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Open Geospatial Consortium

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I ABSTRACT

<Insert Abstract Text here>

II KEYWORDS

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.

There are two ways to specify the Preface: “simple clause” or “full clasuse”

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If the Preface contains subclauses, it needs to be encoded as a full preface clause. This one is recognized as a full Metanorma AsciiDoc section with te title “Preface”, i.e. `== Preface`. (Simple preface content can also be encoded like full preface.)

IV SECURITY CONSIDERATIONS

No security considerations have been made for this Standard.

V 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

VI SOURCE OF THE CONTENT FOR THIS OGC DOCUMENT

VII VALIDITY OF CONTENT

VIII FUTURE WORK

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

CONTRIBUTORS

Additional contributors to this Standard include the following:

Individual name(s), Organization

1 SCOPE

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

2 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

3 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)

4 TERMS AND DEFINITIONS

4 TERMS AND DEFINITIONS

This document uses the terms defined in OGC Policy Directive 49, 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

6 CORE

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

6.1. Class: geosrs:CoordinateSystem

The class `geosrs:geosrs:CoordinateSystem` is defined by the following:

Set of axes that spans a given coordinate space and of mathematical rules for specifying how coordinates are to be assigned to points. Cf. ISO 19111:2007:2007-07, part 9.2, table 17 and annex B.2.

6.2. Class: geosrs:CartesianCoordinateSystem

The class `geosrs:geosrs:CartesianCoordinateSystem` is defined by the following:

Coordinate system which gives the position of points relative to n mutually perpendicular axes. Cf. ISO 19111:2007:2007-07, tables 15 and 18.

6.3. Class: geosrs:EllipsoidalCoordinateSystem

The class `geosrs:geosrs:EllipsoidalCoordinateSystem` is defined by the following:

Coordinate system which gives the position is specified by geodetic latitude, geodetic longitude and (in the three-dimensional case) ellipsoidal height. Cf. ISO 19111:2007:2007-07, tables 15 and 20.

6.4. Class: geosrs:LinearCoordinateSystem

The class `geosrs:geosrs:LinearCoordinateSystem` is defined by the following:

One-dimensional coordinate system in which a linear feature forms the axis.

6.5. Class: geosrs:OrdinalCoordinateSystem

The class `geosrs:geosrs:OrdinalCoordinateSystem` is defined by the following:

n-dimensional coordinate system in which every axis uses integers.

6.6. Class: geosrs:ParametricCoordinateSystem

The class `geosrs:geosrs:ParametricCoordinateSystem` is defined by the following:

One-dimensional coordinate system where the axis units are parameter values which are not inherently spatial.

6.7. Class: geosrs:PolarCoordinateSystem

The class `geosrs:geosrs:PolarCoordinateSystem` is defined by the following:

Two-dimensional coordinate system in Euclidean space in which position is specified by one distance coordinate and one angular coordinate.

6.8. Class: geosrs:SphericalCoordinateSystem

The class `geosrs:geosrs:SphericalCoordinateSystem` is defined by the following:

Three-dimensional coordinate system in Euclidean space with one distance measured from the origin and two angular coordinates

6.9. Class: geosrs:VerticalCoordinateSystem

The class `geosrs:geosrs:VerticalCoordinateSystem` is defined by the following:

One-dimensional coordinate system used for gravity related height or depth measurements. Cf. ISO 19111:2007:2007-07, tables 15 and 25.

6.10. Class: geosrs:CoordinateSystemAxis

The class `geosrs:geosrs:CoordinateSystemAxis` is defined by the following:

Axis relative to which a coordinate of a point is specified in a coordinate system. See ISO 19111:2007:2007-07, part 9.3, table 27 and annex B.2.2.

6.11. Class: geosrs:AreaOfUse

The class `geosrs:geosrs:AreaOfUse` is defined by the following:

6.12. Class: geosrs:CRS

The class `geosrs:geosrs:CRS` is defined by the following:

Depending on the spatial dimension of coordinates (1D, 2D, 3D), this piece of metadata is used for specifying the elements of definition associated to a given set of coordinates: its datum, its ellipsoid, its prime meridian, the type of coordinates (geocentric, geographic, projected,...), the coordinates units of measure, when appropriate the cartographic projection used, the vertical coordinate reference system.

6.13. Class: geosrs:EngineeringCRS

The class `geosrs:geosrs:EngineeringCRS` is defined by the following:

6.14. Class: geosrs:GeodeticCRS

The class `geosrs:geosrs:GeodeticCRS` is defined by the following:

Coordinate reference system associated with a geodetic datum. Cf. ISO 19111:2007:2007-07, part 8.2.2.a, table 10 and annex B.1.2.1.a.

6.15. Class: geosrs:GeographicCRS

The class `geosrs:geosrs:GeographicCRS` is defined by the following:

6.16. Class: geosrs:ProjectedCRS

The class `geosrs:geosrs:ProjectedCRS` is defined by the following:

Coordinate reference system derived from a two-dimensional geodetic coordinate reference system by applying a map projection. Cf. ISO 19111:2007:2007-07, part 8.2.3.b, table 11 and annex B.1.2.3.

6.17. Class: geosrs:SingleCRS

The class `geosrs:geosrs:SingleCRS` is defined by the following:

Coordinate reference system consisting of one coordinate system and one datum. Cf. ISO 19111:2007:2007-07, table 5.

6.18. Class: geosrs:SpatialReferenceSystem

The class `geosrs:geosrs:SpatialReferenceSystem` is defined by the following:

A reference system allowing the description of a position.

6.19. Class: geosrs:CoordinateOperation

The class `geosrs:geosrs:CoordinateOperation` is defined by the following:

Mathematical operation on coordinates, based on one-to-one relationship, that changes coordinates from one coordinate reference system to another. Cf. ISO 19111:2007:2007-07, part 11.1, table 42 and annex B.4.

6.20. Class: geosrs:SingleOperation

The class `geosrs:geosrs:SingleOperation` is defined by the following:

A non concatenated coordinate operation. Cf. ISO 19111:2007:2007-07, table 43.

6.21. Class: geosrs:Transformation

The class `geosrs:geosrs:Transformation` is defined by the following:

Coordinate operation in which the two coordinate reference systems are based on different datums. Cf. ISO 19111:2007:2007-07, table 44.

6.22. Class: geosrs:Conversion

The class `geosrs:geosrs:Conversion` is defined by the following:

Coordinate operation in which both coordinate reference systems are based on the same datum. Cf. ISO 19111:2007:2007-07, table 45 and annex B.4.2.

6.23. Class: geosrs:OperationMethod

The class `geosrs:geosrs:OperationMethod` is defined by the following:

Method used to perform an operation on coordinates. See ISO 19111:2007:2007-07, table 48 and annex B.4.5.

6.24. Class: geosrs:OperationParameter

The class `geosrs:geosrs:OperationParameter` is defined by the following:

Parameter used by a method to perform an operation on coordinates. See ISO 19111:2007:2007-07, table 52 and annex B.4.5.

6.25. Class: geosrs:OperationParameterValue

The class `geosrs:geosrs:OperationParameterValue` is defined by the following:

Value of a parameter used by a method to perform an operation on coordinates. See ISO 19111:2007:2007-07, table 55.

6.26. Class: geosrs:Datum

The class `geosrs:geosrs:Datum` is defined by the following:

Parameter or set of parameters that define the position of the origin, the scale and the orientation of a coordinate system. Cf. ISO 19111:2007:2007-07, part 10.1, table 33 and annex B.3.

