

2026 Heliophysics Full Senior Review

Call for Proposals

1. Overview

NASA’s Science Mission Directorate (SMD) conducts reviews of its operating missions on a 3-year cycle per Title 51 U. S. Code §30504, as modified by the NASA Transition Authorization Act of 2017 (P.L. 115-10), to maximize the scientific return from these missions within finite resources which reads, in part:

- (1) *The Administrator shall carry out triennial reviews within each of the Science divisions to assess the cost and benefits of extending the date of the termination of data collection for those missions that exceed their planned missions’ lifetime.*
- (2) *In conducting an assessment under paragraph (1), the Administrator shall consider whether and how extending missions impacts the start of future missions.*

The 2026 Heliophysics Division (HPD) Senior Review will assess the missions within the Heliophysics System Observatory (HSO) that are in extended operations, including scientific and data merits, performance of the missions, and the balance of the portfolio. The 2026 HPD Senior Review will comprise two separate reviews held in parallel. The 2026 HPD Full Senior Review will assess the following 4 missions: IRIS, MMS, Parker Solar Probe, and THEMIS. The 2026 HPD Simplified Senior Review will assess the following 7 missions that are currently designated as HSO Infrastructure: GOLD, Hinode, SDO, SOHO, STEREO, TIMED, and Wind.

The 2026 HPD Senior Review will cover extended mission operations in the period of FY2027 – FY2029. HPD will use the findings from this review to prioritize the operating missions, define an implementation strategy, and give programmatic direction and budgetary guidelines to the missions concerned for the next 3 fiscal years (FY2027, FY2028, and FY2029). HPD will also use budget information submitted to the Senior Review to plan for support of extended mission operations in later years (FY2030 – FY 2032).

This Call for Proposals addresses requirements for the Full Senior Review. Further details regarding proposal requirements and the review process are provided in Section 3, *General Instructions to Proposers*. The Full Senior Review panel (hereafter referred to as “the panel”), formed by NASA Headquarters (HQ), will assess the proposals using a common set of evaluation criteria (see Section 4, *Senior Review Panel*, and Section 5, *Evaluation Criteria*) and will submit a report of their findings to the HPD Director to be used as input for decisions on the HSO portfolio. The potential outcomes for missions are fully described in Section 3.1, *Full Senior Review* and in Section 6, *Decision Process*.

Missions proposing to the HPD Senior Review will compete for an allocation from a pool of funds composed primarily of the budgets from all Heliophysics missions in extended operations. HPD strives to maintain a scientifically well-balanced portfolio consisting of both new and

continuing missions within the finite resources available. Given the dynamic and constrained budgetary solution space within which HPD operates, missions will be expected to significantly reduce costs and find efficiencies for operations in their proposals. It is understood that such cost reductions and efficiencies may lead to higher operational risk and/or increased risk of data collection degradation.

2. Schedule

This Senior Review will be held in the Spring/Summer of 2026. The Senior Review will be an in-person meeting in the Washington, D.C., metropolitan area, with an option for hybrid participation. The current schedule is as follows (all dates are subject to change):

Draft Call for Proposals Issued	February 27, 2026
Pre-Proposal Briefing to Mission Teams	March 2026
Final Call for Proposals Issued	March 2026
Senior Review Proposals Due	May 2026
Mission Presentations to Senior Review Panel	May 2026
Draft Senior Review Recommendations to HPD	May 2026
Senior Review Panel Report Delivered to HPD	June 2026
HPD Response and Letters of Direction to missions	August 2026 (NET)
Publication of Senior Review Panel Report	August 2026 (NET)

3. General Instructions to Proposers

3.1. Full Senior Review

The Full Senior Review will assess operating missions within the HSO for scientific and data merit, mission performance, and portfolio balance. Strategic science missions (see Section 3.2.1), Explorers, and Missions of Opportunity that have successfully completed their prime mission and currently include a mission-funded science investigation will be invited to propose to the Full Senior Review.

Missions undergoing a Full Senior Review will be assessed on factors similar to those used in previous Senior Reviews, including but not limited to: success of the previous mission science investigation, merits of the proposed science investigation, contribution to the HSO, the health of the mission, and plans for continued mission management and operations. Assessment of mission management and operations will include: the management and reporting of funding, the suitability of the mission operating model to maximize its contribution to the HSO, be a responsible actor in space, workforce development plans, and succession planning to develop future mission leaders.

