ISO Geodetic Registry

Item class	GeodeticCRS	
Name	**CGCS 2000 - LatLonEht**	
Item status	VALID	
Identifier	733	
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)
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**

ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**China Geodetic Coordinate System 2000**	
Item status	VALID	
Identifier	730	
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
	Page	
	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**

ISO Geodetic Registry

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	

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 °	

ISO Geodetic Registry

Item class	EllipsoidalCS	
Name	**Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.**	
Item status	VALID	
Identifier	46	
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 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
	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	Lat	
Direction	north	
Unit	degree (supplier to define representation)	

Item class	CoordinateSystemAxis	
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 status	VALID	
Identifier	36	
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	