

US EPA ARCHIVE DOCUMENT

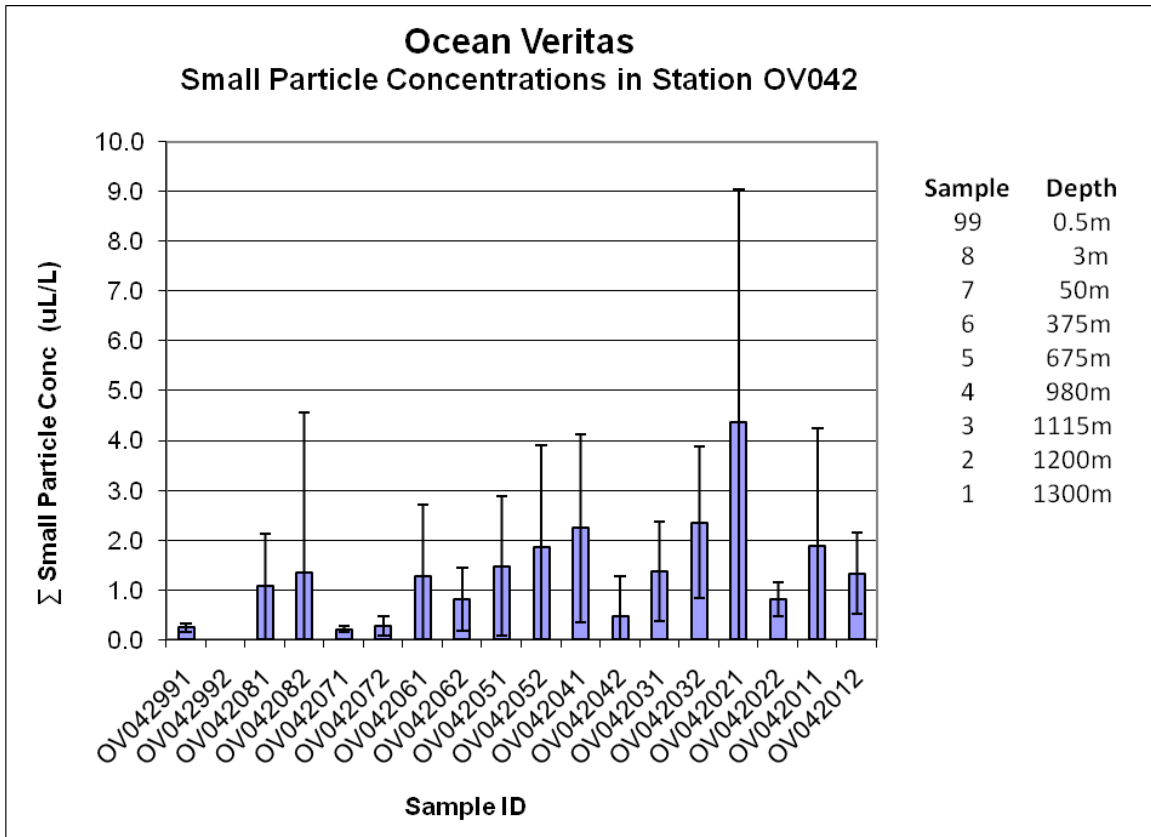
Daily Report: Tracking the Plume of Dispersed Oil using Particle Size Distribution Measurements

