



December 16, 2022

SMD/Heliophysics Division

Subject: 2022 Heliophysics System Observatory Infrastructure Review Findings and NASA Response

Background:

In accordance with 51 U.S.C. §30504, two missions, ACE and SOHO, were invited to propose for extended mission operations as part of the Heliophysics System Observatory (HSO) Infrastructure.

The HSO Infrastructure Review panel was convened on October 19, 2022 and concluded on October 21, 2022. The HSO Infrastructure Review panel was made up of five subject matter experts

Each of the missions were evaluated using the following criteria:

- Factor C-1:* Usefulness and accessibility of the archival mission science data products and associated documentation
- Factor C-2:* Synergy with and benefit to the Heliophysics System Observatory
- Factor D-1:* Health of the mission and suitability of the mission operating model to maximize its contribution to the Heliophysics System Observatory
- Factor D-2:* Cost reasonableness of the mission's operations model
- Factor D-3:* Sufficiency of the management plan and, if applicable, succession plan

For each mission, there are two potential outcomes from this HSO Infrastructure Review:

1. funded for infrastructure operations; or
2. termination.

Both missions were reviewed favorably with a limited number of weaknesses identified. Based on the assessment delivered by the HSO Infrastructure panel, NASA has made decision for each of the two missions, as described below.

NASA Response:

NASA recognizes the amount of work that went into the HSO Infrastructure Review process and the diligence of the panel in the execution of their charge. The time and effort invested greatly contributes to the continues success of the Heliophysics Systems Observatory.

The HSO Infrastructure Review illustrates the value and continued contributions to the HSO that SOHO and ACE provide. Budget conditions allow the accommodation of the requested funding over the next two fiscal years. Specific budget guidance will be provided to each team separately.

NASA Decisions:

The decision for each off the missions are as follows:

SOHO – *Approved for continued infrastructure operations*

The SOHO mission is approved to continue operations as HSO Infrastructure, planning against the current budget guidelines. SOHO continues to operate while maintaining good health with positive resource margins while demonstrating significant synergy with other missions in the HSO.

ACE – *Approved for continued infrastructure operations*

The ACE mission is approved to continue operations as HSO Infrastructure, planning against the current budget guidelines. ACE remains in good health with sufficient resources to continue operations while providing strong synergy to the solar-observing missions in the HSO.

Acknowledgement:

NASA acknowledges the assessment from the HSO Infrastructure Review. NASA is exceedingly grateful for the members of the community who participated in the evaluation of these operating missions.

Sincerely,

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