

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

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

<b>Name Proposed:</b>	Minami-Io To Spur	<b>Ocean or Sea:</b>	N/A
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<b>Geometry that best defines the feature (Yes/No) :</b>						
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)
<b>Coordinates:</b>	140°9.57N	22°9.13'E
	140°9.57N	22°9.20'E
	140°9.61N	22°9.17'E
	140°9.57N	22°9.13'E
	140°9.57N	22°9.13'E
	140°9.61N	22°9.17'E
	140°9.61N	22°9.17'E
	140°17.87N	22°16.43'E
	140°20.33N	22°19.79'E
	140°23.87N	22°24.01'E
	140°32.17N	22°30.02'E
	140°34.40N	22°35.66'E
	140°38.17N	22°38.23'E
	140°45.16N	22°43.72'E
	140°48.24N	22°47.78'E
	140°52.47N	22°46.86'E
	140°52.70N	22°49.35'E
	140°55.54N	22°52.49'E
	140°59.08N	23°1.46'E
	141°6.15N	22°59.04'E
	141°3.00N	22°54.91'E
	141°4.46N	22°49.35'E
	141°2.69N	22°44.01'E
	140°53.39N	22°39.94'E
	140°49.70N	22°36.16'E
	140°46.86N	22°30.37'E
	140°45.93N	22°28.37'E
	140°49.39N	22°31.16'E
	140°50.47N	22°30.44'E
	140°44.24N	22°20.87'E
140°39.09N	22°19.44'E	
140°35.40N	22°16.79'E	
140°24.71N	22°11.06'E	
140°22.18N	22°8.63'E	
140°17.72N	22°5.19'E	
140°14.49N	22°5.05'E	
140°9.57N	22°9.13'E	

<b>Feature Description:</b>	<b>Maximum Depth:</b>	4,545 m	<b>Steepness :</b>	N/A
	<b>Minimum Depth :</b>	2,252 m	<b>Shape :</b>	Elongated
	<b>Total Relief :</b>	2,293 m	<b>Dimension/Size :</b>	120 km in length

<b>Associated Features:</b>	Taisho Seamount, Shosho Seamount
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<b>Chart/Map References:</b>	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:	

<b>Reason for Choice of Name</b> (if a person, state how associated with the feature to be named):	<p>Named after the nearby island, Minami-Io To Island (formerly, Minami-Io Jima Island).</p> <p>This feature is a rear-arc volcanic feature of the West Mariana Ridge (a remnant island arc of the active Mariana Arc). Ishizuka et al. (2010) reported age and chemistry of the Minami-Io-To Spur.</p> <ul style="list-style-type: none"> <li>Ishizuka O., et al., 2010, Migrating shoshonitic magmatism tracks Izu-Bonin-Mariana intra-oceanic arc rift propagation, <i>Earth and Planetary Science Letters</i>, 294, 111-122.</li> </ul> <p>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.</p>
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<b>Discovery Facts:</b>	Discovery Date:	April, 1993
	Discoverer (Individual, Ship):	Japanese survey vessel "Takuyo"

<b>Supporting Survey Data, including Track Controls:</b>	Date of Survey:	Aug. - Sep. 1993 Apr. - May 2001 Apr. - May 2004 Dec. 2005
	Survey Ship:	Japanese survey vessel "Takuyo" and "Shoyo"
	Sounding Equipment:	Multibeam echo sounder Seabeam 2112 (2001, 2004, 2005) Seabeam (1993)
	Type of Navigation:	GPS without Selective Availability (2001, 2004, 2005) GPS with Selective Availability (1993)
	Estimated Horizontal Accuracy, in nautical miles (M):	0.014 nm (26 m) (2001, 2004, 2005) 0.054 nm (100 m) (1993)
	Survey Track Spacing:	6 nm
	Supporting material can be submitted as Annex in analog or digital form.	

