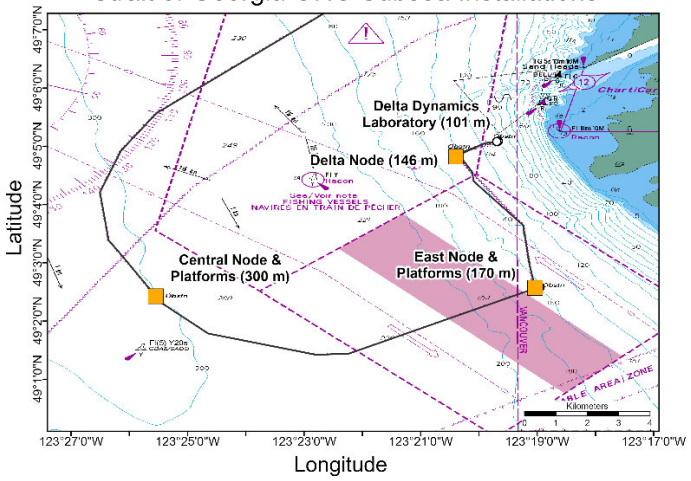
Information for Mariners – June 2023
VENUS/ONC Strait of Georgia

Project: The Victoria Experimental Network Under the Sea (VENUS) is an oceanographic project managed by Ocean Networks Canada (ONC) of the University of Victoria. It consists of cabled observatories in both Saanich Inlet and the Strait of Georgia. 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).
When: Latest system and instrument deployments: **11 May 2023**
Where: **Strait of Georgia**

The following gear is considered permanent and will be serviced for many years. The Central and East Nodes are surrounded by a study area of approximately 250m radius, with instruments and cables, and the Delta Node consists of a single instrument. A cable connects these nodes providing power and communications. Cables and Obstruction Areas are noted on the most recent CHS charts #3492 and #3463.

Strait of Georgia ONC Subsea Installations



Installations:

Name	Latitude	Longitude	Depth(m)	Description
Central Node	49.04044	-123.42579	300	Large (4 m) orange and black frame
Central Instrument Platform	49.04003	-123.42551	294	Large (3 m) grey steel frame
Central Hydrophone	49.03956	-123.42525	298	Large (2.5m) metal platform
Central Cabled CTD	49.04015	-123.42553	296	Large (2m height) metal tripod
Central Autonomous CTD	49.04014	-123.42474	306	Large (8m height) mooring on sea floor
Central Current Meter	49.04006	-123.42541	296	Small (1 m) aluminum tripod
East Node	49.04283	-123.31727	170	Large (4 m) orange and black frame
East Instrument Platform	49.04307	-123.31681	166	Large (3 m) grey steel frame
East Current Meter	49.04308	-123.31671	164	Small (1 m) aluminum tripod
East Autonomous CTD	49.04306	-123.31586	165	Small (1 m) autonomous device
East Hydrophone Array	49.04330	-123.31611	164	Large (3 m) grey and black steel tripod
Delta Node	49.08062	-123.33994	146	Large (3 m) grey steel frame
Delta Dynamics Laboratory	49.08467	-123.32820	101	Large (3 m) white steel frame
Delta Current Meter	49.08479	-123.32777	98	Large (2 m) steel tripod

Cable between East Node and Delta Node:

A1	49.04284	-123.31727
A2	49.04974	-123.31891
A3	49.06071	-123.32068
A4	49.07333	-123.33484
A5	49.07601	-123.33529
A6	49.07996	-123.33832
A7	49.08040	-123.34032
A8	49.08062	-123.33994

Cable between Delta Node and Delta Dynamics Laboratory:

A1	49.08062	-123.33994
A2	49.08083	-123.34019
A3	49.08140	-123.33878
A4	49.08204	-123.33704
A5	49.08309	-123.33453
A6	49.08411	-123.33191
A7	49.08473	-123.32842
A8	49.08467	-123.32820
A9	49.08479	-123.32777

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 Meghan Paulson, Ocean Networks Canada's Director of Observatory Digital Operations at **mpaulson@oceannetworks.ca** or 250-508-6932, or Ocean Networks Canada's GIS Specialists at GIS@oceannetworks.ca.