

**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>	Saint Matthew Canyon (revise ACUF name location, new feature for GEBCO)	<b>Ocean or Sea:</b>	Bering Sea
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<b>Geometry</b> that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
Yes	Yes	No	No	Yes	No	Yes

\* Geometry should be clearly distinguished when providing the coordinates below.

<b>Coordinates:</b>	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	Point (3553 m) 57° 56.7'N	Point (3553 m) 177° 39.7'W
	Line1 Start (645 m) 58° 34.5'N Line1 Mid1 (3109 m) 58° 19.1'N Line1 Mid2 (3380 m) 58° 04.5'N Line1 End (3465 m) 58° 01.3'N	Line1 Start (645 m) 176° 57.3'W Line1 Mid1 (3109 m) 177° 01.5'W Line1 Mid2 (3380 m) 177° 16.7'W Line1 End (3465 m) 177° 29.9'W
	Line2 Start (138 m) 59° 02.2'N Line2 Mid1 (294 m) 58° 55.5'N Line2 Mid2 (2812 m) 58° 31.4'N Line2 Mid3 (3089 m) 58° 26.3'N Line2 Mid4 (3390 m) 58° 07.6'N Line2 Mid5 (3465 m) 58° 01.3'N Line2 Mid6 (3553 m) 57° 56.7'N Line2 Mid7 (3680 m) 57° 50.1'N Line2 End (3743 m) 57° 26.6'N	Line2 Start (138 m) 178° 01.5'W Line2 Mid1 (294 m) 177° 58.3'W Line2 Mid2 (2812 m) 177° 20.9'W Line2 Mid3 (3089 m) 177° 28.7'W Line2 Mid4 (3390 m) 177° 25.7'W Line2 Mid5 (3465 m) 177° 29.9'W Line2 Mid6 (3553 m) 177° 39.7'W Line2 Mid7 (3680 m) 178° 22.6'W Line2 End (3743 m) 178° 52.3'W

<b>Feature Description:</b>	Maximum Depth:	3743 m	Steepness :	1.2°
	Minimum Depth :	138 m	Shape :	U/V
	Total Relief :	3604 m	Dimension/Size :	265739 m long/ ~23000 m wide

<b>Associated Features:</b>	Northern canyons, Pervenets Canyon, Middle Canyon
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<b>Chart/Map References:</b>	Shown Named on Map/Chart:	
	Shown Unnamed on Map/Chart:	US Nav. Chart 513
	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>Our proposed canyon is recognized by ACUF but not GEBCO. We are proposing to shift the ACUF place name farther downstream, after the two major thalwegs have merged, at the steepest part of the canyon.</p> <p>According to ACUF, the name origin is unknown. Please consider updating this to reflect the original publication by Carlson and Karl (USGS), 1984, "Discovery of two new large submarine canyons</p>
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	in the Bering Sea". Marine Geology 56: 159-179.	
<b>Discovery Facts:</b>	Discovery Date:	1984
	Discoverer (Individual, Ship):	Discoverer?
<b>Supporting Survey Data, including Track Controls:</b>	Date of Survey:	various
	Survey Ship:	various
	Sounding Equipment:	various
	Type of Navigation:	various
	Estimated Horizontal Accuracy, in nautical miles (M):	100 m horizontal resolution bathymetry surface
	Survey Track Spacing:	various
	Supporting material can be submitted as Annex in analog or digital form. Please see Zimmermann and Prescott (2018)	
<b>Proposer(s):</b>	Name(s):	Mark Zimmermann & Megan Prescott
	Date:	July 2018
	E-mail:	mark.zimmermann@noaa.gov
	Organization and Address:	National Marine Fisheries Service, NOAA, Alaska Fisheries Science Center, 7600 Sand Point Way NE, Bldg. 4, Seattle, WA 98115-6349 USA
	Concurrer (name, e-mail, organization and address):	
<b>Remarks:</b>	Zimmermann and Prescott (2018): shown in Fig. 8 (please see below). Harris et al. (2014): the upper part is recognized as blind canyon C8904. Harris and Whiteway (2011): both main thalwegs and a short section of the valley are recognized as PERVENETS (incorrect) canyon.	

**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: <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 France 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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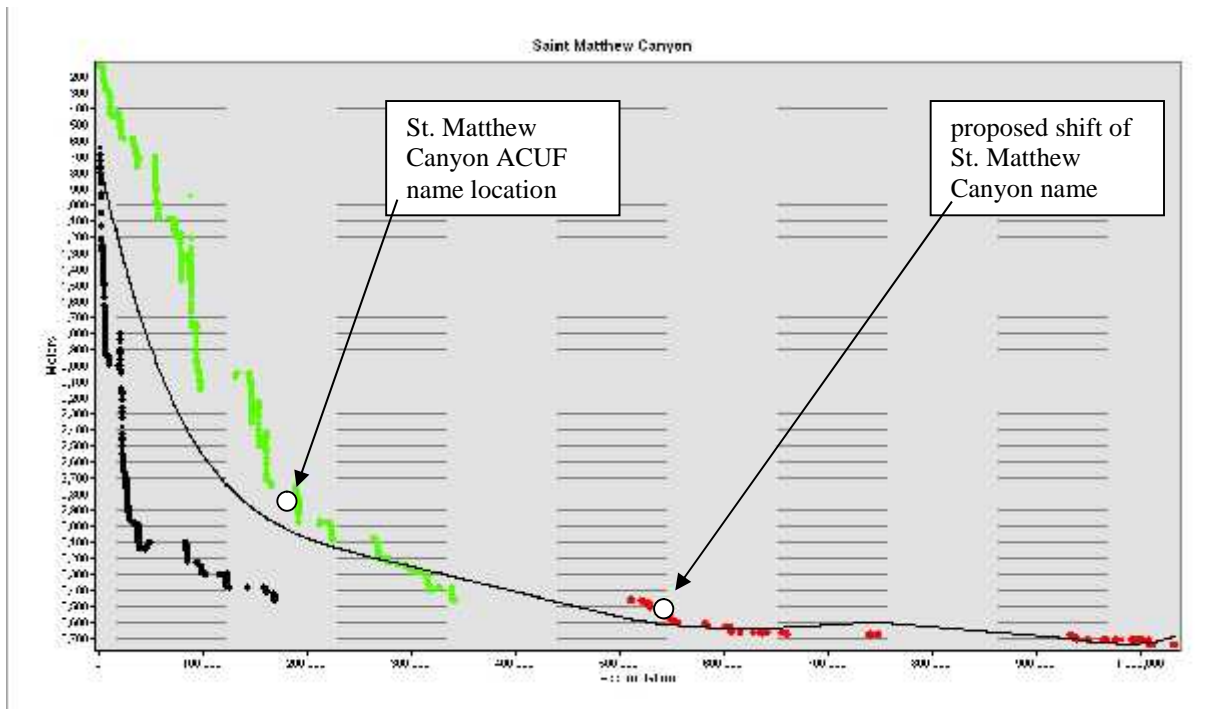


