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:	**Kibblewhite 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:	34°34.57'S (centre)	179°15.72'E (centre)
	34°33.667`S	179°13.017`E
	34°32.45`S	179°14.267`E
	34°32.083`S	179°15.933`E
	34°32.6`S	179°17.333`E
	34°33.1`S	179°18.183`E
	34°34.45`S	179°19.183`E
	34°36.017`S	179°19.55`E
	34°37.217`S	179°19.867`E
	34°38.733`S	179°18.35`E
	34°39.15`S	179°16.25`E
	34°39.25`S	179°13.833`E
	34°38.533`S	179°13.517`E
	34°36.967`S	179°13.5`E
	34°35.45`S	179°12.267`E
	34°34.417`S	179°12.45`E
	34°33.667`S	179°13.017`E

Feature Description:	Maximum Depth:	2200 metres	Steepness :	
	Minimum Depth :	990 metres	Shape :	Volcanic cone with small satellite peak on southern flank
	Total Relief :	1210 metres	Dimension/Size :	10 x 13 km

Associated Features:	Kibblewhite Seamount lies on the Kermadec volcanic arc 38 km NE of Brothers Seamount and 20 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. *Journal of Volcanology and Geothermal Research* 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)**:**	Named after the New Zealand ocean researcher Dr Alick Charles Kibblewhite (died 9-9-2015). Dr Kibblewhite was the first person to detect submarine volcanoes northeast of New Zealand using the RNZN hydrophone array and then subsequently surveyed several of the volcanoes in the southern Kermadec arc.

Discovery Facts:	Discovery Date:	Not recorded
	Discoverer (Individual, Ship):	HMNZS Tui

Supporting Survey Data, including Track Controls:	Date of Survey:	1998-2012
	Survey Ship:	RV Yokosuka (2004), RV Sonne (1998, 2007), RV Tangaroa (2002, 2012)
	Sounding Equipment:	SeaBeam 2112, Atlas Hydrosweep DS-2, SeaBeam2000, EM122, EM300, EM302 multibeam
	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.	

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 Kibblewhite Volcano. The New Zealand Geographic Board gazetted **Kibblewhite Seamount** as an official undersea feature name on 26 May 2016.

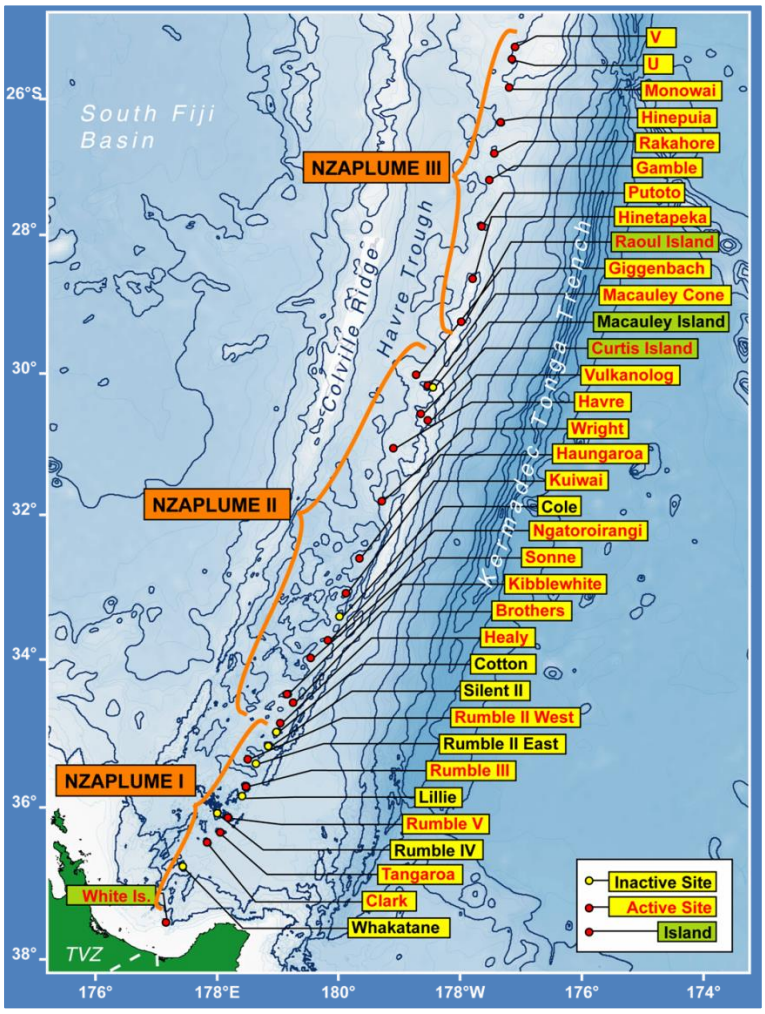
NOTE : This form should be forwarded, when completed :

