INTERNATIONAL HYDROGRAPHIC ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

UNDERSEA FEATURE NAME PROPOSAL

(Sea **NOTE** overleaf)

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

Name Proposed:	**Hinetāpeka Seamount**	**Ocean or Sea:**	South Pacific Ocean

Geometry 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.*

	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
Coordinates:	28°46.75`S (centre) 28°30.9865`S 28°30.3598`S 28°31.0855`S 28°31.3870`S 28°31.2625`S 28°32.5377`S 28°34.8515`S 28°36.6302`S 28°39.3299`S 28°40.6680`S 28°43.3943`S 28°46.1922`S 28°47.3893`S 28°50.9079`S 28°54.6989`S 28°57.8850`S 28°59.8071`S 28°58.0126`S 28°56.2451`S 28°53.6066`S 28°49.8971`S 28°47.4461`S 28°45.2345`S 28°41.2635`S 28°37.0873`S 28°32.0993`S 28°31.0862`S 28°30.9865`S	177°41.93`W (centre) 177°52.4783`W 177°49.9552`W 177°46.4120`W 177°42.5192`W 177°37.4402`W 177°35.3288`W 177°35.0566`W 177°36.8955`W 177°38.0723`W 177°39.3073`W 177°38.4173`W 177°38.5530`W 177°41.0293`W 177°42.5232`W 177°45.4817`W 177°48.7563`W 177°51.0455`W 177°56.4486`W 177°58.0923`W 177°56.1231`W 177°57.6760`W 177°55.9505`W 177°54.3990`W 177°57.1342`W 177°58.5279`W 177°56.3139`W 177°53.9520`W 177°52.4783`W

Feature Description:	Maximum Depth:	1250 metres	Steepness :	
	Minimum Depth :	96 metres	Shape :	Elongate multi-vent volcano
	Total Relief :	1154 metres	Dimension/Size :	55x25 km

Associated Features:	Hinetāpeka Seamount lies 50 km north of Raoul Island in the Kermadec volcanic arc

Chart/Map References:	~~Shown Named on Map/Chart:~~ 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. *Journal of Geophysical Research*, Vol. 113, 1-24.
	Shown Unnamed on Map/Chart:	
	Within Area of Map/Chart:	Chart NZ 14600 INT 600

Reason for Choice of Name (if a person, state how associated with the feature to be named)**:**	Named for the mythological Māori guardian of the internal fires.

Discovery Facts:	Discovery Date:	July 1974
	Discoverer (Individual, Ship):	RV Tangaroa (1)

Supporting Survey Data, including Track Controls:	Date of Survey:	September/October 2004
	Survey Ship:	RV Tangaroa (2)
	Sounding Equipment:	EM300 multibeam
	Type of Navigation:	DGPS
	Estimated Horizontal Accuracy (nm):	25 m
	Survey Track Spacing:	Variable, including some single beam data from earlier surveys
	Supporting material can be submitted as Annex in analog or digital form.	