Potential outcomes of the Full Senior Review are:

- Continuation of mission with funding for management, operations, data, research, and an invitation to the next Full Senior Review (applies only to Strategic Science missions, see Section 3.2.1).
- Continuation of mission with funding for management, operations, data, research as a Repurposed Science mission (see Section 3.2.4), and an invitation to the next Full Senior Review.
- Continuation of mission with funding for management, operations, data, a ramp down of research funding over the following three years (Transition Science mission, see Section 3.2.2), and an invitation to the next Simplified Senior Review as an HSO Foundational Science mission (see Section 3.2.3).
- Termination of mission.

3.2. Mission Categories

3.2.1. Strategic Science Missions

Strategic science missions are those missions for which SMD and/or HPD directs the science goals based on highest Decadal Survey priorities. Currently, MMS and Parker Solar Probe are categorized as missions of strategic significance. These missions will be considered for extended operations with continued funding of scientific research via project funds on a case-by-case basis. This ensures that HPD continues to be supportive of national priorities and initiatives that have been recommended by the Decadal Survey and addressed by these missions.

3.2.2. Transition Science Missions

The transition phase is a three-year period for projects to ramp down project funded research to zero and ramp up competitively funded research. This phase is defined as such to allow time for mission science team members and other researchers to propose and be awarded funds via competitive funding avenues before funds through the project are ramped down to zero. Missions in the transition phase will be referred to as Transition Science missions. Currently, IRIS and THEMIS are categorized as Transition Science missions.

After the transition phase is completed, projects will be invited to propose to the next Simplified Senior Review for continuation as HSO Foundational Science missions. HSO Foundational Science missions receive funding for project management, mission operations and data activities. By continuing to fund core leadership functions throughout the life of the project via project funds, key team personnel and institutional knowledge will be maintained while securing mission science for the benefit of the wider Heliophysics community.

3.2.3. HSO Foundational Science Missions

HPD is introducing a new category of missions called HSO Foundational Science missions in place of HSO Infrastructure. HSO Foundational Science missions will provide long-term observations and measurements of physical phenomena or regions of space that are foundational to the advancement of Heliophysics science knowledge and understanding. They will also ensure continuity of unique observations and measurements that meet NASA objectives and national

priorities such as space weather and support of exploration initiatives. While these missions will not receive funding for mission science investigations, they will be a critical component of the HSO fleet of science missions. HSO Foundational Science missions will be expected to work closely with the Heliophysics Digital Resource Library (HDRL) to ensure that science data products are accessible to the community in a timely manner.

3.2.4. Repurposed Science Missions

If a project would like to be repurposed for a new extended mission, the Principal Investigator (PI) or Project Scientist (PS) may petition to the HPD Operating Missions Program Executive and Program Scientist to be invited to the Full Senior Review for evaluation as a repurposed science mission. Qualifications for consideration will include but are not limited to significant change of operations such as a new orbit or constellation configuration for new scientific objectives and new observations. Repurposed science missions will be considered for extended operations with continued funding of scientific research to accomplish the scientific objectives of the new investigation via project funds on a case-by-case basis.

3.3. Proposal Format

Missions participating in the 2026 Senior Review shall submit a presentation proposal to either the Full Senior Review or the Simplified Senior Review, along with all required additional documents described in Section 3.4.11. No other proposal materials are required or will be accepted. Missions that are invited to propose to the Full Senior Review may instead choose to propose to the Simplified Senior Review for continued operations as an HSO Foundational Science mission.

Presentation proposals shall be submitted in PowerPoint format. No template will be provided for the presentation proposals; however, proposals shall include the content described in Section 3.4 and should adhere to the presentation duration instructions and approximate timing recommendations provided in Section 3.7.

Budgets shall be submitted as Excel spreadsheets using the format provided in the attached Budget Template and shall cover a planning window from FY2027 to FY2032. The Budget Template contains instructions and the mandatory format for the budget portion of each proposal.

3.4. Proposal Content

The main body of the presentation proposal shall include the elements described in Sections 3.4.1 to 3.4.9. Proposals for the Full Senior Review are required to address all proposal elements. Proposals for the Simplified Senior Review are not permitted to propose science objectives for the mission to complete in the next extended mission.

