

ROYAL CAPTAIN SHOAL

9°02'43.83"N, 116°39'48.01"E

Geographic area

Royal Captain Shoal is an oceanic coral atoll that developed on top of a seamount in the eastern part of the Spratlys. It is located less than 45NM southwest of the island of Palawan and 120NM northwest of the island of Borneo. The closest shallow geographic features are Investigator Northeast Shoal, 12.5NM northwest and Half Moon Shoal 22NM southwest. This oval atoll extends 4.3km along its northwest-southeast axis and reaches 2.7km on its northeast-southwest axis.

Land area above water

There are no above-water land areas in the 4 May 2013 satellite image, or in the 23 May 2013 satellite image viewable on Google Earth.

Human infrastructure

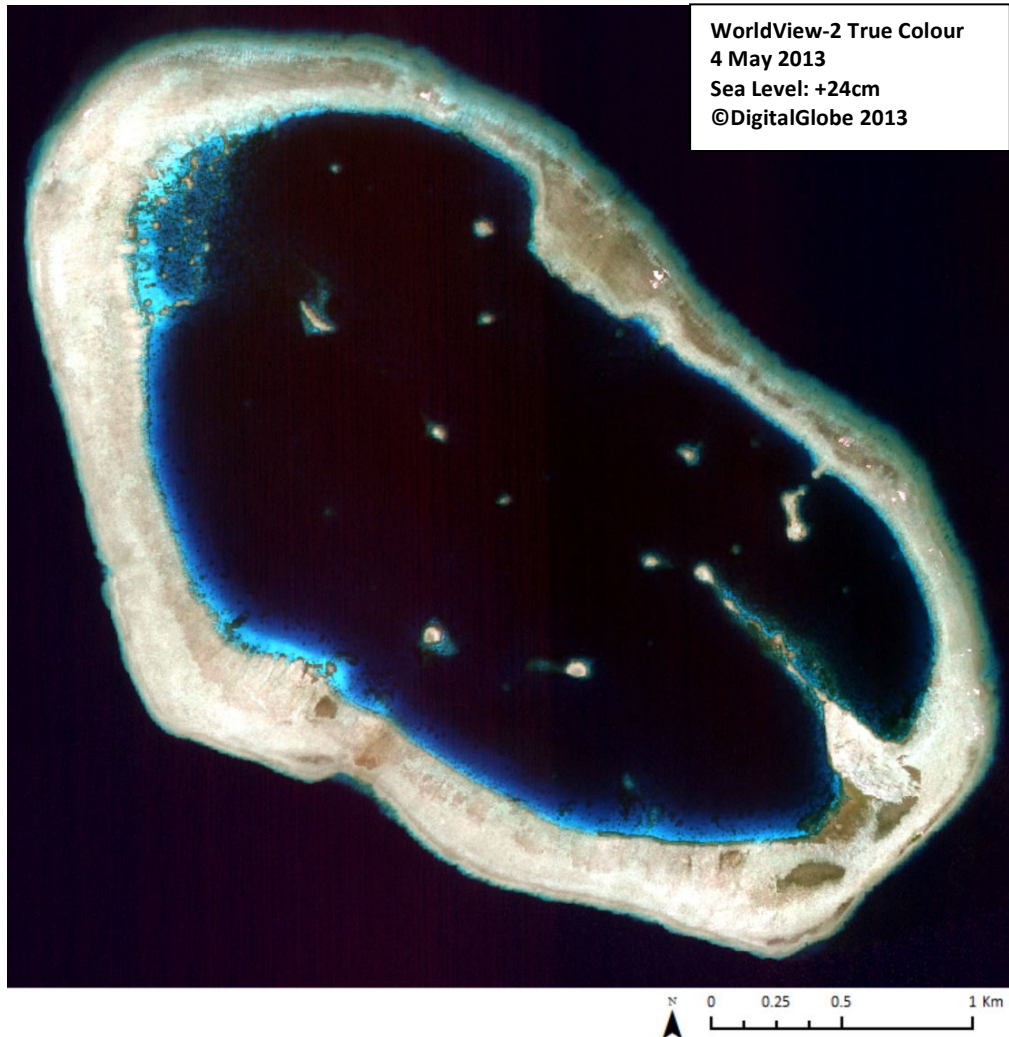
There are no man-made structures visible on this reef as at 23 May 2013.

