

ISO Geodetic Registry

Item class	GeodeticCRS		
Name	SIRGAS-CON DGF04P01 - LatLon		
Item status	VALID		
Identifier	366		
Alias	SIRGAS		
Alias	DGF04P01		
Alias	SIRGAS-CON		
Alias	DGFI04P01		
Alias	SIRGAS Multi-Year Solution 2004		
Alias	Geocentric Reference System for the Americas		
Alias	Sistema de Referencia Geocentrico para las Americas		
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	Station positions and velocities of the IGS regional network for SIRGAS
		Author	W. Seemüller, K. Kaniuth, H. Drewes
Publisher		Deutsches Geodaetisches Forschungsinstitut, Munich, Germany	
Publication date		2004	
Series/Journal name		DGFI Report	
Information source	Issue identification	No. 76	
	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	
Data source	Other citation details	Website	
	ISO Geodetic Registry		
	Scope	Spatial referencing	
Datum	SIRGAS Continuously Operating Network DGF04P01		
Coordinate System	Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree		

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

East-bound longitude
South-bound latitude

-25.28
-59.87

ISO Geodetic Registry

<i>Item class</i>	GeodeticDatum																
<i>Name</i>	SIRGAS Continuously Operating Network DGF04P01																
<i>Item status</i>	VALID																
<i>Identifier</i>	160																
<i>Alias</i>	SIRGAS																
<i>Alias</i>	DGF04P01																
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<i>Alias</i>	DGFI04P01																
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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>	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	
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	<i>East-bound longitude</i>	-25.28	
	<i>South-bound latitude</i>	-59.87	

ISO Geodetic Registry

<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>Page</i>	128–162														
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<i>Publisher</i>	International Association of Geodesy														
<i>Publication date</i>	1984														
<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														

ISO Geodetic Registry

<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 für Kartographie und Geodäsie
	<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>	Ellipsoidal 2D CS. Axes: latitude, longitude. Orientations: north, east. UoM: degree	
<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>	Geodetic latitude	
<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>	Geodetic longitude	
<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)