

OPC's Hosting of the 2024 Mariners' Hazards Workshop

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Mariners' Hazards Workshop

The NWS Ocean Prediction Center (OPC) hosted the **Mariners' Weather Hazards Workshop** from April 14-16, 2024, with the goal of enhancing efforts to safeguard life and property at sea.

- Over 200 marine professionals, including representatives from government, military, non-profits, and private sectors, attended this hybrid event. International attendees included representatives from Canada, Argentina, Denmark, Iceland, the Bahamas, and Portugal.
- The workshop focused on the impact of weather on maritime operations, with topics such as hazard mitigation, vessel selection, weather forecasting, and sea ice analysis.
- Attendees engaged in interactive sessions and provided valuable feedback, with a focus on enhancing the user experience.

Workshop Focus

Day 1

Overview of Marine Weather Centers and Offices ○ Industry Partners & Stakeholders Introduction to the NWS ○ International Meteorological Community Panel ○ Ports, Special Operations, and Sailing Regatta

Day 2

Interactive Breakout Sessions ○ Ice and Freezing Spray ○ Sea Ice Panel

Day 3

Meteorology and Climatology ○ Outreach and Observations ○ Aircraft Operations ○ Future of Marine Forecasting ○ Workshop Summary and Wrap-Up



MARINERS' WEATHER HAZARDS WORKSHOP
16-18 APRIL, 2024

TOPICS TO BE COVERED

- SEA ICE & FREEZING SPRAY
 - Freezing Spray Impacts
 - Sea Ice Forecasting
 - Spillers from US Coast Guard
- EXTRATROPICAL CYCLONES
 - Climatology
 - Impacts on Port Operations
 - Forecasting approach to high impact storms
- MARINE FORECASTING
 - NWS Products and Services
 - High Seas Forecast
 - Search Spiller from the National Ocean Service

ABOUT OUR WORKSHOP

In an effort to provide the world's best marine weather forecasts the Ocean Prediction Center invites you to participate in a three day hybrid Mariners' Weather Hazards Workshop Spring 2024!

The workshop is geared toward a wide spectrum of marine users from coasters to cruise ships from the tropics to the arctic. Operational meteorologists hope to gain a deeper understanding for the maritime community so that we may continue to work toward protecting life and property at sea.



Diverse Interactive Breakout Sessions

A distinctive feature of this workshop was the interactive breakout sessions, which facilitated two-way conversations.

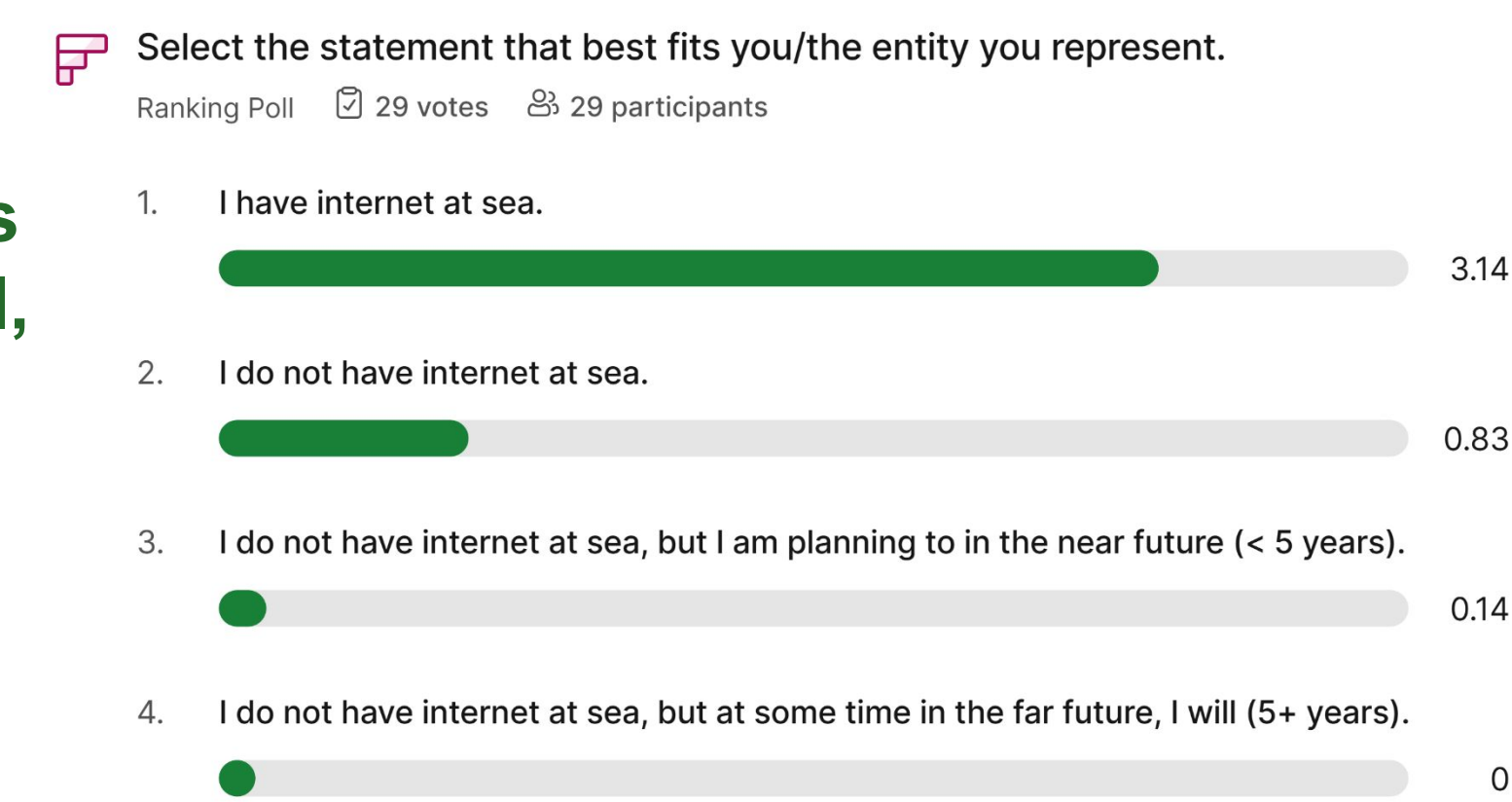
These sessions gave participants the opportunity to ask questions and learn more about NOAA's products and services, while also offering valuable feedback to subject matter experts on user needs related to the following topics:

- Extratropical Transition
- Heavy Freezing Spray and Ice Analysis
- Interactive Surface Analysis Demonstration
- S-100, known as the Universal Hydrographic Data Model

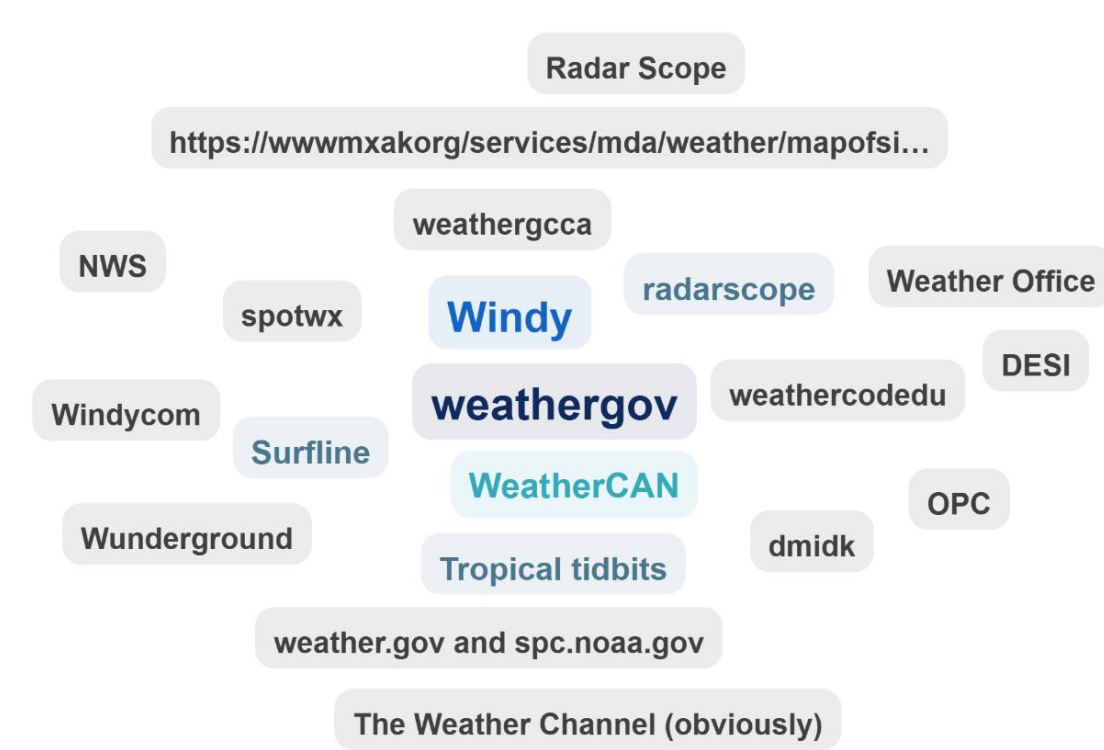
Attendee Engagement

During the workshop, we engaged with attendees in real-time by conducting polls and gathering feedback through Slido, creating an interactive experience that helped us gain valuable insights into our users' needs and preferences.

