

Meeting Summary
National IOOS HF Radar Technical Steering Team Annual Meeting
24-25 July 2014
NCAR Center Green Offices
Boulder, Colorado

Background Information

The Steering Team (ST) is presently composed of the following individuals:

Jack Harlan (IOOS Program Office) <Jack.Harlan@noaa.gov>

The following members were selected by the Regional Associations

Eric Terrill (SCCOOS) <eterrill@ucsd.edu>
Jeffrey Paduan (CeNCOOS) <paduan@nps.edu>
Nick Shay (SECOORA) <nick@rsmas.miami.edu>
Pierre Flament (PacIOOS) <pflament@hawaii.edu>
Scott Glenn (MARACOOS) <glenn@marine.rutgers.edu>
Stephan Howden (GCOOS) <Stephan.Howden@usm.edu>

The following were selected by the IOOS Program Office as experts in HF radar or in operational oceanography.

Mike Kosro (Oregon State University) <kosro@coas.oregonstate.edu>
Art Allen (USCG) <Arthur.A.Allen@uscg.mil>
Chris Paternostro (NOS CO-OPS) <Christopher.paternostro@noaa.gov>
Bob Jensen (USACE) <Robert.E.Jensen@usace.army.mil>
Rex Hervey (NWS NDBC) <rex.hervey@noaa.gov>,
Don Barrick (CODAR Ocean Sensors, Ltd.) don@codar.com

Attendees to the July 2014 Meeting:

Jack Harlan
Jeffrey Paduan (phone)
Nick Shay (phone)
Scott Glenn
Mike Kosro
Don Barrick
Pierre Flament (phone)
Art Allen (phone)
Chris Paternostro
Rex Hervey (phone)

Agenda Topics

Revisit the topics from April 2013 meeting

Annual Report from Steering Team

Action: Harlan will compile HFR portions of Progress Reports into an annual report for delivery to the ST for review and eventual distribution to IOOS Association and others.

Modeling & Data Assimilation

Discussed Alex Kurapov's new position at NCEP creating a West coast 3-day forecast model. This is seen as a good opportunity for IOOS HFR community to become more engaged with NCEP modeling. Also, Scott Glenn has a student at NCEP who should be made aware of the HFR connections.

Action: Harlan will provide email addresses to Scott of POCs at NCEP.

New Items for 2014:

2014 Annual IOOS Directors Retreat Aug 2014

Discussed this upcoming meeting which will be attended by Mike Kosro. It was decided that the IOOS regional members of the HFR ST will assemble a short document with updated costs for O&M, spares, data mgmt., etc. This document will be presented to the IOOS Association Directors at the Aug meeting.

ST spent time estimating costs and discussed possible ways to present those data.

Action: Regionally-elected ST members will create an updated cost estimate for the HFR network.

O&M for non-IOOS radars and new IOOS radars

Consensus was that these radars should be prioritized in the same way as the original prioritization process was carried out.

Draft archive plan review

The review pointed out a few changes/adds needed for the document. These include removing the reference to specific error estimates and adding a way to acknowledge the institutions that operate the radars.

Also, Rex pointed out that NDBC does not have access to RTVs back to 2006 as stated in the Plan.

Action: Harlan will follow up with Scripps, NODC and NDBC to determine how far back we can access RTV data for archiving.

Archiving range series, reprocessed data

Range series are appropriate for archiving. But, it was noted that the definition of “Level 0” would need to be revised since it was previously identified as Doppler spectra. Additionally, challenges will occur due to increased staff time to collect the range series which will likely require additional funds. Aggregation sites will need to be identified e.g. regional, super-regional, sub-regional. Then, devising a way to get those data to NODC efficiently is an additional challenge.

Offshore wind farm interference

Don Barrick gave a short tutorial on the technical issues involved, noting that the interference will impact both compact antenna types and phased array antenna types. Right now, the areas that DOE has funded demo projects include the mid-Atlantic/Northeast and the Oregon coast. However, there are certainly other coastal areas where offshore wind turbines could be deployed and would impact existing HF radars.

It was noted that the public comment period for the OR demo project ends on July 28 and Mike Kosro, Don Barrick and Jack Harlan (via NOAA) intended to submit comments separately.

There was discussion as to funding a short data retrieval in Portugal within sight of their offshore wind turbines. It is preferable that BOEM or DOE fund a short project but we can consider it for IOOS funding.

Action: Don will check with Codar-Europe to see if it’s feasible that an experiment could be run in Portugal.

Status of the International and Domestic Radio Frequency Allocation Process

Don and Jack gave an update on the process. There is currently a document under consideration that has untested and, hence, unacceptable recommendations for methods to ensure spectrum sharing that are being promoted by France and Japan. Our intent is to have an annex to the document that will present the modulation multiplexing technique that has been used for nearly 15 years in the US.

Webinar on Network Diagnostics

Lisa Hazard and Tom Cook (Scripps CORDC) gave a webinar on current diagnostic tools available and solicited input on other features that might be designed into the new tools.

Action: Harlan to confer with WERA operators to find out what engineering parameters can be sent with radial files to the national servers.

Action: Harlan to find out how non-NOAA users can access the GRIB2-encoded HFR data. Scott Glenn has had requests for data in GRIB2 from e.g. sailing community.

Action: Harlan to get NCEP data tank code for HFR data.

Action: Harlan to check with Zdenka to determine what, if any, progress can be made with CSDL during FY15. Also, Pat Burke has lots of interaction with CSDL and may have some insight.

NWS Interface

Jack Harlan gave a status update on the AWIPS and NCEP projects. The AWIPS rollout of HFR data to the WFO's is delayed until Feb 2015. The total vector data are flowing on NWSTG in GRIB2 format. The totals and radials are flowing into NCEP data tanks in BUFR format.

Action: Harlan to get data tank codes for HFR data.

Action: Harlan to find out how public can access GRIB2 formatted files.

Update on HFR Data into CO-OPS PORTS

Chris Paternostro gave a Powerpoint on the new product.

Primary focus is on Chesapeake Bay for prototyping with strong interest in NY Harbor and San Francisco Bay. (NY Harbor had been the prototype region due to strong interest from the NY Harbor Pilots but Hurricane Sandy destroyed the radars that were providing input.)