

Schema documentation for spase-1_1_0.xsd

19 november 2010

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

Schemas

Main schema spase-1_1_0.xsd

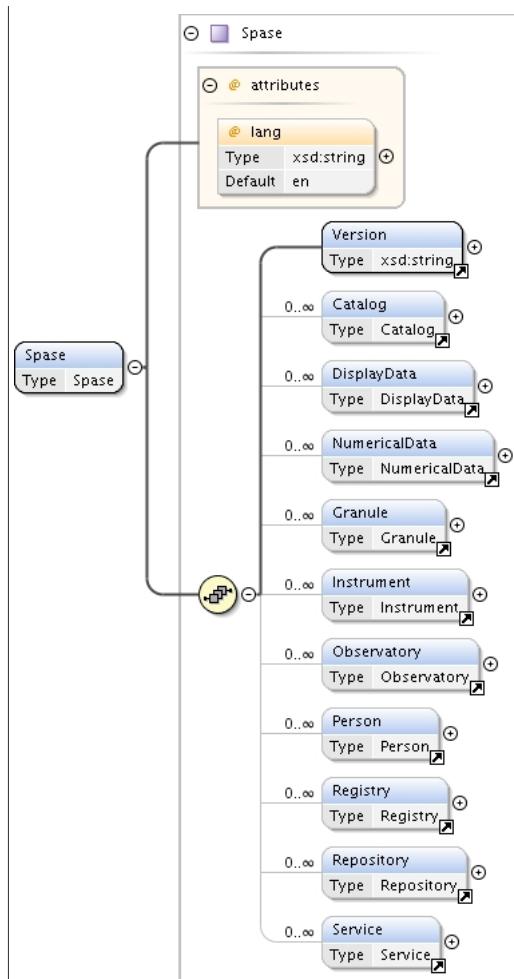
Namespace	http://www.spase-group.org/data/schema
Properties	attribute form default: unqualified element form default: qualified
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Elements

Element Spase

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



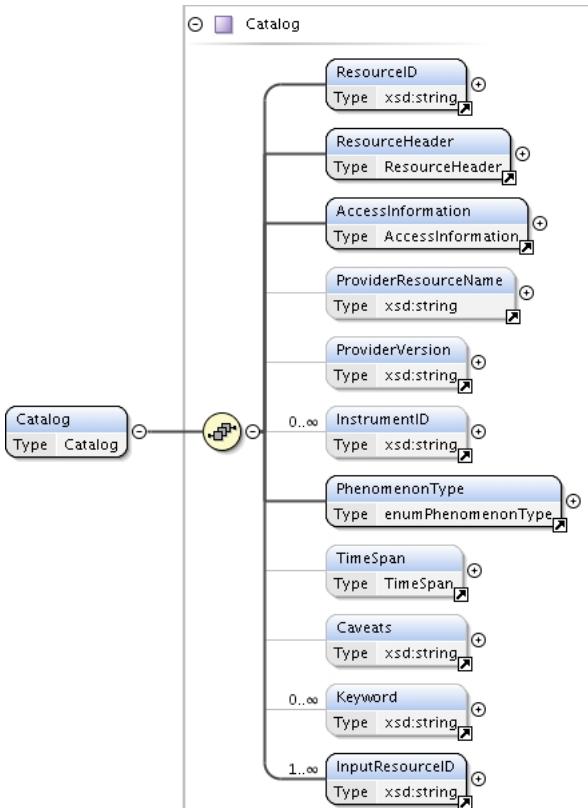
Type	Spase										
Properties	content: complex										
Model	Version , Catalog* , DisplayData* , NumericalData* , Granule* , Instrument* , Observatory* , Person* , Registry* , Repository* , Service*										
Children	Catalog, DisplayData, Granule, Instrument, NumericalData, Observatory, Person, Registry, Repository, Service, Version										
Instance	<pre> <Spase lang="en"> <Version>{1,1}</Version> <Catalog>{0,unbounded}</Catalog> <DisplayData>{0,unbounded}</DisplayData> <NumericalData>{0,unbounded}</NumericalData> <Granule>{0,unbounded}</Granule> <Instrument>{0,unbounded}</Instrument> <Observatory>{0,unbounded}</Observatory> <Person>{0,unbounded}</Person> <Registry>{0,unbounded}</Registry> <Repository>{0,unbounded}</Repository> <Service>{0,unbounded}</Service> </Spase> </pre>										
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>lang</td> <td>xsd:string</td> <td></td> <td>en</td> <td>optional</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	lang	xsd:string		en	optional
QName	Type	Fixed	Default	Use							
lang	xsd:string		en	optional							
Source	<xsd:element name="Spase" type="Spase" />										
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd										

Element Version

Namespace	http://www.spase-group.org/data/schema
Annotations	Indicates the release identifier. When used to indicate the release of the SPASE data model, it is in the form Major.Minor.Fix

	<p>where Major: A significant change in the architecture of the model or rewrite of the implementation. This includes major changes in design or implementation language. This number starts at 0 (zero). Minor: An addition of terms or features that require changes in documentation/external API. This number starts at 0 (zero). Fix: Any change that doesn't require documentation/external API changes. This number starts at 0 (zero).</p>
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type Spase
Source	<pre><xsd:element name="Version" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Indicates the release identifier. When used to indicate the release of the SPASE data model, it is in the form Major.Minor.Fix where Major: A significant change in the architecture of the model or rewrite of the implementation. This includes major changes in design or implementation language. This number starts at 0 (zero). Minor: An addition of terms or features that require changes in documentation/external API. This number starts at 0 (zero). Fix: Any change that doesn't require documentation/external API changes. This number starts at 0 (zero).</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Catalog

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

Used by	Complex Type Spase
Model	ResourceID , ResourceHeader , AccessInformation , ProviderResourceName{0,1} , ProviderVersion{0,1} , InstrumentID* , PhenomenonType , TimeSpan{0,1} , Caveats{0,1} , Keyword* , InputResourceID+
Children	AccessInformation, Caveats, InputResourceID, InstrumentID, Keyword, PhenomenonType, ProviderResourceName, ProviderVersion, ResourceHeader, ResourceID, TimeSpan
Instance	<Catalog> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> <AccessInformation>{1,1}</AccessInformation> <ProviderResourceName>{0,1}</ProviderResourceName> <ProviderVersion>{0,1}</ProviderVersion> <InstrumentID>{0,unbounded}</InstrumentID> <PhenomenonType>{1,1}</PhenomenonType> <TimeSpan>{0,1}</TimeSpan> <Caveats>{0,1}</Caveats> <Keyword>{0,unbounded}</Keyword> <InputResourceID>{1,unbounded}</InputResourceID> </Catalog>
Source	<xsd:element name="Catalog" type="Catalog" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

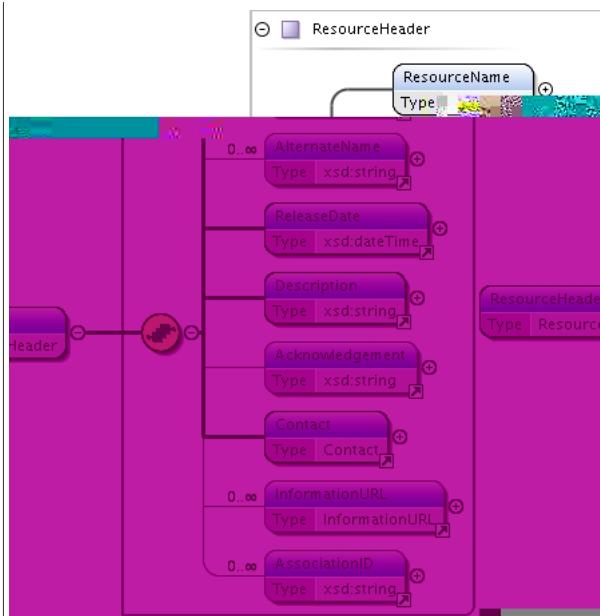
Element ResourceID

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	
Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, Granule, Instrument, NumericalData, Observatory, Person, Registry, Repository, Service
Source	<xsd:element name="ResourceID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ResourceHeader

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



Type	ResourceHeader
Properties	content: complex
Used by	Complex Types Catalog, DisplayData, Instrument, NumericalData, Observatory, Registry, Repository, Service
Model	ResourceName , AlternateName* , ReleaseDate , Description , Acknowledgement{0,1} , Contact , InformationURL* , AssociationID*
Children	Acknowledgement, AlternateName, AssociationID, Contact, Description, InformationURL, ReleaseDate, ResourceName
Instance	<ResourceHeader><ResourceName>{1,1}</ResourceName><AlternateName>{0,unbounded}</AlternateName><ReleaseDate>{1,1}</ReleaseDate><Description>{1,1}</Description><Acknowledgement>{0,1}</Acknowledgement><Contact>{1,1}</Contact><InformationURL>{0,unbounded}</InformationURL><AssociationID>{0,unbounded}</AssociationID></ResourceHeader>
Source	<xsd:element name="ResourceHeader" type="ResourceHeader" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	
Type	xsd:string
Properties	content: simple
Used by	Complex Type ResourceHeader
Source	<xsd:element name="ResourceName" type="xsd:string"><xsd:annotation><xsd:documentation xml:lang="en">A short textual description of a resource which may be useful when read by a person.</xsd:documentation></xsd:annotation></xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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 synonym for a resource.
Diagram	A UML class diagram fragment showing the 'AlternateName' element. It is represented by a rounded rectangle labeled 'AlternateName' with a small circle icon to its right. A line connects it to another rounded rectangle labeled 'xsd:string' with a small square icon to its right. Below the rectangles, the word 'Type' is followed by 'xsd:string'.
Type	xsd:string
Properties	content: simple
Used by	Complex Type ResourceHeader
Source	<pre><xsd:element name="AlternateName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">An alternative or shortened name used to refer to a resource. This includes acronyms, expanded names or synonym for a resource.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ReleaseDate

Namespace	http://www.spase-group.org/data/schema
Annotations	The point in time when an item is made available.
Diagram	A UML class diagram fragment showing the 'ReleaseDate' element. It is represented by a rounded rectangle labeled 'ReleaseDate' with a small circle icon to its right. A line connects it to another rounded rectangle labeled 'xsd:dateTime' with a small square icon to its right. Below the rectangles, the word 'Type' is followed by 'xsd:dateTime'.
Type	xsd:dateTime
Properties	content: simple
Used by	Complex Types Granule, Person, ResourceHeader
Source	<pre><xsd:element name="ReleaseDate" type="xsd:dateTime"> <xsd:annotation> <xsd:documentation xml:lang="en">The point in time when an item is made available.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Description

Namespace	http://www.spase-group.org/data/schema
Annotations	A detailed description of the resource which 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 it.
Diagram	A UML class diagram fragment showing the 'Description' element. It is represented by a rounded rectangle labeled 'Description' with a small circle icon to its right. A line connects it to another rounded rectangle labeled 'xsd:string' with a small square icon to its right. Below the rectangles, the word 'Type' is followed by 'xsd:string'.
Type	xsd:string
Properties	content: simple
Used by	Complex Types AccessURL, Dimension, InformationURL, PhysicalParameter, ResourceHeader
Source	<pre><xsd:element name="Description" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">A detailed description of the resource which 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 it.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	A UML class diagram fragment showing an element named "Acknowledgement". It has a compartment labeled "Type" containing "xsd:string". A line connects this compartment to a rounded rectangle representing the type "xsd:string".
Type	xsd:string
Properties	content: simple
Used by	Complex Types AccessInformation, ResourceHeader
Source	<pre><xsd:element name="Acknowledgement" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The individual, group or organization which should be acknowledged when the data is used in or contributes to a presentation or publication.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Contact

Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram fragment showing an element named "Contact". It has a compartment labeled "Type" containing "Contact". Inside the "Contact" box, there is another box labeled "PersonID" with type "xsd:string" and multiplicity "1..oo". There is also a box labeled "Role" with type "enumRole" and multiplicity "1..oo". A line connects the "Contact" box to the "PersonID" box, and another line connects it to the "Role" box.
Type	Contact
Properties	content: complex
Used by	Complex Type ResourceHeader
Model	PersonID , Role+
Children	PersonID, Role
Instance	<pre><Contact> <PersonID>{1,1}</PersonID> <Role>{1,unbounded}</Role> </Contact></pre>
Source	<xsd:element name="Contact" type="Contact" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element PersonID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier assigned to a Person description.
Diagram	A UML class diagram fragment showing an element named "PersonID". It has a compartment labeled "Type" containing "xsd:string". A line connects this compartment to a rounded rectangle representing the type "xsd:string".
Type	xsd:string
Properties	content: simple
Used by	Complex Type Contact
Source	<pre><xsd:element name="PersonID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The identifier assigned to a Person description.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Role

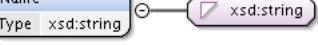
Namespace	http://www.spase-group.org/data/schema		
Annotations	The assigned or assumed function or position of an individual.		
Diagram	<pre> classDiagram class Role { <<Role>> <<Type enumRole>> } class enumRole { <<enumRole>> } Role "1" -- "1" enumRole </pre>		
Type	enumRole		
Properties	content: simple		
Facets	enumeration	CoInvestigator	An individual who is a scientific peer and major participant for an investigation.
	enumeration	DataProducer	An individual who generated the resource and is familiar with its provenance.
	enumeration	GeneralContact	An individual who can provide information on a range of subjects or who can direct you to a domain expert.
	enumeration	PrincipalInvestigator	An individual who is the administrative and scientific lead for an investigation.
	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	Scientist	An individual who is an expert in the phenomenon and related physics represented by the resource.
	enumeration	TeamLeader	An individual who is the scientific and administrative lead for 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
Used by	Complex Type	Contact	
Source	<pre> <xsd:element name="Role" type="enumRole"> <xsd:annotation> <xsd:documentation xml:lang="en">The assigned or assumed function or position of an individual.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Element InformationURL

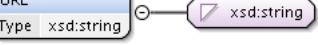
Namespace	http://www.spase-group.org/data/schema		
Diagram	<pre> classDiagram class InformationURL { <<InformationURL>> <<Type InformationURL>> Name "xsd:string" URL "xsd:string" Description "xsd:string" } InformationURL "1" -- "1" InformationURL </pre>		
Type	InformationURL		
Properties	content: complex		
Used by	Complex Type	ResourceHeader	
Model	Name{0,1} , URL , Description{0,1}		

Children	Description, Name, URL
Instance	<InformationURL> <Name>{0,1}</Name> <URL>{1,1}</URL> <Description>{0,1}</Description> </InformationURL>
Source	<xsd:element name="InformationURL" type="InformationURL"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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
Properties	content: simple
Used by	Complex Types AccessURL, InformationURL, PhysicalParameter
Source	<xsd:element name="Name" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">A language unit by which a person or thing is known.</xsd:documentation> </xsd:annotation> </xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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
Properties	content: simple
Used by	Complex Types AccessURL, Granule, InformationURL
Source	<xsd:element name="URL" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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
Properties	content: simple
Used by	Complex Type ResourceHeader
Source	<pre><xsd:element name="AssociationID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The resource identifier for a resource with which this resource is closely associated.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element AccessInformation

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre>classDiagram class AccessInformation { RepositoryID : xsd:string Availability : enumAvailability AccessRights : enumAccessRights Format : enumFormat Encoding : enumEncoding Acknowledgement : xsd:string AccessURL : AccessURL * 1..∞ } AccessInformation < -- AccessInformation</pre>
Type	AccessInformation
Properties	content: complex
Used by	Complex Types Catalog, DisplayData, NumericalData
Model	RepositoryID , Availability{0,1} , AccessRights{0,1} , AccessURL+ , Format , Encoding{0,1} , Acknowledgement{0,1}
Children	AccessRights, AccessURL, Acknowledgement, Availability, Encoding, Format, RepositoryID
Instance	<pre><AccessInformation> <RepositoryID>{1,1}</RepositoryID> <Availability>{0,1}</Availability> <AccessRights>{0,1}</AccessRights> <AccessURL>{1,unbounded}</AccessURL> <Format>{1,1}</Format> <Encoding>{0,1}</Encoding> <Acknowledgement>{0,1}</Acknowledgement> </AccessInformation></pre>
Source	<xsd:element name="AccessInformation" type="AccessInformation"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element RepositoryID

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

Type	xsd:string
Properties	content: simple
Used by	Complex Type AccessInformation
Source	<pre><xsd:element name="RepositoryID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en"> </xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Availability

Namespace	http://www.spase-group.org/data/schema								
Annotations	An indication of the method or service which may be used to access the resource.								
Diagram	<pre> classDiagram class Availability { <<enumAvailability>> } class enumAvailability { <<Type>> } Availability < -- enumAvailability </pre>								
Type	enumAvailability								
Properties	content: simple								
Facets	<table> <tr> <td>enumeration</td> <td>Offline</td> <td>Not directly accessible electronically. This includes resources which may be moved to an online 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 online 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 online status in response to a given request.							
enumeration	Online	Directly accessible electronically.							
Used by	Complex Type AccessInformation								
Source	<pre><xsd:element name="Availability" type="enumAvailability"> <xsd:annotation> <xsd:documentation xml:lang="en">An indication of the method or service which may be used to access the resource.</xsd:documentation> </xsd:annotation> </xsd:element></pre>								
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd								

Element AccessRights

Namespace	http://www.spase-group.org/data/schema								
Annotations	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 { <<enumAccessRights>> } class enumAccessRights { <<Type>> } AccessRights < -- enumAccessRights </pre>								
Type	enumAccessRights								
Properties	content: simple								
Facets	<table> <tr> <td>enumeration</td> <td>Open</td> <td>Access is granted to everyone.</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	Restricted	Access to the product is regulated and requires some form of identification.
enumeration	Open	Access is granted to everyone.							
enumeration	Restricted	Access to the product is regulated and requires some form of identification.							
Used by	Complex Type AccessInformation								
Source	<pre><xsd:element name="AccessRights" type="enumAccessRights"> <xsd:annotation> <xsd:documentation xml:lang="en">Permissions granted or denied by the host of a product to allow other users to access and use the resource.</xsd:documentation> </xsd:annotation> </xsd:element></pre>								
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd								

Element AccessURL

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	AccessURL
Properties	content: complex
Used by	Complex Types AccessInformation, Service
Model	Name{0,1} , URL , Description{0,1}
Children	Description, Name, URL
Instance	<AccessURL> <Name>{0,1}</Name> <URL>{1,1}</URL> <Description>{0,1}</Description> </AccessURL>
Source	<xsd:element name="AccessURL" type="AccessURL"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Format

Namespace	http://www.spase-group.org/data/schema																							
Annotations	The organization of data according to preset specifications. The value is selected from a list of accepted names for known, well documented formats.																							
Diagram																								
Type	enumFormat																							
Properties	content: simple																							
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>FITS</td> <td>Flexible Image Transport System (FITS) is a digital format primarily designed to store</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	FITS	Flexible Image Transport System (FITS) is a digital format primarily designed to store
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		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 < http://www.w3.org/MarkUp/ >
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	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 Centers Network Common Data Form (NetCDF). A self-describing data portable data format for array-oriented data access. See < http://my.unidata.ucar.edu/content/software/netcdf/ >
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	QuickTime	A format for digital movies, as defined by Apple Computer. See < http://developer.apple.com/quicktime/ >
enumeration	Text	ASCII text

	enumeration	TIFF	A binary format for still pictures. Tagged Image Format File (TIFF). Originally developed by Aldus and now controlled by Adobe.
	enumeration	UDF	Universal Data Format (UDF). The Optical Technology Storage Associations Universal Disk Format, based on ISO 13346. See < http://www.osta.org/specs/index.htm >
	enumeration	VOTable	A proposed XML 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 < http://www.w3.org/XML/ >
Used by	Complex Type	AccessInformation	
Source			<pre><xsd:element name="Format" type="enumFormat"> <xsd:annotation> <xsd:documentation xml:lang="en">The organization of data according to preset specifications. The value is selected from a list of accepted names for known, well documented formats.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location			file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Encoding

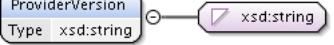
Namespace	http://www.spase-group.org/data/schema		
Annotations	A set of unambiguous rules that establishes the representation of information within a file.		
Diagram	<pre> classDiagram class Encoding { <<Type enumEncoding>> } class enumEncoding { <<Type enumEncoding>> } Encoding < -- enumEncoding </pre>		
Type	enumEncoding		
Properties	content: simple		
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	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	BZIP2	An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See < http://www.bzip.org/ >
	enumeration	GZIP	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/ >
	enumeration	None	A lack or absence of anything.
	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	Complex Type AccessInformation
Source	<pre><xsd:element name="Encoding" type="enumEncoding"> <xsd:annotation> <xsd:documentation xml:lang="en">A set of unambiguous rules that establishes the representation of information within a file.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

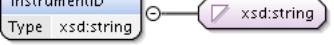
Element ProviderResourceName

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	
Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, NumericalData
Source	<pre><xsd:element name="ProviderResourceName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">A short textual description of a resource used by the provider which may be used to identify a resource.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	
Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, NumericalData
Source	<pre><xsd:element name="ProviderVersion" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element InstrumentID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier of an Instrument resource.
Diagram	

Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, NumericalData
Source	<pre><xsd:element name="InstrumentID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The identifier of an Instrument resource.</ xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element PhenomenonType

