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<Insert Abstract Text here>



The following are keywords to be used by search engines and document catalogues.

keyword_1, keyword_2, keyword_3, etc.

PREFACE

NOTE:Insert Preface Text here. Give OGC specific commentary: describe the technical content, reason for document, history of the document and precursors, and plans for future work.

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SECURITY CONSIDERATIONS

No security considerations have been made for this Standard.



SUBMITTERS

All questions regarding this submission should be directed to the editor or the submitters:

NAME	AFFILIATION	OGC MEMBER
Steve Liang	University of Calgary, Canada / SensorUp Inc.	Yes



SOURCE OF THE CONTENT FOR THIS OGC DOCUMENT



VALIDITY OF CONTENT



FUTURE WORK

NOTE:If you need to place any further sections in the preface area use the [.preface] attribute.



Additional contributors to this Standard include the following: Individual name(s), Organization



1 SCOPE

<Insert Scope text here>

NOTE:Give the subject of the document and the aspects of that scope covered by the document.

2

CONFORMANCE



CONFORMANCE

<Insert conformance content here>

NOTE:Provide a short description of the content approached in subsequent sections and the main subject of the document

3

NORMATIVE REFERENCES



NORMATIVE REFERENCES

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- Identification of Common Molecular Subsequences. Smith, T.F., Waterman, M.S., J. Mol. Biol. 147, 195–197 (1981)
- ZIB Structure Prediction Pipeline: Composing a Complex Biological Workflow through Web Services.

 May, P., Ehrlich, H.C., Steinke, T. In: Nagel, W.E., Walter, W.V., Lehner, W. (eds.)

 Euro-Par 2006. LNCS, vol. 4128, pp. 1148–1158. Springer, Heidelberg (2006)
- The Grid: Blueprint for a New Computing Infrastructure., Foster, I., Kesselman, C.. Morgan Kaufmann, San Francisco (1999).
- Grid Information Services for Distributed Resource Sharing. Czajkowski, K., Fitzgerald, S., Foster, I., Kesselman, C. In: 10th IEEE International Symposium on High Performance Distributed Computing, pp. 181–184. IEEE Press, New York (2001)



TERMS AND DEFINITIONS



TERMS AND DEFINITIONS

This document uses the terms defined in <u>OGC Policy Directive 49</u>, which is based on the ISO/IEC Directives, Part 2, Rules for the structure and drafting of International Standards. In particular, the word "shall" (not "must") is the verb form used to indicate a requirement to be strictly followed to conform to this document and OGC documents do not use the equivalent phrases in the ISO/IEC Directives, Part 2.

This document also uses terms defined in the OGC Standard for Modular specifications (OGC 08-131r3), also known as the 'ModSpec'. The definitions of terms such as standard, specification, requirement, and conformance test are provided in the ModSpec.

For the purposes of this document, the following additional terms and definitions apply.

4.1. example term

term used for exemplary purposes

Note 1 to entry: An example note.

Example Here's an example of an example term.

[SOURCE:]

5 CONVENTIONS

5

CONVENTIONS

NOTE: This section provides details and examples for any conventions used in the document. Examples of conventions are symbols, abbreviations, use of XML schema, or special notes regarding how to read the document.

5.1. Identifiers

The normative provisions in this standard are denoted by the URI

http://www.opengis.net/spec/{standard}/{m.n}

All requirements and conformance tests that appear in this document are denoted by partial URIs which are relative to this base.

5.2. Other conventions

<Place any other convention needed with its corresponding title>



6 CORE

This clause establishes the **Core** Requirements class, with IRI /req/core, which has a corresponding Conformance Class, **Core**, with IRI /conf/core.

Requirements class 1: 06-core.adoc Extension	
IDENTIFIER	/req/06-core.adoc
TARGET TYPE	Implementation Specification
REQUIREMENT	/req/Coordinate_Reference_System_Types

6.1. Coordinate Reference System Types

Requirement 1: Coordinate Reference System Types		
IDENTIFIER	/req/Coordinate_Reference_System_Types	
STATEMENT	Implementations shall allow the RDFS classes geosrs:BoundCRS, geosrs:CompoundCRS, geosrs:EngineeringCRS, geosrs:GeocentricCRS, geosrs:GeodeticCRS, geosrs:Geographic CRS, geosrs:ParametricCRS, geosrs:ProjectedCRS, geosrs:SelenographicCRS, geosrs: SpatioParametricCompoundCRS, geosrs:SpatioParametricTemporalCompoundCRS, geosrs:SpatioTemporalCompoundCRS, geosrs:StaticCRS, geosrs:TemporalCRS, geosrs:VerticalCRS to be used in SPARQL graph patterns.	

6.1.1. Class: geosrs:BoundCRS

Table 1 — geosrs:BoundCRS

URI	https://w3id.org/geosrs/srs/BoundCRS
Super-classes	BoundCRS BoundCRS

6.1.2. Class: geosrs:CompoundCRS

Table 2 — geosrs:CompoundCRS

URI	https://w3id.org/geosrs/srs/CompoundCRS
Definition	Coordinate reference system using at least two independent single coordinate reference systems. Cf. ISO 19111:2007:2007-07, parts 8.2.3.c, 8.2.4, table 6 and annex B.1.2.4.
Super-classes	CompoundCRS

6.1.3. Class: geosrs:GeocentricCRS

Table 3 — geosrs:GeocentricCRS

URI	https://w3id.org/geosrs/srs/GeocentricCRS
Definition	A cartesian coordinate reference system that represents locations in the vicinity of the Earth (including its surface, interior, atmosphere, and surrounding outer space) as X, Y, and Z measurements from its center of mass. Commonly used to track the orbits of satellites.
Super-classes	GeocentricCRS

6.1.4. Class: geosrs:ParametricCRS

Table 4 — geosrs:ParametricCRS

URI	https://w3id.org/geosrs/srs/ParametricCRS
Definition	Coordinate Reference System based on a parametric datum
Super-classes	<u>ParametricCRS</u>

6.1.5. Class: geosrs:SelenographicCRS

Table 5 — geosrs:SelenographicCRS

URI	https://w3id.org/geosrs/srs/SelenographicCRS
Definition	Coordinate Reference System to refer locations on the surface of the Earth's Moon.
Super-classes	<u>SelenographicCRS</u>

6.1.6. Class: geosrs:SpatioParametricCompoundCRS

Table 6 — geosrs:SpatioParametricCompoundCRS

URI	https://w3id.org/geosrs/srs/ SpatioParametricCompoundCRS
Definition	A spatio-parametric coordinate reference system is a compound CRS in which one component is a geographic 2D, projected 2D or engineering 2D CRS, supplemented by a parametric CRS to create a three-dimensional CRS
Super-classes	<u>SpatioParametricCompoundCRS</u>

6.1.7. Class: geosrs:SpatioParametricTemporalCompoundCRS

Table 7 — geosrs:SpatioParametricTemporalCompoundCRS

URI	https://w3id.org/geosrs/srs/ SpatioParametricTemporalCompoundCRS
Definition	Coordinate reference system combining a spatio- parametric reference system with at least one temporal reference system
Super-classes	<u>SpatioParametricTemporalCompoundCRS</u>

6.1.8. Class: geosrs:SpatioTemporalCompoundCRS

 Table 8 — geosrs: Spatio Temporal Compound CRS

URI	https://w3id.org/geosrs/srs/ SpatioTemporalCompoundCRS
Definition	Coordinate reference system combining a spatial reference system with at least one temporal reference system
Super-classes	<u>SpatioTemporalCompoundCRS</u>

6.1.9. Class: geosrs:StaticCRS

Table 9 — geosrs:StaticCRS

URI	https://w3id.org/geosrs/srs/StaticCRS
Definition	Coordinate Reference System that has a static reference frame
Super-classes	StaticCRS

6.1.10. Class: geosrs:TemporalCRS

Table 10 — geosrs:TemporalCRS

URI	https://w3id.org/geosrs/srs/TemporalCRS
Definition	Coordinate Reference System based on a temporal datum
Super-classes	<u>TemporalCRS</u>

6.1.11. Class: geosrs: Vertical CRS

Table 11 — geosrs:VerticalCRS

URI	https://w3id.org/geosrs/srs/VerticalCRS
Definition	One-dimensional coordinate reference system associated with a vertical datum and used for recording heights or depths. Ellipsoidal heights are not captured in a vertical coordinate reference system but as part of a 3D coordinates tuple defined in a geodetic 3D coordinate

	reference system. Cf. ISO 19111:2007:2007-07, parts 8.2.2.b, table 14 and annex B.1.2.1.b.
Super-classes	VerticalCRS



COORDINATE OPERATION MODULE



COORDINATE OPERATION MODULE

This clause establishes the $\bf Co$ Requirements class, with IRI /req/co, which has a corresponding Conformance Class, $\bf Co$, with IRI /conf/co.

8

COORDINATE SYSTEM MODULE

COORDINATE SYSTEM MODULE

This clause establishes the **CS** Requirements class, with IRI /req/cs, which has a corresponding Conformance Class, **CS**, with IRI /conf/cs.

Requirements class 2: 08-cs_extension.adoc Extension		
IDENTIFIER	/req/08-cs_extension.adoc	
TARGET TYPE	Implementation Specification	
	/req/Coordinate_System_Types	
REQUIREMENT	/req/Orthogonal_Coordinate_Systems	
	/req/Celestial_Coordinate_Systems	

8.1. Coordinate System Types

Requirement 2: Coordinate System Types		
IDENTIFIER	/req/Coordinate_System_Types	
STATEMENT	Implementations shall allow the RDFS classes geosrs:1DCoordinateSystem, geosrs:3DCoordinateSystem, geosrs:AffineCoordinateSystem, geosrs: BarycentricCoordinateSystem, geosrs:CartesianCoordinateSystem, geosrs: CelestialCoordinateSystem, geosrs:CurvilinearCoordinateSystem, geosrs:GeodeticCoordinateSystem, geosrs:GridCoordinateSystem, geosrs:LocalCoordinateSystem, geosrs:ObliqueCoordinateSystem, geosrs:OrdinalCoordinateSystem, geosrs:PlanarCoordinateSystem to be used in SPARQL graph patterns.	

