



National Aeronautics and
Space Administration

2026 NASA SCIENCE

**Heliophysics Division Strategic Implementation
and R&A Reorganization**

Dr. Therese Moretto Jorgensen

Heliophysics Research Program Director

NASA Headquarters



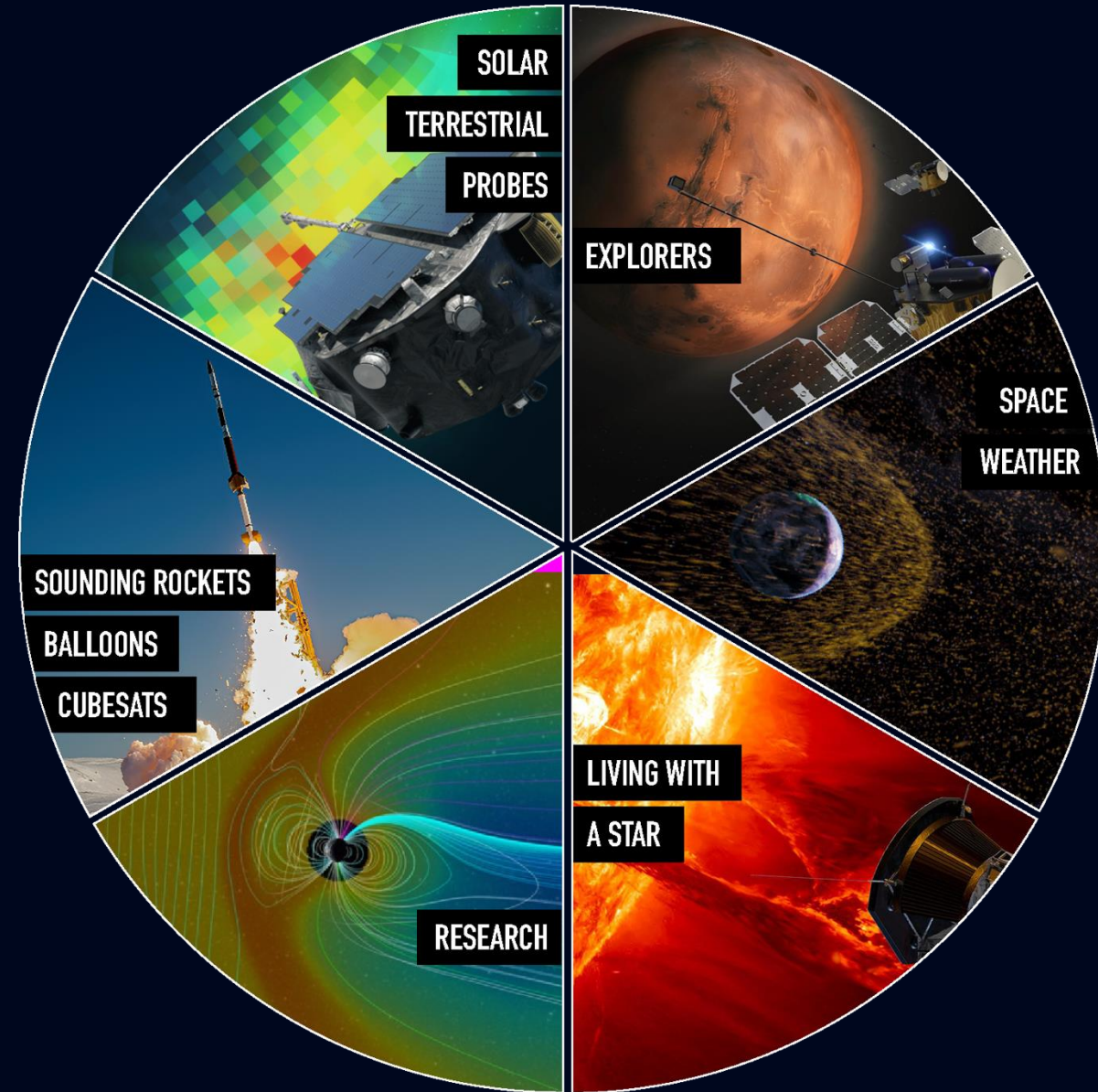
Heliophysics: The science of space weather and human exploration



Heliophysics Research

A broad range of strategic research programs to meet complex challenges over the next decade, including:

- Significantly advancing the frontiers of heliophysics science;
- Building the scientific foundations for applications and space weather operations;
- Enabling human exploration activities toward the Moon, Mars, and beyond; and
- Facilitating the space economy.



