

UNDERSEA FEATURE NAME PROPOSAL
(See IHO-IOC Publication B-6 and **NOTE** overleaf)

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

Name Proposed:	Narra Spur	Ocean or Sea:	Philippine Sea
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Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
Yes	Yes	Yes				

* 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:	18° 32.32'N	(summit)	126° 37.7'E	(summit)
	17° 40.11'N	(bounds)	125° 15.54'E	(bounds)
	18° 9.37'N		125° 52.31'E	
	18° 17.14'N		126° 2.61'E	
	18° 24.34'N		126° 7.6'E	
	18° 36.49'N		126° 3.28'E	
	18° 41.01'N		126° 32.71'E	
	18° 49.15'N		126° 57.1'E	
	18° 49.3'N		126° 7.29'E	
	18° 33.5'N		126° 2.3'E	
	18° 24.03'N		126° 54.79'E	
	18° 17.75'N		126° 33.43'E	
	17° 37.15'N		126° 12.59'E	
	17° 24.7'N		126° 33.17'E	
	17° 14.71'N		126° 34.62'E	
	17° 6.48'N		126° 22.68'E	
	17° 0.24'N		126° 4.0'E	
17° 40.11'N	(bounds)	125° 15.54'E	(bounds)	

Feature Description:	Maximum Depth:	-5,544.87 m	Steepness :	
	Minimum Depth :	-1,179.21 m	Shape :	Spear Shape
	Total Relief :	4,365.66 m	Dimension/Size :	202,003.54m x 206,983.35m

Associated Features:	Philippine Rise (Benham Rise), Narra Saddle
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Chart/Map References:	Shown Named on Map/Chart:	Chart 4726A
	Shown Unnamed on Map/Chart:	
	Within Area of Map/Chart:	Chart 4726A

Reason for Choice of Name (if a person, state how associated with the feature to be named):	Narra is the national tree of the Philippines. The Narra tree is a symbol of many things. It is tall and symbolizes the lofty ideals of the Filipino people. It is tall, strong, enduring and signify the persistence of the Filipinos in their demand for freedom. While other trees are bent or uprooted by storms, the narra usually withstands such disaster. It may strip its leaves or break off smaller branches, but the tree itself remains upright. As the Narra has resisted the tempest, so has the Filipinos fought his oppressors. The feature was first named in the Philippine submission of an extended
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	continental shelf in the Philippine Rise (Benham Rise) Region.
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Discovery Facts:	Discovery Date:	July 3, 2010
	Discoverer (Individual, Ship):	NAMRIA

Supporting Survey Data, including Track Controls:	Date of Survey:	March 19-20,29, 2008; April 11-13, 2008; May 3-6, 2008; June 8-18, 2008; September 3-7, 2008; July 1-3, 2009; June 24-28, 2010; July 3, 2010
	Survey Ship:	BRP HYDROGRAPHER PRESBITERO
	Sounding Equipment:	Seabeam 2112
	Type of Navigation:	GPS with IMU
	Estimated Horizontal Accuracy, in nautical miles (nm):	0.027 nm (50 m)
	Survey Track Spacing:	5 nm
	Supporting material can be submitted as Annex in analog or digital form.	

Proposer(s):	Name(s):	Usec. PETER N. TIANGCO, PhD
	Date :	August 2018
	E-mail :	pntiangco@namria.gov.ph
	Organization and Address:	National Mapping and Resource Information Authority (NAMRIA) Lawton Avenue, Fort Andres Bonifacio, Taguig City, Philippines 1634
	Concurrer (name, e-mail, organization and address):	Department of Foreign Affairs (DFA), Roxas Boulevard, Pasay City, Philippines 1300 moao.div2@dfa.gov.ph
		Department of National Defense (DND), Camp Emilio Aguinaldo, Quezon City, Philippines 1110

Remarks:	The proposal was prepared by the Technical Working Group on Undersea Feature Names of the Hydrography Branch of NAMRIA, in cooperation with the National Institute of Geological Sciences – University of the Philippines and Mines and Geosciences Bureau.
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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 Publication B-6) or, if this does not exist or is not known, either to the IHO 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 IHO or to the IOC, at the following addresses :

