## 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

PublisherPANGAEAPublication date2016Series/Journal namePANGAEA

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

ISO Geodetic Registry Data source

Replaces SIR14P01. Replaced by SIR17P01. Remarks

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** Greenwich Prime Meridian

## Extent

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

## **ISO Geodetic Registry**

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 °