## **ISO Geodetic Registry**

Item class Transformation

Name ITRF2000 to NAD 83 (PACP00) [v1]

Item status INVALID Identifier 484

Information source Title NGS No Longer Updates Published CORS

Coordinates in the Following Reference Frames

Author National Geodetic Survey

Publisher National Oceanic and Atmospheric Administration

(NOAA) National Geodetic Survey (NGS)

Revision date 2017-03-16 Edition date 2017-03-16

Series/Journal name NGS Online listing of transformation parameters

Other citation details webpage

Information source Title Transforming positions and velocities between the

International Terrestrial Reference Frame of 2000

and the North American Datum of 1983

Author T. Soler, R.A. Snay

Publisher American Society of Civil Engineers

Publication date 2004-05

Series/Journal name Journal of Surveying Engineering

Issue identification Volume 130, No. 2

Page 49-55

Information source Title Introducing HTDP 3.1 to transform coordinates

across time and spatial reference frames

Author C. Pearson, R.A. Snay
Publisher Springer-Verlag
Publication date 2013-01-01

Publication date 2013-01-01
Edition date 2013-01-01
Series/Journal name GPS Solutions
Issue identification Volume 17, No. 1

Page 1-15

Other citation details NAD83 (2011), NAD83 (MA11), NAD83 (PA11)

transformation from IGb08

Information source Title Introducing Two Spatial Reference Frames for

Regions of the Pacific Ocean

Author R.A. Snay

Publisher American Cobgress on Surveying and Mapping

Publication date 2003-01-01 Edition date 2003-01-01

Series/Journal name Surveying and Land Information Systems

Issue identification Volume 63, No. 1

Page 5-12

Other citation details MARP00, PACP00

Data source ISO Geodetic Registry

Remarks Transformation defines NAD83(PA11) and is treated as errorless.

Operation version v1

Scope Spatial referencing

Operation accuracy 0.0 m

Source CRS ITRF2000 - XYZ

Target CRS NAD 83 (PACP00) - XYZ

Operation method Time-Dependent Coordinate Frame Transformation (geocentric

Cartesian domain)

Extent

Description	American Samoa - onshore and offshore.  Marshall Islands - onshore and offshore. United States (USA) - onshore and offshore - Hawaii.  United States Minor Outlying Islands - onshore and offshore.	
Geographic Bounding Box	West-bound longitude	157.47
	North-bound latitude	31.8
	East-bound longitude	-151.27
	South-bound latitude	-17.56

## Operation parameter values

X-axis translation	0.9102 metre
Y-axis translation	-2.0141 metre
Z-axis translation	-0.5602 metre
X-axis rotation	29.039 milliarc-second
Y-axis rotation	10.065 milliarc-second
Z-axis rotation	10.065 milliarc-second
Scale difference	0.0 parts per billion
Rate of change of X-axis translation	0.0 metre per year
Rate of change of Y-axis translation	0.0 metre per year
Rate of change of Z-axis translation	0.0 metre per year
Rate of change of X-axis rotation	-0.384 milliarc-second per year
Rate of change of Y-axis rotation	1.007 milliarc-second per year
Rate of change of Z-axis rotation	-2.186 milliarc-second per year
Rate of change of scale difference	0.0 parts per billion per year
Time reference	1997.0 year

## **ISO Geodetic Registry**

Item class OperationMethod

Name Time-Dependent Coordinate Frame

**Transformation (geocentric Cartesian domain)** 

Item status VALID
Identifier 94

Alias Time-Dependent 7-Parameter Transformation

Alias 14-Parameter Transformation

Alias Time-Dependent Coordinate Frame Transformation

Data source ISO Geodetic Registry

Remarks Note the analogy with the Time-dependent Position Vector

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