# **ISO Geodetic Registry**

Item class VerticalCRS

Name NMVD03 - NOHt

Item status VALID
Identifier 391

Alias Northern Marianas Vertical Datum of 2003

Information source Title Development of Comprehensive Geodetic Vertical

Datums for the United States Pacific Territories of American Samoa, Guam, and the Northern

Marianas

Author E. Carlson, D. Doyle, D. Smith

Publisher American Congress on Surveying and Mapping

Publication date 2009-01-01 Edition date 2009-01-01

Series/Journal name Surveying and Land Information Systems

Issue identification Volume 69, No. 1

Page 5-17

Other citation details ASVD02, GUVD04, NMVD03

Data source ISO Geodetic Registry
Scope Spatial referencing

Datum Northern Marianas Vertical Datum of 2003

Coordinate System Vertical CS. Axis: height (H). Orientation: up. UoM: m.

### Extent

Description	Northern Mariana Islands - onshore - Saipan,		
	Tinian, and Rota.		
Geographic Bounding Box	West-bound longitude	143.0	
	North-bound latitude	18.0	
	East-bound longitude	146.0	
	South-bound latitude	14.0	

## ISO Geodetic Registry

Item class VerticalDatum

Northern Marianas Vertical Datum of 2003

Item statusVALIDIdentifier191AliasNMVD03

Information source Title Development of Comprehensive Geodetic Vertical

Datums for the United States Pacific Territories of American Samoa, Guam, and the Northern

Marianas

Author E. Carlson, D. Doyle, D. Smith

Publisher American Congress on Surveying and Mapping

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Series/Journal name Surveying and Land Information Systems

Issue identification Volume 69, No. 1

Page 5-17

Other citation details ASVD02, GUVD04, NMVD03

Information source Title Affirmation of Vertical Datum for Surveying and

Mapping Activities for the Islands of Rota, Saipan and Tinian of the Commonwealth of the Northern

Mariana Islands (CNMI)

Author US Government

Publisher Office of Federal Register, NARA

Publication date 2009-01-22 Edition date 2009-01-22

Series/Journal name Federal Register Notice

Issue identification Volume 74, No. 13, Document: E9-1180, Citation:

74 FR 3990

Page 3990-3991

Other citation details Mandates use of NMVD03

Data source ISO Geodetic Registry

Remarks Normal orthometric heights.

Anchor definition Northern Marianas Vertical Datum of 2003 (NMVD03) consists of a set

of three independent leveling networks on the islands of Rota, Saipan and Tinian (in the Commonwealth of the Northern Mariana Islands). Each of these leveling networks is affixed to a single origin point on their respective islands referenced to the Saipan tide station. Island of Rota: Tide Station Rota East Harbor, Rota (PID: DG4014, VM: None, Bench Mark: Tidal 3, 1.482 m above LMSL). Island of Saipan: Tide Station 1633227, Tanapag Harbor, Saipan (PID: DG3988, VM: 16316, Bench Mark: 163 3227 TIDAL UH-2C, 1.657 m above LMSL). Island of Tinian: Tide Station Tinian Harbor, Tinian (PID: AA4407, VM: None, Bench Mark: Tidal 1, 2.361 m above LMSL). NMVD03 was affirmed as the official vertical datum in the National Spatial Reference System for the islands of Rota, Saipan and Tinian in the Commonwealth of the Northern Mariana Islands (CNMI) by Federal Register Notice

(2009), replacing all previous height systems for this region. The official defining document for that datum was published in 2009.

Release date 2009

Scope Spatial referencing

#### Extent

Northern Mariana Islands - onshore - Saipan, Tinian, and Rota.

Geographic Bounding Box	West-bound longitude	143.0	
	North-bound latitude	18.0	
	East-bound longitude	146.0	
	South-bound latitude	14.0	

## ISO Geodetic Registry

Item class VerticalCS

Vertical CS. Axis: height (H). Orientation: up.

UoM: m.

Item status VALID
Identifier 42

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 vertical coordinate reference systems.

#### Axes

Item class CoordinateSystemAxis

Name Gravity-related height

Item statusVALIDIdentifier35

Information source Title ISO 19111 Geographical information - Spatial

referencing by coordinates

Author International Organization for Standardization

(150)

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 a 1D vertical coordinate system.

Abbreviation H
Direction up
Unit metre