Figure 1. Plot of depth and accumulation of raster cells along main thalweg path (red points), north thalweg (green points), east thalweg (black points), and fitted trend line.

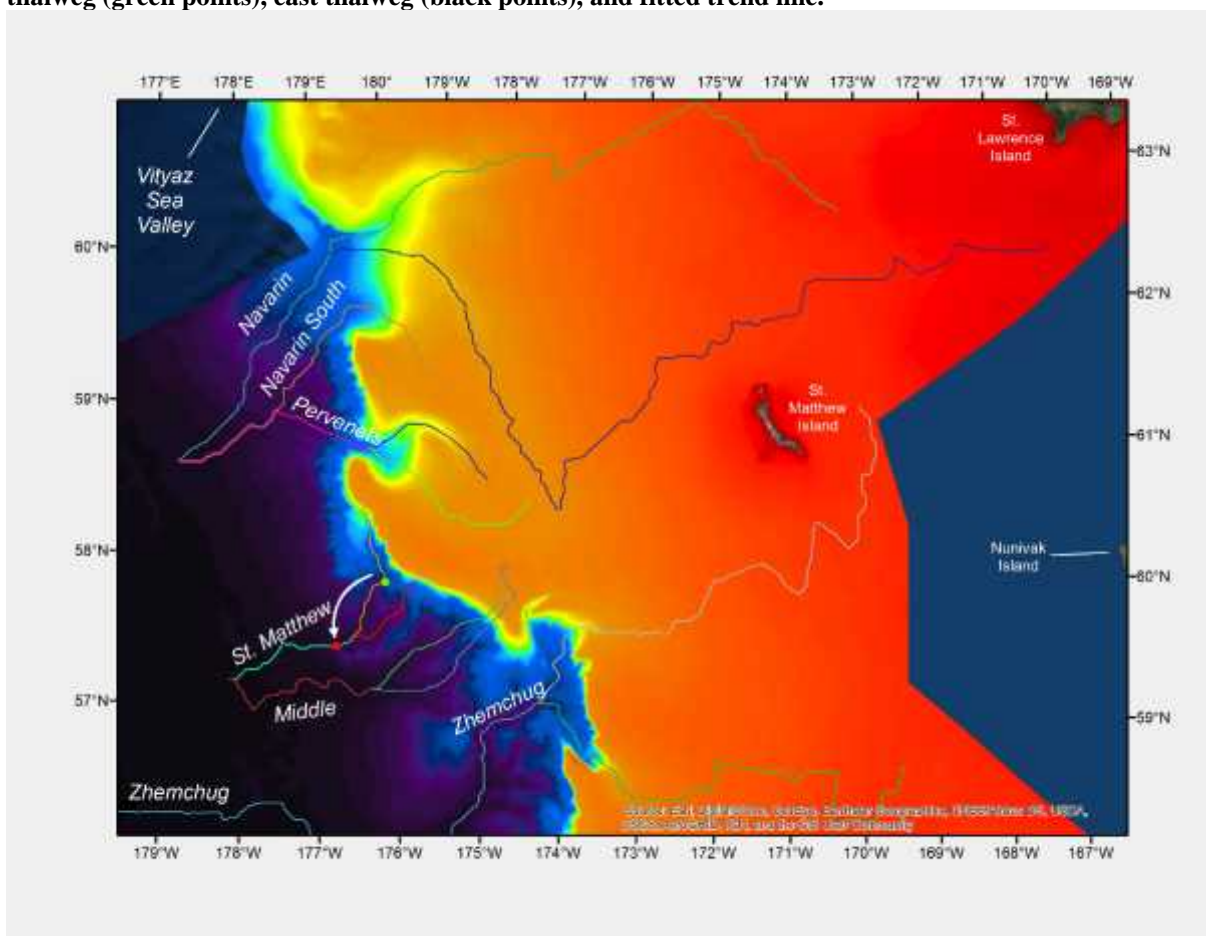


Figure 2. Modified version of Fig 8. (Zimmermann & Prescott, 2018) “Thalwegs of the Navarin Canyon area of the eastern Bering Sea slope” showing proposed St. Matthew Canyon place name revision for ACUF (not recognized by GEBCO).