

UNDERSEA FEATURE NAME PROPOSAL

(Sea NOTE overleaf)

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

Name Proposed:	Speight Knoll	Ocean or Sea:	South Pacific Ocean
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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.

Coordinates:	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	32°23.30'S (centre)	179°35.46'W (centre)
	32°22.233`S	179°35.683`W
	32°22.283`S	179°34.083`W
	32°22.883`S	179°33.667`W
	32°24.05`S	179°34.167`W
	32°24.383`S	179°35.767`W
	32°23.817`S	179°36.967`W
	32°22.833`S	179°36.833`W
	32°22.2`S	179°36.183`W
32°22.233`S	179°35.683`W	

Feature Description:	Maximum Depth:	2800 metres	Steepness :	
	Minimum Depth :	1840 metres	Shape :	Knoll
	Total Relief :	960 metres	Dimension/Size :	5 x 4 km

Associated Features:	Speight Knoll lies 7 km east of Oliver Knoll and 25 km north of Haungaroa Seamount
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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 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):	Named for Professor R Speight (1867-1949), Professor of Geology at Canterbury University, who wrote the first papers on the volcanic geology of the Kermadec Islands.
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Discovery Facts:	Discovery Date:	1998
	Discoverer (Individual, Ship):	RV Sonne

	Date of Survey:	1998 - 2002
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Supporting Survey Data, including Track Controls:	Survey Ship:	RV Sonne (1998), RV Tangaroa (2002)
	Sounding Equipment:	Atlas Hydrosweep DS2, EM300 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 Speight Volcano. The New Zealand Geographic Board gazetted Speight Knoll 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 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
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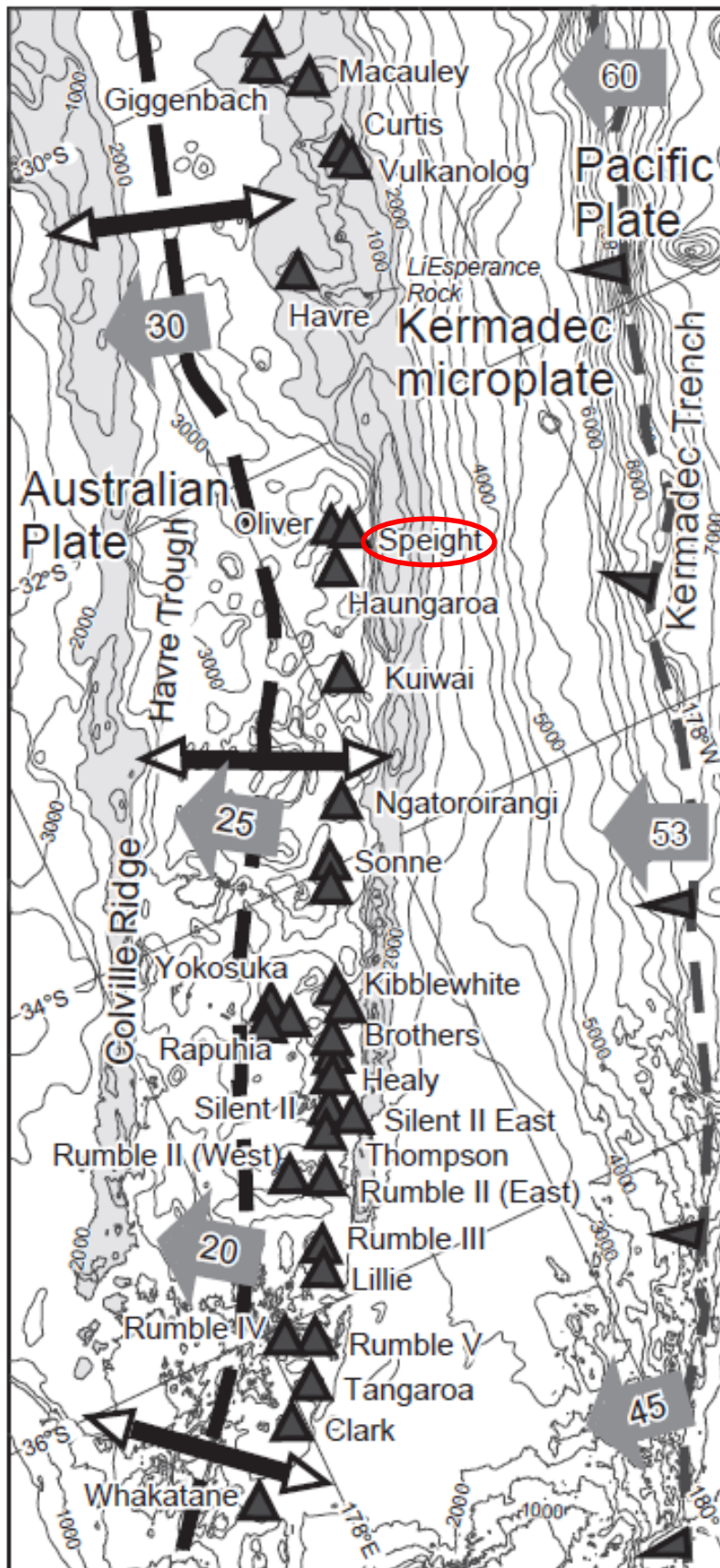
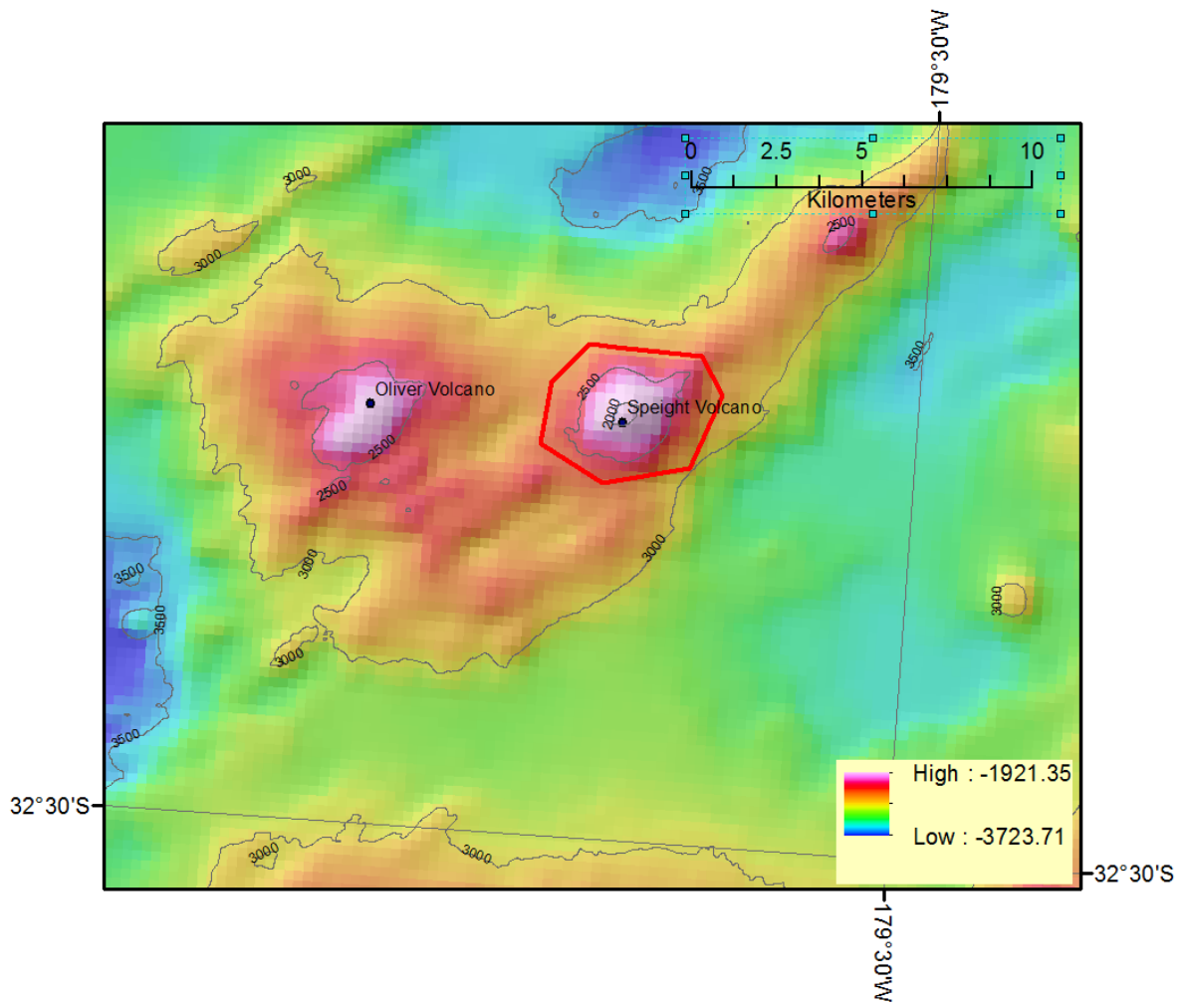
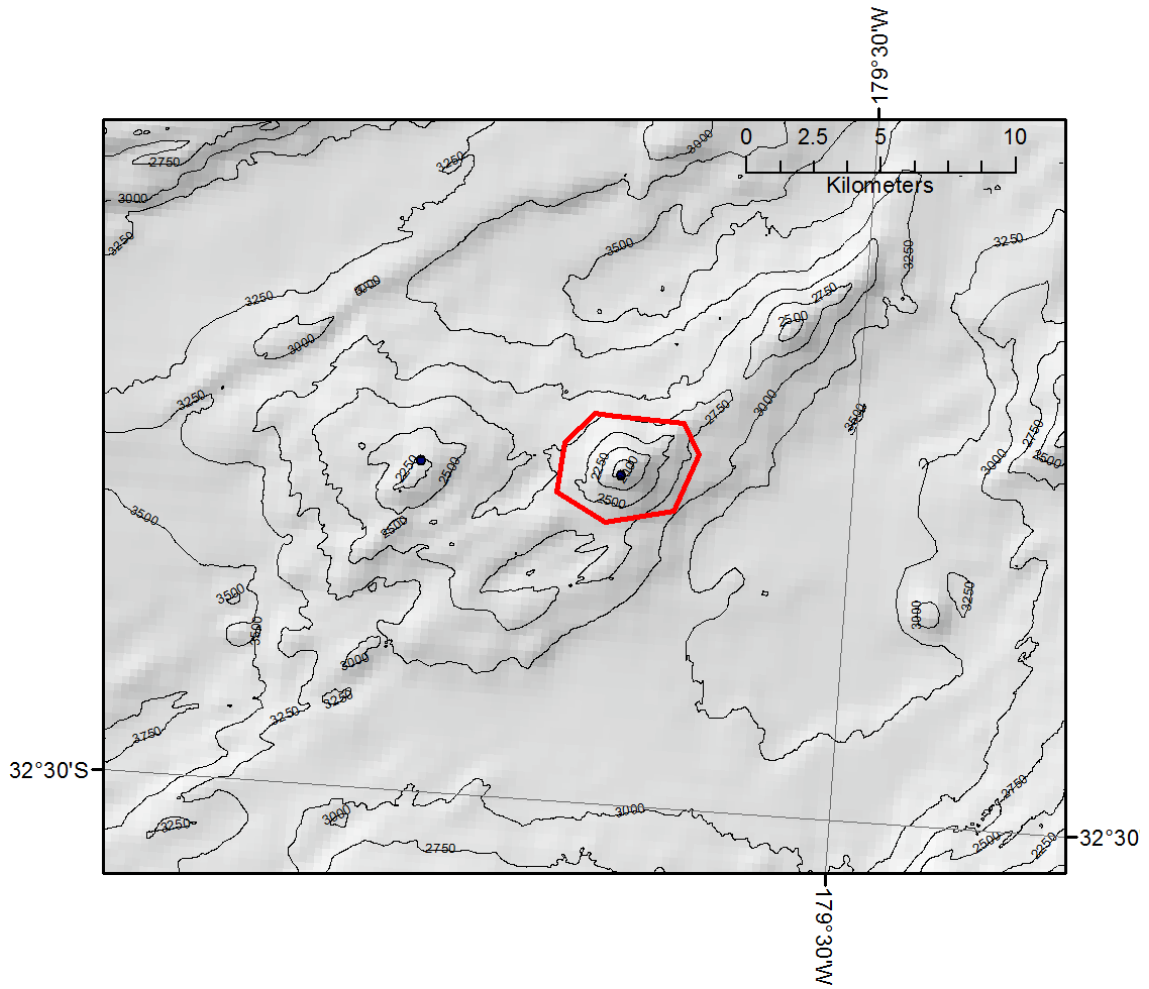