International Hydrographic Organization (IHO) 4b, Quai Antoine 1er B.P. 445 MC 98011 MONACO CEDEX Principality of MONACO Fax: +377 93 10 81 40 E-mail: info@iho.int Web: www.iho.int	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy 75700 PARIS France Fax: +33 1 45 68 58 12 E-mail: info@unesco.org Web: http://ioc-unesco.org/
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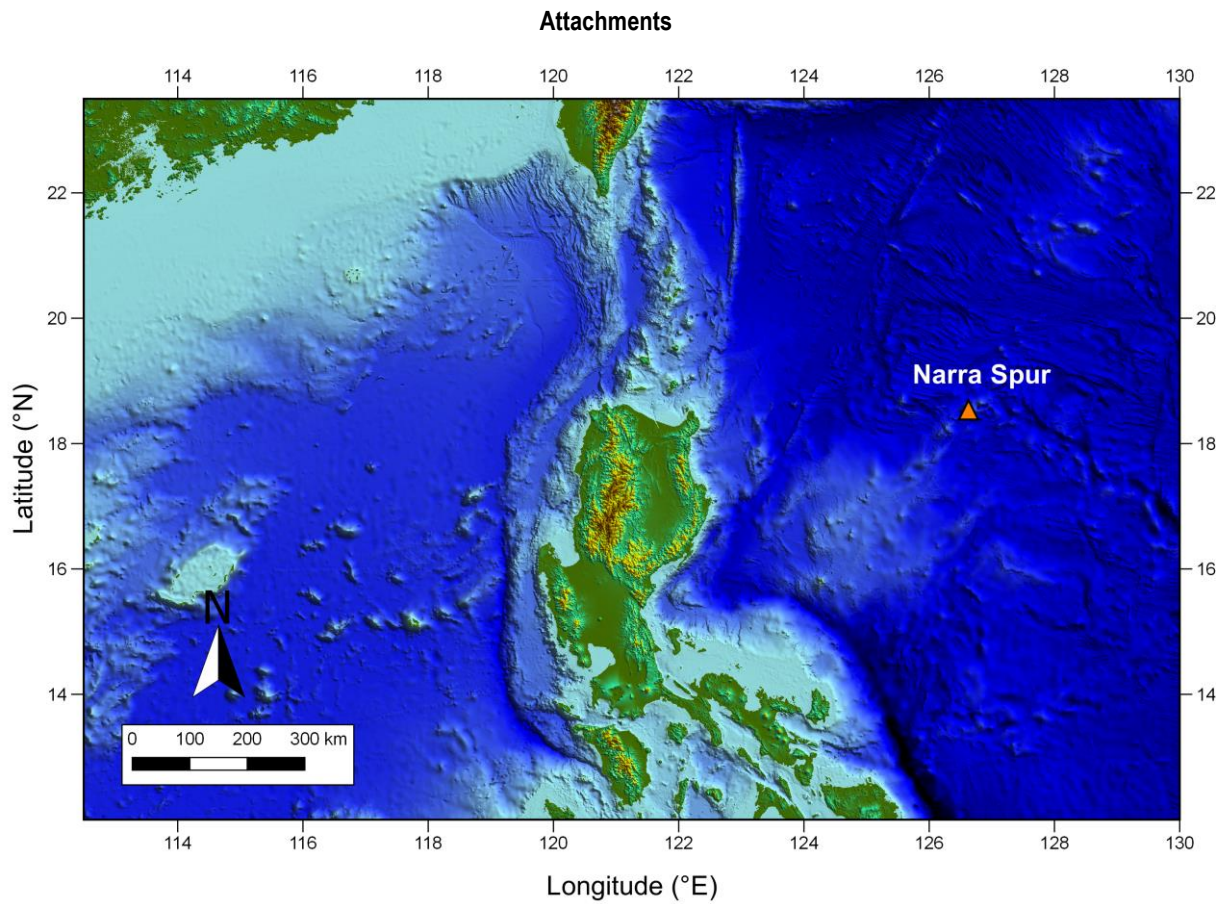


Fig. 1. Index map showing the location of Narra Spur.

