

Global Change Data Encyclopedia

Vanua Levu

Li, D. L.¹ Guo, C. F.¹ Zhang, W.¹ Liu, C.^{2*} Shi, R. X.²

1. School of Geography, Liaoning Normal University, Dalian 116029, China;

2. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China

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Dataset Availability Statement:

The dataset supporting this paper was published and is accessible through the *Digital Journal of Global Change Data Repository* at: <https://doi.org/10.3974/geodb.2020.03.07.V1>.

Vanua Levu, the second largest island in Fiji^[1], formerly known as Sandalwood Island, was discovered in 1643 by the Dutch navigator Abel Jansoon Tasman^[2]. The island is 63.28 km separated from Viti Levu in its southwest, and 7.90 km from Taveuni in its southeast. The geo-location of the Vanua Levu is 16°7'27"S–17°0'58"S; 178°28'31"E–179°57'5"W. The total area of the island is 5,717.26 km², and the coastline is 1,343.63 km long. The island is about 178 km long from the northeast to the southwest, and about 30–40 km wide^[3]. There is a narrow peninsula named Natewa Peninsula extending into the Koro Sea in the southeastern of the island. The Natewa Bay is just located in the north of the peninsula, which is called the paradise of the Spinner Dolphins^[4].

Vanua Island is surrounded by coral reefs. The barrier reef on the north bank is nearly 200 km long, it is one of the largest reefs in the world, and the coral reef located in the Savasavu Bay near Savasavu city on the south bank is one of the best reefs in Fiji. According to the biodiversity records in Fiji, coral, invertebrates and more than 1,000 species of fishes live in the Natewa Bay, this is one of the hot spots of Fiji tourism and world-class diving and amusement spot. In addition to the reef coast, mangrove coast and coral reef mangrove mixed coast constitute the main coastal types of the island. Among them, mangrove coast and coral reef mangrove mixed coast are mainly distributed in the northern coast, especially in the estuary areas where mangroves grow dense and cover with estuaries.

The central and southern part of Vanua Island is a mountain range running through the whole island from northeast to southwest. The mountain is covered by tropical rainforest. The

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***Corresponding Author:** Liu, C. L-3684-2016, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, lchuang@igsnrr.ac.cn

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Waisali rainforest reserve is a nature reserve with tropical rainforest ecosystem. Labasa and Savusavu are the main cities on the island, the former is on the northern coast and the latter is on the southern coast. Besides, the populated places also include Nambouono, Navindamu, Nasorolevu, Ndalomo, Noawara, Naweni, Loa, etc. The agriculture products are mainly copra, sugar, rice, coco and citrus etc.^[5]

The dataset was developed based on the “Global multiple scale shorelines dataset based on Google Earth images (2015)”^[6], and maps and references related to Fiji. The dataset is consisted of 26 data files and archived in .kmz and .shp formats with the data size of 8.75 MB (Compressed to 3.87 MB in three files).

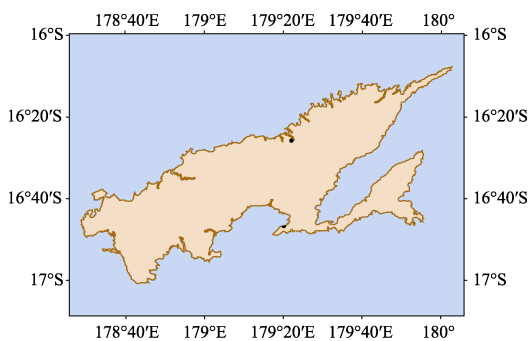


Figure 1 Map of Vanua Levu Island (.shp format)

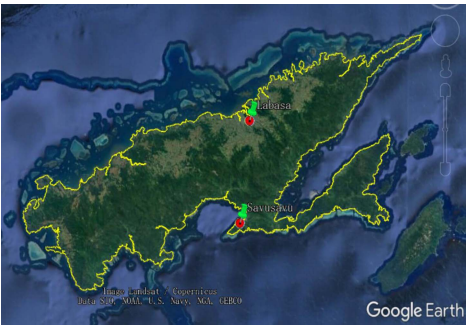


Figure 2 Map of Vanua Levu Island (.shp format)



Figure 3 Image of coral reef near Savusavu on the south bank of Vanua Island (Google Earth)



Figure 4 Image of mangrove coastal in the estuary of the north bank of Vanua Island (Google Earth)

References

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