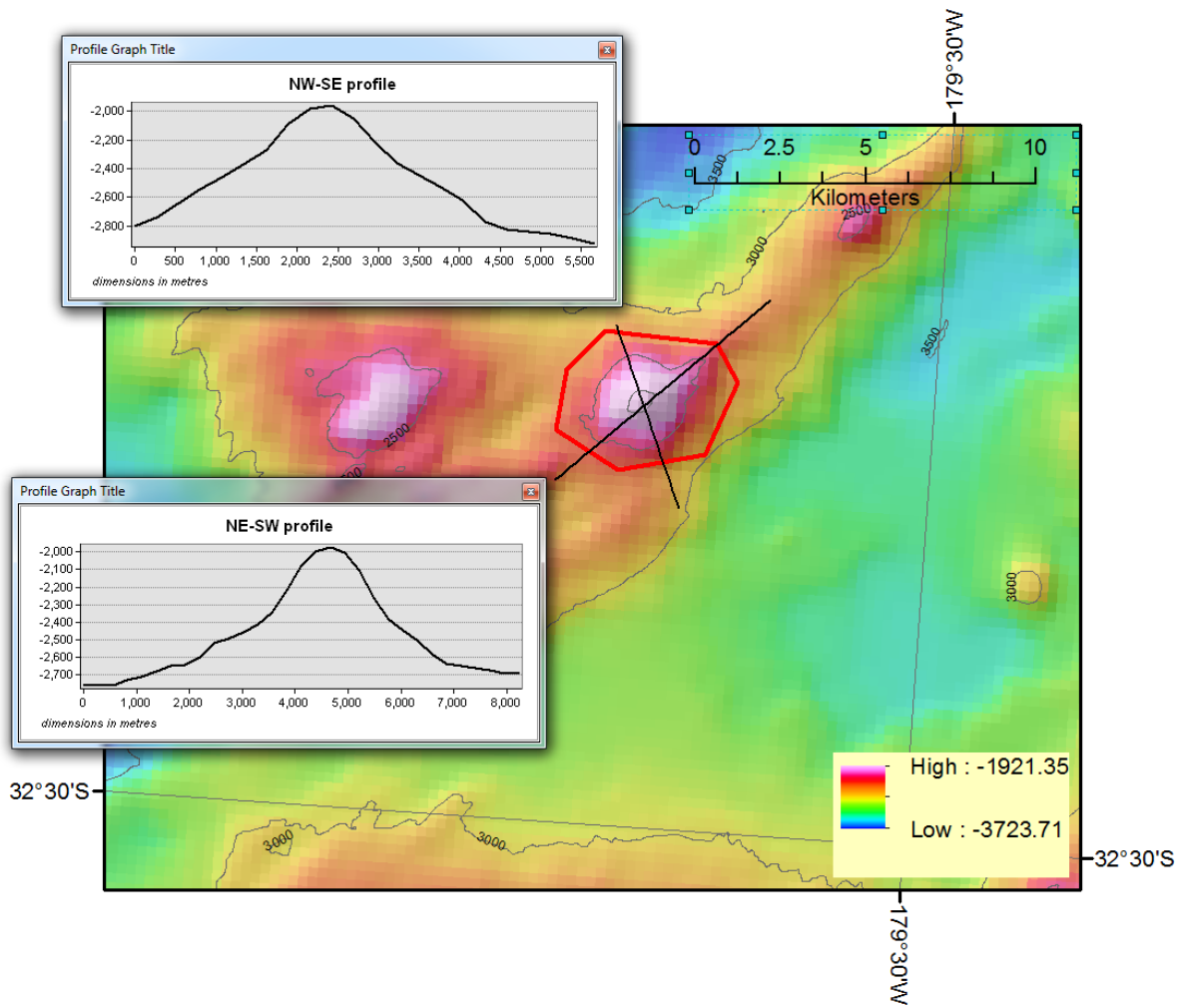
Fig. 2A of Wright et al 2006. Regional setting of the southern and central Kermadec subduction system, including newly discovered volcanoes (closed triangles) of the arc front [including Oliver and Speight]. Dashed lines show location of the subduction and extensional plate boundaries, east and west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



