X axis is from Jupiter to Sun, Z axis is northward in a plane containing the X axis and the Jovian dipole axis.
enumeration	JSO	Jovian Solar Orbital - A coordinate system related to Jupiter where X anti-sunward, Y along the orbital velocity direction.
enumeration	KSM	Kronian Solar Magnetospheric - A coordinate system related to Saturn where the X axis is anti-sunward, Z axis is northward in a plane containing the X axis and the Kronian dipole axis.
enumeration	KSO	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	LGM	Local Geomagnetic - A coordinate system used mainly for Earth surface or near Earth surface magnetic field data. X axis northward from observation point in a geographic meridian. Z axis downward towards Earth's center. In this system, H (total horizontal component) = $\sqrt{B_x^2 + B_y^2}$ and D (declination angle) = $\arctan(B_y/B_x)$
enumeration	MAG	Geomagnetic - geocentric. Z axis is parallel to the geomagnetic dipole axis, positive north. X is in the plane defined by the Z axis and the Earth's rotation axis. If N is a unit vector from the Earth's center to the north geographic pole, the signs of the X and Y axes are given by Y = N x Z, X = Y x Z.. See Russell, 1971, and < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
enumeration	MFA	Magnetic Field Aligned - A coordinate system spacecraft-centered system with Z in the direction of the ambient magnetic field vector. X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
enumeration	MSO	Mars/Mercury Solar Orbital A coordinate system related to Mars or Mercury. A coordinate system where, depending on the body (Mars or Mercury), X is anti-sunward, Y along the orbital velocity direction.
enumeration	RTN	Radial Tangential Normal. Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.
enumeration	SC	Spacecraft - A coordinate system defined by the spacecraft geometry and/or spin. Often has Z axis parallel to spacecraft spin vector. X and Y axes may or may not corotate with the spacecraft. See SR and SR2 below.
enumeration	SE	Solar Ecliptic - A heliocentric coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as HAE above. See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	SM	Solar Magnetic - A geocentric coordinate system where the Z axis is northward along Earth's dipole axis, X axis is in plane of z axis

		and Earth-Sun line, positive sunward. See Russell, 1971.
enumeration	SR	Spin Reference - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X and Y rotate with the spacecraft. See < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
enumeration	SR2	Spin Reference 2 - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
enumeration	SSE	Spacecraft Solar Ecliptic - A coordinate system used for deep space spacecraft, for example Helios. - X axis from spacecraft to Sun. Z axis normal to ecliptic plane, positive northward. Note: Angle between normals to ecliptic and to Helios orbit plane ~ 0.25 deg.
enumeration	SSE_L	Selenocentric Solar Ecliptic. The X axis points from the center of the Earth's moon to the sun, the Z axis is normal to the ecliptic plane, positive northward. And the Y axis completes the right-handed set of axes.
enumeration	SpacecraftOrbitPlane	A coordinate system where X lies in the plane normal to and in the direction of motion of the spacecraft, Z is normal to this plane and Y completes the triad in a right-handed coordinate system.
enumeration	TIIS	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	VSO	Venus Solar Orbital - A coordinate system related to Venus where X is anti-sunward, Y along the orbital velocity direction.
enumeration	WGS84	The World Geodetic System (WGS) defines a reference frame for the earth, for use in geodesy and navigation. The WGS84 uses the zero meridian as defined by the Bureau International de l'Heure.
Source	<xsd:element name="CoordinateSystemName" type="spase:CoordinateSystemName" minOccurs="1" maxOccurs="1" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Parameter / spase:RenderingHints

Namespace	<a href="http://www.spase-group.org/data/schema">http://www.spase-group.org/data/schema</a>
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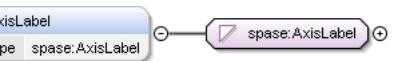
Diagram	
Type	spase:RenderingHints
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:DisplayType{0,1} , spase:AxisLabel{0,1} , spase:RenderingAxis{0,1} , spase:Index{0,1} , spase:ValueFormat{0,1} , spase:ScaleMin{0,1} , spase:ScaleMax{0,1} , spase:ScaleType{0,1}
Children	spase:AxisLabel, spase:DisplayType, spase:Index, spase:RenderingAxis, spase:ScaleMax, spase:ScaleMin, spase:ScaleType, spase:ValueFormat
Instance	<pre>&lt;spase:RenderingHints xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:DisplayType&gt;{0,1}&lt;/spase:DisplayType&gt;   &lt;spase:AxisLabel&gt;{0,1}&lt;/spase:AxisLabel&gt;   &lt;spase:RenderingAxis&gt;{0,1}&lt;/spase:RenderingAxis&gt;   &lt;spase:Index&gt;{0,1}&lt;/spase:Index&gt;   &lt;spase:ValueFormat&gt;{0,1}&lt;/spase:ValueFormat&gt;   &lt;spase:ScaleMin&gt;{0,1}&lt;/spase:ScaleMin&gt;   &lt;spase:ScaleMax&gt;{0,1}&lt;/spase:ScaleMax&gt;   &lt;spase:ScaleType&gt;{0,1}&lt;/spase:ScaleType&gt; &lt;/spase:RenderingHints&gt;</pre>
Source	<code>&lt;xsd:element name="RenderingHints" type="spase:RenderingHints" minOccurs="0" maxOccurs="unbounded" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:RenderingHints / spase:DisplayType

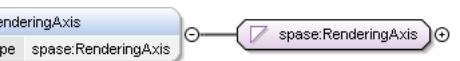
Namespace	http://www.spase-group.org/data/schema		
Diagram			
Type	spase:DisplayType		
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>		
Facets	enumeration	Image	A two-dimensional representation of data with values at each element of the array related to an intensity or a color.
	enumeration	Plasmagram	The characterization of signal strengths in active sounding measurements as a function of virtual range or signal delay time and sounding frequency. A Plasmagram is also referred to as an Ionogram.
	enumeration	Spectrogram	The characterization of signal strengths as

		a function of frequency (or energy) and time.
	enumeration StackPlot	A representation of data showing multiple sets of observations on a single plot, possibly offsetting each plot by some uniform amount.
	enumeration TimeSeries	A representation of data showing a set of observations taken at different points in time and charted as a time series.
	enumeration WaveForm	Spatial or temporal variations of wave amplitude over wave-period timescales.
Source	<code>&lt;xsd:element name="DisplayType" type="spase:DisplayType" minOccurs="0" maxOccurs="1"/&gt;</code>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

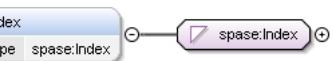
### Element spase:RenderingHints / spase:AxisLabel

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:AxisLabel						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="AxisLabel" type="spase:AxisLabel" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:RenderingHints / spase:RenderingAxis

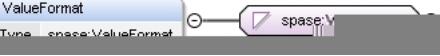
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:RenderingAxis						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Facets	<table> <tr> <td>enumeration ColorBar</td> <td>A spectrum or set of colors used to represent data values.</td> </tr> <tr> <td>enumeration Horizontal</td> <td>Parallel to or in the plane of the horizon or a base line.</td> </tr> <tr> <td>enumeration Vertical</td> <td>Perpendicular to the plane of the horizon or a base line.</td> </tr> </table>	enumeration ColorBar	A spectrum or set of colors used to represent data values.	enumeration Horizontal	Parallel to or in the plane of the horizon or a base line.	enumeration Vertical	Perpendicular to the plane of the horizon or a base line.
enumeration ColorBar	A spectrum or set of colors used to represent data values.						
enumeration Horizontal	Parallel to or in the plane of the horizon or a base line.						
enumeration Vertical	Perpendicular to the plane of the horizon or a base line.						
Source	<code>&lt;xsd:element name="RenderingAxis" type="spase:RenderingAxis" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:RenderingHints / spase:Index

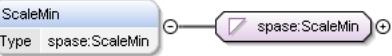
Namespace	http://www.spase-group.org/data/schema				
Diagram					
Type	spase:Index				
Type hierarchy	<ul style="list-style-type: none"> <li>xsd:integer</li> <li>spase:typeSequence</li> <li>spase:Index</li> </ul>				
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> </table>	content:	simple	minOccurs:	0
content:	simple				
minOccurs:	0				

	maxOccurs:	1
Source	<xsd:element name="Index" type="spase:Index" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

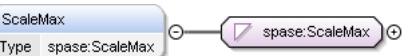
**Element spase:RenderingHints / spase:ValueFormat**

Namespace	http://www.spase-group.org/data/schema	
Diagram		
Type	spase:ValueFormat	
Properties	content: simple minOccurs: 0 maxOccurs: 1	
Source	<xsd:element name="ValueFormat" type="spase:ValueFormat" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

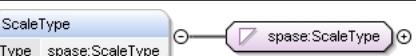
**Element spase:RenderingHints / spase:ScaleMin**

Namespace	http://www.spase-group.org/data/schema	
Diagram		
Type	spase:ScaleMin	
Properties	content: simple minOccurs: 0 maxOccurs: 1	
Source	<xsd:element name="ScaleMin" type="spase:ScaleMin" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

**Element spase:RenderingHints / spase:ScaleMax**

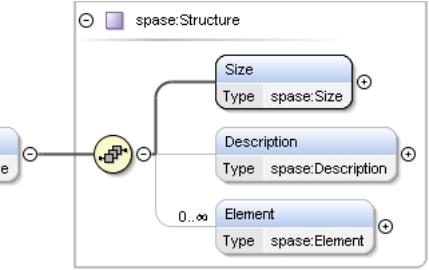
Namespace	http://www.spase-group.org/data/schema	
Diagram		
Type	spase:ScaleMax	
Properties	content: simple minOccurs: 0 maxOccurs: 1	
Source	<xsd:element name="ScaleMax" type="spase:ScaleMax" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

**Element spase:RenderingHints / spase:ScaleType**

Namespace	http://www.spase-group.org/data/schema	
Diagram		
Type	spase:ScaleType	
Properties	content: simple minOccurs: 0 maxOccurs: 1	

Facets	enumeration enumeration	LinearScale LogScale	Intervals which are equally spaced. Intervals which are spaced proportionally to the logarithms of the values being represented.
Source	<xsd:element name="ScaleType" type="spase:ScaleType" minOccurs="0" maxOccurs="1"/>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

**Element spase:Parameter / spase:Structure**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Structure
Properties	content: complex minOccurs: 0 maxOccurs: 1
Model	spase:Size , spase:Description{0,1} , spase:Element*
Children	spase:Description, spase:Element, spase:Size
Instance	<spase:Structure xmlns:spase="http://www.spase-group.org/data/schema"> <spase:Size>{1,1}</spase:Size> <spase:Description>{0,1}</spase:Description> <spase:Element>{0,unbounded}</spase:Element> </spase:Structure>
Source	<xsd:element name="Structure" type="spase:Structure" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Structure / spase:Size**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Size
Type hierarchy	• xsd:integer • spase:typeSequence • spase:Size
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xsd:element name="Size" type="spase:Size" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Structure / spase:Description**

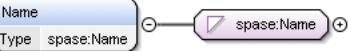
Namespace	http://www.spase-group.org/data/schema
Diagram	

Type	spase:Description
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

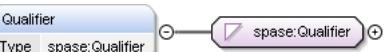
## Element spase:Structure / spase:Element

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class spase:Element {         Name         Qualifier *          Index         ParameterKey         Units         UnitsConversion         ValidMin         ValidMax         FillValue         RenderingHints     }     spase:Element --&gt; spase:Element   </pre>
Type	spase:Element
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:Name , spase:Qualifier* , spase:Index , spase:ParameterKey{0,1} , spase:Units{0,1} , spase:UnitsConversion{0,1} , spase:ValidMin{0,1} , spase:ValidMax{0,1} , spase:FillValue{0,1} , spase:RenderingHints{0,1}
Children	spase:FillValue, spase:Index, spase:Name, spase:ParameterKey, spase:Qualifier, spase:RenderingHints, spase:Units, spase:UnitsConversion, spase:ValidMax, spase:ValidMin
Instance	<spase:Element xmlns:spase="http://www.spase-group.org/data/schema">   <spase:Name>{1,1}</spase:Name>   <spase:Qualifier>{0,unbounded}</spase:Qualifier>   <spase:Index>{1,1}</spase:Index>   <spase:ParameterKey>{0,1}</spase:ParameterKey>   <spase:Units>{0,1}</spase:Units>   <spase:UnitsConversion>{0,1}</spase:UnitsConversion>   <spase:ValidMin>{0,1}</spase:ValidMin>   <spase:ValidMax>{0,1}</spase:ValidMax>   <spase:FillValue>{0,1}</spase:FillValue>   <spase:RenderingHints>{0,1}</spase:RenderingHints> </spase:Element>
Source	<xsd:element name="Element" type="spase:Element" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Element / spase:Name**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Name						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="Name" type="spase:Name" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Element / spase:Qualifier**

Namespace	http://www.spase-group.org/data/schema																														
Diagram																															
Type	spase:Qualifier																														
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded																								
content:	simple																														
minOccurs:	0																														
maxOccurs:	unbounded																														
Facets	<table> <tr> <td>enumeration</td> <td>Anisotropy</td> <td>Direction-dependent property.</td> </tr> <tr> <td>enumeration</td> <td>Array</td> <td>A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.</td> </tr> <tr> <td>enumeration</td> <td>Average</td> <td>The statistical mean; the sum of a set of values divided by the number of values in the set.</td> </tr> <tr> <td>enumeration</td> <td>Characteristic</td> <td>A quantity which can be easily identified and measured in a given environment.</td> </tr> <tr> <td>enumeration</td> <td>Circular</td> <td>Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Column</td> <td>A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.</td> </tr> <tr> <td>enumeration</td> <td>Component</td> <td>Projection of a vector along one of the base axes of a coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.I</td> <td>Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.J</td> <td>Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.K</td> <td>Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</td> </tr> </table>	enumeration	Anisotropy	Direction-dependent property.	enumeration	Array	A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.	enumeration	Characteristic	A quantity which can be easily identified and measured in a given environment.	enumeration	Circular	Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.	enumeration	Column	A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.	enumeration	Component	Projection of a vector along one of the base axes of a coordinate system.	enumeration	Component.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.	enumeration	Component.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.	enumeration	Component.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
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enumeration	Component.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.																													

enumeration	Confidence	An expression of how certain that a quantity is valid or accurate.
enumeration	Core	The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
enumeration	Differential	A measurement within a narrow range of energy and/or solid angle.
enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( By /Bz)$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan(\sqrt{i^2+j^2}/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(Bx/Bt)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.

enumeration	<b>Integral</b>	A flux measurement in a broad range of energy and solid angle.
enumeration	<b>Integral.Area</b>	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	<b>Integral.Bandwidth</b>	Integration over the width a frequency band.
enumeration	<b>Integral.SolidAngle</b>	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	<b>LineOfSight</b>	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.
enumeration	<b>Linear</b>	Polarization where the E-field vector is confined to a given plane
enumeration	<b>Magnitude</b>	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	<b>Maximum</b>	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	<b>Median</b>	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	<b>Minimum</b>	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	<b>Moment</b>	Parameters determined by integration over a distribution function convolved with a power of velocity.
enumeration	<b>Parallel</b>	Having the same direction as a given direction
enumeration	<b>Peak</b>	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	<b>Perpendicular</b>	At right angles to a given direction.
enumeration	<b>Perturbation</b>	Variations in the state of a system.
enumeration	<b>Phase</b>	A point or portion in a recurring series of changes.
enumeration	<b>PhaseAngle</b>	Phase difference between two or more waves, normally expressed in degrees.
enumeration	<b>Projection</b>	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	<b>Projection.IJ</b>	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	<b>Projection.IK</b>	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	<b>Projection.JK</b>	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	<b>Pseudo</b>	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.
enumeration	<b>Ratio</b>	The relative magnitudes of two quantities.
enumeration	<b>Scalar</b>	A quantity that is completely specified by its magnitude and has no direction.
enumeration	<b>Spectral</b>	Characterized as a range or continuum of frequencies.
enumeration	<b>StandardDeviation</b>	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
enumeration	<b>StokesParameters</b>	

	enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.
	enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
	enumeration	Symmetric	Equal distribution about one or more axes.
	enumeration	Tensor	A generalized linear "quantity" or "geometrical entity" that can be expressed as a multi-dimensional array relative to a choice of basis of the particular space on which it is defined.
	enumeration	Total	The summation of quantities over all possible species.
	enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
	enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
	enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
	enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several altitudes, or at a given latitude and longitude;).
Source	<xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded" />		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Element spase:Element / spase:Index

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class Index {         &lt;&lt;Type spase:Index&gt;&gt;     }     class spase:Index     Index &lt; -- spase:Index   </pre>
Type	spase:Index
Type hierarchy	<ul style="list-style-type: none"> <li>xsd:integer</li> <li>spase:typeSequence</li> <li>spase:Index</li> </ul>
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Index" type="spase:Index" minOccurs="1" maxOccurs="1" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Element / spase:ParameterKey

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class ParameterKey {         &lt;&lt;Type spase:ParameterKey&gt;&gt;     }     class spase:ParameterKey     ParameterKey &lt; -- spase:ParameterKey   </pre>
Type	spase:ParameterKey
Properties	content: simple

	minOccurs:	0
	maxOccurs:	1
Source	<xsd:element name="ParameterKey" type="spase:ParameterKey" minOccurs="0" maxOccurs="1" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

**Element spase:Element / spase:Units**

Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class Units     class spase:Units &lt; -- Units     </pre>							
Type	spase:Units							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple							
minOccurs:	0							
maxOccurs:	1							
Source	<xsd:element name="Units" type="spase:Units" minOccurs="0" maxOccurs="1" />							
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd							

**Element spase:Element / spase:UnitsConversion**

Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class UnitsConversion     class spase:UnitsConversion &lt; -- UnitsConversion     </pre>							
Type	spase:UnitsConversion							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple							
minOccurs:	0							
maxOccurs:	1							
Source	<xsd:element name="UnitsConversion" type="spase:UnitsConversion" minOccurs="0" maxOccurs="1" />							
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd							

**Element spase:Element / spase:ValidMin**

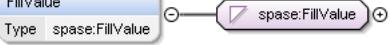
Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class ValidMin     class spase:ValidMin &lt; -- ValidMin     </pre>							
Type	spase:ValidMin							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple							
minOccurs:	0							
maxOccurs:	1							
Source	<xsd:element name="ValidMin" type="spase:ValidMin" minOccurs="0" maxOccurs="1" />							
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd							

**Element spase:Element / spase:ValidMax**

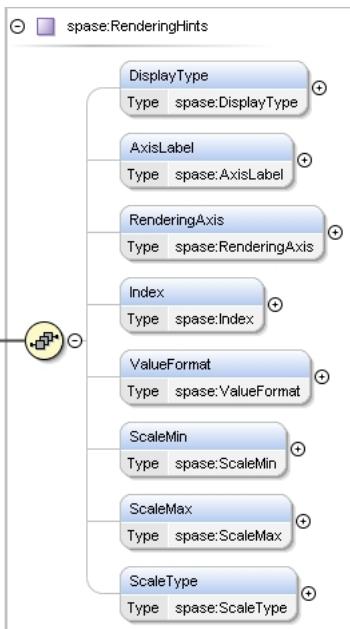
Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class ValidMax     class spase:ValidMax &lt; -- ValidMax     </pre>							
Type	spase:ValidMax							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple							
minOccurs:	0							
maxOccurs:	1							

Source	<code>&lt;xsd:element name="ValidMax" type="spase:ValidMax" minOccurs="0" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Element / spase:FieldValue**

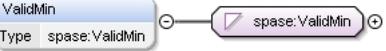
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:FieldValue						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="FieldValue" type="spase:FieldValue" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Element / spase:RenderingHints**

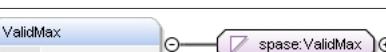
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:RenderingHints						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:DisplayType{0,1} , spase:AxisLabel{0,1} , spase:RenderingAxis{0,1} , spase:Index{0,1} , spase:ValueFormat{0,1} , spase:ScaleMin{0,1} , spase:ScaleMax{0,1} , spase:ScaleType{0,1}						
Children	spase:AxisLabel, spase:DisplayType, spase:Index, spase:RenderingAxis, spase:ScaleMax, spase:ScaleMin, spase:ScaleType, spase:ValueFormat						
Instance	<code>&lt;spase:RenderingHints xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:DisplayType&gt;{0,1}&lt;/spase:DisplayType&gt;   &lt;spase:AxisLabel&gt;{0,1}&lt;/spase:AxisLabel&gt;   &lt;spase:RenderingAxis&gt;{0,1}&lt;/spase:RenderingAxis&gt;   &lt;spase:Index&gt;{0,1}&lt;/spase:Index&gt;   &lt;spase:ValueFormat&gt;{0,1}&lt;/spase:ValueFormat&gt;   &lt;spase:ScaleMin&gt;{0,1}&lt;/spase:ScaleMin&gt;   &lt;spase:ScaleMax&gt;{0,1}&lt;/spase:ScaleMax&gt;   &lt;spase:ScaleType&gt;{0,1}&lt;/spase:ScaleType&gt; &lt;/spase:RenderingHints&gt;</code>						
Source	<code>&lt;xsd:element name="RenderingHints" type="spase:RenderingHints" minOccurs="0" maxOccurs="1"/&gt;</code>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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**Element spase:Parameter / spase:ValidMin**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ValidMin						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="ValidMin" type="spase:ValidMin" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

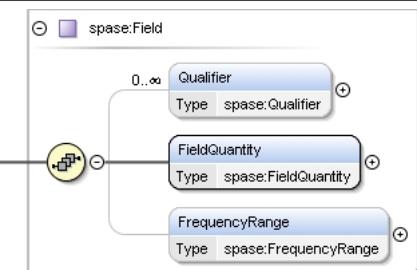
**Element spase:Parameter / spase:ValidMax**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ValidMax						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="ValidMax" type="spase:ValidMax" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Parameter / spase:FieldValue**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:FieldValue						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="FieldValue" type="spase:FieldValue" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Parameter / spase:Field**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Field

Properties	content: complex
Model	spase:Qualifier*, spase:FieldQuantity , spase:FrequencyRange{0,1}
Children	spase:FieldQuantity, spase:FrequencyRange, spase:Qualifier
Instance	<spase:Field xmlns:spase="http://www.spase-group.org/data/schema"> <spase:Qualifier>{0,unbounded}</spase:Qualifier> <spase:FieldQuantity>{1,1}</spase:FieldQuantity> <spase:FrequencyRange>{0,1}</spase:FrequencyRange> </spase:Field>
Source	<xsd:element name="Field" type="spase:Field"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Field / spase:Qualifier

Namespace	http://www.spase-group.org/data/schema																																		
Diagram	<pre> classDiagram     class Qualifier {         &lt;&lt;spase:Qualifier&gt;&gt;     }     class Type {         &lt;&lt;spase:Qualifier&gt;&gt;     }     Qualifier &lt; -- Type   </pre>																																		
Type	spase:Qualifier																																		
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	unbounded																											
content:	simple																																		
minOccurs:	0																																		
maxOccurs:	unbounded																																		
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Anisotropy</td> <td>Direction-dependent property.</td> </tr> <tr> <td>enumeration</td> <td>Array</td> <td>A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.</td> </tr> <tr> <td>enumeration</td> <td>Average</td> <td>The statistical mean; the sum of a set of values divided by the number of values in the set.</td> </tr> <tr> <td>enumeration</td> <td>Characteristic</td> <td>A quantity which can be easily identified and measured in a given environment.</td> </tr> <tr> <td>enumeration</td> <td>Circular</td> <td>Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Column</td> <td>A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.</td> </tr> <tr> <td>enumeration</td> <td>Component</td> <td>Projection of a vector along one of the base axes of a coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.I</td> <td>Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.J</td> <td>Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.K</td> <td>Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Confidence</td> <td>An expression of how certain that a quantity is valid or accurate.</td> </tr> </table>		enumeration	Anisotropy	Direction-dependent property.	enumeration	Array	A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.	enumeration	Characteristic	A quantity which can be easily identified and measured in a given environment.	enumeration	Circular	Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.	enumeration	Column	A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.	enumeration	Component	Projection of a vector along one of the base axes of a coordinate system.	enumeration	Component.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.	enumeration	Component.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.	enumeration	Component.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.	enumeration	Confidence	An expression of how certain that a quantity is valid or accurate.
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enumeration	Confidence	An expression of how certain that a quantity is valid or accurate.																																	

enumeration	Core	The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
enumeration	Differential	A measurement within a narrow range of energy and/or solid angle.
enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( By /Bz)$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan(\sqrt{i^2+j^2}/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(Bx/Bt)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.
enumeration	Integral	A flux measurement in a broad range of energy and solid angle.

enumeration	Integral.Area	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	Integral.Bandwidth	Integration over the width a frequency band.
enumeration	Integral.SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	LineOfSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.
enumeration	Linear	Polarization where the E-field vector is confined to a given plane
enumeration	Magnitude	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	Maximum	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	Median	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	Minimum	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	Moment	Parameters determined by integration over a distribution function convolved with a power of velocity.
enumeration	Parallel	Having the same direction as a given direction
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	Perpendicular	At right angles to a given direction.
enumeration	Perturbation	Variations in the state of a system.
enumeration	Phase	A point or portion in a recurring series of changes.
enumeration	PhaseAngle	Phase difference between two or more waves, normally expressed in degrees.
enumeration	Projection	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	Projection.IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	Projection.IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	Projection.JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	Pseudo	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.
enumeration	Ratio	The relative magnitudes of two quantities.
enumeration	Scalar	A quantity that is completely specified by its magnitude and has no direction.
enumeration	Spectral	Characterized as a range or continuum of frequencies.
enumeration	StandardDeviation	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
enumeration	StokesParameters	
enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example,

		it may occur in a narrow cone aligned with the mean magnetic field direction.
enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
enumeration	Symmetric	Equal distribution about one or more axes.
enumeration	Tensor	A generalized linear "quantity" or "geometrical entity" that can be expressed as a multi-dimensional array relative to a choice of basis of the particular space on which it is defined.
enumeration	Total	The summation of quantities over all possible species.
enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several altitudes, or at a given latitude and longitude).
Source	<xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:Field / spase:FieldQuantity

Namespace	http://www.spase-group.org/data/schema	
Diagram	<pre> classDiagram     class FieldQuantity     class spase:FieldQuantity {         &lt;&lt;Type spase:FieldQuantity&gt;&gt;     }     FieldQuantity &lt; -- spase:FieldQuantity   </pre>	
Type	spase:FieldQuantity	
Properties	content: simple minOccurs: 1 maxOccurs: 1	
Facets	enumeration Current enumeration Electric enumeration Electromagnetic enumeration Gyrofrequency enumeration Magnetic enumeration PlasmaFrequency enumeration Potential	The flow of electrons through a conductor caused by a potential difference. The physical attribute that exerts an electrical force. Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured. The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force. The physical attribute attributed to a magnet or its equivalent. A number-density-dependent characteristic frequency of a plasma. The work required per unit charge to move a charge from a reference point to a point at infinity (electric potential is defined

		<p>to be zero). The electric potential of a spacecraft is often referred to as the "spacecraft potential". The spacecraft potential is the electric potential of the spacecraft relative to the potential of the nearby plasma. The spacecraft potential is non-zero because the spacecraft charges to the level that the emitted photoelectron flux going to infinity is balanced by the plasma electron flux to the spacecraft.</p>
	enumeration	PoyntingFlux Electromagnetic energy flux transported by a wave characterized as the rate of energy transport per unit area per steradian.
Source		<xsd:element name="FieldQuantity" type="spase:FieldQuantity" minOccurs="1" maxOccurs="1"/>
Schema location		file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Field / spase:FrequencyRange

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:FrequencyRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:SpectralRange{0,1} , spase:Low , spase:High , spase:Units , spase:Bin*						
Children	spase:Bin, spase:High, spase:Low, spase:SpectralRange, spase:Units						
Instance	<pre>&lt;spase:FrequencyRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:SpectralRange&gt;{0,1}&lt;/spase:SpectralRange&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:FrequencyRange&gt;</pre>						
Source	<xsd:element name="FrequencyRange" type="spase:FrequencyRange" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:FrequencyRange / spase:SpectralRange

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:SpectralRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						

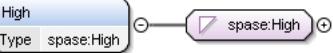
Facets	enumeration	CaK	A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.
	enumeration	ExtremeUltraviolet	A spectrum with a wavelength range of 10.0 nm to 125.0nm. VSO nickname: EUV image with a range of of 10.0 nm to 125.0 nm
	enumeration	FarUltraviolet	A spectrum with a wavelength range of 122 nm to 200.0nm. VSO nickname: FUV image with a range of 122.0 nm to 200 nm
	enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm
	enumeration	Halpha	A spectrum with a wavelength range centered at 656.3 nm. VSO nickname: H-alpha image with a spectrum range of of 655.8 nm to 656.8 nm.
	enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm and an energy range of 12 keV to 120 keV
	enumeration	He10830	A spectrum with a wavelength range centered at 1082.9 nm. VSO nickname: He 10830 image with a range of 1082.5 nm to 1083.3 nm.
	enumeration	He304	A spectrum centered around the resonance line of ionised helium at 304 Angstrom (30.4 nm).
	enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm
	enumeration	K7699	A spectrum with a wavelength range centred at 769.9 nm. VSO nickname: K-7699 dopplergram with a range of 769.8 nm to 770.0 nm.
	enumeration	LBHBand	Lyman-Birge-Hopfield band in the far ultraviolet range with wavelength range of 140nm to 170 nm.
	enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm
	enumeration	NaD	A spectrum with a wavelength range of centered at 589.3 nm. VSO nickname: Na-D image with a range of 588.8 nm to 589.8 nm.
	enumeration	Ni6768	A spectrum with a wavelength range centered at 676.8 nm. VSO nickname: Ni-6768 dopplergram with a range of 676.7 nm to 676.9 nm.
	enumeration	Optical	Photons with a wavelength range: 380 to 760 nm
	enumeration	RadioFrequency	Photons with a wavelength range: 100,000 to 1.00x10^11 nm
	enumeration	SoftXrays	X-Rays with an energy range of 0.12 keV to 12 keV.
	enumeration	Ultraviolet	Photons with a wavelength range: 10 to 400 nm.
	enumeration	WhiteLight	Photons with a wavelength in the visible range for humans.
	enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
Source	<xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="1"/>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Element spase:FrequencyRange / spase:Low

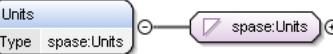
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Low {         &lt;&lt;Low&gt;&gt;         &lt;&lt;Type spase:Low&gt;&gt;     }     Low "1..1" *-- "1..1" spase:Low   </pre>						
Type	spase:Low						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:FrequencyRange / spase:High

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:High
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

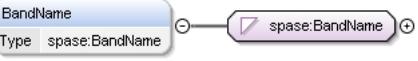
### Element spase:FrequencyRange / spase:Units

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:FrequencyRange / spase:Bin

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Bin
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:BandName{0,1} , spase:Low , spase:High
Children	spase:BandName, spase:High, spase:Low
Instance	<pre> &lt;spase:Bin xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:BandName&gt;{0,1}&lt;/spase:BandName&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt; &lt;/spase:Bin&gt; </pre>
Source	<xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Bin / spase:BandName**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:BandName
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="BandName" type="spase:BandName" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Bin / spase:Low**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Low
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

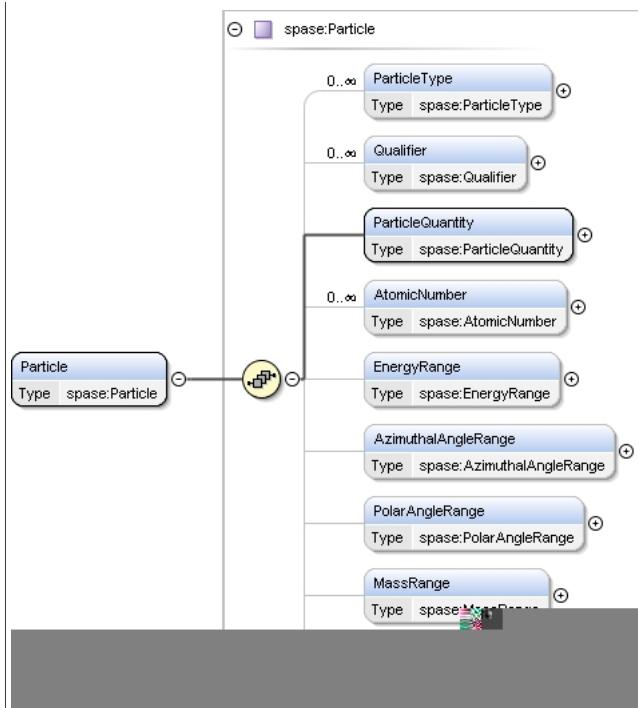
**Element spase:Bin / spase:High**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:High
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Parameter / spase:Particle**

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	spase:Particle
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Properties	content: complex
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Model	spase:ParticleType*, spase:Qualifier*, spase:ParticleQuantity, spase:AtomicNumber*, spase:EnergyRange{0,1}, spase:AzimuthalAngleRange{0,1}, spase:PolarAngleRange{0,1}, spase:MassRange{0,1}, spase:PitchAngleRange{0,1}
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Children	spase:AtomicNumber, spase:AzimuthalAngleRange, spase:EnergyRange, spase:MassRange, spase:ParticleQuantity, spase:ParticleType, spase:PitchAngleRange, spase:PolarAngleRange, spase:Qualifier
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Instance	<spase:Particle xmlns:spase="http://www.spase-group.org/data/schema"> <spase:ParticleType>{0,unbounded}</spase:ParticleType> <spase:Qualifier>{0,unbounded}</spase:Qualifier> <spase:ParticleQuantity>{1,1}</spase:ParticleQuantity> <spase:AtomicNumber>{0,unbounded}</spase:AtomicNumber> <spase:EnergyRange>{0,1}</spase:EnergyRange> <spase:AzimuthalAngleRange>{0,1}</spase:AzimuthalAngleRange> <spase:PolarAngleRange>{0,1}</spase:PolarAngleRange> <spase:MassRange>{0,1}</spase:MassRange> <spase:PitchAngleRange>{0,1}</spase:PitchAngleRange> </spase:Particle>
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Source	<xsd:element name="Particle" type="spase:Particle"/>
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Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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**Element spase:Particle / spase:ParticleType**

Namespace	http://www.spase-group.org/data/schema		
Diagram			
Type	spase:ParticleType		
Properties	content: simple minOccurs: 0 maxOccurs: unbounded		
Facets	enumeration	Aerosol	A suspension of fine solid or liquid particles in a gas.
	enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.
	enumeration	Atom	Matter consisting of a nucleus surrounded by electrons which has no net charge.
	enumeration	Dust	Free microscopic particles of solid material.

enumeration	Electron	An elementary particle consisting of a charge of negative electricity equal to about $1.602 \times 10^{(-19)}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{(-28)}$ gram.
enumeration	Ion	An atom that has acquired a net electric charge by gaining or losing one or more electrons.(Note: Z>2)
enumeration	Molecule	A group of atoms so united and combined by chemical affinity that they form a complete, integrated whole, being the smallest portion of any particular compound that can exist in a free state
enumeration	Neutron	An elementary particle that has no net charge and is a constituent of atomic nuclei, and that has a mass slightly large than a proton ( $1.673 \times 10^{(-24)}$ gram.)
enumeration	Positron	An elementary particle consisting of a charge of positive electricity equal to about $1.602 \times 10^{(-19)}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{(-28)}$ gram.
enumeration	Proton	An elementary particle that is a constituent of all atomic nuclei, that carries a positive charge numerically equal to the charge of an electron, and that has a mass of $1.673 \times 10^{(-24)}$ gram.
Source	<xsd:element name="ParticleType" type="spase:ParticleType" minOccurs="0" maxOccurs="unbounded"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Particle / spase:Qualifier

Namespace	http://www.spase-group.org/data/schema	
Diagram	<pre> classDiagram     class Qualifier {         &lt;&lt;Type&gt;&gt;     }     class spase:Qualifier {         &lt;&lt;Type&gt;&gt;     }     Qualifier "0..*" -- "1" spase:Qualifier   </pre>	
Type	spase:Qualifier	
Properties	content: simple minOccurs: 0 maxOccurs: unbounded	
Facets	enumeration Anisotropy Direction-dependent property. enumeration Array A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index. enumeration Average The statistical mean; the sum of a set of values divided by the number of values in the set. enumeration Characteristic A quantity which can be easily identified and measured in a given environment. enumeration Circular Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field. enumeration Column A two-dimensional measure of a quantity. The column is the area over which the quantity is measured. enumeration Component Projection of a vector along one of the base axes of a coordinate system.	

enumeration	Component.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	Component.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	Component.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Confidence	An expression of how certain that a quantity is valid or accurate.
enumeration	Core	The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
enumeration	Differential	A measurement within a narrow range of energy and/or solid angle.
enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( B_y /B_z)$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan([SQRT(i^2+j^2)]/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(B_x/B_t)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid

		angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.
enumeration	Integral	A flux measurement in a broad range of energy and solid angle.
enumeration	Integral.Area	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	Integral.Bandwidth	Integration over the width a frequency band.
enumeration	Integral.SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	LineOfSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.
enumeration	Linear	Polarization where the E-field vector is confined to a given plane
enumeration	Magnitude	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	Maximum	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	Median	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	Minimum	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	Moment	Parameters determined by integration over a distribution function convolved with a power of velocity.
enumeration	Parallel	Having the same direction as a given direction
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	Perpendicular	At right angles to a given direction.
enumeration	Perturbation	Variations in the state of a system.
enumeration	Phase	A point or portion in a recurring series of changes.
enumeration	PhaseAngle	Phase difference between two or more waves, normally expressed in degrees.
enumeration	Projection	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	Projection.IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	Projection.IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	Projection.JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	Pseudo	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.

	enumeration	Ratio	The relative magnitudes of two quantities.
	enumeration	Scalar	A quantity that is completely specified by its magnitude and has no direction.
	enumeration	Spectral	Characterized as a range or continuum of frequencies.
	enumeration	StandardDeviation	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
	enumeration	StokesParameters	
	enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.
	enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
	enumeration	Symmetric	Equal distribution about one or more axes.
	enumeration	Tensor	A generalized linear "quantity" or "geometrical entity" that can be expressed as a multi-dimensional array relative to a choice of basis of the particular space on which it is defined.
	enumeration	Total	The summation of quantities over all possible species.
	enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
	enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
	enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
	enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several altitudes, or at a given latitude and longitude).
Source	<xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded" />		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

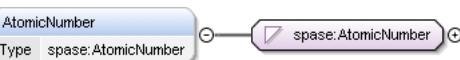
## Element spase:Particle / spase:ParticleQuantity

Namespace	http://www.spase-group.org/data/schema		
Diagram	<pre> classDiagram     class ParticleQuantity {         &lt;&lt;Type spase:ParticleQuantity&gt;&gt;     }     class spase:ParticleQuantity     ParticleQuantity o--&gt; spase:ParticleQuantity   </pre>		
Type	spase:ParticleQuantity		
Properties	content:	simple	
	minOccurs:	1	
	maxOccurs:	1	
Facets	enumeration	AdiabaticInvariant	A property of a physical system usually related to periodic phenomena that remains constant under slowly varying conditions.
	enumeration	AdiabaticInvariant.BounceMode	The second adiabatic invariant is associated with periodic bounce motion of charged particles trapped between two magnetic mirrors on a magnetic field line. The second invariant, termed J, is defined by using the integral $J = m \int v    * ds$ where m is the mass

		of the charged particle, $v  $ is the particle velocity along the field line, and $ds$ represents elemental arc lengths along the field line. The second adiabatic invariant is conserved as long as changes in the background magnetic field occur at time scales much longer than the bounce time of the charged particles.
enumeration	AdiabaticInvariant.DriftMotion	The third invariant for charged particle motion in a dipolar magnetic field is associated with drift of its guiding center in the equatorial plane. The conserved quantity, $J_{\perp}^2$ , is equal to $q\Phi$ ; where $q$ is the particle charge and $\Phi$ is the magnetic flux enclosed within the particle drift path.
enumeration	AdiabaticInvariant.MagneticMoment	A constant of motion related to the gyromotion of a particle in a magnetic field that is either static or slowly varying with respect to the gyroperiod. The magnetic moment is usually denoted by using the lower case Greek letter for $\mu$ , $\gamma$ , and can be calculated by using $\gamma = m u^2 / 2B$ where $m$ is the particle mass, $u$ is the velocity of the particle perpendicular to the constant or average magnetic field direction, and $B$ is the magnitude of the magnetic field strength.
enumeration	ArrivalDirection	An angular measure of the direction from which an energetic particle or photon was incident on a detector. The angles may be measured in any coordinate system.
enumeration	AtomicNumberDetected	The number of protons in the nucleus of an atom as determined by a detector.
enumeration	AverageChargeState	A measure of the composite deficit (positive) or excess (negative) of electrons with respect to protons.
enumeration	ChargeState	Charge of a fully or partially stripped ion, in units of the charge of a proton. Charge state of a bare proton = 1.
enumeration	CountRate	The number of events per unit time.
enumeration	Counts	The number of detection events occurring in a detector over the detector accumulation time.
enumeration	Energy	The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy)
enumeration	EnergyDensity	The amount of energy per unit volume.
enumeration	EnergyFlux	The amount of energy passing through a unit area in a unit time.
enumeration	Entropy	A function of thermodynamic quantity, such as temperature, pressure, or composition, that is a measure of the energy that is not available for work during a thermodynamic process. It is often interpreted as the degree of disorder or randomness in the system.
enumeration	FlowSpeed	The rate at which particles or energy is passing through a unit area in a unit time.
enumeration	FlowVelocity	The volume of matter passing through a unit area perpendicular to the direction of flow in a unit of time.
enumeration	Fluence	The time integral of a flux. A fluence does not have any "per unit time" in its units.
enumeration	GeometricFactor	A measure of the gathering power of a particle detector. The geometric factor can be used to correct particle measurements by accounting for the fact that only a fraction of source particles are able to gain entry through the aperture of a detector. For an isotropic source distribution, the geometric factor corresponds to the solid angle subtended by the aperture. In practice, determination of the geometric factor requires numerical modeling and depends on detector design and the characteristics

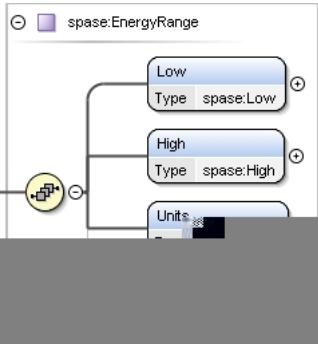
		of the source.
enumeration	Gyrofrequency	The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.
enumeration	HeatFlux	Flow of thermal energy through a gas or plasma; typically computed as third moment of a distribution function.
enumeration	Mass	The measure of inertia (mass) of individual objects (e.g., aerosols).
enumeration	MassDensity	The mass of particles per unit volume.
enumeration	MassNumber	The total number of protons and neutrons (together known as nucleons) in an atomic nucleus.
enumeration	NumberDensity	The number of particles per unit volume.
enumeration	NumberFlux	The number of particles passing a unit area in unit time, possibly also per unit energy (or equivalent) and/or per unit look direction.
enumeration	ParticleRadius	The mean radius for a Gaussian distribution of particles with an axial ratio of 2 and a distribution width that varies as 0.5 radius. A value of zero means no cloud was detected.
enumeration	PhaseSpaceDensity	
enumeration	PlasmaFrequency	A number-density-dependent characteristic frequency of a plasma.
enumeration	Pressure	The force per unit area exerted by a particle distribution or field.
enumeration	SonicMachNumber	The ratio of the bulk flow speed to the speed of sound in the medium.
enumeration	SoundSpeed	The speed at which sound travels through a medium.
enumeration	Temperature	A measure of the kinetic energy of random motion with respect to the average. Temperature is properly defined only for an equilibrium particle distribution (Maxwellian distribution).
enumeration	ThermalSpeed	For a Maxwellian distribution, the difference between the mean speed and the speed within which ~69% (one sigma) of all the members of the speed distribution occur.
enumeration	Velocity	Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".
Source	<xsd:element name="ParticleQuantity" type="spase:ParticleQuantity" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Particle / spase:AtomicNumber

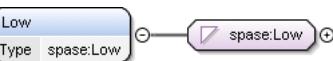
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:AtomicNumber						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="AtomicNumber" type="spase:AtomicNumber" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Particle / spase:EnergyRange

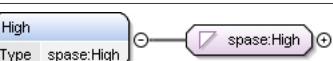
Namespace	http://www.spase-group.org/data/schema
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Diagram							
Type	spase:EnergyRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:Low , spase:High , spase:Units , spase:Bin*						
Children	spase:Bin, spase:High, spase:Low, spase:Units						
Instance	<pre>&lt;spase:EnergyRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:EnergyRange&gt;</pre>						
Source	<code>&lt;xsd:element name="EnergyRange" type="spase:EnergyRange" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:EnergyRange / spase:Low

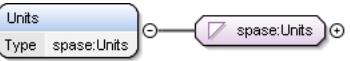
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Low						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:EnergyRange / spase:High

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:High						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:EnergyRange / spase:Units

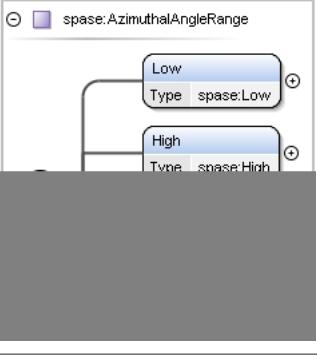
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:EnergyRange / spase:Bin**

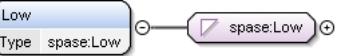
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Bin
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:BandName{0,1} , spase:Low , spase:High
Children	spase:BandName, spase:High, spase:Low
Instance	<spase:Bin xmlns:spase="http://www.spase-group.org/data/schema"> <spase:BandName>{0,1}</spase:BandName> <spase:Low>{1,1}</spase:Low> <spase:High>{1,1}</spase:High> </spase:Bin>
Source	<xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Particle / spase:AzimuthalAngleRange**

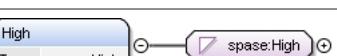
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:AzimuthalAngleRange
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>

Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Instance	<spase:AzimuthalAngleRange xmlns:spase="http://www.spase-group.org/data/schema"> <spase:Low>{1,1}</spase:Low> <spase:High>{1,1}</spase:High> <spase:Units>{1,1}</spase:Units> <spase:Bin>{0,unbounded}</spase:Bin> </spase:AzimuthalAngleRange>
Source	<xsd:element name="AzimuthalAngleRange" type="spase:AzimuthalAngleRange" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

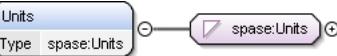
### Element spase:AzimuthalAngleRange / spase:Low

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Low						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:AzimuthalAngleRange / spase:High

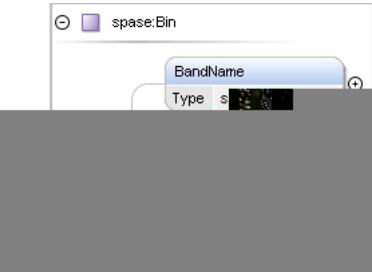
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:High						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:AzimuthalAngleRange / spase:Units

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Units						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:AzimuthalAngleRange / spase:Bin

Namespace	http://www.spase-group.org/data/schema
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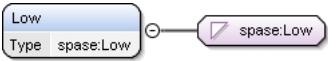
Diagram							
Type	spase:Bin						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	spase:BandName{0,1} , spase:Low , spase:High						
Children	spase:BandName, spase:High, spase:Low						
Instance	<pre>&lt;spase:Bin xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:BandName&gt;{0,1}&lt;/spase:BandName&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt; &lt;/spase:Bin&gt;</pre>						
Source	<code>&lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Particle / spase:PolarAngleRange

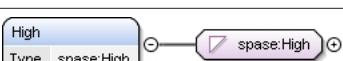
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:PolarAngleRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:Low , spase:High , spase:Units , spase:Bin*						
Children	spase:Bin, spase:High, spase:Low, spase:Units						
Instance	<pre>&lt;spase:PolarAngleRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:PolarAngleRange&gt;</pre>						
Source	<code>&lt;xsd:element name="PolarAngleRange" type="spase:PolarAngleRange" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:PolarAngleRange / spase:Low

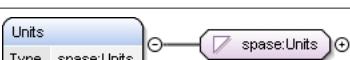
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Low
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

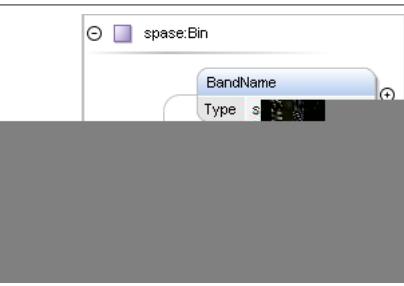
### Element spase:PolarAngleRange / spase:High

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:High
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:PolarAngleRange / spase:Units

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:PolarAngleRange / spase:Bin

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Bin
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>

Model	spase:BandName{0,1} , spase:Low , spase:High
Children	spase:BandName, spase:High, spase:Low
Instance	<pre>&lt;spase:Bin xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:BandName&gt;{0,1}&lt;/spase:BandName&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt; &lt;/spase:Bin&gt;</pre>
Source	<pre>&lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Particle / spase:MassRange

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class MassRange {         &lt;&lt;spase:MassRange&gt;&gt;     }     class Low {         &lt;&lt;spase:Low&gt;&gt;     }     class High {         &lt;&lt;spase:High&gt;&gt;     }     class Units {         &lt;&lt;spase:Units&gt;&gt;     }     class Bin {         &lt;&lt;spase:Bin&gt;&gt;     }      MassRange "0..1" *-- "1" Low     MassRange "0..1" *-- "1" High     MassRange "0..1" *-- "1" Units     MassRange "0..1" *-- "1..infinity" Bin   </pre>						
Type	spase:MassRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:Low , spase:High , spase:Units , spase:Bin*						
Children	spase:Bin, spase:High, spase:Low, spase:Units						
Instance	<pre>&lt;spase:MassRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:MassRange&gt;</pre>						
Source	<pre>&lt;xsd:element name="MassRange" type="spase:MassRange" minOccurs="0" maxOccurs="1"/&gt;</pre>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:MassRange / spase:Low

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Low {         &lt;&lt;spase:Low&gt;&gt;     }   </pre>						
Type	spase:Low						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre>&lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;</pre>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:MassRange / spase:High

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:High
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:MassRange / spase:Units

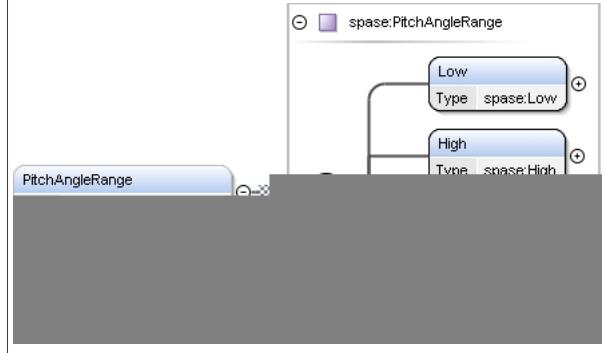
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:MassRange / spase:Bin

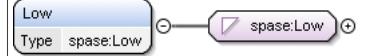
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Bin
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:BandName{0,1} , spase:Low , spase:High
Children	spase:BandName, spase:High, spase:Low
Instance	<pre>&lt;spase:Bin xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:BandName&gt;{0,1}&lt;/spase:BandName&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt; &lt;/spase:Bin&gt;</pre>
Source	<xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Particle / spase:PitchAngleRange

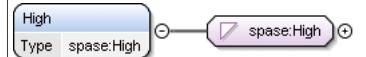
Namespace	http://www.spase-group.org/data/schema
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Diagram							
Type	spase:PitchAngleRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:Low , spase:High , spase:Units , spase:Bin*						
Children	spase:Bin, spase:High, spase:Low, spase:Units						
Instance	<pre>&lt;spase:PitchAngleRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:PitchAngleRange&gt;</pre>						
Source	<code>&lt;xsd:element name="PitchAngleRange" type="spase:PitchAngleRange" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:PitchAngleRange / spase:Low

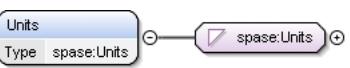
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Low						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:PitchAngleRange / spase:High

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:High						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:PitchAngleRange / spase:Units

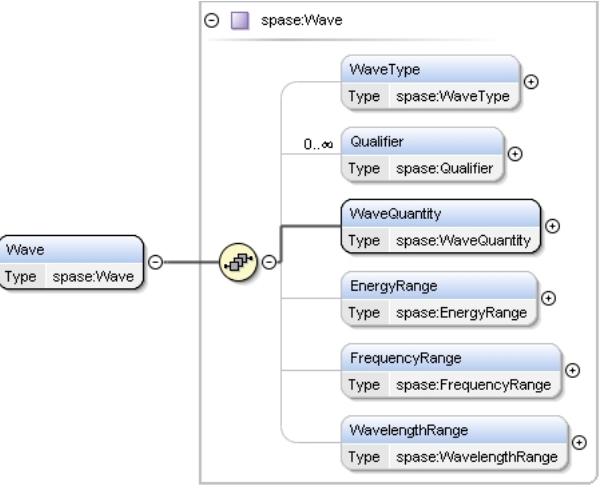
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:PitchAngleRange / spase:Bin

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Bin
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:BandName{0,1} , spase:Low , spase:High
Children	spase:BandName, spase:High, spase:Low
Instance	<spase:Bin xmlns:spase="http://www.spase-group.org/data/schema"> <spase:BandName>{0,1}</spase:BandName> <spase:Low>{1,1}</spase:Low> <spase:High>{1,1}</spase:High> </spase:Bin>
Source	<xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Parameter / spase:Wave

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Wave

Properties	content: complex
Model	spase:WaveType{0,1} , spase:Qualifier* , spase:WaveQuantity , spase:EnergyRange{0,1} , spase:FrequencyRange{0,1} , spase:WavelengthRange{0,1}
Children	spase:EnergyRange, spase:FrequencyRange, spase:Qualifier, spase:WaveQuantity, spase:WaveType, spase:WavelengthRange
Instance	<pre>&lt;spase:Wave xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:WaveType&gt;{0,1}&lt;/spase:WaveType&gt;   &lt;spase:Qualifier&gt;{0,unbounded}&lt;/spase:Qualifier&gt;   &lt;spase:WaveQuantity&gt;{1,1}&lt;/spase:WaveQuantity&gt;   &lt;spase:EnergyRange&gt;{0,1}&lt;/spase:EnergyRange&gt;   &lt;spase:FrequencyRange&gt;{0,1}&lt;/spase:FrequencyRange&gt;   &lt;spase:WavelengthRange&gt;{0,1}&lt;/spase:WavelengthRange&gt; &lt;/spase:Wave&gt;</pre>
Source	<xsd:element name="Wave" type="spase:Wave" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Wave / spase:WaveType

Namespace	http://www.spase-group.org/data/schema											
Diagram	<pre> classDiagram     class WaveType {         &lt;&lt;Type&gt;&gt;     }     class spase:WaveType {         &lt;&lt;Type&gt;&gt;     }     WaveType &lt; -- spase:WaveType   </pre>											
Type	spase:WaveType											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> <td></td> </tr> <tr> <td>minOccurs:</td> <td>0</td> <td></td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> <td></td> </tr> </table>			content:	simple		minOccurs:	0		maxOccurs:	1	
content:	simple											
minOccurs:	0											
maxOccurs:	1											
Facets	enumeration	Electromagnetic	Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured.									
	enumeration	Electrostatic	Collective longitudinal electric-field and plasma oscillations trapped within a body of plasma.									
	enumeration	Hydrodynamic	Periodic or quasi-periodic oscillations of fluid quantities.									
	enumeration	MHD	Hydrodynamic waves in a magnetized plasma in which the background magnetic field plays a key role in controlling the wave propagation characteristics.									
	enumeration	Photon	Electromagnetic waves detected by techniques that utilize their corpuscular character (e.g., CCD, CMOS, photomultipliers).									
	enumeration	PlasmaWaves	Self-consistent collective oscillations of particles and fields (electric and magnetic) in a plasma.									
Source	<xsd:element name="WaveType" type="spase:WaveType" minOccurs="0" maxOccurs="1"/>											
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd											

### Element spase:Wave / spase:Qualifier

Namespace	http://www.spase-group.org/data/schema											
Diagram	<pre> classDiagram     class Qualifier {         &lt;&lt;Type&gt;&gt;     }     class spase:Qualifier {         &lt;&lt;Type&gt;&gt;     }     Qualifier &lt; -- spase:Qualifier   </pre>											
Type	spase:Qualifier											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> <td></td> </tr> <tr> <td>minOccurs:</td> <td>0</td> <td></td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> <td></td> </tr> </table>			content:	simple		minOccurs:	0		maxOccurs:	unbounded	
content:	simple											
minOccurs:	0											
maxOccurs:	unbounded											
Facets	enumeration	Anisotropy	Direction-dependent property.									

enumeration	Array	A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.
enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.
enumeration	Characteristic	A quantity which can be easily identified and measured in a given environment.
enumeration	Circular	Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.
enumeration	Column	A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.
enumeration	Component	Projection of a vector along one of the base axes of a coordinate system.
enumeration	Component.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	Component.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	Component.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Confidence	An expression of how certain that a quantity is valid or accurate.
enumeration	Core	The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
enumeration	Differential	A measurement within a narrow range of energy and/or solid angle.
enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( By /Bz)$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate

		system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan([\sqrt{i^2+j^2}]/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(B_x/B_t)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.
enumeration	Integral	A flux measurement in a broad range of energy and solid angle.
enumeration	Integral.Area	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	Integral.Bandwidth	Integration over the width a frequency band.
enumeration	Integral.SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	LineOfSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.
enumeration	Linear	Polarization where the E-field vector is confined to a given plane
enumeration	Magnitude	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	Maximum	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	Median	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	Minimum	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	Moment	Parameters determined by integration over a distribution function convolved with a power of velocity.

enumeration	Parallel	Having the same direction as a given direction
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	Perpendicular	At right angles to a given direction.
enumeration	Perturbation	Variations in the state of a system.
enumeration	Phase	A point or portion in a recurring series of changes.
enumeration	PhaseAngle	Phase difference between two or more waves, normally expressed in degrees.
enumeration	Projection	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	Projection.IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	Projection.IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	Projection.JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	Pseudo	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.
enumeration	Ratio	The relative magnitudes of two quantities.
enumeration	Scalar	A quantity that is completely specified by its magnitude and has no direction.
enumeration	Spectral	Characterized as a range or continuum of frequencies.
enumeration	StandardDeviation	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
enumeration	StokesParameters	
enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.
enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
enumeration	Symmetric	Equal distribution about one or more axes.
enumeration	Tensor	A generalized linear "quantity" or "geometrical entity" that can be expressed as a multi-dimensional array relative to a choice of basis of the particular space on which it is defined.
enumeration	Total	The summation of quantities over all possible species.
enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several

	altitudes, or at a given latitude and longitude;).
Source	<xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Wave / spase:WaveQuantity

Namespace	http://www.spase-group.org/data/schema																																											
Diagram	<pre> classDiagram     class WaveQuantity {         &lt;&lt;Type&gt;&gt;     }     class spase:WaveQuantity {         &lt;&lt;Type&gt;&gt;     }     WaveQuantity &lt; -- spase:WaveQuantity   </pre>																																											
Type	spase:WaveQuantity																																											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	1	maxOccurs:	1																																				
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minOccurs:	1																																											
maxOccurs:	1																																											
Facets	<table border="1"> <tr> <td>enumeration</td> <td>ACElectricField</td> <td>Alternating electric field component of a wave.</td> </tr> <tr> <td>enumeration</td> <td>ACMagneticField</td> <td>Alternating magnetic field component of a wave.</td> </tr> <tr> <td>enumeration</td> <td>Absorption</td> <td>Decrease of radiant energy (relative to the background continuum spectrum).</td> </tr> <tr> <td>enumeration</td> <td>Albedo</td> <td>The ratio of reflected radiation from the surface to incident radiation upon it.</td> </tr> <tr> <td>enumeration</td> <td>DopplerFrequency</td> <td>Change in the frequency of a propagating wave due to motion of the source, the observer, the reflector, or the propagation medium.</td> </tr> <tr> <td>enumeration</td> <td>Emissivity</td> <td>The energy emitted spontaneously per unit bandwidth (typically frequency) per unit time per unit mass of source. Emissivity is usually integrated over all directions/solid angles.</td> </tr> <tr> <td>enumeration</td> <td>EnergyFlux</td> <td>The amount of energy passing through a unit area in a unit time.</td> </tr> <tr> <td>enumeration</td> <td>EquivalentWidth</td> <td>The spectral width of a total absorption line having the amount of absorbed radiant energy being equivalent to that in an observed absorption line.</td> </tr> <tr> <td>enumeration</td> <td>Frequency</td> <td>The number of occurrences of a repeating event per unit time.</td> </tr> <tr> <td>enumeration</td> <td>Gyrofrequency</td> <td>The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.</td> </tr> <tr> <td>enumeration</td> <td>Intensity</td> <td>The measurement of radiant or wave energy per unit detector area per unit bandwidth per unit solid angle per unit time.</td> </tr> <tr> <td>enumeration</td> <td>LineDepth</td> <td>The measure of the amount of absorption below the continuum (depth) in a particular wavelength or frequency in an absorption spectrum.</td> </tr> <tr> <td>enumeration</td> <td>LowerHybridFrequency</td> <td>Lower hybrid oscillations involve longitudinal motions of electrons and ions in a magnetized plasma. The propagation of lower hybrid waves must be close to perpendicular to the background magnetic field in so that electrons cannot move along field lines thus preventing wave growth. The lower hybrid frequency, <math>\Phi_{LH}</math>, can be calculated by using <math>\Phi_{LH} = [(\Omega_{ce} - \Omega_{ci})^2 + \Phi_i^2]^{1/2}</math> where <math>\Omega_{ce}</math> and <math>\Omega_{ci}</math> are the electron and ion cyclotron frequencies, respectively, and <math>\Phi_{LH}</math> is the ion plasma frequency.</td> </tr> <tr> <td>enumeration</td> <td>MagneticField</td> <td>A region of space near a magnetized body where magnetic forces can be detected (as measured</td> </tr> </table>		enumeration	ACElectricField	Alternating electric field component of a wave.	enumeration	ACMagneticField	Alternating magnetic field component of a wave.	enumeration	Absorption	Decrease of radiant energy (relative to the background continuum spectrum).	enumeration	Albedo	The ratio of reflected radiation from the surface to incident radiation upon it.	enumeration	DopplerFrequency	Change in the frequency of a propagating wave due to motion of the source, the observer, the reflector, or the propagation medium.	enumeration	Emissivity	The energy emitted spontaneously per unit bandwidth (typically frequency) per unit time per unit mass of source. Emissivity is usually integrated over all directions/solid angles.	enumeration	EnergyFlux	The amount of energy passing through a unit area in a unit time.	enumeration	EquivalentWidth	The spectral width of a total absorption line having the amount of absorbed radiant energy being equivalent to that in an observed absorption line.	enumeration	Frequency	The number of occurrences of a repeating event per unit time.	enumeration	Gyrofrequency	The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.	enumeration	Intensity	The measurement of radiant or wave energy per unit detector area per unit bandwidth per unit solid angle per unit time.	enumeration	LineDepth	The measure of the amount of absorption below the continuum (depth) in a particular wavelength or frequency in an absorption spectrum.	enumeration	LowerHybridFrequency	Lower hybrid oscillations involve longitudinal motions of electrons and ions in a magnetized plasma. The propagation of lower hybrid waves must be close to perpendicular to the background magnetic field in so that electrons cannot move along field lines thus preventing wave growth. The lower hybrid frequency, $\Phi_{LH}$ , can be calculated by using $\Phi_{LH} = [(\Omega_{ce} - \Omega_{ci})^2 + \Phi_i^2]^{1/2}$ where $\Omega_{ce}$ and $\Omega_{ci}$ are the electron and ion cyclotron frequencies, respectively, and $\Phi_{LH}$ is the ion plasma frequency.	enumeration	MagneticField	A region of space near a magnetized body where magnetic forces can be detected (as measured
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enumeration	MagneticField	A region of space near a magnetized body where magnetic forces can be detected (as measured																																										

		by methods such as Zeeman splitting, etc.).
enumeration	ModeAmplitude	In helioseismology the magnitude of oscillation of waves of a particular geometry.
enumeration	PlasmaFrequency	A number-density-dependent characteristic frequency of a plasma.
enumeration	Polarization	Direction of the electric vector of an electromagnetic wave. The wave can be linearly polarized in any direction perpendicular to the direction of travel, circularly polarized (clockwise or counterclockwise), unpolarized, or mixtures of the above.
enumeration	PoyntingFlux	Electromagnetic energy flux transported by a wave characterized as the rate of energy transport per unit area per steradian.
enumeration	PropagationTime	Time difference between transmission and reception of a wave in an active wave experiment.
enumeration	StokesParameters	
enumeration	UpperHybridFrequency	Upper hybrid oscillations involve longitudinal motions of electrons perpendicular to the magnetic field. The upper hybrid frequency, $\&\Phi;_{\text{UH}}$ , is governed by the relationship $\&\Phi;_{\text{UH}}^2 = \&\Phi;_{\text{pe}}^2 + \&\Theta;_{\text{ce}}^2$ where $\&\Phi;_{\text{pe}}$ is electron plasma frequency and $\&\Theta;_{\text{ce}}$ is the electron cyclotron frequency.
enumeration	Velocity	Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".
enumeration	Wavelength	The peak-to-peak distance over one wave period.
Source	<xsd:element name="WaveQuantity" type="spase:WaveQuantity" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

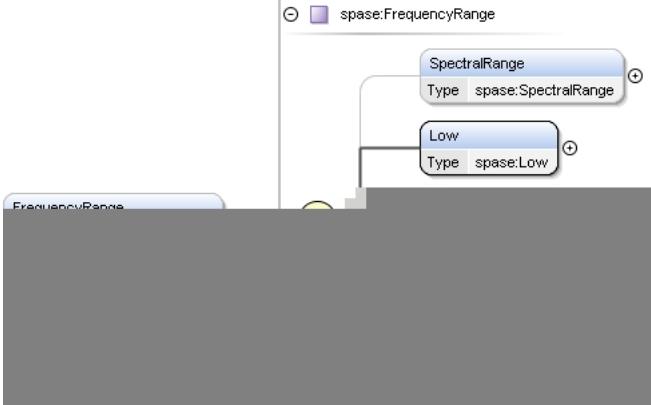
## Element spase:Wave / spase:EnergyRange

Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram showing the 'EnergyRange' class. The class has three attributes: 'Low' (Type: spase:Low), 'High' (Type: spase:High), and 'Units' (Type: spase:Units). There is a self-referencing association from the class back to itself, indicated by a double-headed arrow with a small circle at each end.
Type	spase:EnergyRange
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Instance	<pre>&lt;spase:EnergyRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:EnergyRange&gt;</pre>
Source	<xsd:element name="EnergyRange" type="spase:EnergyRange" minOccurs="0" maxOccurs="1"/>

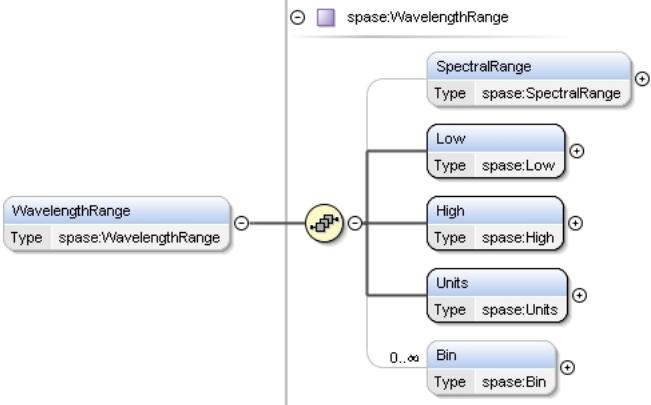
Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

**Element spase:Wave / spase:FrequencyRange**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:FrequencyRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:SpectralRange{0,1} , spase:Low , spase:High , spase:Units , spase:Bin*						
Children	spase:Bin, spase:High, spase:Low, spase:SpectralRange, spase:Units						
Instance	<pre>&lt;spase:FrequencyRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:SpectralRange&gt;{0,1}&lt;/spase:SpectralRange&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:FrequencyRange&gt;</pre>						
Source	<xsd:element name="FrequencyRange" type="spase:FrequencyRange" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Wave / spase:WavelengthRange**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:WavelengthRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						

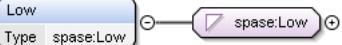
Model	spase:SpectralRange{0,1} , spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:SpectralRange, spase:Units
Instance	<pre>&lt;spase:WavelengthRange xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:SpectralRange&gt;{0,1}&lt;/spase:SpectralRange&gt;   &lt;spase:Low&gt;{1,1}&lt;/spase:Low&gt;   &lt;spase:High&gt;{1,1}&lt;/spase:High&gt;   &lt;spase:Units&gt;{1,1}&lt;/spase:Units&gt;   &lt;spase:Bin&gt;{0,unbounded}&lt;/spase:Bin&gt; &lt;/spase:WavelengthRange&gt;</pre>
Source	<code>&lt;xsd:element name="WavelengthRange" type="spase:WavelengthRange" minOccurs="0" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:WavelengthRange / spase:SpectralRange

Namespace	http://www.spase-group.org/data/schema	
Diagram	<pre> classDiagram     class SpectralRange     class spase:SpectralRange     SpectralRange &lt; -- spase:SpectralRange   </pre>	
Type	spase:SpectralRange	
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>	
Facets	enumeration	CaK A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.
	enumeration	ExtremeUltraviolet A spectrum with a wavelength range of 10.0 nm to 125.0nm. VSO nickname: EUV image with a range of 10.0 nm to 125.0 nm
	enumeration	FarUltraviolet A spectrum with a wavelength range of 122 nm to 200.0nm. VSO nickname: FUV image with a range of 122.0 nm to 200 nm
	enumeration	GammaRays Photons with a wavelength range: 0.00001 to 0.001 nm
	enumeration	Halpha A spectrum with a wavelength range centered at 656.3 nm. VSO nickname: H-alpha image with a spectrum range of 655.8 nm to 656.8 nm.
	enumeration	HardXrays Photons with a wavelength range: 0.001 to 0.1 nm and an energy range of 12 keV to 120 keV
	enumeration	He10830 A spectrum with a wavelength range centered at 1082.9 nm. VSO nickname: He 10830 image with a range of 1082.5 nm to 1083.3 nm.
	enumeration	He304 A spectrum centered around the resonance line of ionised helium at 304 Angstrom (30.4 nm).
	enumeration	Infrared Photons with a wavelength range: 760 to 1.00x10^6 nm
	enumeration	K7699 A spectrum with a wavelength range centred at 769.9 nm. VSO nickname: K-7699 dopplergram with a range of 769.8 nm to 770.0 nm.
	enumeration	LBHBand Lyman-Birge-Hopfield band in the far ultraviolet range with wavelength range of 140nm to 170 nm.
	enumeration	Microwave Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm
	enumeration	NaD A spectrum with a wavelength range of centered at 589.3 nm. VSO nickname: Na-D image with a range of 588.8 nm to 589.8 nm.
	enumeration	Ni6768 A spectrum with a wavelength range centered at 676.8 nm. VSO nickname: Ni-6768 dopplergram with a range of 676.7 nm to 676.9 nm.
	enumeration	Optical Photons with a wavelength range: 380 to 760 nm
	enumeration	RadioFrequency Photons with a wavelength range: 100,000 to 1.00x10^11 nm

	enumeration	SoftXRays	X-Rays with an energy range of 0.12 keV to 12 keV.
	enumeration	Ultraviolet	Photons with a wavelength range: 10 to 400 nm.
	enumeration	WhiteLight	Photons with a wavelength in the visible range for humans.
	enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
Source	<xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="1"/>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Element spase:WavelengthRange / spase:Low

