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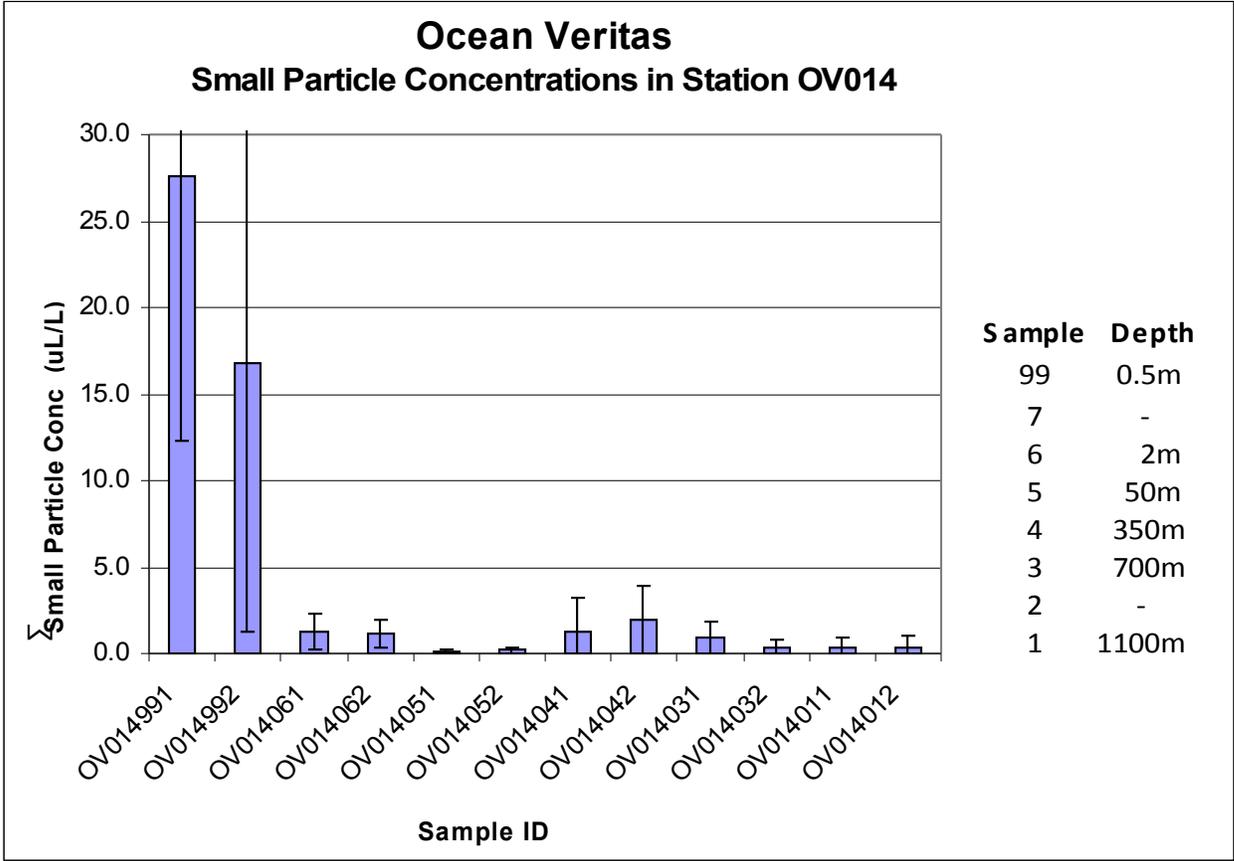
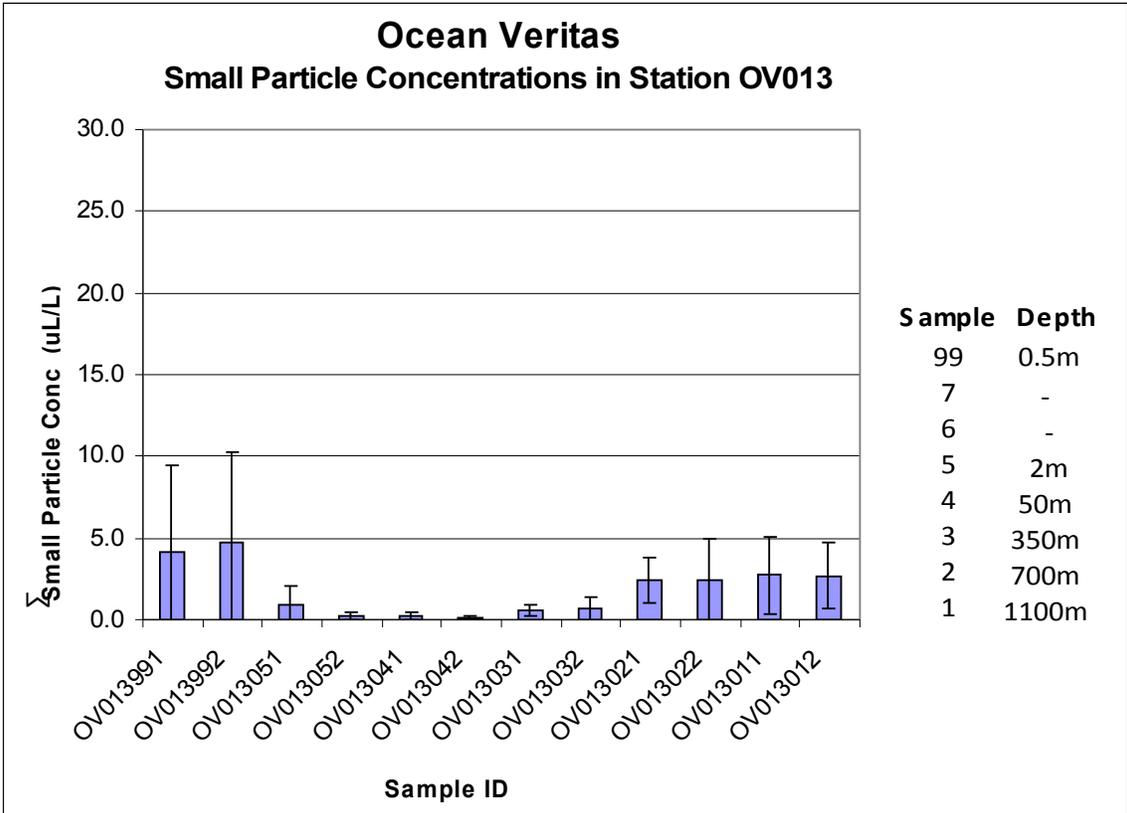
## Daily Report: Tracking the Plume of Dispersed Oil using Particle Size Distribution Measurements

