

# 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	<a href="https://www.fig.net/resources/proceedings/fig_proceedings/fig2008">https://www.fig.net/resources/proceedings/fig_proceedings/fig2008</a> (accessed 2023-04-10)	
	Information source	Title	Korea Geodetic Framework for Sustainable Development
Information source	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	<a href="https://unstats.un.org/unsd/geoinfo/rcc/docs/rccap19/ip/E_Conf.102_IP17_Korea_19th_UNRCC-AP_Session3_26%20Oct.pdf">https://unstats.un.org/unsd/geoinfo/rcc/docs/rccap19/ip/E_Conf.102_IP17_Korea_19th_UNRCC-AP_Session3_26%20Oct.pdf</a> (accessed 2023-04-10)	
	Information source	Title	World Geodetic System Technical Guidelines
Information source	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. <a href="https://www.ngii.go.kr/kor/contents/view.do?sq=119&amp;board_code=contents_data/">https://www.ngii.go.kr/kor/contents/view.do?sq=119&amp;board_code=contents_data/</a> (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	
Information source	Publication date	2017	
	Series/Journal name	Photogrammetric Engineering & Remote Sensing	
	Issue identification	Volume 83, No. 8, August 2017	
	Page	537-539	
	Other citation details	<a href="https://doi.org/10.14358/PERS.83.8.539">https://doi.org/10.14358/PERS.83.8.539</a> (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

<i>Item class</i>	GeodeticDatum	
<i>Name</i>	<b>Korean Geodetic Datum 2002</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	1006	
<i>Alias</i>	KGD2002	
<i>Information source</i>	<i>Title</i>	Grids & Datums: The Republic of Korea
	<i>Author</i>	C.J. Mugnier
	<i>Publisher</i>	American Society for Photogrammetry and Remote Sensing
	<i>Publication date</i>	2017
	<i>Series/Journal name</i>	Photogrammetric Engineering & Remote Sensing
	<i>Issue identification</i>	Volume 83, No. 8, August 2017
	<i>Page</i>	537-539
	<i>Other citation details</i>	<a href="https://doi.org/10.14358/PERS.83.8.539">https://doi.org/10.14358/PERS.83.8.539</a> (accessed 2023-04-10)
	<i>Title</i>	Implementation of the New Korean Geocentric Datum and GPS CORS Management
	<i>Author</i>	Y.-J. Lee, H.-K. Lee, C.-O. Kwon, J.-H. Song
<i>Information source</i>	<i>Publisher</i>	International Federation of Surveyors (FIG)
	<i>Publication date</i>	2008
	<i>Series/Journal name</i>	FIG Working Week 2008, Stockholm, Sweden, 14-19 June 2008
	<i>Other citation details</i>	<a href="https://www.fig.net/resources/proceedings/fig_proceedings/fig2008">https://www.fig.net/resources/proceedings/fig_proceedings/fig2008</a> (accessed 2023-04-10)
	<i>Title</i>	World Geodetic System Technical Guidelines
	<i>Author</i>	Geodesy Department, NGII
	<i>Publisher</i>	National Geographic Information Institute (NGII), Ministry of Construction and Transportation, Republic of Korea
	<i>Revision date</i>	2004-12
	<i>Other citation details</i>	Web page in Korean, accessible only within Korea. <a href="https://www.ngii.go.kr/kor/contents/view.do?sq=119&amp;board_code=contents_data/">https://www.ngii.go.kr/kor/contents/view.do?sq=119&amp;board_code=contents_data/</a> (accessed 2023-06-26)
	<i>Title</i>	Korea Geodetic Framework for Sustainable Development
<i>Information source</i>	<i>Author</i>	J.-H. Kwon
	<i>Publisher</i>	United Nations Economic and Social Council
	<i>Publication date</i>	2012
	<i>Series/Journal name</i>	Nineteenth United Nations Regional Cartographic Conference for Asia and the Pacific, Bangkok, 29 October – 1 November 2012
	<i>Issue identification</i>	E/CONF.102/IP.17
	<i>Other citation details</i>	<a href="https://unstats.un.org/unsd/geoinfo/rcc/docs/rccap19/ip/E_Conf.102_IP17_Korea_19th_UNRCC-AP_Session3_26%20Oct.pdf">https://unstats.un.org/unsd/geoinfo/rcc/docs/rccap19/ip/E_Conf.102_IP17_Korea_19th_UNRCC-AP_Session3_26%20Oct.pdf</a> (accessed 2023-04-10)
	<i>Data source</i>	ISO Geodetic Registry
	<i>Remarks</i>	Replaces Korean 1985 Datum.
	<i>Anchor definition</i>	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.
	<i>Release date</i>	2001-03-19

<i>Coordinate Reference Epoch</i>	2002.0
<i>Scope</i>	Spatial referencing
<i>Ellipsoid</i>	GRS 1980
<i>Prime Meridian</i>	Greenwich

## Extent

<i>Description</i>	<b>Republic of Korea - onshore and offshore</b>
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# ISO Geodetic Registry

