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
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*	-122.19
	North-bound latitude	32.72
	East-bound longitude	-25.28
	South-bound latitude	-59.87

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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 °	