

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:	Nihyakutoka Hill	Ocean or Sea:	N/A
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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				

* 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:	142°12.98'N	22°38.15'E
	142°13.72'N	22°37.74'E
	142°15.15'N	22°37.93'E
	142°16.32'N	22°37.82'E
	142°17.00'N	22°37.34'E
	142°17.14'N	22°36.44'E
	142°17.16'N	22°35.09'E
	142°16.71'N	22°34.23'E
	142°15.89'N	22°33.60'E
	142°14.78'N	22°33.65'E
	142°14.07'N	22°33.88'E
	142°12.70'N	22°33.02'E
	142°11.95'N	22°32.70'E
	142°11.85'N	22°32.14'E
	142°11.26'N	22°31.72'E
	142°10.81'N	22°32.56'E
	142°10.76'N	22°33.88'E
142°10.95'N	22°34.86'E	
142°11.58'N	22°36.29'E	
142°12.24'N	22°36.58'E	
142°12.37'N	22°37.25'E	
142°12.53'N	22°37.86'E	
142°12.98'N	22°38.15'E	

Feature Description:	Maximum Depth:	3,407 m	Steepness :	N/A
	Minimum Depth :	2,580 m	Shape :	Irregular
	Total Relief :	827 m	Dimension/Size :	15 km × 10 km

Associated Features:	Mariana Trough, Nikko Basin
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Chart/Map References:	Shown Named on Map/Chart:	Japanese chart #6723 (to be published in July 26, 2019)
	Shown Unnamed on Map/Chart:	
	Within Area of Map/Chart:	

Reason for Choice of Name (if a person, state how associated with the feature to be named):	Named from the season in early autumn called "Nihyakutoka" in Japan. This undersea feature name was accredited by JCUFN in 1994.
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This feature is located in the northernmost tip of the Mariana Trough, the active backarc spreading center of the Mariana Arc. In fact, this basin is a rift basin within the Mariana Trough. Because of the significance of its tectonic setting, many scientific papers were produced, dealing with the tectonics of the Mariana Trough. Among these, the following papers are noted:

- Marinez F., et al., 1995, Evolution of backarc rifting: Mariana Trough, 20-24N, *Journal of Geophysical Research*, 100, B3, 3807-3827.
- Yamazaki, T. and Murakami, F., 1998, Asymmetric rifting of the northern Mariana Trough, *Island Arc*, 7, 460-470.

Note that the undersea feature names in the Japanese chart #6723 largely consists of two major categories. One is relevant to season names or seasonal/annual event in Japan, and the other is to discovering ship (all are fishery boats except one). The names belonging to the former category were mostly accredited by JCUFN in 1994.

Discovery Facts:	Discovery Date:	Apr. 1993
	Discoverer (Individual, Ship):	Japanese survey vessel "Takuyo"

Supporting Survey Data, including Track Controls:	Date of Survey:	Apr. and Aug. - Sep. 1993 Dec. 2005
	Survey Ship:	Japanese survey vessel "Shoyo" and "Takuyo"
	Sounding Equipment:	Multibeam echo sounder Seabeam 2112 (2005) Seabeam (1993)
	Type of Navigation:	GPS without Selective Availability (2005) GPS with Selective Availability (1993)
	Estimated Horizontal Accuracy, in nautical miles (M):	0.014 nm (26 m) (2005) 0.054 nm (100 m) (1993)
	Survey Track Spacing:	1.5 nm
	Supporting material can be submitted as Annex in analog or digital form.	

Proposer(s):	Name(s):	JCUFN
	Date:	June 4, 2019
	E-mail:	ico@jodc.go.jp
	Organization and Address:	Hydrographic and Oceanographic Department, Japan Coast Guard Kasumigaseki 3-1-1, Chiyoda-ku, Tokyo 100-8932, Japan
	Concurrer (name, e-mail, organization and address):	

