

Science Council

NOAA SCIENCE COUNCIL MEETING November 5th, 2024 10:30 AM - 12:00 PM ET Google Meet

MEETING MINUTES ATTENDEES

Executive
Steve Thur, Chair
Miranda Bitting, Exec Sec
Emily Nocito, Exec Sec

Principal

Sean Corson, NOS John Cortinas, OAR Mike Ford, NESDIS Clay Porch, NMFS Randall TeBeest, OMAO Hendrik Tolman, NWS (Alt)

Advisory

Frank Indiviglio, NOAA Chief Information Officer Alison Krepp, Social Sciences Committee Co-Chair John McLaughlin, Office of Education Liaison Laura Newcomb, RDEC Chair Stephanie Oakes, Acting Scientific Integrity Officer Other Attendees Roxie Allison-Holman, OAR Whit Anderson, OAR Abigail Arnold, OAR Tamara Battle, OAR Victoria Breeze, OAR Devin Burri, OAR Megan Cromwell, NOS Shiv Das, OAR Graham Feingold, OAR Joseph Fillingham, OAR Katherine Flores, OAR Alex Flynt, NESDIS Jordan Gerth, NWS Edward Gorecki, NMFS Jake Gristey, OAR Andrew Heidinger, NESDIS Gabrielle Hillyer, OAR Jan Ising, OAR Jim Jenkins, OAR Monika Kopacz, OAR Ryan Kramer, OAR Katherine Longmire, OAR Victoria Luu, OAR Terence Lynch, OAR Brooke McHansen, NESDIS Valerie Mikles, NESDIS Jessica Morgan, NESDIS David Paynter, OAR Julie Price, NESDIS V Ramaswamy, OAR Ingrid Ramos-Guasp, NESDIS Bonnie Reed, NESDIS Laura Riihimaki, OAR Joseph Sedlar, OAR Sarah Shoffler, NMFS Mackenzie Solomon, HDQ Kenneth Vierra, OAR Meredith Wagner, NESDIS Natasha White, OAR



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Sharon Yaary, OAR Melissa Yencho, NMFS Isabel Zaragosa, NESDIS

CHAIR ANNOUNCEMENTS

- We have received the National Academy of Sciences Ocean Studies Board Q4 Report. It will be emailed to Council membership following this meeting.
- Stephanie Oakes has taken over for Cynthia Decker as the Acting Scientific Integrity Officer and will serve as the Science Council's Scientific Integrity Liaison.
- SoS Fact Sheet on Deep Sea Mining was taken down at request of interagency partners. Authors can review suggested edits per FRC and SI policy.
- NOS: can you review list of comments who provided comments (interagency)
- Chair: state had firm comments; USGS and BOEM were more have you thought about ABC; OSTP was asked by state why it did not go through interagency clearance

MINUTES

• Minutes from the October 15th Science Council meeting were approved.

ACTION ITEM REVIEW

• The Exec Sec reviewed all current action items.

BRIEFINGS

• Earth Radiation Budget Satellite Measurements Memo: Jake Gristey and Ryan Kramer

10:35 – 11:10 AM (35 min) Directional

Ryan Kramer: NOAA has a research need for climate critical satellite measurements of Earth Radiation Budget (herein ERB). We are proposing a value assessment to justify the need for ERB satellite measurement continuity that would be tackled by a Task Force under the Science Council. There are no plans to continue data collection under NASA. ERB is the most fundamental measure of climate change and therefore a climate ready nation must be able to monitor it. CERES is a set of tools that are currently on NASA and NOAA satellites but those will not fly forever. JPSS-4 will end in 2032 with no plans by NASA or NOAA to continue the data collection. With that, plans should materialize now to avoid a data gap. Other communities such as users and congress are thinking about it now. With no ERB Climate Satellite Measurement (ERB CSM), NOAA loses climate model development, validation, and calibration. Routine climate monitoring and attribution will also suffer, and the ability to understand impacts of SRM and other techniques will be reduced. Report to Congress on ERB satellite measurement for monitoring SRM is in draft form. There would also be degradation of NOAA-produced data products such as Climate Predication Center, blended OLR product from NWS, and the GOES-R out of NESDIS/STAR that is used for Coral Reef Watch and others. Value Assessment would not focus solely on CERES but all related to ERB CSM. Noting NOAA Societal Challenges, ERB Measurement addresses them all . The goals to this end include advising future satellite architecture decisions by documenting the value of ERB satellite record continuity. There is a large community of users and stakeholders, such as NASA and researchers



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throughout agencies. A value assessment report that maps the value of ERB satellite measure and details how existing ERB record is being used across LOs will highlight needs for continuity and provide general outlook on emerging ERB activities. A question to the Science Council on this is to what extent should NASA be involved and would you like representation on the writing team from LOs?