Namespace	http://www.spase-group.org/data/schema																												
Annotations	The characteristics or categorization of an event type.																												
Diagram	<pre> classDiagram class PhenomenonType { <<PhenomenonType>> <<Type enumPhenomenonType>> } class enumPhenomenonType { <<enumPhenomenonType>> } PhenomenonType < -- enumPhenomenonType </pre>																												
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Properties	content: simple																												
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Aurora</td> <td></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> <tr> <td>enumeration</td> <td>CoronalMassEjection</td> <td>A solar event which involves a burst of plasma which is ejected from the Sun into the interplanetary medium.</td> </tr> <tr> <td>enumeration</td> <td>EnergeticSolarParticleEvent</td> <td>enhancement of interplanetary fluxes of energetic ions accelerated by interplanetary shocks and/or solar flares.</td> </tr> <tr> <td>enumeration</td> <td>ForbushDecrease</td> <td>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 CMEs, that sweep some galactic cosmic rays away from Earth.</td> </tr> <tr> <td>enumeration</td> <td>GeomagneticStorm</td> <td>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.</td> </tr> <tr> <td>enumeration</td> <td>InterplanetaryShock</td> <td>A shock propagating generally antisunward through the slower solar wind, often seen in front of CME-associated plasma clouds.</td> </tr> <tr> <td>enumeration</td> <td>MagnetopauseCrossing</td> <td>A crossing of the interface between the shocked solar wind in the magnetosheath and the magnetic field and plasma in the magnetosphere.</td> </tr> <tr> <td>enumeration</td> <td>SolarFlare</td> <td>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.</td> </tr> </table>		enumeration	Aurora		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	CoronalMassEjection	A solar event which involves a burst of plasma which is ejected from the Sun into the interplanetary medium.	enumeration	EnergeticSolarParticleEvent	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 CMEs, 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 antisunward through the slower solar wind, often seen in front of CME-associated plasma clouds.	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	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.
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	enumeration	SolarWindExtreme	Intervals of unusually large or small values of solar wind attributes such as flow speed and ion density.
	enumeration	Statistics	
Used by	Complex Type	Catalog	
Source	<xsd:element name="PhenomenonType" type="enumPhenomenonType"> <xsd:annotation> <xsd:documentation xml:lang="en">The characteristics or categorization of an event type.</xsd:documentation> </xsd:annotation> </xsd:element>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Element TimeSpan

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	TimeSpan
Properties	content: complex
Used by	Complex Types Catalog, TemporalDescription
Model	StartDate , EndDate{0,1} , RelativeEndDate{0,1}
Children	EndDate, RelativeEndDate, StartDate
Instance	<TimeSpan> <StartDate>{1,1}</StartDate> <EndDate>{0,1}</EndDate> <RelativeEndDate>{0,1}</RelativeEndDate> </TimeSpan>
Source	<xsd:element name="TimeSpan" type="TimeSpan" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element StartDate

Namespace	http://www.spase-group.org/data/schema
Annotations	The specification of a starting point in time.
Diagram	
Type	xsd:dateTime
Properties	content: simple
Used by	Complex Types Granule, TimeSpan
Source	<xsd:element name="StartDate" type="xsd:dateTime"> <xsd:annotation> <xsd:documentation xml:lang="en">The specification of a starting point in time.</xsd:documentation> </xsd:annotation> </xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element EndDate

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
Properties	content: simple
Used by	Complex Type TimeSpan
Source	<pre><xsd:element name="EndDate" type="xsd:dateTime"> <xsd:annotation> <xsd:documentation xml:lang="en">The specification of a stopping point in time.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element RelativeEndDate

Namespace	http://www.spase-group.org/data/schema
Annotations	An indication of the nominal end date relative to the present.
Diagram	
Type	xsd:duration
Properties	content: simple
Used by	Complex Type TimeSpan
Source	<pre><xsd:element name="RelativeEndDate" type="xsd:duration"> <xsd:annotation> <xsd:documentation xml:lang="en">An indication of the nominal end date relative to the present.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Caveats

Namespace	http://www.spase-group.org/data/schema
Annotations	Information which may be important in the avoidance of misuse of the resource. This includes things such as instrument maladies, corruption or contamination.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, Instrument, NumericalData, PhysicalParameter
Source	<pre><xsd:element name="Caveats" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Information which may be important in the avoidance of misuse of the resource. This includes things such as instrument maladies, corruption or contamination.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	<pre> classDiagram class Keyword { <<Keyword>> <<xsd:string>> } Keyword "1" -- "0" Keyword </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, NumericalData
Source	<pre> <xsd:element name="Keyword" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">A word or phrase that is relevant to the resource but does not exist in other documentary information.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

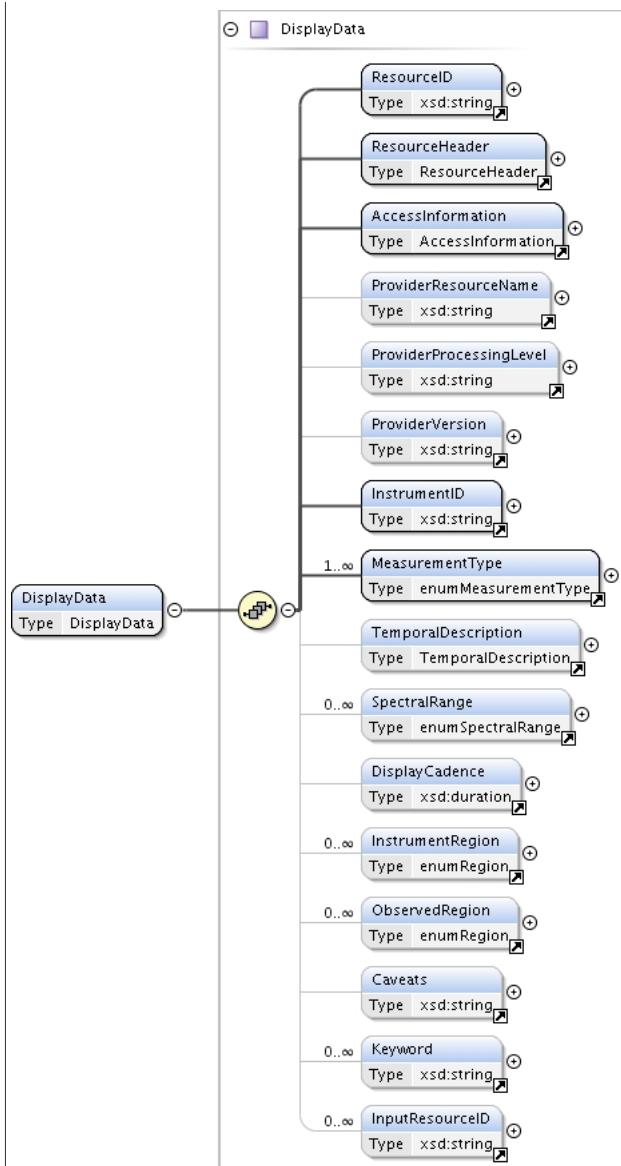
Element InputResourceID

Namespace	http://www.spase-group.org/data/schema
Annotations	The resource identifier for a resource which was used to generate this resource.
Diagram	<pre> classDiagram class InputResourceID { <<InputResourceID>> <<xsd:string>> } InputResourceID "1" -- "0" InputResourceID </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Types Catalog, DisplayData, NumericalData
Source	<pre> <xsd:element name="InputResourceID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The resource identifier for a resource which was used to generate this resource.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element DisplayData

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



Type	DisplayData
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ResourceHeader , AccessInformation , ProviderResourceName{0,1} , ProviderProcessingLevel{0,1} , ProviderVersion{0,1} , InstrumentID , MeasurementType+ , TemporalDescription{0,1} , SpectralRange* , DisplayCadence{0,1} , InstrumentRegion* , ObservedRegion* , Caveats{0,1} , Keyword* , InputResourceId*
Children	AccessInformation, Caveats, DisplayCadence, InputResourceID, InstrumentID, InstrumentRegion, Keyword, MeasurementType, ObservedRegion, ProviderProcessingLevel, ProviderResourceName, ProviderVersion, ResourceHeader, ResourceID, SpectralRange, TemporalDescription
Instance	<pre> <DisplayData> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> <AccessInformation>{1,1}</AccessInformation> <ProviderResourceName>{0,1}</ProviderResourceName> <ProviderProcessingLevel>{0,1}</ProviderProcessingLevel> <ProviderVersion>{0,1}</ProviderVersion> <InstrumentID>{1,1}</InstrumentID> <MeasurementType>{1,unbounded}</MeasurementType> <TemporalDescription>{0,1}</TemporalDescription> <SpectralRange>{0,unbounded}</SpectralRange> <DisplayCadence>{0,1}</DisplayCadence> <InstrumentRegion>{0,unbounded}</InstrumentRegion> <ObservedRegion>{0,unbounded}</ObservedRegion> <Caveats>{0,1}</Caveats> <Keyword>{0,unbounded}</Keyword> </pre>

	<InputResourceID>{0 ,unbounded}</InputResourceID> </DisplayData>
Source	<xsd:element name="DisplayData" type="DisplayData"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ProviderProcessingLevel

Namespace	http://www.spase-group.org/data/schema
Annotations	The provider specific classification of the processing performed on the product.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Types DisplayData, NumericalData
Source	<pre><xsd:element name="ProviderProcessingLevel" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The provider specific classification of the processing performed on the product.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element MeasurementType

Namespace	http://www.spase-group.org/data/schema															
Annotations	A characterization of the quantitative assessment of a phenomenon.															
Diagram																
Type	enumMeasurementType															
Properties	content: simple															
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>ChargedParticleFlux</td> <td>Measurements of fluxes of charged or ionized particles at above thermal energies, including relativistic particles of solar and galactic origin. May give simple fluxes, but more complete distributions are sometimes possible. Composition measurements may also be made.</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>DynamicSpectra</td> <td>A three-dimensional representation of successive spectra which allows time evolution to be clearly seen. Time is plotted along the abscissa, frequency (or particle energy) along the ordinate, and the spectral power density (or differential particle flux) is represented by different shades of grey, or color. This representation is also known as a spectrogram.</td> </tr> <tr> <td>enumeration</td> <td>ElectricField</td> <td>Measurements of electric field vectors (sometimes not all components) as a time series.</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	ChargedParticleFlux	Measurements of fluxes of charged or ionized particles at above thermal energies, including relativistic particles of solar and galactic origin. May give simple fluxes, but more complete distributions are sometimes possible. Composition measurements may also be made.	enumeration	Dopplergram	A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.	enumeration	DynamicSpectra	A three-dimensional representation of successive spectra which allows time evolution to be clearly seen. Time is plotted along the abscissa, frequency (or particle energy) along the ordinate, and the spectral power density (or differential particle flux) is represented by different shades of grey, or color. This representation is also known as a spectrogram.	enumeration	ElectricField	Measurements of electric field vectors (sometimes not all components) as a time series.
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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	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	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	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. The SI unit of irradiance is watts per square meter ($\text{W}\cdot\text{m}^{-2}$).
enumeration	MagneticField	Measurements of magnetic field vectors (sometimes not all components) as time series; can be space- or ground-based. Also, [Zeeman splitting, etc. based]: 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.
enumeration	NeutralGas	Measurements of neutral atomic and molecular components of a body and its surrounding environments.
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 describe 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. The SI unit of radiance is watts per steradian per square meter ($\text{W}\cdot\text{sr}^{-1}\cdot\text{m}^{-2}$).
enumeration	RadioandPlasmaWaves	Measurements of electric and/or magnetic fields using electric or magnetic antennas at frequencies anywhere between the spacecraft spin frequency and the characteristic frequencies of the ambient plasma. The output can be waveform,

		power spectral density, or other statistical parameters.
	enumeration RadioSoundings	Measurements of plasma density, magnetic field and possibly other parameters of the space environment by active probing of the plasma by radio waves.
	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.).
Used by	Complex Types	DisplayData, NumericalData
Source		<pre><xsd:element name="MeasurementType" type="enumMeasurementType"> <xsd:annotation> <xsd:documentation xml:lang="en">A characterization of the quantitative assessment of a phenomenon.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element TemporalDescription

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class TemporalDescription { <<TemporalDescription>> TimeSpan Cadence Exposure } class TimeSpan { <<TimeSpan>> Type TimeSpan } class Cadence { <<Cadence>> Type xsd:duration } class Exposure { <<Exposure>> Type xsd:duration } TemporalDescription < -- TimeSpan TemporalDescription < -- Cadence TemporalDescription < -- Exposure </pre>
Type	TemporalDescription
Properties	content: complex
Used by	Complex Types
	DisplayData, NumericalData
Model	TimeSpan , Cadence{0,1} , Exposure{0,1}
Children	Cadence, Exposure, TimeSpan
Instance	<pre> <TemporalDescription> <TimeSpan>{1,1}</TimeSpan> <Cadence>{0,1}</Cadence> <Exposure>{0,1}</Exposure> </TemporalDescription> </pre>
Source	<xsd:element name="TemporalDescription" type="TemporalDescription"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Cadence

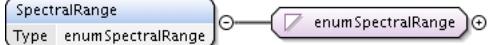
Namespace	http://www.spase-group.org/data/schema
Annotations	The time interval between the start of successive measurements.
Diagram	<pre> classDiagram class TemporalDescription { <<TemporalDescription>> TimeSpan Cadence Exposure } class Cadence { <<Cadence>> Type xsd:duration } TemporalDescription < -- Cadence </pre>
Type	xsd:duration
Properties	content: simple
Used by	Complex Types
	PhysicalParameter, TemporalDescription
Source	<pre><xsd:element name="Cadence" type="xsd:duration"> <xsd:annotation> <xsd:documentation xml:lang="en">The time interval between the start of successive</pre>

	<pre>measurements.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Exposure

Namespace	http://www.spase-group.org/data/schema
Annotations	The time interval over which an individual measurement is taken.
Diagram	
Type	xsd:duration
Properties	content: simple
Used by	Complex Type TemporalDescription
Source	<pre><xsd:element name="Exposure" type="xsd:duration"> <xsd:annotation> <xsd:documentation xml:lang="en">The time interval over which an individual measurement is taken.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element SpectralRange

Namespace	http://www.spase-group.org/data/schema																								
Annotations	The general term used to describe wavelengths or frequencies within a given span of values for those quantities.																								
Diagram																									
Type	enumSpectralRange																								
Properties	content: simple																								
Facets	<table> <tr> <td>enumeration</td> <td>GammaRays</td> <td>Photons with a wavelength range: 0.00001 to 0.001 nm</td> </tr> <tr> <td>enumeration</td> <td>HardXrays</td> <td>Photons with a wavelength range: 0.001 to 0.1 nm</td> </tr> <tr> <td>enumeration</td> <td>Infrared</td> <td>Photons with a wavelength range: 760 to 1.00x10^6 nm</td> </tr> <tr> <td>enumeration</td> <td>Microwave</td> <td>Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm</td> </tr> <tr> <td>enumeration</td> <td>Optical</td> <td>Photons with a wavelength range: 380 to 760 nm</td> </tr> <tr> <td>enumeration</td> <td>RadioFrequency</td> <td>Photons with a wavelength range: 100,000 to 1.00x10^11 nm</td> </tr> <tr> <td>enumeration</td> <td>Ultraviolet</td> <td>Photons with a wavelength range: 10 to 400 nm</td> </tr> <tr> <td>enumeration</td> <td>XRays</td> <td>Photons with a wavelength range: 0.001 <= x < 10 nm</td> </tr> </table>	enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm	enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm	enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm	enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 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	Ultraviolet	Photons with a wavelength range: 10 to 400 nm	enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
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enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm																							
Used by	Complex Types DisplayData, NumericalData																								
Source	<pre><xsd:element name="SpectralRange" type="enumSpectralRange"> <xsd:annotation> <xsd:documentation xml:lang="en">The general term used to describe wavelengths or frequencies within a given span of values for those quantities.</xsd:documentation> </xsd:annotation> </xsd:element></pre>																								
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd																								

Element DisplayCadence

Namespace	http://www.spase-group.org/data/schema
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Annotations	The time interval between the successive display elements.
Diagram	
Type	xsd:duration
Properties	content: simple
Used by	Complex Type DisplayData
Source	<pre><xsd:element name="DisplayCadence" type="xsd:duration"> <xsd:annotation> <xsd:documentation xml:lang="en">The time interval between the successive display elements.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element InstrumentRegion

Namespace	http://www.spase-group.org/data/schema																													
Annotations	The portion of space occupied by the instrument at the time of an observation. A region is distinguished by certain natural features or physical characteristics.																													
Diagram																														
Type	enumRegion																													
Properties	content: simple																													
Facets	<table border="1"> <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 planets magnetic field.</td> </tr> <tr> <td>enumeration</td> <td>Earth.Magnetosphere.Magnetotail</td> <td>Description 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).</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.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 aural 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.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	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 planets magnetic field.	enumeration	Earth.Magnetosphere.Magnetotail	Description 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.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 aural zone.	enumeration	Earth.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.	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.
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	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.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction..
	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.Inner	The region of the heliosphere extending radially out from the "surface" of the Sun to 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 from, but not including, 1 AU to the farthest extent of the heliosphere (heliopause).
	enumeration	Heliosphere.Remote1AU	The heliospheric region near the Earth's orbit, but exclusive of the region near the Earth.
	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.
Used by	Complex Types	DisplayData, NumericalData	
Source		<xsd:element name="InstrumentRegion" type="enumRegion"> <xsd:annotation> <xsd:documentation xml:lang="en">The portion of space occupied by the instrument at the time of an observation. A region is distinguished by certain natural features or physical characteristics.</xsd:documentation> </xsd:annotation> </xsd:element>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Element ObservedRegion

Namespace	http://www.spase-group.org/data/schema
Annotations	The portion of space measured by the instrument at the time of an observation. A region is distinguished by certain natural features

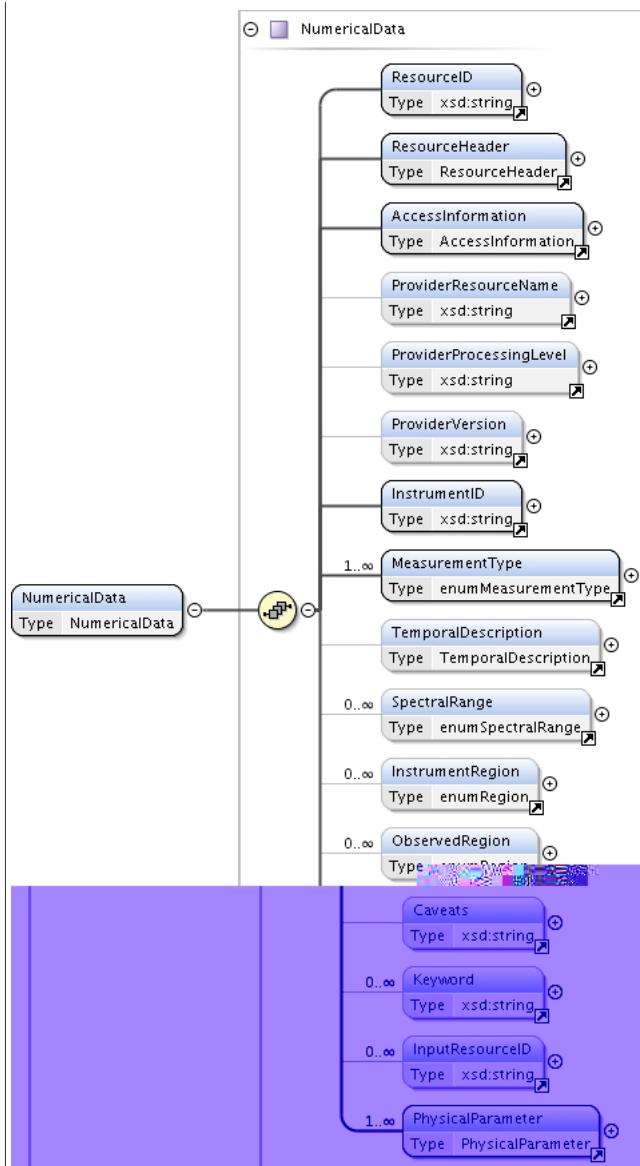
	<p>or physical characteristics. It is the location of the observatory for in situ data, the location or region sensed by remote sensing observatories and the location-of-relevance for parameters that are derived from observational data.</p>		
Diagram	<pre> classDiagram class ObservedRegion { <<Type enumRegion>> } class enumRegion ObservedRegion "1" --> "1" enumRegion </pre>		
Type	enumRegion		
Properties	content: simple		
Facets	enumeration	Earth	The third planet from the sun in our solar system.
	enumeration	Earth.Magnetsheath	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 planets magnetic field.
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	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.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 aural zone.
	enumeration	Earth.Magnetosphere.RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
	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.
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	enumeration	Earth.Surface	The outermost area of a solid object.
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	enumeration	Heliosphere.Inner	The region of the heliosphere extending radially out from the "surface" of the Sun to 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 from, but not

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enumeration	Sun.Interior	The region inside the body which is not visible from outside the body.
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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.
Used by	Complex Types	DisplayData, NumericalData
Source	<pre><xsd:element name="ObservedRegion" type="enumRegion"> <xsd:annotation> <xsd:documentation xml:lang="en">The portion of space measured by the instrument at the time of an observation. A region is distinguished by certain natural features or physical characteristics. It is the location of the observatory for in situ data, the location or region sensed by remote sensing observatories and the location-of-relevance for parameters that are derived from observational data.</xsd:documentation> </xsd:annotation> </xsd:element></pre>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element NumericalData