Intertidal and submerged area

The aerial coverage of the atoll is 8.90km², comprising a reef flat of 2.96km², a lagoon of 5.44km² and a reef slope of 0.50km². The reef flat is a 10.5km long

band that separates the lagoon from the reef slope; it is wider and shallower on the southwest-, northwest- and southeast-facing sides where it reaches 400m as compared to the northeast-facing side, where it is generally 200m wide or less. The shallowest parts of the reef flat are 1.2-1.5m deep but it is mostly 1.5-2m deep. The narrowest parts of the reef flat are the deepest, up to more than 2m in some locations. These measurements are based on the 4 May 2013 satellite image which was captured when the sea level is estimated to have been 0.24cm above Mean Sea Level. Some areas that are 1.34m deep and are mostly located on the southwest-facing half of the reef flat are expected to uncover at Lowest Astronomical Tide. The edges of the lagoon are steep as it reaches 6-8m within a distance of 50m or less of the reef flat, except on the northwestern end of the lagoon which is slightly shallower and where a dense reticulate reef system can be observed that seems to be connected to the reef flat. Several 100m long or more shallow coral heads can also be observed in the lagoon, around which a reticulate reef system is also visible. Although the satellite image does not show that the reticulate reef system extends to the entire lagoon, it may be so although it is not visible due to the great depth of the lagoon. Visible knolls, coral heads and coral bottom areas in the lagoon total 0.68km². The visible part of the reef slope is narrow all around despite being wider on the northwest-, north- and northeast-facing sides, where it extends 100m or less. By contrast, it generally does not exceed 20m off the south- and southeast-facing sides. The great depth of the surrounding seabed suggests that the reef slope is likely to be very steep. Pronounced spurs and grooves are visible throughout.

No dredging marks can be seen on this atoll as at 23 May 2013.

