ISO Geodetic Registry

Item class	GeodeticCRS	
Name	**KGD2002 - LatLonEHt**	
Item status	VALID	
Identifier	1007	
Alias	KGD2002	
Alias	Korean Geodetic Datum 2002	
Information source	*Title*	Implementation of the New Korean Geocentric Datum and GPS CORS Management
	Author	Y.-J. Lee, H.-K. Lee, C.-O. Kwon, J.-H. Song
	Publisher	International Federation of Surveyors (FIG)
	Publication date	2008
	Series/Journal name	FIG Working Week 2008, Stockholm, Sweden, 14-19 June 2008
	Other citation details	https://www.fig.net/resources/proceedings/fig_proceedings/fig2008 (accessed 2023-04-10)
Information source	*Title*	Korea Geodetic Framework for Sustainable Development
	Author	J.-H. Kwon
	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.17
	Other citation details	https://unstats.un.org/unsd/geoinfo/rcc/docs/rccap19/ip/E_Conf.102_IP17_Korea_19th_UNRCC-AP_Session3_26%20Oct.pdf (accessed 2023-04-10)
Information source	*Title*	World Geodetic System Technical Guidelines
	Author	Geodesy Department, NGII
	Publisher	National Geographic Information Institute (NGII), Ministry of Construction and Transportation, Republic of Korea
	Revision date	2004-12
	Other citation details	Web page in Korean, accessible only within Korea. https://www.ngii.go.kr/kor/contents/view.do?sq=119&board_code=contents_data/ (accessed 2023-06-26)
Information source	*Title*	Grids & Datums: The Republic of Korea
	Author	C.J. Mugnier
	Publisher	American Society for Photogrammetry and Remote Sensing
	Publication date	2017
	Series/Journal name	Photogrammetric Engineering & Remote Sensing
	Issue identification	Volume 83, No. 8, August 2017
	Page	537-539
	Other citation details	https://doi.org/10.14358/PERS.83.8.539 (accessed 2023-04-10)
Data source	ISO Geodetic Registry	
Scope	Spatial referencing	
Datum	Korean Geodetic Datum 2002	
Coordinate System	Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.	

Extent

Description	**Republic of Korea - onshore and offshore**

ISO Geodetic Registry

Item class	GeodeticDatum	
Name	**Korean Geodetic Datum 2002**	
Item status	VALID	
Identifier	1006	
Alias	KGD2002	
Information source	*Title*	Grids & Datums: The Republic of Korea
	Author	C.J. Mugnier
	Publisher	American Society for Photogrammetry and Remote Sensing
	Publication date	2017
	Series/Journal name	Photogrammetric Engineering & Remote Sensing
	Issue identification	Volume 83, No. 8, August 2017
	Page	537-539
	Other citation details	https://doi.org/10.14358/PERS.83.8.539 (accessed 2023-04-10)
Information source	*Title*	Implementation of the New Korean Geocentric Datum and GPS CORS Management
	Author	Y.-J. Lee, H.-K. Lee, C.-O. Kwon, J.-H. Song
	Publisher	International Federation of Surveyors (FIG)
	Publication date	2008
	Series/Journal name	FIG Working Week 2008, Stockholm, Sweden, 14-19 June 2008
	Other citation details	https://www.fig.net/resources/proceedings/fig_proceedings/fig2008 (accessed 2023-04-10)
Information source	*Title*	World Geodetic System Technical Guidelines
	Author	Geodesy Department, NGII
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	Revision date	2004-12
	Other citation details	Web page in Korean, accessible only within Korea. https://www.ngii.go.kr/kor/contents/view.do?sq=119&board_code=contents_data/ (accessed 2023-06-26)
Information source	*Title*	Korea Geodetic Framework for Sustainable Development
	Author	J.-H. Kwon
	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.17
	Other citation details	https://unstats.un.org/unsd/geoinfo/rcc/docs/rccap19/ip/E_Conf.102_IP17_Korea_19th_UNRCC-AP_Session3_26%20Oct.pdf (accessed 2023-04-10)
Data source	ISO Geodetic Registry	
Remarks	Replaces Korean 1985 Datum.	
Anchor definition	KGD2002 is a GRS80-based geodetic reference frame aligned to ITRF2000 at epoch 2002.0. The origin of the datum was recalculated based on the VLBI observations from 1995 to 2002. The datum is realized through 60 CORS and a network of about 20,000 control points.	
Release date	2001-03-19	

Coordinate Reference Epoch	2002.0
Scope	Spatial referencing
Ellipsoid	GRS 1980
Prime Meridian	Greenwich

Extent

Description	**Republic of Korea - onshore and offshore**

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 °	

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	