June 2, 2010

Water samples were collected at three stations for particle size distribution measurements using the LISST-100X particle counter. A total of 38 LISST samples were analyzed, including duplicates. Samples were also collected and stored for shore based fluorescence intensity ratio measurements.

Figure 1 presents the small droplet ( $\Sigma$  2.5 - 60 $\mu$ m) particle size data and fluorescence intensity ratios for stations OV013 through OV016. Station OV013 was approx. 8.4km north northwest of the well head. Station OV014 was approx. 5.0km northwest of the well head. Station OV15 and OV16 were both approx. 2.9km west of the well head.

Moderately elevated concentrations of small particles were detected in the surface sample (0.5m) at Station OV013 and OV015. Extremely elevated concentrations were detected in the surface sample at station OV014. The CTD detected a small plume at Station OV015/016 at 1160m that we did not detect with the LISST (refer to Fig 2). Niskin bottle #2 did not fire so an additional cast was required (OV016) to obtain the sample from the plume at 1160m.



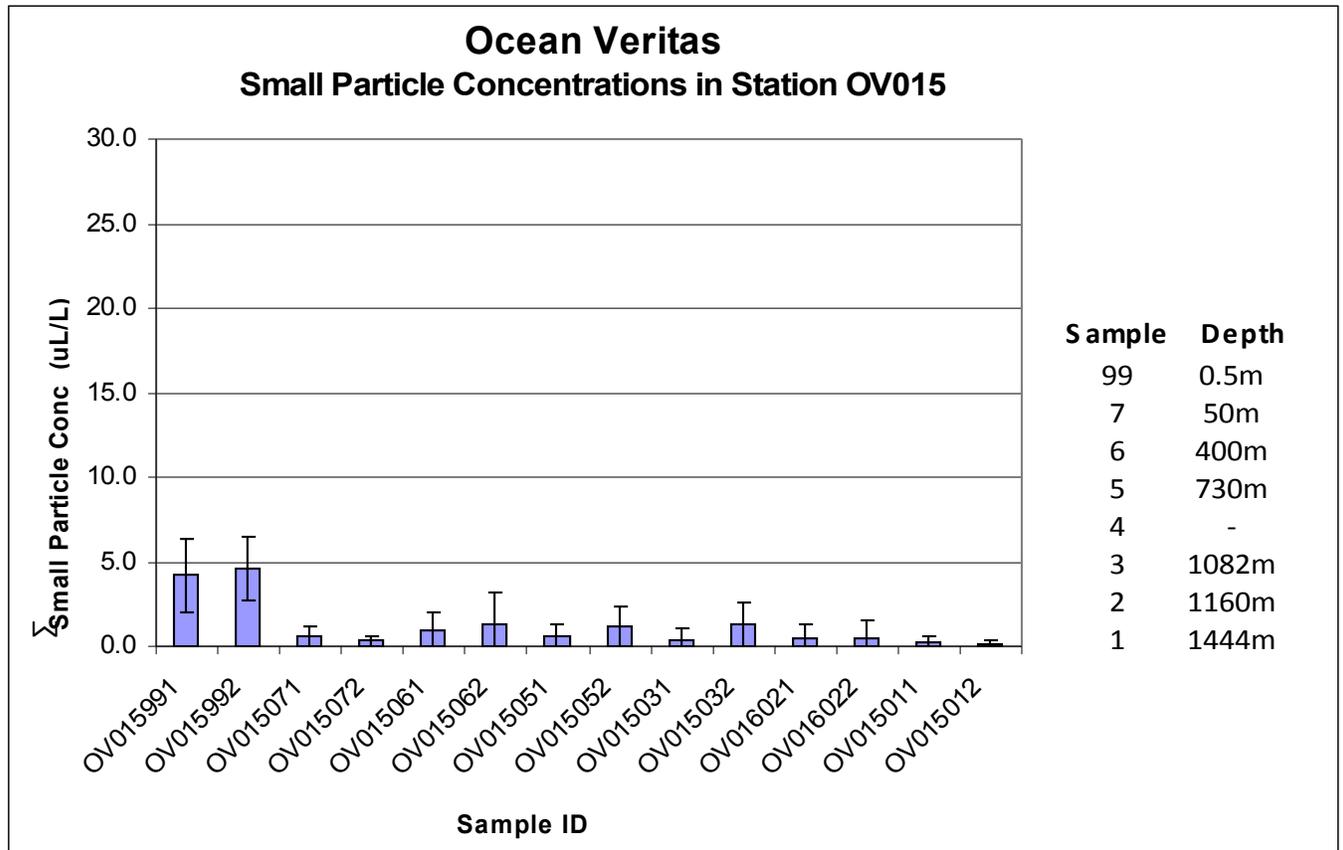


Figure 1: Average small particle concentrations as a function of depth from stations OV009 to OV012.