Remarks:	The position of the summit is located in (22°36.25'N, 142°14.31'E).
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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 <u>Principality of MONACO</u> 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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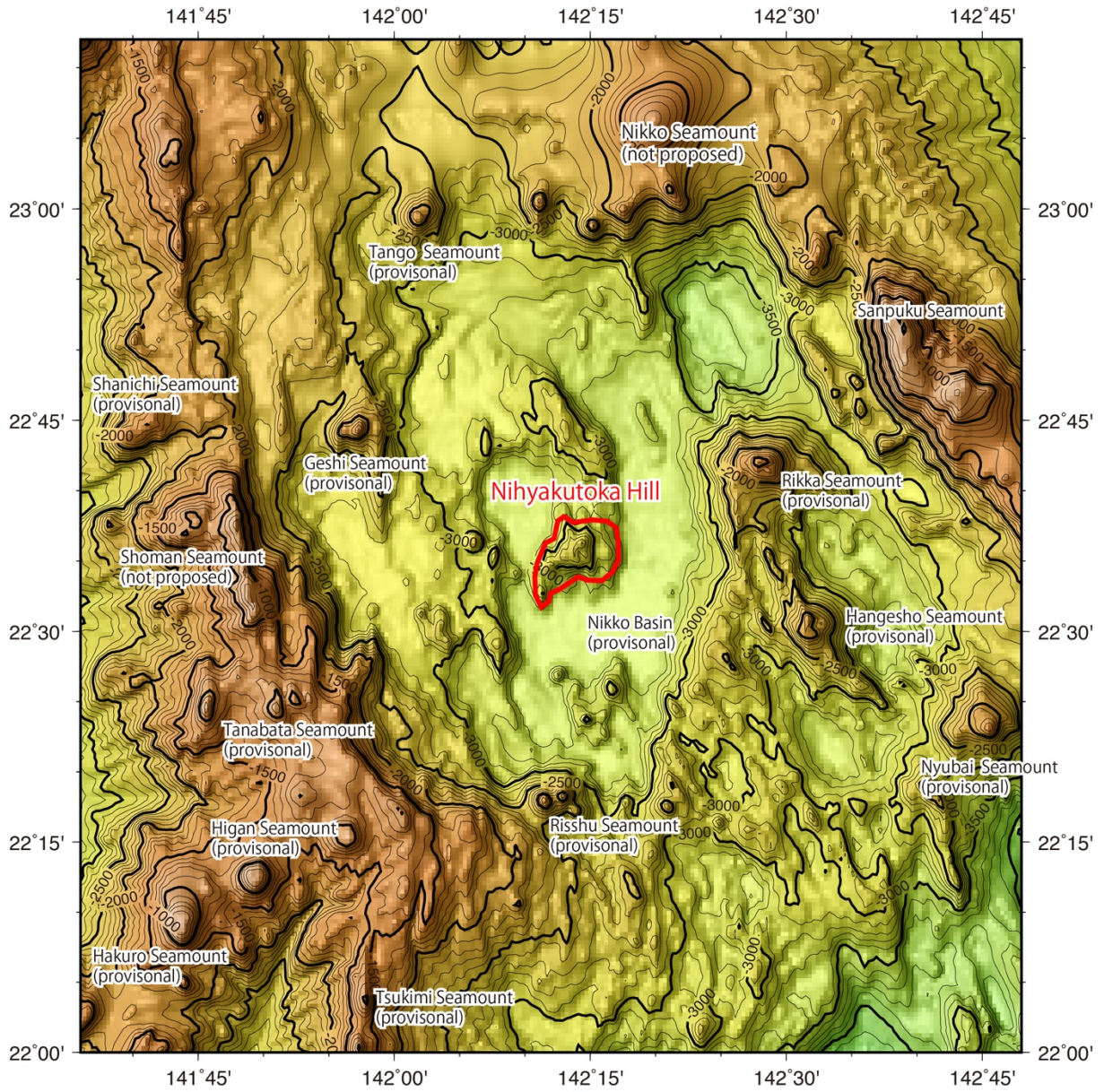


Fig. 1. Bathymetric map of the Nihyakutoka Hill. Contours are in 100 m.

