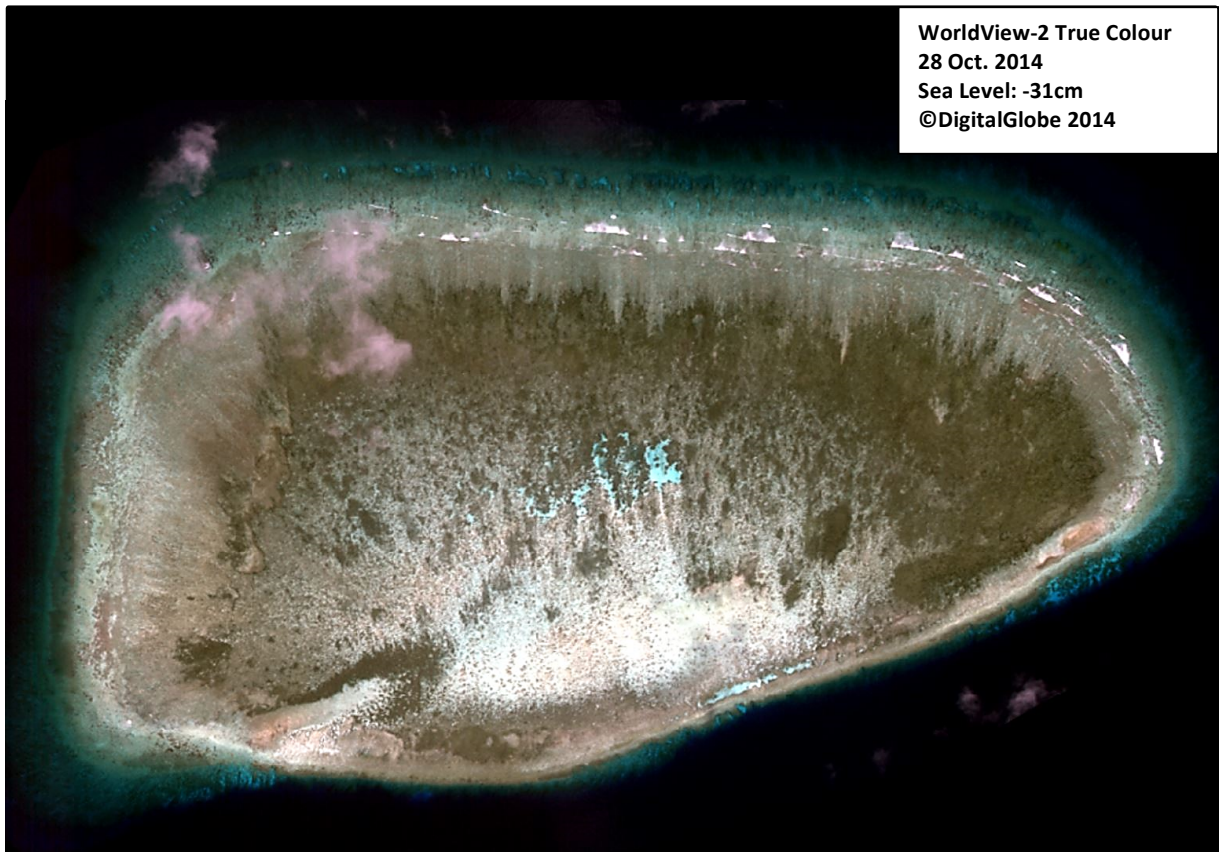


LOUISA REEF

6°19'55.08"N, 113°14'28.29"E

Geographic area

Louisa Reef is a small and shallow oceanic coral reef platform, which has developed on top of a seamount in the southwestern part of the Spratlys. It is located 110NM north of the island of Borneo. The closest shallow geographic feature is Royal Charlotte Reef, just over 41NM northeast. The reef platform extends 2km along its west-east axis and reaches 1km along its north-south axis.



