

C-MORE BAG-1 Cruise Log/Laboratory Notebook (Copy)

Biogeochemistry and Genomes (BAG – 1) Mesocosm Experiment (Leg 1)

1 – 13 Dec 2011

Science Personnel:

The RV KOK accommodates up to 21 scientists (typically 19 + 2 OTG). List of participants is as followed:

#	Participant	Institution
1	Kuhio Vellaloz	OTG
2	Ulf Riebesell	IFM GEMOAR
3	Andrea Ludwig	IFM GEMOAR
4	Jan Czerny	IFM GEMOAR
5	Jan Büdenbender	IFM GEMOAR
6	Klaus von Bröckel	IFM GEMOAR
7	Matthias Fischer	IFM GEMOAR
8	Steve Poulos	UH
9	Daniela Böttjer	UH
10	Karin Björkmann	UH
11	Tara Clemente	UH
12	Blake Watkins	UH
13	Shimi Rii	UH
14	Eric Grabowski	UH
15	Shasha Tozzi	UCSC
16	Chris Schwartz	UH
17	Ken Doggett	UH
18	Angel White	OSU
19	Katie Watkins-Brandt	OSU
20	David Pence	UH
21	Jennie Mowatt	UH

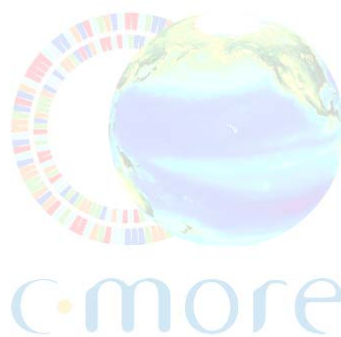


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BAGI KOKIIS Depart: 1 DEC 2011 18:00 (Local time)

Arrive: 2 DEC 2011 08:00 (Local time)

HNL - HNL R/v KOK

Fuse Failure

Delayed Due to STBD #1 SCR Bank

[Local]

Depart: 3 DEC 2011 15:00 (3pm local)

Arrive:

TRANSIT TO KONA ~ 14 hours

Dec 3 \approx Julian Day 337

[GMT]

Departure: GMT: 4 Dec 2011 (338) 01:00 Z

Arrival:

03:45 p - 04:00 pm

Fire Boat Emergency Drill

07:30 4 Dec HST [17:30 4 DEC (338) GMT]

Deploy Drogue line ~ 150 meters

08:00 HST Recovery Drogue line - yellow polypro

08:15 HST Shift SSE position Wind 20-26 kts

08:30 HST Still Transiting

RF - CHITZ⁴ ← 156.725 MHz - Drogue

09:30 HST ON Location - small ship boat in water filming

10:44 HST Drogue released - all away

Deployment Position 19° 38.1' N 156° 11.1' W
wind about 7 kts 88 kts dep

11:15 HST Safe Boat Away

11:30 Safe Boat Tied to #5

Note 00739 084858 2nd ARGOS

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2pm

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Light levels

Outside ~ 1900 μ Einstein

Big Blue

550 μ Einstein

Bubbler

330 μ Einstein

Baby Blue

450 μ Einstein

(24%)

(36%)

1600 surface

520 inside

1290 outside

350 μ Einstein inside

(27%)

Big Blue

1530 μ Einstein575 μ Einstein

Baby Blue

1530 μ Einstein420 μ Einstein

(28%)

10:21 pm 4 Dec Sun eve HST

Mesocosm - 5 hrs - Drifted 153° ~ .5 kt

gone \rightarrow 2.4 ~~mi~~ miles~ 5:21 p \rightarrow 10:21 p ~ 5 hours i.e. .5 kts @ 153°

19:00 HST 19° 35.6' N 156° 07.9' W

20:00 HST 19° 35.1' N 156° 07.5' W

21:00 HST 19° 34.5' N 156° 07.4' W

BAG1 Experiments

12/5/2011

T-1 nutrients sampled from each BAG1 (4,516)

After nutrient addition, To sampling for

- Nutrients
- CUL a (size-fractionation)
- FCM
- Viral abundance
- ATP
- LISST

Deck board experiments

12/6/2011

1am

2am

3am

S1C1-S1C3

All carboys for experiment filled and placed in deck-board incubators (have temperature and light log) Nutrients were added, 10 samples were withdrawn from NISKINS (DIC, MIMS, PPO4, PCIPN, PP, Chl-a, DNA/RNA, HPLC, FRRE, FCM)



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BAG 1

CTD Data Sheet

Station # 1
 Cast # 1
 Operator(s): KB, DB, KD, TC, KBW

Date: 12/06/11 (HST)
 Time: 0115 (HST)

Rosette Position	Depth (m)	Temp	Setup exp				
1	15	24.7					
2	15	23.7					
3	15	23.8					
4	15	24.6					
5	15	24.6					
6	15	24.6					
7	15	24.6					
8	15	24.8					
9	15	24.8					
10	15	24.8					
11	15	24.8					

PROJECT

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SAMPLED MESOCOSUM 4, 5 & 6

12/6/11

ⓐ 0630

PRIMARY PRODUCTION - 2L EACH

BACTERIAL PRODUCTION - ~~15~~ 15ml EACH

SAMPLED MESOCOSM 4, 5, & 6

START ⓐ 0800

FINISHED ~ 1130

NUTS - 0.5L

FCM 15mL

ATP 0.5L X 3 = 1.5L

DOC 200 mL

DMS/CH₄ ~ 1L

DNA/RNA ~ 4L

MIMS 50ml

PC/PN - 4L

PP04 - 0.5L

DIC - ~ 1L

PSi - 2L

12/7/11

CARBON EXPERIMENT

SAMPLED ⓐ 0600 T=1

1L X 3 ADSW+P

→ NUTS, ATP, FRRF, MIMS, CHLA

2 10L X 1 ADSW+P

→ NUTS, DOC, MIMS, ATP, CHLA, 0.2um, 10um, 2um

PCPN - 2L

PSI - 1.9L

PP04 - 0.5L

MESOCOSUM - NOTES T=3

12/8/11

1. BAG 6 PC/PN - 3.5L FILTERED

2. LOST 2um CHLA FILTER - ∴ BAG 5

↳ FELL ON FLOOR FACE DOWN - PROBABLY BAD

3. BAG 4 PSI ~ 1900 ml FILTERED

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Read and Understood By _____

Signed _____

Date _____

Signed _____

Date _____