

MedFlux



Cruises - Endeavor

April 9-15, 2006

[Participants](#)

[Cruise Plan](#)

[Sample Log](#)

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April Endeavor Cruise Plan

	April Endeavor Cruise Plan		
Time	07-April-06	08-April-06	09-April-06
01:00			Zooplankton Tows
02:00			
03:00			Steaming to make water
04:00			
05:00			
06:00			
07:00			Wire marking
08:00		Leave Nice	
09:00		Ship Briefing	Pump Cast
10:00	Load		
11:00		Arrive DYFAMED site	
12:00		CTD-1800m NetTrap fill H ₂ O	
13:00			CTD-200m incub H ₂ O
14:00		Trap carousel problem	
15:00		CTD-Radionuclides	CTD-Radionuclides
16:00			
17:00		Deploy SVNT2-LMGEM	Recover SVNT2-LMGEM
18:00		incubation	incubation
19:00	Science	Deploy SVNT1- 1.5h	
20:00	Meeting		Deploy BulkNT2-Lynn
21:00		CTD-Christian HP	Recover SVNT1- 1.5h
22:00			
23:00			
00:00			

April Endeavor Cruise Plan

	April Endeavor Cruise Plan		
Time	10-April-06	11-April-06	12-April-06
01:00	Zooplankton Tows	Hove to due to weather	
02:00			
03:00			
04:00	Pump Cast-Shallow		
05:00			CTD-Christian HP
06:00			
07:00	CTD-Gregori		
08:00		CTD-Gregori	CTD-Gregori

09:00	Hunt for trap		
10:00			Recover BulkNT (net ripped)
11:00	Recover BulkNT2		
12:00	Abramson		returned to station
13:00	Steam to station		Deploy SVNT1-3h
14:00	CTD-Radionuclides	Deploy BulkNT	
15:00			CTD-Radionuclides
16:00		Pump Cast	
17:00	CTD-Christian HP	and Zhanfei	
18:00			Deploy SVNT2-1.5h
19:00	CTD-Gregori	CTD-Gregori	
20:00			CTD-Gregori
21:00		Phytoplankton Tows	
22:00			
23:00			Zooplankton Tows
00:00			

April Endeavor Cruise Plan

Time	13-April-06	14-April-06	15-April-06
01:00			
02:00		Depart for port	
03:00			
04:00	Followed Nettraps		Incubations Only
05:00			
06:00			
07:00	CTD-Gegori	Arrive Monaco	
08:00			Depart for Nice
09:00	CTD-Christian HP		
10:00			
11:00		IAEA/UAB offload	
12:00			
13:00	CTD Christian HP		
14:00			UW/SUNY/SKIO off
15:00			
16:00	Recover SVNT1-3h		
17:00			
18:00	CTD-Gregori		
19:00			LMGM offload
20:00	Recover SVNT2-1.5h		Sunday
21:00			
22:00			
23:00			
00:00			

