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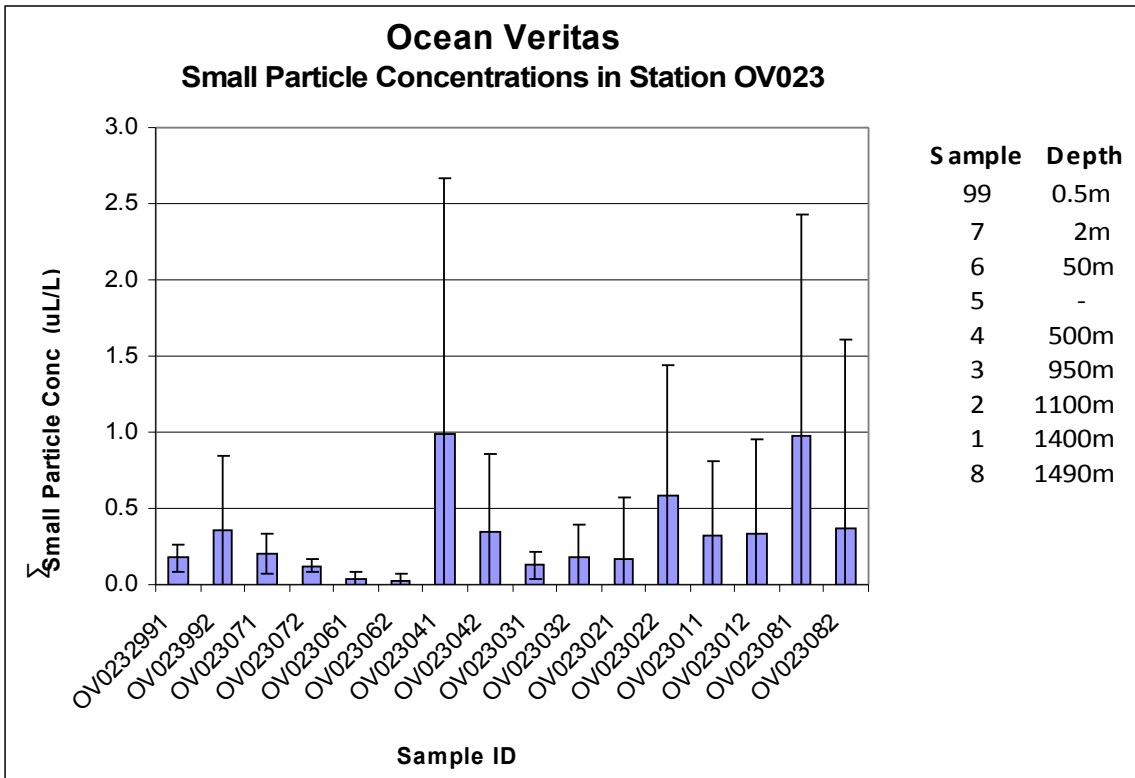
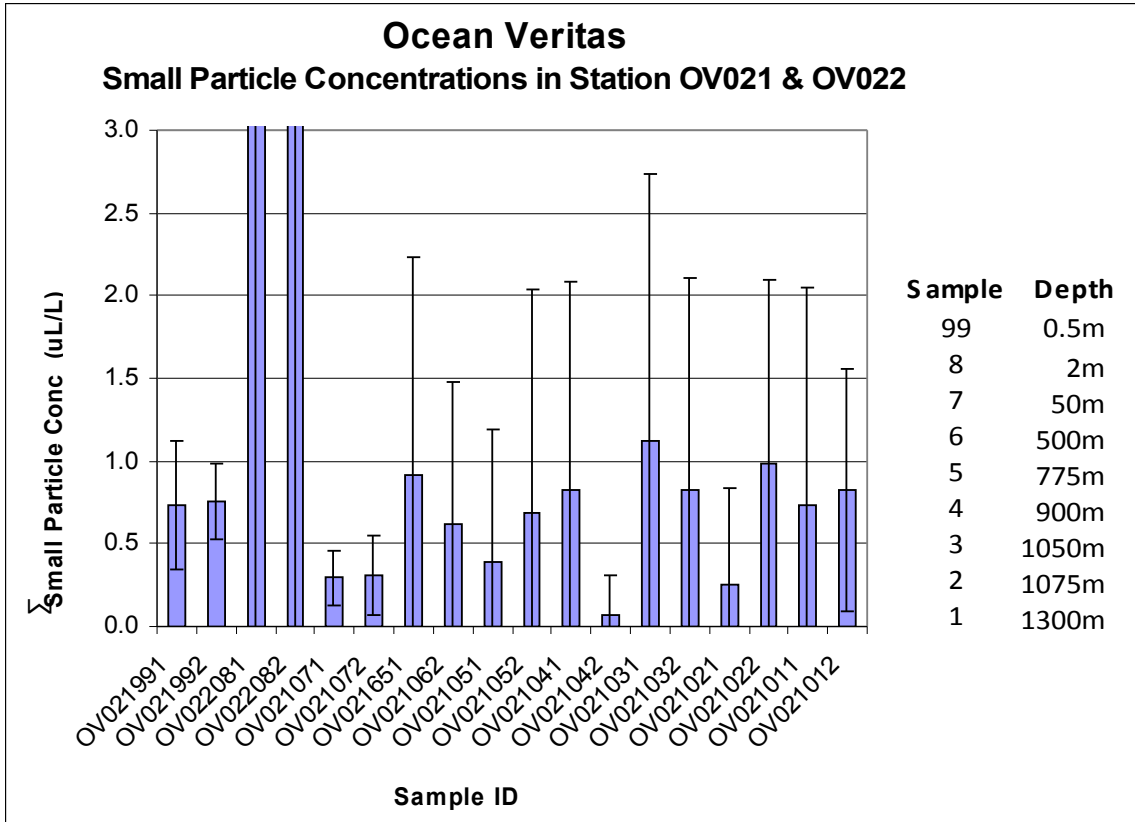
**Daily Report: Tracking the Plume of Dispersed Oil using Particle Size Distribution Measurements**

