

DRAFT PLAN....

Goals:

- 1) Final test of OSP SOLO configuration
(WETLabs POC; seapoint scattering sensor).
- 2) Prove/debug profiling WETLabs PIC sensor.
- 3) Validate spectrophotometer PIC method at sea - vs. Rosette samples
- 4) Cross check accuracy and stability of WETLabs POC meters
(AC9 case and neutrally buoyant case).
- 5) OPC deployments.
- 6) In-situ filtration sampling
- 7) Collect sea water samples

Station 1 ~ 32 39N 117 32W in 1000m water; Station 2 ~ 32 53 117 32 to the North (if weather)

Table 1: R/V Sproul Feb 23&24 planning

Op/Date	Local Time	lat (N)	lon (W)		Activity Description/comments
					CTD Configuration A : Initial configuration 1) Seatech_20 cm 2) Chelsea 3) Seapoint (LBNL) 4) Seapoint (2nd PAPA sensor) 5) WETLabs POC-1 (2nd PAPA sensor) 6) WETLabs POC-3 (neutrally buoyant) 7) WETLabs POC-4 (neutrally buoyant)
					CTD Configuration B after cast 2: 1) Seatech_20 cm 2) Chelsea 3) Seapoint (LBNL) 4) Seapoint (2nd PAPA sensor) 5) WETLabs POC-1 (2nd PAPA sensor) 6) WETLabs POC-3 (neutrally buoyant) 7) WETLabs POC-4 (neutrally buoyant) 8) WETLabs PIC meter (0-600 m only)
22-Feb ATDOCK					Test LBNL CTD SIO CTD test (without bottles)
23-Feb					
	0745 1030			depart arrive	depart for Station 1 ~ (32 39.9N 111 32.2W)
Station 1 CTD.001	1030 1145	32 39.	117 32.	deploy to 1000 m	(PIC sensor not used during this cast) Spool wire off winch to 1000 m + trip Rosette test all sensors - winch speed 30 m/min
					Test LBNL CTD independently [or attached to Rosette frame]
	1200				Depart for Station 2 - for SOLO deployment Station 2 ~ 32 53 117 32
Station 2 SOLO.001	1345				Deploy SOLO - [SOLO goes deep]
CTD.002	1400 1445	32 53	117 32.		Close to SOLO CTD config A [NO PIC meter] 0-900 m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.

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					Attach PIC meter to CTD (DI water blank)
CTD.003	1515 1545			deploy on deck	CTD config B with PIC meter 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.
					set PIC sensor for pumped operation
CTD.004	1600 1645				CTD config B 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.
SOLO surfaces	1700				Position near SOLO [solo surfaces ~5pm]
CTD/ ROS.005	1745 1845			deploy on deck	ROSETTE CAST water samples collected CTD config B 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.
	1900 1930				Water processing Attach the STD-12 / 1 m SeaTech transmissometer frame to the CTD.
CTD.006 CTD.007	1930 2015 2115			deploy stop near sfc on deck	CTD config B 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min. Speed: 0-300 m = ~10 m/min.
CTD.008 CTD.009	2130 2315			deploy stop near sfc on deck	CTD config B 0m-300m-0m Speed: 0-50 m = ~30 m/min. Deeper 50 m/min. Speed: 0-300 m = ~10 m/min.
SOLO surfaces					0400 SOLO ascends from 1000 m depth. 0600-0700 SOLO at surface : tries GPS and Orbcomm up to 1 hr. If no fix or no orbcomm message transmitted, give up & stay at surface. if ok then descend to 200 m.
CTD.010	0630 0715			deploy on deck	Comparison with SOLO's up profile. CTD config B 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.
					Breakfast - prepare Rosette
CTD/ ROS.011	0830 0915			deploy on deck	ROSETTE CAST water samples collected CTD config B 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.

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Op/Date	Local Time	lat (N)	lon (W)		Activity Description/comments
					PREPARE in-situ PUMP / SBE-19
PUMP.001	0930 1100				Deploy and operate in-situ pump at ~100m
SOLO surfaces					Locate Ship at SOLO location
CTD.012	1230 1315				ROSETTE CAST water samples collected CTD config B 0m-600m-0m Speed: 0-100 m = ~30 m/min. Deeper 50 m/min.
PUMP.002	1330 1500			deploy on deck	Deploy and operate in-situ pump at ~50m
OPC.001					"DAY" Attach OPC to Rosette Frame (Check depth limitations)
CTD.013	1515			deploy	CTD config B 0m-250m-0m speed 30 m/min to 50m, 50 m/min deeper then 0-250-0m: speed 10 m/min entire up and down
CTD.014	1700			on deck	
SOLO Recovery	1700 1900				
CTD.015	1900 2030				SWAP SOLO-POC for PIC meter and SOLO scattering sensor CTD config A 0m-800m-0m speed 30 m/min to 50m, 50 m/min deeper then 0-250-0m: speed 10 m/min entire up and down
CTD.016	2100 2200				Blocked beam cast (all sensors) CTD config A 0m-800m-0m speed 30 m/min to 50m, 50 m/min deeper
OPC.002					"NIGHT" Attach OPC to Rosette Frame (Check depth limitations)
CTD.017	2230 2330			deploy on deck	CTD config B 0m-250m-0m speed 30 m/min to 50m, 50 m/min deeper
25 Feb					
Depart Stn 2	0400				latest departure
	0730				docked

