

**UNDERSEA FEATURE NAME PROPOSAL**

(Sea NOTE overleaf)

Note: The boxes will expand as you fill the form.

<b>Name Proposed:</b>	<b>Rakahore Seamount</b>	<b>Ocean or Sea:</b>	<b>South Pacific Ocean</b>
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<b>Geometry</b> that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
		X				

\* Geometry should be clearly distinguished when providing the coordinates below.

<b>Coordinates:</b>	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	26°46.80'S (centre)	177°24'W (centre)
	26°44.817`S	177°28.633`W
	26°43.533`S	177°24.383`W
	26°42.717`S	177°21.883`W
	26°43.667`S	177°19.50`W
	26°46.383`S	177°19.383`W
	26°49.85`S	177°19.967`W
	26°51.733`S	177°22.133`W
	26°52.833`S	177°24.733`W
	26°51.817`S	177°27.45`W
	26°50.117`S	177°29.25`W
	26°48.233`S	177°29.083`W
	26°46.433`S	177°28.333`W
26°44.817`S	177°28.633`W	

<b>Feature Description:</b>	Maximum Depth:	1650 metres	Steepness :	
	Minimum Depth :	560 metres	Shape :	Volcanic edifice and associated caldera
	Total Relief :	1090 metres	Dimension/Size :	16 x 16 km

<b>Associated Features:</b>	Located 48 km south of Hinepuia Seamount and 46 km north of Gamble Seamount in the Kermadec volcanic arc.
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<b>Chart/Map References:</b>	<del>Shown Named on Map/Chart:</del> Named in an internationally peer reviewed journal	IJ Graham, AG Reyes, IC Wright, KM Peckett, IEM Smith & RJ Arculus (2008). Structure and petrology of newly discovered volcanic centers in the northern Kermadec-southern Tofua arc, South Pacific Ocean. <i>Journal of Geophysical Research</i> , Vol. 113, 1-24.
	Shown Unnamed on Map/Chart:	
	Within Area of Map/Chart:	Chart NZ 14600 INT 600, INT 605

<b>Reason for Choice of Name</b> (if a person, state how associated with the feature to be named):	Named for the Māori guardian god of the layer that encrusts and covers the earth (i.e. lithosphere).
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<b>Discovery Facts:</b>	Discovery Date:	April 1995
	Discoverer (Individual, Ship):	RV Melville

<b>Supporting Survey Data, including Track Controls:</b>	Date of Survey:	1995 - 2004
	Survey Ship:	RV Melville (1995) RV Tangaroa (2004)
	Sounding Equipment:	SeaBeam 2000, EM300 multibeam
	Type of Navigation:	DGPS
	Estimated Horizontal Accuracy (nm):	25 m
	Survey Track Spacing:	Variable, including single beam data from other surveys
	Supporting material can be submitted as Annex in analog or digital form.	

