

# ISO Geodetic Registry

|                           |   |  |
|---------------------------|---|--|
| <i>Item class</i>         | VerticalCRS   |  |
| <i>Name</i>               | <b>GUVD04 - NOHt</b>                                    |  |
| <i>Item status</i>        | VALID   |  |
| <i>Identifier</i>         | 253   |  |
| <i>Alias</i>              | Guam Vertical Datum of 2004                             |  |
| <i>Information source</i> | <i>Title</i>  | Development of Comprehensive Geodetic Vertical Datums for the United States Pacific Territories of American Samoa, Guam, and the Northern Marianas |
|                           | <i>Author</i>   | E. Carlson, D. Doyle, D. Smith   |
|                           | <i>Publisher</i>  | American Congress on Surveying and Mapping   |
|                           | <i>Publication date</i>                                 | 2009-01-01   |
|                           | <i>Edition date</i>                                     | 2009-01-01   |
|                           | <i>Series/Journal name</i>                              | Surveying and Land Information Systems   |
|                           | <i>Issue identification</i>                             | Volume 69, No. 1   |
|                           | <i>Page</i>   | 5-17   |
|                           | <i>Other citation details</i>                           | ASVD02, GUVD04, NMVD03   |
|                           | <i>Title</i>  | Affirmation of Vertical Datum for Surveying and Mapping Activities for Guam  |
| <i>Information source</i> | <i>Author</i>   | US Government  |
|                           | <i>Publisher</i>  | Office of Federal Register, NARA   |
|                           | <i>Publication date</i>                                 | 2009-01-22   |
|                           | <i>Edition date</i>                                     | 2009-01-22   |
|                           | <i>Series/Journal name</i>                              | Federal Register Notice  |
|                           | <i>Issue identification</i>                             | Volume 74, No. 13, Document: E9-1182, Citation: 74 FR 3990   |
|                           | <i>Page</i>   | 3990.0   |
| <i>Data source</i>        | <i>Other citation details</i>                           | Mandates use of GUVD04   |
|                           | ISO Geodetic Registry                                   |  |
| <i>Scope</i>              | Spatial referencing                                     |  |
| <i>Datum</i>              | Guam Vertical Datum of 2004                             |  |
| <i>Coordinate System</i>  | Vertical CS. Axis: height (H). Orientation: up. UoM: m. |  |

## Extent

|                                |                             |       |
|--------------------------------|-----------------------------|-------|
| <i>Description</i>             | <b>Guam - onshore.</b>      |       |
| <i>Geographic Bounding Box</i> | <i>West-bound longitude</i> | 143.0 |
|                                | <i>North-bound latitude</i> | 14.0  |
|                                | <i>East-bound longitude</i> | 146.0 |
|                                | <i>South-bound latitude</i> | 13.0  |

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|                           |  |  |
|---------------------------|--|--|
| <i>Item class</i>         | VerticalDatum  |  |
| <i>Name</i>               | <b>Guam Vertical Datum of 2004</b>   |  |
| <i>Item status</i>        | VALID  |  |
| <i>Identifier</i>         | 185  |  |
| <i>Alias</i>              | GUVD04   |  |
| <i>Information source</i> | <i>Title</i>   | Development of Comprehensive Geodetic Vertical Datums for the United States Pacific Territories of American Samoa, Guam, and the Northern Marianas |
|                           | <i>Author</i>  | E. Carlson, D. Doyle, D. Smith   |
|                           | <i>Publisher</i>   | American Congress on Surveying and Mapping   |
|                           | <i>Publication date</i>  | 2009-01-01   |
|                           | <i>Edition date</i>  | 2009-01-01   |
|                           | <i>Series/Journal name</i>   | Surveying and Land Information Systems   |
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|                           | <i>Other citation details</i>  | ASVD02, GUVD04, NMVD03   |
|                           | <i>Title</i>   | Affirmation of Vertical Datum for Surveying and Mapping Activities for Guam  |
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|                           | <i>Publisher</i>   | Office of Federal Register, NARA   |
|                           | <i>Publication date</i>  | 2009-01-22   |
|                           | <i>Edition date</i>  | 2009-01-22   |
|                           | <i>Series/Journal name</i>   | Federal Register Notice  |
|                           | <i>Issue identification</i>  | Volume 74, No. 13, Document: E9-1182, Citation: 74 FR 3990   |
|                           | <i>Page</i>  | 3990.0   |
| <i>Information source</i> | <i>Other citation details</i>  | Mandates use of GUVD04   |
|                           | <i>Title</i>   |  |
| <i>Data source</i>        | ISO Geodetic Registry  |  |
| <i>Remarks</i>            | Normal orthometric heights.  |  |
| <i>Anchor definition</i>  | Guam Vertical Datum of 2004 (GUVD04) consists of a leveling network on the island of Guam affixed to a single origin point on the island: Tide Station 1630000, Apra Harbor, Guam (PID: TW0041, VM: 1684, Bench Mark: 163 0000 TIDAL 4, 2.170 m above LMSL). GUVD04 was affirmed as the official vertical datum in the National Spatial Reference System for the island of Guam by Federal Register Notice (2009), replacing all previous height systems for this region. The official defining document for that datum was published in 2009. |  |
| <i>Release date</i>       | 2009   |  |
| <i>Scope</i>              | Spatial referencing  |  |

## Extent

|                                |                             |       |
|--------------------------------|-----------------------------|-------|
| <i>Description</i>             | <b>Guam - onshore.</b>      |       |
| <i>Geographic Bounding Box</i> | <i>West-bound longitude</i> | 143.0 |
|                                | <i>North-bound latitude</i> | 14.0  |
|                                | <i>East-bound longitude</i> | 146.0 |
|                                | <i>South-bound latitude</i> | 13.0  |

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|                           |  |   |
|---------------------------|--|---|
| <i>Item class</i>         | VerticalCS   |   |
| <i>Name</i>               | <b>Vertical CS. Axis: height (H). Orientation: up. UoM: m.</b> |   |
| <i>Item status</i>        | VALID  |   |
| <i>Identifier</i>         | 42   |   |
| <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 vertical coordinate reference systems.                 |   |

## Axes

|                           |  |   |
|---------------------------|--|---|
| <i>Item class</i>         | CoordinateSystemAxis                     |   |
| <i>Name</i>               | <b>Gravity-related height</b>            |   |
| <i>Item status</i>        | VALID                                    |   |
| <i>Identifier</i>         | 35                                       |   |
| <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 a 1D vertical coordinate system. |   |
| <i>Abbreviation</i>       | H  |   |
| <i>Direction</i>          | up                                       |   |
| <i>Unit</i>               | metre                                    |   |