ISO Geodetic Registry

Item class	Transformation	
Name	**ITRF2020 to IGS20 [IGS v1]**	
Item status	VALID	
Identifier	983	
Information source	*Title*	Upcoming switch to IGS20/igs20.atx and repro3 standards
	Author	Arturo Villiger
	Publisher	International GNSS Service (IGS)
	Publication date	2022-07-26
	Series/Journal name	IGSMAIL
	Issue identification	8238
	Other citation details	https://lists.igs.org/pipermail/igsmail/2022/008234.html (accessed 2023-01-27)
Information source	*Title*	Switch of the IGS products to the IGS20.igs20.atx, repro3 standards and long filenames
	Author	Salim Masoumi
	Publisher	International GNSS Service (IGS)
	Publication date	2022-11-25
	Series/Journal name	IGSMAIL
	Issue identification	8282
	Other citation details	https://lists.igs.org/pipermail/igsmail/2022/008278.html (accessed 2023-01-27)
Data source	ISO Geodetic Registry	
Remarks	Null transformation. IGS20 is aligned to ITRF2020 and is treated as the same reference frame.	
Operation version	IGS v1	
Scope	Spatial referencing	
Operation accuracy	0.0 m	
Source CRS	ITRF2020 - XYZ	
Target CRS	IGS20 - XYZ	
Operation method	Time-Dependent Position Vector Transformation (geocentric Cartesian domain)	

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

Operation parameter values

X-axis translation	0.0 millimetre
Y-axis translation	0.0 millimetre
Z-axis translation	0.0 millimetre
X-axis rotation	0.0 milliarc-second
Y-axis rotation	0.0 milliarc-second
Z-axis rotation	0.0 milliarc-second
Scale difference	0.0 parts per billion
Rate of change of X-axis translation	0.0 millimetre per year

Rate of change of Y-axis translation	0.0 millimetre per year
Rate of change of Z-axis translation	0.0 millimetre per year
Rate of change of X-axis rotation	0.0 milliarc-second per year
Rate of change of Y-axis rotation	0.0 milliarc-second per year
Rate of change of Z-axis rotation	0.0 milliarc-second per year
Rate of change of scale difference	0.0 parts per billion per year
Time reference	2015.0 year

ISO Geodetic Registry

Item class	OperationMethod
Name	**Time-Dependent Position Vector Transformation (geocentric Cartesian domain)**
Item status	VALID
Identifier	82
Alias	Time-Dependent 7-Parameter Transformation
Alias	14-Parameter Transformation
Alias	Time-Dependent Position Vector Transformation
Data source	ISO Geodetic Registry
Remarks	Note the analogy with the rotation for the Time-dependent Coordinate Frame Transformation but beware of the differences! The Position Vector Transformation convention is used by IAG.
Formula	Geomatics Guidance Note No 7, part 2: Coordinate Conversions and Transformations including Formulas

Operation parameters

X-axis translation
Y-axis translation
Z-axis translation
X-axis rotation
Y-axis rotation
Z-axis rotation
Scale difference
Rate of change of X-axis translation
Rate of change of Y-axis translation
Rate of change of Z-axis translation
Rate of change of X-axis rotation
Rate of change of Y-axis rotation
Rate of change of Z-axis rotation
Rate of change of scale difference
Time reference