

CCE-P1604 DAILY ACTIVITY SCHEDULE
(19 April – 12 May 2016)

19 April – EK60 Calibration

0845 Depart MarFac
0930 Anchor for EK60 Calibration
1000 EK60 Calibration
2100 Depart SD Bay

20 April – TEST CASTS in transit

0700 MVP test casts
0900 CTD rosette test cast
1100 Trace Metal rosette test cast
1330 Bongo test
1500 Second bongo test
1600 Second Trace Metal rosette test cast
1800 MOCNESS test
1900 Transit to waypoint: 33° 00'N, 122° 45' W

21 April – Prepare for Cycle 1 (Offshore)

0000 Transit to waypoint: 33° 00'N, 122° 45' W
1300 Lower Centerboard; power EK60
1400 MVP Bow Tie survey #1
2100 CTD cast (for copepod EPR)
2200 Sediment trap deployment, **begin CYCLE 1**

22 April -- CYCLE 1 (near 33° 00'N, 122° 45' W)

0200 CTD, sampling & *in situ* experiments
0300 Trace Metal cast
0500 Deploy driftarray #1
0830 Bongo live tows, zooplankton experiments
0930 Bongo, zooplankton net tow, gut fluor
1100 CTD, microbiology, dissolved organics
1500 MOCNESS
1800 CTD, thorium
1900 CTD, full dilution experiments
2130 Bongo, zooplankton net tow, gut fluor
2230 MOCNESS

23 April

- 0200 CTD, sampling & *in situ* experiments
- 0300 TM cast – deck incubation experiments
- 0500 Recover driftarray #1/deploy #2
- 0600 Unexpected medical issue; transport science party member to Tenth Ave Marine Terminal (TAMT), San Diego

24 April

- 1130 Depart TAMT, San Diego
- 1300 Start MVP Bow Tie #2 - EK60 survey, 9 Mile Bank
- 2000 CTD
- 2045 Ring Net live tow, zooplankton experiments
- 2130 Bongo #1
- 2215 Bongo #2
- 2315 Bongo #3

25 April

- 0000 Bongo #4
- 0100 Bongo #5
- 0145 Bongo #6
- Depart 9 Mile Bank
- Steam to CalCOFI station 93.30 (32° 48'N, 117° 32'W)
- 0700 CTD, CA Undercurrent sampling
- 0830 Trace Metal CTD

26 April

Transit to recover Cycle 1 sediment trap & driftarray

27 April

- In transit to recover Cycle 1 sediment trap & driftarray
- 1015 CTD cast for *Spray* glider calibration
- 1115 Transit to sediment trap: 33° 23.14' N, 123° 11.11' W
- 1430 Recover sediment trap
- 1630 CTD cast, end of Cycle 1
- 1700 Transit to driftarray: 33° 2.97' N, 123° 2.02' W
- 2030 Recover driftarray
- 2130 Transit to MVP survey site for CYCLE 2

28 April

- 0800 MVP Bow Tie #3 – survey before CYCLE 2 (start near 33° 42'N, 122° 18' W)
- 1530 Deep CTD, to 3000 m
- 2130 Bongo, zooplankton net tow, gut fluor

29 April – Start CYCLE 2

0000 Deploy sediment trap
0200 CTD, sampling & *in situ* experiments
0300 Trace Metal cast
0500 Deploy driftarray #2
0830 Bongo live tows, zooplankton experiments
0930 Bongo, zooplankton net tow, gut fluor
1100 CTD, microbiology, dissolved organics
1300 MOCNESS
1800 CTD, thorium
1900 MVP
2130 Bongo, zooplankton net tow, gut fluor
2230 MOCNESS

30 April

0200 CTD, sampling & *in situ* experiments
0500 Recover driftarray #2/Deploy driftarray #3
0600 Trace Metal cast
0700 Dispose galley waste; pump tanks (> 1.5 nm downwind of driftarray)
0830 Bongo live tow, zooplankton experiments (start 0.75 nm downwind of driftarray)
0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics
1300 MOCNESS (start 2 nm downwind of driftarray)
1900 CTD, full dilution experiments and copepod EPR
2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
2230 MOCNESS (start 2 nm downwind of driftarray)

1 May

0200 CTD, sampling & *in situ* experiments
0500 Recover driftarray #3/Deploy driftarray #4
0600 Trace Metal cast
0700 Dispose galley waste; pump tanks (> 1.5 nm downwind of driftarray)
0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)
0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics
1300 MVP Bow Tie #4 survey
2000 CTD, zooplankton experiments
2100 Ring Net live tow, zooplankton experiments (start 0.75 nm downwind of driftarray)
2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)

2230 MOCNESS (start 2 nm downwind of driftarray)

2 May

0200 CTD, sampling
0300 Trace Metal cast
0400 Recover driftarray #4
0500 Recover sediment trap
0700 Dispose galley waste; pump tanks
0730 Steam toward CYCLE 3 Bow Tie survey (start near 34° 20'N, 121° 00' W)
1630 MVP Bow Tie #5 survey, prior to Cycle 3
2300 CTD cast, nitrate