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



Type	NumericalData
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ResourceHeader , AccessInformation , ProviderResourceName{0,1} , ProviderProcessingLevel{0,1} , ProviderVersion{0,1} , InstrumentID , MeasurementType+ , TemporalDescription{0,1} , SpectralRange* , InstrumentRegion* , ObservedRegion* , Caveats{0,1} , Keyword* , InputResourceID* , PhysicalParameter+
Children	AccessInformation, Caveats, InputResourceID, InstrumentID, InstrumentRegion, Keyword, MeasurementType, ObservedRegion, PhysicalParameter, ProviderProcessingLevel, ProviderResourceName, ProviderVersion, ResourceHeader, ResourceID, SpectralRange, TemporalDescription
Instance	<NumericalData> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> <AccessInformation>{1,1}</AccessInformation> <ProviderResourceName>{0,1}</ProviderResourceName> <ProviderProcessingLevel>{0,1}</ProviderProcessingLevel> <ProviderVersion>{0,1}</ProviderVersion> <InstrumentID>{1,1}</InstrumentID> <MeasurementType>{1,unbounded}</MeasurementType> <TemporalDescription>{0,1}</TemporalDescription> <SpectralRange>{0,unbounded}</SpectralRange> <InstrumentRegion>{0,unbounded}</InstrumentRegion> <ObservedRegion>{0,unbounded}</ObservedRegion> <Caveats>{0,1}</Caveats> <Keyword>{0,unbounded}</Keyword> <InputResourceID>{0,unbounded}</InputResourceID>

	<PhysicalParameter>{1,unbounded}</PhysicalParameter> </NumericalData>
Source	<xsd:element name="NumericalData" type="NumericalData" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element PhysicalParameter

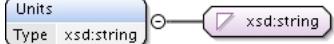
Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class PhysicalParameter { Name : xsd:string ParameterKey : xsd:string Description : xsd:string Cadence : xsd:duration Units : xsd:string UnitsConversion : xsd:string CoordinateSystem : CoordinateSystem Dimension : Dimension Measured : Measured Support : Support } PhysicalParameter < -- PhysicalParameter </pre>
Type	PhysicalParameter
Properties	content: complex
Used by	Complex Type NumericalData
Model	Name{0,1} , ParameterKey , Description{0,1} , Caveats{0,1} , Cadence{0,1} , Units{0,1} , UnitsConversion{0,1} , CoordinateSystem{0,1} , Dimension{0,1} , Measured{0,1} , Support{0,1}
Children	Cadence, Caveats, CoordinateSystem, Description, Dimension, Measured, Name, ParameterKey, Support, Units, UnitsConversion
Instance	<PhysicalParameter> <Name>{0,1}</Name> <ParameterKey>{1,1}</ParameterKey> <Description>{0,1}</Description> <Caveats>{0,1}</Caveats> <Cadence>{0,1}</Cadence> <Units>{0,1}</Units> <UnitsConversion>{0,1}</UnitsConversion> <CoordinateSystem>{0,1}</CoordinateSystem> <Dimension>{0,1}</Dimension> <Measured>{0,1}</Measured> <Support>{0,1}</Support> </PhysicalParameter>
Source	<xsd:element name="PhysicalParameter" type="PhysicalParameter" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ParameterKey

Namespace	http://www.spase-group.org/data/schema
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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.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type PhysicalParameter
Source	<pre><xsd:element name="ParameterKey" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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. Individual units within the phrase must conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures. See < http://www.bipm.fr/ >). The symbol associated with a unit should be used in the phrase. Within the 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 > and those for common derived units can be found at: < http://www.bipm.fr/en/si/derived_units/2-2-2.html >
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Types AzimuthalAngleRange, EnergyRange, FrequencyRange, PhysicalParameter, PolarAngleRange
Source	<pre><xsd:element name="Units" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">A description of the standardized measurement increments in which a value is specified. The description is represented as a mathematical phrase. Individual units within the phrase must conform to the International System of Units (SI) which is maintained by BIPM (Bureau International des Poids et Mesures. See <http://www.bipm.fr/>). The symbol associated with a unit should be used in the phrase. Within the 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> and those for common derived units can be found at: <http://www.bipm.fr/en/si/derived_units/2-2-2.html></xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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 > 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-5>T" which converts the units, presumably nT, to tesla. Another example is: "1.0e-1>km/s" which converts a velocity expressed in meters per second to kilometers per second.</p>
Diagram	<pre> classDiagram class UnitsConversion { <<xsd:string>> } class xsdString { <<xsd:string>> } UnitsConversion o--> xsdString </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type PhysicalParameter
Source	<pre> <xsd:element name="UnitsConversion" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The multiplicative factor for converting a unit into International System of Units (SI) units. The factor is expressed in the form "number > 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-5>T" which converts the units, presumably nT, to tesla. Another example is: "1.0e-1>km/s" which converts a velocity expressed in meters per second to kilometers per second.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element CoordinateSystem

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class CoordinateSystem { <<CoordinateSystem>> } class CoordinateRepresentation { <<enumCoordinateRepresentation>> } class CoordinateSystemName { <<enumCoordinateSystemName>> } CoordinateSystem < -- CoordinateRepresentation CoordinateSystem < -- CoordinateSystemName </pre>
Type	CoordinateSystem
Properties	content: complex
Used by	Complex Type PhysicalParameter
Model	CoordinateRepresentation{0,1} , CoordinateSystemName{0,1}
Children	CoordinateRepresentation, CoordinateSystemName
Instance	<pre> <CoordinateSystem> <CoordinateRepresentation>{0,1}</CoordinateRepresentation> </pre>

	<CoordinateSystemName>{0,1}</CoordinateSystemName> </CoordinateSystem>
Source	<xsd:element name="CoordinateSystem" type="CoordinateSystem"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element CoordinateRepresentation

Namespace	http://www.spase-group.org/data/schema		
Annotations	The method or form for specifying a given point in a given coordinate system		
Diagram	<pre> classDiagram class CoordinateRepresentation { <<CoordinateRepresentation>> <<Type>> } class enumCoordinateRepresentation { <<enumCoordinateRepresentation>> } CoordinateRepresentation < -- enumCoordinateRepresentation </pre>		
Type	enumCoordinateRepresentation		
Properties	content: simple		
Facets	enumeration	Cartesian	A coordinate system in which the position of a point is determined by its distance from two or three mutually perpendicular axes.
		Cylindrical	A system of curvilinear coordinates in which the position of a point in space is determined by its perpendicular distance from a given line, its distance from a selected reference plane perpendicular to this line, and its angular distance from a selected reference line when projected onto this plane.
		Spherical	A system of curvilinear coordinates characterized by an azimuthal angle (longitude), a polar angle (latitude), and a distance (radius) from a point to the origin.
Used by	Complex Type	CoordinateSystem	
Source	<xsd:element name="CoordinateRepresentation" type="enumCoordinateRepresentation"> <xsd:annotation> <xsd:documentation xml:lang="en">The method or form for specifying a given point in a given coordinate system</xsd:documentation> </xsd:annotation> </xsd:element>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Element CoordinateSystemName

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifies the coordinate system in which the position, direction or observation has been expressed.		
Diagram	<pre> classDiagram class CoordinateSystemName { <<CoordinateSystemName>> <<Type>> } class enumCoordinateSystemName { <<enumCoordinateSystemName>> } CoordinateSystemName < -- enumCoordinateSystemName </pre>		
Type	enumCoordinateSystemName		
Properties	content: simple		
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 < http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html >
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 < http://cdpp.cnes.fr/00428.pdf >
enumeration	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
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	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	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	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 < http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html >
enumeration	HGI	Heliochoric 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 < http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html >
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	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 Earths 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 Earths rotation axis. If N is a unit vector from the Earths 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 < http://cdpp.cnes.fr/00428.pdf >
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 < http://cdpp.cnes.fr/00428.pdf >
enumeration	RTN	Radial Tangential Normal. Typically centered at a spacecraft. Used for IMF and plasma V vectors. R (radial) axis is radially away from the Sun, T (tangential) axis is normal to the plane formed by R and the Suns spin vector, positive in the direction of planetary motion. N (normal) is $R \times T$.
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 < http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html >
enumeration	SM	Solar Magnetic - A geocentric coordinate system where the Z axis is northward along Earths 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 < http://cdpp.cnes.fr/00428.pdf >
	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 < http://cdpp.cnes.fr/00428.pdf >
	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.
Used by	Complex Type CoordinateSystem	
Source		<pre><xsd:element name="CoordinateSystemName" type="enumCoordinateSystemName"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifies the coordinate system in which the position, direction or observation has been expressed.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location		file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Dimension

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class Dimension { Type Dimension Size Description } Dimension "0..1" --> "0..1" Dimension Dimension "0..1" --> "0..1" Size Dimension "0..1" --> "0..1" Description </pre>
Type	Dimension
Properties	content: complex
Used by	Complex Type PhysicalParameter
Model	Size , Description
Children	Description, Size
Instance	<pre> <Dimension> <Size>{1,1}</Size> <Description>{1,1}</Description> </Dimension> </pre>
Source	<xsd:element name="Dimension" type="Dimension"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Size

Namespace	http://www.spase-group.org/data/schema
Annotations	The physical dimensions, proportions, magnitude, or extent of an object..
Diagram	<pre> classDiagram class Size { Type xsd:integer } </pre>

Type	xsd:integer
Properties	content: simple
Used by	Complex Type Dimension
Source	<pre><xsd:element name="Size" type="xsd:integer"> <xsd:annotation> <xsd:documentation xml:lang="en">The physical dimensions, proportions, magnitude, or extent of an object..</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Measured

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class Measured { <<Measured>> <<Type Measured>> Field Particle Photon Mixed } Measured < -- PhysicalParameter Measured --> Field Measured --> Particle Measured --> Photon Measured --> Mixed </pre>
Type	Measured
Properties	content: complex
Used by	Complex Type PhysicalParameter
Model	Field{0,1} , Particle{0,1} , Photon{0,1} , Mixed{0,1}
Children	Field, Mixed, Particle, Photon
Instance	<pre> <Measured> <Field>{0,1}</Field> <Particle>{0,1}</Particle> <Photon>{0,1}</Photon> <Mixed>{0,1}</Mixed> </Measured> </pre>
Source	<xsd:element name="Measured" type="Measured" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Field

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class Field { <<Field>> <<Type Field>> Orientation FieldQualifier FieldQuantity } Field < -- Measured Field --> Orientation Field --> FieldQualifier Field --> FieldQuantity FieldQualifier <--> 0..oo FieldQualifier </pre>
Type	Field
Properties	content: complex
Used by	Complex Type Measured
Model	Orientation{0,1} , FieldQualifier* , FieldQuantity
Children	FieldQualifier, FieldQuantity, Orientation

Instance	<pre><Field> <Orientation>{0,1}</Orientation> <FieldQualifier>{0,unbounded}</FieldQualifier> <FieldQuantity>{1,1}</FieldQuantity> </Field></pre>
Source	<xsd:element name="Field" type="Field"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Orientation

Namespace	http://www.spase-group.org/data/schema																						
Annotations	The direction within a coordinate system.																						
Diagram																							
Type	enumOrientation																						
Properties	content: simple																						
Facets	<table> <tr> <td>enumeration</td> <td>H</td> <td>The Hierarchical Data Format</td> </tr> <tr> <td>enumeration</td> <td>Phi</td> <td>The component of a vector in a spherical coordinate system in the direction of the angle between the x-axis and the line from the origin to the measured point.</td> </tr> <tr> <td>enumeration</td> <td>R</td> <td>The component of a vector along in the radial direction in a spherical system.</td> </tr> <tr> <td>enumeration</td> <td>Theta</td> <td>The component of a vector in a spherical coordinate system in the direction of the angle between the z-axis and the line from the origin to the measured point. In a cylindrical coordinate system it is the angle between the x-axis and the line from the origin to the point.</td> </tr> <tr> <td>enumeration</td> <td>X</td> <td>The component of a vector along the X-axis in a cartesian coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Y</td> <td>The component of a vector along the Y-axis in a cartesian coordinate system.</td> </tr> <tr> <td>enumeration</td> <td>Z</td> <td>The component of a vector along the Z-axis in a cartesian coordinate system.</td> </tr> </table>		enumeration	H	The Hierarchical Data Format	enumeration	Phi	The component of a vector in a spherical coordinate system in the direction of the angle between the x-axis and the line from the origin to the measured point.	enumeration	R	The component of a vector along in the radial direction in a spherical system.	enumeration	Theta	The component of a vector in a spherical coordinate system in the direction of the angle between the z-axis and the line from the origin to the measured point. In a cylindrical coordinate system it is the angle between the x-axis and the line from the origin to the point.	enumeration	X	The component of a vector along the X-axis in a cartesian coordinate system.	enumeration	Y	The component of a vector along the Y-axis in a cartesian coordinate system.	enumeration	Z	The component of a vector along the Z-axis in a cartesian coordinate system.
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enumeration	Y	The component of a vector along the Y-axis in a cartesian coordinate system.																					
enumeration	Z	The component of a vector along the Z-axis in a cartesian coordinate system.																					
Used by	Complex Types	Field, Positional																					
Source	<pre><xsd:element name="Orientation" type="enumOrientation"> <xsd:annotation> <xsd:documentation xml:lang="en">The direction within a coordinate system.</xsd:documentation> </xsd:annotation> </xsd:element></pre>																						
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd																						

Element FieldQualifier

Namespace	http://www.spase-group.org/data/schema							
Annotations	Characterizes the directional and statistical aspects of the field observation.							
Diagram								
Type	enumFieldQualifier							
Properties	content: simple							
Facets	<table> <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>Component</td> <td>A part of a multi-part entity, e.g., the components</td> </tr> </table>		enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.	enumeration	Component	A part of a multi-part entity, e.g., the components
enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.						
enumeration	Component	A part of a multi-part entity, e.g., the components						

		of a vector.
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
enumeration	Magnitude	A measure of the strength or size of a vector quantity.
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	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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.
Used by	Complex Type	Field
Source	<xsd:element name="FieldQualifier" type="enumFieldQualifier"> <xsd:annotation> <xsd:documentation xml:lang="en">Characterizes the directional and statistical aspects of the field observation.</xsd:documentation> </xsd:annotation> </xsd:element>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element FieldQuantity

Namespace	http://www.spase-group.org/data/schema		
Annotations	The physical attribute of the field.		
Diagram	<pre> classDiagram class FieldQuantity { <<Type enumFieldQuantity>> } class enumFieldQuantity FieldQuantity "1" -- "1" enumFieldQuantity </pre>		
Type	enumFieldQuantity		
Properties	content: simple		
Facets	enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
	enumeration	Electric	The physical attribute that exerts an electrical force.
	enumeration	Magnetic	The physical attribute attributed to a magnet or its equivalent.
	enumeration	Potential	A field which obeys Laplaces Equation.
	enumeration	PoyntingFlux	The rate of energy transport per unit area per steradian.
Used by	Complex Type	Field	
Source	<xsd:element name="FieldQuantity" type="enumFieldQuantity"> <xsd:annotation> <xsd:documentation xml:lang="en">The physical attribute of the field.</xsd:documentation> </xsd:annotation> </xsd:element>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Element Particle

Namespace	http://www.spase-group.org/data/schema
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Diagram	<pre> classDiagram class Particle { 1..∞ ParticleType Type enumParticleType 0..∞ ParticleQualifier Type enumParticleQualifier 0..∞ ParticleQuantity Type enumParticleQuantity 0..∞ AtomicNumber Type xsd:double 0..∞ EnergyRange Type EnergyRange 0..∞ AzimuthalAngleRange Type AzimuthalAngleRange 0..∞ PolarAngleRange Type PolarAngleRange } Particle < -- Particle Particle < -- Type </pre>
Type	Particle
Properties	content: complex
Used by	Complex Type Measured
Model	ParticleType*, ParticleQualifier*, ParticleQuantity, AtomicNumber*, EnergyRange{0,1}, AzimuthalAngleRange{0,1}, PolarAngleRange{0,1}
Children	AtomicNumber, AzimuthalAngleRange, EnergyRange, ParticleQualifier, ParticleQuantity, ParticleType, PolarAngleRange
Instance	<Particle> <ParticleType>{1,unbounded}</ParticleType> <ParticleQualifier>{0,unbounded}</ParticleQualifier> <ParticleQuantity>{1,1}</ParticleQuantity> <AtomicNumber>{0,unbounded}</AtomicNumber> <EnergyRange>{0,1}</EnergyRange> <AzimuthalAngleRange>{0,1}</AzimuthalAngleRange> <PolarAngleRange>{0,1}</PolarAngleRange> </Particle>
Source	<xsd:element name="Particle" type="Particle" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ParticleType

Namespace	http://www.spase-group.org/data/schema																	
Annotations	A characterization of the kind of particle observed by the measurement.																	
Diagram	<pre> classDiagram class ParticleType { Type enumParticleType } ParticleType < -- enumParticleType </pre>																	
Type	enumParticleType																	
Properties	content: simple																	
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Aerosol</td> <td>A suspension of fine solid or liquid particles in 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>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 1.602×10^{-19} Coulomb and having a mass when at rest of about 9.109534×10^{-28} 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:</td> </tr> </table>			enumeration	Aerosol	A suspension of fine solid or liquid particles in gas.	enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.	enumeration	Dust	Free microscopic particles of solid material.	enumeration	Electron	An elementary particle consisting of a charge of negative electricity equal to about 1.602×10^{-19} Coulomb and having a mass when at rest of about 9.109534×10^{-28} gram.	enumeration	Ion	An atom that has acquired a net electric charge by gaining or losing one or more electrons. (Note:
enumeration	Aerosol	A suspension of fine solid or liquid particles in gas.																
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enumeration	Dust	Free microscopic particles of solid material.																
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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	Neutral	Either a particle, an object, or a system that has a net electric charge of zero
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 x 10**(-24) gram.
Used by	Complex Type	Particle
Source	<xsd:element name="ParticleType" type="enumParticleType"> <xsd:annotation> <xsd:documentation xml:lang="en">A characterization of the kind of particle observed by the measurement.</xsd:documentation> </xsd:annotation> </xsd:element>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element ParticleQualifier

Namespace	http://www.spase-group.org/data/schema		
Annotations	Characterizes the directional and statistical aspects of the particle observation.		
Diagram	<pre> classDiagram class ParticleQualifier { <<Type enumParticleQualifier>> } class enumParticleQualifier ParticleQualifier o--> enumParticleQualifier </pre>		
Type	enumParticleQualifier		
Properties	content: simple		
Facets	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.
	enumeration	Component	A part of a multi-part entity, e.g., the components of a vector.
	enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
	enumeration	Differential	The ratio of the intensity of radiant energy scattered in a given direction to the incident irradiance and thus has dimensions of area per unit solid angle.
	enumeration	Fit	Values that make a model agree with the data.
	enumeration	Integral	The summation of values over a given area or range.
	enumeration	Magnitude	A measure of the strength or size of a vector quantity.
	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	Ratio	The relative magnitudes of two quantities.
	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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.
Used by	Complex Type Particle	
Source		<xsd:element name="ParticleQualifier" type="enumParticleQualifier"> <xsd:annotation> <xsd:documentation xml:lang="en">Characterizes the directional and statistical aspects of the particle observation.</xsd:documentation> </xsd:annotation> </xsd:element>
Schema location		file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ParticleQuantity

Namespace	http://www.spase-group.org/data/schema		
Annotations	A characterization of the physical properties of the particle.		
Diagram	<pre> classDiagram class ParticleQuantity { <<Type enumParticleQuantity>> } class enumParticleQuantity ParticleQuantity o--> enumParticleQuantity </pre>		
Type	enumParticleQuantity		
Properties	content: simple		
Facets	enumeration	AlfvenMachNumber	The ratio of the bulk flow speed to the Alfen speed.
	enumeration	AverageChargeState	A measure of the composite deficit (positive) or excess (negative) of electrons with respect to protons.
	enumeration	Counts	An enumeration of the number of detection events occurring in a particle detector per unit time or over detector accumulation times.
	enumeration	Flux	In radiation studies, this refers to the amount of radiant energy passing through a unit area
	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	NumberDensity	The number of particles per unit volume.
	enumeration	PhaseSpaceDensity	The number of particles per unit volume in the six-dimensional space of position and velocity.
	enumeration	PlasmaBeta	The ratio of the plasma pressure to the magnetic pressure.
	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	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	Complex Type	Particle	
Source	<xsd:element name="ParticleQuantity" type="enumParticleQuantity"> <xsd:annotation> <xsd:documentation xml:lang="en">A characterization of the physical properties of the particle.</xsd:documentation> </xsd:annotation> </xsd:element>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Element AtomicNumber

Namespace	http://www.spase-group.org/data/schema
Annotations	The the number of protons in the nucleus of an atom.
Diagram	
Type	xsd:double
Properties	content: simple
Used by	Complex Type Particle
Source	<xsd:element name="AtomicNumber" type="xsd:double"> <xsd:annotation> <xsd:documentation xml:lang="en">The the number of protons in the nucleus of an atom.</xsd:documentation> </xsd:annotation> </xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element EnergyRange

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	EnergyRange
Properties	content: complex
Used by	Complex Type Particle
Model	Low , High{0,1} , Units , Bin*
Children	Bin, High, Low, Units
Instance	<EnergyRange> <Low>{1,1}</Low> <High>{0,1}</High>

	<pre><Units>{1,1}</Units> <Bin>{0,unbounded}</Bin> </EnergyRange></pre>
Source	<xsd:element name="EnergyRange" type="EnergyRange" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

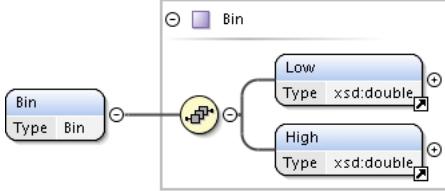
Element Low

Namespace	http://www.spase-group.org/data/schema
Annotations	The smallest value within a range of possible values.
Diagram	
Type	xsd:double
Properties	content: simple
Used by	Complex Types AzimuthalAngleRange, Bin, EnergyRange, FrequencyRange, PolarAngleRange
Source	<pre><xsd:element name="Low" type="xsd:double"> <xsd:annotation> <xsd:documentation xml:lang="en">The smallest value within a range of possible values.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element High

