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:	**Wright Seamounts**	**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:	31°51'S (centre) 31°43.967`S 31°46.367`S 31°47.483`S 31°48.70`S 31°51.633`S 31°54.333`S 31°56.717`S 31°56.017`S 31°53.683`S 31°51.383`S 31°48.20`S 31°46.00`S 31°43.35`S 31°43.317`S 31°43.40`S 31°43.967`S	179°11'W (centre) 179°12.533`W 179°10.917`W 179°8.733`W 179°7.217`W 179°7.133`W 179°8.233`W 179°10.417`W 179°14.567`W 179°18.983`W 179°19.933`W 179°19.7`W 179°18.25`W 179°15.80`W 179°14.683`W 179°13.55`W 179°12.533`W

Feature Description:	Maximum Depth:	2400 m	Steepness :	
	Minimum Depth :	850 m (western peak) 900 m (eastern peak)	Shape :	Twin volcanic cones
	Total Relief :	1550 m	Dimension/Size :	25 x 20 km

Associated Features:	As shown on the overview map below.

Chart/Map References:	~~Shown Named on Map/Chart:~~ Named in an internationally peer reviewed journal	de Ronde, CE J et al. (2007), Submarine hydrothermal activity along the mid-Kermadec Arc, New Zealand: Large-scale effects on venting. *Geochem. Geophys. Geosyst.*, 8, Q07007.
	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)**:**	Named after Dr Ian Wright, a leading scientist in the study of Kermadec volcanoes. The name was given by fellow scientists.

Discovery Facts:	Discovery Date:	1999
	Discoverer (Individual, Ship):	RV Maurice Ewing

Supporting Survey Data, including Track Controls:	Date of Survey:	1999 - 2012
	Survey Ship:	RV Maurice Ewing (1999), RV Tangaroa (2004, 2012)
	Sounding Equipment:	Atlas Hydrosweep DS2, EM300, EM302 multibeam
	Type of Navigation:	GPS and DGPS
	Estimated Horizontal Accuracy (nm):	25 m
	Survey Track Spacing:	Multiple tracks, variable spacing
	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

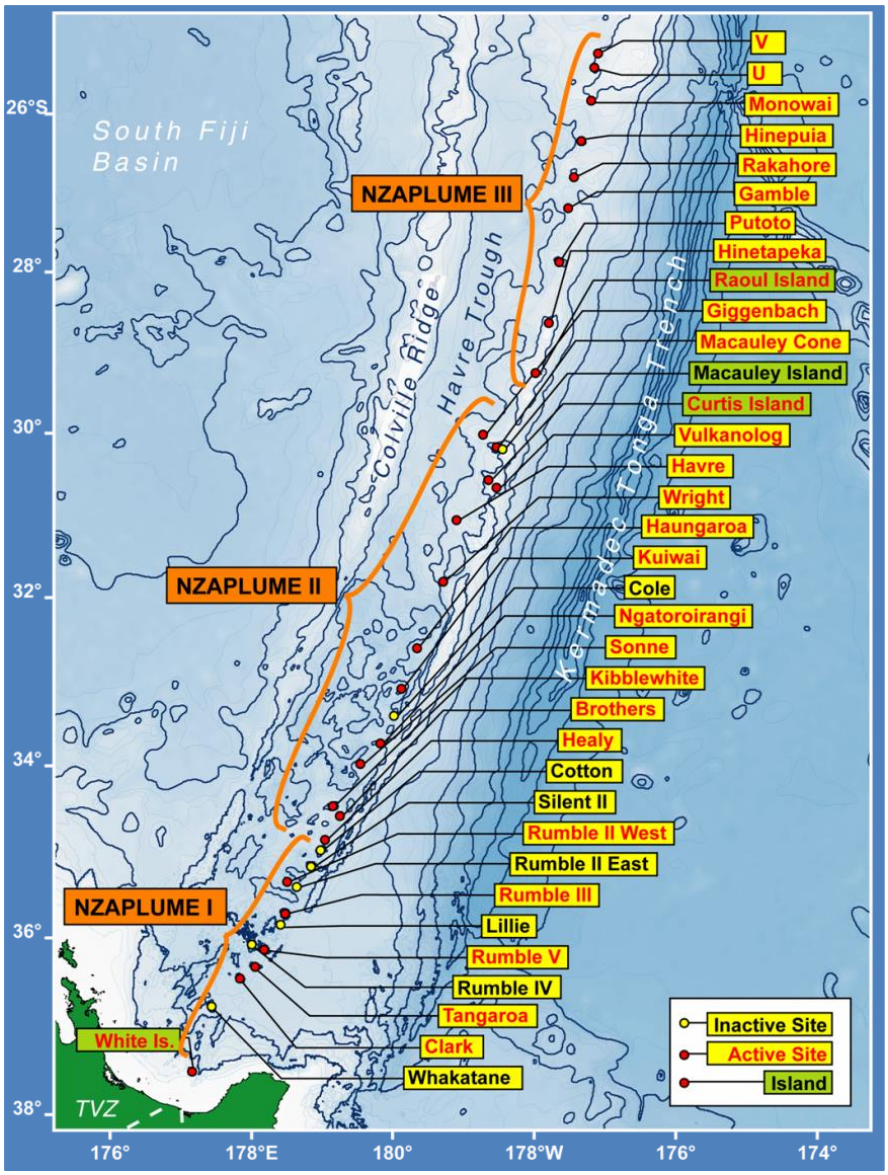
Remarks:	Informally named Wright Volcanic Centre. The New Zealand Geographic Board gazetted **Wright Seamounts** as an official undersea feature name on 26 May 2016.

