

9-12-2014

# Cruise: YR130619, Stations: S5153- S5168, York River Estuary and Pamunkey River, Virginia, MUDBED Longitudinal Profiler Station Survey bracketing an Ebb Tide.

Kelsey A. Fall

*Virginia Institute of Marine Science, kafall@vims.edu*

Grace M. Cartwright

*Virginia Institute of Marine Science, gracec@vims.edu*

Carl T. Friedrichs

*Virginia Institute of Marine Science, carl.friedrichs@vims.edu*

David G. Bowers

Follow this and additional works at: <http://publish.wm.edu/data>

 Part of the [Environmental Sciences Commons](#), [Marine Biology Commons](#), and the [Oceanography Commons](#)

---

## Recommended Citation

Fall, Kelsey A., Cartwright, Grace M., Bowers, David G., and Friedrichs, Carl T., 2014. Cruise: YR130619, Stations: S5153- S5168, York River Estuary and Pamunkey River, Virginia, MUDBED Longitudinal Profiler Station Survey bracketing an Ebb Tide. Virginia Institute of Marine Science, College of William and Mary. <http://doi.org/10.21220/V51012>

**Authors:**

Fall, Kelsey A, Cartwright, Grace M , Friedrichs, Carl T and Bowers, David G

**Title:**

Cruise: YR130619, Stations: S5153- S5168, York River Estuary and Pamunkey River, Virginia, MUDBED Longitudinal Profiler Station Survey bracketing an Ebb Tide.

**Location (place name):**

York River, VA

**Location (bounding box coordinates):**

37° 07 23' N, 076° 09 12'W; 37° 13 33' N, 076° 18 28'W; 37° 39 12' N, 076° 54 00'W;  
37° 34 54' N, 076° 59 24'W

**Start Date:**

2013 June 12

**Abstract:**

Dataset consists of profile and water column burst data collected as part of a longitudinal profiler station survey at approximately 20 km, 25 km, 35 km, 45 km, 56 km and 62 km upriver from the mouth of the York River Estuary.

**Description of Data:**

During each station in the survey, while anchored, a profile time series was collected with a suite of instrumentation mounted on the CHSD profiler including: a YSI 6600 CTD, a Sequia LISST 100X, PICS floc camera system, a Nortek Vector, and a Sontek ADVOcean. The raw data of profile stations are processed to provide a smooth profile of data throughout the water column and a series of between 2 to 5 minute bursts from various heights in the water column. Total Suspended Solids (and fixed solids) were sampled from depth to calibrate the acoustic backscatter. Additional water samples were collected and analyzed for Chlorophyll A. Simultaneously, at each station, a burst was collected with a bow mounted, downward looking, RDI 1200 KHz ADCP. After each deployment of the profiler, a Trios RAMSES hyperspectral radiometer was deployed while drifting across the station location. The "logbook" is the hand written field notes and instrument setup documents. The "Profiler Set up" is a log of the location and serial number of the instruments mounted on the profiler. The "Consecutive Station Log" is an excel spreadsheet of the metadata associated with each station in the survey. Excel spreadsheet "Averaged Data" contains burst averaged data and statistics from the water column and bottom

bursts. Raw and processed data from each instrument are zipped in a folder, or series of folders, identified by the type and serial number of the instrument. All times are Eastern Standard Time (EST).

**Funding sources:**

NSF grants OCE-0536572 and OCE-1061781

**Publication Type:**

Data

**Related Material:**

**Subject Keywords:**

Sediment transport; acoustic backscatter; conductivity temperature and depth sensor; CTD; Acoustic Doppler Current Profiler; ADCP; LISST; settling velocity; suspended size distribution; TSS; Total Suspended Solids; water clarity, radiometer