

Synergy With and An Update On Ocean Networks Canada

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A UNIVERSITY OF VICTORIA INITIATIVE

SOUTHERN BRITISH COLUMBIA INFRASTRUCTURE

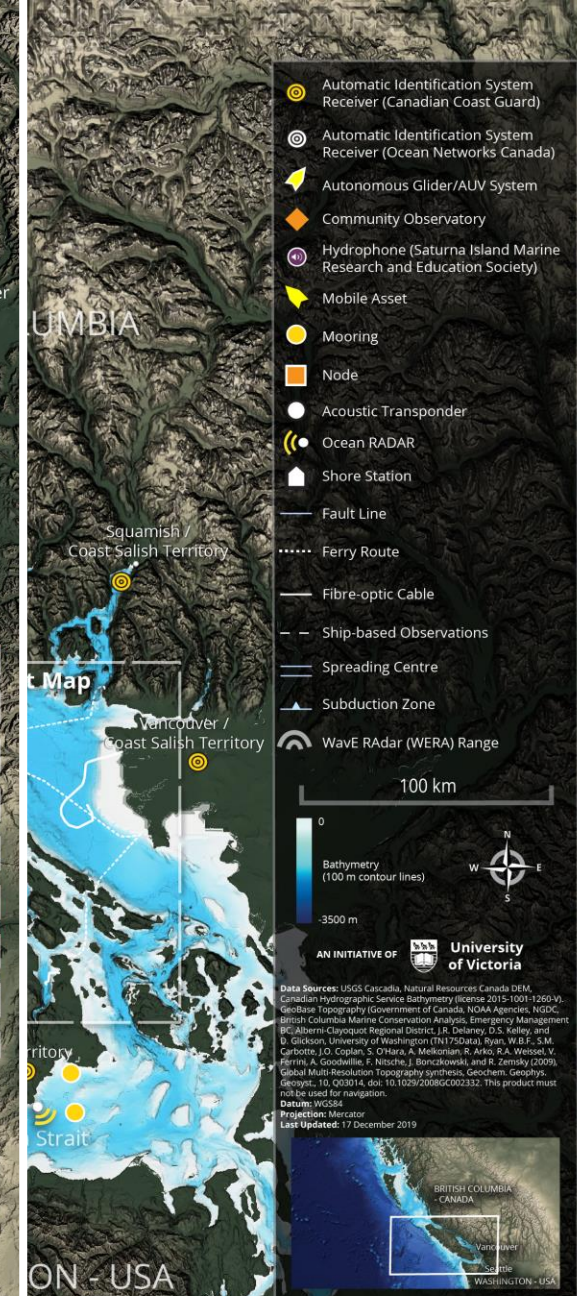
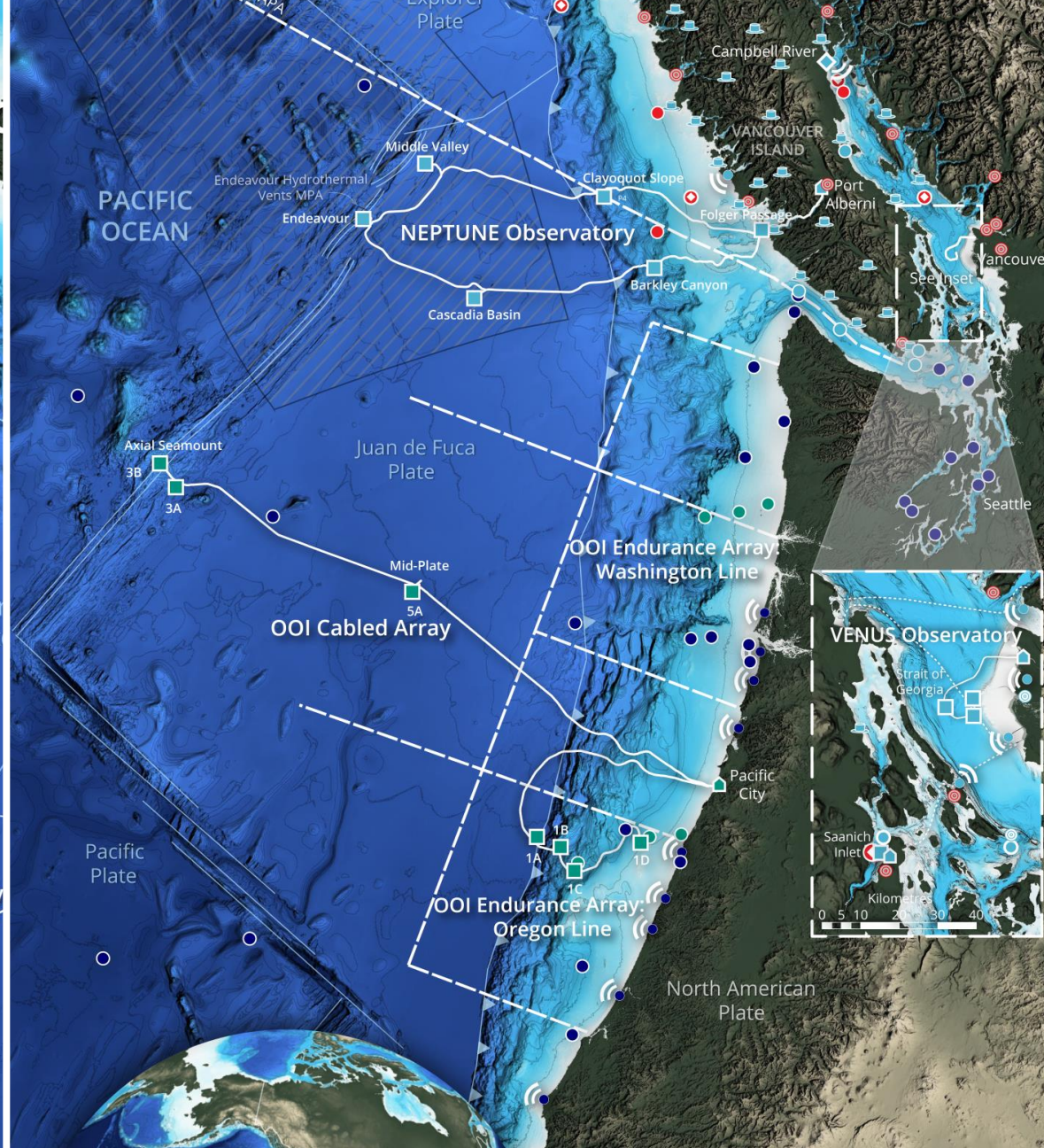