NOTE : This form should be forwarded, when completed :

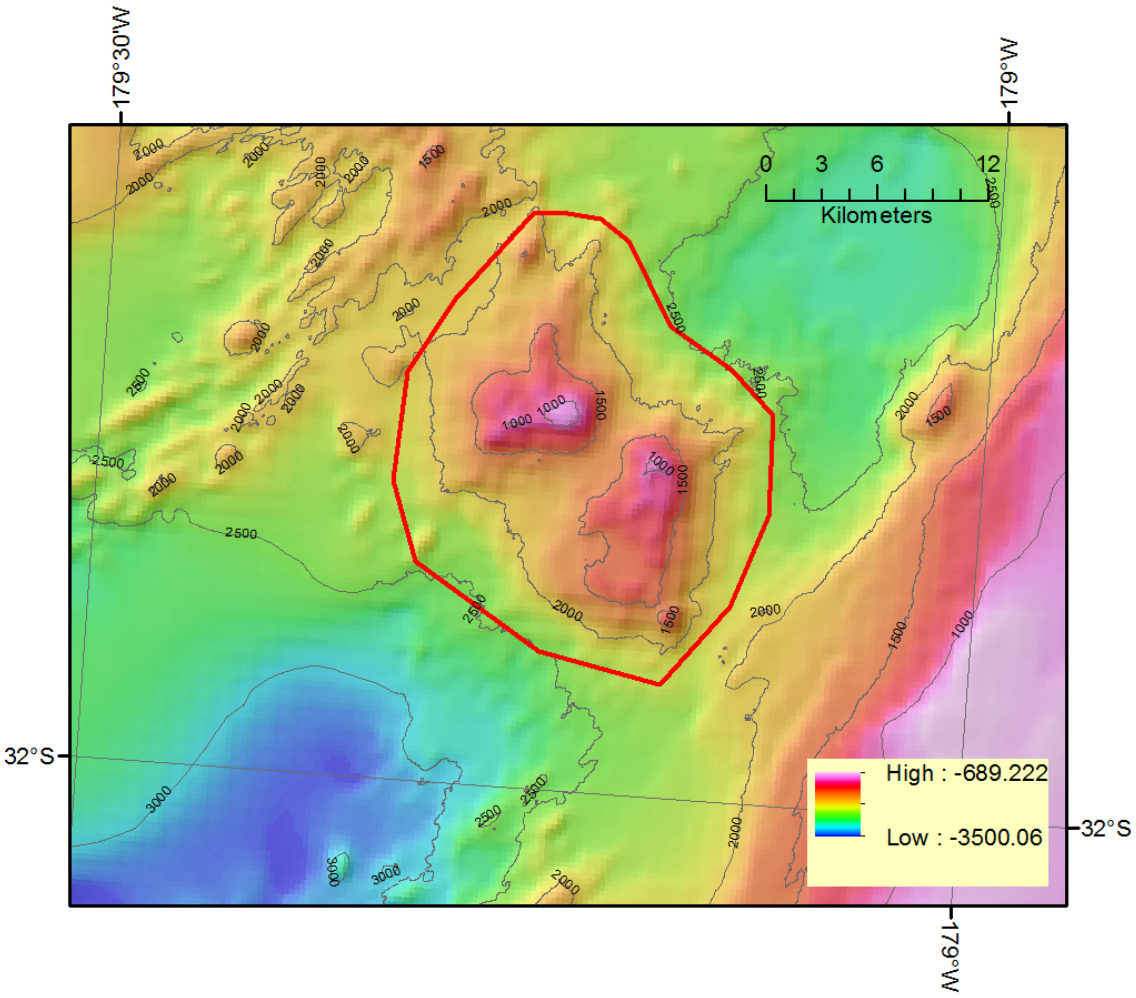
a) **If the undersea feature is located inside the external limit of the territorial sea**:-
to your "National Authority for Approval of Undersea Feature Names" (see page 2-9) or, if this does not exist or is not known, either to the IHB or to the IOC (see addresses below);