Discussion:

NESDIS noted that they don't want to lose traction in this area of work and it is important to get right but what the team is asking for in that value assessment is one we don't have is the clarity of which objective you are trying to achieve and what's the state of science to reach those. That clarity will help and that the value assessment will help weigh options for what we want to do. NESDIS noted that NASA needs to be involved and that they are not sure if the Science Council is right for all of it, i.e. maybe not the value assessment. The continuity that is needed is at the intersection of research effort from other agencies and wanting to mature the system and so we need to decide if we want to, but they are not our instruments; after about 2035 no plans for another launch by NASA of Libera. The value assessment should be done outside council but the gaps and identification would be a good fit to the Council, i.e. help make decisions.

RK noted that they have not thought about splitting it into more reports, which is probably a good idea. He said that was a conversation he would bring back and keep moving towards.

OAR agreed with NESDIS, with some thoughts on the role of the Science Council, and also possibly the NOSC. They see the importance in emerging requirements and while in the past it's evolving quickly and what raises awareness and concern on the OAR side to understand ERB and avoid being put into a position where OAR might not be able to measure in the way they need to; to combat this, it means making sure to follow processes of prioritization given the needs are evolving.

NWS noted they are moving towards evidence based decision making so this fits nicely into that. They feel there is a need to be clear on how this is messaged; is the threat of NASA taking this off their plate so are we trying to convince them to keep doing this or are we picking up the ball? They emphasized the need to be very clear on why this should occur.

NESDIS noted this might be the place to think and write about the scientific needs that emerged and the connectivity to work being done and articulate expectations of objectives and performance for that; e.g., this is where science is going to serve NOAA and this is what we need for that. That then connects to how to formulate requirements and let those NOAA processes around NOSC and elsewhere the work plan to achieve that.

Kramer agreed with the above statements.

NOS underscored NESDIS' comment regarding research and observations. They noted that all LOs are addressing what operational systems we can maintain in the long term and that this is a longer timeline. With that in mind, they don't want to get too far into the details on a particular launch or sensor.

The Chair had two sets of initial reactions. The first is that, in their mind, there is a clear potential role in the Science Council for articulating a research basis needed but noting the NOSC needs to be involved. If the Science Council is to do the value assessment and the primary potential users are parts of NOAA and



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parts of NASA, there may be a way forward through Congress. The Chair further noted on what the relative strength and weakness doing this assessment internally versus at arms length via third party assessment. That request would be to engage at least with the Office of the Chief Economist, especially on studies looking at the value of NOAA products and data streams; this seems to be that vein that the Council might be helpful with the value assessment. The Chair asked that, as a next step, RK and others from LOs revise the proposal to bifurcate the science piece and the economic piece, and to ask about internal or external assessment for the second part.

• Foreign Nationals Working Group Update: Devin Burri

11:10 - 11:35 AM (25 min) Directional

Devin Burri, Exec Sec FNWG: The Foreign Nationals Working Group (herein, FNWG) is tasked with developing guidance for NOAA on types of activities that may or may not require OSY clearance, including different scenarios of foreign national collaboration such as when DAO applicability is in question. They provided a progress update. Noting that the terms 'public' and 'not for public release' are terms that are not defined specifically within guidance such as DAO 207-12. They released tasker to the FNWG to collect examples of such. This resulted in the realization that not for public release can be different in different contexts. This also led to discussions between not for Public release ever vs not for public release at this time. This resulted in another tasker, as well as looking for official definitions from DOC OSY. Given these taskers, they revised the timeline to include a November FNWG meeting; the creation of an example scenario document which will feed into an if/then document with a tentative January review date for the Science Council. Some challenges the FNWG has faced include defining their own terms while comparing to DOC OSY as well as slow response to taskers and lack of meetings.

Whit Anderson, co-chair of FNWG, noted that the balance hangs in needing to take security seriously but also needing to give access to collaborators and others. The FNWG can keep trying to get OSY definitions or get non feasible definitions. A different option is that the FNWG have definitions crafted by FNWG members, or the FNWG can align definitions with PARR efforts as a third alternative.

Ed Gorecki, member of FNWG highlighted that communicating out the findings and the compliance will be critical.

The Chair concurred that we wanted to provide guidance on how compliance and mission functions intersect. One path forward could be going to OSY and saying "we have created definitions, we will proceed this way unless we hear otherwise."

NWS asked for clarification on foreign nationals and guests over contractor firm employees.

The Chair responded that the impetus was not those onsite but do have collaborations which don't require physical access to systems. Whit added that the procedure people would be following depended on interpretation, e.g. a google meet with a FN will need clearance before it. And clearance can get back logged

NWS agreed to all statements previously said.

• Closed Session: Vice Chair Selection Executive Session: Steve Thur



11:35 - 11:45 AM (10 min) Directional

Dr. José Garcia-Rivera was selected as the new Science Council Vice Chair via a vote by the Science Council principal members.