3.4.1. Completion of Previous Science Objectives

All missions shall describe completion of their previous science investigation. This investigation includes either the Science Objectives (SOs) approved in the 2023 Senior Review, for those missions included in that Senior Review, or the prime mission SOs, for missions proposing for their first extended mission.

3.4.2. Proposed Extended Mission Science Objectives

Proposals shall present achievable SOs and describe the research plan that will lead to their completion. These SOs are narrowly focused scientific targets that are part of a larger strategy to achieve a Science Goal (SG). The mission team will achieve these SOs within the requested in-guide budget.

Proposals shall discuss how completion of these SOs would make significant progress on clearly defined SGs. They shall further discuss how those SGs address specific Heliophysics Division goals, as defined in the Division's Strategic Objectives and the 2024 Heliophysics Decadal Survey.

Each proposed SO shall require using the proposing mission's data, is encouraged to leverage other HSO data, and may use non-HSO data. Proposals that require data, a facility, or other resources not under the direct control of the mission team shall include a discussion about the risk of resource availability for the mission's use during the period under consideration in this Senior Review.

Over-guide Requests (Optional)

Proposals may include additional achievable SOs that require resources beyond the in-guide budget. The proposal must provide the additional SO research plan(s) and detailed budget justifying an over-guide request for this increase in scope.

Under-guide/Descope Offers (Optional)

Proposals may offer descopes (under-guides) to reduce the mission budget while preserving the highest-impact SOs. Innovative approaches that would reduce mission operations and science operations costs are encouraged.

3.4.3. Transition Plan to Competitively Funded Research (Transition Science proposals only):

Proposals from Explorers and Missions of Opportunity that currently include a mission-funded science investigation shall include a plan to ramp down project funded research to zero over three years beginning in FY2027. Research activities that are necessary for calibration and/or validation of mission data products should be included the Data and Code Management Plan (Section 3.4.8 of this document).

3.4.4. Contributions to the HSO and National Priorities:

Proposals shall discuss science investigations enabled or enhanced by the mission's continued operations, either alone or with other HSO components. These investigations are not expected to be completed by the mission team within the requested budget. All proposals shall also describe how continued operations would benefit the Heliophysics research objectives described in NASA's 2025 SMD Science Plan (Section 7.2 of this document). The mission *must* continue to produce meaningful and significant science data.

This discussion should include a plan for adjusting the mission orbit(s) and configuration if applicable; such adjustments may either facilitate synergy with other HSO components or address potential gaps in the HSO's coverage. The discussion should focus on investigations that

require or benefit from a long observation period (e.g., related to the solar cycle, improving signal-to-noise on specific observations, etc.) or that benefit from the mission's particular data. These investigations could include improvements or extensions on those previously conducted with the mission data or address studies started with other mission data. The discussion should also address the risk of potential unavailability of other HSO resources. This discussion will be used to assess the mission's contribution to the HSO.

Proposals shall discuss the value of the mission data products in addition to the scientific contribution to the HSO. This discussion should include factors such as accessibility, usability, uniqueness, and usefulness of mission data. Accessibility and usability refer to how easily archival mission data products can be accessed and used for research by the Heliophysics community outside the mission team. Uniqueness refers to data products resulting from observations or measurements not available from other missions. Usefulness refers to the utility and value of the data to the Heliophysics community, as determined by metrics such as the number of publications or citations using mission archival data products, or the number of data downloads from either the PI institution or from NASA archives. The discussion of usefulness should also include whether mission data products are required for continuity of observations to meet Congressional requirements such as those in the [PROSWIFT Act](#) or other national priorities.

3.4.5. Current Mission Status

Proposals shall contain the status of the various mission components, including the spacecraft bus, instruments, and ground system(s) (e.g., spacecraft control center, science center). The proposal should summarize the capabilities and health of the components and systems (including *but not limited to* propellant, power, consumables), instrument performance, and point out limitations to future science investigations because of degradation, aging, use of consumables, obsolescence, etc. If applicable, all missions proposing for a second or later extended mission shall describe how the mission addressed feedback from the 2023 Senior Review.

