

National Aeronautics and
Space Administration



EXPLORESCIENCE

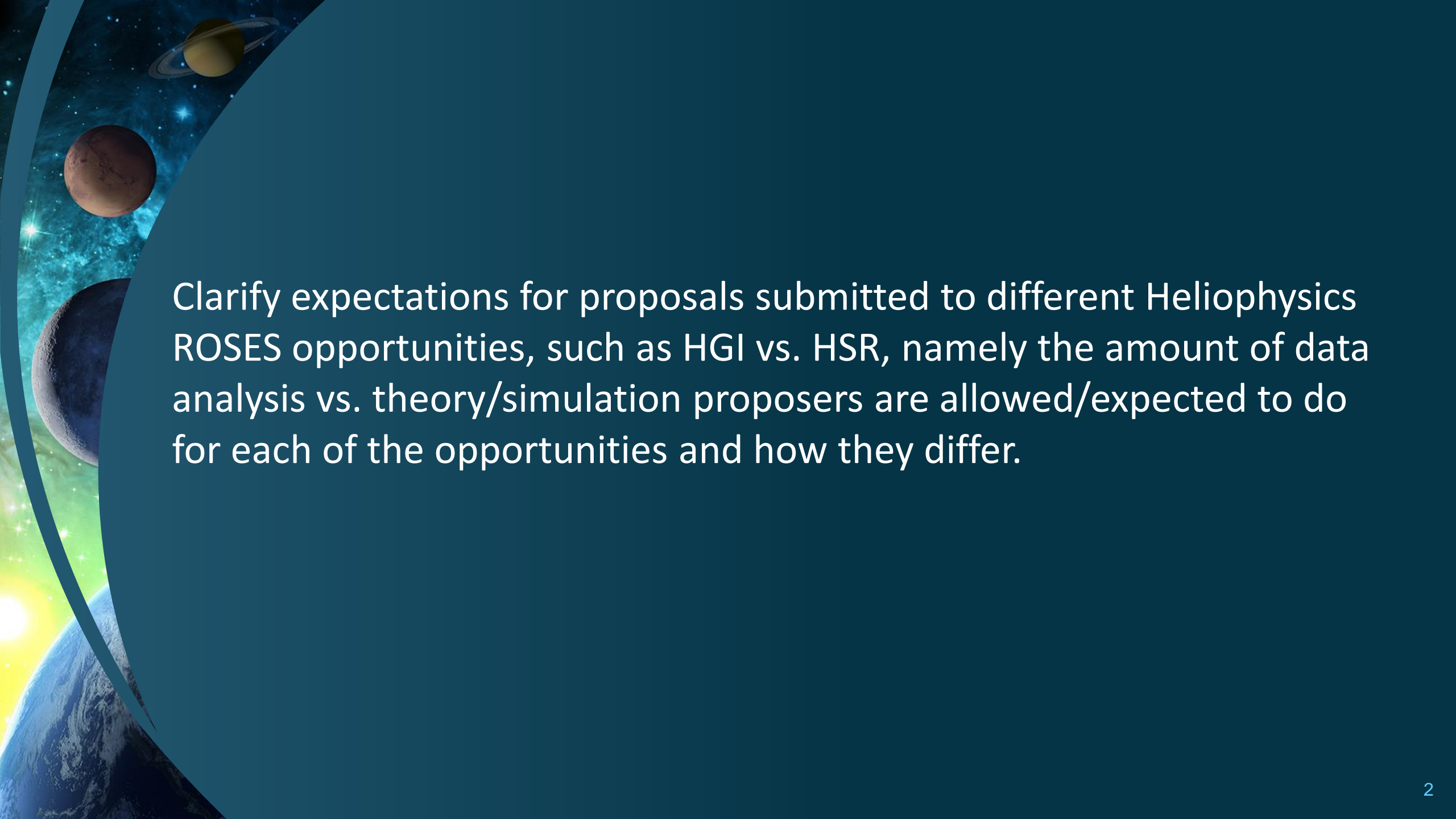
R&A Status

February 13, 2024

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R&A Lead



A vibrant space-themed background featuring a bright yellow sun in the bottom left corner, a blue and white Earth in the bottom left, a grey moon in the middle left, a reddish-brown Mars in the upper middle, and a yellow Saturn with its rings in the top left. The background is filled with a blue and green nebula and numerous stars. A large, semi-transparent blue circle is overlaid on the right side of the image, containing white text.

Clarify expectations for proposals submitted to different Heliophysics ROSES opportunities, such as HGI vs. HSR, namely the amount of data analysis vs. theory/simulation proposers are allowed/expected to do for each of the opportunities and how they differ.

ROSES B.2 HSR 2024

Requirements

Proposals must address 1 (or more) of 3 Heliophysics objectives:

- Explore and characterize the physical processes in the space environment from the Sun to the heliopause and throughout the universe
- Advance our understanding of the Sun's activity, and the connections between solar variability and Earth and planetary space environments, the outer reaches of our solar system, and the interstellar medium
- Develop the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth

All data used for proposed work must be available in a publicly accessible archive at least 30 days before the Step-2 due date (B.1 Overview)

- HDEE (B.12) is a good avenue to make data ready for public use.

Proposers are **encouraged** to include elements of:

- Data analysis or interpretation of current or historical NASA-spacecraft observations
- Theory
- Modeling
- Simulations

ROSES B.2 HSR 2024

Intent

The HSR program provides the opportunity for pursuit of innovative ideas and the employment of novel techniques without constraining the research effort

Investigations focused primarily on data analysis of currently operating HSO missions may be more suitable for HGIO

Investigations that include only theory, modeling and/or simulation may be better suited to HTMS

Note: If a Step-1 proposal is determined to be better suited to another program, the PI may be notified. The PI may be encouraged to withdraw the proposal and submit to another program. Proposals better suited for other programs but submitted to HSR may have a lower priority for funding.

ROSES B.4 HGIO

Requirements

- **Primary** dataset for analysis must come from currently operating HSO missions
 - Past 2 cycles have opened eligibility to CubeSats (e.g., ELFEN, MinXSS)
 - Exceptions allowed for mission data collected before entering Phase F that was not available for analysis in previous year's B.4 solicitation
 - All data used for proposed work must be available in a publicly accessible archive at least 30 days before the Step-2 due date (B.1 Overview)
- Proposers must demonstrate that data analytic tasks constitute two thirds of the research effort.
- Other techniques (e.g., modeling or theory) allowable up to 1/3 of research effort with proper justification of contributing to answering proposed science questions

Panelist instructions: Consistent application of respective panels to determine how to define 2/3 – 1/3 split (e.g., by tasks, or by FTEs committed)

Intent

Provide opportunity for entire community to propose research related to any currently operating HSO mission to maximize science return on recent mission investments

The background of the slide is a composite of two cosmic images. The top half features a dark blue and black space filled with numerous small, bright stars and a prominent, wispy blue nebula on the right side. The bottom half features a bright orange and yellow space filled with many small, bright stars and a large, glowing green and yellow nebula on the right side. A solid dark blue horizontal band runs across the middle of the slide, containing the word "Backup" in white text.

Backup