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Low
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:WavelengthRange / spase:High

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:High
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:WavelengthRange / spase:Units

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Units
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:WavelengthRange / spase:Bin

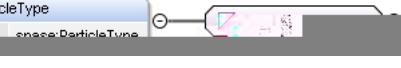
Namespace	http://www.spase-group.org/data/schema
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Diagram



	maxOccurs:	1	
Facets	enumeration	AkasofuEpsilon	A measure of the magnetopause energy flux and an indicator of the solar wind power available for subsequent magnetospheric energization. Defined as: $V^*B^{^2}l^{^2}\sin(\theta/2)^{^4}$ where B is the IMF, l is an empirical scaling parameter equal to 7 RE, and $\theta = \tan(B_Y/B_Z)^{-1}$ the IMF clock angle.
	enumeration	AlfvenMachNumber	The ratio of the bulk flow speed to the Alfvén speed.
	enumeration	AlfvenVelocity	Phase velocity of the Alfvén wave; In SI units it is the velocity of the magnetic field divided by the square root of the mass density times the permeability of free space ( $\mu_0$ ).
	enumeration	FrequencyToGyrofrequencyRatio	The ratio of the characteristic frequency of a medium to gyrofrequency of a particle.
	enumeration	IMFClockAngle	The clockwise angle of the direction of interplanetary magnetic field (IMF) measured in the plane of the body pole perpendicular to the line between the body and the Sun.
	enumeration	MagnetosonicMachNumber	The ratio of the velocity of fast mode waves to the Alfvén velocity.
	enumeration	Other	Not classified with more specific terms. The context of its usage may be described in related text.
	enumeration	PlasmaBeta	The ratio of the plasma pressure ( $n k T$ ) to the magnetic pressure ( $B^2/2\mu_0$ ) of the $\text{SUM}(n k T)/(B^2/2\mu_0)$ .
	enumeration	SolarUVFlux	The amount of Ultraviolet energy originating from the Sun passing through a unit area in a unit time.
	enumeration	TotalPressure	In an MHD fluid it is the number density (N) times Boltzmann constant times the temperature in Kelvin.
	enumeration	VCrossB	The cross product of the charge velocity (V) and the magnetic field (B). It is the electric field exerted on a point charge by a magnetic field.
Source	<xsd:element name="MixedQuantity" type="spase:MixedQuantity" minOccurs="1" maxOccurs="1"/>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Element spase:Mixed / spase:ParticleType

Namespace	http://www.spase-group.org/data/schema		
Diagram			
Type	spase:ParticleType		
Properties	content: simple minOccurs: 0 maxOccurs: unbounded		
Facets	enumeration	Aerosol	A suspension of fine solid or liquid particles in a gas.
	enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.
	enumeration	Atom	Matter consisting of a nucleus surrounded by electrons which has no net charge.
	enumeration	Dust	Free microscopic particles of solid material.
	enumeration	Electron	An elementary particle consisting of a charge of negative electricity equal to about $1.602 \times 10^{-19}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{-28}$ gram.
	enumeration	Ion	An atom that has acquired a net electric charge

		by gaining or losing one or more electrons.(Note: Z>2)
enumeration	Molecule	A group of atoms so united and combined by chemical affinity that they form a complete, integrated whole, being the smallest portion of any particular compound that can exist in a free state
enumeration	Neutron	An elementary particle that has no net charge and is a constituent of atomic nuclei, and that has a mass slightly large than a proton ( $1.673 \times 10^{-24}$ gram.)
enumeration	Positron	An elementary particle consisting of a charge of positive electricity equal to about $1.602 \times 10^{-19}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{-28}$ gram.
enumeration	Proton	An elementary particle that is a constituent of all atomic nuclei, that carries a positive charge numerically equal to the charge of an electron, and that has a mass of $1.673 \times 10^{-24}$ gram.
Source	<code>&lt;xsd:element name="ParticleType" type="spase:ParticleType" minOccurs="0" maxOccurs="unbounded"/&gt;</code>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:Mixed / spase:Qualifier

Namespace	http://www.spase-group.org/data/schema																												
Diagram	<pre> classDiagram     class Qualifier {         &lt;&lt;Qualifer&gt;&gt;         &lt;&lt;Type&gt;&gt;     }     class spase:Qualifier {         &lt;&lt;spase:Qualifer&gt;&gt;     }     Qualifier &lt; -- spase:Qualifier   </pre>																												
Type	spase:Qualifier																												
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>																												
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Anisotropy</td> <td>Direction-dependent property.</td> </tr> <tr> <td>enumeration</td> <td>Array</td> <td>A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.</td> </tr> <tr> <td>enumeration</td> <td>Average</td> <td>The statistical mean; the sum of a set of values divided by the number of values in the set.</td> </tr> <tr> <td>enumeration</td> <td>Characteristic</td> <td>A quantity which can be easily identified and measured in a given environment.</td> </tr> <tr> <td>enumeration</td> <td>Circular</td> <td>Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Column</td> <td>A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.</td> </tr> <tr> <td>enumeration</td> <td>Component</td> <td>Projection of a vector along one of the base axes of a coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.I</td> <td>Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Component.J</td> <td>Projection of a vector along the second named</td> </tr> </table>		enumeration	Anisotropy	Direction-dependent property.	enumeration	Array	A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.	enumeration	Characteristic	A quantity which can be easily identified and measured in a given environment.	enumeration	Circular	Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.	enumeration	Column	A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.	enumeration	Component	Projection of a vector along one of the base axes of a coordinate system.	enumeration	Component.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.	enumeration	Component.J	Projection of a vector along the second named
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		axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	Component.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Confidence	An expression of how certain that a quantity is valid or accurate.
enumeration	Core	The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
enumeration	Differential	A measurement within a narrow range of energy and/or solid angle.
enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( B_y /B_z)$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan(\sqrt{i^2+j^2}/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(B_x/B_t)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation

		or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.
enumeration	Integral	A flux measurement in a broad range of energy and solid angle.
enumeration	Integral.Area	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	Integral.Bandwidth	Integration over the width a frequency band.
enumeration	Integral.SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	LineOfSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.
enumeration	Linear	Polarization where the E-field vector is confined to a given plane
enumeration	Magnitude	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	Maximum	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	Median	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	Minimum	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	Moment	Parameters determined by integration over a distribution function convolved with a power of velocity.
enumeration	Parallel	Having the same direction as a given direction
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	Perpendicular	At right angles to a given direction.
enumeration	Perturbation	Variations in the state of a system.
enumeration	Phase	A point or portion in a recurring series of changes.
enumeration	PhaseAngle	Phase difference between two or more waves, normally expressed in degrees.
enumeration	Projection	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	Projection.IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	Projection.IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	Projection.JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	Pseudo	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.
enumeration	Ratio	The relative magnitudes of two quantities.
enumeration	Scalar	A quantity that is completely specified by its magnitude and has no direction.

	enumeration	Spectral	Characterized as a range or continuum of frequencies.
	enumeration	StandardDeviation	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
	enumeration	StokesParameters	
	enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.
	enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
	enumeration	Symmetric	Equal distribution about one or more axes.
	enumeration	Tensor	A generalized linear "quantity" or "geometrical entity" that can be expressed as a multi-dimensional array relative to a choice of basis of the particular space on which it is defined.
	enumeration	Total	The summation of quantities over all possible species.
	enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
	enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
	enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
	enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several altitudes, or at a given latitude and longitude;).
Source	<xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded" />		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

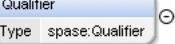
## Element spase:Parameter / spase:Support

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class Support {         &lt;&lt;spase:Support&gt;&gt;     }     class Qualifier {         &lt;&lt;spase:Qualifier&gt;&gt;     }     class SupportQuantity {         &lt;&lt;spase:SupportQuantity&gt;&gt;     }      Support "0..∞" -- "0..∞" Qualifier : "0..∞"     Qualifier "0..∞" -- "0..∞" Support : "0..∞"     Support "0..∞" -- "0..∞" SupportQuantity : "0..∞"     SupportQuantity "0..∞" -- "0..∞" Support : "0..∞"   </pre>
Type	spase:Support
Properties	content: complex
Model	spase:Qualifier*, spase:SupportQuantity
Children	spase:Qualifier, spase:SupportQuantity
Instance	<pre> &lt;spase:Support xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Qualifier&gt;{0,unbounded}&lt;/spase:Qualifier&gt;   &lt;spase:SupportQuantity&gt;{1,1}&lt;/spase:SupportQuantity&gt; &lt;/spase:Support&gt;   </pre>
Source	<xsd:element name="Support" type="spase:Support"/>

Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

**Element spase:Support / spase:Qualifier**

Namespace	http://www.spase-group.org/data/schema	
Diagram	 <b>Type</b> spase:Qualifier	
Type	spase:Qualifier	
Properties	content: simple minOccurs: 0 maxOccurs: unbounded	
Facets	enumeration	Anisotropy Direction-dependent property.
	enumeration	Array A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.
	enumeration	Average The statistical mean; the sum of a set of values divided by the number of values in the set.
	enumeration	Characteristic A quantity which can be easily identified and measured in a given environment.
	enumeration	Circular Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.
	enumeration	Column A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.
	enumeration	Component Projection of a vector along one of the base axes of a coordinate system.
	enumeration	Component.I Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
	enumeration	Component.J Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
	enumeration	Component.K Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
	enumeration	Confidence An expression of how certain that a quantity is valid or accurate.
	enumeration	Core The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
	enumeration	CrossSpectrum The Fourier transform of the cross correlation of two physical or empirical observations.
	enumeration	Deviation The difference between an observed value and the expected value of a quantity.
	enumeration	Differential A measurement within a narrow range of energy and/or solid angle.

enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( By /Bz)$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan(\sqrt{i^2+j^2}/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(Bx/Bt)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.
enumeration	Integral	A flux measurement in a broad range of energy and solid angle.
enumeration	Integral.Area	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	Integral.Bandwidth	Integration over the width a frequency band.
enumeration	Integral.SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	LineOfSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.

enumeration	Linear	Polarization where the E-field vector is confined to a given plane
enumeration	Magnitude	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	Maximum	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	Median	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	Minimum	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	Moment	Parameters determined by integration over a distribution function convolved with a power of velocity.
enumeration	Parallel	Having the same direction as a given direction
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	Perpendicular	At right angles to a given direction.
enumeration	Perturbation	Variations in the state of a system.
enumeration	Phase	A point or portion in a recurring series of changes.
enumeration	PhaseAngle	Phase difference between two or more waves, normally expressed in degrees.
enumeration	Projection	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	Projection.IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	Projection.IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	Projection.JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	Pseudo	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.
enumeration	Ratio	The relative magnitudes of two quantities.
enumeration	Scalar	A quantity that is completely specified by its magnitude and has no direction.
enumeration	Spectral	Characterized as a range or continuum of frequencies.
enumeration	StandardDeviation	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
enumeration	StokesParameters	
enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.
enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
enumeration	Symmetric	Equal distribution about one or more axes.
enumeration	Tensor	A generalized linear "quantity" or "geometrical entity" that can be expressed as a multi-dimensional

		array relative to a choice of basis of the particular space on which it is defined.
enumeration	Total	The summation of quantities over all possible species.
enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several altitudes, or at a given latitude and longitude).
Source	<xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:Support / spase:SupportQuantity

Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class SupportQuantity     class spase:SupportQuantity {         &lt;&lt;Type spase:SupportQuantity&gt;&gt;     }     SupportQuantity &lt; -- spase:SupportQuantity   </pre>							
Type	spase:SupportQuantity							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple							
minOccurs:	1							
maxOccurs:	1							
Facets	enumeration	DataQuality An ancillary parameter that denotes the standard or degree of accuracy, trustworthiness, or usefulness of another parameter.						
	enumeration	InstrumentMode An indication of a state (mode) in which the instrument is operating. How a mode influences the interpretation and representation of data is described in instrument related documentation.						
	enumeration	Orientation The specification of the directional alignment of an object or measurement in a reference coordinate system. The orientation such as a spacecraft spin axis attitude is usually expressed as one or more angles relative to the basis axes of some specified physical space usually together with the date/time of the observation.						
	enumeration	Other Not classified with more specific terms. The context of its usage may be described in related text.						
	enumeration	Positional The specification of the location of an object or measurement within a reference coordinate system. The position is usually expressed as a set of values corresponding to the location along a set of orthogonal axes together with the date/time of the observation.						
	enumeration	SpinPeriod The time required for an object such as a spacecraft or planet to perform one full rotation in a given frame of reference.						
	enumeration	SpinPhase An angular based or normalized parameter that specifies the spin state of an object such as a spacecraft or planet in a specific coordinate system usually together with the date/time of the observation.						
	enumeration	SpinRate The angular rate of change of the spin angle						

		of an object such as a spacecraft or planet.
	enumeration	Temporal
	enumeration	Pertaining to time.
	enumeration	Velocity
		Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".
Source	<xsd:element name="SupportQuantity" type="spase:SupportQuantity" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

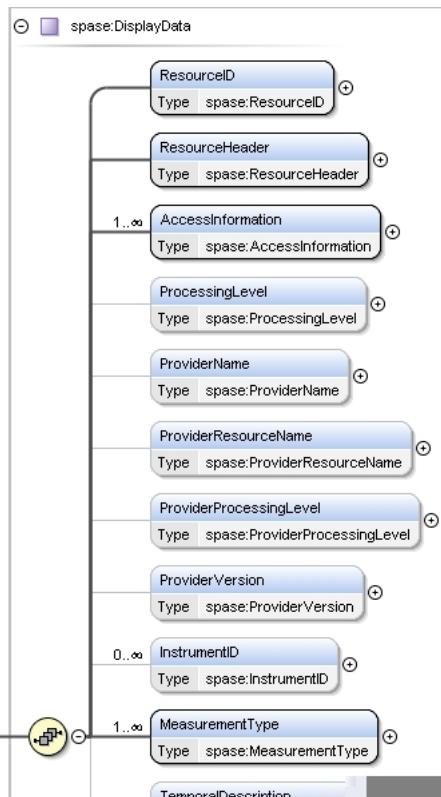
### Element spase:Catalog / spase:Extension

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Extension {         &lt;&lt;Extension&gt;&gt;         &lt;&lt;spase:Extension&gt;&gt;     }     class spase:Extension {         &lt;&lt;spase:Extension&gt;&gt;     }     Extension "0..*" -- "0..*" spase:Extension : &lt;&lt;#&gt;&gt;other   </pre>						
Type	spase:Extension						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Spase / spase:DisplayData

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:DisplayData</code>
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Properties	content: complex
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Model	<code>spase:ResourceID</code> , <code>spase:ResourceHeader</code> , <code>spase:AccessInformation</code> +, <code>spase:ProcessingLevel</code> {0,1}, <code>spase:ProviderName</code> {0,1}, <code>spase:ProviderResourceName</code> {0,1}, <code>spase:ProviderProcessingLevel</code> {0,1}, <code>spase:ProviderVersion</code> {0,1}, <code>spase:InstrumentID</code> *, <code>spase:MeasurementType</code> +, <code>spase:TemporalDescription</code> {0,1}, <code>spase:SpectralRange</code> *, <code>spase:DisplayCadence</code> {0,1}, <code>spase:ObservedRegion</code> *, <code>spase:Caveats</code> {0,1}, <code>spase:Keyword</code> *, <code>spase:InputResourceID</code> *, <code>spase:Parameter</code> *, <code>spase:Extension</code> *
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Children	<code>spase:AccessInformation</code> , <code>spase:Caveats</code> , <code>spase:DisplayCadence</code> , <code>spase:Extension</code> , <code>spase:InputResourceID</code> , <code>spase:InstrumentID</code> , <code>spase:Keyword</code> , <code>spase:MeasurementType</code> , <code>spase:ObservedRegion</code> , <code>spase:Parameter</code> , <code>spase:ProcessingLevel</code> , <code>spase:ProviderName</code> , <code>spase:ProviderProcessingLevel</code> , <code>spase:ProviderResourceName</code> , <code>spase:ProviderVersion</code> , <code>spase:ResourceHeader</code> , <code>spase:ResourceID</code> , <code>spase:SpectralRange</code> , <code>spase:TemporalDescription</code>
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Instance	<pre> &lt;spase:DisplayData xmlns:spase="http://www.spase-group.org/data/schema"&gt;     &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;     &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;     &lt;spase:AccessInformation&gt;{1,unbounded}&lt;/spase:AccessInformation&gt; </pre>
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	<pre> &lt;spase:ProcessingLevel&gt;{0,1}&lt;/spase:ProcessingLevel&gt; &lt;spase:ProviderName&gt;{0,1}&lt;/spase:ProviderName&gt; &lt;spase:ProviderResourceName&gt;{0,1}&lt;/spase:ProviderResourceName&gt; &lt;spase:ProviderProcessingLevel&gt;{0,1}&lt;/spase:ProviderProcessingLevel&gt; &lt;spase:ProviderVersion&gt;{0,1}&lt;/spase:ProviderVersion&gt; &lt;spase:InstrumentID&gt;{0,unbounded}&lt;/spase:InstrumentID&gt; &lt;spase:MeasurementType&gt;{1,unbounded}&lt;/spase:MeasurementType&gt; &lt;spase:TemporalDescription&gt;{0,1}&lt;/spase:TemporalDescription&gt; &lt;spase:SpectralRange&gt;{0,unbounded}&lt;/spase:SpectralRange&gt; &lt;spase:DisplayCadence&gt;{0,1}&lt;/spase:DisplayCadence&gt; &lt;spase:ObservedRegion&gt;{0,unbounded}&lt;/spase:ObservedRegion&gt; &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt; &lt;spase:Keyword&gt;{0,unbounded}&lt;/spase:Keyword&gt; &lt;spase:InputResourceID&gt;{0,unbounded}&lt;/spase:InputResourceID&gt; &lt;spase:Parameter&gt;{0,unbounded}&lt;/spase:Parameter&gt; &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:DisplayData&gt; </pre>
Source	<xsd:element name="DisplayData" type="spase:DisplayData"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

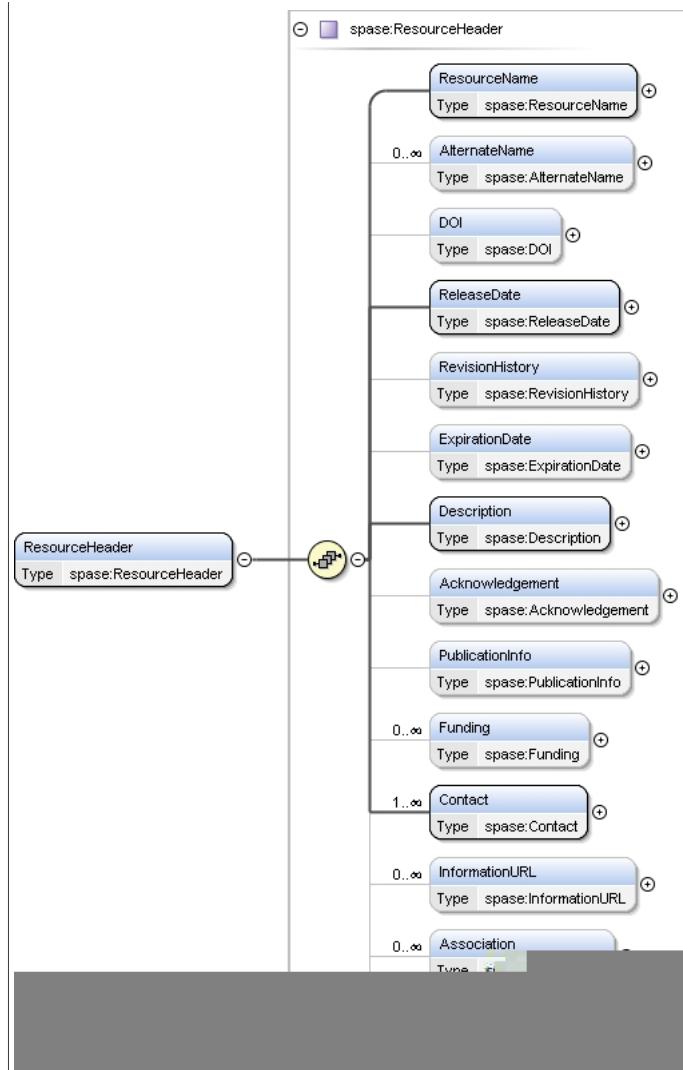
### Element spase:DisplayData / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ResourceID {         spase:ResourceID     }     class ResourceID {         &lt;&lt;Type spase:ResourceID&gt;&gt;     }     ResourceID "0..1" -- "1" ResourceID </pre>						
Type	spase:ResourceID						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:DisplayData / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:ResourceHeader</code>						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	<code>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</code>						
Children	<code>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</code>						
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>						
Source	<code>&lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;</code>						

Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

**Element spase:DisplayData / spase:AccessInformation**

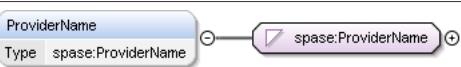
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spase:AccessInformation {         RepositoryID : spase:RepositoryID         Availability : spase:Availability         AccessRights : spase:AccessRights         AccessURL : spase:AccessURL         Format : spase:Format         Encoding : spase:Encoding     }     class AccessInformation : spase:AccessInformation     AccessInformation --&gt; spase:AccessInformation : 1..infinity   </pre>						
Type	spase:AccessInformation						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	spase:RepositoryID , spase:Availability{0,1} , spase:AccessRights{0,1} , spase:AccessURL+ , spase:Format , spase:Encoding{0,1} , spase:DataExtent{0,1} , spase:Acknowledgement{0,1}						
Children	spase:AccessRights, spase:AccessURL, spase:Acknowledgement, spase:Availability, spase:DataExtent, spase:Encoding, spase:Format, spase:RepositoryID						
Instance	<pre> &lt;spase:AccessInformation xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:RepositoryID&gt;{1,1}&lt;/spase:RepositoryID&gt;   &lt;spase:Availability&gt;{0,1}&lt;/spase:Availability&gt;   &lt;spase:AccessRights&gt;{0,1}&lt;/spase:AccessRights&gt;   &lt;spase:AccessURL&gt;{1,unbounded}&lt;/spase:AccessURL&gt;   &lt;spase:Format&gt;{1,1}&lt;/spase:Format&gt;   &lt;spase:Encoding&gt;{0,1}&lt;/spase:Encoding&gt;   &lt;spase:DataExtent&gt;{0,1}&lt;/spase:DataExtent&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt; &lt;/spase:AccessInformation&gt;   </pre>						
Source	<pre> &lt;xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1"   maxOccurs="unbounded"/&gt;   </pre>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:DisplayData / spase:ProcessingLevel**

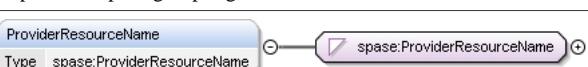
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ProcessingLevel     class spase:ProcessingLevel     ProcessingLevel --&gt; spase:ProcessingLevel : 0..1   </pre>						
Type	spase:ProcessingLevel						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Calibrated</td> <td>Data wherein sensor outputs have been convolved</td> </tr> </table>	enumeration	Calibrated	Data wherein sensor outputs have been convolved			
enumeration	Calibrated	Data wherein sensor outputs have been convolved					

		with instrument response function, often irreversibly, to yield data in physical units.
enumeration	Raw	Data in its original state with no processing to account for calibration!!!
enumeration	Uncalibrated	Duplicate data are removed from the data stream and data are time ordered. Values are not adjusted for any potential biases or external factors.
Source	<code>&lt;xsd:element name="ProcessingLevel" type="spase:ProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;</code>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

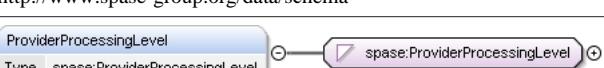
### Element spase:DisplayData / spase:ProviderName

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ProviderName						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="ProviderName" type="spase:ProviderName" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:DisplayData / spase:ProviderResourceName

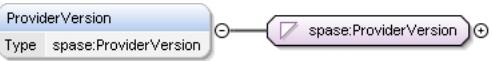
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ProviderResourceName						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="ProviderResourceName" type="spase:ProviderResourceName" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:DisplayData / spase:ProviderProcessingLevel

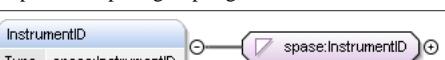
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ProviderProcessingLevel						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="ProviderProcessingLevel" type="spase:ProviderProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:DisplayData / spase:ProviderVersion

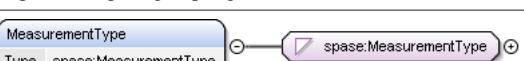
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:ProviderVersion
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ProviderVersion" type="spase:ProviderVersion" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:DisplayData / spase:InstrumentID

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:InstrumentID
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="InstrumentID" type="spase:InstrumentID" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:DisplayData / spase:MeasurementType

Namespace	http://www.spase-group.org/data/schema																					
Diagram																						
Type	spase:MeasurementType																					
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>																					
Facets	<table border="1"> <tr> <td>enumeration</td> <td>ActivityIndex</td> <td>An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.</td> </tr> <tr> <td>enumeration</td> <td>Dopplergram</td> <td>A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.</td> </tr> <tr> <td>enumeration</td> <td>Dust</td> <td>Free microscopic particles of solid material.</td> </tr> <tr> <td>enumeration</td> <td>ElectricField</td> <td>A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.</td> </tr> <tr> <td>enumeration</td> <td>EnergeticParticles</td> <td>Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.</td> </tr> <tr> <td>enumeration</td> <td>Ephemeris</td> <td>The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.</td> </tr> <tr> <td>enumeration</td> <td>ImageIntensity</td> <td>Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.</td> </tr> </table>	enumeration	ActivityIndex	An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.	enumeration	Dopplergram	A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.	enumeration	Dust	Free microscopic particles of solid material.	enumeration	ElectricField	A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.	enumeration	EnergeticParticles	Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.	enumeration	Ephemeris	The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.	enumeration	ImageIntensity	Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.
enumeration	ActivityIndex	An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.																				
enumeration	Dopplergram	A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.																				
enumeration	Dust	Free microscopic particles of solid material.																				
enumeration	ElectricField	A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.																				
enumeration	EnergeticParticles	Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.																				
enumeration	Ephemeris	The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.																				
enumeration	ImageIntensity	Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.																				

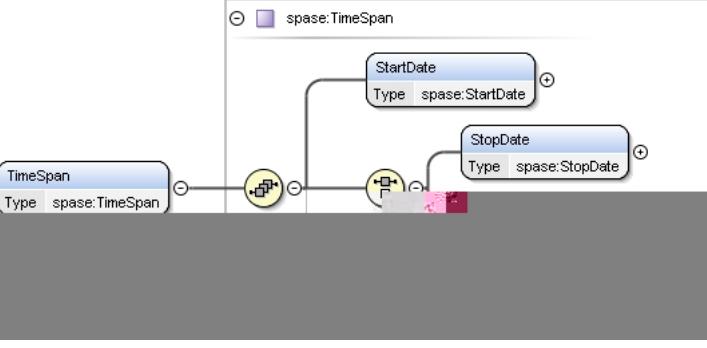
enumeration	InstrumentStatus	A quantity directly related to the operation or function of an instrument.
enumeration	IonComposition	In situ measurements of the relative flux or density of electrically charged particles in the space environment. May give simple fluxes, but full distribution functions are sometimes measured.
enumeration	Irradiance	Irradiance - A radiometric term for the power of electromagnetic radiation at a surface, per unit area. "Irradiance" is used when the electromagnetic radiation is incident on the surface. Irradiance data may be reported in any units (i.e. counts/s) due to, for example, being at a particular wavelength, or to being a not-fully-calibrated relative measurement.
enumeration	MagneticField	A region of space near a magnetized body where magnetic forces can be detected (as measured by methods such as Zeeman splitting, etc.).
enumeration	Magnetogram	Measurements of the vector or line-of-sight magnetic field determined from remote sensing measurements of the detailed structure of spectral lines, including their splitting and polarization. ("Magnetogram.")
enumeration	NeutralAtomImages	Measurements of neutral atom fluxes as a function of look direction; often related to remote energetic charged particles that lose their charge through charge-exchange and then reach the detector on a line-of-sight trajectory.
enumeration	NeutralGas	Measurements of neutral atomic and molecular components of a gas.
enumeration	Profile	Measurements of a quantity as a function of height above an object such as the limb of a body.
enumeration	Radiance	A radiometric measurement that describes the amount of electromagnetic radiation that passes through or is emitted from a particular area, and falls within a given solid angle in a specified direction. They are used to characterize both emission from diffuse sources and reflection from diffuse surfaces.
enumeration	Spectrum	The distribution of a characteristic of a physical system or phenomenon, such as the energy emitted by a radiant source, arranged in the order of wavelengths.
enumeration	ThermalPlasma	Measurements of the plasma in the energy regime where the most of the plasma occurs. May be the basic fluxes in the form of distribution functions or the derived bulk parameters (density, flow velocity, etc.).
enumeration	Waves	Data resulting from observations of wave experiments and natural wave phenomena. Wave experiments are typically active and natural wave phenomena are passive. Examples of wave experiments include coherent/incoherent scatter radars, radio soundings, VLF propagation studies, ionospheric scintillation of beacon satellite signals, etc. Examples of natural wave phenomena include micropulsations, mesospheric gravity waves, auroral/plasmaspheric hiss, Langmuir waves, AKR, Jovian decametric radiation, solar radio bursts, etc.
enumeration	Waves.Active	Exerting an influence or producing a change or effect. An active measurement is one which produces a transmission or excitation as a part of the measurement cycle.
enumeration	Waves.Passive	Movement or effect produced by outside influence. A passive measurement is one which does not produce a transmission or excitation as a part of the measurement cycle.
Source	<xsd:element name="MeasurementType" type="spase:MeasurementType" minOccurs="1" maxOccurs="unbounded" />	

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:DisplayData / spase:TemporalDescription

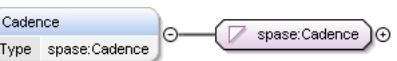
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:TemporalDescription						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:TimeSpan , spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Exposure{0,1} , spase:ExposureMin{0,1} , spase:ExposureMax{0,1}						
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Exposure, spase:ExposureMax, spase:ExposureMin, spase:TimeSpan						
Instance	<pre>&lt;spase:TemporalDescription xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:TimeSpan&gt;{1,1}&lt;/spase:TimeSpan&gt;   &lt;spase:Cadence&gt;{0,1}&lt;/spase:Cadence&gt;   &lt;spase:CadenceMin&gt;{0,1}&lt;/spase:CadenceMin&gt;   &lt;spase:CadenceMax&gt;{0,1}&lt;/spase:CadenceMax&gt;   &lt;spase:Exposure&gt;{0,1}&lt;/spase:Exposure&gt;   &lt;spase:ExposureMin&gt;{0,1}&lt;/spase:ExposureMin&gt;   &lt;spase:ExposureMax&gt;{0,1}&lt;/spase:ExposureMax&gt; &lt;/spase:TemporalDescription&gt;</pre>						
Source	<pre>&lt;xsd:element name="TemporalDescription" type="spase:TemporalDescription" minOccurs="0" maxOccurs="1"/&gt;</pre>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:TemporalDescription / spase:TimeSpan

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:TimeSpan

Properties	content: complex minOccurs: 1 maxOccurs: 1
Model	spase:StartDate , (spase:StopDate   spase:RelativeStopDate) , spase>Note*
Children	spase>Note, spase:RelativeStopDate, spase:StartDate, spase:StopDate
Instance	<spase:TimeSpan xmlns:spase="http://www.spase-group.org/data/schema"> <spase:StartDate>{1,1}</spase:StartDate> <spase:StopDate>{1,1}</spase:StopDate> <spase:RelativeStopDate>{1,1}</spase:RelativeStopDate> <spase>Note>{0,unbounded}</spase>Note> </spase:TimeSpan>
Source	<xsd:element name="TimeSpan" type="spase:TimeSpan" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:TemporalDescription / spase:Cadence

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Cadence
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="Cadence" type="spase:Cadence" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

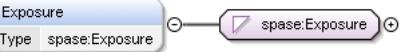
### Element spase:TemporalDescription / spase:CadenceMin

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:CadenceMin
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="CadenceMin" type="spase:CadenceMin" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

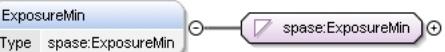
### Element spase:TemporalDescription / spase:CadenceMax

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:CadenceMax
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="CadenceMax" type="spase:CadenceMax" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

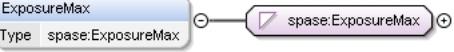
**Element spase:TemporalDescription / spase:Exposure**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Exposure
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Exposure" type="spase:Exposure" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

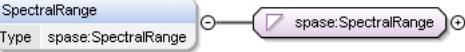
**Element spase:TemporalDescription / spase:ExposureMin**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ExposureMin
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ExposureMin" type="spase:ExposureMin" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:TemporalDescription / spase:ExposureMax**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ExposureMax
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ExposureMax" type="spase:ExposureMax" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:DisplayData / spase:SpectralRange**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:SpectralRange
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Facets	<p>enumeration CaK</p> <p>A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.</p>

enumeration	ExtremeUltraviolet	A spectrum with a wavelength range of 10.0 nm to 125.0nm. VSO nickname: EUV image with a range of of 10.0 nm to 125.0 nm
enumeration	FarUltraviolet	A spectrum with a wavelength range of 122 nm to 200.0nm. VSO nickname: FUV image with a range of 122.0 nm to 200 nm
enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm
enumeration	Halpha	A spectrum with a wavelength range centered at 656.3 nm. VSO nickname: H-alpha image with a spectrum range of of 655.8 nm to 656.8 nm.
enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm and an energy range of 12 keV to 120 keV
enumeration	He10830	A spectrum with a wavelength range centered at 1082.9 nm. VSO nickname: He 10830 image with a range of 1082.5 nm to 1083.3 nm.
enumeration	He304	A spectrum centered around the resonance line of ionised helium at 304 Angstrom (30.4 nm).
enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm
enumeration	K7699	A spectrum with a wavelength range centred at 769.9 nm. VSO nickname: K-7699 dopplergram with a range of 769.8 nm to 770.0 nm.
enumeration	LBHBand	Lyman-Birge-Hopfield band in the far ultraviolet range with wavelength range of 140nm to 170 nm.
enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm
enumeration	NaD	A spectrum with a wavelength range of centered at 589.3 nm. VSO nickname: Na-D image with a range of 588.8 nm to 589.8 nm.
enumeration	Ni6768	A spectrum with a wavelength range centered at 676.8 nm. VSO nickname: Ni-6768 dopplergram with a range of of 676.7 nm to 676.9 nm.
enumeration	Optical	Photons with a wavelength range: 380 to 760 nm
enumeration	RadioFrequency	Photons with a wavelength range: 100,000 to 1.00x10^11 nm
enumeration	SoftXrays	X-Rays with an energy range of 0.12 keV to 12 keV.
enumeration	Ultraviolet	Photons with a wavelength range: 10 to 400 nm.
enumeration	WhiteLight	Photons with a wavelength in the visible range for humans.
enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
Source	<xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="unbounded" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:DisplayData / spase:DisplayCadence

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:DisplayCadence						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="DisplayCadence" type="spase:DisplayCadence" minOccurs="0" maxOccurs="1" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:DisplayData / spase:ObservedRegion

Namespace	http://www.spase-group.org/data/schema																																											
Diagram	<pre> classDiagram     class ObservedRegion {         &lt;&lt;Type: spase:Region&gt;&gt;     }     class spase:Region {         &lt;&lt;Type: spase:Region&gt;&gt;     }     ObservedRegion &lt; -- spase:Region   </pre>																																											
Type	spase:Region																																											
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>																																											
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Asteroid</td> <td>A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.</td> </tr> <tr> <td>enumeration</td> <td>Comet</td> <td>A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.</td> </tr> <tr> <td>enumeration</td> <td>Earth</td> <td>The third planet from the sun in our solar system.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosheath</td> <td>The region between the bow shock and the magnetopause, characterized by very turbulent plasma.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere</td> <td>The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Magnetotail</td> <td>The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (<math>X &gt; -10Re</math>).</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Main</td> <td>The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Plasmasphere</td> <td>The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Polar</td> <td>The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.RadiationBelt</td> <td>The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.RingCurrent</td> <td>The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Moon</td> <td>The only natural satellite of the Earth.</td> </tr> <tr> <td>enumeration</td> <td>Earth.NearSurface</td> <td>The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.</td> </tr> <tr> <td>enumeration</td> <td>Earth.NearSurface.Atmosphere</td> <td>The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.</td> </tr> </table>		enumeration	Asteroid	A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.	enumeration	Comet	A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.	enumeration	Earth	The third planet from the sun in our solar system.	enumeration	Earth.Magnetosheath	The region between the bow shock and the magnetopause, characterized by very turbulent plasma.	enumeration	Earth.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.	enumeration	Earth.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. 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For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.	enumeration	Earth.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.	enumeration	Earth.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. 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enumeration	Earth.NearSurface.AuroralRegion	The region in the atmosphere where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	Earth.NearSurface.EquatorialRegion	The region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	Earth.NearSurface.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.IonosphereLayer	The Region of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	Earth.NearSurface.IonosphereLayer	A Region of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.
enumeration	Earth.NearSurface.IonosphereLayer	A Region that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	Earth.NearSurface.IonosphereLayer	The Topside at the upper most areas of the ionosphere.
enumeration	Earth.NearSurface.Mesosphere	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	Earth.NearSurface.MidLatitudeRegion	Considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	Earth.NearSurface.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Earth.NearSurface.PolarCap	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.
enumeration	Earth.NearSurface.SouthAtlanticAnomalyRegion	The regionally variable Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.
enumeration	Earth.NearSurface.Stratosphere	The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
enumeration	Earth.NearSurface.SubAuroralRegion	Considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending

		from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.
enumeration	Earth.NearSurface.Thermosphere	The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
enumeration	Earth.NearSurface.Troposphere	The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
enumeration	Earth.Surface	The outermost area of a solid object.
enumeration	Heliosphere	The solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.
enumeration	Heliosphere.Heliosheath	The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.
enumeration	Heliosphere.Inner	The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.
enumeration	Heliosphere.NearEarth	The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.
enumeration	Heliosphere.Outer	The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.
enumeration	Heliosphere.Remote1AU	A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.
enumeration	Interstellar	The region between stars outside of the star's heliopause.
enumeration	Jupiter	The fifth planet from the sun in our solar system.
enumeration	Jupiter.Callisto	A second largest moon of Jupiter and the third-largest moon in the solar system.
enumeration	Jupiter.Europa	The sixth-closest round moon of Jupiter.
enumeration	Jupiter.Ganymede	The biggest moon of Jupiter and in the solar system.
enumeration	Jupiter.Io	The innermost of the four round moons of the planet Jupiter.
enumeration	Jupiter.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Jupiter.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Jupiter.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Jupiter.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude

		drop in plasma density.
enumeration	Jupiter.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Jupiter.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Jupiter.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars	The forth planet from the sun in our solar system.
enumeration	Mars.Deimos	
enumeration	Mars.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mars.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mars.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mars.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mars.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mars.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mars.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars.Phobos	The larger and inner most moon of Mars.
enumeration	Mercury	The first planet from the sun in our solar system.
enumeration	Mercury.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mercury.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards

		by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mercury.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mercury.Magnetosphere.Plasmasphere	<b>Plasmasphere</b> of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mercury.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mercury.Magnetosphere.RadiationBelt	<b>RadiationBelt</b> within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mercury.Magnetosphere.RingCurrent	<b>RingCurrent</b> the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Neptune	The seventh planet from the sun in our solar system.
enumeration	Pluto	The ninth (sub)planet from the sun in our solar system.
enumeration	Saturn	The sixth planet from the sun in our solar system.
enumeration	Saturn.Dione	The forth-largest moon of Saturn.
enumeration	Saturn.Enceladus	The sixth-largest moon of Saturn. It is currently endogenously active. The smallest known body in the Solar System that is geologically active today.
enumeration	Saturn.Iapetus	The third-largest moon of Saturn and the eleventh-largest in the Solar System.
enumeration	Saturn.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Saturn.Magnetosphere.Magnetotail	<b>Magnetotail</b> region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Saturn.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Saturn.Magnetosphere.Plasmasphere	<b>Plasmasphere</b> of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Saturn.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Saturn.Magnetosphere.RadiationBelt	<b>RadiationBelt</b> within a magnetosphere where high-energy

		particles could potentially be trapped in a magnetic field.
enumeration	Saturn.Magnetosphere.RingCurrent	the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Saturn.Mimas	The smallest and least massive of the round moons of Saturn.
enumeration	Saturn.Rhea	The second-largest moon of Saturn and the ninth-largest moon in the Solar System.
enumeration	Saturn.Tethys	The third largest moon of Saturn.
enumeration	Saturn.Titan	The largest moon of Saturn and the second-largest moon in the Solar System,
enumeration	Sun	The star upon which our solar system is centered.
enumeration	Sun.Chromosphere	The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.
enumeration	Sun.Corona	The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above $10^5$ K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.
enumeration	Sun.Interior	The region inside the body which is not visible from outside the body.
enumeration	Sun.Photosphere	The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.
enumeration	Sun.TransitionRegion	A very narrow (<100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.
enumeration	Uranus	The eighth planet from the sun in our solar system.
enumeration	Uranus.Ariel	The fourth-largest moon of Uranus.
enumeration	Uranus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Uranus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Uranus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Uranus.Magnetosphere.Plasmasphere	of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Uranus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.

enumeration	Uranus.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Uranus.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Uranus.Miranda	The smallest and innermost round moon of Uranus.
enumeration	Uranus.Oberon	The second-largest and second most massive moon of Uranus, and the ninth most massive moon in the Solar System.
enumeration	Uranus.Puck	The largest inner spherical moon of Uranus.
enumeration	Uranus.Titania	The largest moon of Uranus and the eighth largest moon in the Solar System.
enumeration	Uranus.Umbriel	The third largest and fourth most massive moon of Uranus.
enumeration	Venus	The second planet from the sun in our solar system.
enumeration	Venus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Venus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Venus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Venus.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Venus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Venus.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Venus.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
Source	<xsd:element name="ObservedRegion" type="spase:Region" minOccurs="0" maxOccurs="unbounded"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:DisplayData / spase:Caveats

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Caveats
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:DisplayData / spase:Keyword

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Keyword
Properties	content: simple minOccurs: 0 maxOccurs: unbounded
Source	<xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:DisplayData / spase:InputResourceID

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:InputResourceID
Properties	content: simple minOccurs: 0 maxOccurs: unbounded
Source	<xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:DisplayData / spase:Parameter

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:Parameter</code>
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Properties	content: complex
	minOccurs: 0
	maxOccurs: unbounded

Model	spase:Name , spase:Set* , spase:ParameterKey{0,1} , spase:Description{0,1} , spase:UCD{0,1} , spase:Caveats{0,1} , spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Units{0,1} , spase:UnitsConversion{0,1} , spase:CoordinateSystem{0,1} , spase:RenderingHints* , spase:Structure{0,1} , spase:ValidMin{0,1} , spase:ValidMax{0,1} , spase:FieldValue{0,1} , (spase:Field   spase:Particle   spase:Wave   spase:Mixed   spase:Support)
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Caveats, spase:CoordinateSystem, spase:Description, spase:Field, spase:FieldValue, spase:Mixed, spase:Name, spase:ParameterKey, spase:Particle, spase:RenderingHints, spase:Set, spase:Structure, spase:Support, spase:UCD, spase:Units, spase:UnitsConversion, spase:ValidMax, spase:ValidMin, spase:Wave
Instance	<pre>&lt;spase:Parameter xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Name&gt;{1,1}&lt;/spase:Name&gt;   &lt;spase:Set&gt;{0,unbounded}&lt;/spase:Set&gt;   &lt;spase:ParameterKey&gt;{0,1}&lt;/spase:ParameterKey&gt;   &lt;spase:Description&gt;{0,1}&lt;/spase:Description&gt;   &lt;spase:UCD&gt;{0,1}&lt;/spase:UCD&gt;   &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt;   &lt;spase:Cadence&gt;{0,1}&lt;/spase:Cadence&gt;   &lt;spase:CadenceMin&gt;{0,1}&lt;/spase:CadenceMin&gt;   &lt;spase:CadenceMax&gt;{0,1}&lt;/spase:CadenceMax&gt;   &lt;spase:Units&gt;{0,1}&lt;/spase:Units&gt;   &lt;spase:UnitsConversion&gt;{0,1}&lt;/spase:UnitsConversion&gt;   &lt;spase:CoordinateSystem&gt;{0,1}&lt;/spase:CoordinateSystem&gt;   &lt;spase:RenderingHints&gt;{0,unbounded}&lt;/spase:RenderingHints&gt;   &lt;spase:Structure&gt;{0,1}&lt;/spase:Structure&gt;   &lt;spase:ValidMin&gt;{0,1}&lt;/spase:ValidMin&gt;   &lt;spase:ValidMax&gt;{0,1}&lt;/spase:ValidMax&gt;   &lt;spase:FieldValue&gt;{0,1}&lt;/spase:FieldValue&gt;   &lt;spase:Field&gt;{1,1}&lt;/spase:Field&gt;   &lt;spase:Particle&gt;{1,1}&lt;/spase:Particle&gt;   &lt;spase:Wave&gt;{1,1}&lt;/spase:Wave&gt;   &lt;spase:Mixed&gt;{1,1}&lt;/spase:Mixed&gt;   &lt;spase:Support&gt;{1,1}&lt;/spase:Support&gt; &lt;/spase:Parameter&gt;</pre>
Source	<xsd:element name="Parameter" type="spase:Parameter" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

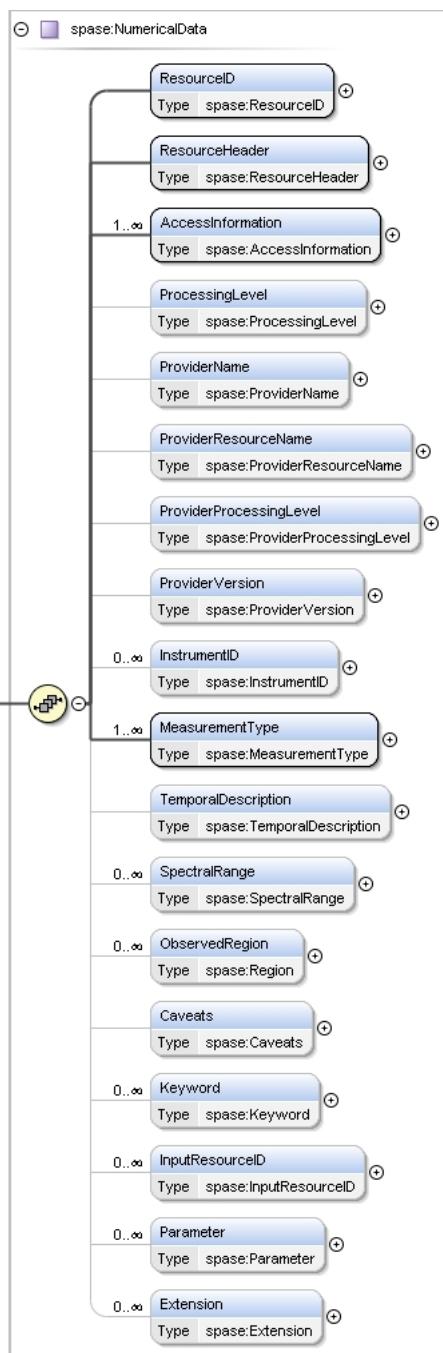
## Element spase:DisplayData / spase:Extension

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Extension {         &lt;&lt;Type spase:Extension&gt;&gt;     }     class spaseExtension {         &lt;&lt;spase:Extension&gt;&gt;     }     Extension &lt; -- spaseExtension     Extension "0..infinity" --&gt; "#other"   </pre>						
Type	spase:Extension						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Spase / spase:NumericalData

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	spase:NumericalData
Properties	content: complex
Model	spase:ResourceId , spase:ResourceHeader , spase:AccessInformation+ , spase:ProcessingLevel{0,1} , spase:ProviderName{0,1} , spase:ProviderResourceName{0,1} , spase:ProviderProcessingLevel{0,1} , spase:ProviderVersion{0,1} , spase:InstrumentID* , spase:MeasurementType+ , spase:TemporalDescription{0,1} , spase:SpectralRange* , spase:ObservedRegion* , spase:Caveats{0,1} , spase:Keyword* , spase:InputResourceID* , spase:Parameter* , spase:Extension*
Children	spase:AccessInformation, spase:Caveats, spase:Extension, spase:InputResourceID, spase:InstrumentID, spase:Keyword, spase:MeasurementType, spase:ObservedRegion, spase:Parameter, spase:ProcessingLevel, spase:ProviderName, spase:ProviderProcessingLevel, spase:ProviderResourceName, spase:ProviderVersion, spase:ResourceHeader, spase:ResourceId, spase:SpectralRange, spase:TemporalDescription
Instance	<pre> &lt;spase:NumericalData xmlns:spase="http://www.spase-group.org/data/schema"&gt;     &lt;spase:ResourceId&gt;{1,1}&lt;/spase:ResourceId&gt;     &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;     &lt;spase:AccessInformation&gt;{1,unbounded}&lt;/spase:AccessInformation&gt;     &lt;spase:ProcessingLevel&gt;{0,1}&lt;/spase:ProcessingLevel&gt;     &lt;spase:ProviderName&gt;{0,1}&lt;/spase:ProviderName&gt;     &lt;spase:ProviderResourceName&gt;{0,1}&lt;/spase:ProviderResourceName&gt; </pre>

	<pre> &lt;spase:ProviderProcessingLevel&gt;{0,1}&lt;/spase:ProviderProcessingLevel&gt; &lt;spase:ProviderVersion&gt;{0,1}&lt;/spase:ProviderVersion&gt; &lt;spase:InstrumentID&gt;{0,unbounded}&lt;/spase:InstrumentID&gt; &lt;spase:MeasurementType&gt;{1,unbounded}&lt;/spase:MeasurementType&gt; &lt;spase:TemporalDescription&gt;{0,1}&lt;/spase:TemporalDescription&gt; &lt;spase:SpectralRange&gt;{0,unbounded}&lt;/spase:SpectralRange&gt; &lt;spase:ObservedRegion&gt;{0,unbounded}&lt;/spase:ObservedRegion&gt; &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt; &lt;spase:Keyword&gt;{0,unbounded}&lt;/spase:Keyword&gt; &lt;spase:InputResourceID&gt;{0,unbounded}&lt;/spase:InputResourceID&gt; &lt;spase:Parameter&gt;{0,unbounded}&lt;/spase:Parameter&gt; &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:NumericalData&gt; </pre>
Source	<xsd:element name="NumericalData" type="spase:NumericalData"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

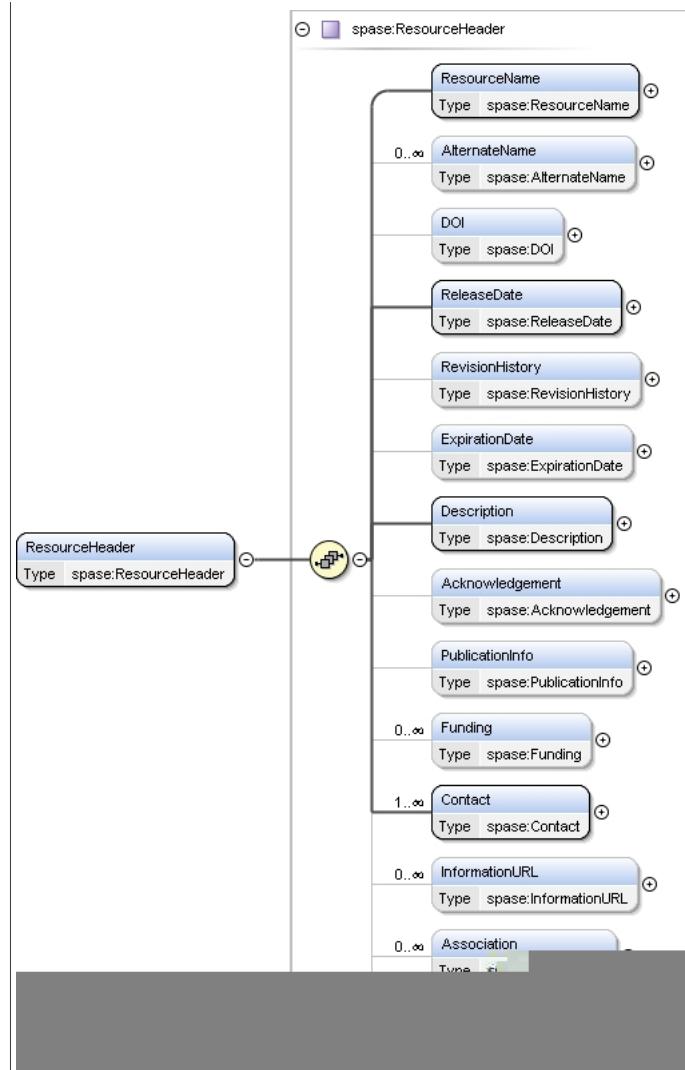
### Element spase:NumericalData / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ResourceID {         spase:ResourceID     }     class Type {         spase:ResourceID     }     ResourceID "0..1" o-- "1" Type </pre>						
Type	spase:ResourceID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:NumericalData / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:ResourceHeader</code>						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	<code>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</code>						
Children	<code>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</code>						
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>						
Source	<code>&lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;</code>						

Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

**Element spase:NumericalData / spase:AccessInformation**

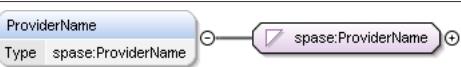
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spase:AccessInformation {         RepositoryID : spase:RepositoryID         Availability : spase:Availability         AccessRights : spase:AccessRights         AccessURL : spase:AccessURL         Format : spase:Format         Encoding : spase:Encoding     }     class AccessInformation : spase:AccessInformation     AccessInformation --&gt; spase:AccessInformation   </pre>						
Type	spase:AccessInformation						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	spase:RepositoryID , spase:Availability{0,1} , spase:AccessRights{0,1} , spase:AccessURL+ , spase:Format , spase:Encoding{0,1} , spase:DataExtent{0,1} , spase:Acknowledgement{0,1}						
Children	spase:AccessRights, spase:AccessURL, spase:Acknowledgement, spase:Availability, spase:DataExtent, spase:Encoding, spase:Format, spase:RepositoryID						
Instance	<pre> &lt;spase:AccessInformation xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:RepositoryID&gt;{1,1}&lt;/spase:RepositoryID&gt;   &lt;spase:Availability&gt;{0,1}&lt;/spase:Availability&gt;   &lt;spase:AccessRights&gt;{0,1}&lt;/spase:AccessRights&gt;   &lt;spase:AccessURL&gt;{1,unbounded}&lt;/spase:AccessURL&gt;   &lt;spase:Format&gt;{1,1}&lt;/spase:Format&gt;   &lt;spase:Encoding&gt;{0,1}&lt;/spase:Encoding&gt;   &lt;spase:DataExtent&gt;{0,1}&lt;/spase:DataExtent&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt; &lt;/spase:AccessInformation&gt;   </pre>						
Source	<pre> &lt;xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1"   maxOccurs="unbounded" /&gt;   </pre>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:NumericalData / spase:ProcessingLevel**

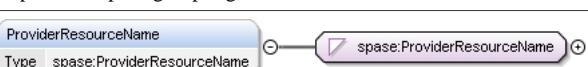
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ProcessingLevel : spase:ProcessingLevel   </pre>						
Type	spase:ProcessingLevel						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Facets	<table> <tr> <td>enumeration</td> <td>Calibrated</td> <td>Data wherein sensor outputs have been convolved</td> </tr> </table>	enumeration	Calibrated	Data wherein sensor outputs have been convolved			
enumeration	Calibrated	Data wherein sensor outputs have been convolved					

		with instrument response function, often irreversibly, to yield data in physical units.
enumeration	Raw	Data in its original state with no processing to account for calibration!!!
enumeration	Uncalibrated	Duplicate data are removed from the data stream and data are time ordered. Values are not adjusted for any potential biases or external factors.
Source	<code>&lt;xsd:element name="ProcessingLevel" type="spase:ProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;</code>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

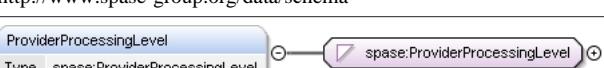
### Element spase:NumericalData / spase:ProviderName

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ProviderName
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<code>&lt;xsd:element name="ProviderName" type="spase:ProviderName" minOccurs="0" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:ProviderResourceName

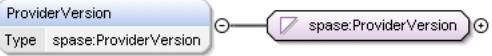
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ProviderResourceName
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<code>&lt;xsd:element name="ProviderResourceName" type="spase:ProviderResourceName" minOccurs="0" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:ProviderProcessingLevel

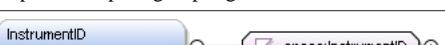
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ProviderProcessingLevel
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<code>&lt;xsd:element name="ProviderProcessingLevel" type="spase:ProviderProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:ProviderVersion

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:ProviderVersion
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ProviderVersion" type="spase:ProviderVersion" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:InstrumentID

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:InstrumentID
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="InstrumentID" type="spase:InstrumentID" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:MeasurementType

Namespace	http://www.spase-group.org/data/schema																					
Diagram																						
Type	spase:MeasurementType																					
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>																					
Facets	<table border="1"> <tr> <td>enumeration</td> <td>ActivityIndex</td> <td>An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.</td> </tr> <tr> <td>enumeration</td> <td>Dopplergram</td> <td>A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.</td> </tr> <tr> <td>enumeration</td> <td>Dust</td> <td>Free microscopic particles of solid material.</td> </tr> <tr> <td>enumeration</td> <td>ElectricField</td> <td>A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.</td> </tr> <tr> <td>enumeration</td> <td>EnergeticParticles</td> <td>Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.</td> </tr> <tr> <td>enumeration</td> <td>Ephemeris</td> <td>The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.</td> </tr> <tr> <td>enumeration</td> <td>ImageIntensity</td> <td>Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.</td> </tr> </table>	enumeration	ActivityIndex	An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.	enumeration	Dopplergram	A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.	enumeration	Dust	Free microscopic particles of solid material.	enumeration	ElectricField	A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.	enumeration	EnergeticParticles	Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.	enumeration	Ephemeris	The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.	enumeration	ImageIntensity	Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.
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enumeration	ElectricField	A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.																				
enumeration	EnergeticParticles	Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.																				
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enumeration	ImageIntensity	Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.																				

enumeration	InstrumentStatus	A quantity directly related to the operation or function of an instrument.
enumeration	IonComposition	In situ measurements of the relative flux or density of electrically charged particles in the space environment. May give simple fluxes, but full distribution functions are sometimes measured.
enumeration	Irradiance	Irradiance - A radiometric term for the power of electromagnetic radiation at a surface, per unit area. "Irradiance" is used when the electromagnetic radiation is incident on the surface. Irradiance data may be reported in any units (i.e. counts/s) due to, for example, being at a particular wavelength, or to being a not-fully-calibrated relative measurement.
enumeration	MagneticField	A region of space near a magnetized body where magnetic forces can be detected (as measured by methods such as Zeeman splitting, etc.).
enumeration	Magnetogram	Measurements of the vector or line-of-sight magnetic field determined from remote sensing measurements of the detailed structure of spectral lines, including their splitting and polarization. ("Magnetogram.")
enumeration	NeutralAtomImages	Measurements of neutral atom fluxes as a function of look direction; often related to remote energetic charged particles that lose their charge through charge-exchange and then reach the detector on a line-of-sight trajectory.
enumeration	NeutralGas	Measurements of neutral atomic and molecular components of a gas.
enumeration	Profile	Measurements of a quantity as a function of height above an object such as the limb of a body.
enumeration	Radiance	A radiometric measurement that describes the amount of electromagnetic radiation that passes through or is emitted from a particular area, and falls within a given solid angle in a specified direction. They are used to characterize both emission from diffuse sources and reflection from diffuse surfaces.
enumeration	Spectrum	The distribution of a characteristic of a physical system or phenomenon, such as the energy emitted by a radiant source, arranged in the order of wavelengths.
enumeration	ThermalPlasma	Measurements of the plasma in the energy regime where the most of the plasma occurs. May be the basic fluxes in the form of distribution functions or the derived bulk parameters (density, flow velocity, etc.).
enumeration	Waves	Data resulting from observations of wave experiments and natural wave phenomena. Wave experiments are typically active and natural wave phenomena are passive. Examples of wave experiments include coherent/incoherent scatter radars, radio soundings, VLF propagation studies, ionospheric scintillation of beacon satellite signals, etc. Examples of natural wave phenomena include micropulsations, mesospheric gravity waves, auroral/plasmaspheric hiss, Langmuir waves, AKR, Jovian decametric radiation, solar radio bursts, etc.
enumeration	Waves.Active	Exerting an influence or producing a change or effect. An active measurement is one which produces a transmission or excitation as a part of the measurement cycle.
enumeration	Waves.Passive	Movement or effect produced by outside influence. A passive measurement is one which does not produce a transmission or excitation as a part of the measurement cycle.
Source	<xsd:element name="MeasurementType" type="spase:MeasurementType" minOccurs="1" maxOccurs="unbounded" />	

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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**Element spase:NumericalData / spase:TemporalDescription**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:TemporalDescription						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:TimeSpan , spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Exposure{0,1} , spase:ExposureMin{0,1} , spase:ExposureMax{0,1}						
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Exposure, spase:ExposureMax, spase:ExposureMin, spase:TimeSpan						
Instance	<pre>&lt;spase:TemporalDescription xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:TimeSpan&gt;{1,1}&lt;/spase:TimeSpan&gt;   &lt;spase:Cadence&gt;{0,1}&lt;/spase:Cadence&gt;   &lt;spase:CadenceMin&gt;{0,1}&lt;/spase:CadenceMin&gt;   &lt;spase:CadenceMax&gt;{0,1}&lt;/spase:CadenceMax&gt;   &lt;spase:Exposure&gt;{0,1}&lt;/spase:Exposure&gt;   &lt;spase:ExposureMin&gt;{0,1}&lt;/spase:ExposureMin&gt;   &lt;spase:ExposureMax&gt;{0,1}&lt;/spase:ExposureMax&gt; &lt;/spase:TemporalDescription&gt;</pre>						
Source	<pre>&lt;xsd:element name="TemporalDescription" type="spase:TemporalDescription" minOccurs="0"   maxOccurs="1" /&gt;</pre>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:NumericalData / spase:SpectralRange**

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:SpectralRange						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Facets	<table border="1"> <tr> <td>enumeration</td> <td>CaK</td> <td>A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.</td> </tr> <tr> <td>enumeration</td> <td>ExtremeUltraviolet</td> <td>A spectrum with a wavelength range of 10.0 nm to 125.0 nm. VSO nickname: EUV image with a range of 10.0 nm to 125.0 nm</td> </tr> </table>	enumeration	CaK	A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.	enumeration	ExtremeUltraviolet	A spectrum with a wavelength range of 10.0 nm to 125.0 nm. VSO nickname: EUV image with a range of 10.0 nm to 125.0 nm
enumeration	CaK	A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.					
enumeration	ExtremeUltraviolet	A spectrum with a wavelength range of 10.0 nm to 125.0 nm. VSO nickname: EUV image with a range of 10.0 nm to 125.0 nm					

	enumeration	FarUltraviolet	A spectrum with a wavelength range of 122 nm to 200.0nm. VSO nickname: FUV image with a range of 122.0 nm to 200 nm
	enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm
	enumeration	Halpha	A spectrum with a wavelength range centered at 656.3 nm. VSO nickname: H-alpha image with a spectrum range of 655.8 nm to 656.8 nm.
	enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm and an energy range of 12 keV to 120 keV
	enumeration	He10830	A spectrum with a wavelength range centered at 1082.9 nm. VSO nickname: He 10830 image with a range of 1082.5 nm to 1083.3 nm.
	enumeration	He304	A spectrum centered around the resonance line of ionised helium at 304 Angstrom (30.4 nm).
	enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm
	enumeration	K7699	A spectrum with a wavelength range centred at 769.9 nm. VSO nickname: K-7699 dopplergram with a range of 769.8 nm to 770.0 nm.
	enumeration	LBHBand	Lyman-Birge-Hopfield band in the far ultraviolet range with wavelength range of 140nm to 170 nm.
	enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm
	enumeration	NaD	A spectrum with a wavelength range of centered at 589.3 nm. VSO nickname: Na-D image with a range of 588.8 nm to 589.8 nm.
	enumeration	Ni6768	A spectrum with a wavelength range centered at 676.8 nm. VSO nickname: Ni-6768 dopplergram with a range of 676.7 nm to 676.9 nm.
	enumeration	Optical	Photons with a wavelength range: 380 to 760 nm
	enumeration	RadioFrequency	Photons with a wavelength range: 100,000 to 1.00x10^11 nm
	enumeration	SoftXRays	X-Rays with an energy range of 0.12 keV to 12 keV.
	enumeration	Ultraviolet	Photons with a wavelength range: 10 to 400 nm.
	enumeration	WhiteLight	Photons with a wavelength in the visible range for humans.
	enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
Source	<xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="unbounded"/>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Element spase:NumericalData / spase:ObservedRegion

Namespace	http://www.spase-group.org/data/schema											
Diagram	<pre> classDiagram     class ObservedRegion {         &lt;&lt;Type: spase:Region&gt;&gt;     }     ObservedRegion "1" --&gt; "1" ObservedRegion : spase:Region   </pre>											
Type	spase:Region											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> <td></td> </tr> <tr> <td>minOccurs:</td> <td>0</td> <td></td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> <td></td> </tr> </table>			content:	simple		minOccurs:	0		maxOccurs:	unbounded	
content:	simple											
minOccurs:	0											
maxOccurs:	unbounded											
Facets	enumeration	Asteroid	A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.									
	enumeration	Comet	A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.									

enumeration	Earth	The third planet from the sun in our solar system.
enumeration	Earth.Magnetosheath	The region between the bow shock and the magnetopause, characterized by very turbulent plasma.
enumeration	Earth.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Earth.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Earth.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Earth.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Earth.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Earth.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Earth.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Earth.Moon	The only natural satellite of the Earth.
enumeration	Earth.NearSurface	The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.
enumeration	Earth.NearSurface.Atmosphere	The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.AuroralRegion	The region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	Earth.NearSurface.EquatorialRegion	A Region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	Earth.NearSurface.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.IonosphereDRegion	The Region of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	Earth.NearSurface.IonosphereERegion	A Region ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.

enumeration	<code>Earth.NearSurface.Ionosphere.FRegion</code>	The <b>FRegion</b> contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	<code>Earth.NearSurface.Ionosphere.TTopside</code>	The <b>TTopside</b> at the upper most areas of the ionosphere.
enumeration	<code>Earth.NearSurface.Mesosphere</code>	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	<code>Earth.NearSurface.MidLatitude</code>	The <b>MidLatitude</b> considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	<code>Earth.NearSurface.Plasmasphere</code>	The <b>Plasmasphere</b> region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	<code>Earth.NearSurface.PolarCap</code>	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.
enumeration	<code>Earth.NearSurface.SouthAtlanticMagneticRegion</code>	The <b>SouthAtlanticMagneticRegion</b> Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.
enumeration	<code>Earth.NearSurface.Stratosphere</code>	The <b>Stratosphere</b> layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
enumeration	<code>Earth.NearSurface.SubAuroral</code>	The <b>SubAuroral</b> region considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.
enumeration	<code>Earth.NearSurface.Thermosphere</code>	The <b>Thermosphere</b> layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
enumeration	<code>Earth.NearSurface.Troposphere</code>	The <b>Troposphere</b> the lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
enumeration	<code>Earth.Surface</code>	The outermost area of a solid object.

enumeration	<b>Heliosphere</b>	The solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.
enumeration	<b>Heliosphere.Heliosheath</b>	The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.
enumeration	<b>Heliosphere.Inner</b>	The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.
enumeration	<b>Heliosphere.NearEarth</b>	The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.
enumeration	<b>Heliosphere.Outer</b>	The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.
enumeration	<b>Heliosphere.RemoteAU</b>	A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.
enumeration	<b>Interstellar</b>	The region between stars outside of the star's heliopause.
enumeration	<b>Jupiter</b>	The fifth planet from the sun in our solar system.
enumeration	<b>Jupiter.Callisto</b>	A second largest moon of Jupiter and the third-largest moon in the solar system.
enumeration	<b>Jupiter.Europa</b>	The sixth-closest round moon of Jupiter.
enumeration	<b>Jupiter.Ganymede</b>	The biggest moon of Jupiter and in the solar system.
enumeration	<b>Jupiter.Io</b>	The innermost of the four round moons of the planet Jupiter.
enumeration	<b>Jupiter.Magnetosphere</b>	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	<b>Jupiter.Magnetosphere.Magnetotail</b>	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	<b>Jupiter.Magnetosphere.Main</b>	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	<b>Jupiter.Magnetosphere.Plasmasphere</b>	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	<b>Jupiter.Magnetosphere.Polar</b>	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	<b>Jupiter.Magnetosphere.Radiationbelt</b>	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	<b>Jupiter.Magnetosphere.Ringcurrent</b>	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm.

		activity at the Earth.
enumeration	Mars	The forth planet from the sun in our solar system.
enumeration	Mars.Deimos	
enumeration	Mars.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mars.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mars.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mars.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mars.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mars.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mars.Magnetosphere.RingCurrent	The one of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars.Phobos	The larger and inner most moon of Mars.
enumeration	Mercury	The first planet from the sun in our solar system.
enumeration	Mercury.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mercury.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mercury.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mercury.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mercury.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mercury.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in

		a magnetic field.
enumeration	Mercury.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Neptune	The seventh planet from the sun in our solar system.
enumeration	Pluto	The ninth (sub)planet from the sun in our solar system.
enumeration	Saturn	The sixth planet from the sun in our solar system.
enumeration	Saturn.Dione	The forth-largest moon of Saturn.
enumeration	Saturn.Enceladus	The sixth-largest moon of Saturn. It is currently endogenously active. The smallest known body in the Solar System that is geologically active today.
enumeration	Saturn.Iapetus	The third-largest moon of Saturn and the eleventh-largest in the Solar System.
enumeration	Saturn.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Saturn.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Saturn.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Saturn.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Saturn.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Saturn.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Saturn.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Saturn.Mimas	The smallest and least massive of the round moons of Saturn.
enumeration	Saturn.Rhea	The second-largest moon of Saturn and the ninth-largest moon in the Solar System.
enumeration	Saturn.Tethys	The third largest moon of Saturn.

enumeration	Saturn.Titan	The largest moon of Saturn and the second-largest moon in the Solar System,
enumeration	Sun	The star upon which our solar system is centered.
enumeration	Sun.Chromosphere	The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.
enumeration	Sun.Corona	The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above $10^5$ K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.
enumeration	Sun.Interior	The region inside the body which is not visible from outside the body.
enumeration	Sun.Photosphere	The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.
enumeration	Sun.TransitionRegion	A very narrow (<100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.
enumeration	Uranus	The eighth planet from the sun in our solar system.
enumeration	Uranus.Ariel	The fourth-largest moon of Uranus.
enumeration	Uranus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Uranus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Uranus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Uranus.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Uranus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Uranus.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Uranus.Magnetosphere.RingCurrent	The current within the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Uranus.Miranda	The smallest and innermost round moon of Uranus.
enumeration	Uranus.Oberon	The second-largest and second most massive moon of Uranus, and the ninth most massive moon in the Solar System.