PACIFIC OCEAN

Endeavour 2300 m

Pacific Plate

Middle Valley 2400 m



- Automatic Identification System Receiver (Canadian Coast Guard)
- Automatic Identification System Receiver (Ocean Networks Canada)
- Autonomous Glider/AUV System
- Community Observatory
- Hydrophone (Saturna Island Marine Research and Education Society)
- Mobile Asset
- Mooring
- Node
- Acoustic Transponder
- Ocean RADAR
- Shore Station
- Fault Line
- Ferry Route
- Fibre-optic Cable
- Ship-based Observations
- Spreading Centre
- Subduction Zone
- Wave RADAR (WERA) Range



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Data Sources: USGS Cascadia, Natural Resources Canada DEM, Canadian Hydrographic Service Bathymetry (license 2015-1001-1266-V), Geobase Topography (Government of Canada, NOAA Agencies, NGDC, British Columbia Marine Conservation Analysis, Emergency Management (BC) Alberni Clayoquot Regional District, J.R. Delaney, D.S. Kelley, and D. Gibson, University of Washington (11/20/2014), Ryan, W.B.F., S.M. Carbotte, J.O. Coplin, S. O'Hara, A. Melkonian, R. Arko, P.A. Weissel, V. Fanning, A. Goodwillie, F. Nitsche, J. Bonczkowski, and R. Ziemsky (2009), Global Multi-Resolution Topography synthesis, Geochem. Geophys. Geophys., 10, Q63014, doi:10.1029/2008GC002332. This product must not be used for navigation.

Projection: Mercator
Datum: WGS84
Last Updated: 17 December 2019

Opportunities and Synergies with OOI

Early (2000-2010) coordination and planning has diminished as we each focus on specific site and network issues and concentrated resources on our active research communities.

