



1-Questions

What are the benefits of using the HawkEye sensor for remote sensing studies of coastal ocean ecosystems?

2-Objectives

- Evaluate HawkEye's accuracy in measuring chlorophyll & turbidity.
- Quantify uncertainty associated with remote sensed estimations.
- Compare HawkEye to the government funded satellite, MODIS-Aqua.
- Validate the practical advantages of HawkEye's superior spatial resolution.

4A-Methods 1

Construct a database with matching HawkEye & Aqua Images for direct comparison.



4B-Methods 2

Vicarious validation with handheld radiometer for atmospheric correction.

In situ chl. a samples to compare for accuracy assessment.

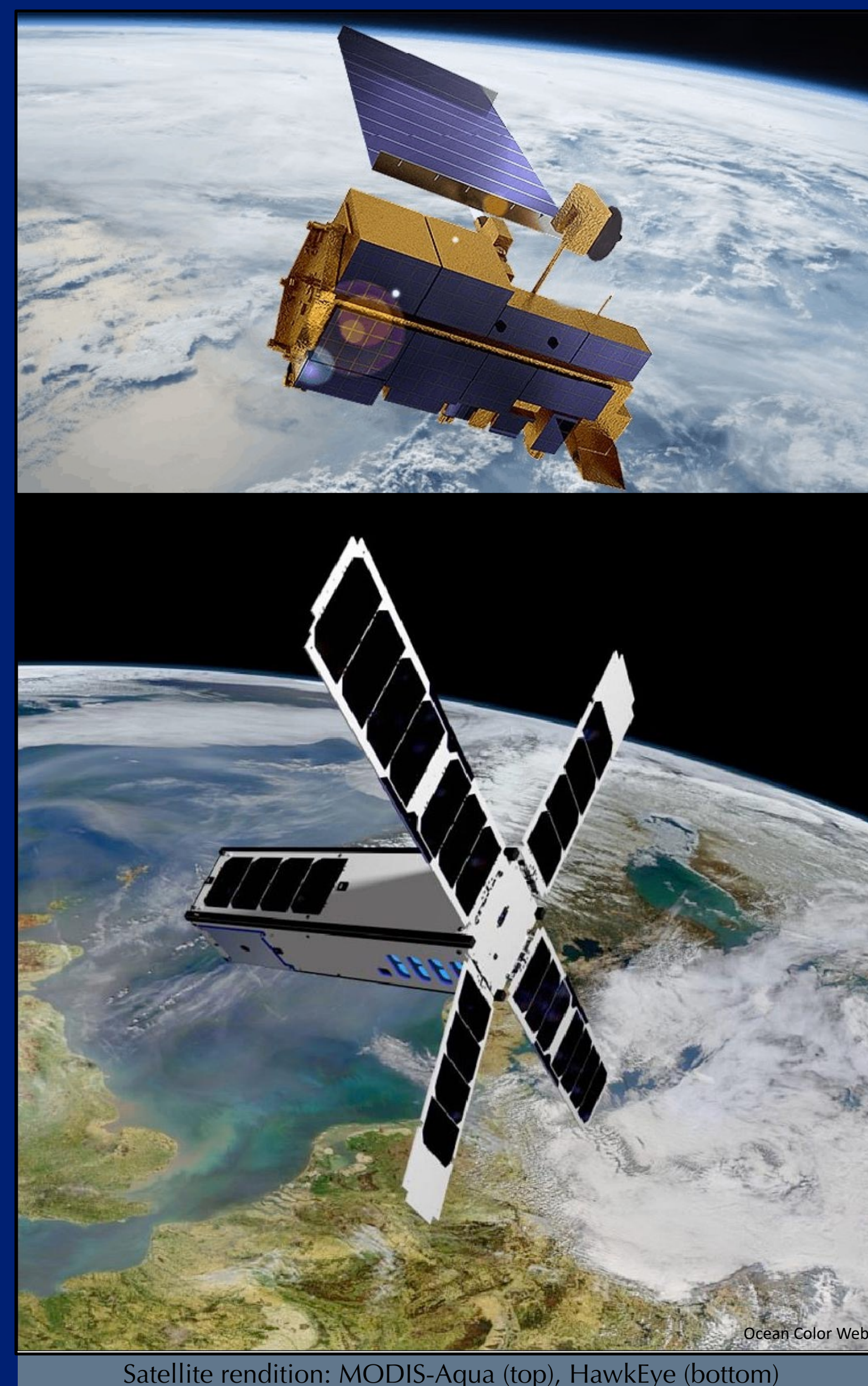


3-Satellites Specifications

The MODIS-Aqua and SeaHawk-HawkEye are two different satellites used for Earth observation, with different characteristics in terms of spatial.

The MODIS-Aqua has a spatial resolution of 1000 meters versus the HawkEye's 120 m. This corresponds to a potential for over 70 times the scientific information per square kilometer.

The higher spatial resolution facilitates the detection of the ranges of ocean variability, especially in nearshore ecosystems.



4C-Methods 3

Statistical analysis of the spectral parameters of each satellite's images, at the pixel level for standard products, chlorophyll a, colored dissolved organic matter, and turbidity.

