ISO Geodetic Registry

Item class	GeodeticCRS	
Name	**WGS 84 (G1150) - XYZ**	
Item status	VALID	
Identifier	210	
Information source	*Title*	Addendum to NIMA TR 8350.2: Implementation of the World Geodetic System 1984 (WGS 84) Reference Frame G1150
	Author	National Imagery and Mapping Agency
	Publisher	National Imagery and Mapping Agency
	Publication date	2003
	Edition date	
	Series/Journal name	Technical Report
	Issue identification	TR8350.2
Information source	*Title*	A Refinement to the World Geodetic System 1984 Reference Frame
	Author	M. J. Merrigan, E.R. Swift, R.F. Wong, Saffel J.T.
	Publisher	Institute of Navigation
	Publication date	2002-09
	Edition date	
	Series/Journal name	Proceedings of the 15th International Technical Meeting of the Satellite Division of The Institue of Navigation (ION-GPS-2002), Portland, OR, September 2002
	Page	1519-1529
Data source	ISO Geodetic Registry	
Remarks	Replaces WGS 84 (G873) - XYZ. Replaced by WGS 84 (G1674) - XYZ.	
Scope	Spatial Referencing and GPS satellite navigation.	
Datum	World Geodetic System 1984 (G1150)	
Coordinate System	Geocentric 3D right-handed Cartesian CS. Axes: Geocentric X,Y,Z. Orientation: Z to North Pole, [X and Y in the equatorial plane, X at Prime Meridian | X in the equatorial plane at the Prime Meridian]. UoM: m.	

Extent

Description	**World.**	
Geographic Bounding Box	*West-bound longitude*	-180.0
	North-bound latitude	90.0
	East-bound longitude	180.0
	South-bound latitude	-90.0

ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**World Geodetic System 1984 (G1150)**	
Item status	VALID	
Identifier	114	
Alias	WGS 84 (G1150)	
Information source	*Title*	Affirmation of Vertical Datum for Surveying and Mapping Activities for the Islands of Rota, Saipan and Tinian of the Commonwealth of the Northern Mariana Islands (CNMI)
	Author	US Government
	Publisher	Office of Federal Register, NARA
	Publication date	2009-01-22
	Edition date	2009-01-22
	Series/Journal name	Federal Register Notice
	Issue identification	Volume 74, No. 13, Document: E9-1180, Citation: 74 FR 3990
	Page	3990-3991
	Other citation details	Mandates use of NMVD03
Information source	*Title*	A Refinement to the World Geodetic System 1984 Reference Frame
	Author	M. J. Merrigan, E.R. Swift, R.F. Wong, Saffel J.T.
	Publisher	Institute of Navigation
	Publication date	2002-09
	Edition date	
	Series/Journal name	Proceedings of the 15th International Technical Meeting of the Satellite Division of The Institue of Navigation (ION-GPS-2002), Portland, OR, September 2002
	Page	1519-1529
Information source	*Title*	Addendum to NIMA TR 8350.2: Implementation of the World Geodetic System 1984 (WGS 84) Reference Frame G1150
	Author	National Imagery and Mapping Agency
	Publisher	National Imagery and Mapping Agency
	Publication date	2003
	Edition date	
	Series/Journal name	Technical Report
	Issue identification	TR8350.2
Data source	ISO Geodetic Registry	
Remarks	Replaces World Geodetic System 1984 (G873) from 2002-01-20. Replaced by World Geodetic System 1984 (G1674) from 2012-02-08. Used in broadcast ephemeris from 2002-01-20 to 2012-02-07 and in precise ephemeris from 2002-01-20 to 2012-05-06.	
Anchor definition	Defined through coordinates of 17 GPS tracking stations adjusted to a subset of 49 IGS stations. Observations made in February 2001. The reference epoch for ITRF2000 is 1997.0; the station coordinates were propagated to 2001.0 using IERS station velocities.	
Release date	2002-01-20	
Coordinate Reference Epoch	2001.0	
Scope	Spatial Referencing and GPS satellite navigation	
Ellipsoid	WGS 84	
Prime Meridian	Greenwich	

Extent

Description	**World.**	
Geographic Bounding Box	*West-bound longitude*	-180.0
	North-bound latitude	90.0
	East-bound longitude	180.0
	South-bound latitude	-90.0

ISO Geodetic Registry

Item class	Ellipsoid	
Name	**WGS 84**	
Item status	VALID	
Identifier	30	
Alias	WGS84	
Information source	*Title*	Department of Defense World Geodetic System 1984: Its Definition and Relationships with Local Geodetic Systems, Version 1.0.0
	Author	National Geospatial-Intelligence Agency
	Publisher	National Geospatial-Intelligence Agency
	Publication date	2014-07-08
	Series/Journal name	Standardization Document
	Issue identification	NGA.STND.0036_1.0.0_WGS84
Information source	*Title*	World Geodetic System 1984
	Author	L.B. Decker, Defense Mapping Agency Aerospace Center
	Publisher	Defense Mapping Agency Aerospace Center
	Publication date	1986-04
	Edition date	
Information source	*Title*	Refinements to The World Geodetic System 1984
	Author	S. Malys, J.A. Slater, R.W. Smith, L.E. Kunz, S.C. Kenyon
	Publisher	Institute of Navigation
	Publication date	1997-09
	Edition date	
	Series/Journal name	Proceedings of the 10th International Technical Meeting of the Satellite Division of The Institue of Navigation (ION-GPS-1997), Kansas City, MO, September 1997
	Page	841-850
Data source	ISO Geodetic Registry	
Remarks	The World Geodetic System 1984 (WGS 84) contains four defining physical parameters for the Earth: the semi-major axis (a), the reciprocal of flattening (1/f) of an oblate spheroid of revolution, the geocentric gravitational constant (GM = 3.986004418e14 m^3/s^2) includes the mass of the atmosphere, and the Earth's angular rotational velocity about its spin axis (omega = 7.2921150e-5 rad/s).	
Semi-major axis	6378137.0 m	
Inverse flattening	298.2572236 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 °	

ISO Geodetic Registry

Item class	CartesianCS	
Name	**Geocentric 3D right-handed Cartesian CS. Axes: Geocentric X,Y,Z. Orientation: Z to North Pole, [X and Y in the equatorial plane, X at Prime Meridian | X in the equatorial plane at the Prime Meridian]. UoM: m.**	
Item status	VALID	
Identifier	45	
Alias	Earth centred, earth fixed, right-handed 3D coordinate system, consisting of 3 orthogonal axes with X and Y axes in the equatorial plane, positive Z-axis parallel to mean earth rotation axis and pointing towards North Pole. UoM: m.	
Alias	ECEF	
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 geocentric coordinate reference systems.	

Axes

Item class	CoordinateSystemAxis	
Name	**Geocentric X**	
Item status	VALID	
Identifier	33	
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	
Abbreviation	X	
Direction	Geocentre > equator/0°E	
Unit	metre	

Item class	CoordinateSystemAxis
Name	**Geocentric Y**
Item status	VALID
Identifier	37

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	
Abbreviation	Y	
Direction	Geocentre > equator/90°E	
Unit	metre	

Item class	CoordinateSystemAxis	
Name	**Geocentric Z**	
Item status	VALID	
Identifier	39	
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	
Abbreviation	Z	
Direction	Geocentre > north pole	
Unit	metre	