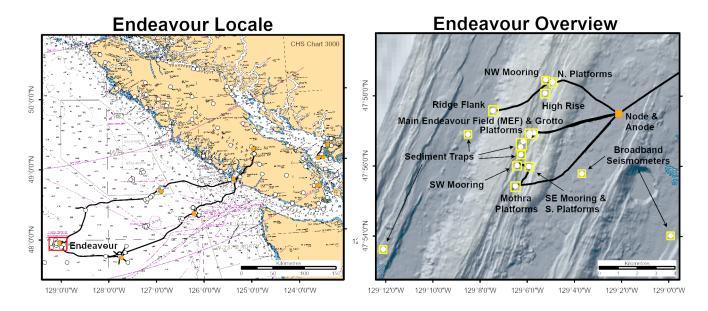
Information for Mariners – September 2025 NEPTUNE Observatory: Endeavour

Project: The North-East Pacific Undersea Networked Experiments (NEPTUNE) is an oceanographic project managed by Ocean Networks Canada (ONC), an initiative of the University of Victoria. It consists of a cabled observatory off the west coast of Vancouver Island, beginning in Port Alberni and extending 300 km offshore along an 813 km loop. From a shore landing, an armoured marine cable extends along the ocean bottom to large observatory "Nodes", into which oceanographic instrument systems connect. High voltage power is supplied down the cable, and Ethernet communications along fibre optics bring data and images back to the University in real time. Project status, system information, and data are available from the Ocean Networks Canada web site: www.oceannetworks.ca

What: High voltage marine fibre-optic cables and observatory systems (see website for system details). **When:** Latest system and instrument deployments at the Endeavour site: **September 2, 2025**

Where: Endeavour, Juan de Fuca Ridge, West Coast Vancouver Island. See Chart # 3000. The infrastructure at Endeavour is located within the Canadian Department of Fisheries and Oceans' Marine Protected Area.

Remotely Operated Vehicle Operators should be made aware that there are **5 moorings** at this site that extend 28 m – 68 m into the water column and **4 moorings** that extend 250 m – 300 m into the water column. Please contact us for more information (contact information provided below).



These figures have been produced by the University of Victoria based on Canadian Hydrographic Service (CHS) charts, pursuant to CHS DULA CHS # 2022-1122-1260-U. The incorporation of data sourced from CHS in these products shall not be construed as constituting an endorsement by CHS of these products. These products do not meet the requirements of the Charts and Nautical Publications Regulations, 1995 under the Canada Shipping Act, 2001. Official charts and publications; corrected and up-to-date, must be used to meet the requirements of those regulations.

Installations:

Installations:	1	T	T	T =
Name	Latitude	Longitude	Depth (m)	Description
Autonomous Broadband				
Seismometer 05	47.67887	-128.87826	2650	1 m yellow cylindrical platform
Autonomous Broadband				
Seismometer 04	47.68038	-129.34952	2762	1 m yellow cylindrical platform
Autonomous Sediment				
Trap(OffAxis FarField)	47.89313	-129.20173	2297	Yellow mooring extending 28m above bottom
Autonomous Broadband				
Seismometer 03	47.90039	-128.99866	2559	1 m yellow cylindrical platform
Mothra Instrument				
Platform	47.92383	-129.10816	2271	Large (3 m) grey steel frame
Mothra Camera	47.92393	-129.10865	2276	2 m titanium tripod
Mothra Mudmat Cable				
(Instrument Platform End)	47.92399	-129.10805	2280	1.5 m yellow rectangular platform
Mothra Bottom Pressure	17.02000	120.10000	2200	Bottom pressure recording instrument
Recorder	47.92401	-129.10818	2276	deployed on the seabed
Mothra Broadband	47.02401	120.10010	LLIO	deployed on the seased
Seismometer	47.92402	-129.10812	2276	0.5 m titanium canister
Autonomous Broadband	77.02702	120.10012	22,0	5.5 III illamani canoloi
Seismometer 01	47.92989	-129.06152	2321	1 m yellow cylindrical platform
			2505	3 m cylindrical steel can
Branching Unit	47.93261	-128.94840	2000	3 m cylinarical steel cari
Bottom Pressure				
Recorder (Regional	47.00040	100 00005	0000	4 manata al tria manula y firama
Circulation South)	47.93310	-129.09885	2228	1 m steel triangular frame
Instrument Platform				
(Regional Circulation	47 00000	100 00006	0000	Lorgo (2 m) group stool from a
South)	47.93323	-129.09886	2230	Large (3 m) grey steel frame
Massins (Davissal				Fixed position mooring extending 250 m into
Mooring (Regional	47,00000	100 0000	4070	the water column and topped with an orange
Circulation SE)	47.93328	-129.09895	1970	buoy
Main Junction Box				Fixed position mooring extending 250 m into
(Regional Circulation	47,00000	100 00005	0000	the water column and topped with an orange
Mooring SE)	47.93328	-129.09895	2220	buoy
Autonomous Mossins				Fixed position mooring extending 250 m into
Autonomous Mooring	47.00400	100 10741	0000	the water column and topped with an orange
(Regional Circulation SW)	47.93482	-129.10741	2038	buoy
Autonomous Sediment				
Trap 3 (South Axial	47,00000	100 10110	0407	Valley, magning extending COm. above to the
Valley) Autonomous Sediment	47.93900	-129.10448	2107	Yellow mooring extending 68m above bottom
Trap 2 (South Axial Valley)	47 04070	120 10405	2086	Vollow magring autonding 60m above hetter
3,	47.94270	-129.10495	2000	Yellow mooring extending 68m above bottom
Autonomous Sediment				
Trap 1 (South Axial	47.04500	100 10000	2072	Vallous magning outending Com share but a
Valley)	47.94520	-129.10298	2072	Yellow mooring extending 68m above bottom
Water Sampler (Main	47.04004	100 00051	0105	Cook and impatry year and at a large distribution of the second of the s
Endeavour Field South)	47.94804	-129.09851	2195	Seabed instrument at a hydrothermal vent
Instrument Platform (Main	47.04005	100 00000	0106	Lorge (2 m) grovesteel from
Endeavour Field South)	47.94805	-129.09892	2186	Large (3 m) grey steel frame
Benthic and Resistivity				
Sensors (Main Endeavour	47.04000	100 00051	0105	1 m ordinal car with 1 lass
Field South)	47.94809	-129.09851	2195	1 m cylindrical can with 4 legs
Bottom Pressure				Pottom procesure recording in the state of
Recorder (Main	47.04047	100 00000	0100	Bottom pressure recording instrument
Endeavour Field South)	47.94817	-129.09883	2193	deployed on seabed.