Sample Log

CTD Log

1215-040806CTD-1	1800 m	Michael	Net Trap fill water	43°24.63'N 7°50.98'E
1538-040806CTD-2	2, 23 (CM), 40, 60, 80, 100, 125, 150, 175, 200, 250 m	Elisabet/Juan Carlos	Radionuclides (plus Jenni)	43°25.06'N 7°50.98'E
1710-040806CTD-3	20, 500, 2000m	Christian	HP-ectoenzymatic activity, prokaryotic structure by CARD-FISH and DNA/RNA	43°24.82'N 7°52.14'E
1333-040906CTD-4	22 (PM), 200 m	Madeleine	Incubation water (+ Jenni/Zhanfei))	43°21.96'N 7°47.90'E
1508-040906CTD-5	22(CM), 200, 1000, 1200, 1400, 1600, 1800, 2000, 2200 m	Elisabet/Juan Carlos	Radionuclides	43°21.45'N 7°46.71'E
0718-041006CTD-6	3, 25, 50(CM), 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°21.28'N 7°49.75'E
1414-041006CTD-7	57(CM), 200, 250, 300, 400, 450, 500, 600, 700, 800, 900m	Elisabet/Juan Carlos	Radionuclides	43°25.01'N 7°50.74'E
1658-041006CTD-8	20, 500, 2000 m	Christian	HP-ectoenzymatic activity, prokaryotic structure by CARD-FISH and DNA/RNA	43°25.08'N 7°50.94'E
1944-041006CTD-9	2, 20 (CM), 40, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°24.76'N 7°51.00'E
0759-041106CTD-10	4, 25(CM), 40, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°23.35'N 7°51.45'E
192X-041106CTD-11	3, 20 (CM), 40, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry; Zhanfei-bottle & pump experiment	43°23.62'N 7°51.63'E
0531-041206CTD-12	20, 500, 1400, 1600, 1800, 2000 m	Christian	HP-ectoenzymatic activity, prokaryotic structure by CARD-FISH and DNA/RNA	43°20.87'N 7°50.26'E
0810-041206CTD-13	2, 15 (CM), 40, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°19.00'N 7°49.36'E
1449-041206CTD-14	2, 10, 20, 30, 40, 50, 60, 80, 100, 125, 150, 175, 200, 250, 300, 650, 900 m	Elisabet/Juan Carlos	Radionuclides	43°24.83'N 7°50.90'E
1953-041206CTD-15	1, 8 (CM), 30, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°24.98'N 7°50.89'E
0708-041306CTD-16	1, 15 (CM), 40, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1200 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°15.81'N 7°55.33'E
0955-041306CTD-17	2000 m	Christian	HP-ectoenzymatic activity, prokaryotic structure by CARD-FISH and DNA/RNA	43°14.84'N 7°56.93'E
1332-041306CTD-18/19	20, 500, 2000, 2400 m	Christian	HP-ectoenzymatic activity, prokaryotic structure by CARD-FISH and DNA/RNA	43°16.16'N 7°58.28'E
1914-041306CTD-20	2, 15 (CM), 40, 60, 80, 100, 150, 200, 300, 400, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100 m	Gerald	Phytoplankton & bacterial counts by flow cytometry	43°17.14'N 7°59.67'E

NetTrap Log (all depths 200 m)

Deployment	Location deployed	Recovery (Hook)	Location recovered	Purpose, Comments
1717-040806SVNT-2-1	43°24.91'N 7°50.92'E	1745-040906	43°21.0'N 7°46.1'E	Biodegradation study
2030-040806SVNT-1-1	43°24.58'N 7°51.57'E	2050-040906	43°22.8'N 7°44.7'E	Nothing recovered
2000-040906BulkNT-2	43°24.94'N 7°50.25'E	1030-041006	43°20.97'N 7°44.23'E	Lynn's exchange study
1415-041106BulkNT-2	43°25.28'N 7°50.68'E	1005-041206	43°18.1'N 7°49.6'E	Gel exp, Net ripped
1320-041206SVNT1-2	43°25.02'N 7°53.37'E	1600-041306	43°17.87'N 7°59.0'E	3-h ball turn exp, photos
1850-041206SVNT2-2	43°22.54'N 7°52.54'E	2215-041306	43°17.87'N 8°00.5'E	1.5-h ball turn exp

In-Situ Pump Log

	Depths	MEL/SUNY	Volume Filtered	Position
0920-040906ISP1	1000, 1200, 1400, 1600, 1800, 2000, 2200 m	S, S, S, M, M, M, M	741, 491, 895, 703, 771, 987, 1131 L	43°23.7'N, 7°48.9'E
0405-041006ISP2	2, 20, 40, 60, 80, 100, 200 m	M, M, M, M, S, S, S,	305, 595, 758, 778, 348, 289.5, 494 L	43°21.8'N, 7°49.72'E
1600-041103ISP3	20*, 150*, 250, 450, 650, 800, 1000 m	M, M, M, M, S, S, S	420, 593, 982, 610, 508.5, 408, 508 L	43°25.26'N, 7°51.53'E

Notes: Times and position are for deployment.

Samples to Kirk, Juan Carlos, Cindy, and Stuart. Samples for Zhanfei are from ISP3.

ISP3 used 293-mm GF/F at Zhanfei's depths* and 293-mm Microquartz at other depths; SUNY used 142-mm Microquartz filters at all depths.

Plankton Log - MedFlux III Cruise (S. Fowler)

N.B. This describes the principal phytoplankton and zooplankton which were collected as samples. It is not a comprehensive quantitative or qualitative listing of all species present in the water column, just the key species observed or used for analyses.