3.4.6. Proposed Extended Mission Operations

Proposals shall describe the activities required to maintain operations during the proposed extended mission. Maintaining operations includes the sustained and safe operation of the mission spacecraft, any supporting facilities, and delivering high-quality science data products to the designated NASA archive. When a mission is in extended operations, NASA will accept higher operational risk, lower data collection efficiency, and instrument/mission degradation due to aging. Along with this greater risk, the cost of implementation is expected to decrease as the operational modes, the nature of the instruments, and the data they produce are better understood. Missions are strongly encouraged to propose and justify an increased risk of data collection degradation in exchange for an associated reduction in cost during the proposed extended mission. For example, greater reliance on autonomous operations and acceptance of longer data outages for anomaly response should be considered. It is expected that a continuous improvement process will result in reductions in the cost of established activities during the proposed extended mission. Missions are also encouraged to propose innovative measures to increase efficiency and/or reduce costs in aggregate during the proposed extension period.

Proposals shall include information related to how the mission is a responsible actor in space. This information should demonstrate that the mission has the technical reliability, resources and consumables to de-orbit or decommission in a manner compliant with the orbital debris mitigation requirements in NASA-STD-8719.14C, *Process for Limiting Orbital Debris*.

Proposals shall describe any operational changes that would potentially require modifications to the End of Mission Plan (EOMP). Proposals shall address any risk to executing the EOMP. Missions should work with their respective Center Safety and Mission Assurance (SMA) organization to ensure the contemplated changes do not violate requirements levied under NPR 8715.6B, *NASA Procedural Requirements for Limiting Orbital Debris and Evaluating the Meteoroid and Orbital Debris Environments* or do not affect the existing EOMP. Proposals will not include the EOMP itself. If necessary, HPD will work with the Center SMA organizations to document that the mission plans are up to date and compliant with the relevant requirements and processes.

If applicable, proposals shall describe the continued need for and support from centralized services such as Space Communications and Navigation (SCaN) and spectrum allocation complete with alternatives identified if those centralized services have a reduced capability or increased cost associated.

3.4.7. Management Plan

Proposals shall include the project organization and roles and capabilities of key personnel, including but not limited to PI/PS and Project Manager (PM). Changes in key personnel will be documented. The Management Plan shall include a section on workforce development and leadership succession planning and may include nominations for replacement or successor of key personnel.

3.4.8. Data and Code Management Plan

All missions shall adhere to the Scientific Information Policy for SMD (SPD-41a) and the Heliophysics Science Data Management Policy (see links in Section 7.2 of this document).

Proposals shall describe the state of the mission data and archiving process and the anticipated long-term (< 50 years) legacy of the mission data. This section shall document and discuss known data issues that impact the data's current and future usefulness or usability (e.g., instrument failures, incomplete calibrations, documentation). It shall describe the current and planned activities that support the data processing and archiving, including *but not limited to* calibration updates, data validation, interfacing with the end-user, the update of relevant documentation, and the potential publication of related papers.

All missions *must* fully and completely archive their data products in the NASA Heliophysics Data Archives. These data shall be of the highest quality produced by the mission and in a format that meets Heliophysics Science Data Management Policy requirements (see link in Section 7.2 of this document). At a minimum, deliveries shall include datasets in appropriate formats, SPASE descriptions for the data to allow them to be accessible and usable by both specialist and non-specialist users, and proper documentation.

The archival data products shall be described in the Project Data Management Plan (PDMP). The algorithms for the processing and calibration of the data shall be described in the Calibration and Measurement Algorithms Document (CMAD). This section of the proposal shall not unnecessarily repeat information in the PDMP or CMAD and will reference those documents as needed. Links to templates for the PDMP and CMAD can be found in Section 7.3. The project PDMP or CMAD shall be updated as needed to reflect changes.

Missions that have not archived all data products in a NASA Heliophysics Data Archive shall propose a reasonable, realistic, and well-justified data curation and archival plan that includes inputs from the target Heliophysics repositories at the HDRL. The plan shall describe the tasks necessary to immediately initiate the transition of all mission data products to the appropriate Heliophysics repositories, identify realistic and reasonable resourcing for both mission and repository curation personnel to execute those tasks, and provide a timeline for completion of the tasks before the next Senior Review.