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Autonomous Sediment				
Trap (West Flank)	47.94850	-129.14212	2366	Yellow mooring extending 28m above bottom
Seismometer (Main				
Endeavour Field)	47.94857	-129.09866	2195	0.5 m titanium canister
Autonomous Sediment				
Trap (Main Endeavour				
Field)	47.94858	-129.09895	2188	Yellow mooring extending 8m above bottom
Bottom Pressure				
Recorder (Main				
Endeavour Field)	47.94858	-129.09868	2195	1 m steel triangular frame
Autonomous Sediment				
Trap (Main Endeavour				
Field)	47.94884	-129.09901	2196	Yellow mooring extending 8m above bottom
Instrument Platform (Main	47.54004	123.03301	2130	Tellow mooning exteriaing oin above bottom
Endeavour Field)	47.94907	-129.09877	2196	Lorgo (2 m) grov stool from
,	47.94907	-129.09077	2190	Large (3 m) grey steel frame
ADCP (Main Endeavour	47.04000	100 0000	0405	1 m cubic aluminum, plastic, and fiberglass
Field)	47.94909	-129.09823	2195	platform
Mudmat (Main Endeavour				
Field Cable Instrument				
Platform End)	47.94923	-129.09536	2211	1.5 m metal and plastic rectangular platform
Camera (Main Endeavour				
Field)	47.94923	-129.09855	2187	1 m white platform
Benthic and Resistivity				
Sensor	47.94924	-129.09835	2187	1 m cylindrical can with 4 legs
Water Sampler (Main				
Endeavour Field)	47.94928	-129.09831	2184	2m metal and plastic multi-tiered platform
Hydrophone Array (Main				
Endeavour Field North)	47.94932	-129.09821	2195	Large (3m) metal tripod
Mudmat (Mothra				
Platform)	47.95820	-129.03576	2323	1.5 m yellow rectangular platform
Mudmat (RCM-North)	47.95826	-129.03582	2321	1.5 m yellow rectangular platform
Broadband Seismometer	47.93620	-129.03362	2321	1.5 III yellow rectangular platform
	47.05005	100 00550	0001	4 m white culinder
(Eastern Flank)	47.95835	-129.03553	2321	1 m white cylinder
Bottom Pressure	47.05005	100 00550	0004	A E an alle and a selection
Recorder (Eastern Flank)	47.95835	-129.03559	2321	1.5 m yellow rectangular platform
				Large 7 m yellow trawl resistant frame, 13
Node	47.95837	-129.03544	2323	tons
				This is the site of the Maris Interface Unit
Node Interface Unit	47.95839	-129.03550	2321	near the Maris Seismometer
Mudmat (Main Endeavour				
Field Cable Node End)	47.95842	-129.03588	2325	1.5 m metal and plastic rectangular platform
Node Junction Box	47.95845	-129.03542	2320	Large (3 m) grey steel frame
Broadband Seismometer				
(Ridge Flank)	47.95977	-129.12448	2361	1 m spherical grey titanium platform
Auxiliary Platform (Ridge				
Flank)	47.95989	-129.12436	2365	1.5 m steel and plastic frame
Mudmat (West Ridge	17.00000	120.12-100		1.5 III otool and plaono framo
Flank)	47.95989	-129.12386	2362	1.5 m yellow rectangular platform
Benthic and Resistivity	47.33303	123.12000	2002	1.5 m yellow rectangular platform
-	47 06011	120 00754	2154	1 m cylindrical can with 4 loss
Sensor Mudmet (West Ridge	47.96811	-129.08754	2154	1 m cylindrical can with 4 legs
Mudmat (West Ridge	47.07010	400 0000	0450	A F was collective at the safety
Flank)	47.97312	-129.08237	2159	1.5 m yellow rectangular platform
Mudmat (Instrument				1
Platform End)	47.97331	-129.08234	2151	1.5 m yellow rectangular platform
Instrument Platform				
(Regional Circulation				
North)	47.97337	-129.08188	2177	Large (3 m) grey steel frame