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 :

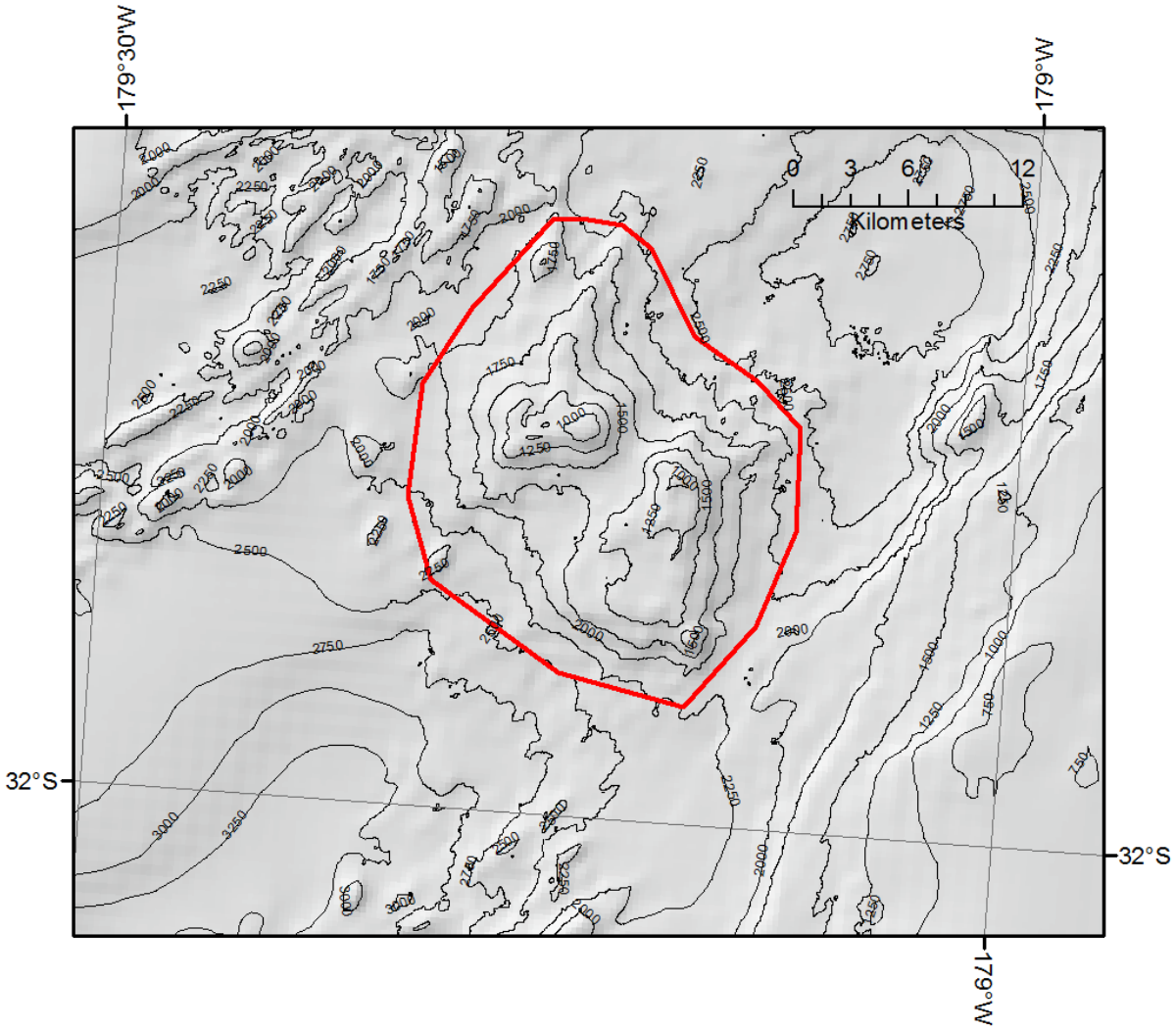
International Hydrographic Bureau (IHB) 4, Quai Antoine 1er B.P. 445 MC 98011 MONACO CEDEX Principality of MONACO Fax: +377 93 10 81 40 E-mail: info@ihb.mc	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy 75700 PARIS France Fax: +33 1 45 68 58 12 E-mail: info@unesco.org