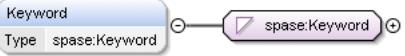
enumeration	Uranus.Puck	The largest inner spherical moon of Uranus.
enumeration	Uranus.Titania	The largest moon of Uranus and the eighth largest moon in the Solar System.
enumeration	Uranus.Umbriel	The third largest and fourth most massive moon of Uranus.
enumeration	Venus	The second planet from the sun in our solar system.
enumeration	Venus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Venus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Venus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Venus.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Venus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Venus.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Venus.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
Source	<xsd:element name="ObservedRegion" type="spase:Region" minOccurs="0" maxOccurs="unbounded"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:NumericalData / spase:Caveats

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Caveats						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:NumericalData / spase:Keyword

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Keyword
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:InputResourceID

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:InputResourceID
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:NumericalData / spase:Parameter

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:Parameter</code>						
Properties	<table border="1"><tr><td>content:</td><td>complex</td></tr><tr><td>minOccurs:</td><td>0</td></tr><tr><td>maxOccurs:</td><td>unbounded</td></tr></table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						

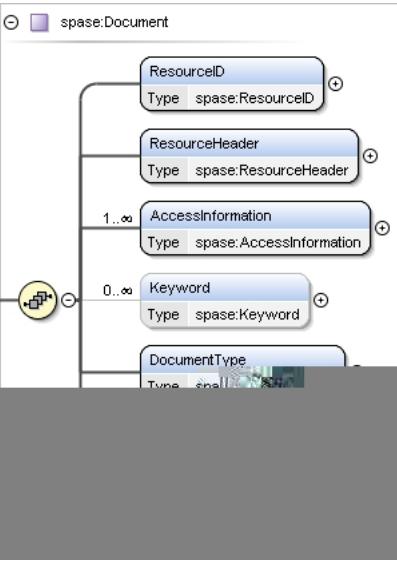
Model	spase:Name , spase:Set* , spase:ParameterKey{0,1} , spase:Description{0,1} , spase:UCD{0,1} , spase:Caveats{0,1} , spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Units{0,1} , spase:UnitsConversion{0,1} , spase:CoordinateSystem{0,1} , spase:RenderingHints* , spase:Structure{0,1} , spase:ValidMin{0,1} , spase:ValidMax{0,1} , spase:FieldValue{0,1} , (spase:Field   spase:Particle   spase:Wave   spase:Mixed   spase:Support)
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Caveats, spase:CoordinateSystem, spase:Description, spase:Field, spase:FieldValue, spase:Mixed, spase:Name, spase:ParameterKey, spase:Particle, spase:RenderingHints, spase:Set, spase:Structure, spase:Support, spase:UCD, spase:Units, spase:UnitsConversion, spase:ValidMax, spase:ValidMin, spase:Wave
Instance	<pre>&lt;spase:Parameter xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Name&gt;{1,1}&lt;/spase:Name&gt;   &lt;spase:Set&gt;{0,unbounded}&lt;/spase:Set&gt;   &lt;spase:ParameterKey&gt;{0,1}&lt;/spase:ParameterKey&gt;   &lt;spase:Description&gt;{0,1}&lt;/spase:Description&gt;   &lt;spase:UCD&gt;{0,1}&lt;/spase:UCD&gt;   &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt;   &lt;spase:Cadence&gt;{0,1}&lt;/spase:Cadence&gt;   &lt;spase:CadenceMin&gt;{0,1}&lt;/spase:CadenceMin&gt;   &lt;spase:CadenceMax&gt;{0,1}&lt;/spase:CadenceMax&gt;   &lt;spase:Units&gt;{0,1}&lt;/spase:Units&gt;   &lt;spase:UnitsConversion&gt;{0,1}&lt;/spase:UnitsConversion&gt;   &lt;spase:CoordinateSystem&gt;{0,1}&lt;/spase:CoordinateSystem&gt;   &lt;spase:RenderingHints&gt;{0,unbounded}&lt;/spase:RenderingHints&gt;   &lt;spase:Structure&gt;{0,1}&lt;/spase:Structure&gt;   &lt;spase:ValidMin&gt;{0,1}&lt;/spase:ValidMin&gt;   &lt;spase:ValidMax&gt;{0,1}&lt;/spase:ValidMax&gt;   &lt;spase:FieldValue&gt;{0,1}&lt;/spase:FieldValue&gt;   &lt;spase:Field&gt;{1,1}&lt;/spase:Field&gt;   &lt;spase:Particle&gt;{1,1}&lt;/spase:Particle&gt;   &lt;spase:Wave&gt;{1,1}&lt;/spase:Wave&gt;   &lt;spase:Mixed&gt;{1,1}&lt;/spase:Mixed&gt;   &lt;spase:Support&gt;{1,1}&lt;/spase:Support&gt; &lt;/spase:Parameter&gt;</pre>
Source	<xsd:element name="Parameter" type="spase:Parameter" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:NumericalData / spase:Extension

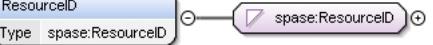
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Extension {         &lt;&lt;Type spase:Extension&gt;&gt;     }     class spaseExtension {         &lt;&lt;spase:Extension&gt;&gt;     }     Extension "0..1" -- "0..&lt;&lt;#other&gt;&gt;" spaseExtension   </pre>						
Type	spase:Extension						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Spase / spase:Document

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Document
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessInformation+ , spase:Keyword* , spase:DocumentType , spase:MIMEType , spase:InputResourceID*
Children	spase:AccessInformation, spase:DocumentType, spase:InputResourceID, spase:Keyword, spase:MIMEType, spase:ResourceHeader, spase:ResourceId
Instance	<pre>&lt;spase:Document xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;   &lt;spase:AccessInformation&gt;{1,unbounded}&lt;/spase:AccessInformation&gt;   &lt;spase:Keyword&gt;{0,unbounded}&lt;/spase:Keyword&gt;   &lt;spase:DocumentType&gt;{1,1}&lt;/spase:DocumentType&gt;   &lt;spase:MIMEType&gt;{1,1}&lt;/spase:MIMEType&gt;   &lt;spase:InputResourceID&gt;{0,unbounded}&lt;/spase:InputResourceID&gt; &lt;/spase:Document&gt;</pre>
Source	<code>&lt;xsd:element name="Document" type="spase:Document" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

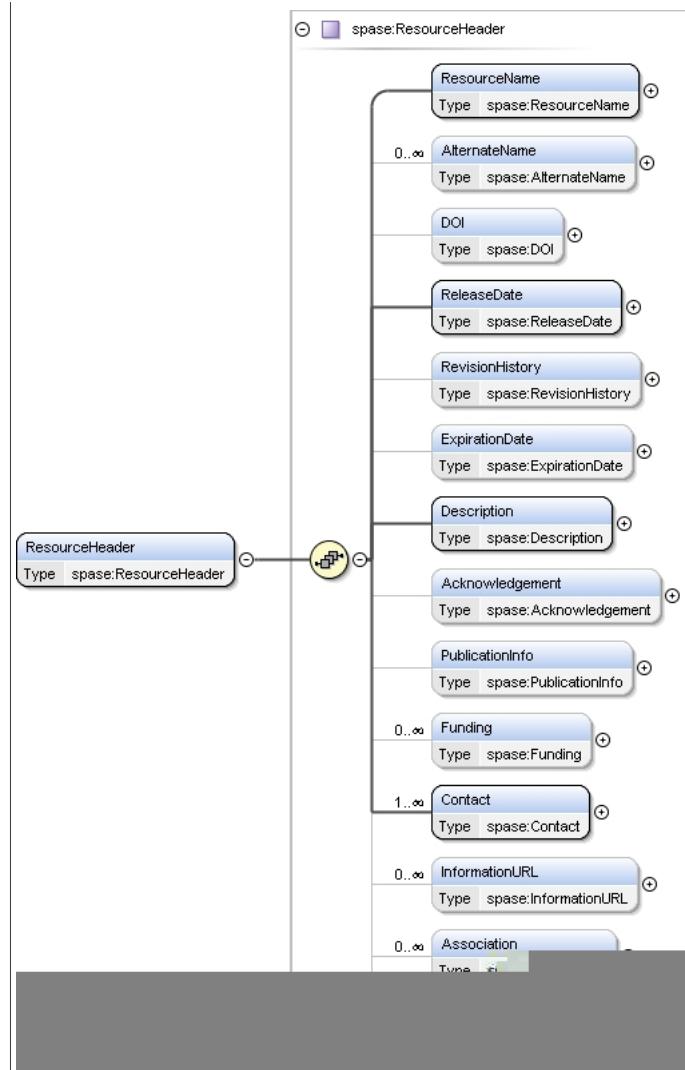
### Element spase:Document / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ResourceID
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<code>&lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Document / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:ResourceHeader</code>						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	<code>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</code>						
Children	<code>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</code>						
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>						
Source	<code>&lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;</code>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:Document / spase:AccessInformation

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spase {         class AccessInformation {             RepositoryID             Availability             AccessRights             &lt; -- AccessURL             Format             Encoding         }     }     class AccessInformation {         &lt; -- spase::AccessInformation     }     AccessInformation --&gt; AccessInformation : 1..infinity   </pre>						
Type	spase:AccessInformation						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	spase:RepositoryID , spase:Availability{0,1} , spase:AccessRights{0,1} , spase:AccessURL+ , spase:Format , spase:Encoding{0,1} , spase:DataExtent{0,1} , spase:Acknowledgement{0,1}						
Children	spase:AccessRights, spase:AccessURL, spase:Acknowledgement, spase:Availability, spase:DataExtent, spase:Encoding, spase:Format, spase:RepositoryID						
Instance	<spase:AccessInformation xmlns:spase="http://www.spase-group.org/data/schema">   <spase:RepositoryID>{1,1}</spase:RepositoryID>   <spase:Availability>{0,1}</spase:Availability>   <spase:AccessRights>{0,1}</spase:AccessRights>   <spase:AccessURL>{1,unbounded}</spase:AccessURL>   <spase:Format>{1,1}</spase:Format>   <spase:Encoding>{0,1}</spase:Encoding>   <spase:DataExtent>{0,1}</spase:DataExtent>   <spase:Acknowledgement>{0,1}</spase:Acknowledgement> </spase:AccessInformation>						
Source	<xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Document / spase:Keyword

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Keyword     class spase {         class Keyword     }     Keyword --&gt; spase::Keyword : 0..1   </pre>						
Type	spase:Keyword						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:Document / spase:DocumentType

Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class DocumentType     class spase:DocumentType {         &lt;&lt;Type&gt;&gt;     }     DocumentType &lt; -- spase:DocumentType   </pre>							
Type	spase:DocumentType							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple							
minOccurs:	1							
maxOccurs:	1							
Facets	enumeration	Other Not classified with more specific terms. The context of its usage may be described in related text.						
	enumeration	Poster A set of information arranged on a single page or sheet, typically in a large format.						
	enumeration	Presentation A set of information that is used when communicating to an audience.						
	enumeration	Report A document which describes the findings of some individual or group.						
	enumeration	Specification A detailed description of the requirements and other aspects of an object or component that may be used to develop an implementation.						
	enumeration	TechnicalNote A document summarizing the performance and other technical characteristics of a product, machine, component, subsystem or software in sufficient detail to be used by an engineer or researcher.						
	enumeration	WhitePaper An authoritative report giving information or proposals on an issue.						
Source	<xsd:element name="DocumentType" type="spase:DocumentType" minOccurs="1" maxOccurs="1"/>							
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd							

### Element spase:Document / spase:MIMETYPE

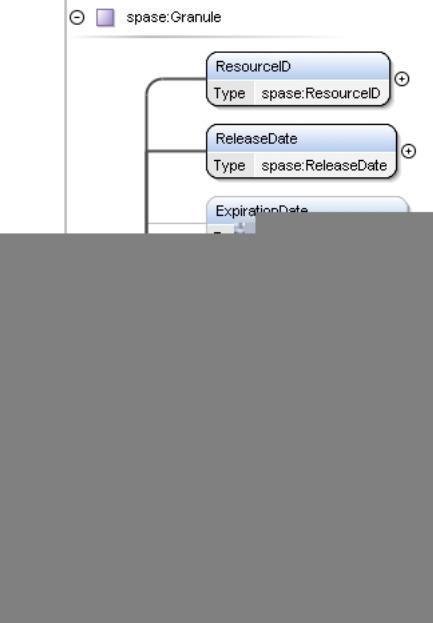
Namespace	http://www.spase-group.org/data/schema							
Diagram	<pre> classDiagram     class MIMETYPE     class spase:MIMETYPE {         &lt;&lt;Type&gt;&gt;     }     MIMETYPE &lt; -- spase:MIMETYPE   </pre>							
Type	spase:MIMETYPE							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple							
minOccurs:	1							
maxOccurs:	1							
Source	<xsd:element name="MIMETYPE" type="spase:MIMETYPE" minOccurs="1" maxOccurs="1"/>							
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd							

### Element spase:Document / spase:InputResourceID

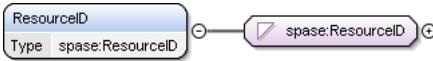
Namespace	http://www.spase-group.org/data/schema					
Diagram	<pre> classDiagram     class InputResourceID     class spase:InputResourceID {         &lt;&lt;Type&gt;&gt;     }     InputResourceID &lt; -- spase:InputResourceID   </pre>					
Type	spase:InputResourceID					
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> </table>		content:	simple	minOccurs:	0
content:	simple					
minOccurs:	0					

	maxOccurs:	unbounded
Source	<xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:Spase / spase:Granule

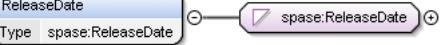
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Granule
Properties	content: complex
Model	spase:ResourceID , spase:ReleaseDate , spase:ExpirationDate{0,1} , spase:ParentID , spase:PriorID* , spase:StartDate , spase:StopDate , spase:Source+
Children	spase:ExpirationDate, spase:ParentID, spase:PriorID, spase:ReleaseDate, spase:ResourceID, spase:Source, spase:StartDate, spase:StopDate
Instance	<pre>&lt;spase:Granule xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:ParentID&gt;{1,1}&lt;/spase:ParentID&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt;   &lt;spase:StartDate&gt;{1,1}&lt;/spase:StartDate&gt;   &lt;spase:StopDate&gt;{1,1}&lt;/spase:StopDate&gt;   &lt;spase:Source&gt;{1,unbounded}&lt;/spase:Source&gt; &lt;/spase:Granule&gt;</pre>
Source	<xsd:element name="Granule" type="spase:Granule"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Granule / spase:ResourceID

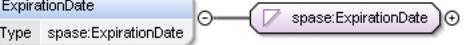
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ResourceID
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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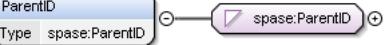
**Element spase:Granule / spase:ReleaseDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ReleaseDate
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

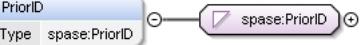
**Element spase:Granule / spase:ExpirationDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ExpirationDate
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ExpirationDate" type="spase:ExpirationDate" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

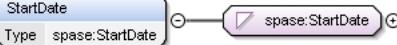
**Element spase:Granule / spase:ParentID**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ParentID
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ParentID" type="spase:ParentID" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Granule / spase:PriorID**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:PriorID
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="PriorID" type="spase:PriorID" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

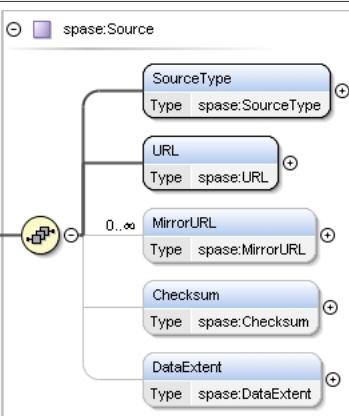
**Element spase:Granule / spase:StartDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:StartDate
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<code>&lt;xsd:element name="StartDate" type="spase:StartDate" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Granule / spase:StopDate**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:StopDate
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<code>&lt;xsd:element name="StopDate" type="spase:StopDate" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Granule / spase:Source**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Source
Properties	content: complex minOccurs: 1 maxOccurs: unbounded
Model	spase:SourceType , spase:URL , spase:MirrorURL* , spase:Checksum{0,1} , spase:DataExtent{0,1}
Children	spase:Checksum, spase:DataExtent, spase:MirrorURL, spase:SourceType, spase:URL
Instance	<code>&lt;spase:Source xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:SourceType&gt;{1,1}&lt;/spase:SourceType&gt;   &lt;spase:URL&gt;{1,1}&lt;/spase:URL&gt;   &lt;spase:MirrorURL&gt;{0,unbounded}&lt;/spase:MirrorURL&gt;   &lt;spase:Checksum&gt;{0,1}&lt;/spase:Checksum&gt;   &lt;spase:DataExtent&gt;{0,1}&lt;/spase:DataExtent&gt; &lt;/spase:Source&gt;</code>

Source	<code>&lt;xsd:element name="Source" type="spase:Source" minOccurs="1" maxOccurs="unbounded" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Source / spase:SourceType

Namespace	http://www.spase-group.org/data/schema											
Diagram	A UML class diagram fragment showing a generalization relationship. A blue-bordered box labeled 'SourceType' contains the text 'Type spase:SourceType'. An association line with open circles at both ends connects it to another blue-bordered box labeled 'spase:SourceType'.											
Type	spase:SourceType											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> <td></td> </tr> <tr> <td>minOccurs:</td> <td>1</td> <td></td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> <td></td> </tr> </table>			content:	simple		minOccurs:	1		maxOccurs:	1	
content:	simple											
minOccurs:	1											
maxOccurs:	1											
Facets	enumeration	Ancillary	A complementary item which can be subordinate, subsidiary, auxiliary, supplementary to the primary item.									
	enumeration	Browse	A representation of an image which is suitable to reveal most or all of the details of the image.									
	enumeration	Data	A collection of organized information, usually the results of experience, observation or experiment, or a set of premises. This may consist of numbers, words, or images, particularly as measurements or observations of a set of variables.									
	enumeration	Layout	The structured arrangement of items in a collection.									
	enumeration	Thumbnail	A small representation of an image which is suitable to infer what the full-sized imaged is like.									
Source	<code>&lt;xsd:element name="SourceType" type="spase:SourceType" minOccurs="1" maxOccurs="1" /&gt;</code>											
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd											

### Element spase:Source / spase:URL

Namespace	http://www.spase-group.org/data/schema											
Diagram	A UML class diagram fragment showing a generalization relationship. A blue-bordered box labeled 'URL' contains the text 'Type spase:URL'. An association line with open circles at both ends connects it to another blue-bordered box labeled 'spase:URL'.											
Type	spase:URL											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> <td></td> </tr> <tr> <td>minOccurs:</td> <td>1</td> <td></td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> <td></td> </tr> </table>			content:	simple		minOccurs:	1		maxOccurs:	1	
content:	simple											
minOccurs:	1											
maxOccurs:	1											
Source	<code>&lt;xsd:element name="URL" type="spase:URL" minOccurs="1" maxOccurs="1" /&gt;</code>											
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd											

### Element spase:Source / spase:MirrorURL

Namespace	http://www.spase-group.org/data/schema											
Diagram	A UML class diagram fragment showing a generalization relationship. A blue-bordered box labeled 'MirrorURL' contains the text 'Type spase:MirrorURL'. An association line with open circles at both ends connects it to another blue-bordered box labeled 'spase:MirrorURL'.											
Type	spase:MirrorURL											
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> <td></td> </tr> <tr> <td>minOccurs:</td> <td>0</td> <td></td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> <td></td> </tr> </table>			content:	simple		minOccurs:	0		maxOccurs:	unbounded	
content:	simple											
minOccurs:	0											
maxOccurs:	unbounded											

Source	<code>&lt;xsd:element name="MirrorURL" type="spase:MirrorURL" minOccurs="0" maxOccurs="unbounded" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Source / spase:Checksum

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Checksum {         &lt;&lt;spase:Checksum&gt;&gt;     }     class HashValue {         &lt;&lt;spase:HashValue&gt;&gt;     }     class HashFunction {         &lt;&lt;spase:HashFunction&gt;&gt;     }      Checksum "0..1" *-- "0..1" HashValue :      Checksum "0..1" *-- "0..1" HashFunction :   </pre>						
Type	spase:Checksum						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:HashValue , spase:HashFunction						
Children	spase:HashFunction, spase:HashValue						
Instance	<code>&lt;spase:Checksum xmlns:spase="http://www.spase-group.org/data/schema"&gt;</code> <code>  &lt;spase:HashValue&gt;{1,1}&lt;/spase:HashValue&gt;</code> <code>  &lt;spase:HashFunction&gt;{1,1}&lt;/spase:HashFunction&gt;</code> <code>&lt;/spase:Checksum&gt;</code>						
Source	<code>&lt;xsd:element name="Checksum" type="spase:Checksum" minOccurs="0" maxOccurs="1" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Checksum / spase:HashValue

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class HashValue {         &lt;&lt;spase:HashValue&gt;&gt;     }     class Checksum {         &lt;&lt;spase:Checksum&gt;&gt;     }      HashValue "0..1" --&gt; "0..1" Checksum :   </pre>						
Type	spase:HashValue						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="HashValue" type="spase:HashValue" minOccurs="1" maxOccurs="1" /&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Checksum / spase:HashFunction

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class HashFunction {         &lt;&lt;spase:HashFunction&gt;&gt;     }     class Checksum {         &lt;&lt;spase:Checksum&gt;&gt;     }      HashFunction "0..1" --&gt; "0..1" Checksum :   </pre>						
Type	spase:HashFunction						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Facets	<table border="1"> <tr> <td>enumeration</td> <td>MD5</td> <td>Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.</td> </tr> <tr> <td>enumeration</td> <td>SHA1</td> <td>Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing</td> </tr> </table>	enumeration	MD5	Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.	enumeration	SHA1	Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing
enumeration	MD5	Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.					
enumeration	SHA1	Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing					

		Standard (FIPS) publication 180-1.
	enumeration	SHA256
		Secure Hash Algorithm (SHA), a 256-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.
Source	<xsd:element name="HashFunction" type="spase:HashFunction" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Source / spase:DataExtent

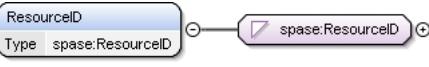
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:DataExtent						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	1
content:	complex						
minOccurs:	0						
maxOccurs:	1						
Model	spase:Quantity , spase:Units{0,1} , spase:Per{0,1}						
Children	spase:Per, spase:Quantity, spase:Units						
Instance	<pre>&lt;spase:DataExtent xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Quantity&gt;{1,1}&lt;/spase:Quantity&gt;   &lt;spase:Units&gt;{0,1}&lt;/spase:Units&gt;   &lt;spase:Per&gt;{0,1}&lt;/spase:Per&gt; &lt;/spase:DataExtent&gt;</pre>						
Source	<xsd:element name="DataExtent" type="spase:DataExtent" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Spase / spase:Instrument

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class spase:Instrument {         ResourceID         Type spase:ResourceID     }   </pre> <p>The diagram shows a UML class named "spase:Instrument". It has two attributes: "ResourceID" and "Type spase:ResourceID". The "Type" attribute is annotated with "spase:ResourceID". There is also a small icon of a person next to the "Type" attribute.</p>

Type	spase:Instrument
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:InstrumentType+ , spase:InvestigationName+ , spase:OperatingSpan{0,1} , spase:ObservatoryID , spase:Caveats{0,1} , spase:Extension*
Children	spase:Caveats, spase:Extension, spase:InstrumentType, spase:InvestigationName, spase:ObservatoryID, spase:OperatingSpan, spase:ResourceHeader, spase:ResourceID
Instance	<pre>&lt;spase:Instrument xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;   &lt;spase:InstrumentType&gt;{1,unbounded}&lt;/spase:InstrumentType&gt;   &lt;spase:InvestigationName&gt;{1,unbounded}&lt;/spase:InvestigationName&gt;   &lt;spase:OperatingSpan&gt;{0,1}&lt;/spase:OperatingSpan&gt;   &lt;spase:ObservatoryID&gt;{1,1}&lt;/spase:ObservatoryID&gt;   &lt;spase:Caveats&gt;{0,1}&lt;/spase:Caveats&gt;   &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Instrument&gt;</pre>
Source	<code>&lt;xsd:element name="Instrument" type="spase:Instrument"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

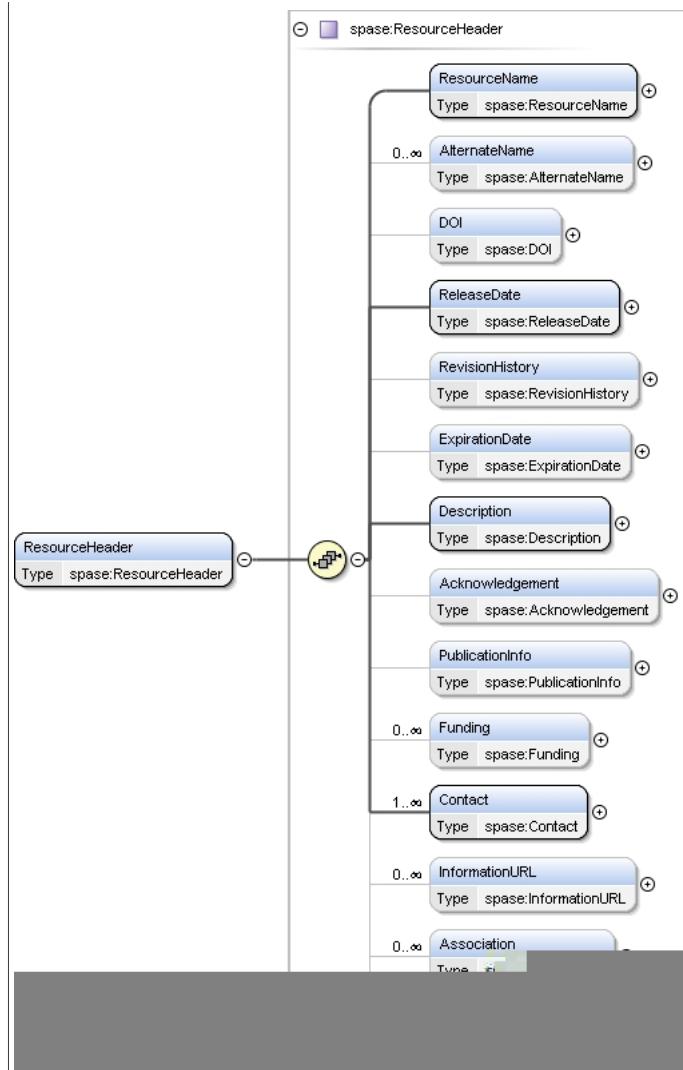
### Element spase:Instrument / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ResourceID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<code>&lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Instrument / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:ResourceHeader</code>						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	<code>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</code>						
Children	<code>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</code>						
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>						
Source	<code>&lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;</code>						

Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

**Element spase:Instrument / spase:InstrumentType**

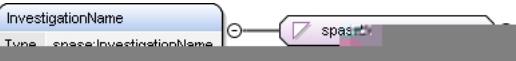
Namespace	http://www.spase-group.org/data/schema																																																	
Diagram																																																		
Type	spase:InstrumentType																																																	
Properties	content: simple minOccurs: 1 maxOccurs: unbounded																																																	
Facets	<table> <tr> <td>enumeration</td> <td>Antenna</td> <td>A sensor used to measure electric potential.</td> </tr> <tr> <td>enumeration</td> <td>Channeltron</td> <td>An instrument that detects electrons, ions, and UV-radiation, according to the principle of a secondary emission multiplier. It is typically used in electron spectroscopy and mass spectrometry.</td> </tr> <tr> <td>enumeration</td> <td>Coronograph</td> <td>An instrument which can image things very close to the Sun by using a disk to block the Sun's bright surface which reveals the faint solar corona and other celestial objects.</td> </tr> <tr> <td>enumeration</td> <td>DoubleSphere</td> <td>A dipole antenna of which the active (sensor) elements are small spheres located at the ends of two wires deployed in the equatorial plane, on opposite sides of a spinning spacecraft.</td> </tr> <tr> <td>enumeration</td> <td>DustDetector</td> <td>An instrument which determines the mass and speed of ambient dust particles.</td> </tr> <tr> <td>enumeration</td> <td>ElectronDriftInstrument</td> <td>An active experiment to measure the electron drift velocity based on sensing the displacement of a weak beam of electrons after one gyration in the ambient magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>ElectrostaticAnalyser</td> <td>An instrument which uses charged plates to analyze the mass, charge and kinetic energies of charged particles which enter the instrument.</td> </tr> <tr> <td>enumeration</td> <td>EnergeticParticleInstrument</td> <td>An instrument that measures fluxes of charged particles as a function of time, direction of motion, mass, charge and/or species.</td> </tr> <tr> <td>enumeration</td> <td>FaradayCup</td> <td>An instrument consisting of an electrode from which electrical current is measured while a charged particle beam (electrons or ions) impinges on it. Used to determine energy spectrum and sometimes ion composition of the impinging particles.</td> </tr> <tr> <td>enumeration</td> <td>FluxFeedback</td> <td>A search coil whose bandwidth and signal/noise ratio are increased by the application of negative feedback at the sensor (flux) level by driving a collocated coil with a signal from the preamplifier.</td> </tr> <tr> <td>enumeration</td> <td>FourierTransformSpectrograph</td> <td>An instrument that determines the spectra of a radiative source, using time-domain measurements and a Fourier transform.</td> </tr> <tr> <td>enumeration</td> <td>GeigerMuellerTube</td> <td></td> </tr> <tr> <td>enumeration</td> <td>Imager</td> <td>An instrument which samples the radiation from an area at one or more spectral ranges emitted or reflected by an object.</td> </tr> <tr> <td>enumeration</td> <td>ImagingSpectrometer</td> <td>An instrument which is a multispectral scanner with a very large number of channels (64-256 channels) with very narrow band widths.</td> </tr> <tr> <td>enumeration</td> <td>Interferometer</td> <td>An instrument to study the properties of two or more waves from the pattern of interference created by their superposition.</td> </tr> <tr> <td>enumeration</td> <td>IonChamber</td> <td>A device in which the collected electrical charge from ionization in a gas-filled cavity is taken to be the proportion to some parameter</td> </tr> </table>		enumeration	Antenna	A sensor used to measure electric potential.	enumeration	Channeltron	An instrument that detects electrons, ions, and UV-radiation, according to the principle of a secondary emission multiplier. 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		(e.g. dose or exposure) of radiation field
enumeration	<code>IonDrift</code>	A device which measures the current produced by the displacement of ambient ions on a grid, thereby allowing the determination of the ion trajectory and velocity.
enumeration	<code>IonGauge</code>	A device which measures low-pressure or vacuum neutral gas with pressures ranging from 10e-3 Torr to 10e?10 Torr. An ion gauge is an electronic amplifying vacuum tube consisting of three electrodes inside an evacuated glass envelope, with the filament being the cathode.
enumeration	<code>LangmuirProbe</code>	A monopole antenna associated with an instrument. The instrument applies a potential to the antenna which is swept to determine the voltage/current characteristic. This provides information about the plasma surrounding the probe and spacecraft.
enumeration	<code>LongWire</code>	A dipole antenna whose active (sensor) elements are two wires deployed in the equatorial plane on opposite sides of a spinning spacecraft, and whose length is several times greater than the spacecraft diameter.
enumeration	<code>Magnetograph</code>	A special type of magnetometer that records a time plot of the local magnetic field near the instrument; or a telescope capable of determining the magnetic field strength and/or direction on a distant object such as the Sun, using the Zeeman splitting or other spectral signatures of magnetization.
enumeration	<code>Magnetometer</code>	An instrument which measures the ambient magnetic field.
enumeration	<code>MassSpectrometer</code>	An instrument which distinguishes chemical species in terms of their different isotopic masses.
enumeration	<code>MicrochannelPlate</code>	An instrument used for the detection of elementary particles, ions, ultraviolet rays and soft X-rays constructed from very thin conductive glass capillaries.
enumeration	<code>MultispectralImager</code>	An instrument which captures images at multiple spectral ranges.
enumeration	<code>NeutralAtomImager</code>	An instrument which measures the quantity and properties of neutral particles over a range of angles. Measured properties can include mass and energy.
enumeration	<code>NeutralParticleDetector</code>	An instrument which measures the quantity and properties of neutral particles. Measured properties can include mass and plasma bulk densities.
enumeration	<code>ParticleCorrelator</code>	An instrument which correlates particle flux to help identify wave/particle interactions.
enumeration	<code>ParticleDetector</code>	An instrument which detects particle flux!!!
enumeration	<code>Photometer</code>	An instrument which measures the strength of electromagnetic radiation within a spectral band which can range from ultraviolet to infrared and includes the visible spectrum.
enumeration	<code>PhotomultiplierTube</code>	A vacuum phototube that is an extremely sensitive detector of light in the ultraviolet, visible, and near-infrared ranges of the electromagnetic spectrum.
enumeration	<code>Photopolarimeter</code>	An instrument which measures the intensity and polarization or radiant energy. A photopolarimeter is a combination of a photometer and a polarimeter.
enumeration	<code>Platform</code>	A collection of components which can be positioned and oriented as a single unit. A platform may contain other platforms. For example, a spacecraft is a platform which may have components that can be articulated and are

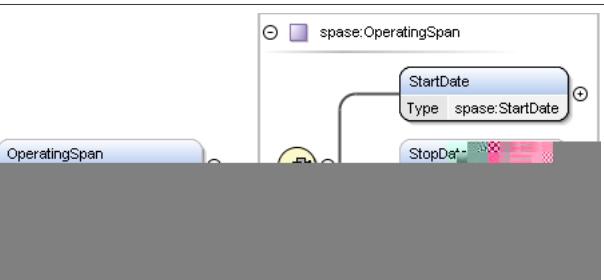
		also considered platforms.
enumeration	ProportionalCounter	An instrument which measures energy of ionization radiation based on interactions with a gas.
enumeration	QuadrисphericalAnalyser	An instrument used for the 3-D detection of plasma, energetic electrons and ions, and for positive-ion composition measurements.
enumeration	Radar	An instrument that uses directional properties of returned power to infer spatial and/or other characteristics of a remote object.
enumeration	Radiometer	An instrument for detecting or measuring radiant energy. Radiometers are commonly limited to infrared radiation.
enumeration	ResonanceSounder	A combination of a radio receiver and a pulsed transmitter used to study the plasma surrounding a spacecraft by identifying resonances or cut-offs (of the wave dispersion relation), whose frequencies are related to the ambient plasma density and magnetic field. When the transmitter is off it is essentially a high frequency-resolution spectral power receiver.
enumeration	RetardingPotentialAnalyser	An instrument which measures ion temperatures and ion concentrations using a planar ion trap.
enumeration	Riometer	An instrument which measure the signal strength in various directions of the galactic radio signals. Variations in these signals are influenced by solar flare activity and geomagnetic storm and substorm processes.
enumeration	ScintillationDetector	An instrument which detects flourescences of a material which is excited by high energy (ionizing) electromagnetic or charged particle radiation.
enumeration	SearchCoil	An instrument which measures the time variation of the magnetic flux threading a loop by measurement of the electric potential difference induced between the ends of the wire.
enumeration	SolidStateDetector	A detector of the charge carriers (electrons and holes) generated in semiconductors by energy deposited by gamma ray photons. Also known as a "semiconductor detector".
enumeration	Sounder	An instrument which measures the radiances from an object. A sounder may measure radiances at multiple spectral ranges.
enumeration	SpacecraftPotentialControl	An instrument to control the electric potential of a spacecraft with respect to the ambient plasma by emitting a variable current of positive ions.
enumeration	SpectralPowerReceiver	A radio receiver which determines the power spectral density of the electric or magnetic field, or both, at one or more frequencies.
enumeration	Spectrometer	An instrument that measures the component wavelengths of light (or other electromagnetic radiation) by splitting the light up into its component wavelengths.
enumeration	TimeOfFlight	An instrument which measures the time it takes for a particle to travel between two detectors.
enumeration	Unspecified	A value which is not provided.
enumeration	WaveformReceiver	A radio receiver which outputs the value of one or more components of the electric and/or magnetic field as a function of time.
Source	<xsd:element name="InstrumentType" type="spase:InstrumentType" minOccurs="1" maxOccurs="unbounded" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

**Element spase:Instrument / spase:InvestigationName**

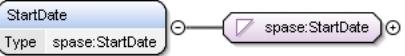
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:InvestigationName
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>
Source	<code>&lt;xsd:element name="InvestigationName" type="spase:InvestigationName" minOccurs="1" maxOccurs="unbounded"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Instrument / spase:OperatingSpan

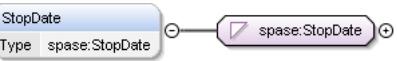
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:OperatingSpan
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Model	spase:StartDate , spase:StopDate{0,1} , spase:Note*
Children	spase:Note, spase:StartDate, spase:StopDate
Instance	<code>&lt;spase:OperatingSpan xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:StartDate&gt;{1,1}&lt;/spase:StartDate&gt;   &lt;spase:StopDate&gt;{0,1}&lt;/spase:StopDate&gt;   &lt;spase:Note&gt;{0,unbounded}&lt;/spase:Note&gt; &lt;/spase:OperatingSpan&gt;</code>
Source	<code>&lt;xsd:element name="OperatingSpan" type="spase:OperatingSpan" minOccurs="0" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:OperatingSpan / spase:StartDate

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:StartDate
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<code>&lt;xsd:element name="StartDate" type="spase:StartDate" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:OperatingSpan / spase:StopDate

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:StopDate
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="StopDate" type="spase:StopDate" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:OperatingSpan / spase:Note

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Note
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Source	<xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Instrument / spase:ObservatoryID

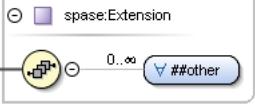
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ObservatoryID
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ObservatoryID" type="spase:ObservatoryID" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Instrument / spase:Caveats

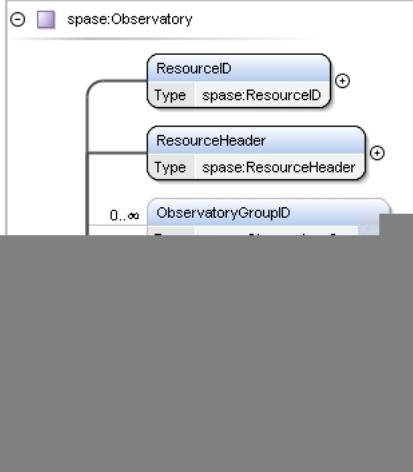
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Caveats
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Instrument / spase:Extension

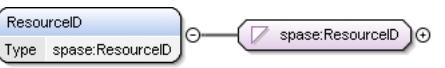
Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Extension
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Spase / spase:Observatory

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Observatory
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:ObservatoryGroupID* , spase:Location , spase:OperatingSpan+ , spase:Extension*
Children	spase:Extension, spase:Location, spase:ObservatoryGroupID, spase:OperatingSpan, spase:ResourceHeader, spase:ResourceID
Instance	<pre> &lt;spase:Observatory xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;   &lt;spase:ObservatoryGroupID&gt;{0,unbounded}&lt;/spase:ObservatoryGroupID&gt;   &lt;spase:Location&gt;{1,1}&lt;/spase:Location&gt;   &lt;spase:OperatingSpan&gt;{1,unbounded}&lt;/spase:OperatingSpan&gt;   &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Observatory&gt; </pre>
Source	<xsd:element name="Observatory" type="spase:Observatory"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Observatory / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ResourceID
Properties	<p>content: simple</p> <p>minOccurs: 1</p>

	maxOccurs:	1
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:Observatory / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ResourceHeader {         &lt;&lt;spase:ResourceHeader&gt;&gt;     }     class ResourceName {         &lt;&lt;spase:ResourceName&gt;&gt;     }     class AlternateName {         &lt;&lt;spase:AlternateName&gt;&gt;     }     class DOI {         &lt;&lt;spase:DOI&gt;&gt;     }     class ReleaseDate {         &lt;&lt;spase:ReleaseDate&gt;&gt;     }     class RevisionHistory {         &lt;&lt;spase:RevisionHistory&gt;&gt;     }     class ExpirationDate {         &lt;&lt;spase:ExpirationDate&gt;&gt;     }     class Description {         &lt;&lt;spase&gt;Description&gt;&gt;     }     class Acknowledgement {         &lt;&lt;spase:Acknowledgement&gt;&gt;     }     class PublicationInfo {         &lt;&lt;spase:PublicationInfo&gt;&gt;     }     class Funding {         &lt;&lt;spase:Funding&gt;&gt;     }     class Contact {         &lt;&lt;spase&gt;Contact&gt;&gt;     }     class InformationURL {         &lt;&lt;spase:InformationURL&gt;&gt;     }     class Association {         &lt;&lt;spase:Association&gt;&gt;     }      ResourceHeader "0..1" -- "1" ResourceName     ResourceHeader "0..1" -- "1" AlternateName     ResourceHeader "0..1" -- "1" DOI     ResourceHeader "0..1" -- "1" ReleaseDate     ResourceHeader "0..1" -- "1" RevisionHistory     ResourceHeader "0..1" -- "1" ExpirationDate     ResourceHeader "0..1" -- "1" Description     ResourceHeader "0..1" -- "1" Acknowledgement     ResourceHeader "0..1" -- "1" PublicationInfo     ResourceHeader "0..1" -- "1" Funding     ResourceHeader "1..1" -- "1" Contact     ResourceHeader "0..1" -- "1" InformationURL     ResourceHeader "0..1" -- "1" Association   </pre>						
Type	spase:ResourceHeader						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	spase:ResourceName ,						

	<pre> &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt; &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt; &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt; &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt; &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt; &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt; &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt; </pre>
Source	<xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Observatory / spase:ObservatoryGroupID

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spaseObservatoryGroupID {         &lt;&lt;ObservatoryGroupID&gt;&gt;         &lt;&lt;Type&gt;&gt; spaseObservatoryGroupID     }     spaseObservatoryGroupID "1..1" --&gt; "1..1" spaseObservatoryGroupID : ObservatoryGroupID </pre>						
Type	spase:ObservatoryGroupID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="ObservatoryGroupID" type="spase:ObservatoryGroupID" minOccurs="0" maxOccurs="unbounded" />						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Observatory / spase:Location

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spaseLocation {         &lt;&lt;spase:Location&gt;&gt;         &lt;&lt;Type&gt;&gt; spaseLocation     }     spaseLocation "1..1" --&gt; "1..1" spaseObservatoryRegion : ObservatoryRegion     spaseLocation "1..1" --&gt; "1..1" spaseCoordinateSystemName : CoordinateSystemName </pre>						
Type	spase:Location						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	spase:ObservatoryRegion+ , spase:CoordinateSystemName{0,1} , spase:Latitude{0,1} , spase:Longitude{0,1} , spase:Elevation{0,1}						
Children	spase:CoordinateSystemName, spase:Elevation, spase:Latitude, spase:Longitude, spase:ObservatoryRegion						
Instance	<pre> &lt;spase:Location xmlns:spase="http://www.spase-group.org/data/schema"&gt;     &lt;spase:ObservatoryRegion&gt;{1,unbounded}&lt;/spase:ObservatoryRegion&gt;     &lt;spase:CoordinateSystemName&gt;{0,1}&lt;/spase:CoordinateSystemName&gt;     &lt;spase:Latitude&gt;{0,1}&lt;/spase:Latitude&gt;     &lt;spase:Longitude&gt;{0,1}&lt;/spase:Longitude&gt;     &lt;spase:Elevation&gt;{0,1}&lt;/spase:Elevation&gt; &lt;/spase:Location&gt; </pre>						
Source	<xsd:element name="Location" type="spase:Location" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Location / spase:ObservatoryRegion

Namespace	http://www.spase-group.org/data/schema																																											
Diagram	<pre> classDiagram     class ObservatoryRegion {         &lt;&lt;spase:Region&gt;&gt;     }     class spase:Region     ObservatoryRegion &lt; -- spase:Region   </pre>																																											
Type	spase:Region																																											
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>																																											
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Asteroid</td> <td>A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.</td> </tr> <tr> <td>enumeration</td> <td>Comet</td> <td>A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.</td> </tr> <tr> <td>enumeration</td> <td>Earth</td> <td>The third planet from the sun in our solar system.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosheath</td> <td>The region between the bow shock and the magnetopause, characterized by very turbulent plasma.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere</td> <td>The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Magnetotail</td> <td>The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (<math>X &gt; -10Re</math>).</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Main</td> <td>The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Plasmasphere</td> <td>The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Polar</td> <td>The region near the pole of a body. 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For the Earth, this altitude is 2000 km.</td> </tr> <tr> <td>enumeration</td> <td>Earth.NearSurface.Atmosphere</td> <td>The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.</td> </tr> </table>		enumeration	Asteroid	A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.	enumeration	Comet	A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.	enumeration	Earth	The third planet from the sun in our solar system.	enumeration	Earth.Magnetosheath	The region between the bow shock and the magnetopause, characterized by very turbulent plasma.	enumeration	Earth.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.	enumeration	Earth.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. 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enumeration	Earth.NearSurface.AuroralRegion	The region in the atmosphere where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	Earth.NearSurface.EquatorialRegion	The region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	Earth.NearSurface.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.IonosphereRegion	The Region of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	Earth.NearSurface.IonosphereRegion	A Region of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.
enumeration	Earth.NearSurface.IonosphereRegion	A Region that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	Earth.NearSurface.IonosphereRegion	The region at the upper most areas of the ionosphere.
enumeration	Earth.NearSurface.Mesosphere	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	Earth.NearSurface.MidLatitudeRegion	Considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	Earth.NearSurface.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Earth.NearSurface.PolarCap	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.
enumeration	Earth.NearSurface.SouthAtlanticAnomalyRegion	The region where Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.
enumeration	Earth.NearSurface.Stratosphere	The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
enumeration	Earth.NearSurface.SubAuroralRegion	Considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending

		from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.
enumeration	Earth.NearSurface.Thermosphere	The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
enumeration	Earth.NearSurface.Troposphere	The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
enumeration	Earth.Surface	The outermost area of a solid object.
enumeration	Heliosphere	The solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.
enumeration	Heliosphere.Heliosheath	The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.
enumeration	Heliosphere.Inner	The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.
enumeration	Heliosphere.NearEarth	The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.
enumeration	Heliosphere.Outer	The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.
enumeration	Heliosphere.Remote1AU	A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.
enumeration	Interstellar	The region between stars outside of the star's heliopause.
enumeration	Jupiter	The fifth planet from the sun in our solar system.
enumeration	Jupiter.Callisto	A second largest moon of Jupiter and the third-largest moon in the solar system.
enumeration	Jupiter.Europa	The sixth-closest round moon of Jupiter.
enumeration	Jupiter.Ganymede	The biggest moon of Jupiter and in the solar system.
enumeration	Jupiter.Io	The innermost of the four round moons of the planet Jupiter.
enumeration	Jupiter.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Jupiter.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Jupiter.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Jupiter.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude

		drop in plasma density.
enumeration	Jupiter.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Jupiter.Magnetosphere.RadiationBelt	Region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Jupiter.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars	The forth planet from the sun in our solar system.
enumeration	Mars.Deimos	
enumeration	Mars.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mars.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mars.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mars.Magnetosphere.Plasmasphere	Region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mars.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mars.Magnetosphere.RadiationBelt	Region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mars.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars.Phobos	The larger and inner most moon of Mars.
enumeration	Mercury	The first planet from the sun in our solar system.
enumeration	Mercury.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mercury.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards

		by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mercury.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mercury.Magnetosphere.Plasmasphere	<b>Plasmasphere</b> of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mercury.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mercury.Magnetosphere.RadiationBelt	<b>RadiationBelt</b> within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mercury.Magnetosphere.RingCurrent	<b>RingCurrent</b> the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Neptune	The seventh planet from the sun in our solar system.
enumeration	Pluto	The ninth (sub)planet from the sun in our solar system.
enumeration	Saturn	The sixth planet from the sun in our solar system.
enumeration	Saturn.Dione	The forth-largest moon of Saturn.
enumeration	Saturn.Enceladus	The sixth-largest moon of Saturn. It is currently endogenously active. The smallest known body in the Solar System that is geologically active today.
enumeration	Saturn.Iapetus	The third-largest moon of Saturn and the eleventh-largest in the Solar System.
enumeration	Saturn.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Saturn.Magnetosphere.Magnetotail	<b>Magnetotail</b> region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Saturn.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Saturn.Magnetosphere.Plasmasphere	<b>Plasmasphere</b> of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Saturn.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Saturn.Magnetosphere.RadiationBelt	<b>RadiationBelt</b> within a magnetosphere where high-energy

		particles could potentially be trapped in a magnetic field.
enumeration	Saturn.Magnetosphere.RingCurrent	the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Saturn.Mimas	The smallest and least massive of the round moons of Saturn.
enumeration	Saturn.Rhea	The second-largest moon of Saturn and the ninth-largest moon in the Solar System.
enumeration	Saturn.Tethys	The third largest moon of Saturn.
enumeration	Saturn.Titan	The largest moon of Saturn and the second-largest moon in the Solar System,
enumeration	Sun	The star upon which our solar system is centered.
enumeration	Sun.Chromosphere	The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.
enumeration	Sun.Corona	The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above $10^5$ K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.
enumeration	Sun.Interior	The region inside the body which is not visible from outside the body.
enumeration	Sun.Photosphere	The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.
enumeration	Sun.TransitionRegion	A very narrow (<100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.
enumeration	Uranus	The eighth planet from the sun in our solar system.
enumeration	Uranus.Ariel	The fourth-largest moon of Uranus.
enumeration	Uranus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Uranus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Uranus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Uranus.Magnetosphere.Plasmasphere	of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Uranus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.

enumeration	Uranus.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Uranus.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Uranus.Miranda	The smallest and innermost round moon of Uranus.
enumeration	Uranus.Oberon	The second-largest and second most massive moon of Uranus, and the ninth most massive moon in the Solar System.
enumeration	Uranus.Puck	The largest inner spherical moon of Uranus.
enumeration	Uranus.Titania	The largest moon of Uranus and the eighth largest moon in the Solar System.
enumeration	Uranus.Umbriel	The third largest and fourth most massive moon of Uranus.
enumeration	Venus	The second planet from the sun in our solar system.
enumeration	Venus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Venus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Venus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Venus.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Venus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Venus.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Venus.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
Source	<xsd:element name="ObservatoryRegion" type="spase:Region" minOccurs="1" maxOccurs="unbounded" />	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Element spase:Location / spase:CoordinateSystemName

Namespace	http://www.spase-group.org/data/schema	
Diagram	<pre> classDiagram     class CoordinateSystemName     class spase::CoordinateSystemName     CoordinateSystemName "1" --&gt; "1" spase::CoordinateSystemName   </pre>	
Type	spase:CoordinateSystemName	
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>	
Facets	enumeration CGM enumeration CSO enumeration Carrington enumeration DM enumeration ECD enumeration ECEF enumeration ENP enumeration GEI	<p>Corrected Geomagnetic - A coordinate system from a spatial point with GEO radial distance and geomagnetic latitude and longitude, follow the epoch-appropriate IGRF/DGRF model field vector through to the point where the field line crosses the geomagnetic dipole equatorial plane. Then trace the dipole magnetic field vector Earthward from that point on the equatorial plane, in the same hemisphere as the original point, until the initial radial distance is reached. Designate the dipole latitude and longitude at that point as the CGM latitude and longitude of the original point. See &lt;<a href="http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html">http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html</a>&gt;</p> <p>Corrected Solar Orbital - A coordinate system related to Earth where X is anti-sunward, Y along the orbital velocity direction.</p> <p>A coordinate system which is centered at the Sun and is "fixed" with respect to the synodic rotation rate; the mean synodic value is about 27.2753 days. The Astronomical Almanac gives a value for Carrington longitude of 349.03 degrees at 0000 UT on 1 January 1995.</p> <p>Dipole Meridian - A coordinate system centered at the observation point. Z axis is parallel to the Earth's dipole axis, positive northward. X is in the plane defined by Z and the line linking the observation point with the Earth's center. Y is positive eastward. See &lt;<a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>&gt;</p> <p>Eccentric Dipole (ECD) coordinate system that aligns with a dipole whose origin and orientation may be different from the physical center and spin axis of the containing body. The IGRF-12 coefficients for 2015 are used to determine the origin for the earth. The 2015 positions are North dip pole: latitude: 86.29, longitude -160.06. South dip pole latitude: -64.28, longitude: 136.59, North geometric pole latitude: 80.37, longitude: -72.63, South geomagnetic pole latitude: -80.37, longitude: 107.37ECD is defined in doi:10.1186/s40623-015-0228-9.</p> <p>The Earth-Centered, Earth-Fixed (ECEF) coordinate system has point (0,0,0) defined as the center of mass of the Earth. Its axes are aligned with the International Reference Pole (IRP) and International Reference Meridian (IRM). The x-axis intersects the sphere of the Earth at 0 degree latitude (Equator) and 0 degree longitude (Greenwich). The z-axis points north. The y-axis completes the right handed coordinate system.</p> <p>ENP (also called PEN) - The P vector component points northward, perpendicular to orbit plane which for a zero degree inclination orbit is parallel to Earth's spin axis. The E vector component is perpendicular to P and N and points earthward. The N component is perpendicular to P and E and is positive eastward.</p> <p>GEI Geocentric Equatorial Inertial - A coordinate system where the Z axis is along Earth's spin</p>

		vector, positive northward. X axis points towards the first point of Aries (from the Earth towards the Sun at the vernal equinox). See Russell, 1971. When the X axis is the direction of the mean vernal equinox of J2000, the coordinate system is also called GCI. Then the Z axis is also defined as being normal to the mean Earth equator of J2000.
enumeration	GEO	Geographic - geocentric corotating - A coordinate system where the Z axis is along Earth's spin vector, positive northward. X axis lies in Greenwich meridian, positive towards Greenwich. See Russell, 1971.
enumeration	GPHIO	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	GSE	Geocentric Solar Ecliptic - A coordinate system where the X axis is from Earth to Sun. Z axis is normal to the ecliptic, positive northward. See Russell, 1971.
enumeration	GSEQ	Geocentric Solar Equatorial - A coordinate system where the X axis is from Earth to Sun. Y axis is parallel to solar equatorial plane. Z axis is positive northward. See Russell, 1971
enumeration	GSM	Geocentric Solar Magnetospheric - A coordinate system where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the geomagnetic dipole axis. See Russell, 1971
enumeration	HAE	Heliocentric Aries Ecliptic - A coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as SE below. See Hapgood, 1992.
enumeration	HCC	Heliocentric Cartesian - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's x and y values, expressed either as physical distances or as fractions of the solar disk radius.
enumeration	HCI	Heliographic Carrington Inertial.
enumeration	HCR	Heliocentric Radial - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's distance rho from the Z axis [ $\rho = \sqrt{x^2 + y^2}$ ] and its phase angle psi measured counterclockwise from the +Y axis [psi = arctan (-y/x)]
enumeration	HEE	Heliocentric Earth Ecliptic - A coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis points from Sun to Earth. See Hapgood, 1992
enumeration	HEEQ	Heliocentric Earth Equatorial - A coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X axis is generally Earthward in the plane defined by the Z axis and the Sun-Earth direction. See Hapgood, 1992.
enumeration	HERTN	Helio-Ecliptic Radial Tangential Normal coordinate system. Typically centered at a spacecraft.

		The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the ecliptic rotational axis which is perpendicular to the primary axis. The Y axis (Normal) is defined as Z cross X.
enumeration	HG	Heliographic - A heliocentric rotating coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X, Y axes rotate with a 25.38 day period. The zero longitude (X axis) is defined as the longitude that passed through the ascending node of the solar equator on the ecliptic plane on 1 January, 1854 at 12 UT. See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	HGI	Heliographic Inertial - A heliocentric coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X axis is along the intersection line between solar equatorial and ecliptic planes. The X axis was positive at SE longitude of 74.367 deg on Jan 1, 1900. (See SE below.) See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	HGRTN	Heliocentric Radial Tangential Normal coordinate system (aka RTN). Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.
enumeration	HPC	Helio-projective Cartesian = A 3-D orthonormal (left-handed) coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the observer and the center of the solar disk, the standard representation of an (x,y) point on the solar disk is via the point's longitude angle [ $\arctan(x/d)$ ] and latitude angle [ $\arctan(y/d)$ ].
enumeration	HPR	Helio-projective Radial - A 3-D orthonormal (left-handed) coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the observer and the center of the solar disk, the standard representation for this system of an (x,y) point on the solar disk is via the point's latitude angle theta [= $\arctan(\sqrt{x^2 + y^2}/d)$ ] or equivalent declination parameter delta (= theta - 90 deg), and its phase angle psi as measured counter-clockwise from the +Y axis [psi = $\arctan(-y/x)$ ].
enumeration	HSM	Heliospheric Solar Magnetospheric - A coordinate system where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the geomagnetic dipole axis.
enumeration	J2000	An astronomical coordinate system which uses the mean equator and equinox of Julian date 2451545.0 TT (Terrestrial Time), or January 1, 2000, noon TT. (aka J2000) to define a celestial reference frame.
enumeration	JSM	Jovian Solar Magnetospheric - A coordinate

		system related to Jupiter where the X axis is from Jupiter to Sun, Z axis is northward in a plane containing the X axis and the Jovian dipole axis.
enumeration	JSO	Jovian Solar Orbital - A coordinate system related to Jupiter where X anti-sunward, Y along the orbital velocity direction.
enumeration	KSM	Kronian Solar Magnetospheric - A coordinate system related to Saturn where the X axis is anti-sunward, Z axis is northward in a plane containing the X axis and the Kronian dipole axis.
enumeration	KSO	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	LGM	Local Geomagnetic - A coordinate system used mainly for Earth surface or near Earth surface magnetic field data. X axis northward from observation point in a geographic meridian. Z axis downward towards Earth's center. In this system, H (total horizontal component) = $\sqrt{B_x^2 + B_y^2}$ and D (declination angle) = $\arctan(B_y/B_x)$
enumeration	MAG	Geomagnetic - geocentric. Z axis is parallel to the geomagnetic dipole axis, positive north. X is in the plane defined by the Z axis and the Earth's rotation axis. If N is a unit vector from the Earth's center to the north geographic pole, the signs of the X and Y axes are given by Y = N x Z, X = Y x Z.. See Russell, 1971, and <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>
enumeration	MFA	Magnetic Field Aligned - A coordinate system spacecraft-centered system with Z in the direction of the ambient magnetic field vector. X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>
enumeration	MSO	Mars/Mercury Solar Orbital A coordinate system related to Mars or Mercury. A coordinate system where, depending on the body (Mars or Mercury), X is anti-sunward, Y along the orbital velocity direction.
enumeration	RTN	Radial Tangential Normal. Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.
enumeration	SC	Spacecraft - A coordinate system defined by the spacecraft geometry and/or spin. Often has Z axis parallel to spacecraft spin vector. X and Y axes may or may not corotate with the spacecraft. See SR and SR2 below.
enumeration	SE	Solar Ecliptic - A heliocentric coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as HAE above. See <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a>
enumeration	SM	Solar Magnetic - A geocentric coordinate system where the Z axis is northward along Earth's dipole axis, X axis is in plane of z axis and Earth-Sun line, positive sunward. See Russell, 1971.
enumeration	SR	Spin Reference - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X and Y rotate with the spacecraft. See <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>

	enumeration	SR2	Spin Reference 2 - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
	enumeration	SSE	Spacecraft Solar Ecliptic - A coordinate system used for deep space spacecraft, for example Helios. - X axis from spacecraft to Sun. Z axis normal to ecliptic plane, positive northward. Note: Angle between normals to ecliptic and to Helios orbit plane ~ 0.25 deg.
	enumeration	SSE_L	Selenocentric Solar Ecliptic. The X axis points from the center of the Earth's moon to the sun, the Z axis is normal to the ecliptic plane, positive northward. And the Y axis completes the right-handed set of axes.
	enumeration	SpacecraftOrbitPlane	A coordinate system where X lies in the plane normal to and in the direction of motion of the spacecraft, Z is normal to this plane and Y completes the triad in a right-handed coordinate system.
	enumeration	TIIS	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
	enumeration	VSO	Venus Solar Orbital - A coordinate system related to Venus where X is anti-sunward, Y along the orbital velocity direction.
	enumeration	WGS84	The World Geodetic System (WGS) defines a reference frame for the earth, for use in geodesy and navigation. The WGS84 uses the zero meridian as defined by the Bureau International de l'Heure.
Source	<xsd:element name="CoordinateSystemName" type="spase:CoordinateSystemName" minOccurs="0" maxOccurs="1"/>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Element spase:Location / spase:Latitude

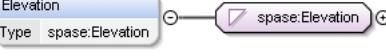
Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class Latitude {         &lt;&lt;Type spase:Latitude&gt;&gt;     }     Latitude "0..1" --&gt; "0..1" Latitude : spase:Latitude   </pre>
Type	spase:Latitude
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="Latitude" type="spase:Latitude" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Location / spase:Longitude

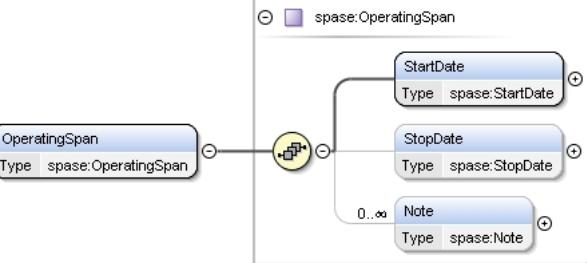
Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class Longitude {         &lt;&lt;Type spase:Longitude&gt;&gt;     }     Longitude "0..1" --&gt; "0..1" Longitude : spase:Longitude   </pre>
Type	spase:Longitude
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="Longitude" type="spase:Longitude" minOccurs="0" maxOccurs="1"/>

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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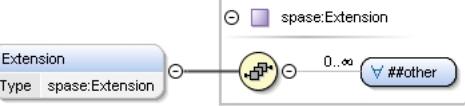
### Element spase:Location / spase:Elevation

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Elevation						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="Elevation" type="spase:Elevation" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Observatory / spase:OperatingSpan

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:OperatingSpan						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Model	spase:StartDate , spase:StopDate{0,1} , spase>Note*						
Children	spase>Note, spase:StartDate, spase:StopDate						
Instance	<spase:OperatingSpan xmlns:spase="http://www.spase-group.org/data/schema"><spase:StartDate>{1,1}</spase:StartDate><spase:StopDate>{0,1}</spase:StopDate><spase>Note>{0,unbounded}</spase>Note></spase:OperatingSpan>						
Source	<xsd:element name="OperatingSpan" type="spase:OperatingSpan" minOccurs="1" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Observatory / spase:Extension

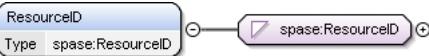
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Extension						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/>						

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Element spase:Spase / spase:Person

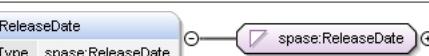
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Person
Properties	content: complex
Model	spase:ResourceID , spase:ReleaseDate{0,1} , spase:PersonName{0,1} , spase:OrganizationName , spase:Address{0,1} , spase:Email* , spase:PhoneNumber* , spase:FaxNumber{0,1} , spase:ORCIDIdentifier{0,1} , spase:Note{0,1} , spase:Extension*
Children	spase:Address, spase:Email, spase:Extension, spase:FaxNumber, spase:Note, spase:ORCIDIdentifier, spase:OrganizationName, spase:PersonName, spase:PhoneNumber, spase:ReleaseDate, spase:ResourceID
Instance	<pre>&lt;spase:Person xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ReleaseDate&gt;{0,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:PersonName&gt;{0,1}&lt;/spase:PersonName&gt;   &lt;spase:OrganizationName&gt;{1,1}&lt;/spase:OrganizationName&gt;   &lt;spase:Address&gt;{0,1}&lt;/spase:Address&gt;   &lt;spase:Email&gt;{0,unbounded}&lt;/spase:Email&gt;   &lt;spase:PhoneNumber&gt;{0,unbounded}&lt;/spase:PhoneNumber&gt;   &lt;spase:FaxNumber&gt;{0,1}&lt;/spase:FaxNumber&gt;   &lt;spase:ORCIDIdentifier&gt;{0,1}&lt;/spase:ORCIDIdentifier&gt;   &lt;spase:Note&gt;{0,1}&lt;/spase:Note&gt;   &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Person&gt;</pre>
Source	<xsd:element name="Person" type="spase:Person"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Person / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema
Diagram	

Type	spase:ResourceID
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

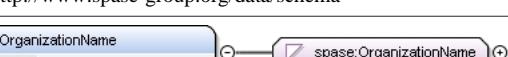
### Element spase:Person / spase:ReleaseDate

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ReleaseDate
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Person / spase:PersonName

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:PersonName
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="PersonName" type="spase:PersonName" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Person / spase:OrganizationName

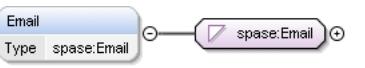
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:OrganizationName
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xsd:element name="OrganizationName" type="spase:OrganizationName" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Person / spase:Address

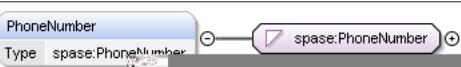
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Address

Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="Address" type="spase:Address" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

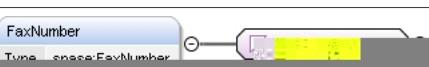
**Element spase:Person / spase:Email**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Email
Properties	content: simple minOccurs: 0 maxOccurs: unbounded
Source	<xsd:element name="Email" type="spase:Email" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

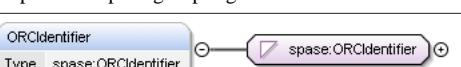
**Element spase:Person / spase:PhoneNumber**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:PhoneNumber
Properties	content: simple minOccurs: 0 maxOccurs: unbounded
Source	<xsd:element name="PhoneNumber" type="spase:PhoneNumber" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Person / spase:FaxNumber**

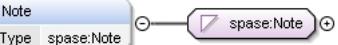
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:FaxNumber
Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xsd:element name="FaxNumber" type="spase:FaxNumber" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Person / spase:ORCIDIdentifier**

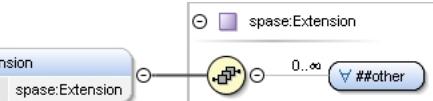
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ORCIDIdentifier
Properties	content: simple

	minOccurs:	0
	maxOccurs:	1
Source	<xsd:element name="ORCIdentifier" type="spase:ORCIdentifier" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

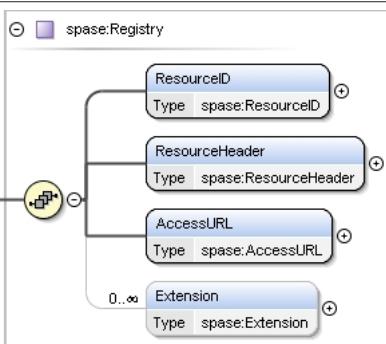
### Element spase:Person / spase:Note

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Note						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Person / spase:Extension

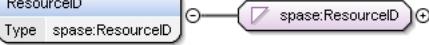
Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Extension						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Spase / spase:Registry

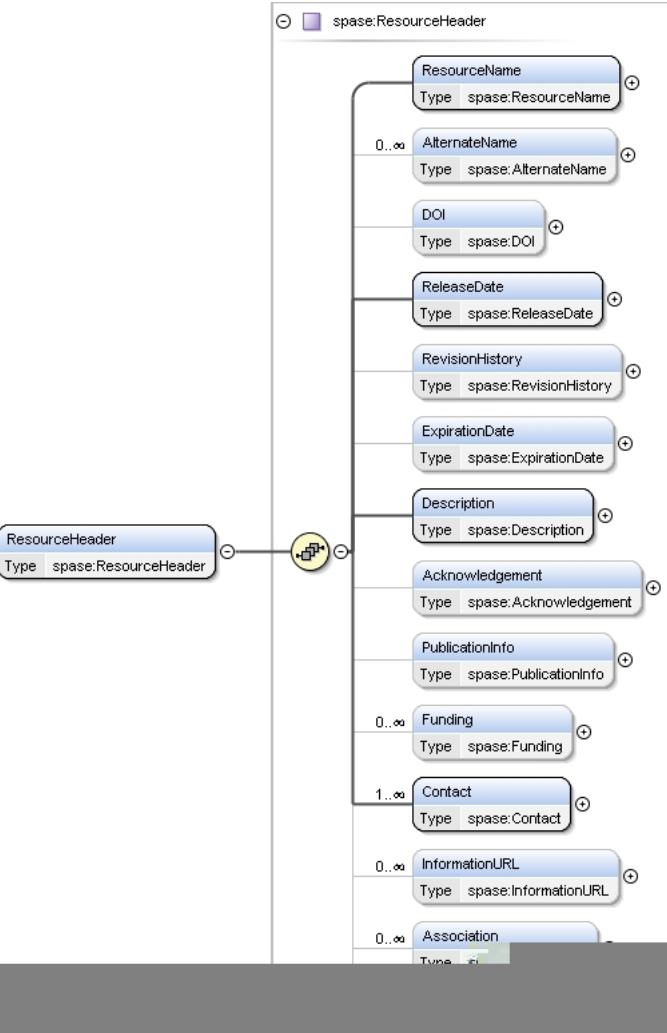
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:Registry
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessURL , spase:Extension*
Children	spase:AccessURL, spase:Extension, spase:ResourceHeader, spase:ResourceID
Instance	<spase:Registry xmlns:spase="http://www.spase-group.org/data/schema"> <spase:ResourceID>{1,1}</spase:ResourceID>

