

NEXTMAP® WORLD 30™ METER DIGITAL SURFACE MODEL

INTERMAP®

SOLUTIONS

Intermap Technologies® NEXTMap World 30 Digital Surface Model (DSM) provides seamless, best available surface elevation data with a 30-meter ground sampling distance (GSD) so you can perform more efficient geospatial analyses. NEXTMap World 30 DSM data for the entire globe, covering all of the countries of the world, is available. Our world-class enterprise workflow allows us to integrate elevation datasets from around the world to provide best-of-breed elevation models with a range of accuracies starting at five vertical meters.

NEXTMap World 30 DSM is a combination of 90-meter Shuttle Radar Topographic Mission (SRTM) v2.1 data, 30-meter ASTER Global DEM v2.0, and 1-kilometer GTOPO which has been ground controlled using LiDAR data from NASA's Ice, Cloud and Land Elevation Satellite (ICESat) collection, resulting in a 25-centimeter root mean square error (RMSE) dataset for vertical control of the DSM. The resulting product is a 30-meter GSD DSM that covers the entire land mass of the planet.

PRODUCT HIGHLIGHTS

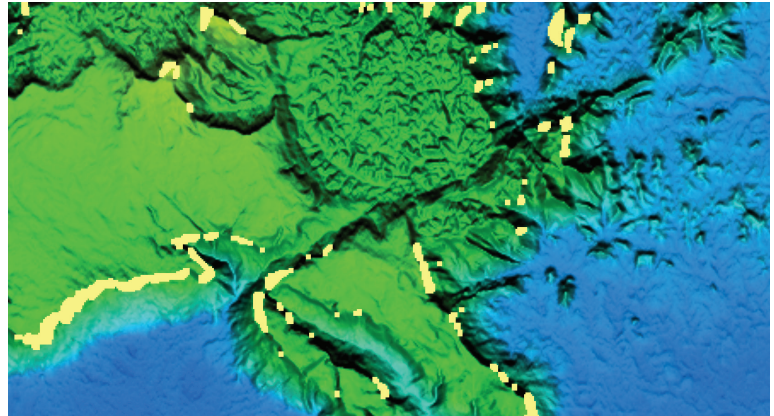
This 30-meter DSM provides the most accurate worldwide elevation product on the market to date. It has been aligned and adjusted using high-resolution worldwide LiDAR (25-centimeter vertical accuracy) producing a significant improvement from the original 30-meter ASTER Global DEM and SRTM 30- and 90-meter products available today. The aggregation and merging process of other elevation datasets has enabled Intermap to remove many of the artifact's "spikes and wells" characteristic of the latest release of ASTER and SRTM data. Additionally, NEXTMap World 30 is void filled and adjusted for vertical and horizontal shifts that occur in ASTER and SRTM global DSM offerings.

A HOMOGENEOUS, SEAMLESS DATASET

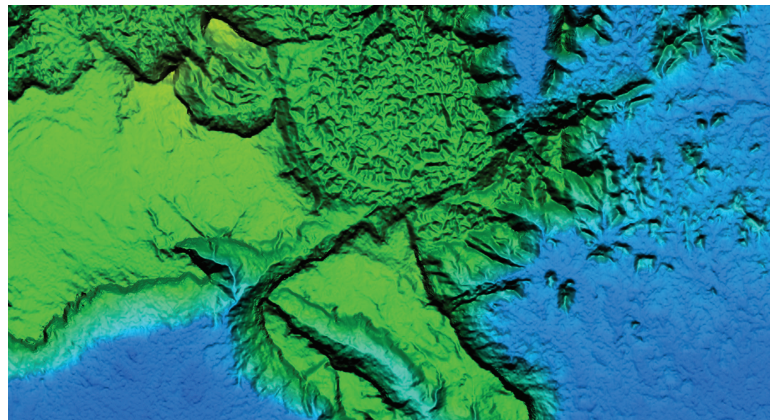
The Intermap fusion process aggregates datasets from IFSAR, LiDAR, and optical photogrammetric methods using specialized data fusion tools to create a homogeneous, seamless, void-filled dataset with accuracies starting at five vertical meters. NEXTMap World 30 is produced with 30-meter (98-foot) postings or GSD, and is formatted as 24,000 one-degree by one-degree tiles. The World 30 DSM covers over 148 million square kilometers of land mass.

Each one-degree by one-degree tile is accompanied by a data characterization mask that provides an insight into the DEM source at every posting or GSD. Our quality process combines automatic tools, manual review, and additional editing, if needed, to remove anomalous features such as seam lines, spikes, and wells in the data.

NEXTMap World 30 DSM is a first-reflective surface model that contains elevations of natural terrain features in addition to elevations of vegetation and cultural features such as buildings and trees. The key benefit of the surface model is that it provides heights of features above the ground, enabling line-of-sight and viewshed analyses, feature extraction, and canopy heights for industries such as telecommunications, forestry, aviation, and geological and topographic mapping.