Namespace	http://www.spase-group.org/data/schema
Annotations	The largest value within a range of possible values.
Diagram	
Type	xsd:double
Properties	content: simple
Used by	Complex Types AzimuthalAngleRange, Bin, EnergyRange, FrequencyRange, PolarAngleRange
Source	<pre><xsd:element name="High" type="xsd:double"> <xsd:annotation> <xsd:documentation xml:lang="en">The largest value within a range of possible values.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Bin

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	Bin
Properties	content: complex
Used by	Complex Types AzimuthalAngleRange, EnergyRange, FrequencyRange, PolarAngleRange
Model	Low , High
Children	High, Low

Instance	<Bin> <Low>{1,1}</Low> <High>{1,1}</High> </Bin>
Source	<xsd:element name="Bin" type="Bin"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element AzimuthalAngleRange

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class AzimuthalAngleRange { Low : xsd:double High : xsd:double Units : xsd:string Bin * } AzimuthalAngleRange < -- "AzimuthalAngleRange" "AzimuthalAngleRange" --> Low "AzimuthalAngleRange" --> High "AzimuthalAngleRange" --> Units "AzimuthalAngleRange" --> Bin </pre>
Type	AzimuthalAngleRange
Properties	content: complex
Used by	Complex Type Particle
Model	Low , High , Units{0,1} , Bin*
Children	Bin, High, Low, Units
Instance	<AzimuthalAngleRange> <Low>{1,1}</Low> <High>{1,1}</High> <Units>{0,1}</Units> <Bin>{0,unbounded}</Bin> </AzimuthalAngleRange>
Source	<xsd:element name="AzimuthalAngleRange" type="AzimuthalAngleRange" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element PolarAngleRange

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class PolarAngleRange { Low : xsd:double High : xsd:double Units : xsd:string Bin * } PolarAngleRange < -- "PolarAngleRange" "PolarAngleRange" --> Low "PolarAngleRange" --> High "PolarAngleRange" --> Units "PolarAngleRange" --> Bin </pre>
Type	PolarAngleRange
Properties	content: complex
Used by	Complex Type Particle
Model	Low , High , Units{0,1} , Bin{0,1}
Children	Bin, High, Low, Units
Instance	<PolarAngleRange> <Low>{1,1}</Low> <High>{1,1}</High> <Units>{0,1}</Units>

	<Bin>{0,1}</Bin> </PolarAngleRange>
Source	<xsd:element name="PolarAngleRange" type="PolarAngleRange" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Photon

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class Photon { <> --> PhotonQualifier <> --> PhotonQuantity <> --> FrequencyRange } class PhotonQualifier { <> <> --> enumPhotonQualifier } class PhotonQuantity { <> <> --> enumPhotonQuantity } class FrequencyRange <> <> --> FrequencyRange </pre>
Type	Photon
Properties	content: complex
Used by	Complex Type Measured
Model	PhotonQualifier*, PhotonQuantity , FrequencyRange{0,1}
Children	FrequencyRange, PhotonQualifier, PhotonQuantity
Instance	<Photon> <PhotonQualifier>{0,unbounded}</PhotonQualifier> <PhotonQuantity>{1,1}</PhotonQuantity> <FrequencyRange>{0,1}</FrequencyRange> </Photon>
Source	<xsd:element name="Photon" type="Photon" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

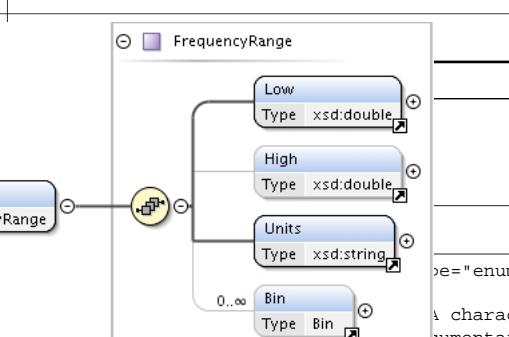
Element PhotonQualifier

Namespace	http://www.spase-group.org/data/schema						
Annotations	Characterizes the directional and statistical aspects of the photon observation.						
Diagram	<pre> classDiagram class PhotonQualifier { <> --> enumPhotonQualifier } class enumPhotonQualifier </pre>						
Type	enumPhotonQualifier						
Properties	content: simple						
Facets	<table> <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>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 </td> </tr> </table>	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.	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
enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.					
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					

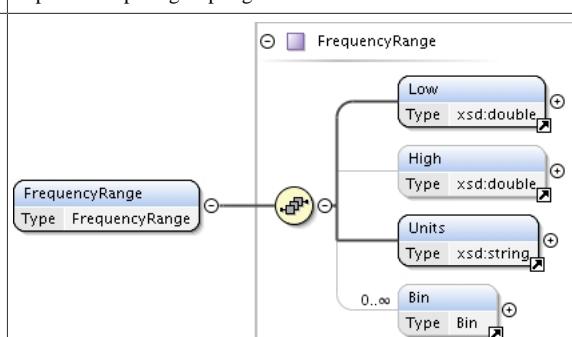
		field.
enumeration	LineofSight	The line of sight is the line that connects the observer with the observed object. This expression is often used with measurements of Doppler velocity and magnetic field in magnetograms, where only the component of the vector field directed along the line of sight is measured.
enumeration	Linear	Relative to polarization, confinement of the E-field vector to a given plane
enumeration	Peak	The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.
enumeration	StokesParameters	The four coordinates (usually called I, Q, U, and V) relative to a particular basis for the representation of the polarization state of an electromagnetic wave propagating through space.
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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.
Used by	Complex Type	Photon
Source	<pre><xsd:element name="PhotonQualifier" type="enumPhotonQualifier"> <xsd:annotation> <xsd:documentation xml:lang="en">Characterizes the directional and statistical aspects of the photon observation.</xsd:documentation> </xsd:annotation> </xsd:element></pre>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element PhotonQuantity

Namespace	http://www.spase-group.org/data/schema																			
Annotations	A characterization of the physical properties of the photon.																			
Diagram	<pre> classDiagram class PhotonQuantity { <<Type enumPhotonQuantity>> } class enumPhotonQuantity PhotonQuantity "1" --> "1" enumPhotonQuantity </pre>																			
Type	enumPhotonQuantity																			
Properties	content: simple																			
Facets	<table border="1"> <tr> <td>enumeration</td> <td>Emissivity</td> <td>The ratio of radiant energy from a material to that from a blackbody at the same kinetic temperature</td> </tr> <tr> <td>enumeration</td> <td>EquivalentWidth</td> <td>The area of the spectral line profile divided by the peak height or depth.</td> </tr> <tr> <td>enumeration</td> <td>Flux</td> <td>In radiation studies, this refers to the amount of radiant energy passing through a unit area</td> </tr> <tr> <td>enumeration</td> <td>Intensity</td> <td>The amount of energy transmitted by electromagnetic radiation, for example, the number of photons arriving in a given time.</td> </tr> <tr> <td>enumeration</td> <td>LineDepth</td> <td>In spectra, a measure of the amount of absorption for a particular wavelength or frequency in the spectrum</td> </tr> <tr> <td>enumeration</td> <td>MagneticField</td> <td>Measurements of magnetic field vectors (sometimes</td> </tr> </table>		enumeration	Emissivity	The ratio of radiant energy from a material to that from a blackbody at the same kinetic temperature	enumeration	EquivalentWidth	The area of the spectral line profile divided by the peak height or depth.	enumeration	Flux	In radiation studies, this refers to the amount of radiant energy passing through a unit area	enumeration	Intensity	The amount of energy transmitted by electromagnetic radiation, for example, the number of photons arriving in a given time.	enumeration	LineDepth	In spectra, a measure of the amount of absorption for a particular wavelength or frequency in the spectrum	enumeration	MagneticField	Measurements of magnetic field vectors (sometimes
enumeration	Emissivity	The ratio of radiant energy from a material to that from a blackbody at the same kinetic temperature																		
enumeration	EquivalentWidth	The area of the spectral line profile divided by the peak height or depth.																		
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enumeration	MagneticField	Measurements of magnetic field vectors (sometimes																		

		<p>not all components) as time series; can be ed. Also, [Zeeman splitting, etc. based]: A region of space near a magnetized body where magnetic forces can be detected [as measured by methods such as Zeeman splitting, etc.]</p>
	enumeration	ModeAmplitude
		In helioseismology the magnitude of oscillation of waves of a particular geometry.
	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	StokesParameters
		The four coordinates (usually called I, Q, U, and V) relative to a particular basis for the representation of the polarization state of an electromagnetic wave propagating through space.
Used by	FrequencyRange	FrequencyRange
Source		 <pre> </xsd:annotation> </xsd:element> </pre>
Schema location		file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

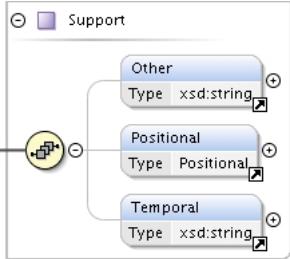
Element FrequencyRange

Namespace	http://www.spase-group.org/data/schema
Diagram	 <pre> </xsd:annotation> </xsd:element> </pre>
Type	

Element Mixed

Namespace	http://www.spase-group.org/data/schema
Annotations	A measured observation which is derived from a combination of two or more individual measurements.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type Measured
Source	<pre><xsd:element name="Mixed" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">A measured observation which is derived from a combination of two or more individual measurements.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Support

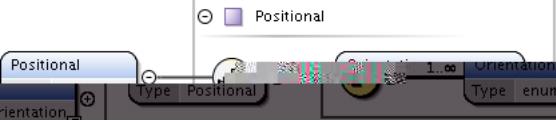
Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	Support
Properties	content: complex
Used by	Complex Type PhysicalParameter
Model	Other{0,1} , Positional{0,1} , Temporal{0,1}
Children	Other, Positional, Temporal
Instance	<pre><Support> <Other>{0,1}</Other> <Positional>{0,1}</Positional> <Temporal>{0,1}</Temporal> </Support></pre>
Source	<xsd:element name="Support" type="Support" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Other

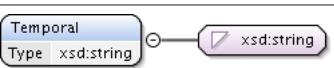
Namespace	http://www.spase-group.org/data/schema
Annotations	Values, such as flags, that are not time tags, location data or measured or derived parameters.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type Support
Source	<pre><xsd:element name="Other" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Values, such as flags, that are not time tags, location data or measured or derived parameters.</xsd:documentation> </xsd:annotation></pre>

	</xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

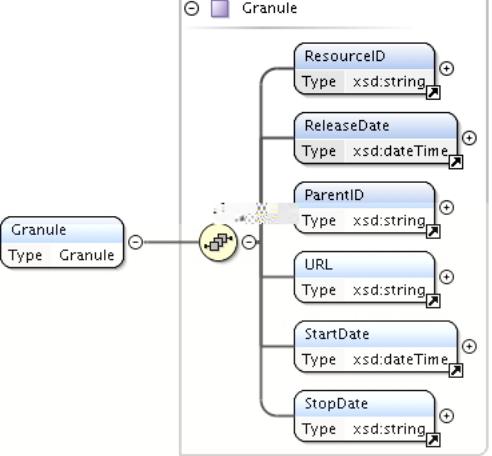
Element Positional

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	Positional
Properties	content: complex
Used by	Complex Type Support
Model	Orientation+
Children	Orientation
Instance	<Positional><Orientation>{1,unbounded}</Orientation></Positional>
Source	<xsd:element name="Positional" type="Positional"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Temporal

Namespace	http://www.spase-group.org/data/schema
Annotations	Pertaining to time.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type Support
Source	<xsd:element name="Temporal" type="xsd:string"><xsd:annotation><xsd:documentation xml:lang="en">Pertaining to time.</xsd:documentation></xsd:annotation></xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Granule

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

Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ReleaseDate , ParentID , URL , StartDate , StopDate
Children	ParentID, ReleaseDate, ResourceID, StartDate, StopDate, URL
Instance	<pre><Granule> <ResourceID>{1,1}</ResourceID> <ReleaseDate>{1,1}</ReleaseDate> <ParentID>{1,1}</ParentID> <URL>{1,1}</URL> <StartDate>{1,1}</StartDate> <StopDate>{1,1}</StopDate> </Granule></pre>
Source	<xsd:element name="Granule" type="Granule"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ParentID

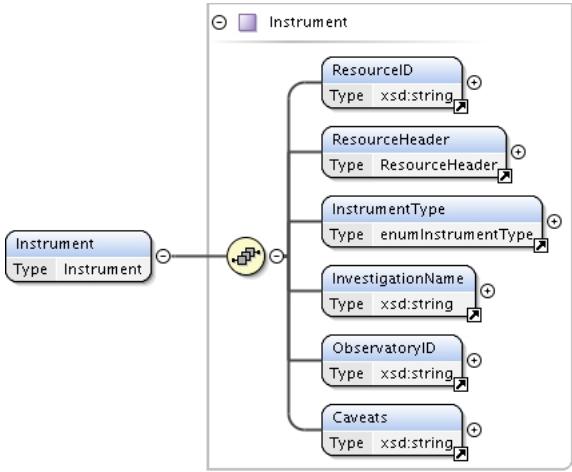
Namespace	http://www.spase-group.org/data/schema
Annotations	The resource identifier for a resource that a resource is a part of. The resource inherits the attributes of the referenced resource. Attributes defined in the resource override attributes of the parent in the manner prescribed by the containing resource.
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type Granule
Source	<pre><xsd:element name="ParentID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element StopDate

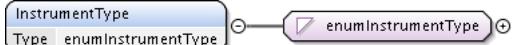
Namespace	http://www.spase-group.org/data/schema
Annotations	
Diagram	
Type	xsd:string
Properties	content: simple
Used by	Complex Type Granule
Source	<pre><xsd:element name="StopDate" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en"> </xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Instrument

Namespace	http://www.spase-group.org/data/schema
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Diagram	
Type	Instrument
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ResourceHeader , InstrumentType , InvestigationName , ObservatoryID , Caveats
Children	Caveats, InstrumentType, InvestigationName, ObservatoryID, ResourceHeader, ResourceID
Instance	<pre><Instrument> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> <InstrumentType>{1,1}</InstrumentType> <InvestigationName>{1,1}</InvestigationName> <ObservatoryID>{1,1}</ObservatoryID> <Caveats>{1,1}</Caveats> </Instrument></pre>
Source	<xsd:element name="Instrument" type="Instrument" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element InstrumentType

Namespace	http://www.spase-group.org/data/schema																
Annotations	A characterization of an integrated collection of software and hardware containing one or more sensors and associated controls used to produce data on an environment.																
Diagram																	
Type	enumInstrumentType																
Properties	content: simple																
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>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>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</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. It is typically used in electron spectroscopy and mass spectrometry.	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	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
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.															
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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	FourierTransformSpectrometer	An instrument that determines the spectra of a radiative source, using time-domain measurements and a Fourier transform.
enumeration	Imager	An instrument which samples the radiation from an area at one or more spectral ranges emitted or reflected by an object.
enumeration	LangmuirProbe	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	LongWire	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	Magnetometer	An instrument which measures the ambient magnetic field.
enumeration	MassSpectrometer	An instrument which distinguishes chemical species in terms of their different isotopic masses.
enumeration	MicrochannelPlate	An instrument used for the detection of elementary particles, ions, ultraviolet rays and soft X-rays constructed from very thin conductive glass capillaries.
enumeration	Monopole	
enumeration	ParticleCorrelator	An instrument which correlates particle flux to help identify wave/particle interactions.
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 which uses radar to obtain an image of an object.
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	SearchCoil	A loop of wire used to determine the time variation of the magnetic flux threading the loop by measurement of the electric potential difference induced between the ends of the wire.
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 into its component wavelengths.
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	Complex Type	Instrument
Source		<pre><xsd:element name="InstrumentType" type="enumInstrumentType"> <xsd:annotation> <xsd:documentation xml:lang="en">A characterization of an integrated collection of software and hardware containing one or more sensors and associated controls used to produce data on an environment.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element 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	<pre> classDiagram class InvestigationName { <<Type xsd:string>> } InvestigationName < -- xsd:string </pre>	
Type	xsd:string	
Properties	content: simple	
Used by	Complex Type	Instrument
Source	<pre><xsd:element name="InvestigationName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element></pre>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Element ObservatoryID

Namespace	http://www.spase-group.org/data/schema
Annotations	The identifier of an Observatory resource.
Diagram	A UML class diagram fragment showing the 'ObservatoryID' element. It is represented by a rounded rectangle labeled 'ObservatoryID' with a blue border. To its right is a small circle with a minus sign, followed by a line connecting to a rounded rectangle labeled 'xsd:string' with a purple border. Below this line is the text 'Type xsd:string'.
Type	xsd:string
Properties	content: simple
Used by	Complex Type Instrument
Source	<pre><xsd:element name="ObservatoryID" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The identifier of an Observatory resource.</ xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Observatory

Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram fragment showing the 'Observatory' element. It is represented by a rounded rectangle labeled 'Observatory' with a blue border. Inside it, there is another rounded rectangle labeled 'ResourceID' with a blue border, which has a line connecting to a rounded rectangle labeled 'xsd:string' with a purple border. Below this line is the text 'Type xsd:string'. Below the 'Observatory' box, there is another rounded rectangle labeled 'Observatory' with a blue border, which has a line connecting to a yellow rounded rectangle labeled 'ResourceHeader' with a green border. Below this line is the text 'Type ...'. A yellow bar at the bottom contains the text 'ObservatoryGroup', 'ResourceHeader', and 'ResourceID'.
Type	Observatory
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ResourceHeader{0,1} , ObservatoryGroup{0,1}
Children	ObservatoryGroup, ResourceHeader, ResourceID
Instance	<pre><Observatory> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{0,1}</ResourceHeader> <ObservatoryGroup>{0,1}</ObservatoryGroup> </Observatory></pre>
Source	<xsd:element name="Observatory" type="Observatory"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element ObservatoryGroup

Namespace	http://www.spase-group.org/data/schema
Annotations	A set of programmatically related observatories. The value is taken from an approved list of observatory group names.
Diagram	A UML class diagram fragment showing the 'ObservatoryGroup' element. It is represented by a rounded rectangle labeled 'ObservatoryGroup' with a blue border. To its right is a small circle with a minus sign, followed by a line connecting to a rounded rectangle labeled 'xsd:string' with a purple border. Below this line is the text 'Type xsd:string'.
Type	xsd:string
Properties	content: simple
Used by	Complex Type Observatory
Source	<pre><xsd:element name="ObservatoryGroup" type="xsd:string"> <xsd:annotation></pre>

	<pre> <xsd:documentation xml:lang="en">A set of programmatically related observatories. The value is taken from an approved list of observatory group names.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Person

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class Person { ResourceID : xsd:string ReleaseDate : xsd:dateTime PersonName : xsd:string OrganizationName : xsd:string Address : xsd:string Email : xsd:string PhoneNumber : xsd:string } </pre>
Type	Person
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ReleaseDate{0,1} , PersonName{0,1} , OrganizationName , Address{0,1} , Email* , PhoneNumber*
Children	Address, Email, OrganizationName, PersonName, PhoneNumber, ReleaseDate, ResourceID
Instance	<pre> <Person> <ResourceID>{1,1}</ResourceID> <ReleaseDate>{0,1}</ReleaseDate> <PersonName>{0,1}</PersonName> <OrganizationName>{1,1}</OrganizationName> <Address>{0,1}</Address> <Email>{0,unbounded}</Email> <PhoneNumber>{0,unbounded}</PhoneNumber> </Person> </pre>
Source	<xsd:element name="Person" type="Person"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element PersonName

Namespace	http://www.spase-group.org/data/schema
Annotations	The words used to address an individual.
Diagram	<pre> attribute PersonName : xsd:string </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type Person
Source	<pre> <xsd:element name="PersonName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The words used to address an individual.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>

	</xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	<pre> classDiagram class OrganizationName { <<xsd:string>> } class xsdstring OrganizationName "1" -- "0" xsdstring </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type Person
Source	<pre> <xsd:element name="OrganizationName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	<pre> classDiagram class Address { <<xsd:string>> } class xsdstring Address "1" -- "0" xsdstring </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type Person
Source	<pre> <xsd:element name="Address" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Directions for finding some location; written on letters or packages that are to be delivered to that location.</xsd:documentation> </xsd:annotation> </xsd:element> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	<pre> classDiagram class Email { <<xsd:string>> } class xsdstring Email "1" -- "0" xsdstring </pre>
Type	xsd:string
Properties	content: simple
Used by	Complex Type Person
Source	<pre> <xsd:element name="Email" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">The electronic address at which the individual may be contacted expressed in the form "local-part@domain".</ xsd:documentation> </xsd:annotation> </xsd:element> </pre>

	</xsd:annotation> </xsd:element>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element 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	A UML class diagram fragment. A rounded rectangle labeled "PhoneNumber" contains the text "Type xsd:string". An association line connects it to another rounded rectangle labeled "xsd:string".
Type	xsd:string
Properties	content: simple
Used by	Complex Type Person
Source	<pre><xsd:element name="PhoneNumber" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Registry

Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram fragment. A rounded rectangle labeled "Registry" contains two associations. One points to a rounded rectangle labeled "ResourceID" with the text "Type xsd:string". Another points to a rounded rectangle labeled "ResourceHeader" with the text "Type ResourceHeader".
Type	Registry
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID, ResourceHeader
Children	ResourceHeader, ResourceID
Instance	<pre><Registry> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> </Registry></pre>
Source	<xsd:element name="Registry" type="Registry" />
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Repository

Namespace	http://www.spase-group.org/data/schema
Diagram	A UML class diagram fragment. A rounded rectangle labeled "Repository" contains two associations. One points to a rounded rectangle labeled "ResourceID" with the text "Type xsd:string". Another points to a rounded rectangle labeled "ResourceHeader" with the text "Type ResourceHeader".