<b>Proposer(s):</b>	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:**

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: <a href="mailto:info@iho.int">info@iho.int</a> Web: <a href="http://www.iho.int">www.iho.int</a>	Intergovernmental Oceanographic Commission (IOC) UNESCO Place de Fontenoy 75700 PARIS <u>France</u> Fax: +33 1 45 68 58 12 E-mail: <a href="mailto:info@unesco.org">info@unesco.org</a> Web: <a href="http://ioc-unesco.org/">http://ioc-unesco.org/</a>
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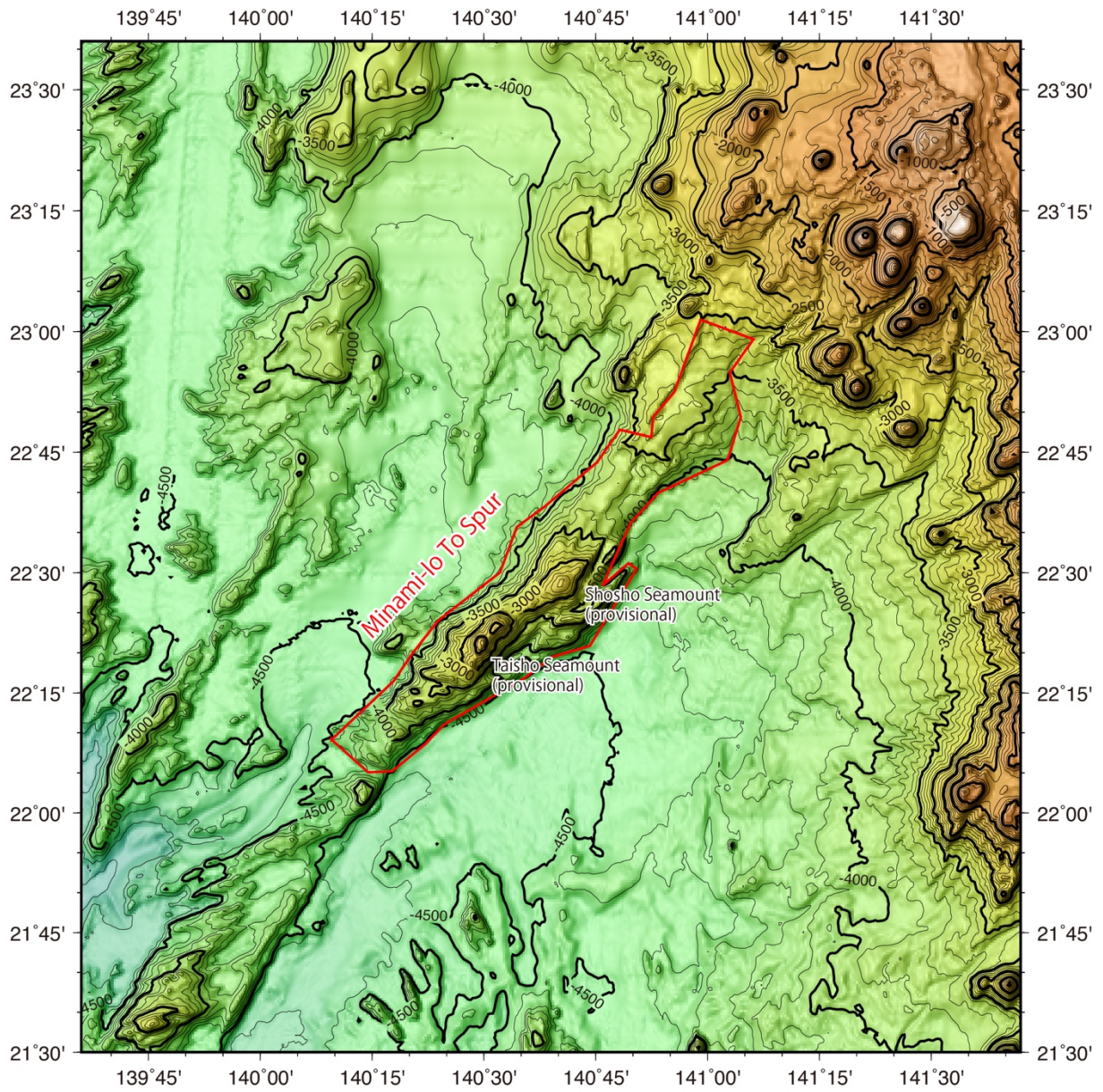


Fig. 1. Bathymetric map of the Minami-Io To Spur. Contours are in 100 m.