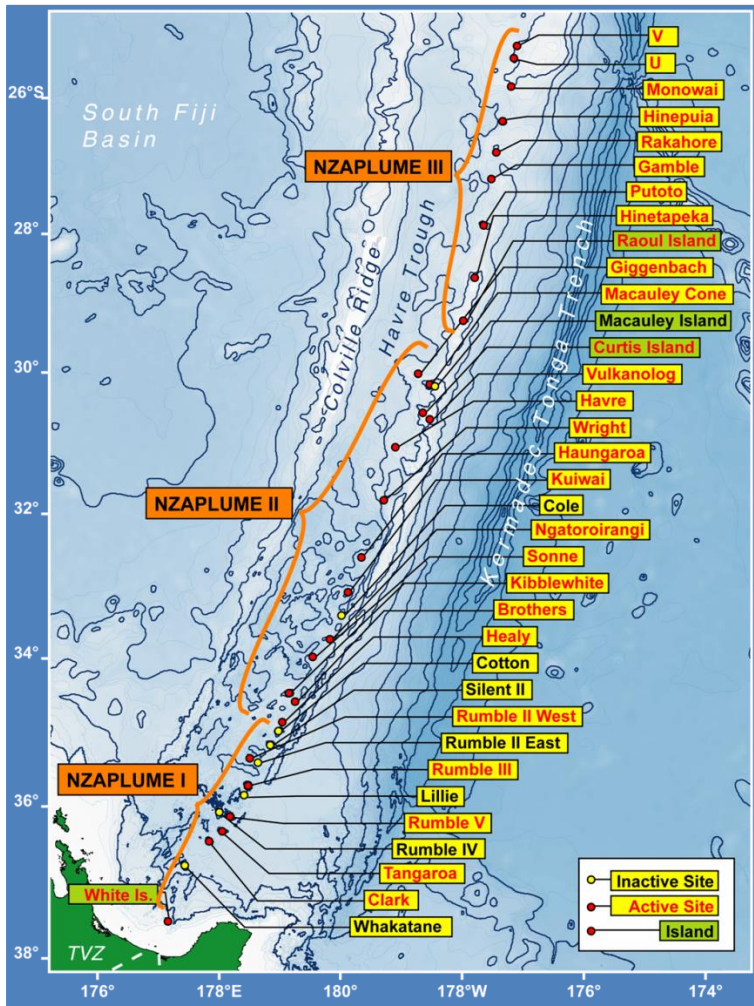
<b>Proposer(s):</b>	Name(s):	Mr Mark Dyer (Chairperson of the NZGB) & Mr Adam Greenland (National Hydrographer)
	Date:	27 June 2016
	E-mail:	markdyer@linz.govt.nz
	Organization and Address:	New Zealand Geographic Board PO Box 5501 Wellington 6145 New Zealand
	Concurrer (name, e-mail, organization and address):	Dr Vaughan Stagpoole V.Stagpoole@gns.cri.nz GNS Science PO Box 30 368 Lower Hutt 5040 New Zealand

<b>Remarks:</b>	Informally named Rakahore Volcano. The New Zealand Geographic Board gazetted <b>Rakahore Seamount</b> as an official undersea feature name on 26 May 2016.
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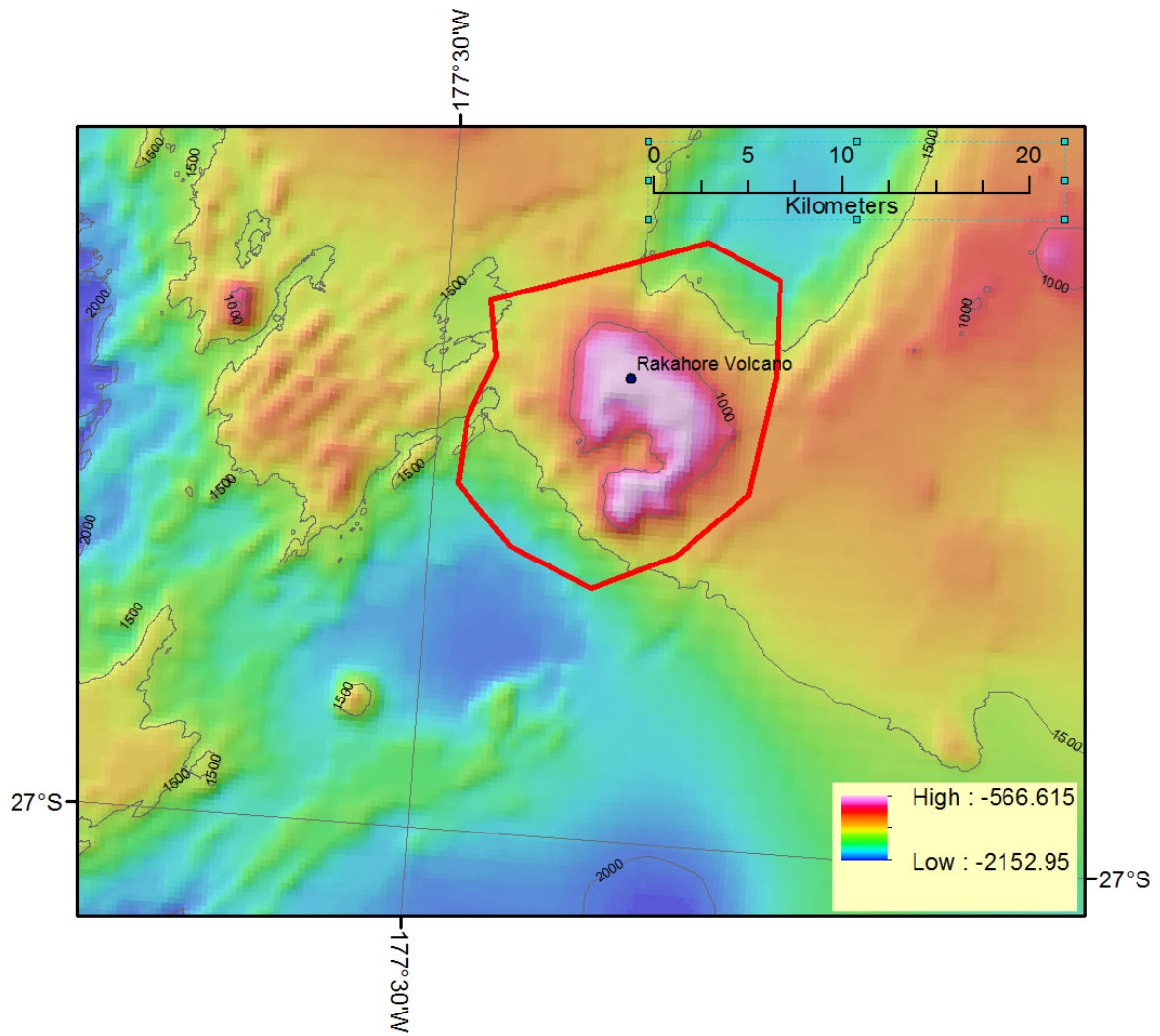
**NOTE :** This form should be forwarded, when completed :