Type	Repository
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ResourceHeader
Children	ResourceHeader, ResourceID
Instance	<Repository> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> </Repository>
Source	<xsd:element name="Repository" type="Repository"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element Service

Namespace	http://www.spase-group.org/data/schema
Diagram	<pre> classDiagram class Service { <<Service>> <<Service>> <<Service>> } class ResourceID { <<ResourceID>> <<ResourceID>> <<ResourceID>> } class ResourceHeader { <<ResourceHeader>> <<ResourceHeader>> <<ResourceHeader>> } class AccessURL { <<AccessURL>> <<AccessURL>> <<AccessURL>> } Service "1..1" -- "1..1" ResourceID Service "1..1" -- "1..1" ResourceHeader Service "1..1" -- "1..1" AccessURL </pre>
Type	Service
Properties	content: complex
Used by	Complex Type Spase
Model	ResourceID , ResourceHeader , AccessURL
Children	AccessURL, ResourceHeader, ResourceID
Instance	<Service> <ResourceID>{1,1}</ResourceID> <ResourceHeader>{1,1}</ResourceHeader> <AccessURL>{1,1}</AccessURL> </Service>
Source	<xsd:element name="Service" type="Service"/>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element enumObservatoryGroup

Namespace	http://www.spase-group.org/data/schema
Annotations	Open List. See: Identifiers for programmatically related observatories. The value is taken from an approved list of observatory group names. See < http://www.igpp.ucla.edu/spase/ > for the list.
Diagram	<pre> classDiagram class enumObservatoryGroup { <<enumObservatoryGroup>> <<enumObservatoryGroup>> <<enumObservatoryGroup>> } class String { <<String>> <<String>> <<String>> } enumObservatoryGroup "1..1" -- "1..1" String </pre>
Type	xsd:string
Properties	content: simple
Source	<xsd:element name="enumObservatoryGroup" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Open List. See: Identifiers for programmatically related observatories. The value is taken from an approved list of observatory group names. See < http://www.igpp.ucla.edu/spase/ > for the list.</xsd:documentation> </xsd:annotation> </xsd:element>

Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd
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Element enumObservatoryName

Namespace	http://www.spase-group.org/data/schema
Annotations	Open List. See: Identifiers for a location or platform. An observatory may be part of an observatory group. The value is taken from an approved list of observatory names. See < http://www.igpp.ucla.edu/spase/ > for the list.
Diagram	
Type	xsd:string
Properties	content: simple
Source	<pre><xsd:element name="enumObservatoryName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Open List. See: Identifiers for a location or platform. An observatory may be part of an observatory group. The value is taken from an approved list of observatory names. See <http://www.igpp.ucla.edu/spase/> for the list.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Element enumRepositoryName

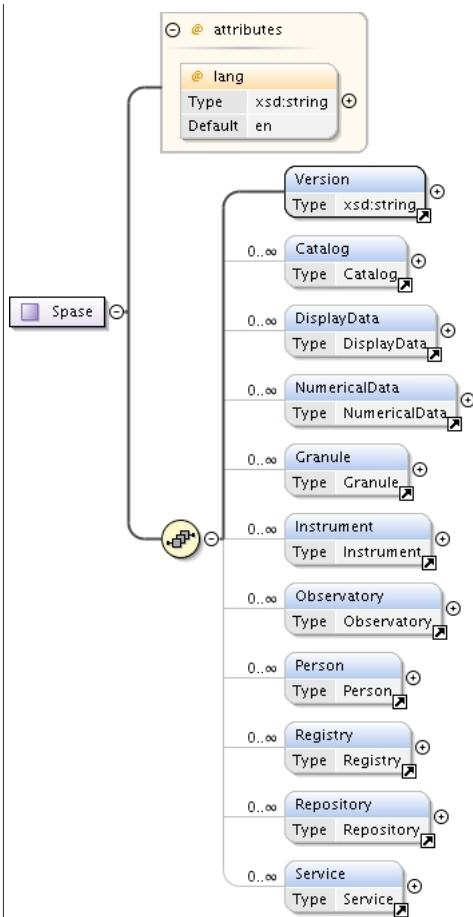
Namespace	http://www.spase-group.org/data/schema
Annotations	Open List. See: Identifiers for the location or facility where the product is stored. The repository name is selected from a list of established repositories. See < http://www.igpp.ucla.edu/spase/ > for the list.
Diagram	
Type	xsd:string
Properties	content: simple
Source	<pre><xsd:element name="enumRepositoryName" type="xsd:string"> <xsd:annotation> <xsd:documentation xml:lang="en">Open List. See: Identifiers for the location or facility where the product is stored. The repository name is selected from a list of established repositories. See <http://www.igpp.ucla.edu/spase/> for the list.</xsd:documentation> </xsd:annotation> </xsd:element></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Types

Complex Type 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



Used by	Element	Spase										
Model	Version , Catalog* , DisplayData* , NumericalData* , Granule* , Instrument* , Observatory* , Person* , Registry* , Repository* , Service*											
Children	Catalog, DisplayData, Granule, Instrument, NumericalData, Observatory, Person, Registry, Repository, Service, Version											
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Fixed</th> <th>Default</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>lang</td> <td>xsd:string</td> <td></td> <td>en</td> <td>optional</td> </tr> </tbody> </table>	QName	Type	Fixed	Default	Use	lang	xsd:string		en	optional	
QName	Type	Fixed	Default	Use								
lang	xsd:string		en	optional								
Source	<pre> <xsd:complexType name="Spase"> <xsd:annotation> <xsd:documentation xml:lang="en">Space Physics Archive Search and Extract (SPASE). The outermost container or envelope for SPASE metadata. This indicates the start of the SPASE metadata.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Version" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Catalog" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="DisplayData" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="NumericalData" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Granule" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Instrument" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Observatory" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Person" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Registry" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Repository" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="Service" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> <xsd:attribute name="lang" type="xsd:string" default="en"/> </xsd:complexType> </pre>											
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd											

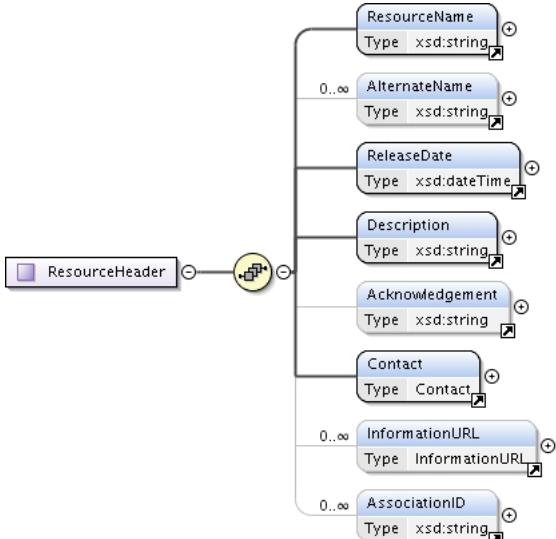
Complex Type Catalog

Namespace	http://www.spase-group.org/data/schema
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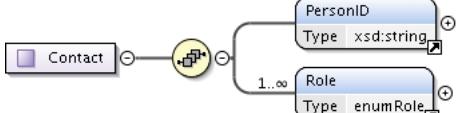
Annotations	A tabular listing of events or observational notes, especially those that have utility in aiding a user in locating data. Catalogues include lists of events, files in a product, and data availability.
Diagram	<pre> classDiagram class Catalog { ResourceID : xsd:string ResourceHeader : ResourceHeader AccessInformation : AccessInformation ProviderResourceName : xsd:string ProviderVersion : xsd:string InstrumentID : xsd:string <-- multiplicity 0..oo PhenomenonType : enumPhenomenonType TimeSpan : TimeSpan Caveats : xsd:string Keyword : xsd:string <-- multiplicity 0..oo InputResourceID : xsd:string <-- multiplicity 1..oo } </pre>
Used by	Element Catalog
Model	ResourceID , ResourceHeader , AccessInformation , ProviderResourceName{0,1} , ProviderVersion{0,1} , InstrumentID* , PhenomenonType , TimeSpan{0,1} , Caveats{0,1} , Keyword* , InputResourceID+
Children	AccessInformation, Caveats, InputResourceID, InstrumentID, Keyword, PhenomenonType, ProviderResourceName, ProviderVersion, ResourceHeader, ResourceID, TimeSpan
Source	<pre> <xsd:complexType name="Catalog"> <xsd:annotation> <xsd:documentation xml:lang="en">A tabular listing of events or observational notes, especially those that have utility in aiding a user in locating data. Catalogues include lists of events, files in a product, and data availability.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ResourceHeader" minOccurs="1" maxOccurs="1"/> <xsd:element ref="AccessInformation" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ProviderResourceName" minOccurs="0" maxOccurs="1"/> <xsd:element ref="ProviderVersion" minOccurs="0" maxOccurs="1"/> <xsd:element ref="InstrumentID" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="PhenomenonType" minOccurs="1" maxOccurs="1"/> <xsd:element ref="TimeSpan" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Caveats" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Keyword" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="InputResourceID" minOccurs="1" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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	Element ResourceHeader
Model	ResourceName , AlternateName* , ReleaseDate , Description , Acknowledgement{0,1} , Contact , InformationURL* , AssociationID*
Children	Acknowledgement, AlternateName, AssociationID, Contact, Description, InformationURL, ReleaseDate, ResourceName
Source	<pre><xsd:complexType name="ResourceHeader"> <xsd:annotation> <xsd:documentation xml:lang="en">Attributes of a resource which pertain to the provider of the resource and descriptive information about the resource.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceName" minOccurs="1" maxOccurs="1"/> <xsd:element ref="AlternateName" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="ReleaseDate" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Description" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Acknowledgement" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Contact" minOccurs="1" maxOccurs="1"/> <xsd:element ref="InformationURL" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="AssociationID" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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	
Used by	Element Contact
Model	PersonID , Role+
Children	PersonID, Role
Source	<pre><xsd:complexType name="Contact"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="PersonID" /> <xsd:element ref="Role" /> </xsd:sequence> </xsd:complexType></pre>

	<pre> <xsd:element ref="PersonID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Role" minOccurs="1" maxOccurs="unbounded" /> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type InformationURL

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of the method of acquiring additional information.
Diagram	<pre> classDiagram class InformationURL { <<Attributes of the method of acquiring additional information.>> } class Name { <<xsd:string>> } class URL { <<xsd:string>> } class Description { <<xsd:string>> } InformationURL "1..0" -- "0..1" Name InformationURL "1..0" -- "0..1" URL InformationURL "1..0" -- "0..1" Description </pre>
Used by	Element InformationURL
Model	Name{0,1} , URL , Description{0,1}
Children	Description, Name, URL
Source	<pre> <xsd:complexType name="InformationURL"> <xsd:annotation> <xsd:documentation xml:lang="en">Attributes of the method of acquiring additional information.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Name" minOccurs="0" maxOccurs="1"/> <xsd:element ref="URL" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Description" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type AccessInformation

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of the resource which pertain to how to acquire the resource, availability and storage format.
Diagram	<pre> classDiagram class AccessInformation { <<Attributes of the resource which pertain to how to acquire the resource, availability and storage format.>> } class RepositoryID { <<xsd:string>> } class Availability { <<enumAvailability>> } class AccessRights { <<enumAccessRights>> } class AccessURL { <<AccessURL>> } class Format { <<enumFormat>> } class Encoding { <<enumEncoding>> } AccessInformation "1..0" -- "1..0" RepositoryID AccessInformation "1..0" -- "1..0" Availability AccessInformation "1..0" -- "1..0" AccessRights AccessInformation "1..0" -- "1..0" AccessURL AccessInformation "1..0" -- "1..0" Format AccessInformation "1..0" -- "1..0" Encoding </pre>
Used by	Element AccessInformation
Model	RepositoryID , Availability{0,1} , AccessRights{0,1} , AccessURL+ , Format , Encoding{0,1} , Acknowledgement{0,1}
Children	AccessRights, AccessURL, Acknowledgement, Availability, Encoding, Format, RepositoryID
Source	<pre> <xsd:complexType name="AccessInformation"> </pre>

	<pre> <xsd:annotation> <xsd:documentation xml:lang="en">Attributes of the resource which pertain to how to acquire the resource, availability and storage format.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="RepositoryID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Availability" minOccurs="0" maxOccurs="1"/> <xsd:element ref="AccessRights" minOccurs="0" maxOccurs="1"/> <xsd:element ref="AccessURL" minOccurs="1" maxOccurs="unbounded"/> <xsd:element ref="Format" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Encoding" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Acknowledgement" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type AccessURL

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of the method of acquiring a resource including a URL, name and description.
Diagram	<pre> classDiagram class AccessURL { Name : xsd:string URL : xsd:string Description : xsd:string } </pre>
Used by	Element AccessURL
Model	Name{0,1} , URL , Description{0,1}
Children	Description, Name, URL
Source	<pre> <xsd:complexType name="AccessURL"> <xsd:annotation> <xsd:documentation xml:lang="en">Attributes of the method of acquiring a resource including a URL, name and description.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Name" minOccurs="0" maxOccurs="1"/> <xsd:element ref="URL" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Description" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type TimeSpan

Namespace	http://www.spase-group.org/data/schema
Annotations	The duration of an interval in time.
Diagram	<pre> classDiagram class TimeSpan { StartDate : xsd:dateTime EndDate : xsd:dateTime RelativeEndDate : xsd:duration } </pre>
Used by	Element TimeSpan
Model	StartDate , EndDate{0,1} , RelativeEndDate{0,1}
Children	EndDate, RelativeEndDate, StartDate
Source	<pre> <xsd:complexType name="TimeSpan"> <xsd:annotation> <xsd:documentation xml:lang="en">The duration of an interval in time.</xsd:documentation> </xsd:annotation> <xsd:sequence> </pre>

	<pre> <xsd:element ref="StartDate" minOccurs="1" maxOccurs="1"/> <xsd:element ref="EndDate" minOccurs="0" maxOccurs="1"/> <xsd:element ref="RelativeEndDate" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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.
Diagram	<pre> classDiagram class DisplayData { ResourceID ResourceHeader AccessInformation ProviderResourceName ProviderProcessingLevel ProviderVersion InstrumentID MeasurementType TemporalDescription SpectralRange DisplayCadence InstrumentRegion ObservedRegion Caveats Keyword InputResourceId } ResourceID < -- DisplayData ResourceHeader < -- DisplayData AccessInformation < -- DisplayData ProviderResourceName < -- DisplayData ProviderProcessingLevel < -- DisplayData ProviderVersion < -- DisplayData InstrumentID < -- DisplayData MeasurementType < -- DisplayData TemporalDescription < -- DisplayData SpectralRange < -- DisplayData DisplayCadence < -- DisplayData InstrumentRegion < -- DisplayData ObservedRegion < -- DisplayData Caveats < -- DisplayData Keyword < -- DisplayData InputResourceId < -- DisplayData </pre>
Used by	Element DisplayData
Model	ResourceID , ResourceHeader , AccessInformation , ProviderResourceName{0,1} , ProviderProcessingLevel{0,1} , ProviderVersion{0,1} , InstrumentID , MeasurementType+ , TemporalDescription{0,1} , SpectralRange* , DisplayCadence{0,1} , InstrumentRegion* , ObservedRegion* , Caveats{0,1} , Keyword* , InputResourceId*
Children	AccessInformation, Caveats, DisplayCadence, InputResourceId, InstrumentID, InstrumentRegion, Keyword, MeasurementType, ObservedRegion, ProviderProcessingLevel, ProviderResourceName, ProviderVersion, ResourceHeader, ResourceID, SpectralRange, TemporalDescription
Source	<pre> <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</pre>

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plots and spectrograms.</xsd:documentation>
</xsd:annotation>
<xsd:sequence>
<xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/>
<xsd:element ref="ResourceHeader" minOccurs="1" maxOccurs="1"/>
<xsd:element ref="AccessInformation" minOccurs="1" maxOccurs="1"/>
<xsd:element ref="ProviderResourceName" minOccurs="0" maxOccurs="1"/>
<xsd:element ref="ProviderProcessingLevel" minOccurs="0" maxOccurs="1"/>
<xsd:element ref="ProviderVersion" minOccurs="0" maxOccurs="1"/>
<xsd:element ref="InstrumentID" minOccurs="1" maxOccurs="1"/>
<xsd:element ref="MeasurementType" minOccurs="1" maxOccurs="unbounded"/>
<xsd:element ref="TemporalDescription" minOccurs="0" maxOccurs="1"/>
<xsd:element ref="SpectralRange" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element ref="DisplayCadence" minOccurs="0" maxOccurs="1"/>
<xsd:element ref="InstrumentRegion" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element ref="ObservedRegion" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element ref="Caveats" minOccurs="0" maxOccurs="1"/>
<xsd:element ref="Keyword" minOccurs="0" maxOccurs="unbounded"/>
<xsd:element ref="InputResourceID" minOccurs="0" maxOccurs="unbounded"/>
</xsd:sequence>
</xsd:complexType>
```

Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd
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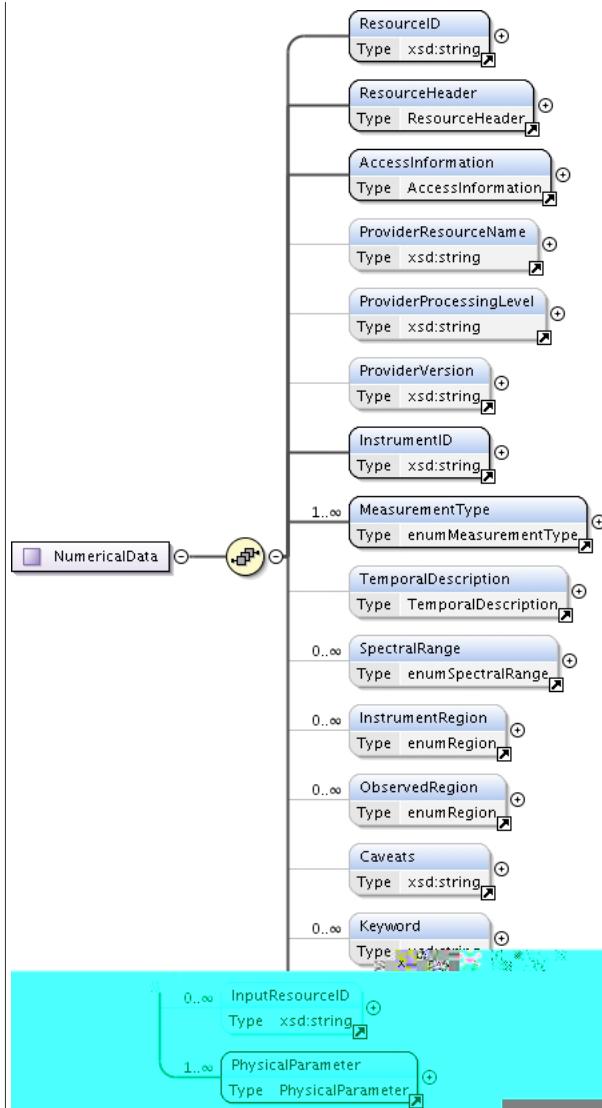
Complex Type TemporalDescription

Namespace	http://www.spase-group.org/data/schema
Annotations	A characterization of the time over which the measurement was taken.
Diagram	<pre> classDiagram class TemporalDescription class TimeSpan { <<TimeSpan>> <<Type: TimeSpan>> } class Cadence { <<Cadence>> <<Type: xsd:duration>> } class Exposure { <<Exposure>> <<Type: xsd:duration>> } TemporalDescription < -- TimeSpan TemporalDescription < -- Cadence TemporalDescription < -- Exposure </pre>
Used by	Element TemporalDescription
Model	TimeSpan , Cadence{0,1} , Exposure{0,1}
Children	Cadence, Exposure, TimeSpan
Source	<pre> <xsd:complexType name="TemporalDescription"> <xsd:annotation> <xsd:documentation xml:lang="en">A characterization of the time over which the measurement was taken.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="TimeSpan" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Cadence" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Exposure" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type NumericalData

Namespace	http://www.spase-group.org/data/schema
Annotations	Data stored as numerical values in a specified format.

Diagram



Used by

Element NumericalData

Model

ResourceID , ResourceHeader , AccessInformation , ProviderResourceName{0,1} , ProviderProcessingLevel{0,1} , ProviderVersion{0,1} , InstrumentID , MeasurementType+ , TemporalDescription{0,1} , SpectralRange* , InstrumentRegion* , ObservedRegion* , Caveats{0,1} , Keyword* , InputResourceID* , PhysicalParameter+

Children

AccessInformation, Caveats, InputResourceID, InstrumentID, InstrumentRegion, Keyword, MeasurementType, ObservedRegion, PhysicalParameter, ProviderProcessingLevel, ProviderResourceName, ProviderVersion, ResourceHeader, ResourceID, SpectralRange, TemporalDescription

Source