8.1.1. Class: geosrs:1DCoordinateSystem

Table 12 — geosrs:1DCoordinateSystem

URI	https://w3id.org/geosrs/cs/1DCoordinateSystem

Definition	Non-repeating sequence of coordinate system axes that spans a given coordinate space in one dimension
Super-classes	1DCoordinateSystem

8.1.2. Class: geosrs:3DCoordinateSystem

Table 13 — geosrs:3DCoordinateSystem

URI	https://w3id.org/geosrs/cs/3DCoordinateSystem
Definition	Non-repeating sequence of coordinate system axes that spans a given coordinate space in three dimensions
Super-classes	3DCoordinateSystem

8.1.3. Class: geosrs:AffineCoordinateSystem

Table 14 — geosrs:AffineCoordinateSystem

URI	https://w3id.org/geosrs/cs/AffineCoordinateSystem
Definition	Coordinate system in Euclidean space with straight axes that are not necessarily mutually perpendicular
Super-classes	AffineCoordinateSystem

8.1.4. Class: geosrs:BarycentricCoordinateSystem

Table 15 — geosrs:BarycentricCoordinateSystem

URI	https://w3id.org/geosrs/cs/BarycentricCoordinateSystem
Definition	A coordinate system in which the location of a point is specified by reference to a simplex (a triangle for points in a plane, a tetrahedron for points in three-dimensional space, etc.)
Super-classes	BarycentricCoordinateSystem

8.1.5. Class: geosrs:CelestialCoordinateSystem

Table 16 — geosrs:CelestialCoordinateSystem

URI	https://w3id.org/geosrs/cs/CelestialCoordinateSystem
Definition	A coordinate system for specifying positions of celestial objects relative to physical reference points
Super-classes	CelestialCoordinateSystem

8.1.6. Class: geosrs:CurvilinearCoordinateSystem

Table 17 — geosrs:CurvilinearCoordinateSystem

URI	https://w3id.org/geosrs/cs/CurvilinearCoordinateSystem
Definition	A coordinate system for the Euclidean space in which the coordinate lines may be curved
Super-classes	CurvilinearCoordinateSystem

8.1.7. Class: geosrs:GeodeticCoordinateSystem

Table 18 — geosrs:GeodeticCoordinateSystem

URI	https://w3id.org/geosrs/cs/GeodeticCoordinateSystem
Definition	Coordinate system used by a Geodetic CRS, one of a Cartesian coordinate system or a spherical coordinate system.
Super-classes	GeodeticCoordinateSystem

8.1.8. Class: geosrs:GridCoordinateSystem

Table 19 — geosrs:GridCoordinateSystem

URI	https://w3id.org/geosrs/cs/GridCoordinateSystem

Definition	A grid coordinate system identifies areas within a grid.
Super-classes	<u>GridCoordinateSystem</u>

8.1.9. Class: geosrs:LocalCoordinateSystem

Table 20 — geosrs:LocalCoordinateSystem

URI	https://w3id.org/geosrs/cs/LocalCoordinateSystem
Definition	Coordinate system with a point of local reference.
Super-classes	<u>LocalCoordinateSystem</u>

8.1.10. Class: geosrs:ObliqueCoordinateSystem

Table 21 — geosrs:ObliqueCoordinateSystem

URI	https://w3id.org/geosrs/cs/ObliqueCoordinateSystem
Definition	A plane coordinate system whose axes are not perpendicular.
Super-classes	<u>ObliqueCoordinateSystem</u>

8.1.11. Class: geosrs:PlanarCoordinateSystem

Table 22 — geosrs:PlanarCoordinateSystem

URI	https://w3id.org/geosrs/cs/PlanarCoordinateSystem
Definition	A two-dimensional measurement system that locates features on a plane based on their distance from an origin (0,0) along two perpendicular axes.
Super-classes	<u>PlanarCoordinateSystem</u>

8.2. Orthogonal Coordinate Systems

Requirement 3: Orthogonal Coordinate Systems	
IDENTIFIER	/req/Orthogonal_Coordinate_Systems
STATEMENT	Implementations shall allow the RDFS classes geosrs: ConicalCoordinateSystem, geosrs: EllipsoidalCoordinateSystem to be used in SPARQL graph patterns.

8.2.1. Class: geosrs:ConicalCoordinateSystem

 Table 23 — geosrs:ConicalCoordinateSystem

URI	https://w3id.org/geosrs/cs/ConicalCoordinateSystem
Definition	A conical coordinate system is a three-dimensional orthogonal coordinate system consisting of concentric spheres (described by their radius r) and by two families of perpendicular cones, aligned along the z- and x-axes, respectively
Super-classes	<u>ConicalCoordinateSystem</u>

8.3. Celestial Coordinate Systems

Requirement 4: Celestial Coordinate Systems	
IDENTIFIER	/req/Celestial_Coordinate_Systems
STATEMENT	Implementations shall allow the RDFS classes geosrs: EclipticCoordinateSystem, geosrs: EquatorialCoordinateSystem, geosrs: GalacticCoordinateSystem, geosrs: HorizontalCoordinateSystem, geosrs: PerifocalCoordinateSystem, geosrs: SuperGalacticCS to be used in SPARQL graph patterns.

8.3.1. Class: geosrs:EclipticCoordinateSystem

Table 24 — geosrs:EclipticCoordinateSystem

URI	https://w3id.org/geosrs/cs/EclipticCoordinateSystem
Definition	An ecliptic coordinate system is used for representing the apparent positions and orbits of solar system objects.
Super-classes	<u>EclipticCoordinateSystem</u>

8.3.2. Class: geosrs:EquatorialCoordinateSystem

 $\textbf{Table 25}- {\tt geosrs:} Equatorial Coordinate System$

URI	https://w3id.org/geosrs/cs/EquatorialCoordinateSystem
Definition	A celestial coordinate system in which an object's position on the celestial sphere is described in terms of its north-south declination and east-west right ascension, measured relative to the celestial equator and vernal equinox, respectively.
Super-classes	<u>EquatorialCoordinateSystem</u>

8.3.3. Class: geosrs:GalacticCoordinateSystem

Table 26 — geosrs:GalacticCoordinateSystem

URI	https://w3id.org/geosrs/cs/GalacticCoordinateSystem
Definition	A coordinate system with the Sun as its center, the primary direction aligned with the approximate center of the Milky Way Galaxy, and the fundamental plane parallel to an approximation of the galactic plane but offset to its north.
Super-classes	CelestialCoordinateSystem 3DCoordinateSystem

8.3.4. Class: geosrs:HorizontalCoordinateSystem

Table 27 — geosrs:HorizontalCoordinateSystem

URI	https://w3id.org/geosrs/cs/HorizontalCoordinateSystem

Definition	A horizontal coordinate system is a celestial coordinate system that uses the observer's local horizon as the fundamental plane.
Super-classes	<u>HorizontalCoordinateSystem</u>

8.3.5. Class: geosrs:PerifocalCoordinateSystem

 Table 28 — geosrs:PerifocalCoordinateSystem

URI	https://w3id.org/geosrs/cs/PerifocalCoordinateSystem
Definition	A frame of reference centered at the focus of the orbit, i. e. the celestial body about which the orbit is centered.
Super-classes	PerifocalCoordinateSystem

8.3.6. Class: geosrs:SuperGalacticCS

Table 29 — geosrs:SuperGalacticCS

URI	https://w3id.org/geosrs/cs/SuperGalacticCS
Definition	A reference frame for the supercluster of galaxies that contains the Milky Way galaxy, referenced to a local relatively flat collection of galaxy clusters used to define the supergalactic plane.
Super-classes	CelestialCoordinateSystem 3DCoordinateSystem



DATUM MODULE

9 DATUM MODULE

This clause establishes the **Datum** Requirements class, with IRI /req/datum, which has a corresponding Conformance Class, **Datum**, with IRI /conf/datum.

Requirements class 3: 09-datum_extension.adoc Extension	
IDENTIFIER	/req/09-datum_extension.adoc
TARGET TYPE	Implementation Specification
REQUIREMENT	/req/DatumTypes

9.1. DatumTypes

Requiremen	nt 5: DatumTypes
IDENTIFIER	/req/DatumTypes
STATEMENT	Implementations shall allow the RDFS classes geosrs:GeodeticDatum, geosrs: DynamicGeodeticReferenceFrame, geosrs:VerticalDatum, geosrs:DynamicVerticalDatum, geosrs:ParametricDatum, geosrs:EngineeringDatum, geosrs:TemporalDatum, geosrs:DatumEnsemble to be used in SPARQL graph patterns.

9.1.1. Class: geosrs:DynamicGeodeticReferenceFrame

Table 30 — geosrs:DynamicGeodeticReferenceFrame

URI	https://w3id.org/geosrs/datum/ DynamicGeodeticReferenceFrame
Definition	Geodetic reference frame in which some of the parameters describe time evolution of defining station coordinates Example: defining station coordinates having linear velocities to account for crustal motion.
Super-classes	<u>DynamicGeodeticReferenceFrame</u>

9.1.2. Class: geosrs:DynamicVerticalDatum

Table 31 — geosrs:DynamicVerticalDatum

URI	https://w3id.org/geosrs/datum/DynamicVerticalDatum
Definition	Vertical reference frame in which some of the defining parameters have time dependencyExample: Defining station heights have velocity to account for post-glacial isostatic rebound motion. Cf. ISO 19111:2019 Geographic information — Referencing by coordinates.
Super-classes	DynamicVerticalDatum

9.1.3. Class: geosrs:ParametricDatum

Table 32 — geosrs:ParametricDatum

URI	https://w3id.org/geosrs/datum/ParametricDatum
Definition	Textual description and/or a set of parameters identifying a particular reference surface used as the origin of a parametric coordinate system, including its position with respect to the Earth. Cf. ISO 19111:2019 Geographic information — Referencing by coordinates.
Super-classes	<u>ParametricDatum</u>

9.1.4. Class: geosrs:EngineeringDatum

Table 33 — geosrs:EngineeringDatum

URI	https://w3id.org/geosrs/datum/EngineeringDatum
Definition	Definition of the origin and orientation of an engineering coordinate reference systemNote: The origin can be fixed with respect to the Earth (such as a defined point at a construction site), or be a defined point on a moving vehicle (such as on a ship or satellite), or a defined point of an image. Cf. ISO 19111:2019 Geographic information — Referencing by coordinates.

9.1.5. Class: geosrs:TemporalDatum

Table 34 — geosrs:TemporalDatum

URI	https://w3id.org/geosrs/datum/TemporalDatum
Definition	Definition of the relationship of a temporal coordinate system to an objectNote: The object is normally time on the Earth. Cf. ISO 19111:2019 Geographic information — Referencing by coordinates.
Super-classes	<u>TemporalDatum</u>

9.1.6. Class: geosrs:DatumEnsemble

Table 35 — geosrs:DatumEnsemble

URI	https://w3id.org/geosrs/datum/DatumEnsemble
Definition	A collection of two or more datums (or if geodetic or vertical, a collection of two or more reference frames) that are realizations of one Conventional Reference System and which for all but the highest accuracy requirements may be considered to be insignificantly different from each other. Note: Within the datum ensemble every frame or datum is constrained to be a realization of the same reference system. Cf. ISO 19111:2019 Geographic information — Referencing by coordinates.



SRS APPLICATION MODULE



SRS APPLICATION MODULE

This clause establishes the **SRSAPP** Requirements class, with IRI /req/srsapp, which has a corresponding Conformance Class, **SRSAPP**, with IRI /conf/srsapp.



PROJECTIONS MODULE



PROJECTIONS MODULE

This clause establishes the **PROJ** Requirements class, with IRI /req/proj, which has a corresponding Conformance Class, **PROJ**, with IRI /conf/proj.

