MARALIE REEF

9°12’25.76”N, 113°39’49.27”E

Geographic area

Maralie Reef is a small oceanic coral reef platform located in the centre of the Spratlys, southwest of Union Reefs, over 200NM west of the island of Palawan, northwest of the island of Borneo and over 300NM east of Vietnam’s mainland. The closest shallow geographic features is Pearson Reef, over 13NM south. This coral reef platform measures 1km along its north-south axis and 800m along its west-east axis.

Land area above water

There do not appear to be any any above-water land areas on this coral reef platform based on a review of satellite images from 29 April 2015 and 17 August 2013 (viewable on Google Earth).

Human infrastructure

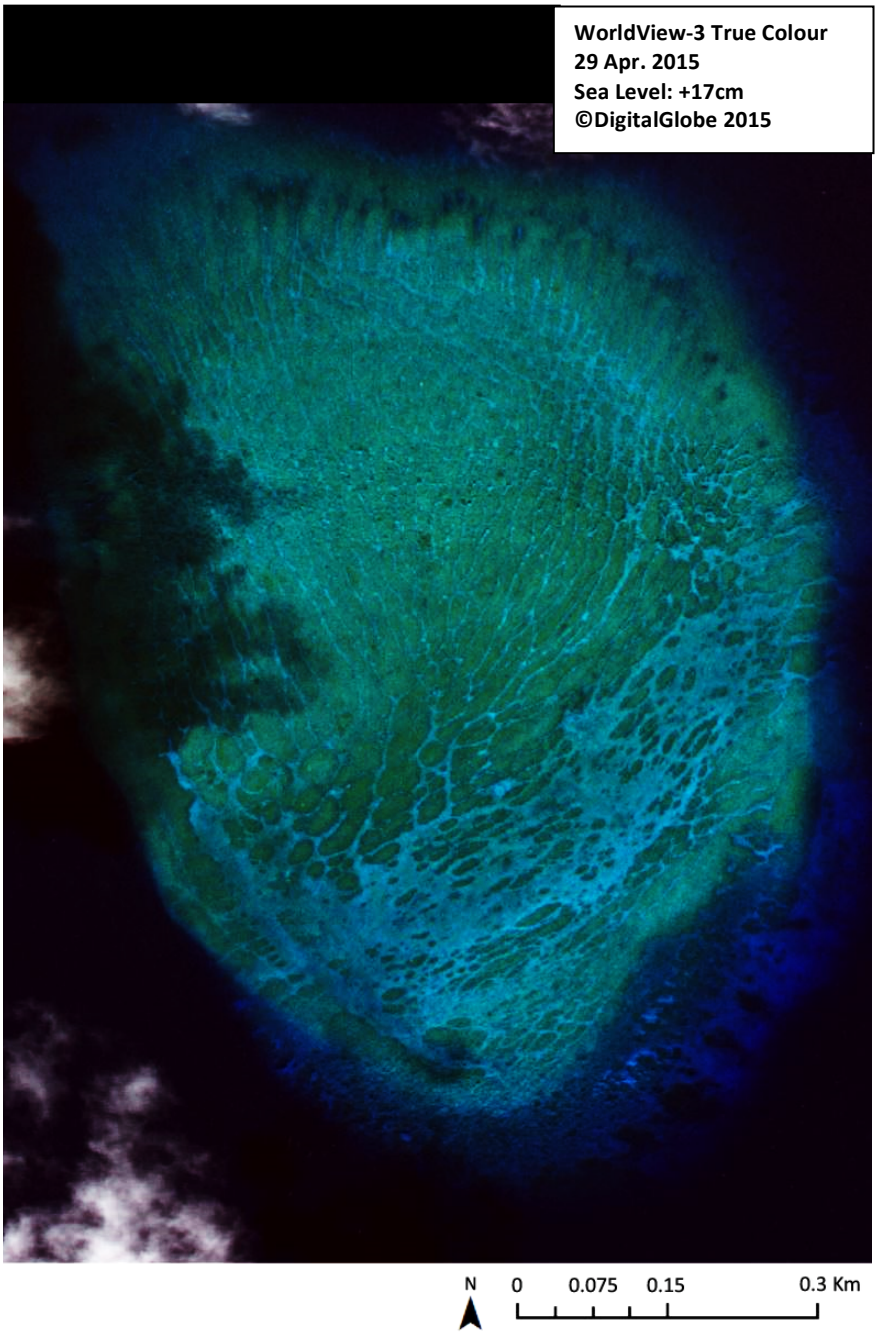
There are no man-made structures visible on this reef as at 29 April 2015.