	<pre>&lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt; &lt;spase:AccessURL&gt;{1,1}&lt;/spase:AccessURL&gt; &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Registry&gt;</pre>
Source	<xsd:element name="Registry" type="spase:Registry"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Registry / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ResourceID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Registry / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
Diagram	

Type	spase:ResourceHeader
Properties	<p>content: complex</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Model	spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase>Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*
Children	spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase&gt;Contact&gt;{1,unbounded}&lt;/spase&gt;Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>
Source	<xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Registry / spase:AccessURL

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class AccessURL {         Name         URL         Style         0..oo ProductKey         Description     }     AccessURL &lt; -- spase:AccessURL   </pre>
Type	spase:AccessURL
Properties	<p>content: complex</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Model	spase:Name{0,1} , spase:URL , spase:Style{0,1} , spase:ProductKey* , spase:Description{0,1} , spase:Language{0,1}
Children	spase:Description, spase:Language, spase:Name, spase:ProductKey, spase:Style, spase:URL
Instance	<pre>&lt;spase:AccessURL xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:Name&gt;{0,1}&lt;/spase:Name&gt;   &lt;spase:URL&gt;{1,1}&lt;/spase:URL&gt;   &lt;spase:Style&gt;{0,1}&lt;/spase:Style&gt;   &lt;spase:ProductKey&gt;{0,unbounded}&lt;/spase:ProductKey&gt;   &lt;spase:Description&gt;{0,1}&lt;/spase:Description&gt;   &lt;spase:Language&gt;{0,1}&lt;/spase:Language&gt; &lt;/spase:AccessURL&gt;</pre>

Source	<code>&lt;xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="1"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Registry / spase:Extension

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class Extension {         &lt;&lt;Extension&gt;&gt;         &lt;&lt;spase:Extension&gt;&gt;     }     class spaseExtension {         &lt;&lt;spase:Extension&gt;&gt;     }     Extension &lt; -- spaseExtension     spaseExtension --o "0..&gt;" ##other   </pre>						
Type	spase:Extension						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<code>&lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;</code>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Spase / spase:Repository

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class Repository {         &lt;&lt;Repository&gt;&gt;         &lt;&lt;spase:Repository&gt;&gt;     }     class spaseRepository {         &lt;&lt;spase:Repository&gt;&gt;     }     Repository &lt; -- spaseRepository     spaseRepository --o "0..&gt;" ResourceID     spaseRepository --o "0..&gt;" ResourceHeader     spaseRepository --o "0..&gt;" AccessURL     spaseRepository --o "0..&gt;" Extension   </pre>
Type	spase:Repository
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessURL , spase:Extension*
Children	spase:AccessURL, spase:Extension, spase:ResourceHeader, spase:ResourceID
Instance	<code>&lt;spase:Repository xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;   &lt;spase:AccessURL&gt;{1,1}&lt;/spase:AccessURL&gt;   &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Repository&gt;</code>
Source	<code>&lt;xsd:element name="Repository" type="spase:Repository"/&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Repository / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class ResourceID {         &lt;&lt;ResourceID&gt;&gt;         &lt;&lt;spase:ResourceID&gt;&gt;     }     class spaseResourceID {         &lt;&lt;spase:ResourceID&gt;&gt;     }     ResourceID &lt; -- spaseResourceID   </pre>
Type	spase:ResourceID
Properties	content: simple

	minOccurs:	1
	maxOccurs:	1
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1xsd	

## Element spase:Repository / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ResourceHeader {         +ResourceName         +AlternateName         +DOI         +ReleaseDate         +RevisionHistory         +ExpirationDate         +Description         +Acknowledgement         +PublicationInfo         +Funding         +Contact         +InformationURL         +Association     }     class ResourceHeader {         &lt;&lt;spase:ResourceHeader&gt;&gt;     }     ResourceHeader "0..&gt;" ResourceHeader </pre> <p>The diagram illustrates the structure of the spase:ResourceHeader element. It consists of a main container class 'ResourceHeader' (indicated by a blue box) and a nested class 'ResourceHeader' (indicated by a purple box). The nested class contains several attributes: ResourceName, AlternateName, DOI, ReleaseDate, RevisionHistory, ExpirationDate, Description, Acknowledgement, PublicationInfo, Funding, Contact, InformationURL, and Association. Each attribute is associated with a specific type: spase:ResourceName, spase:AlternateName, spase:DOI, spase:ReleaseDate, spase:RevisionHistory, spase:ExpirationDate, spase&gt;Description, spase:Acknowledgement, spase:PublicationInfo, spase:Funding, spase&gt;Contact, spase:InformationURL, and spase:Association respectively. The nested class also has a self-referencing association named 'ResourceHeader' with multiplicity '0..&gt;'.</p>						
Type	spase:ResourceHeader						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*						
Children	spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory						
Instance	<pre> &lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;     &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;     &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;     &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;     &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;     &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt; </pre>						

	<pre> &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt; &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt; &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt; &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt; &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt; &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt; &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt; &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt; &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt; </pre>
Source	<xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Repository / spase:AccessURL

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class AccessURL {         Name : spase:Name         URL : spase:URL         Style : spase:Style         0..* ProductKey : spase:ProductKey         Description : spase:Description     }     AccessURL &lt; -- spase:AccessURL </pre>						
Type	spase:AccessURL						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	spase:Name{0,1} , spase:URL , spase:Style{0,1} , spase:ProductKey* , spase:Description{0,1} , spase:Language{0,1}						
Children	spase:Description, spase:Language, spase:Name, spase:ProductKey, spase:Style, spase:URL						
Instance	<pre> &lt;spase:AccessURL xmlns:spase="http://www.spase-group.org/data/schema"&gt;     &lt;spase:Name&gt;{0,1}&lt;/spase:Name&gt;     &lt;spase:URL&gt;{1,1}&lt;/spase:URL&gt;     &lt;spase:Style&gt;{0,1}&lt;/spase:Style&gt;     &lt;spase:ProductKey&gt;{0,unbounded}&lt;/spase:ProductKey&gt;     &lt;spase:Description&gt;{0,1}&lt;/spase:Description&gt;     &lt;spase:Language&gt;{0,1}&lt;/spase:Language&gt; &lt;/spase:AccessURL&gt; </pre>						
Source	<xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Repository / spase:Extension

Namespace	http://www.spase-group.org/data/schema				
Diagram	<pre> classDiagram     class Extension {         &lt;&lt;#other&gt;&gt;     }     Extension &lt; -- spase:Extension </pre>				
Type	spase:Extension				
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> </table>	content:	complex	minOccurs:	0
content:	complex				
minOccurs:	0				

	maxOccurs: unbounded
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:Spase / spase:Service

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram     class spase:Service {         ResourceID         ResourceHeader         AccessURL         Extension     }     class Service {         &lt;--&gt; spase:Service     }   </pre>
Type	spase:Service
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessURL , spase:Extension*
Children	spase:AccessURL, spase:Extension, spase:ResourceHeader, spase:ResourceID
Instance	<spase:Service xmlns:spase="http://www.spase-group.org/data/schema">   <spase:ResourceID>{1,1}</spase:ResourceID>   <spase:ResourceHeader>{1,1}</spase:ResourceHeader>   <spase:AccessURL>{1,1}</spase:AccessURL>   <spase:Extension>{0,unbounded}</spase:Extension> </spase:Service>
Source	<xsd:element name="Service" type="spase:Service"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

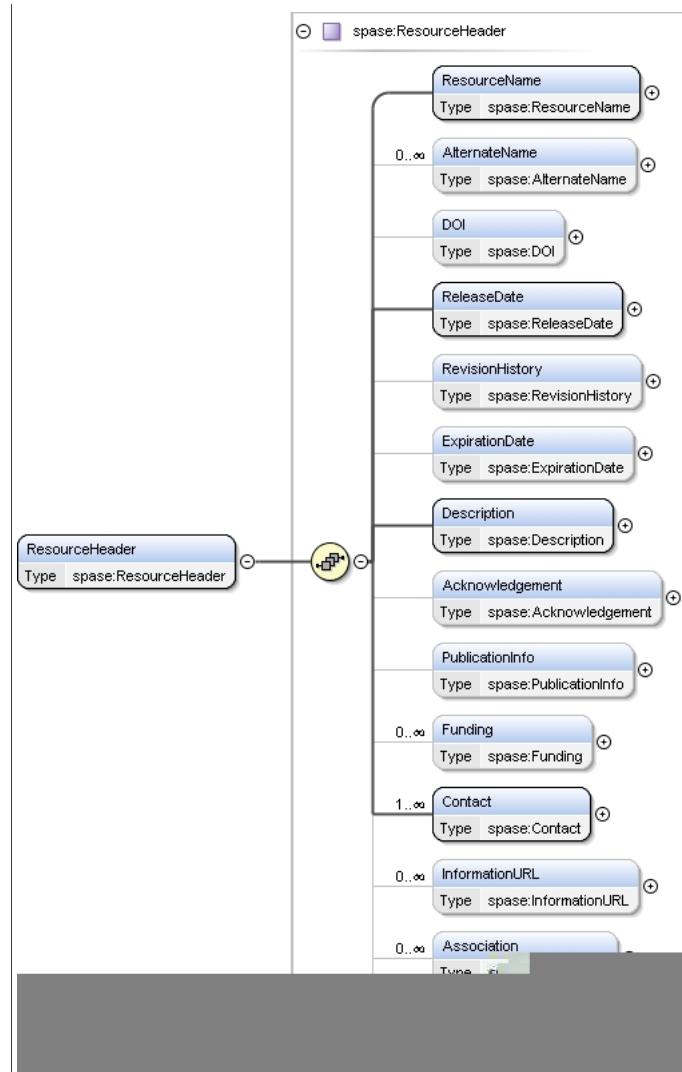
## Element spase:Service / spase:ResourceID

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ResourceID						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

## Element spase:Service / spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
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## Diagram



Type	<code>spase:ResourceHeader</code>						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>1</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	<code>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</code>						
Children	<code>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</code>						
Instance	<pre>&lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; &lt;/spase:ResourceHeader&gt;</pre>						
Source	<code>&lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;</code>						

Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

**Element spase:Service / spase:AccessURL**

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spase:AccessURL {         Name : spase:Name         URL : spase:URL         Style : spase:Style         ProductKey : spase:ProductKey *{0..*}         Description : spase:Description     }     class AccessURL {         &lt;&lt;spase:AccessURL&gt;&gt;     }     spase:AccessURL "0..1" --&gt; "0..1" AccessURL   </pre>						
Type	spase:AccessURL						
Properties	<table> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	spase:Name{0,1} , spase:URL , spase:Style{0,1} , spase:ProductKey* , spase:Description{0,1} , spase:Language{0,1}						
Children	spase:Description, spase:Language, spase:Name, spase:ProductKey, spase:Style, spase:URL						
Instance	<spase:AccessURL xmlns:spase="http://www.spase-group.org/data/schema">   <spase:Name>{0,1}</spase:Name>   <spase:URL>{1,1}</spase:URL>   <spase:Style>{0,1}</spase:Style>   <spase:ProductKey>{0,unbounded}</spase:ProductKey>   <spase:Description>{0,1}</spase:Description>   <spase:Language>{0,1}</spase:Language> </spase:AccessURL>						
Source	<xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Service / spase:Extension**

Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class spase:Extension {         &lt;&lt;spase:Extension&gt;&gt;     }     class Extension {         &lt;&lt;spase:Extension&gt;&gt;     }     Extension "0..1" --&gt; "0..*" Extension   </pre>						
Type	spase:Extension						
Properties	<table> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'						
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

**Element spase:Spase / spase:Annotation**

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	spase:Annotation
Properties	content: complex
Model	spase:ResourceID , spase:ResourceHeader , spase:ImageURL{0,1} , spase:AnnotationType , spase:PhenomenonType{0,1} , spase:ClassificationMethod{0,1} , spase:ConfidenceRating{0,1} , spase:TimeSpan* , spase:ObservationExtent* , spase:Extension*
Children	spase:AnnotationType, spase:ClassificationMethod, spase:ConfidenceRating, spase:Extension, spase:ImageURL, spase:ObservationExtent, spase:PhenomenonType, spase:ResourceHeader, spase:ResourceID, spase:TimeSpan
Instance	<pre>&lt;spase:Annotation xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceID&gt;{1,1}&lt;/spase:ResourceID&gt;   &lt;spase:ResourceHeader&gt;{1,1}&lt;/spase:ResourceHeader&gt;   &lt;spase:ImageURL&gt;{0,1}&lt;/spase:ImageURL&gt;   &lt;spase:AnnotationType&gt;{1,1}&lt;/spase:AnnotationType&gt;   &lt;spase:PhenomenonType&gt;{0,1}&lt;/spase:PhenomenonType&gt;   &lt;spase:ClassificationMethod&gt;{0,1}&lt;/spase:ClassificationMethod&gt;   &lt;spase:ConfidenceRating&gt;{0,1}&lt;/spase:ConfidenceRating&gt;   &lt;spase:TimeSpan&gt;{0,unbounded}&lt;/spase:TimeSpan&gt;   &lt;spase:ObservationExtent&gt;{0,unbounded}&lt;/spase:ObservationExtent&gt;   &lt;spase:Extension&gt;{0,unbounded}&lt;/spase:Extension&gt; &lt;/spase:Annotation&gt;</pre>
Source	<code>&lt;xsd:element name="Annotation" type="spase:Annotation" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Element spase:Annotation / spase:ResourceID

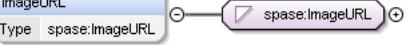
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ResourceID
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<code>&lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1" /&gt;</code>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Annotation / spase:ResourceHeader**

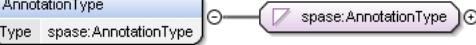
Namespace	http://www.spase-group.org/data/schema						
Diagram	<pre> classDiagram     class ResourceHeader {         resourceName         alternateName *          doi         releaseDate         revisionHistory         expirationDate         description         acknowledgement         publicationInfo         funding *          contact *          informationURL *          association         priorID     }     class ResourceName     class AlternateName     class DOI     class ReleaseDate     class RevisionHistory     class ExpirationDate     class Description     class Acknowledgement     class PublicationInfo     class Funding     class Contact     class InformationURL     class Association     class PriorID     class ResourceHeader      ResourceHeader "0..&gt;" ResourceName     ResourceHeader "0..&gt;" AlternateName     ResourceHeader "0..&gt;" DOI     ResourceHeader "0..&gt;" ReleaseDate     ResourceHeader "0..&gt;" RevisionHistory     ResourceHeader "0..&gt;" ExpirationDate     ResourceHeader "0..&gt;" Description     ResourceHeader "0..&gt;" Acknowledgement     ResourceHeader "0..&gt;" PublicationInfo     ResourceHeader "0..&gt;" Funding     ResourceHeader "1..&gt;" Contact     ResourceHeader "0..&gt;" InformationURL     ResourceHeader "0..&gt;" Association     ResourceHeader "0..&gt;" PriorID   </pre>						
Type	spase:ResourceHeader						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	1
content:	complex						
minOccurs:	1						
maxOccurs:	1						
Model	spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*						
Children	spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory						
Instance	<pre> &lt;spase:ResourceHeader xmlns:spase="http://www.spase-group.org/data/schema"&gt;   &lt;spase:ResourceName&gt;{1,1}&lt;/spase:ResourceName&gt;   &lt;spase:AlternateName&gt;{0,unbounded}&lt;/spase:AlternateName&gt;   &lt;spase:DOI&gt;{0,1}&lt;/spase:DOI&gt;   &lt;spase:ReleaseDate&gt;{1,1}&lt;/spase:ReleaseDate&gt;   &lt;spase:RevisionHistory&gt;{0,1}&lt;/spase:RevisionHistory&gt;   &lt;spase:ExpirationDate&gt;{0,1}&lt;/spase:ExpirationDate&gt;   &lt;spase:Description&gt;{1,1}&lt;/spase:Description&gt;   &lt;spase:Acknowledgement&gt;{0,1}&lt;/spase:Acknowledgement&gt;   &lt;spase:PublicationInfo&gt;{0,1}&lt;/spase:PublicationInfo&gt;   &lt;spase:Funding&gt;{0,unbounded}&lt;/spase:Funding&gt;   &lt;spase:Contact&gt;{1,unbounded}&lt;/spase:Contact&gt;   &lt;spase:InformationURL&gt;{0,unbounded}&lt;/spase:InformationURL&gt;   &lt;spase:Association&gt;{0,unbounded}&lt;/spase:Association&gt;   &lt;spase:PriorID&gt;{0,unbounded}&lt;/spase:PriorID&gt; </pre>						

	</spase:ResourceHeader>
Source	<xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

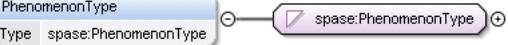
### Element spase:Annotation / spase:ImageURL

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:ImageURL						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<xsd:element name="ImageURL" type="spase:ImageURL" minOccurs="0" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Annotation / spase:AnnotationType

Namespace	http://www.spase-group.org/data/schema									
Diagram										
Type	spase:AnnotationType									
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1			
content:	simple									
minOccurs:	1									
maxOccurs:	1									
Facets	<table> <tr> <td>enumeration</td> <td>Anomaly</td> <td>An interval where measurements or observations may be adversely affected.</td> </tr> <tr> <td>enumeration</td> <td>Event</td> <td>An action or observation which occurs at a point in time.</td> </tr> <tr> <td>enumeration</td> <td>Feature</td> <td>A prominent or distinctive characteristic that occurs at a location or persists over a period of time.</td> </tr> </table>	enumeration	Anomaly	An interval where measurements or observations may be adversely affected.	enumeration	Event	An action or observation which occurs at a point in time.	enumeration	Feature	A prominent or distinctive characteristic that occurs at a location or persists over a period of time.
enumeration	Anomaly	An interval where measurements or observations may be adversely affected.								
enumeration	Event	An action or observation which occurs at a point in time.								
enumeration	Feature	A prominent or distinctive characteristic that occurs at a location or persists over a period of time.								
Source	<xsd:element name="AnnotationType" type="spase:AnnotationType" minOccurs="1" maxOccurs="1"/>									
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd									

### Element spase:Annotation / spase:PhenomenonType

Namespace	http://www.spase-group.org/data/schema									
Diagram										
Type	spase:PhenomenonType									
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1			
content:	simple									
minOccurs:	0									
maxOccurs:	1									
Facets	<table> <tr> <td>enumeration</td> <td>ActiveRegion</td> <td>A localized, transient volume of the solar atmosphere in which PLAGES, SUNSPOTS, FACULAE, FLAREs, etc. may be observed.</td> </tr> <tr> <td>enumeration</td> <td>Aurora</td> <td>An atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force.</td> </tr> <tr> <td>enumeration</td> <td>BowShockCrossing</td> <td>A crossing of the boundary between the undisturbed (except for foreshock effects) solar wind and the shocked, decelerated solar wind of the magnetosheath.</td> </tr> </table>	enumeration	ActiveRegion	A localized, transient volume of the solar atmosphere in which PLAGES, SUNSPOTS, FACULAE, FLAREs, etc. may be observed.	enumeration	Aurora	An atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force.	enumeration	BowShockCrossing	A crossing of the boundary between the undisturbed (except for foreshock effects) solar wind and the shocked, decelerated solar wind of the magnetosheath.
enumeration	ActiveRegion	A localized, transient volume of the solar atmosphere in which PLAGES, SUNSPOTS, FACULAE, FLAREs, etc. may be observed.								
enumeration	Aurora	An atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force.								
enumeration	BowShockCrossing	A crossing of the boundary between the undisturbed (except for foreshock effects) solar wind and the shocked, decelerated solar wind of the magnetosheath.								

enumeration	CoronalHole	An extended region of the corona, exceptionally low in density and associated with unipolar photospheric regions. A coronal hole can be an "open" magnetic field in the corona and (perhaps) inner heliosphere which has a faster than average outflow (wind); A region of lower than "quiet" ion and electron density in the corona; or a region of lower peak electron temperature in the corona than in the "quiet" corona.
enumeration	CoronalMassEjection	A solar event (CME) that involves a burst of plasma ejected into the interplanetary medium. CME's may be observed remotely relatively near the sun or in situ in the interplanetary medium. The latter type of observations are often referred to as Interplanetary CME's (ICME's).
enumeration	EITWave	A wave in the corona of the Sun which produce shock waves on the Sun's chromosphere (Moreton Waves). EIT Waves are produced by large solar flare and expand outward at about 1,000 km/s. It usually appears as a slowly moving diffuse arc of brightening in H-alpha, and may travel for several hundred thousand km.
enumeration	EnergeticSolarParticleEvent	An enhancement of interplanetary fluxes of energetic ions accelerated by interplanetary shocks and/or solar flares.
enumeration	ForbushDecrease	A rapid decrease in the observed galactic cosmic ray intensity following the passage of an outwardly convecting interplanetary magnetic field disturbance, such as those associated with large CME's, that sweep some galactic cosmic rays away from Earth.
enumeration	GeomagneticStorm	A magnetospheric disturbance typically defined by variations in the horizontal component of the Earth's surface magnetic field. The variation typically starts with a field enhancement associated with a solar wind pressure pulse and continues with a field depression associated with an enhancement of the diamagnetic magnetospheric ring current.
enumeration	InterplanetaryShock	A shock propagating generally anti-sunward through the slower solar wind, often seen in front of CME-associated plasma clouds.
enumeration	MagneticCloud	A transient event observed in the solar wind characterized as a region of enhanced magnetic field strength, smooth rotation of the magnetic field vector and low proton density and temperature.
enumeration	MagnetopauseCrossing	A crossing of the interface between the shocked solar wind in the magnetosheath and the magnetic field and plasma in the magnetosphere.
enumeration	RadioBurst	Emissions of the sun in radio wavelengths from centimeters to dekameters, under both quiet and disturbed conditions. Radio Bursts can be "Type I" consisting of many short, narrow-band bursts in the metric range (300 - 50 MHz); "Type II" consisting of narrow-band emission that begins in the meter range (300 MHz) and sweeps slowly (tens of minutes) toward dekameter wavelengths (10 MHz); "Type III" consisting of narrow-band bursts that sweep rapidly (seconds) from decimeter to dekameter wavelengths (500 - 0.5 MHz); and "Type IV" consisting of a smooth continuum of broad-band bursts primarily in the meter range (300 - 30 MHz).
enumeration	SectorBoundaryCrossing	A sector boundary crossing is a transit by a spacecraft across the heliospheric current sheet separating the dominantly outward (away-from-the-sun) interplanetary magnetic field of one hemisphere of the heliosphere from the dominantly inward (toward-the-sun) polarity of the other hemisphere.

		Such crossings have multi-day intervals of opposite IMF dominant polarities on either side.
enumeration	SolarFlare	An explosive event in the Sun's atmosphere which produces electromagnetic radiation across the electromagnetic spectrum at multiple wavelengths from long-wave radio to the shortest wavelength gamma rays.
enumeration	SolarWindExtreme	Intervals of unusually large or small values of solar wind attributes such as flow speed and ion density.
enumeration	StreamInteractionRegion	The region (SIR) where two solar wind streams, typically having differing characteristics and solar sources, abut up against (and possibly partially interpenetrate) each other.
enumeration	Substorm	A process by which plasma in the magnetotail becomes energized at a fast rate.
Source	<xsd:element name="PhenomenonType" type="spase:PhenomenonType" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Annotation / spase:ClassificationMethod

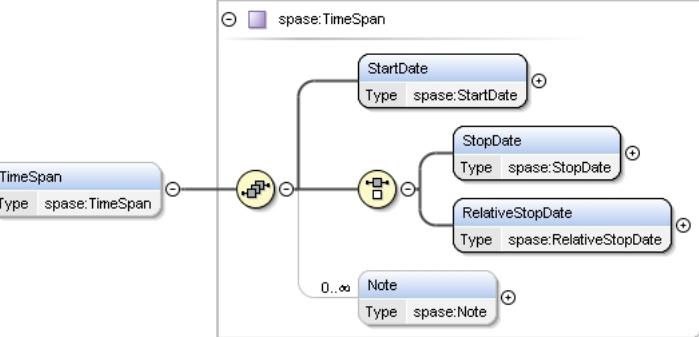
Namespace	http://www.spase-group.org/data/schema	
Diagram	<pre> classDiagram     ClassificationMethod &lt; -- spase:ClassificationMethod     </pre>	
Type	spase:ClassificationMethod	
Properties	content: simple minOccurs: 0 maxOccurs: 1	
Facets	enumeration Automatic Determined by the analysis or assessment performed by a program or server. enumeration Inferred Determined by the analysis of other information or resources. enumeration Inspection Determined by the analysis or assessment performed by a person.	
Source	<xsd:element name="ClassificationMethod" type="spase:ClassificationMethod" minOccurs="0" maxOccurs="1"/>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Element spase:Annotation / spase:ConfidenceRating

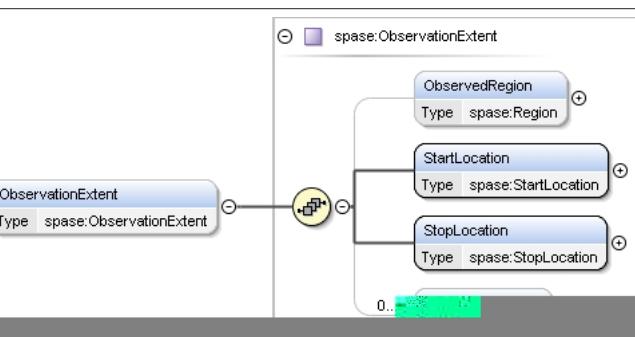
Namespace	http://www.spase-group.org/data/schema	
Diagram	<pre> classDiagram     ConfidenceRating &lt; -- spase:ConfidenceRating     </pre>	
Type	spase:ConfidenceRating	
Properties	content: simple minOccurs: 0 maxOccurs: 1	
Facets	enumeration Probable Likely given the available evidence. Considered in the range of 4-7 on a scale of 0-10. enumeration Strong Highly likely given the available evidence. Considered in the range of 7-10 on a scale of 0-10. enumeration Unlikely Not likely given the available evidence. Considered in the range of 0 on a scale of 0-10. enumeration Weak Slightly likely given the available evidence.	

	Considered in the range of 1-4 on a scale of 0-10.
Source	<xsd:element name="ConfidenceRating" type="spase:ConfidenceRating" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Annotation / spase:TimeSpan**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:TimeSpan
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:StartDate , (spase:StopDate   spase:RelativeStopDate) , spase:Note*
Children	spase:Note, spase:RelativeStopDate, spase:StartDate, spase:StopDate
Instance	<spase:TimeSpan xmlns:spase="http://www.spase-group.org/data/schema">     <spase:StartDate>{1,1}</spase:StartDate>     <spase:StopDate>{1,1}</spase:StopDate>     <spase:RelativeStopDate>{1,1}</spase:RelativeStopDate>     <spase:Note>{0,unbounded}</spase:Note> </spase:TimeSpan>
Source	<xsd:element name="TimeSpan" type="spase:TimeSpan" minOccurs="0" maxOccurs="unbounded"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

**Element spase:Annotation / spase:ObservationExtent**

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	spase:ObservationExtent
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	spase:ObservedRegion{0,1} , spase:StartLocation , spase:StopLocation , spase:Note*
Children	spase:Note, spase:ObservedRegion, spase:StartLocation, spase:StopLocation
Instance	<spase:ObservationExtent xmlns:spase="http://www.spase-group.org/data/schema">

	<pre> &lt;spase:ObservedRegion&gt;{0,1}&lt;/spase:ObservedRegion&gt; &lt;spase:StartLocation&gt;{1,1}&lt;/spase:StartLocation&gt; &lt;spase:StopLocation&gt;{1,1}&lt;/spase:StopLocation&gt; &lt;spase:Note&gt;{0,unbounded}&lt;/spase:Note&gt; &lt;/spase:ObservationExtent&gt; </pre>
Source	<xsd:element name="ObservationExtent" type="spase:ObservationExtent" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Element spase:ObservationExtent / spase:ObservedRegion

Namespace	http://www.spase-group.org/data/schema							
Diagram								
Type	spase:Region							
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>		content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple							
minOccurs:	0							
maxOccurs:	1							
Facets	enumeration	Asteroid A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.						
	enumeration	Comet A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.						
	enumeration	Earth The third planet from the sun in our solar system.						
	enumeration	Earth.Magnetosheath The region between the bow shock and the magnetopause, characterized by very turbulent plasma.						
	enumeration	Earth.Magnetosphere The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.						
	enumeration	Earth.Magnetosphere.Magnetotail The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).						
	enumeration	Earth.Magnetosphere.Main The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.						
	enumeration	Earth.Magnetosphere.Plasmasphere A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.						
	enumeration	Earth.Magnetosphere.Polar The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.						
	enumeration	Earth.Magnetosphere.RadiationBelt The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.						
	enumeration	Earth.Magnetosphere.RingCurrent One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm						

		activity at the Earth.
enumeration	Earth.Moon	The only natural satellite of the Earth.
enumeration	Earth.NearSurface	The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.
enumeration	Earth.NearSurface.Atmosphere	The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.AuroralRegion	A region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	Earth.NearSurface.EquatorialRegion	A Region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	Earth.NearSurface.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.Ionosphere.DRegion	The D Region of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	Earth.NearSurface.Ionosphere.ERegion	A Region ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.
enumeration	Earth.NearSurface.Ionosphere.FRegion	A Region that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	Earth.NearSurface.Ionosphere.Topside	The Topside at the upper most areas of the ionosphere.
enumeration	Earth.NearSurface.Mesosphere	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	Earth.NearSurface.MidLatitudeRegion	The Region considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	Earth.NearSurface.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Earth.NearSurface.PolarCap	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.
enumeration	Earth.NearSurface.SouthAtlanticMagneticAnomalyRegion	The region is a region of the Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity

		is higher over this region than elsewhere.
enumeration	Earth.NearSurface.Stratosphere	The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
enumeration	Earth.NearSurface.SubAuroralRegion	Regions considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.
enumeration	Earth.NearSurface.Thermosphere	The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
enumeration	Earth.NearSurface.Troposphere	The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
enumeration	Earth.Surface	The outermost area of a solid object.
enumeration	Heliosphere	The solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.
enumeration	Heliosphere.Heliosheath	The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.
enumeration	Heliosphere.Inner	The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.
enumeration	Heliosphere.NearEarth	The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.
enumeration	Heliosphere.Outer	The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.
enumeration	Heliosphere.Remote1AU	A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.
enumeration	Interstellar	The region between stars outside of the star's heliopause.
enumeration	Jupiter	The fifth planet from the sun in our solar system.
enumeration	Jupiter.Callisto	A second largest moon of Jupiter and the third-largest moon in the solar system.
enumeration	Jupiter.Europa	The sixth-closest round moon of Jupiter.
enumeration	Jupiter.Ganymede	The biggest moon of Jupiter and in the solar system.
enumeration	Jupiter.Io	The innermost of the four round moons of the planet Jupiter.
enumeration	Jupiter.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Jupiter.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial

		distance of 10 Re ( $X > -10Re$ ).
enumeration	Jupiter.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Jupiter.Magnetosphere.Plasmasphere	<b>Plasmasphere</b> of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Jupiter.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Jupiter.Magnetosphere.RadiationBelt	<b>Radiation belt</b> within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Jupiter.Magnetosphere.RingCurrent	<b>Ring current</b> the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars	The forth planet from the sun in our solar system.
enumeration	Mars.Deimos	
enumeration	Mars.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mars.Magnetosphere.Magnetotail	<b>Magnetotail</b> region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mars.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mars.Magnetosphere.Plasmasphere	<b>Plasmasphere</b> of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mars.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mars.Magnetosphere.RadiationBelt	<b>Radiation belt</b> within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mars.Magnetosphere.RingCurrent	<b>Ring current</b> of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.

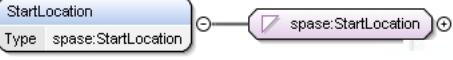
enumeration	Mars.Phobos	The larger and inner most moon of Mars.
enumeration	Mercury	The first planet from the sun in our solar system.
enumeration	Mercury.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mercury.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mercury.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mercury.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Mercury.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mercury.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Mercury.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Neptune	The seventh planet from the sun in our solar system.
enumeration	Pluto	The ninth (sub)planet from the sun in our solar system.
enumeration	Saturn	The sixth planet from the sun in our solar system.
enumeration	Saturn.Dione	The forth-largest moon of Saturn.
enumeration	Saturn.Enceladus	The sixth-largest moon of Saturn. It is currently endogenously active. The smallest known body in the Solar System that is geologically active today.
enumeration	Saturn.Iapetus	The third-largest moon of Saturn and the eleventh-largest in the Solar System.
enumeration	Saturn.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Saturn.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Saturn.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Saturn.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above

		the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Saturn.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Saturn.Magnetosphere.RadiationBelldon	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Saturn.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Saturn.Mimas	The smallest and least massive of the round moons of Saturn.
enumeration	Saturn.Rhea	The second-largest moon of Saturn and the ninth-largest moon in the Solar System.
enumeration	Saturn.Tethys	The third largest moon of Saturn.
enumeration	Saturn.Titan	The largest moon of Saturn and the second-largest moon in the Solar System,
enumeration	Sun	The star upon which our solar system is centered.
enumeration	Sun.Chromosphere	The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.
enumeration	Sun.Corona	The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above $10^5$ K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.
enumeration	Sun.Interior	The region inside the body which is not visible from outside the body.
enumeration	Sun.Photosphere	The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.
enumeration	Sun.TransitionRegion	A very narrow (<100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.
enumeration	Uranus	The eighth planet from the sun in our solar system.
enumeration	Uranus.Ariel	The fourth-largest moon of Uranus.
enumeration	Uranus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Uranus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Uranus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Uranus.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of

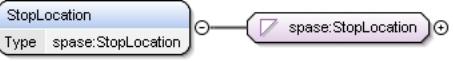
		low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Uranus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Uranus.Magnetosphere.RadiationRegion	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Uranus.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Uranus.Miranda	The smallest and innermost round moon of Uranus.
enumeration	Uranus.Oberon	The second-largest and second most massive moon of Uranus, and the ninth most massive moon in the Solar System.
enumeration	Uranus.Puck	The largest inner spherical moon of Uranus.
enumeration	Uranus.Titania	The largest moon of Uranus and the eighth largest moon in the Solar System.
enumeration	Uranus.Umbriel	The third largest and fourth most massive moon of Uranus.
enumeration	Venus	The second planet from the sun in our solar system.
enumeration	Venus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Venus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Venus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Venus.Magnetosphere.Plasmasphere	One of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Venus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Venus.Magnetosphere.RadiationRegion	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Venus.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6.

	6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
Source	<xsd:element name="ObservedRegion" type="spase:Region" minOccurs="0" maxOccurs="1"/>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

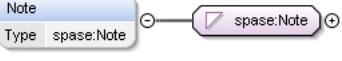
### Element spase:ObservationExtent / spase:StartLocation

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:StartLocation						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="StartLocation" type="spase:StartLocation" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

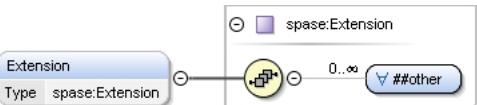
### Element spase:ObservationExtent / spase:StopLocation

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:StopLocation						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<xsd:element name="StopLocation" type="spase:StopLocation" minOccurs="1" maxOccurs="1"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:ObservationExtent / spase:Note

Namespace	http://www.spase-group.org/data/schema						
Diagram							
Type	spase:Note						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	unbounded
content:	simple						
minOccurs:	0						
maxOccurs:	unbounded						
Source	<xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="unbounded"/>						
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd						

### Element spase:Annotation / spase:Extension

Namespace	http://www.spase-group.org/data/schema
Diagram	

Type	spase:Extension
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'
Source	<xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded" />
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type(s)

### Complex Type spase:Spase

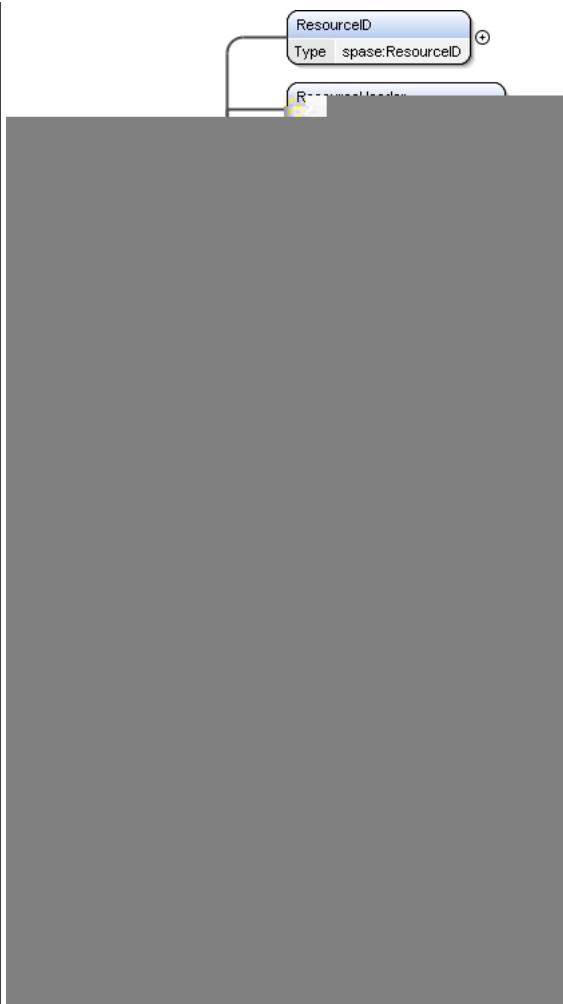
Namespace	http://www.spase-group.org/data/schema
Annotations	Space Physics Archive Search and Extract (SPASE). The outermost container or envelope for SPASE metadata. This indicates the start of the SPASE metadata.
Diagram	<pre> classDiagram     class Spase     class Attributes {         @ lang : xsd:string     }     class Version     class Catalog     class DisplayData     class NumericalData     class Document     class Granule     class Instrument     class Observatory     class Person     class Registry     class Repository     class Service     class Annotation      Spase "1..∞" --&gt; Attributes     Attributes --&gt; Version     Version --&gt; Catalog     Version --&gt; DisplayData     Version --&gt; NumericalData     Version --&gt; Document     Version --&gt; Granule     Version --&gt; Instrument     Version --&gt; Observatory     Version --&gt; Person     Version --&gt; Registry     Version --&gt; Repository     Version --&gt; Service     Version --&gt; Annotation   </pre>
Used by	Element spase:Spase
Model	spase:Version , (spase:Catalog   spase:DisplayData   spase:NumericalData   spase:Document   spase:Granule   spase:Instrument   spase:Observatory   spase:Person   spase:Registry   spase:Repository   spase:Service   spase:Annotation)
Children	spase:Annotation, spase:Catalog, spase:DisplayData, spase:Document, spase:Granule, spase:Instrument, spase:NumericalData, spase:Observatory, spase:Person, spase:Registry, spase:Repository, spase:Service, spase:Version

Attributes	QName	Type	Default	Use	
	lang	xsd:string	en	optional	
Source	<pre> &lt;xsd:complexType name="Spase"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Space Physics Archive Search and Extract (SPASE). The outermost container or envelope for SPASE metadata. This indicates the start of the SPASE metadata.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Version" type="spase:Version" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:choice minOccurs="1" maxOccurs="unbounded"&gt;       &lt;xsd:element name="Catalog" type="spase:Catalog"/&gt;       &lt;xsd:element name="DisplayData" type="spase:DisplayData"/&gt;       &lt;xsd:element name="NumericalData" type="spase:NumericalData"/&gt;       &lt;xsd:element name="Document" type="spase:Document"/&gt;       &lt;xsd:element name="Granule" type="spase:Granule"/&gt;       &lt;xsd:element name="Instrument" type="spase:Instrument"/&gt;       &lt;xsd:element name="Observatory" type="spase:Observatory"/&gt;       &lt;xsd:element name="Person" type="spase:Person"/&gt;       &lt;xsd:element name="Registry" type="spase:Registry"/&gt;       &lt;xsd:element name="Repository" type="spase:Repository"/&gt;       &lt;xsd:element name="Service" type="spase:Service"/&gt;       &lt;xsd:element name="Annotation" type="spase:Annotation"/&gt;     &lt;/xsd:choice&gt;   &lt;/xsd:sequence&gt;   &lt;xsd:attribute name="lang" type="xsd:string" default="en"/&gt; &lt;/xsd:complexType&gt;</pre>				
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd				

## Complex Type spase:Catalog

Namespace	http://www.spase-group.org/data/schema
Annotations	A tabular listing of events or observational notes, especially those that have utility in aiding a user in locating data. Catalogs include lists of events, files in a product, and data availability. A Catalog resource is a type of "data product" which is a set of data that is uniformly processed and formatted, from one or more instruments, typically spanning the full duration of the observations of the relevant instrument(s). A data product may consist of a collection of granules of successive time spans, but may be a single high-level entity.

## Diagram



Used by	Element spase:Spase/spase:Catalog
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessInformation+ , spase:ProviderName{0,1} , spase:ProviderResourceName{0,1} , spase:ProviderVersion{0,1} , spase:InstrumentID* , spase:PhenomenonType+ , spase:TimeSpan{0,1} , spase:Caveats{0,1} , spase:Keyword* , spase:InputResourceID* , spase:Parameter* , spase:Extension*
Children	spase:AccessInformation, spase:Caveats, spase:Extension, spase:InputResourceID, spase:InstrumentID, spase:Keyword, spase:Parameter, spase:PhenomenonType, spase:ProviderName, spase:ProviderResourceName, spase:ProviderVersion, spase:ResourceHeader, spase:ResourceID, spase:TimeSpan
Source	<pre> &lt;xsd:complexType name="Catalog"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A tabular listing of events or observational notes, especially those that have utility in aiding a user in locating data. Catalogs include lists of events, files in a product, and data availability. A Catalog resource is a type of "data product" which is a set of data that is uniformly processed and formatted, from one or more instruments, typically spanning the full duration of the observations of the relevant instrument(s). A data product may consist of a collection of granules of successive time spans, but may be a single high-level entity.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="ProviderName" type="spase:ProviderName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProviderResourceName" type="spase:ProviderResourceName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProviderVersion" type="spase:ProviderVersion" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="InstrumentID" type="spase:InstrumentID" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="PhenomenonType" type="spase:PhenomenonType" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="TimeSpan" type="spase:TimeSpan" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>

	<pre>&lt;xsd:element name="Parameter" type="spase:Parameter" minOccurs="0" maxOccurs="unbounded"/&gt; &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:ResourceHeader

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of a resource which pertain to the provider of the resource and descriptive information about the resource.
Diagram	
Used by	<p>Elements</p> <p>spase:Annotation/spase:ResourceHeader, spase:Catalog/spase:ResourceHeader, spase:DisplayData/spase:ResourceHeader, spase:Document/spase:ResourceHeader, spase:Instrument/spase:ResourceHeader, spase:NumericalData/spase:ResourceHeader, spase:Observatory/spase:ResourceHeader, spase:Registry/spase:ResourceHeader, spase:Repository/spase:ResourceHeader, spase:Service/spase:ResourceHeader</p>
Model	<p>spase:ResourceName , spase:AlternateName* , spase:DOI{0,1} , spase:ReleaseDate , spase:RevisionHistory{0,1} , spase:ExpirationDate{0,1} , spase:Description , spase:Acknowledgement{0,1} , spase:PublicationInfo{0,1} , spase:Funding* , spase:Contact+ , spase:InformationURL* , spase:Association* , spase:PriorID*</p>
Children	<p>spase:Acknowledgement, spase:AlternateName, spase:Association, spase:Contact, spase:DOI, spase:Description, spase:ExpirationDate, spase:Funding, spase:InformationURL, spase:PriorID, spase:PublicationInfo, spase:ReleaseDate, spase:ResourceName, spase:RevisionHistory</p>
Source	<pre>&lt;xsd:complexType name="ResourceHeader"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Attributes of a resource which pertain to the provider of the resource and descriptive information about the resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceName" type="spase:ResourceName" minOccurs="1" maxOccurs="1"/&gt;</pre>

	<pre> &lt;xsd:element name="AlternateName" type="spase:AlternateName" minOccurs="0" maxOccurs="unbounded" /&gt; &lt;xsd:element name="DOI" type="spase:DOI" minOccurs="0" maxOccurs="1" /&gt; &lt;xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="1" maxOccurs="1" /&gt; &lt;xsd:element name="RevisionHistory" type="spase:RevisionHistory" minOccurs="0" maxOccurs="1" /&gt; &lt;xsd:element name="ExpirationDate" type="spase:ExpirationDate" minOccurs="0" maxOccurs="1" /&gt; &lt;xsd:element name="Description" type="spase:Description" minOccurs="1" maxOccurs="1" /&gt; &lt;xsd:element name="Acknowledgement" type="spase:Acknowledgement" minOccurs="0" maxOccurs="1" /&gt; &lt;xsd:element name="PublicationInfo" type="spase:PublicationInfo" minOccurs="0" maxOccurs="1" /&gt; &lt;xsd:element name="Funding" type="spase:Funding" minOccurs="0" maxOccurs="unbounded" /&gt; &lt;xsd:element name="Contact" type="spase&gt;Contact" minOccurs="1" maxOccurs="unbounded" /&gt; &lt;xsd:element name="InformationURL" type="spase:InformationURL" minOccurs="0" maxOccurs="unbounded" /&gt; &lt;xsd:element name="Association" type="spase:Association" minOccurs="0" maxOccurs="unbounded" /&gt; &lt;xsd:element name="PriorID" type="spase:PriorID" minOccurs="0" maxOccurs="unbounded" /&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:RevisionHistory

Namespace	http://www.spase-group.org/data/schema
Annotations	A history of changes that improve or upgrade.
Diagram	
Used by	Element spase:ResourceHeader/spase:RevisionHistory
Model	spase:RevisionEvent+
Children	spase:RevisionEvent
Source	<pre> &lt;xsd:complexType name="RevisionHistory"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A history of changes that improve or upgrade.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="RevisionEvent" type="spase:RevisionEvent" minOccurs="1" maxOccurs="unbounded" /&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:RevisionEvent

Namespace	http://www.spase-group.org/data/schema
Annotations	A specific change that improves or upgrades.
Diagram	
Used by	Element spase:RevisionHistory/spase:RevisionEvent
Model	spase:ReleaseDate , spase:Note
Children	spase:Note, spase:ReleaseDate
Source	<pre> &lt;xsd:complexType name="RevisionEvent"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A specific change that improves or upgrades.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="1" maxOccurs="1" /&gt;     &lt;xsd:element name="Note" type="spase:Note" minOccurs="1" maxOccurs="1" /&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:PublicationInfo

Namespace	http://www.spase-group.org/data/schema
Annotations	Information related to the issuing of a book, journal, piece of music, or other work.
Diagram	<pre> classDiagram     class PublicationInfo {         &lt;&lt;Authors&gt;&gt;         &lt;&lt;PublicationDate&gt;&gt;         &lt;&lt;PublishedBy&gt;&gt;     }     Authors &lt; -- PublicationInfo     PublicationDate &lt; -- PublicationInfo     PublishedBy &lt; -- PublicationInfo   </pre>
Used by	Element spase:ResourceHeader/spase:PublicationInfo
Model	spase:Authors , spase:PublicationDate , spase:PublishedBy
Children	spase:Authors, spase:PublicationDate, spase:PublishedBy
Source	<pre> &lt;xsd:complexType name="PublicationInfo"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Information related to the issuing of a book, journal, piece of music, or other work.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Authors" type="spase:Authors" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="PublicationDate" type="spase:PublicationDate" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="PublishedBy" type="spase:PublishedBy" minOccurs="1" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Funding

Namespace	http://www.spase-group.org/data/schema
Annotations	The source of financial support (funding) for the resource.
Diagram	<pre> classDiagram     class Funding {         &lt;&lt;Agency&gt;&gt;         &lt;&lt;Project&gt;&gt;         &lt;&lt;AwardNumber&gt;&gt;     }     Agency &lt; -- Funding     Project &lt; -- Funding     AwardNumber &lt; -- Funding   </pre>
Used by	Element spase:ResourceHeader/spase:Funding
Model	spase:Agency , spase:Project , spase:AwardNumber{0,1}
Children	spase:Agency, spase:AwardNumber, spase:Project
Source	<pre> &lt;xsd:complexType name="Funding"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The source of financial support (funding) for the resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Agency" type="spase:Agency" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Project" type="spase:Project" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AwardNumber" type="spase:AwardNumber" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase>Contact

Namespace	http://www.spase-group.org/data/schema
Annotations	The person or organization who may be able to provide special assistance or serve as a channel for communication for additional

	information about a resource.
Diagram	<pre> classDiagram     class Contact {         PersonID : spase:PersonID         Role : spase:Role+         StartDate : spase:StartDate{0,1}         StopDate : spase:StopDate{0,1}         Note : spase&gt;Note{0,1}     }   </pre>
Used by	Element spase:ResourceHeader/spase:Contact
Model	spase:PersonID , spase:Role+ , spase:StartDate{0,1} , spase:StopDate{0,1} , spase>Note{0,1}
Children	spase>Note, spase:PersonID, spase:Role, spase:StartDate, spase:StopDate
Source	<pre> &lt;xsd:complexType name="Contact"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The person or organization who may be able to provide special assistance or serve as a channel for communication for additional information about a resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="PersonID" type="spase:PersonID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Role" type="spase:Role" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="StartDate" type="spase:StartDate" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="StopDate" type="spase:StopDate" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Note" type="spase&gt;Note" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:InformationURL

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of the method of acquiring additional information.
Diagram	<pre> classDiagram     class InformationURL {         Name : spase:Name         URL : spase:URL     }   </pre>
Used by	Element spase:ResourceHeader/spase:InformationURL
Model	spase:Name{0,1} , spase:URL , spase>Description{0,1} , spase:Language{0,1}
Children	spase>Description, spase:Language, spase:Name, spase:URL
Source	<pre> &lt;xsd:complexType name="InformationURL"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Attributes of the method of acquiring additional information.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Name" type="spase:Name" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="URL" type="spase:URL" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Description" type="spase&gt;Description" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Language" type="spase:Language" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Association

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of a relationship a resource has with another resource.
Diagram	<pre> classDiagram     class Association     class AssociationID {         Type spase:AssociationID     }     class AssociationType {         Type spase:AssociationType     }     class Note {         Type spase&gt;Note     }      Association "1" -- "1" AssociationID :      Association "1" -- "1" AssociationType :      Association "1" -- "1" Note :   </pre>
Used by	Element spase:ResourceHeader/spase:Association
Model	spase:AssociationID , spase:AssociationType , spase>Note{0,1}
Children	spase:AssociationID, spase:AssociationType, spase>Note
Source	<pre> &lt;xsd:complexType name="Association"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Attributes of a relationship a resource has with another resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="AssociationID" type="spase:AssociationID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AssociationType" type="spase:AssociationType" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Note" type="spase&gt;Note" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:AccessInformation

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of the resource which pertain to how to accessing the resource, availability and storage format.
Diagram	<pre> classDiagram     class Availability     class RepositoryID {         Type spase:RepositoryID     }     class Availability {         Type spase:Availability     }      Availability "1" -- "1" RepositoryID :      Availability "1" -- "1" Availability :   </pre>
Used by	Elements spase:Catalog/spase:AccessInformation, spase:DisplayData/spase:AccessInformation, spase:Document/spase:AccessInformation, spase:NumericalData/spase:AccessInformation
Model	spase:RepositoryID , spase:Availability{0,1} , spase:AccessRights{0,1} , spase:AccessURL+ , spase:Format , spase:Encoding{0,1} , spase:DataExtent{0,1} , spase:Acknowledgement{0,1}
Children	spase:AccessRights, spase:AccessURL, spase:Acknowledgement, spase:Availability, spase:DataExtent, spase:Encoding, spase:Format, spase:RepositoryID
Source	<pre> &lt;xsd:complexType name="AccessInformation"&gt;   &lt;xsd:annotation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:complexType&gt;   </pre>

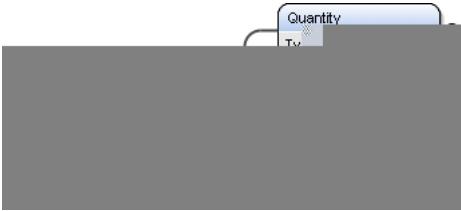
	<pre> &lt;xsd:documentation xml:lang="en"&gt;Attributes of the resource which pertain to how to accessing the resource, availability and storage format.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:sequence&gt;   &lt;xsd:element name="RepositoryID" type="spase:RepositoryID" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="Availability" type="spase:Availability" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="AccessRights" type="spase:AccessRights" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="Format" type="spase:Format" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="Encoding" type="spase:Encoding" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="DataExtent" type="spase:DataExtent" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="Acknowledgement" type="spase:Acknowledgement" minOccurs="0" maxOccurs="1"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:AccessURL

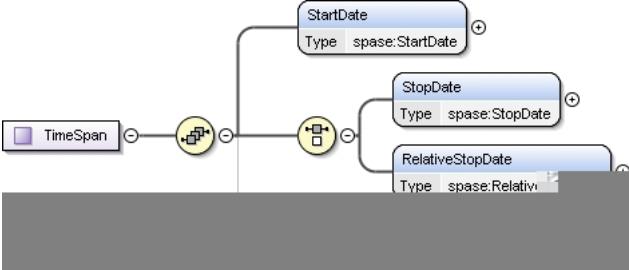
Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of the method for accessing a resource including a URL, name and description.
Diagram	<pre> classDiagram     class AccessURL {         Name : spase:Name         URL : spase:URL         Style : spase:Style         0..oo ProductKey : spase:ProductKey         Description : spase:Description     } </pre>
Used by	Elements spase:AccessInformation/spase:AccessURL, spase:Registry/spase:AccessURL, spase:Repository/spase:AccessURL, spase:Service/spase:AccessURL
Model	spase:Name{0,1} , spase:URL , spase:Style{0,1} , spase:ProductKey* , spase:Description{0,1} , spase:Language{0,1}
Children	spase:Description, spase:Language, spase:Name, spase:ProductKey, spase:Style, spase:URL
Source	<pre> &lt;xsd:complexType name="AccessURL"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Attributes of the method for accessing a resource including a URL, name and description.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Name" type="spase:Name" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="URL" type="spase:URL" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Style" type="spase:Style" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProductKey" type="spase:ProductKey" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Language" type="spase:Language" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:DataExtent

Namespace	http://www.spase-group.org/data/schema
Annotations	The area of storage in a file system required to store the contents of a resource. The default units for data extent is bytes.

Diagram	
Used by	Elements spase:AccessInformation/spase:DataExtent, spase:Source/spase:DataExtent
Model	spase:Quantity , spase:Units{0,1} , spase:Per{0,1}
Children	spase:Per, spase:Quantity, spase:Units
Source	<pre> &lt;xsd:complexType name="DataExtent"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The area of storage in a file system required to store the     contents of a resource. The default units for data extent is bytes.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Quantity" type="spase:Quantity" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Per" type="spase:Per" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

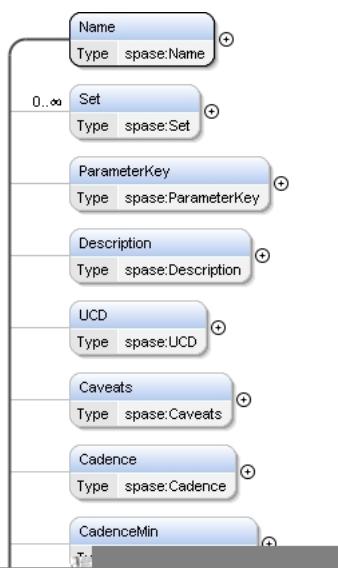
### Complex Type spase:TimeSpan

Namespace	http://www.spase-group.org/data/schema
Annotations	The duration of an interval in time.
Diagram	
Used by	Elements spase:Annotation/spase:TimeSpan, spase:Catalog/spase:TimeSpan, spase:TemporalDescription/ spase:TimeSpan
Model	spase:StartDate , (spase:StopDate   spase:RelativeStopDate) , spase:Note*
Children	spase:Note, spase:RelativeStopDate, spase:StartDate, spase:StopDate
Source	<pre> &lt;xsd:complexType name="TimeSpan"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The duration of an interval in time.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="StartDate" type="spase:StartDate" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:choice minOccurs="1" maxOccurs="1"&gt;       &lt;xsd:element name="StopDate" type="spase:StopDate"/&gt;       &lt;xsd:element name="RelativeStopDate" type="spase:RelativeStopDate"/&gt;     &lt;/xsd:choice&gt;     &lt;xsd:element name="Note" type="spase:Note" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Complex Type spase:Parameter

Namespace	http://www.spase-group.org/data/schema
Annotations	A container of information regarding a parameter whose values are part of the product. Every product contains or can be related to one or more parameters.

## Diagram



## Used by

Elements  
 spase:Catalog/spase:Parameter, spase:DisplayData/spase:Parameter, spase:NumericalData/  
 spase:Parameter

## Model

spase:Name , spase:Set\* , spase:ParameterKey{0,1} , spase:Description{0,1} , spase:UCD{0,1} , spase:Caveats{0,1} ,  
 spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Units{0,1} , spase:UnitsConversion{0,1} ,  
 spase:CoordinateSystem{0,1} , spase:RenderingHints\* , spase:Structure{0,1} , spase:ValidMin{0,1} , spase:ValidMax{0,1} ,  
 spase:FieldValue{0,1} , (spase:Field | spase:Particle | spase:Wave | spase:Mixed | spase:Support)

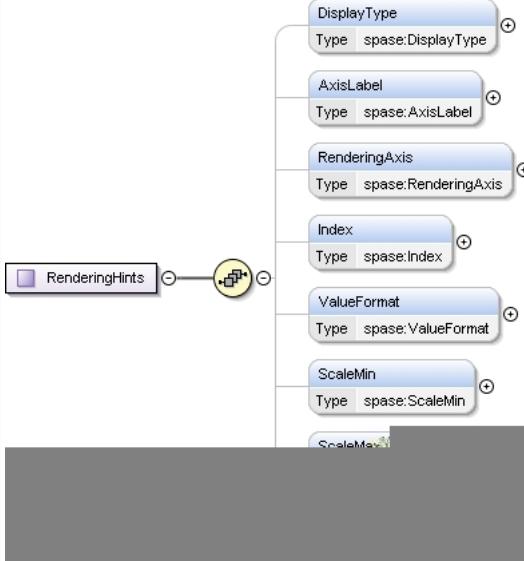
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Caveats, spase:CoordinateSystem, spase:Description, spase:Field, spase:FieldValue, spase:Mixed, spase:Name, spase:ParameterKey, spase:Particle, spase:RenderingHints, spase:Set, spase:Structure, spase:Support, spase:UCD, spase:Units, spase:UnitsConversion, spase:ValidMax, spase:ValidMin, spase:Wave
Source	<pre> &lt;xsd:complexType name="Parameter"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A container of information regarding a parameter whose values are part of the product. Every product contains or can be related to one or more parameters.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Name" type="spase:Name" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Set" type="spase:Set" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="ParameterKey" type="spase:ParameterKey" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="UCD" type="spase:UCD" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Cadence" type="spase:Cadence" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="CadenceMin" type="spase:CadenceMin" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="CadenceMax" type="spase:CadenceMax" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="UnitsConversion" type="spase:UnitsConversion" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="CoordinateSystem" type="spase:CoordinateSystem" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="RenderingHints" type="spase:RenderingHints" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Structure" type="spase:Structure" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ValidMin" type="spase:ValidMin" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ValidMax" type="spase:ValidMax" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="FieldValue" type="spase:FieldValue" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:choice minOccurs="1" maxOccurs="1"&gt;     &lt;xsd:element name="Field" type="spase:Field"/&gt;     &lt;xsd:element name="Particle" type="spase:Particle"/&gt;     &lt;xsd:element name="Wave" type="spase:Wave"/&gt;     &lt;xsd:element name="Mixed" type="spase:Mixed"/&gt;     &lt;xsd:element name="Support" type="spase:Support"/&gt;   &lt;/xsd:choice&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:CoordinateSystem

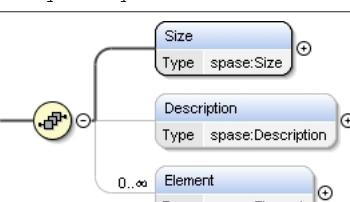
Namespace	http://www.spase-group.org/data/schema
Annotations	The specification of the orientation of a set of (typically) orthogonal base axes.
Diagram	
Used by	Element spase:Parameter/spase:CoordinateSystem
Model	spase:CoordinateRepresentation, spase:CoordinateSystemName
Children	spase:CoordinateRepresentation, spase:CoordinateSystemName
Source	<pre> &lt;xsd:complexType name="CoordinateSystem"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The specification of the orientation of a set of (typically) orthogonal base axes.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="CoordinateRepresentation" type="spase:CoordinateRepresentation" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="CoordinateSystemName" type="spase:CoordinateSystemName" minOccurs="1" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:RenderingHints

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes to aid in the rendering of parameter.

Diagram	
Used by	Elements spase:Element/spase:Parameter/spase:RenderingHints
Model	spase:DisplayType{0,1} , spase:AxisLabel{0,1} , spase:RenderingAxis{0,1} , spase:Index{0,1} , spase:ValueFormat{0,1} , spase:ScaleMin{0,1} , spase:ScaleMax{0,1} , spase:ScaleType{0,1}
Children	spase:AxisLabel, spase:DisplayType, spase:Index, spase:RenderingAxis, spase:ScaleMax, spase:ScaleMin, spase:ScaleType, spase:ValueFormat
Source	<pre>&lt;xsd:complexType name="RenderingHints"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Attributes to aid in the rendering of parameter.&lt;/   xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="DisplayType" type="spase:DisplayType" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="AxisLabel" type="spase:AxisLabel" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="RenderingAxis" type="spase:RenderingAxis" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Index" type="spase:Index" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ValueFormat" type="spase:ValueFormat" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ScaleMin" type="spase:ScaleMin" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ScaleMax" type="spase:ScaleMax" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ScaleType" type="spase:ScaleType" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Structure

Namespace	http://www.spase-group.org/data/schema
Annotations	The organization and relationship of individual values within a quantity.
Diagram	
Used by	Element spase:Parameter/spase:Structure
Model	spase:Size , spase:Description{0,1} , spase:Element*
Children	spase:Description, spase:Element, spase:Size
Source	<pre>&lt;xsd:complexType name="Structure"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The organization and relationship of individual values within a quantity.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Size" type="spase:Size"/&gt;     &lt;xsd:element name="Description" type="spase:Description"/&gt;     &lt;xsd:element name="Element" type="spase:Element" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>

	<pre>&lt;xsd:element name="Size" type="spase:Size" minOccurs="1" maxOccurs="1"/&gt; &lt;xsd:element name="Description" type="spase:Description" minOccurs="0" maxOccurs="1"/&gt; &lt;xsd:element name="Element" type="spase:Element" minOccurs="0" maxOccurs="unbounded"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Element

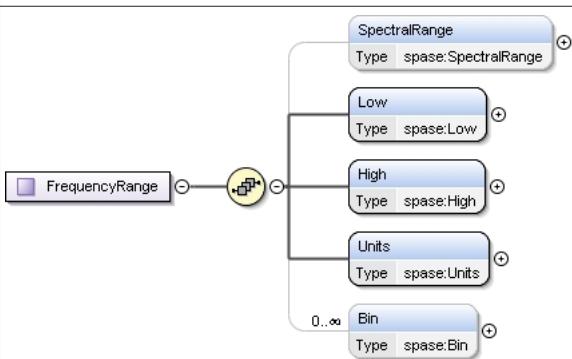
Namespace	http://www.spase-group.org/data/schema
Annotations	A component or individual unit of a multiple value quantity such as an array or vector.
Diagram	<pre> classDiagram     class Element     class Name {         &lt;&lt;Type spase:Name&gt;&gt;     }     class Qualifier {         &lt;&lt;Type spase:Qualifier&gt;&gt;     }     class Index {         &lt;&lt;Type spase:Index&gt;&gt;     }     class ParameterKey {         &lt;&lt;Type spase:ParameterKey&gt;&gt;     }     class Units {         &lt;&lt;Type spase:Units&gt;&gt;     }     class UnitsConversion {         &lt;&lt;Type spase:UnitsConversion&gt;&gt;     }     class ValidMin {         &lt;&lt;Type spase:ValidMin&gt;&gt;     }     class ValidMax {         &lt;&lt;Type spase:ValidMax&gt;&gt;     }     class FillValue {         &lt;&lt;Type spase:FillValue&gt;&gt;     }     class RenderingHints {         &lt;&lt;Type spase:RenderingHints&gt;&gt;     }      Element &lt; -- Name     Element &lt; -- Qualifier     Element &lt; -- Index     Element &lt; -- ParameterKey     Element &lt; -- Units     Element &lt; -- UnitsConversion     Element &lt; -- ValidMin     Element &lt; -- ValidMax     Element &lt; -- FillValue     Element &lt; -- RenderingHints   </pre>
Used by	Element spase:Structure/spase:Element
Model	spase:Name , spase:Qualifier* , spase:Index , spase:ParameterKey{0,1} , spase:Units{0,1} , spase:UnitsConversion{0,1} , spase:ValidMin{0,1} , spase:ValidMax{0,1} , spase:FillValue{0,1} , spase:RenderingHints{0,1}
Children	spase:FieldValue, spase:Index, spase:Name, spase:ParameterKey, spase:Qualifier, spase:RenderingHints, spase:Units, spase:UnitsConversion, spase:ValidMax, spase:ValidMin
Source	<pre> &lt;xsd:complexType name="Element"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A component or individual unit of a multiple value quantity such as an array or vector.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Name" type="spase:Name" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Index" type="spase:Index" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ParameterKey" type="spase:ParameterKey" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="UnitsConversion" type="spase:UnitsConversion" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ValidMin" type="spase:ValidMin" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ValidMax" type="spase:ValidMax" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="FieldValue" type="spase:FieldValue" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="RenderingHints" type="spase:RenderingHints" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Field

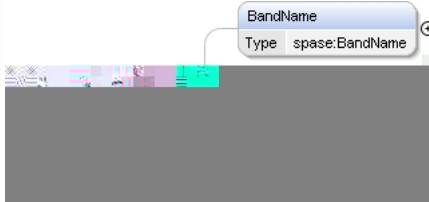
Namespace	http://www.spase-group.org/data/schema
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Annotations	The space around a radiating body within which its electromagnetic attributes can exert force on another similar body that is not in direct contact.
Diagram	
Used by	Element spase:Parameter/spase:Field
Model	spase:Qualifier*, spase:FieldQuantity , spase:FrequencyRange{0,1}
Children	spase:FieldQuantity, spase:FrequencyRange, spase:Qualifier
Source	<pre> &lt;xsd:complexType name="Field"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The space around a radiating body within which its electromagnetic attributes can exert force on another similar body that is not in direct contact.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="FieldQuantity" type="spase:FieldQuantity" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="FrequencyRange" type="spase:FrequencyRange" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

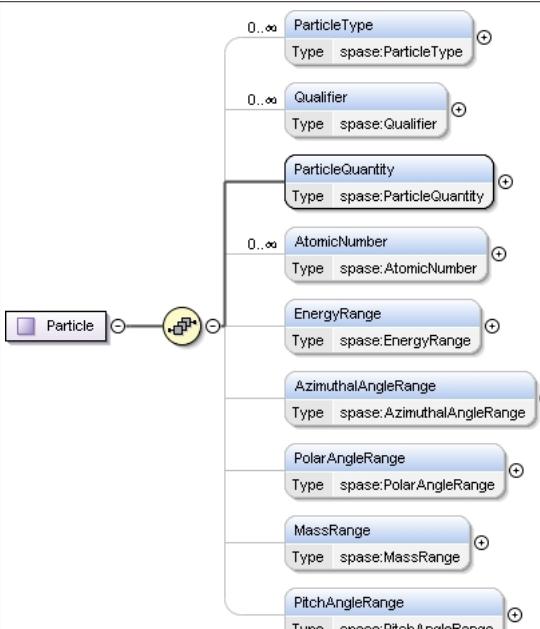
## Complex Type spase:FrequencyRange

Namespace	http://www.spase-group.org/data/schema
Annotations	The range of possible values for the observed frequency.
Diagram	
Used by	Elements spase:Field/spase:FrequencyRange, spase:Wave/spase:FrequencyRange
Model	spase:SpectralRange{0,1} , spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:SpectralRange, spase:Units
Source	<pre> &lt;xsd:complexType name="FrequencyRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The range of possible values for the observed frequency.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Bin

Namespace	http://www.spase-group.org/data/schema
Annotations	A grouping of observations according to a band or window of a common attribute.
Diagram	
Used by	Elements spase:AzimuthalAngleRange/spase:Bin, spase:EnergyRange/spase:Bin, spase:FrequencyRange/spase:Bin, spase:MassRange/spase:Bin, spase:PitchAngleRange/spase:Bin, spase:PolarAngleRange/spase:Bin, spase:WavelengthRange/spase:Bin
Model	spase:BandName{0,1} , spase:Low , spase:High
Children	spase:BandName, spase:High, spase:Low
Source	<pre>&lt;xsd:complexType name="Bin"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A grouping of observations according to a band or window of a common attribute.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="BandName" type="spase:BandName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Particle

Namespace	http://www.spase-group.org/data/schema
Annotations	A description of the types of particles observed in the measurement. This includes both direct observations and inferred observations.
Diagram	
Used by	Element spase:Parameter/spase:Particle
Model	spase:ParticleType*, spase:Qualifier*, spase:ParticleQuantity, spase:AtomicNumber*, spase:EnergyRange{0,1}, spase:AzimuthalAngleRange{0,1}, spase:PolarAngleRange{0,1}, spase:MassRange{0,1}, spase:PitchAngleRange{0,1}

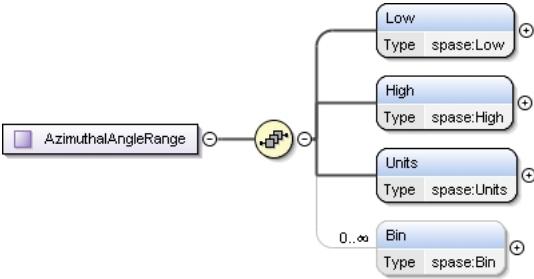
Children	spase:AtomicNumber, spase:AzimuthalAngleRange, spase:EnergyRange, spase:MassRange, spase:ParticleQuantity, spase:ParticleType, spase:PitchAngleRange, spase:PolarAngleRange, spase:Qualifier
Source	<pre> &lt;xsd:complexType name="Particle"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A description of the types of particles observed in the measurement. This includes both direct observations and inferred observations.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ParticleType" type="spase:ParticleType" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="ParticleQuantity" type="spase:ParticleQuantity" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AtomicNumber" type="spase:AtomicNumber" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="EnergyRange" type="spase:EnergyRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="AzimuthalAngleRange" type="spase:AzimuthalAngleRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="PolarAngleRange" type="spase:PolarAngleRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="MassRange" type="spase:MassRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="PitchAngleRange" type="spase:PitchAngleRange" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:EnergyRange

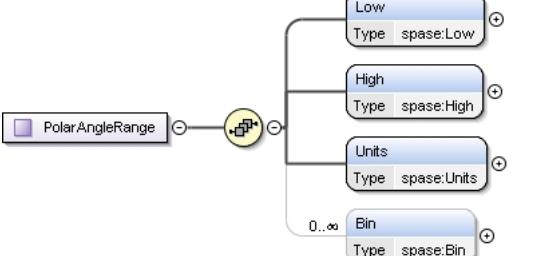
Namespace	http://www.spase-group.org/data/schema
Annotations	The minimum and maximum energy values of the particles represented by a given "physical parameter" description.
Diagram	<pre> classDiagram     class EnergyRange     class Low {Type spase:Low}     class High {Type spase:High}     class Units {Type spase:Units}     class Bin {Type spase:Bin, multiplicity 0..*}      EnergyRange &lt; -- Low     EnergyRange &lt; -- High     EnergyRange &lt; -- Units     EnergyRange &lt; -- Bin   </pre>
Used by	Elements spase:Particle/spase:EnergyRange, spase:Wave/spase:EnergyRange
Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Source	<pre> &lt;xsd:complexType name="EnergyRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The minimum and maximum energy values of the particles represented by a given "physical parameter" description.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:AzimuthalAngleRange

Namespace	http://www.spase-group.org/data/schema
Annotations	The range of possible azimuthal angles for a group of energy observations. Default units are degrees.