June 14, 2010

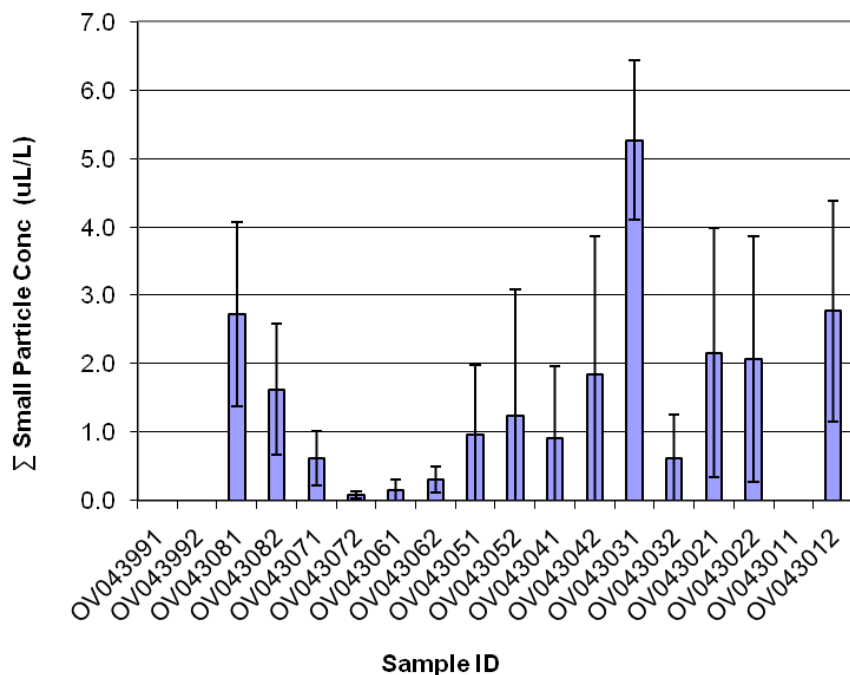
Water samples were collected at five stations for particle size distribution measurements using the LISST-100X particle counter. A total of 90 LISST samples were analyzed, including duplicates. Samples were also collected and stored for shore based fluorescence intensity ratio measurements.

Figure 1 presents the small droplet (Σ 2.5 - 60 μ m) particle size data for stations OV042 through OV046. LISST analysis and in-situ fluorometry detected a slight plume in all stations. The LISST compliments the CTD fluorescence signal revealing a slight elevation of small particles at the bottom depths.

Station #	Lat	Long
OV042	28.791880	-88.338926
OV043	28.762861	-88.353747
OV044	28.752616	-88.340081
OV045	28.763623	-88.323622
OV046	28.751052	-88.316943