Intertidal and submerged area

The aerial coverage of this small reef platform is 0.72km^2. It is deeper than most other shallow features, the shallowest part of the platform being 7-9m deep. The sea level in the 29 April 2015 satellite image is estimated to have been 17cm above Mean Sea Level. It is expected that the sea level decreases by 1.38m at Lowest Astronomical Tide.

Pronounced spurs and grooves are visible throughout. Along the eastern and southern side of the platform where it is shallower, spurs and grooves can also be observed that drop to a depth of 10-12m or more within a distance of less than 50m.

No dredging marks or other clear traces of human activities were visible on this reef as at 29 April 2015. However, given the depth of this feature, this finding may not be conclusive.



MARALIE REEF

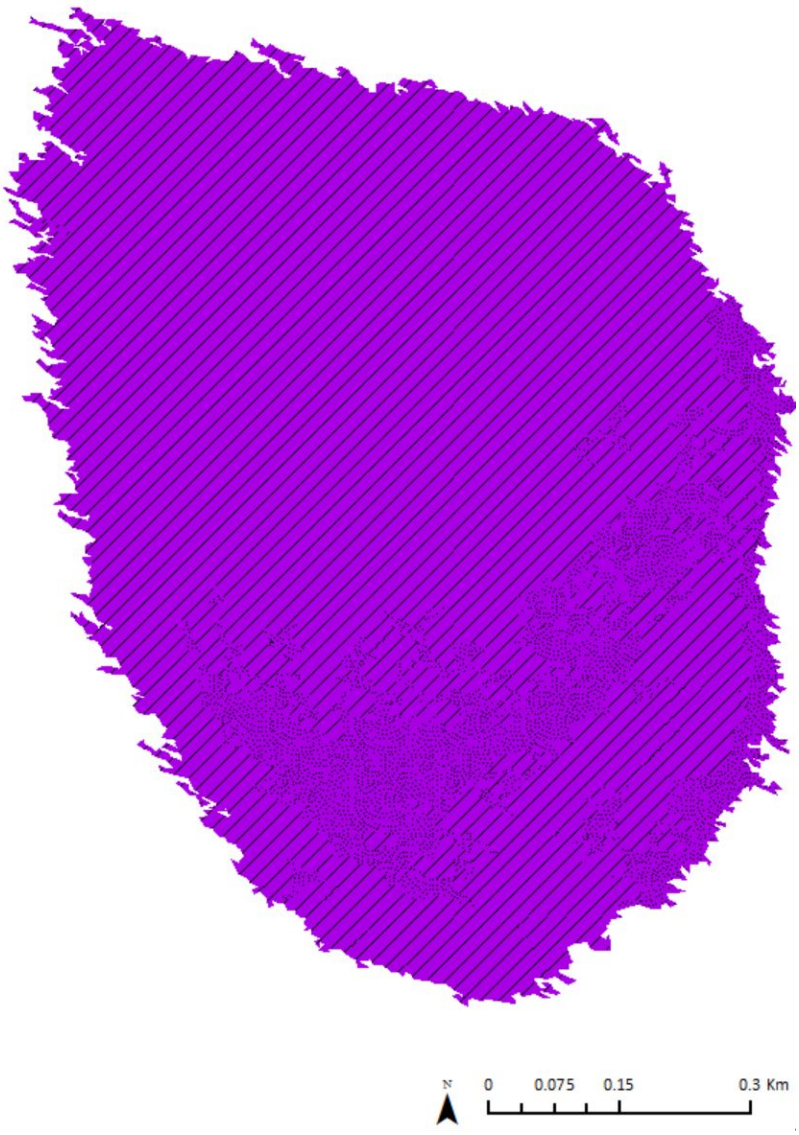
9°12’25.76”N, 113°39’49.27”E

Derived from WorldView-3 satellite data captured on 29 April 2015 [Sea Level: +17cm]

