

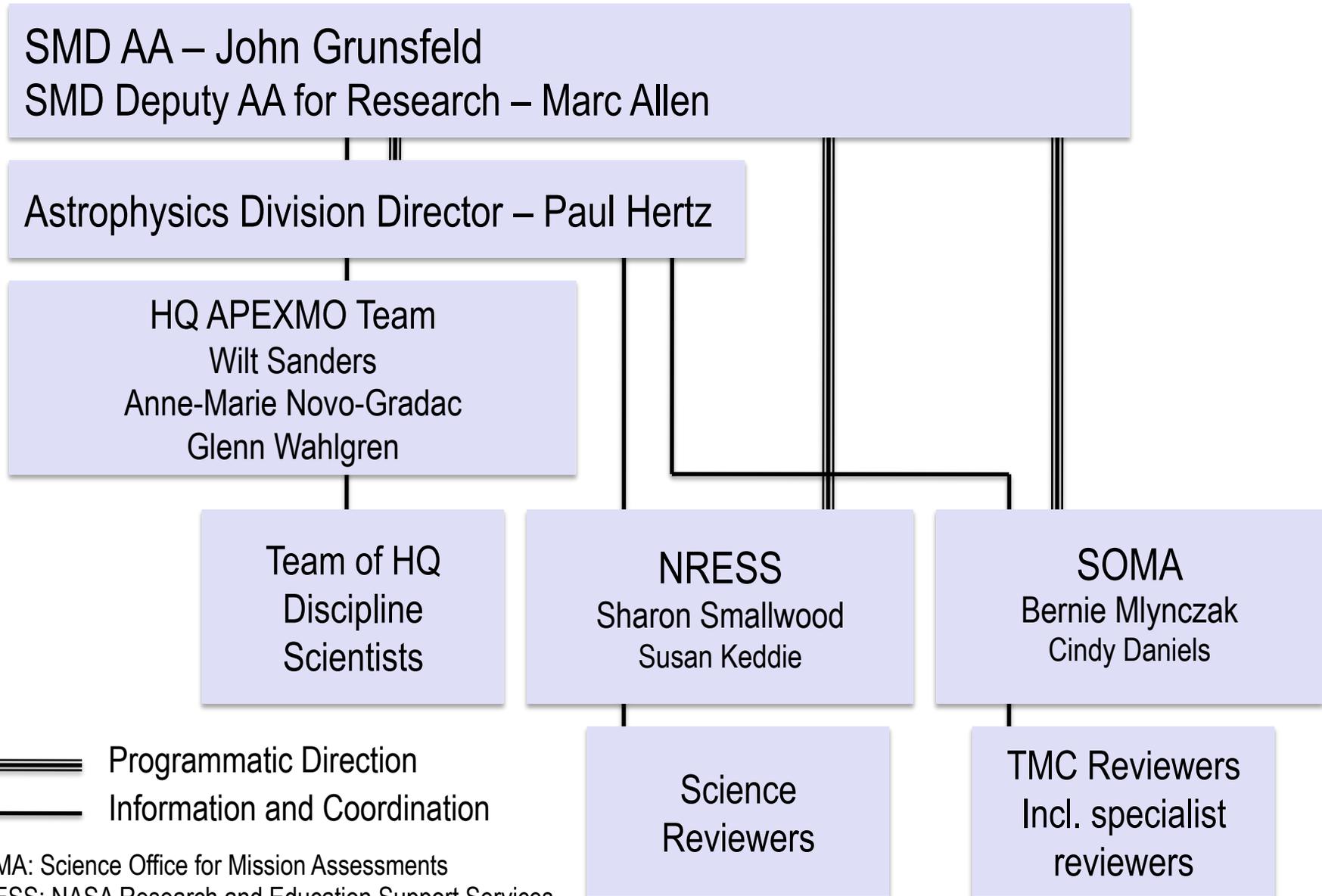
# **Astrophysics Explorer Mission of Opportunity Evaluation, Categorization, and Selection**

