

Pioneer 8 Deployment

Installation Readiness Review

May 16, 2017



Pioneer 8 Deployment

Inshore

- CP03ISSM

Central Inshore

- CP02PMCI

Central Offshore

- CP02PMCO

Offshore

- CP04OSSM,
CP04OSPM

Upstream Inshore

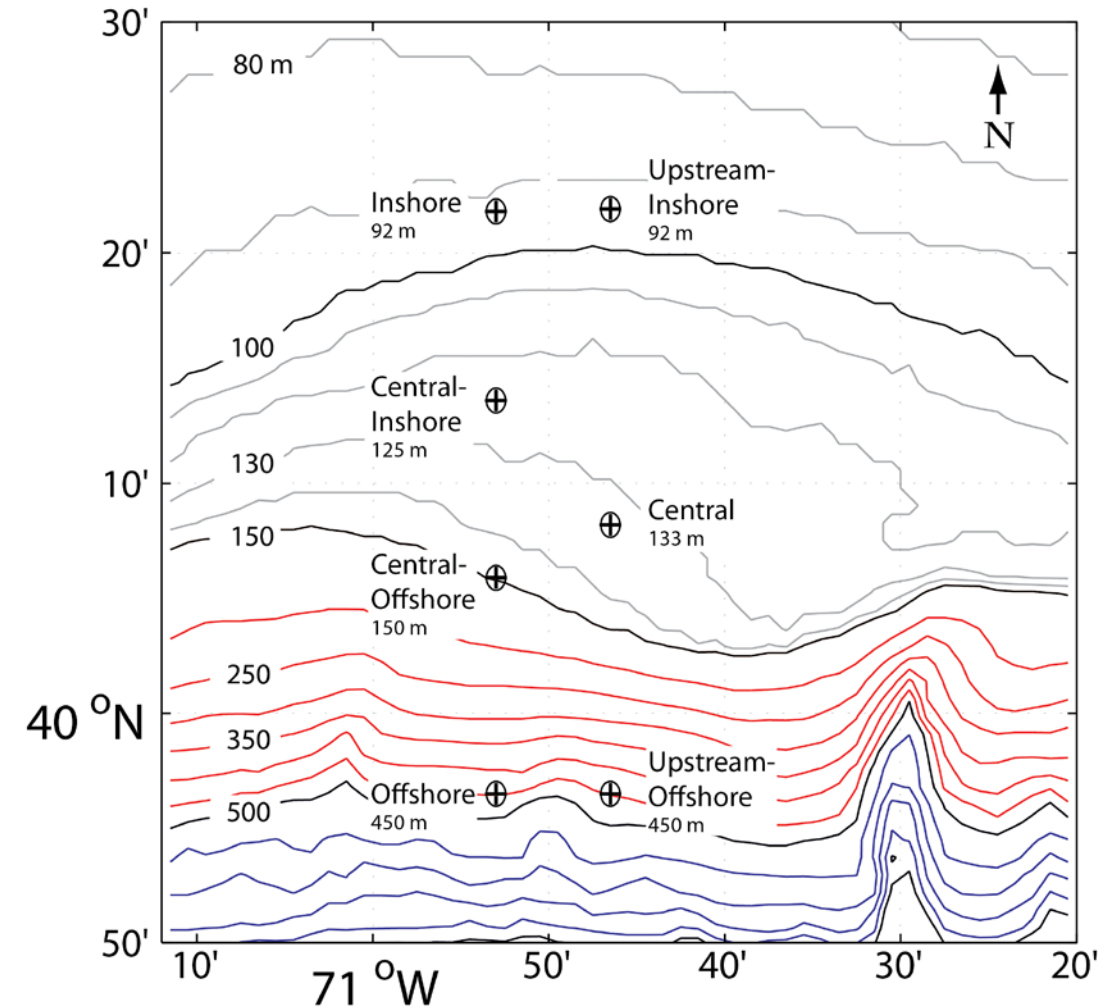
- CP02PMUI

Central

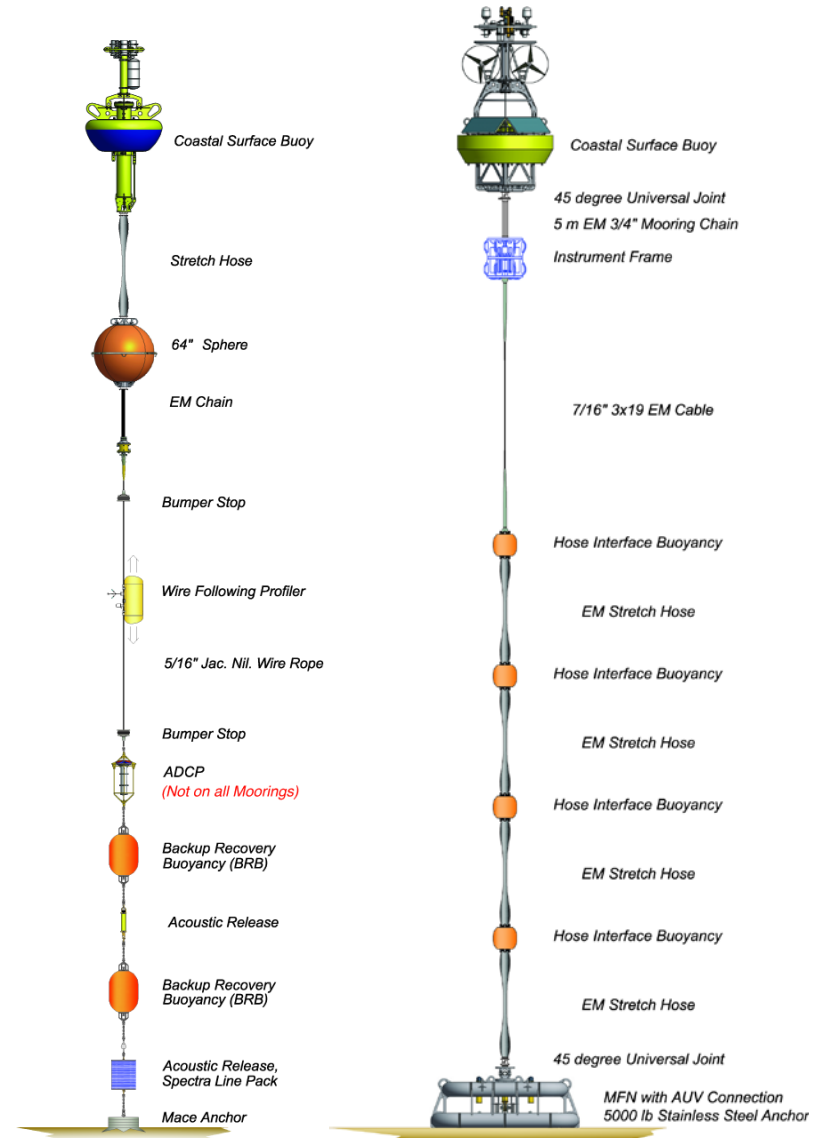
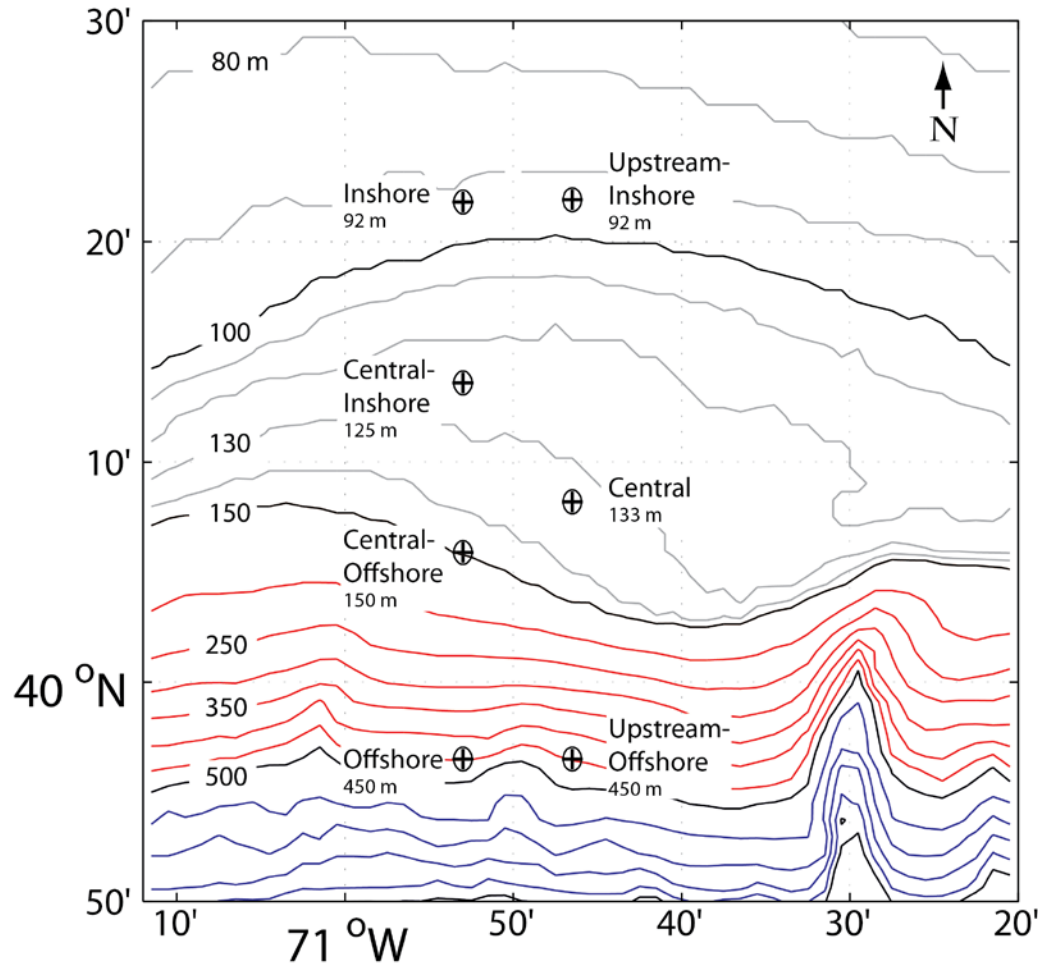
- CP01CNSM