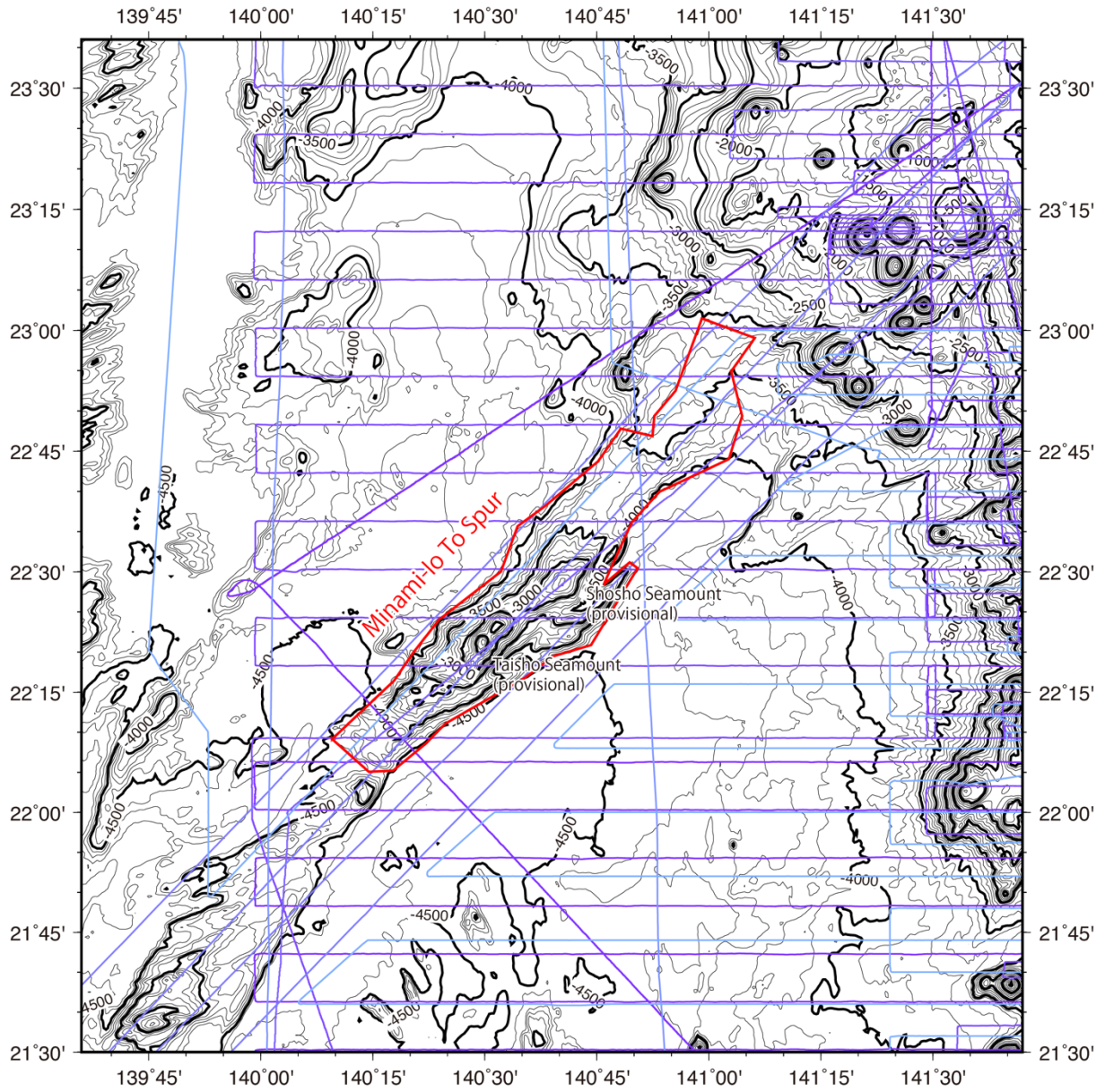


Fig. 2. Bathymetric map of the Minami-Io To Spur, shown with track lines. Contours are in 100 m.

