

US EPA ARCHIVE DOCUMENT

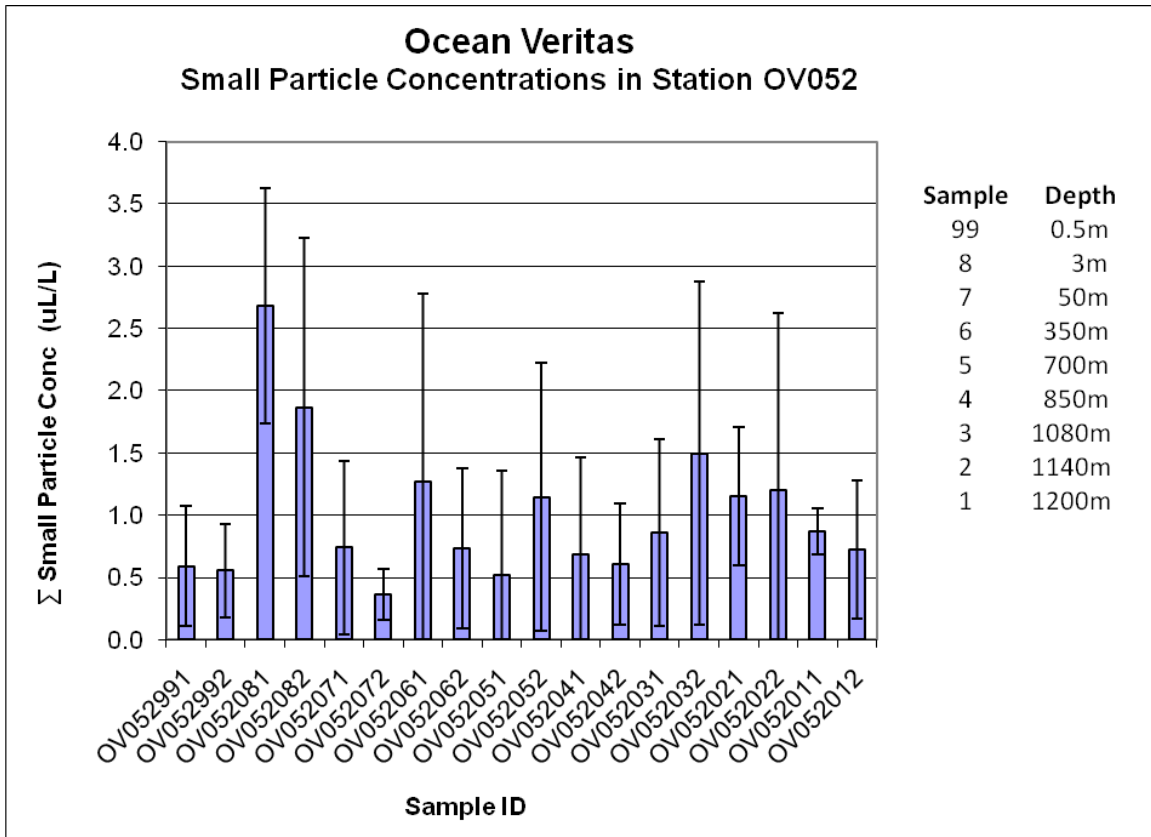
Daily Report: Tracking the Plume of Dispersed Oil using Particle Size Distribution Measurements

June 16, 2010

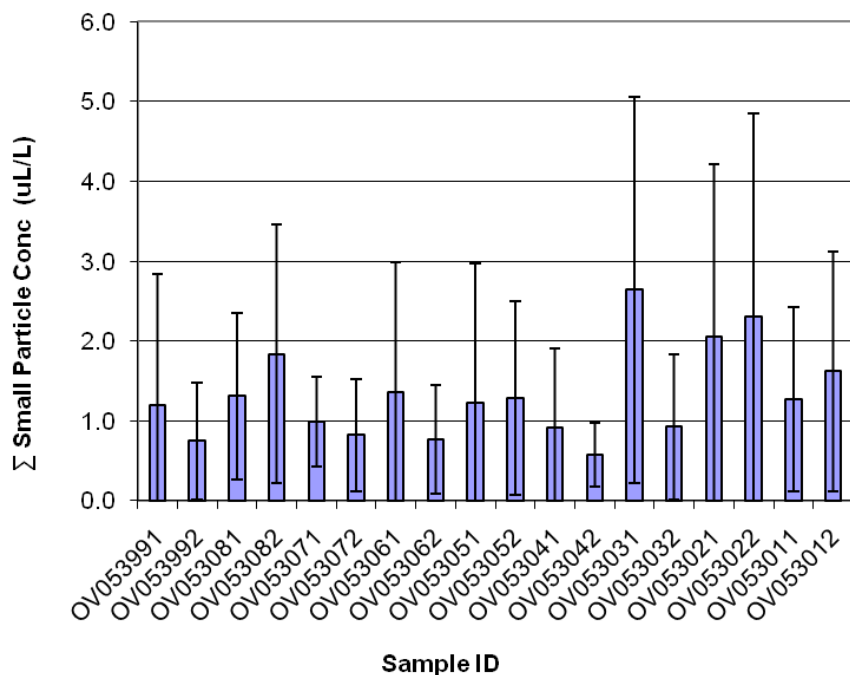
Water samples were collected at four stations for particle size distribution measurements using the LISST-100X particle counter. A total of 72 LISST samples were analyzed, including duplicates. Samples were also collected and stored for shore based fluorescence intensity ratio measurements.

Figure 1 presents the small droplet (Σ 2.5 - 60 μ m) particle size data for stations OV052 through OV055. LISST analysis and in-situ fluorometry detected a slightly increased small particle concentration in subsurface around 1000m depth in all stations. The LISST compliments the CTD fluorescence signal revealing a slight elevation of small particles at the depths of 900 to 1000m.