Bathymetry Map



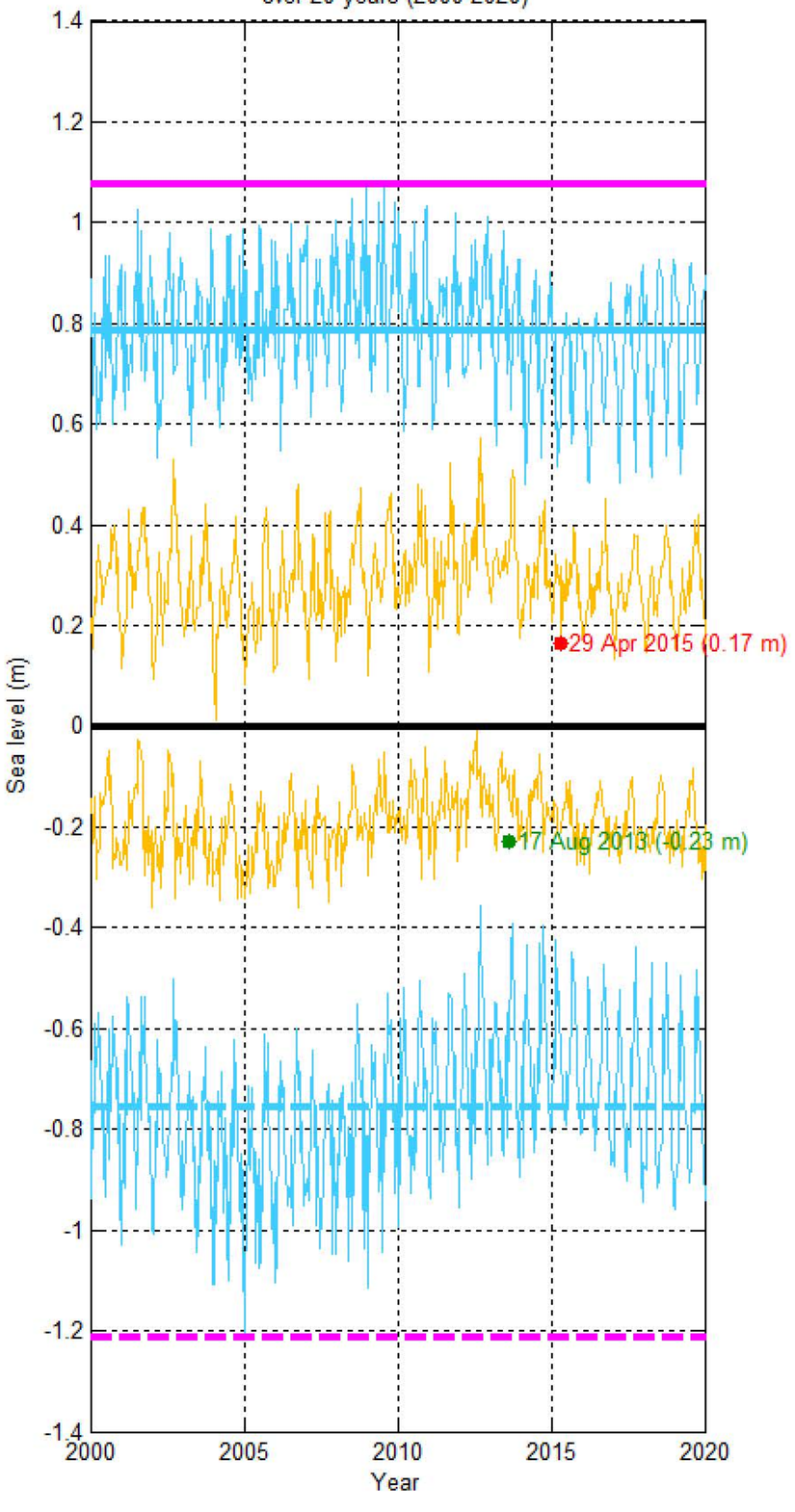
Habitat Classification and Land Cover Map



