

METADATA

The 2010 Fiji coral reef system map is given in an ArcMap shapefile format and consists of seven associated files:

1. fj20100815qbikon_Kadavu_Habitat_Map.shp
2. fj20100815qbikon_Kadavu_Habitat_Map.dbf
3. fj20100815qbikon_Kadavu_Habitat_Map.prj
4. fj20100815qbikon_Kadavu_Habitat_Map.sbn
5. fj20100815qbikon_Kadavu_Habitat_Map.shx
6. fj20100815qbikon_Kadavu_Habitat_Map.sbx
7. fj20100815qbikon_Kadavu_Habitat_Map.xml

Data in the *.dbf file are in a tabular format where each line corresponds to a one polygon. The columns for each line give all the associated information for the particular polygon.

A description of the column header titles is given by Table 1.

Heading	Heading Info
LandReefWa	General cover type
ReefType	Areas within the reef, varying in exposure to deep clear water, terrestrial influences and variation in hydrodynamics
Geomorphi	Type of geomorphic zone
BenthicCom	Type of benthic community Type
Source	University of Queensland, Biophysical Remote Sensing Group
FieldSourc	see: Roelfsema, C. M., S. R. Phinn, S. Jupiter, J. Comley and S. Albert (2013). "Mapping Coral Reefs at Reef to Reef-System Scales (10-600 Km2) Using Obia Driven Ecological and Geomorphic Principles." International Journal of Remote Sensing, pp: 1-22. doi:http://10.1080/01431161.2013.800660
ImageType	see: Roelfsema, C. M., S. R. Phinn, S. Jupiter, J. Comley and S. Albert (2013). "Mapping Coral Reefs at Reef to Reef-System Scales (10-600 Km2) Using Obia Driven Ecological and Geomorphic Principles." International Journal of Remote Sensing, pp: 1-22.

	doi: http://10.1080/01431161.2013.800660
ClasMethod	see: Roelfsema, C. M., S. R. Phinn, S. Jupiter, J. Comley and S. Albert (2013). "Mapping Coral Reefs at Reef to Reef-System Scales (10-600 Km2) Using Obia Driven Ecological and Geomorphic Principles." International Journal of Remote Sensing, pp: 1-22. doi: http://10.1080/01431161.2013.800660
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Table 1. Column header titles

The 27 benthic community types and their description are given in Table 2.

Type	Description
'Breaking Waves'	Breaking waves are often a distinguishable feature of the reef crest on the barrier reef
'Cloud or Shade'	Cover mainly dominated by cloud or shade
'Coral – Reef Matrix'	Cover dominated by coral and reef matrix
'Coral – Rubble'	Cover dominated by coral and rubble
'Coral – Rubble – Sed'	Cover dominated by coral, rubble and sediment
'Coral/AlgaeRubble'	Cover dominated by coral, algae and rubble
'Deep Slope'	Deep section of the reef slope
'Deep patch reefs'	Deep section of patch reef, reef areas that cannot be discriminated what exact cover it is
'Lagoon Reefs'	Reef within a lagoon
'Lagoon Slope'	Slope section of lagoon reef
'Land'	Land

'Land other'	Land Other
'Reef Matrix – Coral'	Cover dominated by reef matrix and coral
'Rubble – Reef Matrix'	Cover dominated by rubble and reef matrix
'Rubble – Reef matrix – Coral'	Cover dominated by rubble, reef matrix and coral
'Seagrass'	Cover dominated by seagrass
'Seagrass – Sed'	Cover dominated by seagrass and sediment
'Seagrass/Algae Rubble Sed'	Cover dominated by seagrass, algae, rubble and sediment
'Sed'	Cover dominated by sediment
'Sed + small features'	Cover dominated by sediment and small features
'Sed – Rubble'	Cover dominated by sediment and rubble
'Sed Rubble'	Cover dominated by sediment and rubble
'Sed Rubble Coral'	Cover dominated by sediment, rubble and coral
'Sed Rubble Seagrass/Algae'	Cover dominated by sediment, rubble, seagrass and algae
'Turbid Water'	Water where bottom is not visible due water clarity, generally close to shore
'Water Deep'	Clear water where bottom is not visible due to water depth.
'Water Deep Lagoon'	As deep water but now surrounded by reefs, does not have to be completely enclosed

Table 2. Benthic community types

The 10 geomorphic zone types and their description are given in Table 3.

Type	Description
'Cloud or shade'	Cloud and shades
'Land'	Land
'Reef Crest'	Between the reef slope and outer reef flat and is mostly consolidated material and sometimes exposed, as it's the shallowest part of the reef
'Reef Flat'	Reef flat section of the reef where there is no clear distinguish between inner and outer reef flat
'Reef Flat Inner'	Inner reef flat section of the reef, area with dominant sand combined with patches of coral/ Algae
'Reef Flat Outer'	Outer reef flat section of the reef, area with dominant coral and algae, with patches of sand or rubble in between
'Reef Slope'	Reef slope section of the reef, the area neighbouring deep water at one site and reef crest on the shallow site
'Shallow Reef'	Shallow reef flat section of the reef, areas that are visible through the water column and do not include deep water, turbid water, lagoon water, land.
'ShallowWater'	Shallow water areas that are visible in the image but do not belong to a specific geomorphic zone
'Water Deep'	Clear water where bottom is not visible due to water depth.

Table 3. Geomorphic zone types

The 9 reef types and their description are given in Table 4.

Type	Description
'Barrier Reef'	Reefs neighbour open ocean/deep water one side forming a barrier to the adjacent deep lagoons and land on the other side
'Cloud or shade'	Areas covered by cloud or shade
'Fringing Barrier Reef'	Similar to 'barrier reef' as it formed a well-defined barrier and similar to fringing reef as it is attached to land, and not adjacent to a deep lagoon
'Fringing Reef'	Reefs that are directly attached to land at one side with the other side facing protected water such as a lagoon
'Lagoon Reefs'	Reefs that are within the lagoon but not connected to land
'Land'	Land
'Shallow Water'	Shallow water areas that are visible in the image but do not belong to a specific geomorphic zone
'Water Deep'	Clear water where bottom is not visible due to water depth.
'Water Deep Lagoon'	Clear water where bottom is not visible due to water depth. but areas surrounded by reefs, does not have to be completely enclosed

Table 4. Reef types

The 6 LandReefWa types and their description are given in Table 5.

Type	Description
'Cloud or Shade'	cloud or shade
'Land'	A land
'Reef'	Area covered by reef
'ShallowWater'	Shallow water areas that are visible in the image but do not belong to a specific geomorphic zone
'Water Deep'	Clear water where bottom is not visible due to water depth.
'Water Deep Lagoon'	Clear water where bottom is not visible due to water depth. but areas surrounded by reefs, does not have to be completely enclosed

Table 5. General cover types