Requirements class 4: 11-projection	s_extension.adoc Extension
IDENTIFIER	/req/11-projections_extension.adoc
TARGET TYPE	Implementation Specification
	/req/Lenticular_Projections
	/req/Conformal_Projections
	/req/Minimum_Error_Projections
	/req/Pseudo_Azimuthal_Projections
	/req/Equal_Area_Projections
	/req/Pseudo_Conical_Projections
	/req/Globular_Projections
	/req/Pseudo_Cylindrical_Projections
REQUIREMENT	/req/Cylindrical_Projections
	/req/Compromise_Projections
	/req/Polyhedral_Projections
	/req/Equidistant_Projections
	/req/Conical_Projections
	/req/Azimuthal_Projections
	/req/Perspective_Projections
	/req/Polyconic_Projections
	/req/Stereographic_Projections

11.1. Lenticular Projections

Requiremer	nt 6: Lenticular Projections
IDENTIFIER	/req/Lenticular_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:A4Projection, geosrs: BriesemeisterProjection, geosrs:CiricIProjection, geosrs:CupolaProjection, geosrs:DedistortProjection, geosrs:DietrichKitadaProjection, geosrs: FranculaIIIProjection, geosrs:FranculaIVProjection, geosrs:FranculaIXProjection, geosrs:FranculaVIIIProjection, geosrs:FranculaVProjection, geosrs: FranculaXIIIProjection, geosrs:FranculaXIIProjection, geosrs: FranculaXIVProjection, geosrs:HamusoidalProjection, geosrs:KissProjection to be used in SPARQL graph patterns.

11.1.1. Class: geosrs:A4Projection

Table 36 — geosrs:A4Projection

URI	https://w3id.org/geosrs/projection/A4Projection
Super-classes	<u>A4Projection</u>

11.1.2. Class: geosrs:BriesemeisterProjection

Table 37 — geosrs:BriesemeisterProjection

URI	https://w3id.org/geosrs/projection/ BriesemeisterProjection
Super-classes	<u>BriesemeisterProjection</u>

11.1.3. Class: geosrs:CiriclProjection

Table 38 — geosrs:CiricIProjection

URI	https://w3id.org/geosrs/projection/CiricIProjection

Super-classes <u>CiricIProjection</u>

11.1.4. Class: geosrs:CupolaProjection

Table 39 — geosrs:CupolaProjection

URI	https://w3id.org/geosrs/projection/CupolaProjection
Super-classes	<u>CupolaProjection</u>

11.1.5. Class: geosrs:DedistortProjection

Table 40 — geosrs:DedistortProjection

URI	https://w3id.org/geosrs/projection/DedistortProjection
Super-classes	<u>DedistortProjection</u>

11.1.6. Class: geosrs:DietrichKitadaProjection

Table 41 — geosrs:DietrichKitadaProjection

URI	https://w3id.org/geosrs/projection/ DietrichKitadaProjection
Super-classes	<u>DietrichKitadaProjection</u>

11.1.7. Class: geosrs:FranculalIIProjection

Table 42 — geosrs:FranculaIIIProjection

URI	https://w3id.org/geosrs/projection/FranculalIIProjection
Super-classes	<u>FranculalIIProjection</u>

11.1.8. Class: geosrs:FranculalVProjection

Table 43 — geosrs:FranculalVProjection

URI	https://w3id.org/geosrs/projection/FranculalVProjection
Super-classes	<u>FranculalVProjection</u>

11.1.9. Class: geosrs:FranculalXProjection

Table 44 — geosrs:FranculalXProjection

URI	https://w3id.org/geosrs/projection/FranculalXProjection
Super-classes	<u>FranculalXProjection</u>

11.1.10. Class: geosrs:FranculaVIIIProjection

Table 45 — geosrs:FranculaVIIIProjection

URI	https://w3id.org/geosrs/projection/ FranculaVIIIProjection
Super-classes	FranculaVIIIProjection

11.1.11. Class: geosrs:FranculaVProjection

Table 46 — geosrs:FranculaVProjection

URI	https://w3id.org/geosrs/projection/FranculaVProjection
Super-classes	<u>FranculaVProjection</u>

11.1.12. Class: geosrs:FranculaXIIIProjection

Table 47 — geosrs:FranculaXIIIProjection

URI	https://w3id.org/geosrs/projection/ FranculaXIIIProjection
Super-classes	FranculaXIIIProjection

11.1.13. Class: geosrs:FranculaXIIProjection

Table 48 — geosrs:FranculaXIIProjection

URI	https://w3id.org/geosrs/projection/FranculaXIIProjection
Super-classes	FranculaXIIProjection

11.1.14. Class: geosrs:FranculaXIVProjection

Table 49 — geosrs:FranculaXIVProjection

URI	https://w3id.org/geosrs/projection/ FranculaXIVProjection
Super-classes	FranculaXIVProjection

11.1.15. Class: geosrs:HamusoidalProjection

Table 50 — geosrs:HamusoidalProjection

URI	https://w3id.org/geosrs/projection/ HamusoidalProjection
Super-classes	<u>HamusoidalProjection</u>

11.1.16. Class: geosrs:KissProjection

Table 51 — geosrs:KissProjection

URI	https://w3id.org/geosrs/projection/KissProjection

Super-classes <u>KissProjection</u>

11.2. Conformal Projections

Requirement 7: Conformal Projections	
IDENTIFIER	/req/Conformal_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:AdamsProjection, geosrs: AdamsWorldInASquareIIProjection, geosrs:AdamsWorldInASquareIProjection, geosrs:AugustEpicycloidalProjection, geosrs:CoxConformalProjection, geosrs: EisenlohrProjection, geosrs:GS50Projection, geosrs:PeirceQuincuncialProjection, geosrs:StereographicProjection to be used in SPARQL graph patterns.

11.2.1. Class: geosrs:AdamsProjection

Table 52 — geosrs:AdamsProjection

URI	https://w3id.org/geosrs/projection/AdamsProjection
Super-classes	AdamsProjection

11.2.2. Class: geosrs:AdamsWorldInASquareIIProjection

Table 53 — geosrs:AdamsWorldInASquareIIProjection

URI	https://w3id.org/geosrs/projection/ AdamsWorldInASquareIIProjection
Super-classes	<u>AdamsWorldInASquareIIProjection</u>

11.2.3. Class: geosrs:AdamsWorldInASquareIProjection

 $\textbf{Table 54}- {\tt geosrs:} A dams World In ASquare I Projection$

URI	https://w3id.org/geosrs/projection/ AdamsWorldInASquareIProjection
Super-classes	AdamsWorldInASquareIProjection

11.2.4. Class: geosrs:AugustEpicycloidalProjection

Table 55 — geosrs:AugustEpicycloidalProjection

URI	https://w3id.org/geosrs/projection/ AugustEpicycloidalProjection
Definition	A projection in which every angle between two curves that crosss each other on a celestical body is preserved in the image of the projection
Super-classes	AugustEpicycloidalProjection

11.2.5. Class: geosrs:CoxConformalProjection

Table 56 — geosrs:CoxConformalProjection

URI	https://w3id.org/geosrs/projection/ CoxConformalProjection
Super-classes	CoxConformalProjection

11.2.6. Class: geosrs:EisenlohrProjection

Table 57 — geosrs:EisenlohrProjection

URI	https://w3id.org/geosrs/projection/EisenlohrProjection
Super-classes	<u>EisenlohrProjection</u>

11.2.7. Class: geosrs:GS50Projection

Table 58 — geosrs:GS50Projection

URI	https://w3id.org/geosrs/projection/GS50Projection
Super-classes	GS50Projection

11.2.8. Class: geosrs:PeirceQuincuncialProjection

Table 59 — geosrs:PeirceQuincuncialProjection

URI	https://w3id.org/geosrs/projection/ PeirceQuincuncialProjection
Super-classes	<u>PeirceQuincuncialProjection</u>

11.2.9. Class: geosrs:StereographicProjection

Table 60 — geosrs:StereographicProjection

URI	https://w3id.org/geosrs/projection/ StereographicProjection
Super-classes	StereographicProjection

11.3. Minimum Error Projections

Requirement 8: Minimum Error Projections	
IDENTIFIER	/req/Minimum_Error_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs: AiryProjection to be used in SPARQL graph patterns.

11.3.1. Class: geosrs:AiryProjection

Table 61 — geosrs:AiryProjection

URI	https://w3id.org/geosrs/projection/AiryProjection
Definition	An azimuthal minimum error projection for the region within the small or great circle defined by an angular distance, from the tangency point of the plane
Super-classes	AiryProjection

11.4. Pseudo Azimuthal Projections

Requirement 9: Pseudo Azimuthal Projections	
IDENTIFIER	/req/Pseudo_Azimuthal_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:AitoffObliqueProjection, geosrs: AitoffProjection, geosrs:HammerProjection, geosrs:Strebe1995Projection, geosrs: WinkelTripelProjection to be used in SPARQL graph patterns.

11.4.1. Class: geosrs:AitoffObliqueProjection

Table 62 — geosrs:AitoffObliqueProjection

URI	https://w3id.org/geosrs/projection/ AitoffObliqueProjection
Super-classes	<u>AitoffObliqueProjection</u>

11.4.2. Class: geosrs:AitoffProjection

Table 63 — geosrs:AitoffProjection

URI	https://w3id.org/geosrs/projection/AitoffProjection
Definition	A modified azimuthal projection whose graticule takes the form of an ellipse
Super-classes	<u>AitoffProjection</u>

11.4.3. Class: geosrs:HammerProjection

Table 64 — geosrs:HammerProjection

URI	https://w3id.org/geosrs/projection/HammerProjection
Super-classes	<u>HammerProjection</u>

11.4.4. Class: geosrs:Strebe1995Projection

Table 65 — geosrs:Strebe1995Projection

URI	https://w3id.org/geosrs/projection/ Strebe1995Projection
Super-classes	Strebe1995Projection

11.4.5. Class: geosrs:WinkelTripelProjection

Table 66 — geosrs:WinkelTripelProjection

URI	https://w3id.org/geosrs/projection/ WinkelTripelProjection
Super-classes	<u>WinkelTripelProjection</u>

11.5. Equal Area Projections

Requirement 10: Equal Area Projections IDENTIFIER /req/Equal_Area_Projections Implementations shall allow the RDFS classes geosrs:AlbersEqualAreaProjection, geosrs:AzimuthalEqualAreaProjection, geosrs:CylindricalEqualArea, geosrs:GallPetersProjection, geosrs:HoboDyerProjection, geosrs:

Requirement 10: Equal Area Projections

LambertAzimuthalEqualArea, geosrs:TrystanEdwardsProjection, geosrs: WiechelProjection to be used in SPARQL graph patterns.