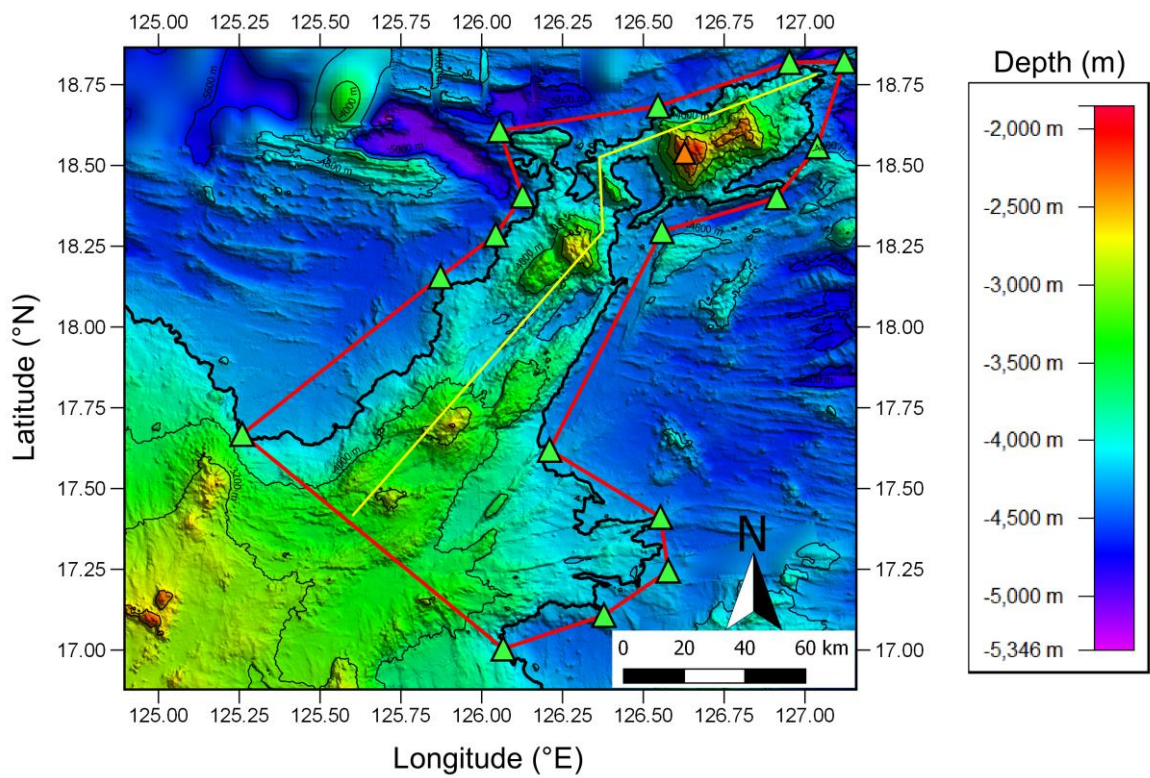


Fig. 2. Bathymetric map of the Narra Spur. Contour interval is 800 meters. Yellow line showing the connection of spur to a bigger area, the Benham Rise region.

