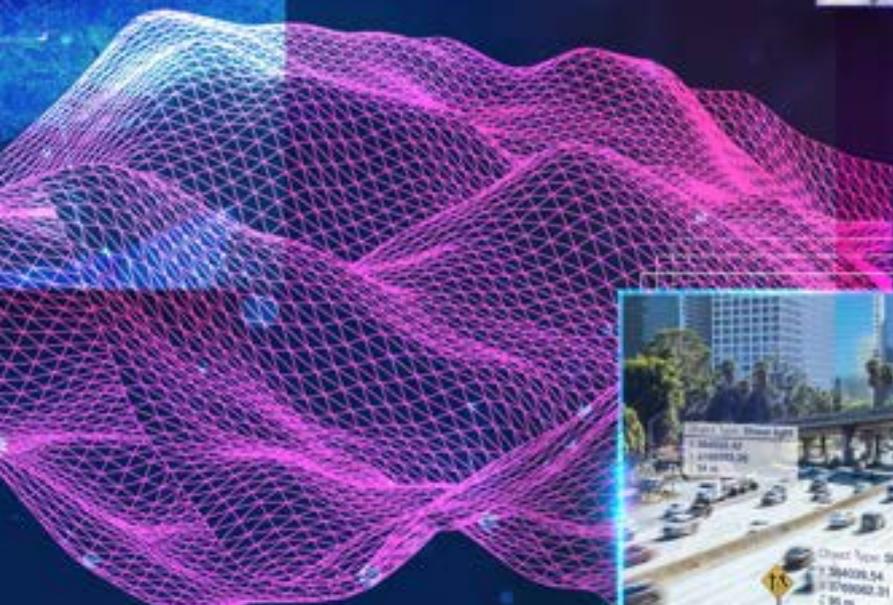


DEFENCE AND SPACE  
Intelligence



# Airbus Reference Layers

Highly Precise 2D & 3D Information  
on a Global Scale



vs. **AIRBUS**

# Enhancing Your Data with Our Highly Precise Range of Geometric Information

Airbus Reference Layers offer the most comprehensive range of digital elevation models, global Basemap and 3D coordinate data, providing highly accurate information anywhere on Earth. Be it defence mission planning, targeting, global and urban mapping, aviation, infrastructure planning – you will find your solution here.

-  **Globally available**
-  **Rapid on-demand delivery**
-  **Tailored to individual business needs**

## Worldwide Elevation Data

Whatever your area of interest and your usage for wherever in the world, we have the right elevation model for your needs.

We offer elevation models from global to local, in different resolutions, with accuracies up to 1.5m, for off-the-shelf or on-demand products.

All elevation products are available in DSM (Digital Surface Model) and DTM (Digital Terrain Model).

## WorldDEM™ Neo

WorldDEM Neo is the most accurate global satellite-based Digital Elevation Model available today. With unique data quality and level of detail, it facilitates a wide range of applications such as line-of-sight analysis, hydrological modelling, satellite imagery orthorectification, and much more. Worldwide availability makes it the most robust reference layers model for risk assessments and investigating global phenomena.



- GLOBAL COVERAGE**
- Off-the-Shelf Availability**
- 1.4m** Abs. vertical accuracy
- 2m/4m** Rel. vertical accuracy
- 5m** Resolution

## Elevation 0.5

**Elevation 0.5:** This next level high-resolution elevation model offers 50cm resolution based on Pléiades Neo stereo and tri-stereo imagery with exceptional 3D photorealistic quality. This outstanding resolution and accuracy supports new use cases, like digital twin visualisation to simulate smart city concepts, replacing the need for drone or aerial data in the mining industry.



- 0.5m** Resolution
- UP TO DATE** data acquisitions
- <1m\*** Rel. vertical accuracy
- Based on **PLÉIADES NE**
- 0.5m\*** Abs. vertical accuracy

\* Elevation 0.5 accuracy dependent on ground control points (GCPs); valid for slopes ≤20%

## Elevation 1 & 4

**Elevation 1 & 4 are ideal solutions for accurate 3D modelling in 1m and 4m resolutions.**

Based on Pléiades stereo and tri-stereo optical satellite data, Elevation 1 and Elevation 4 deliver Digital Elevation Models deliver highly precise altimetric information providing the best elevation data of choice for infrastructure and engineering projects.

**Elevation 1:** ideally suited for areas with little vegetation and few buildings.

**Elevation 4:** applicable for any kind of relief – urban or environmental. Ortho-Mosaics with 50cm resolution are optional and available for both products.

