Item class GeodeticCRS

Name CGCS 2000 - LatLonEht

Item statusVALIDIdentifier733

Alias China Geodetic Coordinate System 2000

Information source Title Modernization of National Geodetic Datum in

China

Author P. Zhang, Z. Li, H. Wen

Publisher United Nations Economic and Social Council

Publication date 2012

Series/Journal name Nineteenth United Nations Regional Cartographic

Conference for Asia and the Pacific, Bangkok, 29

October – 1 November 2012

Issue identification E/CONF.102/IP.16

Other citation details https://unstats.un.org/unsd/geoinfo/RCC/docs/

rccap19/ip/E_Conf.102_IP16_Modernization %20of%20National%20Geodetic%20Datum %20in%20China.pdf (accessed 2020-05-15) Chinese Modern Geodetic Datum - Chinese

Information source Title Chinese Modern Geodetic Datum - Chinese

Geodetic Coordinate System 2000 (CGCS 2000)

and Its Frame

Author J. Chen

Publisher Surveying and Mapping Press

Publication date 2008

Series/Journal name Acta Geodaetica et Cartographica Sinica

Issue identification 37(3)
Page 269-271

Other citation details In Chinese; http://xb.sinomaps.com/EN/Y2008/

V37/I3/269 (accessed 2020-05-19)

Information source Title Chinese geodetic coordinate system 2000

Author Y. Yang

Publisher Science China Press

Publication date 2009

Series/Journal name Chinese Science Bulletin

Issue identification 54.0 Page 2714- 2721

Other citation details In Chinese; https://doi.org/10.1007/

s11434-009-0342-9 (accessed 2020-05-19)

Data source ISO Geodetic Registry

Remarks Adopted July 2008 by China. Replaces Xian 1980 horizontal datum.

Scope Spatial referencing

Datum China Geodetic Coordinate System 2000

Coordinate System Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.

Extent

Description China - onshore and offshore

Item class GeodeticDatum

Name China Geodetic Coordinate System 2000

Item statusVALIDIdentifier730

Alias CGCS 2000

Information source Title Chinese Modern Geodetic Datum - Chinese

Geodetic Coordinate System 2000 (CGCS 2000)

and Its Frame

Author J. Chen

Publisher Surveying and Mapping Press

Publication date 2008

Edition Edition date

Series/Journal name Acta Geodaetica et Cartographica Sinica

Issue identification 37(3) Page 269-271

Other citation details In Chinese; http://xb.sinomaps.com/EN/Y2008/

V37/I3/269 (accessed 2020-05-19)

Information source Title National GNSS continuous operation reference

stations

Author National Basic Geographic Information Center

Publisher National Geomatics Center of China

Publication date 2019

Edition Edition date

Series/Journal name Issue identification

Page

Other citation details In Chinese; http://www.ngcc.cn/ngcc/

html/1/396/401/16122.html (accessed

2020-06-05)

Information source Title Modernization of National Geodetic Datum in

China

Author P. Zhang, Z. Li, H. Wen

Publisher United Nations Economic and Social Council

Publication date 2012

Edition Edition date

Series/Journal name Nineteenth United Nations Regional Cartographic

Conference for Asia and the Pacific, Bangkok, 29

October - 1 November 2012

Issue identification E/CONF.102/IP.16

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Other citation details https://unstats.un.org/unsd/geoinfo/RCC/docs/

rccap19/ip/E_Conf.102_IP16_Modernization %20of%20National%20Geodetic%20Datum %20in%20China.pdf (accessed 2020-05-15)

Information source Title Chinese geodetic coordinate system 2000

Author Y. Yang

Publisher Science China Press

Publication date 2009

Edition Edition date

Series/Journal name Chinese Science Bulletin

Issue identification 54.0 Page 2714- 2721 Other citation details In Chinese; https://doi.org/10.1007/

s11434-009-0342-9 (accessed 2020-05-19)

Data source ISO Geodetic Registry

Remarks The China Geodetic Coordinate System 2000 (CGCS 2000) is a

geocentric terrestrial reference system compatible with the International Terrestrial Reference System. CGCS 2000 is the standard Chinese geodetic reference system for geospatial information. It was originally realized by a combined adjustment of astro-geodetic observations as used for Xian 1980 and a GPS control network observed 2000-2003. It is presently realized and maintained by a network of 360 national CORS stations and 4508 GNSS geodetic control points. Adopted July

2008 by China. Replaces Xian 1980 horizontal datum.

Anchor definition The China Geodetic Coordinate System 2000 is presently defined and

maintained by 360 national CORS stations and 4508 GNSS geodetic control points that are aligned with ITRF97 at epoch 2000.0. There are zero translations, rotations, and scale change with respect to ITRF97 at

epoch 2000.0.

Release date 2008-07-01

Coordinate Reference Epoch 2000.0

Scope Spatial referencing

Ellipsoid CGCS 2000
Prime Meridian Greenwich

Extent

Description China - onshore and offshore

Item class Ellipsoid

Name CGCS 2000

Item status VALID
Identifier 729

Alias China Geodetic Coordinate System 2000

Information source Title Parameters of the CGCS 2000 Ellipsoid and

Comparisons with GRS 80 and WGS 84

Author P. Cheng, H. Wen, Y Cheng, H. Wang

Publisher Surveying and Mapping Press

Publication date 2009

Series/Journal name Acta Geodaetica et Cartographica Sinica

Issue identification 38(3) Page 189-194

Other citation details In Chinese; http://xb.sinomaps.com/EN/volumn/

volumn_195.shtml#1 (accessed 2020-05-19)

Data source ISO Geodetic Registry

Remarks Defining parameters semi-major axis and inverse flattening equivalent

with values for GRS 1980 and IERS Conventions (2010).

Semi-major axis 6378137.0 \$item.semiMajorAxisUom.name

Inverse flattening 298.257222101 \$item.inverseFlatteningUom.name

Item class PrimeMeridian

Name Greenwich

Item statusVALIDIdentifier25

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 °

EllipsoidalCS Item class

Name Ellipsoidal 3D CS. Axes: latitude, longitude,

ellipsoidal height. Orientations: north, east, up.

UoM: degree, degree, metre.

VALID Item status Identifier 46

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization Author

(ISO)

Publisher International Organization for Standardization

(ISO)

2007-07-01 Publication date Edition Second Edition Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 3D coordinate reference systems. Horizontal

> coordinates referenced to this CS are in degrees. Any degree representation (e.g. DMSH, decimal, etc.) may be used but that used

must be declared for the user.

Axes

Item class CoordinateSystemAxis

Name Geodetic latitude

Item status **VALID** Identifier 38

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

International Organization for Standardization **Author**

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01 Edition Second Edition Series/Journal name International Standard Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Used in geographic 2D and geographic 3D coordinate reference Remarks

systems.

Abbreviation Lat Direction north

Unit degree (supplier to define representation)

CoordinateSystemAxis Item class

Name **Geodetic longitude**

Item status **VALID** Identifier 34

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01

Edition Second Edition

Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used in geographic 2D and geographic 3D coordinate reference

systems.

Abbreviation Lon
Direction east

Unit degree (supplier to define representation)

Item class CoordinateSystemAxis

Name Ellipsoidal height

Item statusVALIDIdentifier36

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(ISO)

Publisher International Organization for Standardization

(ISO)

Publication date 2007-07-01

Edition Second Edition

Series/Journal name International Standard

Issue identification ISO 19111:2007

Data source ISO Geodetic Registry

Remarks Used only as part of an ellipsoidal 3D coordinate system in a

geographic 3D coordinate reference system, never on its own.

Abbreviation h

Direction up
Unit metre