3 May – Start CYCLE 3

0000 Deploy sediment trap
0200 CTD, sampling & *in situ* experiments
0300 Trace Metal cast
0500 Deploy driftarray #5
0700 Dispose galley waste; pump tanks (> 1.5 nm downwind of driftarray)
0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)
0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics
1300 MOCNESS (start 2 nm downwind of driftarray)
1800 CTD, thorium
1900 Trace Metal cast
2030 Ring net live tow, zooplankton experiments (start 0.75 nm downwind of driftarray)
2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
2230 MOCNESS (start 2 nm downwind of driftarray)

4 May

0200 CTD, sampling & *in situ* experiments
0300 Trace Metal cast
0500 Recover driftarray #5, Deploy driftarray #6
0700 Dispose galley waste; pump tanks (> 1.5 nm downwind of driftarray)
0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)
0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics

- 1300 MOCNESS (start 2 nm downwind of driftarray)
- 1700 Trace Metal cast
- 1900 CTD, full dilution experiments and copepod EPR
- 2030 Ring net live tow, zooplankton experiments (start 0.75 nm downwind of driftarray)
- 2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
- 2230 MOCNESS (start 2 nm downwind of driftarray)

5 May

- 0200 CTD, sampling & *in situ* experiments
- 0300 Trace Metal cast
- 0500 Recover driftarray #6/Deploy driftarray #7
- 0700 Dispose galley waste; pump tanks (> 1.5 nm downwind of driftarray)
- 0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)
- 0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
- 1100 CTD, microbiology, dissolved organics
- 1300 CTD (UVP5) vs. MVP (LOPC) comparison – series of repeated casts
- 2000 Trace Metal cast
- 2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)

6 May

- 0200 CTD, sampling
- 0300 Trace Metal cast
- 0400 Recover driftarray #7
- 0500 Recover sediment trap
- 0700 Dispose galley waste; pump tanks
- 0900 CTD, microbiology, dissolved organics
- 1000 Steam toward CYCLE 4 Bow Tie survey
- 1300 MVP Bow Tie #6 survey, prior to Cycle 4 (near 34° 20'N, 120° 44' W)
- 2030 Ring net live tow, zooplankton experiments
- 2300 CTD cast, nitrate

7 May – Start CYCLE 4

- 0000 Deploy sediment trap
- 0200 CTD, sampling & *in situ* experiments
- 0300 Trace Metal cast
- 0500 Deploy driftarray #8
- 0700 Dispose galley waste; pump tanks (> 1.5 nm downwind of driftarray)
- 0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)

0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics
1300 MOCNESS (start 2 nm downwind of driftarray)
1800 CTD, thorium
1900 Trace Metal cast
2030 Ring net live tow, zooplankton experiments (start 0.75 nm downwind of driftarray)
2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
2230 MOCNESS (start 2 nm downwind of driftarray)

8 May

0200 CTD, sampling & *in situ* experiments
0300 Trace Metal cast
0500 Recover driftarray #8, Deploy driftarray #9
0600 Trash burn; dispose galley waste; pump tanks (> 12 nm from shore)
0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)
0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics
1300 MOCNESS (start 2 nm downwind of driftarray)
1800 Trace Metal cast
1900 CTD, full dilution experiments and copepod EPR
2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
2230 MOCNESS (start 2 nm downwind of driftarray)

9 May

0200 CTD, sampling & *in situ* experiments
0300 Trace Metal cast
0500 Recover driftarray #9/Deploy driftarray #10
0600 Dispose galley waste; pump tanks (> 12 nm from shore)
0830 Bongo live tows, zooplankton experiments (start 0.75 nm downwind of driftarray)
0930 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)
1100 CTD, microbiology, dissolved organics
1400 Go-Flo Test Cast
1300 Science Tour
1630 CTD, Thorium
1800 Trace Metal cast
2130 Bongo, zooplankton net tow, gut fluor (start 0.5 nm downwind of driftarray)

10 May

0200 CTD, sampling
0400 Recover driftarray #10
0500 Recover sediment trap
0730 Dispose galley waste; pump tanks
0830 Steam toward Benthic Boundary Layer (BBL) stations
Line 77 stn 49 35° 5.16' 120° 46.30'
Vandenburg 34 53.34' 120 44.34'
Santa Ynez 34 41.69' 120 42.63'
Pt Arguello 34 34.29' 120 42.59'
Line 80 stn 51 34 26.99' 120 31.39'
Gato 34 24.88' 120 24.73'
0200 CTD cast (1000 m), Thorium calibration, > 2,000 m water depth

11 May

0400 Begin transit toward Pt. Loma
0700 Dispose galley waste; pump tanks

12 May

~1300 Dock at MarFac