All missions shall provide a plan to release, under an open-source license, project-originated code that was developed for end user data access and analysis. All associated documentation should accompany the release of the code. This requirement does not apply to:

- Calibration and processing codes that implement the algorithms described in the CMAD, unless there is significant utility in doing so.
- Code that originated outside of the mission and has contributed to the mission.
- Personal research code that is not useful to an end user or that is near-trivial to redevelop.

3.4.9. Budget Narrative

The Budget Narrative shall discuss the proposed budgets, labor, major equipment, and other expenses for the in-guide budget, and explain in detail sufficient to allow insight into the incremental cost of each proposed task. The budget shall include all project-specific costs, including costs supported by the project budget, NASA-furnished mission services, and direct or ‘in-kind’ services from non-NASA sources.

3.4.10. Backup Material

The following elements shall be included as backup material in the presentation proposal:

- i. Acronym List: List of all acronyms used in the main body of the proposal.
- ii. References: List of all references to external publications cited in the main body of the proposal.
- iii. Team Publications: List of relevant journal publications from the past 3 years where the primary author is or was on the mission team during the execution of the research and the research was funded by the mission.
 - When possible, a Digital Object Identifier (DOI) should be included.
 - It is recommended that the publications should be listed in sequence with the most recent refereed publications first. It is appropriate to list papers presented at American Geophysical Union (AGU) and American Astronomical Society (AAS)

meetings, other conferences, Ph.D. theses, etc., though these should be listed separately from the listing of the refereed publications.

- iv. External Publications: List of relevant journal publications from the past 3 years where the primary author is not or was not on the mission team during the execution of the research or the research was not funded by the mission.
 - o When possible, a DOI should be included.
 - o Missions may identify, via bold font, external publication co-authors that were mission team members whose work on the external publication was supported by the mission.

3.4.11. Additional Documents

The following additional documents shall be submitted with the presentation proposal:

- i. Budget Spreadsheet(s): see Section 3.5 for details.
- ii. Project Data Management Plan (PDMP): Each proposal shall include an updated Project Data Management Plan (PDMP) for curating, archiving, and retaining science data products arising from mission operations in a manner consistent with the Heliophysics Science Data Management Policy and the Science Mission Directorate Policy SPD-41a. A template for the PDMP is provided in Section 7.37.3. Proposers shall engage the HDRL early in the PDMP development process to develop a reasonable, realistic, and well-resourced plan that is compliant with current HPD policy.
- iii. Calibration and Measurement Algorithms Document (CMAD): Each proposal shall include a Calibration and Measurement Algorithm Document (CMAD) that describes the mission instrumentation and how the mission will conduct inflight calibrations and details the algorithms for converting instrument signals to scientific measurements. A template for the CMAD is provided in Section 7.3. Projects with a CMAD that has previously been approved by NASA shall deliver an updated version.

3.5. Budget

Each mission shall use its in-guide budget, as delivered by the Program Executive for the Senior Review with this Call for Proposals. Missions should contact the Program Executive for the Senior Review (see Section 7) for assistance with any budget questions during this Senior Review. The budgets that will be submitted in the parallel Program Planning and Budget Execution (PPBE) 2028 process must be fully consistent with those proposed to the Senior Review.

Each mission shall submit the required Budget Template for, at a minimum, an in-guide submission. The in-guide budget shall prioritize operations over any non-operations tasks, with science research funding reduced to accommodate any operating requirements. If the current budget program guidance provided for any of the years under consideration is zero and the project is proposing to continue operations during that year, the proposal shall include an over-guide request to support that year's activities.

Proposals may request over-guides for specific enhancements to the mission, whether operations tasks, science tasks, or other mission activities. Any requests that exceed the in-guide allocation

shall be detailed in over-guide requests, with each over-guide on a separate budget spreadsheet in the Budget Template. Multiple over-guide requests may be listed within this section, and the proposal shall clarify any interdependencies between them. The proposal shall detail and provide a description of the additional tasks. An over-guide for operations shall not be requested before all non-operation activities have been removed from the in-guide budget. Any proposed over-guide shall be clearly separable from the in-guide and from other proposed over-guides.