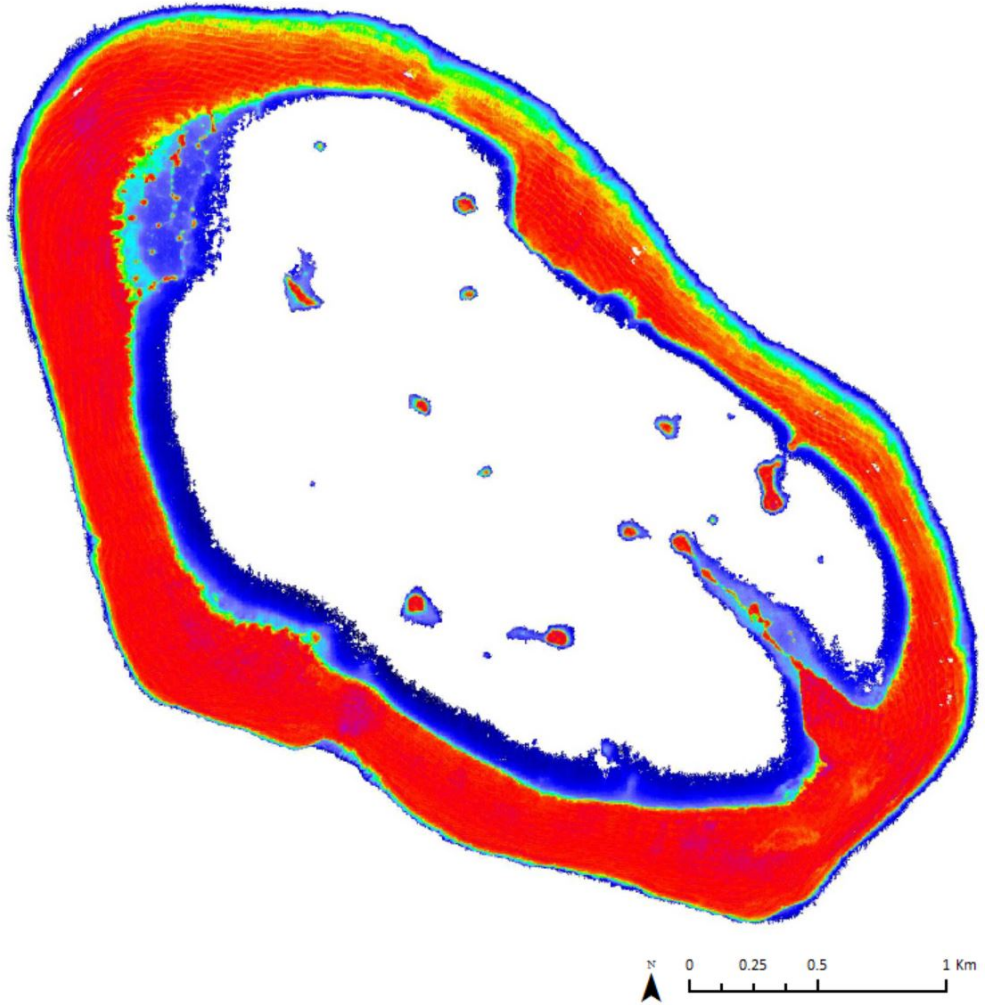


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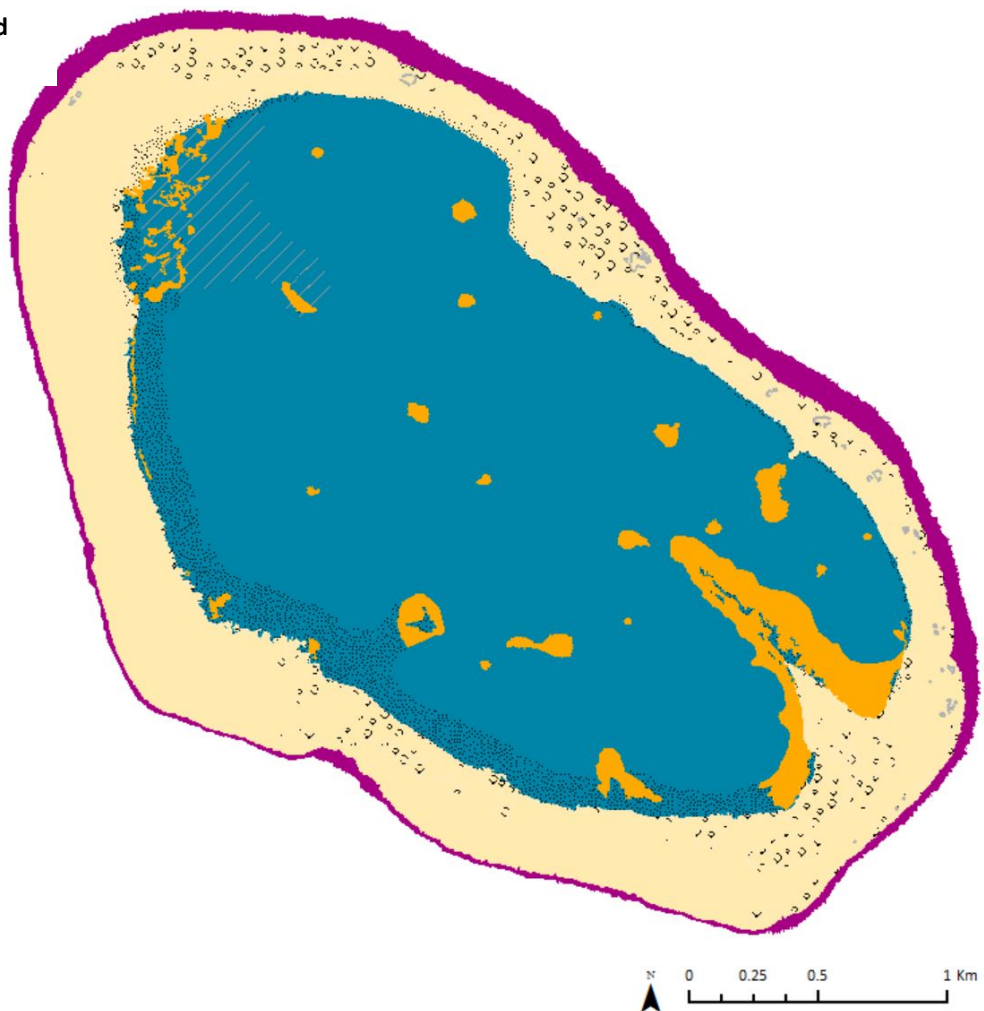
9°02'43.83"N, 116°39'48.01"E

