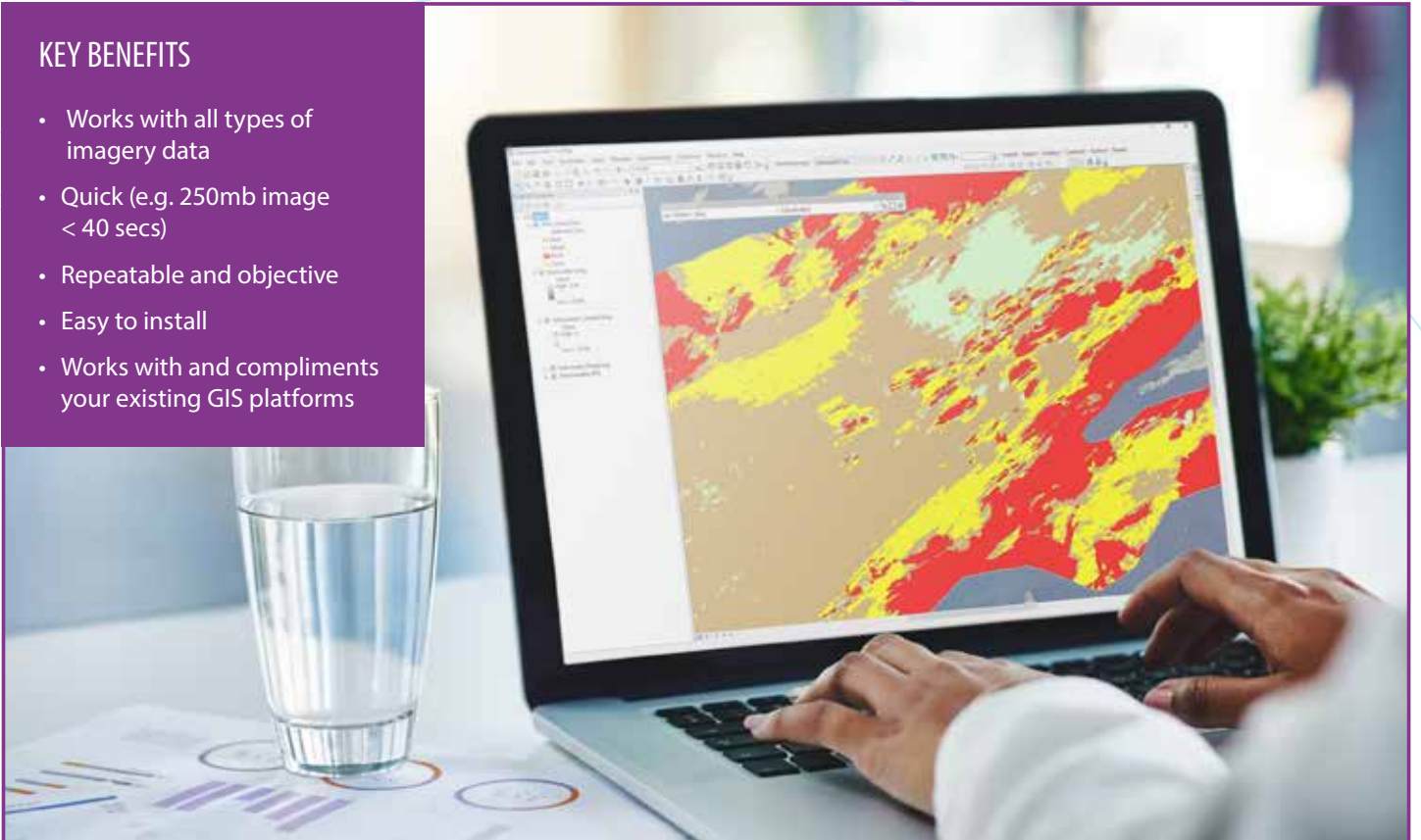


# OBJECT BASED IMAGE ANALYSIS

When you need to interpret and digitise areas and boundaries in an image quickly and easily

## KEY BENEFITS

- Works with all types of imagery data
- Quick (e.g. 250mb image < 40 secs)
- Repeatable and objective
- Easy to install
- Works with and compliments your existing GIS platforms



Remote Sensing Object Based Image Analysis (RSOBIA) is an image analysis extension tool for Esri which takes multi-layered raster imagery and segments the data into geographic areas with similar statistical properties.

This intuitive software tool, which complements existing GIS platforms, interprets and digitises the areas and boundaries seen in an image (such as multibeam bathymetry and backscatter) and creates a polygonised map of the results. It supports Segmentation and Classification which are key techniques for image analysis, and gives quick, easy, repeatable results.

Manually digitising images can be slow, subjective, and non-repeatable. Using **RSOBIA**, segmentation of the results will provide straight-forward and objective polygons which are statistically calculated.

Delivered as a part of **Maritime Toolbar**, a suite of tools which manipulates maritime data in GIS, RSOBIA is compatible with Esri ArcMap making it integral to workflows.

“ The software highlights similar areas of seabed in far greater detail than could be achieved by hand, and can turn weeks of work into hours. ”

*Jon Evans, National Oceanography Centre*

**Watch the demo** on our website at [www.oceanwise.eu/software](http://www.oceanwise.eu/software)

This extension has been created by **OceanWise's** Licensed Partner Tim Le Bas and is maintained and supported by **OceanWise** as a collaborative project.

