

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
	Other citation details	
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	

<i>Ellipsoid</i>	GRS 1980
<i>Prime Meridian</i>	Greenwich

Extent

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

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<i>Item class</i>	Ellipsoid														
<i>Name</i>	GRS 1980														
<i>Item status</i>	VALID														
<i>Identifier</i>	27														
<i>Alias</i>	Geodetic Reference System 1980														
<i>Alias</i>	GRS1980														
<i>Alias</i>	IAG GRS80														
<i>Alias</i>	International 1979														
<i>Alias</i>	GRS80														
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<i>Issue identification</i>	Volume 58, No. 3														
<i>Page</i>	395-405														
<i>Data source</i>	ISO Geodetic Registry														
<i>Remarks</i>	Adopted by IUGG 1979 Canberra. Inverse flattening is derived from geocentric gravitational constant $GM = 3986005e8 \text{ m}^3/\text{s}^2$, dynamic form factor $J_2 = 108263e-8$ and Earth's angular velocity = $7292115e-11 \text{ rad/s}$.														
<i>Semi-major axis</i>	6378137.0 m														
<i>Inverse flattening</i>	298.257222101 m														

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<i>Item class</i>	PrimeMeridian	
<i>Name</i>	Greenwich	
<i>Item status</i>	VALID	
<i>Identifier</i>	25	
<i>Alias</i>	Zero meridian	
<i>Information source</i>	<i>Title</i>	Why the Greenwich meridian moved
	<i>Author</i>	S. Malys, J.H. Seago, N.K. Pavlis, P.K. Seidelmann, G.H. Kaplan
	<i>Publisher</i>	Springer International Publishing
	<i>Publication date</i>	2015-12
	<i>Series/Journal name</i>	Journal of Geodesy
	<i>Issue identification</i>	Volume 89, No. 12
	<i>Page</i>	1263–1272
<i>Information source</i>	<i>Title</i>	IERS Conventions (2010)
	<i>Author</i>	G. Petit, B.J. Luzum (eds)
	<i>Publisher</i>	Verlag des Bundesamts fur Kartographie und Geodasie
	<i>Publication date</i>	2010
	<i>Edition date</i>	
	<i>Series/Journal name</i>	IERS Technical Notes
	<i>Issue identification</i>	36.0
<i>Data source</i>	<i>Other citation details</i>	ISSN: 1019-4568
	ISO Geodetic Registry	
<i>Greenwich longitude</i>	0.0 °	