Upstream Offshore

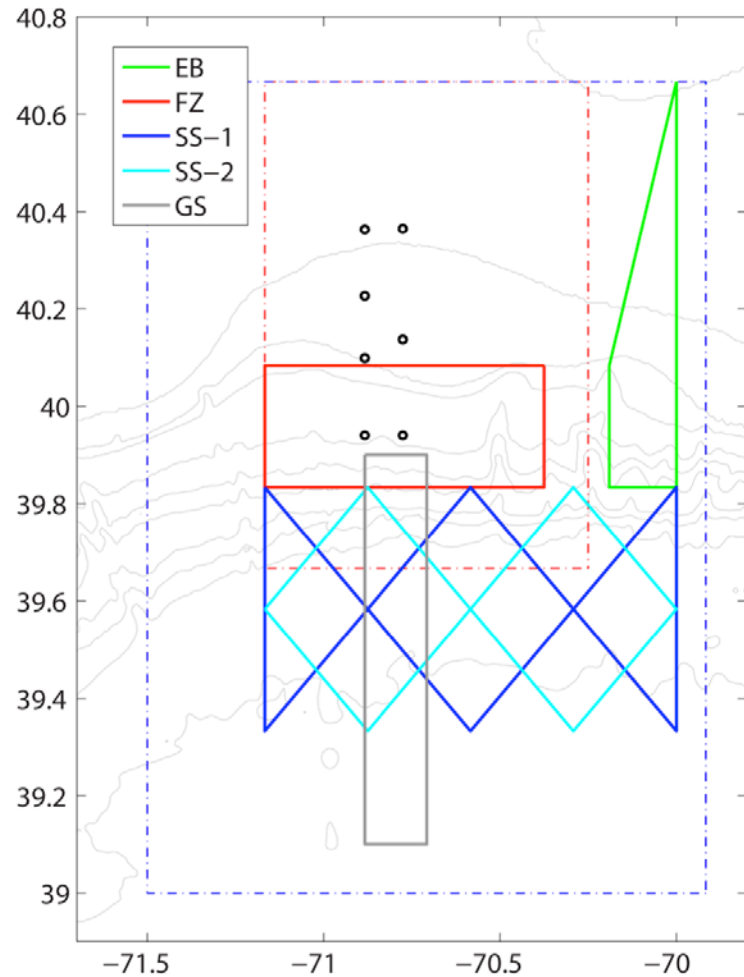
- CP02PMUO



Coastal Mooring Diagram



Pioneer Glider Lines



Name	Region	Buoyancy Engine	Pioneer-8
EB	Eastern Boundary	200 m	Planned deployment
FZ-1	Frontal Zone	1000 m	Planned deployment
SS-1	Slope Sea	1000 m	Planned deployment
SS-2	Slope Sea	1000 m	Not planned
FZ-2	Frontal Zone	200 m	Not planned
GS	Gulf Stream	1000 m	Not planned

Variations from the Baseline

- Moorings
 - No fuel cells on any Surface Mooring
 - NSIF CTDBPs taking only one sample every 15 minutes (baseline is 3 minute bursts every 15 minutes)
- Gliders/AUVs
 - Deploying 3 of 6 Coastal Gliders
 - 1 of 2 Coastal Profiling Gliders deployed
 - Only 1 of 2 AUVs being deployed
- Completion of draft report on glider investigations with a list of corrective actions to be completed prior to Pioneer 8



Cruise Objectives

Primary Objectives

- 01-3.* Recover 3 Coastal Surface Moorings/Anchors (ISSM, OSSM, CNSM)
- 04-8.* Recover 5 Coastal Profiler Moorings (PMUI, PMUO, PMCI, PMCO, OSPM)
- 09-13.* Recover 4 anchors from previous deployments
(ISSM-4, PMCO-6, PMUI-7, PMUO-4), plus anchor and line pack from OSPM-5
- 014.* Recover 2 deep (FZ-1, SS-1) Coastal Gliders
- 015-17.* Deploy 3 Coastal Surface Moorings (ISSM, OSSM, CNSM)
- 018-22.* Deploy 5 Coastal Profiler Moorings (PMUI, PMUO, PMCI, PMCO, OSPM)
- 023-24.* Deploy 3 gliders: 2 deep (FZ-1, SS-1) and 1 shallow (EB)
- 025.* Conduct multiple AUV missions in vicinity of moored array



Cruise Objectives (continued)

Primary Objectives (cont.)

- 026.* Conduct CTD casts with water sampling at the deployment and recovery sites
- 027.* Carry out shipboard underway sampling in support of field calibration/validation.



Cruise Objectives (continued)

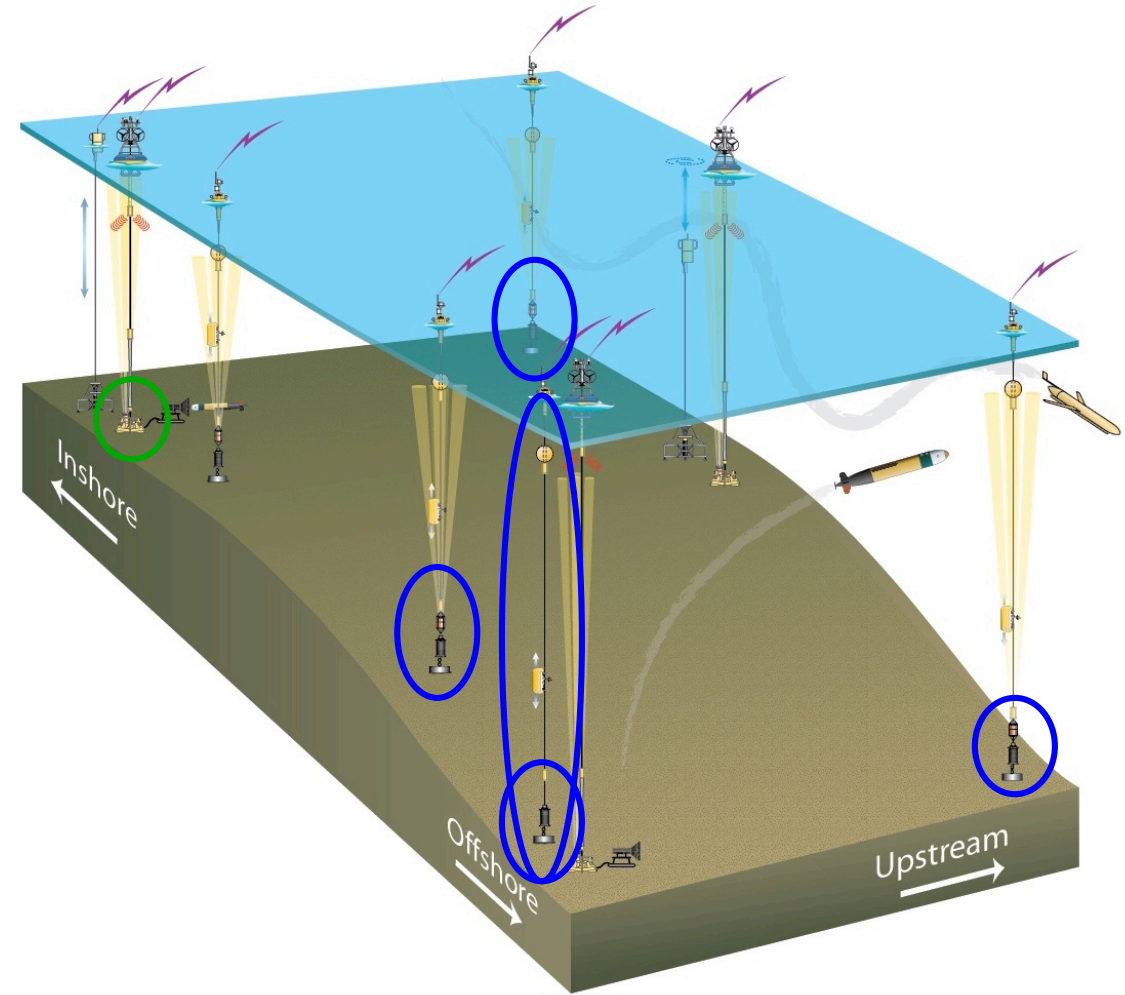
Additional Objectives

- A1. Conduct ship vs. buoy meteorological comparisons at each CSM site
- A2. Conduct CTD surveys (no bottle samples) in the vicinity of the moored array
- A3. Conduct underway surveys (ADCP, EK-80) in the vicinity of the moored array.



