

OPTTECH REA

Rapid Environment Assessment



REA

The only image processing software to provide coastal environmental information by fusing airborne lidar and hyperspectral data

Lidar Products

- Seamless topo/bathy images
- Sea-surface reflectance images
- Water attenuation images
- Water column volume images
- Seafloor reflectance images
- Shoreline vectors

Lidar/Hyperspectral Fusion Products

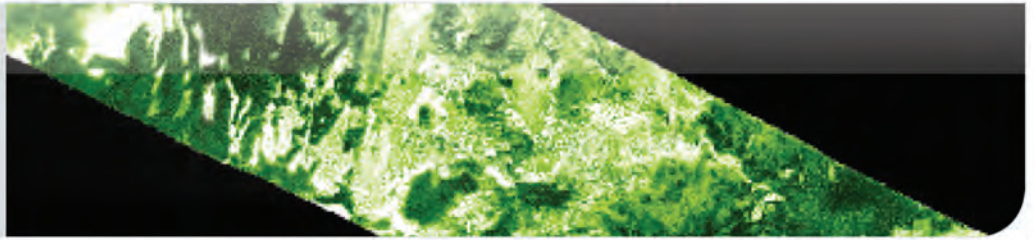
- Water-leaving reflectance images
- Seafloor reflectance images
- Chlorophyll concentration images
- CDOM concentration images
- Suspended sediments images
- Sand/grass weight images
- Seafloor/land-cover classification

3D Visualizations

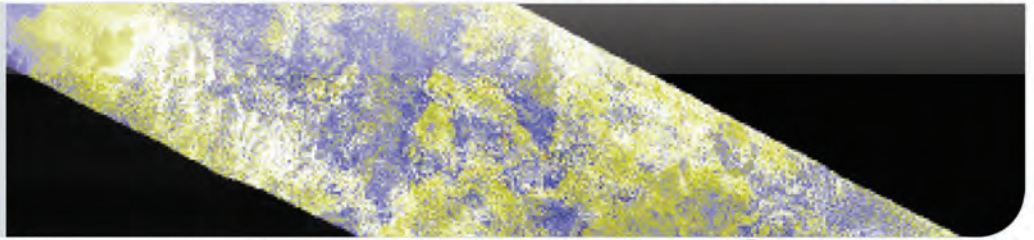
- 3D volumetric viewer of water column
- 3D autostereo view



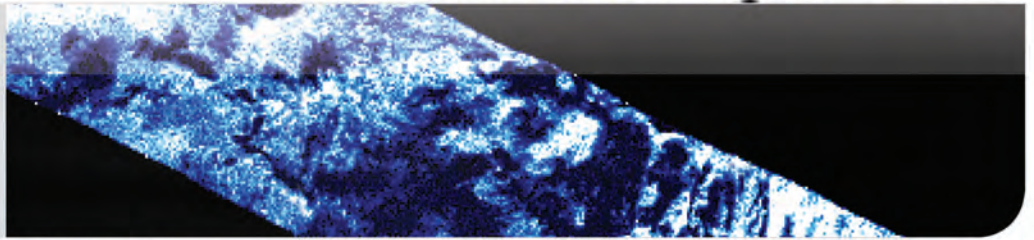
**Chlorophyll
Concentration
Image**



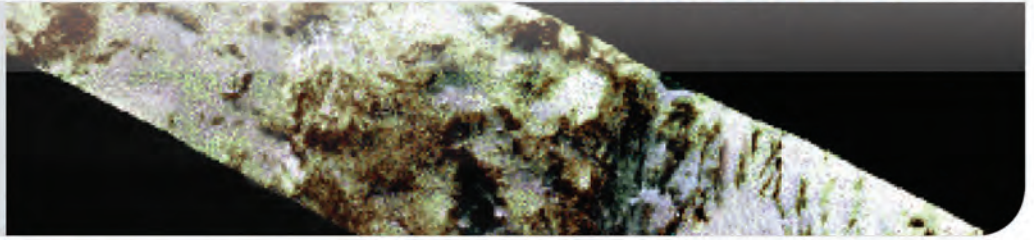
**CDOM
Concentration
Image**
*Colored dissolved
organic matter*



**Sand Endmember
Image**



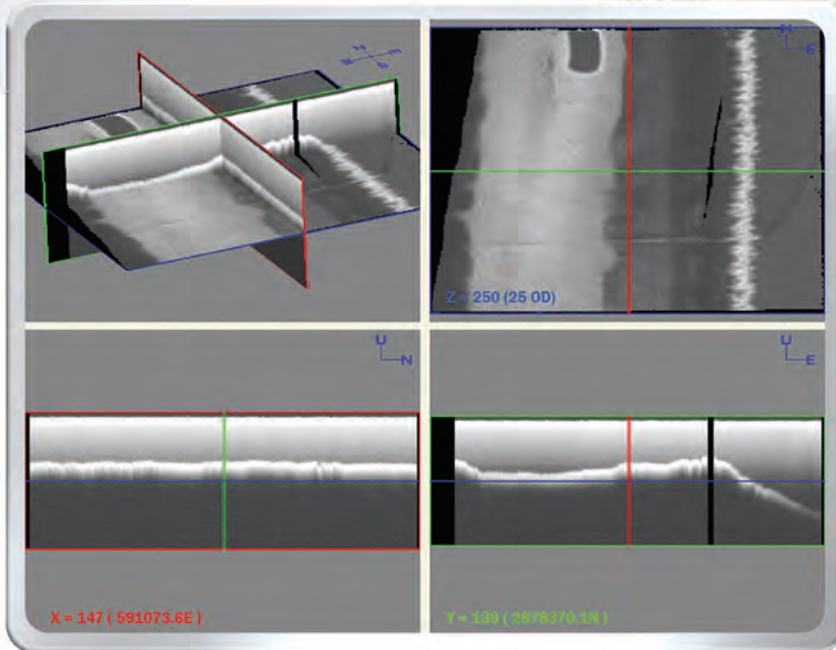
**Seafloor Spectral
Reflectance
Image**



**Fusion-Based Seafloor
Classification**



Data gathered by SHOALS system



**3D Water
Volume Slice
Viewer**