Diagram	
Used by	Element spase:Particle/spase:AzimuthalAngleRange
Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Source	<pre>&lt;xsd:complexType name="AzimuthalAngleRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The range of possible azimuthal angles for a group of energy observations. Default units are degrees.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Complex Type spase:PolarAngleRange

Namespace	http://www.spase-group.org/data/schema
Annotations	The range of possible polar angles for a group of energy observations. Defaults units are degrees.
Diagram	
Used by	Element spase:Particle/spase:PolarAngleRange
Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Source	<pre>&lt;xsd:complexType name="PolarAngleRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The range of possible polar angles for a group of energy observations. Defaults units are degrees.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Complex Type spase:MassRange

Namespace	http://www.spase-group.org/data/schema
Annotations	The range of possible mass for a group of

	particle observations.
Diagram	<pre> classDiagram     class MassRange {         &lt;&lt;MassRange&gt;&gt;         &lt;&lt;spase:MassRange&gt;&gt;         &lt;&lt;Low&gt;&gt;         &lt;&lt;High&gt;&gt;         &lt;&lt;Units&gt;&gt;         &lt;&lt;Bin&gt;&gt;     }     MassRange &lt; -- Low     MassRange &lt; -- High     MassRange &lt; -- Units     MassRange &lt; -- Bin   </pre>
Used by	Element spase:Particle/spase:MassRange
Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Source	<pre> &lt;xsd:complexType name="MassRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The range of possible mass for a group of particle observations.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Complex Type spase:PitchAngleRange

Namespace	http://www.spase-group.org/data/schema
Annotations	The range of possible pitch angles for a group of particle observations.
Diagram	<pre> classDiagram     class PitchAngleRange {         &lt;&lt;PitchAngleRange&gt;&gt;         &lt;&lt;spase:PitchAngleRange&gt;&gt;         &lt;&lt;Low&gt;&gt;         &lt;&lt;High&gt;&gt;         &lt;&lt;Units&gt;&gt;         &lt;&lt;Bin&gt;&gt;     }     PitchAngleRange &lt; -- Low     PitchAngleRange &lt; -- High     PitchAngleRange &lt; -- Units     PitchAngleRange &lt; -- Bin   </pre>
Used by	Element spase:Particle/spase:PitchAngleRange
Model	spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:Units
Source	<pre> &lt;xsd:complexType name="PitchAngleRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The range of possible pitch angles for a group of particle observations.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Complex Type spase:Wave

Namespace	http://www.spase-group.org/data/schema
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Annotations	Periodic or quasi-periodic (AC) variations of physical quantities in time and space, capable of propagating or being trapped within particular regimes.
Diagram	
Used by	Element spase:Parameter/spase:Wave
Model	spase:WaveType{0,1} , spase:Qualifier* , spase:WaveQuantity , spase:EnergyRange{0,1} , spase:FrequencyRange{0,1} , spase:WavelengthRange{0,1}
Children	spase:EnergyRange, spase:FrequencyRange, spase:Qualifier, spase:WaveQuantity, spase:WaveType, spase:WavelengthRange
Source	<pre>&lt;xsd:complexType name="Wave"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Periodic or quasi-periodic (AC) variations of physical quantities in time and space, capable of propagating or being trapped within particular regimes.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="WaveType" type="spase:WaveType" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="WaveQuantity" type="spase:WaveQuantity" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="EnergyRange" type="spase:EnergyRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="FrequencyRange" type="spase:FrequencyRange" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="WavelengthRange" type="spase:WavelengthRange" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:WavelengthRange

Namespace	http://www.spase-group.org/data/schema
Annotations	The range of possible values for the observed wavelength.
Diagram	
Used by	Element spase:Wave/spase:WavelengthRange
Model	spase:SpectralRange{0,1} , spase:Low , spase:High , spase:Units , spase:Bin*
Children	spase:Bin, spase:High, spase:Low, spase:SpectralRange, spase:Units
Source	<pre>&lt;xsd:complexType name="WavelengthRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The range of possible values for the observed wavelength.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;</pre>

	<pre> &lt;/xsd:annotation&gt; &lt;xsd:sequence&gt;   &lt;xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="Low" type="spase:Low" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="High" type="spase:High" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="Units" type="spase:Units" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="Bin" type="spase:Bin" minOccurs="0" maxOccurs="unbounded"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Mixed

Namespace	http://www.spase-group.org/data/schema
Annotations	A parameter derived from more than one of the type of parameter. For example, plasma beta, the ratio of plasma particle energy density to the energy density of the magnetic field permeating the plasma, is "mixed."
Diagram	<pre> classDiagram     class Mixed     class MixedQuantity {         &lt;&lt;MixedQuantity&gt;&gt;         Type spase:MixedQuantity     }     class ParticleType {         &lt;&lt;ParticleType&gt;&gt;         Type spase:ParticleType     }     class Qualifier {         &lt;&lt;Qualifier&gt;&gt;         Type spase:Qualifier     }      Mixed "0..1" -- "0..1" MixedQuantity     Mixed "0..infinity" -- "0..infinity" ParticleType     Mixed "0..infinity" -- "0..infinity" Qualifier </pre>
Used by	Element spase:Parameter/spase:Mixed
Model	spase:MixedQuantity , spase:ParticleType* , spase:Qualifier*
Children	spase:MixedQuantity, spase:ParticleType, spase:Qualifier
Source	<pre> &lt;xsd:complexType name="Mixed"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A parameter derived from more than one of the type of parameter. For example, plasma beta, the ratio of plasma particle energy density to the energy density of the magnetic field permeating the plasma, is "mixed."&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="MixedQuantity" type="spase:MixedQuantity" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ParticleType" type="spase:ParticleType" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Support

Namespace	http://www.spase-group.org/data/schema
Annotations	Information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.
Diagram	<pre> classDiagram     class Support     class Qualifier {         &lt;&lt;Qualifier&gt;&gt;         Type spase:Qualifier     }     class SupportQuantity {         &lt;&lt;SupportQuantity&gt;&gt;         Type spase:SupportQuantity     }      Support "0..infinity" -- "0..infinity" Qualifier     Support "0..infinity" -- "0..infinity" SupportQuantity </pre>
Used by	Element spase:Parameter/spase:Support
Model	spase:Qualifier* , spase:SupportQuantity
Children	spase:Qualifier, spase:SupportQuantity
Source	<pre> &lt;xsd:complexType name="Support"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:complexType&gt; </pre>

	<pre> &lt;xsd:sequence&gt;   &lt;xsd:element name="Qualifier" type="spase:Qualifier" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="SupportQuantity" type="spase:SupportQuantity" minOccurs="1" maxOccurs="1"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

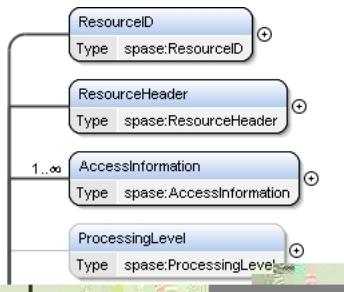
## Complex Type spase:Extension

Namespace	http://www.spase-group.org/data/schema
Annotations	A container of other metadata which is not part of the SPASE data model. The contents of this element are defined by individual usage. The organization and content are constrained by the implementation. For example, in an XML representation of the SPASE metadata the content must conform to the XML specifications.
Diagram	
Used by	Elements spase:Annotation/spase:Extension, spase:Catalog/spase:Extension, spase:DisplayData/spase:Extension, spase:Instrument/spase:Extension, spase:NumericalData/spase:Extension, spase:Observatory/spase:Extension, spase:Person/spase:Extension, spase:Registry/spase:Extension, spase:Repository/spase:Extension, spase:Service/spase:Extension
Model	ANY element from ANY namespace OTHER than 'http://www.spase-group.org/data/schema'
Source	<pre> &lt;xsd:complexType name="Extension"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A container of other metadata which is not part of the SPASE data model. The contents of this element are defined by individual usage. The organization and content are constrained by the implementation. For example, in an XML representation of the SPASE metadata the content must conform to the XML specifications.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:any minOccurs="0" maxOccurs="unbounded" processContents="lax" namespace="##other"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:DisplayData

Namespace	http://www.spase-group.org/data/schema
Annotations	A graphical representation of data wherein the underlying numeric values are not (readily) accessible for analysis.. Examples are line plots and spectrograms. A Display Data resource is a type of "data product" which is a set of data that is uniformly processed and formatted, from one or more instruments, typically spanning the full duration of the observations of the relevant instrument(s). A data product may consist of a collection of granules of successive time spans, but may be a single high-level entity.

## Diagram



## Used by

Element spase:Spase/spase:DisplayData

## Model

spase:ResourceId , spase:ResourceHeader , spase:AccessInformation+ , spase:ProcessingLevel{0,1} , spase:ProviderName{0,1} , spase:ProviderResourceName{0,1} , spase:ProviderProcessingLevel{0,1} , spase:ProviderVersion{0,1} , spase:InstrumentID\* , spase:MeasurementType+ , spase:TemporalDescription{0,1} , spase:SpectralRange\* , spase:DisplayCadence{0,1} , spase:ObservedRegion\* , spase:Caveats{0,1} , spase:Keyword\* , spase:InputResourceID\* , spase:Parameter\* , spase:Extension\*

## Children

spase:AccessInformation, spase:Caveats, spase:DisplayCadence, spase:Extension, spase:InputResourceID, spase:InstrumentID, spase:Keyword, spase:MeasurementType, spase:ObservedRegion, spase:Parameter, spase:ProcessingLevel, spase:ProviderName, spase:ProviderProcessingLevel, spase:ProviderResourceName, spase:ProviderVersion, spase:ResourceHeader, spase:ResourceId, spase:SpectralRange, spase:TemporalDescription

## Source

```

<xsd:complexType name="DisplayData">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A graphical representation of data wherein the underlying numeric values are not (readily) accessible for analysis.. Examples are line plots and spectrograms. A Display Data resource is a type of "data product" which is a set of data that is uniformly processed and formatted, from one or more instruments, typically spanning the full duration of the observations of the relevant instrument(s). A data product may consist

```

<pre> of a collection of granules of successive time spans, but may be a single high-level entity.&lt;/ xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:sequence&gt;   &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="ProcessingLevel" type="spase:ProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="ProviderName" type="spase:ProviderName" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="ProviderResourceName" type="spase:ProviderResourceName" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="ProviderProcessingLevel" type="spase:ProviderProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="ProviderVersion" type="spase:ProviderVersion" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="InstrumentID" type="spase:InstrumentID" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="MeasurementType" type="spase:MeasurementType" minOccurs="1" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="TemporalDescription" type="spase:TemporalDescription" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="DisplayCadence" type="spase:DisplayCadence" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="ObservedRegion" type="spase:Region" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="Parameter" type="spase:Parameter" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>	Schema location file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
--	--

## Complex Type spase:TemporalDescription

Namespace	http://www.spase-group.org/data/schema
Annotations	A characterization of the time over which the measurement was taken.
Diagram	<pre> classDiagram     class TimeSpan {         Type spase:TimeSpan     }     class Cadence {         Type spase:Cadence     }     class CadenceMin {         Type spase:CadenceMin     }     class CadenceMax {         Type spase:CadenceMax     }     class TemporalDescription {         --&gt; TimeSpan     }     </pre>
Used by	Elements spase:DisplayData/spase:TemporalDescription, spase:NumericalData/spase:TemporalDescription
Model	spase:TimeSpan , spase:Cadence{0,1} , spase:CadenceMin{0,1} , spase:CadenceMax{0,1} , spase:Exposure{0,1} , spase:ExposureMin{0,1} , spase:ExposureMax{0,1}
Children	spase:Cadence, spase:CadenceMax, spase:CadenceMin, spase:Exposure, spase:ExposureMax, spase:ExposureMin, spase:TimeSpan
Source	<pre> &lt;xsd:complexType name="TemporalDescription"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A characterization of the time over which the measurement was taken.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="TimeSpan" type="spase:TimeSpan" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Cadence" type="spase:Cadence" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="CadenceMin" type="spase:CadenceMin" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="CadenceMax" type="spase:CadenceMax" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>

	<pre> &lt;xsd:element name="Exposure" type="spase:Exposure" minOccurs="0" maxOccurs="1"/&gt; &lt;xsd:element name="ExposureMin" type="spase:ExposureMin" minOccurs="0" maxOccurs="1"/&gt; &lt;xsd:element name="ExposureMax" type="spase:ExposureMax" minOccurs="0" maxOccurs="1"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:NumericalData

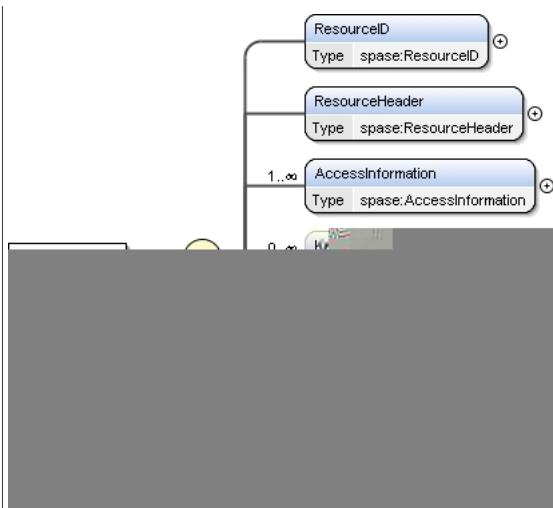
Namespace	http://www.spase-group.org/data/schema
Annotations	<p>Data stored as numerical values in one or more specified formats. A Numerical Data resource is a type of "data product" which is a set of data that is uniformly processed and formatted, from one or more instruments, typically spanning the full duration of the observations of the relevant instrument(s). A data product may consist of Parameters stored in a collection of granules of successive time spans or a single data granule.</p>
Diagram	 <p>The diagram shows a UML class named "spase:Record". The class has a single attribute named "ResourceID". The class is represented by a blue rounded rectangle, and the attribute is shown as a small box with the text "ResourceID" above it and "Type: spase:Record" below it.</p>

Used by	Element spase:Spase/spase:NumericalData
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessInformation+ , spase:ProcessingLevel{0,1} , spase:ProviderName{0,1} , spase:ProviderResourceName{0,1} , spase:ProviderProcessingLevel{0,1} , spase:ProviderVersion{0,1} , spase:InstrumentID* , spase:MeasurementType+ , spase:TemporalDescription{0,1} , spase:SpectralRange* , spase:ObservedRegion* , spase:Caveats{0,1} , spase:Keyword* , spase:InputResourceID* , spase:Parameter* , spase:Extension*
Children	spase:AccessInformation, spase:Caveats, spase:Extension, spase:InputResourceID, spase:InstrumentID, spase:Keyword, spase:MeasurementType, spase:ObservedRegion, spase:Parameter, spase:ProcessingLevel, spase:ProviderName, spase:ProviderProcessingLevel, spase:ProviderResourceName, spase:ProviderVersion, spase:ResourceHeader, spase:ResourceID, spase:SpectralRange, spase:TemporalDescription
Source	<pre> &lt;xsd:complexType name="NumericalData"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Data stored as numerical values in one or more specified formats. A Numerical Data resource is a type of "data product" which is a set of data that is uniformly processed and formatted, from one or more instruments, typically spanning the full duration of the observations of the relevant instrument(s). A data product may consist of Parameters stored in a collection of granules of successive time spans or a single data granule.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AccessInformation" type="spase:AccessInformation" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="ProcessingLevel" type="spase:ProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProviderName" type="spase:ProviderName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProviderResourceName" type="spase:ProviderResourceName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProviderProcessingLevel" type="spase:ProviderProcessingLevel" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ProviderVersion" type="spase:ProviderVersion" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="InstrumentID" type="spase:InstrumentID" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="MeasurementType" type="spase:MeasurementType" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="TemporalDescription" type="spase:TemporalDescription" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="SpectralRange" type="spase:SpectralRange" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="ObservedRegion" type="spase:Region" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Keyword" type="spase:Keyword" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="InputResourceID" type="spase:InputResourceID" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Parameter" type="spase:Parameter" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Document

Namespace	http://www.spase-group.org/data/schema
Annotations	A set of information designed and presented as an individual entity. A document may contain plain or formatted text, in-line graphics, sound, other multimedia data, or hypermedia references. A Document resource is intended for use on digital objects that have no other identifier (e.g., DOI or ISBN).

## Diagram



## Used by

Element spase:Spase/spase:Document

## Model

spase:ResourceID , spase:ResourceHeader , spase:AccessInformation+ , spase:Keyword\* , spase:DocumentType , spase:MIMEType , spase:InputResourceID\*

## Children

spase:AccessInformation, spase:DocumentType, spase:InputResourceID, spase:Keyword, spase:MIMEType, spase:ResourceHeader, spase:ResourceID

## Source

```

<xsd:complexType name="Document">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A set of information designed and presented as an individual or group of related data items, conforming to a formal structure</xsd:documentation>
  </xsd:annotation>
</xsd:complexType>
  
```

Diagram	
Used by	Element spase:Spase/spase:Granule
Model	spase:ResourceID , spase:ReleaseDate , spase:ExpirationDate{0,1} , spase:ParentID , spase:PriorID* , spase:StartDate , spase:StopDate , spase:Source+
Children	spase:ExpirationDate, spase:ParentID, spase:PriorID, spase:ReleaseDate, spase:ResourceID, spase:Source, spase:StartDate, spase:StopDate
Source	<pre> &lt;xsd:complexType name="Granule"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;An accessible portion of another resource. A Granule may be composed of one or more physical pieces (files) which are considered inseparable. For example, a data storage format that maintains metadata and binary data in separate, but tightly coupled files. Granules should not be used to group files that have simple relationships or which are associated through a parent resource. For example, each file containing a time interval data for a Numerical Data resource would each be considered a Granule. The ParentID of a Granule resource must be a NumericalData resource. The attributes of a Granule supersede the corresponding attributes in the NumericalData resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ExpirationDate" type="spase:ExpirationDate" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ParentID" type="spase:ParentID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="PriorID" type="spase:PriorID" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="StartDate" type="spase:StartDate" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="StopDate" type="spase:StopDate" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Source" type="spase:Source" minOccurs="1" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Source

Namespace	http://www.spase-group.org/data/schema
Annotations	The location and attributes of an object.
Diagram	

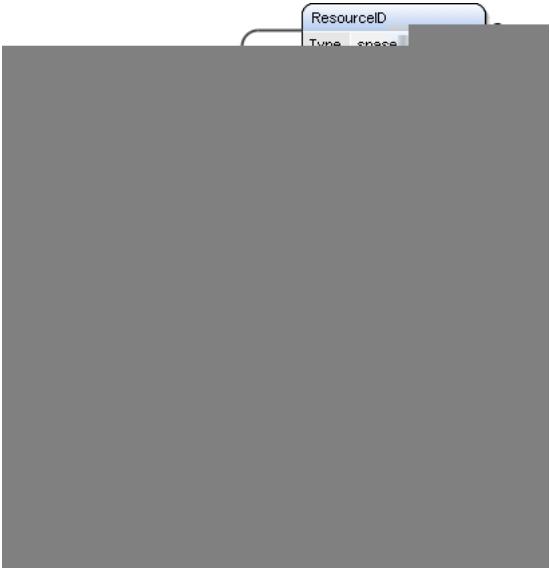
Used by	Element spase:Granule/spase:Source
Model	spase:SourceType , spase:URL , spase:MirrorURL* , spase:Checksum{0,1} , spase:DataExtent{0,1}
Children	spase:Checksum, spase:DataExtent, spase:MirrorURL, spase:SourceType, spase:URL
Source	<pre>&lt;xsd:complexType name="Source"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The location and attributes of an object.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="SourceType" type="spase:SourceType" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="URL" type="spase:URL" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="MirrorURL" type="spase:MirrorURL" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Checksum" type="spase:Checksum" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="DataExtent" type="spase:DataExtent" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Checksum

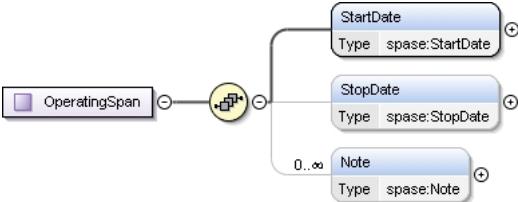
Namespace	http://www.spase-group.org/data/schema
Annotations	A computed value that is dependent upon the contents of a digital data object. Primarily used to check whether errors or alterations have occurred during the transmission or storage of a data object.
Diagram	<pre> classDiagram     class Checksum     class HashValue {         &lt;&lt;Type spase:HashValue&gt;&gt;     }     class HashFunction {         &lt;&lt;Type spase:HashFunction&gt;&gt;     }      Checksum &lt; -- HashValue     Checksum &lt; -- HashFunction   </pre>
Used by	Element spase:Source/spase:Checksum
Model	spase:HashValue , spase:HashFunction
Children	spase:HashFunction, spase:HashValue
Source	<pre>&lt;xsd:complexType name="Checksum"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A computed value that is dependent upon the contents of a digital data object. Primarily used to check whether errors or alterations have occurred during the transmission or storage of a data object.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="HashValue" type="spase:HashValue" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="HashFunction" type="spase:HashFunction" minOccurs="1" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Instrument

Namespace	http://www.spase-group.org/data/schema
Annotations	A device that makes measurements used to characterize a physical phenomenon, or a family of like devices.

Diagram	
Used by	Element spase:Spase/spase:Instrument
Model	spase:ResourceID , spase:ResourceHeader , spase:InstrumentType+ , spase:InvestigationName+ , spase:OperatingSpan{0,1} , spase:ObservatoryID , spase:Caveats{0,1} , spase:Extension*
Children	spase:Caveats, spase:Extension, spase:InstrumentType, spase:InvestigationName, spase:ObservatoryID, spase:OperatingSpan, spase:ResourceHeader, spase:ResourceID
Source	<pre>&lt;xsd:complexType name="Instrument"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A device that makes measurements used to characterize a physical phenomenon, or a family of like devices.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="InstrumentType" type="spase:InstrumentType" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="InvestigationName" type="spase:InvestigationName" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="OperatingSpan" type="spase:OperatingSpan" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ObservatoryID" type="spase:ObservatoryID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Caveats" type="spase:Caveats" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:OperatingSpan

Namespace	http://www.spase-group.org/data/schema
Annotations	The interval in time from the first point at which an instrument or spacecraft was producing and sending data until the last such time, ignoring possible gaps.
Diagram	
Used by	Elements spase:Instrument/spase:OperatingSpan, spase:Observatory/spase:OperatingSpan
Model	spase:StartDate , spase:StopDate{0,1} , spase>Note*
Children	spase>Note, spase:StartDate, spase:StopDate
Source	<pre>&lt;xsd:complexType name="OperatingSpan"&gt;   &lt;xsd:annotation&gt;</pre>

	<pre> &lt;xsd:documentation xml:lang="en"&gt;The interval in time from the first point at which an instrument or spacecraft was producing and sending data until the last such time, ignoring possible gaps.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:sequence&gt;   &lt;xsd:element name="StartDate" type="spase:StartDate" minOccurs="1" maxOccurs="1"/&gt;   &lt;xsd:element name="StopDate" type="spase:StopDate" minOccurs="0" maxOccurs="1"/&gt;   &lt;xsd:element name="Note" type="spase&gt;Note" minOccurs="0" maxOccurs="unbounded"/&gt; &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Observatory

Namespace	http://www.spase-group.org/data/schema
Annotations	The host (spacecraft, network, facility) for instruments making observations, or a family of closely related hosts.
Diagram	<pre> classDiagram     class Observatory     class ResourceID     class ResourceHeader     class ObservatoryGroupID     class Location     class OperatingSpan     class Extension      Observatory "0..1" -- "1..infinity" ResourceID :      Observatory "0..1" -- "1..infinity" ResourceHeader :      Observatory "0..1" -- "1..infinity" ObservatoryGroupID :      Observatory "1..infinity" -- "1..infinity" Location :      Observatory "1..infinity" -- "1..infinity" OperatingSpan :      Observatory "0..1" -- "1..infinity" Extension :    </pre>
Used by	Element spase:Spase/spase:Observatory
Model	spase:ResourceID , spase:ResourceHeader , spase:ObservatoryGroupID* , spase:Location , spase:OperatingSpan+ , spase:Extension*
Children	spase:Extension, spase:Location, spase:ObservatoryGroupID, spase:OperatingSpan, spase:ResourceHeader, spase:ResourceID
Source	<pre> &lt;xsd:complexType name="Observatory"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The host (spacecraft, network, facility) for instruments making observations, or a family of closely related hosts.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ObservatoryGroupID" type="spase:ObservatoryGroupID" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Location" type="spase:Location" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="OperatingSpan" type="spase:OperatingSpan" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Location

Namespace	http://www.spase-group.org/data/schema
Annotations	A position in space definable by a regional referencing system and geographic coordinates.

Diagram	
Used by	Element spase:Observatory/spase:Location
Model	spase:ObservatoryRegion+ , spase:CoordinateSystemName{0,1} , spase:Latitude{0,1} , spase:Longitude{0,1} , spase:Elevation{0,1}
Children	spase:CoordinateSystemName, spase:Elevation, spase:Latitude, spase:Longitude, spase:ObservatoryRegion
Source	<pre>&lt;xsd:complexType name="Location"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A position in space definable by a regional referencing system and geographic coordinates.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ObservatoryRegion" type="spase:Region" minOccurs="1" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="CoordinateSystemName" type="spase:CoordinateSystemName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Latitude" type="spase:Latitude" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Longitude" type="spase:Longitude" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Elevation" type="spase:Elevation" minOccurs="0" maxOccurs="1"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Complex Type spase:Person

Namespace	http://www.spase-group.org/data/schema
Annotations	An individual human being.
Diagram	

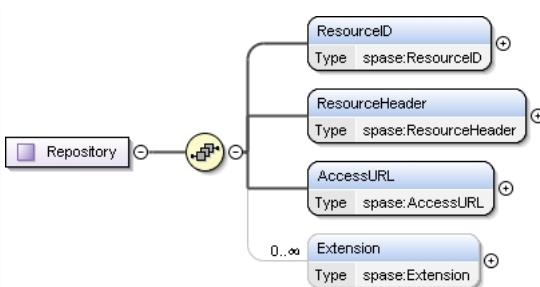
Used by	Element spase:Spase/spase:Person
Model	spase:ResourceID , spase:ReleaseDate{0,1} , spase:PersonName{0,1} , spase:OrganizationName , spase:Address{0,1} , spase:Email* , spase:PhoneNumber* , spase:FaxNumber{0,1} , spase:ORCIdentifier{0,1} , spase>Note{0,1} , spase:Extension*
Children	spase:Address, spase:Email, spase:Extension, spase:FaxNumber, spase>Note, spase:ORCIdentifier, spase:OrganizationName, spase:PersonName, spase:PhoneNumber, spase:ReleaseDate, spase:ResourceID
Source	<pre>&lt;xsd:complexType name="Person"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;An individual human being.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ReleaseDate" type="spase:ReleaseDate" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="PersonName" type="spase:PersonName" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="OrganizationName" type="spase:OrganizationName" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Address" type="spase:Address" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Email" type="spase:Email" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="PhoneNumber" type="spase:PhoneNumber" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="FaxNumber" type="spase:FaxNumber" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ORCIdentifier" type="spase:ORCIdentifier" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Note" type="spase&gt;Note" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Registry

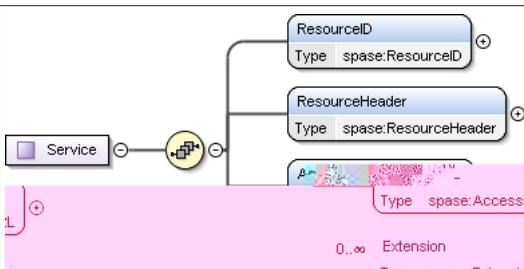
Namespace	http://www.spase-group.org/data/schema
Annotations	A location or facility where resources are catalogued.
Diagram	<pre> classDiagram     class Registry     class ResourceID     class ResourceHeader     class AccessURL     class Extension      Registry "0..1" -- "1" ResourceID : Type spase:ResourceID     Registry "0..1" -- "1" ResourceHeader : Type spase:ResourceHeader     Registry "0..1" -- "1" AccessURL : Type spase:AccessURL     Registry "0..&gt;" -- "0..&gt;" Extension : Type spase:Extension   </pre>
Used by	Element spase:Spase/spase:Registry
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessURL , spase:Extension*
Children	spase:AccessURL, spase:Extension, spase:ResourceHeader, spase:ResourceID
Source	<pre>&lt;xsd:complexType name="Registry"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A location or facility where resources are catalogued.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Repository

Namespace	http://www.spase-group.org/data/schema
Annotations	A location or facility where resources are stored.

Diagram	
Used by	Element spase:Spase/spase:Repository
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessURL , spase:Extension*
Children	spase:AccessURL, spase:Extension, spase:ResourceHeader, spase:ResourceID
Source	<pre>&lt;xsd:complexType name="Repository"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A location or facility where resources are stored.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:Service

Namespace	http://www.spase-group.org/data/schema
Annotations	A location or facility that can perform a well defined task.
Diagram	
Used by	Element spase:Spase/spase:Service
Model	spase:ResourceID , spase:ResourceHeader , spase:AccessURL , spase:Extension*
Children	spase:AccessURL, spase:Extension, spase:ResourceHeader, spase:ResourceID
Source	<pre>&lt;xsd:complexType name="Service"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A location or facility that can perform a well defined task.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="AccessURL" type="spase:AccessURL" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

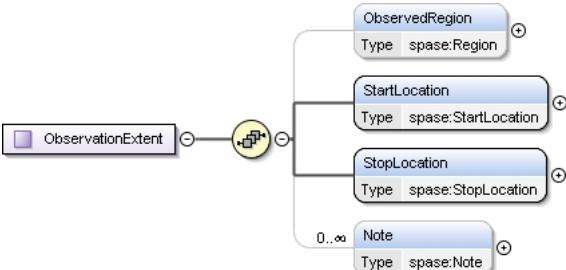
## Complex Type spase:Annotation

Namespace	http://www.spase-group.org/data/schema
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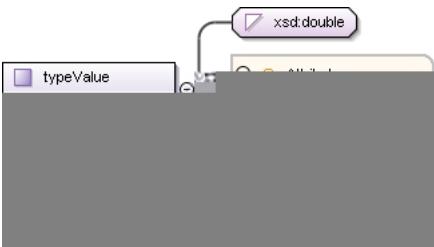
Annotations	Information which is explanatory or descriptive which is associated with another resource.
Diagram	<pre> classDiagram     class ResourceID {         Type spase:ResourceID     }     class ResourceHeader {         Type spase:ResourceHeader     }     class ImageURL {         Type spase:ImageURL     }     class AnnotationType {         Type spase:AnnotationType     }      ResourceID &lt; -- ResourceHeader     ResourceHeader &lt; -- ImageURL     ImageURL &lt; -- AnnotationType   </pre>
Used by	Element spase:Spase/spase:Annotation
Model	spase:ResourceID , spase:ResourceHeader , spase:ImageURL{0,1} , spase:AnnotationType , spase:PhenomenonType{0,1} , spase:ClassificationMethod{0,1} , spase:ConfidenceRating{0,1} , spase:TimeSpan* , spase:ObservationExtent* , spase:Extension*
Children	spase:AnnotationType, spase:ClassificationMethod, spase:ConfidenceRating, spase:Extension, spase:ImageURL, spase:ObservationExtent, spase:PhenomenonType, spase:ResourceHeader, spase:ResourceID, spase:TimeSpan
Source	<pre> &lt;xsd:complexType name="Annotation"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Information which is explanatory or descriptive which is associated with another resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ResourceID" type="spase:ResourceID" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ResourceHeader" type="spase:ResourceHeader" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="ImageURL" type="spase:ImageURL" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="AnnotationType" type="spase:AnnotationType" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="PhenomenonType" type="spase:PhenomenonType" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ClassificationMethod" type="spase:ClassificationMethod" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="ConfidenceRating" type="spase:ConfidenceRating" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="TimeSpan" type="spase:TimeSpan" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="ObservationExtent" type="spase:ObservationExtent" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;xsd:element name="Extension" type="spase:Extension" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;   </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:ObservationExtent

Namespace	http://www.spase-group.org/data/schema
Annotations	The spatial area encompassed by an observation.

Diagram	
Used by	Element spase:Annotation/spase:ObservationExtent
Model	spase:ObservedRegion{0,1}, spase:StartLocation, spase:StopLocation, spase>Note*
Children	spase>Note, spase:ObservedRegion, spase:StartLocation, spase:StopLocation
Source	<pre> &lt;xsd:complexType name="ObservationExtent"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The spatial area encompassed by an observation.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:sequence&gt;     &lt;xsd:element name="ObservedRegion" type="spase:Region" minOccurs="0" maxOccurs="1"/&gt;     &lt;xsd:element name="StartLocation" type="spase:StartLocation" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="StopLocation" type="spase:StopLocation" minOccurs="1" maxOccurs="1"/&gt;     &lt;xsd:element name="Note" type="spase&gt;Note" minOccurs="0" maxOccurs="unbounded"/&gt;   &lt;/xsd:sequence&gt; &lt;/xsd:complexType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Complex Type spase:typeValue

Namespace	http://www.spase-group.org/data/schema		
Annotations	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;   &lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt;</pre>		
Diagram			
Type	extension of xsd:double		
Attributes	QName	Type	Use
	Units	xsd:string	optional
		<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A description of the standardized measurement increments in which a value is specified. The description is represented as a mathematical phrase. Units should be represented by widely accepted representation. For example, units should conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures (see &lt;http://www.bipm.fr/&gt;) when appropriate or use tokens like "Re" to represent units of the Radius of the Earth. Within a phrase the circumflex (^) is used to indicate a power, a star (*) is used to indicate multiplication and a slash (/) division. When symbols are not separated by a mathematical operator, multiplication is assumed. Symbols for base units can be found at: &lt;http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols&gt; and those for common derived units can be found at: &lt;http://www.bipm.fr/en/si/ derived_units/2-2-2.html&gt;&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt;</pre>	
	UnitsConversion	xsd:string	optional
		<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number &gt; x", where "number" is a</pre>	

QName	Type	Use
		<p>numerical value and "x" is the appropriate SI units. The basic SI units are Enumerated: m (meter), N (newton), kg (kilogram), Pa (pascal), s (second), Hz (hertz), A (ampere), V (volt), K (kelvin), W (watt), rad (radian), J (joule), sr (steradian), C (coulomb), T (tesla), ohm (ohm), mho (mho or seimens), H (henry), and F (farad). Two useful units which are not SI units are: degree (angle), and unitless (no units). An example is: "1.0E-9&gt;T" which converts the units, presumably nT, to Tesla. Another example is: "1.0e+3&gt;m/s" which converts a velocity expressed in kilometers per second to meters per second. &lt;/xsd:documentation&gt;</p>
Source	<pre>&lt;xsd:complexType name="typeValue"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;           &lt;/xsd:documentation&gt;         &lt;/xsd:annotation&gt;       &lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:simpleContent&gt;       &lt;xsd:extension base="xsd:double"&gt;         &lt;xsd:attribute name="Units" type="xsd:string"&gt;           &lt;xsd:annotation&gt;             &lt;xsd:documentation xml:lang="en"&gt;               &lt;xsd:annotation&gt;                 &lt;xsd:documentation xml:lang="en"&gt;A description of the standardized measurement increments in which a value is specified. The description is represented as a mathematical phrase. Units should be represented by widely accepted representation. For example, units should conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures (see &lt;a href="http://www.bipm.fr/"&gt;http://www.bipm.fr/) ) when appropriate or use tokens like "Re" to represent units of the Radius of the Earth. Within a phrase the circumflex (^) is used to indicate a power, a star (*) is used to indicate multiplication and a slash (/) division. When symbols are not separated by a mathematical operator, multiplication is assumed. Symbols for base units can be found at: &lt;a href="http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols"&gt;http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols and those for common derived units can be found at: &lt;a href="http://www.bipm.fr/en/si/derived_units/2-2-2.html"&gt;http://www.bipm.fr/en/si/derived_units/2-2-2.html&lt;/xsd:documentation&gt;               &lt;/xsd:annotation&gt;             &lt;/xsd:documentation&gt;           &lt;/xsd:annotation&gt;         &lt;/xsd:documentation&gt;       &lt;/xsd:attribute&gt;       &lt;xsd:attribute name="UnitsConversion" type="xsd:string"&gt;         &lt;xsd:annotation&gt;           &lt;xsd:documentation xml:lang="en"&gt;             &lt;xsd:annotation&gt;               &lt;xsd:documentation xml:lang="en"&gt;The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number &gt; x", where "number" is a numerical value and "x" is the appropriate SI units. The basic SI units are Enumerated: m (meter), N (newton), kg (kilogram), Pa (pascal), s (second), Hz (hertz), A (ampere), V (volt), K (kelvin), W (watt), rad (radian), J (joule), sr (steradian), C (coulomb), T (tesla), ohm (ohm), mho (mho or seimens), H (henry), and F (farad). Two useful units which are not SI units are: degree (angle), and unitless (no units). An example is: "1.0E-9&gt;T" which converts the units, presumably nT, to Tesla. Another example is: "1.0e+3&gt;m/s" which converts a velocity expressed in kilometers per second to meters per second.&lt;/xsd:documentation&gt;               &lt;/xsd:annotation&gt;             &lt;/xsd:documentation&gt;           &lt;/xsd:annotation&gt;         &lt;/xsd:documentation&gt;       &lt;/xsd:attribute&gt;     &lt;/xsd:simpleContent&gt;   &lt;/xsd:complexType&gt;</pre>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Complex Type spase:typeElementBoundary

Namespace	http://www.spase-group.org/data/schema
Annotations	
Diagram	
Model	
Source	<pre>&lt;xsd:complexType name="typeElementBoundary"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;       &lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:sequence&gt;       &lt;xsd:sequence&gt;</pre>

	</xsd:complexType>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type(s)

### Simple Type spase:Version

Namespace	http://www.spase-group.org/data/schema
Annotations	Version number.
Diagram	A UML class diagram fragment showing a class named "Version" with a multiplicity of 1..1 at its end of a directed association labeled "xsd:string".
Type	restriction of xsd:string
Facets	enumeration 2.3.1
Used by	Element spase:Spase/spase:Version
Source	<pre> &lt;xsd:simpleType name="Version"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Version number.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="2.3.1"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ResourceID

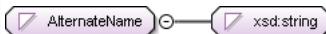
Namespace	http://www.spase-group.org/data/schema
Annotations	A Resource ID is a URI that has the form "scheme://authority/path" where "scheme" is "spase" for those resources administered through the SPASE framework, "authority" is the unique identifier for the resource provider registered within the SPASE framework and "path" is the unique identifier of the resource within the context of the "authority". The resource ID must be unique within the SPASE framework.
Diagram	A UML class diagram fragment showing a class named "ResourceID" with a multiplicity of 1..1 at its end of a directed association labeled "xsd:string".
Type	xsd:string
Used by	Elements spase:Annotation/spase:ResourceID, spase:Catalog/spase:ResourceID, spase:DisplayData/spase:ResourceID, spase:Document/spase:ResourceID, spase:Granule/spase:ResourceID, spase:Instrument/spase:ResourceID, spase:NumericalData/spase:ResourceID, spase:Observatory/spase:ResourceID, spase:Person/spase:ResourceID, spase:Registry/spase:ResourceID, spase:Repository/spase:ResourceID, spase:Service/spase:ResourceID
Source	<pre> &lt;xsd:simpleType name="ResourceID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A Resource ID is a URI that has the form "scheme://authority/path" where "scheme" is "spase" for those resources administered through the SPASE framework, "authority" is the unique identifier for the resource provider registered within the SPASE framework and "path" is the unique identifier of the resource within the context of the "authority". The resource ID must be unique within the SPASE framework.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ResourceName

Namespace	http://www.spase-group.org/data/schema
Annotations	A short textual description of a resource which may be useful when read by a person.
Diagram	A UML class diagram fragment showing a class named "ResourceName" with a multiplicity of 1..1 at its end of a directed association labeled "xsd:string".
Type	xsd:string

Used by	Element spase:ResourceHeader/spase:ResourceName
Source	<pre>&lt;xsd:simpleType name="ResourceName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A short textual description of a resource which may be useful when read by a person.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:AlternateName

Namespace	http://www.spase-group.org/data/schema
Annotations	An alternative or shortened name used to refer to a resource. This includes acronyms, expanded names or a synonym for a resource.
Diagram	
Type	xsd:string
Used by	Element spase:ResourceHeader/spase:AlternateName
Source	<pre>&lt;xsd:simpleType name="AlternateName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;An alternative or shortened name used to refer to a resource. This includes acronyms, expanded names or a synonym for a resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:DOI

Namespace	http://www.spase-group.org/data/schema
Annotations	A digital object identifier (DOI) is a unique alphanumeric string assigned by a registration agency (the International DOI Foundation) to identify content and provide a persistent link to its location on the Internet.
Diagram	
Type	xsd:string
Used by	Element spase:ResourceHeader/spase:DOI
Source	<pre>&lt;xsd:simpleType name="DOI"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A digital object identifier (DOI) is a unique alphanumeric string assigned by a registration agency (the International DOI Foundation) to identify content and provide a persistent link to its location on the Internet.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ReleaseDate

Namespace	http://www.spase-group.org/data/schema
Annotations	The date and time when a resource is made available. The availability of a resource coincides with the release of a resource description. If the Release Date is specified as a future date then it indicates that resource should not be made available until that time. However, this is only advisory and in practice the Release Date should be the actual date the resource description was published.
Diagram	

Type	xsd:dateTime
Used by	Elements spase:Granule/spase:ReleaseDate, spase:Person/spase:ReleaseDate, spase:ResourceHeader/ spase:ReleaseDate, spase:RevisionEvent/spase:ReleaseDate
Source	<pre>&lt;xsd:simpleType name="ReleaseDate"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The date and time when a resource is made available. The availability of a resource coincides with the release of a resource description. If the Release Date is specified as a future date then it indicates that resource should not be made available until that time. However, this is only advisory and in practice the Release Date should be the actual date the resource description was published.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:dateTime"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Note

Namespace	http://www.spase-group.org/data/schema
Annotations	Information which is useful or important for the understanding of a value or parameter.
Diagram	
Type	xsd:string
Used by	Elements spase:Association/spase:Note, spase:Contact/spase:Note, spase:ObservationExtent/spase:Note, spase:OperatingSpan/spase:Note, spase:Person/spase:Note, spase:RevisionEvent/spase:Note, spase:TimeSpan/spase:Note
Source	<pre>&lt;xsd:simpleType name="Note"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Information which is useful or important for the understanding of a value or parameter.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

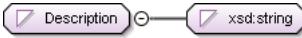
### Simple Type spase:ExpirationDate

Namespace	http://www.spase-group.org/data/schema
Annotations	The date and time when a resource is no longer available. If the Expiration Date is specified then it indicates that resource should not be made available after that time. However, this is only advisory and in practice a resource description should be unpublished to eliminate access to a resource.
Diagram	
Type	xsd:dateTime
Used by	Elements spase:Granule/spase:ExpirationDate, spase:ResourceHeader/spase:ExpirationDate
Source	<pre>&lt;xsd:simpleType name="ExpirationDate"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The date and time when a resource is no longer available. If the Expiration Date is specified then it indicates that resource should not be made available after that time. However, this is only advisory and in practice a resource description should be unpublished to eliminate access to a resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:dateTime"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Description

Namespace	http://www.spase-group.org/data/schema
Annotations	A narrative explanation with detail appropriate

for the item it describes. For example a description of data resource should include discussions of the main quantities in the resource, possible uses and search terms. A description should also include whether any corrections (i.e., geometry, inertial) have been applied to the resource.

Diagram	
Type	xsd:string
Used by	Elements spase:AccessURL/spase:Description, spase:InformationURL/spase:Description, spase:Parameter/spase:Description, spase:ResourceHeader/spase:Description, spase:Structure/spase:Description
Source	<pre>&lt;xsd:simpleType name="Description"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A narrative explanation with detail appropriate for the item it describes. For example a description of data resource should include discussions of the main quantities in the resource, possible uses and search terms. A description should also include whether any corrections (i.e., geometry, inertial) have been applied to the resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Acknowledgement

Namespace	http://www.spase-group.org/data/schema
Annotations	The individual, group or organization which should be acknowledged when the data is used in or contributes to a presentation or publication.
Diagram	
Type	xsd:string
Used by	Elements spase:AccessInformation/spase:Acknowledgement, spase:ResourceHeader/spase:Acknowledgement
Source	<pre>&lt;xsd:simpleType name="Acknowledgement"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The individual, group or organization which should be acknowledged when the data is used in or contributes to a presentation or publication.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Authors

Namespace	http://www.spase-group.org/data/schema
Annotations	A list of individuals or organizations who prepared a work for publication. Separate multiple names with ";". When an author is a persons use "last,first[,middle]" format. Including a middle name is optional.
Diagram	
Type	xsd:string
Used by	Element spase:PublicationInfo/spase:Authors
Source	<pre>&lt;xsd:simpleType name="Authors"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A list of individuals or organizations who prepared a work for publication. Separate multiple names with ";". When an author is a persons use "last,first[,middle]" format. Including a middle name is optional.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:PublicationDate

Namespace	http://www.spase-group.org/data/schema
Annotations	The date that the work was first published.
Diagram	
Type	xsd:dateTime
Used by	Element spase:PublicationInfo/spase:PublicationDate
Source	<pre>&lt;xsd:simpleType name="PublicationDate"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The date that the work was first published.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:dateTime"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:PublishedBy

Namespace	http://www.spase-group.org/data/schema
Annotations	The name or the company, organization or individual that published the work.
Diagram	
Type	xsd:string
Used by	Element spase:PublicationInfo/spase:PublishedBy
Source	<pre>&lt;xsd:simpleType name="PublishedBy"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The name or the company, organization or individual that published the work.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Agency

Namespace	http://www.spase-group.org/data/schema
Annotations	The name of an organization that provides a service or funding for specific projects.
Diagram	
Type	xsd:string
Used by	Element spase:Funding/spase:Agency
Source	<pre>&lt;xsd:simpleType name="Agency"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The name of an organization that provides a service or funding for specific projects.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Project

Namespace	http://www.spase-group.org/data/schema
Annotations	The name of an organized activity with a stated goal or objective.
Diagram	
Type	xsd:string
Used by	Element spase:Funding/spase:Project

Source	<pre>&lt;xsd:simpleType name="Project"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The name of an organized activity with a stated goal or objective.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:AwardNumber

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifying information assigned to the financial support (funding) of a project.
Diagram	A UML class diagram fragment showing a class 'AwardNumber' with a multiplicity of 0..1 and a directed association to 'xsd:string' with a multiplicity of 1..1.
Type	xsd:string
Used by	Element spase:Funding/spase:AwardNumber
Source	<pre>&lt;xsd:simpleType name="AwardNumber"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The identifying information assigned to the financial support (funding) of a project.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:PersonID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier assigned to a Person description.
Diagram	A UML class diagram fragment showing a class 'PersonID' with a multiplicity of 0..1 and a directed association to 'xsd:string' with a multiplicity of 1..1.
Type	xsd:string
Used by	Element spase>Contact/spase:PersonID
Source	<pre>&lt;xsd:simpleType name="PersonID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The identifier assigned to a Person description.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Role

Namespace	http://www.spase-group.org/data/schema												
Annotations	Identifiers for the assigned or assumed function or position of an individual.												
Diagram	A UML class diagram fragment showing a class 'Role' with a multiplicity of 0..1 and a directed association to 'xsd:string' with a multiplicity of 1..1.												
Type	restriction of xsd:string												
Facets	<table border="1"> <tr> <td>enumeration</td> <td>ArchiveSpecialist</td> <td>An individual who is an expert on a collection of resources and may also be knowledgeable of the phenomenon and related physics represented by the resources. This includes librarians, curators, archive scientists and other experts.</td> </tr> <tr> <td>enumeration</td> <td>CoInvestigator</td> <td>An individual who is a scientific peer and major participant in an investigation.</td> </tr> <tr> <td>enumeration</td> <td>CoPI</td> <td>An individual who is peer of a principal investigator and is an administrative and scientific lead for an investigation.</td> </tr> <tr> <td>enumeration</td> <td>Contributor</td> <td>An entity responsible for making contributions</td> </tr> </table>	enumeration	ArchiveSpecialist	An individual who is an expert on a collection of resources and may also be knowledgeable of the phenomenon and related physics represented by the resources. This includes librarians, curators, archive scientists and other experts.	enumeration	CoInvestigator	An individual who is a scientific peer and major participant in an investigation.	enumeration	CoPI	An individual who is peer of a principal investigator and is an administrative and scientific lead for an investigation.	enumeration	Contributor	An entity responsible for making contributions
enumeration	ArchiveSpecialist	An individual who is an expert on a collection of resources and may also be knowledgeable of the phenomenon and related physics represented by the resources. This includes librarians, curators, archive scientists and other experts.											
enumeration	CoInvestigator	An individual who is a scientific peer and major participant in an investigation.											
enumeration	CoPI	An individual who is peer of a principal investigator and is an administrative and scientific lead for an investigation.											
enumeration	Contributor	An entity responsible for making contributions											

		to the content of the resource.
enumeration	DataProducer	An individual who generated the resource and is familiar with its provenance.
enumeration	DeputyPI	An individual who is an administrative or scientific leader for an investigation operating under the supervision of a Principal Investigator.
enumeration	Developer	The developer of a system to imitate a situation or process.
enumeration	FormerPI	An individual who had served as the administrative and scientific lead for an investigation, but no longer assumes that role.
enumeration	GeneralContact	An individual who can provide information on a range of subjects or who can direct you to a domain expert.
enumeration	HostContact	An individual who can provide specific information with regard the hosting of a resource or supporting software.
enumeration	MetadataContact	An individual who can affect a change in the metadata describing a resource.
enumeration	PrincipalInvestigator	An individual who is the administrative and scientific lead for an investigation.
enumeration	ProjectEngineer	An engineer tasked with the full suite of responsibilities as a project transitions through requirements derivation and preliminary design into controlled hardware development, assembly and environmental testing. The Project Engineer manages a team while developing the cadence of hardware manufacturing and assembly until instrument deployment and through the end of the mission.
enumeration	ProjectManager	An individual whose major task entails direction of project team members such that the full organization achieves the objectives and goals of the mission. The Project Manager is expected to provide clear guidance and resolve conflicts and issues while maintaining focus on achieving mission success.
enumeration	ProjectScientist	An individual who is an expert in the phenomenon and related physics explored by the project. A project scientist may also have a managerial role within the project.
enumeration	Publisher	An individual, organization, institution or government department responsible for the production and dissemination of a document.
enumeration	Scientist	An individual who is an expert in the phenomenon and related physics represented by the resource.
enumeration	TeamLeader	An individual who is the designated leader of an investigation.
enumeration	TeamMember	An individual who is a major participant in an investigation.
enumeration	TechnicalContact	An individual who can provide specific information with regard to the resource or supporting software.
enumeration	User	An individual who utilizes a resource or service.
Used by	Element	spase:Contact/spase:Role
Source	<pre> &lt;xsd:simpleType name="Role"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the assigned or assumed function or position of an individual.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ArchiveSpecialist"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An individual who is an expert on a collection of resources and may also be knowledgeable of the phenomenon and related physics represented by the resources. This includes librarians, curators, archive scientists and other experts.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>	

```

        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="CoInvestigator">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who is a scientific peer and major participant in an investigation.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="CoPI">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who is peer of a principal investigator and is an administrative and scientific lead for an investigation.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Contributor">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An entity responsible for making contributions to the content of the resource.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="DataProducer">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who generated the resource and is familiar with its provenance.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="DeputyPI">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who is an administrative or scientific leader for an investigation operating under the supervision of a Principal Investigator.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Developer">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The developer of a system to imitate a situation or process.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="FormerPI">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who had served as the administrative and scientific lead for an investigation, but no longer assumes that role.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="GeneralContact">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who can provide information on a range of subjects or who can direct you to a domain expert.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="HostContact">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who can provide specific information with regard the hosting of a resource or supporting software.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="MetadataContact">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who can affect a change in the metadata describing a resource.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="PrincipalInvestigator">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual who is the administrative and scientific lead for an investigation.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="ProjectEngineer">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An engineer tasked with the full suite of responsibilities as a project transitions through requirements derivation and preliminary design into controlled hardware development, assembly and environmental testing. The Project Engineer manages a team while developing the cadence of hardware manufacturing and assembly until instrument deployment and through the end of the mission.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="ProjectManager">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">An individual whose major task entails direction of project team members such that the full organization achieves the objectives and goals of the mission.
        </xsd:annotation>
    </xsd:enumeration>

```

The Project Manager is expected to provide clear guidance and resolve conflicts and issues while maintaining focus on achieving mission success.</xsd:documentation>

```

</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ProjectScientist">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual who is an expert in the phenomenon and related physics explored by the project. A project scientist may also have a managerial role within the project.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Publisher">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual, organization, institution or government department responsible for the production and dissemination of a document.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Scientist">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual who is an expert in the phenomenon and related physics represented by the resource.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TeamLeader">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual who is the designated leader of an investigation.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TeamMember">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual who is a major participant in an investigation.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TechnicalContact">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual who can provide specific information with regard to the resource or supporting software.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="User">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An individual who utilizes a resource or service.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:StartDate

Namespace	http://www.spase-group.org/data/schema
Annotations	The specification of a starting point in time.
Diagram	
Type	xsd:dateTime
Used by	Elements spase:Contact/spase:StartDate, spase:Granule/spase:StartDate, spase:OperatingSpan/spase:StartDate, spase:TimeSpan/spase:StartDate
Source	<pre> &lt;xsd:simpleType name="StartDate"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The specification of a starting point in time.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="xsd:dateTime"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:StopDate

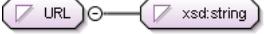
Namespace	http://www.spase-group.org/data/schema
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Annotations	The specification of a stopping point in time.
Diagram	
Type	xsd:dateTime
Used by	Elements spase:Contact/spase:StopDate, spase:Granule/spase:StopDate, spase:OperatingSpan/spase:StopDate, spase:TimeSpan/spase:StopDate
Source	<pre>&lt;xsd:simpleType name="StopDate"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The specification of a stopping point in time.&lt;/   xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:dateTime" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Name

Namespace	http://www.spase-group.org/data/schema
Annotations	A language unit by which a person or thing is known.
Diagram	
Type	xsd:string
Used by	Elements spase:AccessURL/spase:Name, spase:Element/spase:Name, spase:InformationURL/spase:Name, spase:Parameter/spase:Name
Source	<pre>&lt;xsd:simpleType name="Name"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A language unit by which a person or thing is known.&lt;/   xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:URL

Namespace	http://www.spase-group.org/data/schema
Annotations	Uniform Resource Locator (URL) is the global address of documents and other resources on the World Wide Web. The first part of the address indicates what protocol to use, and the second part specifies the IP address or the domain name where the resource is located followed by the pathname of the resource. A URL is specified in the form protocol://server.domain.name:port/pathname. Example protocols are HTTP or FTP, server domain name is the Internet name.
Diagram	
Type	xsd:string
Used by	Elements spase:AccessURL/spase:URL, spase:InformationURL/spase:URL, spase:Source/spase:URL
Source	<pre>&lt;xsd:simpleType name="URL"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Uniform Resource Locator (URL) is the global address of documents and other resources on the World Wide Web. The first part of the address indicates what protocol to use, and the second part specifies the IP address or the domain name where the resource is located followed by the pathname of the resource. A URL is specified in the form protocol://server.domain.name:port/pathname. Example protocols are HTTP or FTP, server domain name is the Internet name.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Language

Namespace	http://www.spase-group.org/data/schema
Annotations	The two character indicator of language selected from the ISO 639-1 codes for the representation of names of languages.
Diagram	
Type	xsd:string
Used by	Elements spase:AccessURL/spase:Language, spase:InformationURL/spase:Language
Source	<pre>&lt;xsd:simpleType name="Language"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The two character indicator of language selected from the ISO 639-1 codes for the representation of names of languages.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:AssociationID

Namespace	http://www.spase-group.org/data/schema
Annotations	The resource identifier for a resource with which this resource is closely associated.
Diagram	
Type	xsd:string
Used by	Element spase:Association/spase:AssociationID
Source	<pre>&lt;xsd:simpleType name="AssociationID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The resource identifier for a resource with which this resource is closely associated.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:AssociationType

Namespace	http://www.spase-group.org/data/schema																		
Annotations	Identifiers for resource associations.																		
Diagram																			
Type	restriction of xsd:string																		
Facets	<table> <tr> <td>enumeration</td> <td>ChildEventOf</td> <td>A descendant or caused by another resource.</td> </tr> <tr> <td>enumeration</td> <td>DerivedFrom</td> <td>A transformed or altered version of a resource instance.</td> </tr> <tr> <td>enumeration</td> <td>ObservedBy</td> <td>Detected or originating from another resource.</td> </tr> <tr> <td>enumeration</td> <td>Other</td> <td>Not classified with more specific terms. The context of its usage may be described in related text.</td> </tr> <tr> <td>enumeration</td> <td>PartOf</td> <td>A portion of a larger resource.</td> </tr> <tr> <td>enumeration</td> <td>RevisionOf</td> <td>A modified version of a resource instance.</td> </tr> </table>	enumeration	ChildEventOf	A descendant or caused by another resource.	enumeration	DerivedFrom	A transformed or altered version of a resource instance.	enumeration	ObservedBy	Detected or originating from another resource.	enumeration	Other	Not classified with more specific terms. The context of its usage may be described in related text.	enumeration	PartOf	A portion of a larger resource.	enumeration	RevisionOf	A modified version of a resource instance.
enumeration	ChildEventOf	A descendant or caused by another resource.																	
enumeration	DerivedFrom	A transformed or altered version of a resource instance.																	
enumeration	ObservedBy	Detected or originating from another resource.																	
enumeration	Other	Not classified with more specific terms. The context of its usage may be described in related text.																	
enumeration	PartOf	A portion of a larger resource.																	
enumeration	RevisionOf	A modified version of a resource instance.																	
Used by	Element spase:Association/spase:AssociationType																		
Source	<pre>&lt;xsd:simpleType name="AssociationType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for resource associations.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ChildEventOf"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A descendant or caused by another resource.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>																		

	<pre> &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="DerivedFrom"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A transformed or altered version of a resource instance.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="ObservedBy"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Detected or originating from another resource.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="Other"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Not classified with more specific terms. The context of its usage may be described in related text.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="PartOf"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A portion of a larger resource.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="RevisionOf"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A modified version of a resource instance.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:PriorID

Namespace	http://www.spase-group.org/data/schema
Annotations	The resource identifier for a resource that is superseded or replaced by a resource.
Diagram	A UML class diagram fragment showing a class named "PriorID" with a multiplicity of 0..1 and a directed association to a class named "xsd:string" with a multiplicity of 1..1.
Type	xsd:string
Used by	Elements spase:Granule/spase:PriorID, spase:ResourceHeader/spase:PriorID
Source	<pre> &lt;xsd:simpleType name="PriorID"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The resource identifier for a resource that is superseded or replaced by a resource.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:RepositoryID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier of an Repository resource.
Diagram	A UML class diagram fragment showing a class named "RepositoryID" with a multiplicity of 0..1 and a directed association to a class named "xsd:string" with a multiplicity of 1..1.
Type	xsd:string
Used by	Element spase:AccessInformation/spase:RepositoryID
Source	<pre> &lt;xsd:simpleType name="RepositoryID"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The identifier of an Repository resource.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Availability

Namespace	http://www.spase-group.org/data/schema								
Annotations	Identifiers for indicating the method or service which may be used to access the resource.								
Diagram	<pre> classDiagram     class Availability {         &lt;&lt;Simple Type&gt;&gt;     }     class xsd {         class string {             &lt;&lt;Complex Type&gt;&gt;         }     }     Availability &lt; -- xsd.string   </pre>								
Type	restriction of xsd:string								
Facets	<table> <tr> <td>enumeration</td> <td>Offline</td> <td>Not directly accessible electronically. This includes resources which may be moved to an on-line status in response to a given request.</td> </tr> <tr> <td>enumeration</td> <td>Online</td> <td>Directly accessible electronically.</td> </tr> </table>			enumeration	Offline	Not directly accessible electronically. This includes resources which may be moved to an on-line status in response to a given request.	enumeration	Online	Directly accessible electronically.
enumeration	Offline	Not directly accessible electronically. This includes resources which may be moved to an on-line status in response to a given request.							
enumeration	Online	Directly accessible electronically.							
Used by	Element spase:AccessInformation/spase:Availability								
Source	<pre> &lt;xsd:simpleType name="Availability"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for indicating the method or service which may be used to access the resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Offline"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Not directly accessible electronically. This includes resources which may be moved to an on-line status in response to a given request.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Online"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Directly accessible electronically.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;   </pre>								
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd								

## Simple Type spase:AccessRights

Namespace	http://www.spase-group.org/data/schema											
Annotations	Identifiers for permissions granted or denied by the host of a product to allow other users to access and use the resource.											
Diagram	<pre> classDiagram     class AccessRights {         &lt;&lt;Simple Type&gt;&gt;     }     class xsd {         class string {             &lt;&lt;Complex Type&gt;&gt;         }     }     AccessRights &lt; -- xsd.string   </pre>											
Type	restriction of xsd:string											
Facets	<table> <tr> <td>enumeration</td> <td>Open</td> <td>Access is granted to everyone.</td> </tr> <tr> <td>enumeration</td> <td>PartiallyRestricted</td> <td>Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.</td> </tr> <tr> <td>enumeration</td> <td>Restricted</td> <td>Access to the product is regulated and requires some form of identification.</td> </tr> </table>			enumeration	Open	Access is granted to everyone.	enumeration	PartiallyRestricted	Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.	enumeration	Restricted	Access to the product is regulated and requires some form of identification.
enumeration	Open	Access is granted to everyone.										
enumeration	PartiallyRestricted	Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.										
enumeration	Restricted	Access to the product is regulated and requires some form of identification.										
Used by	Element spase:AccessInformation/spase:AccessRights											
Source	<pre> &lt;xsd:simpleType name="AccessRights"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for permissions granted or denied by the host of a product to allow other users to access and use the resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Open"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Access is granted to everyone.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="PartiallyRestricted"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Some portions of the resource have restricted access, the rest is open access. Typically this is for accumulating data collections where some data is under review before being publicly released.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;   </pre>											

	<pre>         &lt;/xsd:annotation&gt;       &lt;/xsd:enumeration&gt;       &lt;xsd:enumeration value="Restricted"&gt;         &lt;xsd:annotation&gt;           &lt;xsd:documentation xml:lang="en"&gt;Access to the product is regulated and requires some form           of identification.&lt;/xsd:documentation&gt;         &lt;/xsd:annotation&gt;       &lt;/xsd:enumeration&gt;     &lt;/xsd:restriction&gt;   &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Style

Namespace	http://www.spase-group.org/data/schema																						
Annotations	Identifiers for the manner in which a response from a URL is presented.																						
Diagram	<pre> classDiagram     class Style     class xsd:string     Style "1" -- "1" xsd:string   </pre>																						
Type	restriction of xsd:string																						
Facets	<table border="1"> <tr> <td>enumeration</td> <td>File</td> <td>Access to a file containing the data.</td> </tr> <tr> <td>enumeration</td> <td>HAPI</td> <td>A Heliophysics Application Programmer Interface (HAPI) specification compliant access point.</td> </tr> <tr> <td>enumeration</td> <td>Listing</td> <td>A listing of files - either through FTP or HTTP.</td> </tr> <tr> <td>enumeration</td> <td>Overview</td> <td>A web page that provides and overview of available data and links.</td> </tr> <tr> <td>enumeration</td> <td>Search</td> <td>A web search interface that requires additional input.</td> </tr> <tr> <td>enumeration</td> <td>Template</td> <td>A URI template that contains special fields as defined in URI Template specification &lt;<a href="http://tsds.org/uri_templates">http://tsds.org/uri_templates</a>&gt;.</td> </tr> <tr> <td>enumeration</td> <td>WebService</td> <td>A Web-based service that uses SOAP, WSDL or UDDI open standards.</td> </tr> </table>		enumeration	File	Access to a file containing the data.	enumeration	HAPI	A Heliophysics Application Programmer Interface (HAPI) specification compliant access point.	enumeration	Listing	A listing of files - either through FTP or HTTP.	enumeration	Overview	A web page that provides and overview of available data and links.	enumeration	Search	A web search interface that requires additional input.	enumeration	Template	A URI template that contains special fields as defined in URI Template specification < <a href="http://tsds.org/uri_templates">http://tsds.org/uri_templates</a> >.	enumeration	WebService	A Web-based service that uses SOAP, WSDL or UDDI open standards.
enumeration	File	Access to a file containing the data.																					
enumeration	HAPI	A Heliophysics Application Programmer Interface (HAPI) specification compliant access point.																					
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enumeration	WebService	A Web-based service that uses SOAP, WSDL or UDDI open standards.																					
Used by	Element	spase:AccessURL/spase:Style																					
Source	<pre> &lt;xsd:simpleType name="Style"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the manner in which a response from a URL is     presented.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="File"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Access to a file containing the data.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="HAPI"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A Heliophysics Application Programmer Interface (HAPI)         specification compliant access point.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Listing"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A listing of files - either through FTP or HTTP.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Overview"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A web page that provides and overview of available data and         links.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Search"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A web search interface that requires additional input.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Template"&gt;   </pre>																						

	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A URI template that contains special fields as defined in URI Template specification &lt;a href="http://tsds.org/uri_templates"&gt;http://tsds.org/uri_templates&lt;/a&gt;.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="WebService"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A Web-based service that uses SOAP, WSDL or UDDI open standards.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ProductKey

Namespace	http://www.spase-group.org/data/schema
Annotations	The key (identifier) of the resource within a Repository. This is a local identifier which can be used to retrieve or locate the resource.
Diagram	
Type	xsd:string
Used by	Element spase:AccessURL/spase:ProductKey
Source	<pre> &lt;xsd:simpleType name="ProductKey"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The key (identifier) of the resource within a Repository. This is a local identifier which can be used to retrieve or locate the resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Format

Namespace	http://www.spase-group.org/data/schema																					
Annotations	Identifiers for data organized according to preset specifications.																					
Diagram																						
Type	restriction of xsd:string																					
Facets	<table border="1"> <tr> <td>enumeration</td> <td>AVI</td> <td>Audio Video Interleave (AVI) a digital format for movies that conforms to the Microsoft Windows Resource Interchange File Format (RIFF).</td> </tr> <tr> <td>enumeration</td> <td>Binary</td> <td>A direct representation of the bits which may be stored in memory on a computer.</td> </tr> <tr> <td>enumeration</td> <td>CDF</td> <td>Common Data Format (CDF). A binary storage format developed at Goddard Space Flight Center (GSFC).</td> </tr> <tr> <td>enumeration</td> <td>CEF</td> <td>Cluster Exchange Format (CEF) is a self-documenting ASCII format designed for the exchange of data. There are two versions of CEF which are not totally compatible.</td> </tr> <tr> <td>enumeration</td> <td>CEF1</td> <td>Cluster Exchange Format (CEF), version 1, is a self-documenting ASCII format designed for the exchange of data. The metadata contains information compatible with the ISTP recommendations for CDF.</td> </tr> <tr> <td>enumeration</td> <td>CEF2</td> <td>Cluster Exchange Format (CEF), version 2, is a self-documenting ASCII format designed for the exchange of data and introduced for Cluster Active Archive. Compared to version 1, the metadata description of vectors and tensors is different.</td> </tr> <tr> <td>enumeration</td> <td>CSV</td> <td>Comma Separated Value - A data exchange format</td> </tr> </table>	enumeration	AVI	Audio Video Interleave (AVI) a digital format for movies that conforms to the Microsoft Windows Resource Interchange File Format (RIFF).	enumeration	Binary	A direct representation of the bits which may be stored in memory on a computer.	enumeration	CDF	Common Data Format (CDF). A binary storage format developed at Goddard Space Flight Center (GSFC).	enumeration	CEF	Cluster Exchange Format (CEF) is a self-documenting ASCII format designed for the exchange of data. There are two versions of CEF which are not totally compatible.	enumeration	CEF1	Cluster Exchange Format (CEF), version 1, is a self-documenting ASCII format designed for the exchange of data. The metadata contains information compatible with the ISTP recommendations for CDF.	enumeration	CEF2	Cluster Exchange Format (CEF), version 2, is a self-documenting ASCII format designed for the exchange of data and introduced for Cluster Active Archive. Compared to version 1, the metadata description of vectors and tensors is different.	enumeration	CSV	Comma Separated Value - A data exchange format
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enumeration	CEF1	Cluster Exchange Format (CEF), version 1, is a self-documenting ASCII format designed for the exchange of data. The metadata contains information compatible with the ISTP recommendations for CDF.																				
enumeration	CEF2	Cluster Exchange Format (CEF), version 2, is a self-documenting ASCII format designed for the exchange of data and introduced for Cluster Active Archive. Compared to version 1, the metadata description of vectors and tensors is different.																				
enumeration	CSV	Comma Separated Value - A data exchange format																				

		defined by RFC 4180.
enumeration	Excel	A Microsoft spreadsheet format used to hold a variety of data in tables which can include calculations.
enumeration	FITS	Flexible Image Transport System (FITS) is a digital format primarily designed to store scientific data sets consisting of multi-dimensional arrays (1-D spectra, 2-D images or 3-D data cubes) and 2-dimensional tables containing rows and columns of data.
enumeration	GIF	Graphic Interchange Format (GIF) first introduced in 1987 by CompuServe. GIF uses LZW compression and images are limited to 256 colours.
enumeration	HDF	Hierarchical Data Format
enumeration	HDF4	Hierarchical Data Format, Version 4
enumeration	HDF5	Hierarchical Data Format, Version 5
enumeration	HTML	A text file containing structured information represented in the HyperText Mark-up Language (HTML). See < <a href="http://www.w3.org/MarkUp/">http://www.w3.org/MarkUp/</a> >
enumeration	Hardcopy	A permanent reproduction, or copy in the form of a physical object, of any media suitable for direct use by a person.
enumeration	Hardcopy.Film	An image recording medium on which usually a "negative" analog image is registered. A "positive" image can be recovered or reproduced from film, which is usually made of flexible materials for ease of storage and transportation.
enumeration	Hardcopy.Microfiche	A sheet of microfilm on which many pages of material have been photographed; a magnification system is used to read the material.
enumeration	Hardcopy.Microfilm	Film rolls on which materials are photographed at greatly reduced size; a magnification system is used to read the material.
enumeration	Hardcopy.Photograph	An image (positive or negative) registered on a piece of photo-sensitive paper
enumeration	Hardcopy.PhotographicPlate	A rigid (typically glass) medium that functions like film. Its rigidity is for guarding against image distortion due to medium deformation (caused by heat and humidity). Photographic plates are often used for astronomical photography.
enumeration	Hardcopy.Print	A sheet of any written or printed material which may include notes or graphics. Multiple printed pages may be bound into a manuscript or book.
enumeration	IDFS	Instrument Data File Set (IDFS) is a set of files written in a prescribed format which contain data, timing data, and meta-data. IDFS was developed at Southwest Research Institute (SwRI).
enumeration	IDL	Interactive Data Language (IDL) save set. IDL is a proprietary format.
enumeration	JPEG	A binary format for still images defined by the Joint Photographic Experts Group
enumeration	JSON	Javascript Object Notation - A lightweight data-interchange format.
enumeration	MATLAB_4	MATLAB Workspace save set, version 4. MAT-files are double-precision, binary, MATLAB format files. MATLAB is a proprietary product of The MathWorks.
enumeration	MATLAB_6	MATLAB Workspace save set, version 6. MAT-files are double-precision, binary, MATLAB format files. MATLAB is a proprietary product of The MathWorks.
enumeration	MATLAB_7	MATLAB Workspace save set, version 7. MAT-files are double-precision, binary, MATLAB format files. Version 7 includes data compression and Unicode encoding. MATLAB is a proprietary product of The MathWorks.

	enumeration	MPEG	A digital format for movies defined by the Motion Picture Experts Group
	enumeration	NCAR	The National Center for Atmospheric Research (NCAR) format. A complete description of that standard is given in appendix C of the "Report on Establishment & Operation of the Incoherent-Scatter Data Base", dated August 23, 1984, obtainable from NCAR, P.O. Box 3000 Boulder, Colorado 80307-3000.
	enumeration	NetCDF	Unidata Program Center's Network Common Data Form (NetCDF). A self-describing portable data format for array-oriented data access. See < <a href="http://my.unidata.ucar.edu/content/software/netcdf">http://my.unidata.ucar.edu/content/software/netcdf</a> >
	enumeration	PDF	A document expressed in the Portable Document Format (PDF) as defined by Adobe.
	enumeration	PNG	A digital format for still images. Portable Network Graphics (PNG)
	enumeration	Postscript	A page description programming language created by Adobe Systems Inc. that is a device-independent industry standard for representing text and graphics.
	enumeration	QuickTime	A format for digital movies, as defined by Apple Computer. See < <a href="http://developer.apple.com/quicktime/">http://developer.apple.com/quicktime/</a> >
	enumeration	TIFF	A binary format for still pictures. Tagged Image Format File (TIFF). Originally developed by Aldus and now controlled by Adobe.
	enumeration	Text	A sequence of characters which may have an imposed structure or organization.
	enumeration	Text.ASCII	A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.
	enumeration	Text.Unicode	Text in multi-byte Unicode format.
	enumeration	UDF	Universal Data Format (UDF). The Optical Technology Storage Association's Universal Disk Format, based on ISO 13346. See < <a href="http://www.osta.org/specs/index.htm">http://www.osta.org/specs/index.htm</a> >
	enumeration	VOTable	A proposed IVOA standard designed as a flexible storage and exchange format for tabular data.
	enumeration	XML	eXtensible Mark-up Language (XML). A structured format for representing information. See < <a href="http://www.w3.org/XML/">http://www.w3.org/XML/</a> >
Used by	Element	spase:AccessInformation/spase:Format	
Source		<pre> &lt;xsd:simpleType name="Format"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for data organized according to preset specifications.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="AVI"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Audio Video Interleave (AVI) a digital format for movies that conforms to the Microsoft Windows Resource Interchange File Format (RIFF).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Binary"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A direct representation of the bits which may be stored in memory on a computer.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="CDF"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Common Data Format (CDF). A binary storage format developed at Goddard Space Flight Center (GSFC).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="CEF"&gt;       &lt;xsd:annotation&gt; </pre>	

