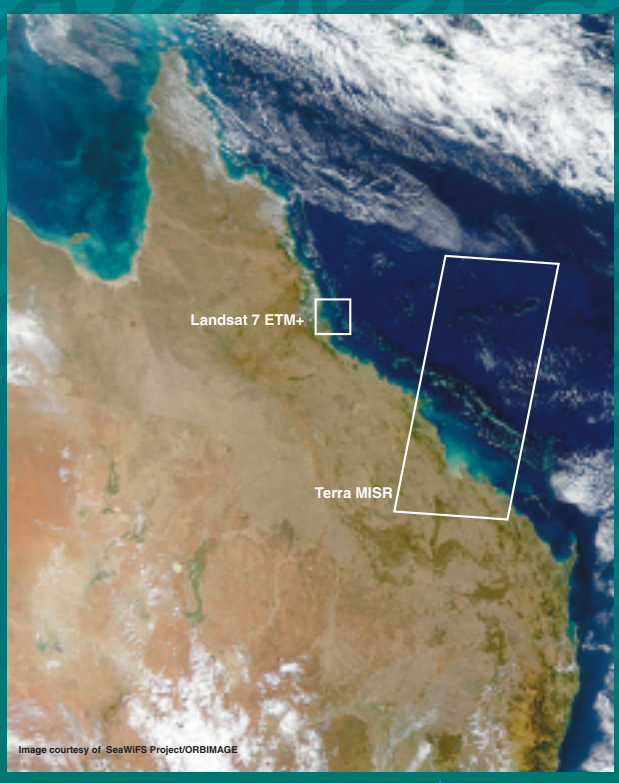
Ocean and Land... Struggling for Mastery

Darwin, *The Voyage of the Beagle*

The Great Barrier Reef Observed by EOSDIS Data



OrbView–2 SeaWiFS wide–angle camera shows the entire 1,800–km–long Great Barrier Reef.

Terra MISR depicts reefs in clear ocean water, as well as near–shore features and turbid water along the Queensland coast.

Nadir, true–color composite images locate and detail reefs, coral cays, reef passages, and coastal features. Light in the blue bands penetrates clear water and is reflected by corals and coral sand at shallow depths. Yellowish light is reflected by suspended sediment and phytoplankton that harm corals. Images display coral health and growth patterns, which are sensitive to ocean currents and turbid water. Coral changes are tropical indicators of global climatic changes.

Landsat 7 ETM+ reveals detailed variations in water depth and water clarity as variations in blue (yellow–blue is turbid water, light blue is shallow clear water, and dark blue is deep water).

National Aeronautics and Space Administration

The Great Barrier Reef is a UNESCO World Heritage Area.

NorW012375 Great Barrier Reef