

# ISO Geodetic Registry

<i>Item class</i>	GeodeticCRS	
<i>Name</i>	<b>SIRGAS-CON DGF04P01 - LatLon</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	366	
<i>Alias</i>	SIRGAS	
<i>Alias</i>	DGF04P01	
<i>Alias</i>	SIRGAS-CON	
<i>Alias</i>	DGFI04P01	
<i>Alias</i>	SIRGAS Multi-Year Solution 2004	
<i>Alias</i>	Geocentric Reference System for the Americas	
<i>Alias</i>	Sistema de Referencia Geocentrico para las Americas	
<i>Information source</i>	<i>Title</i>	Deformation of the South American crust estimated from finite element and collocation methods
	<i>Author</i>	H. Drewes, O. Heidbach
	<i>Publisher</i>	Springer Berlin Heidelberg
	<i>Publication date</i>	2005
	<i>Series/Journal name</i>	International Association of Geodesy Symposia
	<i>Issue identification</i>	128.0
	<i>Page</i>	544-549
	<i>Other citation details</i>	In Sanso F. (eds) A Window on the Future of Geodesy. International Association of Geodesy Symposia, Vol 128. Springer, Berlin, Heidelberg
	<i>Title</i>	Station positions and velocities of the IGS regional network for SIRGAS
	<i>Author</i>	W. Seemüller, K. Kaniuth, H. Drewes
<i>Information source</i>	<i>Publisher</i>	Deutsches Geodaetisches Forschungsinstitut, Munich, Germany
	<i>Publication date</i>	2004
	<i>Series/Journal name</i>	DGFI Report
	<i>Issue identification</i>	No. 76
	<i>Title</i>	Sistema de Referencia Geocentrico para las Americas (SIRGAS)
<i>Information source</i>	<i>Author</i>	Sistema de Referencia Geocéntrico para las Américas (SIRGAS)
	<i>Publisher</i>	Sistema de Referencia Geocéntrico para las Américas (SIRGAS)
	<i>Publication date</i>	2018
	<i>Other citation details</i>	Website
	<i>Data source</i>	ISO Geodetic Registry
<i>Scope</i>	Spatial referencing	
<i>Datum</i>	SIRGAS Continuously Operating Network DGF04P01	
<i>Coordinate System</i>	Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree	

## Extent

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

<i>East-bound longitude</i>
<i>South-bound latitude</i>

-25.28
-59.87

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<i>Item class</i>	GeodeticDatum																
<i>Name</i>	<b>SIRGAS Continuously Operating Network DGF04P01</b>																
<i>Item status</i>	VALID																
<i>Identifier</i>	160																
<i>Alias</i>	SIRGAS																
<i>Alias</i>	DGF04P01																
<i>Alias</i>	SIRGAS-CON																
<i>Alias</i>	DGFI04P01																
<i>Alias</i>	SIRGAS Multi-Year Solution 2004																
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<i>Series/Journal name</i>	DGFI Report																
<i>Issue identification</i>	No. 76																
<i>Data source</i>	ISO Geodetic Registry																
<i>Remarks</i>	Replaces DGF02P01. Replaced by DGF05P01.																
<i>Anchor definition</i>	Realized by a frame of 69 continuously operating stations using GPS observations from June 1996 to July 2004 and aligned to ITRF2000 at epoch 2003.0. Velocity model VEMOS2003 used to propagate coordinates from an arbitrary epoch to the 2003.0 reference epoch.																
<i>Release date</i>	2004																
<i>Coordinate Reference Epoch</i>	2003.0																
<i>Scope</i>	Spatial referencing																
<i>Ellipsoid</i>	GRS 1980																
<i>Prime Meridian</i>	Greenwich																

Extent

<i>Description</i>	<b>South America - onshore and offshore. Central America - onshore and offshore. Mexico - onshore and offshore.</b>		
<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>	<b>GRS 1980</b>														
<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														
<i>Information source</i>	<table> <tr> <td><i>Title</i></td><td>Geodetic Reference System 1980</td></tr> <tr> <td><i>Author</i></td><td>H. Moritz</td></tr> <tr> <td><i>Publisher</i></td><td>Springer International Publishing</td></tr> <tr> <td><i>Publication date</i></td><td>2003-03</td></tr> <tr> <td><i>Series/Journal name</i></td><td>Journal of Geodesy</td></tr> <tr> <td><i>Issue identification</i></td><td>Volume 74, No. 1</td></tr> <tr> <td><i>Page</i></td><td>128–162</td></tr> </table>	<i>Title</i>	Geodetic Reference System 1980	<i>Author</i>	H. Moritz	<i>Publisher</i>	Springer International Publishing	<i>Publication date</i>	2003-03	<i>Series/Journal name</i>	Journal of Geodesy	<i>Issue identification</i>	Volume 74, No. 1	<i>Page</i>	128–162
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<i>Publisher</i>	International Association of Geodesy														
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<i>Series/Journal name</i>	Bulletin Geodesique														
<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>	<b>Greenwich</b>	
<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 °	

# ISO Geodetic Registry

<i>Item class</i>	EllipsoidalCS	
<i>Name</i>	<b>Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	43	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Used in geographic 2D coordinate reference systems. 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 by the supplier of data.	

## Axes

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Geodetic latitude</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	38	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Used in geographic 2D and geographic 3D coordinate reference systems.	
<i>Abbreviation</i>	Lat	
<i>Direction</i>	north	
<i>Unit</i>	degree (supplier to define representation)	

  

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Geodetic longitude</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	34	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)

	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>		ISO Geodetic Registry
<i>Remarks</i>		Used in geographic 2D and geographic 3D coordinate reference systems.
<i>Abbreviation</i>		Lon
<i>Direction</i>		east
<i>Unit</i>		degree (supplier to define representation)