```

<xsd:documentation xml:lang="en">Cluster Exchange Format (CEF) is a self-documenting ASCII
format designed for the exchange of data. There are two versions of CEF which are not totally
compatible.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="CEF1">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Cluster Exchange Format (CEF), version 1, is a self-
documenting ASCII format designed for the exchange of data. The metadata contains information
compatible with the ISTP recommendations for CDF.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="CEF2">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Cluster Exchange Format (CEF), version 2, is a self-
documenting ASCII format designed for the exchange of data and introduced for Cluster Active
Archive. Compared to version 1, the metadata description of vectors and tensors is different.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="CSV">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Comma Separated Value - A data exchange format defined by
RFC 4180.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Excel">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A Microsoft spreadsheet format used to hold a variety of
data in tables which can include calculations.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="FITS">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Flexible Image Transport System (FITS) is a digital format
primarily designed to store scientific data sets consisting of multi-dimensional arrays (1-D
spectra, 2-D images or 3-D data cubes) and 2-dimensional tables containing rows and columns of
data.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="GIF">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Graphic Interchange Format (GIF) first introduced in 1987
by CompuServe. GIF uses LZW compression and images are limited to 256 colours.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="HDF">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Hierarchical Data Format</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="HDF4">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Hierarchical Data Format, Version 4</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="HDF5">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Hierarchical Data Format, Version 5</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="HTML">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A text file containing structured information represented
in the HyperText Mark-up Language (HTML). See <a href="http://www.w3.org/MarkUp/"></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A permanent reproduction, or copy in the form of a physical
object, of any media suitable for direct use by a person.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy.Film">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An image recording medium on which usually a "negative"
analog image is registered. A "positive" image can be recovered or reproduced from film, which is
usually made of flexible materials for ease of storage and transportation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy.Microfiche">
  <xsd:annotation>

```

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<xsd:documentation xml:lang="en">A sheet of microfilm on which many pages of material have
been photographed; a magnification system is used to read the material.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy.Microfilm">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Film rolls on which materials are photographed at greatly
reduced size; a magnification system is used to read the material.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy.Photograph">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An image (positive or negative) registered on a piece of
photo-sensitive paper</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy.PhotographicPlate">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A rigid (typically glass) medium that functions like film.
Its rigidity is for guarding against image distortion due to medium deformation (caused by heat and
humidity). Photographic plates are often used for astronomical photography.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Hardcopy.Print">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A sheet of any written or printed material which may
include notes or graphics. Multiple printed pages may be bound into a manuscript or book.</
xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="IDFS">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Instrument Data File Set (IDFS) is a set of files written
in a prescribed format which contain data, timing data, and meta-data. IDFS was developed at
Southwest Research Institute (SwRI).</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="IDL">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Interactive Data Language (IDL) save set. IDL is a
proprietary format.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="JPEG">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A binary format for still images defined by the Joint
Photographic Experts Group</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="JSON">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Javascript Object Notation - A lightweight data-interchange
format.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MATLAB_4">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">MATLAB Workspace save set, version 4. MAT-files are
double-precision, binary, MATLAB format files. MATLAB is a proprietary product of The MathWorks.</
xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MATLAB_6">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">MATLAB Workspace save set, version 6. MAT-files are
double-precision, binary, MATLAB format files. MATLAB is a proprietary product of The MathWorks.</
xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MATLAB_7">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">MATLAB Workspace save set, version 7. MAT-files are double-
precision, binary, MATLAB format files. Version 7 includes data compression and Unicode encoding.
MATLAB is a proprietary product of The MathWorks.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MPEG">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A digital format for movies defined by the Motion Picture
Experts Group</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NCAR">

```

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<xsd:annotation>
  <xsd:documentation xml:lang="en">The National Center for Atmospheric Research (NCAR) format.
  A complete description of that standard is given in appendix C of the "Report on Establishment &
  Operation of the Incoherent- Scatter Data Base", dated August 23, 1984, obtainable from NCAR, P.O.
  Box 3000 Boulder, Colorado 80307-3000.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NetCDF">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Unidata Program Center's Network Common Data Form
    (NetCDF). A self-describing portable data format for array-oriented data access. See <http://my.unidata.ucar.edu/content/software/netcdf></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PDF">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A document expressed in the Portable Document Format (PDF)
    as defined by Adobe.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PNG">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A digital format for still images. Portable Network
    Graphics (PNG)</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Postscript">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A page description programming language created by Adobe
    Systems Inc. that is a device-independent industry standard for representing text and graphics.</
    xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="QuickTime">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A format for digital movies, as defined by Apple Computer.
    See <http://developer.apple.com/quicktime/></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TIFF">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A binary format for still pictures. Tagged Image Format
    File (TIFF). Originally developed by Aldus and now controlled by Adobe.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Text">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A sequence of characters which may have an imposed
    structure or organization.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Text.ASCII">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A sequence of characters that adheres to American
    Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.</
    xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Text.Unicode">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Text in multi-byte Unicode format.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="UDF">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Universal Data Format (UDF). The Optical Technology
    Storage Association's Universal Disk Format, based on ISO 13346. See <http://www.osta.org/specs/index.htm></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="VOTable">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A proposed IVOA standard designed as a flexible storage and
    exchange format for tabular data.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="XML">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">eXtensible Mark-up Language (XML). A structured format for
    representing information. See <http://www.w3.org/XML/></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>

```

	</xsd:simpleType>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Encoding

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for unambiguous rules that establishes the representation of information within a file.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	ASCII A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.
	enumeration	BZIP2 An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See < <a href="http://www.bzip.org/">http://www.bzip.org/</a> >
	enumeration	Base64 A data encoding scheme whereby binary-encoded data is converted to printable ASCII characters. It is defined as a MIME content transfer encoding for use in Internet e-mail. The only characters used are the upper- and lower-case Roman alphabet characters (A-Z, a-z), the numerals (0-9), and the "+" and "/" symbols, with the "=" symbol as a special suffix (padding) code.
	enumeration	GZIP An open standard algorithm distributed by GNU based on LZ77 and Huffman coding. See < <a href="http://www.gnu.org/software/gzip/gzip.html">http://www.gnu.org/software/gzip/gzip.html</a> > or < <a href="http://www.gzip.org/">http://www.gzip.org/</a> >
	enumeration	None A lack or absence of anything.
	enumeration	S3_BUCKET A container of objects that comply with the Amazon Simple Storage Service (S3) specifications. A bucket has a unique, user-assigned key (name). A bucket can contain any number of objects with an aggregate size of 5 gigabytes. A bucket may be accompanied by up to 2 kilobytes of metadata.
	enumeration	TAR A file format used to collate collections of files into one larger file, for distribution or archiving, while preserving file system information such as user and group permissions, dates, and directory structures. The format was standardized by POSIX.1-1988 and later POSIX.1-2001.
	enumeration	Unicode Text in multi-byte Unicode format.
	enumeration	ZIP An open standard for compression which is a variation of the LZW method and was originally used in the PKZIP utility.
Used by	Element	spase:AccessInformation/spase:Encoding
Source	<pre> &lt;xsd:simpleType name="Encoding"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for unambiguous rules that establishes the representation of information within a file.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ASCII"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 7-bit character-coding scheme.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="BZIP2"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See &lt;<a href="http://www.bzip.org/">http://www.bzip.org/</a>&gt;&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>	

```

<xsd:enumeration value="Base64">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A data encoding scheme whereby binary-encoded data is converted to printable ASCII characters. It is defined as a MIME content transfer encoding for use in Internet e-mail. The only characters used are the upper- and lower-case Roman alphabet characters (A-Z, a-z), the numerals (0-9), and the "+" and "/" symbols, with the "=" symbol as a special suffix (padding) code.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="GZIP">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An open standard algorithm distributed by GHU based on LZ77 and Huffman coding. See <http://www.gnu.org/software/gzip/gzip.html> or <http://www.gzip.org/></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="None">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A lack or absence of anything.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="S3_BUCKET">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A container of objects that comply with the Amazon Simple Storage Service (S3) specifications. A bucket has a unique, user-assigned key (name). A bucket can contain any number of objects with an aggregate size of 5 gigabytes. A bucket may be accompanied by up to 2 kilobytes of metadata.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TAR">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A file format used to collate collections of files into one larger file, for distribution or archiving, while preserving file system information such as user and group permissions, dates, and directory structures. The format was standardized by POSIX.1-1988 and later POSIX.1-2001.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Unicode">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Text in multi-byte Unicode format.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ZIP">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An open standard for compression which is a variation of the LZW method and was originally used in the PKZIP utility.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:Quantity

Namespace	http://www.spase-group.org/data/schema
Annotations	A value that describes a characteristic of a system.
Diagram	
Type	xsd:double
Used by	Element spase:DataExtent/spase:Quantity
Source	<pre> &lt;xsd:simpleType name="Quantity"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A value that describes a characteristic of a system.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Units

Namespace	http://www.spase-group.org/data/schema
Annotations	A description of the standardized measurement

increments in which a value is specified. The description is represented as a mathematical phrase. Units should be represented by widely accepted representation. For example, units should conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures (see <<http://www.bipm.fr/>> ) when appropriate or use tokens like "Re" to represent units of the Radius of the Earth. Within a phrase the circumflex (^) is used to indicate a power, a star (\*) is used to indicate multiplication and a slash (/) division. When symbols are not separated by a mathematical operator, multiplication is assumed. Symbols for base units can be found at: <[http://www.bipm.fr/en/si/si\\_brochure/chapter2/2-1/#symbols](http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols)> and those for common derived units can be found at: <[http://www.bipm.fr/en/si/derived\\_units/2-2-2.html](http://www.bipm.fr/en/si/derived_units/2-2-2.html)>

Diagram	
Type	xsd:string
Used by	Elements spase:AzimuthalAngleRange/spase:Units, spase:DataExtent/spase:Units, spase:Element/spase:Units, spase:EnergyRange/spase:Units, spase:FrequencyRange/spase:Units, spase:MassRange/spase:Units, spase:Parameter/spase:Units, spase:PitchAngleRange/spase:Units, spase:PolarAngleRange/spase:Units, spase:WavelengthRange/spase:Units
Source	<pre> &lt;xsd:simpleType name="Units"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A description of the standardized measurement increments in which a value is specified. The description is represented as a mathematical phrase. Units should be represented by widely accepted representation. For example, units should conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures (see &lt;<a href="http://www.bipm.fr/">http://www.bipm.fr/</a>&gt; ) when appropriate or use tokens like "Re" to represent units of the Radius of the Earth. Within a phrase the circumflex (^) is used to indicate a power, a star (*) is used to indicate multiplication and a slash (/) division. When symbols are not separated by a mathematical operator, multiplication is assumed. Symbols for base units can be found at: &lt;<a href="http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols">http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols</a>&gt; and those for common derived units can be found at: &lt;<a href="http://www.bipm.fr/en/si/derived_units/2-2-2.html">http://www.bipm.fr/en/si/derived_units/2-2-2.html</a>&gt;&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Per

Namespace	<a href="http://www.spase-group.org/data/schema">http://www.spase-group.org/data/schema</a>
Annotations	The time interval over which a characterization applies. For example, the number of bytes generated each day.
Diagram	
Type	xsd:duration
Used by	Element spase:DataExtent/spase:Per
Source	<pre> &lt;xsd:simpleType name="Per"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The time interval over which a characterization applies. For example, the number of bytes generated each day.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ProviderName

Namespace	<a href="http://www.spase-group.org/data/schema">http://www.spase-group.org/data/schema</a>
Annotations	The source, or original provider, of the data (for example, PDS PPI)
Diagram	
Type	xsd:string

Used by	Elements	spase:Catalog/spase:ProviderName, spase:DisplayData/spase:ProviderName, spase:NumericalData/spase:ProviderName
Source	<pre>&lt;xsd:simpleType name="ProviderName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The source, or original provider, of the data (for example, PDS PPI)&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>	The source, or original provider, of the data (for example, PDS PPI)
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Simple Type spase:ProviderResourceName

Namespace	http://www.spase-group.org/data/schema	
Annotations	A short textual description of a resource used by the provider which may be used to identify a resource.	
Diagram	A UML class diagram fragment showing a class named "ProviderResourceName" with a multiplicity of 1..* at its end and a "xsd:string" type at the other end, connected by a directed association.	
Type	xsd:string	
Used by	Elements	spase:Catalog/spase:ProviderResourceName, spase:DisplayData/spase:ProviderResourceName, spase:NumericalData/spase:ProviderResourceName
Source	<pre>&lt;xsd:simpleType name="ProviderResourceName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A short textual description of a resource used by the provider which may be used to identify a resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>	The source, or original provider, of the data (for example, PDS PPI)
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Simple Type spase:ProviderVersion

Namespace	http://www.spase-group.org/data/schema	
Annotations	Describes the release or edition of the product used by the provider. The formation rule may vary between providers. It is intended to aid in queries to the provider regarding the product.	
Diagram	A UML class diagram fragment showing a class named "ProviderVersion" with a multiplicity of 1..* at its end and a "xsd:string" type at the other end, connected by a directed association.	
Type	xsd:string	
Used by	Elements	spase:Catalog/spase:ProviderVersion, spase:DisplayData/spase:ProviderVersion, spase:NumericalData/spase:ProviderVersion
Source	<pre>&lt;xsd:simpleType name="ProviderVersion"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Describes the release or edition of the product used by the provider. The formation rule may vary between providers. It is intended to aid in queries to the provider regarding the product.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>	The source, or original provider, of the data (for example, PDS PPI)
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

### Simple Type spase:InstrumentID

Namespace	http://www.spase-group.org/data/schema	
Annotations	The identifier of an Instrument resource.	
Diagram	A UML class diagram fragment showing a class named "InstrumentID" with a multiplicity of 1..* at its end and a "xsd:string" type at the other end, connected by a directed association.	
Type	xsd:string	
Used by	Elements	spase:Catalog/spase:InstrumentID, spase:DisplayData/spase:InstrumentID, spase:NumericalData/spase:InstrumentID

Source	<pre>&lt;xsd:simpleType name="InstrumentID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The identifier of an Instrument resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:PhenomenonType

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the characteristics or categorization of an observation. Note: Joe King to provide.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	ActiveRegion A localized, transient volume of the solar atmosphere in which PLAGES, SUNSPOTS, FACULAE, FLARES, etc. may be observed.
	enumeration	Aurora An atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force.
	enumeration	BowShockCrossing A crossing of the boundary between the undisturbed (except for foreshock effects) solar wind and the shocked, decelerated solar wind of the magnetosheath.
	enumeration	CoronalHole An extended region of the corona, exceptionally low in density and associated with unipolar photospheric regions. A coronal hole can be an "open" magnetic field in the corona and (perhaps) inner heliosphere which has a faster than average outflow (wind); A region of lower than "quiet" ion and electron density in the corona; or a region of lower peak electron temperature in the corona than in the "quiet" corona.
	enumeration	CoronalMassEjection A solar event (CME) that involves a burst of plasma ejected into the interplanetary medium. CME's may be observed remotely relatively near the sun or in situ in the interplanetary medium. The latter type of observations are often referred to as Interplanetary CME's (ICME's).
	enumeration	EITWave A wave in the corona of the Sun which produce shock waves on the Sun's chromosphere (Moreton Waves). EIT Waves are produced by large solar flare and expand outward at about 1,000 km/s. It usually appears as a slowly moving diffuse arc of brightening in H-alpha, and may travel for several hundred thousand km.
	enumeration	EnergeticSolarParticleEvent An enhancement of interplanetary fluxes of energetic ions accelerated by interplanetary shocks and/or solar flares.
	enumeration	ForbushDecrease A rapid decrease in the observed galactic cosmic ray intensity following the passage of an outwardly convecting interplanetary magnetic field disturbance, such as those associated with large CME's, that sweep some galactic cosmic rays away from Earth.
	enumeration	GeomagneticStorm A magnetospheric disturbance typically defined by variations in the horizontal component of the Earth's surface magnetic field. The variation typically starts with a field enhancement associated with a solar wind pressure pulse and continues with a field depression associated with an enhancement of the diamagnetic magnetospheric ring current.
	enumeration	InterplanetaryShock A shock propagating generally anti-sunward through the slower solar wind, often seen

enumeration	MagneticCloud	in front of CME-associated plasma clouds. A transient event observed in the solar wind
-------------	---------------	---

```

</xsd:enumeration>
<xsd:enumeration value="CoronalHole">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An extended region of the corona, exceptionally low in density and associated with unipolar photospheric regions. A coronal hole can be an "open" magnetic field in the corona and (perhaps) inner heliosphere which has a faster than average outflow (wind); A region of lower than "quiet" ion and electron density in the corona; or a region of lower peak electron temperature in the corona than in the "quiet" corona.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="CoronalMassEjection">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A solar event (CME) that involves a burst of plasma ejected into the interplanetary medium. CME's may be observed remotely relatively near the sun or in situ in the interplanetary medium. The latter type of observations are often referred to as Interplanetary CME's (ICME's).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="EITWave">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A wave in the corona of the Sun which produce shock waves on the Sun's chromosphere (Moreton Waves). EIT Waves are produced by large solar flare and expand outward at about 1,000 km/s. It usually appears as a slowly moving diffuse arc of brightening in H-alpha, and may travel for several hundred thousand km.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="EnergeticSolarParticleEvent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An enhancement of interplanetary fluxes of energetic ions accelerated by interplanetary shocks and/or solar flares.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ForbushDecrease">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A rapid decrease in the observed galactic cosmic ray intensity following the passage of an outwardly convecting interplanetary magnetic field disturbance, such as those associated with large CME's, that sweep some galactic cosmic rays away from Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="GeomagneticStorm">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A magnetospheric disturbance typically defined by variations in the horizontal component of the Earth's surface magnetic field. The variation typically starts with a field enhancement associated with a solar wind pressure pulse and continues with a field depression associated with an enhancement of the diamagnetic magnetospheric ring current.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="InterplanetaryShock">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A shock propagating generally anti-sunward through the slower solar wind, often seen in front of CME-associated plasma clouds.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MagneticCloud">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A transient event observed in the solar wind characterized as a region of enhanced magnetic field strength, smooth rotation of the magnetic field vector and low proton density and temperature.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MagnetopauseCrossing">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A crossing of the interface between the shocked solar wind in the magnetosheath and the magnetic field and plasma in the magnetosphere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="RadioBurst">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Emissions of the sun in radio wavelengths from centimeters to dekameters, under both quiet and disturbed conditions. Radio Bursts can be "Type I" consisting of many short, narrow-band bursts in the metric range (300 - 50 MHz); "Type II" consisting of narrow-band emission that begins in the meter range (300 MHz) and sweeps slowly (tens of minutes) toward dekameter wavelengths (10 MHz); "Type III" consisting of narrow-band bursts that sweep rapidly (seconds) from decimeter to dekameter wavelengths (500 - 0.5 MHz); and "Type IV" consisting of a smooth continuum of broad-band bursts primarily in the meter range (300 - 30 MHz).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SectorBoundaryCrossing">
  <xsd:annotation>

```

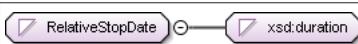
```

<xsd:documentation xml:lang="en">A sector boundary crossing is a transit by a spacecraft across the heliospheric current sheet separating the dominantly outward (away-from-the-sun) interplanetary magnetic field of one hemisphere of the heliosphere from the dominantly inward (toward-the-sun) polarity of the other hemisphere. Such crossings have multi-day intervals of opposite IMF dominant polarities on either side.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SolarFlare">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An explosive event in the Sun's atmosphere which produces electromagnetic radiation across the electromagnetic spectrum at multiple wavelengths from long-wave radio to the shortest wavelength gamma rays.</xsd:documentation>
            </xsd:annotation>
    </xsd:enumeration>
<xsd:enumeration value="SolarWindExtreme">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Intervals of unusually large or small values of solar wind attributes such as flow speed and ion density.</xsd:documentation>
            </xsd:annotation>
    </xsd:enumeration>
<xsd:enumeration value="StreamInteractionRegion">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The region (SIR) where two solar wind streams, typically having differing characteristics and solar sources, abut up against (and possibly partially interpenetrate) each other.</xsd:documentation>
            </xsd:annotation>
    </xsd:enumeration>
<xsd:enumeration value="Substorm">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A process by which plasma in the magnetotail becomes energized at a fast rate.</xsd:documentation>
            </xsd:annotation>
    </xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:RelativeStopDate

Namespace	http://www.spase-group.org/data/schema
Annotations	An indication of the nominal end date relative to the present.
Diagram	
Type	xsd:duration
Used by	Element spase:TimeSpan/spase:RelativeStopDate
Source	<pre> &lt;xsd:simpleType name="RelativeStopDate"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An indication of the nominal end date relative to the present.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Caveats

Namespace	http://www.spase-group.org/data/schema
Annotations	Information which may be important in the avoidance of the misuse of the resource, for instance instrument maladies, corruption or contamination.
Diagram	
Type	xsd:string
Used by	Elements spase:Catalog/spase:Caveats, spase:DisplayData/spase:Caveats, spase:Instrument/spase:Caveats, spase:NumericalData/spase:Caveats, spase:Parameter/spase:Caveats
Source	<pre> &lt;xsd:simpleType name="Caveats"&gt;     &lt;xsd:annotation&gt; </pre>

	<pre> &lt;xsd:documentation xml:lang="en"&gt;Information which may be important in the avoidance of the misuse of the resource, for instance instrument maladies, corruption or contamination.&lt;/ xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Keyword

Namespace	http://www.spase-group.org/data/schema
Annotations	A word or phrase that is relevant to the resource but does not exist in other documentary information.
Diagram	
Type	xsd:string
Used by	Elements spase:Catalog/spase:Keyword, spase:DisplayData/spase:Keyword, spase:Document/spase:Keyword, spase:NumericalData/spase:Keyword
Source	<pre> &lt;xsd:simpleType name="Keyword"&gt; &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A word or phrase that is relevant to the resource but does not exist in other documentary information.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:InputResourceID

Namespace	http://www.spase-group.org/data/schema
Annotations	The resource identifier for a resource which was used to generate this resource.
Diagram	
Type	xsd:string
Used by	Elements spase:Catalog/spase:InputResourceID, spase:DisplayData/spase:InputResourceID, spase:Document/spase:InputResourceID, spase:NumericalData/spase:InputResourceID
Source	<pre> &lt;xsd:simpleType name="InputResourceID"&gt; &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;The resource identifier for a resource which was used to generate this resource.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Set

Namespace	http://www.spase-group.org/data/schema
Annotations	A collection of items for a particular purpose.
Diagram	
Type	xsd:string
Used by	Element spase:Parameter/spase:Set
Source	<pre> &lt;xsd:simpleType name="Set"&gt; &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A collection of items for a particular purpose.&lt;/ xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:ParameterKey

Namespace	http://www.spase-group.org/data/schema
Annotations	The name or identifier which can be used to access the parameter in the resource. The associated value is dependent on the service used to access the resource. For columnar ASCII data, use "Column_X" for a single-element parameter and "Column_X-Column_Y" for a multi-element parameter, where X and Y are the relevant column index. The first column index is 1.
Diagram	
Type	xsd:string
Used by	Elements spase:Element/spase:ParameterKey, spase:Parameter/spase:ParameterKey
Source	<pre>&lt;xsd:simpleType name="ParameterKey"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The name or identifier which can be used to access the parameter in the resource. The associated value is dependent on the service used to access the resource. For columnar ASCII data, use "Column_X" for a single-element parameter and "Column_X-Column_Y" for a multi-element parameter, where X and Y are the relevant column index. The first column index is 1.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:UCD

Namespace	http://www.spase-group.org/data/schema
Annotations	The nature of a physical parameter expressed using the IVOA UCD1+ controlled vocabulary.
Diagram	
Type	xsd:string
Used by	Element spase:Parameter/spase:UCD
Source	<pre>&lt;xsd:simpleType name="UCD"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The nature of a physical parameter expressed using the IVOA UCD1+ controlled vocabulary.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Cadence

Namespace	http://www.spase-group.org/data/schema
Annotations	The nominal or most common time interval between the start of successive measurements.
Diagram	
Type	xsd:duration
Used by	Elements spase:Parameter/spase:Cadence, spase:TemporalDescription/spase:Cadence
Source	<pre>&lt;xsd:simpleType name="Cadence"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The nominal or most common time interval between the start of successive measurements.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:CadenceMin

Namespace	http://www.spase-group.org/data/schema
Annotations	The smallest time interval between the start of successive measurements.
Diagram	
Type	xsd:duration
Used by	Elements spase:Parameter/spase:CadenceMin, spase:TemporalDescription/spase:CadenceMin
Source	<pre>&lt;xsd:simpleType name="CadenceMin"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The smallest time interval between the start of successive measurements.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:CadenceMax

Namespace	http://www.spase-group.org/data/schema
Annotations	The largest time interval between the start of successive measurements.
Diagram	
Type	xsd:duration
Used by	Elements spase:Parameter/spase:CadenceMax, spase:TemporalDescription/spase:CadenceMax
Source	<pre>&lt;xsd:simpleType name="CadenceMax"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The largest time interval between the start of successive measurements.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:UnitsConversion

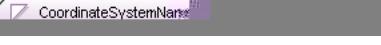
Namespace	http://www.spase-group.org/data/schema
Annotations	<p>The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number &gt; x", where "number" is a numerical value and "x" is the appropriate SI units. The basic SI units are Enumerated: m (meter), N (newton), kg (kilogram), Pa (pascal), s (second), Hz (hertz), A (ampere), V (volt), K (kelvin), W (watt), rad (radian), J (joule), sr (steradian), C (coulomb), T (tesla), ohm (ohm), mho (mho or seimens), H (henry), and F (farad). Two useful units which are not SI units are: degree (angle), and unitless (no units). An example is: "1.0E-9&gt;T" which converts the units, presumably nt, to Tesla. Another example is: "1.0e+3&gt;m/s" which converts a velocity expressed in kilometers per second to meters per second.</p>
Diagram	
Type	xsd:string
Used by	Elements spase:Element/spase:UnitsConversion, spase:Parameter/spase:UnitsConversion
Source	<pre>&lt;xsd:simpleType name="UnitsConversion"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number &gt; x",</pre>

	<p>where "number" is a numerical value and "x" is the appropriate SI units. The basic SI units are Enumerated: m (meter), N (newton), kg (kilogram), Pa (pascal), s (second), Hz (hertz), A (ampere), V (volt), K (kelvin), W (watt), rad (radian), J (joule), sr (steradian), C (coulomb), T (tesla), ohm (ohm), mho (mho or seimens), H (henry), and F (farad). Two useful units which are not SI units are: degree (angle), and unitless (no units). An example is: "1.0E-9&gt;T" which converts the units, presumably nT, to Tesla. Another example is: "1.0e+3&gt;m/s" which converts a velocity expressed in kilometers per second to meters per second.</p> <pre>&lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:CoordinateRepresentation

Namespace	http://www.spase-group.org/data/schema				
Annotations	Identifiers of the method or form for specifying a given point or vector in a given coordinate system.				
Diagram					
Type	restriction of xsd:string				
Facets	enumeration	Cartesian	A representation in which a position vector or a measured vector (e.g., field or flow) is specified by its components along the base axes of the coordinate system.		
	enumeration	Cylindrical	A coordinate representation of a position vector or measured vector (field or flow) by its k-component, the magnitude of its projection into the i-j plane, and the azimuthal angle of the i-j plane projection.		
	enumeration	Spherical	A coordinate representation of a position vector or of a measured vector by its magnitude and two direction angles. The angles are relative to the base axes of the coordinate system used. Typically the angles are phi [azimuth angle, =arctan (j/i)] and theta, where theta may be a polar angle, arctan {[SQRT(i^2+j^2)]/k}, or an elevation angle, arctan [k/SQRT (i^2+j^2)].		
Used by	Element	spase:CoordinateSystem/spase:CoordinateRepresentation			
Source	<pre>&lt;xsd:simpleType name="CoordinateRepresentation"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers of the method or form for specifying a given point or vector in a given coordinate system.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Cartesian"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A representation in which a position vector or a measured vector (e.g., field or flow) is specified by its components along the base axes of the coordinate system.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Cylindrical"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A coordinate representation of a position vector or measured vector (field or flow) by its k-component, the magnitude of its projection into the i-j plane, and the azimuthal angle of the i-j plane projection.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Spherical"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A coordinate representation of a position vector or of a measured vector by its magnitude and two direction angles. The angles are relative to the base axes of the coordinate system used. Typically the angles are phi [azimuth angle, =arctan (j/i)] and theta, where theta may be a polar angle, arctan {[SQRT(i^2+j^2)]/k}, or an elevation angle, arctan [k/SQRT (i^2+j^2)].&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>				
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd				

## Simple Type `spase:CoordinateSystemName`

Namespace	<a href="http://www.spase-group.org/data/schema">http://www.spase-group.org/data/schema</a>	
Annotations	Identifiers of the origin and orientation of a set of typically orthogonal axes.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration CGM enumeration CSO enumeration Carrington enumeration DM enumeration ECD enumeration ECEF enumeration ENP enumeration GEI	<p>Corrected Geomagnetic - A coordinate system from a spatial point with GEO radial distance and geomagnetic latitude and longitude, follow the epoch-appropriate IGRF/DGRF model field vector through to the point where the field line crosses the geomagnetic dipole equatorial plane. Then trace the dipole magnetic field vector Earthward from that point on the equatorial plane, in the same hemisphere as the original point, until the initial radial distance is reached. Designate the dipole latitude and longitude at that point as the CGM latitude and longitude of the original point. See &lt;<a href="http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html">http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html</a>&gt;</p> <p>Corrected Solar Orbital - A coordinate system related to Earth where X is anti-sunward, Y along the orbital velocity direction.</p> <p>A coordinate system which is centered at the Sun and is "fixed" with respect to the synodic rotation rate; the mean synodic value is about 27.2753 days. The Astronomical Almanac gives a value for Carrington longitude of 349.03 degrees at 0000 UT on 1 January 1995.</p> <p>Dipole Meridian - A coordinate system centered at the observation point. Z axis is parallel to the Earth's dipole axis, positive northward. X is in the plane defined by Z and the line linking the observation point with the Earth's center. Y is positive eastward. See &lt;<a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>&gt;</p> <p>Eccentric Dipole (ECD) coordinate system that aligns with a dipole whose origin and orientation may be different from the physical center and spin axis of the containing body. The IGRF-12 coefficients for 2015 are used to determine the origin for the earth. The 2015 positions are North dip pole: latitude: 86.29, longitude -160.06. South dip pole latitude: -64.28, longitude: 136.59, North geometric pole latitude: 80.37, longitude: -72.63, South geomagnetic pole latitude: -80.37, longitude: 107.37ECD is defined in doi:10.1186/s40623-015-0228-9.</p> <p>The Earth-Centered, Earth-Fixed (ECEF) coordinate system has point (0,0,0) defined as the center of mass of the Earth. Its axes are aligned with the International Reference Pole (IRP) and International Reference Meridian (IRM). The x-axis intersects the sphere of the Earth at 0 degree latitude (Equator) and 0 degree longitude (Greenwich). The z-axis points north. The y-axis completes the right handed coordinate system.</p> <p>ENP (also called PEN) - The P vector component points northward, perpendicular to orbit plane which for a zero degree inclination orbit is parallel to Earth's spin axis. The E vector component is perpendicular to P and N and points earthward. The N component is perpendicular to P and E and is positive eastward.</p> <p>GEI Geocentric Equatorial Inertial - A coordinate system where the Z axis is along Earth's spin vector, positive northward. X axis points towards the first point of Aries (from the Earth towards the Sun at the vernal equinox). See Russell, 1971. When the X axis is the</p>

		direction of the mean vernal equinox of J2000, the coordinate system is also called GCI. Then the Z axis is also defined as being normal to the mean Earth equator of J2000.
enumeration	GEO	Geographic - geocentric corotating - A coordinate system where the Z axis is along Earth's spin vector, positive northward. X axis lies in Greenwich meridian, positive towards Greenwich. See Russell, 1971.
enumeration	GPHIO	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	GSE	Geocentric Solar Ecliptic - A coordinate system where the X axis is from Earth to Sun. Z axis is normal to the ecliptic, positive northward. See Russell, 1971.
enumeration	GSEQ	Geocentric Solar Equatorial - A coordinate system where the X axis is from Earth to Sun. Y axis is parallel to solar equatorial plane. Z axis is positive northward. See Russell, 1971
enumeration	GSM	Geocentric Solar Magnetospheric - A coordinate system where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the geomagnetic dipole axis. See Russell, 1971
enumeration	HAE	Heliocentric Aries Ecliptic - A coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as SE below. See Hapgood, 1992.
enumeration	HCC	Heliocentric Cartesian - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's x and y values, expressed either as physical distances or as fractions of the solar disk radius.
enumeration	HCI	Heliographic Carrington Inertial.
enumeration	HCR	Heliocentric Radial - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's distance rho from the Z axis [Rho = SQRT(x**2 + y**2)] and its phase angle psi measured counterclockwise from the +Y axis [psi = arctan (-y/x)]
enumeration	HEE	Heliocentric Earth Ecliptic - A coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis points from Sun to Earth. See Hapgood, 1992
enumeration	HEEQ	Heliocentric Earth Equatorial - A coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X axis is generally Earthward in the plane defined by the Z axis and the Sun-Earth direction. See Hapgood, 1992.
enumeration	HERTN	Helio-Ecliptic Radial Tangential Normal coordinate system. Typically centered at a spacecraft. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis,

		and is defined as that portion of the ecliptic rotational axis which is perpendicular to the primary axis. The Y axis (Normal) is defined as Z cross X.
enumeration	HG	Heliographic - A heliocentric rotating coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X, Y axes rotate with a 25.38 day period. The zero longitude (X axis) is defined as the longitude that passed through the ascending node of the solar equator on the ecliptic plane on 1 January, 1854 at 12 UT. See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	HGI	Heliographic Inertial - A heliocentric coordinate system where the Z axis is normal to the solar equatorial plane, positive northward. X axis is along the intersection line between solar equatorial and ecliptic planes. The X axis was positive at SE longitude of 74.367 deg on Jan 1, 1900. (See SE below.) See < <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a> >
enumeration	HGRTN	Heliocentric Radial Tangential Normal coordinate system (aka RTN). Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.
enumeration	HPC	Helioprojective Cartesian = A 3-D orthonormal (left-handed) coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the observer and the center of the solar disk, the standard representation of an (x,y) point on the solar disk is via the point's longitude angle [ $\arctan(x/d)$ ] and latitude angle [ $\arctan(y/d)$ ].
enumeration	HPR	Helioprojective Radial - A 3-D orthonormal (left-handed) coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the observer and the center of the solar disk, the standard representation for this system of an (x,y) point on the solar disk is via the point's latitude angle theta [= $\arctan(\sqrt{x^2 + y^2}/d)$ ] or equivalent declination parameter delta (= theta - 90 deg), and its phase angle psi as measured counter-clockwise from the +Y axis [psi = $\arctan(-y/x)$ ].
enumeration	HSM	Heliospheric Solar Magnetospheric - A coordinate system where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the geomagnetic dipole axis.
enumeration	J2000	An astronomical coordinate system which uses the mean equator and equinox of Julian date 2451545.0 TT (Terrestrial Time), or January 1, 2000, noon TT. (aka J2000) to define a celestial reference frame.
enumeration	JSM	Jovian Solar Magnetospheric - A coordinate system related to Jupiter where the X axis is from Jupiter to Sun, Z axis is northward in a plane containing the X axis and the Jovian dipole axis.

enumeration	JSO	Jovian Solar Orbital - A coordinate system related to Jupiter where X anti-sunward, Y along the orbital velocity direction.
enumeration	KSM	Kronian Solar Magnetospheric - A coordinate system related to Saturn where the X axis is anti-sunward, Z axis is northward in a plane containing the X axis and the Kronian dipole axis.
enumeration	KSO	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	LGM	Local Geomagnetic - A coordinate system used mainly for Earth surface or near Earth surface magnetic field data. X axis northward from observation point in a geographic meridian. Z axis downward towards Earth's center. In this system, H (total horizontal component) = $\sqrt{B_x^2 + B_y^2}$ and D (declination angle) = $\arctan(B_y/B_x)$
enumeration	MAG	Geomagnetic - geocentric. Z axis is parallel to the geomagnetic dipole axis, positive north. X is in the plane defined by the Z axis and the Earth's rotation axis. If N is a unit vector from the Earth's center to the north geographic pole, the signs of the X and Y axes are given by $Y = N \times Z$ , $X = Y \times Z$ . See Russell, 1971, and <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>
enumeration	MFA	Magnetic Field Aligned - A coordinate system spacecraft-centered system with Z in the direction of the ambient magnetic field vector. X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>
enumeration	MSO	Mars/Mercury Solar Orbital A coordinate system related to Mars or Mercury. A coordinate system where, depending on the body (Mars or Mercury), X is anti-sunward, Y along the orbital velocity direction.
enumeration	RTN	Radial Tangential Normal. Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.
enumeration	SC	Spacecraft - A coordinate system defined by the spacecraft geometry and/or spin. Often has Z axis parallel to spacecraft spin vector. X and Y axes may or may not corotate with the spacecraft. See SR and SR2 below.
enumeration	SE	Solar Ecliptic - A heliocentric coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as HAE above. See <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html">http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html</a>
enumeration	SM	Solar Magnetic - A geocentric coordinate system where the Z axis is northward along Earth's dipole axis, X axis is in plane of z axis and Earth-Sun line, positive sunward. See Russell, 1971.
enumeration	SR	Spin Reference - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X and Y rotate with the spacecraft. See <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>
enumeration	SR2	Spin Reference 2 - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector.

		X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See < <a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a> >
enumeration	SSE	Spacecraft Solar Ecliptic - A coordinate system used for deep space spacecraft, for example Helios. - X axis from spacecraft to Sun. Z axis normal to ecliptic plane, positive northward. Note: Angle between normals to ecliptic and to Helios orbit plane ~ 0.25 deg.
enumeration	SSE_L	Selenocentric Solar Ecliptic. The X axis points from the center of the Earth's moon to the sun, the Z axis is normal to the ecliptic plane, positive northward. And the Y axis completes the right-handed set of axes.
enumeration	SpacecraftOrbitPlane	A coordinate system where X lies in the plane normal to and in the direction of motion of the spacecraft, Z is normal to this plane and Y completes the triad in a right-handed coordinate system.
enumeration	TIIS	Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.
enumeration	VSO	Venus Solar Orbital - A coordinate system related to Venus where X is anti-sunward, Y along the orbital velocity direction.
enumeration	WGS84	The World Geodetic System (WGS) defines a reference frame for the earth, for use in geodesy and navigation. The WGS84 uses the zero meridian as defined by the Bureau International de l'Heure.
Used by	Elements	spase:CoordinateSystem/spase:CoordinateSystemName, spase:Location/spase:CoordinateSystemName
Source		<pre> &lt;xsd:simpleType name="CoordinateSystemName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers of the origin and orientation of a set of typically orthogonal axes.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="CGM"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Corrected Geomagnetic - A coordinate system from a spatial point with GEO radial distance and geomagnetic latitude and longitude, follow the epoch-appropriate IGRF/DGRF model field vector through to the point where the field line crosses the geomagnetic dipole equatorial plane. Then trace the dipole magnetic field vector Earthward from that point on the equatorial plane, in the same hemisphere as the original point, until the initial radial distance is reached. Designate the dipole latitude and longitude at that point as the CGM latitude and longitude of the original point. See &lt;<a href="http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html">http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html</a>&gt;&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="CSO"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Corrected Solar Orbital - A coordinate system related to Earth where X is anti-sunward, Y along the orbital velocity direction.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Carrington"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A coordinate system which is centered at the Sun and is "fixed" with respect to the synodic rotation rate; the mean synodic value is about 27.2753 days. The Astronomical Almanac gives a value for Carrington longitude of 349.03 degrees at 0000 UT on 1 January 1995.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="DM"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Dipole Meridian - A coordinate system centered at the observation point. Z axis is parallel to the Earth's dipole axis, positive northward. X is in the plane defined by Z and the line linking the observation point with the Earth's center. Y is positive eastward. See &lt;<a href="http://cdpp.cnes.fr/00428.pdf">http://cdpp.cnes.fr/00428.pdf</a>&gt;&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="ECD"&gt;       &lt;xsd:annotation&gt; </pre>

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<xsd:documentation xml:lang="en">Eccentric Dipole (ECD) coordinate system that aligns
with a dipole whose origin and orientation may be different from the physical center and spin
axis of the containing body. The IGRF-12 coefficients for 2015 are used to determine the origin
for the earth. The 2015 positions are North dip pole: latitude: 86.29, longitude -160.06. South
dip pole latitude: -64.28, longitude: 136.59, North geometric pole latitude: 80.37, longitude:
-72.63, South geomagnetic pole latitude: -80.37, longitude: 107.37ECD is defined in doi:10.1186/
s40623-015-0228-9.</xsd:documentation>
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system has point (0,0,0) defined as the center of mass of the Earth. Its axes are aligned
with the International Reference Pole (IRP) and International Reference Meridian (IRM). The x-
axis intersects the sphere of the Earth at 0 degree latitude (Equator) and 0 degree longitude
(Greenwich). The z-axis points north. The y-axis completes the right handed coordinate system.</
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northward, perpendicular to orbit plane which for a zero degree inclination orbit is parallel to
Earth's spin axis. The E vector component is perpendicular to P and N and points earthward. The N
component is perpendicular to P and E and is positive eastward.</xsd:documentation>
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where the Z axis is along Earth's spin vector, positive northward. X axis points towards the first
point of Aries (from the Earth towards the Sun at the vernal equinox). See Russell, 1971. When
the X axis is the direction of the mean vernal equinox of J2000, the coordinate system is also
called GCI. Then the Z axis is also defined as being normal to the mean Earth equator of J2000.</
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meridian, positive towards Greenwich. See Russell, 1971.</xsd:documentation>
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X axis is from Earth to Sun. Z axis is normal to the ecliptic, positive northward. See Russell,
1971.</xsd:documentation>
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the X axis is from Earth to Sun. Y axis is parallel to solar equatorial plane. Z axis is positive
northward. See Russell, 1971.</xsd:documentation>
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where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the
geomagnetic dipole axis. See Russell, 1971.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
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the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the
first point of Aries (from Earth to Sun at vernal equinox). Same as SE below. See Hapgood, 1992.</
xsd:documentation>
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  <xsd:annotation>
    <xsd:documentation xml:lang="en">Heliocentric Cartesian - A 3-D orthonormal coordinate
system that is primarily intended to specify with two dimensions a point on the solar disk. The Z

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axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's x and y values, expressed either as physical distances or as fractions of the solar disk radius.</xsd:documentation>

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    <xsd:documentation xml:lang="en">Heliocentric Radial - A 3-D orthonormal coordinate system that is primarily intended to specify with two dimensions a point on the solar disk. The Z axis points toward the observer. The Y axis lies in the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is perpendicular to the Y and Z axes, positive toward solar west. Standard representation for this system is via the point's distance rho from the Z axis [Rho = SQRT(x**2 + y**2)] and its phase angle psi measured counterclockwise from the +Y axis [psi = arctan (-y/x)]</xsd:documentation>
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solar disk is via the point's longitude angle [arctan (x/d)] and latitude angle [arctan y/d].</
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    </xsd:annotation>
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coordinate system that is primarily intended to specify with two dimensions a point on the solar
disk. The Z axis points from the observer to the center of the solar disk. The Y axis lies in
the plane defined by the solar spin vector and the Z axis, positive northward. The X axis is
perpendicular to the Y and Z axes, positive toward solar west. Given as the distance between the
observer and the center of the solar disk, the standard representation for this system of an (x,y)
point on the solar disk is via the point's latitude angle theta [= arctan [SQRT(x**2 + y**2)]/d]
or equivalent declination parameter delta (= theta - 90 deg), and its phase angle psi as measured
counter- clockwise from the +Y axis [psi = arctan (-y/x)].</xsd:documentation>
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</xsd:enumeration>
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where the X axis is from Earth to Sun, Z axis is northward in a plane containing the X axis and the
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(aka J2000) to define a celestial reference frame.</xsd:documentation>
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</xsd:enumeration>
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to Jupiter where the X axis is from Jupiter to Sun, Z axis is northward in a plane containing the X
axis and the Jovian dipole axis.</xsd:documentation>
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    <xsd:annotation>
        <xsd:documentation xml:lang="en">Jovian Solar Orbital - A coordinate system related to
Jupiter where X anti-sunward, Y along the orbital velocity direction.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="KSM">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Kronian Solar Magnetospheric - A coordinate system related
to Saturn where the X axis is anti-sunward, Z axis is northward in a plane containing the X axis
and the Kronian dipole axis.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="KSO">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Kronian Solar Orbital - A coordinate system related to
Saturn where X is anti-sunward, Y along the orbital velocity direction.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="LGM">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Local Geomagnetic - A coordinate system used mainly for
Earth surface or near Earth surface magnetic field data. X axis northward from observation point in
a geographic meridian. Z axis downward towards Earth's center. In this system, H (total horizontal
component) = SQRT (Bx^2 + By^2) and D (declination angle) = arctan (By/Bx)</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MAG">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Geomagnetic - geocentric. Z axis is parallel to the
geomagnetic dipole axis, positive north. X is in the plane defined by the Z axis and the Earth's
rotation axis. If N is a unit vector from the Earth's center to the north geographic pole, the
signs of the X and Y axes are given by Y = N x Z, X = Y x Z.. See Russell, 1971, and <http://cdpp.cnes.fr/00428.pdf></xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MFA">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">Magnetic Field Aligned - A coordinate system spacecraft-
centered system with Z in the direction of the ambient magnetic field vector. X is in the plane
defined by Z and the spacecraft-Sun line, positive sunward. See <http://cdpp.cnes.fr/00428.pdf></
xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MSO">

```

```

<xsd:annotation>
  <xsd:documentation xml:lang="en">Mars/Mercury Solar Orbital A coordinate system related to Mars or Mercury. A coordinate system where, depending on the body (Mars or Mercury), X is anti-sunward, Y along the orbital velocity direction.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="RTN">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Radial Tangential Normal. Typically centered at a spacecraft. Used for IMF and plasma V vectors. The X axis (radial) is set as the primary axis, and is defined as the axis pointing from the spacecraft to the Sun. The Z axis (tangential) is set as the secondary axis, and is defined as that portion of the solar North rotational axis which is perpendicular to the primary axis. The Y axis (normal) is defined as Z cross X.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SC">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Spacecraft - A coordinate system defined by the spacecraft geometry and/or spin. Often has Z axis parallel to spacecraft spin vector. X and Y axes may or may not corotate with the spacecraft. See SR and SR2 below.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SE">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Solar Ecliptic - A heliocentric coordinate system where the Z axis is normal to the ecliptic plane, positive northward. X axis is positive towards the first point of Aries (from Earth to Sun at vernal equinox). Same as HAE above. See <a href="http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html"></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SM">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Solar Magnetic - A geocentric coordinate system where the Z axis is northward along Earth's dipole axis, X axis is in plane of z axis and Earth-Sun line, positive sunward. See Russell, 1971.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SR">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Spin Reference - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X and Y rotate with the spacecraft. See <a href="http://cdpp.cnes.fr/00428.pdf"></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SR2">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Spin Reference 2 - A special case of a Spacecraft (SC) coordinate system for a spinning spacecraft. Z is parallel to the spacecraft spin vector. X is in the plane defined by Z and the spacecraft-Sun line, positive sunward. See <a href="http://cdpp.cnes.fr/00428.pdf"></xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SSE">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Spacecraft Solar Ecliptic - A coordinate system used for deep space spacecraft, for example Helios. - X axis from spacecraft to Sun. Z axis normal to ecliptic plane, positive northward. Note: Angle between normals to ecliptic and to Helios orbit plane ~ 0.25 deg.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SSE_L">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Selenocentric Solar Ecliptic. The X axis points from the center of the Earth's moon to the sun, the Z axis is normal to the ecliptic plane, positive northward. And the Y axis completes the right-handed set of axes.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SpacecraftOrbitPlane">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A coordinate system where X lies in the plane normal to and in the direction of motion of the spacecraft, Z is normal to this plane and Y completes the triad in a right-handed coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TIIS">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Kronian Solar Orbital - A coordinate system related to Saturn where X is anti-sunward, Y along the orbital velocity direction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="VSO">
  <xsd:annotation>

```

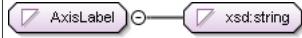
	<pre> &lt;xsd:documentation xml:lang="en"&gt;Venus Solar Orbital - A coordinate system related to Venus where X is anti-sunward, Y along the orbital velocity direction.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="WGS84"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The World Geodetic System (WGS) defines a reference frame for the earth, for use in geodesy and navigation. The WGS84 uses the zero meridian as defined by the Bureau International de l'Heure.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:DisplayType

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for types or classes of rendered data.		
Diagram	<pre> classDiagram     class DisplayType {         &lt;&lt;restriction of xsd:string&gt;&gt;     } </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Image	A two-dimensional representation of data with values at each element of the array related to an intensity or a color.
	enumeration	Plasmagram	The characterization of signal strengths in active sounding measurements as a function of virtual range or signal delay time and sounding frequency. A Plasmagram is also referred to as an Ionogram.
	enumeration	Spectrogram	The characterization of signal strengths as a function of frequency (or energy) and time.
	enumeration	StackPlot	A representation of data showing multiple sets of observations on a single plot, possibly offsetting each plot by some uniform amount.
	enumeration	TimeSeries	A representation of data showing a set of observations taken at different points in time and charted as a time series.
	enumeration	WaveForm	Spatial or temporal variations of wave amplitude over wave-period timescales.
Used by	Element	spase:RenderingHints/spase:DisplayType	
Source	<pre> &lt;xsd:simpleType name="DisplayType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for types or classes of rendered data.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Image"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A two-dimensional representation of data with values at each element of the array related to an intensity or a color.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Plasmagram"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The characterization of signal strengths in active sounding measurements as a function of virtual range or signal delay time and sounding frequency. A Plasmagram is also referred to as an Ionogram.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Spectrogram"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The characterization of signal strengths as a function of frequency (or energy) and time.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="StackPlot"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A representation of data showing multiple sets of observations on a single plot, possibly offsetting each plot by some uniform amount.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>		

	<pre> &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="TimeSeries"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A representation of data showing a set of observations taken at different points in time and charted as a time series.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="WaveForm"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Spatial or temporal variations of wave amplitude over wave-period timescales.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:AxisLabel

Namespace	http://www.spase-group.org/data/schema
Annotations	A short character string (approximately 10 characters, but preferably 6 characters - more only if absolutely required for clarity) which can be used to label a y-axis for a plot or to provide a heading for a data listing.
Diagram	
Type	xsd:string
Used by	Element spase:RenderingHints/spase:AxisLabel
Source	<pre> &lt;xsd:simpleType name="AxisLabel"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A short character string (approximately 10 characters, but preferably 6 characters - more only if absolutely required for clarity) which can be used to label a y-axis for a plot or to provide a heading for a data listing.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:RenderingAxis

Namespace	http://www.spase-group.org/data/schema									
Annotations	Identifiers for the reference component of a plot or rendering of data.									
Diagram										
Type	restriction of xsd:string									
Facets	<table> <tr> <td>enumeration</td> <td>ColorBar</td> <td>A spectrum or set of colors used to represent data values.</td> </tr> <tr> <td>enumeration</td> <td>Horizontal</td> <td>Parallel to or in the plane of the horizon or a base line.</td> </tr> <tr> <td>enumeration</td> <td>Vertical</td> <td>Perpendicular to the plane of the horizon or a base line.</td> </tr> </table>	enumeration	ColorBar	A spectrum or set of colors used to represent data values.	enumeration	Horizontal	Parallel to or in the plane of the horizon or a base line.	enumeration	Vertical	Perpendicular to the plane of the horizon or a base line.
enumeration	ColorBar	A spectrum or set of colors used to represent data values.								
enumeration	Horizontal	Parallel to or in the plane of the horizon or a base line.								
enumeration	Vertical	Perpendicular to the plane of the horizon or a base line.								
Used by	Element spase:RenderingHints/spase:RenderingAxis									
Source	<pre> &lt;xsd:simpleType name="RenderingAxis"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the reference component of a plot or rendering of data.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt;     &lt;xsd:enumeration value="ColorBar"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A spectrum or set of colors used to represent data values.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Horizontal"&gt;       &lt;xsd:annotation&gt; </pre>									

```

        <xsd:documentation xml:lang="en">Parallel to or in the plane of the horizon or a base
line.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Vertical">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Perpendicular to the plane of the horizon or a base line.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:Index

Namespace	http://www.spase-group.org/data/schema
Annotations	The location of an item in an array or vector. An index can be multivalued to represent the location in a multidimensional object. The index of the first item is "1". A value of "0" is a wild card for all elements at the location in an array. A value of "-1" is a reference to the dimension at the location in the array. A "-1" is used when describing the attributes of the dimension, whereas "0" or a positive integer is used to describe attributes of individual elements.
Diagram	
Type	spase:typeSequence
Type hierarchy	<ul style="list-style-type: none"> <li>• xsd:integer</li> <li>• spase:typeSequence</li> <li>• spase:Index</li> </ul>
Used by	Elements spase:Element/spase:Index, spase:RenderingHints/spase:Index
Source	<pre> &lt;xsd:simpleType name="Index"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The location of an item in an array or vector. An index can be multivalued to represent the location in a multidimensional object. The index of the first item is "1". A value of "0" is a wild card for all elements at the location in an array. A value of "-1" is a reference to the dimension at the location in the array. A "-1" is used when describing the attributes of the dimension, whereas "0" or a positive integer is used to describe attributes of individual elements.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="spase:typeSequence" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:typeSequence

Namespace	http://www.spase-group.org/data/schema
Annotations	<pre> &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A list of whole number values where the order of the values is fixed. A space separates each value. For example, "1 2 3".&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; </pre>
Diagram	
Type	list of xsd:integer
Used by	Simple Types spase:Index, spase:Size
Source	<pre> &lt;xsd:simpleType name="typeSequence"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;             &lt;xsd:annotation&gt;                 &lt;xsd:documentation xml:lang="en"&gt;A list of whole number values where the order of the values is fixed. A space separates each value. For example, "1 2 3".&lt;/xsd:documentation&gt;             &lt;/xsd:annotation&gt;         &lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; &lt;/xsd:simpleType&gt; </pre>

	<pre>&lt;xsd:list itemType="xsd:integer" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ValueFormat

Namespace	http://www.spase-group.org/data/schema
Annotations	A string defining the output format used when extracting data values out to a file or screen. The magnitude and the number of significant figures needed should be carefully considered. The output format string can be in either Fortran or C syntax.
Diagram	
Type	xsd:string
Used by	Element spase:RenderingHints/spase:ValueFormat
Source	<pre>&lt;xsd:simpleType name="ValueFormat"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A string defining the output format used when extracting data values out to a file or screen. The magnitude and the number of significant figures needed should be carefully considered. The output format string can be in either Fortran or C syntax.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ScaleMin

Namespace	http://www.spase-group.org/data/schema
Annotations	The minimum value that the variable is expected to attain. Used, for example, by automated plotting software.
Diagram	
Type	xsd:double
Used by	Element spase:RenderingHints/spase:ScaleMin
Source	<pre>&lt;xsd:simpleType name="ScaleMin"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The minimum value that the variable is expected to attain. Used, for example, by automated plotting software.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ScaleMax

Namespace	http://www.spase-group.org/data/schema
Annotations	The maximum value that the variable is expected to attain. Used, for example, by automated plotting software.
Diagram	
Type	xsd:double
Used by	Element spase:RenderingHints/spase:ScaleMax
Source	<pre>&lt;xsd:simpleType name="ScaleMax"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The maximum value that the variable is expected to attain. Used, for example, by automated plotting software.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double" /&gt; &lt;/xsd:simpleType&gt;</pre>

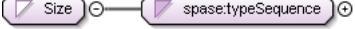
Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

## Simple Type spase:ScaleType

Namespace	http://www.spase-group.org/data/schema								
Annotations	Identifiers for scaling applied to a set of numbers.								
Diagram									
Type	restriction of xsd:string								
Facets	<table> <tr> <td>enumeration</td> <td>LinearScale</td> <td>Intervals which are equally spaced.</td> </tr> <tr> <td>enumeration</td> <td>LogScale</td> <td>Intervals which are spaced proportionally to the logarithms of the values being represented.</td> </tr> </table>			enumeration	LinearScale	Intervals which are equally spaced.	enumeration	LogScale	Intervals which are spaced proportionally to the logarithms of the values being represented.
enumeration	LinearScale	Intervals which are equally spaced.							
enumeration	LogScale	Intervals which are spaced proportionally to the logarithms of the values being represented.							
Used by	Element	spase:RenderingHints/spase:ScaleType							
Source	<pre> &lt;xsd:simpleType name="ScaleType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for scaling applied to a set of numbers.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="LinearScale"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Intervals which are equally spaced.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="LogScale"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Intervals which are spaced proportionally to the logarithms of the values being represented.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>								
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd								

## Simple Type spase:Size

Namespace	http://www.spase-group.org/data/schema		
Annotations	The number of elements in each dimension of a multi-dimensional array. A scalar has a size of 1. A multi-dimensional vector will have a size for each dimension. Note that the number of elements in the size of an N-dimensional array conveys the array's dimensionality while the product of those numbers conveys the total number of elements in the array. When size is used to describe a tensor it is the number of elements in the tensor. As such it has a limited set of values. A tensor of rank 1 has a size of 3, rank 2 a size of 9, rank 3 a size of 27 and rank n a size of 3^n.		
Diagram			
Type	spase:typeSequence		
Type hierarchy	<ul style="list-style-type: none"> <li>• xsd:integer</li> <li>• spase:typeSequence</li> <li>• spase:Size</li> </ul>		
Used by	Element	spase:Structure/spase:Size	
Source	<pre> &lt;xsd:simpleType name="Size"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The number of elements in each dimension of a multi-dimensional array. A scalar has a size of 1. A multi-dimensional vector will have a size for each dimension. Note that the number of elements in the size of an N-dimensional array conveys the array's dimensionality while the product of those numbers conveys the total number of elements in the array. When size is used to describe a tensor it is the number of elements in the tensor. As such </pre>		

	<p>it has a limited set of values. A tensor of rank 1 has a size of 3, rank 2 a size of 9, rank 3 a size of 27 and rank n a size of <math>3^n</math>.</p> <pre>&lt;/xsd:documentation&gt; &lt;xsd:annotation&gt; &lt;xsd:restriction base="spase:typeSequence" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Qualifier

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for terms which refine the type or attribute of a quantity.	
Diagram	<pre>graph LR; Qualifier --&gt; xsdString</pre>	
Type	restriction of xsd:string	
Facets	enumeration	Anisotropy Direction-dependent property.
	enumeration	Array A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.
	enumeration	Average The statistical mean; the sum of a set of values divided by the number of values in the set.
	enumeration	Characteristic A quantity which can be easily identified and measured in a given environment.
	enumeration	Circular Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.
	enumeration	Column A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.
	enumeration	Component Projection of a vector along one of the base axes of a coordinate system.
	enumeration	Component.I Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
	enumeration	Component.J Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
	enumeration	Component.K Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
	enumeration	Confidence An expression of how certain that a quantity is valid or accurate.
	enumeration	Core The central or main part of an object or calculated distribution. For example, the part of a distribution of particles at low energies that is a thermal (Maxwellian) population.
	enumeration	CrossSpectrum The Fourier transform of the cross correlation of two physical or empirical observations.
	enumeration	Deviation The difference between an observed value and the expected value of a quantity.
	enumeration	Differential A measurement within a narrow range of energy

		and/or solid angle.
enumeration	Direction	The spatial relation between an object and another object, the orientation of the object or the course along which the object points or moves.
enumeration	DirectionAngle	The angle between a position vector or measured vector (or one of its projections onto a plane) and one of the base axes of the coordinate system.
enumeration	DirectionAngle.AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( B_y / B_z )$ .
enumeration	DirectionAngle.ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
enumeration	DirectionAngle.PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan(\sqrt{i^2+j^2}/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(B_x/B_t)$ .
enumeration	DirectionCosine	The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.
enumeration	DirectionCosine.I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.
enumeration	DirectionCosine.J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.
enumeration	DirectionCosine.K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	Directional	A measurement within a narrow range of solid angle.
enumeration	FieldAligned	
enumeration	Fit	Values that make a model agree with the data.
enumeration	Group	An assemblage of values that a certain relation or common characteristic.
enumeration	Halo	The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.
enumeration	Integral	A flux measurement in a broad range of energy and solid angle.
enumeration	Integral.Area	Integration over the extent of a planar region, or of the surface of a solid.
enumeration	Integral.Bandwidth	Integration over the width a frequency band.
enumeration	Integral.SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	LineOfSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of

		sight is measured.
enumeration	Linear	Polarization where the E-field vector is confined to a given plane
enumeration	Magnitude	A measure of the strength of a vector quantity or length of its representational vector.
enumeration	Maximum	The largest value of a batch or sample or the upper bound of a probability distribution.
enumeration	Median	The measure of central tendency of a set of n. values computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.
enumeration	Minimum	The smallest value of a batch or sample or the lower bound of a probability distribution.
enumeration	Moment	Parameters determined by integration over a distribution function convolved with a power of velocity.
enumeration	Parallel	Having the same direction as a given direction
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	Perpendicular	At right angles to a given direction.
enumeration	Perturbation	Variations in the state of a system.
enumeration	Phase	A point or portion in a recurring series of changes.
enumeration	PhaseAngle	Phase difference between two or more waves, normally expressed in degrees.
enumeration	Projection	A measure of the length of a position or measured vector as projected into a plane of the coordinate system.
enumeration	Projection.IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
enumeration	Projection.IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
enumeration	Projection.JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
enumeration	Pseudo	Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.
enumeration	Ratio	The relative magnitudes of two quantities.
enumeration	Scalar	A quantity that is completely specified by its magnitude and has no direction.
enumeration	Spectral	Characterized as a range or continuum of frequencies.
enumeration	StandardDeviation	The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.
enumeration	StokesParameters	
enumeration	Strahl	A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.
enumeration	Superhalo	The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.
enumeration	Symmetric	Equal distribution about one or more axes.
enumeration	Tensor	A generalized linear "quantity" or "geometrical

		entity" that can be expressed as a multi-dimensional array relative to a choice of basis of the particular space on which it is defined.
enumeration	Total	The summation of quantities over all possible species.
enumeration	Trace	The sum of the elements on the main diagonal (the diagonal from the upper left to the lower right) of a square matrix.
enumeration	Uncertainty	A statistically defined discrepancy between a measured quantity and the true value of that quantity that cannot be corrected by calculation or calibration.
enumeration	Variance	A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.
enumeration	Vector	A set of parameter values each along some independent variable (e.g., components of a field in three orthogonal spatial directions; atmospheric temperature values at several altitudes, or at a given latitude and longitude;).
Used by	Elements	spase:Element/spase:Qualifier, spase:Field/spase:Qualifier, spase:Mixed/spase:Qualifier, spase:Particle/spase:Qualifier, spase:Support/spase:Qualifier, spase:Wave/spase:Qualifier
Source	<pre> &lt;xsd:simpleType name="Qualifier"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for terms which refine the type or attribute of a quantity.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Anisotropy"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Direction-dependent property.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Array"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A sequence of values corresponding to the elements in a rectilinear, n-dimension matrix. Each value can be referenced by a unique index.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Average"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The statistical mean; the sum of a set of values divided by the number of values in the set.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Characteristic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A quantity which can be easily identified and measured in a given environment.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Circular"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Relative to polarization, right-hand circularly polarized light is defined such that the electric field is rotating clockwise as seen by an observer towards whom the wave is moving. Left-hand circularly polarized light is defined such that the electric field is rotating counterclockwise as seen by an observer towards whom the wave is moving. The polarization of magnetohydrodynamic waves is specified with respect to the ambient mean magnetic field : right-hand polarized waves have a transverse electric field component which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Column"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A two-dimensional measure of a quantity. The column is the area over which the quantity is measured.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Component"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Projection of a vector along one of the base axes of a coordinate system.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Component.I"&gt;</pre>	

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<xsd:annotation>
  <xsd:documentation xml:lang="en">Projection of a vector along the first named axis of a
coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Component.J">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Projection of a vector along the second named axis of a
coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Component.K">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Projection of a vector along the third named axis of a
coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Confidence">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An expression of how certain that a quantity is valid or
accurate.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Core">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The central or main part of an object or calculated
distribution. For example, the part of a distribution of particles at low energies that is a
thermal (Maxwellian) population.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="CrossSpectrum">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The Fourier transform of the cross correlation of two
physical or empirical observations.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Deviation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The difference between an observed value and the expected
value of a quantity.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Differential">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measurement within a narrow range of energy and/or solid
angle.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Direction">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The spatial relation between an object and another
object, the orientation of the object or the course along which the object points or moves.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionAngle">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The angle between a position vector or measured vector
(or one of its projections onto a plane) and one of the base axes of the coordinate system.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionAngle.AzimuthAngle">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The angle between the projection into the i-j plane of
a position or measured vector and the i-axis of the coordinate system. Mathematically defined as
arctan(j/i). This term could be also applied to angles measured in different planes, for example
the IMF clock angle defined as arctan(|By|/Bz).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionAngle.ElevationAngle">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The angle between the position or measured vector and
the i-j plane of the coordinate system. Mathematically defined as arctan(k/SQRT(i^2+j^2)).</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionAngle.PolarAngle">
  <xsd:annotation>

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<xsd:documentation xml:lang="en">The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as arctan([SQRT(i^2+j^2)]/k). This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as arccos(Bx/Bt).</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionCosine">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The cosine of the angle between two vectors usually between a vector and one of the basis axes defining a Cartesian coordinate system. Three angles and thus three direction cosines are required to define a vector direction in a three dimensional Euclidean space.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionCosine.I">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionCosine.J">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="DirectionCosine.K">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Directional">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measurement within a narrow range of solid angle.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Fieldaligned">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      </xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Fit">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Values that make an model agree with the data.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Group">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An assemblage of values that a certain relation or common characteristic.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Halo">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The part of an object or distribution surrounding some central body or distribution. For example, the particles above the core energies that show enhancements above the thermal population. Typically, a "power law tail" shows a break from the core Maxwellian at a particular energy.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Integral">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A flux measurement in a broad range of energy and solid angle.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Integral.Area">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Integration over the extent of a planar region, or of the surface of a solid.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Integral.Bandwidth">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Integration over the width a frequency band.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>

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        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Integral.SolidAngle">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Integration over the angle in three-dimensional space that
an object subtends at a point.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="LineOfSight">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The line of sight is the line that connects the observer
with the observed object. This expression is often used with measurements of Doppler velocity and
magnetic field in magnetograms, where only the component of the vector field directed along the
line of sight is measured.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Linear">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Polarization where the E-field vector is confined to a
given plane</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Magnitude">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A measure of the strength of a vector quantity or length of
its representational vector.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Maximum">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The largest value of a batch or sample or the upper bound
of a probability distribution.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Median">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The measure of central tendency of a set of n. values
computed by ordering the values and taking the value at position (n. + 1) / 2 when n. is odd
or the arithmetic mean of the values at positions n. / 2 and (n. / 2) + 1 when n. is even.</
xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Minimum">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The smallest value of a batch or sample or the lower bound
of a probability distribution.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Moment">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Parameters determined by integration over a distribution
function convolved with a power of velocity.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Parallel">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Having the same direction as a given direction</
xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Peak">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The maximum value for the quantity in question, over a
period of time which is usually equal to the cadence.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Perpendicular">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">At right angles to a given direction.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Perturbation">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Variations in the state of a system.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Phase">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A point or portion in a recurring series of changes.</
xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="PhaseAngle">

```

```

<xsd:annotation>
  <xsd:documentation xml:lang="en">Phase difference between two or more waves, normally expressed in degrees.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Projection">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measure of the length of a position or measured vector as projected into a plane of the coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Projection.IJ">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Projection.IK">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Projection.JK">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Pseudo">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Similar to or having the appearance of something else. Can be used to indicate an estimation or approximation of a particular quantity.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Ratio">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The relative magnitudes of two quantities.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Scalar">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A quantity that is completely specified by its magnitude and has no direction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Spectral">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Characterized as a range or continuum of frequencies.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="StandardDeviation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The square root of the average of the squares of deviations about the mean of a set of data. Standard deviation is a statistical measure of spread or variability.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="StokesParameters">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
      </xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
<xsd:enumeration value="Strahl">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A distribution of particles concentrated in a narrow energy band. The band may be aligned with a secondary feature. For example, it may occur in a narrow cone aligned with the mean magnetic field direction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Superhalo">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The part of an object or distribution surrounding some central body or distribution evident in a second break in the distribution function (e.g., a different power law). It consists of a population at a higher energies than for a halo.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Symmetric">
  <xsd:annotation>

```

```

<xsd:documentation xml:lang="en">Equal distribution about one or more axes.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Tensor">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A generalized linear "quantity" or "geometrical entity"
that can be expressed as a multi-dimensional array relative to a choice of basis of the particular
space on which it is defined.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Total">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The summation of quantities over all possible species.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Trace">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The sum of the elements on the main diagonal (the diagonal
from the upper left to the lower right) of a square matrix.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uncertainty">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A statistically defined discrepancy between a measured
quantity and the true value of that quantity that cannot be corrected by calculation or
calibration.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Variance">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A measure of dispersion of a set of data points
around their mean value. The expectation value of the squared deviations from the mean.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Vector">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A set of parameter values each along some independent
variable (e.g., components of a field in three orthogonal spatial directions; atmospheric
temperature values at several altitudes, or at a given latitude and longitude;).</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

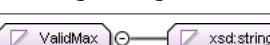
```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
-----------------	---

### Simple Type spase:ValidMin

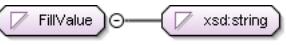
Namespace	http://www.spase-group.org/data/schema
Annotations	The smallest legitimate value.
Diagram	
Type	xsd:string
Used by	Elements spase:Element/spase:ValidMin, spase:Parameter/spase:ValidMin
Source	<pre> &lt;xsd:simpleType name="ValidMin"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The smallest legitimate value.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ValidMax

Namespace	http://www.spase-group.org/data/schema
Annotations	The largest legitimate value.
Diagram	
Type	xsd:string

Used by	Elements spase:Element/spase:ValidMax, spase:Parameter/spase:ValidMax
Source	<pre>&lt;xsd:simpleType name="ValidMax"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The largest legitimate value.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:FieldValue

Namespace	http://www.spase-group.org/data/schema
Annotations	A value that indicates that a quantity is undefined.
Diagram	 A diagram showing a rounded rectangle labeled "FillValue" connected by a line with an open circle to another rounded rectangle labeled "xsd:string".
Type	xsd:string
Used by	Elements spase:Element/spase:FieldValue, spase:Parameter/spase:FieldValue
Source	<pre>&lt;xsd:simpleType name="FieldValue"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A value that indicates that a quantity is undefined.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:FieldQuantity

Namespace	http://www.spase-group.org/data/schema																					
Annotations	Identifiers for the physical attribute of the field.																					
Diagram	 A diagram showing a rounded rectangle labeled "FieldQuantity" connected by a line with an open circle to another rounded rectangle labeled "xsd:string".																					
Type	restriction of xsd:string																					
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Current</td> <td>The flow of electrons through a conductor caused by a potential difference.</td> </tr> <tr> <td>enumeration</td> <td>Electric</td> <td>The physical attribute that exerts an electrical force.</td> </tr> <tr> <td>enumeration</td> <td>Electromagnetic</td> <td>Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured.</td> </tr> <tr> <td>enumeration</td> <td>Gyrofrequency</td> <td>The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.</td> </tr> <tr> <td>enumeration</td> <td>Magnetic</td> <td>The physical attribute attributed to a magnet or its equivalent.</td> </tr> <tr> <td>enumeration</td> <td>PlasmaFrequency</td> <td>A number-density-dependent characteristic frequency of a plasma.</td> </tr> <tr> <td>enumeration</td> <td>Potential</td> <td>The work required per unit charge to move a charge from a reference point to a point at infinity (electric potential is defined to be zero). The electric potential of a spacecraft is often referred to as the "spacecraft potential". The spacecraft potential is the electric potential of the spacecraft relative to the potential of the nearby plasma. The spacecraft potential is non-zero because the spacecraft charges to the level that the emitted photoelectron flux going to infinity is balanced by the</td> </tr> </table>	enumeration	Current	The flow of electrons through a conductor caused by a potential difference.	enumeration	Electric	The physical attribute that exerts an electrical force.	enumeration	Electromagnetic	Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured.	enumeration	Gyrofrequency	The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.	enumeration	Magnetic	The physical attribute attributed to a magnet or its equivalent.	enumeration	PlasmaFrequency	A number-density-dependent characteristic frequency of a plasma.	enumeration	Potential	The work required per unit charge to move a charge from a reference point to a point at infinity (electric potential is defined to be zero). The electric potential of a spacecraft is often referred to as the "spacecraft potential". The spacecraft potential is the electric potential of the spacecraft relative to the potential of the nearby plasma. The spacecraft potential is non-zero because the spacecraft charges to the level that the emitted photoelectron flux going to infinity is balanced by the
enumeration	Current	The flow of electrons through a conductor caused by a potential difference.																				
enumeration	Electric	The physical attribute that exerts an electrical force.																				
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enumeration	Magnetic	The physical attribute attributed to a magnet or its equivalent.																				
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		plasma electron flux to the spacecraft.
	enumeration PoyntingFlux	Electromagnetic energy flux transported by a wave characterized as the rate of energy transport per unit area per steradian.
Used by	Element	spase:Field/spase:FieldQuantity
Source	<pre> &lt;xsd:simpleType name="FieldQuantity"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the physical attribute of the field.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Current"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The flow of electrons through a conductor caused by a potential difference.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Electric"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The physical attribute that exerts an electrical force.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Electromagnetic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Gyrofrequency"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The physical attribute attributed to a magnet or its equivalent.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="PlasmaFrequency"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A number-density-dependent characteristic frequency of a plasma.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Potential"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The work required per unit charge to move a charge from a reference point to a point at infinity (electric potential is defined to be zero). The electric potential of a spacecraft is often referred to as the "spacecraft potential". The spacecraft potential is the electric potential of the spacecraft relative to the potential of the nearby plasma. The spacecraft potential is non-zero because the spacecraft charges to the level that the emitted photoelectron flux going to infinity is balanced by the plasma electron flux to the spacecraft.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="PoyntingFlux"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Electromagnetic energy flux transported by a wave characterized as the rate of energy transport per unit area per steradian.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd	

## Simple Type spase:SpectralRange

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifiers for names associated with wavelengths. Based on the ISO 21348 Solar Irradiance Standard. Additions have been made to extend the frequency ranges to include those used in space physics.