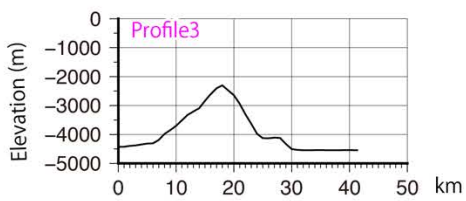
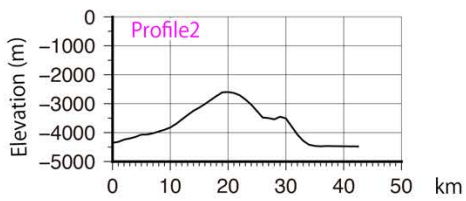
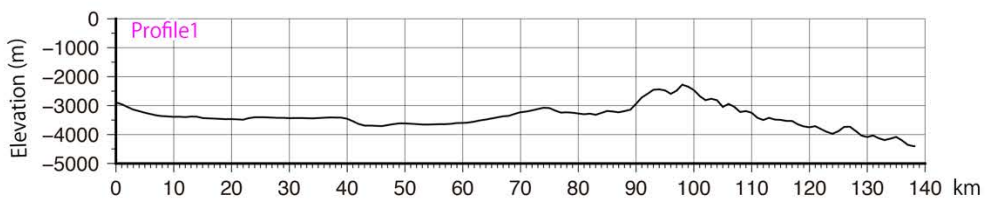
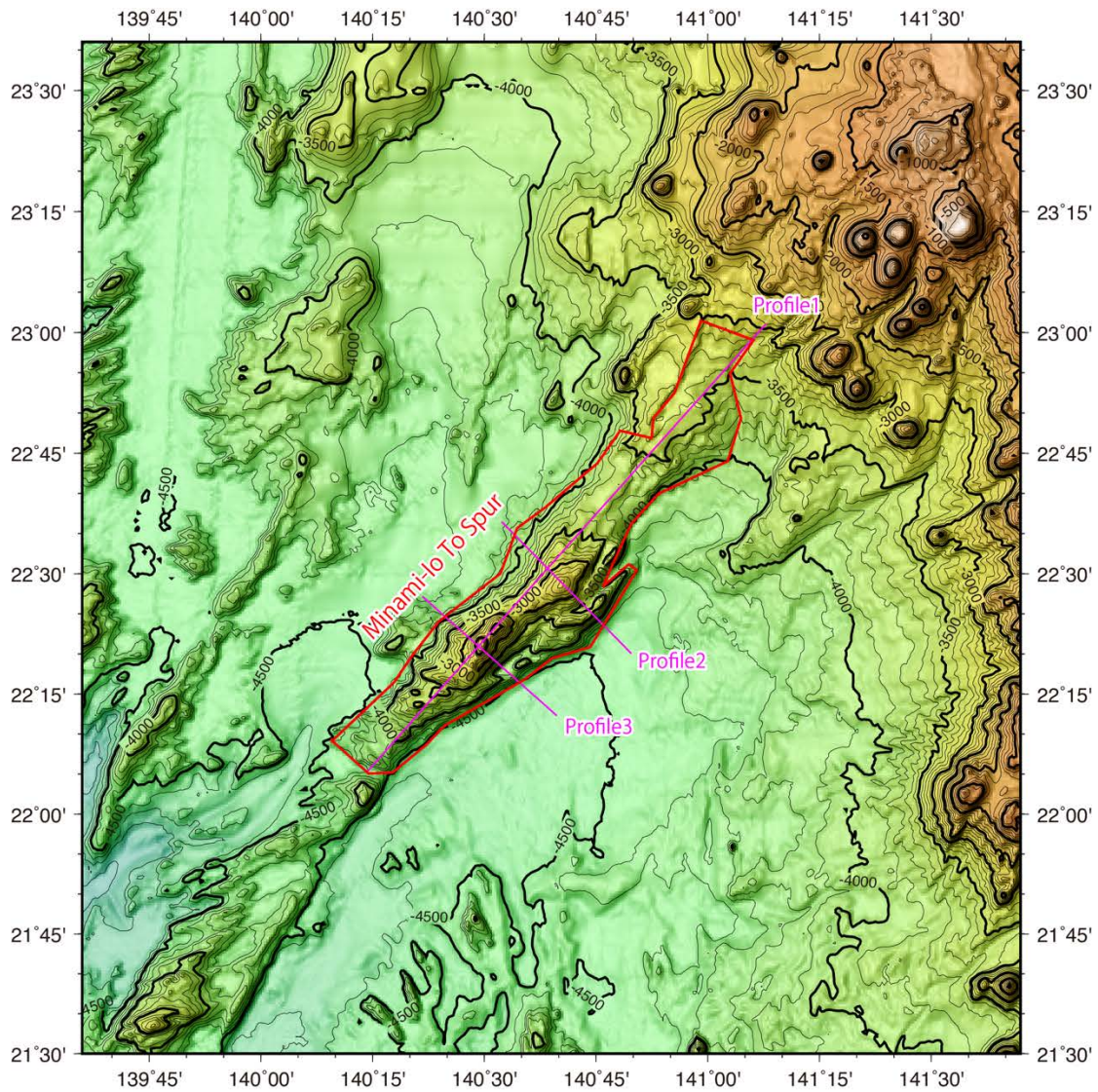


