ISO Geodetic Registry

Item class GeodeticDatum

Name SIRGAS Continuously Operating Network

SIR17P01

Item statusVALIDIdentifier129AliasSIRGASAliasSIRGAS-CON

Alias SIRGAS Multi-Year Solution 2017

Alias Geocentric Reference System for the Americas

Alias Sistema de Referencia Geocentrico para las Americas

Alias SIR17P01

Information source Title Velocity model for SIRGAS 2017: VEMOS2017

Author L. Sanchez, H. Drewes

Publisher Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publication date 2018-08-14

Other citation details In supplement to: Drewes H. and Sanchez

L. (2017) The varying surface kinematics in Latin America: VEMOS 2009, 2015, and 2017, Symposium SIRGAS2017. Mendoza, Argentina.

November 28, 2017

Information source Title Kinematics of the SIRGAS reference frame

Author L. Sanchez

Publisher Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publication date 2017-11-28

Series/Journal name Symposium SIRGAS2017. Mendoza, Argentina.

November 28, 2017

Other citation details Data for paper included in supplement: Sanchez

L. (2017) SIRGAS reference frame realization SIR17P01, Technische Universitaet Muenchen, Deutsches Geodaetisches Forschungsinstitut

DGFI-TUM, IGS RNAAC SIRGAS

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 The varying surface kinematics in Latin America:

VEMOS 2009, 2015, and 2017

Author L. Sanchez, H. Drewes

Publisher Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publication date 2017-11-28

Series/Journal name Symposium SIRGAS2017. Mendoza, Argentina.

November 28, 2017

Other citation details Data for paper included in supplement:

Drewes H. and Sanchez L. (2017): Velocity model for SIRGAS 2017: VEMOS2017,

Technische Universitaet Muenchen, Deutsches Geodaetisches Forschungsinstitut (DGFI-TUM),

IGS RNAAC

Information source Title SIRGAS reference frame realization SIR17P01

Author L. Sanchez

Publisher Sistema de Referencia Geocéntrico para las

Américas (SIRGAS)

Publication date 2018-08-14

Other citation details In supplement to: Sanchez L. (2017) Kinematics

of the SIRGAS reference frame, Symposium SIRGAS2018. Mendoza, Argentina. November

28, 2017

Data source ISO Geodetic Registry
Remarks Replaces SIR15P01.

Anchor definition Realized by a frame of 345 continuously operating stations using GPS

and GLONASS observations from April 2011 to January 2017 and aligned to IGS14 at epoch 2015.0. This cumulative solution has been made consistent with the phase centre calibrations referring to the IGS14 reference frame using the latitude-dependent phase centre correction model by the International GNSS Service. Velocity model VEMOS2017 used to propagate coordinates from an arbitrary epoch to

the 2015.0 reference epoch.

Release date 2018 Coordinate Reference Epoch 2015.0

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 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 °