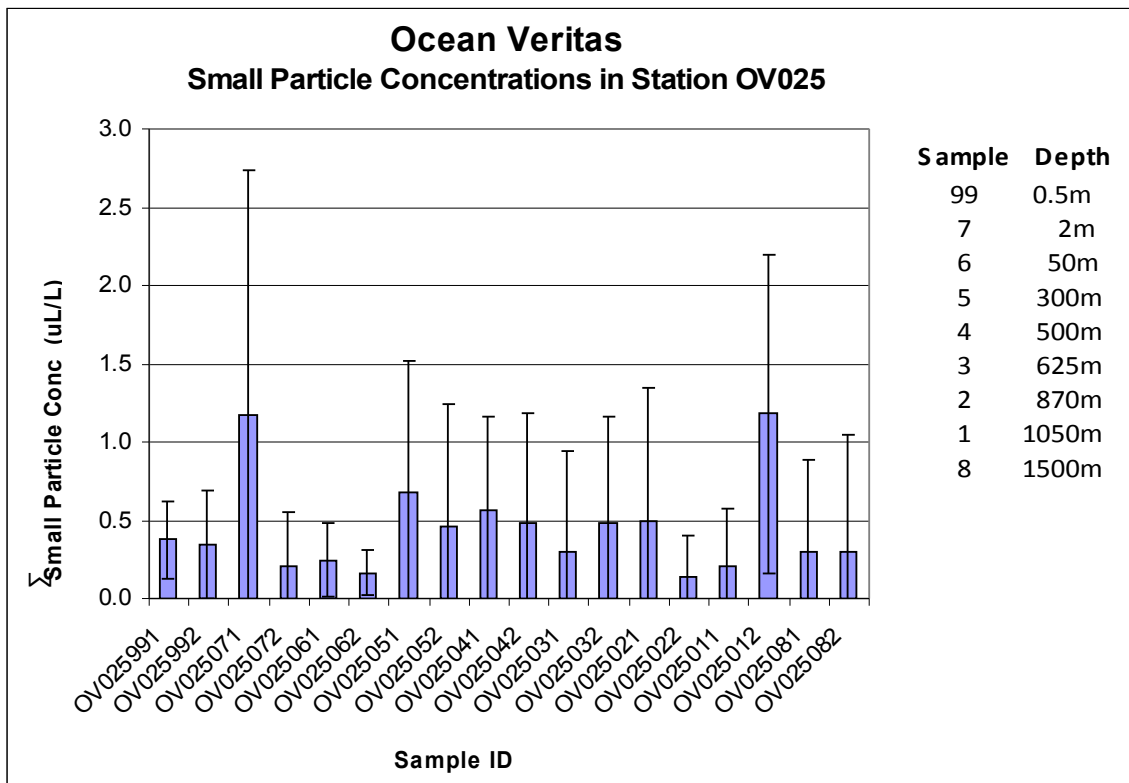
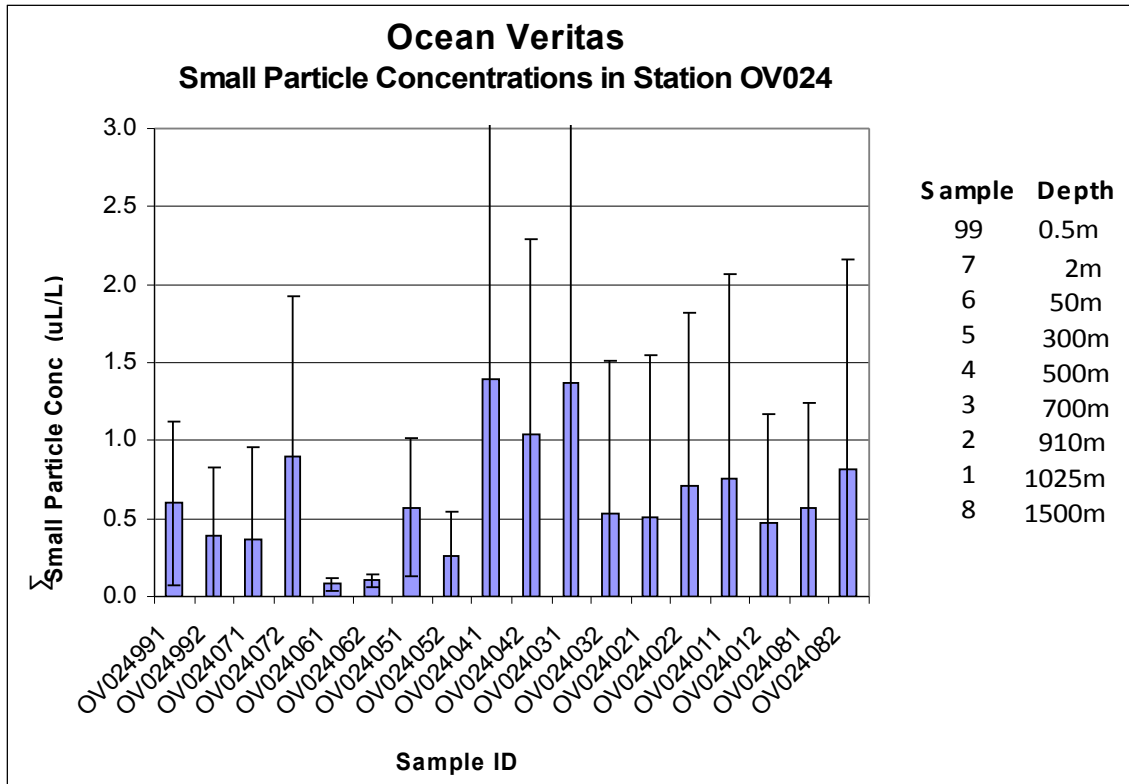
**June 4, 2010**

