**Vessel-Mounted Acoustic Doppler Current Profiler (VMADCP)**

**Diana Cardoso**

The R/V Endeavor is equipped with two RDI Doppler sonars; a 75 kHz Ocean Surveyor ADCP and a 300 KHz Workhorse Mariner ADCP at a nominal depth of approximately 5 meters. The 75 kHz ADCP can reach to 600-800 m in good weather in its deep-profiling mode, the 300 KHz has a maximum of 100-200 m. In bad weather, low scattering conditions, or some speed/heading/sea state conditions that entrain bubbles under the transducer, the range is less.

Data acquisition for the sonar and the requisite ancillary navigation streams occurs via the UHDAS software (University of Hawaii's Data Acquisition System). An Ocean Surveyor is capable of running in either broadband mode (higher resolution at the expense of penetration) or narrowband mode (slightly deeper profiling but lower resolution). It is also capable of interweaving these pings. The ADCP system configuration is in the table below which was not changed for the duration of the mission. Both ADCPs were run continuously and simultaneously for the entire mission with the exception the transits through MPA regions and French waters and to turn off the bottom tracking. Bottom tracking was turned on the first day for about half a day then remained off the remainder of the mission.

A detailed digital log for the ADCPs was maintained by the ship technicians which was sent together with the data to BIO Data Services for upload and archival into their protected server. For access to these data, please contact DFO.BIODataServices-BIOServicesdeDonnees.MPO@dfo-mpo.gc.ca.

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| --- | --- | --- | --- | --- | --- | --- |
| ADCP | Start day | End day | ping | # of bins | Bine size (m) | Blank distance (m) |
| 75 kHz | 2025-03-29, 12:53 | 2025-04-18 11:56 | Narrow band | 100 | 8 | 8 |
| 300 kHz | Water profile | 35 | 4 | 4 |

Table: Vessel-Mounted Acoustic Doppler Current Profiler configuration