Proposer(s):	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

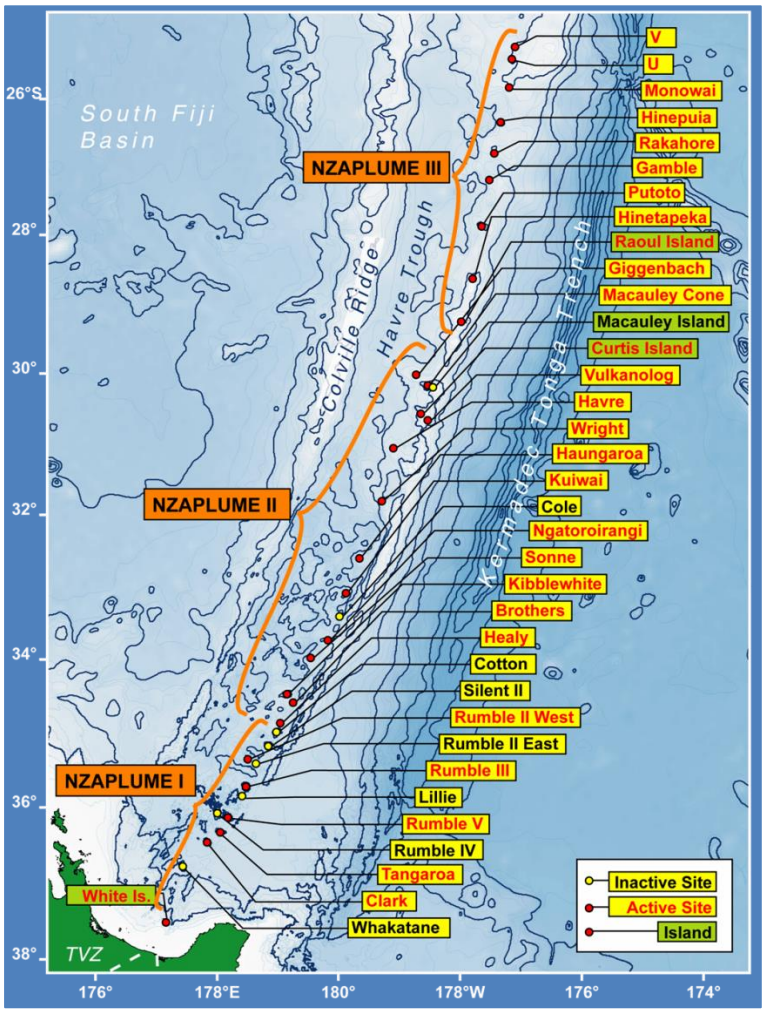
Remarks:	Informally named Hinetapeka Volcano. The New Zealand Geographic Board gazetted **Hinetāpeka Seamount** as an official undersea feature name on 26 May 2016.

NOTE : This form should be forwarded, when completed :

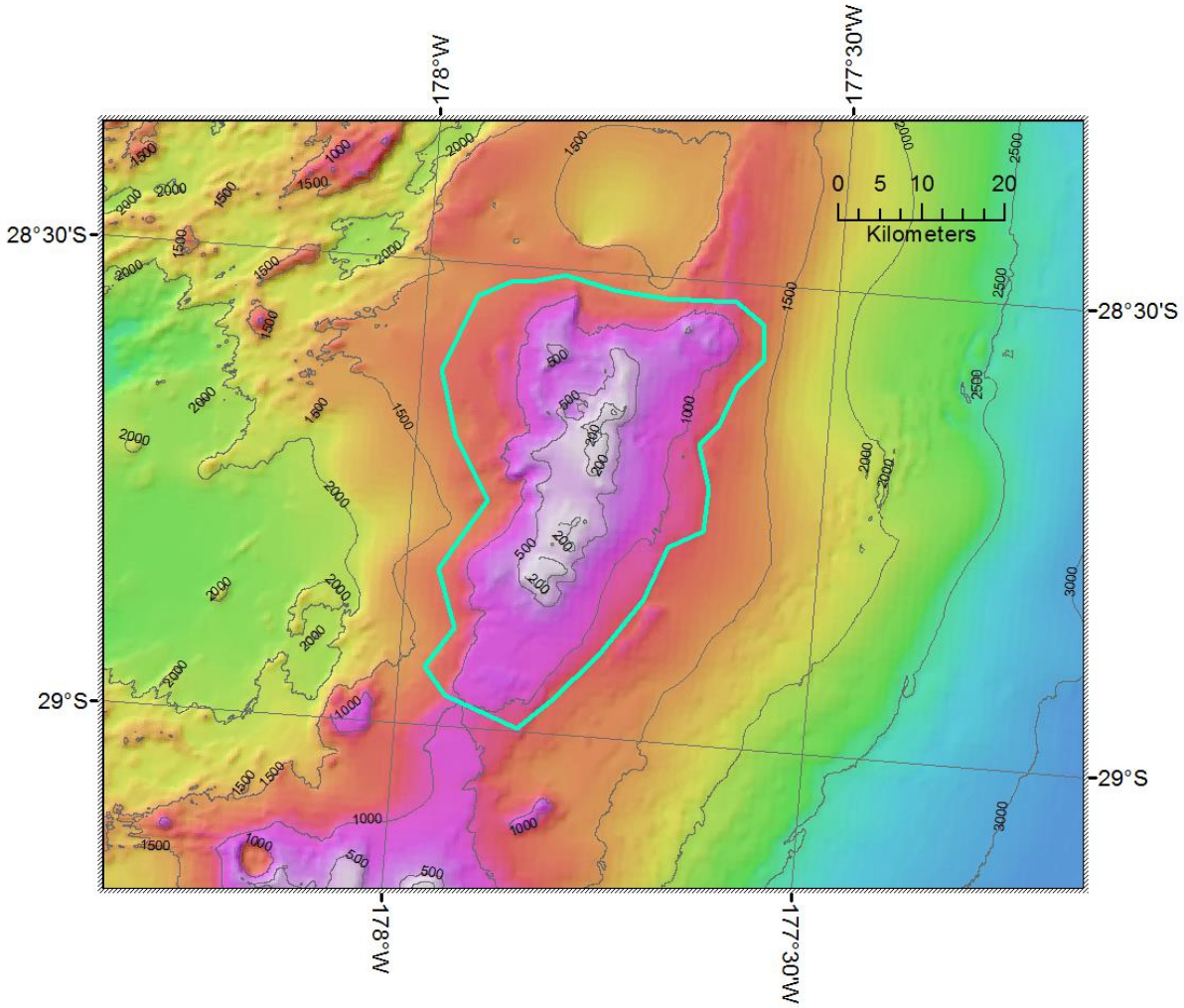
a) **If the undersea feature is located <u>inside the external limit</u> of the territorial sea**:-
to your "National Authority for Approval of Undersea Feature Names" (see page 2-9) or, if this does not exist or is not known, either to the IHB or to the IOC (see addresses below);