Land area above water

There is one small above-water sand bank (60m by 15m) in the 28 October 2014 which is also visible in the 11 November 2014 satellite image viewable on Google Earth although it is partly submerged in the latter. It looks partly awash in both satellite images and on the basis that the images were captured when the sea level was 31cm and 28cm below Mean Sea Level, respectively, it is expected that the bank is submerged at Mean High Water Spring with an increase in sea level of over 1m.

Human infrastructure

There appears to be a small beacon on this reef in the 28 October 2014 satellite image but this is subject to *in-situ* confirmation.

Intertidal and submerged area

The aerial coverage of this coral platform is 1.98km², comprising a reef flat of 1.59km² and a reef slope of 0.39km². The southern half and western side of the reef flat are shallow: 1m or less in the 28 October 2014 satellite image that was captured at somewhat low tide (31cm below Mean Sea Level). Parts that are 88cm deep or less are expected to be exposed at Lowest Astronomical Tide. The rest of the reef flat is 1.2-2m deep. Overall, this reef flat is coral/seagrass/algae dominated, except for a sandy area in the middle of the southern side. The reef slope extends less than 50m seaward off the southern side but it extends 100 off the other sides (even 130m off the northwestern and southwestern sides). This suggests that the reef slope is steeper in the south than on the other sides. Spurs and grooves are visible throughout.

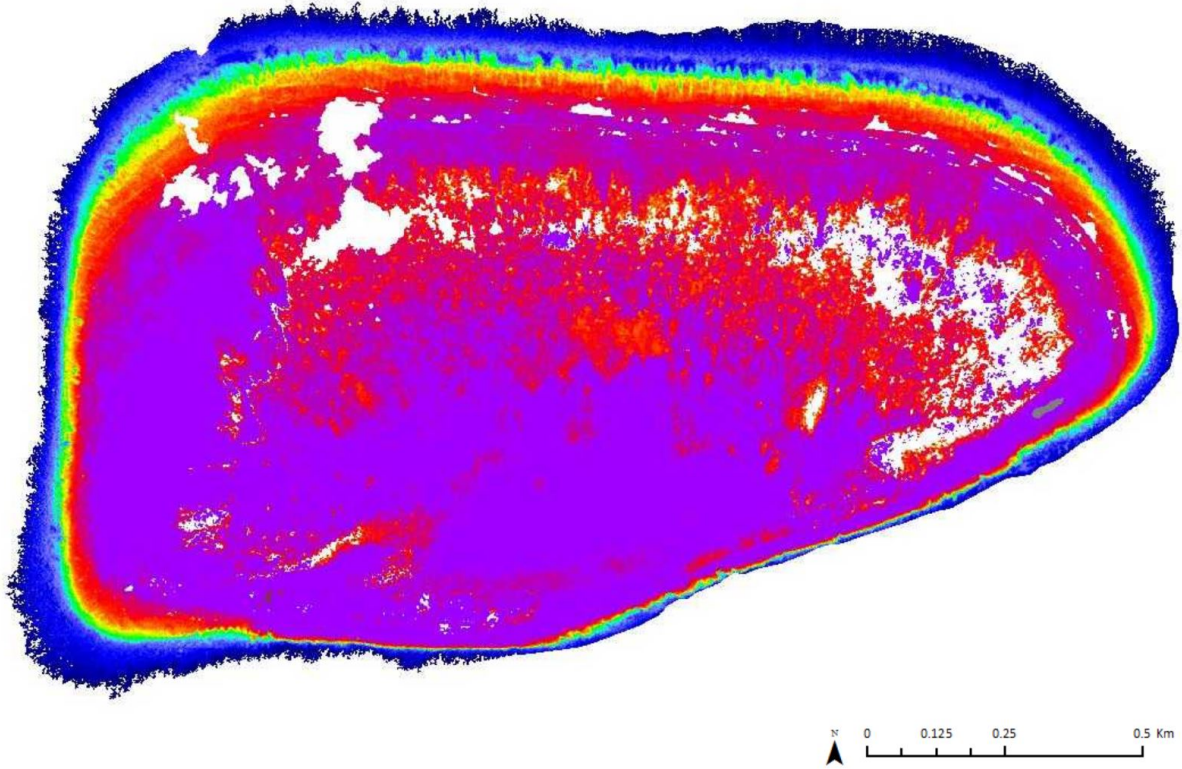
No dredging marks are visible in the 28 October and 11 November 2014 satellite images.