Fig. 3. Bathymetric profile across the Minami-Io To Spur.

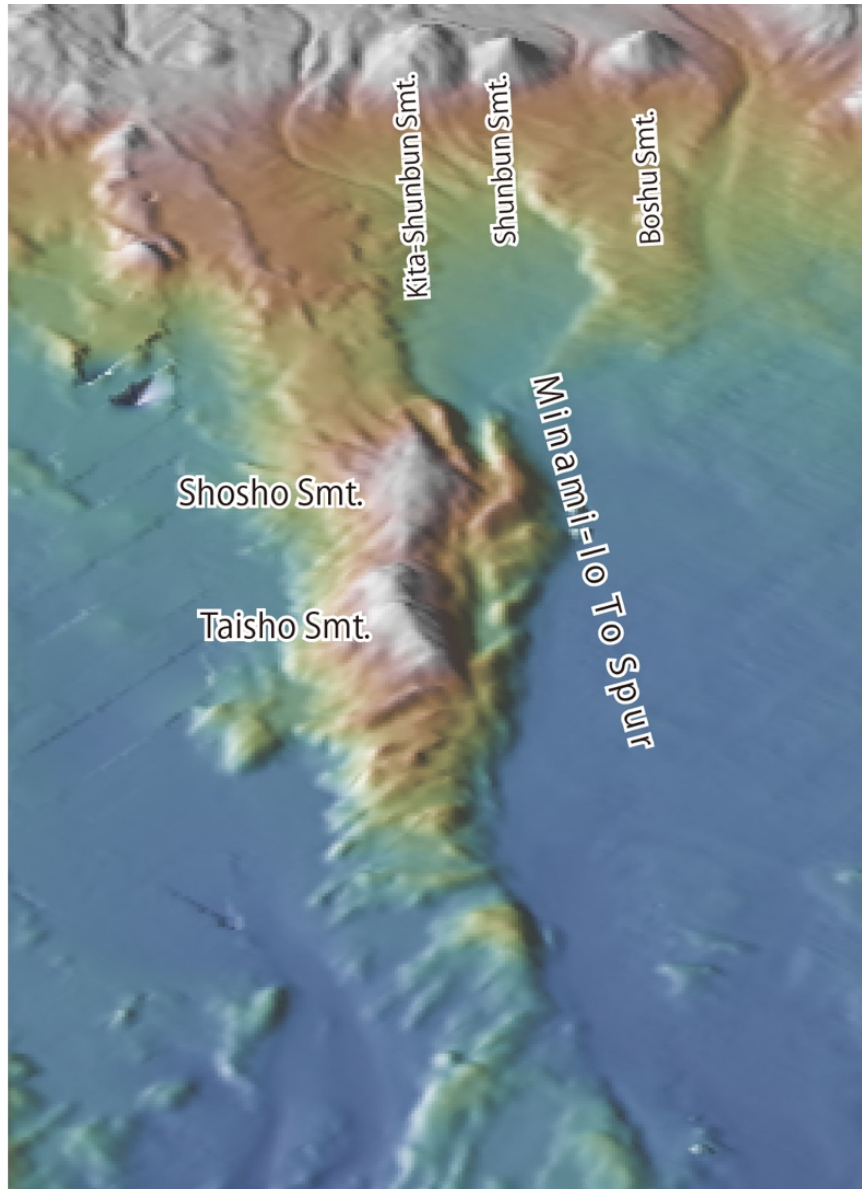


Fig. 4. 3D image of the Minami-Io To Spur and its vicinity.