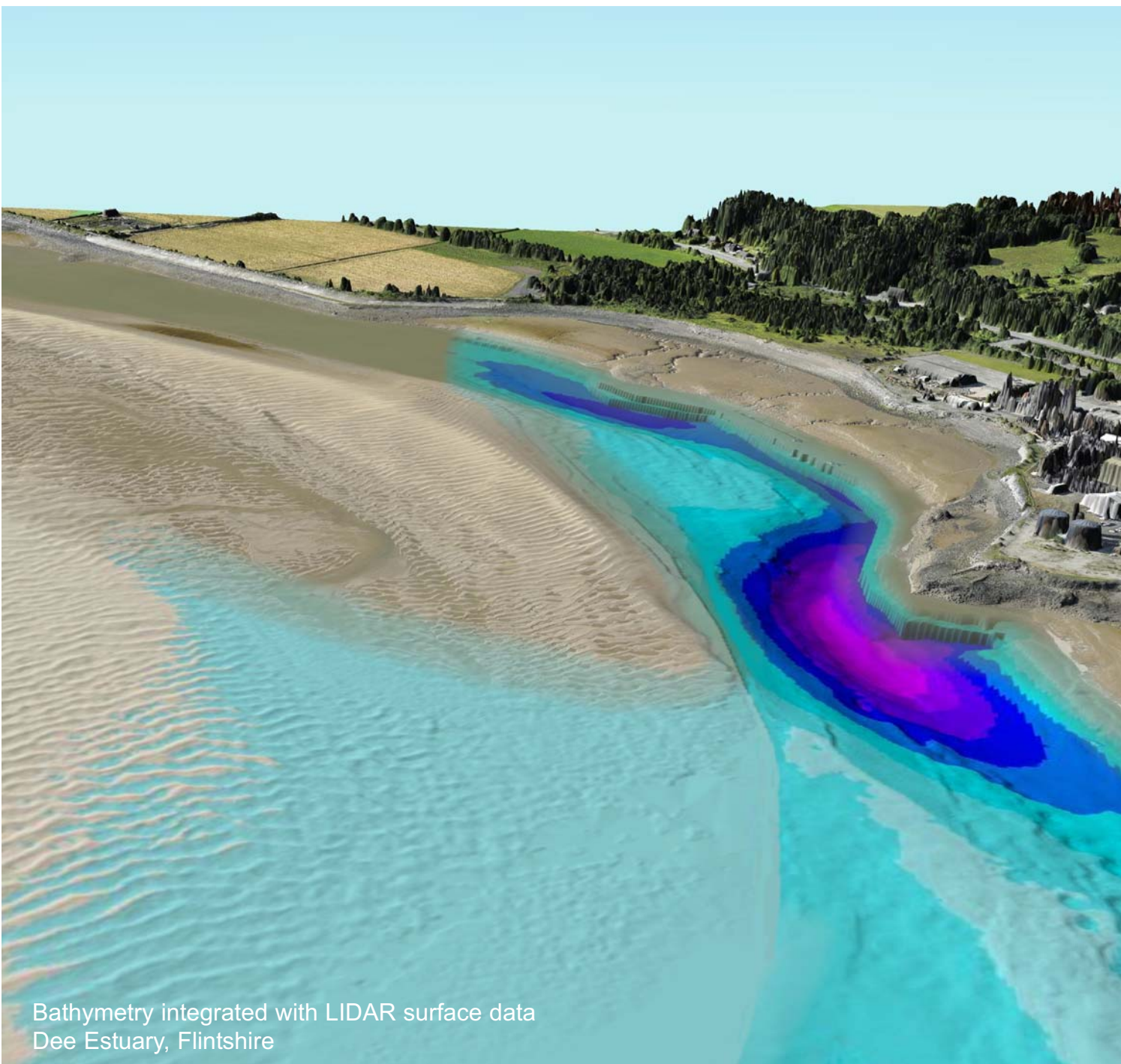


Bathymetry



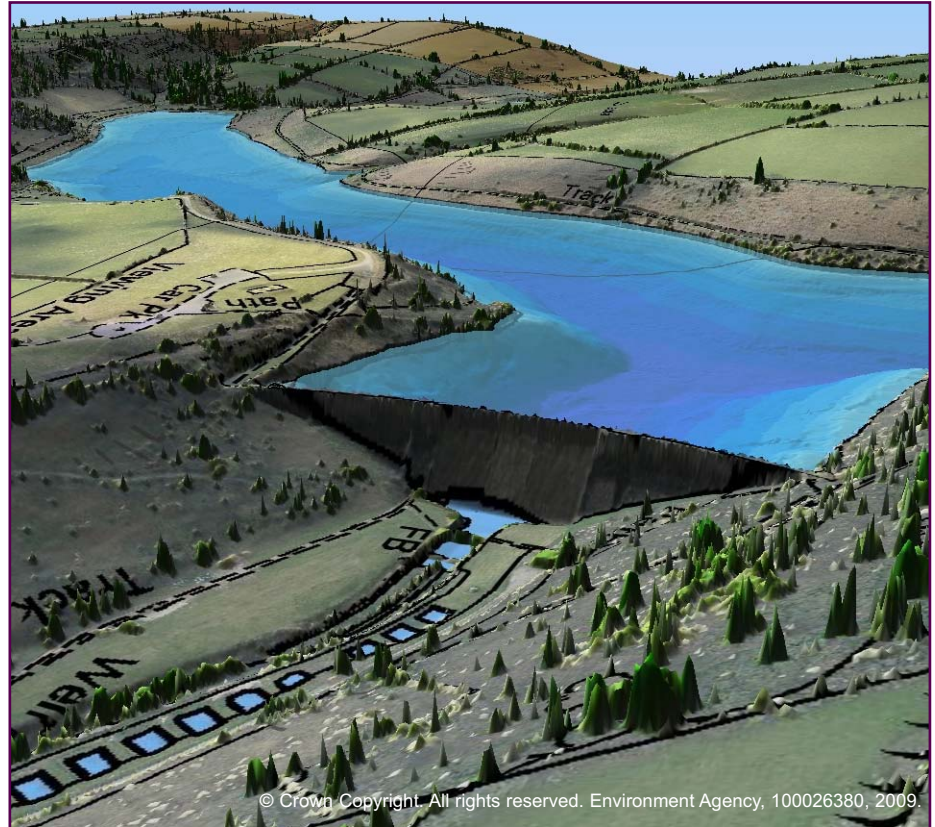
Geomatics Group regularly carry out bathymetric surveys for government bodies and utilities companies, which can cover areas ranging from inland waterways to nearshore zones.

A bathymetric survey can quickly and accurately map the topography underwater. Detailed maps of the underwater terrain can be generated, with submerged objects and geological formations clearly visible.

We operate a number of bathymetry systems, including single beam and multi beam echo sounders, which can be deployed from a range of small boats or larger vessels. This enables us to provide a scalable solution to suit any survey site, including coastal waters, estuaries, rivers, lakes and reservoirs.

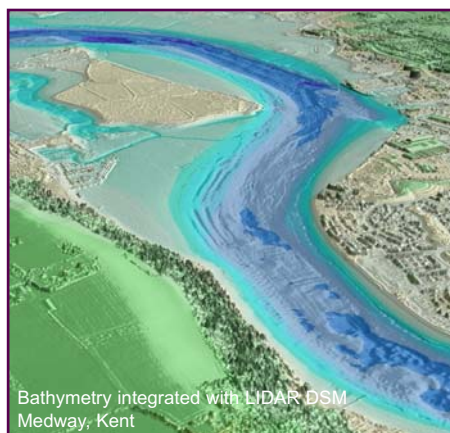
Bathymetry surveys can be utilised for a wide variety of applications, including reservoir safety surveys and for environmental monitoring and flood modelling.

Swath bathymetry systems can be linked with a bottom classification system and a survey grade echo sounder to provide accurate bottom topography, suitable for merging with LIDAR data. As both the LIDAR and bathymetry systems operate with reference to the Ordnance Survey National GPS Network, these data can be seamlessly merged across the water



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Bathymetry integrated with LIDAR surface data and aerial photography
Clatworthy Reservoir, Somerset



Bathymetry integrated with LIDAR DSM
Medway, Kent

line. Side scan imagery of the water body floor can also be collected for analysis.

Features & benefits

- Product is a surface of elevation points at 50cm intervals
- Highly accurate data, typically 5cm to 15cm relative to OS National Grid
- Full integration with other survey datasets
- Data map ready and provided in a range of digital formats suitable for GIS and CAD
- Full range of products available including DTMs and 3D visualisations
- Bathymetry systems are fully integrated with survey grade

positioning and motion referencing unit to allow for the boat's roll, pitch and yaw

- A number of different survey vessels available for deployment in most aquatic environments

Applications

- Reservoir surveys
- Flood risk modelling
- Maritime archaeology
- Dredging surveys
- Underwater pipeline surveys
- Construction planning
- Hydro-electric impact assessment
- Environmental monitoring

Geomatics Group is a leading provider of high quality survey solutions. As a specialist business unit within the Environment Agency, we deliver integrated spatial data products to government and commercial clients. Combining cutting edge technology with expert personnel, we work to the highest scientific and ethical standards to provide accurate and high quality spatial data.

