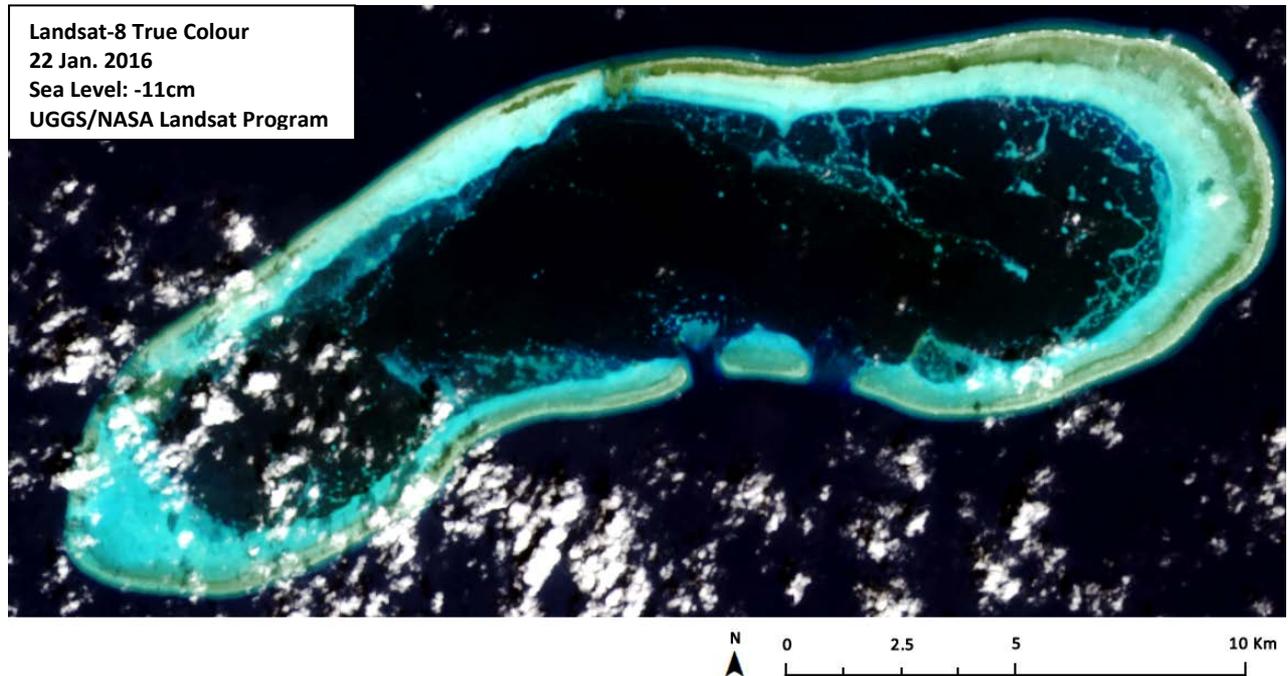


DISCOVERY REEF

16°03'14.84"N, 111°47'25.45"E

Geographic area

Discovery Reef is a large and shallow atoll in the southwestern part of the Paracels, 157NM southeast of the island of Hainan and over 162Nm northwest of Vietnam's mainland. The closest shallow geographic features are Passu Keah, 8NM southeast, Vuladdore Reef, 10NM northeast and Duncan Island, 11NM north. Discovery Reef extends 15km along its northeast-southwest axis and stretches over 4km along its north-south axis.



Land area above water

There are no above-water land areas on this atoll in the 22 January 2016 Landsat-8 satellite image or the 20 January 2012 GeoEye-1 satellite image.

Human infrastructure

There are no man-made structures on this reef as at 22 January 2016.

Intertidal and submerged area

The aerial coverage of the reef platform is 191.48km², comprising a reef flat of 65.31km², a lagoon of 112.16km² and a reef slope 14.01km². The reef flat is a long ring that follows the contours of the reef slope and stretches close to 60km. It is itself composed of two adjoining rings: a shallow outer ring with a hard coral bottom and an inner ring that links the reef flat's outer ring with the lagoon (the back reef). The outer ring is widest on the eastern and northeastern sides of the reef flat (400-600m wide), where it is around 1m deep at Mean Sea Level. However, the rest of the outer ring is discontinuous and of varying depth mostly up to 1.5m deep (deeper in some areas). Parts of the outer ring that are less than 1m deep are expected to uncover at Lowest Astronomical Tide. The back reef, which is sand dominated, occupies most of the reef flat and extends up to 2.5km on the southwestern part of the reef flat. It is 2-4m deep. Two naturally-formed channels on the south-facing side of the reef flat connect the lagoon to the open sea; they are over 700m wide. The lagoon is characterised by areas of reticulate reef systems where coral heads that are of the same depth as the back reef form a tight network of coral ribbons, located mostly on the outer part of the lagoon adjacent to the back reef. The banks of the lagoon are steep and, within 100m or less from them, the lagoon reaches 7m in depth. The central part of the lagoon is too deep to be derived from satellite data. The visible part of the reef slope extends 100-400m off the reef flat, indicating a steep slope all around.