Derived from WorldView-2 satellite data captured on 4 May 2013 [Sea Level: +24cm]

Bathymetry Map

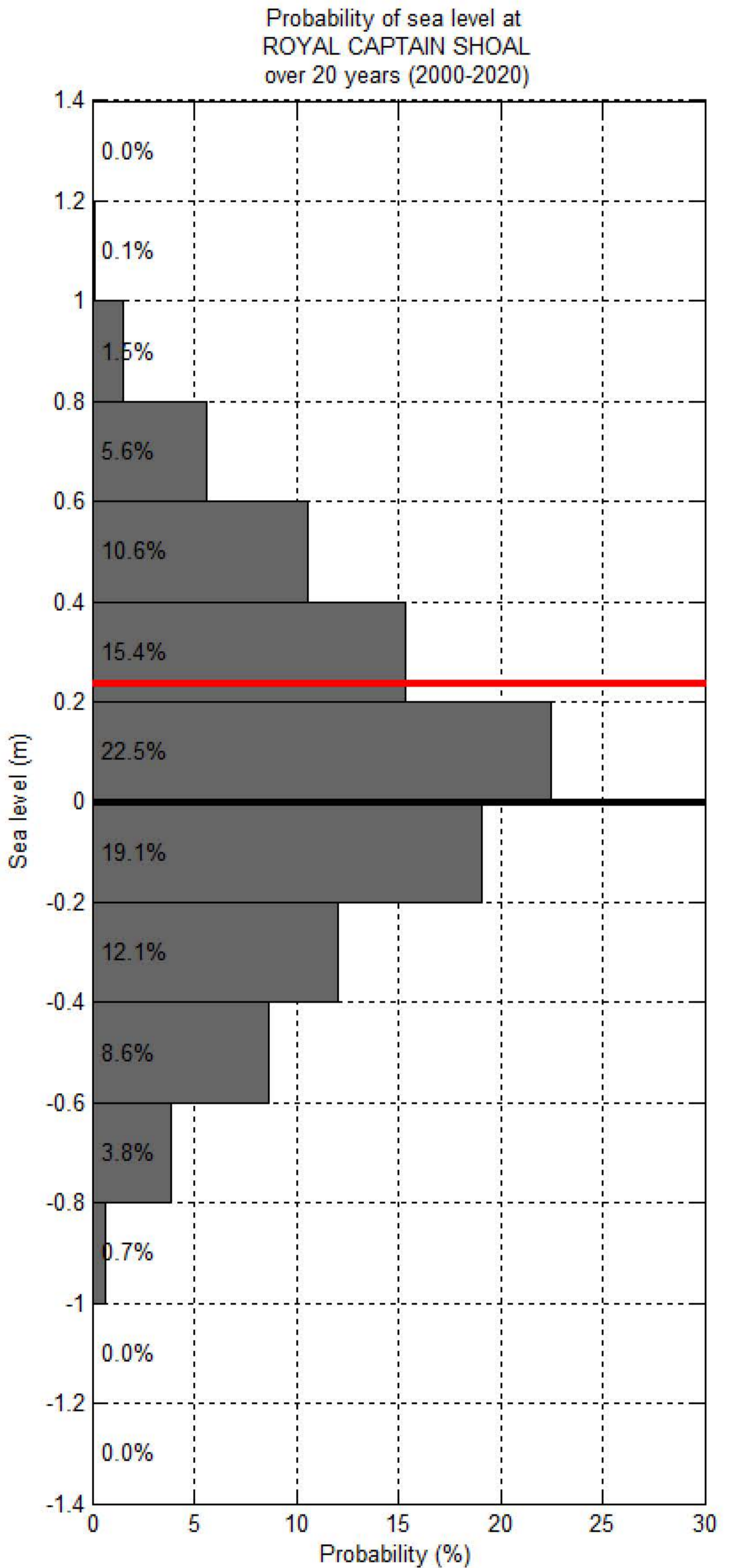