Heliophysics R&A Reorganization

GOALS

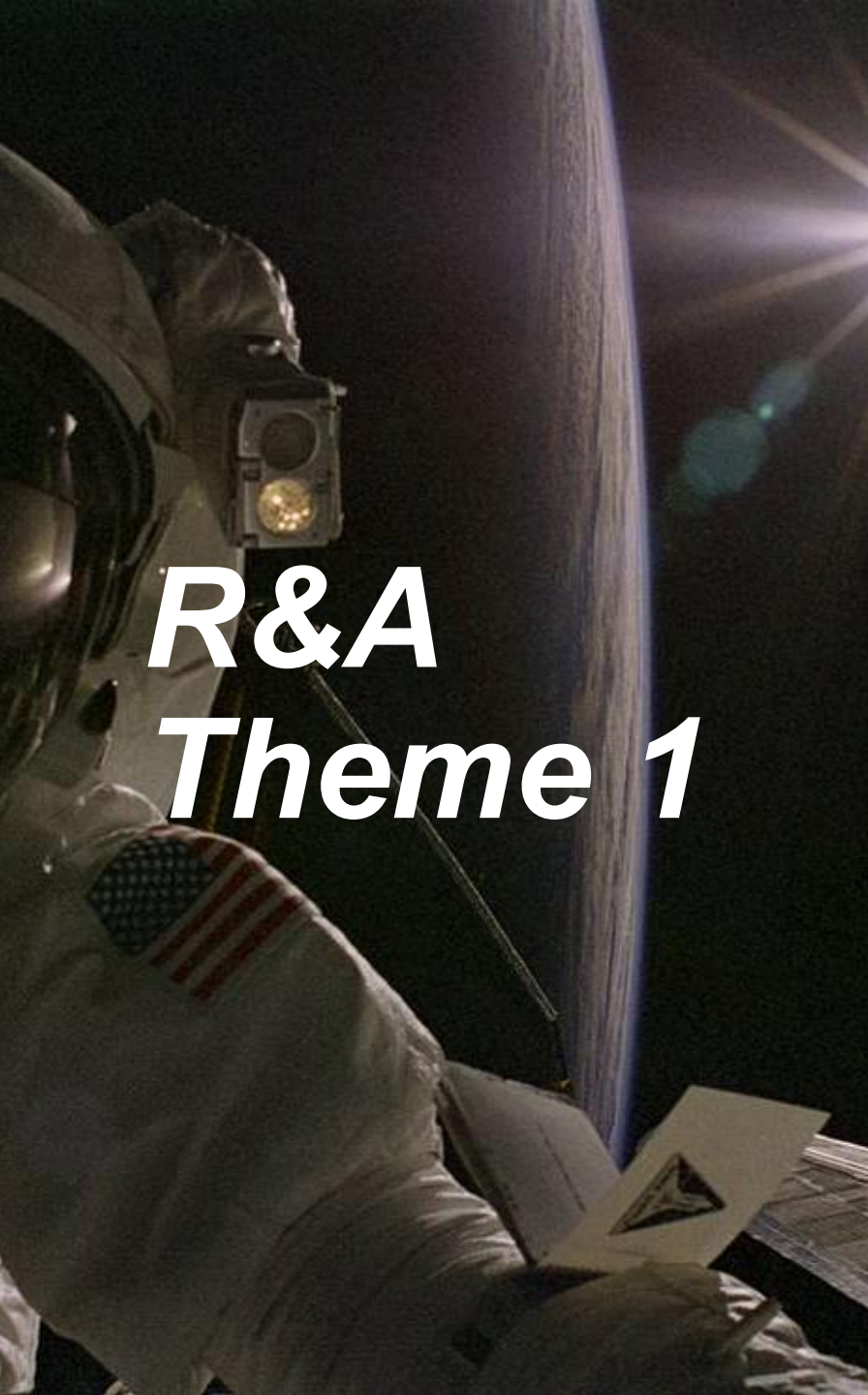
- Simplify and streamline structure to enable innovative Heliophysics research for the taxpayer
- Modernize approach to align research with National Priorities, Agency Priorities, NASA Heliophysics goals, and Decadal Survey science

ELEMENTS

- Programs organized by strategic, results-driven purpose rather than science discipline
- Strategic alignment, scalability, and metrics
- Collaborative, longer-term research
- Strengthened connections between different parts of Heliophysics portfolio, including the transition to applications

BENEFITS

- Emphasis on system-level and interdisciplinary science
- More opportunities for early- and mid-career scientists to explore different roles
- Reduced time spent writing and reviewing proposals



R&A Theme 1

Preparation for Spaceflight

Develop the scientific foundation for future spaceflight activities and explore future scientific directions

This theme includes

- Identification of new targets on the frontier of heliophysics
- Closure on knowledge gaps in preparation for a strategic spaceflight investigation
- Closure on knowledge gaps relevant to space weather, human exploration programs



R&A Theme 2

Focused Science Objectives and Foundational Research

Achieve priority science with existing data and capabilities

This theme includes

- Fundamental physical processes
- Integrated system-level science
- Immediate strategic needs



R&A Theme 3

Strategic Capabilities

Advance capabilities needed for priority heliophysics science

This theme includes

- New reference data, data products
- Analytical tools
- Model development



R&A
Theme 4

Rapid Access to Space

Mature heliophysics technology on the ground and demonstrate in space

This theme includes

- Instrument development
- Sub-orbital, CubeSat activities



R&A **Theme 5**

Space Weather Applications

Apply heliophysics science to improve space weather forecasting and decision-making capabilities

This theme includes

- Operational space weather research
- Research to operations transition



R&A Theme 6

Workforce Development

Foster and support a healthy pipeline of heliophysics scientists and future leaders

This theme includes

- Multiple methods for workforce training
- Supporting outstanding early-career professionals
- Developing innovative research initiatives and scientific leadership

Key Takeaways

New HPD R&A Program structure prioritizes innovative strategic advances by:

- Building on existing processes, including large team efforts (DRIVE, CoE, LWS FST teams)
- Progressing from foundational research to applications by addressing big questions and system-of-systems science.
- Introducing more opportunities for multidisciplinary multi-method investigations with increased award duration and size
- Promoting active portfolio management to drive progress forward using science-based metrics for success