<i>Item class</i>	Ellipsoid														
<i>Name</i>	<b>GRS 1980</b>														
<i>Item status</i>	VALID														
<i>Identifier</i>	27														
<i>Alias</i>	Geodetic Reference System 1980														
<i>Alias</i>	GRS1980														
<i>Alias</i>	IAG GRS80														
<i>Alias</i>	International 1979														
<i>Alias</i>	GRS80														
<i>Information source</i>	<table> <tr> <td><i>Title</i></td><td>Geodetic Reference System 1980</td></tr> <tr> <td><i>Author</i></td><td>H. Moritz</td></tr> <tr> <td><i>Publisher</i></td><td>Springer International Publishing</td></tr> <tr> <td><i>Publication date</i></td><td>2003-03</td></tr> <tr> <td><i>Series/Journal name</i></td><td>Journal of Geodesy</td></tr> <tr> <td><i>Issue identification</i></td><td>Volume 74, No. 1</td></tr> <tr> <td><i>Page</i></td><td>128–162</td></tr> </table>	<i>Title</i>	Geodetic Reference System 1980	<i>Author</i>	H. Moritz	<i>Publisher</i>	Springer International Publishing	<i>Publication date</i>	2003-03	<i>Series/Journal name</i>	Journal of Geodesy	<i>Issue identification</i>	Volume 74, No. 1	<i>Page</i>	128–162
<i>Title</i>	Geodetic Reference System 1980														
<i>Author</i>	H. Moritz														
<i>Publisher</i>	Springer International Publishing														
<i>Publication date</i>	2003-03														
<i>Series/Journal name</i>	Journal of Geodesy														
<i>Issue identification</i>	Volume 74, No. 1														
<i>Page</i>	128–162														
<i>Information source</i>	<table> <tr> <td><i>Title</i></td><td>Geodetic Reference System 1980</td></tr> <tr> <td><i>Author</i></td><td>H. Moritz</td></tr> <tr> <td><i>Publisher</i></td><td>International Association of Geodesy</td></tr> <tr> <td><i>Publication date</i></td><td>1984</td></tr> <tr> <td><i>Series/Journal name</i></td><td>Bulletin Geodesique</td></tr> <tr> <td><i>Issue identification</i></td><td>Volume 58, No. 3</td></tr> <tr> <td><i>Page</i></td><td>395-405</td></tr> </table>	<i>Title</i>	Geodetic Reference System 1980	<i>Author</i>	H. Moritz	<i>Publisher</i>	International Association of Geodesy	<i>Publication date</i>	1984	<i>Series/Journal name</i>	Bulletin Geodesique	<i>Issue identification</i>	Volume 58, No. 3	<i>Page</i>	395-405
<i>Title</i>	Geodetic Reference System 1980														
<i>Author</i>	H. Moritz														
<i>Publisher</i>	International Association of Geodesy														
<i>Publication date</i>	1984														
<i>Series/Journal name</i>	Bulletin Geodesique														
<i>Issue identification</i>	Volume 58, No. 3														
<i>Page</i>	395-405														
<i>Data source</i>	ISO Geodetic Registry														
<i>Remarks</i>	Adopted by IUGG 1979 Canberra. Inverse flattening is derived from geocentric gravitational constant $GM = 3986005e8 \text{ m}^3/\text{s}^2$ , dynamic form factor $J_2 = 108263e-8$ and Earth's angular velocity = $7292115e-11 \text{ rad/s}$ .														
<i>Semi-major axis</i>	6378137.0 m														
<i>Inverse flattening</i>	298.257222101 m														

# ISO Geodetic Registry

<i>Item class</i>	PrimeMeridian	
<i>Name</i>	<b>Greenwich</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	25	
<i>Alias</i>	Zero meridian	
<i>Information source</i>	<i>Title</i>	Why the Greenwich meridian moved
	<i>Author</i>	S. Malys, J.H. Seago, N.K. Pavlis, P.K. Seidelmann, G.H. Kaplan
	<i>Publisher</i>	Springer International Publishing
	<i>Publication date</i>	2015-12
	<i>Series/Journal name</i>	Journal of Geodesy
	<i>Issue identification</i>	Volume 89, No. 12
	<i>Page</i>	1263–1272
	<i>Title</i>	IERS Conventions (2010)
	<i>Author</i>	G. Petit, B.J. Luzum (eds)
	<i>Publisher</i>	Verlag des Bundesamts für Kartographie und Geodäsie
<i>Information source</i>	<i>Publication date</i>	2010
	<i>Edition date</i>	
	<i>Series/Journal name</i>	IERS Technical Notes
	<i>Issue identification</i>	36.0
	<i>Other citation details</i>	ISSN: 1019-4568
<i>Data source</i>	ISO Geodetic Registry	
<i>Greenwich longitude</i>	0.0 °	

# ISO Geodetic Registry

<i>Item class</i>	EllipsoidalCS	
<i>Name</i>	<b>Ellipsoidal 3D CS. Axes: latitude, longitude, ellipsoidal height. Orientations: north, east, up. UoM: degree, degree, metre.</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	46	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	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

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Geodetic latitude</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	38	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Used in geographic 2D and geographic 3D coordinate reference systems.	
<i>Abbreviation</i>	Lat	
<i>Direction</i>	north	
<i>Unit</i>	degree (supplier to define representation)	

  

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Geodetic longitude</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	34	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)

	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Used in geographic 2D and geographic 3D coordinate reference systems.	
<i>Abbreviation</i>	Lon	
<i>Direction</i>	east	
<i>Unit</i>	degree (supplier to define representation)	

  

<i>Item class</i>	CoordinateSystemAxis	
<i>Name</i>	<b>Ellipsoidal height</b>	
<i>Item status</i>	VALID	
<i>Identifier</i>	36	
<i>Information source</i>	<i>Title</i>	ISO 19111 Geographical information - Spatial referencing by coordinates
	<i>Author</i>	International Organization for Standardization (ISO)
	<i>Publisher</i>	International Organization for Standardization (ISO)
	<i>Publication date</i>	2007-07-01
	<i>Edition</i>	Second Edition
	<i>Series/Journal name</i>	International Standard
	<i>Issue identification</i>	ISO 19111:2007
<i>Data source</i>	ISO Geodetic Registry	
<i>Remarks</i>	Used only as part of an ellipsoidal 3D coordinate system in a geographic 3D coordinate reference system, never on its own.	
<i>Abbreviation</i>	h	
<i>Direction</i>	up	
<i>Unit</i>	metre	