



# Test Procedure Name: Endurance Inshore Surface Mooring End-to-End Data Flow Validation Test Procedure

## Document Control Number: 1158-02033 Rev: 1-00

<b>Test Plan Document Control Number:</b> 1158-02000	<b>Test Plan Revision Number:</b> 1-00	<b>Test Date(s) &lt;YYYY-MM-DD&gt;:</b>
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Test Procedure Approval Signature Block (signed before the test procedure is executed; signature indicates approval of the procedure content)				
Approval Authority (role)	Print Name	Signature	Date (yyyy-mm-dd)	Revision
Chief Systems Engineer	John Pesaturo			1-00

**Test Type(s)** (select all applicable)  
 Requirements Verification  
 Developmental  
 Integration  
 Interface  
 Stability  
 Performance  
 Validation  
 Acceptance  
 Other

**Test Procedure Description**

This procedure contributes to the Validation Testing of the Endurance Inshore Surface Mooring, which is required for Commissioning. It applies to Endurance Inshore Surface Moorings, which are deployed at the CE01 (Oregon Inshore) and CE06 (Washington Inshore) sites of the Endurance Array.

This procedure is the End-to-end Data Flow Scenario (Section 4.3.3, Validation Test Plan for OOI Endurance Array – 1158-02000).

- Confirm that engineering data are received on shore in the OMC (Data Server)
- Confirm that engineering data can be transferred from the OMC Data Server to CI
- Confirm that engineering data are available via OOINet
- Confirm that engineering data are within reasonable limits
- Confirm that science data are received on shore in the OMC (Data Server)
- Confirm that science data can be transferred from the OMC Data Server to CI
- Confirm that science data are available via OOINet
- Confirm that science data are within reasonable limits
- Confirm error indications/alerts in OOINet are functional

**Test Location**

Platforms will be deployed in their defined locations within the Endurance Array. Testers will be located where they have access (directly, via internet, or via WebEx) to the Endurance Array data, command and control software, and monitoring displays (e.g., the OSU OMC) and OOINet.

Test Equipment				
Equipment ID or Serial Number	Calibration Due Date (yyyy-mm-dd)	Equipment Technician (print name)	Certification Signature (indicates that calibration has not expired)	Date (yyyy-mm-dd)
N/A				

Test Software (Including custom and COTS)	
Software Product Name	Software Version
CGSN Mooring Platform software	<to be filled in at time of test>
CGSN Platform Shore Server software	<to be filled in at time of test>



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Input Data					
Dataset Name	Dataset Description	Dataset Source <small>(e.g., IOOS, CTD sensor)</small>	Dataset Location <small>(e.g., complete file path and name)</small>	Data Volume	Procedure Step(s) <small>(Where Data is used)</small>

Output Data				
Dataset Name	Dataset Description	Dataset Source <small>(e.g., IOOS, CTD sensor)</small>	Data Storage Location <small>(e.g., complete file path and name)</small>	Comments <small>(e.g., explain any naming conventions used)</small>

**Test Safety**  
Tests shall be conducted in accordance with the OOI Environmental Health and Safety Plan (1006-00000), and in accordance with institutional operational safety policies.

Preconditions	Test Reports
The platform(s) to undergo Validation Testing must be deployed. The OMC and OOINet must be operational with the appropriate Dataset Agent Drivers integrated. Test operator must be comfortable operating from the Linux command line using standard utilities to view data directories and files.	<i>&lt;Identify the document numbers of any test reports produced from the execution of this procedure&gt;</i>



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Test Procedure				Test Results				
Step No.	Instructions	Requirement ID (If applicable)	Expected Results	Actual Results (If different than Expected)	Step Completed By (Enter initials, unless test is automated)	Pass/Fail	Notes	Redmine Issues (Identify issues found in this step)
A-1	<b>Confirm science and engineering data</b> Review status on OMC Platform Shore Server: e.g. ssh 128.193.86.200							
A-2	Login as: ooouser							
A-3	<b>Navigate to Mooring deployment directory:</b> cd /DS/CE01ISSM/DNNNNN						Directory names are case-sensitive	
A-4	Verify directory structure: Linux command: ls -l Cfg2Buoy cpm3 dcl17 dcl37 irid proc_mopak syslog cfg_files dcl16 dcl35 gps irid2shore superv uplink_logs							



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A-5	Verify data in directories: Cd /dcl17>ls -l cfg_files ctddb3 mopak superv syslog ucssp velpt1						Dcl17 only has ctddb3 (ctd and flort data) in winter configuration	
A-6	Verify data in directories: Cd /dcl16>ls -l cfg_files flort optaa1 phsen1 superv velpt2 ctddb1 nutnr pco2w1 spkir syslog							



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A-7	Verify data in directories: Cd /dcl35>ls -l adcpt cfg_files pco2w2 phsen2 presf superv syslog vel3d						Dosta data are taken through the ctd	
A-8	Verify data in directories: Cd /dcl37>ls -l cfg_files ctdbp2 optaa2 superv syslog							
A-9	Download a copy of the status log cd irid2shore\ view most recent cpm_status.<date>.txt log file							
A-10	Confirm all components are functional: MPIC Main Voltage MPIC Main Current (Ma) Temperature (degC) Humidity (%) CPM Ldet Enable Ldet mV Gfit Detect (uA)	N/A	Reasonable environmental values displayed in the plots					
<b>B</b>	<b>Data Present on OOI Net</b>							



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B-1	Go to <b>OOINet</b> site							
B-2	Navigate to Endurance Array Select a site and platform Record platform name (RefDes)							
B-3	Navigate to the data products page for selected platform. Confirm data is present (plotted) and within reasonable limits							
B-4	Examine MOPAK data							
B-5	Examine buoy CTDBPC data						EAISSM winter addition	
B-6	Examine buoy VELPTA data							
B-7	Examine buoy FLORTD data						collected through buoy CTD during winter	
B-8	Examine NSIF PCO2WB data							
B-9	Examine NSIF PHSEND data							
B-10	Examine NSIF CTDBPC data							
B-11	Examine NSIF FLORTD data							
B-12	Examine NSIF OPTAAD data							
B-13	Examine NSIF FLORTD data							
B-14	Examine NSIF SPKIRB data							
B-15	Examine NSIF DOSTAD data						collected through NSIF CTD	
B-16	Examine NSIF VELPTA data							
B-17	Examine MFN PCO2WB data							
B-18	Examine MFN PHSEND data							
B-19	Examine MFN SPKIRB data							
B-20	Examine MFN CTDBPC data							
B-21	Examine MFN DOSTAD data						collected through MFN CTD	



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B-22	Examine MFN OPTAAD data							
B-23	Examine MFN ADCPTM data							
B-24	Examine MFN PRESFA data							
B-25	Examine MFN -VEL3DD data							
<b>C</b>	<b>Indications/Alerts in OOINet</b>							
C-1	Pending definition from OOINET							

Post-Test Signature Block (Signatures indicate that the test procedure has been completed according to the instructions and results documented above or as noted in comments below.)				
Role (e.g., Test Lead, Test Operator, Systems Engineer, Design Engineer, Safety Engineer, QA/QC Engineer, Witness)	Print Name	Initials	Signature	Date (yyyy-mm-dd)

**Comments:**



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### Document Control Sheet

Version	Date	Description	Originator
0-01	9/14/2015	Initial Draft based on 1153-01003	D. Neiman
1-00	9/15/2015	Corrections suggested by C. Wingard	D. Neiman