b) **If at least 50 % of the undersea feature is located <u>outside the external limits</u> of the territorial sea**:-
to the IHB or to the IOC, at the following addresses :

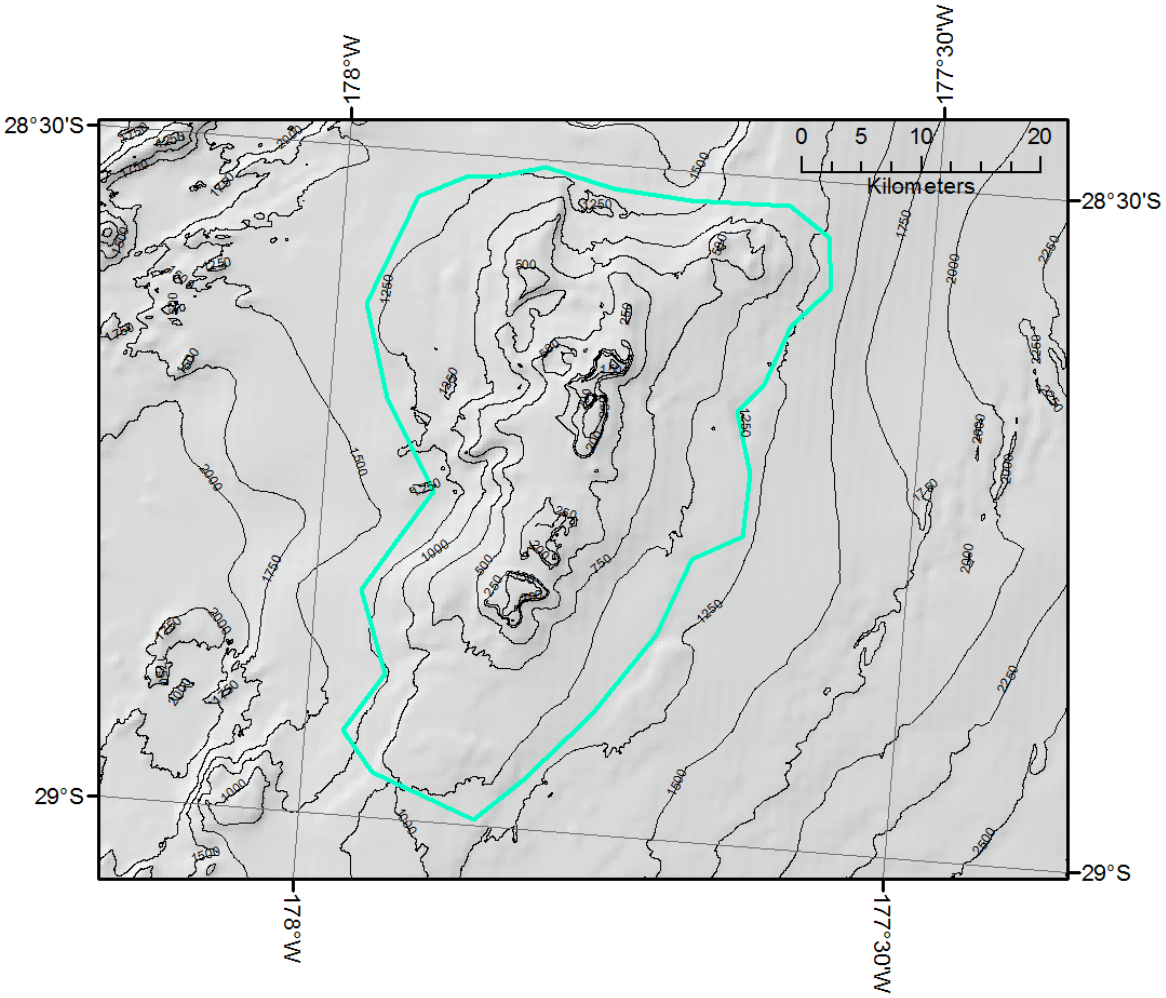
International Hydrographic Bureau (IHB) 4, Quai Antoine 1er B.P. 445 MC 98011 MONACO CEDEX <u>Principality of MONACO</u> Fax: +377 93 10 81 40 E-mail: <u>info@ihb.mc</u>	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy 75700 PARIS <u>France</u> Fax: +33 1 45 68 58 12 E-mail: <u>info@unesco.org</u>