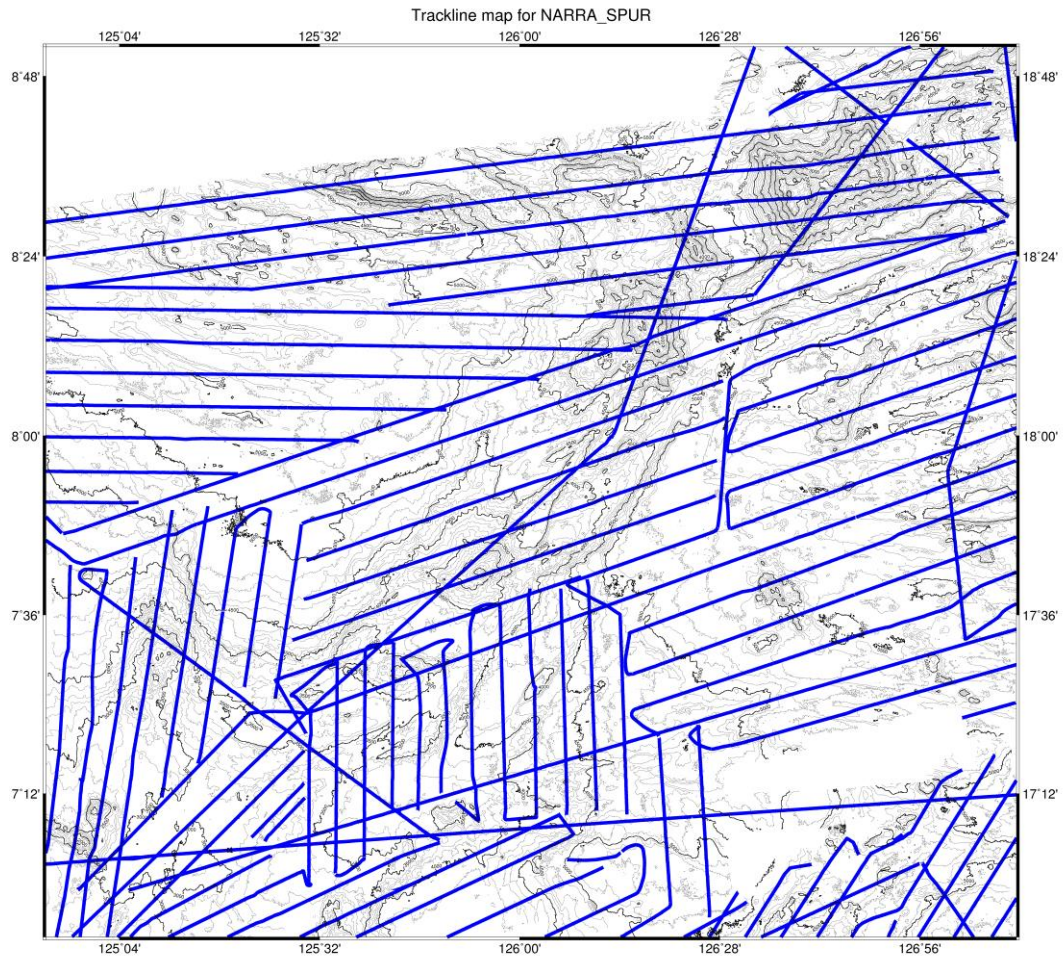


Fig 3. Bathymetric map of Narra Spur showing track lines.

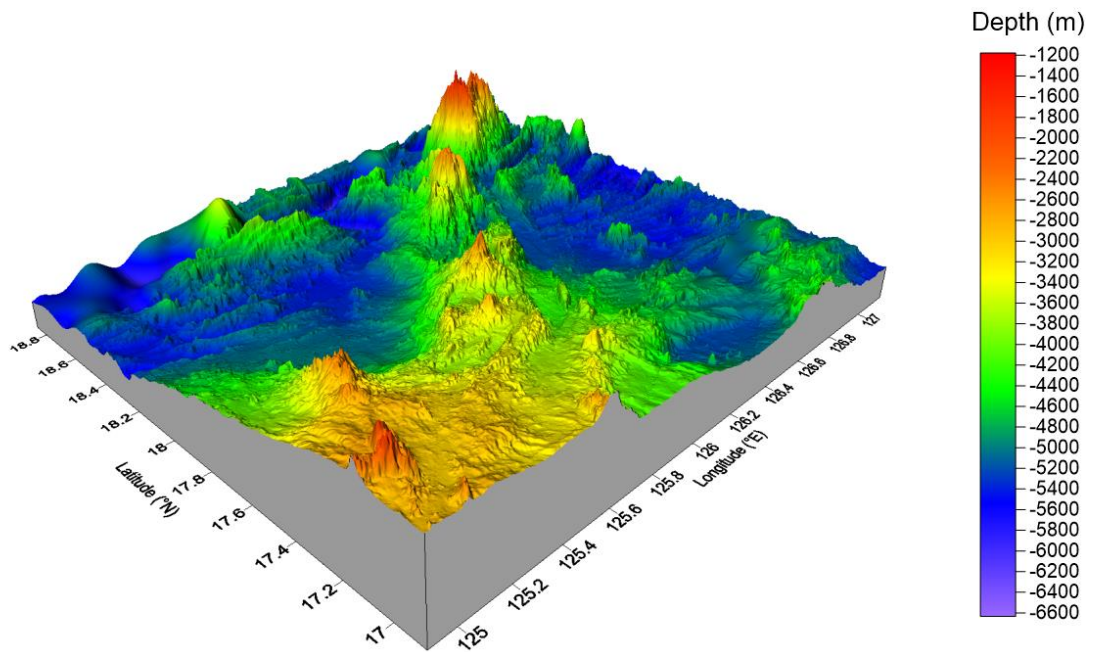


Figure 4. 3D bathymetric map of the Narra Spur. View looking northeast.