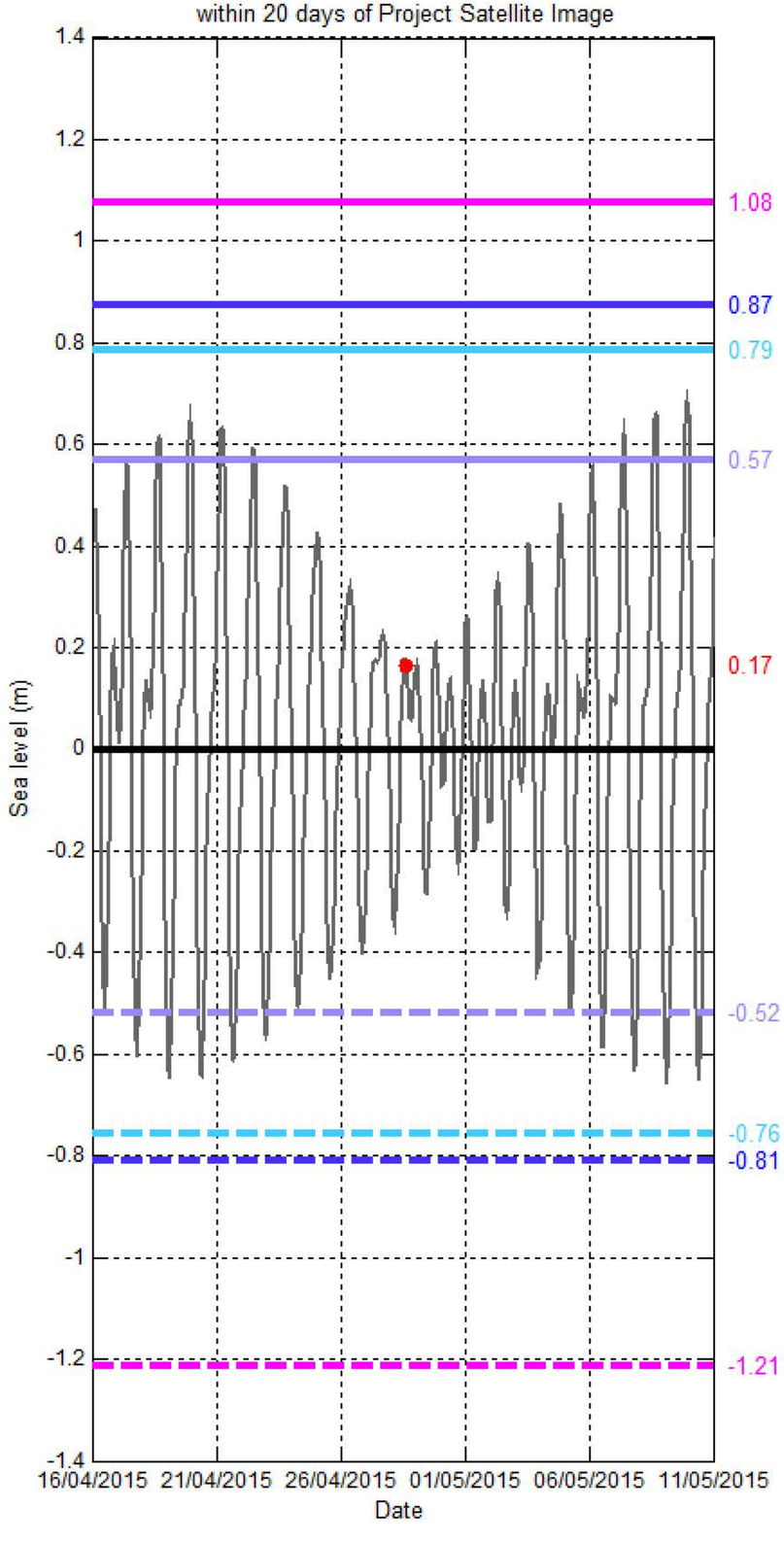
Sea level (SL) at MARALIE REEF

[9°12'25.76"N, 113°39'49.27"E]

