

JONES REEF (UNION REEFS)

9°53'23.73"N, 114°31'56.36"E

Geographic area

Jones Reef is a shallow and triangular coral reef atoll located on the southeast-facing side of Union Reefs between Union Reefs Unnamed Reef 1 (1.5-2NM northeast) and Higgens Reef (just over 3.5NM southwest); the latter being of similar size and geomorphology. Two deeper coral platforms are also visible between Jones Reef and Higgens Reef; the biggest of which is around 800m by 600m. Overall Jones Reef extends 2km along its west-east axis and reaches close to 2km along its north-south axis.

Land area above water

There are no visible above-water land areas on this reef as at 26 January 2015.

Human infrastructure

There are no man-made structures visible on this reef as at 26 January 2015.

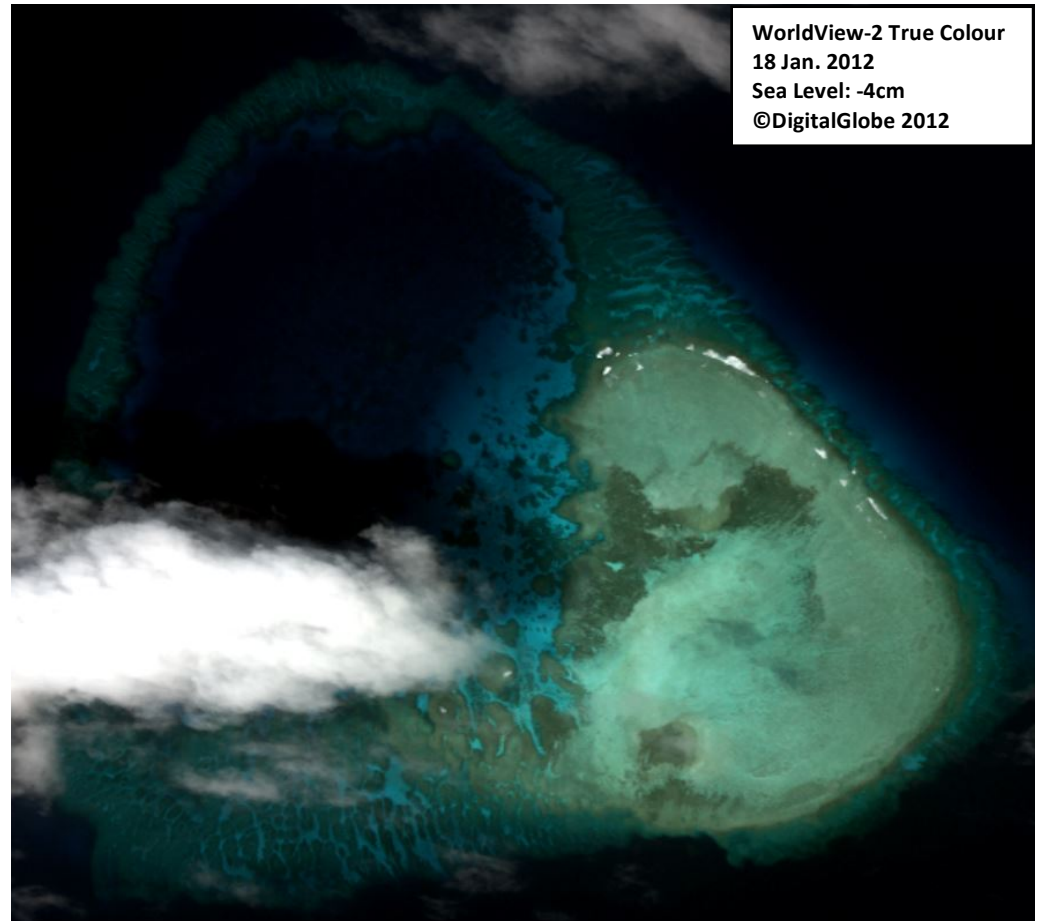
Intertidal and submerged area

The aerial coverage of Jones Reef is 3.04km² comprising a reef flat of 0.82km², a reef slope of 1.06km² and a lagoon of 1.16km². The reef flat is located on the eastern part of this triangular coral reef and

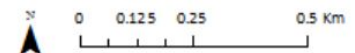
includes a small section of coral/seagrass/algae cover (0.16km²). Most of the reef flat is 1-1.6m deep. On the basis that the 18 January 2012 satellite data were captured when the sea level was 4cm below Mean Sea Level, it is expected that the sea level will decrease by 1.10m at Lowest Astronomical Tide, at which point only small coral heads that may be shallow enough will uncover.