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	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy

MC 98011 MONACO CEDEX Principality of MONACO Fax: +377 93 10 81 40 E-mail: info@ihb.mc	75700 PARIS France Fax: +33 1 45 68 58 12 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.

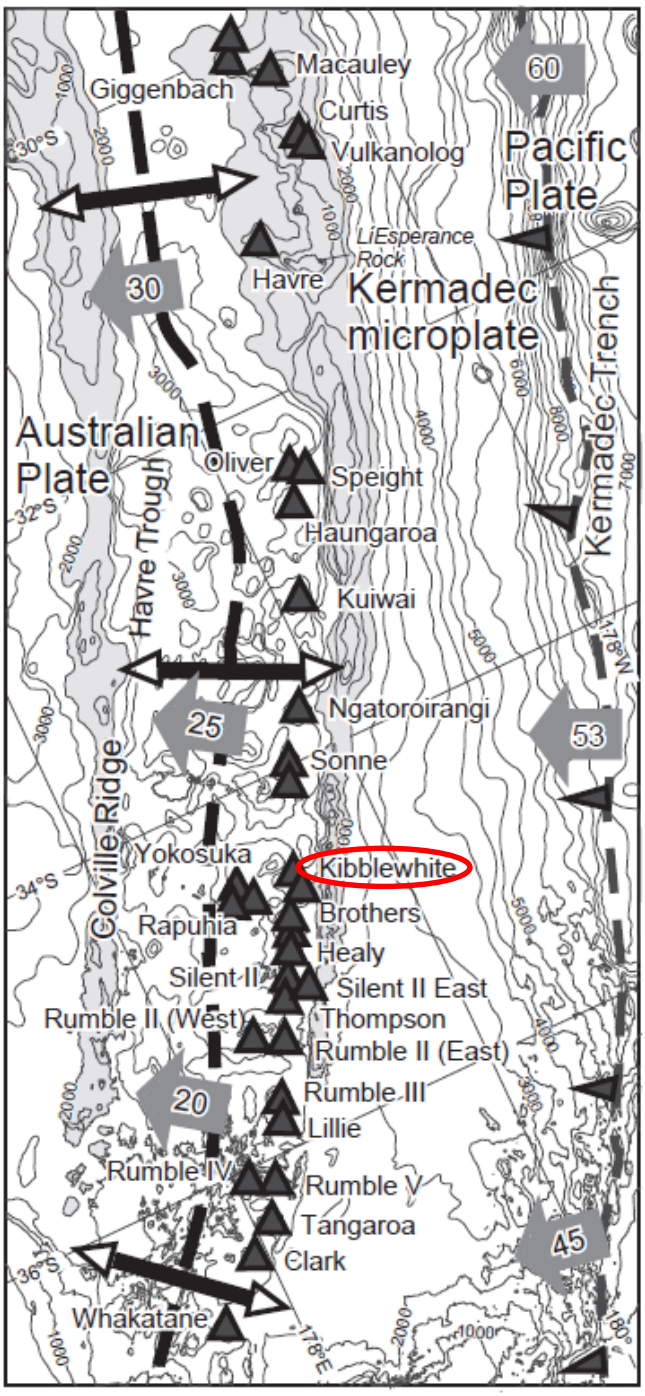
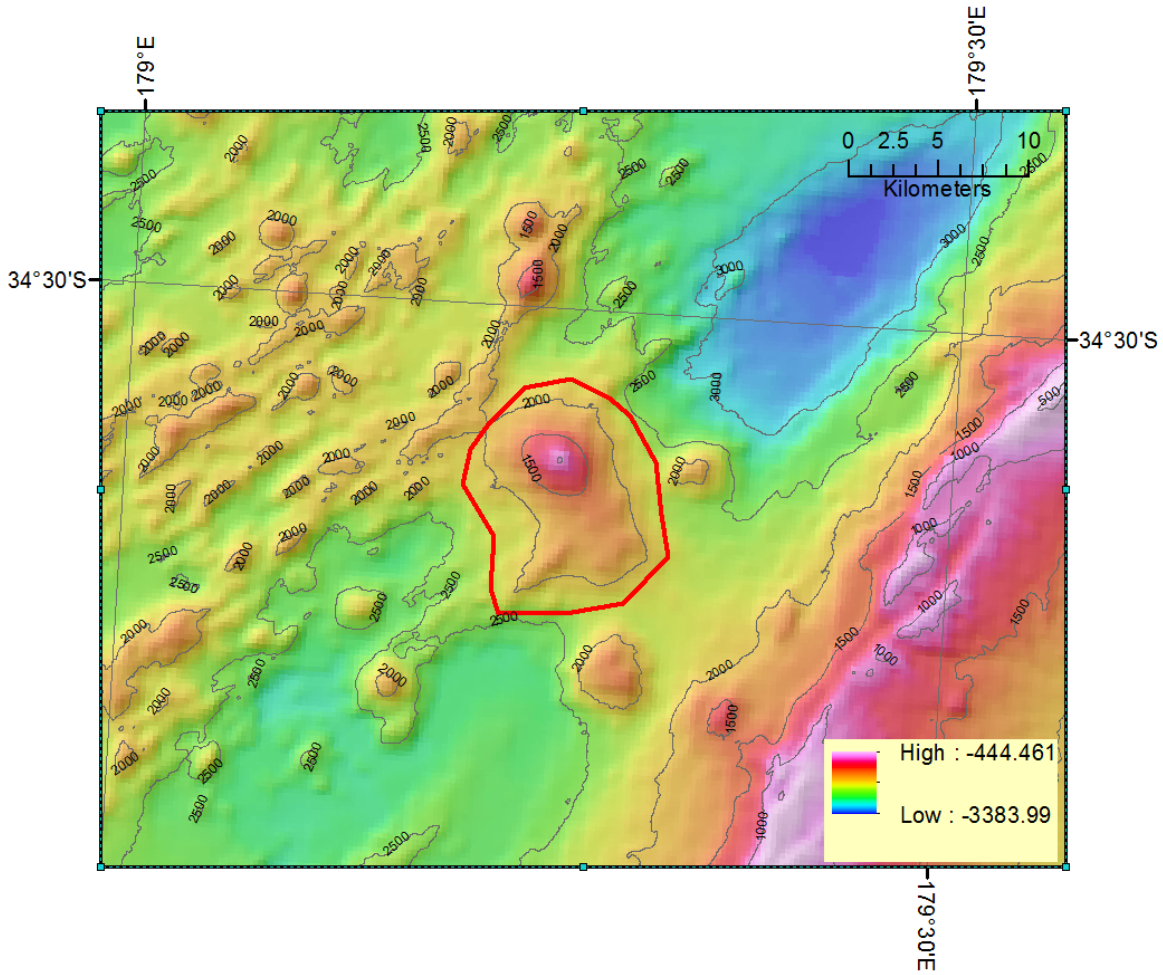
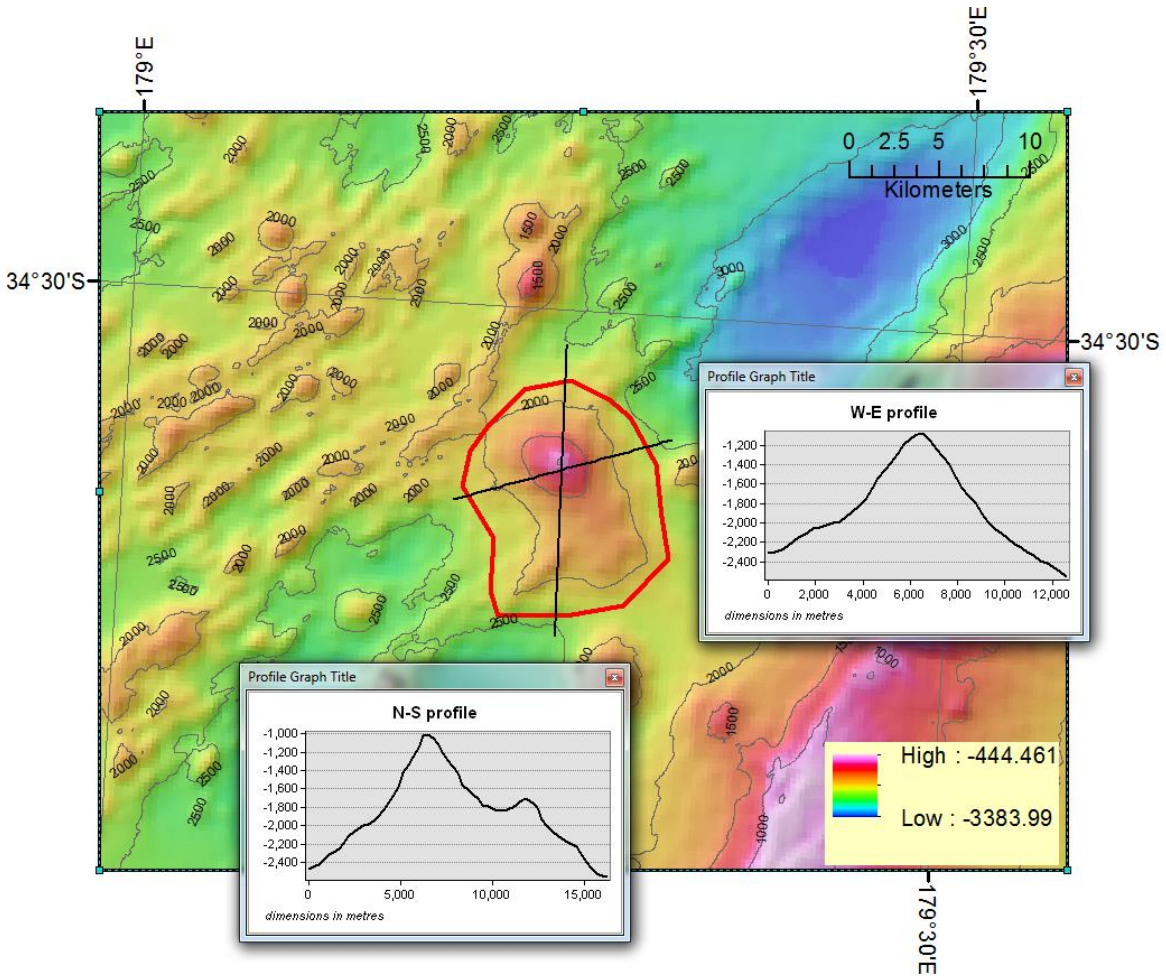


