## UnderwayCTD Customers Gather 'The Deadliest Data'



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Oceanscience has waved goodbye to the 50th UnderwayCTD system off its production line. Recent deployments have taken place in the 'worst ever' conditions of 40kt winds and to depths of over 1,500m.

Woods Hole Oceanographic Institution put their two brand new UnderwayCTDs to good use with 400 casts to 400m on the annual Stratus cruise. In challenging North Atlantic conditions, researchers from the University of Rhode Island easily took the title of the 'Worst Ever UnderwayCTD Deployment Conditions' in over 40kt winds. Teachers at Sea programme members, on board the *R/V Knorr* (see image) filmed a video of the

deployment, and called it 'The Deadliest Data'; watch it at <u>Oceanscience - Underway CTD</u>. Despite terrible conditions, the URI team collected over 100 deep profiles.

Although the majority of UnderwayCTD users are using the system while underway to save on vessel time expended in upper-ocean profiling, increasingly Oceanscience customers have taken advantage of the unique free-fall nature of the system to perform fast stationary profiles. One example is collecting CTD profiles at buoy locations to help calibrate acoustic equipment on the mooring. Deployed in this manner, the UnderwayCTD probe can hit 1000m depth in just over 4 minutes! In more record-breaking activities, NOAA operators in the Pacific on *R/V Bluefin* recently took the title of 'Deepest UnderwayCTD profile' at 1,563m. Developments in the future will further increase the maximum attainable depth both for underway and stationary casts.

Since the introduction of the Series II UnderwayCTD in 2009, the prospect of research-quality CTD profiling to over 500m while fully underway has led to several unique research opportunities. Company founder Ron George sees this as a great start for the new system: "Our customers are gathering great data, and have been able to deploy the UnderwayCTD from vessels without having to invest greatly in vessel space or infrastructure."

On the future of the UnderwayCTD, Ron is very optimistic: "We have a sound platform and the experience of dozens of research cruises and are now firmly on track to even greater capability: deeper, faster, and with less operator involvement". Oceanscience customers have already notched up well over one thousand deep underway CTD profiles in 2011.

https://www.hydro-international.com/content/news/underwayctd-customers-gather-the-deadliest-data