**To receive your 4 week FREE trial please contact us today**

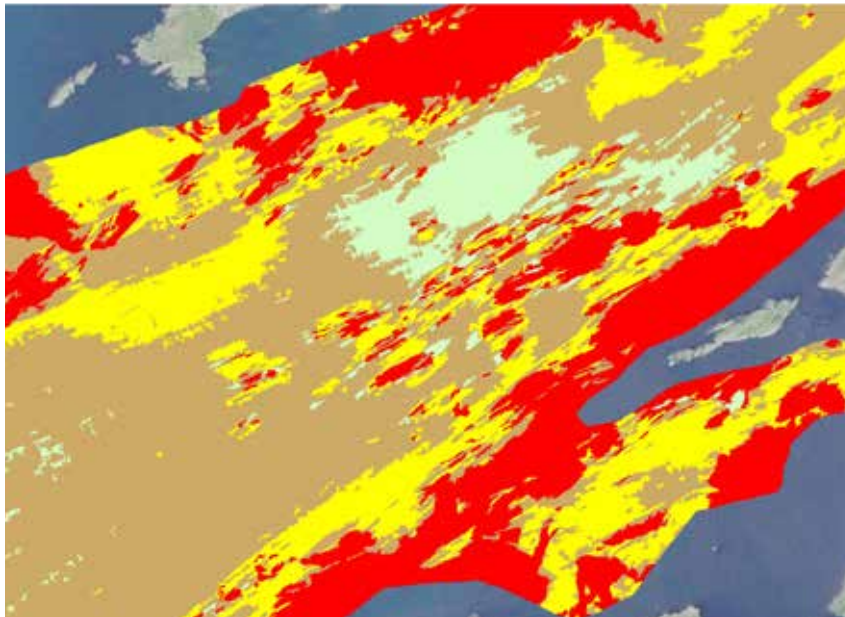
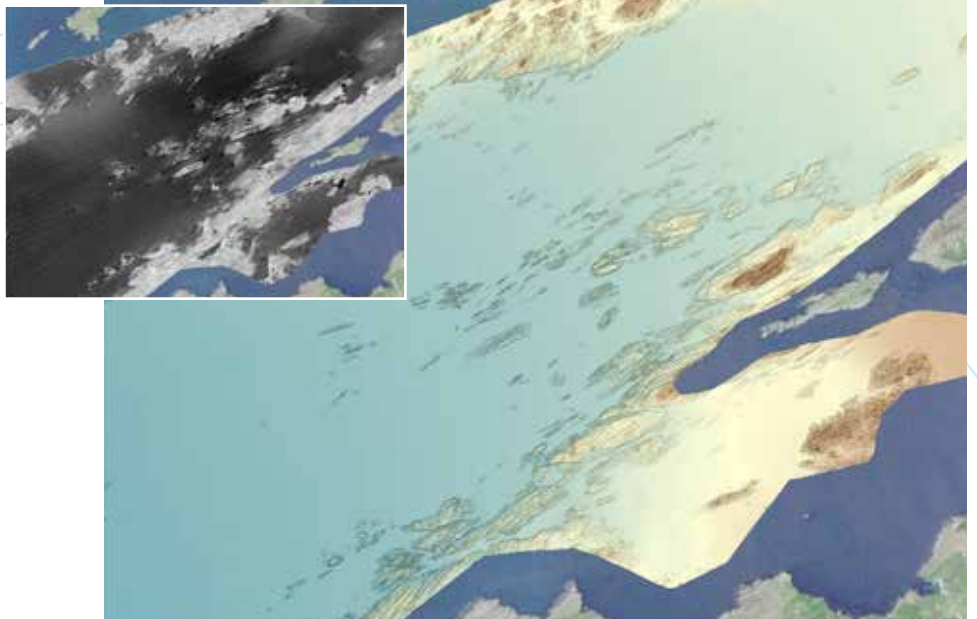
We offer discounted rates for users in education and academic bodies. Please contact us today for a quote.

## Application Example

Image to the right shows 2 data sets (Bathymetry & Backscatter) in ArcMap before the **RSOBIA** tool has been applied.

The image below shows the same data after the **RSOBIA** tool has been applied. In this example **RSOBIA** has calculated the ruggedness and slope and added it to the backscatter – resulting in a polygonised map.

The tool allows you to select your preferred criteria; for example - you can select the number and minimum size of the interpretation classifications, and also what data may be pertinent to a classification such as depth, roughness, slope, backscatter, northness, eastness, curvature and texture measures.



## Technical Details

- For use with Esri ArcMap 10.0-10.7
- Requires ArcGIS Spatial Analyst extension
- Each polygon has statistics for every image layer
- Scale and level of detail defined by numeric parameters chosen by the user – providing either a high resolution interpretation or a more generalised solution
- Can use more than 3 data layers (no limit)
- Select from two main categories: Segmentation and derivatives
- Requires Advanced ArcGIS License

## Want to try it out?

We offer a 4 week **FREE** trial of the **RSOBIA** tool – to apply simply contact us at [info@oceanwise.eu](mailto:info@oceanwise.eu)

For more information OR to watch our video demonstration please visit the software pages on our website

[www.oceanwise.eu/software](http://www.oceanwise.eu/software)

