## 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	Kuiwai Seamount	Ocean or Sea:	South Pacific Ocean
Name i Toposeu.	Kulwal Seamount	Ocean of Sea.	South Facilic Ocean

Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
		Х				

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

	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	33°09.54'S (centre)	179°57.39'W (centre)
	33°15.983`S	179°57.15`E
	33°11.983`S	179°54.083`E
	33°6.8`S	179°54.133`E
Coordinates:	33°4.483`S	179°55.983`E
	33°2.6`S	179°59.15`W
	33°4.367`S	179°53.783`W
	33°7.383`S	179°48.917`W
	33°11.633`S	179°49.133`W
	33°14.7`S	179°51.633`W
	33°16.583`S	179°56.317`W
	33°15.983`S	179°57.15`E

	Maximum Depth:	3100 metres	Steepness :	
	Minimum Depth :	560 metres	Shape :	Volcanic cone with
Feature Description:				small satellite peak
				on western flank
	Total Relief :	2540 metres	Dimension/Size :	25 x 25 km

Associated Features:	Kuiwai Seamount lies on the Kermadec volcanic arc 30 km NE of Cole
	Seamount and 35 km west of Kermadec Ridge.

Chart/Map References:	Shown Named on Map/Chart: Named in an internationally peer reviewed journal	IC Wright, TJ Worthington & JA Gamble (2006). New multibeam mapping and geochemistry of the 308–358 S sector, and overview, of southern Kermadec arc volcanism. <i>Journal of Volcanology and</i> <i>Geothermal Research</i> 149, 263 – 296.
	Shown Unnamed on Map/Chart:	
	Within Area of Map/Chart:	Chart NZ 14600 INT 600, INT 605

Reason for Choice of Name (if a person, state how associated with the feature to be named):	From the Māori legend of the great navigator Ngātoroirangi, who was caught in a cold southerly snow blizzard at the peak of Mount Tongariro calling to his sisters Kuiwai and Haungaroa in Hawaiki to send fire to warm
	him. The sisters summoned the fire demons Te Pupu and Te Hoata who travelled underground, erupting flames as they went.

Discovery Easter	Discovery Date:	October 1998
Discovery Facts:	Discoverer (Individual, Ship):	RV Sonne

	Date of Survey:	1998 - 2012
	Survey Ship:	RV Sonne (1998), RV Tangaroa (2005, 2012)
Supporting Survey Data, including Track Controls:	Sounding Equipment:	Atlas hydrosweep DS-2. EM300, EM302, multibeam
Track Controls.	Type of Navigation:	DGPS
	Estimated Horizontal Accuracy (nm):	25 m
	Survey Track Spacing:	Variable
	Supporting material can be submitted as Annex in analog or digital form.	

	Name(s):	Mr Mark Dyer (Chairperson of the NZGB) & Mr Adam Greenland (National Hydrographer)
	Date:	27 June 2016
	E-mail:	markdyer@linz.govt.nz
Proposer(s):	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

	Informally named Kuiwai Volcano. The New Zealand Geographic Board
Remarks:	gazetted Kuiwai 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)	Intergovernmental Oceanographic Commission (IOC)
4, Quai Antoine 1er	UNESCO
B.P. 445	Place de Fontenoy
MC 98011 MONACO CEDEX	75700 PARIS
Principality of MONACO	France
Fax: +377 93 10 81 40	Fax: +33 1 45 68 58 12
E-mail: info@ihb.mc	E-mail: info@unesco.org



Commonly used names of volcanoes of the Kernmadec 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.