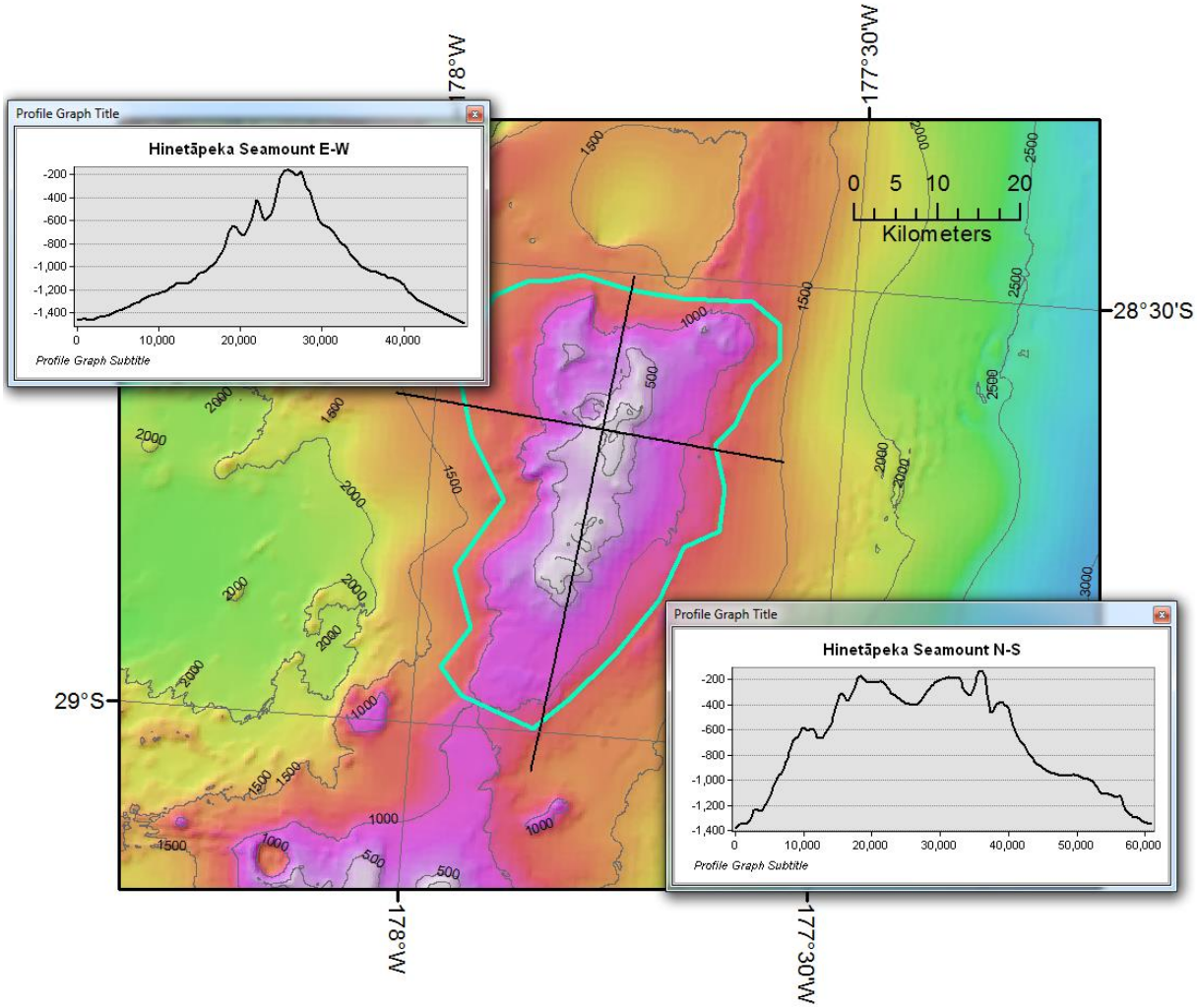
Commonly used names of volcanoes of the Kermadec arc (de Ronde, pers. com. 2015). NZAPLUME I (1999) NZAPLUME II (2002) and NZAPLUME III (2004) refer to New Zealand-led surveys that mapped the regions and named many of the features (U and V are in Tongan waters). Active sites are those that are hydrothermally active and known to vent hot water. Hinetāpeka Seamount is north of Raoul Island.