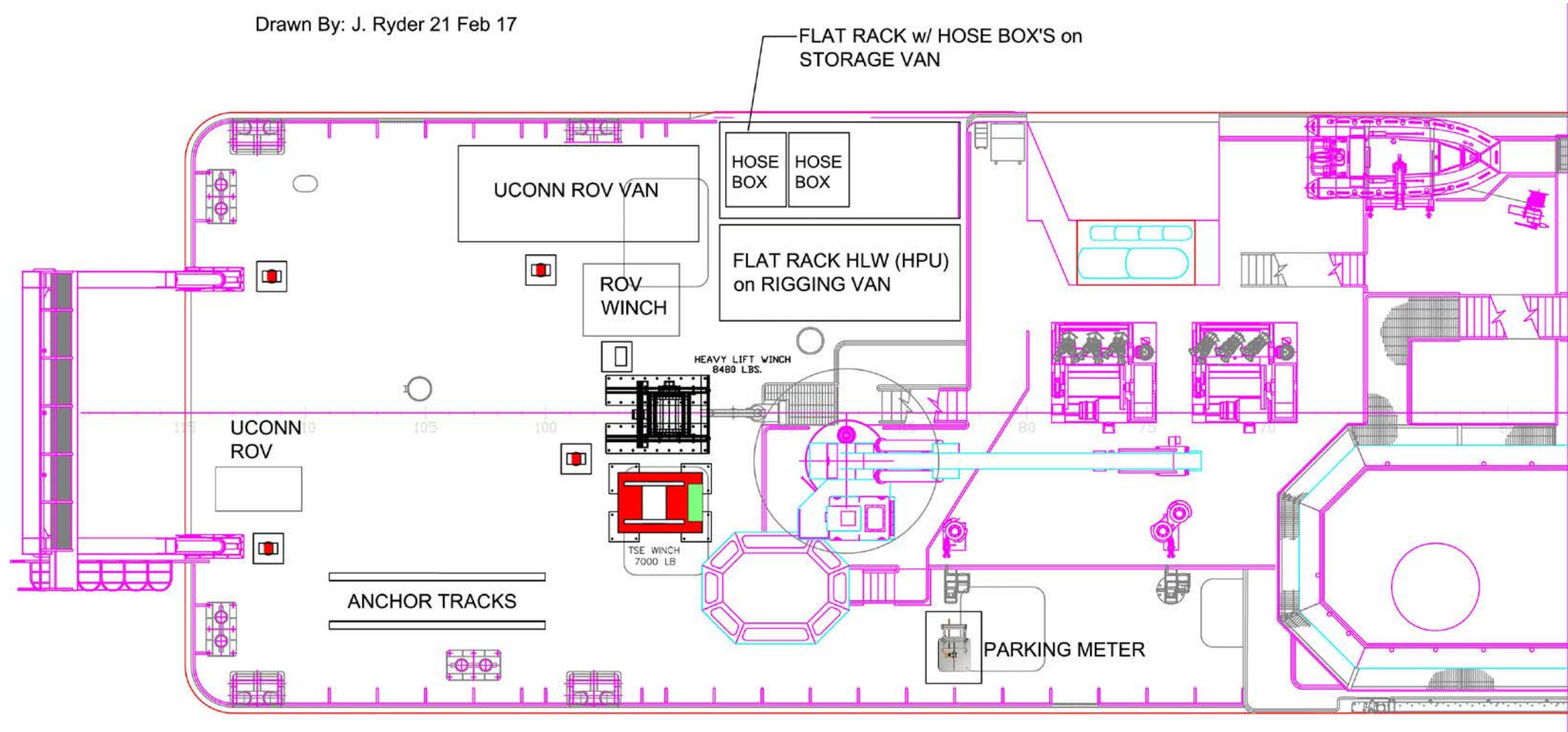
Pioneer 8 Leg 1

- Recover 4 Coastal Profiler Mooring Anchors:
 - CP02PMUI-00007
 - CP02PMCO-00006
 - CP02PMUO-00004
 - CP04OSPM-00005
- Recover 1 Coastal Surface Mooring Anchor and ARM:
 - CP03ISSM-00004
- Recover Coastal Profiler Mooring
 - CP04OSPM-00006



Pioneer 8 Leg 1 Deck Plan

Drawn By: J. Ryder 21 Feb 17



Pioneer 8 Leg 1 Cruise Schedule

28-29 May

- In-port WHOI
- Staging and Loading for Leg 1

30 May

- Complete loading, depart WHOI

31 May

- Recover [CP03ISSM-00004](#) anchor & ARM
- Recover [CP02PMUI-00007](#) anchor

1 June

- Recover [CP04OSPM-00005](#) anchor & line pack
- Recover [CP04OSPM-00006](#)

2 June

- Recover [CP02PMCO-00006](#) anchor
- Recover [CP02PMUO-00004](#) anchor

3 June

- Arrive WHOI, offload



Pioneer 8 Leg 2

Turn Coastal Surface Moorings

- CP04OSSM
- CP01CNSM

Turn Coastal Profiler Moorings

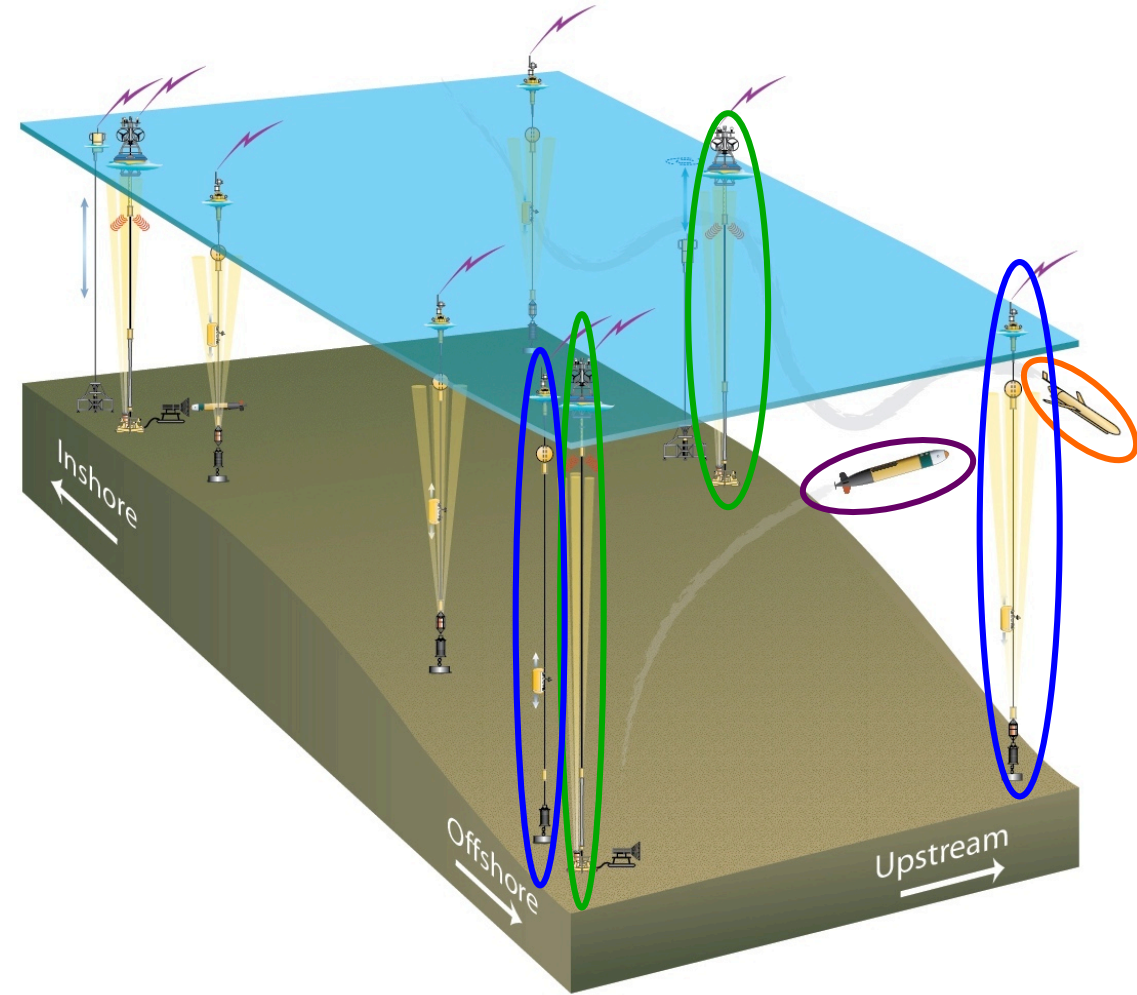
- CP02PMUO
- CP04OSPM

Turn Coastal Gliders

- Deploy 2 deep Gliders 336, 376 (FZ, SS)
- Deploy 1 shallow Glider 339 (EB)
- Recover 2 deep Gliders (FZ, SS)

