

Information for Mariners – September 2025

NEPTUNE Observatory: Clayoquot Slope (Formerly ODP 889)

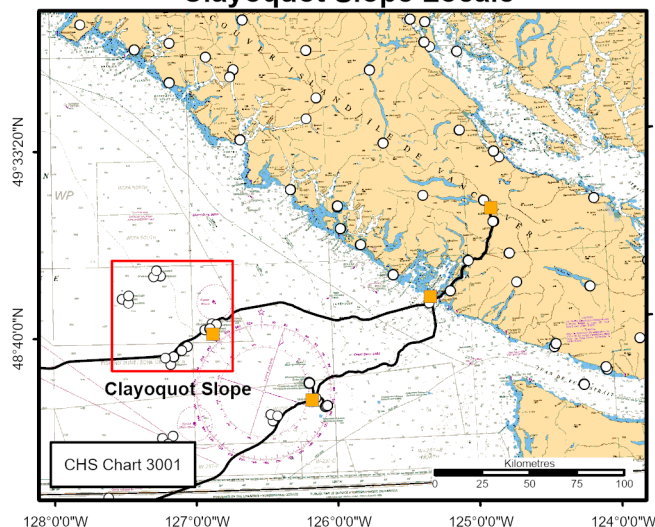
Project: The North-East Pacific Undersea Networked Experiments (NEPTUNE) is an oceanographic project managed by Ocean Networks Canada (ONC), an initiative of the University of Victoria. It consists of a cabled observatory off the west coast of Vancouver Island, beginning in Port Alberni and extending 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 web site for system details). The acoustic transponders are not cabled, please see Clayoquot Slope Site Overview map.

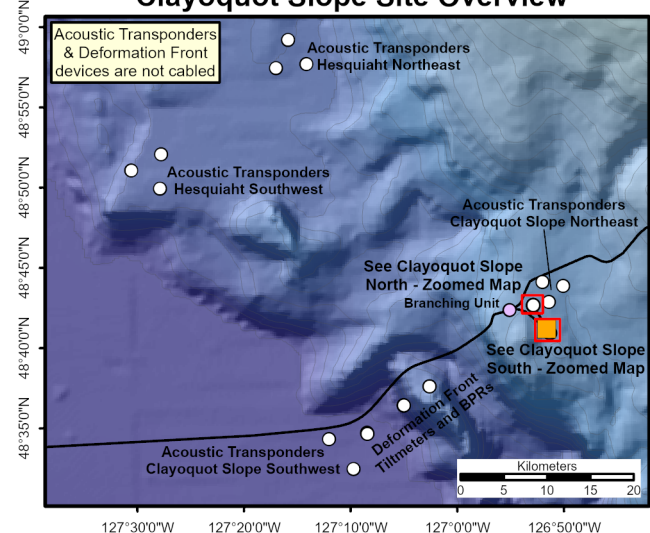
When: Latest system and instrument deployments at Clayoquot Slope: **September 2, 2025**

Where: **Clayoquot Slope, West Coast Vancouver Island.** See **chart # 3001** (ENC CA270389) for main cable route.

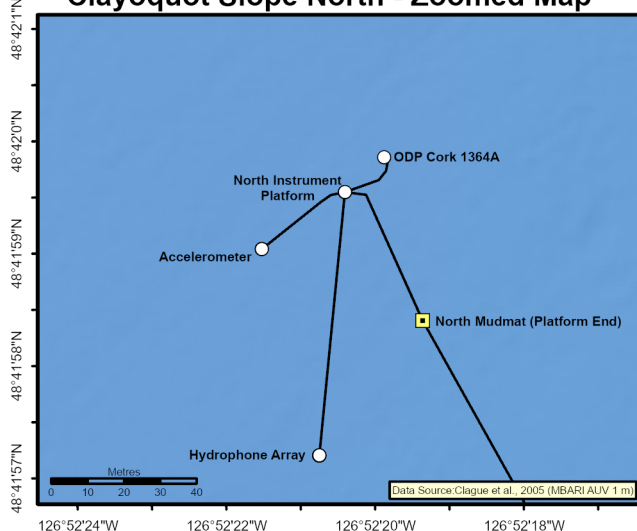
Clayoquot Slope Locale



Clayoquot Slope Site Overview



Clayoquot Slope North - Zoomed Map



Clayoquot Slope South - Zoomed Map



These figures have been produced by the University of Victoria based on Canadian Hydrographic Service (CHS) charts, pursuant to 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:

Name	Latitude	Longitude	Depth (m)	Description
Accelerometer	48.67047	-126.84770	1259	Buried 1 m circular green caisson
Accelerometer	48.69972	-126.87262	1318	0.5 m Cylindrical frame with glass sphere buried in a green caisson
Branching Unit	48.69510	-126.90954	1367	3 m cylindrical steel can
Bullseye ADCP	48.67084	-126.84743	1258	1 cubic meter, white mesh platform
Bullseye BPR	48.67083	-126.84799	1257	1 m triangular steel platform
Bullseye Broadband Seismometer	48.67054	-126.84877	1256	1 m spherical grey titanium platform
Camera	48.67022	-126.84805	1255	Large (5 m) grey steel frame.
CORK	48.69994	-126.87215	1329	6.5 m Cylindrical steel frame with circular platform
CORK Instrument Platform	48.69985	-126.87230	1315	Large (3 m) grey steel frame.
CTD	48.67064	-126.84807	1257	3 m white tripod
Deformation Front East Data Logger	48.61821	-127.03834	1753	1 cubic meter steel and plastic mesh platform.
Deformation Front Middle Data Logger	48.59889	-127.07953	2498	1 cubic meter steel and plastic mesh platform.
Deformation Front West Data Logger	48.57053	-127.13736	2575	1 cubic meter steel and plastic mesh platform.
Gastown Alley Borehole with Instrument (SCIMPI)	48.66971	-126.84752	1272	25 m yellow cable with floats
Hesquiaht Transponder 1 (NE)	48.95259	-127.26764	2042	An orange GPS Acoustics device extending 2 m off seafloor.
Hesquiaht Transponder 2 (NE)	48.98161	-127.24745	2031	An orange GPS Acoustics device extending 2 m off seafloor.
Hesquiaht Transponder 3 (NE)	48.95601	-127.21950	2046	An orange GPS Acoustics device extending 2 m off seafloor.
Hesquiaht Transponder 1 (SW)	48.82995	-127.45438	2253	An orange GPS Acoustics device extending 2 m off seafloor.
Hesquiaht Transponder 2 (SW)	48.84936	-127.49905	2253	An orange GPS Acoustics device extending 2 m off seafloor.
Hesquiaht Transponder 3 (SW)	48.86559	-127.45157	2234	An orange GPS Acoustics device extending 2 m off seafloor.
Hydrophone Array	48.69920	-126.87242	1314	Yellow metal pole rising 3 m from seafloor
Instrument Platform	48.67060	-126.84789	1254	Large (3 m) grey steel frame
Mud Mat (Instrument Platform End)	48.69953	-126.87202	1310	1.5 m yellow rectangular platform
Mud Mat (Node End)	48.67483	-126.85259	1240	1.5 m yellow rectangular platform
Node	48.67454	-126.85251	1256	Large 7 m yellow trawl resistant frame, 13 tons
TiltMeter	48.67087	-126.84814	1259	1 m cylindrical titanium can, with white plate
Tiltmeter (Deformation Front East)	48.61841	-127.03806	1748	Small metallic device buried in seafloor connected by cable to nearby 1 cubic meter steel and plastic mesh platform
Tiltmeter (Deformation Front Middle)	48.59944	-127.07943	2504	Small metallic device buried in seafloor connected by cable to nearby 1 cubic meter steel and plastic mesh platform

Tiltmeter (West)	48.57075	-127.13759	2559	Small metallic device buried in seafloor connected by cable to nearby 1 cubic meter steel and plastic mesh platform
Transponder 1 (NE)	48.71867	-126.82464	1408	An orange GPS Acoustics device extending 2 m off seafloor
Transponder 1 (SW)	48.56603	-127.19777	2556	An orange GPS Acoustics device extending 2 m off seafloor.
Transponder 2 (NE)	48.72343	-126.85690	1401	An orange GPS Acoustics device extending 2 m off seafloor
Transponder 2 (SW)	48.53446	-127.16049	2559	An orange GPS Acoustics device extending 2 m off seafloor.
Transponder 3 (NE)	48.70260	-126.84766	1404	An orange GPS Acoustics device extending 2 m off seafloor
Transponder 3 (SW)	48.57170	-127.13804	2559	An orange GPS Acoustics device extending 2 m off seafloor.

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.