11.5.1. Class: geosrs:AlbersEqualAreaProjection

Table 67 — geosrs:AlbersEqualAreaProjection

URI	https://w3id.org/geosrs/projection/ AlbersEqualAreaProjection
Super-classes	<u>AlbersEqualAreaProjection</u>

11.5.2. Class: geosrs:AzimuthalEqualAreaProjection

Table 68 — geosrs:AzimuthalEqualAreaProjection

URI	https://w3id.org/geosrs/projection/ AzimuthalEqualAreaProjection
Super-classes	AzimuthalEqualAreaProjection

11.5.3. Class: geosrs:CylindricalEqualArea

Table 69 — geosrs:CylindricalEqualArea

URI	https://w3id.org/geosrs/projection/CylindricalEqualArea
Super-classes	<u>CylindricalEqualArea</u>

11.5.4. Class: geosrs:GallPetersProjection

Table 70 — geosrs:GallPetersProjection

URI	https://w3id.org/geosrs/projection/GallPetersProjection
Super-classes	GallPetersProjection

11.5.5. Class: geosrs:HoboDyerProjection

Table 71 — geosrs:HoboDyerProjection

URI	https://w3id.org/geosrs/projection/HoboDyerProjection
Super-classes	<u>HoboDyerProjection</u>

11.5.6. Class: geosrs:LambertAzimuthalEqualArea

Table 72 — geosrs:LambertAzimuthalEqualArea

URI	https://w3id.org/geosrs/projection/ LambertAzimuthalEqualArea
Super-classes	<u>LambertAzimuthalEqualArea</u>

11.5.7. Class: geosrs:TrystanEdwardsProjection

Table 73 — geosrs:TrystanEdwardsProjection

URI	https://w3id.org/geosrs/projection/ TrystanEdwardsProjection
Super-classes	<u>TrystanEdwardsProjection</u>

11.5.8. Class: geosrs:WiechelProjection

Table 74 — geosrs:WiechelProjection

URI	https://w3id.org/geosrs/projection/WiechelProjection
Super-classes	WiechelProjection

11.6. Pseudo Conical Projections

Requirement 11: Pseudo Conical Projections

IDENTIFIER /req/Pseudo_Conical_Projections

Implementations shall allow the RDFS classes geosrs:AmericanPolyconicProjection, geosrs:BonneProjection, geosrs:BottomleyProjection, geosrs:NicolosiGlobularProjection, geosrs:PtolemyIIProjection, geosrs:WernerProjection to be used in SPARQL graph patterns.

11.6.1. Class: geosrs:AmericanPolyconicProjection

Table 75 — geosrs:AmericanPolyconicProjection

URI	https://w3id.org/geosrs/projection/ AmericanPolyconicProjection
Super-classes	<u>AmericanPolyconicProjection</u>

11.6.2. Class: geosrs:BonneProjection

Table 76 — geosrs:BonneProjection

URI	https://w3id.org/geosrs/projection/BonneProjection
Super-classes	<u>BonneProjection</u>

11.6.3. Class: geosrs:BottomleyProjection

Table 77 — geosrs:BottomleyProjection

URI	https://w3id.org/geosrs/projection/BottomleyProjection
Super-classes	BottomleyProjection

11.6.4. Class: geosrs:NicolosiGlobularProjection

Table 78 — geosrs:NicolosiGlobularProjection

URI	https://w3id.org/geosrs/projection/ NicolosiGlobularProjection
Super-classes	NicolosiGlobularProjection

11.6.5. Class: geosrs:PtolemyIIProjection

Table 79 — geosrs:PtolemyIIProjection

URI	https://w3id.org/geosrs/projection/PtolemyllProjection
Super-classes	PtolemyIIProjection

11.6.6. Class: geosrs: Werner Projection

Table 80 — geosrs:WernerProjection

URI	https://w3id.org/geosrs/projection/WernerProjection
Super-classes	WernerProjection

11.7. Globular Projections

Requirement 12: Globular Projections	
IDENTIFIER	/req/Globular_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:ApianGlobularIProjection, geosrs: BaconGlobularProjection, geosrs:FournierGlobularIProjection to be used in SPARQL graph patterns.

11.7.1. Class: geosrs:ApianGlobularIProjection

Table 81 — geosrs:ApianGlobularlProjection

URI	https://w3id.org/geosrs/projection/ ApianGlobularlProjection
Super-classes	<u>ApianGlobularIProjection</u>

11.7.2. Class: geosrs:BaconGlobularProjection

Table 82 — geosrs:BaconGlobularProjection

URI	https://w3id.org/geosrs/projection/ BaconGlobularProjection
Super-classes	<u>BaconGlobularProjection</u>

11.7.3. Class: geosrs:FournierGlobularlProjection

Table 83 — geosrs:FournierGlobularlProjection

URI	https://w3id.org/geosrs/projection/ FournierGlobularIProjection
Super-classes	<u>FournierGlobularIProjection</u>

11.8. Pseudo Cylindrical Projections

Requirement 13: Pseudo Cylindrical Projections IDENTIFIER /req/Pseudo_Cylindrical_Projections Implementations shall allow the RDFS classes geosrs: ApianIIProjection, geosrs: AtlantisProjection, geosrs: BaranyiIIIProjection, geosrs: BaranyiIIProjection, geosrs: BaranyiIProjection, geosrs: BoggsEumorphicProjection, geosrs: BromleyProjection, geosrs: CabotProjection,

Requirement 13: Pseudo Cylindrical Projections

geosrs:CollignonProjection, geosrs:CrasterParabolicProjection, geosrs: DeakinMinimumErrorProjection, geosrs: Eckert1Projection, geosrs: Eckert2Projection, geosrs: Eckert3Projection, geosrs: Eckert4Projection, geosrs: Eckert5Projection, geosrs: Eckert6Projection, geosrs: EqualEarthProjection, geosrs: FaheyProjection, geosrs: FoucautProjection, geosrs: FoucautSinusoidalProjection, geosrs:FournierIIProjection, geosrs:GinzburgVIIIProjection, geosrs: GoodeHomolosineProjection, geosrs:HEALPixProjection, geosrs:HufnagelProjection, geosrs:Kavrayskiy7Projection, geosrs:LoximuthalProjection, geosrs: MayrProjection, geosrs: McBrydeThomasFlatPolarParabolicProjection, geosrs:McBrydeThomasFlatPolarQuarticProjection, geosrs: McBrydeThomasFlatPolarSinusoidalProjection, geosrs:McBrydeThomasIIProjection, geosrs:McBrydeThomasIProjection, geosrs:NaturalEarth2Projection, geosrs: NaturalEarthProjection, geosrs:NellHammerProjection, geosrs:NellProjection, geosrs:OrteliusOvalProjection, geosrs:PutninsP1Projection, geosrs: PutninsP2Projection, geosrs:PutninsP3Projection, geosrs:PutninsP5Projection, geosrs:PutninsP6Projection, geosrs:QuarticAuthalicProjection, geosrs: RobinsonProjection, geosrs:SinusoidalProjection, geosrs:TheTimesProjection, geosrs:ToblerG1Projection, geosrs:ToblerHyperellipticalProjection, geosrs: WagnerIIIProjection, geosrs: WagnerIIProjection, geosrs: WagnerIProjection, geosrs: WagnerIVProjection, geosrs: WagnerVIProjection, geosrs: WagnerVProjection, geosrs: WerenskioldIProjection, geosrs:PutninsP3'Projection, geosrs:PutninsP4'Projection, geosrs: PutninsP5' Projection, geosrs: PutninsP6' Projection to be used in SPARQL graph patterns.

11.8.1. Class: geosrs: Apian II Projection

Table 84 — geosrs:ApianIIProjection

URI	https://w3id.org/geosrs/projection/ApianIIProjection
Super-classes	<u>ApianIIProjection</u>

11.8.2. Class: geosrs: Atlantis Projection

Table 85 — geosrs:AtlantisProjection

URI	https://w3id.org/geosrs/projection/AtlantisProjection
Super-classes	<u>AtlantisProjection</u>

11.8.3. Class: geosrs:BaranyillIProjection

Table 86 — geosrs:BaranyillIProjection

URI	https://w3id.org/geosrs/projection/BaranyillIProjection
Super-classes	BaranyillIProjection

11.8.4. Class: geosrs:BaranyillProjection

Table 87 — geosrs:BaranyillProjection

URI	https://w3id.org/geosrs/projection/BaranyillProjection
Super-classes	BaranyillProjection

11.8.5. Class: geosrs:BaranyilProjection

Table 88 — geosrs:BaranyilProjection

URI	https://w3id.org/geosrs/projection/BaranyilProjection
Super-classes	BaranyilProjection

11.8.6. Class: geosrs:BaranyilVProjection

Table 89 — geosrs:BaranyilVProjection

URI	https://w3id.org/geosrs/projection/BaranyilVProjection
Super-classes	BaranyilVProjection

11.8.7. Class: geosrs:BoggsEumorphicProjection

Table 90 — geosrs:BoggsEumorphicProjection

URI	https://w3id.org/geosrs/projection/ BoggsEumorphicProjection
Super-classes	<u>BoggsEumorphicProjection</u>

11.8.8. Class: geosrs:BromleyProjection

Table 91 — geosrs:BromleyProjection

URI	https://w3id.org/geosrs/projection/BromleyProjection
Super-classes	BromleyProjection

11.8.9. Class: geosrs:CabotProjection

Table 92 — geosrs:CabotProjection

URI	https://w3id.org/geosrs/projection/CabotProjection
Super-classes	<u>CabotProjection</u>

11.8.10. Class: geosrs:CollignonProjection

Table 93 — geosrs:CollignonProjection

URI	https://w3id.org/geosrs/projection/CollignonProjection
Definition	An equal-area pseudocylindrical projection that maps the sphere onto a triangle or diamond
Super-classes	CollignonProjection

11.8.11. Class: geosrs:CrasterParabolicProjection

Table 94 — geosrs:CrasterParabolicProjection

URI	https://w3id.org/geosrs/projection/ CrasterParabolicProjection
Super-classes	<u>CrasterParabolicProjection</u>

11.8.12. Class: geosrs:DeakinMinimumErrorProjection

Table 95 — geosrs:DeakinMinimumErrorProjection

URI	https://w3id.org/geosrs/projection/ DeakinMinimumErrorProjection
Super-classes	<u>DeakinMinimumErrorProjection</u>

11.8.13. Class: geosrs:Eckert1Projection

Table 96 — geosrs:Eckert1Projection

URI	https://w3id.org/geosrs/projection/Eckert1Projection
Super-classes	Eckert1Projection

11.8.14. Class: geosrs:Eckert2Projection

Table 97 — geosrs:Eckert2Projection

URI	https://w3id.org/geosrs/projection/Eckert2Projection
Super-classes	Eckert2Projection

11.8.15. Class: geosrs:Eckert3Projection

Table 98 — geosrs:Eckert3Projection

URI	https://w3id.org/geosrs/projection/Eckert3Projection
Super-classes	Eckert3Projection

11.8.16. Class: geosrs:Eckert4Projection

Table 99 — geosrs:Eckert4Projection

URI	https://w3id.org/geosrs/projection/Eckert4Projection
Super-classes	Eckert4Projection

11.8.17. Class: geosrs:Eckert5Projection

Table 100 — geosrs:Eckert5Projection

URI	https://w3id.org/geosrs/projection/Eckert5Projection
Super-classes	Eckert5Projection

11.8.18. Class: geosrs:Eckert6Projection

Table 101 — geosrs:Eckert6Projection

URI	https://w3id.org/geosrs/projection/Eckert6Projection
Super-classes	Eckert6Projection

11.8.19. Class: geosrs:EqualEarthProjection

Table 102 — geosrs:EqualEarthProjection

URI	https://w3id.org/geosrs/projection/EqualEarthProjection
Super-classes	EqualEarthProjection

11.8.20. Class: geosrs:FaheyProjection

Table 103 — geosrs:FaheyProjection

URI	https://w3id.org/geosrs/projection/FaheyProjection
Super-classes	FaheyProjection

11.8.21. Class: geosrs:FoucautProjection

Table 104 — geosrs:FoucautProjection

URI	https://w3id.org/geosrs/projection/FoucautProjection
Super-classes	<u>FoucautProjection</u>