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Bottom Pressure				
Recorder (Regional			0.50	
Circulation North)	47.97350	-129.08186	2152	1 m steel triangular frame
Main Junction Box				Weighted bottom of fixed position mooring
(Regional Circulation			0.50	extending 270 m into the water column and
Mooring NE)	47.97355	-129.08228	2153	topped with an orange buoy
				Fixed position mooring extending 270 m into
				the water column and topped with an orange
Mooring (NE)	47.97355	-129.08228	1902	buoy
Short Period				
Seismometer (Regional	47.07004	100 00100	0.450	
Circulation North)	47.97364	-129.08192	2158	1 m steel triangular frame
Main Junction Box				Fixed position mooring extending 300 m into
(Regional Circulation	47.07.457	100 00700	0.4.47	the water column and topped with an orange
Mooring NW)	47.97457	-129.08709	2147	buoy
				Fixed position mooring extending 300 m into
	47.07.457	100 00700	1007	the water column and topped with an orange
Mooring (NW)	47.97457	-129.08709	1897	buoy
Autonomous Broadband	47.00077	100 11017	0000	d as collect as the delegate of the force
Seismometer 02	47.99977	-129.11817	2329	1 m yellow cylindrical platform
Autonomous Broadband	47.07007	400.07000	0050	4 Harris artification of all attacks
Seismometer 05	47.67887	-128.87826	2650	1 m yellow cylindrical platform
Autonomous Broadband	47.00000	100 0 1050	0700	
Seismometer 04	47.68038	-129.34952	2762	1 m yellow cylindrical platform
Autonomous Sediment				V II
Trap(OffAxis FarField)	47.89313	-129.20173	2297	Yellow mooring extending 28m above bottom
Autonomous Broadband				
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Instrument Platform				
(Regional Circulation				
South)	47.93323	-129.09886	2230	Large (3 m) grey steel frame
				Fixed position mooring extending 250 m into
Mooring (Regional				the water column and topped with an orange
Circulation SE)	47.93328	-129.09895	1970	buoy
Main Junction Box (Fixed position mooring extending 250 m into
Regional Circulation				the water column and topped with an orange
Mooring SE)	47.93328	-129.09895	2220	buoy

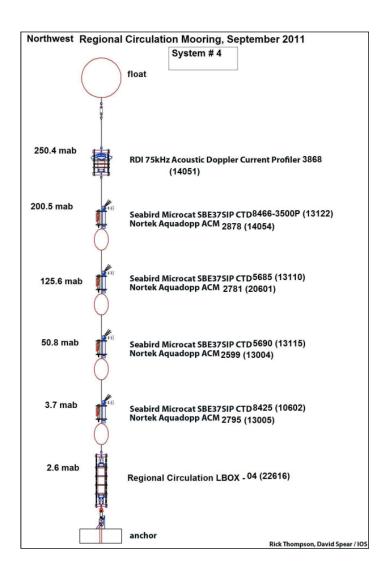


Figure 1: Regional Circulation Mooring (RCM) Diagram

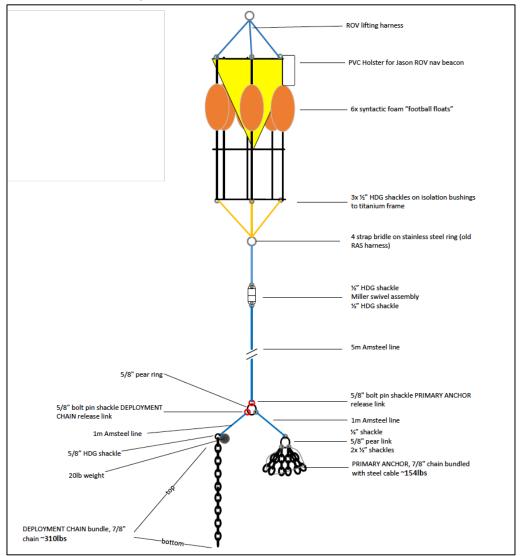


Figure 2: Sediment Trap Diagram

Full cable routes and waypoints are available for use with Electronic Navigation Systems from the ONC website: https://www.oceannetworks.ca/notice-for-mariners/

Contacts: If you have any concerns, or would like further information, please contact either: Ben Biffard, Ocean Networks Canada's Director of Observatory Digital Operations, at bbiffard@uvic.ca, or ONC GIS Specialists at GIS@oceannetworks.ca.