9 April 2006	Omari Zooplankton net: Net had huge clumps of green phytoplankton along with the zooplankton. Copepods (<i>Euchirella rostrata</i> , <i>Calanus helgolandicus</i>), salps (<i>Iasis zonaria</i> , <i>Salpa fusiformis</i> , <i>Thalia democratica</i>), euphausiids (<i>Meganyctiphanes norvegica</i>), <i>Euphausia krohnii</i> , and many furcilia stage), psuedothecosome pteropod (<i>Cymbulia peroni</i>), euthecosome pteropods (<i>Euclio pyramidata</i> , <i>Cavolinia gibbosa</i>), and in the green phyto wash there were numerous diatoms (<i>Nitzschia</i> sp. and <i>Thalassionema nitzschiodes</i>).
10 April 2006	Omari zooplankton net: Lots of jellyfish (<i>Solmissus albescens</i>), psuedothecosome pteropod (<i>Cymbulia peroni</i>), euthecosome pteropods (<i>Euclio pyramidata</i> , <i>Cavolinia gibbosa</i>), copepods (<i>Euchirella rostrata</i> , <i>Calanus helgolandicus</i>), euphausiids (<i>Nematoscelis megalops</i> , <i>Meganyctiphanes norvegica</i>). Also some nektonic shrimp <i>Sergestes</i>
11 April 2006	Took a huge phytoplankton tow that split the net. Nice rich green sample which appeared to be nearly pure diatoms. The main species observed were <i>Thalassionema nitzschiodes</i> , <i>Thalassiothrix frauenfeldi</i> , <i>Ditylum brightwelli</i> , <i>Chaetoceros atlanticum</i> , and what seemed to be was <i>Skeletonema costatum</i> .
12 April 2006	Omari zooplankton net: copepods (<i>Euchirella rostrata</i> , <i>Calanus helgolandicus</i>), psuedothecosome pteropod (<i>Cymbulia peroni</i>), salps (<i>Salpa fusiformis</i>).

Phytoplankton (50µm) and Zooplankton (480µm) Tows (initial time and location)

0002-040906ZT1 (43°24.85'N, 7°50.66'E)
 0130-040906ZT2 (43°24.72'N, 7°50.43'E)
 0230-040906ZT3 (43°25.36'N, 7°52.02'E)
 0000-041006ZT4 (43°23.88'N, 7°48.40'E)
 0039-041006ZT5 (43°24.3'N, 7°48.2'E)
 0120-041006ZT6 (43°21.26'N, 7°47.84'E)
 2238-041206ZT7 (43°20.2'N, 7°51.5'E)
 23XX-041206ZT8 (43°19.4'N, 7°50.9'E)
 0033-041206ZT9 (43°19.61'N, 7°50.63'E)

2140-041106PT1 (43°20.99'N, 7°51.83'E)
 2210-041106PT2 (43°20.4'N, 7°52.09'E)
 2240-041106PT3 (43°19.79'N, 7°52.24'E)
 2310-041106PT4 (43°19.69'N, 7°51.83'E)

Plankton Tow Details

Date	Group/species	Net for Fecal Pellet production	Samples:	
			Animal	Pellets
4/9/06	copepods >140 um	140 / 43 µm	y	y
	copepods 2 >140 um	140 / 43 µm	y	y
	copepods >300 um	300 / 43 µm	y	y
	<i>Cymbulia</i> body	2000 µm basket	y	---
	<i>Cymbulia pseudoconch</i>	2000 µm basket	y	---
	Salps	2000 µm basket	y	---
	Euthecosomes body	2000 µm basket	y	---
	Euthecosomes shell	2000 µm basket	y	---
4/10/06	copepods >140 um	140 / 43 µm	y	y
	copepods >300 um	300 / 43 µm	y	y
	<i>Meganyctiphanes norvegica</i>	2000 µm basket	y	---
	<i>Nematoscelis megalops</i>	2000 µm basket	y	---
	Euthecosomes	2000 µm basket	y	
4/11/06	Phytoplankton 1 <300 um			
	Phytoplankton 2 <300 um			
	Phytoplankton 3 <500 um			
	Phytoplankton 4 <600 um	Archived; huge sample		
4/13/06	copepods 1 >140 um	140 / 43 µm	y	y
	copepods 3 >140 um	140 / 43 µm	y	y
	copepods 4 > 300 um	300 / 43 µm	y	y
	<i>Cymbulia</i> body	2000 µm basket	y	y

	<i>Cymbulia pseudoconch</i>	2000 µm basket	y	---
	<i>Salpa fusiformis</i> chain	2-L jar	y	y
			total: 29 samples	