Station #	Lat	Long
OV052	28.754902	-88.291345
OV053	28.779023	-88.305090
OV054	28.798055	-88.330431
OV055	28.806069	-88.365333

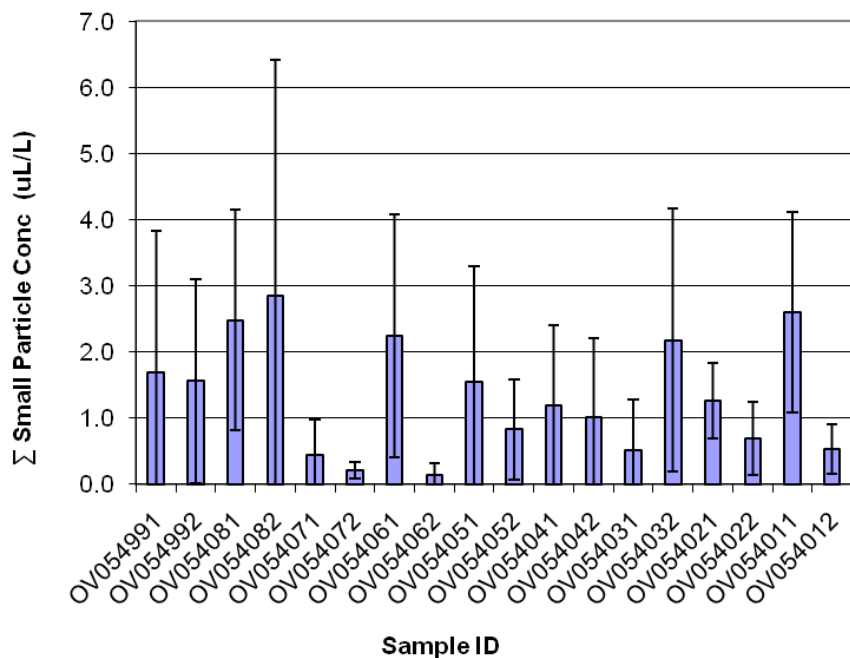


Ocean Veritas Small Particle Concentrations in Station OV053



Sample	Depth
99	0.5m
8	3m
7	50m
6	200m
5	550m
4	950m
3	1100m
2	1140m
1	1200m

Ocean Veritas Small Particle Concentrations in Station OV054



Sample	Depth
99	0.5m
8	3m
7	50m
6	240m
5	475m
4	700m
3	900m
2	1075m
1	1200m

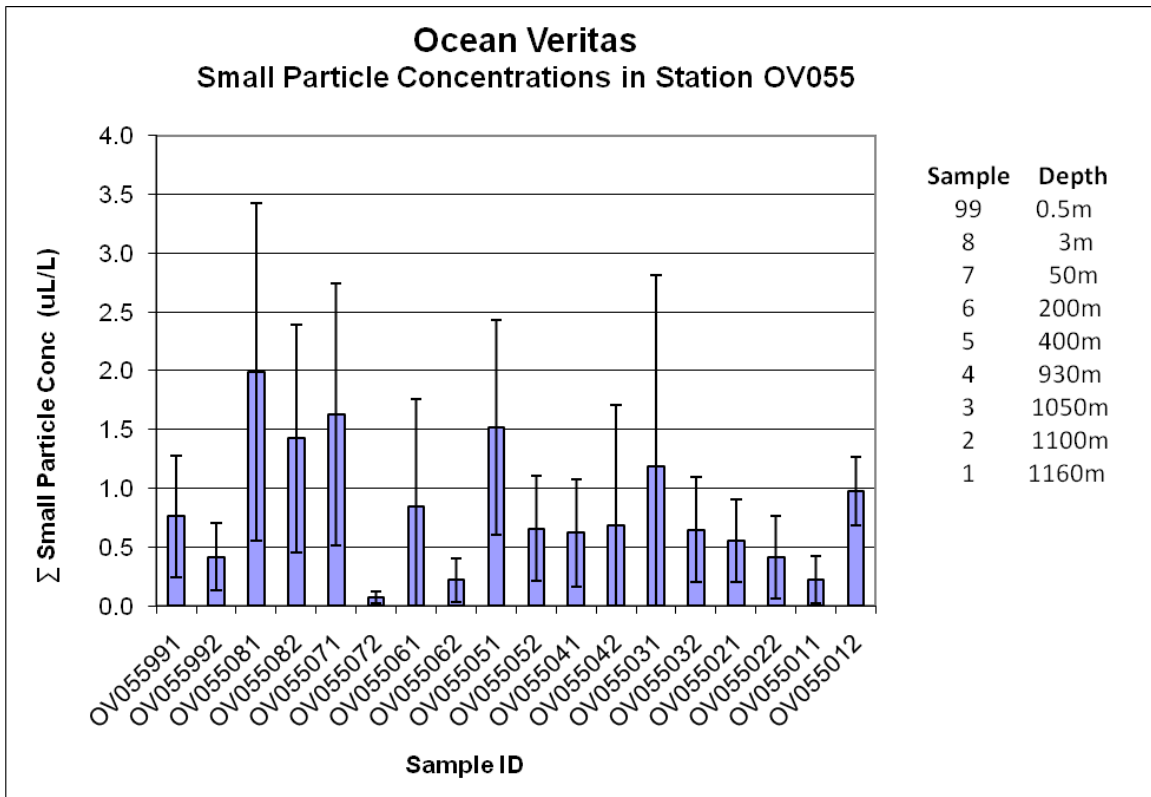


Figure 1: Average small particle concentrations as a function of depth from stations OV052 to OV055.