

Geo-Intelligence

**WorldDEM™**

Reaching New Heights

# WorldDEM™: The New Standard of Global Elevation Models

Precise elevation data is the initial foundation of any accurate geospatial product. To date, elevation data users often had to accept a compromise: either DEMs were not available globally / nationwide, or the data did not provide the required accuracy and quality. Airbus Defence and Space (DS)'s WorldDEM can now close this gap.

## Accuracy of a New Dimension

Pole-to-pole coverage coupled with unrivalled accuracy and quality - these are the defining characteristics of the WorldDEM. The accuracy surpasses that of any global satellite-based elevation model available today and will define a new industry standard:

- Vertical accuracy of 2m (relative) / 4m (absolute)
- 12m x 12m raster
- Will be available for the entire landmass of the Earth - 150 Million km<sup>2</sup>

## Worldwide Elevation Data

WorldDEM is the product of the TanDEM-X Mission (TerraSAR-X add-on for Digital Elevation Measurements), realised as a Public Private Partnership (PPP) between Airbus DS and the German Aerospace Centre (DLR). Airbus DS holds the exclusive commercial marketing rights for the data and refines the elevation models according to the needs of commercial users worldwide.

Initially three WorldDEM products will be available:

- **WorldDEM<sub>core</sub>**

Unedited Digital Surface Model, usually contains radar artefacts and voids

- **WorldDEM™**

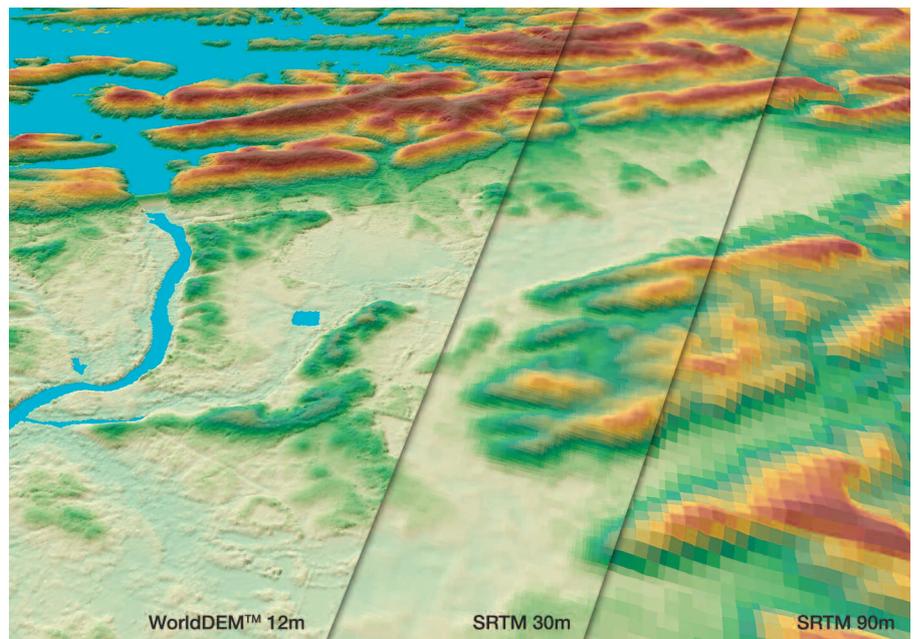
Edited Digital Surface Model with assured hydrological consistency (i.e. flattening of water bodies, consistent flow of rivers, editing of shoreline)

- **WorldDEM DTM**

Digital Terrain Model representing the bare Earth terrain (vegetation and man-made objects are removed)

## High Level of Detail for Versatile Applications

A multitude of applications such as satellite image orthorectification, military and civil aviation, management of oil and gas fields as well as defence and security related missions, benefit from the unique WorldDEM dataset. The global coverage will also support international cooperation and cross-border mission planning: particularly when the rapid provision of accurate information is of utmost importance (for instance in case of natural disasters), the availability of a standardised, highly accurate DEM will be a major advantage.



WorldDEM™ provides a superior level of detail and accuracy compared to SRTM data. Location: Arkansas, USA

### WorldDEM™ in Brief:

- Superior terrain information anywhere on Earth
- Global consistency thanks to data collection within 3 years
- Reliable and precise reference layer to enhance a wide range of applications