- a) **If the undersea feature is located inside the external limit of the territorial sea:-**  
to your "National Authority for Approval of Undersea Feature Names" (see page 2-9) or, if this does not exist or is not known, either to the IHB or to the IOC (see addresses below);
- b) **If at least 50 % of the undersea feature is located outside the external limits of the territorial sea:-**  
to the IHB or to the IOC, at the following addresses :

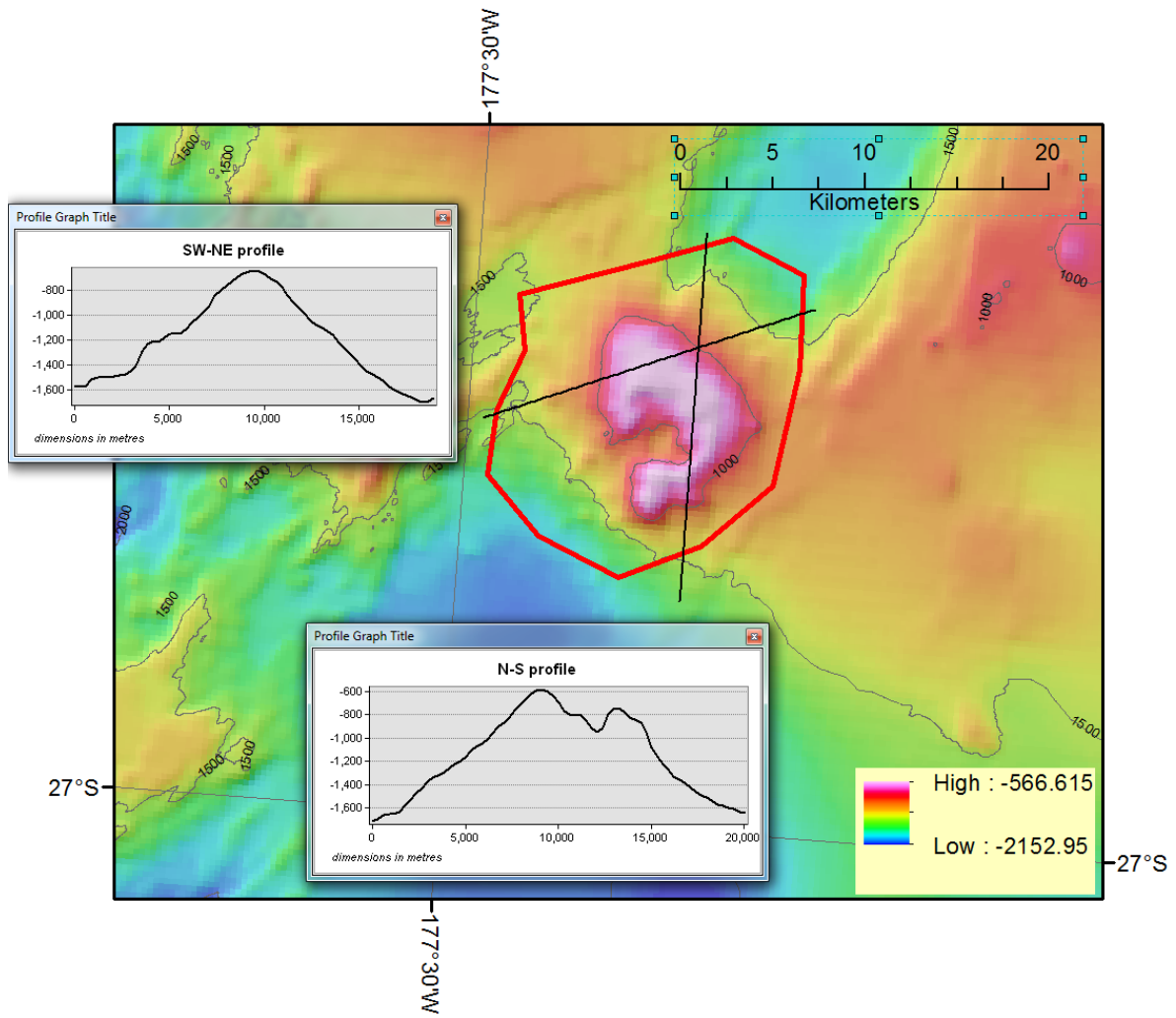
International Hydrographic Bureau (IHB) 4, Quai Antoine 1er B.P. 445 MC 98011 MONACO CEDEX