A large lagoon (140% of the reef flat and 40% of the overall reef formation) extends over 1km west of the reef flat. It is 1.3km long along its north-south axis and 8-11m deep. It is characterised by a reticulate reef system. Its northern and western edges are a narrow (around 100m) but continuous coral ridge that is connected to the reef slope and is 5-8m deep. The southern edge extends 500m and pronounced spurs and grooves are visible.

Dredging marks are visible on the central part of the reef flat (7100m²) in the 18 January 2012 and 26 February 2014 satellite images, the latter being viewable on Google Earth. However, they occupy a larger area and are deeper in the 26 January 2015 satellite image viewable on Google Earth, which suggests that extensive dredging activities occurred between 26 February 2014 and 26 January 2015.



WorldView-2 True Colour
18 Jan. 2012
Sea Level: -4cm
©DigitalGlobe 2012

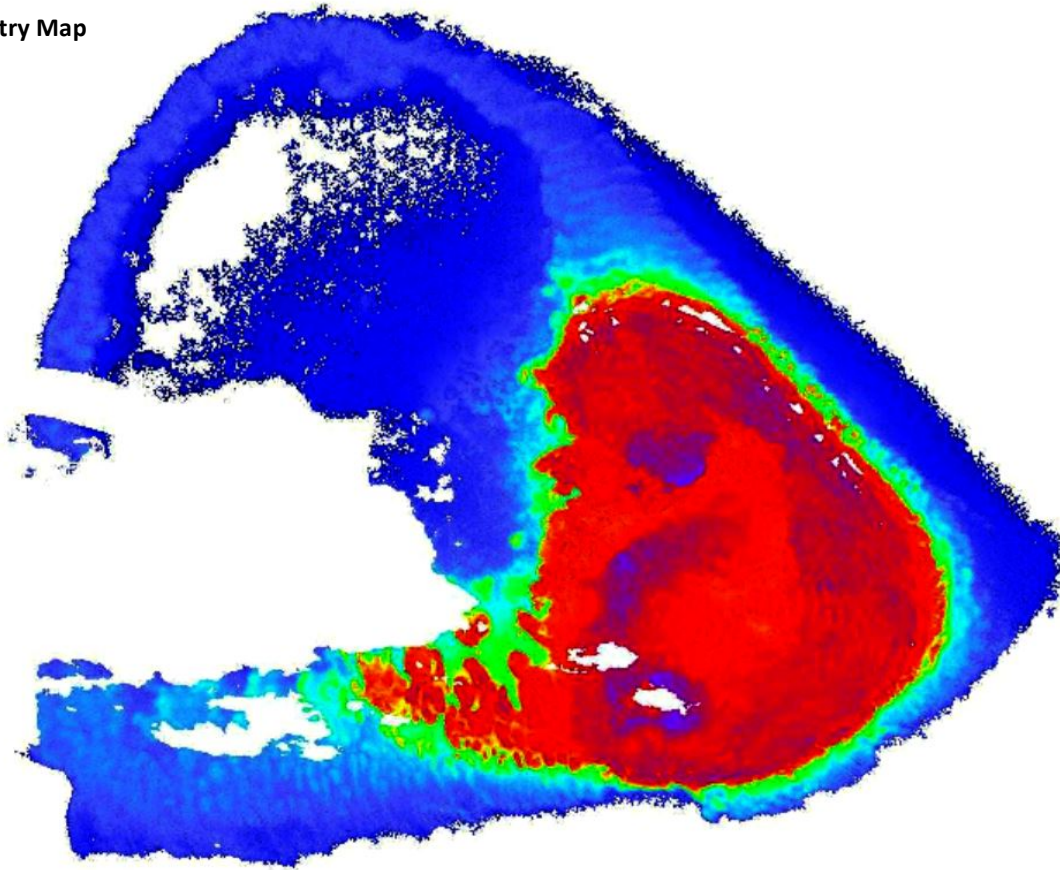


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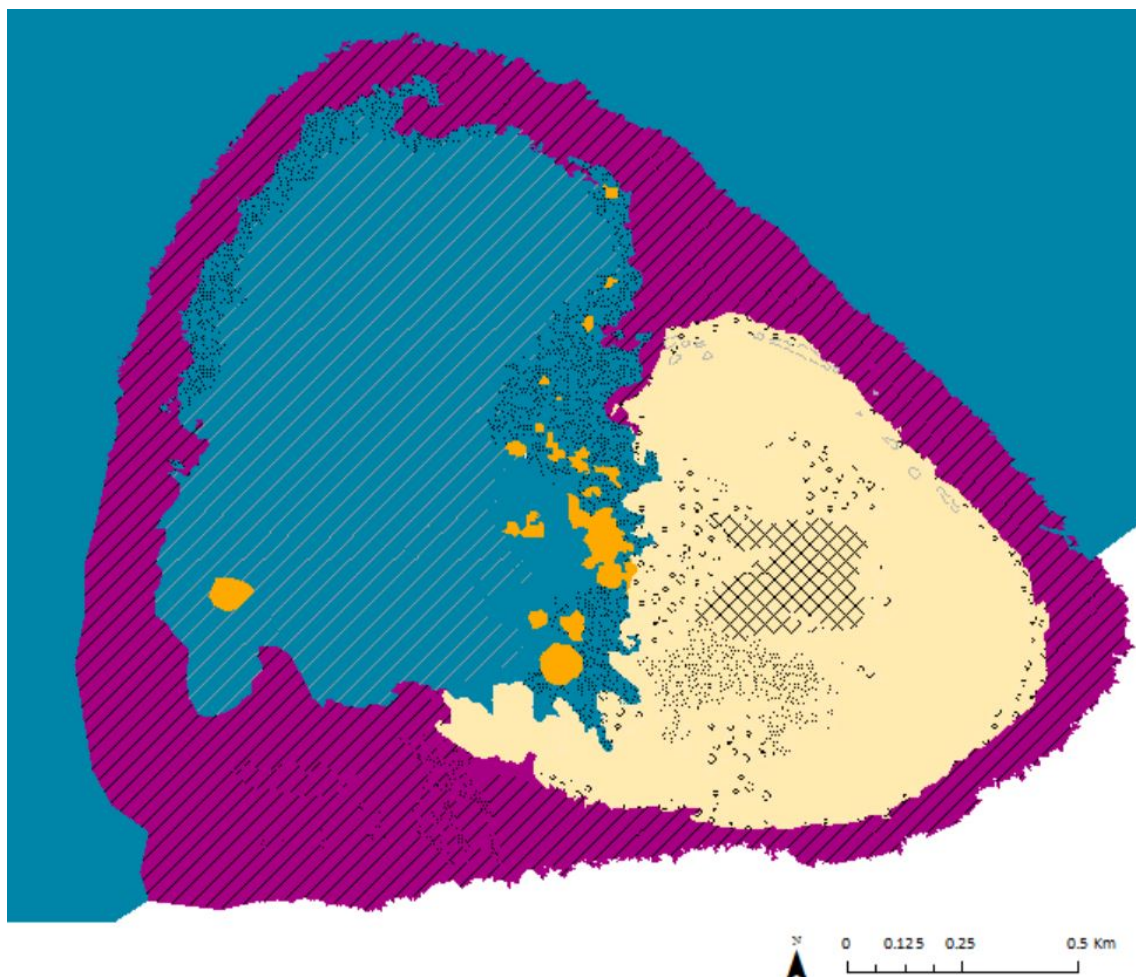
9°53'23.73"N, 114°31'56.36"E

