

## **GSaaS: Aerial Survey Services**

# Digitise the environment and turn geodata into valuable insights

High quality business information from aerial imagery and geospatial data

### Introduction to Aerial Surveys

Creating digital replicas is vitally important to providing a deeper understanding of the world in which we live.

Getmapping has been a leading global provider of aerial imagery and geospatial data that enables us to see the Earth "as the birds do" for more than 20 years. We capture, process and make this data easy to access, visualise and share across organisations.

The resolution and accuracy of Getmapping's data make it a valuable asset for any project requiring detailed analysis of the environment.

#### The Solution

Aerial photography is used for the mapping of terrestrial features. We take photographs from an aircraft using specialised cameras and can capture LiDAR at the same time for maximum cost efficiency.

We use best of breed airborne digital technology for superior data and image quality to ensure our footage can be leveraged for modelling and analysis with the greatest measure of accuracy.

The data is processed by our specialised production techniques, who extract key insights and intelligence.

### **Aerial Imagery:**



Vertical: A vertical photograph is taken with the camera axis directed toward the ground as vertically as possible. We provide both 25cm and 12.5cm resolution as standard, but also capture specialised ultra-high 3cm and 5cm resolution imagery for multiple urban areas.



**Oblique:** Oblique imagery is captured at an angle of approximately 45°. This technique allows the imagery to reveal building façades and footprints.

Note: we can combine oblique with vertical imagery in a single software environment to obtain a richer view.



10cm aerial oblique image, London, 2021

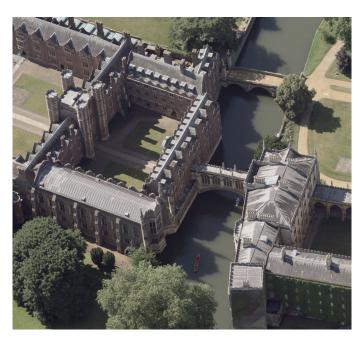


**Infrared:** False colour imagery shows the reflected electromagnetic waves from objects allowing users to differentiate between vegetative and nonvegetative surfaces.



**Historical:** Unique access to a variety of film and print archives, created from original film where possible, including the very best of RAF and Luftwaffe aerial photography flown during 1939 to 1952.

Our data is regularly updated - every three years for 12.5cm data and more frequently for specialist ultra high resolution data sets. It is used by professional users who require high quality, highly accurate and current data. This standard cannot be supplied by Google Earth, where the data is a less accurate combination of lower resolution satellite and aerial imagery that is often out of date..



3cm aerial image, Cambridge 2021

## Aerial LiDAR:

Light Detection and Ranging (LiDAR) uses light in the form of a laser to measure variable distances to the Earth. LiDAR creates a dense, detail-rich 'image' using thousands of points of data. The resulting three -dimensional (3D) point clouds allow precise measurements of objects or locations on the Earth surface which can then be used for multiple applications and 3D modelling in many industries.

We provide the most up to date and detailed national height data across Great Britain, including selected 5m Digital Terrain Models and 2m Digital Surface Models.

#### Instant access to data

We provide 'on demand' access to our extensive catalogue of accurate, up-to-date, high and ultra high resolution GIS/CAD ready aerial imagery:



'high resolution 12.5cm and 25cm imagery with complete national coverage of Great Britain



specialised ultra -high resolution 3 and 5cm vertical and oblique imagery for multiple urban areas



10cm vertical and oblique imagery for Greater I ondon.



25cm vertical imagery for areas of the Republic of Ireland



A range of Height and LiDAR datasets



A wealth of historic imagery

## **Bespoke Services**

Where a project requires a custom solution, Getmapping offers a range of bespoke aerial survey services.

We pride ourselves on identifying the right solution to meet individual project requirements and the specific challenges and opportunities of our clients.

We are differentiated from other providers as we survey from both the air and the ground, offering a unique 'ground up, air down' view of the environment for the most comprehensive analysis.

Our powerful range of streaming and visualisation tools make it easy for to access, analyse and share the insights organisations need.

## Winning solutions



Accurate digital replica of the environment for your own analyses purposes



Rapid, cost-effective access to a wide range of premium aerial geospatial content 'on demand'



Flexibility to combine 'on demand data' with bespoke aerial and ground-based surveys for a tailored solution designed to meet your individual requirements



Simplification of complex data to provide the insights you need and improve decision-making



Easily combined with data from other sources to facilitate analyses



Available in multiple formats to suit specific access needs

#### The 'Power of Where'

It's what organisations can do with aerial imagery and geospatial data that is phenomenally powerful. Used to provide a deeper understanding of issues, answer questions, help with predictions, carry out detailed analysis and make better decision making.

Geospatial data has a huge impact on the development of spaces, buildings, natural resource management and much more.

### Features of Aerial Imagery



All aerial imagery is captured to RICS specifications, using airborne INS and ground GPS to control and optimise output and quality.



Data is processed in several stages to maximise quality and accuracy:

- Cloud checking
- IMU Processing
- Colour Balancing to maximise the information content
- GCP & Aerial Triangulation
- Full true Orthorectiification process
- Mosaicing & Tiling
- Photo-editing
- Edge-matching

## Why Getmapping

Getmapping is one of the leading global providers of geospatial data and survey solutions with over 20 years' experience working on projects across Europeand Africa.

We have a proven track record of excellence and employ only the best of breed surveying technology. We collect, transform, store and deliver geospatial data to enable better decision-making and are differentiated from other providers as we supply both a 'ground up' and an 'air down' view of the environment.

Getmapping is the 'Home of GSaaS', a powerful platform that helps people unlock the full value of geospatial data across their organisation and ensures users can access the content and information they need, in a format that makes it easy for them to use. GSaaS also enables users to share data and collaborate effectively with their partners.

We are trusted by our customers to provide optimised solutions tailored to their individual requirements. By creating true digital replicas of the environment, we empower our clients and partners to create solutions to the challenges and opportunities facing their business and our planet, wherever they may be.

## Are you looking to leverage the 'power of where' across your organisation?

To find out more about how aerial imagery and geospatial data can help your organisation, please email sales@getmapping.com or call us on +44 (0) 1252 849440 to start the conversation.