

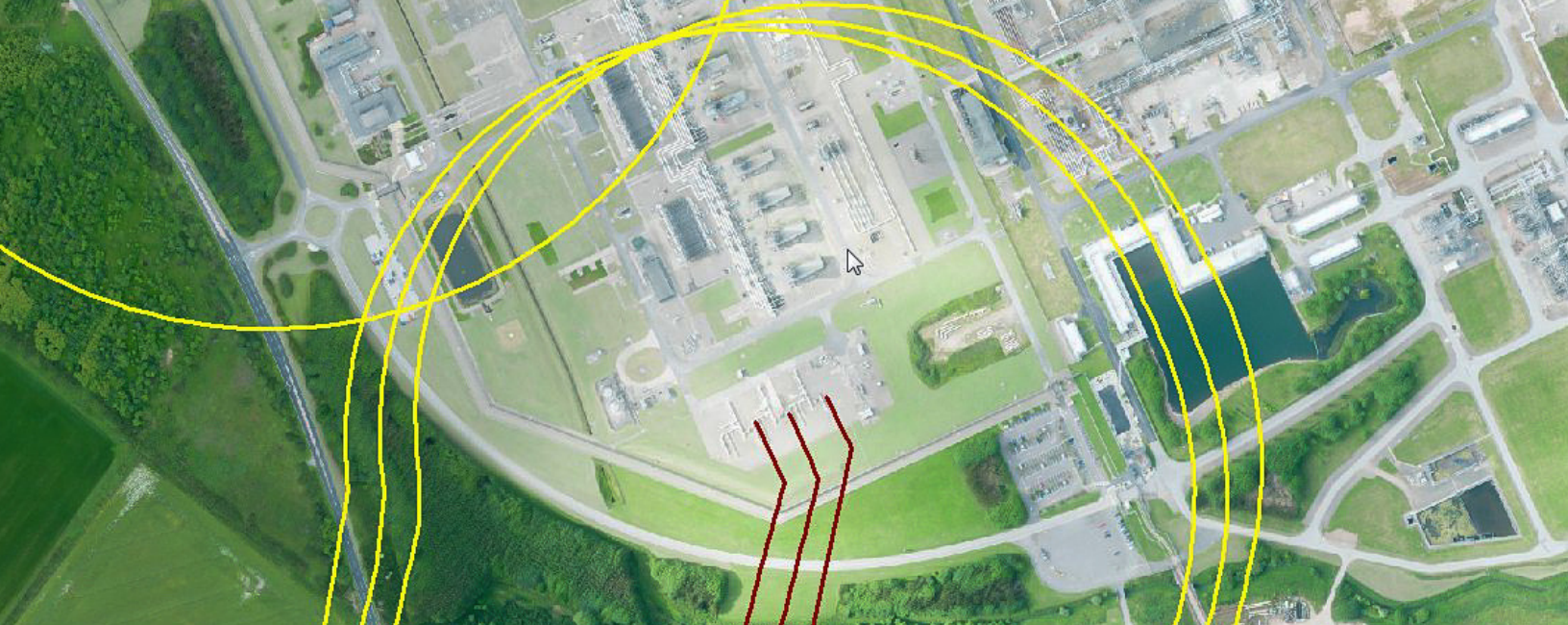


ORTHO-RECTIFIED PHOTOGRAPHY

High resolution vertical imagery

An ortho-rectified image is an aerial photograph that is geometrically correct, with the removal of inaccuracies caused by displacement, distortion, aircraft movement and camera tilt. It allows the scale of the image to remain uniform with the same lack of distortion that can be seen on a map. This process of ortho-rectification, renders surface features with great accuracy and enables precise measurements to be made from the image. How it differs from an aerial photo is that it can be used to measure true distances giving an accurate representation of the Earth's surface, as it has been adjusted for topographical relief, lens distortion and camera tilt.





An exciting addition to our range of services, ortho-rectified photography (or orthophotos), allows the production of seamless, accurate and high resolution vertical aerial photography and elevation data of the earth's surface for use in geographic information systems (GIS).

There are a lot of advantages in using orthophotography. For instance, when compared to the conventional line mapping, it is a more cost-effective mapping tool and as a technique has already proven itself to be an inexpensive and excellent base for GIS. It is an ideal medium for those who require up to date, high detailed mapping whilst avoiding the high costs of going into the field, particularly in remote or sensitive areas. As the features on the image are correctly measured, it is a technique favoured by many, particularly engineers, planners, designers and asset operators.

We can deliver the images either individually in a number of formats, or combined into mosaics of images ready for direct use in GIS systems such as ESRI's ArcGIS. We can also deliver the images online using our Visivi imaging and mapping tool. Users may then make use of the imagery without the need to invest in their own suite of GIS mapping tools – enabling them to markup, and collaborate online using just their web-browsers.

Our orthorectification process corrects image distortions in aerial photography, quickly generating colour, CIR or black and white orthophotos. Elevated structures are corrected with specialised routines. Images are mosaicked and colour balanced with predefined or interactively defined seamlines based on project specifications. Utilising the IMU component from our Airborne GPS and INU systems gives us higher accuracy capabilities for orthophotos over rough terrain and water and enables us to deliver quick turnaround mapping without the need for expensive and time consuming ground control.