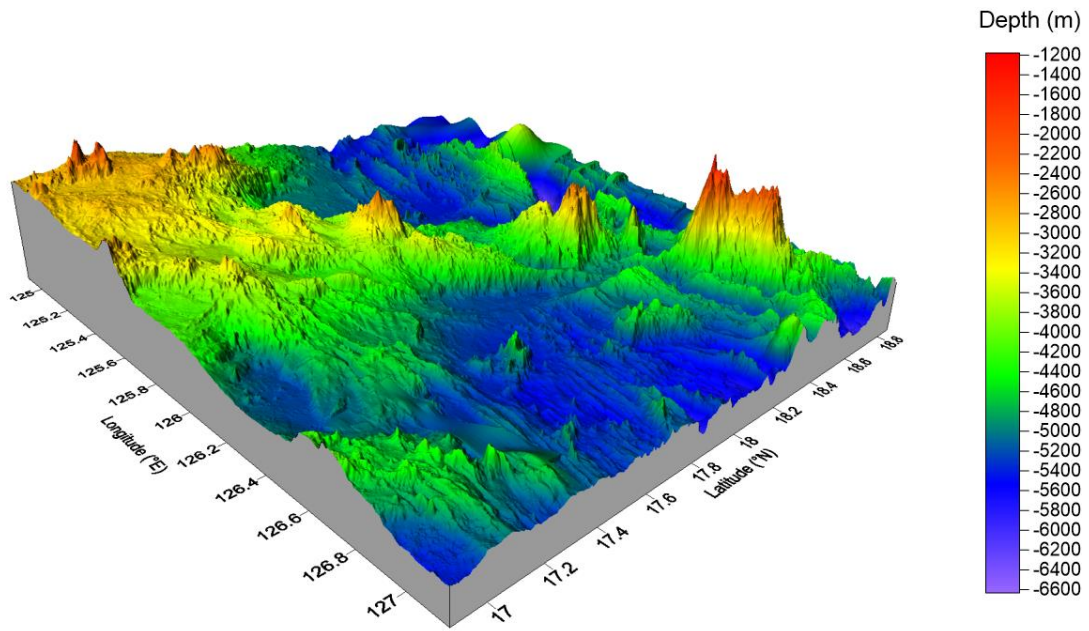


Figure 5. 3D bathymetric map of the Narra Spur. View looking northwest.

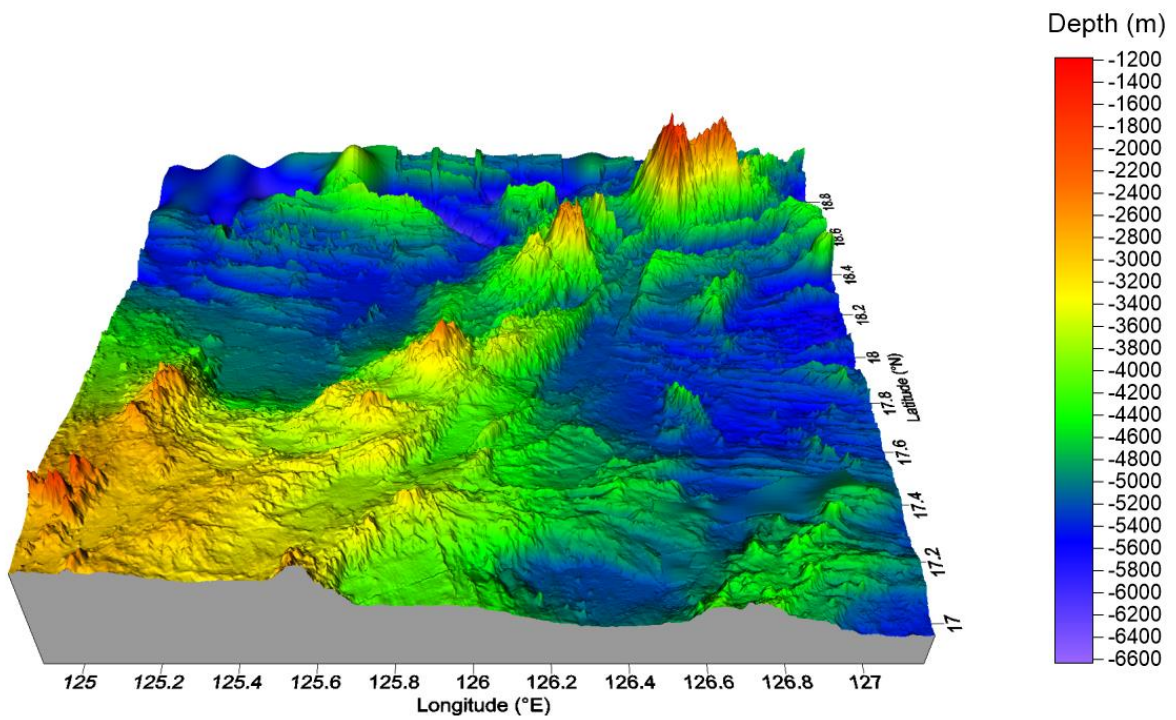


Figure 6. 3D bathymetric map of the Narra Spur, view looking north.