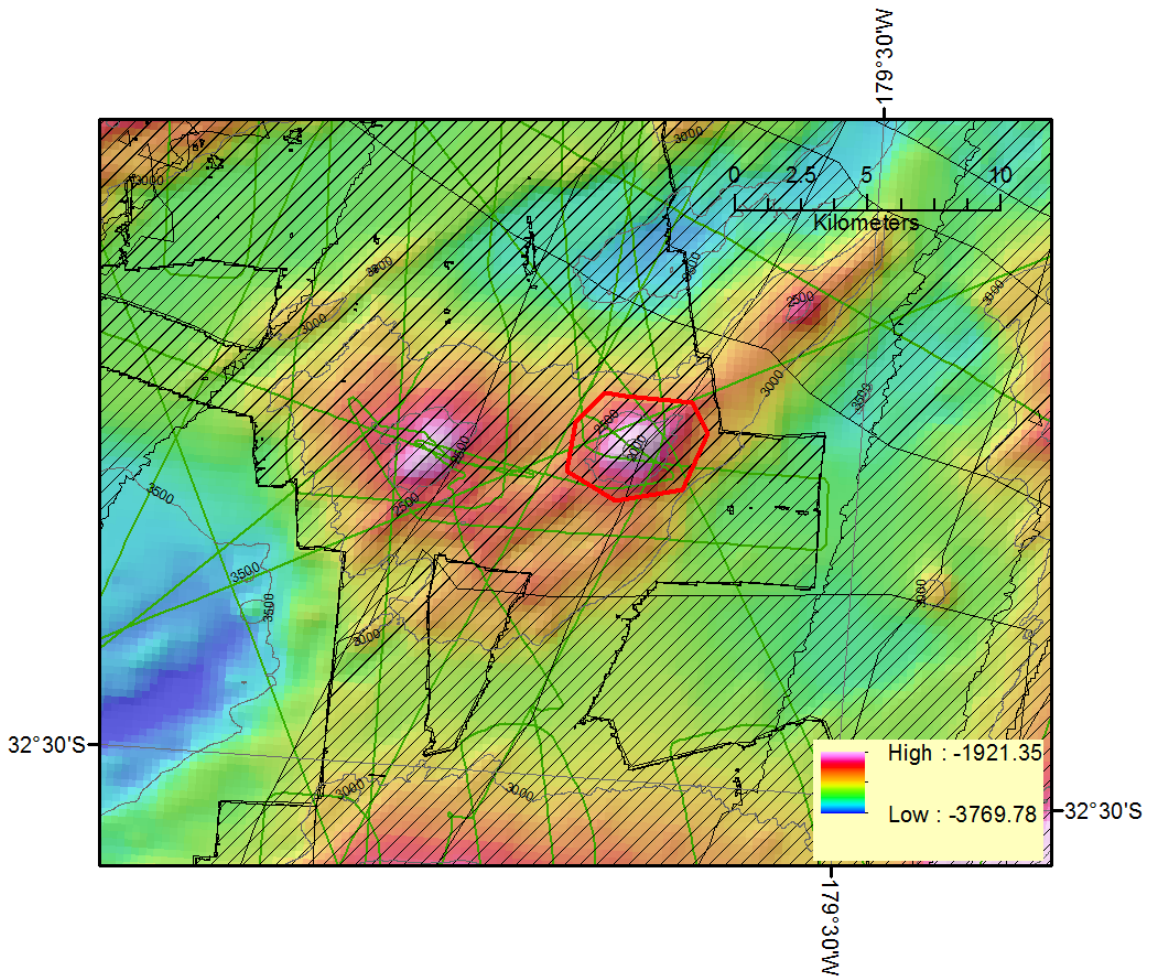
Bathymetry of Speight Knoll (250m grid) and polygon around the feature.



