

BACKGROUND
August 24, 2015



Explore the Abyss Live with Ocean Networks Canada (ONC)

Everyone—from scientists to science students to people of all ages with an interest in the deep sea—is invited to join via live streaming video of every dive to the seafloor. Interaction with scientists, educators and crew on board both ships will be available 24/7, as operations continue around the clock.

The first leg of the expedition, from 25 August to 2 September, will feature *E/V Nautilus*. This first leg will focus on ONC observatory sites in the Salish Sea. Expedition goals include:

- servicing all the instrument platforms in the Salish Sea;
- installing a new 3D camera in Saanich Inlet;
- deploying pigs carcasses for forensic research in the Strait of Georgia;
- installing a new sensor system to measure underwater landslides on the Fraser Delta;
- servicing moorings in the Strait of Juan de Fuca.

Leg two runs from 3 to 15 September, when the *E/V Nautilus* will be joined by *R/V Thompson*. The two state-of-the-art ships will be heading offshore Vancouver Island with stops at five deep sea sites in the Pacific. Their path will span a wide variety of seafloor environments— from rocky coast to submarine canyons and across an abyssal plain to the hydrothermal vents at Endeavour, 300 kilometres off the west coast of Canada. Expedition goals include:

- servicing instrument platforms;
- deploying autonomous moorings at the Barkley Canyon site;
- repairing the hydrophone array at Clayoquot Slope;
- connecting the tsunami array at Cascadia Basin;
- recovering the Cabled Observatory Vent Imaging Sonar at Endeavour;
- maintaining Tempo-mini at Endeavour;
- conducting high tech photogrammetry surveys at Endeavour and Barkley Canyon.

Starting Aug 25 up-to-the moment dive plans and shipboard activities will be posted on the ONCAbyss website and @Ocean_Networks.

E/V Nautilus

The Exploration Vessel (*E/V Nautilus*) is a 64 metre ship equipped with the latest in ocean technology and two robotic vehicles *Hercules* and *Argus* that can dive up to 6000 meters. It hosts a team of 31 scientists and a ships crew of 17.

R/V Thompson

The Research Vessel (*R/V Thompson*) is an 84 metre ship equipped with the latest in ocean technology and the Woods Hole Oceanographic's robotic vehicle *Jason* that can dive to 6500 metres. It hosts a team of 36 scientists and a ships crew of 23.