```
<xsd:complexType name="NumericalData">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Data stored as numerical values in a specified
      format.</xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/>
    <xsd:element ref="ResourceHeader" minOccurs="1" maxOccurs="1"/>
    <xsd:element ref="AccessInformation" minOccurs="1" maxOccurs="1"/>
    <xsd:element ref="ProviderResourceName" minOccurs="0" maxOccurs="1"/>
    <xsd:element ref="ProviderProcessingLevel" minOccurs="0" maxOccurs="1"/>
    <xsd:element ref="ProviderVersion" minOccurs="0" maxOccurs="1"/>
    <xsd:element ref="InstrumentID" minOccurs="1" maxOccurs="1"/>
    <xsd:element ref="MeasurementType" minOccurs="1" maxOccurs="unbounded"/>
    <xsd:element ref="TemporalDescription" minOccurs="0" maxOccurs="1"/>
    <xsd:element ref="SpectralRange" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="InstrumentRegion" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="ObservedRegion" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="Caveats" minOccurs="0" maxOccurs="1"/>
    <xsd:element ref="Keyword" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="InputResourceID" minOccurs="0" maxOccurs="unbounded"/>
    <xsd:element ref="PhysicalParameter" minOccurs="1" maxOccurs="unbounded"/>
```

	</xsd:sequence> </xsd:complexType>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type PhysicalParameter

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	<pre> classDiagram class PhysicalParameter { <<PhysicalParameter>> +Name : xsd:string +ParameterKey : xsd:string +Description : xsd:string +Caveats : xsd:string +Cadence : xsd:duration +Units : xsd:string +UnitsConversion : xsd:string +CoordinateSystem : CoordinateSystem +Dimension : Dimension +Measured : Measured +Support : Support } class PhysicalParameter { <<Parameter>> < -- PhysicalParameter } class Parameter { < -- PhysicalParameter } </pre>
Used by	Element PhysicalParameter
Model	Name{0,1} , ParameterKey , Description{0,1} , Caveats{0,1} , Cadence{0,1} , Units{0,1} , UnitsConversion{0,1} , CoordinateSystem{0,1} , Dimension{0,1} , Measured{0,1} , Support{0,1}
Children	Cadence, Caveats, CoordinateSystem, Description, Dimension, Measured, Name, ParameterKey, Support, Units, UnitsConversion
Source	<pre> <xsd:complexType name="PhysicalParameter"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Name" minOccurs="0" maxOccurs="1"/> <xsd:element ref="ParameterKey" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Description" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Caveats" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Cadence" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Units" minOccurs="0" maxOccurs="1"/> <xsd:element ref="UnitsConversion" minOccurs="0" maxOccurs="1"/> <xsd:element ref="CoordinateSystem" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Dimension" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Measured" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Support" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type CoordinateSystem

Namespace	http://www.spase-group.org/data/schema
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Annotations	Specification of the origin and orientation of axes against which the location of some point is given and the representative form of each point.
Diagram	
Used by	Element CoordinateSystem
Model	CoordinateRepresentation{0,1} , CoordinateSystemName{0,1}
Children	CoordinateRepresentation, CoordinateSystemName
Source	<pre><xsd:complexType name="CoordinateSystem"> <xsd:annotation> <xsd:documentation xml:lang="en">Specification of the origin and orientation of axes against which the location of some point is given and the representative form of each point.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="CoordinateRepresentation" minOccurs="0" maxOccurs="1"/> <xsd:element ref="CoordinateSystemName" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Dimension

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of an independent variable or axis associated with the data.
Diagram	
Used by	Element Dimension
Model	Size , Description
Children	Description, Size
Source	<pre><xsd:complexType name="Dimension"> <xsd:annotation> <xsd:documentation xml:lang="en">Attributes of an independent variable or axis associated with the data.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Size" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Description" minOccurs="1" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Measured

Namespace	http://www.spase-group.org/data/schema
Annotations	Attributes of observations obtained from an instrument or sensor.
Diagram	

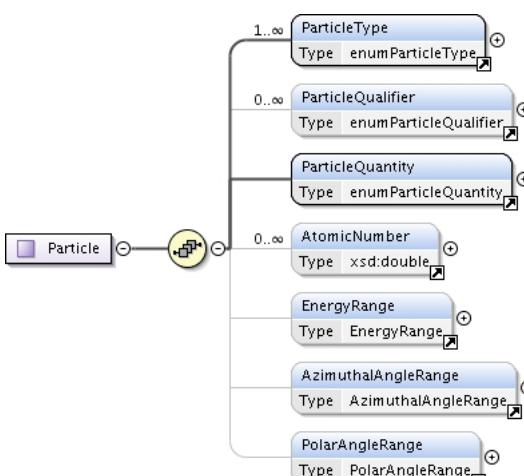
Used by	Element	Measured
Model	Field{0,1} , Particle{0,1} , Photon{0,1} , Mixed{0,1}	
Children	Field, Mixed, Particle, Photon	
Source		<pre><xsd:complexType name="Measured"> <xsd:annotation> <xsd:documentation xml:lang="en">Attributes of observations obtained from an instrument or sensor.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Field" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Particle" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Photon" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Mixed" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location		file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Field

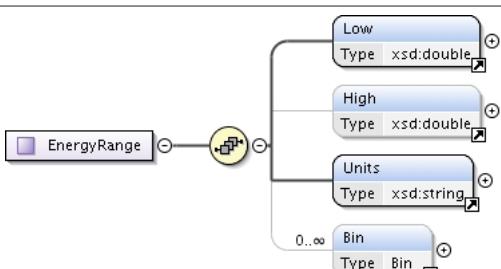
Namespace	http://www.spase-group.org/data/schema	
Annotations	The space around a radiating body within which its electromagnetic attributes can exert force on another similar body that is not in direct contact.	
Diagram	<pre> classDiagram class Field class Orientation { <<enumOrientation>> } class FieldQualifier { <<enumFieldQualifier>> } class FieldQuantity { <<enumFieldQuantity>> } Field "0..>" Orientation Field "0..>" FieldQualifier Field "0..>" FieldQuantity </pre>	
Used by	Element Field	
Model	Orientation{0,1} , FieldQualifier*, FieldQuantity	
Children	FieldQualifier, FieldQuantity, Orientation	
Source	<pre><xsd:complexType name="Field"> <xsd:annotation> <xsd:documentation xml:lang="en">The space around a radiating body within which its electromagnetic attributes can exert force on another similar body that is not in direct contact.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Orientation" minOccurs="0" maxOccurs="1"/> <xsd:element ref="FieldQualifier" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="FieldQuantity" minOccurs="1" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>	
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd	

Complex Type 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 Particle
Model	ParticleType+, ParticleQualifier*, ParticleQuantity , AtomicNumber*, EnergyRange{0,1} , AzimuthalAngleRange{0,1} , PolarAngleRange{0,1}
Children	AtomicNumber, AzimuthalAngleRange, EnergyRange, ParticleQualifier, ParticleQuantity, ParticleType, PolarAngleRange
Source	<pre><xsd:complexType name="Particle"> <xsd:annotation> <xsd:documentation xml:lang="en">A description of the types of particles observed in the measurement. This includes both direct observations and inferred observations.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ParticleType" minOccurs="1" maxOccurs="unbounded"/> <xsd:element ref="ParticleQualifier" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="ParticleQuantity" minOccurs="1" maxOccurs="1"/> <xsd:element ref="AtomicNumber" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="EnergyRange" minOccurs="0" maxOccurs="1"/> <xsd:element ref="AzimuthalAngleRange" minOccurs="0" maxOccurs="1"/> <xsd:element ref="PolarAngleRange" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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	
Used by	Element EnergyRange
Model	Low , High{0,1} , Units , Bin*
Children	Bin, High, Low, Units
Source	<pre><xsd:complexType name="EnergyRange"> <xsd:annotation> <xsd:documentation xml:lang="en">The minimum and maximum energy values of the particles represented by a given "physical parameter" description.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Low" type="xsd:double"/> <xsd:element ref="High" type="xsd:double"/> <xsd:element ref="Units" type="xsd:string"/> <xsd:element ref="Bin" type="Bin" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType></pre>

	<pre> <xsd:element ref="Low" minOccurs="1" maxOccurs="1"/> <xsd:element ref="High" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Units" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Bin" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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	<pre> classDiagram class Bin { Low High Units } class Low { type xsd:double } class High { type xsd:double } class Units { type xsd:string } Bin < -- Low Bin < -- High Bin < -- Units </pre>
Used by	Element Bin
Model	Low , High
Children	High, Low
Source	<pre> <xsd:complexType name="Bin"> <xsd:annotation> <xsd:documentation xml:lang="en">A grouping of observations according to a band or window of a common attribute.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Low" minOccurs="1" maxOccurs="1"/> <xsd:element ref="High" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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	<pre> classDiagram class AzimuthalAngleRange { Low High Units Bin } class Low { type xsd:double } class High { type xsd:double } class Units { type xsd:string } class Bin { type Bin } AzimuthalAngleRange < -- Low AzimuthalAngleRange < -- High AzimuthalAngleRange < -- Units AzimuthalAngleRange < -- Bin </pre>
Used by	Element AzimuthalAngleRange
Model	Low , High , Units{0,1} , Bin*
Children	Bin, High, Low, Units
Source	<pre> <xsd:complexType name="AzimuthalAngleRange"> <xsd:annotation> <xsd:documentation xml:lang="en">The range of possible azimuthal angles for a group of energy observations. Default units are degrees.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Low" minOccurs="1" maxOccurs="1"/> <xsd:element ref="High" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Units" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Bin" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type 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	<pre> classDiagram class PolarAngleRange class Low { <<Low>> <<xsd:double>> } class High { <<High>> <<xsd:double>> } class Units { <<Units>> <<xsd:string>> } class Bin { <<Bin>> <<Bin>> } PolarAngleRange < --> Low PolarAngleRange < --> High PolarAngleRange < --> Units PolarAngleRange < --> Bin </pre>
Used by	Element PolarAngleRange
Model	Low , High , Units{0,1} , Bin{0,1}
Children	Bin, High, Low, Units
Source	<pre> <xsd:complexType name="PolarAngleRange"> <xsd:annotation> <xsd:documentation xml:lang="en">The range of possible polar angles for a group of energy observations. Defaults units are degrees.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Low" minOccurs="1" maxOccurs="1"/> <xsd:element ref="High" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Units" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Bin" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Photon

Namespace	http://www.spase-group.org/data/schema
Annotations	Photon (radio through gamma-rays): the fundamental particle or quantum of electromagnetic radiation (radianc energy)
Diagram	<pre> classDiagram class Photon class PhotonQualifier { <<PhotonQualifier>> <<enumPhotonQualifier>> } class PhotonQuantity { <<PhotonQuantity>> <<enumPhotonQuantity>> } class FrequencyRange { <<FrequencyRange>> <<FrequencyRange>> } Photon < --> PhotonQualifier Photon < --> PhotonQuantity Photon < --> FrequencyRange </pre>
Used by	Element Photon
Model	PhotonQualifier*, PhotonQuantity , FrequencyRange{0,1}
Children	FrequencyRange, PhotonQualifier, PhotonQuantity
Source	<pre> <xsd:complexType name="Photon"> <xsd:annotation> <xsd:documentation xml:lang="en">Photon (radio through gamma-rays): the fundamental particle or quantum of electromagnetic radiation (radianc energy)</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="PhotonQualifier" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="PhotonQuantity" minOccurs="1" maxOccurs="1"/> <xsd:element ref="FrequencyRange" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type FrequencyRange

Namespace	http://www.spase-group.org/data/schema
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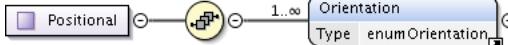
Annotations	The range of possible values for the observed frequency.
Diagram	<pre> classDiagram class FrequencyRange { Low High Units Bin } FrequencyRange < -- Low FrequencyRange < -- High FrequencyRange < -- Units FrequencyRange < -- Bin </pre>
Used by	Element FrequencyRange
Model	Low , High{0,1} , Units , Bin*
Children	Bin, High, Low, Units
Source	<pre> <xsd:complexType name="FrequencyRange"> <xsd:annotation> <xsd:documentation xml:lang="en">The range of possible values for the observed frequency.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Low" minOccurs="1" maxOccurs="1"/> <xsd:element ref="High" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Units" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Bin" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Support

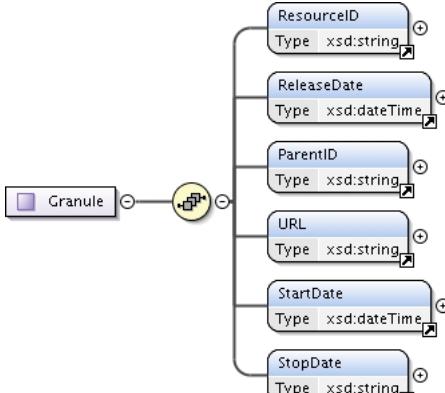
Namespace	http://www.spase-group.org/data/schema
Annotations	Information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.
Diagram	<pre> classDiagram class Support { Other Positional Temporal } Support < -- Other Support < -- Positional Support < -- Temporal </pre>
Used by	Element Support
Model	Other{0,1} , Positional{0,1} , Temporal{0,1}
Children	Other, Positional, Temporal
Source	<pre> <xsd:complexType name="Support"> <xsd:annotation> <xsd:documentation xml:lang="en">Information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Other" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Positional" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Temporal" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Positional

Namespace	http://www.spase-group.org/data/schema
Annotations	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.
Diagram	
Used by	Element Positional
Model	Orientation+
Children	Orientation
Source	<pre><xsd:complexType name="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:sequence> <xsd:element ref="Orientation" minOccurs="1" maxOccurs="unbounded" /> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Granule

Namespace	http://www.spase-group.org/data/schema
Annotations	An accessible portion of another resource. The ParentID of a Granule resource must be a NumericalData resource. The attributes of a Granule supersede the corresponding attributes in the NumericalData resource.
Diagram	
Used by	Element Granule
Model	ResourceID , ReleaseDate , ParentID , URL , StartDate , StopDate
Children	ParentID, ReleaseDate, ResourceID, StartDate, StopDate, URL
Source	<pre><xsd:complexType name="Granule"> <xsd:annotation> <xsd:documentation xml:lang="en">An accessible portion of another resource. The ParentID of a Granule resource must be a NumericalData resource. The attributes of a Granule supersede the corresponding attributes in the NumericalData resource.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ReleaseDate" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ParentID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="URL" minOccurs="1" maxOccurs="1"/> <xsd:element ref="StartDate" minOccurs="1" maxOccurs="1"/> <xsd:element ref="StopDate" minOccurs="1" maxOccurs="1"/> </xsd:sequence> </xsd:complexType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Instrument

Namespace	http://www.spase-group.org/data/schema
Annotations	A device which is used to sense and parameterize a physical phenomenon.
Diagram	<pre> classDiagram class ResourceID { Type xsd:string } class ResourceHeader { Type ResourceHeader } class InstrumentType { Type ResourceHeader } ResourceID < -- ResourceHeader ResourceHeader < -- InstrumentType </pre>
Used by	Element Instrument
Model	ResourceID, ResourceHeader, InstrumentType, InvestigationName, ObservatoryID, Caveats
Children	Caveats, InstrumentType, InvestigationName, ObservatoryID, ResourceHeader, ResourceID
Source	<pre> <xsd:complexType name="Instrument"> <xsd:annotation> <xsd:documentation xml:lang="en">A device which is used to sense and parameterize a physical phenomenon.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ResourceHeader" minOccurs="1" maxOccurs="1"/> <xsd:element ref="InstrumentType" minOccurs="1" maxOccurs="1"/> <xsd:element ref="InvestigationName" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ObservatoryID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Caveats" minOccurs="1" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Observatory

Namespace	http://www.spase-group.org/data/schema
Annotations	The host (spacecraft, network, facility) for instruments making observations.
Diagram	<pre> classDiagram class Observatory { *host } class ResourceID { Type xsd:string } class ResourceHeader { Type ResourceHeader } class ObservatoryGroup { Type xsd:string } Observatory < -- ResourceID Observatory < -- ResourceHeader Observatory < -- ObservatoryGroup </pre>
Used by	Element Observatory
Model	ResourceID, ResourceHeader{0,1}, ObservatoryGroup{0,1}
Children	ObservatoryGroup, ResourceHeader, ResourceID
Source	<pre> <xsd:complexType name="Observatory"> <xsd:annotation> <xsd:documentation xml:lang="en">The host (spacecraft, network, facility) for instruments making observations.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="Observatory" minOccurs="0" maxOccurs="1"/> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ResourceHeader" minOccurs="0" maxOccurs="1"/> <xsd:element ref="ObservatoryGroup" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Person

Namespace	http://www.spase-group.org/data/schema
Annotations	An individual human being.
Diagram	<pre> classDiagram class Person { <<Person>> <<ResourceID>> <<ReleaseDate>> <<PersonName>> <<OrganizationName>> <<Address>> <<Email>> <<PhoneNumber>> } Person "1" *-- "1" ResourceID Person "1" *-- "1" ReleaseDate Person "1" *-- "1" PersonName Person "1" *-- "1" OrganizationName Person "0..1" *-- "1" Address Person "0..1" *-- "1" Email Person "0..1" *-- "1" PhoneNumber </pre>
Used by	Element Person
Model	ResourceID , ReleaseDate{0,1} , PersonName{0,1} , OrganizationName , Address{0,1} , Email* , PhoneNumber*
Children	Address, Email, OrganizationName, PersonName, PhoneNumber, ReleaseDate, ResourceID
Source	<pre> <xsd:complexType name="Person"> <xsd:annotation> <xsd:documentation xml:lang="en">An individual human being.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ReleaseDate" minOccurs="0" maxOccurs="1"/> <xsd:element ref="PersonName" minOccurs="0" maxOccurs="1"/> <xsd:element ref="OrganizationName" minOccurs="1" maxOccurs="1"/> <xsd:element ref="Address" minOccurs="0" maxOccurs="1"/> <xsd:element ref="Email" minOccurs="0" maxOccurs="unbounded"/> <xsd:element ref="PhoneNumber" minOccurs="0" maxOccurs="unbounded"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Registry

Namespace	http://www.spase-group.org/data/schema
Annotations	A location or facility where resources are cataloged.
Diagram	<pre> classDiagram class Registry { <<Registry>> <<ResourceID>> <<ResourceHeader>> } Registry "1" *-- "1" ResourceID Registry "0..1" *-- "1" ResourceHeader </pre>
Used by	Element Registry
Model	ResourceID , ResourceHeader
Children	ResourceHeader, ResourceID
Source	<pre> <xsd:complexType name="Registry"> <xsd:annotation> <xsd:documentation xml:lang="en">A location or facility where resources are cataloged.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1"/> <xsd:element ref="ResourceHeader" minOccurs="0" maxOccurs="1"/> </xsd:sequence> </xsd:complexType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Complex Type Repository

Namespace	http://www.spase-group.org/data/schema
Annotations	A location or facility where resources are stored.
Diagram	<pre> classDiagram class Repository class ResourceID { <<ResourceID>> Type xsd:string } class ResourceHeader { <<ResourceHeader>> Type ResourceHeader } Repository "2..1" --> "1..1" ResourceID : Repository "2..1" --> "1..1" ResourceHeader : </pre>
Used by	Element Repository
Model	ResourceID , ResourceHeader
Children	ResourceHeader, ResourceID
Source	<pre> <xsd:complexType name="Repository"> <xsd:annotation> <xsd:documentation xml:lang="en">A location or facility where resources are stored.</xsd:documentation> </xsd:annotation> <xsd:sequence> <xsd:element ref="ResourceID" minOccurs="1" maxOccurs="1" /> <xsd:element ref="ResourceHeader" minOccurs="1" maxOccurs="1" /> </xsd:sequence> </xsd:complexType> </pre>

	enumeration	DataProducer	An individual who generated the resource and is familiar with its provenance.
	enumeration	GeneralContact	An individual who can provide information on a range of subjects or who can direct you to a domain expert.
	enumeration	PrincipalInvestigator	An individual who is the administrative and scientific lead for an investigation.
	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	Scientist	An individual who is an expert in the phenomenon and related physics represented by the resource.
	enumeration	TeamLeader	An individual who is the scientific and administrative lead for 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
Used by	Element	Role	
Source	<pre> <xsd:simpleType name="enumRole"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the assigned or assumed function or position of an individual.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="CoInvestigator"> <xsd:annotation> <xsd:documentation xml:lang="en">An individual who is a scientific peer and major participant for an investigation.</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="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="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="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="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 scientific and administrative lead for an investigation.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>		

	<pre> </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:restriction> </xsd:simpleType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumAvailability

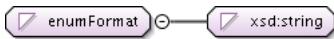
Namespace	http://www.spase-group.org/data/schema				
Annotations	Identifiers for indicating the method or service which may be used to access the resource.				
Diagram					
Type	restriction of xsd:string				
Facets	enumeration	Offline	Not directly accessible electronically. This includes resources which may be moved to an online status in response to a given request.		
	enumeration	Online	Directly accessible electronically.		
Used by	Element	Availability			
Source	<pre> <xsd:simpleType name="enumAvailability"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for indicating the method or service which may be used to access the resource.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Offline"> <xsd:annotation> <xsd:documentation xml:lang="en">Not directly accessible electronically. This includes resources which may be moved to an online status in response to a given request.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Online"> <xsd:annotation> <xsd:documentation xml:lang="en">Directly accessible electronically.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType></pre>				
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd				

Simple Type enumAccessRights

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			
Type	restriction of xsd:string		
Facets	enumeration	Open	Access is granted to everyone.
	enumeration	Restricted	Access to the product is regulated and requires some form of identification.

Used by	Element	AccessRights
Source		<pre> <xsd:simpleType name="enumAccessRights"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for permissions granted or denied by the host of a product to allow other users to access and use the resource.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Open"> <xsd:annotation> <xsd:documentation xml:lang="en">Access is granted to everyone.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Restricted"> <xsd:annotation> <xsd:documentation xml:lang="en">Access to the product is regulated and requires some form of identification.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>
Schema location		file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumFormat

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for data organized according to preset specifications.		
Diagram			
Type	restriction of xsd:string		
Facets	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	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 < http://www.w3.org/MarkUp/ >
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	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 Centers Network Common Data Form (NetCDF). A self-describing data portable data format for array-oriented data access. See < http://my.unidata.ucar.edu/content/software/netcdf >
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	QuickTime	A format for digital movies, as defined by Apple Computer. See < http://developer.apple.com/quicktime/ >
enumeration	Text	ASCII text
enumeration	TIFF	A binary format for still pictures. Tagged Image Format File (TIFF). Originally developed by Aldus and now controlled by Adobe.
enumeration	UDF	Universal Data Format (UDF). The Optical Technology Storage Associations Universal Disk Format, based on ISO 13346. See < http://www.osta.org/specs/index.htm >

	enumeration	VOTable	A proposed XML 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 < http://www.w3.org/XML/ >
Used by	Element	Format	
Source		<pre> <xsd:simpleType name="enumFormat"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for data organized according to preset specifications.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="AVI"> <xsd:annotation> <xsd:documentation xml:lang="en">Audio Video Interleave (AVI) a digital format for movies that conforms to the Microsoft Windows Resource Interchange File Format (RIFF).</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Binary"> <xsd:annotation> <xsd:documentation xml:lang="en">A direct representation of the bits which may be stored in memory on a computer.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="CDF"> <xsd:annotation> <xsd:documentation xml:lang="en">Common Data Format (CDF). A binary storage format developed at Goddard Space Flight Center (GSFC).</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="CEF"> <xsd:annotation> <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="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:simpleType> </pre>	

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<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/"></a></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="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">
  <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,

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        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 data 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="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="Text">
    <xsd:annotation>
        <xsd:documentation xml:lang="en">ASCII text</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="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 XML 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>

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Schema location file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumEncoding

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifier 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	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	BZIP2	An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See http://www.bzip.org/
	enumeration	GZIP	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/
	enumeration	None	A lack or absence of anything.
	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	Encoding	
Source	<pre> <xsd:simpleType name="enumEncoding"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifier for unambiguous rules that establishes the representation of information within a file.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="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="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="BZIP2"> <xsd:annotation> <xsd:documentation xml:lang="en">An open standard algorithm by Julian Seward using Burrows-Wheeler block sorting and Huffman coding. See http://www.bzip.org/</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></pre>		

