ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**SIRGAS Continuously Operating Network SIR15P01**	
Item status	VALID	
Identifier	109	
Alias	SIR15P01	
Alias	SIRGAS	
Alias	SIRGAS-CON	
Alias	SIRGAS Multi-Year Solution 2015	
Alias	Geocentric Reference System for the Americas	
Alias	Sistema de Referencia Geocentrico para las Americas	
Information source	*Title*	SIR15P01: Multiyear solution for the SIRGAS Reference Frame, link to ZIP archive
	Author	L. Sanchez, H. Drewes
	Publisher	PANGAEA
	Publication date	2016
	Series/Journal name	PANGAEA
	Issue identification	10.1594/PANGAEA.862536
	Other citation details	In supplement to: Sánchez, L; Drewes, H (2016): Crustal deformation and surface kinematics after the 2010 earthquakes in Latin America. Journal of Geodynamics, 102, 1-23, https://doi.org/10.1016/j.jog.2016.06.005
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*	Crustal deformation and surface kinematics after the 2010 earthquakes in Latin America
	Author	L. Sanchez, H. Drewes
	Publisher	Elsevier
	Publication date	2016
	Series/Journal name	Journal of Geodynamics
	Issue identification	102.0
	Page	2023-01-01
	Other citation details	Data for paper included in two supplements: Sanchez L., Drewes H (2016): SIR15P01: Multiyear solution for the SIRGAS Reference Frame, link to ZIP archive, PANGAEA, doi:10.1594/PANGAEA.862536; Sanchez L., Drewes H (2016): VEMOS2015: Velocity and deformation model for Latin America and the Caribbean, link to ZIP archive, PANGAEA, doi:10.1594/PANGAEA.863131.
Information source	*Title*	VEMOS2015: Velocity and deformation model for Latin America and the Caribbean, link to ZIP archive
	Author	L. Sanchez, H. Drewes
	Publisher	PANGAEA
	Publication date	2016
	Series/Journal name	PANGAEA

	Issue identification	10.1594/PANGAEA.863131
	Other citation details	In supplement to: Sánchez, L; Drewes, H (2016): Crustal deformation and surface kinematics after the 2010 earthquakes in Latin America. Journal of Geodynamics, 102, 1-23, https://doi.org/10.1016/j.jog.2016.06.005
Data source	ISO Geodetic Registry	
Remarks	Replaces SIR14P01. Replaced by SIR17P01.	
Anchor definition	Realized by a frame of 303 continuously operating stations using GPS and GLONASS observations from March 2010 to April 2015 and aligned to IGb08 at epoch 2013.0. Weekly normal equations from March 2010 to April 2011 were reprocessed using the second reprocessing campaign products (IG2) of the International GNSS Service and absolute phase centre calibrations referring to the IGS08 reference frame. Velocity model VEMOS2015 used to propagate coordinates from an arbitrary epoch to the 2013.0 reference epoch.	
Release date	2016	
Coordinate Reference Epoch	2013.0	
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 °	