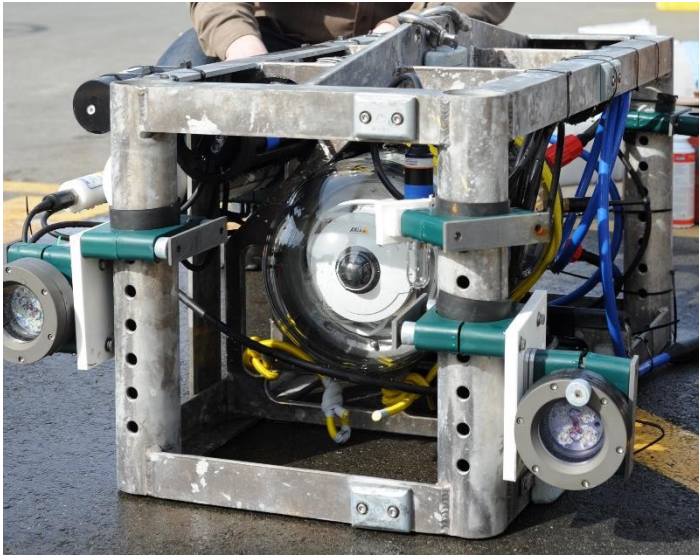


Prince Rupert Community Observatory - What can it do?



Community observatories provide essential information to assess the local marine conditions. The instruments on the community observatory collect scientific data which are available for anyone to download over the Internet.

Underwater equipment:



Video camera

Video is recorded and streamed live to the Internet. Can be used to monitor sea life, examine sea bottom, and monitor turbidity (cloudiness).



Hydrophone

Underwater sound is recorded and streamed live to the Internet. Can be used to study marine mammals, monitor vessels, and detect earthquakes and landslides.



Water Property Measurements

Used to monitor basic ocean conditions. Measures temperature, salinity, oxygen, chlorophyll and turbidity.

Above water equipment:



Weather station

Used to monitor basic weather conditions. Measures air temperature, wind speed and direction, relative humidity, barometric pressure, solar radiation.



Shore camera

Time lapse video is recorded and streamed to the Internet. Can be used to monitor weather conditions and vessel traffic.



WaMoS RADAR

With a range of 2-4 kms - monitor and record targets as small as a swimming person, water current direction/speed, wave height/shape/direction, oil spills.



CODAR: HF RADAR system

Creates a surface current map over a wide area giving mariners and others an improved understanding of the state of the ocean's surface. This system produces an hourly graphic of current speeds and directions in the area. This understanding of current patterns also assists scientific research into the behavior of the ocean in this unique marine environment.



AIS (Automatic Identification System) antenna

Large ships are often required to be fitted with an AIS transmitter which broadcasts identification, position, course and speed of the vessel. Some community observatories may include an AIS antenna to receive these transmissions. This information can be used to track and record the routes and volume of vessel traffic in the local area and can also be used in search and rescue operations.

Other specialized scientific equipment can be added for specific sites as needed.

Local observations. Global connections.