Principality of MONACO Fax: +377 93 10 81 40	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy 75700 PARIS France Fax: +33 1 45 68 58 12
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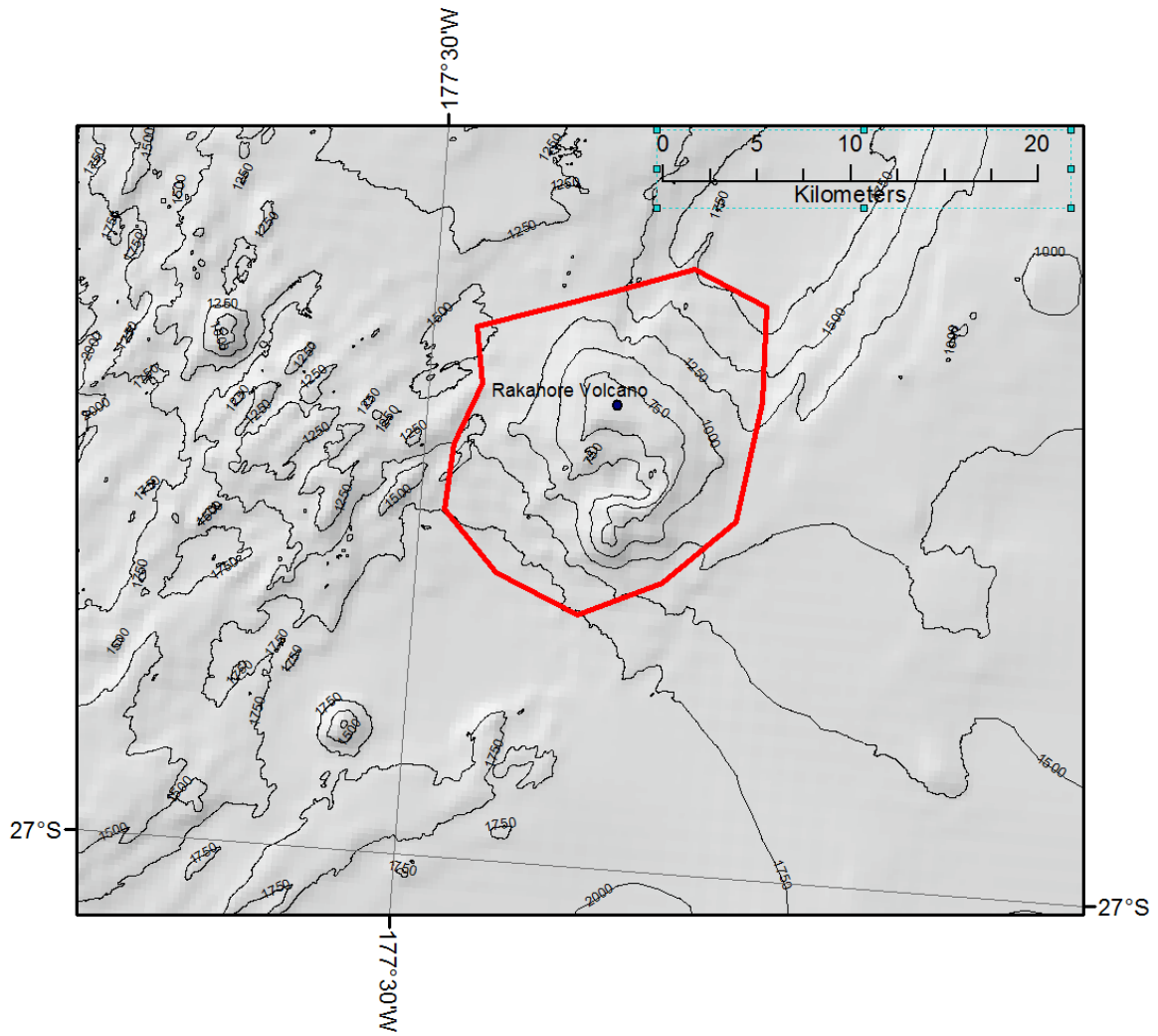
Commonly used names of volcanoes of the Kermadec Arc (de Ronde, pers. com. 2015). NZAPLUME I (1999) NZAPLUME II (2002) and NZAPLUME III (2004) refer to New Zealand-led surveys that mapped the regions and named many of the features (U and V are in Tongan waters). Active sites are those that are hydrothermally active and known to vent hot water.