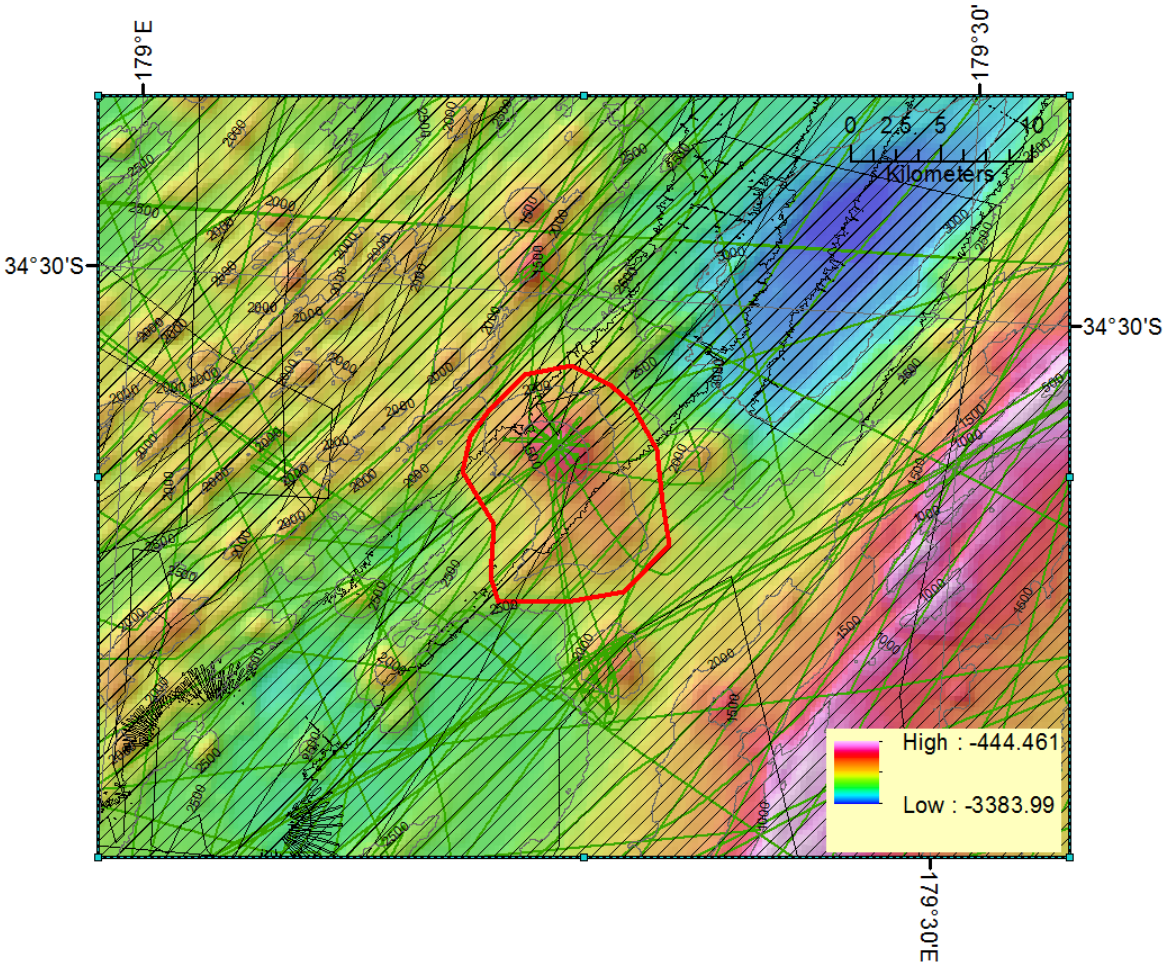
Fig. 2A of Wright et al 2006. Regional setting of the southern and central Kermadec subduction system, including newly discovered volcanoes (closed triangles) of the arc front [including Kibblewhite]. Dashed lines show location of the subduction and extensional plate boundaries, east and west of the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



