

Information for Mariners – February 2021 NEPTUNE Observatory: Clayoquot Slope (Formerly ODP 889)

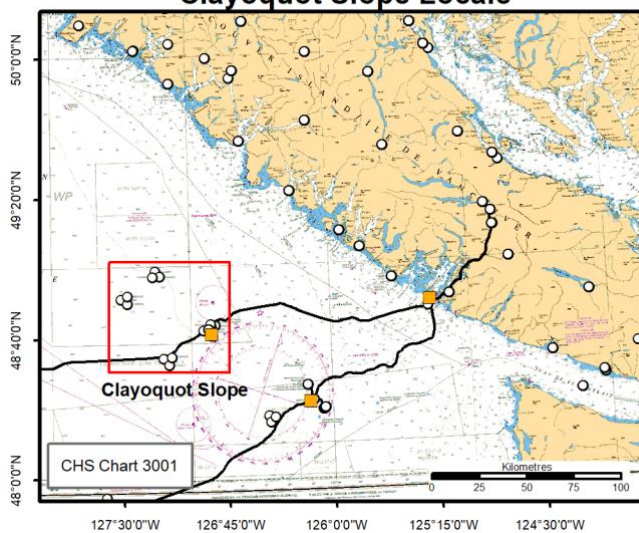
Project: The North-East Pacific Undersea Networked Experiments (NEPTUNE) is an oceanographic project managed by Ocean Networks Canada (ONC), an initiative of the University of Victoria. It consists of a cabled observatory off the west coast of Vancouver Island, beginning in Port Alberni and extending 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.

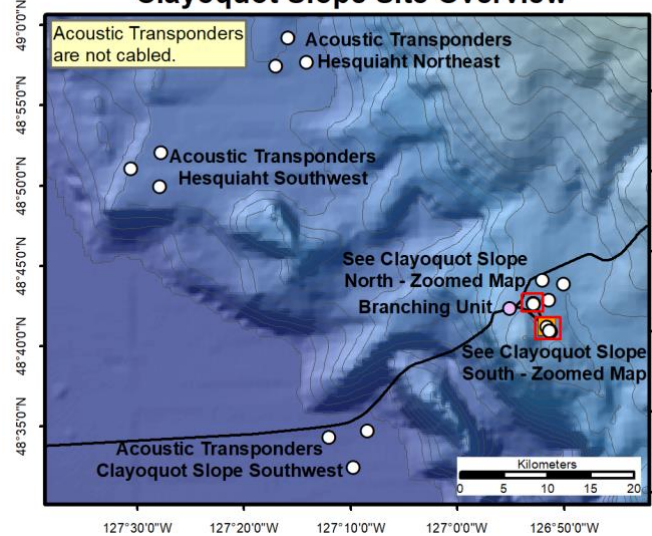
When: Latest system and instrument deployments at Clayoquot Slope: **14 September 2020**