11.8.22. Class: geosrs:FoucautSinusoidalProjection

Table 105 — geosrs:FoucautSinusoidalProjection

URI	https://w3id.org/geosrs/projection/ FoucautSinusoidalProjection
Super-classes	<u>FoucautSinusoidalProjection</u>

11.8.23. Class: geosrs:FournierIIProjection

Table 106 — geosrs:FournierIIProjection

URI	https://w3id.org/geosrs/projection/FournierIIProjection
Super-classes	<u>FournierIIProjection</u>

11.8.24. Class: geosrs:GinzburgVIIIProjection

Table 107 — geosrs:GinzburgVIIIProjection

URI	https://w3id.org/geosrs/projection/ GinzburgVIIIProjection
Super-classes	GinzburgVIIIProjection

11.8.25. Class: geosrs:GoodeHomolosineProjection

Table 108 — geosrs:GoodeHomolosineProjection

URI	https://w3id.org/geosrs/projection/ GoodeHomolosineProjection
Super-classes	<u>GoodeHomolosineProjection</u>

11.8.26. Class: geosrs: HEALPixProjection

Table 109 — geosrs:HEALPixProjection

URI	https://w3id.org/geosrs/projection/HEALPixProjection
Super-classes	<u>HEALPixProjection</u>

11.8.27. Class: geosrs:HufnagelProjection

Table 110 — geosrs:HufnagelProjection

URI	https://w3id.org/geosrs/projection/HufnagelProjection
Super-classes	HufnagelProjection

11.8.28. Class: geosrs:Kavrayskiy7Projection

Table 111 — geosrs:Kavrayskiy7Projection

URI	https://w3id.org/geosrs/projection/ Kavrayskiy7Projection
Super-classes	Kavrayskiy7Projection

11.8.29. Class: geosrs:LoximuthalProjection

Table 112 — geosrs:LoximuthalProjection

URI	https://w3id.org/geosrs/projection/LoximuthalProjection
Super-classes	<u>LoximuthalProjection</u>

11.8.30. Class: geosrs: MayrProjection

Table 113 — geosrs:MayrProjection

URI	https://w3id.org/geosrs/projection/MayrProjection
Super-classes	MayrProjection

11.8.31. Class: geosrs:McBrydeThomasFlatPolarParabolicProjection

Table 114- geosrs: McBryde Thomas Flat Polar Parabolic Projection

URI	https://w3id.org/geosrs/projection/ McBrydeThomasFlatPolarParabolicProjection
Super-classes	$\underline{McBrydeThomasFlatPolarParabolicProjection}$

11.8.32. Class: geosrs:McBrydeThomasFlatPolarQuarticProjection

Table 115 — geosrs:McBrydeThomasFlatPolarQuarticProjection

URI	https://w3id.org/geosrs/projection/ McBrydeThomasFlatPolarQuarticProjection
Super-classes	$\underline{McBrydeThomasFlatPolarQuarticProjection}$

11.8.33. Class: geosrs:McBrydeThomasFlatPolarSinusoidalProjection

Table 116 - geosrs: McBrydeThomasFlatPolarSinusoidalProjection

URI https://w3id.org/geosrs/projection/ https://w3id.org/geosrs/projection/ McBrydeThomasFlatPolarSinusoidalProjection	
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11.8.34. Class: geosrs:McBrydeThomasIIProjection

Table 117 — geosrs:McBrydeThomasIIProjection

URI	https://w3id.org/geosrs/projection/ McBrydeThomasIIProjection
Super-classes	<u>McBrydeThomasIIProjection</u>

11.8.35. Class: geosrs:McBrydeThomasIProjection

Table 118 — geosrs:McBrydeThomaslProjection

URI	https://w3id.org/geosrs/projection/ McBrydeThomaslProjection
Super-classes	<u>McBrydeThomasIProjection</u>

11.8.36. Class: geosrs:NaturalEarth2Projection

Table 119 — geosrs:NaturalEarth2Projection

URI	https://w3id.org/geosrs/projection/ NaturalEarth2Projection
Super-classes	NaturalEarth2Projection

11.8.37. Class: geosrs: Natural Earth Projection

Table 120 — geosrs:NaturalEarthProjection

URI	https://w3id.org/geosrs/projection/ NaturalEarthProjection
Definition	A pseudocylindrical map projection designed by Tom Patterson and introduced in 2008
Super-classes	<u>NaturalEarthProjection</u>

11.8.38. Class: geosrs:NellHammerProjection

Table 121 — geosrs:NellHammerProjection

URI	https://w3id.org/geosrs/projection/ NellHammerProjection
Super-classes	<u>NellHammerProjection</u>

11.8.39. Class: geosrs:NellProjection

Table 122 — geosrs:NellProjection

URI	https://w3id.org/geosrs/projection/NellProjection
Super-classes	NellProjection

11.8.40. Class: geosrs:OrteliusOvalProjection

Table 123 — geosrs:OrteliusOvalProjection

URI	https://w3id.org/geosrs/projection/ OrteliusOvalProjection
Super-classes	<u>OrteliusOvalProjection</u>

11.8.41. Class: geosrs:PutninsP1Projection

Table 124 — geosrs:PutninsP1Projection

URI	https://w3id.org/geosrs/projection/PutninsP1Projection
Super-classes	PutninsP1Projection

11.8.42. Class: geosrs:PutninsP2Projection

Table 125 — geosrs:PutninsP2Projection

URI	https://w3id.org/geosrs/projection/PutninsP2Projection
Super-classes	PutninsP2Projection

11.8.43. Class: geosrs:PutninsP3Projection

Table 126 — geosrs:PutninsP3Projection

URI	https://w3id.org/geosrs/projection/PutninsP3Projection
Super-classes	PutninsP3Projection

11.8.44. Class: geosrs:PutninsP5Projection

Table 127 — geosrs:PutninsP5Projection

URI	https://w3id.org/geosrs/projection/PutninsP5Projection
Super-classes	PutninsP5Projection

11.8.45. Class: geosrs:PutninsP6Projection

Table 128 — geosrs:PutninsP6Projection

URI	https://w3id.org/geosrs/projection/PutninsP6Projection
Super-classes	PutninsP6Projection

11.8.46. Class: geosrs:QuarticAuthalicProjection

Table 129 — geosrs:QuarticAuthalicProjection

URI	https://w3id.org/geosrs/projection/ QuarticAuthalicProjection
Super-classes	QuarticAuthalicProjection

11.8.47. Class: geosrs:RobinsonProjection

Table 130 — geosrs:RobinsonProjection

URI	https://w3id.org/geosrs/projection/RobinsonProjection
Super-classes	RobinsonProjection

11.8.48. Class: geosrs:SinusoidalProjection

Table 131 — geosrs:SinusoidalProjection

URI	https://w3id.org/geosrs/projection/SinusoidalProjection
Super-classes	SinusoidalProjection

11.8.49. Class: geosrs:TheTimesProjection

Table 132 — geosrs:TheTimesProjection

URI	https://w3id.org/geosrs/projection/TheTimesProjection
Super-classes	TheTimesProjection

11.8.50. Class: geosrs:ToblerG1Projection

Table 133 — geosrs:ToblerG1Projection

URI	https://w3id.org/geosrs/projection/ToblerG1Projection
Super-classes	ToblerG1Projection

11.8.51. Class: geosrs:ToblerHyperellipticalProjection

Table 134 — geosrs:ToblerHyperellipticalProjection

URI	https://w3id.org/geosrs/projection/ ToblerHyperellipticalProjection
Super-classes	<u>ToblerHyperellipticalProjection</u>

11.8.52. Class: geosrs: Wagner III Projection

Table 135 — geosrs:WagnerIIIProjection

URI	https://w3id.org/geosrs/projection/WagnerIIIProjection
Super-classes	WagnerIIIProjection

11.8.53. Class: geosrs: Wagner II Projection

Table 136 — geosrs:WagnerIIProjection

URI	https://w3id.org/geosrs/projection/WagnerIIProjection
Super-classes	<u>WagnerIIProjection</u>

11.8.54. Class: geosrs:WagnerlProjection

Table 137 — geosrs:WagnerlProjection

URI	https://w3id.org/geosrs/projection/WagnerlProjection
Super-classes	WagnerlProjection

11.8.55. Class: geosrs:WagnerIVProjection

Table 138 — geosrs:WagnerIVProjection

URI	https://w3id.org/geosrs/projection/WagnerIVProjection
Super-classes	WagnerIVProjection

11.8.56. Class: geosrs:WagnerVIProjection

Table 139 — geosrs:WagnerVIProjection

URI	https://w3id.org/geosrs/projection/WagnerVIProjection
Super-classes	<u>WagnerVIProjection</u>

11.8.57. Class: geosrs: Wagner VProjection

Table 140 — geosrs:WagnerVProjection

URI	https://w3id.org/geosrs/projection/WagnerVProjection
Super-classes	<u>WagnerVProjection</u>

11.8.58. Class: geosrs:WerenskioldlProjection

Table 141 — geosrs:WerenskioldlProjection

URI	https://w3id.org/geosrs/projection/ WerenskioldlProjection
Super-classes	WerenskioldlProjection

11.8.59. Class: geosrs:PutninsP3'Projection

Table 142 — geosrs:PutninsP3'Projection

URI	https://w3id.org/geosrs/projection/PutninsP3'Projection
Super-classes	PutninsP3'Projection

11.8.60. Class: geosrs:PutninsP4'Projection

Table 143 — geosrs:PutninsP4'Projection

URI	https://w3id.org/geosrs/projection/PutninsP4'Projection
Super-classes	PutninsP4'Projection

11.8.61. Class: geosrs:PutninsP5'Projection

Table 144 — geosrs:PutninsP5'Projection

URI	https://w3id.org/geosrs/projection/PutninsP5'Projection
Super-classes	PutninsP5'Projection

11.8.62. Class: geosrs:PutninsP6'Projection

Table 145 — geosrs:PutninsP6'Projection

URI	https://w3id.org/geosrs/projection/PutninsP6'Projection
Super-classes	PutninsP6'Projection

11.9. Cylindrical Projections

Requireme	Requirement 14: Cylindrical Projections	
IDENTIFIER	/req/Cylindrical_Projections	
STATEMENT	Implementations shall allow the RDFS classes geosrs:ArdenCloseProjection, geosrs: BraunPerspectiveProjection, geosrs:CompactMillerProjection, geosrs: CylindricalStereographicProjection, geosrs:KarchenkoShabanovaProjection, geosrs:LabordeProjection, geosrs:MercatorProjection, geosrs:MillerProjection, geosrs:PattersonCylindricalProjection, geosrs:PavlovProjection, geosrs: ToblerCylindricalIIProjection, geosrs:ToblerCylindricalIProjection, geosrs: UrmayevIIIProjection, geosrs:WebMercatorProjection to be used in SPARQL graph patterns.	

