

DALLAS REEF

7°37'13.32"N, 113°47'40.07"E

Geographic area

Dallas Reef is an oceanic coral atoll that developed on top of a seamount in the southern part of the Spratlys. It is located approximately 165NM northwest of the island of Borneo and under 200NM southwest of Balabac Island, south of the island of Palawan. The closest shallow geographic features are Ardasier Reef, 5.3 NM east, Swallow Reef, close to 14NM south and Mariveles Reef, 19NM north. This elongated atoll extends 9.3km along its southwest-northeast axis and under 2km on its north-south axis.



Land area above water

There is no land area that is clearly above water in the 19 February 2015 image. However, several stretches of a narrow (around 30m-wide) sand bank have shaped along the seaward edge of the eastern and southeastern side of the reef flat (a 12km-long section) and appear to have some parts that are uncovered whilst others are awash. However, they are all expected to be fully submerged with an increase in sea level of 85cm as is expected at Mean High Water Spring.

Human infrastructure

There are no man-made structures visible on this reef as at 19 February 2015.

Intertidal and submerged area

The aerial coverage of this atoll covers 14.18km² comprising a reef flat of 7.26km² that surrounds a lagoon of 5.71km² and a reef slope of 1.20km². The reef flat is a 19km long and 300-450m-wide band that separates the lagoon from the reef slope; it is wider in the north than in the south. On the northern side, the reef flat includes a sandy back reef that slopes into the lagoon. Apart from the sand banks described above, the shallow part is around 1-1.5m; large areas are thus expected to uncover at Lowest Astronomical Tide when the sea level decreases by 1.13m. The sand-dominated back reef on the northern side of the lagoon is 2-4m deep. The lagoon is 6-10m deep and characterised by a reticulate reef comprising connected shallow coral heads and ridges that extend in 500m-long coral ribbons. The visible part of the reef slope is narrow all around; it generally does not exceed 30 -60m in the south but is slightly wider in the west, north and south where it extends 100-150m. The great depth of the surrounding seabed suggests that the reef slope is likely to be very steep. Nevertheless, pronounced spurs and grooves are visible all around.

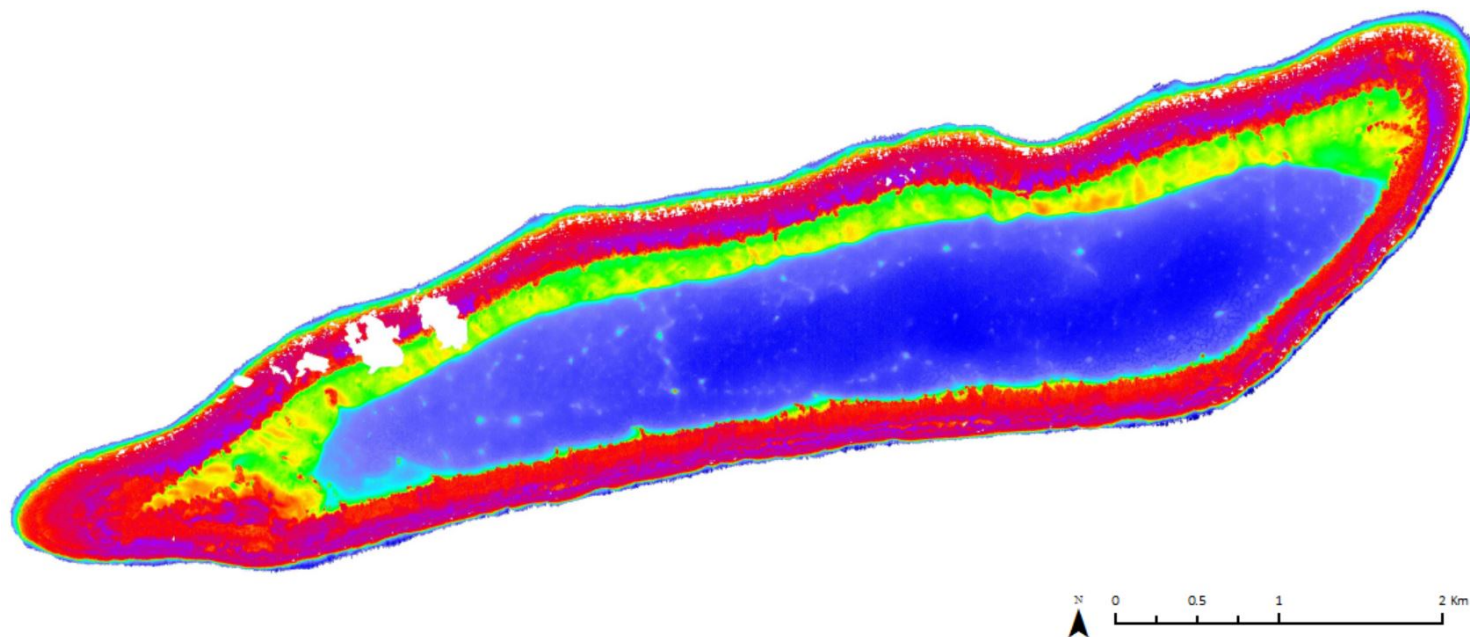
Dredging marks can be observed in discrete areas on the eastern and southern sides of the reef flat that are coral/seagrass/algae-dominated, a habitat where giant clams are commonly found. These marks may be the result of destructive fishing methods or coral harvesting.

