ISO Geodetic Registry

Item class GeodeticDatum

Name SIRGAS Continuously Operating Network

SIR14P01

Item statusVALIDIdentifier189AliasSIRGASAliasSIRGAS-CONAliasSIR14P01

Alias SIRGAS Multi-Year Solution 2014

Alias Geocentric Reference System for the Americas

Alias Sistema de Referencia Geocentrico para las Americas

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 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 SIRGAS Regional Network Associate Analysis

Center, Technical Report 2014

Author L. Sanchez

Publisher International GNSS Service

Publication date 2015

Series/Journal name International GNSS Service Technical Report

2014

Page 101-110

Data source ISO Geodetic Registry

Remarks Replaces SIR13P01. Replaced by SIR15P01.

Anchor definition Realized by a frame of 242 continuously operating stations using GPS

and GLONASS observations from April 2010 to July 2014 and aligned to IGb08 at epoch 2013.0. Weekly normal equations from April 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 VEMOS2009 used to propagate coordinates from an arbitrary

epoch to the 2013.0 reference epoch.

Release date 2014
Coordinate Reference Epoch 2013.0

Scope Spatial referencing

Ellipsoid GRS 1980

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 °