11.9.1. Class: geosrs:ArdenCloseProjection

Table 146 — geosrs:ArdenCloseProjection

URI	https://w3id.org/geosrs/projection/ ArdenCloseProjection
Super-classes	<u>ArdenCloseProjection</u>

11.9.2. Class: geosrs:BraunPerspectiveProjection

Table 147 — geosrs:BraunPerspectiveProjection

URI	https://w3id.org/geosrs/projection/ BraunPerspectiveProjection
Super-classes	<u>BraunPerspectiveProjection</u>

11.9.3. Class: geosrs:CompactMillerProjection

Table 148 — geosrs:CompactMillerProjection

URI	https://w3id.org/geosrs/projection/ CompactMillerProjection
Super-classes	<u>CompactMillerProjection</u>

11.9.4. Class: geosrs:CylindricalStereographicProjection

 $\textbf{Table 149}-{\sf geosrs:} Cylindrical Stereographic Projection$

URI	https://w3id.org/geosrs/projection/ CylindricalStereographicProjection
Super-classes	<u>CylindricalStereographicProjection</u>

11.9.5. Class: geosrs:KarchenkoShabanovaProjection

Table 150 — geosrs:KarchenkoShabanovaProjection

URI	https://w3id.org/geosrs/projection/ KarchenkoShabanovaProjection
Super-classes	KarchenkoShabanovaProjection

11.9.6. Class: geosrs:LabordeProjection

Table 151 — geosrs:LabordeProjection

URI	https://w3id.org/geosrs/projection/LabordeProjection
Super-classes	LabordeProjection

11.9.7. Class: geosrs:MercatorProjection

Table 152 — geosrs:MercatorProjection

URI	https://w3id.org/geosrs/projection/MercatorProjection
Super-classes	<u>MercatorProjection</u>

11.9.8. Class: geosrs:MillerProjection

Table 153 — geosrs:MillerProjection

URI	https://w3id.org/geosrs/projection/MillerProjection
Super-classes	MillerProjection

11.9.9. Class: geosrs:PattersonCylindricalProjection

Table 154 — geosrs:PattersonCylindricalProjection

URI	https://w3id.org/geosrs/projection/ PattersonCylindricalProjection
Super-classes	<u>PattersonCylindricalProjection</u>

11.9.10. Class: geosrs:PavlovProjection

Table 155 — geosrs:PavlovProjection

URI	https://w3id.org/geosrs/projection/PavlovProjection
Super-classes	<u>PavlovProjection</u>

11.9.11. Class: geosrs:ToblerCylindricalIIProjection

Table 156 — geosrs:ToblerCylindricalIIProjection

URI	https://w3id.org/geosrs/projection/ ToblerCylindricalIIProjection
Super-classes	ToblerCylindricalIIProjection

11.9.12. Class: geosrs:ToblerCylindricalIProjection

Table 157 — geosrs:ToblerCylindricallProjection

URI	https://w3id.org/geosrs/projection/ ToblerCylindricallProjection
Super-classes	<u>ToblerCylindricalIProjection</u>

11.9.13. Class: geosrs:UrmayevIIIProjection

Table 158 — geosrs:UrmayevIIIProjection

URI	https://w3id.org/geosrs/projection/UrmayevIIIProjection
Super-classes	<u>UrmayevIIIProjection</u>

11.9.14. Class: geosrs:WebMercatorProjection

Table 159 — geosrs:WebMercatorProjection

URI	https://w3id.org/geosrs/projection/ WebMercatorProjection
Super-classes	WebMercatorProjection

11.10. Compromise Projections

Requirement 15: Compromise Projections	
IDENTIFIER	/req/Compromise_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:ArmadilloProjection, geosrs:BakerDinomicProjection, geosrs:BertinProjection, geosrs: ChamberlinTrimetricProjection, geosrs:DenoyerSemiEllipticalProjection, geosrs: FairgrieveProjection, geosrs:LarriveeProjection, geosrs:PetermannStarProjection, geosrs:SpilhausOceanicProjection, geosrs:VanDerGrintenIIIProjection, geosrs:WinkelIIProjection, geosrs:WinkelIProjection, geosrs:WinkelSnyderProjection to be used in SPARQL graph patterns.

11.10.1. Class: geosrs:ArmadilloProjection

Table 160 — geosrs:ArmadilloProjection

URI	https://w3id.org/geosrs/projection/ArmadilloProjection
Super-classes	ArmadilloProjection

11.10.2. Class: geosrs:BakerDinomicProjection

Table 161 — geosrs:BakerDinomicProjection

URI	https://w3id.org/geosrs/projection/ BakerDinomicProjection
Super-classes	BakerDinomicProjection

11.10.3. Class: geosrs:BertinProjection

Table 162 — geosrs:BertinProjection

URI	https://w3id.org/geosrs/projection/BertinProjection
Super-classes	BertinProjection

11.10.4. Class: geosrs:ChamberlinTrimetricProjection

Table 163 — geosrs:ChamberlinTrimetricProjection

URI	https://w3id.org/geosrs/projection/ ChamberlinTrimetricProjection
Super-classes	<u>ChamberlinTrimetricProjection</u>

11.10.5. Class: geosrs: Denoyer Semi Elliptical Projection

Table 164 — geosrs:DenoyerSemiEllipticalProjection

URI	https://w3id.org/geosrs/projection/ DenoyerSemiEllipticalProjection
Super-classes	<u>DenoyerSemiEllipticalProjection</u>

11.10.6. Class: geosrs:FairgrieveProjection

Table 165 — geosrs:FairgrieveProjection

URI	https://w3id.org/geosrs/projection/FairgrieveProjection
Super-classes	<u>FairgrieveProjection</u>

11.10.7. Class: geosrs:LarriveeProjection

Table 166 — geosrs:LarriveeProjection

URI	https://w3id.org/geosrs/projection/LarriveeProjection
Super-classes	LarriveeProjection

11.10.8. Class: geosrs:PetermannStarProjection

Table 167 — geosrs:PetermannStarProjection

URI	https://w3id.org/geosrs/projection/ PetermannStarProjection
Super-classes	<u>PetermannStarProjection</u>

11.10.9. Class: geosrs:SpilhausOceanicProjection

Table 168 — geosrs:SpilhausOceanicProjection

URI	https://w3id.org/geosrs/projection/ SpilhausOceanicProjection
Super-classes	<u>SpilhausOceanicProjection</u>

11.10.10. Class: geosrs:VanDerGrintenIIIProjection

Table 169 — geosrs:VanDerGrintenIIIProjection

URI	https://w3id.org/geosrs/projection/ VanDerGrintenIIIProjection
Super-classes	VanDerGrintenIIIProjection

11.10.11. Class: geosrs:WinkellIProjection

Table 170 — geosrs:WinkelIIProjection

URI	https://w3id.org/geosrs/projection/WinkellIProjection

11.10.12. Class: geosrs:WinkellProjection

Table 171 — geosrs:WinkellProjection

URI	https://w3id.org/geosrs/projection/WinkellProjection
Super-classes	WinkellProjection

11.10.13. Class: geosrs:WinkelSnyderProjection

Table 172 — geosrs:WinkelSnyderProjection

URI	https://w3id.org/geosrs/projection/ WinkelSnyderProjection
Super-classes	WinkelSnyderProjection

11.11. Polyhedral Projections

11.11.1. Class: geosrs: Autha Graph Projection

Table 173 — geosrs:AuthaGraphProjection

URI	https://w3id.org/geosrs/projection/ AuthaGraphProjection
Super-classes	AuthaGraphProjection

11.11.2. Class: geosrs:CahillKeyesProjection

Table 174 — geosrs:CahillKeyesProjection

URI	https://w3id.org/geosrs/projection/CahillKeyesProjection
Super-classes	<u>CahillKeyesProjection</u>

11.11.3. Class: geosrs:CollignonButterflyProjection

Table 175 — geosrs:CollignonButterflyProjection

URI	https://w3id.org/geosrs/projection/ CollignonButterflyProjection
Super-classes	<u>CollignonButterflyProjection</u>

11.11.4. Class: geosrs:DodecahedralProjection

Table 176 — geosrs:DodecahedralProjection

URI	https://w3id.org/geosrs/projection/ DodecahedralProjection
Super-classes	<u>DodecahedralProjection</u>

11.11.5. Class: geosrs:DymaxionProjection

Table 177 — geosrs:DymaxionProjection

URI	https://w3id.org/geosrs/projection/DymaxionProjection

11.11.6. Class: geosrs:GnomonicButterflyProjection

Table 178 — geosrs:GnomonicButterflyProjection

URI	https://w3id.org/geosrs/projection/ GnomonicButterflyProjection
Super-classes	GnomonicButterflyProjection

11.11.7. Class: geosrs:GnomonicCubedSphereProjection

Table 179 — geosrs:GnomonicCubedSphereProjection

URI	https://w3id.org/geosrs/projection/ GnomonicCubedSphereProjection
Super-classes	<u>GnomonicCubedSphereProjection</u>

11.11.8. Class: geosrs:GnomoniclcosahedronProjection

Table 180 — geosrs:GnomoniclcosahedronProjection

URI	https://w3id.org/geosrs/projection/ GnomoniclcosahedronProjection
Super-classes	<u>GnomoniclcosahedronProjection</u>

11.11.9. Class: geosrs:GuyouProjection

Table 181 — geosrs:GuyouProjection

URI	https://w3id.org/geosrs/projection/GuyouProjection
Super-classes	<u>GuyouProjection</u>

11.11.10. Class: geosrs:lcosahedralProjection

Table 182 — geosrs:lcosahedralProjection

URI	https://w3id.org/geosrs/projection/IcosahedralProjection
Super-classes	<u>IcosahedralProjection</u>

11.11.11. Class: geosrs:LeeProjection

Table 183 — geosrs:LeeProjection

URI	https://w3id.org/geosrs/projection/LeeProjection
Super-classes	<u>LeeProjection</u>

11.11.12. Class: geosrs:MyrahedalProjection

Table 184 — geosrs: Myrahedal Projection

URI	https://w3id.org/geosrs/projection/MyrahedalProjection
Super-classes	MyrahedalProjection

11.11.13. Class: geosrs:OctantProjection

Table 185 — geosrs:OctantProjection

URI	https://w3id.org/geosrs/projection/OctantProjection
Super-classes	OctantProjection

11.11.14. Class: geosrs:QuadrilateralizedSphericalCubeProjection

Table 186 - geosrs: Quadrilateralized Spherical Cube Projection

URI	https://w3id.org/geosrs/projection/ QuadrilateralizedSphericalCubeProjection
Super-classes	QuadrilateralizedSphericalCubeProjection

11.11.15. Class: geosrs:WatermanButterflyProjection

Table 187 — geosrs:WatermanButterflyProjection

URI	https://w3id.org/geosrs/projection/ WatermanButterflyProjection
Super-classes	WatermanButterflyProjection

11.12. Equidistant Projections

Requirement 17: Equidistant Projections	
IDENTIFIER	/req/Equidistant_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:AzimuthalEquidistantProjection, geosrs:BerghausStarProjection, geosrs:CassiniProjection, geosrs: EquidistantConicProjection, geosrs:EquidistantCylindricalProjection, geosrs: EquirectangularProjection, geosrs:ObliquePlateCarreeProjection, geosrs: PlateCarreeProjection, geosrs:TwoPointEquidistantProjection to be used in SPARQL graph patterns.

