



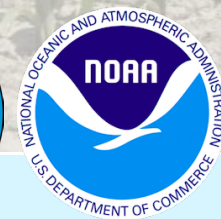
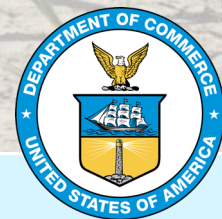
Strategic Research Guidance Memorandum

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Strategic Research Guidance Memorandum (SRGM)

- The SRGM provides the portfolio logic by which NOAA's R&D enterprise can be continually reviewed, evaluated and rebalanced in light of the Agency's evolving mission needs.
- The FY25 SRGM was finalized in May 2023
 - Available in the NOAA Science Council website sciencecouncil.noaa.gov
- The FY26 SRGM is under development
- Used a communications document



SRGM as a R&D Priorities Communication Document

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**National Oceanic and Atmospheric Administration
Strategic Research Guidance Memorandum
FY2026**

There are several key research and development themes emerging across NOAA, requiring budget consideration for their success. These high level themes are summarized below in random order. Details of FY25 research priorities mapped onto the NOAA 2022-2026 Strategic Plan are provided in this document in full.

Data acquisition, open data, big data	<ul style="list-style-type: none">Continued support of new aircraft and instrumentation, especially in light of upcoming aircraft retirement schedulesContinued data acquisition to monitor and predict the Earth system including space weatherEnsure data stewardship including record continuity, accuracy, consistency, and accessibilityExpand research to make use of big data, especially artificial intelligence and machine learningContinued expansion of open science capabilities and data delivery to support commerceExpand deep ocean instrumentation capabilitiesContinued investment and support for high performance computing
Data assimilation and reanalysis	<ul style="list-style-type: none">Build sustained operational reanalysis capabilitiesContinued support of data assimilation advancementsLeverage to forecasts, seasonal-to-decadal predictions, and product deliverySupport sustained, long-term satellite records and their incorporation into data assimilation, reanalysis, and models
Earth system modeling across timescales	<ul style="list-style-type: none">Advance skill and resolutionExpand outlooks and information across timescales for decision makersSupport transitions from research to operational outlooks and products
Social, Behavioral, Economic Sciences (SBES)	<ul style="list-style-type: none">Increase use of SBES along with product and service design and developmentMeasure societal impacts of NOAA's products and servicesConduct authoritative science to support new fields of nature capital and prediction applicationsSupport economic forecasting and cross-timescale economic impact assessment reliant on NOAA data
Workforce and partnerships	<ul style="list-style-type: none">Advance workforce development at NOAA and with our partnersLeverage strategic partnerships to deliver research and development goalsSupport co-design and co-development of applications to fully exploit datasets (satellite and other)
Accessibility and equity	<ul style="list-style-type: none">Build a workforce that reflects the diversity of our NationReview and expand accessibility and equity of our data, products, and services

May 2023

2026 Structure:

- R&D Areas
 - Critical Continuing
 - Emerging
 - Refocusing
- Risk Factors

Wish to communicate:

- Why this R&D area?
 - How do we benefit?
 - What is lost if we do not conduct this work?
 - How is the impact changing?
 - What do we need for success?



Proposed Outline for FY26

- Critical Continuing: What do we need to maintain our funding for and potentially prioritize in a resource constrained environment?
 - Observations
 - Improving forecasts and predictions
 - Arctic





Proposed Outline for FY26



- Emerging: What are the emerging areas we need to put science on a path to success when NOAA is asked for leadership down the line?
 - Future of Earth System Models, Climate Services Innovation
 - Nature Capital / Biodiversity / 'Omics
 - Artificial Intelligence





Proposed Outline for FY26

- Refocusing: What areas have reached maturity or transition phases? What can be de-emphasized versus prior communications?





Proposed Outline for FY26

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- Risk Factors that Support R&D Success: To focus the above sections on R&D areas, this final section lists risk factors separate from R&D topics that can alter success.
 - Competition for talent: recruitment, retention
 - Workforce diversity
 - Resources/Infrastructure
 - Leveraging advancements in Artificial Intelligence
 - Communication and sustainment of BIL/IRA funded work
 - Interagency coordination across disciplines and offices

Let's Discuss!



FIRST IMAGE FROM GOES-18 This composite color full-disk visible image is from May 5, 2022 and was created using the GOES-18 Advanced Baseline Imager (ABI) instrument. The image shows North and South America and surrounding oceans. Launched on March 1, 2022, GOES-18 is currently undergoing post-launch testing, validation, and calibration of its instruments and systems to prepare it for operations.