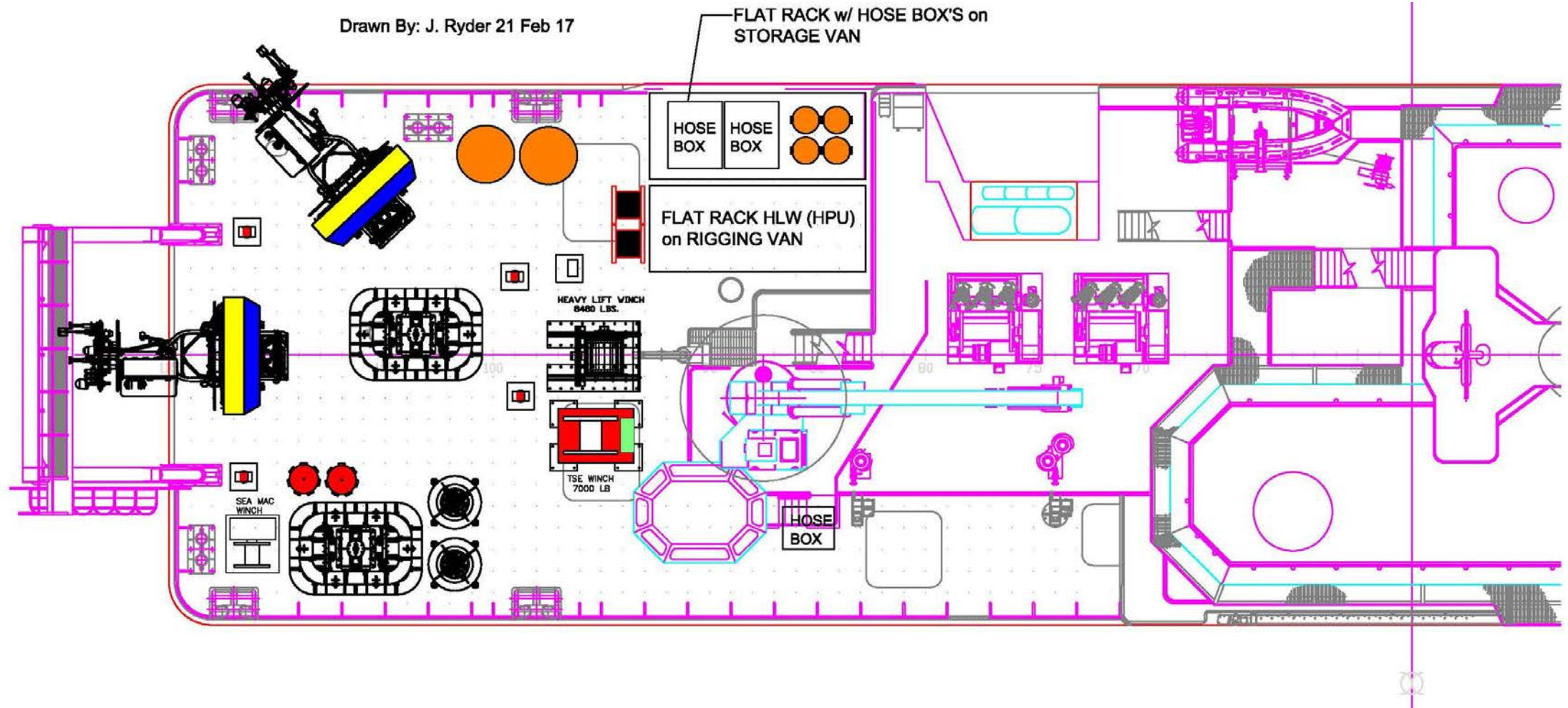
AUV

- Expeditionary missions



Pioneer 8 Leg 2 Deck Plan

Drawn By: J. Ryder 21 Feb 17



Pioneer 8 Leg 2 Cruise Schedule

4 June

- In-port WHOI, loading for Leg 2
- SOO-LARS test

5 June

- Complete loading, depart WHOI
- Recover **gliders**
- Deploy **shelf glider** (EB)

6 June

- Deploy **CP04OSSM-00006**
- CTD cast
- Deploy **slope gliders** (FZ, SS)
- CTD cast

7 June

- Recover **CP04OSPM-00006** anchor?
- CTD casts
- Deploy **CP04OSPM-00007**

8 June

- Recover **CP02PMUO-00008**
- CTD casts
- Deploy **CP02PMUO-00009**

9 June

- Recover **CP04OSSM-00005**
- Assess **CN profiling glider**
- Deploy **CP01CNSM-00007**