11.12.1. Class: geosrs:AzimuthalEquidistantProjection

Table 188 — geosrs:AzimuthalEquidistantProjection

URI	https://w3id.org/geosrs/projection/ AzimuthalEquidistantProjection
Super-classes	AzimuthalEquidistantProjection

11.12.2. Class: geosrs:BerghausStarProjection

Table 189 — geosrs:BerghausStarProjection

URI	https://w3id.org/geosrs/projection/ BerghausStarProjection
Super-classes	BerghausStarProjection

11.12.3. Class: geosrs: Cassini Projection

Table 190 — geosrs:CassiniProjection

URI	https://w3id.org/geosrs/projection/CassiniProjection
Definition	A map projection first described in an approximate form by César-François Cassini de Thury in 1745
Super-classes	CassiniProjection

11.12.4. Class: geosrs: Equidistant Conic Projection

Table 191 — geosrs:EquidistantConicProjection

URI	https://w3id.org/geosrs/projection/ EquidistantConicProjection
Super-classes	<u>EquidistantConicProjection</u>

11.12.5. Class: geosrs: Equidistant Cylindrical Projection

Table 192 — geosrs:EquidistantCylindricalProjection

URI	https://w3id.org/geosrs/projection/ EquidistantCylindricalProjection
Super-classes	EquidistantCylindricalProjection

11.12.6. Class: geosrs:EquirectangularProjection

Table 193 — geosrs:EquirectangularProjection

URI	https://w3id.org/geosrs/projection/ EquirectangularProjection
Super-classes	<u>EquirectangularProjection</u>

11.12.7. Class: geosrs:ObliquePlateCarreeProjection

Table 194 — geosrs:ObliquePlateCarreeProjection

URI	https://w3id.org/geosrs/projection/ ObliquePlateCarreeProjection
Super-classes	<u>ObliquePlateCarreeProjection</u>

11.12.8. Class: geosrs:PlateCarreeProjection

Table 195 — geosrs:PlateCarreeProjection

URI	https://w3id.org/geosrs/projection/ PlateCarreeProjection
Super-classes	<u>PlateCarreeProjection</u>

11.12.9. Class: geosrs:TwoPointEquidistantProjection

 $\textbf{Table 196} - \mathsf{geosrs:} Two Point Equidistant Projection$

URI	https://w3id.org/geosrs/projection/ TwoPointEquidistantProjection
Super-classes	<u>TwoPointEquidistantProjection</u>

11.13. Conical Projections

Requirement 18: Conical Projections	
IDENTIFIER	/req/Conical_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs: BipolarObliqueConicConformalProjection, geosrs:CentralConicProjection, geosrs:HerschelConformalConicProjection, geosrs:Krovak, geosrs: LambertConformalConicProjection, geosrs:MurdochIIIProjection, geosrs: MurdochIIProjection, geosrs:MurdochIProjection, geosrs:SchjerningIProjection, geosrs:VitkovskyIProjection to be used in SPARQL graph patterns.

11.13.1. Class: geosrs:BipolarObliqueConicConformalProjection

Table 197 — geosrs:BipolarObliqueConicConformalProjection

URI	https://w3id.org/geosrs/projection/ BipolarObliqueConicConformalProjection
Super-classes	BipolarObliqueConicConformalProjection

11.13.2. Class: geosrs:CentralConicProjection

Table 198 — geosrs:CentralConicProjection

URI	https://w3id.org/geosrs/projection/ CentralConicProjection
Super-classes	<u>CentralConicProjection</u>

11.13.3. Class: geosrs:HerschelConformalConicProjection

Table 199 — geosrs:HerschelConformalConicProjection

URI	https://w3id.org/geosrs/projection/ HerschelConformalConicProjection
Super-classes	HerschelConformalConicProjection

11.13.4. Class: geosrs:Krovak

Table 200 — geosrs:Krovak

URI	https://w3id.org/geosrs/projection/Krovak
Super-classes	Krovak

11.13.5. Class: geosrs:LambertConformalConicProjection

Table 201 — geosrs:LambertConformalConicProjection

URI	https://w3id.org/geosrs/projection/ LambertConformalConicProjection
Super-classes	<u>LambertConformalConicProjection</u>

11.13.6. Class: geosrs:MurdochIIIProjection

Table 202 — geosrs:MurdochIIIProjection

URI	https://w3id.org/geosrs/projection/MurdochIIIProjection
Super-classes	MurdochIIIProjection

11.13.7. Class: geosrs:MurdochIIProjection

Table 203 — geosrs:MurdochIIProjection

URI	https://w3id.org/geosrs/projection/MurdochIIProjection
Super-classes	MurdochllProjection

11.13.8. Class: geosrs:MurdochlProjection

Table 204 — geosrs:MurdochlProjection

URI	https://w3id.org/geosrs/projection/MurdochIProjection
Super-classes	MurdochlProjection

11.13.9. Class: geosrs:SchjerningIProjection

Table 205 — geosrs:SchjerninglProjection

URI	https://w3id.org/geosrs/projection/SchjerninglProjection
Super-classes	<u>SchjerninglProjection</u>

11.13.10. Class: geosrs:VitkovskylProjection

Table 206 — geosrs:VitkovskylProjection

URI	https://w3id.org/geosrs/projection/VitkovskylProjection
Super-classes	VitkovskylProjection

11.14. Azimuthal Projections

Requirement 19: Azimuthal Projections	
IDENTIFIER	/req/Azimuthal_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:BreusingGeometricProjection, geosrs:BreusingHarmonicProjection, geosrs:GinzburgIIProjection, geosrs:GinzburgIProjection, geosrs:GinzburgIProjection, geosrs:JamesAzimuthalProjection to be used in SPARQL graph patterns.

11.14.1. Class: geosrs:BreusingGeometricProjection

Table 207 — geosrs:BreusingGeometricProjection

URI	https://w3id.org/geosrs/projection/ BreusingGeometricProjection
Super-classes	<u>BreusingGeometricProjection</u>

11.14.2. Class: geosrs:BreusingHarmonicProjection

$\textbf{Table 208} - \mathsf{geosrs:} Breusing Harmonic Projection$

URI	https://w3id.org/geosrs/projection/ BreusingHarmonicProjection
Super-classes	<u>BreusingHarmonicProjection</u>

11.14.3. Class: geosrs:GinzburgIIProjection

Table 209 — geosrs:GinzburgIIProjection

URI	https://w3id.org/geosrs/projection/GinzburgIIProjection
Super-classes	GinzburgIIProjection

11.14.4. Class: geosrs:GinzburglProjection

Table 210 — geosrs:GinzburglProjection

URI	https://w3id.org/geosrs/projection/GinzburgIProjection
Super-classes	GinzburglProjection

11.14.5. Class: geosrs:GnomonicProjection

Table 211 — geosrs:GnomonicProjection

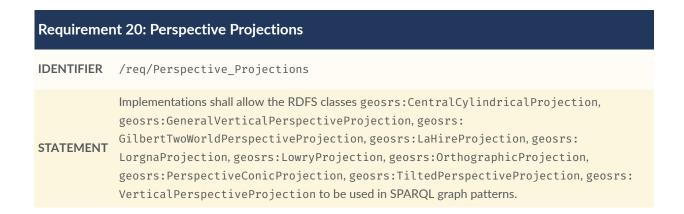
URI	https://w3id.org/geosrs/projection/GnomonicProjection
Super-classes	GnomonicProjection

11.14.6. Class: geosrs:JamesAzimuthalProjection

Table 212 — geosrs:JamesAzimuthalProjection

URI	https://w3id.org/geosrs/projection/ JamesAzimuthalProjection
Super-classes	<u>JamesAzimuthalProjection</u>

11.15. Perspective Projections



11.15.1. Class: geosrs:CentralCylindricalProjection

Table 213 — geosrs:CentralCylindricalProjection

URI	https://w3id.org/geosrs/projection/ CentralCylindricalProjection
Super-classes	CentralCylindricalProjection

11.15.2. Class: geosrs:GeneralVerticalPerspectiveProjection

Table 214 — geosrs:GeneralVerticalPerspectiveProjection

URI	https://w3id.org/geosrs/projection/
OKI	<u>GeneralVerticalPerspectiveProjection</u>

11.15.3. Class: geosrs:GilbertTwoWorldPerspectiveProjection

Table 215 — geosrs:GilbertTwoWorldPerspectiveProjection

URI	https://w3id.org/geosrs/projection/ GilbertTwoWorldPerspectiveProjection
Super-classes	GilbertTwoWorldPerspectiveProjection

11.15.4. Class: geosrs:LaHireProjection

Table 216 — geosrs:LaHireProjection

URI	https://w3id.org/geosrs/projection/LaHireProjection
Super-classes	<u>LaHireProjection</u>

11.15.5. Class: geosrs:LorgnaProjection

Table 217 — geosrs:LorgnaProjection

URI	https://w3id.org/geosrs/projection/LorgnaProjection
Super-classes	<u>LorgnaProjection</u>

11.15.6. Class: geosrs:LowryProjection

Table 218 — geosrs:LowryProjection

URI	https://w3id.org/geosrs/projection/LowryProjection
Super-classes	<u>LowryProjection</u>

11.15.7. Class: geosrs:OrthographicProjection

Table 219 — geosrs:OrthographicProjection

URI	https://w3id.org/geosrs/projection/ OrthographicProjection
Super-classes	<u>OrthographicProjection</u>

11.15.8. Class: geosrs:PerspectiveConicProjection

Table 220 — geosrs:PerspectiveConicProjection

URI	https://w3id.org/geosrs/projection/ PerspectiveConicProjection
Super-classes	<u>PerspectiveConicProjection</u>

11.15.9. Class: geosrs:TiltedPerspectiveProjection

Table 221 — geosrs:TiltedPerspectiveProjection

URI	https://w3id.org/geosrs/projection/ TiltedPerspectiveProjection
Super-classes	TiltedPerspectiveProjection

11.15.10. Class: geosrs:VerticalPerspectiveProjection

Table 222 — geosrs:VerticalPerspectiveProjection

URI	https://w3id.org/geosrs/projection/ VerticalPerspectiveProjection
Super-classes	<u>VerticalPerspectiveProjection</u>

11.16. Polyconic Projections

Requireme	nt 21: Polyconic Projections
IDENTIFIER	/req/Polyconic_Projections
STATEMENT	Implementations shall allow the RDFS classes geosrs:GinzburgIVProjection, geosrs:GinzburgIXProjection, geosrs:GinzburgVIProjection, geosrs: GinzburgVProjection, geosrs:GottWagnerProjection, geosrs:HillEucyclicProjection, geosrs:LagrangeProjection, geosrs:LaskowskiProjection, geosrs: RectangularPolyconicProjection, geosrs:StabiusWernerIIIProjection, geosrs: StabiusWernerIProjection, geosrs:VanDerGrintenIIProjection, geosrs: VanDerGrintenIProjection, geosrs:VanDerGrintenIVProjection, geosrs: WagnerIXProjection, geosrs:WagnerVIIIProjection, geosrs:WagnerVIIProjection to be used in SPARQL graph patterns.