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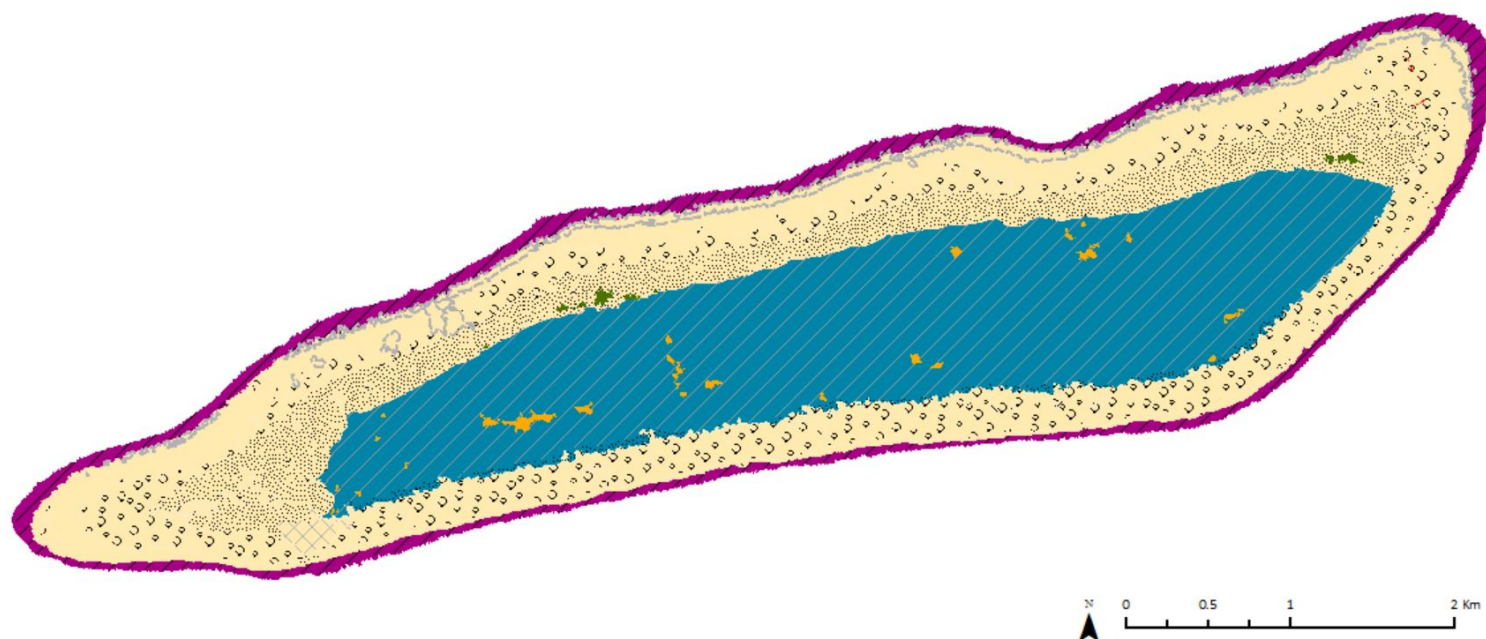
7°37'13.32"N, 113°47'40.07"E