6.27. Class: geosrs:GeodeticDatum

The class `geosrs:geosrs:GeodeticDatum` is defined by the following:

Datum describing the relation of a two- or three-dimensional coordinate system to the Earth. Cf. ISO 19111:2007:2007-07, part 10.2, table 34 and annex B.3.2.

6.28. Class: geosrs:PrimeMeridian

The class `geosrs:geosrs:PrimeMeridian` is defined by the following:

Meridian from which the longitudes of other meridians are quantified. Cf. ISO 19111:2007:2007-07, part 10.2.1, table 35 and annex B.3.2.2.

6.29. Class: geosrs:Ellipsoid

The class `geosrs:geosrs:Ellipsoid` is defined by the following:

Surface formed by the rotation of an ellipse about its minor axis, defined by a semi-major axis and a flattening parameter and fairly geocentric. NB : It is a mathematical model of the geoid, i.e.

the Earth without its relief. Many geodetic ellipsoids exist. Cf. ISO 19111:2007:2007-07, part 10.2.2, table 36 and annex B.3.2.3.

6.30. Class: geosrs:VerticalDatum

The class `geosrs:geosrs:VerticalDatum` is defined by the following:

Datum describing the relation of gravity-related heights or depths to the Earth. Cf. ISO 19111:2007:2007-07, table 41 and annex B.3.3.

6.31. Property: geosrs:semiMajorAxis

The class `geosrs:geosrs:semiMajorAxis` is defined by the following:

Indicates the length of the semi major axis of an ellipsoid. Cf. ISO 19111:2007:2007-07, table 36, attribute length of semi-major axis.

6.32. Property: geosrs:semiMinorAxis

The class `geosrs:geosrs:semiMinorAxis` is defined by the following:

Indicates the length of the semi minor axis of an ellipsoid. Cf. ISO 19111:2007:2007-07, table 37, attribute length of semi-minor axis.

6.33. Property: geosrs:axis

The class `geosrs:geosrs:axis` is defined by the following:

The property relates a coordinate system to one of its axis

6.34. Property: geosrs:baseCRS

The class `geosrs:geosrs:baseCRS` is defined by the following:

The geodetic coordinate reference system on which a projected coordinate reference system is based. Cf. ISO 19111:2007:2007-07, table 11, association role baseCRS.

6.35. Property: geosrs:coordinateSystem

The class `geosrs:geosrs:coordinateSystem` is defined by the following:

The property relates a coordinate reference system to its coordinate system

6.36. Property: geosrs:datum

The class `geosrs:geosrs:datum` is defined by the following:

The property relates a coordinate reference system to a datum

6.37. Property: geosrs:domainOfValidity

The class `geosrs:geosrs:domainOfValidity` is defined by the following:

Geographic area or time interval in which the referring object is valid. Cf. ISO 19111:2007:2007-07, tables 4, 33 and 42, attribute domainOfValidity.

6.38. Property: geosrs:ellipsoid

The class `geosrs:geosrs:ellipsoid` is defined by the following:

The properties relates a datum to its ellipsoid definition

6.39. Property: geosrs:sourceCRS

The class `geosrs:geosrs:sourceCRS` is defined by the following:

The coordinate reference system associated to the data used as input of a given operation. Cf. ISO 19111:2007:2007-07, table 42, named association Source.

6.40. Property: geosrs:targetCRS

The class `geosrs:geosrs:targetCRS` is defined by the following:

The coordinate reference system associated to the data obtained as output of a given operation. Cf. ISO 19111:2007:2007-07, table 42, named association Target.

7

COORDINATE OPERATION MODULE

7 COORDINATE OPERATION MODULE

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

7.1. Property: geosrs:derivingConversion

The class `geosrs:geosrs:derivingConversion` is defined by the following:

7.2. Property: geosrs:method

The class `geosrs:geosrs:method` is defined by the following:

7.3. Property: geosrs:parameter

The class `geosrs:geosrs:parameter` is defined by the following:

8

COORDINATE SYSTEM MODULE

8 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`.

8.1. Class: geosrs:1DCoordinateSystem

The class `geosrs:geosrs:1DCoordinateSystem` is defined by the following:

Non-repeating sequence of coordinate system axes that spans a given coordinate space in one dimension

8.2. Class: geosrs:3DCoordinateSystem

The class `geosrs:geosrs:3DCoordinateSystem` is defined by the following:

Non-repeating sequence of coordinate system axes that spans a given coordinate space in three dimensions

8.3. Class: geosrs:AffineCoordinateSystem

The class `geosrs:geosrs:AffineCoordinateSystem` is defined by the following:

Coordinate system in Euclidean space with straight axes that are not necessarily mutually perpendicular

8.4. Class: geosrs:BarycentricCoordinateSystem

The class `geosrs:geosrs:BarycentricCoordinateSystem` is defined by the following:

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.)

8.5. Class: geosrs:CelestialCoordinateSystem

The class `geosrs:geosrs:CelestialCoordinateSystem` is defined by the following:

A coordinate system for specifying positions of celestial objects relative to physical reference points

8.6. Class: geosrs:ConicalCoordinateSystem

The class `geosrs:geosrs:ConicalCoordinateSystem` is defined by the following:

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

8.7. Class: geosrs:CurvilinearCoordinateSystem

The class `geosrs:geosrs:CurvilinearCoordinateSystem` is defined by the following:

A coordinate system for the Euclidean space in which the coordinate lines may be curved

8.8. Class: geosrs:CylindricalCoordinateSystem

The class `geosrs:geosrs:CylindricalCoordinateSystem` is defined by the following:

Three-dimensional coordinate system in Euclidean space in which position is specified by two linear coordinates and one angular coordinate

8.9. Class: geosrs:EclipticCoordinateSystem

The class `geosrs:geosrs:EclipticCoordinateSystem` is defined by the following:

An ecliptic coordinate system is used for representing the apparent positions and orbits of solar system objects.

8.10. Class: geosrs:EngineeringCoordinateSystem

The class `geosrs:geosrs:EngineeringCoordinateSystem` is defined by the following:

Coordinate system used by an engineering coordinate reference system, one of an affine coordinate system, a Cartesian coordinate system, a cylindrical coordinate system, a linear coordinate sytem, an ordinal coordinate system, a polar coordinate system or a spherical coordinate system

8.11. Class: geosrs:EquatorialCoordinateSystem

The class `geosrs:geosrs:EquatorialCoordinateSystem` is defined by the following:

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.

8.12. Class: geosrs:GalacticCoordinateSystem

The class `geosrs:geosrs:GalacticCoordinateSystem` is defined by the following:

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.

8.13. Class: geosrs:GeodeticCoordinateSystem

The class `geosrs:geosrs:GeodeticCoordinateSystem` is defined by the following:

Coordinate system used by a Geodetic CRS, one of a Cartesian coordinate system or a spherical coordinate system.

8.14. Class: geosrs:GeographicalCoordinateSystem

The class `geosrs:geosrs:GeographicalCoordinateSystem` is defined by the following:

Spherical or geodetic coordinate system for measuring and communicating positions directly on Earth as latitude and longitude.

8.15. Class: geosrs:GridCoordinateSystem

The class `geosrs:geosrs:GridCoordinateSystem` is defined by the following:

A grid coordinate system identifies areas within a grid.

8.16. Class: geosrs:HexagonalCoordinateSystem

The class `geosrs:geosrs:HexagonalCoordinateSystem` is defined by the following:

A hexagonal coordinate system identifies areas within a hexagonal lattice.