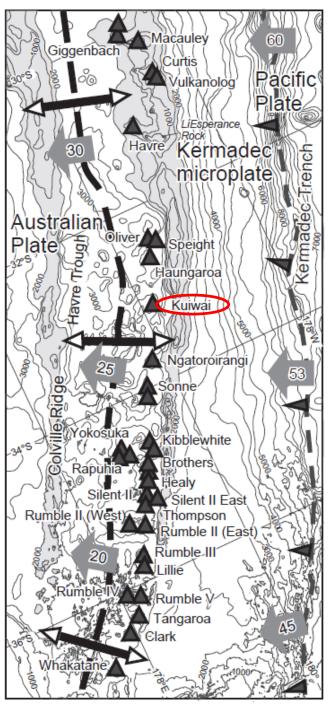
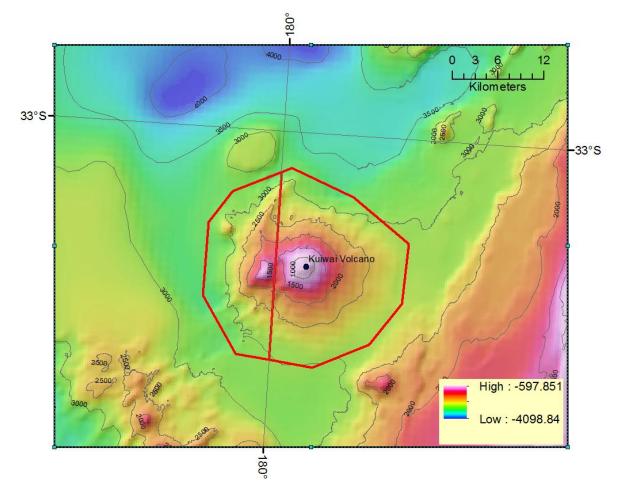
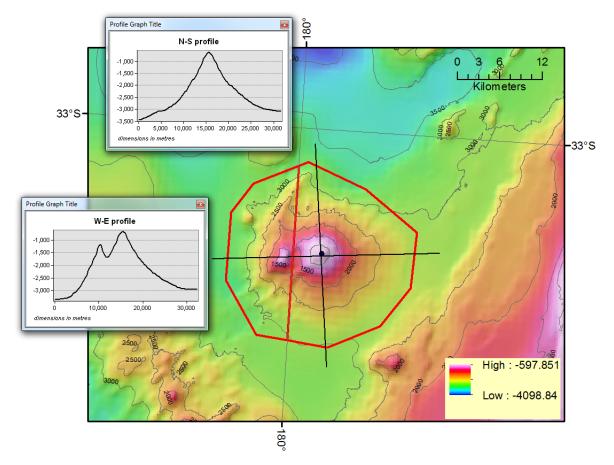


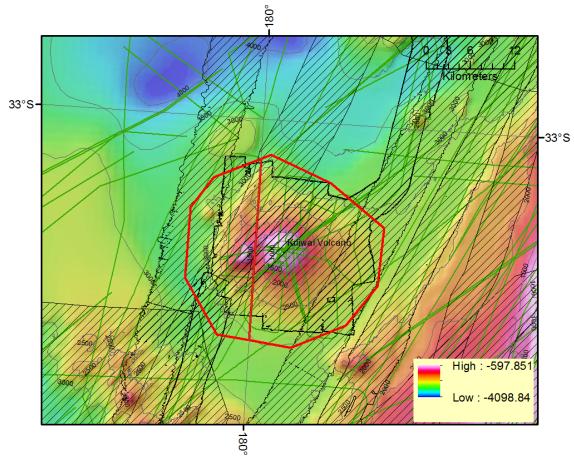
Fig. 2A of Wright et al 2006. Regional setting of the southern and central Kermadec subduction system, including newly discovered volcances (closed triangles) of the arc front [including Kuiwai]. Dashed lines show location of the subduction and extensional plate boundaries, east and west of the Kermadec microplate, respectively, with grey arrows showing estimated relative Pa–Ke and Ke–Au plate motion in millimeters per annum.



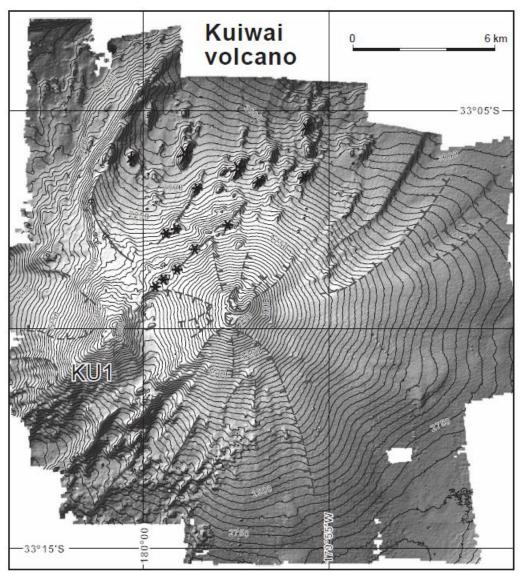
Bathymetry (250m grid) of Kuiwai Seamount and polygon around the feature. (please disregard the red 180 degree line within the outline polygon)



Profiles of Kuiwai Seamount (dimensions in metres)



Data coverage : Cross-hatch = multibeam bathymetry coverage Dark green = single beam bathymetry data



Source: Wright et al., 2006