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



Bathymetry contours on hillshade background


178°W
177°30'W
28°30'S
29°S
0 5 10 20
Kilometers
Profile Graph Title
Hinetāpeka Seamount E-W
-200
-400
-600
-800
-1,000
-1,200
-1,400
0
10,000
20,000
30,000
40,000
Profile Graph Subtitle
Profile Graph Title
Hinetāpeka Seamount N-S
-200
-400
-600
-800
-1,000
-1,200
-1,400
0
10,000
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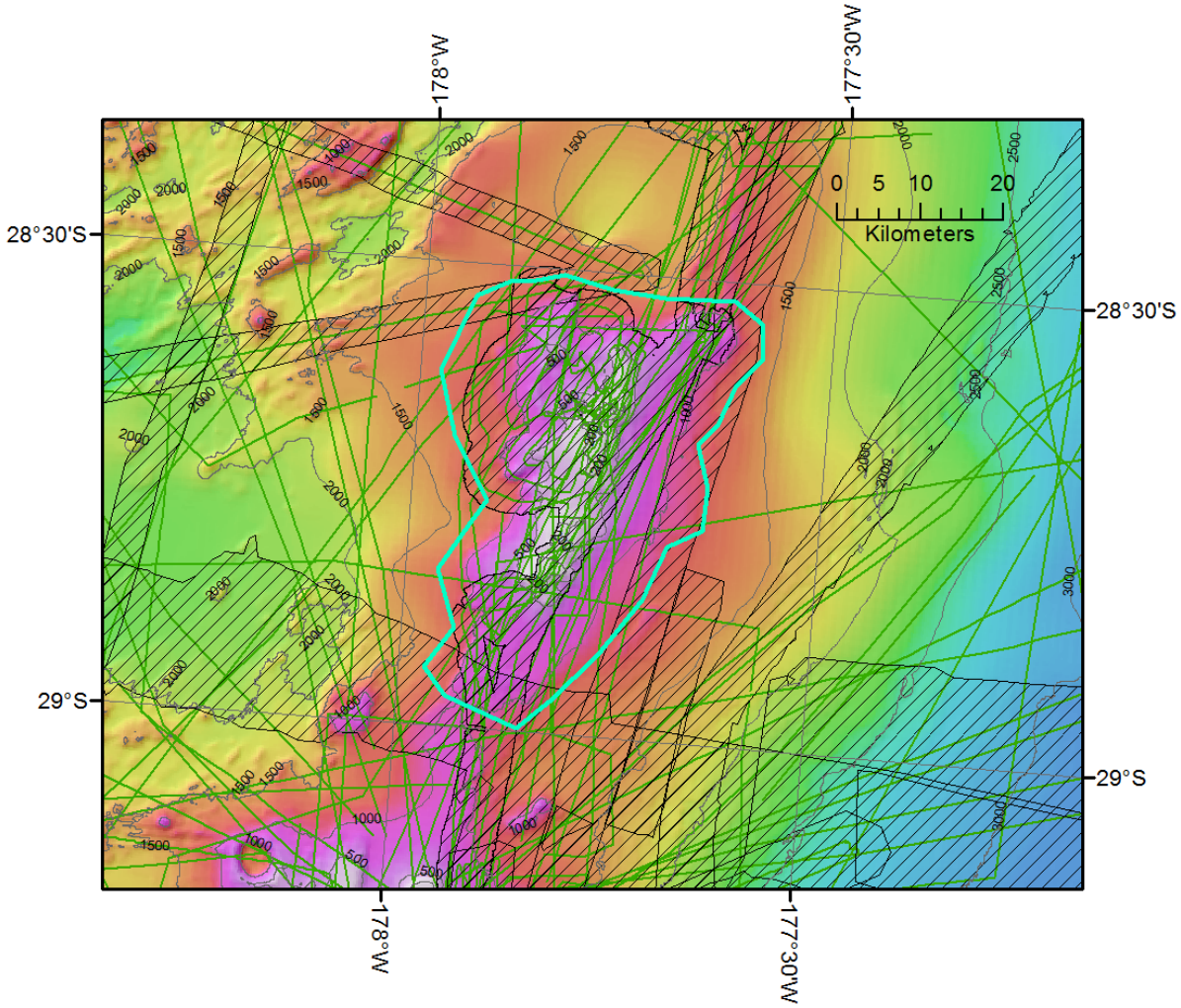
Profile Graph Subtitle