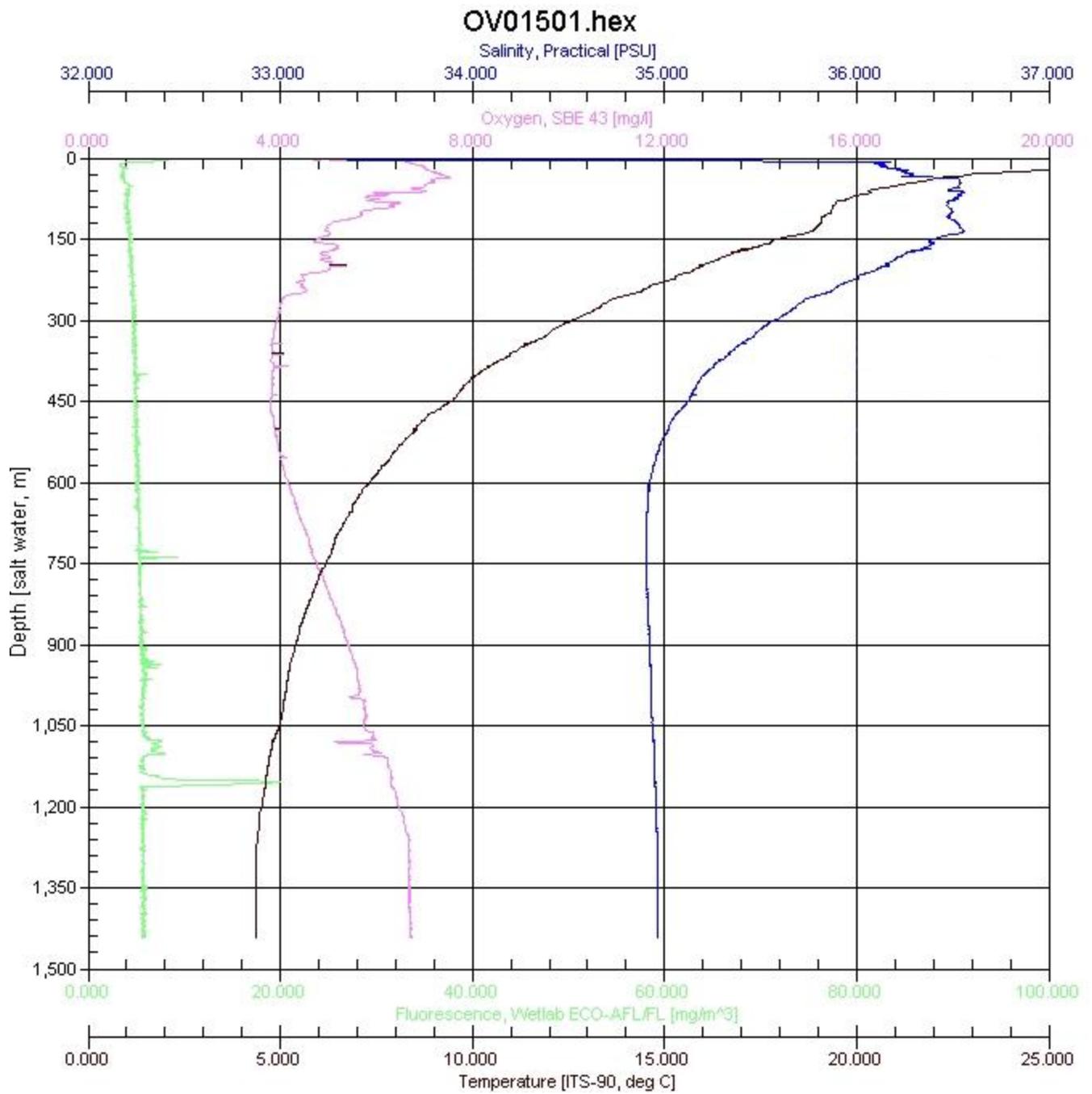


Figure 2: Station OV015 CTD Cast