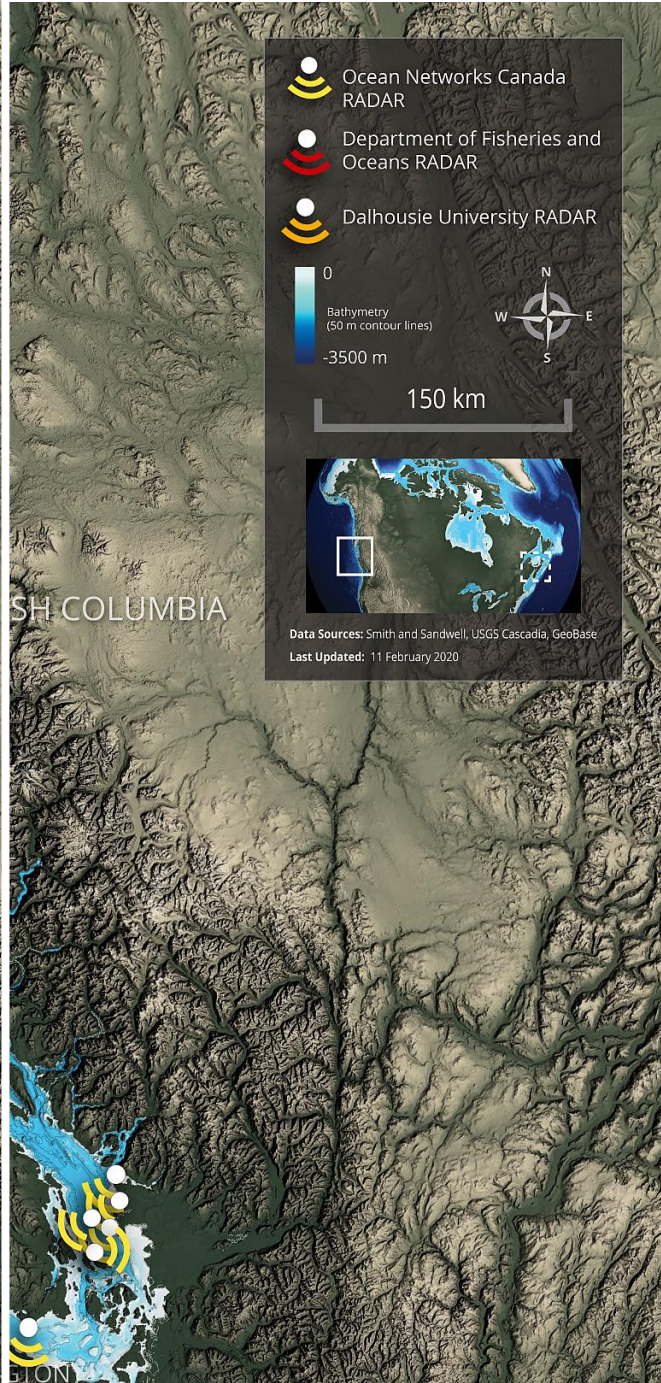
But core cross-boarder science and common observations abound:

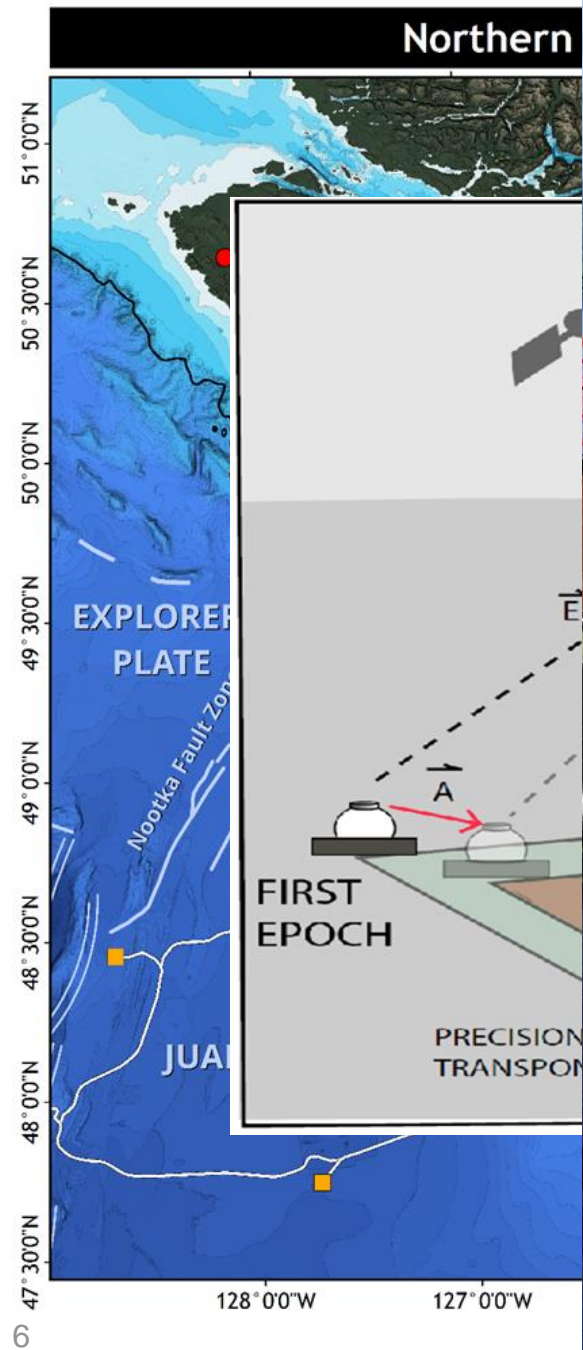
- Seismicity → IRIS
- Marine Heat Waves → The Blob
- Marine Hypoxia Events → 2017 and 2021
- Regional Upwelling and Tracking Ocean Acidification
- Modelling Efforts → Live Ocean (UW) / Salish Sea Cast (UBC)
- Ships and ROVs of Opportunity → Rescue Hercules and Argus (2021)
- Data interoperability and linked data portals/services