LOUISA REEF

6°19'55.08"N, 113°14'28.29"E

Derived from WorldView-2 satellite data captured on 28 October 2014 [Sea Level: -31cm]

Bathymetry Map

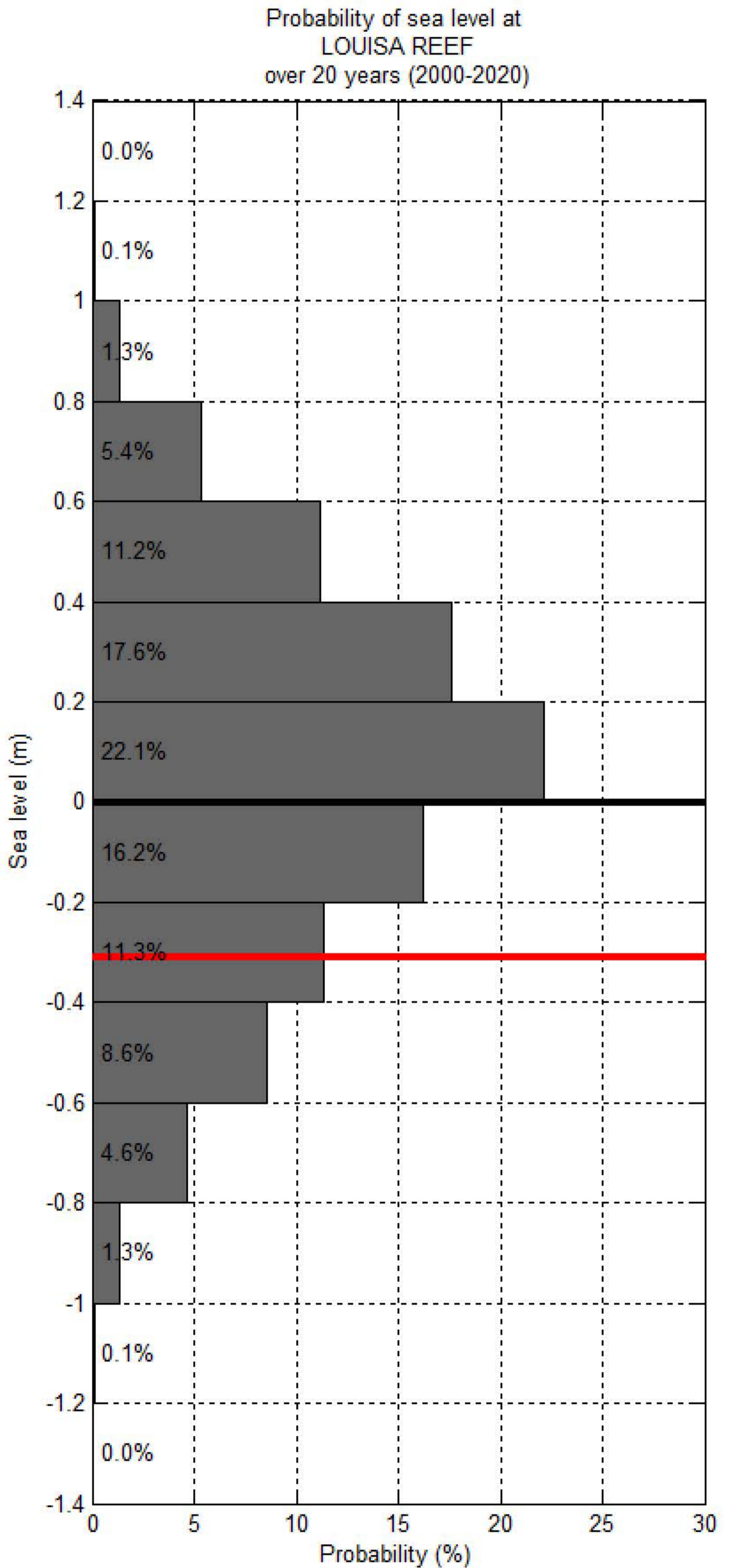
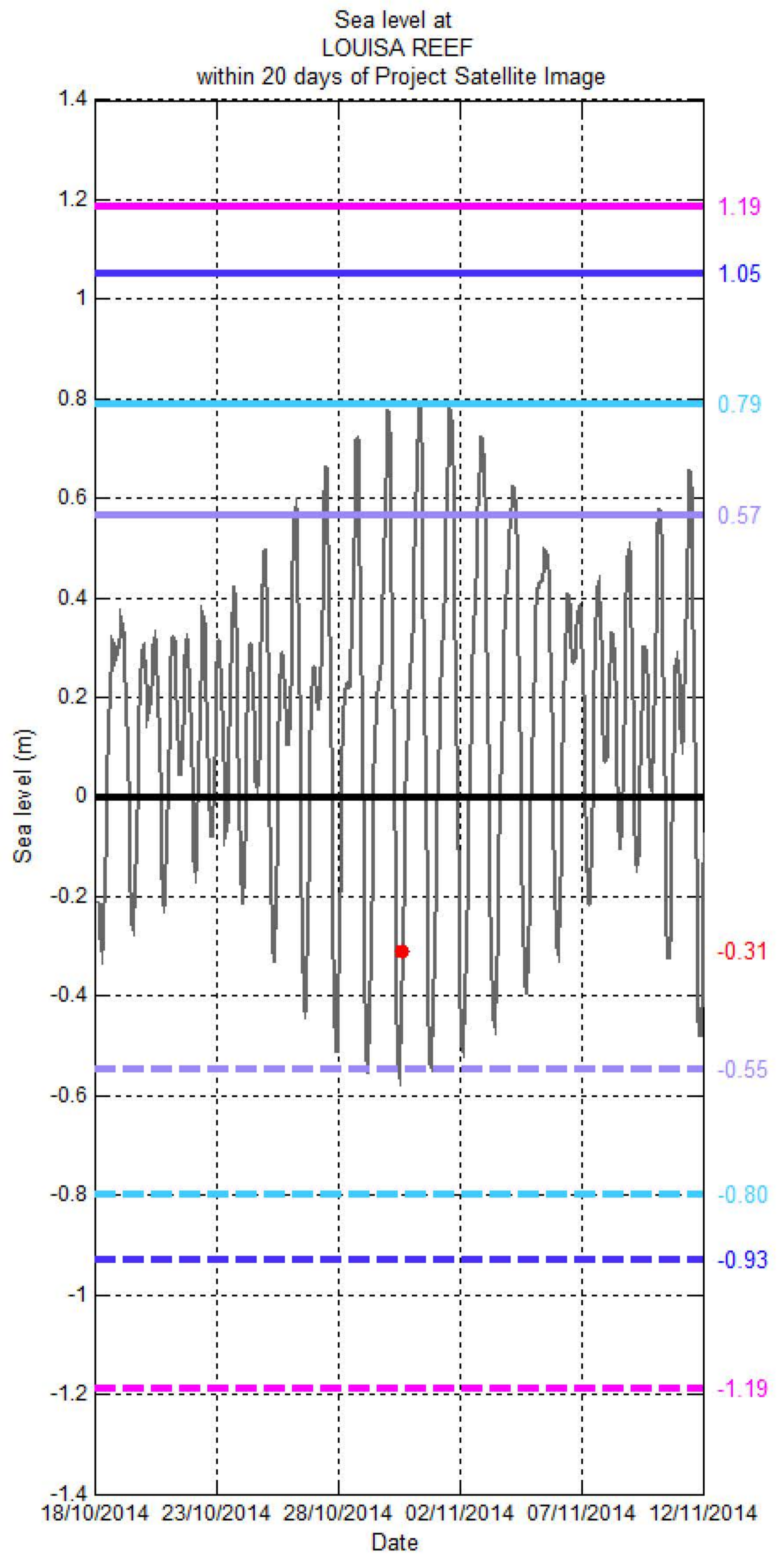
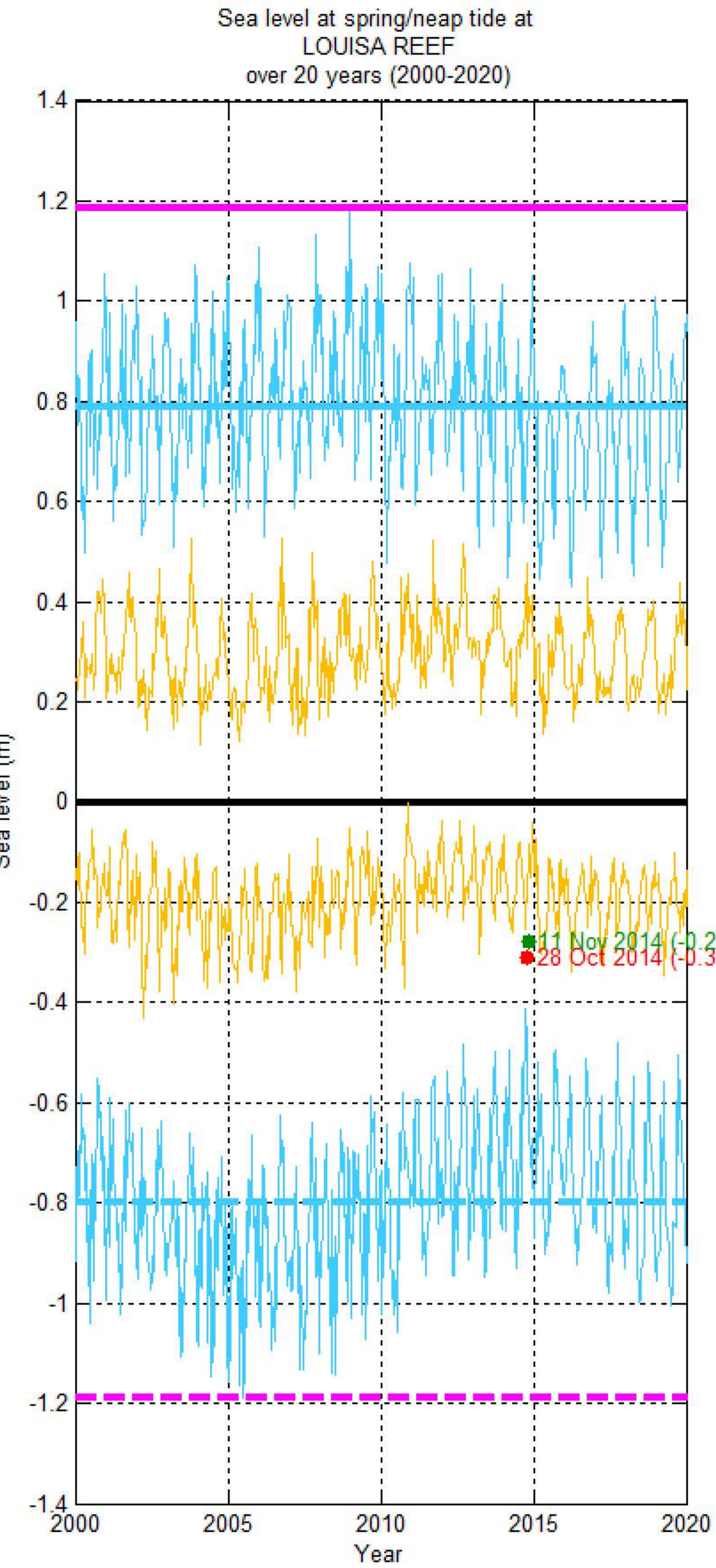


Habitat Classification and Land Cover Map



Sea level (SL) at LOUISA REEF

[6°19'55.08"N, 113°14'28.29"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