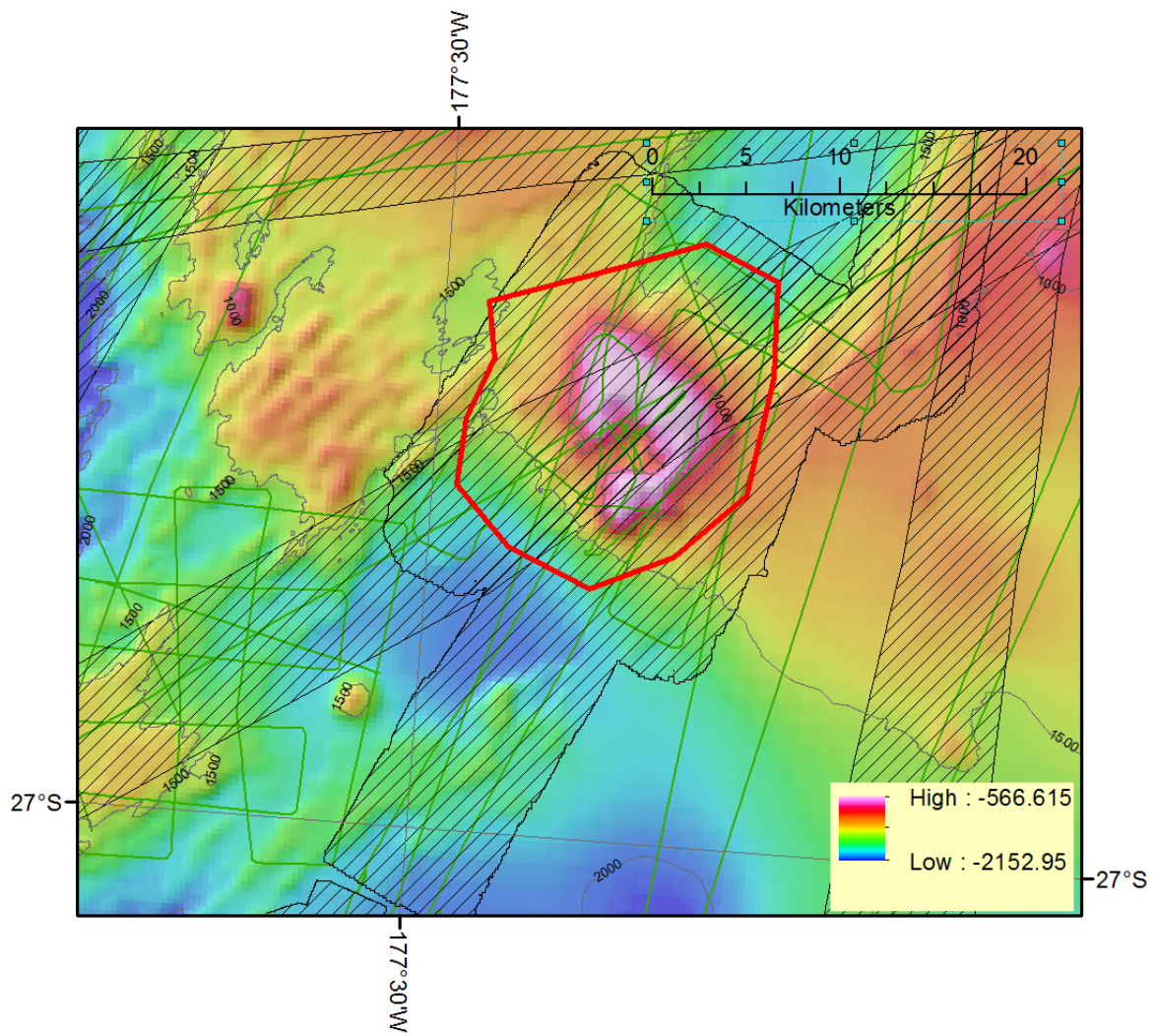
Bathymetry of Rakahore Seamount (250m grid) and polygon around the feature.