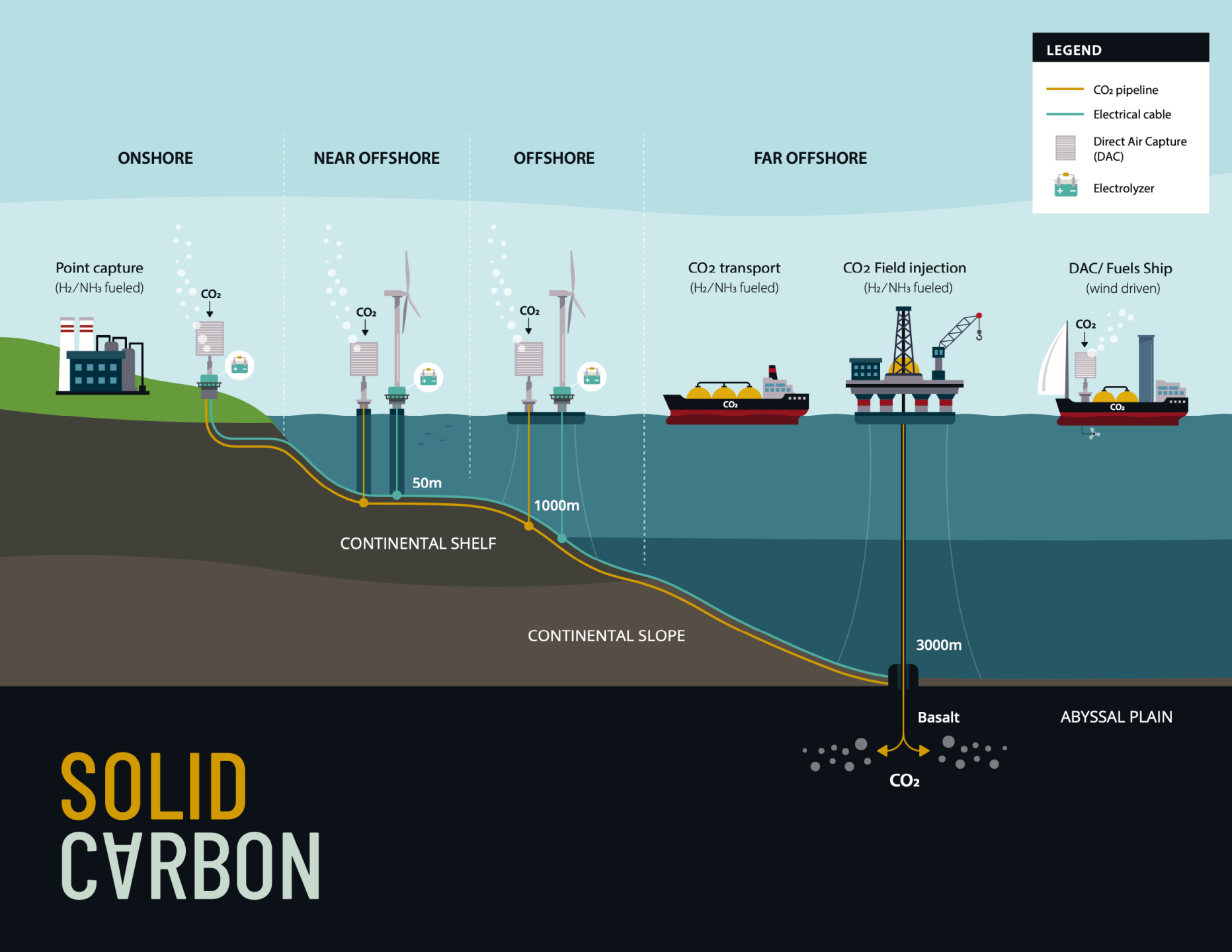
Recent ONC Initiatives and Systems



National HF Radar & Pacific CIOOS & BGC Argo







**SOLID
CARBON**

Out to 2030:

Neutrino
Observatory
&
Climate
Mitigation: Solid
Carbon

Systems
Engineering
Assessment &
Technology
Research
Underway at
UVic/ONC

THANK YOU!

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 @ocean_networks  OceanNetworksCanada visit: oceannetworks.ca

BRITISH COLUMBIA OCEANOGRAPHIC RADAR

PACIFIC
OCEAN