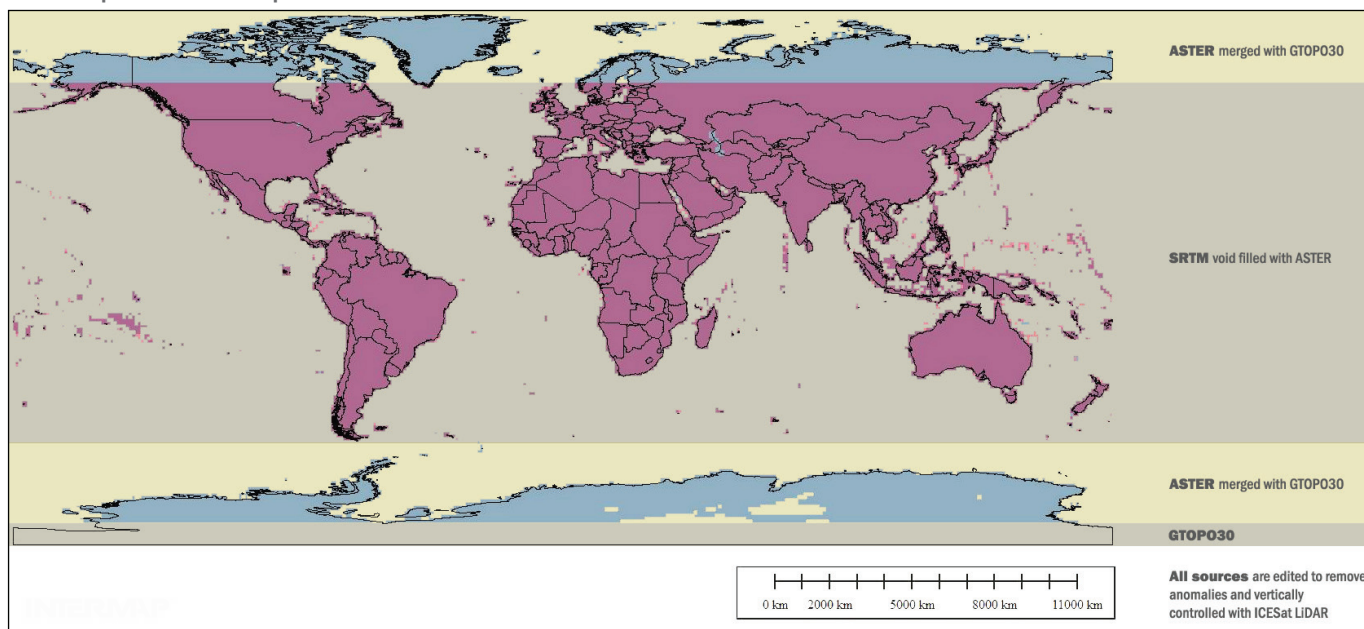


Coarse resolution and voids can be seen in this SRTM 90-meter DSM.



This image of the NEXTMap World 30 product depicts the same area as the SRTM but with a 30-meter GSD and no voids.

NEXTMap World 30 Components



SUMMARY OF PRODUCT AND SERVICE BENEFITS

- Accuracies starting at five vertical meters
- Void-filled SRTM dataset merged with ASTER 30 meter using 25 centimeter vertical control from ICESat
- Utility of a seamless aggregated 30-meter GSD elevation fused dataset
- Flattened water body surfaces between North 60 degrees and South 56 degrees*
- NEXTMap World 30 DSM's accurate topographic data will be used for orthorectification, telecommunications, forest management, aviation, engineering, energy exploration, conserving natural resources, environmental management, public works design, fire fighting, recreation, geology, and city planning, to name just a few areas.

**flattening of water body surfaces North of 60° or South of 56° can be completed by request.*

DATA LICENSE AGREEMENT

Intermap supplies NEXTMap World 30 DSM data under a data license agreement for a specified period of mutual commitment. Under this arrangement, Intermap provides to the customer a database of NEXTMap World 30 DSM data, or data for the selected geographic area of interest, to the user. A maintenance plan is available and includes yearly updates of the database as additional data is collected and fused as it is received.

Product Specifications for NEXTMap World 30 DSM:

- World-wide coverage
- Digital surface model
- A fusion of SRTM, ASTER, GTOPO30, using ICESat for vertical control
- 1 arc second postings (~30m)
- Geographic projection
- WGS84 horizontal datum
- WGS84 vertical datum
- EGM96 geoid
- 1°x1° tiles
- 32 bit BIL / HDR
- File size per 1°x1° cell is ~50MB
- Oceans set to 0 meter
- Flattened water body surfaces between North 60 degrees and South 56 degrees

Custom data formats and projections available upon request.

LEARN MORE

For more information about how you can benefit from Intermap's NEXTMap digital elevation models for your geospatial needs, please contact an Intermap representative or an Intermap Business partner. Additional information can be found at www.intermap.com.