8.17. Class: geosrs:HorizontalCoordinateSystem

The class `geosrs:geosrs:HorizontalCoordinateSystem` is defined by the following:

A horizontal coordinate system is a celestial coordinate system that uses the observer's local horizon as the fundamental plane.

8.18. Class: geosrs:LocalCoordinateSystem

The class `geosrs:geosrs:LocalCoordinateSystem` is defined by the following:

Coordinate system with a point of local reference.

8.19. Class: geosrs:ObliqueCoordinateSystem

The class `geosrs:geosrs:ObliqueCoordinateSystem` is defined by the following:

A plane coordinate system whose axes are not perpendicular.

8.20. Class: geosrs:OrthogonalCoordinateSystem

The class `geosrs:geosrs:OrthogonalCoordinateSystem` is defined by the following:

A orthogonal coordinate system is a system of curvilinear coordinates in which each family of surfaces intersects the others at right angles.

8.21. Class: geosrs:PerifocalCoordinateSystem

The class `geosrs:geosrs:PerifocalCoordinateSystem` is defined by the following:

A frame of reference centered at the focus of the orbit, i.e. the celestial body about which the orbit is centered.

8.22. Class: geosrs:PlanarCoordinateSystem

The class `geosrs:geosrs:PlanarCoordinateSystem` is defined by the following:

A two-dimensional measurement system that locates features on a plane based on their distance from an origin (0,0) along two perpendicular axes.

8.23. Class: geosrs:SkewCoordinateSystem

The class `geosrs:geosrs:SkewCoordinateSystem` is defined by the following:

A skew coordinate system is a system of curvilinear coordinates in which each family of surfaces intersects the others at angles other than right angles.

8.24. Class: geosrs:DateTimeTemporalCoordinateSystem

The class `geosrs:geosrs:DateTimeTemporalCoordinateSystem` is defined by the following:

One-dimensional coordinate system used to record time in dateTime representation as defined in ISO 8601.

8.25. Class: geosrs:TemporalCountCoordinateSystem

The class `geosrs:geosrs:TemporalCountCoordinateSystem` is defined by the following:

One-dimensional coordinate system used to record time as an integer count.

8.26. Class: geosrs:TemporalCoordinateSystem

The class `geosrs:geosrs:TemporalCoordinateSystem` is defined by the following:

One-dimensionalcoordinate system where the axis is time.

8.27. Class: geosrs:TemporalMeasureCoordinateSystem

The class `geosrs:geosrs:TemporalMeasureCoordinateSystem` is defined by the following:

One-dimensional coordinate system used to record a time as a real number.

8.28. Class: geosrs:SuperGalacticCS

The class `geosrs:geosrs:SuperGalacticCS` is defined by the following:

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.

8.29. Property: geosrs:axisDirection

The class `geosrs:geosrs:axisDirection` is defined by the following:

The direction of an axis. Cf. ISO 19111:2007:2007-07, table 27, attribute coordinate system axis direction.

8.30. Property: geosrs:cylindricalCS

The class `geosrs:geosrs:cylindricalCS` is defined by the following:

Links a coordinate reference system to a cylindrical coordinate system

9

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`.

9.1. Class: geosrs:DynamicGeodeticReferenceFrame

The class `geosrs:geosrs:DynamicGeodeticReferenceFrame` is defined by the following:

Geodetic reference frame in which some of the parameters describe time evolution of defining station coordinatesExample: defining station coordinates having linear velocities to account for crustal motion.

9.2. Class: geosrs:TriaxialEllipsoid

The class `geosrs:geosrs:TriaxialEllipsoid` is defined by the following:

Surface of an analytic ellipsoid defined by three axes of different length. Also referred as scalene ellipsoid.

9.3. Class: geosrs:DynamicVerticalDatum

The class `geosrs:geosrs:DynamicVerticalDatum` is defined by the following:

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.

9.4. Class: geosrs:ParametricDatum

The class `geosrs:geosrs:ParametricDatum` is defined by the following:

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.

9.5. Class: geosrs:DefiningParameter

The class `geosrs:geosrs:DefiningParameter` is defined by the following:

Parameter value, an ordered sequence of values, or a reference to a file of parameter values that define a paramtric datum. Cf. ISO 19111:2019 Geographic information — Referencing by coordinates.

9.6. Class: geosrs:EngineeringDatum

The class `geosrs:geosrs:EngineeringDatum` is defined by the following:

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.

9.7. Class: geosrs:TemporalDatum

The class `geosrs:geosrs:TemporalDatum` is defined by the following:

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.

9.8. Class: geosrs:DatumEnsemble

The class `geosrs:geosrs:DatumEnsemble` is defined by the following:

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.

9.9. Property: geosrs:inverseFlattening

The class `geosrs:geosrs:inverseFlattening` is defined by the following:

Indicates the inverse flattening value of an ellipsoid, expressed as a number or a ratio (percentage rate, parts per million, etc.). Cf. ISO 19111:2007:2007-07, table 37, attribute inverse flattening

9.10. Property: geosrs:primeMeridian

The class `geosrs:geosrs:primeMeridian` is defined by the following:

The prime meridian used by a geodetic datum. Cf. ISO 19111:2007:2007-07, table 34, association role primeMeridian.

10

SRS APPLICATION MODULE

10 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`.

11

PROJECTIONS MODULE

11 PROJECTIONS MODULE

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

11.1. Class: geosrs:A4Projection

The class `geosrs:geosrs:A4Projection` is defined by the following:

11.2. Class: geosrs:AdamsProjection

The class `geosrs:geosrs:AdamsProjection` is defined by the following:

11.3. Class: geosrs:AdamsWorldInASquareIIProjection

The class `geosrs:geosrs:AdamsWorldInASquareIIProjection` is defined by the following:

11.4. Class: geosrs:AdamsWorldInASquareIProjection

The class `geosrs:geosrs:AdamsWorldInASquareIProjection` is defined by the following:

11.5. Class: geosrs:AiryProjection

The class `geosrs:geosrs:AiryProjection` is defined by the following:

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

11.6. Class: geosrs:AitoffObliqueProjection

The class `geosrs:geosrs:AitoffObliqueProjection` is defined by the following:

11.7. Class: geosrs:AitoffProjection

The class `geosrs:geosrs:AitoffProjection` is defined by the following:

A modified azimuthal projection whose graticule takes the form of an ellipse

11.8. Class: geosrs:AlbersEqualAreaProjection

The class `geosrs:geosrs:AlbersEqualAreaProjection` is defined by the following:

11.9. Class: geosrs:AmericanPolyconicProjection

The class `geosrs:geosrs:AmericanPolyconicProjection` is defined by the following:

11.10. Class: geosrs:ApianGlobularIProjection

The class `geosrs:geosrs:ApianGlobularIProjection` is defined by the following:

11.11. Class: geosrs:ApianIIProjection

The class `geosrs:geosrs:ApianIIProjection` is defined by the following:

11.12. Class: geosrs:ArchaicProjection

The class `geosrs:geosrs:ArchaicProjection` is defined by the following:

11.13. Class: geosrs:ArdenCloseProjection

The class `geosrs:geosrs:ArdenCloseProjection` is defined by the following:

11.14. Class: geosrs:ArmadilloProjection

The class `geosrs:geosrs:ArmadilloProjection` is defined by the following:

11.15. Class: geosrs:AtlantisProjection

The class `geosrs:geosrs:AtlantisProjection` is defined by the following:

11.16. Class: geosrs:AugustEpicycloidalProjection

The class `geosrs:geosrs:AugustEpicycloidalProjection` is defined by the following:

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

11.17. Class: geosrs:AuthaGraphProjection

The class `geosrs:geosrs:AuthaGraphProjection` is defined by the following:

11.18. Class: geosrs:AzimuthalEqualAreaProjection

The class `geosrs:geosrs:AzimuthalEqualAreaProjection` is defined by the following:

11.19. Class: geosrs:AzimuthalEquidistantProjection

The class `geosrs:geosrs:AzimuthalEquidistantProjection` is defined by the following:

11.20. Class: geosrs:AzimuthalProjection

The class `geosrs:geosrs:AzimuthalProjection` is defined by the following:

11.21. Class: geosrs:BSAMCylindricalProjection

The class `geosrs:geosrs:BSAMCylindricalProjection` is defined by the following:

11.22. Class: geosrs:BaconGlobularProjection

The class `geosrs:geosrs:BaconGlobularProjection` is defined by the following:

11.23. Class: geosrs:BakerDinomicProjection

The class `geosrs:geosrs:BakerDinomicProjection` is defined by the following:

11.24. Class: geosrs:BalthasartProjection

The class `geosrs:geosrs:BalthasartProjection` is defined by the following:

A cylindrical equal-area projection that uses a standard parallel of phi_s=50 degrees

11.25. Class: geosrs:BaranyiIIIProjection

The class `geosrs:geosrs:BaranyiIIIProjection` is defined by the following:

11.26. Class: geosrs:BaranyiIIProjection

The class `geosrs:geosrs:BaranyiIIProjection` is defined by the following:

11.27. Class: geosrs:BaranyiIProjection

The class `geosrs:geosrs:BaranyiIProjection` is defined by the following:

11.28. Class: geosrs:BaranyiIVProjection

The class `geosrs:geosrs:BaranyiIVProjection` is defined by the following:

11.29. Class: geosrs:BartholomewProjection

The class `geosrs:geosrs:BartholomewProjection` is defined by the following:

11.30. Class: geosrs:BehrmannProjection

The class `geosrs:geosrs:BehrmannProjection` is defined by the following:

A cylindrical equal-area map projection with standard parallels set at 30° north and south

11.31. Class: geosrs:BerghausStarProjection

The class `geosrs:geosrs:BerghausStarProjection` is defined by the following:

11.32. Class: geosrs:BertinProjection

The class `geosrs:geosrs:BertinProjection` is defined by the following:

11.33. Class: geosrs:BipolarObliqueConicConformalProjection

The class `geosrs:geosrs:BipolarObliqueConicConformalProjection` is defined by the following:

11.34. Class: geosrs:BoggsEumorphicProjection

The class `geosrs:geosrs:BoggsEumorphicProjection` is defined by the following:

11.35. Class: geosrs:BonneProjection

The class `geosrs:geosrs:BonneProjection` is defined by the following:

11.36. Class: geosrs:BottomleyProjection

The class `geosrs:geosrs:BottomleyProjection` is defined by the following:

11.37. Class: geosrs:BraunPerspectiveProjection

The class `geosrs:geosrs:BraunPerspectiveProjection` is defined by the following:

11.38. Class: geosrs:BraunStereographicProjection

The class `geosrs:geosrs:BraunStereographicProjection` is defined by the following:

11.39. Class: geosrs:BreusingGeometricProjection

The class `geosrs:geosrs:BreusingGeometricProjection` is defined by the following:

11.40. Class: geosrs:BreusingHarmonicProjection

The class `geosrs:geosrs:BreusingHarmonicProjection` is defined by the following:

11.41. Class: geosrs:BriesemeisterProjection

The class `geosrs:geosrs:BriesemeisterProjection` is defined by the following:

11.42. Class: geosrs:BromleyProjection

The class `geosrs:geosrs:BromleyProjection` is defined by the following:

11.43. Class: geosrs:CabotProjection

The class `geosrs:geosrs:CabotProjection` is defined by the following:

11.44. Class: geosrs:CahillKeyesProjection

The class `geosrs:geosrs:CahillKeyesProjection` is defined by the following:

11.45. Class: geosrs:CassiniProjection

The class `geosrs:geosrs:CassiniProjection` is defined by the following:

A map projection first described in an approximate form by César-François Cassini de Thury in 1745

11.46. Class: geosrs:CentralConicProjection

The class `geosrs:geosrs:CentralConicProjection` is defined by the following:

11.47. Class: geosrs:CentralCylindricalProjection

The class `geosrs:geosrs:CentralCylindricalProjection` is defined by the following:

11.48. Class: geosrs:ChamberlinTrimetricProjection

The class `geosrs:geosrs:ChamberlinTrimetricProjection` is defined by the following:

11.49. Class: geosrs:CiricIProjection

The class `geosrs:geosrs:CiricIProjection` is defined by the following:

11.50. Class: geosrs:CollignonButterflyProjection

The class `geosrs:geosrs:CollignonButterflyProjection` is defined by the following:

11.51. Class: geosrs:CollignonProjection

The class `geosrs:geosrs:CollignonProjection` is defined by the following:

An equal-area pseudocylindrical projection that maps the sphere onto a triangle or diamond

11.52. Class: geosrs:ColombiaUrbanProjection

The class `geosrs:geosrs:ColombiaUrbanProjection` is defined by the following:

11.53. Class: geosrs:CompactMillerProjection

The class `geosrs:geosrs:CompactMillerProjection` is defined by the following:

11.54. Class: geosrs:CompromiseProjection

The class `geosrs:geosrs:CompromiseProjection` is defined by the following:

11.55. Class: geosrs:ConformalProjection

The class `geosrs:geosrs:ConformalProjection` is defined by the following:

11.56. Class: geosrs:ConicalProjection

The class `geosrs:geosrs:ConicalProjection` is defined by the following:

11.57. Class: geosrs:CordiformProjection

The class `geosrs:geosrs:CordiformProjection` is defined by the following:

11.58. Class: geosrs:CoxConformalProjection

The class `geosrs:geosrs:CoxConformalProjection` is defined by the following:

11.59. Class: geosrs:CraigRetroazimuthalProjection

The class `geosrs:geosrs:CraigRetroazimuthalProjection` is defined by the following:

11.60. Class: geosrs:CrasterParabolicProjection

The class `geosrs:geosrs:CrasterParabolicProjection` is defined by the following:

11.61. Class: geosrs:CupolaProjection

The class `geosrs:geosrs:CupolaProjection` is defined by the following:

11.62. Class: geosrs:CylindricalEqualArea

The class `geosrs:geosrs:CylindricalEqualArea` is defined by the following:

11.63. Class: geosrs:CylindricalProjection

The class `geosrs:geosrs:CylindricalProjection` is defined by the following:

11.64. Class: geosrs:CylindricalStereographicProjection

The class `geosrs:geosrs:CylindricalStereographicProjection` is defined by the following:

11.65. Class: geosrs:DeakinMinimumErrorProjection

The class `geosrs:geosrs:DeakinMinimumErrorProjection` is defined by the following:

11.66. Class: geosrs:DedistortProjection

The class `geosrs:geosrs:DedistortProjection` is defined by the following:

11.67. Class: geosrs:DenoyerSemiEllipticalProjection

The class `geosrs:geosrs:DenoyerSemiEllipticalProjection` is defined by the following:

11.68. Class: geosrs:DietrichKitadaProjection

The class `geosrs:geosrs:DietrichKitadaProjection` is defined by the following:

11.69. Class: geosrs:DodecahedralProjection

The class `geosrs:geosrs:DodecahedralProjection` is defined by the following:

11.70. Class: geosrs:DymaxionProjection

The class `geosrs:geosrs:DymaxionProjection` is defined by the following:

11.71. Class: geosrs:Eckert1Projection

The class `geosrs:geosrs:Eckert1Projection` is defined by the following:

11.72. Class: geosrs:Eckert2Projection

The class `geosrs:geosrs:Eckert2Projection` is defined by the following:

11.73. Class: geosrs:Eckert3Projection

The class `geosrs:geosrs:Eckert3Projection` is defined by the following:

11.74. Class: geosrs:Eckert4Projection

The class `geosrs:geosrs:Eckert4Projection` is defined by the following:

11.75. Class: geosrs:Eckert5Projection

The class `geosrs:geosrs:Eckert5Projection` is defined by the following:

11.76. Class: geosrs:Eckert6Projection

The class `geosrs:geosrs:Eckert6Projection` is defined by the following:

11.77. Class: geosrs:EisenlohrProjection

The class `geosrs:geosrs:EisenlohrProjection` is defined by the following:

11.78. Class: geosrs:EqualAreaProjection

The class `geosrs:geosrs:EqualAreaProjection` is defined by the following:

11.79. Class: geosrs:EqualEarthProjection

The class `geosrs:geosrs:EqualEarthProjection` is defined by the following:

11.80. Class: geosrs:EquallySpacedParallelsProjection

The class `geosrs:geosrs:EquallySpacedParallelsProjection` is defined by the following:

11.81. Class: geosrs:EquidistantConicProjection

The class `geosrs:geosrs:EquidistantConicProjection` is defined by the following:

11.82. Class: geosrs:EquidistantCylindricalProjection

The class `geosrs:geosrs:EquidistantCylindricalProjection` is defined by the following:

11.83. Class: geosrs:EquidistantProjection

The class `geosrs:geosrs:EquidistantProjection` is defined by the following:

11.84. Class: geosrs:EquirectangularProjection

The class `geosrs:geosrs:EquirectangularProjection` is defined by the following:

11.85. Class: geosrs:FaheyProjection

The class `geosrs:geosrs:FaheyProjection` is defined by the following:

11.86. Class: geosrs:FairgrieveProjection

The class `geosrs:geosrs:FairgrieveProjection` is defined by the following:

11.87. Class: geosrs:FoucautProjection

The class `geosrs:geosrs:FoucautProjection` is defined by the following:

11.88. Class: geosrs:FoucautSinusoidalProjection

The class `geosrs:geosrs:FoucautSinusoidalProjection` is defined by the following:

11.89. Class: geosrs:FournierGlobularIProjection

The class `geosrs:geosrs:FournierGlobularIProjection` is defined by the following:

11.90. Class: geosrs:FournierIIProjection

The class `geosrs:geosrs:FournierIIProjection` is defined by the following:

11.91. Class: geosrs:FranculaIIIProjection

The class `geosrs:geosrs:FranculaIIIProjection` is defined by the following:

11.92. Class: geosrs:FranculaIVProjection

The class `geosrs:geosrs:FranculaIVProjection` is defined by the following:

11.93. Class: geosrs:FranculaIXProjection

The class `geosrs:geosrs:FranculaIXProjection` is defined by the following:

11.94. Class: geosrs:FranculaVIIIProjection

The class `geosrs:geosrs:FranculaVIIIProjection` is defined by the following:

11.95. Class: geosrs:FranculaVProjection

The class `geosrs:geosrs:FranculaVProjection` is defined by the following:

11.96. Class: geosrs:FranculaXIIIProjection

The class `geosrs:geosrs:FranculaXIIIProjection` is defined by the following:

11.97. Class: geosrs:FranculaXIIProjection

The class `geosrs:geosrs:FranculaXIIProjection` is defined by the following:

11.98. Class: geosrs:FranculaXIVProjection

The class `geosrs:geosrs:FranculaXIVProjection` is defined by the following:

11.99. Class: geosrs:GS50Projection

The class `geosrs:geosrs:GS50Projection` is defined by the following:

11.100. Class: geosrs:GallIsographicProjection

The class `geosrs:geosrs:GallIsographicProjection` is defined by the following:

11.101. Class: geosrs:GallPetersProjection

The class `geosrs:geosrs:GallPetersProjection` is defined by the following:

11.102. Class: geosrs:GallStereographicProjection

The class `geosrs:geosrs:GallStereographicProjection` is defined by the following:

11.103. Class: geosrs:GaussKruegerProjection

The class `geosrs:geosrs:GaussKruegerProjection` is defined by the following:

11.104. Class: geosrs:GeneralVerticalPerspectiveProjection

The class `geosrs:geosrs:GeneralVerticalPerspectiveProjection` is defined by the following:

11.105. Class: geosrs:GilbertTwoWorldPerspectiveProjection

The class `geosrs:geosrs:GilbertTwoWorldPerspectiveProjection` is defined by the following:

11.106. Class: geosrs:GingeryProjection

The class `geosrs:geosrs:GingeryProjection` is defined by the following:

11.107. Class: geosrs:GinzburgIIProjection

The class `geosrs:geosrs:GinzburgIIProjection` is defined by the following:

11.108. Class: geosrs:GinzburgIProjection

The class `geosrs:geosrs:GinzburgIProjection` is defined by the following:

11.109. Class: geosrs:GinzburgIVProjection

The class `geosrs:geosrs:GinzburgIVProjection` is defined by the following:

11.110. Class: geosrs:GinzburgIXProjection

The class `geosrs:geosrs:GinzburgIXProjection` is defined by the following:

11.111. Class: geosrs:GinzburgVIIIProjection

The class `geosrs:geosrs:GinzburgVIIIProjection` is defined by the following:

11.112. Class: geosrs:GinzburgVIProjection

The class `geosrs:geosrs:GinzburgVIProjection` is defined by the following:

11.113. Class: geosrs:GinzburgVProjection

The class `geosrs:geosrs:GinzburgVProjection` is defined by the following:

11.114. Class: geosrs:GlobularProjection

The class `geosrs:geosrs:GlobularProjection` is defined by the following:

11.115. Class: geosrs:GnomonicButterflyProjection

The class `geosrs:geosrs:GnomonicButterflyProjection` is defined by the following:

11.116. Class: geosrs:GnomonicCubedSphereProjection

The class `geosrs:geosrs:GnomonicCubedSphereProjection` is defined by the following:

11.117. Class: geosrs:GnomonicIcosahedronProjection

The class `geosrs:geosrs:GnomonicIcosahedronProjection` is defined by the following:

11.118. Class: geosrs:GnomonicProjection

The class `geosrs:geosrs:GnomonicProjection` is defined by the following:

11.119. Class: geosrs:GoodeHomolosineProjection

The class `geosrs:geosrs:GoodeHomolosineProjection` is defined by the following:

11.120. Class: geosrs:GottWagnerProjection

The class `geosrs:geosrs:GottWagnerProjection` is defined by the following:

11.121. Class: geosrs:GringortenProjection

The class `geosrs:geosrs:GringortenProjection` is defined by the following:

11.122. Class: geosrs:GringortenQuincuncialProjection

The class `geosrs:geosrs:GringortenQuincuncialProjection` is defined by the following:

11.123. Class: geosrs:GuyouProjection

The class `geosrs:geosrs:GuyouProjection` is defined by the following:

11.124. Class: geosrs:HEALPixProjection

The class `geosrs:geosrs:HEALPixProjection` is defined by the following:

11.125. Class: geosrs:HammerProjection

The class `geosrs:geosrs:HammerProjection` is defined by the following:

11.126. Class: geosrs:HammerRetroazimuthalProjection

The class `geosrs:geosrs:HammerRetroazimuthalProjection` is defined by the following:

11.127. Class: geosrs:HamusoidalProjection

The class `geosrs:geosrs:HamusoidalProjection` is defined by the following:

11.128. Class: geosrs:HatanoAsymmetricalEqualAreaProjection

The class `geosrs:geosrs:HatanoAsymmetricalEqualAreaProjection` is defined by the following:

11.129. Class: geosrs:HerschelConformalConicProjection

The class `geosrs:geosrs:HerschelConformalConicProjection` is defined by the following:

11.130. Class: geosrs:HillEucyclicProjection

The class `geosrs:geosrs:HillEucyclicProjection` is defined by the following:

11.131. Class: geosrs:HoboDyerProjection

The class `geosrs:geosrs:HoboDyerProjection` is defined by the following:

11.132. Class: geosrs:HufnagelIIIProjection

The class `geosrs:geosrs:HufnagelIIIProjection` is defined by the following:

11.133. Class: geosrs:HufnagelIIProjection

The class `geosrs:geosrs:HufnagelIIProjection` is defined by the following:

11.134. Class: geosrs:HufnagelIProjection

The class `geosrs:geosrs:HufnagelIProjection` is defined by the following:

11.135. Class: geosrs:HufnagelIVProjection

The class `geosrs:geosrs:HufnagelIVProjection` is defined by the following:

11.136. Class: geosrs:HufnagelIXProjection

The class `geosrs:geosrs:HufnagelIXProjection` is defined by the following:

11.137. Class: geosrs:HufnagelProjection

The class `geosrs:geosrs:HufnagelProjection` is defined by the following:

11.138. Class: geosrs:HufnagelVIIIProjection

The class `geosrs:geosrs:HufnagelVIIIProjection` is defined by the following:

11.139. Class: geosrs:HufnagelVIIProjection

The class `geosrs:geosrs:HufnagelVIIProjection` is defined by the following:

11.140. Class: geosrs:HufnagelVIProjection

The class `geosrs:geosrs:HufnagelVIProjection` is defined by the following:

11.141. Class: geosrs:HufnagelVProjection

The class `geosrs:geosrs:HufnagelVProjection` is defined by the following:

11.142. Class: geosrs:HufnagelXIIProjection

The class `geosrs:geosrs:HufnagelXIIProjection` is defined by the following:

11.143. Class: geosrs:HufnagelXIProjection

The class `geosrs:geosrs:HufnagelXIProjection` is defined by the following:

11.144. Class: geosrs:HufnagelXProjection

The class `geosrs:geosrs:HufnagelXProjection` is defined by the following:

11.145. Class: geosrs:IcosahedralProjection

The class `geosrs:geosrs:IcosahedralProjection` is defined by the following:

11.146. Class: geosrs:InterruptedGoodeHomolosineOceanicViewProjection

The class `geosrs:geosrs:InterruptedGoodeHomolosineOceanicViewProjection` is defined by the following:

11.147. Class: geosrs:InterruptedGoodeHomolosineProjection

The class `geosrs:geosrs:InterruptedGoodeHomolosineProjection` is defined by the following:

11.148. Class: geosrs:InterruptedQuarticAuthalicProjection

The class `geosrs:geosrs:InterruptedQuarticAuthalicProjection` is defined by the following:

11.149. Class: geosrs:JamesAzimuthalProjection

The class `geosrs:geosrs:JamesAzimuthalProjection` is defined by the following:

11.150. Class: geosrs:KamenetskiyIProjection

The class `geosrs:geosrs:KamenetskiyIProjection` is defined by the following:

11.151. Class: geosrs:KarchenkoShabanovaProjection

The class `geosrs:geosrs:KarchenkoShabanovaProjection` is defined by the following:

11.152. Class: geosrs:Kavrayskiy7Projection

The class `geosrs:geosrs:Kavrayskiy7Projection` is defined by the following:

11.153. Class: geosrs:KissProjection

The class `geosrs:geosrs:KissProjection` is defined by the following:

11.154. Class: geosrs:Krovak

The class `geosrs:geosrs:Krovak` is defined by the following:

11.155. Class: geosrs:LaHireProjection

The class `geosrs:geosrs:LaHireProjection` is defined by the following:

11.156. Class: geosrs:LabordeProjection

The class `geosrs:geosrs:LabordeProjection` is defined by the following:

11.157. Class: geosrs:LagrangeProjection

The class `geosrs:geosrs:LagrangeProjection` is defined by the following:

11.158. Class: geosrs:LambertAzimuthalEqualArea

The class `geosrs:geosrs:LambertAzimuthalEqualArea` is defined by the following:

11.159. Class: geosrs:LambertConformalConicProjection

The class `geosrs:geosrs:LambertConformalConicProjection` is defined by the following:

11.160. Class: geosrs:LambertCylindricalEqualAreaProjection

The class `geosrs:geosrs:LambertCylindricalEqualAreaProjection` is defined by the following:

11.161. Class: geosrs:LarriveeProjection

The class `geosrs:geosrs:LarriveeProjection` is defined by the following:

11.162. Class: geosrs:LaskowskiProjection

The class `geosrs:geosrs:LaskowskiProjection` is defined by the following:

11.163. Class: geosrs:LatLonProjection

The class `geosrs:geosrs:LatLonProjection` is defined by the following:

11.164. Class: geosrs:LeeProjection

The class `geosrs:geosrs:LeeProjection` is defined by the following:

11.165. Class: geosrs:LenticularProjection

The class `geosrs:geosrs:LenticularProjection` is defined by the following:

11.166. Class: geosrs:LittrowProjection

The class `geosrs:geosrs:LittrowProjection` is defined by the following:

11.167. Class: geosrs:LonLatProjection

The class `geosrs:geosrs:LonLatProjection` is defined by the following:

11.168. Class: geosrs:LorgnaProjection

The class `geosrs:geosrs:LorgnaProjection` is defined by the following:

11.169. Class: geosrs:LowryProjection

The class `geosrs:geosrs:LowryProjection` is defined by the following:

11.170. Class: geosrs:LoximuthalProjection

The class `geosrs:geosrs:LoximuthalProjection` is defined by the following:

11.171. Class: geosrs:MaurerNo73Projection

The class `geosrs:geosrs:MaurerNo73Projection` is defined by the following:

11.172. Class: geosrs:MayrProjection

The class `geosrs:geosrs:MayrProjection` is defined by the following:

11.173. Class: geosrs:McBrydeThomasFlatPolarParabolicProjection

The class `geosrs:geosrs:McBrydeThomasFlatPolarParabolicProjection` is defined by the following:

11.174. Class: geosrs:McBrydeThomasFlatPolarQuarticProjection

The class `geosrs:geosrs:McBrydeThomasFlatPolarQuarticProjection` is defined by the following:

11.175. Class: geosrs:McBrydeThomasFlatPolarSinusoidalProjection

The class `geosrs:geosrs:McBrydeThomasFlatPolarSinusoidalProjection` is defined by the following:

11.176. Class: geosrs:McBrydeThomasIIProjection

The class `geosrs:geosrs:McBrydeThomasIIProjection` is defined by the following:

11.177. Class: geosrs:McBrydeThomasIProjection

The class `geosrs:geosrs:McBrydeThomasIProjection` is defined by the following:

11.178. Class: geosrs:MercatorProjection

The class `geosrs:geosrs:MercatorProjection` is defined by the following:

11.179. Class: geosrs:MillerOblatedStereographicProjection

The class `geosrs:geosrs:MillerOblatedStereographicProjection` is defined by the following:

11.180. Class: geosrs:MillerProjection

The class `geosrs:geosrs:MillerProjection` is defined by the following:

11.181. Class: geosrs:MinimumErrorProjection

The class `geosrs:geosrs:MinimumErrorProjection` is defined by the following:

11.182. Class: geosrs:MollweideProjection

The class `geosrs:geosrs:MollweideProjection` is defined by the following:

11.183. Class: geosrs:MurdochIIIProjection

The class `geosrs:geosrs:MurdochIIIProjection` is defined by the following:

11.184. Class: geosrs:MurdochIIProjection

The class `geosrs:geosrs:MurdochIIProjection` is defined by the following:

11.185. Class: geosrs:MurdochIProjection

The class `geosrs:geosrs:MurdochIProjection` is defined by the following:

11.186. Class: geosrs:MyrahedalProjection

The class `geosrs:geosrs:MyrahedalProjection` is defined by the following:

11.187. Class: geosrs:NaturalEarth2Projection

The class `geosrs:geosrs:NaturalEarth2Projection` is defined by the following:

11.188. Class: geosrs:NaturalEarthProjection

The class `geosrs:geosrs:NaturalEarthProjection` is defined by the following:

A pseudocylindrical map projection designed by Tom Patterson and introduced in 2008

11.189. Class: geosrs:NellHammerProjection

The class `geosrs:geosrs:NellHammerProjection` is defined by the following:

11.190. Class: geosrs:NellProjection

The class `geosrs:geosrs:NellProjection` is defined by the following:

11.191. Class: geosrs:NicolosiGlobularProjection

The class `geosrs:geosrs:NicolosiGlobularProjection` is defined by the following:

11.192. Class: geosrs:NordicProjection

The class `geosrs:geosrs:NordicProjection` is defined by the following:

11.193. Class: geosrs:ObliqueCylindricalEqualAreaProjection

The class `geosrs:geosrs:ObliqueCylindricalEqualAreaProjection` is defined by the following:

11.194. Class: geosrs:ObliqueMercatorProjection

The class `geosrs:geosrs:ObliqueMercatorProjection` is defined by the following:

11.195. Class: geosrs:ObliquePlateCarreeProjection

The class `geosrs:geosrs:ObliquePlateCarreeProjection` is defined by the following:

11.196. Class: geosrs:ObliqueProjection

The class `geosrs:geosrs:ObliqueProjection` is defined by the following:

11.197. Class: geosrs:ObliqueStereographicProjection

The class `geosrs:geosrs:ObliqueStereographicProjection` is defined by the following:

11.198. Class: geosrs:OctantProjection

The class `geosrs:geosrs:OctantProjection` is defined by the following:

11.199. Class: geosrs:OrteliusOvalProjection

The class `geosrs:geosrs:OrteliusOvalProjection` is defined by the following:

11.200. Class: geosrs:OrthographicProjection

The class `geosrs:geosrs:OrthographicProjection` is defined by the following:

11.201. Class: geosrs:OvalProjection

The class `geosrs:geosrs:OvalProjection` is defined by the following:

11.202. Class: geosrs:PattersonCylindricalProjection

The class `geosrs:geosrs:PattersonCylindricalProjection` is defined by the following:

11.203. Class: geosrs:PavlovProjection

The class `geosrs:geosrs:PavlovProjection` is defined by the following:

11.204. Class: geosrs:PeirceQuincuncialProjection

The class `geosrs:geosrs:PeirceQuincuncialProjection` is defined by the following:

11.205. Class: geosrs:PerspectiveConicProjection

The class `geosrs:geosrs:PerspectiveConicProjection` is defined by the following:

11.206. Class: geosrs:PerspectiveProjection

The class `geosrs:geosrs:PerspectiveProjection` is defined by the following:

11.207. Class: geosrs:PetermannStarProjection

The class `geosrs:geosrs:PetermannStarProjection` is defined by the following:

11.208. Class: geosrs:PlateCarreeProjection

The class `geosrs:geosrs:PlateCarreeProjection` is defined by the following:

11.209. Class: geosrs:PoleLineProjection

The class `geosrs:geosrs:PoleLineProjection` is defined by the following:

11.210. Class: geosrs:PolyconicProjection

The class `geosrs:geosrs:PolyconicProjection` is defined by the following:

11.211. Class: geosrs:PolyhedralProjection

The class `geosrs:geosrs:PolyhedralProjection` is defined by the following:

11.212. Class: geosrs:Projection

The class `geosrs:geosrs:Projection` is defined by the following:

11.213. Class: geosrs:PseudoAzimuthalProjection

The class `geosrs:geosrs:PseudoAzimuthalProjection` is defined by the following:

11.214. Class: geosrs:PseudoConicalProjection

The class `geosrs:geosrs:PseudoConicalProjection` is defined by the following:

11.215. Class: geosrs:PseudoCylindricalProjection

The class `geosrs:geosrs:PseudoCylindricalProjection` is defined by the following:

11.216. Class: geosrs:PseudoOrthographicProjection

The class `geosrs:geosrs:PseudoOrthographicProjection` is defined by the following:

11.217. Class: geosrs:PtolemyIIProjection

The class `geosrs:geosrs:PtolemyIIProjection` is defined by the following:

11.218. Class: geosrs:PtolemyIProjection

The class `geosrs:geosrs:PtolemyIProjection` is defined by the following:

11.219. Class: geosrs:PutninsP1Projection

The class `geosrs:geosrs:PutninsP1Projection` is defined by the following:

11.220. Class: geosrs:PutninsP2Projection

The class `geosrs:geosrs:PutninsP2Projection` is defined by the following:

11.221. Class: geosrs:PutninsP3Projection

The class `geosrs:geosrs:PutninsP3Projection` is defined by the following:

11.222. Class: geosrs:PutninsP5Projection

The class `geosrs:geosrs:PutninsP5Projection` is defined by the following:

11.223. Class: geosrs:PutninsP6Projection

The class `geosrs:geosrs:PutninsP6Projection` is defined by the following:

11.224. Class: geosrs:QuadrilateralizedSphericalCubeProjection

The class `geosrs:geosrs:QuadrilateralizedSphericalCubeProjection` is defined by the following:

11.225. Class: geosrs:QuarticAuthalicProjection

The class `geosrs:geosrs:QuarticAuthalicProjection` is defined by the following:

11.226. Class: geosrs:RectangularPolyconicProjection

The class `geosrs:geosrs:RectangularPolyconicProjection` is defined by the following:

11.227. Class: geosrs:RetroazimuthalProjection

The class `geosrs:geosrs:RetroazimuthalProjection` is defined by the following:

11.228. Class: geosrs:RobinsonProjection

The class `geosrs:geosrs:RobinsonProjection` is defined by the following:

11.229. Class: geosrs:RoussilheProjection

The class `geosrs:geosrs:RoussilheProjection` is defined by the following:

11.230. Class: geosrs:SchjerningIProjection

The class `geosrs:geosrs:SchjerningIProjection` is defined by the following:

11.231. Class: geosrs:SinusoidalProjection

The class `geosrs:geosrs:SinusoidalProjection` is defined by the following:

11.232. Class: geosrs:SmythEqualSurfaceProjection

The class `geosrs:geosrs:SmythEqualSurfaceProjection` is defined by the following:

11.233. Class: geosrs:SpaceObliqueMercatorProjection

The class `geosrs:geosrs:SpaceObliqueMercatorProjection` is defined by the following:

11.234. Class: geosrs:SpilhausOceanicProjection

The class `geosrs:geosrs:SpilhausOceanicProjection` is defined by the following:

11.235. Class: geosrs:StabiusWernerIIIProjection

The class `geosrs:geosrs:StabiusWernerIIIProjection` is defined by the following:

11.236. Class: geosrs:StabiusWernerIIProjection

The class `geosrs:geosrs:StabiusWernerIIProjection` is defined by the following:

11.237. Class: geosrs:StabiusWernerIProjection

The class `geosrs:geosrs:StabiusWernerIProjection` is defined by the following:

11.238. Class: geosrs:StereographicProjection

The class `geosrs:geosrs:StereographicProjection` is defined by the following:

11.239. Class: geosrs:Strebe1995Projection

The class `geosrs:geosrs:Strebe1995Projection` is defined by the following:

11.240. Class: geosrs:TheTimesProjection

The class `geosrs:geosrs:TheTimesProjection` is defined by the following:

11.241. Class: geosrs:TiltedPerspectiveProjection

The class `geosrs:geosrs:TiltedPerspectiveProjection` is defined by the following:

11.242. Class: geosrs:ToblerCylindricalIIProjection

The class `geosrs:geosrs:ToblerCylindricalIIProjection` is defined by the following:

11.243. Class: geosrs:ToblerCylindricalIProjection

The class `geosrs:geosrs:ToblerCylindricalIProjection` is defined by the following:

11.244. Class: geosrs:ToblerG1Projection

The class `geosrs:geosrs:ToblerG1Projection` is defined by the following:

11.245. Class: geosrs:ToblerHyperellipticalProjection

The class `geosrs:geosrs:ToblerHyperellipticalProjection` is defined by the following:

11.246. Class: geosrs:ToblerWorldInASquareProjection

The class `geosrs:geosrs:ToblerWorldInASquareProjection` is defined by the following:

11.247. Class: geosrs:TransverseCylindricalEqualAreaProjection

The class `geosrs:geosrs:TransverseCylindricalEqualAreaProjection` is defined by the following:

11.248. Class: geosrs:TransverseMercatorProjection

The class `geosrs:geosrs:TransverseMercatorProjection` is defined by the following:

11.249. Class: geosrs:TrystanEdwardsProjection

The class `geosrs:geosrs:TrystanEdwardsProjection` is defined by the following:

11.250. Class: geosrs:TwoPointEquidistantProjection

The class `geosrs:geosrs:TwoPointEquidistantProjection` is defined by the following:

11.251. Class: geosrs:UniversalTransverseMercatorProjection

The class `geosrs:geosrs:UniversalTransverseMercatorProjection` is defined by the following:

11.252. Class: geosrs:UrmayevIIIProjection

The class `geosrs:geosrs:UrmayevIIIProjection` is defined by the following:

11.253. Class: geosrs:VanDerGrintenIIIProjection

The class `geosrs:geosrs:VanDerGrintenIIIProjection` is defined by the following:

11.254. Class: geosrs:VanDerGrintenIIProjection

The class `geosrs:geosrs:VanDerGrintenIIProjection` is defined by the following:

11.255. Class: geosrs:VanDerGrintenIProjection

The class `geosrs:geosrs:VanDerGrintenIProjection` is defined by the following:

11.256. Class: geosrs:VanDerGrintenIVProjection

The class `geosrs:geosrs:VanDerGrintenIVProjection` is defined by the following:

11.257. Class: geosrs:VerticalPerspectiveProjection

The class `geosrs:geosrs:VerticalPerspectiveProjection` is defined by the following:

11.258. Class: geosrs:VitkovskyIProjection

The class `geosrs:geosrs:VitkovskyIProjection` is defined by the following:

11.259. Class: geosrs:WagnerIIIProjection

The class `geosrs:geosrs:WagnerIIIProjection` is defined by the following:

11.260. Class: geosrs:WagnerIIProjection

The class `geosrs:geosrs:WagnerIIProjection` is defined by the following:

11.261. Class: geosrs:WagnerIProjection

The class `geosrs:geosrs:WagnerIProjection` is defined by the following:

11.262. Class: geosrs:WagnerIVProjection

The class `geosrs:geosrs:WagnerIVProjection` is defined by the following:

11.263. Class: geosrs:WagnerIXProjection

The class `geosrs:geosrs:WagnerIXProjection` is defined by the following:

11.264. Class: geosrs:WagnerVIIIProjection

The class `geosrs:geosrs:WagnerVIIIProjection` is defined by the following:

11.265. Class: geosrs:WagnerVIIProjection

The class `geosrs:geosrs:WagnerVIIProjection` is defined by the following:

11.266. Class: geosrs:WagnerVIProjection

The class `geosrs:geosrs:WagnerVIProjection` is defined by the following:

11.267. Class: geosrs:WagnerVProjection

The class `geosrs:geosrs:WagnerVProjection` is defined by the following:

11.268. Class: geosrs:WatermanButterflyProjection

The class `geosrs:geosrs:WatermanButterflyProjection` is defined by the following:

11.269. Class: geosrs:WebMercatorProjection

The class `geosrs:geosrs:WebMercatorProjection` is defined by the following:

11.270. Class: geosrs:WerenskioldIProjection

The class `geosrs:geosrs:WerenskioldIProjection` is defined by the following:

11.271. Class: geosrs:WernerProjection

The class `geosrs:geosrs:WernerProjection` is defined by the following:

11.272. Class: geosrs:WiechelProjection

The class `geosrs:geosrs:WiechelProjection` is defined by the following:

11.273. Class: geosrs:WinkelIIProjection

The class `geosrs:geosrs:WinkelIIProjection` is defined by the following:

11.274. Class: geosrs:WinkelIProjection

The class `geosrs:geosrs:WinkelIProjection` is defined by the following:

11.275. Class: geosrs:WinkelSnyderProjection

The class `geosrs:geosrs:WinkelSnyderProjection` is defined by the following:

11.276. Class: geosrs:WinkelTripelProjection

The class `geosrs:geosrs:WinkelTripelProjection` is defined by the following:

11.277. Class: geosrs:PutninsP3'Projection

The class `geosrs:geosrs:PutninsP3'Projection` is defined by the following:

11.278. Class: geosrs:PutninsP4'Projection

The class `geosrs:geosrs:PutninsP4'Projection` is defined by the following:

11.279. Class: geosrs:PutninsP5'Projection

The class `geosrs:geosrs:PutninsP5'Projection` is defined by the following:

11.280. Class: geosrs:PutninsP6'Projection

The class `geosrs:geosrs:PutninsP6'Projection` is defined by the following:

11.281. Class: geosrs:MollweideWagnerProjection

The class `geosrs:geosrs:MollweideWagnerProjection` is defined by the following:

12

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`.

A

ANNEX A (INFORMATIVE) ALIGNMENTS

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 CRS Ontology

Table A.2 — Alignment: IGN CRS 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	-

A.2. ISO 19111 Ontology

Table A.3 — Alignment: ISO 19111 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	-

A.3. IFCOWL Ontology

Table A.4 — Alignment: IFCOWL Ontology

FROM ELEMENT	MAPPING RELATION	TO ELEMENT	NOTES
geosrs:CRS	owl:equivalentClass	ifc:CoordinateReferenceSystem	-

B

ANNEX B (INFORMATIVE) SHACL SHAPES

ANNEX B (INFORMATIVE) SHACL SHAPES

Overview

Overview

C

ANNEX C (INFORMATIVE) REVISION HISTORY

ANNEX C (INFORMATIVE) REVISION HISTORY

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

BIBLIOGRAPHY

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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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