Derived from WorldView-2 satellite data captured on 18 January 2012 [Sea Level: -4cm]

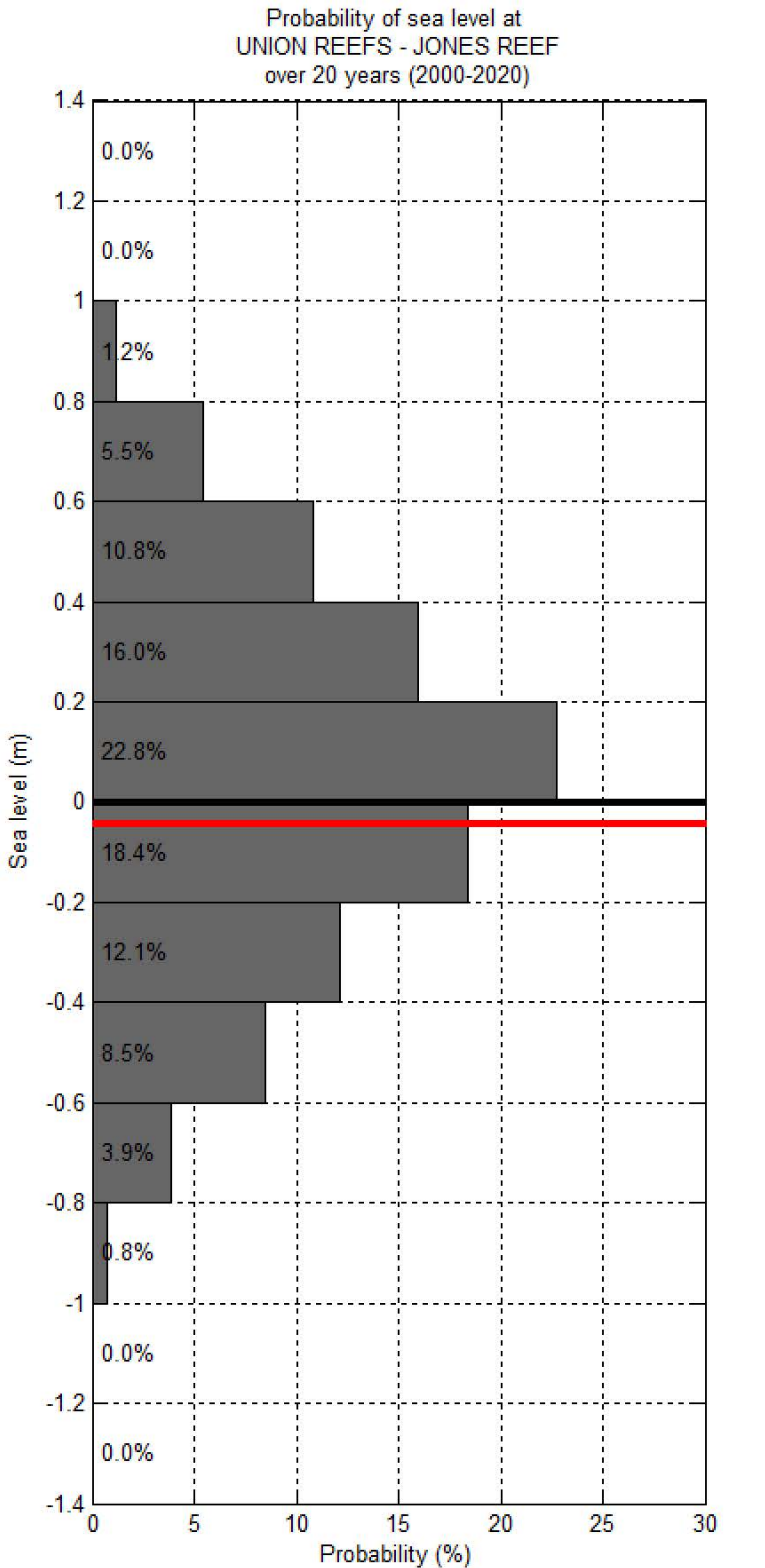
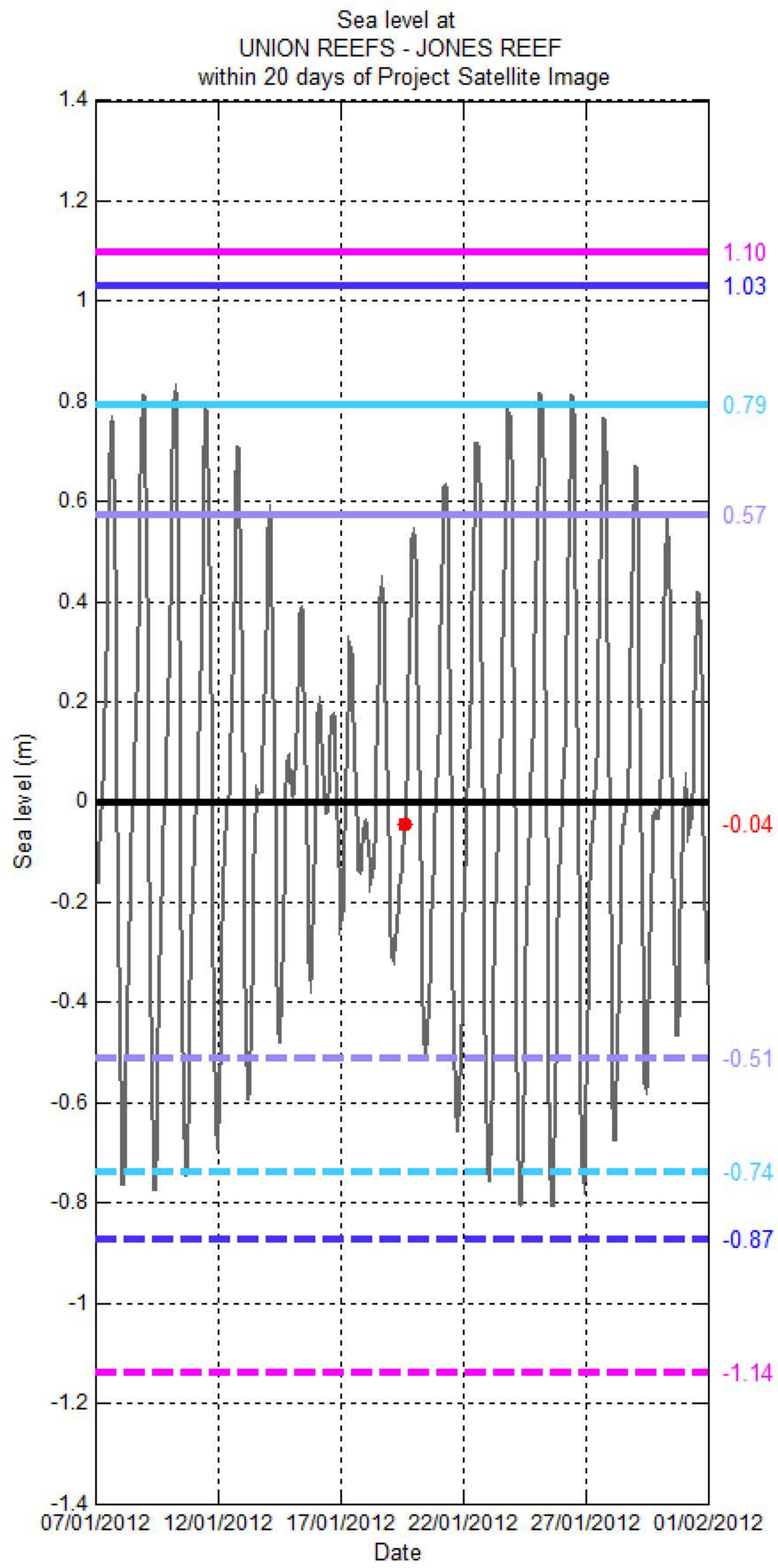
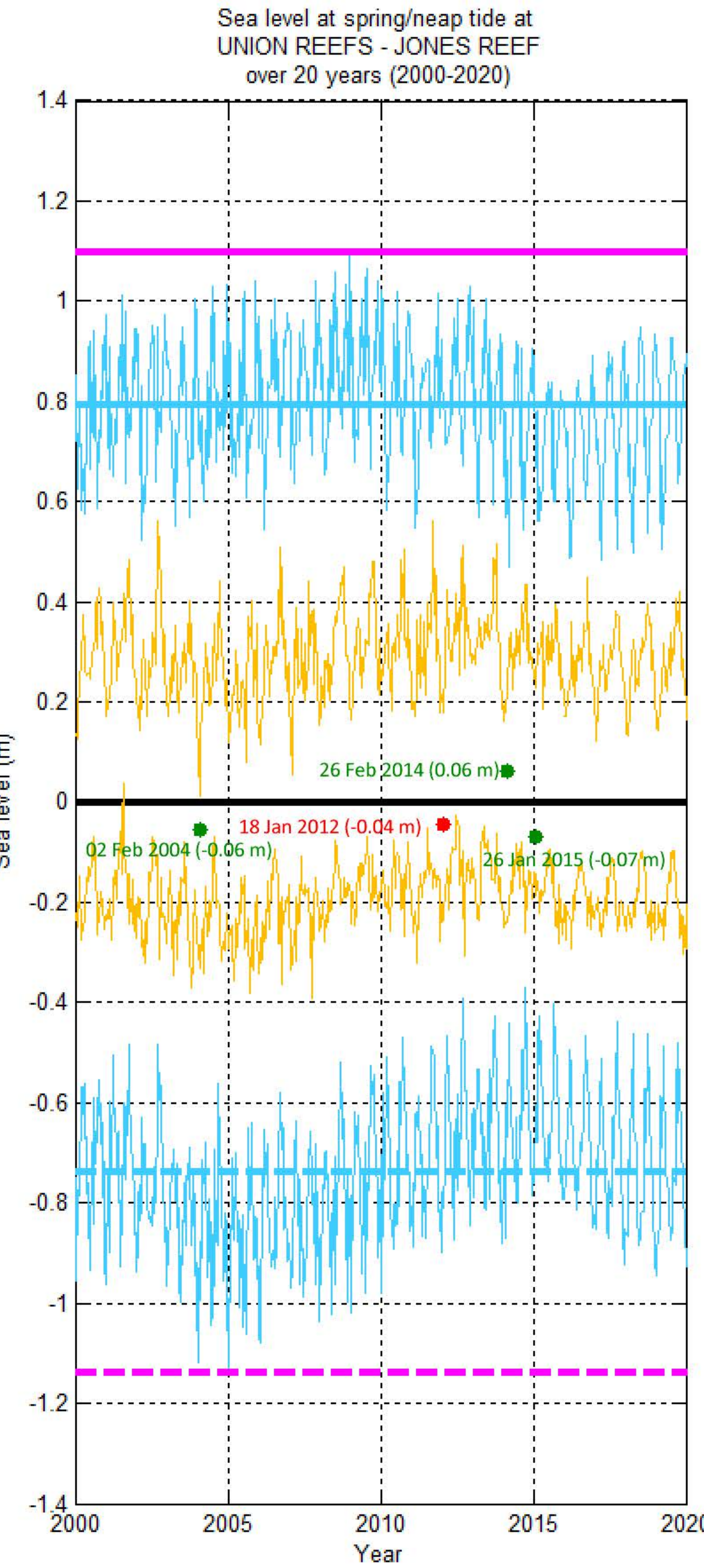
Bathymetry Map



Habitat Classification and Land Cover Map



Sea level (SL) at JONES REEF (UNION REEFS)
[9°49'49.93"N, 114°27'53.04"E]



Hourly sea level SL at spring tide SL at Mean High Water Spring SL at highest tide of the year SL at Mean Higher High Water SL at Highest Astronomical Tide Project Satellite Image

Mean Sea Level SL at neap tide SL at Mean Low Water Spring SL at lowest tide of the year SL at Mean Lower Low Water SL at Lowest Astronomical Tide Google Earth and Landsat satellite images