```

<xsd:documentation xml:lang="en">A lack or absence of anything.</
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>

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Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd
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Simple Type enumPhenomenonType

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	<table border="1"> <tr> <td>enumeration</td> <td>Aurora</td> <td></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> <tr> <td>enumeration</td> <td>CoronalMassEjection</td> <td>A solar event which involves a burst of plasma which is ejected from the Sun into the interplanetary medium.</td> </tr> <tr> <td>enumeration</td> <td>EnergeticSolarParticleEvent</td> <td>An enhancement of interplanetary fluxes of energetic ions accelerated by interplanetary shocks and/or solar flares.</td> </tr> <tr> <td>enumeration</td> <td>ForbushDecrease</td> <td>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 CMEs, that sweep some galactic cosmic rays away from Earth.</td> </tr> <tr> <td>enumeration</td> <td>GeomagneticStorm</td> <td>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.</td> </tr> <tr> <td>enumeration</td> <td>InterplanetaryShock</td> <td>A shock propagating generally antisunward through the slower solar wind, often seen in front of CME-associated plasma clouds.</td> </tr> <tr> <td>enumeration</td> <td>MagnetopauseCrossing</td> <td>A crossing of the interface between the shocked solar wind in the magnetosheath and the magnetic field and plasma in the magnetosphere.</td> </tr> <tr> <td>enumeration</td> <td>SolarFlare</td> <td>An explosive event in the Sun's atmosphere which produces electromagnetic radiation across the electromagnetic spectrum at multiple wavelengths</td> </tr> </table>			enumeration	Aurora		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	CoronalMassEjection	A solar event which involves a burst of plasma which is ejected from the Sun into the interplanetary medium.	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 CMEs, 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 antisunward through the slower solar wind, often seen in front of CME-associated plasma clouds.	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	SolarFlare	An explosive event in the Sun's atmosphere which produces electromagnetic radiation across the electromagnetic spectrum at multiple wavelengths
enumeration	Aurora																													
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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 CMEs, that sweep some galactic cosmic rays away from Earth.																												
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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	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	Statistics
Used by	Element	PhenomenonType
Source	<pre> <xsd:simpleType name="enumPhenomenonType"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the characteristics or categorization of an observation. Note: Joe King to provide.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Aurora"> <xsd:annotation> <xsd:documentation xml:lang="en"> </xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="BowShockCrossing"> <xsd:annotation> <xsd:documentation xml:lang="en">A crossing of the boundary between the undisturbed (except for foreshock effects) solar wind and the shocked, decelerated solar wind of the magnetosheath.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="CoronalMassEjection"> <xsd:annotation> <xsd:documentation xml:lang="en">A solar event which involves a burst of plasma which is ejected from the Sun into the interplanetary medium.</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 antisunward through the slower solar wind, often seen in front of CME-associated plasma clouds.</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:simpleType> </pre>	

	<pre> <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="Statistics"> <xsd:annotation> <xsd:documentation xml:lang="en"> </xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumMeasurementType

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	<pre> classDiagram class enumMeasurementType { <<enum>> } class xsdString { <<xsd:string>> } enumMeasurementType ⊑ xsdString </pre>		
Type	restriction of xsd:string		
Facets	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	ChargedParticleFlux	Measurements of fluxes of charged or ionized particles at above thermal energies, including relativistic particles of solar and galactic origin. May give simple fluxes, but more complete distributions are sometimes possible. Composition measurements may also be made.
	enumeration	Dopplergram	A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.
	enumeration	DynamicSpectra	A three-dimensional representation of successive spectra which allows time evolution to be clearly seen. Time is plotted along the abscissa, frequency (or particle energy) along the ordinate, and the spectral power density (or differential particle flux) is represented by different shades of grey, or color. This representation is also known as a spectrogram.
	enumeration	ElectricField	Measurements of electric field vectors (sometimes not all components) as a time series.
	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	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	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	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. The SI unit of irradiance is watts per square meter ($\text{W}\cdot\text{m}^{-2}$).
enumeration	MagneticField	Measurements of magnetic field vectors (sometimes not all components) as time series; can be space- or ground-based. Also, [Zeeman splitting, etc. based]: 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.
enumeration	NeutralGas	Measurements of neutral atomic and molecular components of a body and its surrounding environments.
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 describe 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. The SI unit of radiance is watts per steradian per square meter ($\text{W}\cdot\text{sr}^{-1}\cdot\text{m}^{-2}$).
enumeration	RadioandPlasmaWaves	Measurements of electric and/or magnetic fields using electric or magnetic antennas at frequencies anywhere between the spacecraft spin frequency and the characteristic frequencies of the ambient plasma. The output can be waveform, power spectral density, or other statistical parameters.
enumeration	RadioSoundings	Measurements of plasma density, magnetic field and possibly other parameters of the space

		environment by active probing of the plasma by radio waves.
	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.).
Used by	Element	MeasurementType
Source		<pre> <xsd:simpleType name="enumMeasurementType"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the method of making an estimated value of a quantity that forms the basis of an observation.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="ActivityIndex"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="ChargedParticleFlux"> <xsd:annotation> <xsd:documentation xml:lang="en">Measurements of fluxes of charged or ionized particles at above thermal energies, including relativistic particles of solar and galactic origin. May give simple fluxes, but more complete distributions are sometimes possible. Composition measurements may also be made.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Dopplergram"> <xsd:annotation> <xsd:documentation xml:lang="en">A map or image depicting the spatial distribution of line-of-sight velocities of the observed object.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="DynamicSpectra"> <xsd:annotation> <xsd:documentation xml:lang="en">A three-dimensional representation of successive spectra which allows time evolution to be clearly seen. Time is plotted along the abscissa, frequency (or particle energy) along the ordinate, and the spectral power density (or differential particle flux) is represented by different shades of grey, or color. This representation is also known as a spectrogram.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="ElectricField"> <xsd:annotation> <xsd:documentation xml:lang="en">Measurements of electric field vectors (sometimes not all components) as a time series.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="EnergeticParticles"> <xsd:annotation> <xsd:documentation xml:lang="en">Pieces of matter that are moving very fast. Energetic particles include protons, electrons, neutrons, neutrinos, the nuclei of atoms, and other sub-atomic particles.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="ImageIntensity"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="IonComposition"> </pre>

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<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">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. The SI unit of
    irradiance is watts per square meter (W·m-2).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="MagneticField">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of magnetic field vectors (sometimes
not all components) as time series; can be
space- or ground-based. Also, [Zeeman splitting,
etc. based]: 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.</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 body and its surrounding environments.</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 describe 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. The SI unit of radiance
is watts per steradian per square meter (W·sr-1·m-2).</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="RadioandPlasmaWaves">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">Measurements of electric and/or magnetic fields
using electric or magnetic antennas at frequencies
anywhere between the spacecraft spin frequency
and the characteristic frequencies of the
ambient plasma. The output can be waveform,
power spectral density, or other statistical
parameters.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>

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	<pre> <xsd:enumeration value="RadioSoundings"> <xsd:annotation> <xsd:documentation xml:lang="en">Measurements of plasma density, magnetic field and possibly other parameters of the space environment by active probing of the plasma by radio waves.</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:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumSpectralRange

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. 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 spectral range. See Appendix A - Comparison of Spectrum Domains for a comparison of the spectral ranges with other systems.																										
Diagram	<pre> classDiagram enumSpectralRange < -- xsd:string </pre>																										
Type	restriction of xsd:string																										
Facets	<table border="1"> <tr> <td>enumeration</td> <td>GammaRays</td> <td>Photons with a wavelength range: 0.00001 to 0.001 nm</td> </tr> <tr> <td>enumeration</td> <td>HardXrays</td> <td>Photons with a wavelength range: 0.001 to 0.1 nm</td> </tr> <tr> <td>enumeration</td> <td>Infrared</td> <td>Photons with a wavelength range: 760 to 1.00x10^6 nm</td> </tr> <tr> <td>enumeration</td> <td>Microwave</td> <td>Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 nm</td> </tr> <tr> <td>enumeration</td> <td>Optical</td> <td>Photons with a wavelength range: 380 to 760 nm</td> </tr> <tr> <td>enumeration</td> <td>RadioFrequency</td> <td>Photons with a wavelength range: 100,000 to 1.00x10^11 nm</td> </tr> <tr> <td>enumeration</td> <td>Ultraviolet</td> <td>Photons with a wavelength range: 10 to 400 nm</td> </tr> <tr> <td>enumeration</td> <td>XRays</td> <td>Photons with a wavelength range: 0.001 <= x < 10 nm</td> </tr> </table>			enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm	enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm	enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm	enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 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	Ultraviolet	Photons with a wavelength range: 10 to 400 nm	enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm
enumeration	GammaRays	Photons with a wavelength range: 0.00001 to 0.001 nm																									
enumeration	HardXrays	Photons with a wavelength range: 0.001 to 0.1 nm																									
enumeration	Infrared	Photons with a wavelength range: 760 to 1.00x10^6 nm																									
enumeration	Microwave	Photons with a wavelength range: 1.00x10^6 to 1.50x10^7 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	Ultraviolet	Photons with a wavelength range: 10 to 400 nm																									
enumeration	XRays	Photons with a wavelength range: 0.001 <= x < 10 nm																									
Used by	Element	SpectralRange																									
Source	<pre> <xsd:simpleType name="enumSpectralRange"> <xsd:annotation> <xsd:documentation xml:lang="en">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 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="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:restriction> </pre>																										

	<pre> </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</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="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="Optical"> <xsd:annotation> <xsd:documentation xml:lang="en">Photons with a wavelength range: 380 to 760 nm</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="RadioFrequency"> <xsd:annotation> <xsd:documentation xml:lang="en">Photons with a wavelength range: 100,000 to 1.00x10^11 nm</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Ultraviolet"> <xsd:annotation> <xsd:documentation xml:lang="en">Photons with a wavelength range: 10 to 400 nm</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="XRays"> <xsd:annotation> <xsd:documentation xml:lang="en">Photons with a wavelength range: 0.001 <= x < 10 nm</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumRegion

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	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 planets magnetic field.
	enumeration	Earth.Magnetosphere.Magnetotail	Magnetotail 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.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 aural zone.
enumeration	Earth.Magnetosphere.Radiointercept	A region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
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.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction..
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.Inner	The region of the heliosphere extending radially out from the "surface" of the Sun to 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 from, but not including, 1 AU to the farthest extent of the heliosphere (heliopause).
enumeration	Heliosphere.Remote1AU	The heliospheric region near the Earth's orbit, but exclusive of the region near the Earth.
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.
Used by	Elements	InstrumentRegion, ObservedRegion
Source		<pre> <xsd:simpleType name="enumRegion"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for areas of the physical world which may be occupied or observed.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Earth"> <xsd:annotation> <xsd:documentation xml:lang="en">The third planet from the sun in our solar system.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Earth.Magnetosheath"> <xsd:annotation> <xsd:documentation xml:lang="en">The region between the bow shock and the magnetopause, characterized by very turbulent plasma.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Earth.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="Earth.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="Earth.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="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 aural 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.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 </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>

```
particles bombarding the upper atmosphere
of a planet in the presence of a magnetic
field produce an optcal phenomenum.</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.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.Inner">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">The region of the heliosphere extending radially
      out from the "surface" of the Sun to 1 AU.</xsd:documentation>
  </xsd:annotation>
```

	<pre> </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:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumCoordinateRepresentation

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers the representational form for coordinate system.ation has been expressed.		
Diagram	<pre> classDiagram class enumCoordinateRepresentation { <<Identifiers the representational form for coordinate system.ation has been expressed. >> } class xsd:string enumCoordinateRepresentation < -- xsd:string </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Cartesian	A coordinate system in which the position of a point is determined by its distance from two or three mutually perpendicular axes.
	enumeration	Cylindrical	A system of curvilinear coordinates in which the position of a point in space is determined by its perpendicular distance from a given line, its distance from a selected reference plane perpendicular to this line, and its angular distance from a selected reference line when projected onto this plane.
	enumeration	Spherical	A system of curvilinear coordinates characterized by an azimuthal angle (longitude), a polar angle (latitude), and a distance (radius) from a point to the origin.
Used by	Element	CoordinateRepresentation	
Source	<pre> <xsd:simpleType name="enumCoordinateRepresentation"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers the representational form for coordinate system.ation has been expressed.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Cartesian"> <xsd:annotation> <xsd:documentation xml:lang="en">A coordinate system in which the position of a point is determined by its distance from two or three mutually perpendicular axes.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Cylindrical"> <xsd:annotation> <xsd:documentation xml:lang="en">A system of curvilinear coordinates in which the position of a point in space is determined by its perpendicular distance from a given line, its distance from a selected reference plane perpendicular to this line, and its angular distance from a selected reference line when projected onto this plane.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Spherical"> <xsd:annotation> <xsd:documentation xml:lang="en">A system of curvilinear coordinates characterized by an azimuthal angle (longitude), a polar </pre>		

	<pre> angle (latitude), and a distance (radius) from a point to the origin.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumCoordinateSystemName

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for coordinate systems in which the position, direction or observation has been expressed.		
Diagram	<pre> classDiagram class enumCoordinateSystemName { <<enumeration>> } class xsd:string { <<string>> } enumCoordinateSystemName < -- xsd:string </pre>		
Type	restriction of xsd:string		
Facets	enumeration	CGM	<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 <http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html></p>
	enumeration	DM	<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 <http://cdpp.cnes.fr/00428.pdf></p>
	enumeration	GEI	<p>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</p>
	enumeration	GEO	<p>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.</p>
	enumeration	GSE	<p>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.</p>
	enumeration	GSEQ	<p>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</p>

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	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	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 < http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html >
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 < http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html >
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	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 < http://cdpp.cnes.fr/00428.pdf >

	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 http://cdpp.cnes.fr/00428.pdf
	enumeration	RTN	Radial Tangential Normal. Typically centered at a spacecraft. Used for IMF and plasma V vectors. R (radial) axis is radially away from the Sun, T (tangential) axis is normal to the plane formed by R and the Suns spin vector, positive in the direction of planetary motion. N (normal) is R x T.
	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 http://nssdc.gsfc.nasa.gov/space/helios/coor_des.html
	enumeration	SM	Solar Magnetic - A geocentric coordinate system where the Z axis is northward along Earths 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 http://cdpp.cnes.fr/00428.pdf
	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 http://cdpp.cnes.fr/00428.pdf
	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.
Used by	Element	CoordinateSystemName	
Source			<pre> <xsd:simpleType name="enumCoordinateSystemName"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for coordinate systems in which the position, direction or observation has been expressed.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="CGM"> <xsd:annotation> <xsd:documentation xml:lang="en">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 </xsd:documentation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>

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 [<http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html>](http://nssdc.gsfc.nasa.gov/space/cgm/cgmm_des.html)

</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="DM">

<xsd:annotation>

<xsd:documentation xml:lang="en">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 [<http://cdpp.cnrs.fr/00428.pdf>](http://cdpp.cnrs.fr/00428.pdf)

</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="GEI">

<xsd:annotation>

<xsd:documentation xml:lang="en">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</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="GEO">

<xsd:annotation>

<xsd:documentation xml:lang="en">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.</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="GSE">

<xsd:annotation>

<xsd:documentation xml:lang="en">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.</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="GSEQ">

<xsd:annotation>

<xsd:documentation xml:lang="en">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</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="GSM">

<xsd:annotation>

<xsd:documentation xml:lang="en">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</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="HAE">

<xsd:annotation>

<xsd:documentation xml:lang="en">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.</xsd:documentation>

</xsd:annotation>

</xsd:enumeration>

<xsd:enumeration value="HEE">

<xsd:annotation>

<xsd:documentation xml:lang="en">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</xsd:documentation>

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        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="HEEQ">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">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.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="HG">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">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 <http://nssdc.gsfc.nasa.gov/space/helios/coor\_des.html></xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="HGI">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">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 <http://nssdc.gsfc.nasa.gov/space/helios/coor\_des.html></xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="J2000">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">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.</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) =  $\sqrt{B_x^2 + B_y^2}$  and D (declination angle) =  $\arctan(B_y/B_x)$ </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="RTN">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">Radial Tangential Normal. Typically centered

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        at a spacecraft. Used for IMF and plasma V
        vectors. R (radial) axis is radially away
        from the Sun, T (tangential) axis is normal
        to the plane formed by R and the Sun's spin
        vector, positive in the direction of planetary
        motion. N (normal) is R x T.</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 <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 <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 <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:restriction>
</xsd:simpleType>

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Schema location file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumOrientation

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the axis of coordinate systems.		
Diagram	<pre> classDiagram class enumOrientation { <<restriction of xsd:string>> } </pre>		
Type	restriction of xsd:string		
Facets	enumeration	H	The Hierarchical Data Format

	enumeration	Phi	The component of a vector in a spherical coordinate system in the direction of the angle between the x-axis and the line from the origin to the measured point.
	enumeration	R	The component of a vector along in the radial direction in a spherical system.
	enumeration	Theta	The component of a vector in a spherical coordinate system in the direction of the angle between the z-axis and the line from the origin to the measured point. In a cylindrical coordinate system it is the angle between the x-axis and the line from the origin to the point.
	enumeration	X	The component of a vector along the X-axis in a cartesian coordinate system.
	enumeration	Y	The component of a vector along the Y-axis in a cartesian coordinate system.
	enumeration	Z	The component of a vector along the Z-axis in a cartesian coordinate system.
Used by	Element	Orientation	
Source	<pre> <xsd:simpleType name="enumOrientation"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the axis of coordinate systems.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="H"> <xsd:annotation> <xsd:documentation xml:lang="en">The Hierarchical Data Format</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Phi"> <xsd:annotation> <xsd:documentation xml:lang="en">The component of a vector in a spherical coordinate system in the direction of the angle between the x-axis and the line from the origin to the measured point.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="R"> <xsd:annotation> <xsd:documentation xml:lang="en">The component of a vector along in the radial direction in a spherical system.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Theta"> <xsd:annotation> <xsd:documentation xml:lang="en">The component of a vector in a spherical coordinate system in the direction of the angle between the z-axis and the line from the origin to the measured point. In a cylindrical coordinate system it is the angle between the x-axis and the line from the origin to the point.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="X"> <xsd:annotation> <xsd:documentation xml:lang="en">The component of a vector along the X-axis in a cartesian coordinate system.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Y"> <xsd:annotation> <xsd:documentation xml:lang="en">The component of a vector along the Y-axis in a cartesian coordinate system.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Z"> <xsd:annotation> <xsd:documentation xml:lang="en">The component of a vector along the Z-axis in a cartesian coordinate system.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType></pre>		

	</xsd:restriction> </xsd:simpleType>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumFieldQualifier

Namespace	http://www.spase-group.org/data/schema																									
Annotations	Identifiers for terms which can be associated with a Field Quantity.																									
Diagram	<pre> classDiagram class enumFieldQualifier { <<Identifiers for terms which can be associated with a Field Quantity.>> } class xsd.string enumFieldQualifier < -- xsd.string </pre>																									
Type	restriction of xsd:string																									
Facets	<table border="1"> <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>Component</td> <td>A part of a multi-part entity, e.g., the components of a vector.</td> </tr> <tr> <td>enumeration</td> <td>Deviation</td> <td>The difference between an observed value and the expected value of a quantity.</td> </tr> <tr> <td>enumeration</td> <td>Magnitude</td> <td>A measure of the strength or size of a vector quantity.</td> </tr> <tr> <td>enumeration</td> <td>Peak</td> <td>The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.</td> </tr> <tr> <td>enumeration</td> <td>Perpendicular</td> <td>At right angles to a given direction.</td> </tr> <tr> <td>enumeration</td> <td>Variance</td> <td>A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.</td> </tr> <tr> <td>enumeration</td> <td>Vector</td> <td>A quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.</td> </tr> </table>		enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.	enumeration	Component	A part of a multi-part entity, e.g., the components of a vector.	enumeration	Deviation	The difference between an observed value and the expected value of a quantity.	enumeration	Magnitude	A measure of the strength or size of a vector quantity.	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	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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.
enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.																								
enumeration	Component	A part of a multi-part entity, e.g., the components of a vector.																								
enumeration	Deviation	The difference between an observed value and the expected value of a quantity.																								
enumeration	Magnitude	A measure of the strength or size of a vector quantity.																								
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	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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.																								
Used by	Element	FieldQualifier																								
Source	<pre> <xsd:simpleType name="enumFieldQualifier"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for terms which can be associated with a Field Quantity.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Average"> <xsd:annotation> <xsd:documentation xml:lang="en">The statistical mean; the sum of a set of values divided by the number of values in the set.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Component"> <xsd:annotation> <xsd:documentation xml:lang="en">A part of a multi-part entity, e.g., the components of a vector.</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="Magnitude"> <xsd:annotation> <xsd:documentation xml:lang="en">A measure of the strength or size of a vector quantity.</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,</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>																									

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        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="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 quantity having both magnitude and direction,
        e.g. displacement, velocity, acceleration
        and force.</xsd:documentation>
    </xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

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Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd
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Simple Type enumFieldQuantity

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the physical attribute of the field.		
Diagram			
Type	restriction of xsd:string		
Facets	enumeration	CrossSpectrum	The Fourier transform of the cross correlation of two physical or empirical observations.
	enumeration	Electric	The physical attribute that exerts an electrical force.
	enumeration	Magnetic	The physical attribute attributed to a magnet or its equivalent.
	enumeration	Potential	A field which obeys Laplaces Equation.
	enumeration	PoyntingFlux	The rate of energy transport per unit area per steradian.
Used by	Element	FieldQuantity	
Source	<pre> <xsd:simpleType name="enumFieldQuantity"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the physical attribute of the field.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <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="Electric"> <xsd:annotation> <xsd:documentation xml:lang="en">The physical attribute that exerts an electrical force.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Magnetic"> <xsd:annotation> <xsd:documentation xml:lang="en">The physical attribute attributed to a magnet or its equivalent.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Potential"> <xsd:annotation> </pre>		

	<pre> <xsd:documentation xml:lang="en">A field which obeys Laplace's Equation.</ xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="PoyntingFlux"> <xsd:annotation> <xsd:documentation xml:lang="en">The rate of energy transport per unit area per steradian.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumParticleType

Namespace	http://www.spase-group.org/data/schema																									
Annotations	Identifiers for the characterization of the kind of particle observed by the measurement.																									
Diagram	<pre> classDiagram enumParticleType < -- xsd:string </pre>																									
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 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>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 $1.602 \times 10^{(-19)}$ Coulomb and having a mass when at rest of about $9.109534 \times 10^{(-28)}$ 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: $Z > 2$)</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>Neutral</td> <td>Either a particle, an object, or a system that has a net electric charge of zero</td> </tr> <tr> <td>enumeration</td> <td>Proton</td> <td>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.</td> </tr> </table>		enumeration	Aerosol	A suspension of fine solid or liquid particles in gas.	enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.	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	Neutral	Either a particle, an object, or a system that has a net electric charge of zero	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.
enumeration	Aerosol	A suspension of fine solid or liquid particles in gas.																								
enumeration	AlphaParticle	A positively charged nuclear particle that consists of two protons and two neutrons.																								
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	Neutral	Either a particle, an object, or a system that has a net electric charge of zero																								
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	Element	ParticleType																								
Source	<pre> <xsd:simpleType name="enumParticleType"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the characterization of the kind of particle observed by the measurement.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Aerosol"> <xsd:annotation> <xsd:documentation xml:lang="en">A suspension of fine solid or liquid particles in gas.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="AlphaParticle"> <xsd:annotation> <xsd:documentation xml:lang="en">A positively charged nuclear particle that consists of two protons and two neutrons.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Dust"> <xsd:annotation> </pre>																									

	<pre> <xsd:documentation xml:lang="en">Free microscopic particles of solid material.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Electron"> <xsd:annotation> <xsd:documentation xml:lang="en">An elementary particle consisting of a charge of negative electricity equal to about 1.602 x 10**(-19) Coulomb and having a mass when at rest of about 9.109534 x 10**(-28) gram.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Ion"> <xsd:annotation> <xsd:documentation xml:lang="en">An atom that has acquired a net electric charge by gaining or losing one or more electrons.(Note: Z>2)</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Molecule"> <xsd:annotation> <xsd:documentation xml:lang="en">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</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Neutral"> <xsd:annotation> <xsd:documentation xml:lang="en">Either a particle, an object, or a system that has a net electric charge of zero</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Proton"> <xsd:annotation> <xsd:documentation xml:lang="en">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 x 10**(-24) gram.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumParticleQualifier

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for terms which can be associated with a Particle Quantity.		
Diagram	<pre> classDiagram class enumParticleQualifier { <<enumParticleQualifier>> } class xsdString { <<xsd:string>> } enumParticleQualifier < -- xsdString </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.
	enumeration	Component	A part of a multi-part entity, e.g., the components of a vector.
	enumeration	Deviation	The difference between an observed value and the expected value of a quantity.
	enumeration	Differential	The ratio of the intensity of radiant energy scattered in a given direction to the incident irradiance and thus has dimensions of area per unit solid angle.
	enumeration	Fit	Values that make a model agree with the data.
	enumeration	Integral	The summation of values over a given area or range.
	enumeration	Magnitude	A measure of the strength or size of a vector quantity.

	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	Ratio	The relative magnitudes of two quantities.
	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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.
Used by	Element	ParticleQualifier	
Source	<pre> <xsd:simpleType name="enumParticleQualifier"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for terms which can be associated with a Particle Quantity.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Average"> <xsd:annotation> <xsd:documentation xml:lang="en">The statistical mean; the sum of a set of values divided by the number of values in the set.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Component"> <xsd:annotation> <xsd:documentation xml:lang="en">A part of a multi-part entity, e.g., the components of a vector.</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">The ratio of the intensity of radiant energy scattered in a given direction to the incident irradiance and thus has dimensions of area per unit solid angle.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Fit"> <xsd:annotation> <xsd:documentation xml:lang="en">Values that make a model agree with the data.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Integral"> <xsd:annotation> <xsd:documentation xml:lang="en">The summation of values over a given area or range.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Magnitude"> <xsd:annotation> <xsd:documentation xml:lang="en">A measure of the strength or size of a vector quantity.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Moment"> <xsd:annotation> <xsd:documentation xml:lang="en">Parameters determined by integration over </pre>		

	<pre> 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="Ratio"> <xsd:annotation> <xsd:documentation xml:lang="en">The relative magnitudes of two quantities.</ 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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumParticleQuantity

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the characterization of the physical properties of the particle.		
Diagram	<pre> classDiagram class enumParticleQuantity { <<Identifiers for the characterization of the physical properties of the particle. >> } class xsdString { <<Simple type xsd:string>> } enumParticleQuantity ⊕--> xsdString </pre>		
Type	restriction of xsd:string		
Facets	enumeration	AlfvenMachNumber	The ratio of the bulk flow speed to the Alfven speed.
	enumeration	AverageChargeState	A measure of the composite deficit (positive) or excess (negative) of electrons with respect to protons.
	enumeration	Counts	An enumeration of the number of detection events occurring in a particle detector per unit time or over detector accumulation times.
	enumeration	Flux	In radiation studies, this refers to the amount of radiant energy passing through a unit area
	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	NumberDensity	The number of particles per unit volume.
	enumeration	PhaseSpaceDensity	The number of particles per unit volume in the six-dimensional space of position and velocity.
	enumeration	PlasmaBeta	The ratio of the plasma pressure to the magnetic pressure.
	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	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	ParticleQuantity	
Source			<pre> <xsd:simpleType name="enumParticleQuantity"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the characterization of the physical properties of the particle.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="AlfvenMachNumber"> <xsd:annotation> <xsd:documentation xml:lang="en">The ratio of the bulk flow speed to the Alfvén speed.</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="Counts"> <xsd:annotation> <xsd:documentation xml:lang="en">An enumeration of the number of detection events occurring in a particle detector per unit time or over detector accumulation times.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Flux"> <xsd:annotation> <xsd:documentation xml:lang="en">In radiation studies, this refers to the amount of radiant energy passing through a unit area</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:restriction> </xsd:simpleType> </pre>

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        </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="NumberDensity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The number of particles per unit volume.</
xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="PhaseSpaceDensity">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The number of particles per unit volume in
the six-dimensional space of position and
velocity.</xsd:documentation>
        </xsd:annotation>
    </xsd:enumeration>
    <xsd:enumeration value="PlasmaBeta">
        <xsd:annotation>
            <xsd:documentation xml:lang="en">The ratio of the plasma pressure to the magnetic
pressure.</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="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:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd
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Simple Type enumPhotonQualifier

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for terms which can be associated with a Photon Quantity.		
Diagram			
Type	restriction of xsd:string		
Facets	enumeration	Average	The statistical mean; the sum of a set of values divided by the number of values in the set.

	enumeration	Circular	<p>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.</p>
	enumeration	LineofSight	<p>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.</p>
	enumeration	Linear	<p>Relative to polarization, confinement of the E-field vector to a given plane</p>
	enumeration	Peak	<p>The maximum value for the quantity in question, over a period of time which is usually equal to the cadence.</p>
	enumeration	StokesParameters	<p>The four coordinates (usually called I, Q, U, and V) relative to a particular basis for the representation of the polarization state of an electromagnetic wave propagating through space.</p>
	enumeration	Variance	<p>A measure of dispersion of a set of data points around their mean value. The expectation value of the squared deviations from the mean.</p>
	enumeration	Vector	<p>A quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.</p>
Used by	Element	PhotonQualifier	
Source			<pre><xsd:simpleType name="enumPhotonQualifier"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for terms which can be associated with a Photon Quantity.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Average"> <xsd:annotation> <xsd:documentation xml:lang="en">The statistical mean; the sum of a set of values divided by the number of values in the set.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Circular"> <xsd:annotation> <xsd:documentation xml:lang="en">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</pre>

	<pre> which turns in a right-handed sense (that of the gyrating electrons) around the magnetic field.</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">Relative to polarization, confinement of the E-field vector to a given plane</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="StokesParameters"> <xsd:annotation> <xsd:documentation xml:lang="en">The four coordinates (usually called I, Q, U, and V) relative to a particular basis for the representation of the polarization state of an electromagnetic wave propagating through space.</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 quantity having both magnitude and direction, e.g. displacement, velocity, acceleration and force.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumPhotonQuantity

Namespace	http://www.spase-group.org/data/schema		
Annotations	Identifiers for the characterization of the physical properties of the photon.		
Diagram	<pre> classDiagram class enumPhotonQuantity { <<Identifiers for the characterization of the physical properties of the photon. >> } class xsdString { <<Simple type xsd:string>> } enumPhotonQuantity --o xsdString </pre>		
Type	restriction of xsd:string		
Facets	enumeration	Emissivity	The ratio of radiant energy from a material to that from a blackbody at the same kinetic temperature
	enumeration	EquivalentWidth	The area of the spectral line profile divided by the peak height or depth.
	enumeration	Flux	In radiation studies, this refers to the amount of radiant energy passing through a unit area
	enumeration	Intensity	The amount of energy transmitted by electromagnetic

		radiation, for example, the number of photons arriving in a given time.
enumeration	LineDepth	In spectra, a measure of the amount of absorption for a particular wavelength or frequency in the spectrum
enumeration	MagneticField	Measurements of magnetic field vectors (sometimes not all components) as time series; can be space- or ground-based. Also, [Zeeman splitting, etc. based]: 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	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	StokesParameters	The four coordinates (usually called I, Q, U, and V) relative to a particular basis for the representation of the polarization state of an electromagnetic wave propagating through space.
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	PhotonQuantity
Source	<pre> <xsd:simpleType name="enumPhotonQuantity"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the characterization of the physical properties of the photon.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Emissivity"> <xsd:annotation> <xsd:documentation xml:lang="en">The ratio of radiant energy from a material to that from a blackbody at the same kinetic temperature</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="EquivalentWidth"> <xsd:annotation> <xsd:documentation xml:lang="en">The area of the spectral line profile divided by the peak height or depth.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Flux"> <xsd:annotation> <xsd:documentation xml:lang="en">In radiation studies, this refers to the amount of radiant energy passing through a unit area</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Intensity"> <xsd:annotation> <xsd:documentation xml:lang="en">The amount of energy transmitted by electromagnetic radiation, for example, the number of photons arriving in a given time.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="LineDepth"> <xsd:annotation> <xsd:documentation xml:lang="en">In spectra, a measure of the amount of absorption for a particular wavelength or frequency in </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>	

	<pre> the spectrum</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="MagneticField"> <xsd:annotation> <xsd:documentation xml:lang="en">Measurements of magnetic field vectors (sometimes not all components) as time series; can be space- or ground-based. Also, [Zeeman splitting, etc. based]: 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="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="StokesParameters"> <xsd:annotation> <xsd:documentation xml:lang="en">The four coordinates (usually called I, Q, U, and V) relative to a particular basis for the representation of the polarization state of an electromagnetic wave propagating through space.</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></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumInstrumentType

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	<pre> classDiagram class enumInstrumentType { <<xsd:string>> } enumInstrumentType --> xsd:string </pre>		
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	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	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	FourierTransformSpectrometer	An instrument that determines the spectra of a radiative source, using time-domain measurements and a Fourier transform.
enumeration	Imager	An instrument which samples the radiation from an area at one or more spectral ranges emitted or reflected by an object.
enumeration	LangmuirProbe	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	LongWire	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	Magnetometer	An instrument which measures the ambient magnetic field.
enumeration	MassSpectrometer	An instrument which distinguishes chemical species in terms of their different isotopic masses.
enumeration	MicrochannelPlate	An instrument used for the detection of elementary particles, ions, ultraviolet rays and soft X-rays constructed from very thin conductive glass capillaries.
enumeration	Monopole	
enumeration	ParticleCorrelator	An instrument which correlates particle flux to help identify wave/particle interactions.
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 which uses radar to obtain an image of an object.
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	SearchCoil	A loop of wire used to determine the time variation of the magnetic flux threading the loop by measurement of the electric potential difference induced between the ends of the wire.
enumeration	SpacecraftPotentialController	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 into its component wavelengths.
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	InstrumentType
Source	<pre> <xsd:simpleType name="enumInstrumentType"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the type of experiment the instrument performs. This is the technique of observation.</xsd:documentation> </xsd:annotation> <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="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="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:restriction> </xsd:simpleType> </pre>	

```

</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="Imager">
  <xsd:annotation>
    <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="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="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="Monopole">
  <xsd:annotation>
    <xsd:documentation xml:lang="en">
    </xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="ParticleCorrelator">
  <xsd:annotation>

```

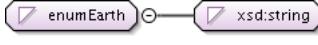
```

<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="QuadrисphericalAnalyser">
<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 which uses radar to obtain an
image of an object.</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="SearchCoil">
<xsd:annotation>
<xsd:documentation xml:lang="en">A loop of wire used to determine the time
variation of the magnetic flux threading the
loop by measurement of the electric potential
difference induced between the ends of the
wire.</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 into its component wavelengths.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="WaveformReceiver">
<xsd:annotation>
<xsd:documentation xml:lang="en">A radio receiver which outputs the value of
one or more components of the electric and/or
magnetic field as a function of time.</xsd:documentation>
</xsd:annotation>
</xsd:enumeration>
</xsd:restriction>
</xsd:simpleType>

```

Schema location file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumEarth

Namespace	http://www.spase-group.org/data/schema
Annotations	identifiers for the regions surrounding the Earth.
Diagram	
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 planets 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.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 aural zone.
	enumeration	Magnetosphere.Radiationbelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
	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.Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction..
	enumeration	Surface	The outermost area of a solid object.
Source	<pre> <xsd:simpleType name="enumEarth"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for the regions surrounding the Earth.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Magnetosheath"> <xsd:annotation> <xsd:documentation xml:lang="en">The region between the bow shock and the magnetopause, characterized by very turbulent plasma.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="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="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:restriction> </xsd:simpleType> </pre>		

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</xsd:enumeration>
<xsd:enumeration value="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="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 aural zone.</xsd:documentation>
  </xsd:annotation>
</xsd:enumeration>
<xsd:enumeration value="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="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.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="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:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumFieldComponent

Namespace	http://www.spase-group.org/data/schema
Annotations	Identifiers for components of a coordinate system which can be associated with a Field Quantity.
Diagram	
Type	xsd:string
Source	<pre> <xsd:simpleType name="enumFieldComponent"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for components of a coordinate system which can be associated with a Field </xsd:documentation> </xsd:annotation> </xsd:simpleType> </pre>

	<pre>Quantity.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> </xsd:restriction> </xsd:simpleType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumHeliosphere

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	<pre> classDiagram class enumHeliosphere { <<restriction of xsd:string>> } </pre>		
Type	restriction of xsd:string		
Facets	enumeration Inner <hr/> enumeration		The region of the heliosphere extending radially out from the "surface" of the Sun to 1 AU.

	<p>the atmosphere or surface of the planet, and bounded by the magnetopause, that is under the direct influence of planets magnetic field.</p>		
Diagram			
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	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 aural zone.
	enumeration	RadiationBelt	The region within a magnetosphere where high-energy particles could potentially be trapped in a magnetic field.
Source	<pre><xsd:simpleType name="enumMagnetosphere"> <xsd:annotation> <xsd:documentation xml:lang="en">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.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="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="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="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 aural zone.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="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:restriction> </xsd:simpleType></pre>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Simple Type enumNearEarth

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

Annotations	Identifiers for heliospheric regions near the earth or within the earth's orbit.
Diagram	
Type	xsd:string
Source	<pre><xsd:simpleType name="enumNearEarth"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for heliospheric regions near the earth or within the earth's orbit.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> </xsd:restriction> </xsd:simpleType></pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type enumNearSurface

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												
Type	restriction of xsd:string											
Facets	<table border="0"> <tr> <td>enumeration</td> <td>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> <tr> <td>enumeration</td> <td>AuroralRegion</td> <td>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.</td> </tr> <tr> <td>enumeration</td> <td>Ionosphere</td> <td>The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction..</td> </tr> </table>			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	Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction..
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	Ionosphere	The charged or ionized gases surrounding a body that are nominally bound to the body by virtue of the gravitational attraction..										
Source	<pre><xsd:simpleType name="enumNearSurface"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for regions of the gaseous and possibly ionized environment of a body extending from the surface to some specified altitude.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="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="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="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:restriction> </xsd:simpleType></pre>											
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd											

Simple Type enumProcessingLevel

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 physical parameter values.
	enumeration	Raw	
	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	<pre> <xsd:simpleType name="enumProcessingLevel"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers to characterize the amount and type of manipulation which has been applied to the sampled data.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="Calibrated"> <xsd:annotation> <xsd:documentation xml:lang="en">Data wherein sensor outputs have been convolved with instrument response function, often irreversibly, to yield physical parameter values.</xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Raw"> <xsd:annotation> <xsd:documentation xml:lang="en"> </xsd:documentation> </xsd:annotation> </xsd:enumeration> <xsd:enumeration value="Uncalibrated"> <xsd:annotation> <xsd:documentation xml:lang="en">Duplicate data are removed from the data stream and data are time ordered. Values are not adjusted for any potential biases or external factors.</xsd:documentation> </xsd:annotation> </xsd:enumeration> </xsd:restriction> </xsd:simpleType> </pre>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Simple Type enumSun

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 Suns (or a stars) 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> <xsd:simpleType name="enumSun"> <xsd:annotation> <xsd:documentation xml:lang="en">Identifiers for regions of the star upon which our solar system is centered.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> <xsd:enumeration value="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="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="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="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="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:restriction> </xsd:simpleType></pre>		
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd		

Simple Type enumSupport

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	xsd:string
Source	<pre> <xsd:simpleType name="enumSupport"> <xsd:annotation></pre>

	<pre> <xsd:documentation xml:lang="en">Identifiers for the information useful in understanding the context of an observation, typically observed or measured coincidentally with a physical observation.</xsd:documentation> </xsd:annotation> <xsd:restriction base="xsd:string"> </xsd:restriction> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Simple Type typeSequence

Namespace	http://www.spase-group.org/data/schema
Diagram	
Type	list of xsd:integer
Source	<pre> <xsd:simpleType name="typeSequence"> <xsd:list itemType="xsd:integer" /> </xsd:simpleType> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd

Namespace: ""

Attributes

Attribute Spase / @lang

Namespace	No namespace
Type	xsd:string
Properties	default: en
Used by	Complex Type Spase
Source	<pre> <xsd:attribute name="lang" type="xsd:string" default="en" /> </pre>
Schema location	file:/var/www/spase/site/root/data/schema/spase-1_1_0.xsd