ISO Geodetic Registry

Item class GeodeticDatum

Name SIRGAS Continuously Operating Network

SIR11P01

Item statusVALIDIdentifier174AliasSIRGASAliasSIRGAS-CON

Alias SIRGAS Multi-Year Solution 2011

Alias Geocentric Reference System for the Americas

Alias Sistema de Referencia Geocentrico para las Americas

Alias SIR11P01

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 2009 Horizontal Velocity Field for South

America and the Caribbean

Author H. Drewes, O. Heidbach Publisher Springer Berlin Heidelberg

Publication date 2012

Series/Journal name International Association of Geodesy Symposia

Issue identification 136.0 Page 657-664

Other citation details In Kenyon S., Pacino M., Marti U. (eds) Geodesy

for Planet Earth. International Association of Geodesy Symposia, Vol 136. Springer, Berlin,

Heidelberg

Information source Title Recent activities of the IGS Regional Network

Associate Analysis Centre for SIRGAS (IGS

RNAAC SIR)

Author L. Sanchez, M. Seitz

Publisher Deutsches Geodaetisches Forschungsinstitut,

Munich, Germany, PANGAEA

Publication date 2011

Series/Journal name DGFI Report Issue identification No. 87

Other citation details Data for paper included in supplement SIRGAS

reference frame realization SIR11P01.

Data source ISO Geodetic Registry

Remarks Replaces SIR10P01. Replaced by SIR13P01. Last multi-year solution

without the effects of the El Maule earthquake in February 2010.

Anchor definition Realized by a frame of 230 continuously operating stations using

GPS observations from January 2000 to April 2011 and aligned to ITRF2008 at epoch 2005.0. GPS data from January 2000 to November 2006 reprocessed using the first reprocessing campaign products (IG1) of the International GNSS Service and absolute phase centre calibrations referring to the IGS05/IGb05 reference frame. Velocity model VEMOS2009 used to propagate coordinates from an arbitrary

epoch to the 2005.0 reference epoch.

Release date 2011

Coordinate Reference Epoch 2005.0

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	-122.19 32.72
	East-bound longitude South-bound latitude	-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 °