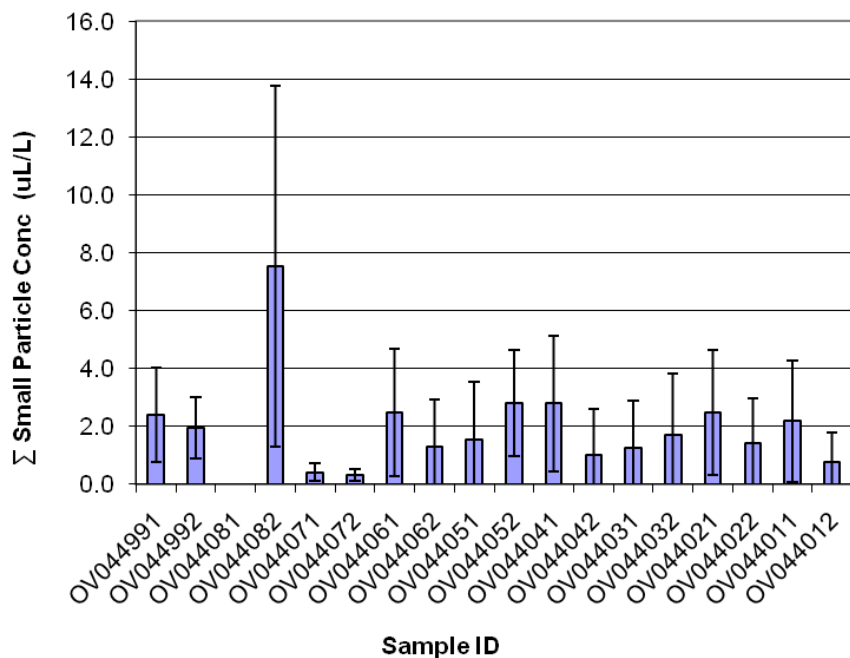


Ocean Veritas Small Particle Concentrations in Station OV043



Sample	Depth
99	0.5m
8	3m
7	50m
6	375m
5	725m
4	900m
3	1150m
2	1150m
1	1449m

Ocean Veritas Small Particle Concentrations in Station OV044



Sample	Depth
99	0.5m
8	3m
7	50m
6	375m
5	700m
4	1050m
3	1100m
2	1150m
1	1500m

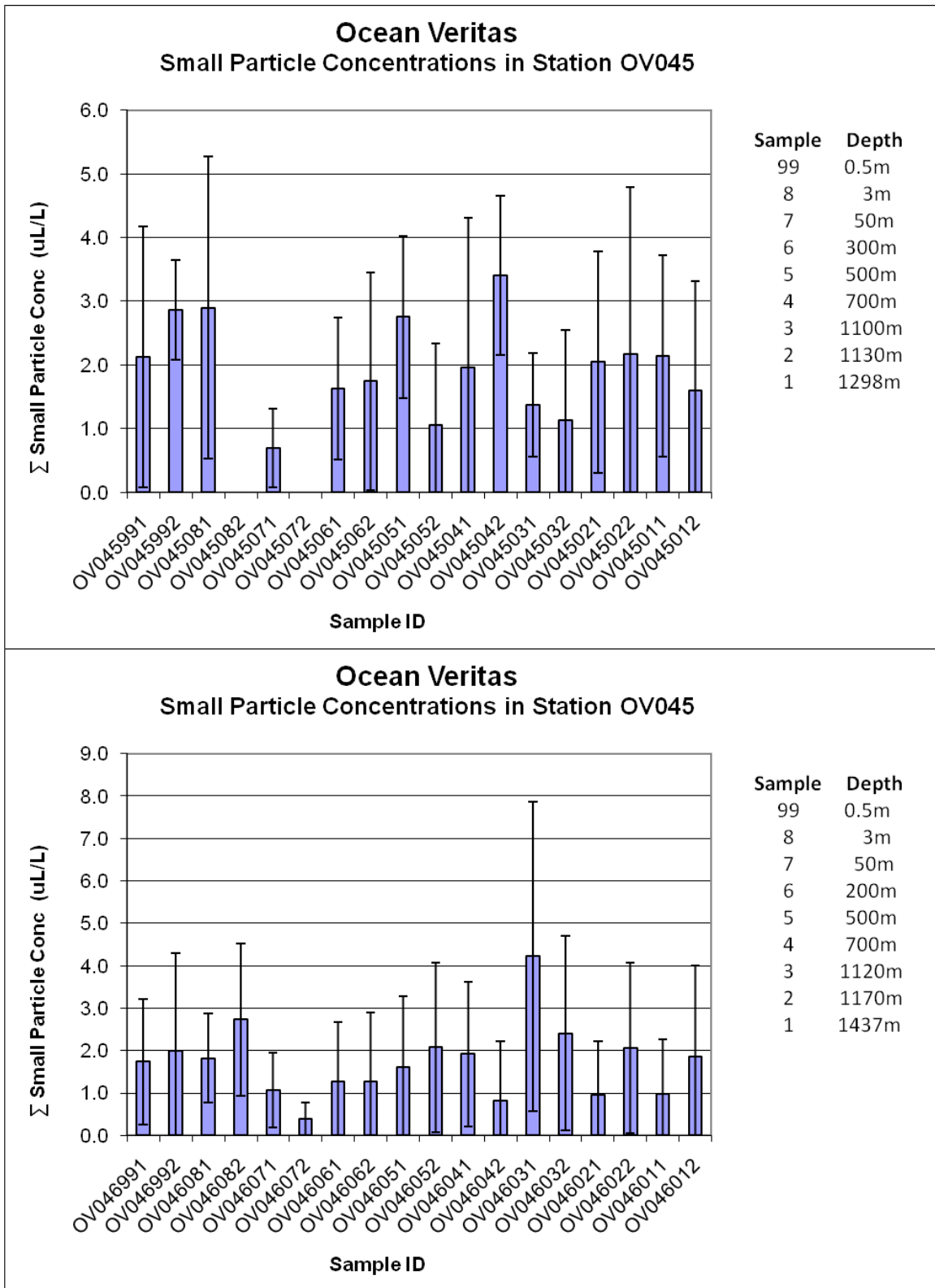


Figure 1: Average small particle concentrations as a function of depth from stations OV042 to OV046.

