Rabaul Caldera (with Tavurvur and Vulcan Volcanoes)



The low-lying Rabaul caldera on the tip of the Gazelle Peninsula at the NE end of New Britain forms a broad sheltered harbor utilized by what was the island's largest city prior to a major eruption in 1994. The outer flanks of the 688-m-high asymmetrical pyroclastic shield volcano are formed by thick pyroclastic-flow deposits. The 8 x 14 km caldera is widely breached on the east, where its floor is flooded by Blanche Bay and was formed about 1400 years ago. An earlier caldera-forming eruption about 7100 years ago is now considered to have originated from Tavui caldera, offshore to the north. Three small stratovolcanoes lie outside the northern and NE caldera floor near the NE and western caldera walls. Several of these, including Vulcan cone, which was formed during a large eruption in 1878, have produced major explosive activity during historical time. A powerful explosive eruption in 1994 occurred simultaneously from Vulcan and Tavurvur volcanoes and forced the temporary abandonment of Rabaul city.



1994 Eruption - Tavurvur (left) and Vulcan (right) (See article on <u>Rabaul Town History</u>)



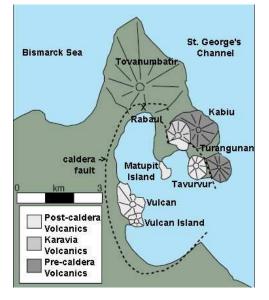
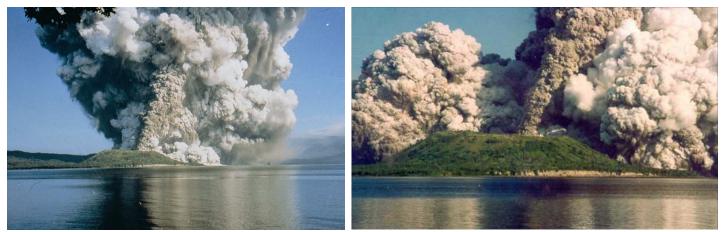


Photo of Tavurvur across the caldera from the south

Tavurvur is right of center. Turagunan is immediately behind Tavurvur.

Kabu (Kombiu) is the largest cone (left of center) with Rabalanakaia in its foreground to the left.

Sulphur Creek Volcano should be on the far left of the photo. Dawapia Rocks are in the foreground.



1994 photos of Vulcan's eruption



Early morning photo of Tavurvur eruption



Amazing sunrise photo



A beautiful place to live and visit...

Volcanologists knew this area would erupt and the people had practiced evacuation drills. So when the eruptions started in the evening, some 50 thousand people would evacuate to safety. Just 5 people died. 4 of deaths were from collapsing roofs and 1 person was struck by lightning.

But the TRUE TRAGEDY was just beginning and continues today...



Pyroclastic flows and ejected debris (tephra) would follow



Cumulative effects of ash fall after 3 days



Shown here are the volcanic layers that were deposited over 3 weeks.

The provincial capital was moved to Kokopo

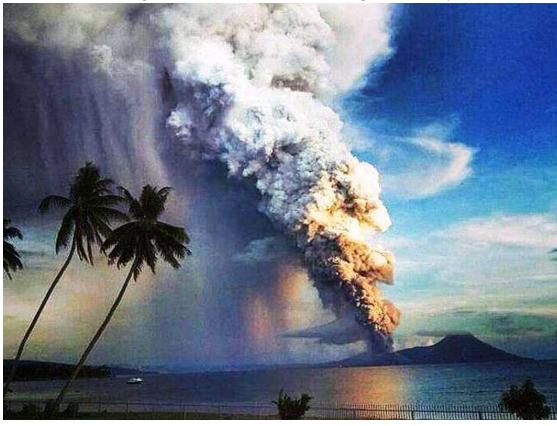
Vulcan has remained quiet but Tavurvur has continued to be active.



Evacuated watch Tavurvur - 2006



Tavurvur - 2012



Then in August 2014 there was another significant eruption...

Before and After satellite photos (April vs September) showing the ash fall



...and the people

"With its clear azure sea and lush palm trees, the town of Rabaul on East New Britain Island in Papua New Guinea should be a gorgeous slice of tropical paradise. But as these incredible photos reveal, that couldn't be further from the truth. Once a thriving holiday destination, Rabaul was left virtually empty when, 20 years ago, Tavurvur, Vulcan and Rabalankaia, three volcances on the edge of town, erupted - smothering the town in layers of volcanic ash and scalding lava. But despite the risk of further eruptions and the grim landscape, described by photographer Eric Lafforgue as 'Hell on Earth', some families, too poor to move, have been left to scratch a living in the rubble, while their children play in the scarred, otherworldly landscape left behind." (from an article by Ruth Styles for dailymail.co.uk)

Photos by Eric Lafforgue





Former Deputy Major, Mr Jewakauckes remains, alone. He lost his wife in the 1994 eruption. His son and most have moved away.







Megapode (big foot)

The megapode incubate their eggs by burying them in warm ground. Usually this is near decaying vegetation (with the male adding debris to increase temperatures). In Rabaul they also bury their eggs deep in the ash covered ground. Somewhat dangerous to retrieve, each egg can sell for \$1.