10 June

- Recover **CP01CNSM-00006**
- CTD cast
- Start along-shelf **AUV** survey

11 June

- Complete **AUV** survey

12 June

- Arrive WHOI, start offloading



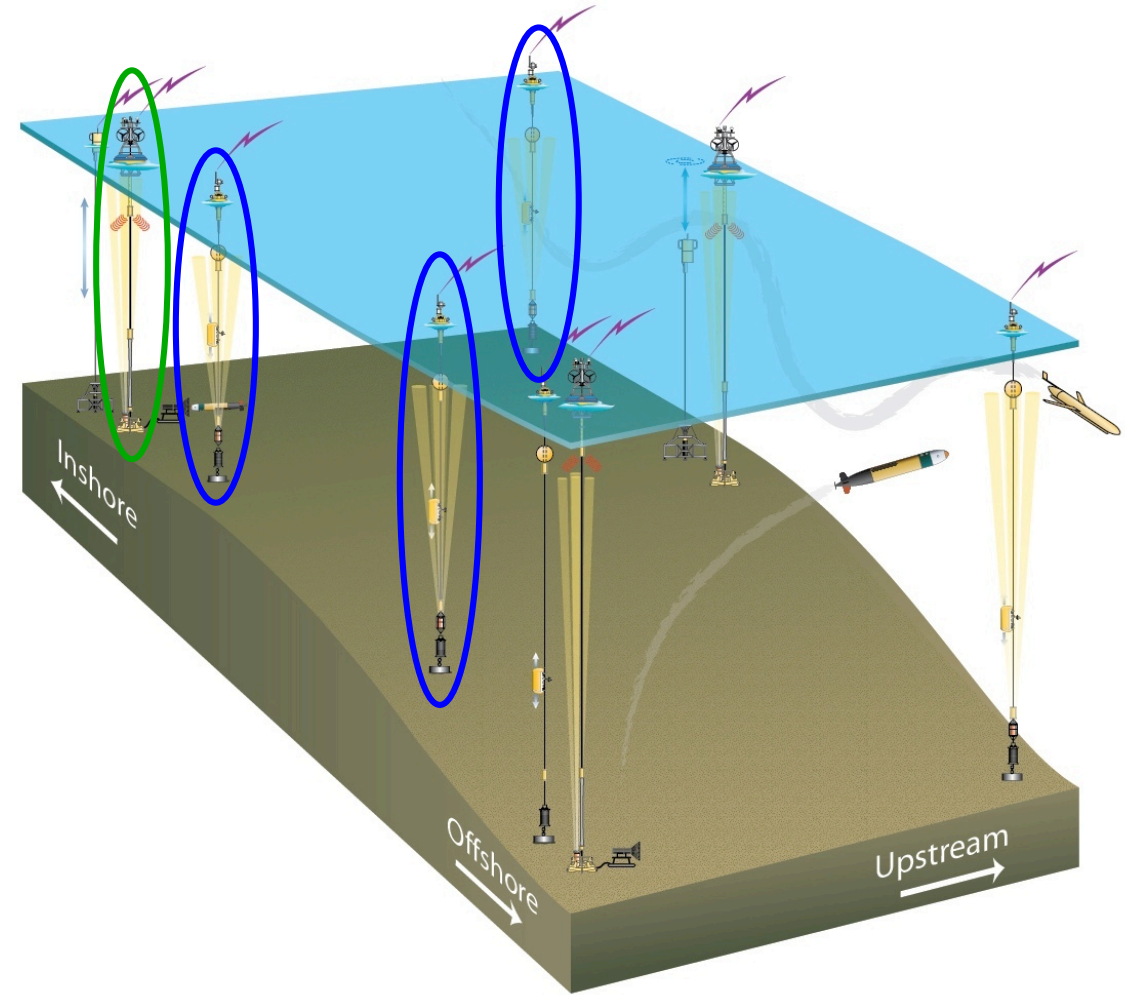
Pioneer 8 Leg 3

Turn Coastal Surface Mooring

- CP03ISSM

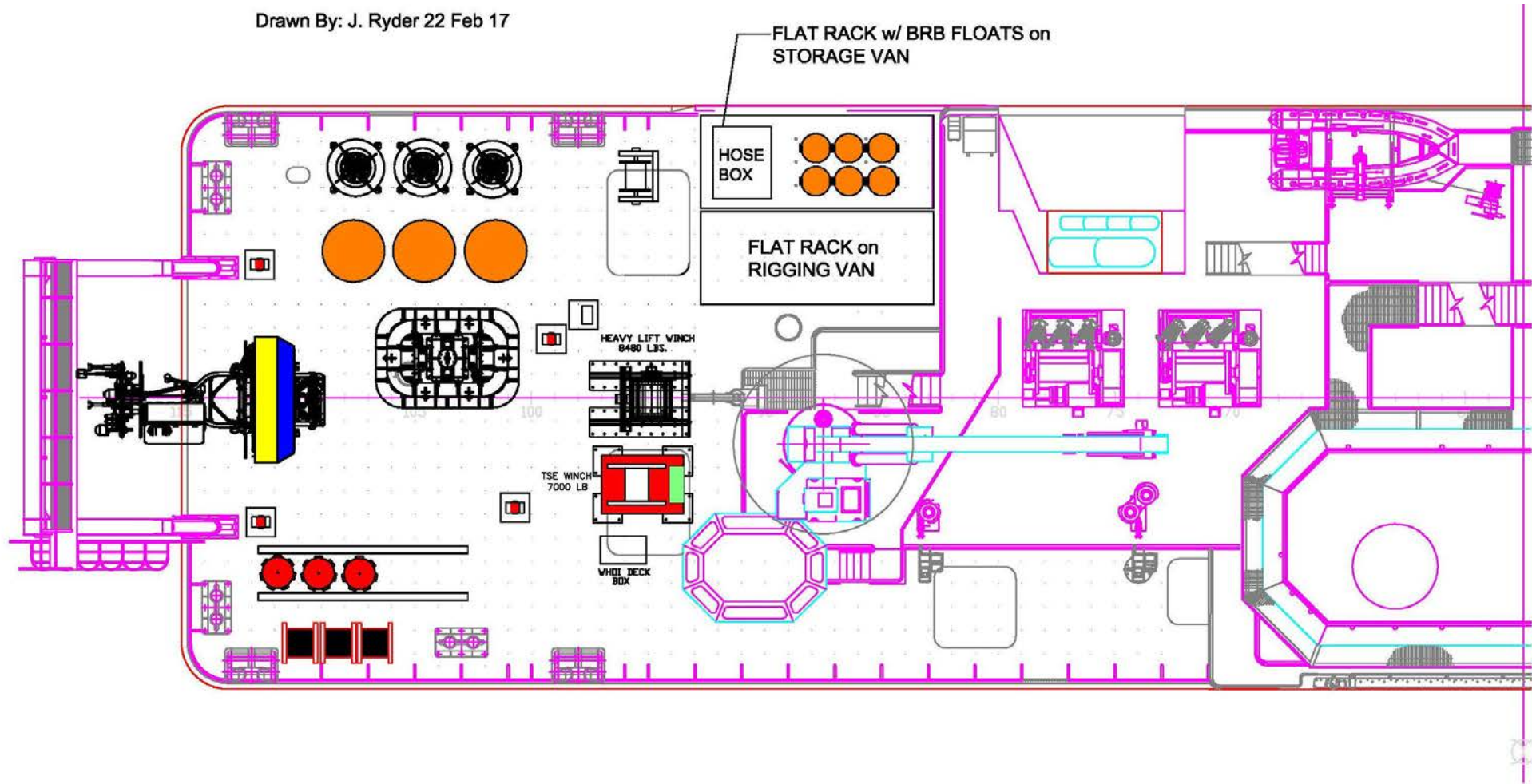
Turn 3 Coastal Profiler Moorings

- CP02PMCO
- CP02PMCI
- CP02PMUI



Pioneer 8 Leg 3 Deck Plan

Drawn By: J. Ryder 22 Feb 17



Pioneer 8 Leg 3 Cruise Schedule

13 June

- In port, Staging & loading for Leg 3

14 June

- Complete loading
- Depart WHOI

15 June

- Deploy [CP03ISSM-00006](#)
- CTD casts
- Recover [CP03ISSM-00005](#)

16 June

- Recover [CP02PMCO-00007](#)
- CTD casts
- Deploy [CP02PMCO-00008](#)

17 June

- Recover [CP02PMCI-00007](#)
- CTD casts
- Deploy [CP02PMCI-00008](#)

18 June

- Recover [CP02PMUI-00008](#)
- CTD casts
- Deploy [CP02PMUI-00009](#)

19 June

- Cross-shelf CTD survey
- Complete primary objectives as needed

20 June

- Arrive WHOI, offload



OOI IRR Checklist

	Item	Ready
1	All instruments planned for the deployment are integrated onto the platforms or are ready to be integrated at sea	✓
2	All instruments have been tested successfully	✓
3	All platforms have been tested successfully	✓
4	Emergency process, procedures, and contacts are ready	✓
5	Safety training is complete	✓
6	Operations training is complete	✓
7	Cruise staffing is in place	✓
8	The associated shore facilities (OMCs and/or shore station) are ready	✓
9	System for sea-to-shore data communication is ready	✓
10	Data from all Instruments can be captured by CI. (If not, attach a document detailing the alternate plan.)	✓
11	All platforms can be commanded and controlled	✓
12	Initial mission plans are developed and documented for mobile assets	✓
13	Initial sampling strategies are developed and documented for all instruments to be deployed	✓
14	All permits, clearances, and authorizations are in place	✓
15	All PATONs are in place	✓
16	The property management system has been updated for those items that are covered by the Property Management Plan	✓

To be completed prior to deployments

To be posted following deployments

To be done following deployment

OOI IRR Checklist

OL IRR Checklist Item

- #1 *All instruments planned for the deployment are integrated onto the platforms or are ready to be integrated at sea*
- #3 *All platforms have been tested successfully*
- #11 *All platforms can be commanded and controlled*

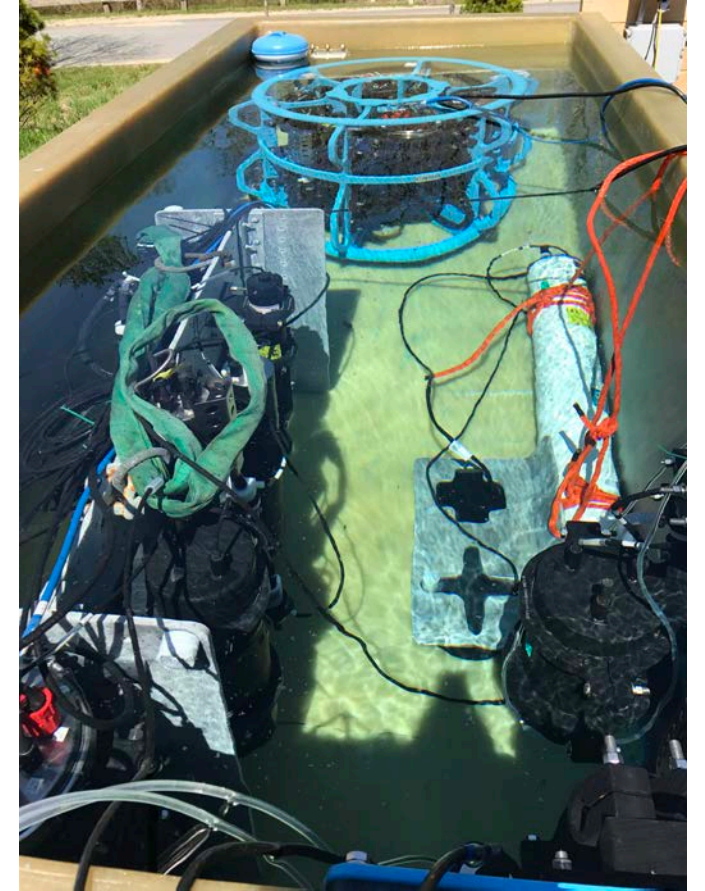
CGSN Evidence

- Moorings
 - Initial checklists for mooring integration
(Operations > Coastal Pioneer Cruises > Pioneer 8 Deployment Mooring folders in Vault; and to (CG EA) Moorings in Alfresco)
- Coastal & Coastal Profiling Gliders
 - Functional Checkout Test Results
(To be completed and posted to Vault and OOI > ARCHIVE > Test Documents > (CG EA) Gliders folder in Alfresco)

OOI IRR Checklist



OOI IRR Checklist



OOI IRR Checklist

OL IRR Checklist Item

#2 All instruments have been tested successfully

CGSN Evidence

- Fixed Instruments
 - Quality Conformance Test Results
 - Pre-deployment Test Results – **OPTAA & NUTNR to be done after burn-in**
(OOI > ARCHIVE > Test Documents > (CG EA) Instruments folder in Alfresco)
- Wire Following Profiler
 - Quality Conformance Test Results
(OOI > ARCHIVE > Test Documents > (CG EA) Profilers folder in Alfresco)

