## INTERNATIONAL HYDROGRAPHIC ORGANIZATION

## INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

## 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:	Risshu Seamount	Ocean or Sea:	N/A

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)
	22°17.46'N	142°08.78'E
	22°18.72'N	142°08.34'E
	22°19.71'N	142°09.21'E
	22°20.56'N	142°10.52'E
	22°20.74'N	142°12.02'E
	22°20.61'N	142°13.28'E
Coordinates:	22°20.16'N	142°14.58'E
coordinates.	22°19.26'N	142°15.12'E
	22°17.86'N	142°15.36'E
	22°17.28'N	142°14.78'E
	22°16.65'N	142°14.10'E
	22°16.24'N	142°11.63'E
	22°16.60'N	142°09.94'E
	22°17.46'N	142°08.78'E

	Maximum Depth:	3,344 m	Steepness :	N/A
Feature	Minimum Depth :	1,585 m	Shape :	Irregular, with three
Description:				small peaks
	Total Relief :	1,759 m	Dimension/Size :	$11 \text{ km} \times 10 \text{ km}$

Associated Features:	Mariana Trough, Nikko Basin

Chart/Man Deferences	Shown Named on Map/Chart:	Japanese chart #6723 (to be published in July 26, 2019)
Chart/Map References:	Shown Unnamed on Map/Chart:	
	Wthin Area of Map/Chart:	

Reason for Choice of Name (if a person, state how associated with the feature to be named):	Named from the day of "Risshu," which is considered the first day of autumn in Japan. This undersea feature name was accredited by JCUFN in 1994.
	This feature is located in the northernmost tip of the Mariana Trough, the active backarc spreading center of the Mariana Arc. 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:
	<ul> <li>Marinez F., et al., 1995, Evolution of backarc rifting: Mariana Trough, 20-24N, Journal of Geophysical Research, 100, B3, 3807-3827.</li> </ul>

• Yamazaki, T. and Murakami, F., 1998, Asymmetric rifting of the northern Mariana Trough, <i>Island Arc</i> , 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 Factor	Discovery Date:	Apr. 1993
Discovery Facts:	Discoverer (Individual, Ship):	Japanese survey vessel "Takuyo"

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

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

**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 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 <u>outside the external limits</u> of the territorial sea:
  - to the IHO or to the IOC, at the following addresses :

International Hydrographic Organization (IHO)	Intergovernmental Oceanographic Commission (IOC)
4b, Quai Antoine 1er	UNESCO
B.P. 445	Place de Fontenoy
MC 98011 MONACO CEDEX	75700 PARIS

Principality of MONACO	France
Fax: +377 93 10 81 40	Fax: +33 1 45 68 58 12
E-mail: info@iho.int	E-mail: info@unesco.org
Web: <u>www.iho.int</u>	Web: http://ioc-unesco.org/

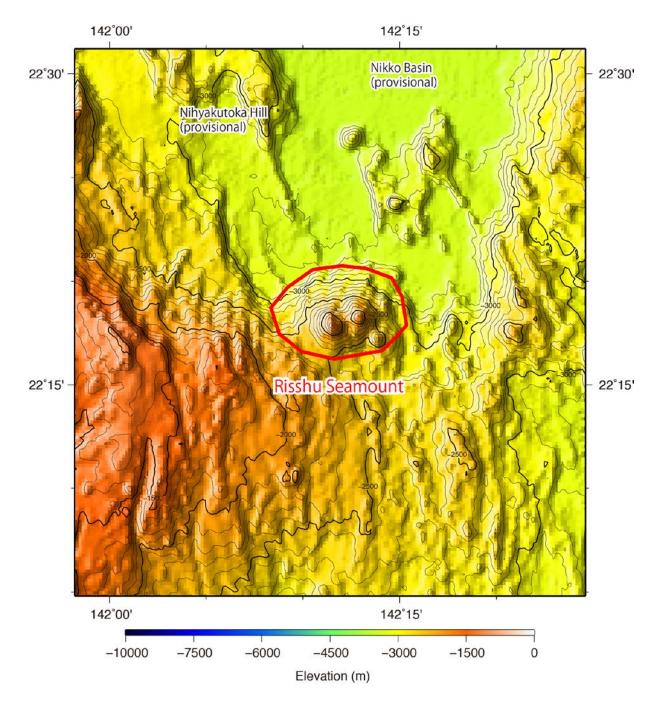


Fig. 1. Bathymetric map of the Risshu Seamount. Contours are in 100 m.