Profiles of Rakahore Seamount (dimensions in metres). Summit elevation = 560 m



Bathymetry contours on hillshade background



Data coverage

Cross-hatch = multibeam bathymetry coverage

Dark green = single beam bathymetry data



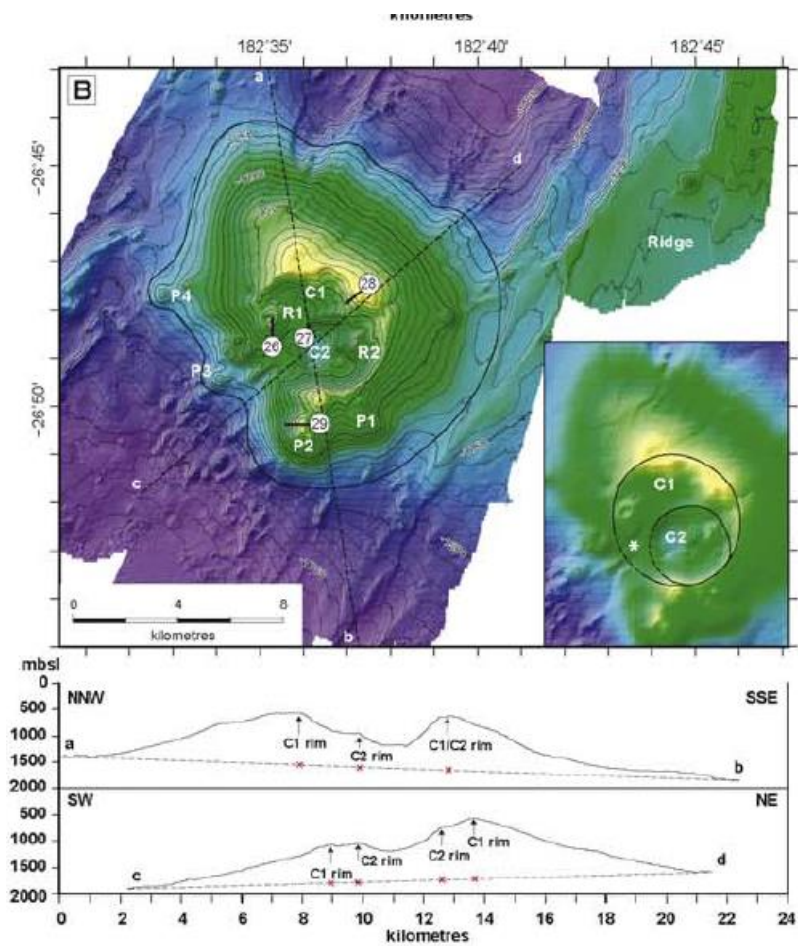


Figure 6(b) from Graham et al. (2008). Multibeam bathymetric map and cross section of Rakahore volcanic centre.