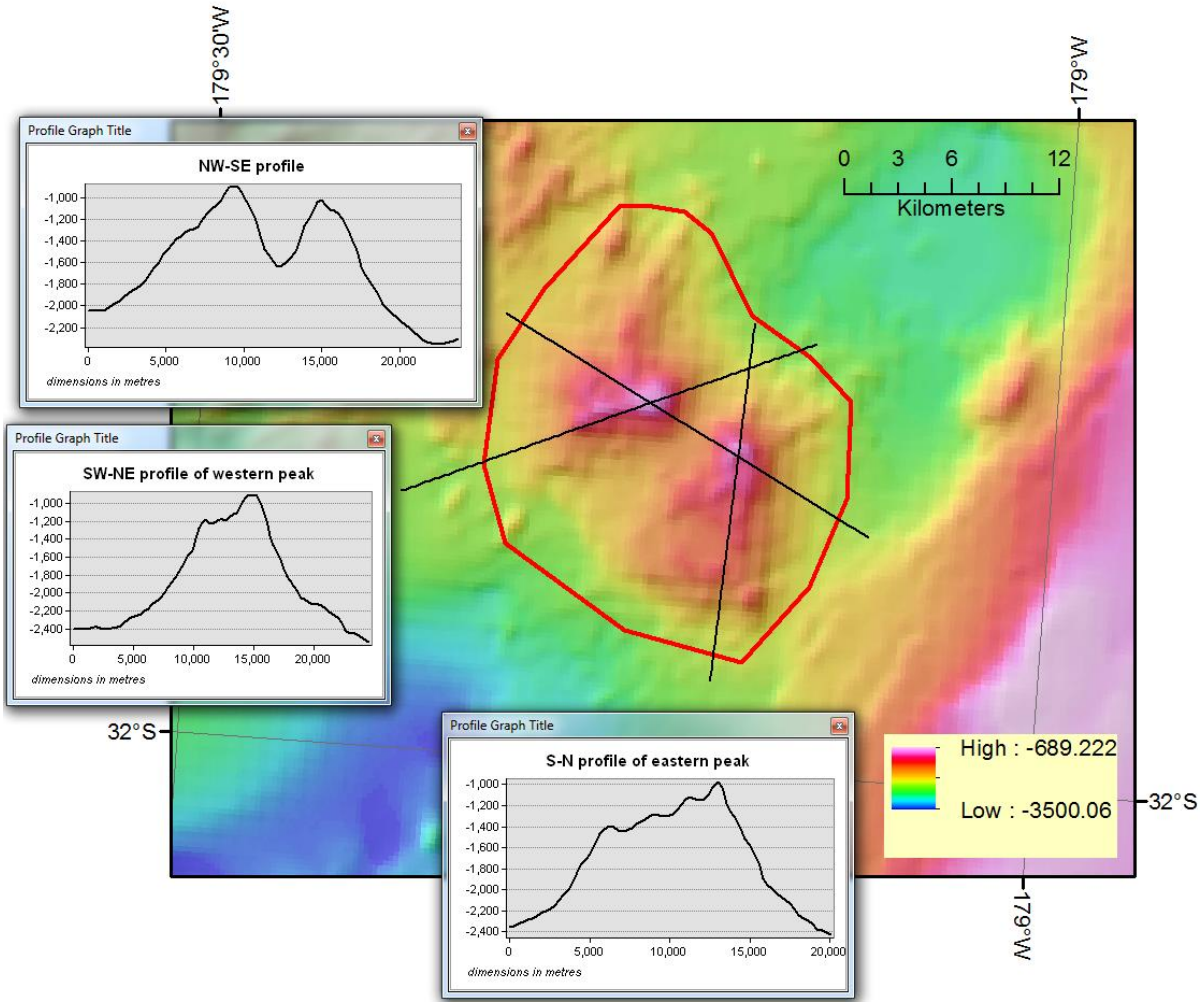
Commonly used names of volcanoes on the Kermadec Arc (de Ronde, pers. com. 2015). NZAPLUME I (1999) NZAPLUME II (2002) and NZAPLUME III (2004) refer to New Zealand-led surveys that mapped the regions and named many of the features (U and V are in Tongan waters). Active sites are those that are hydrothermally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



