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Tripod Deployment: YR160825 to YR160913, PC-ADP and LISST, Clay Bank, York River Virginia

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Document Type

Data contagious sincerely

Department/Program

Virginia Institute of Marine Science

Publication Date

2022

Spatial Information

All samples contained within (37°39'N, 76°54'W), (37°16'N, 76°20'W), (37°8'N, 76°24'W), (37°34'N, 76°0'W)

Data Access

On Hard Drive: Tripods >> Claybank >> PCADP Tripod >> YR160825

Abstract

Dataset consists of burst data collected as part of a tripod deployment. The tripod included the following instruments: Pulse-coherent Acoustic Doppler Profiler (PCADP), Sequoia LISST, two HOBOs.

Description

Tripods were deployed for a prolonged amount of time to monitor suspended sediment fluxes as well as conductivity and temperature.

Because the tripods were deployed for longer periods of time, biofouling did occur. To combat biofouling, the PC-ADP was treated with Interlux Trilux 33 antifouling paint, including a thin coat of over the acoustic sensors. This thin layer of paint had a negligible effect on the acoustic data collected by the PC-ADP. Optical sensors included on the tripod did not have any anti-fouling paint on the sensors (which means their reliability timeframe may be shorter than acoustic sensors), and were secured to the tripod using copper supports. The tripod structure itself was painted with Interlux MicronCSC anti-fouling paint and all instrument bodies were wrapped in cellophane and electrical tape for easy removal of biofouling. It should be noted that data occurring closer to the start date of the deployment is more reliable than data collected later in the deployment. Any excessive biofouling of the tripod should be listed in the logbook during retrieval.

List of files:

- HOBO This folder includes conductivity and temperature data from the tripod deployment. If the
 data are processed, MATLAB m-files are also included. If this folder is absent in the data set, this
 parameter was not collected.
- LISST This folder includes all raw data from the tripod deployment. If the data have been
 processed, MATLAB m-files for processing are also included. If this folder is absent in the data
 set, this parameter was not collected.
- Logbook Hand-written field notes and instrument setup documents. This file also contains the
 deployment log of locations and samples taken during the cruise. All field notes and
 complications/observations are included here.

- **PC-ADP** This folder includes all raw data from the tripod deployment. If the data have been processed, MATLAB m-files for processing are also included. If this folder is absent in the data set, this parameter was not collected.
- **Sediment Trap –** This file includes an Excel file with raw grain size distribution data collected from the sediment trap.

DOI

https://doi.org/10.xxxxxxxx/xxxx.xxxx

Keywords

Sediment transport, suspended sediment, ADV, acoustic Doppler velocimeter, CTD, conductivity, temperature, depth, LISST, sediment trap

Associated Publications

Master Sampling Spreadsheet and Timeline for MUDBED Project

(Link: On Hard Drive: Master Entry)

Tripod Deployment: YR160825 to YR161103, ADV, Clay Bank, York River Virginia

(Link: On Hard Drive: Tripods >> Claybank >> ADV Tripod >> YR160825)

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