Derived from WorldView-2 satellite data captured on 19 February 2015 [Sea Level: -5cm]

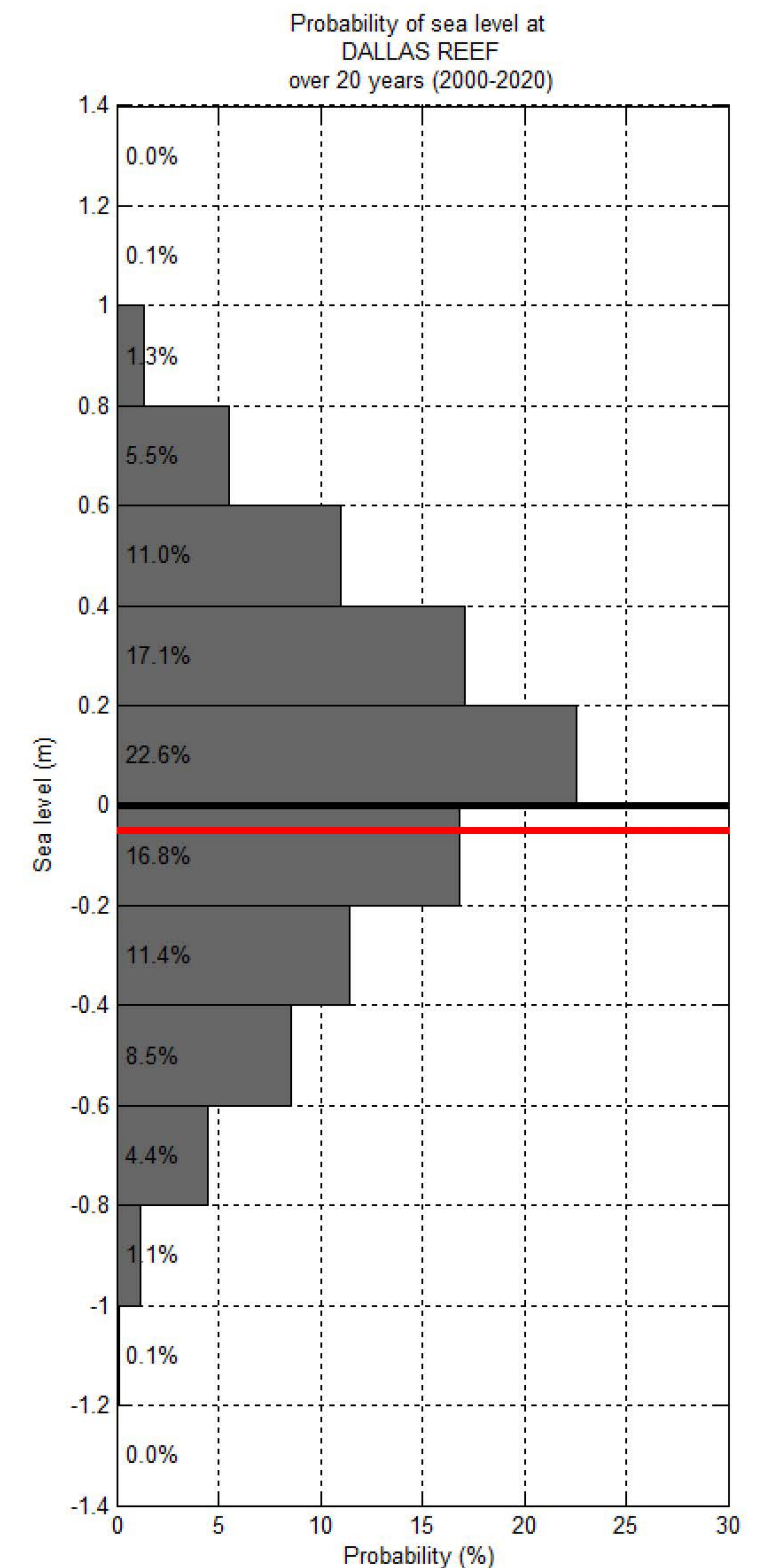
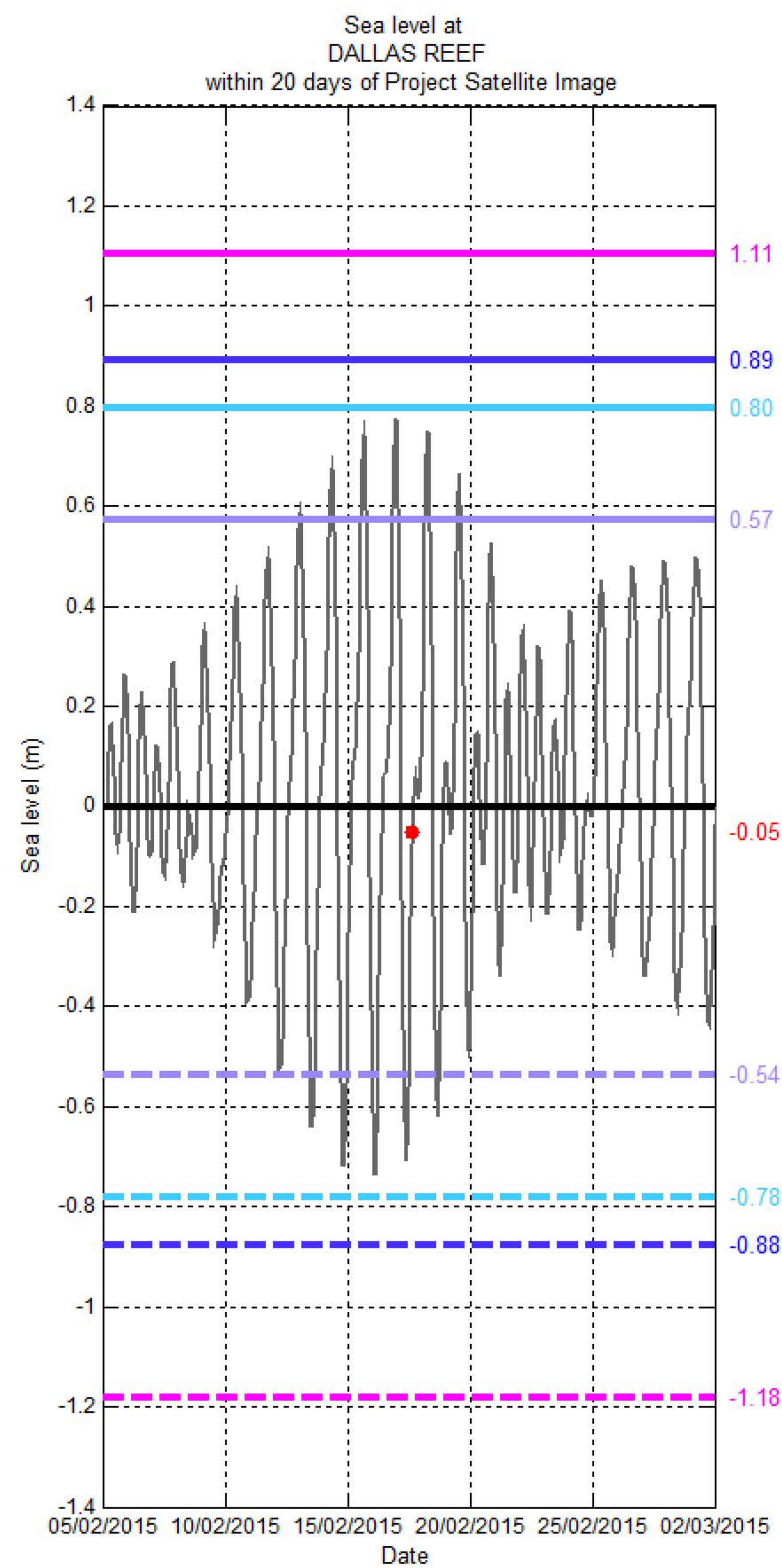
Bathymetry Map



Habitat Classification and Land Cover Map



[7°37'13.32"N, 113°47'40.07"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