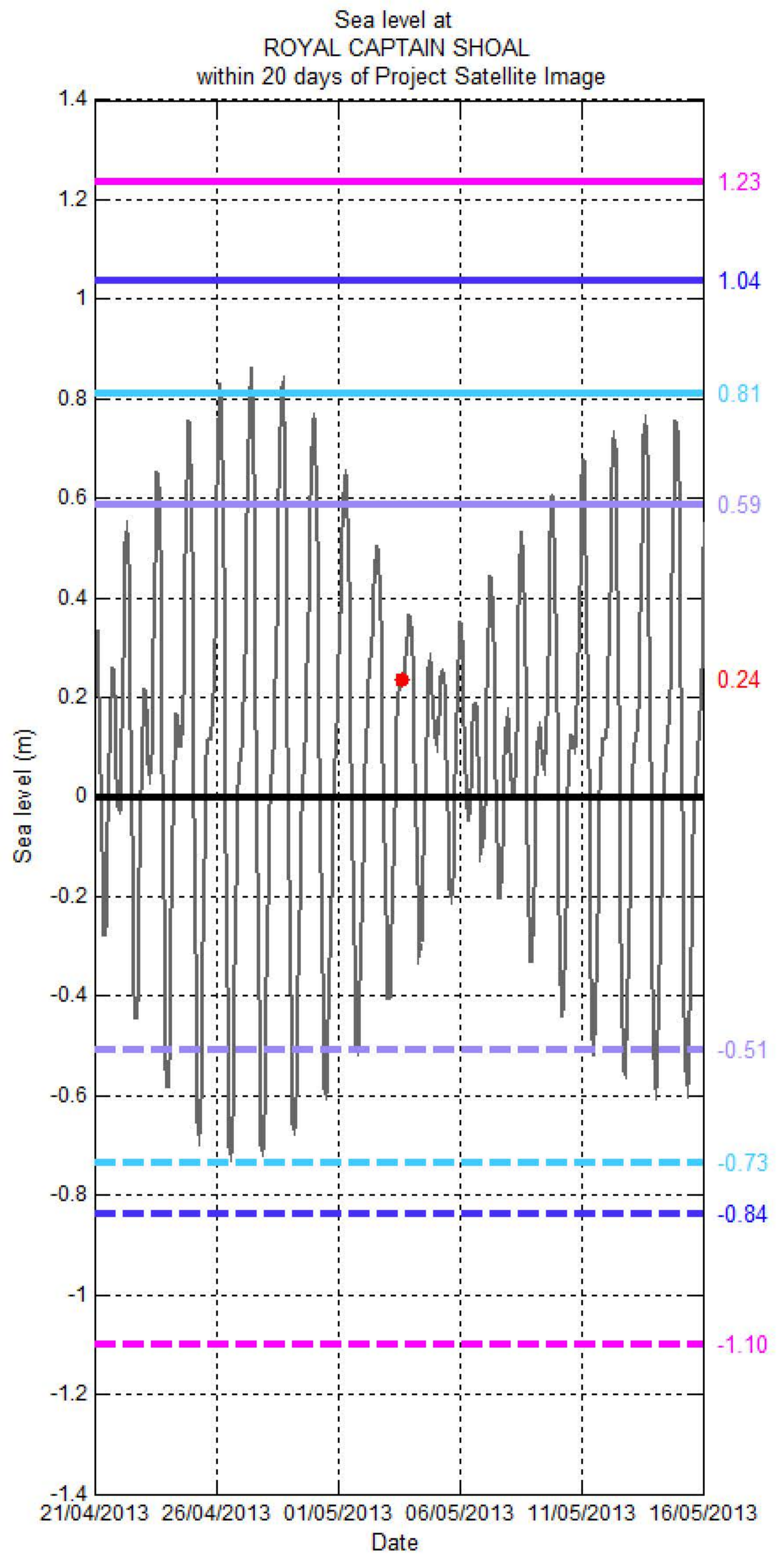
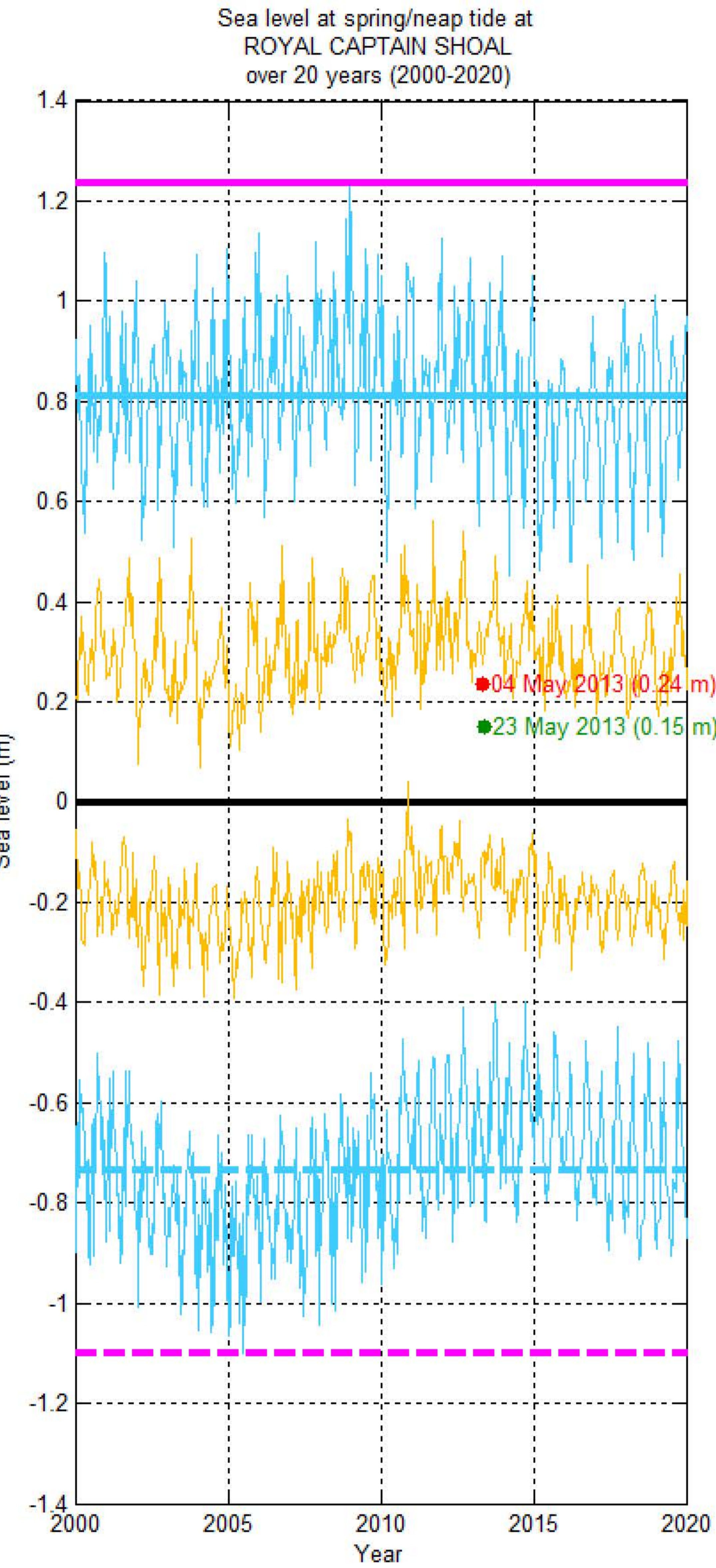


Habitat Classification and Land Cover Map



Sea level (SL) at ROYAL CAPTAIN SHOAL

[9°02'43.83"N, 116°39'48.01"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