Proposals may offer descopes (under-guides) to reduce the mission budget while preserving the highest-impact scientific activities. These descopes should be set to allow meaningful cost savings to NASA by substantively reducing the scope of the science investigation, if proposed, and/or of mission operations. These descopes may increase the risk of the mission. Innovative approaches that would reduce mission operations and science operations costs are specifically encouraged and can include things such as reduced telemetry or data downlink requirements for systems that have been in extended operations and are well known. Depending on the nature of the descopes, the proposal may present these descopes as independent options, or cumulatively.

Any mission requiring the use of NASA High End Computing resources is requested to fill in the best estimates for those needs by fiscal year in the Budget Template, Sections VII and VIII. The units of accounting are Standard Billing Units (SBUs), the definition of which can be found at <https://www.hec.nasa.gov/user/policies/sbus.html>. Missions that require High End Computing assets but do not fill out these Sections of the Budget Template will receive a lower priority in access when allocations are made annually or will not receive an allocation.

The Management budget shall include funds for key roles such as the mission PI, PM, PS and instrument PIs for all activities needed to manage the project. Co-Investigators (Co-Is) shall not be included in project management activities and associated funding.

The Operations budget shall include funds for mission operations and science operations. Mission operations include activities necessary to maintain mission (spacecraft or stand-alone instrument, as appropriate) health and safety, and to maintain and operate necessary mission-support infrastructure (e.g. ground stations, hosting fees). Examples of mission operations activities include planning and execution of spacecraft maneuvers, orbit maintenance, maintenance of spacecraft subsystems, monitoring and allocation of spacecraft resources such as power and memory, commanding and telemetry. Mission operations may also include the development and/or procurement of new ground assets. Science operations include planning and execution of instrument observations and/or measurements and instrument calibration activities.

The Data budget shall encompass activities necessary to process, calibrate, validate, and archive science and engineering data products defined in the Project Data Management Plan. The data budget shall not include any costs that would be incurred from scientific research investigation or conclusions utilizing mission data.

The Research budget shall include activities necessary for the science investigation(s), including but not limited to research activities, theory and model development, publication of research results, conference attendance, etc. This shall include funding for Co-Is who are members of the

mission or project science team. The research budget explicitly shall not include funds for data processing, calibration, validation and archiving activities.

It is recognized that there may be some overlap and/or dependencies between these budget categories. For example, some research may be necessary to validate science data products, and planning instrument observations frequently depends on the outcome of data calibration and validation activities and research results.

3.6. Proposal Submission

Each mission shall submit their proposal and other required documents via the NASA Box system no later than 11:59 PM US Eastern Time on May TBD, 2026. Instructions for submitting documents through the Box system will be transmitted to the missions individually by the Program Executive for the Senior Review.

3.7. Presentations to the Senior Review Panel

Each mission shall give an oral presentation to the panel with a maximum duration of 1 hour for the prepared presentation and an additional 30 minutes for questions from the panel. It is recommended that approximately 75% of the oral presentation should focus on the science, technical, and management sections, with the remaining 25% dedicated to cost considerations. Backup charts will not be part of the oral presentation; however, they may be referenced when addressing panel questions. Each mission may supply no more than three mission representatives for the mission presentation, to be negotiated with the Program Executive for the Senior Review in advance of the presentation.

4. Senior Review Panel

The panel will assess the scientific merits and performance of the mission described in each mission's proposal. The panel will review the following to assess the availability, usefulness, and usability of a mission's archival data sets and the current state of the spacecraft and ground systems:

- Presentation proposals from the missions;
- Space Science Mission Operations (SSMO) report to describe the current state of the missions; and
- Heliophysics Digital Resource Library (HDRL) will provide an overview of the science data products provided by each mission and how the missions interact with the repository.

Panelists will be civil servants not directly associated with the missions under review. The panel will include (but may not be limited to) key HPD personnel such as the Operating Mission Program Executive(s) and Program Scientist, Mission Managers from the Explorers, Solar Terrestrial Probes and Living With a Star Program Office at NASA's Goddard Space Flight Center, and subject matter experts. The panel will include members from non-Heliophysics disciplines within SMD (Astrophysics, Biological and Physical Sciences, Earth Science, and/or Planetary Science).