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



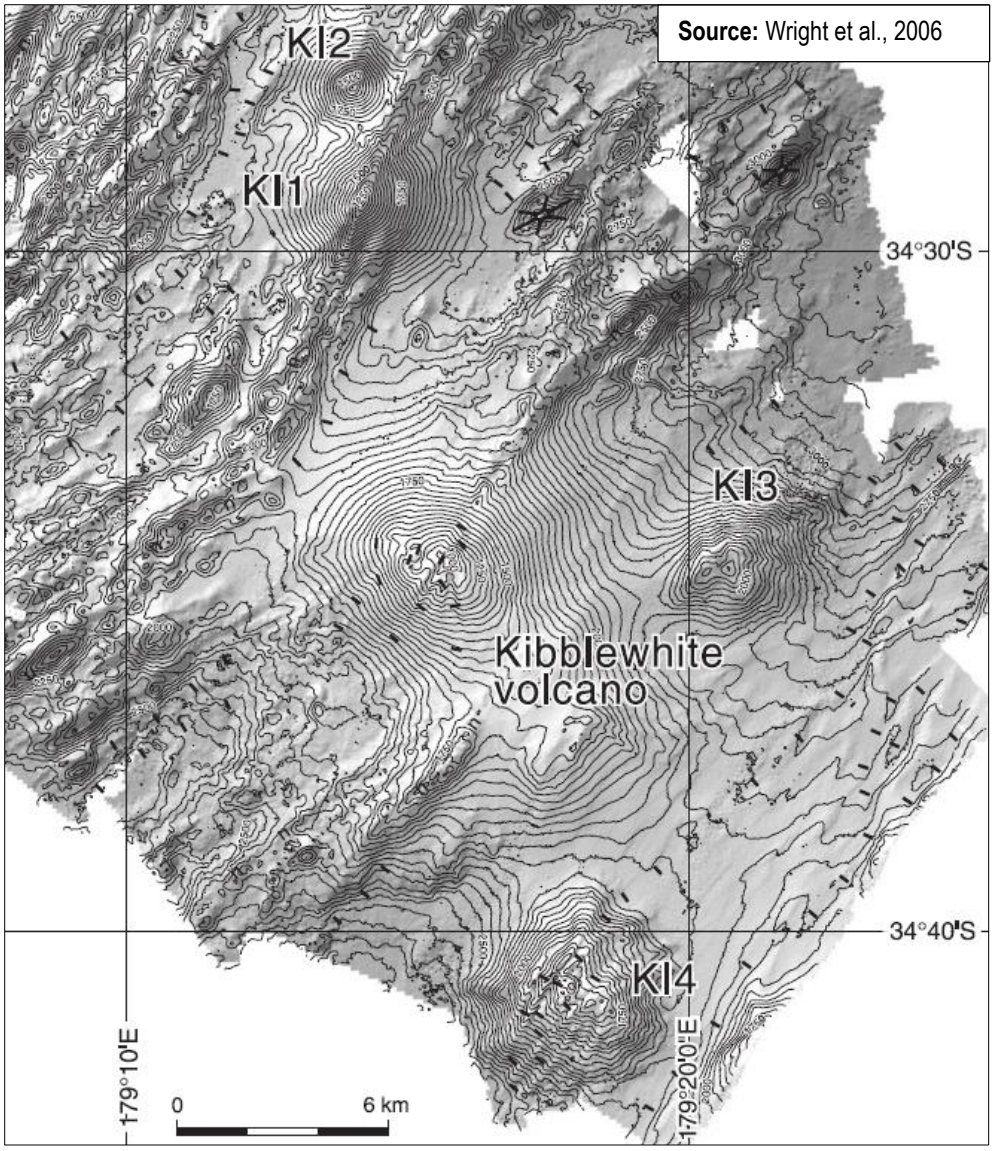
Profiles of Kibblewhite Seamount (dimensions in metres), summit elevation = 990 metres.



Data coverage :

Cross-hatch = multibeam bathymetry coverage

Dark green = single beam bathymetry data


Source: Wright et al., 2006
KI2
KI1
34°30'S
KI3
Kibblewhite
volcano
34°40'S
KI4
179°10'E
179°20'E
0
6 km