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

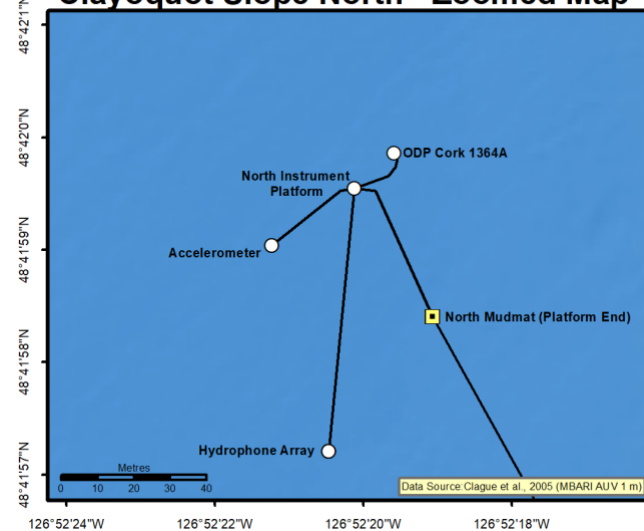
Clayoquot Slope Locale



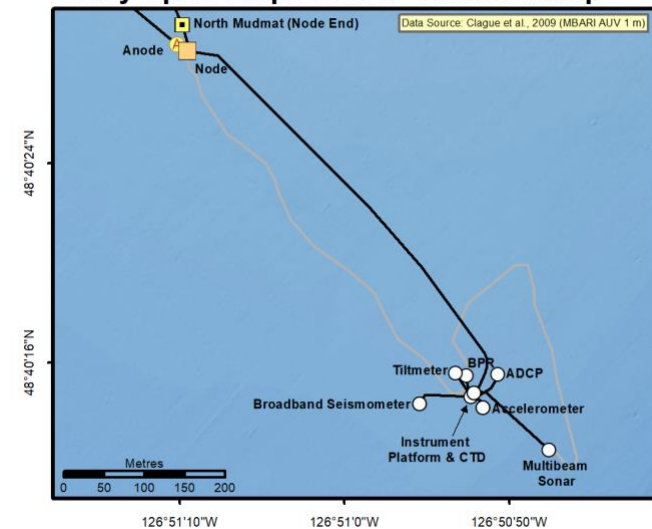
Clayoquot Slope Site Overview



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 # 2019-1004-1260-UV. 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 |
|---|-------------|--------------|-----------|--|
| Bullseye_Accelerometer_2016-06 | 48.67047314 | -126.8477014 | 1259 | Buried 1 m circular green caisson. |
| Bullseye_ADCP_2020-06 | 48.67084382 | -126.84743 | 1258 | 1 cubic meter, white mesh platform. |
| Bullseye_BBS_NC89_2009-09 | 48.67053667 | -126.8487667 | 1256 | 1 m spherical grey titanium platform. |
| Bullseye_BPR_2009-09 | 48.670835 | -126.847965 | 1258 | 1 m triangular steel platform. |
| Bullseye_CTD_2018-06 | 48.67064 | -126.847847 | 1253 | 3 m white tripod. |
| Bullseye_IP_2018-06 | 48.6706 | -126.847893 | 1254 | Large (3 m) grey steel frame. |
| ClayoquotSlope_BranchingUnit_2007-08 | 48.69510333 | -126.909535 | 1367 | 3 m cylindrical steel can. |
| ClayoquotSlope_CORK-1364A_2010-09 | 48.69993667 | -126.8721517 | 1329 | 6.5 m Cylindrical steel frame with circular platform. |
| ClayoquotSlope_CORK-1364A_IP_2016-06-23 | 48.699853 | -126.872302 | 1315 | Large (3 m) grey steel frame. |
| ClayoquotSlope_CQS64_W1_Accelerometer_2018-07 | 48.69971814 | -126.8726178 | 1318 | Buried 1 m circular green caisson. |
| ClayoquotSlope_NE_Transponder_1 | 48.7186745 | -126.8246378 | 1408 | An orange GPS Acoustics device extending 2 m off seafloor. |
| ClayoquotSlope_NE_Transponder_2 | 48.7234343 | -126.8569018 | 1401 | An orange GPS Acoustics device extending 2 m off seafloor. |
| ClayoquotSlope_NE_Transponder_3 | 48.7025976 | -126.8476572 | 1404 | An orange GPS Acoustics device extending 2 m off seafloor. |
| ClayoquotSlope_Node_2009-08 | 48.67453667 | -126.85251 | 1256 | Large 7 m yellow trawl resistant frame, 13 tons. |
| ClayoquotSlope_ODP1364A_HydrophoneArray_2020-09 | 48.69920415 | -126.8724249 | 1314 | Yellow metal pole rising 3 m from seafloor. |
| ClayoquotSlope_RBRTiltMeter_2017-06 | 48.67086956 | -126.8481413 | 1259 | 1 m cylindrical titanium can, with white plate. |
| ClayoquotSlope_SW_Transponder_1 | 48.56602716 | -127.1977728 | 2556 | An orange GPS Acoustics device extending 2 m off seafloor. |
| ClayoquotSlope_SW_Transponder_2 | 48.53446383 | -127.1604925 | 2559 | An orange GPS Acoustics device extending 2 m off seafloor. |
| ClayoquotSlope_SW_Transponder_3 | 48.5717875 | -127.1380086 | 2550 | An orange GPS Acoustics device extending 2 m off seafloor. |
| GastownAlley_Multi-beamSonar_2020-06 | 48.669982 | -126.846603 | 1259 | 1 m steel tripod with yellow cone. |
| Hesquiaht_NE_Transponder_1 | 48.95258916 | -127.2676398 | 2042 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_NE_Transponder_2 | 48.98160616 | -127.2474543 | 2031 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_NE_Transponder_3 | 48.95600916 | -127.2194973 | 2046 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_SW_Transponder_1 | 48.8299456 | -127.4543846 | 2253 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_SW_Transponder_2 | 48.8493556 | -127.4990543 | 2253 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_SW_Transponder_3 | 48.8655876 | -127.4515735 | 2234 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_SW_Transponder_2 | 48.8493556 | -127.4990543 | 2253 | An orange GPS Acoustics device extending 2 m off seafloor. |
| Hesquiaht_SW_Transponder_3 | 48.8655876 | -127.4515735 | 2234 | 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:

<http://www.oceannetworks.ca/installations/notice-mariners>

Contacts: If you have any concerns, or would like further information, please contact either: Ian Kulin, Ocean Networks Canada's Director of Marine Operations at ikulin@uvic.ca or 250 721-6279 or ONC GIS Specialists at GIS@oceannetworks.ca.