OOI IRR Checklist

OL IRR Checklist Item

#4 Emergency process, procedures, and contacts are ready

CGSN Evidence

- OL Notification/Reporting Procedures
 - Equipment_Notification_Escalation_Process_OOI_09_20_12_Rev -1.2.doc
 - Incident_Reporting_Process_OOI_2012_09_21_ver_1-1.doc

(OOI > REFERENCE > Process Library > Environmental, Health, and Safety folder in Alfresco)
- Emergency Contact Lists

(Operations > Coastal Pioneer Cruises > Pioneer_Operations folder in Vault)
- DISA Card Procedure (3312-10000)

(OOI > CONTROLLED > 3000 Coastal Global folder in Alfresco)
- Surface Mooring Recovery Procedure (3350-00001)

OOI IRR Checklist

OL IRR Checklist Item

#5 Safety Training is complete

#6 Operations training is complete

CGSN Evidence

- Cruise participants up-to-date on WHOI EH&S training
([Project_Files > Operations > 04-Deployments > Deployments Notebook > Cruise Staffing](#) in Vault)
- UNOLS safety procedures, hydrogen safety procedures will be covered on the cruise
(Initial safety meeting, Research Vessel Safety Standards and RVOC Safety Training manual available on-board and on-line)
- Glider piloting training (at TWR) complete
([Project_Files > Documentation > Program > Program Notebook > Training > CGSN_Training_Record.xls](#) in Vault)

OOI IRR Checklist

OL IRR Checklist Item

- #8 The associated shore facilities (OMCs and/or shore station) are ready*
- #9 System for sea-to-shore data communication is ready*
- #10 Data from all Instruments can be captured by CI*

CGSN Evidence

- OMC is online and functional and receiving data from deployed platforms at Pioneer and all Global Arrays
- Burn-in data is being recieved by the OMC
- All data is on the Data Server and accessible by CI

OMC Platform Status

CG Platform Shore Server Dashboard

CP01CNSM
D0001

PLATFORM LIST

- Detailed Status
- SBD13-06-METBK
- SBD13-01-MOPAK
- SBD12-09-FDCHP
- SBD12-06-METBK
- SBD12-05-WAVSS
- SBD12-04-PCO2A
- RID27-04-DOSTA
- RID27-03-CTDBP
- RID27-02-FLOTT
- RID27-01-OPTAA
- RID26-08-SPKIR
- RID26-07-NUTNR
- RID26-06-EHSEN
- RID26-05-ACOMM
- RID26-04-VELPT
- MFD37-04-DOSTA
- MFD37-03-CTDBP
- MFD37-01-OPTAA
- MFD35-06-PHSEN
- MFD35-05-PCO2W
- MFD35-04-VELPT
- MFD35-02-PRESE
- MFD35-01-ADCPT
- MFD00-00-ZPLSC

Coastal Pioneer Central Surface Mooring - Current Time: 2014/04/06 15:55:01 GMT version:

View Status System CPM CTL MF Alarms Errors Msgs Serial Cfg Network Cfg Fault Tables Data
 Syslog All MPIC PSC GPS PPS NTP CPU FB250 Irid Call Logs logins.txt SBD Data XEOS Data View dcl_syslog

Plot: ntp cpm psc cpu dcl13 dcl12 dcl26 dcl27 dcl35 dcl37 dcl1 Watch Circle

Platform: cp01cnsm MyId: cpm1 Time: 2014/02/17 12:04:41.032

CPM1 Status - Iu: 0.001

Up: 8 days 19:03:21 Load: 1.18 0.75 0.54 Eflag: 00400000

Temp: 13.4 10.9 degC Humid: -0.6% Press: 14.5 psi

GndFlt: 2.4 -81.0 727.0 -3.6 ua Ldet: 1208.0 1201.0 mv Enable: gf=0f Id=03

Main: 28.60 v 360.00 ma 10.30 w wtc: 0.00 wpc: 1

CPM Heartbeat: enable 1 dtm 125 threshold 2

Hotel1: wake 1 ir 0 0 0 0 0 0 fwf 0 0 0 0 0 0 gps 1 sbd 0 0 pps 0 dcl 66 esw 1 dsl 1

Hotel2: eth0 1 eth1 0 fb1 1 fb2 0

Load Shed: ena 0 low 22.0 high 22.5 priority 1,2,3 shed:

RDA6: 28.56 272.07 00000000 gf 0 0 0 0 0 0 0 0 type 1 rda 1 0 0 0 0 0 0

RDA7: 28.31 41.01 00000000 gf 0 0 0 0 0 0 0 0 type 2 rda 0 0 0 0 0 0 0

Alarms: CPM1=2014/02/08 17:03:42 404 Loss of CI status on 1391878981

Error Cnts:

No cpm.wake schedule: View Wake Codes Leak Detect

Timing Status - Iu: 0.028

Refid: FPS Offset: -0.103 ms Jitter: 0.061 ms

NMEA Lock: TRUE Bad Pulses: 0001 TS: 2014/02/17 12:04:41.001

Power Controller Status - Iu: 4.178

Volt: 28.40 Watts: 73.08 Curr: 2573.33 ma Chrg: 95 90%

Override: 0100 Eflag: 00400000,00000000,0c0000c9

Connected: pv1 pv2 pv3 pv4 wt1 wt2 cvt

BT (degC): 6.94 7.34 7.34 7.34

BT (v): 28.30 28.25 28.31 28.30

BT (ma): -2635.0 -2424.0 -2400.0 -2531.0

BT Net: -9990 ma Charging

PV (ma): 2.00 0.00 0.00 1716.00

WT (ma): 7032.00 5484.00

FC (ma): 0.00 0.00

CVT: 1.376.31 105.00 1 8

FB250 (I) Status - Iu:

FB250 Time

Status

Max Duration min

LinkUp secs

Elapsed secs

Remaining secs

GPS

Max Duration min

LinkUp secs

Elapsed secs

Remaining secs

CPM Telemetry Schedule Status - Iu: 1.160

Name	State	Sched	Status
mfn_pwr	started	1:0-23:55:15	Remaining: 321 sec
telem_fb1	started	1:0-6:12:18:0:15	Remaining: 621 sec
telem_fb2	stopped	1:3,9,15,21:0:15	Start_in: 10521 sec
telem_iri1	stopped	1:0-4-8-12-16:20:10:20	Start_in: 321 sec

Platform: cp01cnsm MyId: DCL12 Time: 2014/02/17 12:04:35.828

DCL12 Status - Iu: 1.813

Up: 87 days 22:57:17 Load: 0.29 0.29 0.23 Eflag: 00000060

Temp: 15.8 14.3 19.7 20.0 24.9 degC Humid: -1.0% Press: 14.5 psi

GndFlt: 1.6 721.8 -266.9 ua Ldet: 0 0 0 0 mv Enable: gf=07 Id=00

Main: 28.60 v 465.00 ma 13.30 w

Pwrbd: Hi Pwr mode=I2C vsel=3 vmain=9.61 v 12v=2.83 v 24v=0.00 w

Load Shed: ena 0 low 22.0 high 22.5 priority 8,7,6,5,4,3,2,1 shed:

Alarms:

Error Cnts:

GPS Status - Iu: 0.000

2014/02/17 12:04:35.825 Spd: 2.30 COG: 000.70

Lat: 40.136223 Lon: -70.769017 Alt: 9.20

Fix_q: 2 Nsat: 9 Hdop: 0.90

Timing Status - Iu: 8.825

Refid: PPS Offset: -0.282 ms Jitter: 0.061 ms

NMEA Lock: TRUE Bad Pulses: 0000 TS: 2014/02/17 12:04:27.000

Instrument Port Status

Port	State	volt	ma	Err	Inst	Status	bad	Id	Iu	Type	State	Sched	Status
1	Off	0.00	0.00	0	none	na	0	-1	-1.00				
2	Off	0.00	0.00	0	none	na	0	-1	-1.00				
3	Off	0.00	0.00	0	none	na	0	-1	-1.00				
4	On	11.90	-4.90	0	pc02a	DAQ	0	322	20.25				
5	On	11.90	73.30	0	wavss	DAQ	0	30	30.40				
6	On	11.90	122.20	0	metbk2	DAQ	0	32	0.43				
7	Off	0.00	0.00	0	none	na	0	-1	-1.00				
8	Off	0.00	0.00	0	none	na	0	-1	-1.00				

dmgr status: 2014/02/17 12:04:27.318 act:3 str:4 hit:1 fid:0 map:000DDDD00

dcl12 Data Dir Summary

Inst Name	Current File	File Size (bytes)	Last Modified
metbk2	20140217.metbk2.log	84889 (0.08 mb)	48 03:50:26
pc02a	20140217.pco2a.log	22140 (0.02 mb)	48 03:56:36
rsync	20140217.rsync.log	2214 (0.00 mb)	48 03:50:52
superv	20140217.superv.log	239093 (0.24 mb)	48 03:50:51
wavss	20140217.wavss.log	1216 (0.00 mb)	48 04:23:32

