



Optical Bathymetry using Sentinel-2 by ACRI-HE - now ARGANS



Background & Objectives

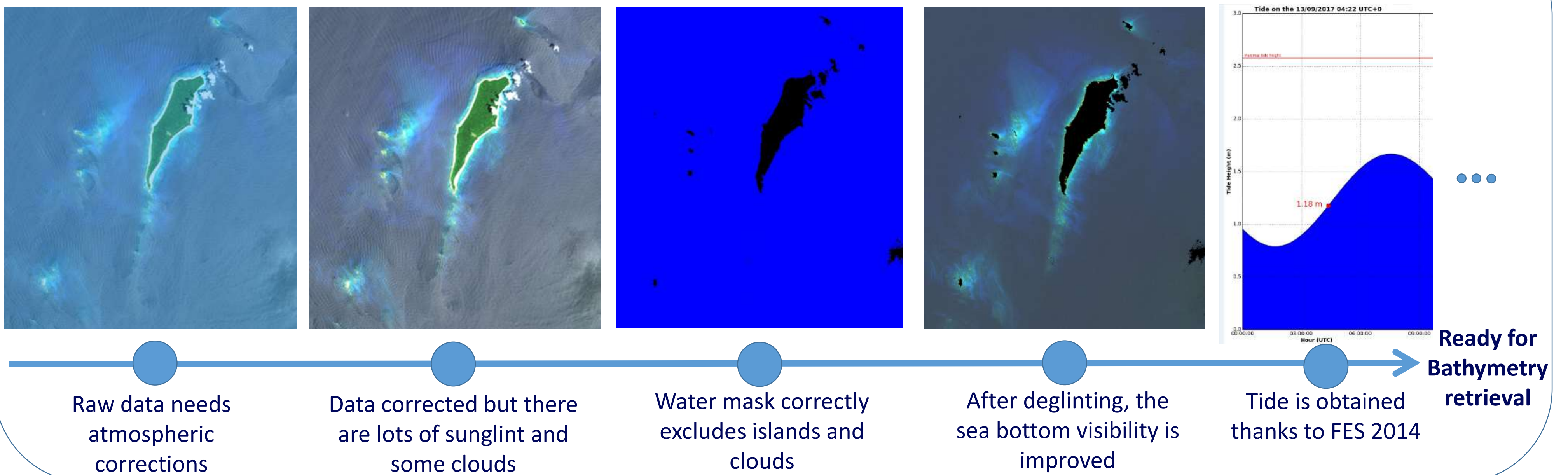
Nowadays, there is an increasing demand of coastal monitoring because of new requirements in developing countries to investigate on the impact of human activities and natural behaviour.

Remote sensing is a solution as it is cheap and allows large scale analysis.

Key Attributes

- ✓ Based on Sentinel-2
- ✓ At least 50 images/year
- ✓ Can be applied anywhere
- ✓ Do not need any *in-situ*
- ✓ Run numerous pre-processing
- ✓ Deliver Bathymetry maps and water quality properties
- ✓ Apply ICEC model
- ✓ Run in around 1 hour
- ✓ Provide JPEGs and TIFs

Methodology



Key Results

Physical bathymetry retrieval algorithm defined by LEE is applied and provide high quality results.

This chosen image is not the best for a good bathymetry retrieval as it originally showed lots of sunglint to correct. But it is a good demonstration of the importance of each step performed in this processing in order to prepare data before the bathymetry retrieval.

