

Qloud

3D Area based cleaning



Technology marches on with the newest sounders capable of generating thousands of soundings per second. The latest generation of multibeam and swath systems dramatically increased the number of depth soundings, both in number of beams and in ping rate.

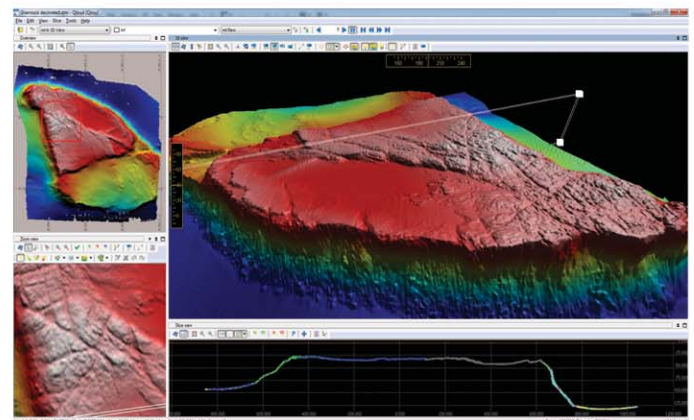
The QINSy philosophy of computing almost final soundings in real-time remains as effective as ever. However, computed on-the-fly results must be validated using offline tools.

Current and future data volumes require more powerful offline tools, ready for the future.

Qloud is such an offline tool that is fully integrated with QINSy. Handling extremely large datasets, it performs statistically-based data cleaning using parameters such as **TPU** and **IHO** guidelines, both in the CUBE algorithm (UNH), and the Statistical Surface Spline algorithms.

Qloud imports DTM points directly from QINSy QPD files (including attributes and metadata), or from any 3rd party points files, with or without attributes and metadata. The moment the data is loaded into Qloud, the survey is viewed as a single points cloud, presented in the full geographical context of ENCs, DXF and GeoTIFF imagery.

Automatic data cleaning tools using clips, Statistical Surface Spline and CUBE gridding are applied to the entire survey at once, or sequentially to selected sections. Whether the data is viewed as individual soundings, or as gridded data is the user's choice, often dictated by the final product.



Qloud data example

Key features

- CUBE gridding algorithm
- Statistical Surface Spline cleaning algorithm
- Qlean++ cleaning algorithm
- SVP correction model
- Area repair algorithm
- Fast cleaning of huge data sets with IHO guidelines and survey accuracies
- Creation of annotation markers / flags
- 3D depth figure creation / golden sounding
- 3D measuring and polygon selection

Validated data can be exported back to QINSy for chart production or can be exported directly to various formats, such as ASCII XYZ and CUBE grid files.