	<p>Those additions are indicated in blue text.</p> <p>The "Total Solar Irradiance" category has not been included since it is a type of measurement and not a specific spectral range. See Appendix A - Comparison of Spectrum Domains for a comparison of the spectral ranges with other systems.</p>		
Diagram	<pre> classDiagram     class SpectralRange     class xsdString     SpectralRange "1" -- "0..1" xsdString   </pre>		
Type	restriction of xsd:string		
Facets	enumeration	CaK	A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with a range of 391.9 nm to 395.2 nm.
	enumeration	ExtremeUltraviolet	A spectrum with a wavelength range of 10.0 nm to 125.0nm. VSO nickname: EUV image with a range of 10.0 nm to 125.0 nm
	enumeration	FarUltraviolet	A spectrum with a wavelength range of 122 nm to 200.0nm. VSO nickname: FUV image with a range of 122.0 nm to 200 nm
	enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm
	enumeration	Halpha	A spectrum with a wavelength range centered at 656.3 nm. VSO nickname: H-alpha image with a spectrum range of 655.8 nm to 656.8 nm.
	enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm and an energy range of 12 keV to 120 keV
	enumeration	He10830	A spectrum with a wavelength range centered at 1082.9 nm. VSO nickname: He 10830 image with a range of 1082.5 nm to 1083.3 nm.
	enumeration	He304	A spectrum centered around the resonance line of ionised helium at 304 Angstrom (30.4 nm).
	enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm
	enumeration	K7699	A spectrum with a wavelength range centred at 769.9 nm. VSO nickname: K-7699 dopplergram with a range of 769.8 nm to 770.0 nm.
	enumeration	LBHBand	Lyman-Birge-Hopfield band in the far ultraviolet range with wavelength range of 140nm to 170 nm.
	enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm
	enumeration	NaD	A spectrum with a wavelength range of centered at 589.3 nm. VSO nickname: Na-D image with a range of 588.8 nm to 589.8 nm.
	enumeration	Ni6768	A spectrum with a wavelength range centered at 676.8 nm. VSO nickname: Ni-6768 dopplergram with a range of 676.7 nm to 676.9 nm.
	enumeration	Optical	Photons with a wavelength range: 380 to 760 nm
	enumeration	RadioFrequency	Photons with a wavelength range: 100,000 to 1.00x10^11 nm
	enumeration	SoftXrays	X-Rays with an energy range of 0.12 keV to 12 keV.
	enumeration	Ultraviolet	Photons with a wavelength range: 10 to 400 nm.
	enumeration	WhiteLight	Photons with a wavelength in the visible range for humans.
	enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
Used by	Elements	spase:DisplayData/spase:SpectralRange, spase:FrequencyRange/spase:SpectralRange, spase:NumericalData/spase:SpectralRange, spase:WavelengthRange/spase:SpectralRange	
Source	<pre> &lt;xsd:simpleType name="SpectralRange"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for names associated with wavelengths. Based on the ISO 21348 Solar Irradiance Standard. Additions have been made to extend the frequency ranges to include those used in space physics. Those additions are indicated in blue text. The "Total Solar Irradiance" category has not been included since it is a type of measurement and not a specific   </pre>		

spectral range. See Appendix A - Comparison of Spectrum Domains for a comparison of the spectral ranges with other systems.</xsd:documentation>

```

</xsd:annotation>
<xsd:restriction base="xsd:string">
  <xsd:enumeration value="CaK">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength of range centered near 393.5 nm. VSO nickname: Ca-K image with range of 391.9 nm to 395.2 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="ExtremeUltraviolet">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range of 10.0 nm to 125.0nm. VSO nickname: EUV image with a range of of 10.0 nm to 125.0 nm</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="FarUltraviolet">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range of 122 nm to 200.0nm. VSO nickname: FUV image with a range of 122.0 nm to 200 nm</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="GammaRays">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">Photons with a wavelength range: 0.00001 to 0.001 nm</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Halpha">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range centered at 656.3 nm. VSO nickname: H-alpha image with a spectrum range of of 655.8 nm to 656.8 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="HardXrays">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">Photons with a wavelength range: 0.001 to 0.1 nm and an energy range of 12 keV to 120 keV</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="He10830">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range centered at 1082.9 nm. VSO nickname: He 10830 image with a range of 1082.5 nm to 1083.3 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="He304">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum centered around the resonance line of ionised helium at 304 Angstrom (30.4 nm).</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Infrared">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">Photons with a wavelength range: 760 to 1.00x10^6 nm</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="K7699">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range centred at 769.9 nm. VSO nickname: K-7699 dopplergram with a range of 769.8 nm to 770.0 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="LBHBand">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">Lyman-Birge-Hopfield band in the far ultraviolet range with wavelength range of 140nm to 170 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Microwave">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="NaD">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range of centered at 589.3 nm. VSO nickname: Na-D image with a range of 588.8 nm to 589.8 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Ni6768">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A spectrum with a wavelength range of centered at 6768 nm. VSO nickname: Ni-6768 image with a range of 6767.5 nm to 6768.5 nm.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>

```

	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A spectrum with a wavelength range centered at 676.8 nm.   vso nickname: Ni-6768 dopplergram with a range of of 676.7 nm to 676.9 nm.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="Optical"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Photons with a wavelength range: 380 to 760 nm&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="RadioFrequency"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Photons with a wavelength range: 100,000 to 1.00x10^11 nm&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="SoftXrays"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;X-Rays with an energy range of 0.12 keV to 12 keV.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="Ultraviolet"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Photons with a wavelength range: 10 to 400 nm.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="WhiteLight"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Photons with a wavelength in the visible range for humans.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="XRays"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Photons with a wavelength range: 0.001 &lt;= x &lt; 10 nm&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Low

Namespace	http://www.spase-group.org/data/schema
Annotations	The smallest value within a range of possible values.
Diagram	
Type	xsd:double
Used by	Elements spase:AzimuthalAngleRange/spase:Low, spase:Bin/spase:Low, spase:EnergyRange/spase:Low, spase:FrequencyRange/spase:Low, spase:MassRange/spase:Low, spase:PitchAngleRange/spase:Low, spase:PolarAngleRange/spase:Low, spase:WavelengthRange/spase:Low
Source	<pre> &lt;xsd:simpleType name="Low"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The smallest value within a range of possible values.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:High

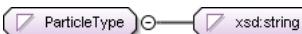
Namespace	http://www.spase-group.org/data/schema
Annotations	The largest value within a range of possible values.
Diagram	

Type	xsd:double
Used by	Elements spase:AzimuthalAngleRange/spase:High, spase:Bin/spase:High, spase:EnergyRange/spase:High, spase:FrequencyRange/spase:High, spase:MassRange/spase:High, spase:PitchAngleRange/spase:High, spase:PolarAngleRange/spase:High, spase:WavelengthRange/spase:High
Source	<pre>&lt;xsd:simpleType name="High"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The largest value within a range of possible values.&lt;/   xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:BandName

Namespace	http://www.spase-group.org/data/schema
Annotations	A common or provider assigned name for a range of values.
Diagram	
Type	xsd:string
Used by	Element spase:Bin/spase:BandName
Source	<pre>&lt;xsd:simpleType name="BandName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A common or provider assigned name for a range of values.&lt;/   xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ParticleType

Namespace	http://www.spase-group.org/data/schema																											
Annotations	Identifiers for the characterization of the kind of particle observed by the measurement.																											
Diagram																												
Type	restriction of xsd:string																											
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Aerosol</td> <td>A suspension of fine solid or liquid particles in a gas.</td> </tr> <tr> <td>enumeration</td> <td>AlphaParticle</td> <td>A positively charged nuclear particle that consists of two protons and two neutrons.</td> </tr> <tr> <td>enumeration</td> <td>Atom</td> <td>Matter consisting of a nucleus surrounded by electrons which has no net charge.</td> </tr> <tr> <td>enumeration</td> <td>Dust</td> <td>Free microscopic particles of solid material.</td> </tr> <tr> <td>enumeration</td> <td>Electron</td> <td>An elementary particle consisting of a charge of negative electricity equal to about <math>1.602 \times 10^{-19}</math> Coulomb and having a mass when at rest of about <math>9.109534 \times 10^{-28}</math> gram.</td> </tr> <tr> <td>enumeration</td> <td>Ion</td> <td>An atom that has acquired a net electric charge by gaining or losing one or more electrons.(Note: Z&gt;2)</td> </tr> <tr> <td>enumeration</td> <td>Molecule</td> <td>A group of atoms so united and combined by chemical affinity that they form a complete, integrated whole, being the smallest portion of any particular compound that can exist in a free state</td> </tr> <tr> <td>enumeration</td> <td>Neutron</td> <td>An elementary particle that has no net charge and is a constituent of atomic nuclei, and that has a mass slightly large than a proton (<math>1.673 \times 10^{-24}</math> gram.)</td> </tr> <tr> <td>enumeration</td> <td>Positron</td> <td>An elementary particle consisting of a charge of positive electricity equal to about <math>1.602 \times 10^{-19}</math> Coulomb and having a mass when</td> </tr> </table>	enumeration	Aerosol	A suspension of fine solid or liquid particles in a gas.	enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.	enumeration	Atom	Matter consisting of a nucleus surrounded by electrons which has no net charge.	enumeration	Dust	Free microscopic particles of solid material.	enumeration	Electron	An elementary particle consisting of a charge of negative electricity equal to about $1.602 \times 10^{-19}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{-28}$ gram.	enumeration	Ion	An atom that has acquired a net electric charge by gaining or losing one or more electrons.(Note: Z>2)	enumeration	Molecule	A group of atoms so united and combined by chemical affinity that they form a complete, integrated whole, being the smallest portion of any particular compound that can exist in a free state	enumeration	Neutron	An elementary particle that has no net charge and is a constituent of atomic nuclei, and that has a mass slightly large than a proton ( $1.673 \times 10^{-24}$ gram.)	enumeration	Positron	An elementary particle consisting of a charge of positive electricity equal to about $1.602 \times 10^{-19}$ Coulomb and having a mass when
enumeration	Aerosol	A suspension of fine solid or liquid particles in a gas.																										
enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.																										
enumeration	Atom	Matter consisting of a nucleus surrounded by electrons which has no net charge.																										
enumeration	Dust	Free microscopic particles of solid material.																										
enumeration	Electron	An elementary particle consisting of a charge of negative electricity equal to about $1.602 \times 10^{-19}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{-28}$ gram.																										
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enumeration	Positron	An elementary particle consisting of a charge of positive electricity equal to about $1.602 \times 10^{-19}$ Coulomb and having a mass when																										

		at rest of about $9.109534 \times 10^{-28}$ gram.
	enumeration Proton	An elementary particle that is a constituent of all atomic nuclei, that carries a positive charge numerically equal to the charge of an electron, and that has a mass of $1.673 \times 10^{-24}$ gram.
Used by	Elements	spase:Mixed/spase:ParticleType, spase:Particle/spase:ParticleType
Source	<pre> &lt;xsd:simpleType name="ParticleType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the characterization of the kind of particle observed by the measurement.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Aerosol"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A suspension of fine solid or liquid particles in a gas.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="AlphaParticle"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A positively charged nuclear particle that consists of two protons and two neutrons.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Atom"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Matter consisting of a nucleus surrounded by electrons which has no net charge.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Dust"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Free microscopic particles of solid material.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Electron"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An elementary particle consisting of a charge of negative electricity equal to about <math>1.602 \times 10^{-19}</math> Coulomb and having a mass when at rest of about <math>9.109534 \times 10^{-28}</math> gram.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An atom that has acquired a net electric charge by gaining or losing one or more electrons.(Note: Z&gt;2)&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Molecule"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A group of atoms so united and combined by chemical affinity that they form a complete, integrated whole, being the smallest portion of any particular compound that can exist in a free state&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Neutron"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An elementary particle that has no net charge and is a constituent of atomic nuclei, and that has a mass slightly large than a proton (<math>1.673 \times 10^{-24}</math> gram.).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Positron"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An elementary particle consisting of a charge of positive electricity equal to about <math>1.602 \times 10^{-19}</math> Coulomb and having a mass when at rest of about <math>9.109534 \times 10^{-28}</math> gram.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Proton"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An elementary particle that is a constituent of all atomic nuclei, that carries a positive charge numerically equal to the charge of an electron, and that has a mass of <math>1.673 \times 10^{-24}</math> gram.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	

Schema location

file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2\_3\_1.xsd

## Simple Type spase:ParticleQuantity

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the characterization of the physical properties of the particle.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	AdiabaticInvariant
	<p>A property of a physical system usually related to periodic phenomena that remains constant under slowly varying conditions.</p>	
	enumeration	AdiabaticInvariant.BounceMotion
	<p>The second adiabatic invariant is associated with periodic bounce motion of charged particles trapped between two magnetic mirrors on a magnetic field line. The second invariant, termed <math>J</math>, is defined by using the integral <math>J = m \int v \cdot ds</math> where <math>m</math> is the mass of the charged particle, <math>v</math> is the particle velocity along the field line, and <math>ds</math> represents elemental arc lengths along the field line. The second adiabatic invariant is conserved as long as changes in the background magnetic field occur at time scales much longer than the bounce time of the charged particles.</p>	
	enumeration	AdiabaticInvariant.DriftMotion
	<p>The third invariant for charged particle motion in a dipolar magnetic field is associated with drift of its guiding center in the equatorial plane. The conserved quantity, <math>J^2</math>, is equal to <math>q\Phi</math>; where <math>q</math> is the particle charge and <math>\Phi</math> is the magnetic flux enclosed within the particle drift path.</p>	
	enumeration	AdiabaticInvariant.MagneticMoment
	<p>Moment of motion related to the gyromotion of a particle in a magnetic field that is either static or slowly varying with respect to the gyroperiod. The magnetic moment is usually denoted by using the lower case Greek letter for mu, <math>\mu</math>, and can be calculated by using <math>\mu = m u^2 / 2B</math> where <math>m</math> is the particle mass, <math>u</math> is the velocity of the particle perpendicular to the constant or average magnetic field direction, and <math>B</math> is the magnitude of the magnetic field strength.</p>	
	enumeration	ArrivalDirection
	<p>An angular measure of the direction from which an energetic particle or photon was incident on a detector. The angles may be measured in any coordinate system.</p>	
	enumeration	AtomicNumberDetected
	<p>The number of protons in the nucleus of an atom as determined by a detector.</p>	
	enumeration	AverageChargeState
	<p>A measure of the composite deficit (positive) or excess (negative) of electrons with respect to protons.</p>	
	enumeration	ChargeState
	<p>Charge of a fully or partially stripped ion, in units of the charge of a proton. Charge state of a bare proton = 1.</p>	
	enumeration	CountRate
	<p>The number of events per unit time.</p>	
	enumeration	Counts
	<p>The number of detection events occurring in a detector over the detector accumulation time.</p>	
	enumeration	Energy
	<p>The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy)</p>	
	enumeration	EnergyDensity
	<p>The amount of energy per unit volume.</p>	
	enumeration	EnergyFlux
	<p>The amount of energy passing through a unit area in a unit time.</p>	
	enumeration	Entropy
	<p>A function of thermodynamic quantity, such as temperature, pressure, or composition,</p>	

		that is a measure of the energy that is not available for work during a thermodynamic process. It is often interpreted as the degree of disorder or randomness in the system.
enumeration	FlowSpeed	The rate at which particles or energy is passing through a unit area in a unit time.
enumeration	FlowVelocity	The volume of matter passing through a unit area perpendicular to the direction of flow in a unit of time.
enumeration	Fluence	The time integral of a flux. A fluence does not have any "per unit time" in its units.
enumeration	GeometricFactor	A measure of the gathering power of a particle detector. The geometric factor can be used to correct particle measurements by accounting for the fact that only a fraction of source particles are able to gain entry through the aperture of a detector. For an isotropic source distribution, the geometric factor corresponds to the solid angle subtended by the aperture. In practice, determination of the geometric factor requires numerical modeling and depends on detector design and the characteristics of the source.
enumeration	Gyrofrequency	The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.
enumeration	HeatFlux	Flow of thermal energy through a gas or plasma; typically computed as third moment of a distribution function.
enumeration	Mass	The measure of inertia (mass) of individual objects (e.g., aerosols).
enumeration	MassDensity	The mass of particles per unit volume.
enumeration	MassNumber	The total number of protons and neutrons (together known as nucleons) in an atomic nucleus.
enumeration	NumberDensity	The number of particles per unit volume.
enumeration	NumberFlux	The number of particles passing a unit area in unit time, possibly also per unit energy (or equivalent) and/or per unit look direction.
enumeration	ParticleRadius	The mean radius for a Gaussian distribution of particles with an axial ratio of 2 and a distribution width that varies as 0.5 radius. A value of zero means no cloud was detected.
enumeration	PhaseSpaceDensity	
enumeration	PlasmaFrequency	A number-density-dependent characteristic frequency of a plasma.
enumeration	Pressure	The force per unit area exerted by a particle distribution or field.
enumeration	SonicMachNumber	The ratio of the bulk flow speed to the speed of sound in the medium.
enumeration	SoundSpeed	The speed at which sound travels through a medium.
enumeration	Temperature	A measure of the kinetic energy of random motion with respect to the average. Temperature is properly defined only for an equilibrium particle distribution (Maxwellian distribution).
enumeration	ThermalSpeed	For a Maxwellian distribution, the difference between the mean speed and the speed within which ~69% (one sigma) of all the members of the speed distribution occur.
enumeration	Velocity	Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".
Used by	Element	spase:Particle/spase:ParticleQuantity
Source	<pre>&lt;xsd:simpleType name="ParticleQuantity"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the characterization of the physical properties of the particle.&lt;/xsd:documentation&gt;</pre>	

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</xsd:annotation>
<xsd:restriction base="xsd:string">
  <xsd:enumeration value="AdiabaticInvariant">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A property of a physical system usually related to periodic phenomena that remains constant under slowly varying conditions.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="AdiabaticInvariant.BounceMotion">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The second adiabatic invariant is associated with periodic bounce motion of charged particles trapped between two magnetic mirrors on a magnetic field line. The second invariant, termed J, is defined by using the integral  $J = m \int v_{||} ds$  where m is the mass of the charged particle,  $v_{||}$  is the particle velocity along the field line, and ds represents elemental arc lengths along the field line. The second adiabatic invariant is conserved as long as changes in the background magnetic field occur at time scales much longer than the bounce time of the charged particles.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="AdiabaticInvariant.DriftMotion">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The third invariant for charged particle motion in a dipolar magnetic field is associated with drift of its guiding center in the equatorial plane. The conserved quantity,  $J_{\text{sub}2}$ , is equal to  $q\Phi$ ; where q is the particle charge and  $\Phi$  is the magnetic flux enclosed within the particle drift path.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="AdiabaticInvariant.MagneticMoment">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A constant of motion related to the gyromotion of a particle in a magnetic field that is either static or slowly varying with respect to the gyroperiod. The magnetic moment is usually denoted by using the lower case Greek letter for mu, ?, and can be calculated by using  $\mu = m u^2 / 2B$  where m is the particle mass, u is the velocity of the particle perpendicular to the constant or average magnetic field direction, and B is the magnitude of the magnetic field strength.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="ArrivalDirection">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An angular measure of the direction from which an energetic particle or photon was incident on a detector. The angles may be measured in any coordinate system.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="AtomicNumberDetected">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The number of protons in the nucleus of an atom as determined by a detector.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="AverageChargeState">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A measure of the composite deficit (positive) or excess (negative) of electrons with respect to protons.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="ChargeState">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">Charge of a fully or partially stripped ion, in units of the charge of a proton. Charge state of a bare proton = 1.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="CountRate">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The number of events per unit time.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Counts">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The number of detection events occurring in a detector over the detector accumulation time.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Energy">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy)</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="EnergyDensity">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">The amount of energy per unit volume.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>

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        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="EnergyFlux">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The amount of energy passing through a unit area in a unit time.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Entropy">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A function of thermodynamic quantity, such as temperature, pressure, or composition, that is a measure of the energy that is not available for work during a thermodynamic process. It is often interpreted as the degree of disorder or randomness in the system.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="FlowSpeed">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The rate at which particles or energy is passing through a unit area in a unit time.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="FlowVelocity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The volume of matter passing through a unit area perpendicular to the direction of flow in a unit of time.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Fluence">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The time integral of a flux. A fluence does not have any "per unit time" in its units.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="GeometricFactor">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A measure of the gathering power of a particle detector. The geometric factor can be used to correct particle measurements by accounting for the fact that only a fraction of source particles are able to gain entry through the aperture of a detector. For an isotropic source distribution, the geometric factor corresponds to the solid angle subtended by the aperture. In practice, determination of the geometric factor requires numerical modeling and depends on detector design and the characteristics of the source.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Gyrofrequency">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="HeatFlux">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Flow of thermal energy through a gas or plasma; typically computed as third moment of a distribution function.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Mass">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The measure of inertia (mass) of individual objects (e.g., aerosols).</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="MassDensity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The mass of particles per unit volume.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="MassNumber">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The total number of protons and neutrons (together known as nucleons) in an atomic nucleus.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="NumberDensity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The number of particles per unit volume.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="NumberFlux">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The number of particles passing a unit area in unit time, possibly also per unit energy (or equivalent) and/or per unit look direction.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>

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        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="ParticleRadius">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The mean radius for a Gaussian distribution of particles with an axial ratio of 2 and a distribution width that varies as 0.5 radius. A value of zero means no cloud was detected.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="PhaseSpaceDensity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">
            </xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="PlasmaFrequency">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A number-density-dependent characteristic frequency of a plasma.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Pressure">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The force per unit area exerted by a particle distribution or field.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="SonicMachNumber">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The ratio of the bulk flow speed to the speed of sound in the medium.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="SoundSpeed">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The speed at which sound travels through a medium.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Temperature">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A measure of the kinetic energy of random motion with respect to the average. Temperature is properly defined only for an equilibrium particle distribution (Maxwellian distribution).</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="ThermalSpeed">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">For a Maxwellian distribution, the difference between the mean speed and the speed within which ~69% (one sigma) of all the members of the speed distribution occur.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Velocity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

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Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:AtomicNumber

Namespace	http://www.spase-group.org/data/schema
Annotations	The number of protons in the nucleus of an atom.
Diagram	
Type	xsd:double
Used by	Element spase:Particle/spase:AtomicNumber
Source	<pre> &lt;xsd:simpleType name="AtomicNumber"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The number of protons in the nucleus of an atom.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt; </pre>

	<pre> &lt;xsd:restriction base="xsd:double" /&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:WaveType

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the carrier or phenomenum of wave information observed by the measurement.	
Diagram	<pre> classDiagram     class WaveType {         &lt;&lt;simple type&gt;&gt;     }     class xsd:string {         &lt;&lt;complex type&gt;&gt;     }     WaveType &lt; -- xsd:string </pre>	
Type	restriction of xsd:string	
Facets	enumeration	Electromagnetic Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured.
	enumeration	Electrostatic Collective longitudinal electric-field and plasma oscillations trapped within a body of plasma.
	enumeration	Hydrodynamic Periodic or quasi-periodic oscillations of fluid quantities.
	enumeration	MHD Hydrodynamic waves in a magnetized plasma in which the background magnetic field plays a key role in controlling the wave propagation characteristics.
	enumeration	Photon Electromagnetic waves detected by techniques that utilize their corpuscular character (e.g., CCD, CMOS, photomultipliers).
	enumeration	PlasmaWaves Self-consistent collective oscillations of particles and fields (electric and magnetic) in a plasma.
Used by	Element	spase:Wave/spase:WaveType
Source	<pre> &lt;xsd:simpleType name="WaveType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the carrier or phenomenum of wave information observed by the measurement.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Electromagnetic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Electric and magnetic field variations in time and space that propagate through a medium or a vacuum with the wave's propagation, electric field, and magnetic field vectors forming an orthogonal triad. Waves in this category are detected by having their field quantities measured.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Electrostatic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Collective longitudinal electric-field and plasma oscillations trapped within a body of plasma.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Hydrodynamic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Periodic or quasi-periodic oscillations of fluid quantities.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="MHD"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Hydrodynamic waves in a magnetized plasma in which the background magnetic field plays a key role in controlling the wave propagation characteristics.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Photon"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Electromagnetic waves detected by techniques that utilize their corpuscular character (e.g., CCD, CMOS, photomultipliers).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>	

	<pre> &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="PlasmaWaves"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Self-consistent collective oscillations of particles and fields (electric and magnetic) in a plasma.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:WaveQuantity

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the characterization of the physical properties of a wave.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	ACElectricField Alternating electric field component of a wave.
	enumeration	ACMagneticField Alternating magnetic field component of a wave.
	enumeration	Absorption Decrease of radiant energy (relative to the background continuum spectrum).
	enumeration	Albedo The ratio of reflected radiation from the surface to incident radiation upon it.
	enumeration	DopplerFrequency Change in the frequency of a propagating wave due to motion of the source, the observer, the reflector, or the propagation medium.
	enumeration	Emissivity The energy emitted spontaneously per unit bandwidth (typically frequency) per unit time per unit mass of source. Emissivity is usually integrated over all directions/solid angles.
	enumeration	EnergyFlux The amount of energy passing through a unit area in a unit time.
	enumeration	EquivalentWidth The spectral width of a total absorption line having the amount of absorbed radiant energy being equivalent to that in an observed absorption line.
	enumeration	Frequency The number of occurrences of a repeating event per unit time.
	enumeration	Gyrofrequency The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.
	enumeration	Intensity The measurement of radiant or wave energy per unit detector area per unit bandwidth per unit solid angle per unit time.
	enumeration	LineDepth The measure of the amount of absorption below the continuum (depth) in a particular wavelength or frequency in an absorption spectrum.
	enumeration	LowerHybridFrequency Lower hybrid oscillations involve longitudinal motions of electrons and ions in a magnetized plasma. The propagation of lower hybrid waves must be close to perpendicular to the background magnetic field in so that electrons cannot move along field lines thus preventing wave growth. The lower hybrid frequency, $\Phi_{LH}$ , can be calculated by using $\Phi_{LH} = [(\Omega_{ce} - \Omega_{ci})]^{1/2}$ where $\Omega_{ce}$ and $\Omega_{ci}$ are the electron and ion cyclotron frequencies, respectively, and $\Phi_{LH}$ is the ion plasma frequency.
	enumeration	MagneticField A region of space near a magnetized body where magnetic forces can be detected (as measured

		by methods such as Zeeman splitting, etc.).
enumeration	ModeAmplitude	In helioseismology the magnitude of oscillation of waves of a particular geometry.
enumeration	PlasmaFrequency	A number-density-dependent characteristic frequency of a plasma.
enumeration	Polarization	Direction of the electric vector of an electromagnetic wave. The wave can be linearly polarized in any direction perpendicular to the direction of travel, circularly polarized (clockwise or counterclockwise), unpolarized, or mixtures of the above.
enumeration	PoyntingFlux	Electromagnetic energy flux transported by a wave characterized as the rate of energy transport per unit area per steradian.
enumeration	PropagationTime	Time difference between transmission and reception of a wave in an active wave experiment.
enumeration	StokesParameters	
enumeration	UpperHybridFrequency	Upper hybrid oscillations involve longitudinal motions of electrons perpendicular to the magnetic field. The upper hybrid frequency, $\&\Phi;_{\text{UH}}$ , is governed by the relationship $\&\Phi;_{\text{UH}}^2 = \&\Phi;_{\text{pe}}^2 + \&\Theta;_{\text{ce}}^2$ where $\&\Phi;_{\text{pe}}$ is electron plasma frequency and $\&\Theta;_{\text{ce}}$ is the electron cyclotron frequency.
enumeration	Velocity	Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".
enumeration	Wavelength	The peak-to-peak distance over one wave period.
Used by	Element	spase:Wave/spase:WaveQuantity
Source	<pre> &lt;xsd:simpleType name="WaveQuantity"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the characterization of the physical properties of a wave.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ACElectricField"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Alternating electric field component of a wave.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="ACMagneticField"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Alternating magnetic field component of a wave.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Absorption"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Decrease of radiant energy (relative to the background continuum spectrum).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Albedo"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The ratio of reflected radiation from the surface to incident radiation upon it.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="DopplerFrequency"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Change in the frequency of a propagating wave due to motion of the source, the observer, the reflector, or the propagation medium.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Emissivity"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The energy emitted spontaneously per unit bandwidth (typically frequency) per unit time per unit mass of source. Emissivity is usually integrated over all directions/solid angles.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	

```

</xsd:enumeration>
<xsd:enumeration value="EnergyFlux">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The amount of energy passing through a unit area in a unit time.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="EquivalentWidth">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The spectral width of a total absorption line having the amount of absorbed radiant energy being equivalent to that in an observed absorption line.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Frequency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The number of occurrences of a repeating event per unit time.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Gyrofrequency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The number of gyrations around a magnetic guiding center (field line) a charged particle makes per unit time due to the Lorentz force.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Intensity">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The measurement of radiant or wave energy per unit detector area per unit bandwidth per unit solid angle per unit time.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="LineDepth">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The measure of the amount of absorption below the continuum (depth) in a particular wavelength or frequency in an absorption spectrum.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="LowerHybridFrequency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Lower hybrid oscillations involve longitudinal motions of electrons and ions in a magnetized plasma. The propagation of lower hybrid waves must be close to perpendicular to the background magnetic field in so that electrons cannot move along field lines thus preventing wave growth. The lower hybrid frequency,  $\Phi_{LH}$ , can be calculated by using  $\Phi_{LH} = [(\Omega_e + \Omega_i)/2]^{1/2}$  where  $\Omega_e$  and  $\Omega_i$  are the electron and ion cyclotron frequencies, respectively, and  $\Phi_{LH}$  is the ion plasma frequency.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MagneticField">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of space near a magnetized body where magnetic forces can be detected (as measured by methods such as Zeeman splitting, etc.).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ModeAmplitude">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">In helioseismology the magnitude of oscillation of waves of a particular geometry.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PlasmaFrequency">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A number-density-dependent characteristic frequency of a plasma.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Polarization">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Direction of the electric vector of an electromagnetic wave. The wave can be linearly polarized in any direction perpendicular to the direction of travel, circularly polarized (clockwise or counterclockwise), unpolarized, or mixtures of the above.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PoyntingFlux">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Electromagnetic energy flux transported by a wave characterized as the rate of energy transport per unit area per steradian.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PropagationTime">

```

	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;Time difference between transmission and reception of a wave in an active wave experiment.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="StokesParameters"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;     &lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="UpperHybridFrequency"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Upper hybrid oscillations involve longitudinal motions of electrons perpendicular to the magnetic field. The upper hybrid frequency, &amp;Phi;&lt;sub&gt;UH&lt;/sub&gt;, is governed by the relationship&amp;Phi;&lt;sub&gt;UH&lt;/sub&gt;^2 = &amp;Phi;&lt;sub&gt;pe&lt;/sub&gt;^2 + &amp;Theta;&lt;sub&gt;ce&lt;/sub&gt;^2 where &amp;Phi;&lt;sub&gt;pe&lt;/sub&gt; is electron plasma frequency and &amp;Theta;&lt;sub&gt;ce&lt;/sub&gt; is the electron cyclotron frequency.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="Velocity"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;xsd:enumeration value="Wavelength"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The peak-to-peak distance over one wave period.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:MixedQuantity

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the combined attributes of a mixed parameter quantity.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	AkasofuEpsilon
		A measure of the magnetopause energy flux and an indicator of the solar wind power available for subsequent magnetospheric energization. Defined as: $V^*B^2l^2\sin(\theta/2)^4$ where $B$ is the IMF, $l$ is an empirical scaling parameter equal to 7 RE, and $\theta = \tan(BY/BZ)^{-1}$ the IMF clock angle.
	enumeration	AlfvenMachNumber
		The ratio of the bulk flow speed to the Alfvén speed.
	enumeration	AlfvenVelocity
		Phase velocity of the Alfvén wave; In SI units it is the velocity of the magnetic field divided by the square root of the mass density times the permeability of free space ( $\mu_0$ ).
	enumeration	FrequencyToGyrofrequencyRatio
		The ratio of the characteristic frequency of a medium to gyrofrequency of a particle.
	enumeration	IMFClockAngle
		The clockwise angle of the direction of interplanetary magnetic field (IMF) measured in the plane of the body pole perpendicular to the line between the body and the Sun.
	enumeration	MagnetosonicMachNumber
		The ratio of the velocity of fast mode waves to the Alfvén velocity.
	enumeration	Other
		Not classified with more specific terms. The context of its usage may be described in related text.
	enumeration	PlasmaBeta
		The ratio of the plasma pressure ( $nkT$ ) to the magnetic pressure ( $B^2/2\mu_0$ ) of the SUM( $nkT$ )/( $B^2/2\mu_0$ ).

	enumeration	SolarUVFlux	The amount of Ultraviolet energy originating from the Sun passing through a unit area in a unit time.
	enumeration	TotalPressure	In an MHD fluid it is the number density (N) times Boltzmann constant times the temperature in Kelvin.
	enumeration	VCrossB	The cross product of the charge velocity (V) and the magnetic field (B). It is the electric field exerted on a point charge by a magnetic field.
Used by	Element	spase:Mixed/spase:MixedQuantity	
Source	<pre> &lt;xsd:simpleType name="MixedQuantity"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the combined attributes of a mixed parameter quantity.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="AkasofuEpsilon"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A measure of the magnetopause energy flux and an indicator of the solar wind power available for subsequent magnetospheric energization. Defined as: V*B^2*l^2sin(theta/2)^4 where B is the IMF, l is an empirical scaling parameter equal to 7 RE, and theta = tan(BY /BZ)^-1 the IMF clock angle.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="AlfvenMachNumber"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The ratio of the bulk flow speed to the Alfvén speed.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="AlfvenVelocity"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Phase velocity of the Alfvén wave; In SI units it is the velocity of the magnetic field divided by the square root of the mass density times the permeability of free space (mu).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="FrequencyToGyrofrequencyRatio"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The ratio of the characteristic frequency of a medium to gyrofrequency of a particle.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="IMFClockAngle"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The clockwise angle of the direction of interplanetary magnetic field (IMF) measured in the plane of the body pole perpendicular to the line between the body and the Sun.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="MagnetosonicMachNumber"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The ratio of the velocity of fast mode waves to the Alfvén velocity.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Other"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Not classified with more specific terms. The context of its usage may be described in related text.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="PlasmaBeta"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The ratio of the plasma pressure (nkT) to the magnetic pressure (B^2/2mu0) of the SUM(nkT)/(B^2/2mu0).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="SolarUVFlux"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The amount of Ultraviolet energy originating from the Sun passing through a unit area in a unit time.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="TotalPressure"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;In an MHD fluid it is the number density (N) times Boltzmann constant times the temperature in Kelvin.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>		

	<pre>         &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="VCrossB"&gt;         &lt;xsd:annotation&gt;             &lt;xsd:documentation xml:lang="en"&gt;The cross product of the charge velocity (V) and the magnetic field (B). It is the electric field exerted on a point charge by a magnetic field.&lt;/xsd:documentation&gt;         &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:SupportQuantity

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	DataQuality An ancillary parameter that denotes the standard or degree of accuracy, trustworthiness, or usefulness of another parameter.
	enumeration	InstrumentMode An indication of a state (mode) in which the instrument is operating. How a mode influences the interpretation and representation of data is described in instrument related documentation.
	enumeration	Orientation The specification of the directional alignment of an object or measurement in a reference coordinate system. The orientation such as a spacecraft spin axis attitude is usually expressed as one or more angles relative to the basis axes of some specified physical space usually together with the date/time of the observation.
	enumeration	Other Not classified with more specific terms. The context of its usage may be described in related text.
	enumeration	Positional The specification of the location of an object or measurement within a reference coordinate system. The position is usually expressed as a set of values corresponding to the location along a set of orthogonal axes together with the date/time of the observation.
	enumeration	SpinPeriod The time required for an object such as a spacecraft or planet to perform one full rotation in a given frame of reference.
	enumeration	SpinPhase An angular based or normalized parameter that specifies the spin state of an object such as a spacecraft or planet in a specific coordinate system usually together with the date/time of the observation.
	enumeration	SpinRate The angular rate of change of the spin angle of an object such as a spacecraft or planet.
	enumeration	Temporal Pertaining to time.
	enumeration	Velocity Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".
Used by	Element	spase:Support/spase:SupportQuantity
Source	<pre> &lt;xsd:simpleType name="SupportQuantity"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.&lt;/xsd:documentation&gt;     &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="xsd:string"&gt; </pre>	

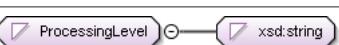
```

<xsd:enumeration value="DataQuality">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An ancillary parameter that denotes the standard or degree of accuracy, trustworthiness, or usefulness of another parameter.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="InstrumentMode">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An indication of a state (mode) in which the instrument is operating. How a mode influences the interpretation and representation of data is described in instrument related documentation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Orientation">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The specification of the directional alignment of an object or measurement in a reference coordinate system. The orientation such as a spacecraft spin axis attitude is usually expressed as one or more angles relative to the basis axes of some specified physical space usually together with the date/time of the observation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Other">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Not classified with more specific terms. The context of its usage may be described in related text.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Positional">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The specification of the location of an object or measurement within a reference coordinate system. The position is usually expressed as a set of values corresponding to the location along a set of orthogonal axes together with the date/time of the observation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SpinPeriod">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The time required for an object such as a spacecraft or planet to perform one full rotation in a given frame of reference.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SpinPhase">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An angular based or normalized parameter that specifies the spin state of an object such as a spacecraft or planet in a specific coordinate system usually together with the date/time of the observation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SpinRate">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The angular rate of change of the spin angle of an object such as a spacecraft or planet.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Temporal">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Pertaining to time.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Velocity">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Rate of change of position. Also used for the average velocity of a collection of particles, also referred to as "bulk velocity".</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

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Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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### Simple Type spase:ProcessingLevel

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifiers to characterize the amount and type of manipulation which has been applied to the sampled data.
Diagram	
Type	restriction of xsd:string

Facets	enumeration	Calibrated	Data wherein sensor outputs have been convolved with instrument response function, often irreversibly, to yield data in physical units.		
	enumeration	Raw	Data in its original state with no processing to account for calibration!!!		
	enumeration	Uncalibrated	Duplicate data are removed from the data stream and data are time ordered. Values are not adjusted for any potential biases or external factors.		
Used by	Elements	spase:DisplayData/spase:ProcessingLevel, spase:NumericalData/spase:ProcessingLevel			
Source	<pre>&lt;xsd:simpleType name="ProcessingLevel"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers to characterize the amount and type of manipulation which has been applied to the sampled data.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Calibrated"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Data wherein sensor outputs have been convolved with instrument response function, often irreversibly, to yield data in physical units.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Raw"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Data in its original state with no processing to account for calibration!!!&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Uncalibrated"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Duplicate data are removed from the data stream and data are time ordered. Values are not adjusted for any potential biases or external factors.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>				
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd				

### Simple Type spase:ProviderProcessingLevel

Namespace	http://www.spase-group.org/data/schema				
Annotations	The provider specific classification of the processing performed on the product.				
Diagram	A UML class diagram fragment showing a class named "ProviderProcessingLevel" with a multiplicity of 0..1 and a directed association to a class named "xsd:string" with a multiplicity of 1..1.				
Type	xsd:string				
Used by	Elements	spase:DisplayData/spase:ProviderProcessingLevel, spase:NumericalData/spase:ProviderProcessingLevel			
Source	<pre>&lt;xsd:simpleType name="ProviderProcessingLevel"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The provider specific classification of the processing performed on the product.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>				
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd				

### Simple Type spase:MeasurementType

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifiers for the method of making an estimated value of a quantity that forms the basis of an observation.
Diagram	A UML class diagram fragment showing a class named "MeasurementType" with a multiplicity of 0..1 and a directed association to a class named "xsd:string" with a multiplicity of 1..1.
Type	restriction of xsd:string

Facets	enumeration	<b>ActivityIndex</b>	An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.
	enumeration	<b>Dopplergram</b>	A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.
	enumeration	<b>Dust</b>	Free microscopic particles of solid material.
	enumeration	<b>ElectricField</b>	A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.
	enumeration	<b>EnergeticParticles</b>	Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.
	enumeration	<b>Ephemeris</b>	The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.
	enumeration	<b>ImageIntensity</b>	Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.
	enumeration	<b>InstrumentStatus</b>	A quantity directly related to the operation or function of an instrument.
	enumeration	<b>IonComposition</b>	In situ measurements of the relative flux or density of electrically charged particles in the space environment. May give simple fluxes, but full distribution functions are sometimes measured.
	enumeration	<b>Irradiance</b>	Irradiance - A radiometric term for the power of electromagnetic radiation at a surface, per unit area. "Irradiance" is used when the electromagnetic radiation is incident on the surface. Irradiance data may be reported in any units (i.e. counts/s) due to, for example, being at a particular wavelength, or to being a not-fully-calibrated relative measurement.
	enumeration	<b>MagneticField</b>	A region of space near a magnetized body where magnetic forces can be detected (as measured by methods such as Zeeman splitting, etc.).
	enumeration	<b>Magnetogram</b>	Measurements of the vector or line-of-sight magnetic field determined from remote sensing measurements of the detailed structure of spectral lines, including their splitting and polarization. ("Magnetogram.")
	enumeration	<b>NeutralAtomImages</b>	Measurements of neutral atom fluxes as a function of look direction; often related to remote energetic charged particles that lose their charge through charge-exchange and then reach the detector on a line-of-sight trajectory.
	enumeration	<b>NeutralGas</b>	Measurements of neutral atomic and molecular components of a gas.
	enumeration	<b>Profile</b>	Measurements of a quantity as a function of height above an object such as the limb of a body.
	enumeration	<b>Radiance</b>	A radiometric measurement that describes the amount of electromagnetic radiation that passes through or is emitted from a particular area, and falls within a given solid angle in a specified direction. They are used to characterize both emission from diffuse sources and reflection from diffuse surfaces.
	enumeration	<b>Spectrum</b>	The distribution of a characteristic of a physical system or phenomenon, such as the energy emitted by a radiant source, arranged in the order of wavelengths.
	enumeration	<b>ThermalPlasma</b>	Measurements of the plasma in the energy regime

		where the most of the plasma occurs. May be the basic fluxes in the form of distribution functions or the derived bulk parameters (density, flow velocity, etc.).
enumeration	Waves	Data resulting from observations of wave experiments and natural wave phenomena. Wave experiments are typically active and natural wave phenomena are passive. Examples of wave experiments include coherent/incoherent scatter radars, radio soundings, VLF propagation studies, ionospheric scintillation of beacon satellite signals, etc. Examples of natural wave phenomena include micropulsations, mesospheric gravity waves, auroral/plasmaspheric hiss, Langmuir waves, AKR, Jovian decametric radiation, solar radio bursts, etc.
enumeration	Waves.Active	Exerting an influence or producing a change or effect. An active measurement is one which produces a transmission or excitation as a part of the measurement cycle.
enumeration	Waves.Passive	Movement or effect produced by outside influence. A passive measurement is one which does not produce a transmission or excitation as a part of the measurement cycle.
Used by	Elements	spase:DisplayData/spase:MeasurementType, spase:NumericalData/spase:MeasurementType
Source	<pre> &lt;xsd:simpleType name="MeasurementType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the method of making an estimated value of a quantity that forms the basis of an observation.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ActivityIndex"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An indication, derived from one or more measurements, of the level of activity of an object or region, such as sunspot number, F10.7 flux, Dst, or the Polar Cap Indices.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Dopplergram"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Dust"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Free microscopic particles of solid material.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="ElectricField"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A region of space around a charged particle, or between two voltages within which a force is exerted on charged objects in its vicinity. An electric field is the electric force per unit charge.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="EnergeticParticles"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other subatomic particles.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ephemeris"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The spatial coordinates of a body as a function of time. When used as an Instrument Type it represents the process or methods used to generate spatial coordinates.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="ImageIntensity"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Measurements of the two-dimensional distribution of the intensity of photons from some region or object such as the Sun or the polar auroral regions; can be in any wavelength band, and polarized, etc.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>	

```

</xsd:enumeration>
<xsd:enumeration value="InstrumentStatus">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A quantity directly related to the operation or function of
an instrument.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="IonComposition">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">In situ measurements of the relative flux or density
of electrically charged particles in the space environment. May give simple fluxes, but full
distribution functions are sometimes measured.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Irradiance">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Irradiance - A radiometric term for the power
of electromagnetic radiation at a surface, per unit area. "Irradiance" is used when the
electromagnetic radiation is incident on the surface. Irradiance data may be reported in any units
(i.e. counts/s) due to, for example, being at a particular wavelength, or to being a not-fully-
calibrated relative measurement.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MagneticField">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of space near a magnetized body where magnetic
forces can be detected (as measured by methods such as Zeeman splitting, etc.).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Magnetogram">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of the vector or line-of-sight magnetic field
determined from remote sensing measurements of the detailed structure of spectral lines, including
their splitting and polarization. ("Magnetogram.")</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NeutralAtomImages">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of neutral atom fluxes as a function of look
direction; often related to remote energetic charged particles that lose their charge through
charge-exchange and then reach the detector on a line-of-sight trajectory.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NeutralGas">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of neutral atomic and molecular components of
a gas.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Profile">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of a quantity as a function of height above an
object such as the limb of a body.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Radiance">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A radiometric measurement that describes the amount of
electromagnetic radiation that passes through or is emitted from a particular area, and falls
within a given solid angle in a specified direction. They are used to characterize both emission
from diffuse sources and reflection from diffuse surfaces.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Spectrum">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The distribution of a characteristic of a physical
system or phenomenon, such as the energy emitted by a radiant source, arranged in the order of
wavelengths.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ThermalPlasma">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of the plasma in the energy regime where the
most of the plasma occurs. May be the basic fluxes in the form of distribution functions or the
derived bulk parameters (density, flow velocity, etc.).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Waves">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Data resulting from observations of wave experiments
and natural wave phenomena. Wave experiments are typically active and natural wave phenomena
are passive. Examples of wave experiments include coherent/incoherent scatter radars, radio
soundings, VLF propagation studies, ionospheric scintillation of beacon satellite signals, etc.
  </xsd:annotation>
</xsd:enumeration>

```

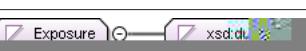
```

Examples of natural wave phenomena include micropulsations, mesospheric gravity waves, auroral/plasmaspheric hiss, Langmuir waves, AKR, Jovian decametric radiation, solar radio bursts, etc.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Waves.Active">
<xsd:annotation>
<xsd:documentation xml:lang="en">Exerting an influence or producing a change or effect. An active measurement is one which produces a transmission or excitation as a part of the measurement cycle.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Waves.Passive">
<xsd:annotation>
<xsd:documentation xml:lang="en">Movement or effect produced by outside influence. A passive measurement is one which does not produce a transmission or excitation as a part of the measurement cycle.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
-----------------	---

### Simple Type spase:Exposure

Namespace	http://www.spase-group.org/data/schema
Annotations	The time interval over which an individual measurement is taken.
Diagram	
Type	xsd:duration
Used by	Element spase:TemporalDescription/spase:Exposure
Source	<pre> &lt;xsd:simpleType name="Exposure"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The time interval over which an individual measurement is taken.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ExposureMin

Namespace	http://www.spase-group.org/data/schema
Annotations	The smallest time interval over which an individual measurement is taken.
Diagram	
Type	xsd:duration
Used by	Element spase:TemporalDescription/spase:ExposureMin
Source	<pre> &lt;xsd:simpleType name="ExposureMin"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The smallest time interval over which an individual measurement is taken.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ExposureMax

Namespace	http://www.spase-group.org/data/schema
Annotations	The largest interval over which an individual measurement is taken.
Diagram	
Type	xsd:duration

Used by	Element spase:TemporalDescription/spase:ExposureMax
Source	<pre>&lt;xsd:simpleType name="ExposureMax"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The largest interval over which an individual measurement is taken.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:DisplayCadence

Namespace	http://www.spase-group.org/data/schema
Annotations	The time interval between the successive display elements.
Diagram	
Type	xsd:duration
Used by	Element spase:DisplayData/spase:DisplayCadence
Source	<pre>&lt;xsd:simpleType name="DisplayCadence"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The time interval between the successive display elements.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:duration"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Region

Namespace	http://www.spase-group.org/data/schema																								
Annotations	Identifiers for areas of the physical world which may be occupied or observed.																								
Diagram																									
Type	restriction of xsd:string																								
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Asteroid</td> <td>A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.</td> </tr> <tr> <td>enumeration</td> <td>Comet</td> <td>A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.</td> </tr> <tr> <td>enumeration</td> <td>Earth</td> <td>The third planet from the sun in our solar system.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosheath</td> <td>The region between the bow shock and the magnetopause, characterized by very turbulent plasma.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere</td> <td>The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Magnetotail</td> <td>The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (<math>X &gt; -10Re</math>).</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Main</td> <td>The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Plasmasphere</td> <td>A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude</td> </tr> </table>	enumeration	Asteroid	A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.	enumeration	Comet	A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.	enumeration	Earth	The third planet from the sun in our solar system.	enumeration	Earth.Magnetosheath	The region between the bow shock and the magnetopause, characterized by very turbulent plasma.	enumeration	Earth.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.	enumeration	Earth.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).	enumeration	Earth.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.	enumeration	Earth.Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude
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enumeration	Comet	A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.																							
enumeration	Earth	The third planet from the sun in our solar system.																							
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		drop in plasma density.
enumeration	Earth.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Earth.Magnetosphere.RadiationRegion	within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Earth.Magnetosphere.RingCurrent	one of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Earth.Moon	The only natural satellite of the Earth.
enumeration	Earth.NearSurface	The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.
enumeration	Earth.NearSurface.Atmosphere	The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.AuroralRegion	the region in the atmosphere where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	Earth.NearSurface.EquatorialRegion	the region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	Earth.NearSurface.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	Earth.NearSurface.Ionosphere	The region of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	Earth.NearSurface.Ionosphere	A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.
enumeration	Earth.NearSurface.Ionosphere	The region contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	Earth.NearSurface.Ionosphere	The region at the upper most areas of the ionosphere.
enumeration	Earth.NearSurface.Mesosphere	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	Earth.NearSurface.MidLatitudeRegion	considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may

		be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	Earth.NearSurface.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Earth.NearSurface.PolarCap	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude and the region south of 60 degrees south latitude.
enumeration	Earth.NearSurface.SouthAtlanticMagneticAnomalyRegion	The region near the Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.
enumeration	Earth.NearSurface.Stratosphere	The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
enumeration	Earth.NearSurface.SubAuroralRegion	Considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.
enumeration	Earth.NearSurface.Thermosphere	The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
enumeration	Earth.NearSurface.Troposphere	The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
enumeration	Earth.Surface	The outermost area of a solid object.
enumeration	Heliosphere	The solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.
enumeration	Heliosphere.Heliosheath	The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.
enumeration	Heliosphere.Inner	The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.
enumeration	Heliosphere.NearEarth	The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.
enumeration	Heliosphere.Outer	The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.
enumeration	Heliosphere.Remote1AU	A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.
enumeration	Interstellar	The region between stars outside of the star's

		heliosphere.
enumeration	Jupiter	The fifth planet from the sun in our solar system.
enumeration	Jupiter.Callisto	A second largest moon of Jupiter and the third-largest moon in the solar system.
enumeration	Jupiter.Europa	The sixth-closest round moon of Jupiter.
enumeration	Jupiter.Ganymede	The biggest moon of Jupiter and in the solar system.
enumeration	Jupiter.Io	The innermost of the four round moons of the planet Jupiter.
enumeration	Jupiter.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Jupiter.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Jupiter.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Jupiter.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Jupiter.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Jupiter.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Jupiter.Magnetosphere.RingCurrent	The region of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Mars	The forth planet from the sun in our solar system.
enumeration	Mars.Deimos	
enumeration	Mars.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mars.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Mars.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mars.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude

		drop in plasma density.
enumeration	Mars.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mars.Magnetosphere.RadiationBelt	<del>The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</del>
enumeration	Mars.Magnetosphere.RingCurrent	<del>One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</del>
enumeration	Mars.Phobos	The larger and inner most moon of Mars.
enumeration	Mercury	The first planet from the sun in our solar system.
enumeration	Mercury.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Mercury.Magnetosphere.Magnetotail	<del>The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (<math>X &gt; -10Re</math>).</del>
enumeration	Mercury.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Mercury.Magnetosphere.Plasmasphere	<del>A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</del>
enumeration	Mercury.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Mercury.Magnetosphere.RadiationBelt	<del>The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</del>
enumeration	Mercury.Magnetosphere.RingCurrent	<del>One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</del>
enumeration	Neptune	The seventh planet from the sun in our solar system.
enumeration	Pluto	The ninth (sub)planet from the sun in our solar system.
enumeration	Saturn	The sixth planet from the sun in our solar system.
enumeration	Saturn.Dione	The forth-largest moon of Saturn.
enumeration	Saturn.Enceladus	The sixth-largest moon of Saturn. It is currently

		endogenously active. The smallest known body in the Solar System that is geologically active today.
enumeration	Saturn.Iapetus	The third-largest moon of Saturn and the eleventh-largest in the Solar System.
enumeration	Saturn.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Saturn.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Saturn.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Saturn.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Saturn.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Saturn.Magnetosphere.RadiationBelts	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Saturn.Magnetosphere.RingCurrent	The major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Saturn.Mimas	The smallest and least massive of the round moons of Saturn.
enumeration	Saturn.Rhea	The second-largest moon of Saturn and the ninth-largest moon in the Solar System.
enumeration	Saturn.Tethys	The third largest moon of Saturn.
enumeration	Saturn.Titan	The largest moon of Saturn and the second-largest moon in the Solar System,
enumeration	Sun	The star upon which our solar system is centered.
enumeration	Sun.Chromosphere	The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.
enumeration	Sun.Corona	The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above $10^5$ K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.
enumeration	Sun.Interior	The region inside the body which is not visible from outside the body.
enumeration	Sun.Photosphere	The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.
enumeration	Sun.TransitionRegion	A very narrow (<100 km) layer between the

		chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.
enumeration	Uranus	The eighth planet from the sun in our solar system.
enumeration	Uranus.Ariel	The fourth-largest moon of Uranus.
enumeration	Uranus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Uranus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Uranus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Uranus.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	Uranus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Uranus.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Uranus.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
enumeration	Uranus.Miranda	The smallest and innermost round moon of Uranus.
enumeration	Uranus.Oberon	The second-largest and second most massive moon of Uranus, and the ninth most massive moon in the Solar System.
enumeration	Uranus.Puck	The largest inner spherical moon of Uranus.
enumeration	Uranus.Titania	The largest moon of Uranus and the eighth largest moon in the Solar System.
enumeration	Uranus.Umbriel	The third largest and fourth most massive moon of Uranus.
enumeration	Venus	The second planet from the sun in our solar system.
enumeration	Venus.Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
enumeration	Venus.Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
enumeration	Venus.Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
enumeration	Venus.Magnetosphere.Plasmasphere	The region of the magnetosphere consisting of low energy (cool) plasma. It is located above

		<p>the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</p>
enumeration	Venus.Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
enumeration	Venus.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
enumeration	Venus.Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.
Used by	Elements	spase:DisplayData/spase:ObservedRegion, spase:Location/spase:ObservatoryRegion, spase:NumericalData/spase:ObservedRegion, spase:ObservationExtent/spase:ObservedRegion
Source	<pre> &lt;xsd:simpleType name="Region"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for areas of the physical world which may be occupied or observed.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Asteroid"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A small extraterrestrial body consisting mostly of rock and metal that is in orbit around the sun.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Comet"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A relatively small extraterrestrial body consisting of a frozen mass that travels around the sun in a highly elliptical orbit.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Earth"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The third planet from the sun in our solar system.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Earth.Magnetsheath"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region between the bow shock and the magnetopause, characterized by very turbulent plasma.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Earth.Magnetosphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Earth.Magnetosphere.Magnetotail"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X &gt; -10Re).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Earth.Magnetosphere.Main"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Earth.Magnetosphere.Plasmasphere"&gt;</pre>	

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<xsd:annotation>
  <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.Magnetosphere.Polar">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.Magnetosphere.RadiationBelt">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.Magnetosphere.RingCurrent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.Moon">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The only natural satellite of the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Atmosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.AuroralRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.EquatorialRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Ionosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Ionosphere.DRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Ionosphere.ERegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Ionosphere.FRegion">
  <xsd:annotation>

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<xsd:documentation xml:lang="en">A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Ionosphere.Topside">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region at the upper most areas of the ionosphere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Mesosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.MidLatitudeRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">When considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Plasmasphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.PolarCap">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.SouthAtlanticAnomalyRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region where the Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Stratosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.SubAuroralRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">When considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Thermosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Earth.NearSurface.Troposphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>

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        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Earth.Surface">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The outermost area of a solid object.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Heliosphere">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The solar atmosphere extending roughly from the outer corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Heliosphere.Heliosheath">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Heliosphere.Inner">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Heliosphere.NearEarth">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Heliosphere.Outer">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Heliosphere.RemotelAU">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Interstellar">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region between stars outside of the star's heliopause.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Jupiter">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The fifth planet from the sun in our solar system.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Jupiter.Callisto">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A second largest moon of Jupiter and the third-largest moon in the solar system.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Jupiter.Europa">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The sixth-closest round moon of Jupiter.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Jupiter.Ganymede">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The biggest moon of Jupiter and in the solar system.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Jupiter.Io">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The innermost of the four round moons of the planet Jupiter.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Jupiter.Magnetosphere">
        <xsd:annotation>