How is user experience evolving? Do legacy systems like radiifax remain essential, or could newer options, like interactive forecast maps, better serve users, even if online-only?



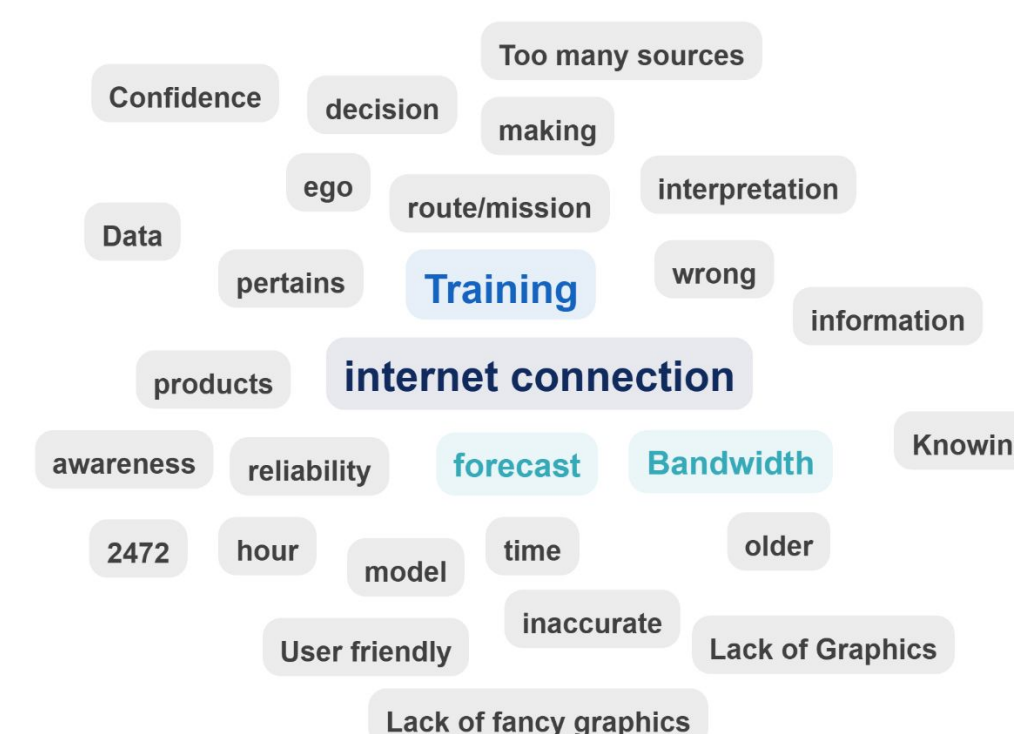
What is your go-to weather app/website for your operations?
Wordcloud Poll 54 responses 44 participants