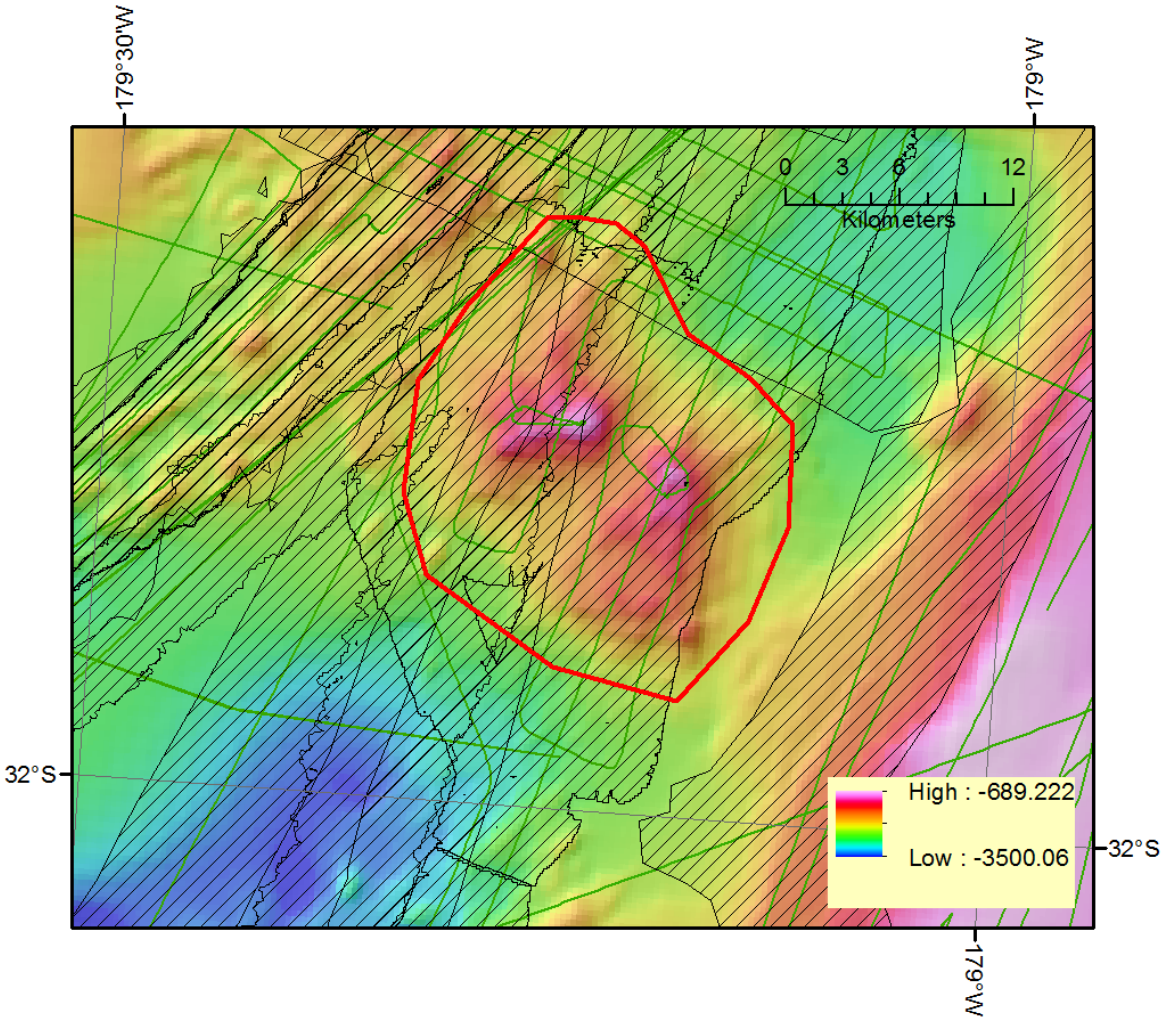
Bathymetry (250m grid) of Wright Seamounts and polygon around the feature