4.1. Post-Presentation Meeting of the Senior Review Panel

The panel will provide a brief and deliver an electronic presentation with preliminary findings to the HPD Director on the last day of the meeting. The electronic presentation of the preliminary findings will be delivered to the Program Executive for the Senior Review.

The panel will deliver a Final Report to the Program Executive of the Senior Review when the final assessment has been completed.

It is anticipated that by August 2026, the HPD Director will contact each of the proposing missions and provide a Letter of Direction. This Letter may include new budget guidelines and other specific instructions. Within 90 days from the notification of the results, each mission shall submit to the HPD Director their plan for complying with the new guidance and instructions.

NASA will post the outcomes of the Senior Review to a public NASA website. NASA will ensure that key officials in international space agencies and other U.S. Government agencies are apprised of decisions resulting from the Senior Review.

The next Senior Review will be in three years, as required by Title 51 U. S. Code §30504, as modified by the NASA Transition Authorization Act of 2017 (P.L. 115-10), to reassess the operating mission portfolio.

5. Evaluation Criteria

The panel will assess the proposal content against the following criteria:

Criterion A: Scientific Success in Previous Mission Investigation

- **Factor A-1:** Success of previous science investigation. (Achievement of Science Objectives in the previous extended mission period, for missions returning to their second or later Senior Review; or achievement of prime mission Science Objectives, for missions proposing for their first extended mission.)
- **Factor A-2:** Performance in addressing any findings in the previous Senior Review. (The panel will have access to the previous Senior Review report for a mission, and other information from that review as needed.) This factor will only be assessed for missions returning to the Senior Review.

Criterion B: Overall Evaluation of the Proposed Science Investigation

- **Factor B-1:** Scientific merit and impact of the proposed in-guide science investigation.
- **Factor B-2:** Implementation merit of the proposed in-guide science investigation, including the plan for transition to competed research funding where applicable.
- **Factor B-3:** Relevance of the proposed in-guide science investigation to HPD's scientific goals as defined in the Division's Strategic Objectives and the 2024 Heliophysics Decadal Survey.
- **Factor B-4:** Cost reasonableness of the proposed in-guide science investigation.

Criterion C: Contribution to the Heliophysics System Observatory

- **Factor C-1:** Merit of the proposed data and code management plan.
- **Factor C-2:** Quality of the archival mission science data products and associated documentation.
- **Factor C-3:** Synergy with and benefit to the HSO, and contributions of mission data to meeting national priorities. This factor applies only to the proposed observations and observations or investigations begun or completed during the past three years, to the extent to which those past observations or investigations provide context for future plans.

Criterion D: Technical Implementation

- **Factor D-1:** Health of the mission and suitability of the mission operating model to maximize its contribution to the HSO. For this factor, the mission includes the spacecraft, instruments, and project-managed ground systems.
- **Factor D-2:** Cost reasonableness of the mission's operations model. This factor includes the ability to continue healthy operations within the in-guide budget, and any proposed measures to increase efficiency and/or reduce costs during the extension period.
- **Factor D-3:** Sufficiency of the mission's plans to be a responsible actor in space, including compliance with orbital debris requirements and reasonable or reduced reliance on centralized services such as SCaN and spectrum allocation.
- **Factor D-4:** Sufficiency of the mission management plan, including the workforce development and leadership succession plan.

Criterion E: Under-guide and Over-guide Requests (Informational Only)

- **Factor E-1:** Scientific merit and impact of any proposed under-guide or over-guide science investigation.
- **Factor E-2:** Implementation merit of any proposed under-guide or over-guide science investigation.
- **Factor E-3:** Merit and impact of any proposed under-guide or over-guide for data activities.
- **Factor E-4:** Merit and impact of any proposed under-guide or over-guide for mission operations.
- **Factor E-5:** Merit and impact of any proposed under-guide or over-guide for mission management, including the workforce development and leadership succession plan.

The evaluation of each mission will consider the following points:

- Criteria A – D are rated and weighted to provide an overall proposal rating. For proposals to the Full Senior Review, the criteria are weighted as follows: Criterion A, 25%; Criterion B, 30%; Criterion C, 20%; Criterion D, 25%.
- Criterion E is informational and unrated. It does not contribute to the overall proposal rating.
- The factors within each evaluation criterion will be weighted equally in determining the rating for that criterion.

