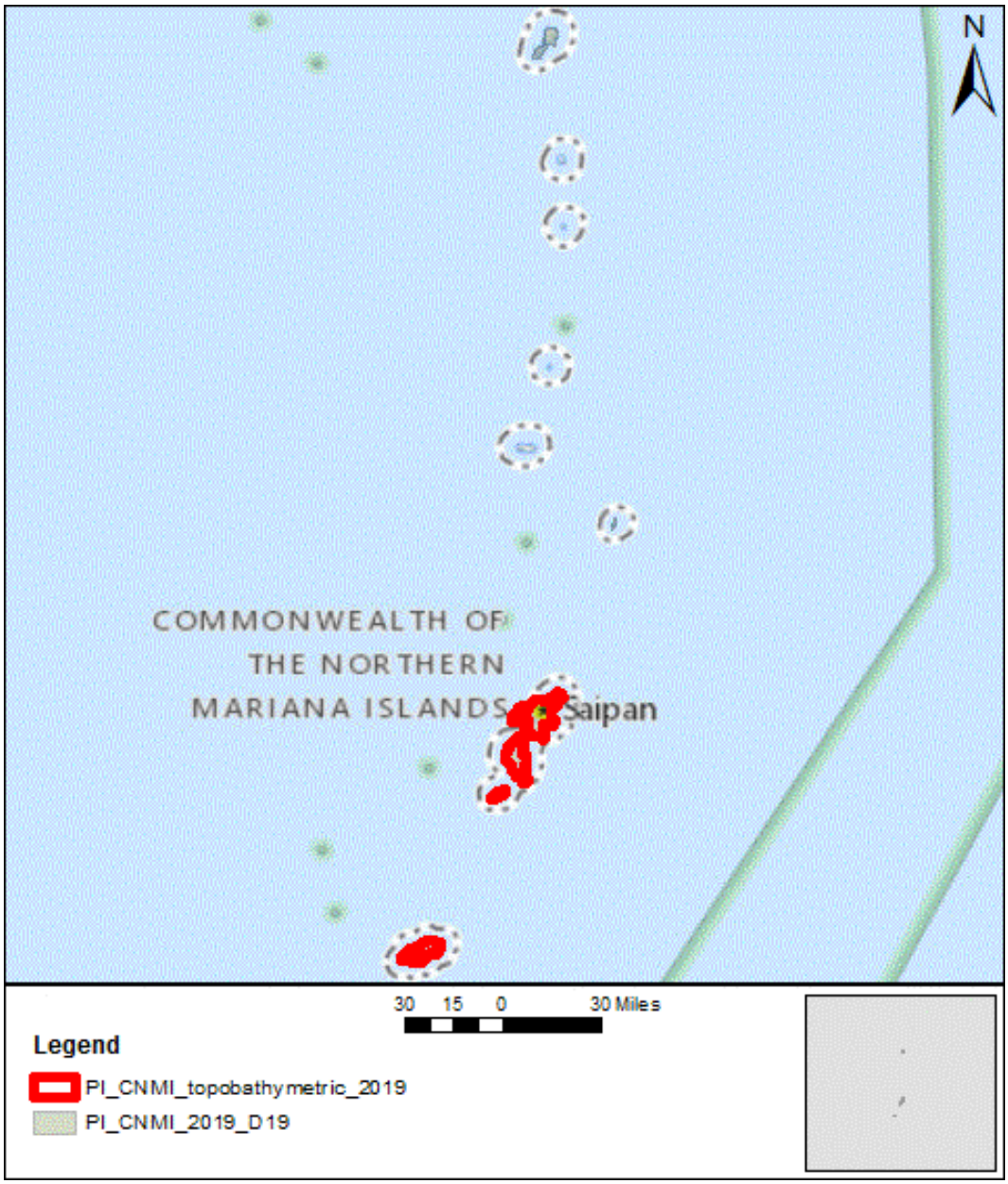
# Data Validation Report

## from the National Geospatial Technical Operations Center in Support of the 3D Elevation Program

## PI_CNMI_topobathymetric_2019

**2022-02-03**






Project Name: PI_CNMI_2019_D19

Report Date: 2022-02-03

Based on this review, the delivered data **DOES NOT MEET** 3D Elevation Program requirements.

## Work Unit Summary Information

| | | |
|---|---|---|
| **Project Name:** PI_CNMI_2019_D19 | **Project ID:** 175072 | |
| **WU Name:** PI_CNMI_topobathymetric_2019 | **Work Unit ID:** 211535 | |
| **Mechanism:** GPSC | **Lidar Base Spec:** 1.3 | |
| **Quality Level:** 2 | **P-Method:** 13 - Topobathymetric Lida | |
| **Horizontal EPSG Code:** 8693 | **Vertical EPSG Code:** 6640 | **Geoid Model:** GEOID 12B |
| **The National Map Help Desk Email:** tnm_help@usgs.gov | | |

The U.S. Geological Survey evaluates absolute vertical accuracy of the lidar and lidar-derived bare earth digital elevation model (DEM) data at the project level. Data are produced to meet 9.8 cm absolute vertical accuracy at the 95-percent confidence level in non-vegetated, open terrain. To review vertical accuracy results, please see the project report

### Breaklines

Based on this Review, the USGS-NGTOC **ACCEPTS** the Breaklines

This is a topobathymetric project and there were no breaklines used in the creation of this data.

| Error Type | Subtype | Quantity |
|---|---|---|

### Reporting Metadata

Based on this Review, the USGS-NGTOC **ACCEPTS** the Reporting Metadata

Reports from the contractor, including calibration, collection, and processing methods, are reviewed for accurate information. For more information, please see the work units metadata.

| Error Type | Subtype | Quantity |
|---|---|---|

### FGDC XML Metadata

Based on this Review, the USGS-NGTOC **ACCEPTS** the FGDC XML Metadata

CSGDM .xml metadata are parsed using the USGS Geospatial Metadata Validation Service and reviewed for accurate information. CSDGM is maintained by the Federal Geographic Data Committee (FGDC).

| Error Type | Subtype | Quantity |
|---|---|---|

### Spatial Metadata

Based on this Review, the USGS-NGTOC **ACCEPTS** the Spatial Metadata

Spatial metadata from the contractor, including raster and vector datasets, are evaluated together with pertinent deliverables for geometric fidelity and attribution accuracy. For more information, please see the work units metadata.

| Error Type | Subtype | Quantity |
|---|---|---|

## Raster Metadata

Based on this Review, the USGS-NGTOC **ACCEPTS** the Raster Metadata

None

| Error Type | Subtype | Quantity |
|---|---|---|

## DEM

Based on this Review, the USGS-NGTOC **ACCEPTS** the DEM

Visual review is performed on .tif bare earth rasters at a 1:5,000 or larger viewing scale to validate point cloud geometry, raster processing methodology, point classification, and breaklines. Comprehensive review is completed to ensure consistency and accuracy across all files. For additional information, please see this work units metadata folder.

| Error Type | Subtype | Quantity |
|---|---|---|

## Pointcloud

Based on this Review, the USGS-NGTOC **ACCEPTS** the Pointcloud

Visual and statistical review is performed on classified .las files to validate adherence to contracted specifications. A comprehensive review is completed to ensure consistency and accuracy across all files, including the spatial reference system. Classification verification is limited to the minimum required by applicable Lidar Base Specification. Classifications beyond the minimum are not verified by USGS. LAS files are evaluated to ensure the public header block, point data records, and variable/extended variable length records are correctly populated. For additional information, please see the work units metadata folder.

| Error Type | Subtype | Quantity |
|---|---|---|