

Beaufort Gyre Exploration Project: Dispatch 27: ITP deployment

Steve Lambert, WHOI
August 28, 2012

With two days of ice work behind us we decided to deploy another ITP. The Ice-Tethered Profiler is a system that consists of a sub-surface unit that climbs up and down the wire and a surface unit that contains a GPS, modem, antennas, and batteries; the modem calls to a satellite several times per day to transmit data. This ITP, ITP64, is the same system as the unit deployed Sunday (ITP65) in that it employs a bio-suite sensor head, the Submersible Autonomous Moored Instrument (SAMI) and extra batteries all around. Since we were short of time deploying the ITP over the side of the ship (instead of on a floe) in an ice area worked with our schedule. The idea is that this area is very likely to refreeze in the coming months and the ITP will drift with the ice.

In a way the ship is divided into two sections: the forward hold and foredeck are used for mooring and other ship-based operations while the helicopter hangar and upper deck are used to store off-ship equipment like the ITP. Setting up for this over-the-side deployment took a bit of doing. We had to open a hatch in the upper deck and move the heavy and fragile wire down then roll it forward. After that came the floatation foam and anchor, then the profiler. After a couple hours of work we were all set up and ready to go shortly after breakfast.

As with all ITP deployments the wire was set up in the winch then run through a hanging block and attached to the 250 lb. anchor. Then the instrument was attached and that was all lowered over the side. Then came several hundred meters of wire, then the SAMI. After this a grounding plate has to be attached for the communications and surface package attached and slid into the foam. Once all that is done a communication check is done to ensure cable connections and that the individual units are working correctly. After all that is complete we were able to pull the release line and send it on its way. The following morning we saw new data coming in!

Last updated: September 29, 2014

Copyright ©2007 Woods Hole Oceanographic Institution, All Rights Reserved.

Mail: Woods Hole Oceanographic Institution, 266 Woods Hole Road, Woods Hole, MA 02543, USA.

E-Contact: info@whoi.edu; press relations: media@whoi.edu, tel. (508) 457-2000

Problems or questions about the site, please contact webdev@whoi.edu

Related Multimedia



August 28 photos

» [View Slideshow](#)