ISO Geodetic Registry

Item class	Ellipsoid	
Name	**Bessel 1841**	
Item status	VALID	
Identifier	996	
Alias	Bessel	
Information source	*Title*	The Universal Grids and the Transverse Mercator and Polar Stereographic Map Projections
	Author	National Geospatial-Intelligence Agency
	Publisher	Office of Geomatics, National Geospatial-Intelligence Agency
	Revision date	2014-03-25
	Edition	Version 2.0.0
	Series/Journal name	National Geospatial-Intelligence Agency Standardization Document
	Issue identification	NGA.SIG.0012_2.0.0_UTMUPS
Information source	*Title*	Ueber einen Fehler in der Berechnung der französischen Gradmessung und seinen Einfluss auf die Bestimmung der Figur der Erde
	Author	F.W. Bessel
	Publication date	1841-12-01
	Series/Journal name	Astronomische Nachrichten (Astronomical Notes)
	Issue identification	Volumes 19, Issue 7-8, No. 438
	Page	97-116
	Other citation details	https://doi.org/10.1002/asna.18420190702 (accessed 2023-04-10)
Data source	ISO Geodetic Registry	
Remarks	The Bessel ellipsoid was derived in 1841 by Friedrich Wilhelm Bessel, based on several meridian arcs and other data of continental geodetic networks of Europe, Russia and the British Survey of India. It is based on 10 meridional arcs and 38 precise measurements of astrogeodetic latitude and longitude. The dimensions of the ellipsoid axes were defined by logarithms in keeping with former calculation methods. The original axes were defined as a=3272077.14 and b=3261139.33 toise. This was based a weighted mean of values from several authors but did not account for differences in the length of the various toise. The "Bessel toise" is therefore of uncertain length.	
Semi-major axis	6377397.155 m	
Inverse flattening	299.1528128 m	