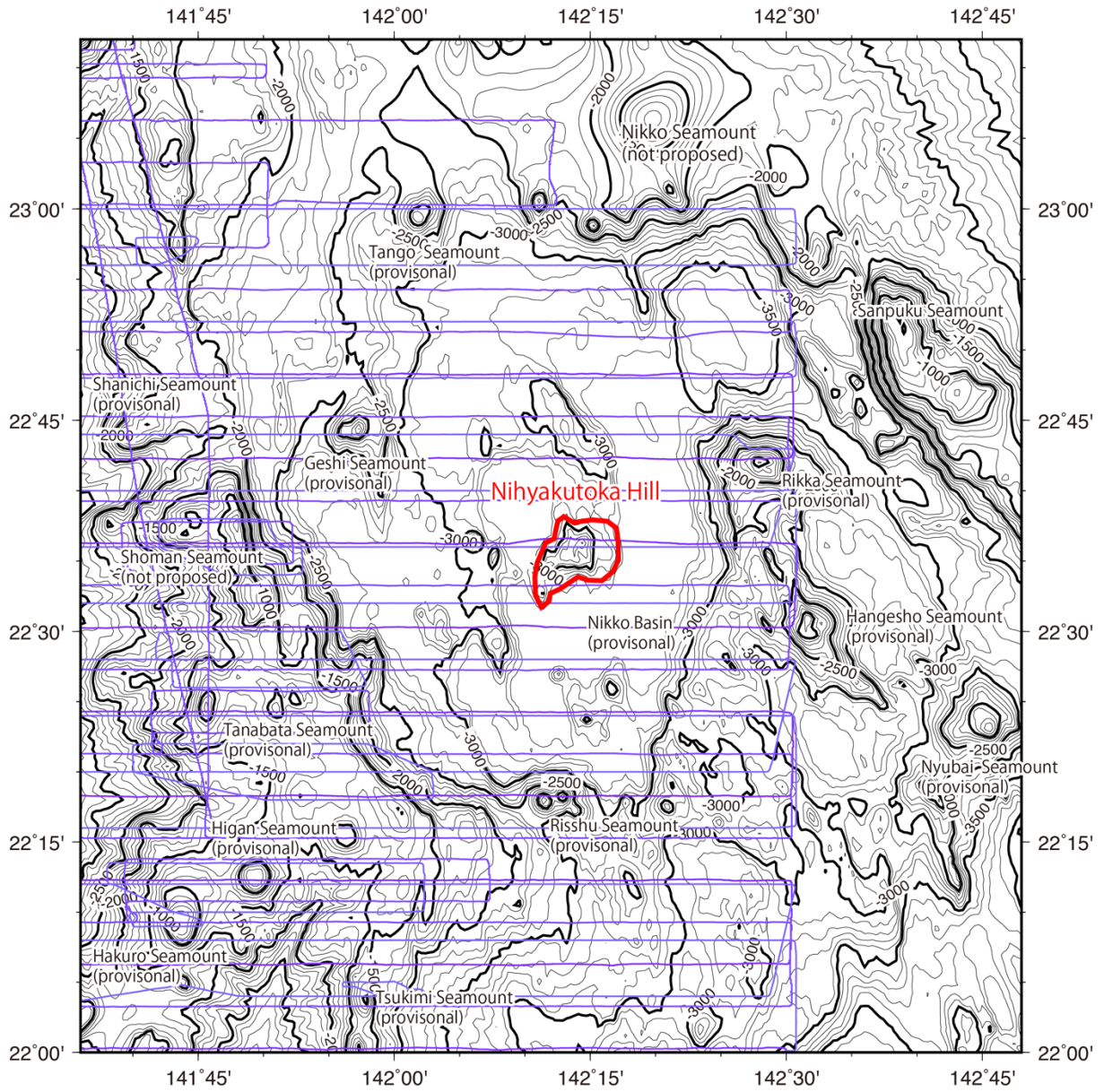


Fig. 2. Bathymetric map of the Nihyakutoka Hill, shown with track lines. Contours are in 100 m.

