Item class GeodeticCRS

Name SIRGAS95 - LatLonEHt

Item statusVALIDIdentifier306

Alias South American Geocentric Reference System 1995

Alias SIRGAS
Alias SIRGAS 1995
Alias SIRGAS1995
Alias SIRGAS95

Alias Geocentric Reference System for South America

Information source Title Sistema de Referencia Geocentrico para las

Americas (SIRGAS)

Author Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publisher Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publication date 2018
Other citation details Website

Information source Title South American Geocentric Reference System:

Final Report, Working Groups I and II

Author SIRGAS Working Groups I and II

Publisher Instituto Brasileiro de Geografia e Estatistica

(IBGE), Rio de Janeiro, Brasil

Publication date 1997

Other citation details Report in both English and Spanish.

Title Deformation of the South American crust

estimated from finite element and collocation

methods

Author H. Drewes, O. Heidbach
Publisher Springer Berlin Heidelberg

Publication date 2005

Series/Journal name International Association of Geodesy Symposia

Issue identification 128.0 Page 544-549

Other citation details In Sanso F. (eds) A Window on the Future of

Geodesy. International Association of Geodesy Symposia, Vol 128. Springer, Berlin, Heidelberg

Data source ISO Geodetic Registry
Scope Spatial referencing

Datum Sistema de Referencia Geocentrico para America del Sur 1995 Coordinate System Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height.

Orientations: north, east, up. UoM: degree, degree, metre.

Extent

Information source

Description	South America - onshore and offshore	
Geographic Bounding Box	West-bound longitude	-113.21
	North-bound latitude	16.75
	East-bound longitude	-26.0
	South-bound latitude	-59.87

Item class GeodeticDatum

Name Sistema de Referencia Geocentrico para

America del Sur 1995

Item statusVALIDIdentifier150

Alias South American Geocentric Reference System 1995

Alias SIRGAS
Alias SIRGAS 1995
Alias SIRGAS1995
Alias SIRGAS95

Alias Geocentric Reference System for South America

Information source Title South American Geocentric Reference System:

Final Report, Working Groups I and II

Author SIRGAS Working Groups I and II

Publisher Instituto Brasileiro de Geografia e Estatistica

(IBGE), Rio de Janeiro, Brasil

Publication date 1997

Other citation details Report in both English and Spanish.

Information source Title Sistema de Referencia Geocentrico para las

Americas (SIRGAS)

Author Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publisher Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publication date 2018
Other citation details Website

Information source Title Deformation of the South American crust

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Issue identification 128.0 Page 544-549

Other citation details In Sanso F. (eds) A Window on the Future of

Geodesy. International Association of Geodesy Symposia, Vol 128. Springer, Berlin, Heidelberg

Data source ISO Geodetic Registry
Remarks Replaced by SIRGAS2000.

Anchor definition Realized by a frame of 58 stations observed in 1995 and aligned

to ITRF94 at epoch 1995.4. Velocity model VEMOS2003 used to propagate coordinates from an arbitrary epoch to the 1995.4 reference

epoch.

Release date 1997 Coordinate Reference Epoch 1995.4

Scope Spatial referencing

Ellipsoid GRS 1980
Prime Meridian Greenwich

Extent

Description	South America - onshore and offshore	
Geographic Bounding Box	West-bound longitude	-113.21
	North-bound latitude	16.75
	East-bound longitude	-26.0
	South-bound latitude	-59.87

Item class Ellipsoid

Name GRS 1980

Item status VALID Identifier 27

Alias Geodetic Reference System 1980

Alias GRS1980
Alias IAG GRS80

Alias International 1979

Alias GRS80

Information source Title Geodetic Reference System 1980

Author H. Moritz

Publisher Springer International Publishing

Publication date 2003-03

Series/Journal name Journal of Geodesy Issue identification Volume 74, No. 1

Page 128–162

Information source Title Geodetic Reference System 1980

Author H. Moritz

Publisher International Association of Geodesy

Publication date 1984

Series/Journal name Bulletin Geodesique Issue identification Volume 58, No. 3

Page 395-405

Data source ISO Geodetic Registry

Remarks Adopted by IUGG 1979 Canberra. Inverse flattening is derived from

geocentric gravitational constant GM = 3986005e8 m*m*m/s/s, dynamic form factor J2 = 108263e-8 and Earth's angular velocity =

7292115e-11 rad/s.

 Semi-major axis
 6378137.0 m

 Inverse flattening
 298.257222101 m

Item class PrimeMeridian

Name Greenwich

Item status VALID
Identifier 25

Alias Zero meridian

Information source Title Why the Greenwich meridian moved

Author S. Malys, J.H. Seago, N.K. Pavlis, P.K.

Seidelmann, G.H. Kaplan

Publisher Springer International Publishing

Publication date 2015-12

Series/Journal name Journal of Geodesy Issue identification Volume 89, No. 12

Page 1263–1272

Information source Title IERS Conventions (2010)

Author G. Petit, B.J. Luzum (eds)

Publisher Verlag des Bundesamts fur Kartographie und

Geodasie

Publication date 2010

Edition date

Series/Journal name IERS Technical Notes

Issue identification 36.0

Other citation details ISSN: 1019-4568

Data source ISO Geodetic Registry

Greenwich longitude 0.0 °

EllipsoidalCS Item class

Name Ellipsoidal 3D CS. Axes: latitude, longitude,

ellipsoidal height. Orientations: north, east, up.

UoM: degree, degree, metre.

VALID Item status Identifier 46

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization Author

(ISO)

Publisher International Organization for Standardization

(ISO)

2007-07-01 Publication date Edition Second Edition Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 3D coordinate reference systems. Horizontal

> coordinates referenced to this CS are in degrees. Any degree representation (e.g. DMSH, decimal, etc.) may be used but that used

must be declared for the user.

Axes

Item class CoordinateSystemAxis

Name Geodetic latitude

Item status **VALID** Identifier 38

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization **Author**

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01 Edition Second Edition Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Used in geographic 2D and geographic 3D coordinate reference Remarks

systems.

Abbreviation Lat Direction north

Unit degree (supplier to define representation)

CoordinateSystemAxis Item class

Name **Geodetic longitude**

Item status **VALID** Identifier 34

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01

Edition Second Edition

Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 2D and geographic 3D coordinate reference

systems.

Abbreviation Lon
Direction east

Unit degree (supplier to define representation)

Item class CoordinateSystemAxis

Name Ellipsoidal height

Item statusVALIDIdentifier36

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01

Edition Second Edition

Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used only as part of an ellipsoidal 3D coordinate system in a

geographic 3D coordinate reference system, never on its own.

Abbreviation h

Direction up
Unit metre