

Airbus Ground Control Points

Get the highest level of precision
for your data

Object Type: Street light
X 384032.42
Y 3768983.28
Z 94 m

Object Type: Street sign
X 384039.54
Y 3769062.31
Z 95 m

Object Type: Street light
X 384024.64
Y 3769055.66
Z 96 m

Object Type: Fence
X 383982.38
Y 3769001.29
Z 109 m

Airbus Ground Control Points

Based on high-resolution stereo imagery from Airbus' Radar Constellation, the Airbus Ground Control Points (GCPs) provide precise 3D coordinates, with accuracy down to centimetre level. 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 localisation of ground features, landmark detection and target recognition. Furthermore, GCPs calibrate and validate all types of map data. Thanks to the high geo-location accuracy of the GCPs, they are increasing the accuracy of your input data.



Applications

- Precise orthorectification of optical imagery, elevation models and maps
- Increasing accuracy of optical imagery and mapping data
- Homogenise geo-information layers
- Supporting sensor data fusion



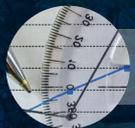
Benefits

- Complementing, substituting and validating in-situ measurements
- Reduce costs and save time compared to in-situ measurements
- Homogenous data source, providing redundant data acquisition
- Covering large areas



Markets

- **Mapping:** Precise orthorectification of input data, supporting map scales of 1:2,500 to 1:10,000
- **Aeronautics:** Build and refresh airport runway database
- **Defence:** Support of mission planning
- **Oil, Gas and Mining:** Localisation of potential exploration sites and pipeline corridors
- **Civil Engineering:** Infrastructure planning
- **Automobile Industry:** Co-registration and validation of HD maps and mobile mapping data to support autonomous driving



Increase spatial data accuracy

Allow precise orthorectification of aerial or satellite imagery



Globally available, avoid in-situ risks

Definition

A Ground Control Point represents the specific geolocation of a fixed point/object on the Earth's surface, with specific geolocation accuracy across horizontal (2D) and vertical (3D) axes.

The geolocation of the measured landmark/object is provided in coordinates, using a related geo-reference system. Airbus Ground Control Points are calculated via a space-borne approach, utilising Airbus Radar Constellation imagery, which provides highly accurate ground information.

Product Details

Airbus Ground Control Points are automatically generated by using Radar stereo images, acquired over a specific area of interest (AOI). The process of GCP extraction is also automated and provides up to 1,000 points per stereo pair, depending on the availability of man-made objects (Infrastructure features) in the AOI. These objects are mainly metallic poles (lighting, traffic signs, fences, etc.) and notable elements on buildings. The points can be used to link with corresponding elements in optical imagery or in-situ measurements.

Airbus Defence and Space

Australia, Brazil, China, Finland, France, Germany, Hungary, Singapore, Spain, United Kingdom, United States

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