11.16.1. Class: geosrs:GinzburgIVProjection

Table 223 — geosrs:GinzburgIVProjection

URI	https://w3id.org/geosrs/projection/GinzburgIVProjection
Super-classes	<u>GinzburgIVProjection</u>

11.16.2. Class: geosrs:GinzburgIXProjection

Table 224 — geosrs:GinzburgIXProjection

URI	https://w3id.org/geosrs/projection/GinzburgIXProjection
Super-classes	GinzburgIXProjection

11.16.3. Class: geosrs:GinzburgVIProjection

Table 225 — geosrs:GinzburgVIProjection

URI	https://w3id.org/geosrs/projection/GinzburgVIProjection

11.16.4. Class: geosrs:GinzburgVProjection

Table 226 — geosrs:GinzburgVProjection

URI	https://w3id.org/geosrs/projection/GinzburgVProjection
Super-classes	GinzburgVProjection

11.16.5. Class: geosrs:GottWagnerProjection

Table 227 — geosrs:GottWagnerProjection

URI	https://w3id.org/geosrs/projection/ GottWagnerProjection
Super-classes	GottWagnerProjection

11.16.6. Class: geosrs:HillEucyclicProjection

Table 228 — geosrs:HillEucyclicProjection

URI	https://w3id.org/geosrs/projection/HillEucyclicProjection
Super-classes	HillEucyclicProjection

11.16.7. Class: geosrs:LagrangeProjection

Table 229 — geosrs:LagrangeProjection

URI	https://w3id.org/geosrs/projection/LagrangeProjection
Super-classes	<u>LagrangeProjection</u>

11.16.8. Class: geosrs:LaskowskiProjection

Table 230 — geosrs:LaskowskiProjection

URI	https://w3id.org/geosrs/projection/LaskowskiProjection
Super-classes	LaskowskiProjection

11.16.9. Class: geosrs:RectangularPolyconicProjection

Table 231 — geosrs:RectangularPolyconicProjection

URI	https://w3id.org/geosrs/projection/ RectangularPolyconicProjection
Super-classes	<u>RectangularPolyconicProjection</u>

11.16.10. Class: geosrs:StabiusWernerIIIProjection

Table 232 — geosrs:StabiusWernerIIIProjection

URI	https://w3id.org/geosrs/projection/ StabiusWernerIIIProjection
Super-classes	<u>StabiusWernerIIIProjection</u>

11.16.11. Class: geosrs:StabiusWernerlProjection

Table 233 — geosrs:StabiusWernerlProjection

URI	https://w3id.org/geosrs/projection/ StabiusWernerlProjection
Super-classes	StabiusWernerlProjection

11.16.12. Class: geosrs:VanDerGrintenIIProjection

Table 234 — geosrs:VanDerGrintenIIProjection

URI	https://w3id.org/geosrs/projection/ VanDerGrintenIIProjection
Super-classes	<u>VanDerGrintenIIProjection</u>

11.16.13. Class: geosrs:VanDerGrintenlProjection

Table 235 — geosrs:VanDerGrintenIProjection

URI	https://w3id.org/geosrs/projection/ VanDerGrintenIProjection
Super-classes	VanDerGrintenIProjection

11.16.14. Class: geosrs: Van Der Grinten IV Projection

Table 236 — geosrs:VanDerGrintenIVProjection

URI	https://w3id.org/geosrs/projection/ VanDerGrintenIVProjection
Super-classes	<u>VanDerGrintenIVProjection</u>

11.16.15. Class: geosrs: Wagner IXProjection

Table 237 — geosrs:WagnerIXProjection

URI	https://w3id.org/geosrs/projection/WagnerlXProjection
Super-classes	WagnerIXProjection

11.16.16. Class: geosrs: Wagner VIII Projection

Table 238 — geosrs:WagnerVIIIProjection

URI	https://w3id.org/geosrs/projection/WagnerVIIIProjection

11.16.17. Class: geosrs: Wagner VII Projection

Table 239 — geosrs:WagnerVIIProjection

URI	https://w3id.org/geosrs/projection/WagnerVIIProjection
Super-classes	WagnerVIIProjection

11.17. Stereographic Projections

Requirement 22: Stereographic Projections		
IDENTIFIER	/req/Stereographic_Projections	
STATEMENT	Implementations shall allow the RDFS classes geosrs: MillerOblatedStereographicProjection, geosrs:RoussilheProjection to be used in SPARQL graph patterns.	

11.17.1. Class: geosrs:MillerOblatedStereographicProjection

Table 240 — geosrs:MillerOblatedStereographicProjection

URI	https://w3id.org/geosrs/projection/ MillerOblatedStereographicProjection
Super-classes	<u>MillerOblatedStereographicProjection</u>

11.17.2. Class: geosrs:RoussilheProjection

Table 241 — geosrs:RoussilheProjection

URI	https://w3id.org/geosrs/projection/RoussilheProjection



PLANET MODULE

12 PLANET MODULE

This clause establishes the **PLANET** Requirements class, with IRI /req/planet, which has a corresponding Conformance Class, **PLANET**, with IRI /conf/planet.





ANNEX A (INFORMATIVE) ALIGNMENTS



Overview

Overview

The prefixes used for the ontologies mapped to in all following sections are given in the following table.

Table A.1 — Alignment: Namespaces

ign:	http://data.ign.fr/def/ignf#
iso19111:	http://def.isotc211.org/iso19112/2019/SpatialReferencingByGeographicIdentifier#
geosrs:	http://www.opengis.net/ont/geosparql#
ifc:	https://standards.buildingsmart.org/IFC/DEV/IFC4/ADD2_TC1/OWL/
owl:	http://www.w3.org/2002/07/owl#
prov:	http://www.w3.org/ns/prov#
rdf:	http://www.w3.org/1999/02/22-rdf-syntax-ns#
rdfs:	http://www.w3.org/2000/01/rdf-schema#

A.1. IGN Ontology

Table A.2 - Alignment: IGN Ontology

FROM ELEMENT	MAPPING RELATION	TO ELEMENT	NOTES
geosrs:CoordinateSystem	owl:equivalentClass	ign:CoordinateSystem	-
geosrs:Datum	owl:equivalentClass	ign:Datum	-
geosrs:Ellipsoid	owl:equivalentClass	ign:Ellipsoid	-
geosrs:Conversion	owl:equivalentClass	ign:Conversion	-
geosrs:CoordinateOperation	owl:equivalentClass	ign:CoordinateOperation	-
geosrs:OperationMethod	owl:equivalentClass	ign:OperationMethod	-
geosrs:OperationParameter	owl:equivalentClass	ign:OperationParameter	-
geosrs:OperationParameterValue	owl:equivalentClass	ign:OperationParameterValue	-
geosrs:SingleOperation	owl:equivalentClass	ign:SingleOperation	-
geosrs:Transformation	owl:equivalentClass	ign:Transformation	-
geosrs:CartesianCoordinateSystem	owl:equivalentClass	ign:CartesianCS	-
geosrs:CoordinateSystem	owl:equivalentClass	ign:CoordinateSystem	-
geosrs:CoordinateSystemAxis	owl:equivalentClass	ign:CoordinateSystemAxis	-
geosrs:EllipsoidalCoordinateSystem	owl:equivalentClass	ign:EllipsoidalCS	-
geosrs:VerticalCoordinateSystem	owl:equivalentClass	ign:VerticalCS	-
geosrs:Datum	owl:equivalentClass	ign:Datum	-
geosrs:Ellipsoid	owl:equivalentClass	ign:Ellipsoid	-
geosrs:GeodeticDatum	owl:equivalentClass	ign:GeodeticDatum	-
geosrs:PrimeMeridian	owl:equivalentClass	ign:PrimeMeridian	-
geosrs:VerticalDatum	owl:equivalentClass	ign:VerticalDatum	-
geosrs:AxesList	owl:equivalentClass	ign:AxesList	-

FROM ELEMENT	MAPPING RELATION	TO ELEMENT	NOTES
geosrs:CRS	owl:equivalentClass	ign:CRS	-
geosrs:CompoundCRS	owl:equivalentClass	ign:CompoundCRS	-
geosrs:Extent	owl:equivalentClass	ign:Extent	-
geosrs:GeodeticCRS	owl:equivalentClass	ign:GeodeticCRS	-
geosrs:GeographicBoundingBox	owl:equivalentClass	ign:GeographicBoundingBox	-
geosrs:ProjectedCRS	owl:equivalentClass	ign:ProjectedCRS	-
geosrs:SingleCRS	owl:equivalentClass	ign:SingleCRS	-
geosrs:SingleCRSList	owl:equivalentClass	ign:SingleCRSList	-
geosrs:VerticalCRS	owl:equivalentClass	ign:VerticalCRS	-

A.2. ISO19111 Ontology

Table A.3 — Alignment: ISO19111 Ontology

FROM ELEMENT	MAPPING RELATION	TO ELEMENT	NOTES
geosrs:CoordinateSystem	owl:equivalentClass	iso19111:CoordinateSystem	-
geosrs:Datum	owl:equivalentClass	iso19111:Datum	-
geosrs:Ellipsoid	owl:equivalentClass	iso19111:Ellipsoid	-
geosrs:CRS	owl:equivalentClass	iso19111:CRS	-
geosrs:CompoundCRS	owl:equivalentClass	iso19111:CompoundCRS	-
geosrs:EngineeringCRS	owl:equivalentClass	iso19111:EngineeringCRS	-
geosrs:GeodeticCRS	owl:equivalentClass	iso19111:GeodeticCRS	-

FROM ELEMENT	MAPPING RELATION	TO ELEMENT	NOTES
geosrs:GeographicCRS	owl:equivalentClass	iso19111:GeographicCRS	-
geosrs:ParametricCRS	owl:equivalentClass	iso19111:ParametricCRS	-
geosrs:ProjectedCRS	owl:equivalentClass	iso19111:ProjectedCRS	-
geosrs:SingleCRS	owl:equivalentClass	iso19111:SingleCRS	-
geosrs:TemporalCRS	owl:equivalentClass	iso19111:TemporalCRS	-
geosrs:VerticalCRS	owl:equivalentClass	iso19111:VerticalCRS	-

A.3. IFC Ontology

Table A.4 — Alignment: IFC Ontology

FROM ELEMENT	MAPPING RELATION TO ELEMENT		NOTES
geosrs:AxisDirection	owl:equivalentClass	ifc:lfcDirection	-
geosrs:CRS	owl:equivalentClass	ifc:IfcCoordinateReferenceSystem	-
geosrs:CoordinateOperation	owl:equivalentClass	ifc:IfcCoordinateOperation	-
geosrs:ProjectedCRS	owl:equivalentClass	ifc:IfcProjectedCRS	-
geosrs:axis	owl:equivalentProperty	ifc:axis_lfcAxis1Placement	-
geosrs:sourceCRS	owl:equivalentProperty	ifc:sourceCRS	-
geosrs:targetCRS	owl:equivalentProperty	ifc:targetCRS	-



ANNEX B (INFORMATIVE) SHACL SHAPES

В

ANNEX B (INFORMATIVE) SHACL SHAPES

Overview

Overview



ANNEX C (INFORMATIVE) REVISION HISTORY



DATE	RELEASE	AUTHOR	PRIMARY CLAUSES MODIFIED	DESCRIPTION
2016-04-28	0.1	G. Editor	all	initial version



BIBLIOGRAPHY

NOTE: The TC has approved Springer LNCS as the official document citation type. Springer LNCS is widely used in technical and computer science journals and other publications For citations in the text please use square brackets and consecutive numbers: [1], [2], [3] Actual References: [n] Journal: Author Surname, A.: Title. Publication Title. Volume number, Issue number, Pages Used (Year Published)

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