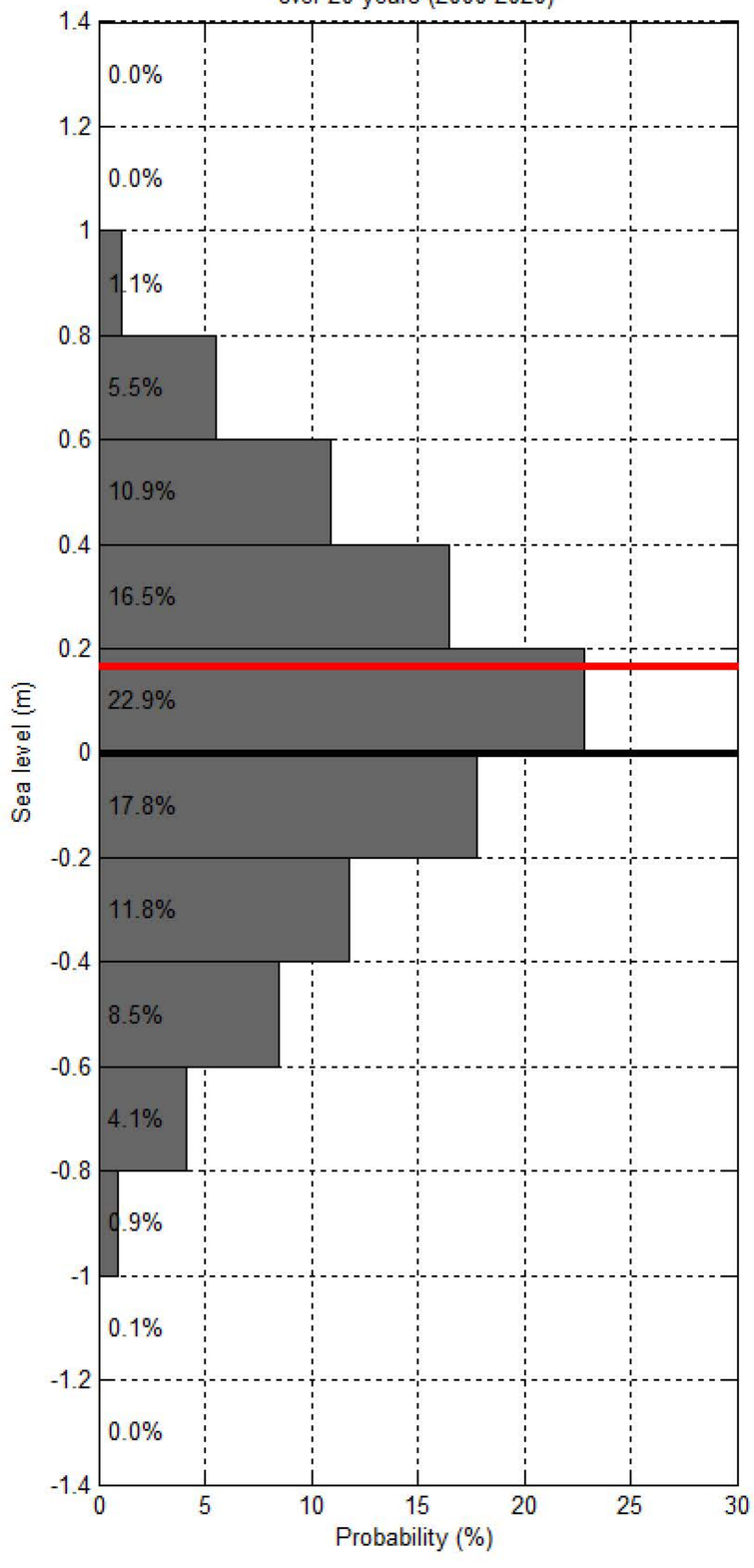
Sea level at spring/neap tide at
MARALIE REEF
over 20 years (2000-2020)



Sea level at
MARALIE REEF
within 20 days of Project Satellite Image



Probability of sea level at
MARALIE REEF
over 20 years (2000-2020)



Hourly sea level
Mean Sea Level
SL at spring tide
SL at neap tide
SL at Mean High Water Spring
SL at Mean Low Water Spring
SL at highest tide of the year
SL at lowest tide of the year
SL at Mean Higher High Water
SL at Mean Lower Low Water
SL at Highest Astronomical Tide
SL at Lowest Astronomical Tide
Project Satellite Image
Google Earth and Landsat satellite images