- Each evaluation criterion above will be rated based on the number and significance of the strengths and weaknesses, according to the following table. The overall rating for each evaluation criterion will be the median of the individual panelists’ ratings.

Adjectival rating (Numerical Score)	Basis
Excellent (5)	A thorough and compelling proposal of exceptional merit that fully responds to the objectives of this Call as documented by numerous or significant strengths and with no major weaknesses.
Very Good (4)	A competent proposal of high merit that fully responds to the objectives of this Call, whose strengths fully out-balance any weaknesses and none of those weaknesses constitute fatal flaws.
Good (3)	A competent proposal that represents a credible response to this Call, whose strengths and weaknesses essentially balance each other.
Fair (2)	A proposal that provides a nominal response to this Call and whose weaknesses outweigh any strengths.
Poor (1)	A seriously flawed proposal having one or more major weaknesses that constitute fatal flaws.

NASA will use the individual mission evaluations when considering the continuation decisions in this Senior Review. This will include:

- The assessment of the missions under consideration.
- The overall strength and ability of the HSO – including both missions in operation and development – to fulfill the HPD priorities from FY2027 through FY2029, as represented in the 2025 SMD Science Plan and the context of the 2024 Heliophysics Decadal Survey.
- Programmatic factors such as portfolio balance and budgetary considerations.

6. Decision Process

The panel will write a Final Report of all reviewed missions for the HPD Director. The HPD Director will develop a response to the findings, including decisions on continuation or termination, and notify the following parties in sequence:

1. SMD Associate Administrator
2. Individual missions
3. The public, via the Final Report and NASA Response published on website linked below.

A Letter of Direction will provide each mission with their individual continuation/termination decision and further directions before the Final Report is posted. All public documents, such as the Final Report and the NASA Response, will be posted on the Heliophysics Senior Review page: <https://science.nasa.gov/heliophysics/resources/senior-review>.

6.1. Continuation

Missions selected for continuation will receive an approved plan identifying whether the mission will continue as a Strategic Science, Transition Science, Repurposed Science, or HSO Foundational Science mission and a budget for the extended mission period, with preliminary direction for future years.

Missions selected for continuation may be funded at the in-guide budget, a descoped (under-guide) budget, or the in-guide budget plus NASA-approved over-guide requests.

6.2. Termination

Missions selected for termination will begin executing their EOMP upon delivery of the termination decision. After the end of operations, missions will enter Phase F for up to 12 months. In Phase F, a significantly reduced budget will be available to complete mission activities to ensure the successful ingestion of all mission data into the designated NASA archive(s) and finalize other mission documents for public release (e.g., PDMP, CMAD).

A notification process will be followed for each terminated mission.

7. Further Information

For further information, please contact:

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7.1. Useful Links

Heliophysics Digital Resource Library:
<https://hdrl.gsfc.nasa.gov/>

Heliophysics Data Portal:
<http://heliophysicsdata.gsfc.nasa.gov>

Digital Object Identifier info:
<https://datacite.org>

Space Physics Archive Search and Extract and Digital Object Identifier records:
<https://hpde.io/>

7.2. Policy Documents

NASA Strategic Plan (2022):
<https://www.nasa.gov/wp-content/uploads/2023/09/fy-22-strategic-plan-1.pdf?emrc=ff1a1e>

SMD Science Plan (2025):
<https://assets.science.nasa.gov/content/dam/science/cds/about-us/2025/2025-2026-NASA-Science-Plan.pdf>

NASA Heliophysics Decadal Survey:
<https://www.nationalacademies.org/our-work/decadal-survey-for-solar-and-space-physics-heliophysics-2024-2033>

Scientific Information Policy for the Science Mission Directorate (SPD-41a)
<https://science.nasa.gov/wp-content/uploads/2023/08/smd-information-policy-spd-41a.pdf>

Heliophysics Science Data Management Policy
https://assets.science.nasa.gov/content/dam/science/hpd/key-documents/2025/HPD_Data_Policy_v2_2_Final.pdf

NASA STD-8719.14C Process for Limiting Orbital Debris,
<https://standards.nasa.gov/sites/default/files/standards/NASA/C/0/nasa-std-871914c.pdf>

7.3. Templates

[PDMP Template](#)

[CMAD Template](#)

Budget Template (will be provided)