Bathymetry contours on hillshade background



Profiles of Speight Knoll (dimensions in metres)



Data coverage

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

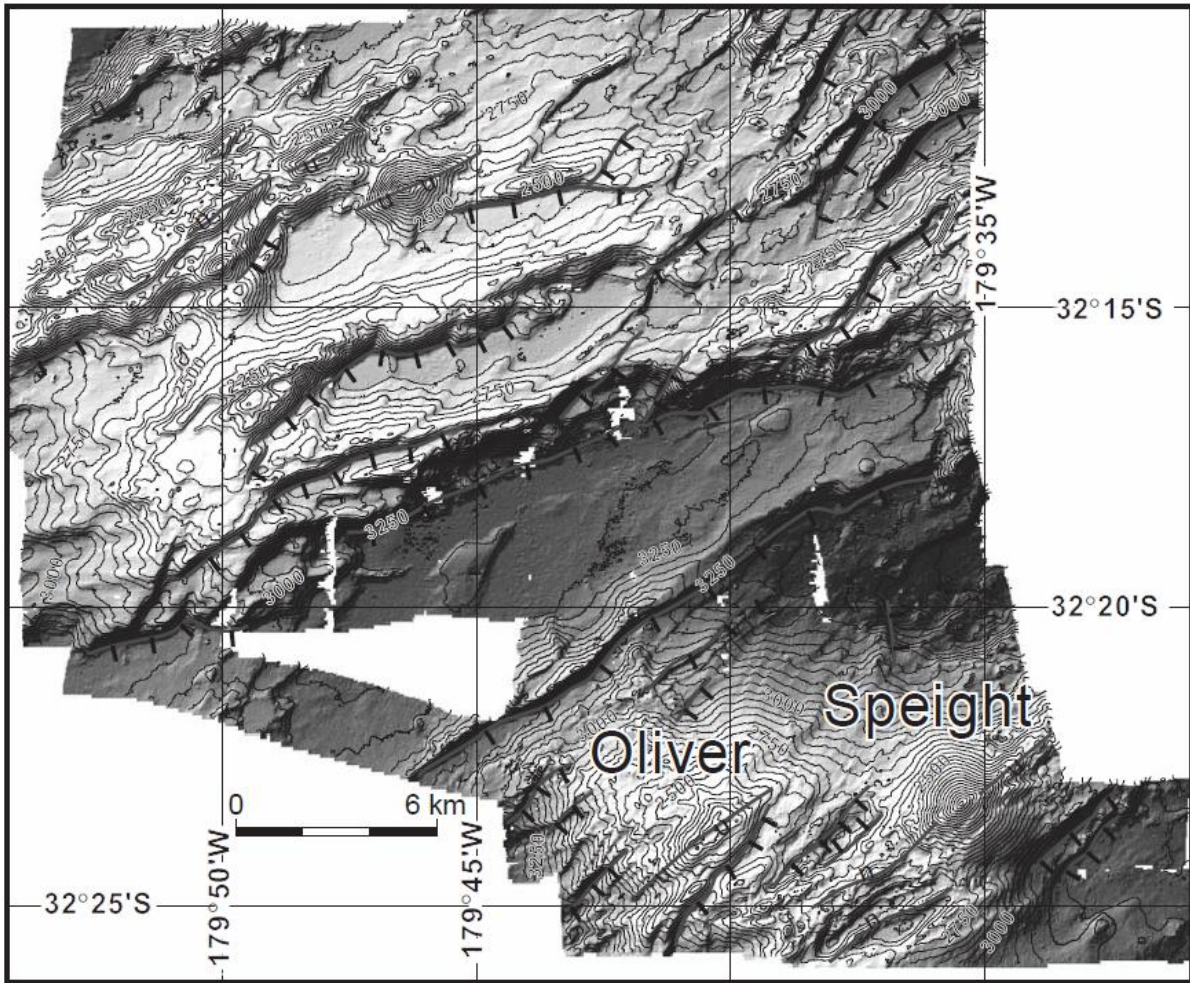


Figure 9 in Wright et al., 2006 showing the bathymetry and synoptic volcanic geology of Speight volcano.