Key Facts	
<b>Resolution</b>	1m & 4m
<b>Accuracy</b> (abs. vertical LE90)	1.5m*
<b>Availability</b>	On demand
<b>Up to date</b>	Fresh data
<b>Coverage</b>	Local



## 3D Textured Model

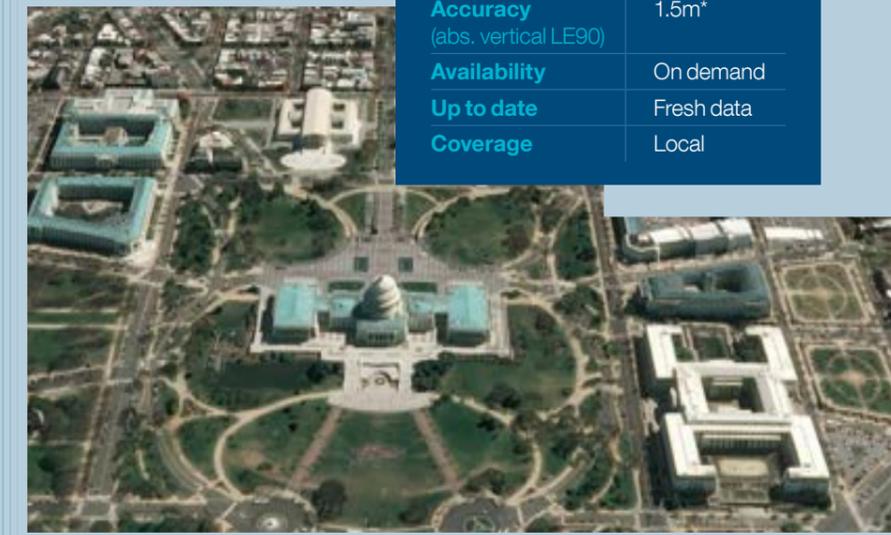
**Add relief to your imagery and visualise the world in 3D**

**Visualise** your area of interest, even in remote and hot spot areas using regularly updated, fresh and relevant data.

**Simulate** your tactical mission, network utilisation or natural event with consistency and homogeneity around the globe.

**Model** your construction project, geological point of interest or city map.

Key Facts	
<b>Resolution</b>	0.5m
<b>Accuracy</b> (abs. vertical LE90)	1.5m*
<b>Availability</b>	On demand
<b>Up to date</b>	Fresh data
<b>Coverage</b>	Local



# Global Reference Information

Get highly precise 2D and 3D reference information to enhance the accuracy of your data. Our reference layers are available on demand or off the shelf, locally and globally to support ortho-rectification and image registration of satellite, aerial and drone images for every project needs, everywhere on Earth.



Globally available



Increase spatial data accuracy



Allow precise orthorectification of aerial or satellite imagery

## Airbus Ground Control Points

Airbus Ground Control Points (GCPs) provide precise 3D coordinates, with accuracy down to centimetre level, based on high-resolution stereo imagery from Airbus' Radar Constellation. Fully independent of weather conditions and daylight, GCPs can be extracted anywhere on Earth, at any time. GCPs are essential for accurate orthorectification of aerial, optical satellite imagery and drone data, as well as precise locating of ground features, landmark detection and target recognition.



### Key Facts

<b>Accuracy</b>	10 cm horizontal and vertical
<b>Availability</b>	On demand
<b>Map scales</b>	1:2.500 – 1:10.000
<b>Point density</b>	10 GCPs/25km <sup>2</sup>

## Airbus Space Reference Points

Airbus Space Reference Points (SRPs) is a global reference layer consisting of a set of image chips, every 2km<sup>2</sup>, with a 3D centre coordinate. The database is available almost everywhere worldwide, supporting image and orthorectification processing, and can register all kinds of optical images even with poor native location.



## Basemap

### An accurate, expertly curated, global imagery reference layer

OneAtlas Basemap is a highly accurate, expertly curated global satellite imagery reference layer available off-the-shelf. Fresh, premium quality imagery curated by Airbus experts ensures consistent, complete and nearly cloud-free coverage with minimised haze and seasonal differences between contiguous images.

OneAtlas Basemap provides a flexible and cost-effective solution for mission/project planning, change detection, mapping/route updates and feature extraction. It also works well as a background layer in location-based apps. Purchase the complete global layer or just an area of interest and access it via streaming, download or API.

### Key Facts

<b>Resolution</b>	0.3m to 1.5m
<b>Accuracy</b>	Geolocation accuracy of ≤5m CE90
<b>Availability</b>	Off-the-shelf
<b>Up to date</b>	Fresh data
<b>Coverage</b>	Global

**5m**

Vertical accuracy

**Up to 10**

Image chips

**<3m**

Horizontal accurate

**2m**

Resolution

**1GCP/2km<sup>2</sup>**

High density



Airbus Defence and Space  
Australia, Brazil, China, Finland, France, Germany, Hungary, Singapore, Spain, United Kingdom, United States

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