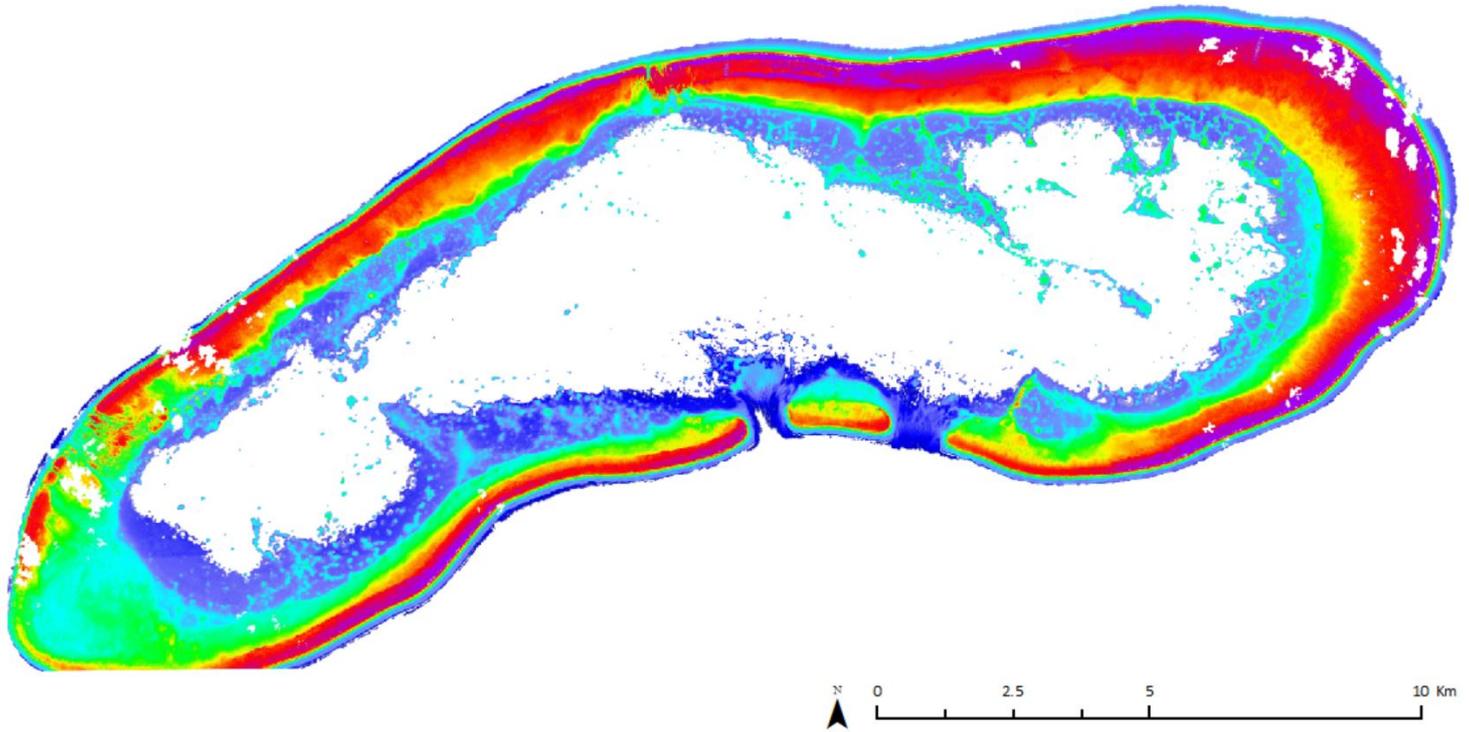
Selective dredging marks are visible on sandy parts of the reef flat (1.84km²).

DISCOVERY REEF

111°47'25.45"E, 16°03'14.84"N

Derived from GeoEye-1 Satellite Data captured on 20 January 2012 [Sea Level: -6cm]

Bathymetry Map



Habitat Classification and Land Cover Map

