

Question 1: What are the likely key advances in ocean observations and associated technologies?

National Science Foundation funded three new Regional Class Research Vessels

Oregon State University will receive the first ship in 2021

The ships will come with Real-Time Data Presence or Coriolix and shoreside support model



CORIOLIX - Real time data QA QC

The ships will come with Real-Time Data Presence or Coriolix and shoreside support model:

- chart function
- real-time data portal
- sensor plots
- sensor alarms
- meta data

Going from 10-> 40 resident sensors. Challenging for technicians to support.

The screenshot shows a web browser window displaying the 'R/V Simulated Data Datapresence Dashboard'. The dashboard includes a navigation menu, a status bar, and several data tables. The status bar shows 'status ok' in black, 'mild warning' in orange, 'medium warning' in yellow, 'severe warning' in red, and 'inactive' in grey. The data tables are organized into three categories: Ocean Sensors, Navigation Sensors, and Meteorological Sensors.

Ocean Sensors

Salinity - TSG	33.35 PSU	Chla Fluorescence	0.890 µg/L	Light Attenuation	2.96 1/m	Water Depth - Echosounder	35.06 m
Water Temperature - TSG	18.64 °C	Water Temperature - Forward	15.99 °C	Water Temperature - Hull	11.05 °C		

Navigation Sensors

Vessel Speed - GNSS	0.00 knots	Vessel Course - GNSS	0.00 °True	Vessel Heading - Gyro	112.40 °	True Heading - Spdlog	-999.00 °
Magnetic Heading - Spdlog	-999.00 °	Vessel Speed - Spdlog	4.06 km/hr	Vessel Speed - Spdlog	2.19 knots		

Meteorological Sensors

Precipitation	0.007 V	Wind Speed	1.47 knots	Wind Direction	44.00 °	True Wind Speed	1.47 knots
True Wind Direction	156.40 °	True Winds u	-0.59 knots	True Winds v	1.35 knots	Air Temperature - Stbd	13.70 °C
Air Pressure - Stbd	1017.0 hPa	Air Relative Humidity - Stbd	98.4 %RH	Air Temperature - Bow	13.70 °C	Air Relative Humidity - Bow	98.4 %RH
PAR	0.0000 µE/cm ² s	IR Radiation	-4.7 W/m ²	SW Radiation	16.5 W/m ²		

For more information, please contact [Chris Romsos](#) (RCRV Datapresence Systems Engineer).
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Question 2: What is the role/evaluation of best practices and the OBPS in supporting these advances?

- Buy-in and visibility to the operators as well as the scientists
- Continue to review and collect Best Practices