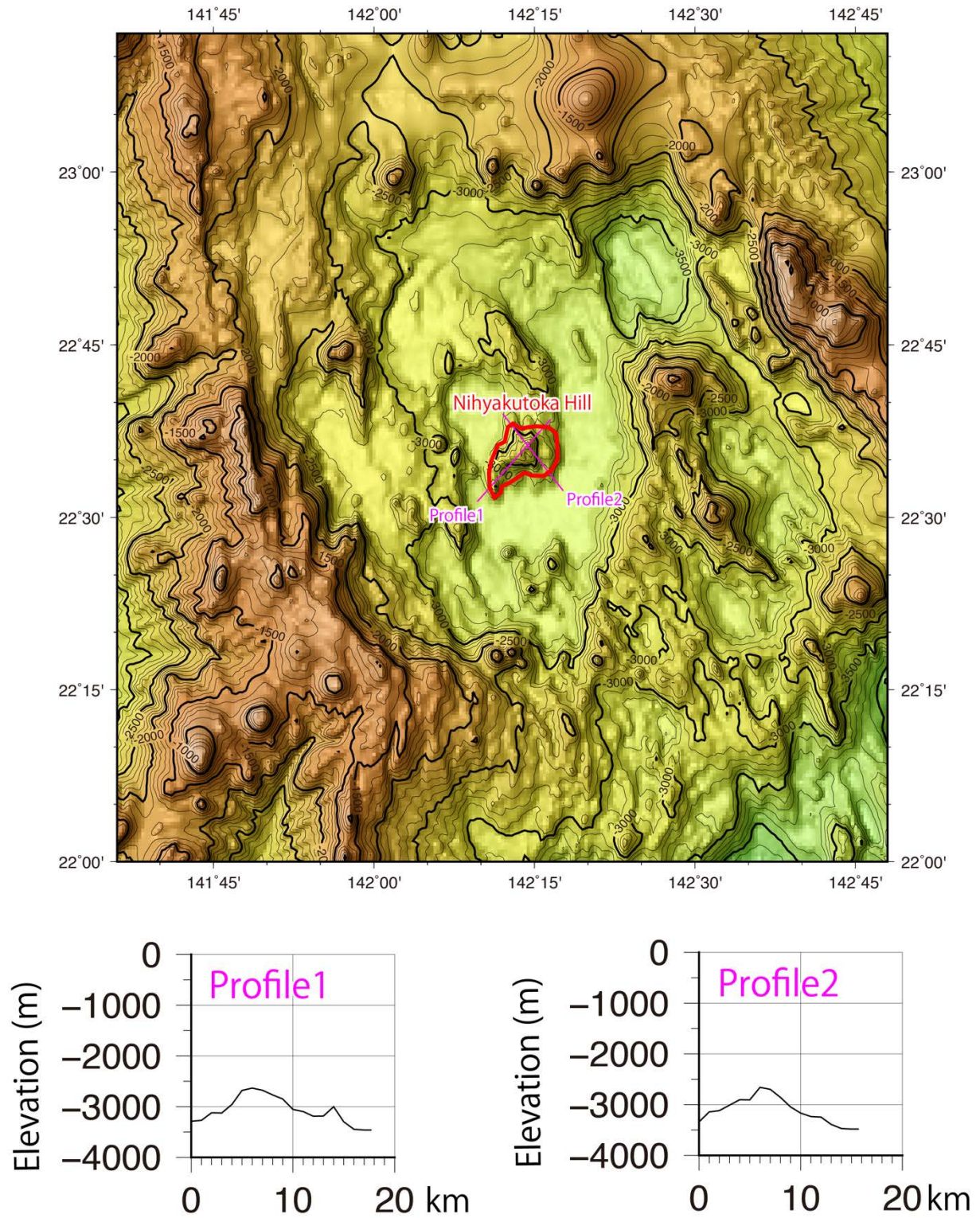


Fig. 3. Bathymetric profile across the Nihyakutoka Hill.

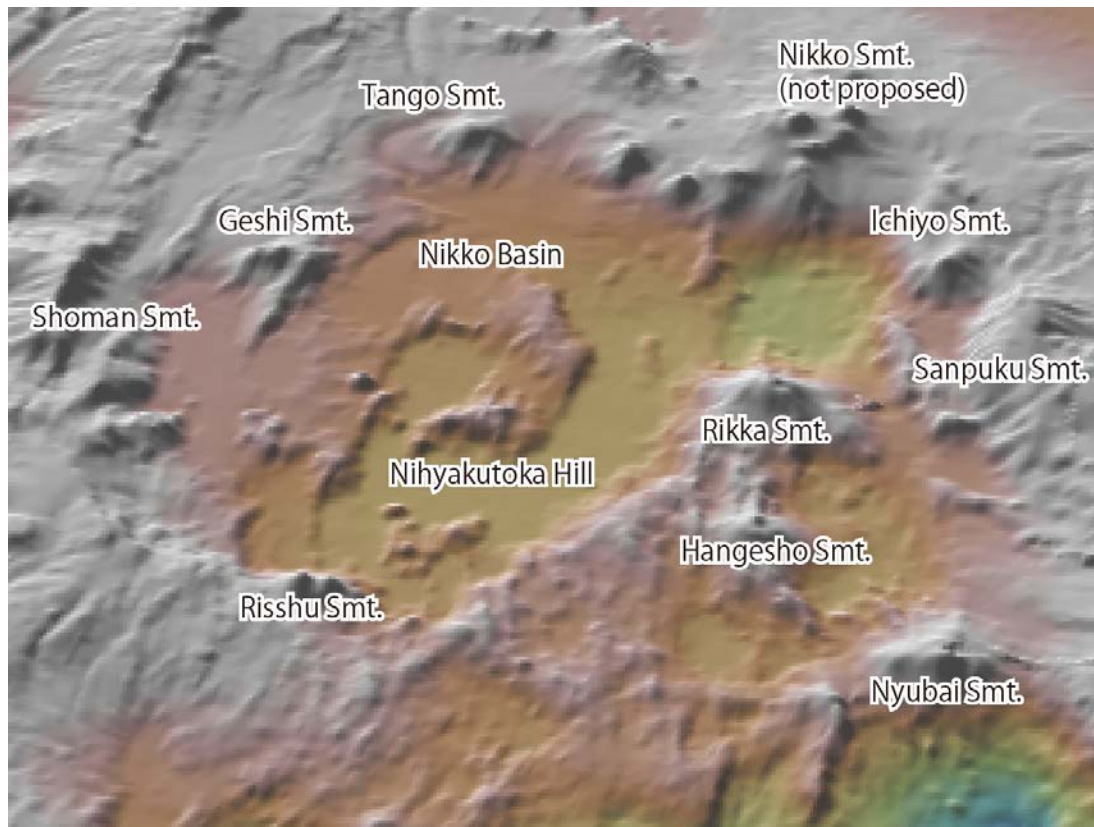


Fig. 4. 3D image of the Nihyakutoka Hill and its vicinity.