Profiles



Data coverage

Cross-hatch = multibeam bathymetry coverage

Dark green = single beam bathymetry data

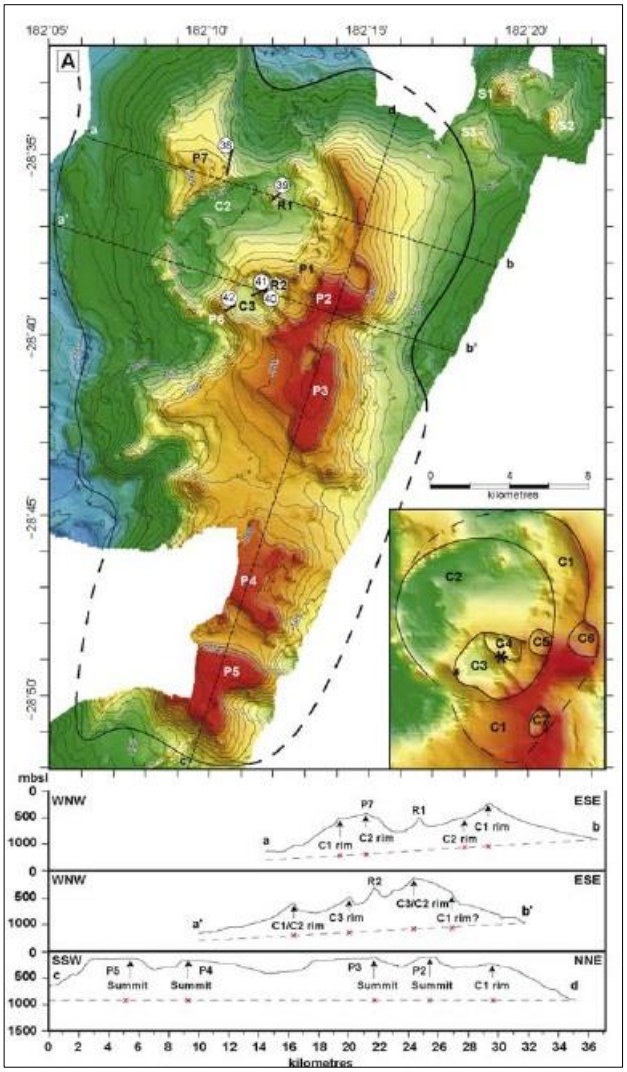


Figure 2 of Graham et al., 2008. – Caption (a) Multibeam bathymetric map of Hinetapeka volcanic center. Nominal limits are shown by the thick connected line, and dredge tracks by the short black lines numbered 38–42. The inset shows the inferred caldera outlines, with asterisks denoting sites of active hydrothermal venting (the larger symbol indicating greater intensity) [de Ronde et al., 2006]. The cross sections help define the outer limits of the center as well as the basal areas of edifices and their relief with respect to estimated baselines. The crosses on the baselines show the position of key peaks and troughs in the profiles above.