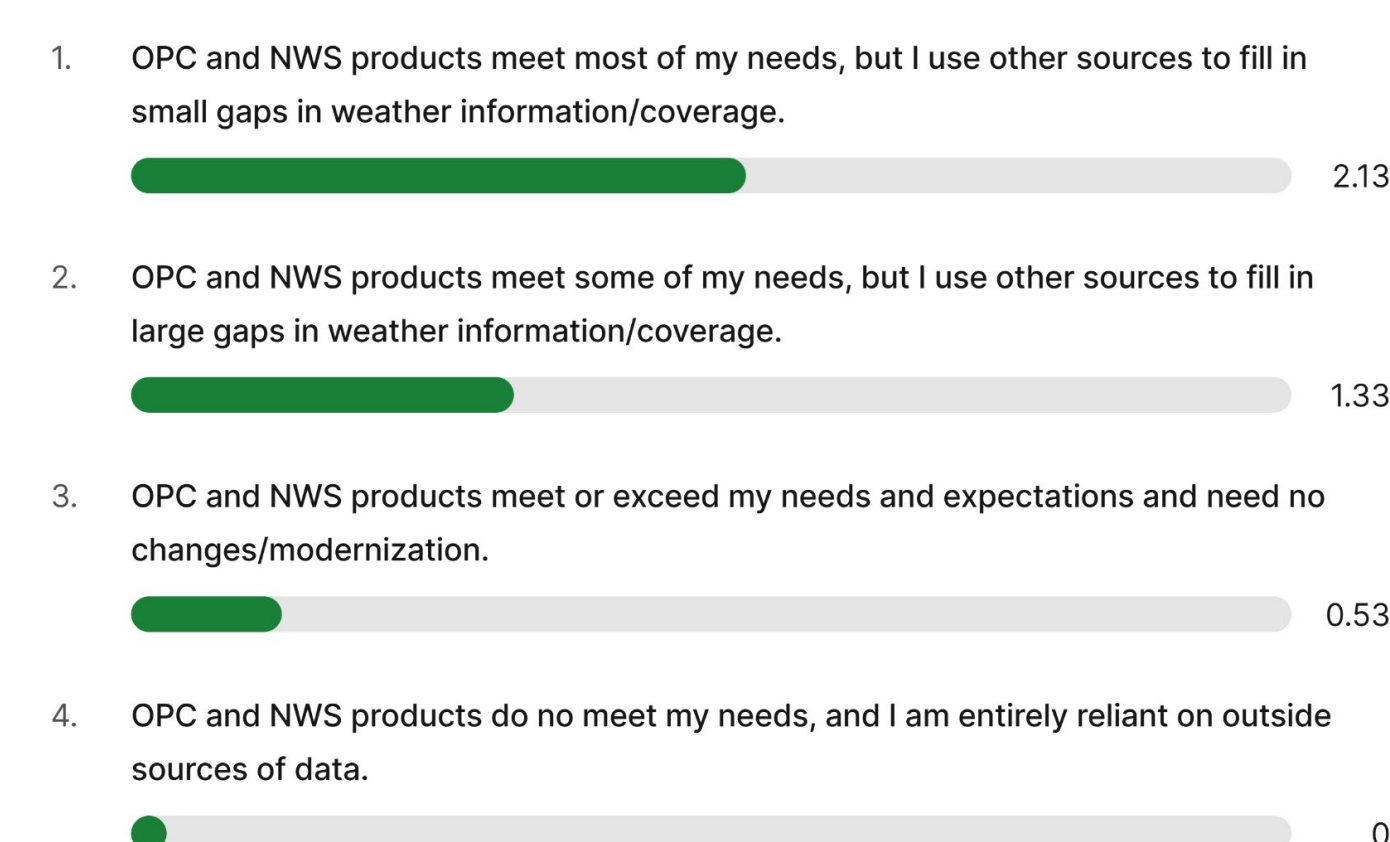
When seeking weather information, what source do you turn to first, and why? What features or qualities influence your choice of app or website? What formats and dissemination methods are most useful to mariners?

How can OPC and NWS improve support by ensuring accurate, timely, and relevant information? Where can communication, data access, or customization be enhanced to better meet user needs? What tools or collaborations could offer more effective, user-friendly support for critical decisions?

In your opinion, what are the biggest challenges faced by mariners in accessing and interpreting weather information while at sea?
Wordcloud Poll 28 responses 22 participants



Select the statement that best describes your usage of OPC products.
Ranking Poll 30 votes 30 participants



How are we meeting user needs? Is OPC effectively addressing the evolving demands of mariners and stakeholders, providing timely, relevant information and tools to navigate emerging challenges at sea?

Key Takeaways

- Real-World Impact:** The workshop strengthened the connection between forecasters and mariners across many regions, enhancing understanding of marine weather needs and NWS products.
- User-Friendly Information:** There was an emphasis on providing actionable, user-centric data that mariners can easily interpret and apply in real-time decision-making, which OPC has begun implementing through product expansions such as a full basin 24-hour forecast for both the Pacific and Atlantic Oceans.
- Better Communication Needed:** Participants discussed improving the clarity and accessibility of NWS marine products to enhance usability for diverse users at sea.
- Positive Feedback:** Attendees praised the workshop, highlighting its value with comments like "10 out of 10" and "Best conference combining virtual and in-person formats."

Future Directions

- Next Workshop:** The 2025 Mariners' Weather Hazards Workshop will take place at the National Hurricane Center's Tropical Analysis and Forecast Branch (TAFB) in Miami, FL, focusing on the cruise industry [Tentative Dates: Apr 29-May 1]. In 2026, the workshop will return to OPC with the goal of having over 50% of attendees be end users.
- Ongoing Collaboration and Continued User Engagement:** Continued engagement and feedback gathering with marine users to refine forecasting products and services ensure the NWS continues to meet the needs of the maritime community.
- Global Outreach:** Expanding participation from international communities to enhance global marine weather forecasting and collaboration.
- Advancements in S-100 Interface and Marine Weather Tools:** Integrating OPC products into the S-100 framework and developing advanced tools to improve weather data accessibility and accuracy for mariners.

Acknowledgements



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