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<xsd:documentation xml:lang="en">The region of space above the atmosphere or surface of
the planet, and bounded by the magnetopause, that is under the direct influence of the planet's
magnetic field.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Jupiter.Magnetosphere.Magnetotail">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region on the night side of the body where the magnetic
field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a
night-side radial distance of 10 Re (X > -10Re).</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Jupiter.Magnetosphere.Main">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region of the magnetosphere where the magnetic field
lines are closed, but does not include the gaseous region gravitationally bound to the body.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Jupiter.Magnetosphere.Plasmasphere">
<xsd:annotation>
<xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy
(cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is
known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Jupiter.Magnetosphere.Polar">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere
the polar region is the area where magnetic field lines are open and includes the auroral zone.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Jupiter.Magnetosphere.RadiationBelt">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy
particles could potentially be trapped in a magnetic field.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Jupiter.Magnetosphere.RingCurrent">
<xsd:annotation>
<xsd:documentation xml:lang="en">One of the major current systems confined within planetary
magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It
is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-
like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged
particles typically located at L-shells between 3 and 6. The ring current is also the primary
driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars">
<xsd:annotation>
<xsd:documentation xml:lang="en">The forth planet from the sun in our solar system.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Deimos">
<xsd:annotation>
<xsd:documentation xml:lang="en">
</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Magnetosphere">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region of space above the atmosphere or surface of
the planet, and bounded by the magnetopause, that is under the direct influence of the planet's
magnetic field.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Magnetosphere.Magnetotail">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region on the night side of the body where the magnetic
field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a
night-side radial distance of 10 Re (X > -10Re).</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Magnetosphere.Main">
<xsd:annotation>
<xsd:documentation xml:lang="en">The region of the magnetosphere where the magnetic field
lines are closed, but does not include the gaseous region gravitationally bound to the body.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
```

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<xsd:enumeration value="Mars.Magnetosphere.Plasmasphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Magnetosphere.Polar">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Magnetosphere.RadiationBelt">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Magnetosphere.RingCurrent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mars.Phobos">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The larger and inner most moon of Mars.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The first planet from the sun in our solar system.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere.Magnetotail">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X > -10Re).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere.Main">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere.Plasmasphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere.Polar">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere.RadiationBelt">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</xsd:documentation>
  </xsd:annotation>

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</xsd:enumeration>
<xsd:enumeration value="Mercury.Magnetosphere.RingCurrent">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Neptune">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The seventh planet from the sun in our solar system.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Pluto">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The ninth (sub)planet from the sun in our solar system.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The sixth planet from the sun in our solar system.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Dione">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The forth-largest moon of Saturn.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Enceladus">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The sixth-largest moon of Saturn. It is currently endogenously active. The smallest known body in the Solar System that is geologically active today.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Iapetus">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The third-largest moon of Saturn and the eleventh-largest in the Solar System.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Magnetosphere">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Magnetosphere.Magnetotail">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X > -10Re).</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Magnetosphere.Main">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Magnetosphere.Plasmasphere">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Magnetosphere.Polar">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>

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<xsd:enumeration value="Saturn.Magnetosphere.RadiationBelt">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Magnetosphere.RingCurrent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Mimas">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The smallest and least massive of the round moons of Saturn.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Rhea">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The second-largest moon of Saturn and the ninth-largest moon in the Solar System.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Tethys">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The third largest moon of Saturn.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Saturn.Titan">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The largest moon of Saturn and the second-largest moon in the Solar System.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sun">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The star upon which our solar system is centered.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sun.Chromosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sun.Corona">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above 10^5 K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sun.Interior">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region inside the body which is not visible from outside the body.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sun.Photosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sun.TransitionRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A very narrow (<100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus">
  <xsd:annotation>

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<xsd:documentation xml:lang="en">The eighth planet from the sun in our solar system.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Ariel">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The fourth-largest moon of Uranus.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region of space above the atmosphere or surface of
the planet, and bounded by the magnetopause, that is under the direct influence of the planet's
magnetic field.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere.Magnetotail">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region on the night side of the body where the magnetic
field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a
night-side radial distance of 10 Re (X -> -10Re).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere.Main">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region of the magnetosphere where the magnetic field
lines are closed, but does not include the gaseous region gravitationally bound to the body.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere.Plasmasphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy
(cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is
known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere.Polar">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere
the polar region is the area where magnetic field lines are open and includes the auroral zone.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere.RadiationBelt">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy
particles could potentially be trapped in a magnetic field.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Magnetosphere.RingCurrent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">One of the major current systems confined within planetary
magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It
is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-
like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged
particles typically located at L-shells between 3 and 6. The ring current is also the primary
driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Miranda">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The smallest and innermost round moon of Uranus.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Oberon">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The second-largest and second most massive mon of Uranus,
and the ninth most massive moon in the Solar System.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Puck">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The largest inner spherical moon of Uranus.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Uranus.Titania">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The largest moon of Uranus and the eighth largest moon in
the Solar System.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>

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        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Uranus.Umbriel">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The third largest and fourth most massive moon of Uranus.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The second planet from the sun in our solar system.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere.Magnetotail">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X > -10Re).</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere.Main">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere.Plasmasphere">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere.Polar">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere.RadiationBelt">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="Venus.Magnetosphere.RingCurrent">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

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Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:DocumentType

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifiers for the characterization of the content or purpose of a document.
Diagram	
Type	restriction of xsd:string

Facets	enumeration	Other	Not classified with more specific terms. The context of its usage may be described in related text.		
	enumeration	Poster	A set of information arranged on a single page or sheet, typically in a large format.		
	enumeration	Presentation	A set of information that is used when communicating to an audience.		
	enumeration	Report	A document which describes the findings of some individual or group.		
	enumeration	Specification	A detailed description of the requirements and other aspects of an object or component that may be used to develop an implementation.		
	enumeration	TechnicalNote	A document summarizing the performance and other technical characteristics of a product, machine, component, subsystem or software in sufficient detail to be used by an engineer or researcher.		
	enumeration	WhitePaper	An authoritative report giving information or proposals on an issue.		
Used by	Element	spase:Document/spase:DocumentType			
Source	<pre> &lt;xsd:simpleType name="DocumentType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the characterization of the content or purpose of a document.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Other"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Not classified with more specific terms. The context of its usage may be described in related text.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Poster"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A set of information arranged on a single page or sheet, typically in a large format.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Presentation"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A set of information that is used when communicating to an audience.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Report"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A document which describes the findings of some individual or group.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Specification"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A detailed description of the requirements and other aspects of an object or component that may be used to develop an implementation.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="TechnicalNote"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A document summarizing the performance and other technical characteristics of a product, machine, component, subsystem or software in sufficient detail to be used by an engineer or researcher.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="WhitePaper"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An authoritative report giving information or proposals on an issue.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>				
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd				

## Simple Type spase:MIMETYPE

Namespace	http://www.spase-group.org/data/schema
Annotations	<p>Multipurpose Internet Mail Extensions (MIME) type and sub-type which characterizes the format of a file. MIME media types are define in RFC memorandum RFC 2046. Current MIME types are maintained by Internet Assigned Numbers Authority (IANA) at <a href="http://www.iana.org/assignments/media-types/index.html">http://www.iana.org/assignments/media-types/index.html</a>. Commonly used MIME types are: application/vnd.ms-powerpoint (ppt, pptx), application/vnd.ms-excel (xls, xlsx), text/richtext (rtx), application/postscript (eps, ps), application/pdf (pdf), application/xml-dtd (dtd), text/html (htm, html), text/xml (xsl, xml, xsd), application/x-dvi (dvi). If a document is compressed the specified MIME type should be for the uncompressed document.</p>
Diagram	
Type	xsd:string
Used by	Element spase:Document/spase:MIMETYPE
Source	<pre>&lt;xsd:simpleType name="MIMETYPE"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Multipurpose Internet Mail Extensions (MIME) type and sub-type which characterizes the format of a file. MIME media types are define in RFC memorandum RFC 2046. Current MIME types are maintained by Internet Assigned Numbers Authority (IANA) at <a href="http://www.iana.org/assignments/media-types/index.html">http://www.iana.org/assignments/media-types/index.html</a>. Commonly used MIME types are: application/vnd.ms-powerpoint (ppt, pptx), application/vnd.ms-excel (xls, xlsx), text/richtext (rtx), application/postscript (eps, ps), application/pdf (pdf), application/xml-dtd (dtd), text/html (htm, html), text/xml (xsl, xml, xsd), application/x-dvi (dvi). If a document is compressed the specified MIME type should be for the uncompressed document.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:ParentID

Namespace	http://www.spase-group.org/data/schema
Annotations	The resource identifier for a resource that a resource is a part of. The resource inherits the attributes of the referenced resource. Attributes defined in the resource override attributes of the parent in the manner prescribed by the containing resource.
Diagram	
Type	xsd:string
Used by	Element spase:Granule/spase:ParentID
Source	<pre>&lt;xsd:simpleType name="ParentID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The resource identifier for a resource that a resource is a part of. The resource inherits the attributes of the referenced resource. Attributes defined in the resource override attributes of the parent in the manner prescribed by the containing resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:SourceType

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifiers for the characterization of the function or purpose of a source.
Diagram	

Type	restriction of xsd:string				
Facets	enumeration	Ancillary	A complementary item which can be subordinate, subsidiary, auxiliary, supplementary to the primary item.		
	enumeration	Browse	A representation of an image which is suitable to reveal most or all of the details of the image.		
	enumeration	Data	A collection of organized information, usually the results of experience, observation or experiment, or a set of premises. This may consist of numbers, words, or images, particularly as measurements or observations of a set of variables.		
	enumeration	Layout	The structured arrangement of items in a collection.		
	enumeration	Thumbnail	A small representation of an image which is suitable to infer what the full-sized imaged is like.		
Used by	Element	spase:Source/spase:SourceType			
Source	<pre> &lt;xsd:simpleType name="SourceType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the characterization of the function or purpose of a source.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Ancillary"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A complementary item which can be subordinate, subsidiary, auxiliary, supplementary to the primary item.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Browse"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A representation of an image which is suitable to reveal most or all of the details of the image.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Data"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A collection of organized information, usually the results of experience, observation or experiment, or a set of premises. This may consist of numbers, words, or images, particularly as measurements or observations of a set of variables.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Layout"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The structured arrangement of items in a collection.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Thumbnail"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A small representation of an image which is suitable to infer what the full-sized imaged is like.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>				
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd				

### Simple Type spase:MirrorURL

Namespace	http://www.spase-group.org/data/schema
Annotations	A Uniform Resource Locator (URL) to an alternate location of a resource.
Diagram	
Type	xsd:anyURI
Used by	Element spase:Source/spase:MirrorURL
Source	<xsd:simpleType name="MirrorURL">

	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A Uniform Resource Locator (URL) to an alternate location of a resource.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:anyURI" /&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:HashValue

Namespace	http://www.spase-group.org/data/schema
Annotations	The value calculated by a hash function, e.g. the message digest of a digital data object.
Diagram	
Type	xsd:string
Used by	Element spase:Checksum/spase:HashValue
Source	<pre> &lt;xsd:simpleType name="HashValue"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The value calculated by a hash function, e.g. the message digest of a digital data object.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:HashFunction

Namespace	http://www.spase-group.org/data/schema									
Annotations	Identifiers for functions or algorithms that convert a digital data object into a hash value.									
Diagram										
Type	restriction of xsd:string									
Facets	<table border="0"> <tr> <td>enumeration</td> <td>MD5</td> <td>Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.</td> </tr> <tr> <td>enumeration</td> <td>SHA1</td> <td>Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.</td> </tr> <tr> <td>enumeration</td> <td>SHA256</td> <td>Secure Hash Algorithm (SHA), a 256-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.</td> </tr> </table>	enumeration	MD5	Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.	enumeration	SHA1	Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.	enumeration	SHA256	Secure Hash Algorithm (SHA), a 256-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.
enumeration	MD5	Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.								
enumeration	SHA1	Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.								
enumeration	SHA256	Secure Hash Algorithm (SHA), a 256-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.								
Used by	Element spase:Checksum/spase:HashFunction									
Source	<pre> &lt;xsd:simpleType name="HashFunction"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for functions or algorithms that convert a digital data object into a hash value.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="MD5"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Message Digest 5 (MD5) is a 128-bit message digest algorithm created in 1991 by Professor Ronald Rivest.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="SHA1"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Secure Hash Algorithm (SHA), a 160-bit message digest algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS) publication 180-1.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="SHA256"&gt;       &lt;xsd:annotation&gt; </pre>									

```

<xsd:documentation xml:lang="en">Secure Hash Algorithm (SHA), a 256-bit message digest
algorithm developed by the NSA and described in Federal Information Processing Standard (FIPS)
publication 180-1.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
-----------------	---

## Simple Type spase:InstrumentType

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for the type of experiment the instrument performs. This is the technique of observation.	
Diagram		
Type	restriction of xsd:string	
Facets	enumeration	Antenna A sensor used to measure electric potential.
	enumeration	Channeltron An instrument that detects electrons, ions, and UV-radiation, according to the principle of a secondary emission multiplier. It is typically used in electron spectroscopy and mass spectrometry.
	enumeration	Coronograph An instrument which can image things very close to the Sun by using a disk to block the Sun's bright surface which reveals the faint solar corona and other celestial objects.
	enumeration	DoubleSphere A dipole antenna of which the active (sensor) elements are small spheres located at the ends of two wires deployed in the equatorial plane, on opposite sides of a spinning spacecraft.
	enumeration	DustDetector An instrument which determines the mass and speed of ambient dust particles.
	enumeration	ElectronDriftInstrument An active experiment to measure the electron drift velocity based on sensing the displacement of a weak beam of electrons after one gyration in the ambient magnetic field.
	enumeration	ElectrostaticAnalyser An instrument which uses charged plates to analyze the mass, charge and kinetic energies of charged particles which enter the instrument.
	enumeration	EnergeticParticleInstrument An instrument that measures fluxes of charged particles as a function of time, direction of motion, mass, charge and/or species.
	enumeration	FaradayCup An instrument consisting of an electrode from which electrical current is measured while a charged particle beam (electrons or ions) impinges on it. Used to determine energy spectrum and sometimes ion composition of the impinging particles.
	enumeration	FluxFeedback A search coil whose bandwidth and signal/noise ratio are increased by the application of negative feedback at the sensor (flux) level by driving a collocated coil with a signal from the preamplifier.
	enumeration	FourierTransformSpectrograph An instrument that determines the spectra of a radiative source, using time-domain measurements and a Fourier transform.
	enumeration	GeigerMuellerTube
	enumeration	Imager An instrument which samples the radiation from an area at one or more spectral ranges emitted or reflected by an object.
	enumeration	ImagingSpectrometer An instrument which is a multispectral scanner with a very large number of channels (64-256 channels) with very narrow band widths.
	enumeration	Interferometer An instrument to study the properties of two or more waves from the pattern of interference created by their superposition.

enumeration	<code>IonChamber</code>	A device in which the collected electrical charge from ionization in a gas-filled cavity is taken to be the proportion to some parameter (e.g. dose or exposure) of radiation field
enumeration	<code>IonDrift</code>	A device which measures the current produced by the displacement of ambient ions on a grid, thereby allowing the determination of the ion trajectory and velocity.
enumeration	<code>IonGauge</code>	A device which measures low-pressure or vacuum neutral gas with pressures ranging from 10e-3 Torr to 10e-10 Torr. An ion gauge is an electronic amplifying vacuum tube consisting of three electrodes inside an evacuated glass envelope, with the filament being the cathode.
enumeration	<code>LangmuirProbe</code>	A monopole antenna associated with an instrument. The instrument applies a potential to the antenna which is swept to determine the voltage/current characteristic. This provides information about the plasma surrounding the probe and spacecraft.
enumeration	<code>LongWire</code>	A dipole antenna whose active (sensor) elements are two wires deployed in the equatorial plane on opposite sides of a spinning spacecraft, and whose length is several times greater than the spacecraft diameter.
enumeration	<code>Magnetograph</code>	A special type of magnetometer that records a time plot of the local magnetic field near the instrument; or a telescope capable of determining the magnetic field strength and/or direction on a distant object such as the Sun, using the Zeeman splitting or other spectral signatures of magnetization.
enumeration	<code>Magnetometer</code>	An instrument which measures the ambient magnetic field.
enumeration	<code>MassSpectrometer</code>	An instrument which distinguishes chemical species in terms of their different isotopic masses.
enumeration	<code>MicrochannelPlate</code>	An instrument used for the detection of elementary particles, ions, ultraviolet rays and soft X-rays constructed from very thin conductive glass capillaries.
enumeration	<code>MultispectralImager</code>	An instrument which captures images at multiple spectral ranges.
enumeration	<code>NeutralAtomImager</code>	An instrument which measures the quantity and properties of neutral particles over a range of angles. Measured properties can include mass and energy.
enumeration	<code>NeutralParticleDetector</code>	An instrument which measures the quantity and properties of neutral particles. Measured properties can include mass and plasma bulk densities.
enumeration	<code>ParticleCorrelator</code>	An instrument which correlates particle flux to help identify wave/particle interactions.
enumeration	<code>ParticleDetector</code>	An instrument which detects particle flux!!!
enumeration	<code>Photometer</code>	An instrument which measures the strength of electromagnetic radiation within a spectral band which can range from ultraviolet to infrared and includes the visible spectrum.
enumeration	<code>PhotomultiplierTube</code>	A vacuum phototube that is an extremely sensitive detector of light in the ultraviolet, visible, and near-infrared ranges of the electromagnetic spectrum.
enumeration	<code>Photopolarimeter</code>	An instrument which measures the intensity and polarization of radiant energy. A photopolarimeter is a combination of a photometer and a polarimeter.
enumeration	<code>Platform</code>	A collection of components which can be positioned and oriented as a single unit. A platform

		<p>may contain other platforms. For example, a spacecraft is a platform which may have components that can be articulated and are also considered platforms.</p>
enumeration	ProportionalCounter	An instrument which measures energy of ionization radiation based on interactions with a gas.
enumeration	QuadrисphericalAnalyser	An instrument used for the 3-D detection of plasma, energetic electrons and ions, and for positive-ion composition measurements.
enumeration	Radar	An instrument that uses directional properties of returned power to infer spatial and/or other characteristics of a remote object.
enumeration	Radiometer	An instrument for detecting or measuring radiant energy. Radiometers are commonly limited to infrared radiation.
enumeration	ResonanceSounder	A combination of a radio receiver and a pulsed transmitter used to study the plasma surrounding a spacecraft by identifying resonances or cut-offs (of the wave dispersion relation), whose frequencies are related to the ambient plasma density and magnetic field. When the transmitter is off it is essentially a high frequency-resolution spectral power receiver.
enumeration	RetardingPotentialAnalyser	An instrument which measures ion temperatures and ion concentrations using a planar ion trap.
enumeration	Riometer	An instrument which measure the signal strength in various directions of the galactic radio signals. Variations in these signals are influenced by solar flare activity and geomagnetic storm and substorm processes.
enumeration	ScintillationDetector	An instrument which detects flourescences of a material which is excited by high energy (ionizing) electromagnetic or charged particle radiation.
enumeration	SearchCoil	An instrument which measures the time variation of the magnetic flux threading a loop by measurement of the electric potential difference induced between the ends of the wire.
enumeration	SolidStateDetector	A detector of the charge carriers (electrons and holes) generated in semiconductors by energy deposited by gamma ray photons. Also known as a "semiconductor detector".
enumeration	Sounder	An instrument which measures the radiances from an object. A sounder may measure radiances at multiple spectral ranges.
enumeration	SpacecraftPotentialControl	An instrument to control the electric potential of a spacecraft with respect to the ambient plasma by emitting a variable current of positive ions.
enumeration	SpectralPowerReceiver	A radio receiver which determines the power spectral density of the electric or magnetic field, or both, at one or more frequencies.
enumeration	Spectrometer	An instrument that measures the component wavelengths of light (or other electromagnetic radiation) by splitting the light up into its component wavelengths.
enumeration	TimeOfFlight	An instrument which measures the time it takes for a particle to travel between two detectors.
enumeration	Unspecified	A value which is not provided.
enumeration	WaveformReceiver	A radio receiver which outputs the value of one or more components of the electric and/or magnetic field as a function of time.
Used by	Element	spase:Instrument/spase:InstrumentType
Source	<pre>&lt;xsd:simpleType name="InstrumentType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the type of experiment the instrument performs. This is the technique of observation.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;</pre>	

```

<xsd:restriction base="xsd:string">
  <xsd:enumeration value="Antenna">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A sensor used to measure electric potential.</
xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Channeltron">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument that detects electrons, ions, and UV-
radiation, according to the principle of a secondary emission multiplier. It is typically used in
electron spectroscopy and mass spectrometry.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="Coronograph">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument which can image things very close to the Sun
by using a disk to block the Sun's bright surface which reveals the faint solar corona and other
celestial objects.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="DoubleSphere">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A dipole antenna of which the active (sensor) elements are
small spheres located at the ends of two wires deployed in the equatorial plane, on opposite sides
of a spinning spacecraft.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="DustDetector">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument which determines the mass and speed of
ambient dust particles.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="ElectronDriftInstrument">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An active experiment to measure the electron drift velocity
based on sensing the displacement of a weak beam of electrons after one gyration in the ambient
magnetic field.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="ElectrostaticAnalyser">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument which uses charged plates to analyze
the mass, charge and kinetic energies of charged particles which enter the instrument.</
xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="EnergeticParticleInstrument">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument that measures fluxes of charged particles as
a function of time, direction of motion, mass, charge and/or species.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="FaradayCup">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument consisting of an electrode from which
electrical current is measured while a charged particle beam (electrons or ions) impinges on it.
Used to determine energy spectrum and sometimes ion composition of the impinging particles.</
xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="FluxFeedback">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">A search coil whose bandwidth and signal/noise ratio
are increased by the application of negative feedback at the sensor (flux) level by driving a
collocated coil with a signal from the preamplifier.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="FourierTransformSpectrograph">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">An instrument that determines the spectra of a radiative
source, using time-domain measurements and a Fourier transform.</xsd:documentation>
    </xsd:annotation>
  </xsd:enumeration>
  <xsd:enumeration value="GeigerMuellerTube">
    <xsd:annotation>
      <xsd:documentation xml:lang="en">
        </xsd:documentation>
      </xsd:annotation>
    </xsd:enumeration>
  </xsd:enumeration>
  <xsd:enumeration value="Imager">
    <xsd:annotation>

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<xsd:documentation xml:lang="en">An instrument which samples the radiation from an area at
one or more spectral ranges emitted or reflected by an object.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ImagingSpectrometer">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An instrument which is a multispectral scanner with a very
large number of channels (64-256 channels) with very narrow band widths.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Interferometer">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An instrument to study the properties of two or more waves
from the pattern of interference created by their superposition.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="IonChamber">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A device in which the collected electrical charge from
ionization in a gas-filled cavity is taken to be the proportion to some parameter (e.g. dose or
exposure) of radiation field</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="IonDrift">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A device which measures the current produced by the
displacement of ambient ions on a grid, thereby allowing the determination of the ion trajectory
and velocity.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="IonGauge">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A device which measures low-pressure or vacuum neutral gas
with pressures ranging from 10e-3 Torr to 10e-10 Torr. An ion gauge is an electronic amplifying
vacuum tube consisting of three electrodes inside an evacuated glass envelope, with the filament
being the cathode.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="LangmuirProbe">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A monopole antenna associated with an instrument. The
instrument applies a potential to the antenna which is swept to determine the voltage/current
characteristic. This provides information about the plasma surrounding the probe and spacecraft.</
xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="LongWire">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A dipole antenna whose active (sensor) elements are two
wires deployed in the equatorial plane on opposite sides of a spinning spacecraft, and whose length
is several times greater than the spacecraft diameter.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Magnetograph">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">A special type of magnetometer that records a time plot of
the local magnetic field near the instrument; or a telescope capable of determining the magnetic
field strength and/or direction on a distant object such as the Sun, using the Zeeman splitting or
other spectral signatures of magnetization.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Magnetometer">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An instrument which measures the ambient magnetic field.</
xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MassSpectrometer">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An instrument which distinguishes chemical species in terms
of their different isotopic masses.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MicrochannelPlate">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">An instrument used for the detection of elementary
particles, ions, ultraviolet rays and soft X-rays constructed from very thin conductive glass
capillaries.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MultispectralImager">
    <xsd:annotation>

```

```

<xsd:documentation xml:lang="en">An instrument which captures images at multiple spectral
ranges.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NeutralAtomImager">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the quantity and properties
of neutral particles over a range of angles. Measured properties can include mass and energy.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NeutralParticleDetector">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the quantity and properties
of neutral particles. Measured properties can include mass and plasma bulk densities.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ParticleCorrelator">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which correlates particle flux to help
identify wave/particle interactions.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ParticleDetector">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which detects particle flux!!!</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Photometer">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the strength of
electromagnetic radiation within a spectral band which can range from ultraviolet to infrared and
includes the visible spectrum.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PhotomultiplierTube">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A vacuum phototube that is an extremely sensitive detector
of light in the ultraviolet, visible, and near-infrared ranges of the electromagnetic spectrum.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Photopolarimeter">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the intensity and polarization
or radiant energy. A photopolarimeter is a combination of a photometer and a polarimeter.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Platform">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A collection of components which can be positioned and
oriented as a single unit. A platform may contain other platforms. For example, a spacecraft is
a platform which may have components that can be articulated and are also considered platforms.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ProportionalCounter">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures energy of ionization radiation
based on interactions with a gas.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="QuadrisphereAnalyser">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument used for the 3-D detection of plasma,
energetic electrons and ions, and for positive-ion composition measurements.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Radar">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument that uses directional properties of returned
power to infer spatial and/or other characteristics of a remote object.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Radiometer">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument for detecting or measuring radiant energy.
Radiometers are commonly limited to infrared radiation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>

```

```

<xsd:enumeration value="ResonanceSounder">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A combination of a radio receiver and a pulsed transmitter used to study the plasma surrounding a spacecraft by identifying resonances or cut-offs (of the wave dispersion relation), whose frequencies are related to the ambient plasma density and magnetic field. When the transmitter is off it is essentially a high frequency-resolution spectral power receiver.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="RetardingPotentialAnalyser">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures ion temperatures and ion concentrations using a planar ion trap.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Riometer">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measure the signal strength in various directions of the galactic radio signals. Variations in these signals are influenced by solar flare activity and geomagnetic storm and substorm processes.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ScintillationDetector">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which detects flourescences of a material which is excited by high energy (ionizing) electromagnetic or charged particle radiation.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SearchCoil">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the time variation of the magnetic flux threading a loop by measurement of the electric potential difference induced between the ends of the wire.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SolidStateDetector">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A detector of the charge carriers (electrons and holes) generated in semiconductors by energy deposited by gamma ray photons. Also known as a "semiconductor detector".</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Sounder">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the radiances from an object. A sounder may measure radiances at multiple spectral ranges.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SpacecraftPotentialControl">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument to control the electric potential of a spacecraft with respect to the ambient plasma by emitting a variable current of positive ions.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SpectralPowerReceiver">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A radio receiver which determines the power spectral density of the electric or magnetic field, or both, at one or more frequencies.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Spectrometer">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument that measures the component wavelengths of light (or other electromagnetic radiation) by splitting the light up into its component wavelengths.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="TimeOfFlight">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">An instrument which measures the time it takes for a particle to travel between two detectors.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Unspecified">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A value which is not provided.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="WaveformReceiver">
  <xsd:annotation>

```

	<pre> &lt;xsd:documentation xml:lang="en"&gt;A radio receiver which outputs the value of one or more components of the electric and/or magnetic field as a function of time.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:InvestigationName

Namespace	http://www.spase-group.org/data/schema
Annotations	The name given to the contract or engagement which enabled the data to be produced. Each investigation is associated with a Principal Investigator or Guest Investigator who was responsible for the original proposal. For single PI missions each major subsystem having its own identified Team Leader may also be classed as an "Investigation" for the purposes of data archiving.
Diagram	A UML class diagram fragment showing a class named 'InvestigationName' with a multiplicity of 0..1 and a directed association to a class named 'xsd:string' with a multiplicity of 1..1.
Type	xsd:string
Used by	Element spase:Instrument/spase:InvestigationName
Source	<pre> &lt;xsd:simpleType name="InvestigationName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The name given to the contract or engagement which enabled the data to be produced. Each investigation is associated with a Principal Investigator or Guest Investigator who was responsible for the original proposal. For single PI missions each major subsystem having its own identified Team Leader may also be classed as an "Investigation" for the purposes of data archiving.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ObservatoryID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier of an Observatory resource.
Diagram	A UML class diagram fragment showing a class named 'ObservatoryID' with a multiplicity of 0..1 and a directed association to a class named 'xsd:string' with a multiplicity of 1..1.
Type	xsd:string
Used by	Element spase:Instrument/spase:ObservatoryID
Source	<pre> &lt;xsd:simpleType name="ObservatoryID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The identifier of an Observatory resource.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ObservatoryGroupID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier of an Observatory resource which the referring resource is a member of.
Diagram	A UML class diagram fragment showing a class named 'ObservatoryGroupID' with a multiplicity of 0..1 and a directed association to a class named 'xsd:string' with a multiplicity of 1..1.
Type	xsd:string
Used by	Element spase:Observatory/spase:ObservatoryGroupID
Source	<pre> &lt;xsd:simpleType name="ObservatoryGroupID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The identifier of an Observatory resource which the referring resource is a member of.&lt;/xsd:documentation&gt;</pre>

	<pre>&lt;/xsd:annotation&gt; &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Latitude

Namespace	http://www.spase-group.org/data/schema
Annotations	The angular distance north (positive) or south (negative) from the equator, measured along the meridian passing through the point.
Diagram	
Type	xsd:double
Used by	Element spase:Location/spase:Latitude
Source	<pre>&lt;xsd:simpleType name="Latitude"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The angular distance north (positive) or south (negative) from the equator, measured along the meridian passing through the point.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Longitude

Namespace	http://www.spase-group.org/data/schema
Annotations	The angular distance measured west (positive) or east (negative) from a north-south line called the Prime Meridian.
Diagram	
Type	xsd:double
Used by	Element spase:Location/spase:Longitude
Source	<pre>&lt;xsd:simpleType name="Longitude"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The angular distance measured west (positive) or east (negative) from a north-south line called the Prime Meridian.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Elevation

Namespace	http://www.spase-group.org/data/schema
Annotations	The distance in meters above (positive) or below (negative) the "zero elevation" defined by the World Geodetic System reference frame (WGS84).
Diagram	
Type	xsd:double
Used by	Element spase:Location/spase:Elevation
Source	<pre>&lt;xsd:simpleType name="Elevation"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The distance in meters above (positive) or below (negative) the "zero elevation" defined by the World Geodetic System reference frame (WGS84).&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:double"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:PersonName

Namespace	http://www.spase-group.org/data/schema
Annotations	The words used to address an individual.
Diagram	A diagram showing a rounded rectangle labeled "PersonName" connected by a line with an open circle to another rounded rectangle labeled "xsd:string".
Type	xsd:string
Used by	Element spase:Person/spase:PersonName
Source	<pre>&lt;xsd:simpleType name="PersonName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The words used to address an individual.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:OrganizationName

Namespace	http://www.spase-group.org/data/schema
Annotations	A unit within a company or other entity (e.g., Government agency or branch of service) within which many projects are managed as a whole.
Diagram	A diagram showing a rounded rectangle labeled "OrganizationName" connected by a line with an open circle to another rounded rectangle labeled "xsd:string".
Type	xsd:string
Used by	Element spase:Person/spase:OrganizationName
Source	<pre>&lt;xsd:simpleType name="OrganizationName"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A unit within a company or other entity (e.g., Government agency or branch of service) within which many projects are managed as a whole.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Address

Namespace	http://www.spase-group.org/data/schema
Annotations	Directions for finding some location; written on letters or packages that are to be delivered to that location.
Diagram	A diagram showing a rounded rectangle labeled "Address" connected by a line with an open circle to another rounded rectangle labeled "xsd:string".
Type	xsd:string
Used by	Element spase:Person/spase:Address
Source	<pre>&lt;xsd:simpleType name="Address"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Directions for finding some location; written on letters or packages that are to be delivered to that location.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string" /&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:Email

Namespace	http://www.spase-group.org/data/schema
Annotations	The electronic address at which the individual may be contacted expressed in the form "local-part@domain".
Diagram	A diagram showing a rounded rectangle labeled "Email" connected by a line with an open circle to another rounded rectangle labeled "xsd:string".
Type	xsd:string

Used by	Element spase:Person/spase:Email
Source	<pre>&lt;xsd:simpleType name="Email"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The electronic address at which the individual may be contacted expressed in the form "local-part@domain".&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:PhoneNumber

Namespace	http://www.spase-group.org/data/schema
Annotations	The symbols and numerals required to contact an individual by telephone. The string may contain punctuation marks such as dash (-) or dot (.) to separate fields within the string.
Diagram	
Type	xsd:string
Used by	Element spase:Person/spase:PhoneNumber
Source	<pre>&lt;xsd:simpleType name="PhoneNumber"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The symbols and numerals required to contact an individual by telephone. The string may contain punctuation marks such as dash (-) or dot (.) to separate fields within the string.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:FaxNumber

Namespace	http://www.spase-group.org/data/schema
Annotations	The symbols and numerals required to send a facsimile (FAX) to an individual by telephone. The string may contain punctuation marks such as dash (-) or dot (.) to separate fields within the string.
Diagram	
Type	xsd:string
Used by	Element spase:Person/spase:FaxNumber
Source	<pre>&lt;xsd:simpleType name="FaxNumber"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The symbols and numerals required to send a facsimile (FAX) to an individual by telephone. The string may contain punctuation marks such as dash (-) or dot (.) to separate fields within the string.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ORCIDIdentifier

Namespace	http://www.spase-group.org/data/schema
Annotations	A Open Researcher Contributor (ORC) identifier which is a unique alphanumeric string assigned by a registration agency ( <a href="https://orcid.org/">https://orcid.org/</a> ) to identify an individual. It has the format xxxx-xxxx-xxxx-xxxx
Diagram	
Type	xsd:string

Used by	Element spase:Person/spase:ORCIDIdentifier
Source	<pre>&lt;xsd:simpleType name="ORCIDIdentifier"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A Open Researcher Contributor (ORC) identifier which is a unique alphanumeric string assigned by a registration agency (<a href="https://orcid.org/">https://orcid.org/</a>) to identify an individual. It has the format xxxx-xxxx-xxxx-xxxx&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ImageURL

Namespace	http://www.spase-group.org/data/schema
Annotations	A URL to graphic, image or movie.
Diagram	
Type	xsd:anyURI
Used by	Element spase:Annotation/spase:ImageURL
Source	<pre>&lt;xsd:simpleType name="ImageURL"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;A URL to graphic, image or movie.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:anyURI"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:AnnotationType

Namespace	http://www.spase-group.org/data/schema									
Annotations	Identifiers for an classification of an annotation.									
Diagram										
Type	restriction of xsd:string									
Facets	<table> <tr> <td>enumeration</td> <td>Anomaly</td> <td>An interval where measurements or observations may be adversely affected.</td> </tr> <tr> <td>enumeration</td> <td>Event</td> <td>An action or observation which occurs at a point in time.</td> </tr> <tr> <td>enumeration</td> <td>Feature</td> <td>A prominent or distinctive characteristic that occurs at a location or persists over a period of time.</td> </tr> </table>	enumeration	Anomaly	An interval where measurements or observations may be adversely affected.	enumeration	Event	An action or observation which occurs at a point in time.	enumeration	Feature	A prominent or distinctive characteristic that occurs at a location or persists over a period of time.
enumeration	Anomaly	An interval where measurements or observations may be adversely affected.								
enumeration	Event	An action or observation which occurs at a point in time.								
enumeration	Feature	A prominent or distinctive characteristic that occurs at a location or persists over a period of time.								
Used by	Element spase:Annotation/spase:AnnotationType									
Source	<pre>&lt;xsd:simpleType name="AnnotationType"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for an classification of an annotation.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Anomaly"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An interval where measurements or observations may be adversely affected.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Event"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An action or observation which occurs at a point in time.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Feature"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A prominent or distinctive characteristic that occurs at a location or persists over a period of time.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>									

	</xsd:simpleType>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:ClassificationMethod

Namespace	http://www.spase-group.org/data/schema											
Annotations	Identifiers for the technique used to determine the characteristics of an object.											
Diagram												
Type	restriction of xsd:string											
Facets	<table> <tr> <td>enumeration</td> <td>Automatic</td> <td>Determined by the analysis or assessment performed by a program or server.</td> </tr> <tr> <td>enumeration</td> <td>Inferred</td> <td>Determined by the analysis of other information or resources.</td> </tr> <tr> <td>enumeration</td> <td>Inspection</td> <td>Determined by the analysis or assessment performed by a person.</td> </tr> </table>			enumeration	Automatic	Determined by the analysis or assessment performed by a program or server.	enumeration	Inferred	Determined by the analysis of other information or resources.	enumeration	Inspection	Determined by the analysis or assessment performed by a person.
enumeration	Automatic	Determined by the analysis or assessment performed by a program or server.										
enumeration	Inferred	Determined by the analysis of other information or resources.										
enumeration	Inspection	Determined by the analysis or assessment performed by a person.										
Used by	Element	spase:Annotation/spase:ClassificationMethod										
Source	<pre> &lt;xsd:simpleType name="ClassificationMethod"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the technique used to determine the characteristics of an object.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Automatic"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Determined by the analysis or assessment performed by a program or server.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Inferred"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Determined by the analysis of other information or resources.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Inspection"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Determined by the analysis or assessment performed by a person.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>											
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd											

### Simple Type spase:ConfidenceRating

Namespace	http://www.spase-group.org/data/schema														
Annotations	Identifiers for the classification of the certainty of an assertion.														
Diagram															
Type	restriction of xsd:string														
Facets	<table> <tr> <td>enumeration</td> <td>Probable</td> <td>Likely given the available evidence. Considered in the range of 4-7 on a scale of 0-10.</td> </tr> <tr> <td>enumeration</td> <td>Strong</td> <td>Highly likely given the available evidence. Considered in the range of 7-10 on a scale of 0-10.</td> </tr> <tr> <td>enumeration</td> <td>Unlikely</td> <td>Not likely given the available evidence. Considered in the range of 0 on a scale of 0-10.</td> </tr> <tr> <td>enumeration</td> <td>Weak</td> <td>Slightly likely given the available evidence. Considered in the range of 1-4 on a scale of 0-10.</td> </tr> </table>			enumeration	Probable	Likely given the available evidence. Considered in the range of 4-7 on a scale of 0-10.	enumeration	Strong	Highly likely given the available evidence. Considered in the range of 7-10 on a scale of 0-10.	enumeration	Unlikely	Not likely given the available evidence. Considered in the range of 0 on a scale of 0-10.	enumeration	Weak	Slightly likely given the available evidence. Considered in the range of 1-4 on a scale of 0-10.
enumeration	Probable	Likely given the available evidence. Considered in the range of 4-7 on a scale of 0-10.													
enumeration	Strong	Highly likely given the available evidence. Considered in the range of 7-10 on a scale of 0-10.													
enumeration	Unlikely	Not likely given the available evidence. Considered in the range of 0 on a scale of 0-10.													
enumeration	Weak	Slightly likely given the available evidence. Considered in the range of 1-4 on a scale of 0-10.													

Used by	Element spase:Annotation/spase:ConfidenceRating
Source	<pre> &lt;xsd:simpleType name="ConfidenceRating"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the classification of the certainty of an assertion.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Probable"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Likely given the available evidence. Considered in the range of 4-7 on a scale of 0-10.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Strong"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Highly likely given the available evidence. Considered in the range of 7-10 on a scale of 0-10.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Unlikely"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Not likely given the available evidence. Considered in the range of 0 on a scale of 0-10.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Weak"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Slightly likely given the available evidence. Considered in the range of 1-4 on a scale of 0-10.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:StartLocation

Namespace	http://www.spase-group.org/data/schema
Annotations	The initial position in space.
Diagram	 A UML class diagram showing a class named "StartLocation" with a multiplicity of 1..* at its end and a type "xsd:string" at the other end, connected by a directed association.
Type	xsd:string
Used by	Element spase:ObservationExtent/spase:StartLocation
Source	<pre> &lt;xsd:simpleType name="StartLocation"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The initial position in space.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:StopLocation

Namespace	http://www.spase-group.org/data/schema
Annotations	The final position in space.
Diagram	 A UML class diagram showing a class named "StopLocation" with a multiplicity of 1..* at its end and a type "xsd:string" at the other end, connected by a directed association.
Type	xsd:string
Used by	Element spase:ObservationExtent/spase:StopLocation
Source	<pre> &lt;xsd:simpleType name="StopLocation"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;The final position in space.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type `spase:AdiabaticInvariant`

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for properties of a physical system related to periodic phenomena that remains constant under slowly varying conditions.	
Diagram	<pre> classDiagram     class AdiabaticInvariant {         &lt;&lt;AdiabaticInvariant&gt;&gt;     }     class xsd.string {         &lt;&lt;xsd:string&gt;&gt;     }     AdiabaticInvariant &lt; -- xsd.string   </pre>	
Type	restriction of xsd:string	
Facets	enumeration	BounceMotion  The second adiabatic invariant is associated with periodic bounce motion of charged particles trapped between two magnetic mirrors on a magnetic field line. The second invariant, termed J, is defined by using the integral $J = m \int v   * ds$ where m is the mass of the charged particle, $v  $ is the particle velocity along the field line, and ds represents elemental arc lengths along the field line. The second adiabatic invariant is conserved as long as changes in the background magnetic field occur at time scales much longer than the bounce time of the charged particles.
	enumeration	DriftMotion  The third invariant for charged particle motion in a dipolar magnetic field is associated with drift of its guiding center in the equatorial plane. The conserved quantity, $J<sub>2</sub>$ , is equal to $q\Phi$ ; where q is the particle charge and $\Phi$ is the magnetic flux enclosed within the particle drift path.
	enumeration	MagneticMoment  A constant of motion related to the gyromotion of a particle in a magnetic field that is either static or slowly varying with respect to the gyroperiod. The magnetic moment is usually denoted by using the lower case Greek letter for mu, ?, and can be calculated by using $\mu = m u^2/2B$ where m is the particle mass, u is the velocity of the particle perpendicular to the constant or average magnetic field direction, and B is the magnitude of the magnetic field strength.
Source	<pre> &lt;xsd:simpleType name="AdiabaticInvariant"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for properties of a physical system related to periodic phenomena that remains constant under slowly varying conditions.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="BounceMotion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The second adiabatic invariant is associated with periodic bounce motion of charged particles trapped between two magnetic mirrors on a magnetic field line. The second invariant, termed J, is defined by using the integral <math>J = m \int v   * ds</math> where m is the mass of the charged particle, <math>v  </math> is the particle velocity along the field line, and ds represents elemental arc lengths along the field line. The second adiabatic invariant is conserved as long as changes in the background magnetic field occur at time scales much longer than the bounce time of the charged particles.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="DriftMotion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The third invariant for charged particle motion in a dipolar magnetic field is associated with drift of its guiding center in the equatorial plane. The conserved quantity, <math>J&lt;sub&gt;2&lt;/sub&gt;</math>, is equal to <math>q\Phi</math>; where q is the particle charge and <math>\Phi</math> is the magnetic flux enclosed within the particle drift path.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="MagneticMoment"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A constant of motion related to the gyromotion of a particle in a magnetic field that is either static or slowly varying with respect to the gyroperiod. The magnetic moment is usually denoted by using the lower case Greek letter for mu, ?, and can be calculated by using <math>\mu = m u^2/2B</math> where m is the particle mass, u is the velocity of the particle perpendicular to the constant or average magnetic field direction, and B is the magnitude of the magnetic field strength.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; </pre>	

	</xsd:simpleType>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Component

Namespace	http://www.spase-group.org/data/schema										
Annotations	Identifiers for the axis of coordinate systems.										
Diagram											
Type	restriction of xsd:string										
Facets	<table> <tr> <td>enumeration</td> <td>I</td> <td>Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>J</td> <td>Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>K</td> <td>Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</td> </tr> </table>		enumeration	I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.	enumeration	J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.	enumeration	K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.									
enumeration	J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.									
enumeration	K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.									
Source	<pre> &lt;xsd:simpleType name="Component"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the axis of coordinate systems.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="I"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.&lt;/ xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="J"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.&lt;/ xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="K"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.&lt;/ xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>										
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd										

## Simple Type spase:DirectionAngle

Namespace	http://www.spase-group.org/data/schema				
Annotations	Identifiers for the angle between a vector and a base axis.				
Diagram					
Type	restriction of xsd:string				
Facets	<table> <tr> <td>enumeration</td> <td>AzimuthAngle</td> <td>The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as <math>\arctan(j/i)</math>. This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as <math>\arctan( By /Bz)</math>.</td> </tr> </table>		enumeration	AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( By /Bz)$ .
enumeration	AzimuthAngle	The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as $\arctan(j/i)$ . This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as $\arctan( By /Bz)$ .			

	enumeration	ElevationAngle	The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as $\arctan(k/\sqrt{i^2+j^2})$ .
	enumeration	PolarAngle	The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as $\arctan([\sqrt{i^2+j^2}]/k)$ . This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as $\arccos(B_x/B_t)$ .
Source	<pre>&lt;xsd:simpleType name="DirectionAngle"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the angle between a vector and a base axis.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="AzimuthAngle"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The angle between the projection into the i-j plane of a position or measured vector and the i-axis of the coordinate system. Mathematically defined as <math>\arctan(j/i)</math>. This term could be also applied to angles measured in different planes, for example the IMF clock angle defined as <math>\arctan( B_y / B_z )</math>.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="ElevationAngle"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The angle between the position or measured vector and the i-j plane of the coordinate system. Mathematically defined as <math>\arctan(k/\sqrt{i^2+j^2})</math>.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="PolarAngle"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The angle between the position or measured vector and the k-axis of the coordinate system. Mathematically defined as <math>\arctan([\sqrt{i^2+j^2}]/k)</math>. This term could be also applied to angles between the vector and other components, for example the IMF cone angle defined as <math>\arccos(B_x/B_t)</math>.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>		
Schema location	file:///C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

### Simple Type spase:DirectionCosine

Namespace	http://www.spase-group.org/data/schema											
Annotations	Identifiers for the cosine of the angle between two vectors in a three dimensional Euclidean space.											
Diagram	<pre> classDiagram     class DirectionCosine     class xsd:string     DirectionCosine "1" -- "0..1" xsd:string   </pre>											
Type	restriction of xsd:string											
Facets	<table border="1"> <tr> <td>enumeration</td> <td>I</td> <td>Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>J</td> <td>Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>K</td> <td>Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</td> </tr> </table>			enumeration	I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.	enumeration	J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.	enumeration	K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.
enumeration	I	Projection of a vector along the first named axis of a coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.										
enumeration	J	Projection of a vector along the second named axis of a coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.										
enumeration	K	Projection of a vector along the third named axis of a coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.										
Source	<pre>&lt;xsd:simpleType name="DirectionCosine"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the cosine of the angle between two vectors in a three dimensional Euclidean space.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="I"&gt;       &lt;xsd:annotation&gt;</pre>											

```

<xsd:documentation xml:lang="en">Projection of a vector along the first named axis of a
coordinate system. Typically the X axis, but could be the R axis for an RTN coordinate system.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="J">
<xsd:annotation>
<xsd:documentation xml:lang="en">Projection of a vector along the second named axis of a
coordinate system. Typically the Y axis, but could be the T axis for an RTN coordinate system.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="K">
<xsd:annotation>
<xsd:documentation xml:lang="en">Projection of a vector along the third named axis of a
coordinate system. Typically the Z axis, but could be the N axis for an RTN coordinate system.</
xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:Earth

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the regions surrounding the Earth.		
Diagram	<pre> classDiagram     class Earth     class xsdString     Earth "1" -- "*" xsdString   </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Magnetosheath	The region between the bow shock and the magnetopause, characterized by very turbulent plasma.
	enumeration	Magnetosphere	The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.
	enumeration	Magnetosphere.Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re ( $X > -10Re$ ).
	enumeration	Magnetosphere.Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
	enumeration	Magnetosphere.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
	enumeration	Magnetosphere.Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
	enumeration	Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
Facets	enumeration	Magnetosphere.RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.

enumeration	Moon	The only natural satellite of the Earth.
enumeration	NearSurface	The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.
enumeration	NearSurface.AtmOSPHERE	The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.
enumeration	NearSurface.AuroralRegion	The region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	NearSurface.EquatorialRegion	A region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	NearSurface.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	NearSurface.Ionosphere.DRegion	The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	NearSurface.Ionosphere.ERegion	A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.
enumeration	NearSurface.Ionosphere.FRegion	A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	NearSurface.Ionosphere.Tops	The region at the upper most areas of the ionosphere.
enumeration	NearSurface.Mesosphere	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	NearSurface.MidLatitudeRegion	When considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	NearSurface.Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	NearSurface.PolarCap	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude and the region south of 60 degrees south latitude.
enumeration	NearSurface.SouthAtlanticAnomaly	The region where the Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.

	enumeration	NearSurface.Stratosphere	The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
	enumeration	NearSurface.SubAuroralRegion	When considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.
	enumeration	NearSurface.Thermosphere	The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
	enumeration	NearSurface.Troposphere	The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
	enumeration	Surface	The outermost area of a solid object.
Source	<pre> &lt;xsd:simpleType name="Earth"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the regions surrounding the Earth.&lt;/ xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Magnetosheath"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region between the bow shock and the magnetopause, characterized by very turbulent plasma.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetosphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of the planet's magnetic field.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetosphere.Magnetotail"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X &gt; -10Re).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetosphere.Main"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.&lt;/ xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetosphere.Plasmasphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.&lt;/ xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetosphere.Polar"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.&lt;/ xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Magnetosphere.RadiationBelt"&gt; </pre>		

```

<xsd:annotation>
  <xsd:documentation xml:lang="en">The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Magnetosphere.RingCurrent">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 kev charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Moon">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The only natural satellite of the Earth.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The gaseous and possibly ionized environment of a body extending from the surface to some specified altitude. For the Earth, this altitude is 2000 km.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Atmosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.AuroralRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.EquatorialRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Ionosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Ionosphere.DRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Ionosphere.ERegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Ionosphere.FRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Ionosphere.Topside">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region at the upper most areas of the ionosphere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Mesosphere">
  <xsd:annotation>

```

```

<xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the
Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.MidLatitudeRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">When considering the case of the Earth, the mid-latitude
region typically refers to two latitudinal bands, one in the northern hemisphere and the other
in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-
latitude regions does not apply to all bodies in the solar system and different latitudinal ranges
would apply for each body case by case. The mid-latitude regions may be defined by using either
planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis
of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned
to measure magnetic storm-time ring current variations.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Plasmasphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy
(cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is
known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</
xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.PolarCap">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The areas of the globe surrounding the poles and consisting
of the region north of 60 degrees north latitude an the region south of 60 degrees south
latitude.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.SouthAtlanticAnomalyRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region where the Earth's inner van Allen radiation belt
makes its closest approach to the planet's surface. The result is that, for a given altitude, the
radiation intensity is higher over this region than elsewhere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Stratosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the
troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone
layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.SubAuroralRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">When considering the case of the Earth, the sub-auroral
region typically refers to two latitudinal bands, one in the northern hemisphere and the other
in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-
auroral regions does not apply to all bodies in the solar system and different latitudinal ranges
would apply for each body case by case. The sub-auroral regions may be defined by using either
planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis
of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a
mixture of activity driven by auroral zone currents and the ring current.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Thermosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the
Mesosphere to 640+ km, temperature increasing with height.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="NearSurface.Troposphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The lowest layer of the atmosphere which begins at the
surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with
some variation due to weather factors.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Surface">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The outermost area of a solid object.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type `spase:Hardcopy`

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for permanent reproductions, or copy in the form of a physical object, of any media suitable for direct use by a person.	
Diagram	<pre> classDiagram     class Hardcopy {         &lt;&lt;Physical Object Identifier&gt;&gt;     }     class xsdString {         &lt;&lt;XML String Type&gt;&gt;     }     Hardcopy ⊞ xsdString   </pre>	
Type	restriction of xsd:string	
Facets	enumeration	Film An image recording medium on which usually a "negative" analog image is registered. A "positive" image can be recovered or reproduced from film, which is usually made of flexible materials for ease of storage and transportation.
	enumeration	Microfiche A sheet of microfilm on which many pages of material have been photographed; a magnification system is used to read the material.
	enumeration	Microfilm Film rolls on which materials are photographed at greatly reduced size; a magnification system is used to read the material.
	enumeration	Photograph An image (positive or negative) registered on a piece of photo-sensitive paper
	enumeration	PhotographicPlate A rigid (typically glass) medium that functions like film. Its rigidity is for guarding against image distortion due to medium deformation (caused by heat and humidity). Photographic plates are often used for astronomical photography.
	enumeration	Print A sheet of any written or printed material which may include notes or graphics. Multiple printed pages may be bound into a manuscript or book.
Source	<pre> &lt;xsd:simpleType name="Hardcopy"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for permanent reproductions, or copy in the form of a physical object, of any media suitable for direct use by a person.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Film"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An image recording medium on which usually a "negative" analog image is registered. A "positive" image can be recovered or reproduced from film, which is usually made of flexible materials for ease of storage and transportation.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Microfiche"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A sheet of microfilm on which many pages of material have been photographed; a magnification system is used to read the material.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Microfilm"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Film rolls on which materials are photographed at greatly reduced size; a magnification system is used to read the material.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Photograph"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;An image (positive or negative) registered on a piece of photo-sensitive paper&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="PhotographicPlate"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A rigid (typically glass) medium that functions like film. Its rigidity is for guarding against image distortion due to medium deformation (caused by heat and humidity). Photographic plates are often used for astronomical photography.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Print"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A sheet of any written or printed material which may include notes or graphics. Multiple printed pages may be bound into a manuscript or book.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;   </pre>	

	<pre> &lt;/xsd:enumeration&gt; &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type **spase:Heliosphere**

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for regions of the solar atmosphere which extends roughly from the inner corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.		
Diagram			
Type	restriction of xsd:string		
Facets	enumeration	Heliosheath	The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.
	enumeration	Inner	The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.
	enumeration	NearEarth	The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.
	enumeration	Outer	The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.
	enumeration	Remote1AU	A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.
Source	<pre> &lt;xsd:simpleType name="Heliosphere"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for regions of the solar atmosphere which extends roughly from the inner corona to the edge of the solar plasma at the heliopause separating primarily solar plasma from interstellar plasma.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Heliosheath"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region extending radially outward from the heliospheric termination shock and in which the decelerated solar wind plasma is still significant.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Inner"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of the heliosphere extending radially outward from the solar coronal base to just inside 1 AU.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="NearEarth"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The heliospheric region near the Earth which extends to and includes the area near the L1 and L2 Lagrange point.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Outer"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of the heliosphere extending radially outward from just outside 1 AU to the heliospheric termination shock.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Remote1AU"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A roughly toroidal region that includes the Earth's orbit, but exclusive of the region near the Earth.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>		

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type spase:Integral

Namespace	http://www.spase-group.org/data/schema										
Annotations	Identifiers for values above a given threshold and over area or solid-angle range.										
Diagram	<pre> classDiagram     class Integral {         &lt;&lt;restriction of xsd:string&gt;&gt;     } </pre>										
Type	restriction of xsd:string										
Facets	<table> <tr> <td>enumeration</td> <td>Area</td> <td>Integration over the extent of a planar region, or of the surface of a solid.</td> </tr> <tr> <td>enumeration</td> <td>Bandwidth</td> <td>Integration over the width a frequency band.</td> </tr> <tr> <td>enumeration</td> <td>SolidAngle</td> <td>Integration over the angle in three-dimensional space that an object subtends at a point.</td> </tr> </table>		enumeration	Area	Integration over the extent of a planar region, or of the surface of a solid.	enumeration	Bandwidth	Integration over the width a frequency band.	enumeration	SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.
enumeration	Area	Integration over the extent of a planar region, or of the surface of a solid.									
enumeration	Bandwidth	Integration over the width a frequency band.									
enumeration	SolidAngle	Integration over the angle in three-dimensional space that an object subtends at a point.									
Source	<pre> &lt;xsd:simpleType name="Integral"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for values above a given threshold and over area or solid-angle range.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Area"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Integration over the extent of a planar region, or of the surface of a solid.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Bandwidth"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Integration over the width a frequency band.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="SolidAngle"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Integration over the angle in three-dimensional space that an object subtends at a point.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt; </pre>										
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd										

## Simple Type spase:Ionosphere

Namespace	http://www.spase-group.org/data/schema													
Annotations	Identifiers for ionospheric regions.													
Diagram	<pre> classDiagram     class Ionosphere {         &lt;&lt;restriction of xsd:string&gt;&gt;     } </pre>													
Type	restriction of xsd:string													
Facets	<table> <tr> <td>enumeration</td> <td>DRegion</td> <td>The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.</td> </tr> <tr> <td>enumeration</td> <td>ERegion</td> <td>A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.</td> </tr> <tr> <td>enumeration</td> <td>FRegion</td> <td>A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.</td> </tr> <tr> <td>enumeration</td> <td>Topside</td> <td>The region at the upper most areas of the</td> </tr> </table>		enumeration	DRegion	The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.	enumeration	ERegion	A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.	enumeration	FRegion	A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.	enumeration	Topside	The region at the upper most areas of the
enumeration	DRegion	The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.												
enumeration	ERegion	A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.												
enumeration	FRegion	A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.												
enumeration	Topside	The region at the upper most areas of the												

	ionosphere.
Source	<pre> &lt;xsd:simpleType name="Ionosphere"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for ionospheric regions.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="DRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="ERegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="FRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Topside"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region at the upper most areas of the ionosphere.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Magnetosphere

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of planet's magnetic field.		
Diagram	<pre> classDiagram     class Magnetosphere     class xsd.string     Magnetosphere &lt; -- xsd.string   </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Magnetotail	The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X > -10Re).
	enumeration	Main	The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.
	enumeration	Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
	enumeration	Polar	The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.
	enumeration	RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
	enumeration	RingCurrent	One of the major current systems confined within planetary magnetospheres. The ring

	<p>current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.</p>
Source	<pre> &lt;xsd:simpleType name="Magnetosphere"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the region of space above the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of planet's magnetic field.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Magnetotail"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region on the night side of the body where the magnetic field is stretched backwards by the force of the solar wind. For Earth, the magnetotail begins at a night-side radial distance of 10 Re (X &gt; -10Re).&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Main"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of the magnetosphere where the magnetic field lines are closed, but does not include the gaseous region gravitationally bound to the body.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Plasmasphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Polar"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region near the pole of a body. For a magnetosphere the polar region is the area where magnetic field lines are open and includes the auroral zone.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="RadiationBelt"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="RingCurrent"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;One of the major current systems confined within planetary magnetospheres. The ring current circles in the magnetic equatorial plane of magnetospheres. It is generated by the longitudinal drift of energetic charged particles trapped on inner, dipole-like magnetospheric field lines. At the Earth, the ring current is carried by 10 to 200 keV charged particles typically located at L-shells between 3 and 6. The ring current is also the primary driver of the Sym H and Dst Indices of magnetic storm activity at the Earth.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Simple Type spase:NearSurface

Namespace	http://www.spase-group.org/data/schema	
Annotations	Identifiers for regions of the gaseous and possibly ionized environment of a body extending from the surface to some specified altitude.	
Diagram	<pre> classDiagram     class NearSurface {         &lt;&lt;restriction of xsd:string&gt;&gt;     }     class xsd:string     NearSurface o--&gt; xsd:string   </pre>	
Type	restriction of xsd:string	
Facets	enumeration	Atmosphere The neutral gases surrounding a body that

		extends from the surface and is bound to the body by virtue of the gravitational attraction.
enumeration	AuroralRegion	The region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.
enumeration	EquatorialRegion	A region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.
enumeration	Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.
enumeration	Ionosphere.DRegion	The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.
enumeration	Ionosphere.ERegion	A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.
enumeration	Ionosphere.FRegion	A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.
enumeration	Ionosphere.Topside	The region at the upper most areas of the ionosphere.
enumeration	Mesosphere	The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.
enumeration	MidLatitudeRegion	When considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.
enumeration	Plasmasphere	A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.
enumeration	PolarCap	The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.
enumeration	SouthAtlanticAnomalyRegion	The region where the Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.
enumeration	Stratosphere	The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.
enumeration	SubAuroralRegion	When considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere

		<p>and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.</p>
enumeration	Thermosphere	The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.
enumeration	Troposphere	The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.
Source	<pre> &lt;xsd:simpleType name="NearSurface"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for regions of the gaseous and possibly ionized environment of a body extending from the surface to some specified altitude.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Atmosphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The neutral gases surrounding a body that extends from the surface and is bound to the body by virtue of the gravitational attraction.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="AuroralRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region in the atmospheric where electrically-charged particles bombarding the upper atmosphere of a planet in the presence of a magnetic field produce an optical phenomenon.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="EquatorialRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A region centered on the equator and limited in latitude by approximately 23 degrees north and south of the equator.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ionosphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ionosphere.DRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The layer of the ionosphere that exists approximately 50 to 95 km above the surface of the Earth. One of several layers in the ionosphere.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ionosphere.ERegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A layer of ionised gas occurring at 90-150km above the ground. One of several layers in the ionosphere. Also called the The Kennelly-Heaviside layer.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ionosphere.FRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A layer that contains ionized gases at a height of around 150-800 km above sea level, placing it in the thermosphere. the F region has the highest concentration of free electrons and ions anywhere in the atmosphere. It may be thought of as comprising two layers, the F1-and F2-layers. One of several layers in the ionosphere. Also known as the Appleton layer.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Ionosphere.Topside"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region at the upper most areas of the ionosphere.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:simpleType&gt; </pre>	

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<xsd:enumeration value="Mesosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the Stratosphere to a range of 80 km to 85 km, temperature decreasing with height.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MidLatitudeRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">When considering the case of the Earth, the mid-latitude region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 23 degrees to 50 degrees. The concept of mid-latitude regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The mid-latitude regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at mid latitude on the Earth are well positioned to measure magnetic storm-time ring current variations.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Plasmasphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">A region of the magnetosphere consisting of low energy (cool) plasma. It is located above the ionosphere. The outer boundary of the plasmasphere is known as the plasmapause, which is defined by an order of magnitude drop in plasma density.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="PolarCap">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The areas of the globe surrounding the poles and consisting of the region north of 60 degrees north latitude an the region south of 60 degrees south latitude.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SouthAtlanticAnomalyRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region where the Earth's inner van Allen radiation belt makes its closest approach to the planet's surface. The result is that, for a given altitude, the radiation intensity is higher over this region than elsewhere.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Stratosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the troposphere to about 30 km, temperature increases with height. The stratosphere contains the ozone layer.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="SubAuroralRegion">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">When considering the case of the Earth, the sub-auroral region typically refers to two latitudinal bands, one in the northern hemisphere and the other in the southern hemisphere extending from about 50 degrees to low 60 degrees. The concept sub-auroral regions does not apply to all bodies in the solar system and different latitudinal ranges would apply for each body case by case. The sub-auroral regions may be defined by using either planetographic or magnetic coordinates if the magnetic dipole is closely aligned with the spin axis of a magnetized body. Ground magnetometers located at sub-auroral latitudes on the Earth measure a mixture of activity driven by auroral zone currents and the ring current.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Thermosphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The layer of the atmosphere that extends from the Mesosphere to 640+ km, temperature increasing with height.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="Troposphere">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The lowest layer of the atmosphere which begins at the surface and extends to between 7 km (4.4 mi) at the poles and 17 km (10.6 mi) at the equator, with some variation due to weather factors.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd
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## Simple Type **spase:Projection**

Namespace	http://www.spase-group.org/data/schema
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Annotations	Identifiers to projections into a coordinate system.		
Diagram			
Type	restriction of xsd:string		
Facets	enumeration	IJ	A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.
	enumeration	IK	A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.
	enumeration	JK	A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.
Source	<pre> &lt;xsd:simpleType name="Projection"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers to projections into a coordinate system.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="IJ"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A measure of the length of a position or measured vector projected into the i-j (typically X-Y) plane of the coordinate system.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="IK"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A measure of the length of a position or measured vector projected into the i-k (typically X-Z) plane of the coordinate system.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="JK"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A measure of the length of a position or measured vector projected into the j-k (typically Y-Z) plane of the coordinate system.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

## Simple Type spase:Sun

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for regions of the star upon which our solar system is centered.		
Diagram			
Type	restriction of xsd:string		
Facets	enumeration	Chromosphere	The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.
	enumeration	Corona	The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above $10^5$ K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.
	enumeration	Interior	The region inside the body which is not visible from outside the body.
	enumeration	Photosphere	The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.
	enumeration	TransitionRegion	A very narrow (<100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000

	K.
Source	<pre> &lt;xsd:simpleType name="Sun"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for regions of the star upon which our solar system is centered.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="Chromosphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region of the Sun's (or a star's) atmosphere above the temperature minimum and below the Transition Region. The solar chromosphere is approximately 400 km to 2100 km above the photosphere, and characterized by temperatures from 4500 - 28000 K.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Corona"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The outermost atmospheric region of the Sun or a star, characterized by ionization temperatures above 10^5 K. The solar corona starts at about 2100 km above the photosphere; there is no generally defined upper limit.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Interior"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The region inside the body which is not visible from outside the body.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Photosphere"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The atmospheric layer of the Sun or a star from which continuum radiation, especially optical, is emitted to space. For the Sun, the photosphere is about 500 km thick.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="TransitionRegion"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A very narrow (&lt;100 km) layer between the chromosphere and the corona where the temperature rises abruptly from about 8000 to about 500,000 K.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Text

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the encoding of sequences of characters.		
Diagram	<pre> graph LR     Text[Text] --- O(( ))     O --- xsdString[xsd:string]   </pre>		
Type	restriction of xsd:string		
Facets	enumeration	ASCII	A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 8-bit character-coding scheme.
	enumeration	Unicode	Text in multi-byte Unicode format.
Source	<pre> &lt;xsd:simpleType name="Text"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;Identifiers for the encoding of sequences of characters.&lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="ASCII"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A sequence of characters that adheres to American Standard Code for Information Interchange (ASCII) which is an 8-bit character-coding scheme.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;     &lt;xsd:enumeration value="Unicode"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Text in multi-byte Unicode format.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:enumeration&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>		

	<pre>         &lt;/xsd:annotation&gt;         &lt;/xsd:enumeration&gt;         &lt;/xsd:restriction&gt;     &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type spase:Waves

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for experimental and natural wave phenomena.		
Diagram	<pre> classDiagram     class Waves {         &lt;&lt;spase:Waves&gt;&gt;     }     class xsdString {         &lt;&lt;xsd:string&gt;&gt;     }     Waves "1" --&gt; "1" xsdString   </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Active	Exerting an influence or producing a change or effect. An active measurement is one which produces a transmission or excitation as a part of the measurement cycle.
	enumeration	Passive	Movement or effect produced by outside influence. A passive measurement is one which does not produce a transmission or excitation as a part of the measurement cycle.
Source	<pre> &lt;xsd:simpleType name="Waves"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;Identifiers for experimental and natural wave phenomena.&lt;/     &lt;xsd:documentation&gt;         &lt;/xsd:annotation&gt;     &lt;xsd:restriction base="xsd:string"&gt;         &lt;xsd:enumeration value="Active"&gt;             &lt;xsd:annotation&gt;                 &lt;xsd:documentation xml:lang="en"&gt;Exerting an influence or producing a change or effect. An active measurement is one which produces a transmission or excitation as a part of the measurement cycle.&lt;/xsd:documentation&gt;             &lt;/xsd:annotation&gt;         &lt;/xsd:enumeration&gt;         &lt;xsd:enumeration value="Passive"&gt;             &lt;xsd:annotation&gt;                 &lt;xsd:documentation xml:lang="en"&gt;Movement or effect produced by outside influence. A passive measurement is one which does not produce a transmission or excitation as a part of the measurement cycle.&lt;/xsd:documentation&gt;             &lt;/xsd:annotation&gt;         &lt;/xsd:enumeration&gt;     &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

## Simple Type spase:typeStringSequence

Namespace	http://www.spase-group.org/data/schema		
Annotations	<pre> &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;     &lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt;</pre>		
Diagram	<pre> classDiagram     class typeStringSequence {         &lt;&lt;spase:typeStringSequence&gt;&gt;     }     class xsdString {         &lt;&lt;xsd:string&gt;&gt;     }     typeStringSequence "1" --&gt; "1" xsdString   </pre>		
Type	list of xsd:string		
Source	<pre> &lt;xsd:simpleType name="typeStringSequence"&gt;     &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;             &lt;xsd:annotation&gt;                 &lt;xsd:documentation xml:lang="en"&gt;                     &lt;/xsd:documentation&gt;                 &lt;/xsd:annotation&gt;             &lt;/xsd:documentation&gt;         &lt;/xsd:annotation&gt;         &lt;xsd:list itemType="xsd:string" /&gt;     &lt;/xsd:simpleType&gt;</pre>		
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd		

## Simple Type **spase:typeFloatSequence**

Namespace	http://www.spase-group.org/data/schema
Annotations	<pre>&lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;   &lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt;</pre>
Diagram	
Type	list of xsd:float
Source	<pre>&lt;xsd:simpleType name="typeFloatSequence"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;         &lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:list itemType="xsd:float"/&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Simple Type **spase:typeID**

Namespace	http://www.spase-group.org/data/schema
Annotations	<pre>&lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;SPASE Identifier&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt;</pre>
Diagram	
Type	restriction of xsd:string
Facets	pattern [^:]+://[^/]+/.+
Source	<pre>&lt;xsd:simpleType name="typeID"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;SPASE Identifier&lt;/xsd:documentation&gt;         &lt;/xsd:annotation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:pattern value="[^:]+://[^/]+/.+/"&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

## Namespace: ""

### Attribute(s)

#### Attribute **spase:Spase / @lang**

Namespace	No namespace
Type	xsd:string
Properties	default: en
Used by	Complex Type spase:Spase
Source	<pre>&lt;xsd:attribute name="lang" type="xsd:string" default="en"/&gt;</pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

#### Attribute **spase:typeValue / @Units**

Namespace	No namespace
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Annotations	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;A description of the standardized measurement increments in which a value is specified. The description is represented as a mathematical phrase. Units should be represented by widely accepted representation. For example, units should conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures (see &lt;http://www.bipm.fr/&gt; ) when appropriate or use tokens like "Re" to represent units of the Radius of the Earth. Within a phrase the circumflex (^) is used to indicate a power, a star (*) is used to indicate multiplication and a slash (/) division. When symbols are not separated by a mathematical operator, multiplication is assumed. Symbols for base units can be found at: &lt;http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols&gt; and those for common derived units can be found at: &lt;http://www.bipm.fr/en/si/derived_units/2-2-2.html&gt;&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type spase:typeValue
Source	<pre> &lt;xsd:attribute name="Units" type="xsd:string"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;A description of the standardized measurement increments in which a value is specified. The description is represented as a mathematical phrase. Units should be represented by widely accepted representation. For example, units should conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures (see &lt;http://www.bipm.fr/&gt; ) when appropriate or use tokens like "Re" to represent units of the Radius of the Earth. Within a phrase the circumflex (^) is used to indicate a power, a star (*) is used to indicate multiplication and a slash (/) division. When symbols are not separated by a mathematical operator, multiplication is assumed. Symbols for base units can be found at: &lt;http://www.bipm.fr/en/si/si_brochure/chapter2/2-1/#symbols&gt; and those for common derived units can be found at: &lt;http://www.bipm.fr/en/si/derived_units/2-2-2.html&gt;&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:attribute&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd

### Attribute spase:typeValue / @UnitsConversion

Namespace	No namespace
Annotations	<pre> &lt;xsd:annotation&gt;   &lt;xsd:documentation xml:lang="en"&gt;The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number &gt; x", where "number" is a numerical value and "x" is the appropriate SI units. The basic SI units are Enumerated: m (meter), N (newton), kg (kilogram), Pa (pascal), s (second), Hz (hertz), A (ampere), V (volt), K (kelvin), W (watt), rad (radian), J (joule), sr (steradian), C (coulomb), T (tesla), ohm (ohm), mho (mho or seimens), H (henry), and F (farad). Two useful units which are not SI units are: degree (angle), and unitless (no units). An example is: "1.0E-9&gt;T" which converts the units, presumable nT, to Tesla. Another example is: "1.0e+3&gt;m/s" which converts a velocity expressed in kilometers per second to meters per second.&lt;/xsd:documentation&gt; &lt;/xsd:annotation&gt; </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type spase:typeValue
Source	<pre> &lt;xsd:attribute name="UnitsConversion" type="xsd:string"&gt;   &lt;xsd:annotation&gt;     &lt;xsd:documentation xml:lang="en"&gt;       &lt;xsd:annotation&gt;         &lt;xsd:documentation xml:lang="en"&gt;The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number &gt; x", where "number" is a numerical value and "x" is the appropriate SI units. The basic SI units are Enumerated: m (meter), N (newton), kg (kilogram), Pa (pascal), s (second), Hz (hertz), A (ampere), V (volt), K (kelvin), W (watt), rad (radian), J (joule), sr (steradian), C (coulomb), T (tesla), ohm (ohm), mho (mho or seimens), H (henry), and F (farad). Two useful units which are not SI units are: degree (angle), and unitless (no units). An example is: "1.0E-9&gt;T" which converts the units, presumable nT, to Tesla. Another example is: "1.0e+3&gt;m/s" which converts a velocity expressed in kilometers per second to meters per second.&lt;/xsd:documentation&gt;       &lt;/xsd:annotation&gt;     &lt;/xsd:documentation&gt;   &lt;/xsd:annotation&gt; &lt;/xsd:attribute&gt; </pre>
Schema location	file:/C:/Projects/work/spase/data-model/spase-model-tools/build/bin/spase-2_3_1.xsd