Platform: cp01cnsm MyId: DCL13

DCL13 Status - Iu: 0.7

Up: 87 days 22:57:28 Load: 0.60 (

Temp: 15.7 13.7 13.8 13.5 30.3 degC Humid: -1.1

GndFlt: 4.4 733.1 -155.6 ua Ldet: 0 0 0 0

Main: 27.80 v 419.00 ma 11.65 w

Pwrbd: Hi Pwr mode=I2C vsel=3 vmain=8.54 w

Load Shed: ena 0 low 22.0 high 22.5 priority 8,7,6,

Alarms:

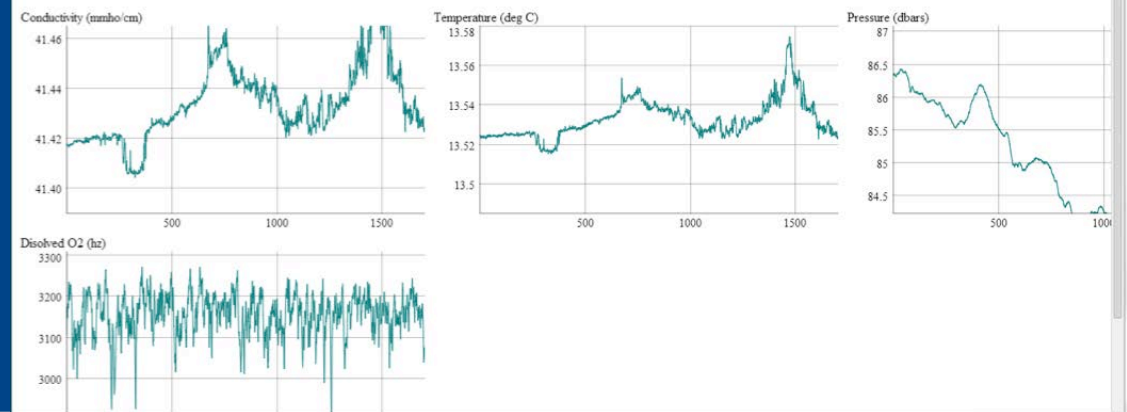
Error Cnts:

GPS Status - Iu: 0.847

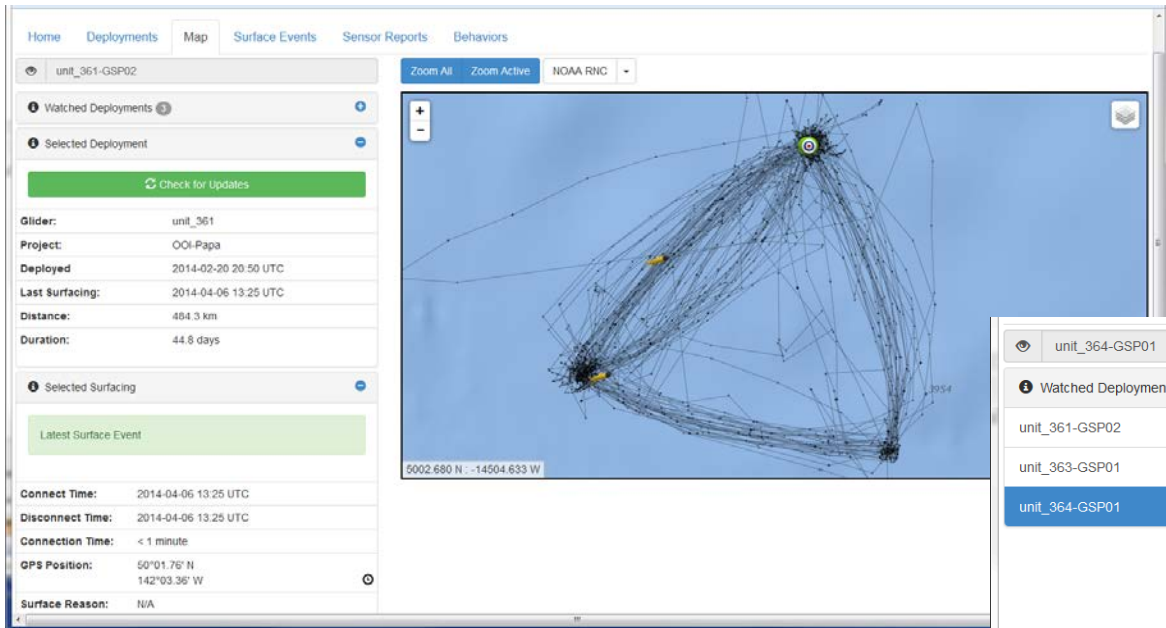
CTDPF/DOFST Data

C0000011.TXT

Profile Number: 11
 CTD Power On Time: 11/25/2013 12:00:02
 CTD Power Off Time: 11/25/2013 12:28:37
 Read 1704 data records



OMC Glider Fleet Status



Fleet view and last surfacing

- unit_364-GSP01
- unit_361-GSP02
- unit_363-GSP01
- unit_364-GSP01

Surface event summary

Selected Surface Events

Previous 10 Surfacing

Glider	Time (UTC)	Since Last Call	Call Length	Mission Reason	Segment	GPS	Waypoint	Range Bearing	Speed Heading	Distance (km)	Battery (Volts)	Vacuum (inHg)
unit_364	2014-04-05 01:33	10.0 hrs	< 1 min	TRANS58.MI pitch not commanded	0729.0007	50°03.86' N 144°47.66' W	50°04.24' N 144°47.88' W	0.8 km 340°	0.19 m/s @ 255°	6.8		
unit_364	2014-04-04 15:33	9.9 hrs	< 1 min	TRANS58.MI pitch not commanded	0729.0006	50°04.78' N 144°42.17' W	50°04.24' N 144°47.88' W	6.9 km 261°	0.20 m/s @ 232°	7.1		
unit_364	2014-04-04 05:36	10.1 hrs	< 1 min	TRANS58.MI pitch not commanded	0729.0005	50°07.08' N 144°37.43' W	50°04.24' N 144°47.88' W	13.5 km 247°	0.17 m/s @ 224°	6.0		
unit_364	2014-04-03 19:31	9.9 hrs	1 min	TRANS58.MI pitch not commanded	0729.0004	50°09.37' N 144°33.86' W	50°04.24' N 144°47.88' W	19.2 km 240°	0.19 m/s @ 214°	6.9		
unit_364	2014-04-03 09:36	10.3 hrs	< 1 min	TRANS58.MI pitch not commanded	0729.0003	50°12.41' N 144°30.58' W	50°04.24' N 144°47.88' W	25.6 km 233°	0.13 m/s @ 215°	4.8		
unit_364	2014-04-02 23:14	5.0 hrs	< 1 min	TRANS58.MI pitch not commanded	0729.0002	50°14.53' N 144°28.26' W	50°04.24' N 144°47.88' W	30.1 km 230°	0.20 m/s @ 233°	3.6		
unit_364	2014-04-02 18:16	5.7 hrs	< 1 min	TRANS58.MI no comms for a while	0729.0001	50°15.69' N 144°25.79' W	50°04.24' N 144°47.88' W	33.8 km 231°	0.19 m/s @ 175°	3.9		
unit_364	2014-04-02 12:37	10.0 hrs	< 1 min	TRANS58.MI pitch not commanded	0729.0000	50°17.80' N 144°26.08' W	50°04.24' N 144°47.88' W	36.1 km 225°	0.14 m/s @ 205°	5.3		

ooi-sporell.whoii.ooi-omc.org/fmc/get/surfacings/?type=glider&value=3&ts0=2014-04-05 01:33:59&view=summary&format=html&num=-10&ts1=2013-07-19 20:32



OOI IRR Checklist

OL IRR Checklist Item

#12 Initial mission plans are developed and documented for mobile assets

#13 Initial sampling strategies are developed and documented for all instruments to be deployed

CGSN Evidence

- 1102-00200 OOI Sampling Strategy Document
(Released to Alfresco)
- Mooring Configuration Spreadsheets
(Pioneer 8 Deployment folder in Vault & Alfresco) – Finalized post-deployment
- Mission Files for Profilers and Gliders
(Pioneer 8 Deployment/Mission Files folder in Vault) – To be posted

OOI IRR Checklist

OL IRR Checklist Item

#7 *Cruise staffing is in place*

#14 *All permits, clearances, and authorizations are in place*

#15 *All PATONs are in place*

CGSN Evidence

- Cruise Plan indicates cruise participants
(3204-00801 Coastal Pioneer 8 Deployment Cruise Plan in Vault; will be released to Alfresco prior to ship departure)
- Permits and PATON in place
(UACE Permit NAE-2010-1283; *Program Notebook > Field Ops > Pioneer Permit folder in Vault*)
(PATON – <http://www.usharbormaster.com>)
- Navy Fleet Surface and Subsurface checked
- USCG notified
- Boatracs notified (fishing fleet)

