

DISCOVER THE OCEAN. UNDERSTAND THE PLANET.

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Ocean Observing Workshop Ocean Networks Canada Overview

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AN INITIATIVE OF  University
of Victoria

Ocean Networks Canada Overview

- Not-for-profit society under the University of Victoria
- Management and operation of ocean science infrastructure (hardware and digital)
- 100 plus staff
 - User Engagement
 - Operations
 - Finance and Administration
 - Innovation

Ocean Networks Canada Infrastructure (Hardware)

- NEPTUNE Cabled Ocean Observatory
 - Regional scale observatory on Juan De Fuca Plate
 - 5 primary science sites
 - Diverse ocean environments
- VENUS Cable Ocean Observatory
 - Coastal scale observatory in Saanich Inlet and Strait of Georgia
 - 3 primary science sites
 - Diverse coastal environments

Ocean Networks Canada Infrastructure (HARdware)

- Smart Ocean Community Observatories
 - 5 community observatories
 - BC coastal locations
 - Range of sub-sea and surface observing systems
- Cambridge Bay
 - Shallow water Arctic observatory
 - Under ice operations
 - Limited data “pipes”

Ocean Networks Canada Infrastructure (Hardware)

- Churchill Marine Observatory
 - Shallow water Arctic observatory
 - Installation planned for 2017
 - Under ice operations
- Three instrumented Coastal Ferries (BC Ferry Corporation)
- Webb Glider

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Ocean Networks Canada Infrastructure (Hardware)

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Ocean Networks Canada Infrastructure (Hardware)

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Ocean Networks Canada Infrastructure (Software)

- Ocean 2.0
 - Integrated data capture, data QA/QC, data delivery and observatory control system
 - Meta-data capture and archive a key component
 - Video capture and annotation onboard or from shore (remote logging)
 - Direct ingestion of shipboard/ROV sensor data into data archive

Ocean Networks Canada

Key Issues

- Maximize the probability of a successful instrument deployment
- Life cycle considerations in design, implementation and maintenance phases
- Standardization of sub-sea infrastructure (cables, connectors)
- Sub-sea infrastructure in hostile environments (hot vents, spreading ridges)

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Ocean Networks Canada Workshop Goal

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You must learn from the mistakes of others. You can't possibly live long enough to make them all yourself.