Bathymetry contours on hillshade background



Profiles of Wright Seamounts (dimensions in metres)



Data coverage

Cross-hatch = multibeam bathymetry coverage

Dark green = single beam bathymetry data

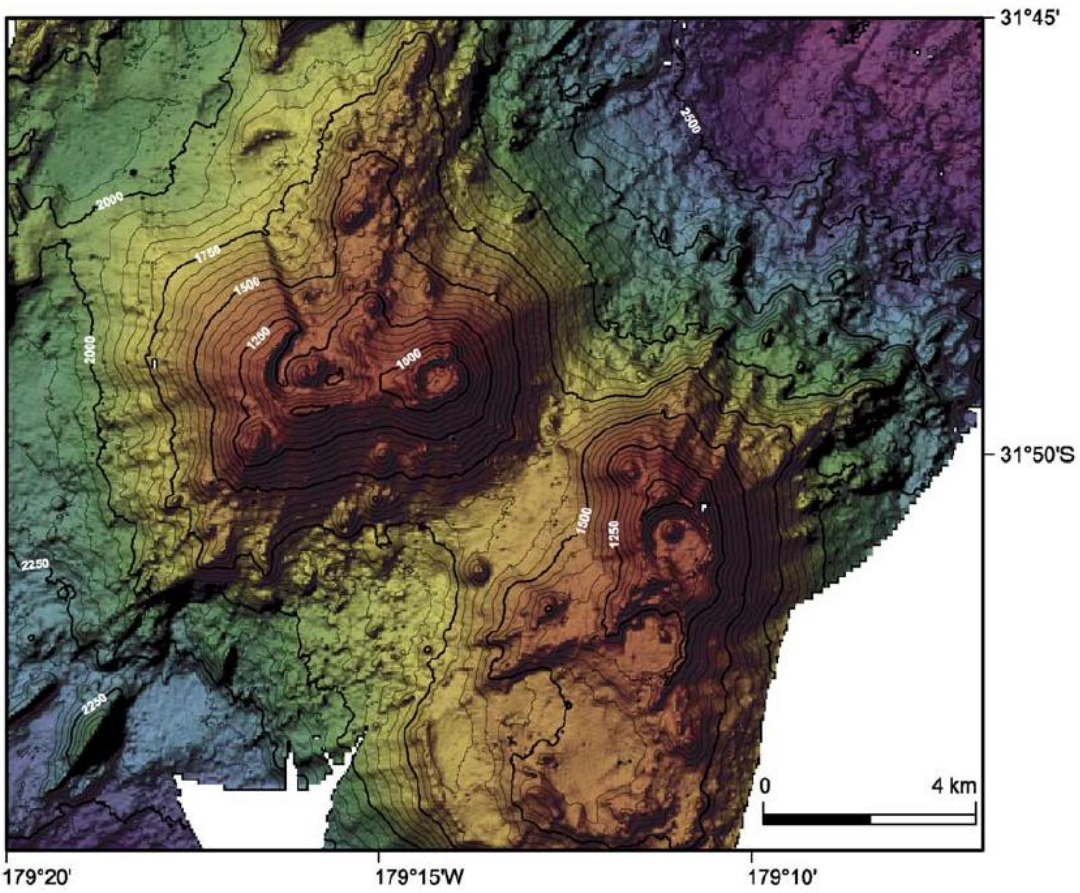


Figure 3. The Wright volcanic center is dominated by two large volcanic cones that each host two summit craters, with the largest 2 km across. A small cone rises out of one of the craters at each of the major volcanic edifices. This center also sits atop the Kermadec Ridge with each of the major cones having an elevation of at least 900 m above the seafloor. A CTDO tow-yo was done W-E over the summit of the western edifice and a single vertical cast in the center of the northern crater of the eastern edifice, where evidence for hydrothermal activity was noted. The dominant ~NE-SW structural grain of the regional fabric can be seen in the northern part of the map (compare to Cole volcano in Figure 2). This volcanic center was discovered during the 2004 NZAPLUME III cruise, which took a different route (i.e., more along the Kermadec Ridge) than that of the NZAPLUME II survey.

Source: de Ronde et al., 2007