Water samples were collected at six stations for particle size distribution measurements using the LISST-100X particle counter. A total of 60 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 OV021 through OV026. Refer to the map for station locations and distance from the well head. LISST analysis did not detect the plume at any of these stations.

Station OV022 had moderately higher concentrations of small particles at the 2m depth. We saw a small fluorescent plume from the CTD on station 26. Due to inclement weather, when retrieving the rosette from station 26 the unit hit the back of the ship smashing 6 Niskins. Only three samples were saved (sample# 8, 7, and 99).





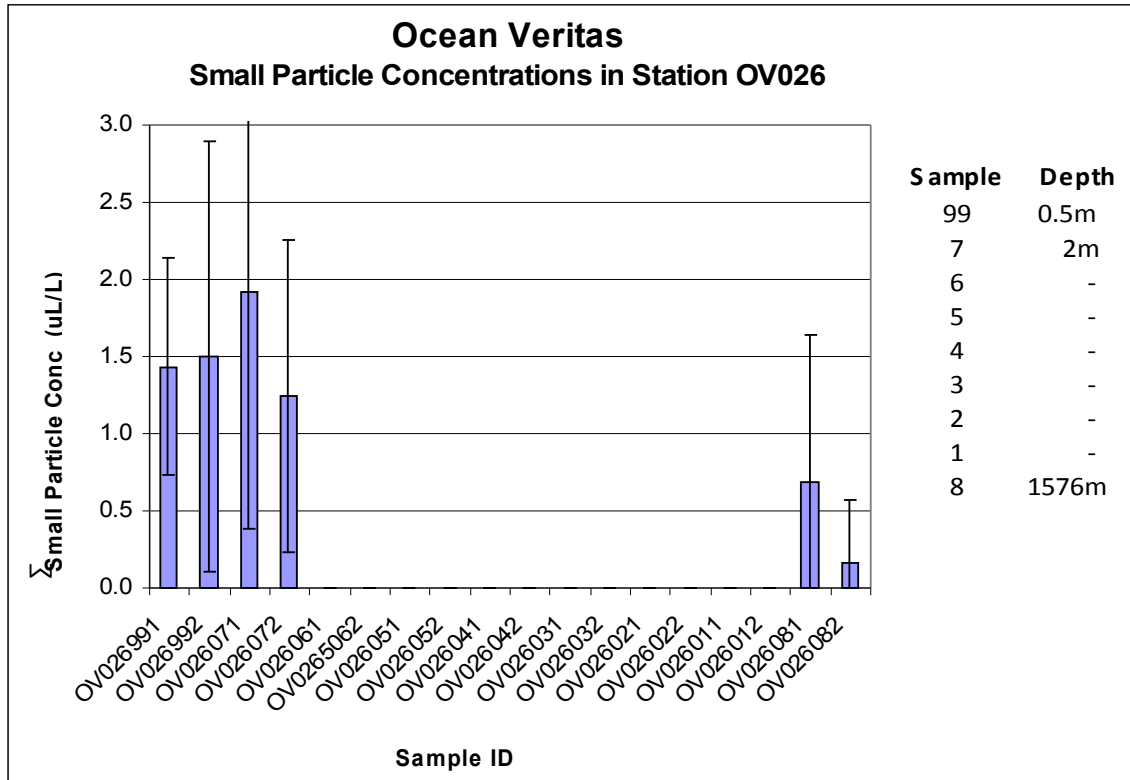


Figure 1: Average small particle concentrations as a function of depth from stations OV021 to OV026.