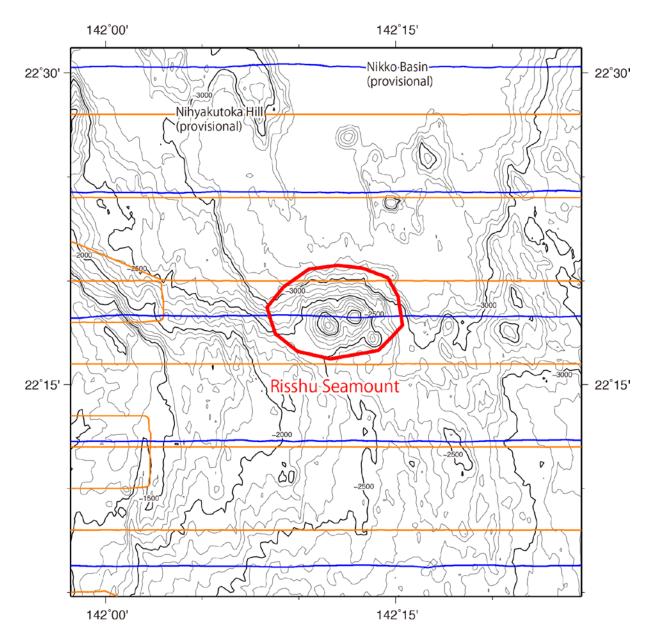


Fig. 2. Bathymetric map of the Risshu Seamount, shown with track lines. Contours are in 100 m.

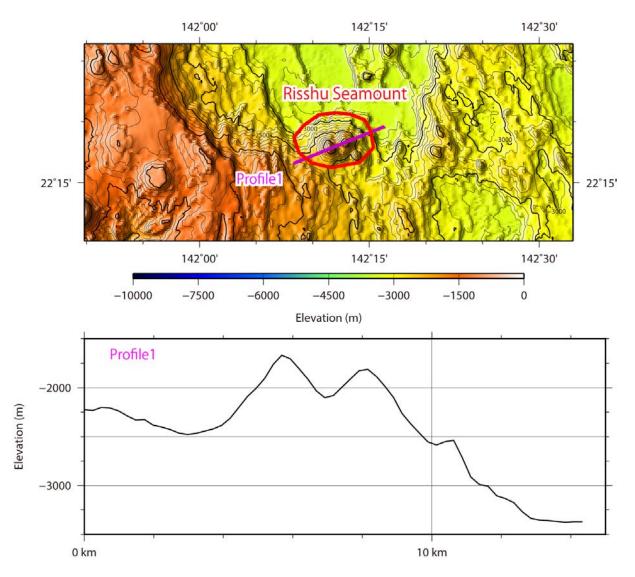


Fig. 3. Bathymetric profile across the Risshu Seamount.

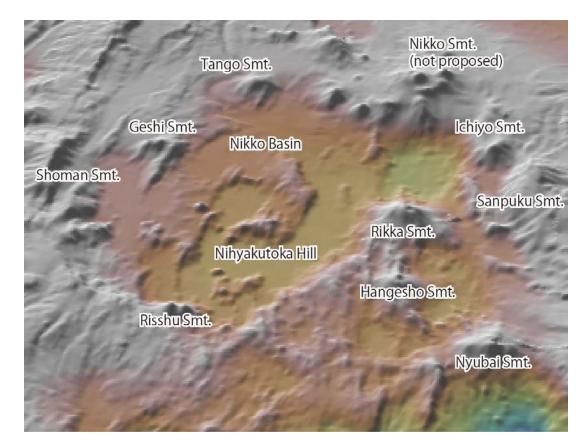


Fig. 4. 3D image of the Risshu Seamount and its vicinity.