Detailed agenda

Day 1 February 25: Introduction and Question 1

8:00am	Depart hotel
8:30am	Arrival, Coffee
9:00am	NOAA Research Overview and Discussion • Welcome and introductions • OAR & Review Overview • Q&A on Charge to Reviewers
9:45am	AOML Overview • AOML Lab Director Presentation • Clarifying Panel Member Questions
10:35am	Break
10:45am	AOML Overview continued and Discussion • Communications and Outreach
12:00pm	Informal lunch with Early Career professionals

1:00pm	**Question 1** - Collecting foundational observations and improving understanding of climate mean state, variability, and associated impacts
1:15pm	Theme 1 - Monitoring the key components of the Atlantic ocean circulation systems • AOML contributions to Global Ocean Networks Data Assembly (Drifters, Argo DAC) • AOML contributions to observing the Atlantic Meridional Overturning Circulation • Attributing the historical Atlantic Meridional Overturning Circulation changes • Theme 1 Discussion
2:15pm	Coffee Break + Tour of the Engineering Lab + Looking forward
3:00pm	Theme 2: Sustained Observations and Modeling of physical, chemical, and biological changes in the ocean • Observing the air-sea interface • Observing essential ocean variables: ocean carbon & biogeochemistry • Routine monitoring of marine communities using 'omics approaches

- Monitoring Coral Reef Ecosystem Environments
- Discovering the role of the ocean in long-term marine ecosystem changes: Marine carbon and ecosystem modeling
- Theme 2 Discussion

4:30pm Reviewer discussion (closed)

5:00pm Adjourn

Day 2 February 26: Question 1 (continued) and Question 2

8:30am Depart hotel

9:00am **Question 1** continued

9:00am Theme 3 - Discovering the role of the ocean in extreme weather

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- Seasonal hurricane outlooks
- Tropical Atlantic impacts on hurricane intensification and development
- Large-scale sea level changes and coastal inundation
- Theme 3 Panel Discussion

10:30am Break

10:45am Stakeholder closed session with reviewers
(Reviewers, Stakeholders discussing all of Q1)

10:45am Concurrent LO Session (LO reps, AOML Leadership & OAR HQ)

11:30pm Lunch (Reviewers and AOML leadership)

12:30pm **Question 2** - Improving our monitoring, understanding, and prediction of tropical cyclones and ocean phenomena as well as their broader impacts on extreme events and associated hazards

12:35pm Theme 1 - An integrated view of hurricanes

- Hurricane Field Program: Preparing the Armada
- Interactive Stations
    - Tail Doppler Radar: Operational Support and Research
    - Dropsondes: Operational Support and/or Research
    - Uncrewed Aircraft Systems: Taking Observations in Difficult Places

        - Uncrewed Marine Systems: Taking Observations in Difficult Places
        - Understanding Conflicting Data
    - Summary of Theme 1 and Looking Forward

1:55pm Break + Virtual reality experience

2:05pm Theme 2 - Making our observations count
- Advancing data assimilation techniques
- Inner-Core data assimilation strategies
- Oceanic Data Assimilation & Impacts

2:50pm Theme 3 - Modeling Hurricanes from above and below
- Advancing Model Developments (HFIP)
- Ocean Modeling for Improved Hurricane Forecasts
- Statistical Modeling
- Artificial intelligence for hurricane research and development

3:35pm Break + Virtual reality experience

3:45pm Question 2 Discussion

4:30pm Stakeholder closed session with reviewers
(Reviewers, Stakeholders discussing all of Q2)

5:00pm Reviewer closed session

5:30pm Adjourn

Day 3 February 27: Question 3 and Question 4

8:30am Depart hotel

9:00am **Question 3** - Advancing Science and Technologies to Understand Multiple Stressors on Marine Ecosystems

9:05am Multiple Stressors on Marine Ecosystems from Global to Local Scales
- Observing basin-scale ecosystem dynamics with satellite remote sensing: Seascapes, Sargassum, Vibrio
- Generating ecosystem assessments for decision makers and the public
- Providing actionable information for climate-ready decision making
- Quantifying the response of microscopic calcifying marine organisms to ocean acidification and alkalinization
- Informing reef conservation and restoration through experimental manipulations

10:00am	Question 3 Discussion
10:30am	Coffee break + Coral / Omics Lab Tours
11:15am	Stakeholder closed session with reviewers (Reviewers, Stakeholders discussing all of Q3)
11:45pm	Working Lunch (reviewers only)

1:00pm	**Question 4** - What should AOML's role be in developing its work environment for the continued pursuit of world-class science, and building strong connections with communities and stakeholders to ensure broad access to science results? • Overview / Summary • Data Accessibility
2:00pm	End user panel discussion • Kathryn Lohr, NOAA Office of National Marine Sanctuaries • Craig Setzer, Royal Caribbean Group • Rachel Silverstein, Miami Waterkeeper • Jessica Snowden, AtlantOS
3:00pm	Stakeholder closed session with reviewers (Reviewers, Stakeholders discussing all of Q4)
3:00pm	Concurrent OAR Session (OAR and AOML Leadership)
3:30pm	Reviewers Session (closed)
4:30pm	Preliminary Impressions & Clarifying Questions (OAR/AOML Leadership + Reviewers)
5:00pm	Adjourn
