ISO Geodetic Registry

Item class GeodeticDatum

Name Sistema de Referencia Geocentrico para

America del Sur 2000

Item status VALID
Identifier 169

Alias SIRGAS 2000

Alias Geocentric Reference System for the Americas

Alias SIRGAS2000

Alias Sistema de Referencia Geocentrico para las Americas
Alias South American Geocentric Reference System 2000
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 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

December of the CIDOAC comments and COOC and

Information source Title Results of the SIRGAS campaign 2000 and

coordinates variations with respect to the 1995 South American geocentric reference frame

Author H. Drewes, K. Kaniuth, C. Voelksen, S.M. Alves

Costa, L.P. Souto Fortes

Publisher Springer Berlin Heidelberg

Publication date 2005

Series/Journal name International Association of Geodesy Symposia

Issue identification 128.0 Page 32-37

Data source ISO Geodetic Registry

Remarks Name changed from "South American Geocentric Reference System"

to "Geocentric Reference System of the Americas" in 2001. Replaces SIRGAS95. Replaced by DGF00P01 for continuous stations in some

SIRGAS countries.

Anchor definition Realized by a frame of 184 continuously operating and campaign

stations using GPS observations from ten days in May 2000 and aligned to ITRF2000 at epoch 2000.4. Velocity model VEMOS2003 used to propagate coordinates from an arbitrary epoch to the 2000.4

reference epoch.

Release date 2005
Coordinate Reference Epoch 2000.4

Scope Spatial referencing

Ellipsoid	GRS 1980	
Prime Meridian	Greenwich	

Extent

Description	South America - onshore and offshore. Central America - onshore and offshore. Mexico - onshore and offshore.	
Geographic Bounding Box	West-bound longitude North-bound latitude East-bound longitude	-122.19 32.72 -25.28
	South-bound latitude	-59.87

ISO Geodetic Registry

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

ISO Geodetic Registry

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 °