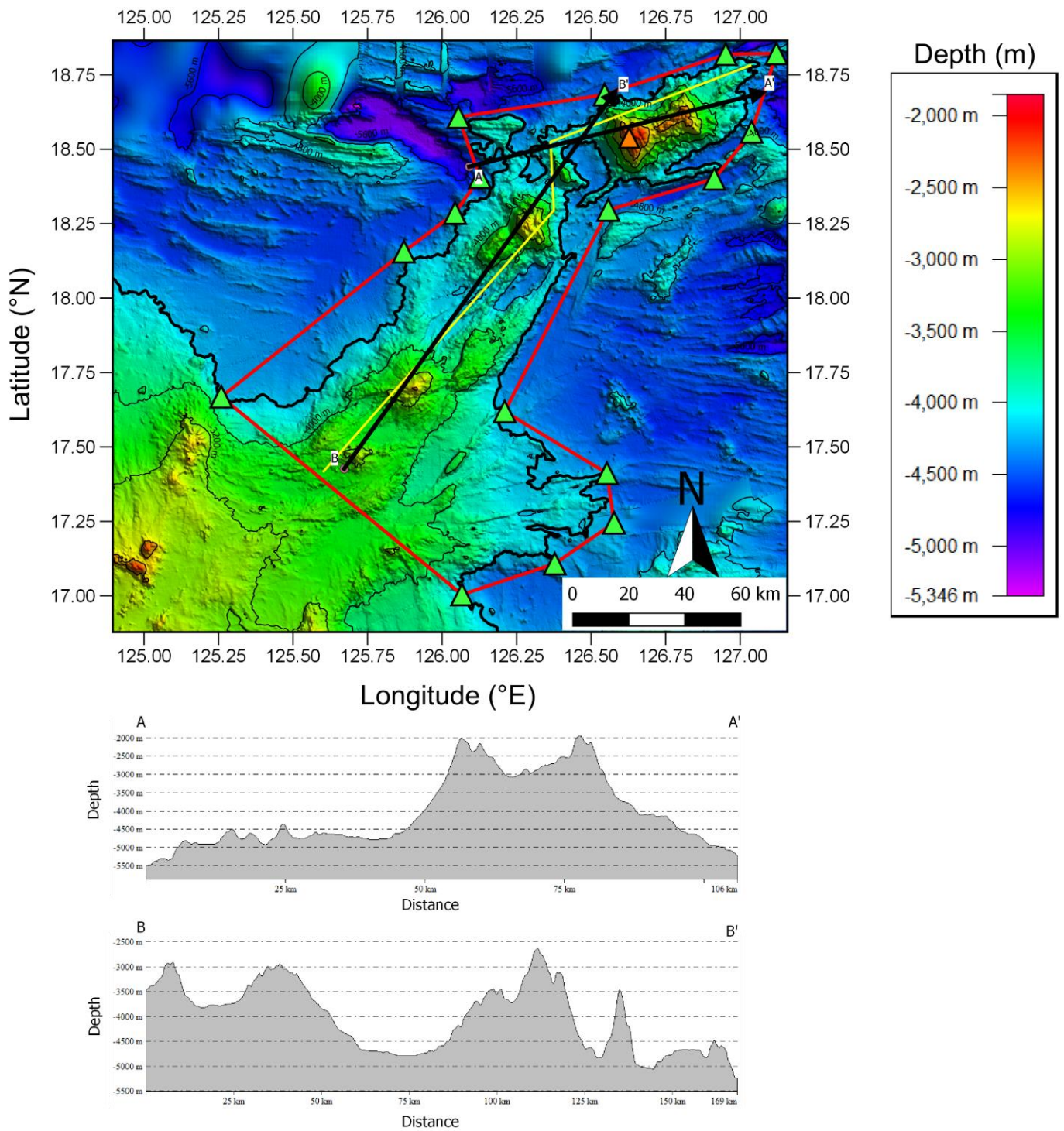


Figure 7. Profiles of Narra Spur from the southwest to northeast edge (A-A') and southwest edge to northeast edge (B-B').