OOI IRR Checklist

OL IRR Checklist Item

#16 The property management system has been updated for those items that are covered by the Property Management Plan

CGSN Evidence

- Configuration Spreadsheets for Asset Tracking and Property Management are drafted
 - Will be completed during the deployment and submitted to the WHOI Property Office
(Pioneer 8 Deployment folders in Vault)
- As-Built TDP index drafts posted to Alfresco
 - Indices will be completed and all documents posted Alfresco
(OOI > Technical Data Package (TDP) Repository > As-Built > Array folders in Alfresco)

OOI IRR Checklist

- Mooring Configurations
 - Captured in spreadsheets for deployment check-offs and Asset Tracking

- As-Built TDP items
 - Deck Drawings
 - Drawing Trees
 - Assembly Drawings
 - Design Drawings
 - BOMs

Coastal Surface Mooring Configuration

Reference Designator:	CP040SSM	Latitude:	0
Mooring S/N:	CP040SSM-0002	Longitude:	0
Anchor/Launch Date:	0	Water Depth:	0
Anchor/Launch Time:	0	Cruise #:	0

BUOY TELEMETRY COMPONENTS	BUILD	DEPLOY
Light S/N	0	
GPS 1 S/N	25	
GPS 2 S/N	83	
FBB ABU 1 S/N	80020080	
FBB ABU 2 S/N	80020081	
ISU 1 S/N	25	
ISU 2 S/N	25	
ISU 3 S/N	25	
ISU 4 S/N	25	
ISU 5 S/N	25	
ISU 6 S/N	25	
ISU 7 S/N	25	
ISU 8 S/N	25	
ISU 9 S/N	25	
ISU 10 S/N	25	
ISU 11 S/N	25	
ISU 12 S/N	25	
ISU 13 S/N	25	
ISU 14 S/N	25	
ISU 15 S/N	25	
ISU 16 S/N	25	
ISU 17 S/N	25	
ISU 18 S/N	25	
ISU 19 S/N	25	
ISU 20 S/N	25	
ISU 21 S/N	25	
ISU 22 S/N	25	
ISU 23 S/N	25	
ISU 24 S/N	25	
ISU 25 S/N	25	
ISU 26 S/N	25	
ISU 27 S/N	25	
ISU 28 S/N	25	
ISU 29 S/N	25	
ISU 30 S/N	25	
ISU 31 S/N	25	
ISU 32 S/N	25	
ISU 33 S/N	25	
ISU 34 S/N	25	
ISU 35 S/N	25	
ISU 36 S/N	25	
ISU 37 S/N	25	
ISU 38 S/N	25	
ISU 39 S/N	25	
ISU 40 S/N	25	
ISU 41 S/N	25	
ISU 42 S/N	25	
ISU 43 S/N	25	
ISU 44 S/N	25	
ISU 45 S/N	25	
ISU 46 S/N	25	
ISU 47 S/N	25	
ISU 48 S/N	25	
ISU 49 S/N	25	
ISU 50 S/N	25	
ISU 51 S/N	25	
ISU 52 S/N	25	
ISU 53 S/N	25	
ISU 54 S/N	25	
ISU 55 S/N	25	
ISU 56 S/N	25	
ISU 57 S/N	25	
ISU 58 S/N	25	
ISU 59 S/N	25	
ISU 60 S/N	25	
ISU 61 S/N	25	
ISU 62 S/N	25	
ISU 63 S/N	25	
ISU 64 S/N	25	
ISU 65 S/N	25	
ISU 66 S/N	25	
ISU 67 S/N	25	
ISU 68 S/N	25	
ISU 69 S/N	25	
ISU 70 S/N	25	
ISU 71 S/N	25	
ISU 72 S/N	25	
ISU 73 S/N	25	
ISU 74 S/N	25	
ISU 75 S/N	25	
ISU 76 S/N	25	
ISU 77 S/N	25	
ISU 78 S/N	25	
ISU 79 S/N	25	
ISU 80 S/N	25	
ISU 81 S/N	25	
ISU 82 S/N	25	
ISU 83 S/N	25	
ISU 84 S/N	25	
ISU 85 S/N	25	
ISU 86 S/N	25	
ISU 87 S/N	25	
ISU 88 S/N	25	
ISU 89 S/N	25	
ISU 90 S/N	25	
ISU 91 S/N	25	
ISU 92 S/N	25	
ISU 93 S/N	25	
ISU 94 S/N	25	
ISU 95 S/N	25	
ISU 96 S/N	25	
ISU 97 S/N	25	
ISU 98 S/N	25	
ISU 99 S/N	25	
ISU 100 S/N	25	

BUOY POWER COMPONENTS	BUILD	DEPLOY
Wind Turbine 1 S/N	2002	
Wind Turbine 2 S/N	2002	
PW Panel 1 S/N - Vane S	110100A00002	
PW Panel 2 S/N - Deck S	0	
PW Panel 3 S/N - Deck P	0	
PW Panel 4 S/N - Vane P	110100A00002	

ISER COMPONENTS	BUILD	DEPLOY
EM Chain S/N	0	
Shack Line 1 S/N	028	
Shack Line 2 S/N	028	
Shack Line 3 S/N	028	
Shack Line 4 S/N	028	

Coastal Surface Mooring Configuration

Reference Designator:	CP040SSM	Latitude:	0
Mooring S/N:	CP040SSM-0002	Longitude:	0
Anchor/Launch Date:	0	Water Depth:	0
Anchor/Launch Time:	0	Cruise #:	0

BUOY HALO INSTRUMENTS	BUILD	DEPLOY
FOOP S/N	N/A	
FOOP P (non-circled) S/N	N/A	
FOOP M (non-circled) S/N	N/A	
METK-1-BPR S/N	255	
METK-1-CI S/N	245 (242, 255)	
METK-1-PRC S/N	241	
METK-1-LWR S/N	250	
METK-1-PRC S/N	251	
METK-1-SWR S/N	247	
METK-1-WND S/N	247	
METK-2-BPR S/N	N/A	
METK-2-CI S/N	N/A	
METK-2-HRR S/N	N/A	
METK-2-LWR S/N	N/A	
METK-2-PRC S/N	N/A	
METK-2-SWR S/N	N/A	
METK-2-WND S/N	N/A	

BUOY INSTRUMENTS	BUILD	DEPLOY
FOOP S/N	25104 BDA	
VELPT S/N	N/A	

Coastal Surface Mooring Configuration

Reference Designator:	CP040SSM	Latitude:	0
Mooring S/N:	CP040SSM-0002	Longitude:	0
Anchor/Launch Date:	0	Water Depth:	0
Anchor/Launch Time:	0	Cruise #:	0

SEGMENT 1 COMPONENTS	BUILD	DEPLOY
NUNRFSN	001	
NUNRFBUSN	222	
SPNRSN	279228	

SEGMENT 2 COMPONENTS	BUILD	DEPLOY
DCL Aram S/N	015	

SEGMENT 3 COMPONENTS	BUILD	DEPLOY
CIDEP S/N	1010004	
VELPT S/N	ACD11417	

SEGMENT 4 COMPONENTS	BUILD	DEPLOY
CP04A S/N	AC018	
AC04M S/N	N/A	

SEGMENT 5 COMPONENTS	BUILD	DEPLOY
CPM DCL Aram S/N	004	
AC0PT S/N	N/A	
POOZW S/N	N/A	

SEGMENT 6 COMPONENTS	BUILD	DEPLOY
DOSTA S/N	276	
FLOPS S/N	1221	
PLSEN S/N	PUR01	

Coastal Surface Mooring Configuration

Reference Designator:	0	Latitude:	0
Mooring S/N:	0	Longitude:	0
Anchor/Launch Date:	0	Water Depth:	0
Anchor/Launch Time:	0	Cruise #:	0

SEGMENT 1 COMPONENTS	BUILD	DEPLOY
POOZW S/N (in Segment 6)	0002	
CIDEP S/N	1010004	
VELPT S/N	2877006-1208	
VELPT S/N	ACD11417	
VELSD S/N	N/A	
DCL Aram S/N	0001	
META Aram S/N	0	

SEGMENT 2 COMPONENTS	BUILD	DEPLOY
XEOS KLO S/N	0	
Acoustic Release 1 S/N	0	

SEGMENT 3 COMPONENTS	BUILD	DEPLOY
DOSTA S/N	276	
Floater S/N	0	
XEOS KLO S/N	0	
Acoustic Release 2 S/N	0	

SEGMENT 4 COMPONENTS	BUILD	DEPLOY
PLSEN S/N (in Segment 7)	1000	
AC0PT S/N	21468	
CP04A S/N	AC018	
DCL AC04M Aram S/N	0007	

ARM COMPONENTS	BUILD	DEPLOY
Acoustic Release S/N	0	



OOI IRR Checklist

- Calibration Info Spreadsheets to CI
 - Instrument calibration information provided to CI prior to deployment of platforms
 - Updated spreadsheets will be provided after the cruise (w/ deployment times/locations/etc.)



Questions?