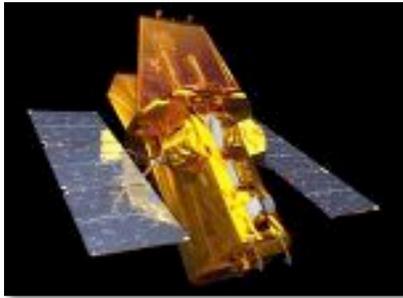
**Wilton Sanders**

Astrophysics Explorer Program Scientist

Science Mission Directorate

# Astrophysics Explorer Mission of Opportunity Team



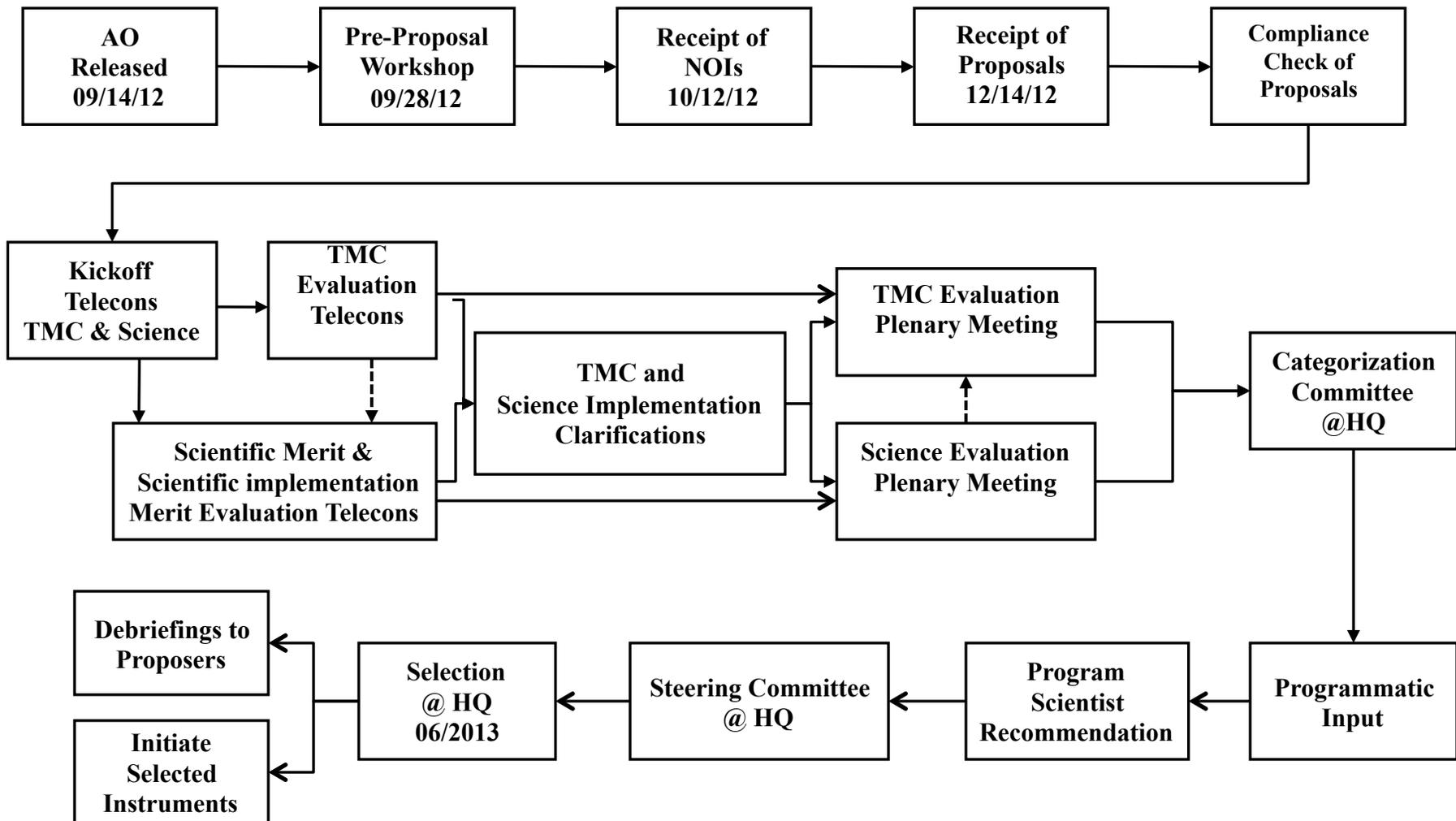


## **SOMA Background**

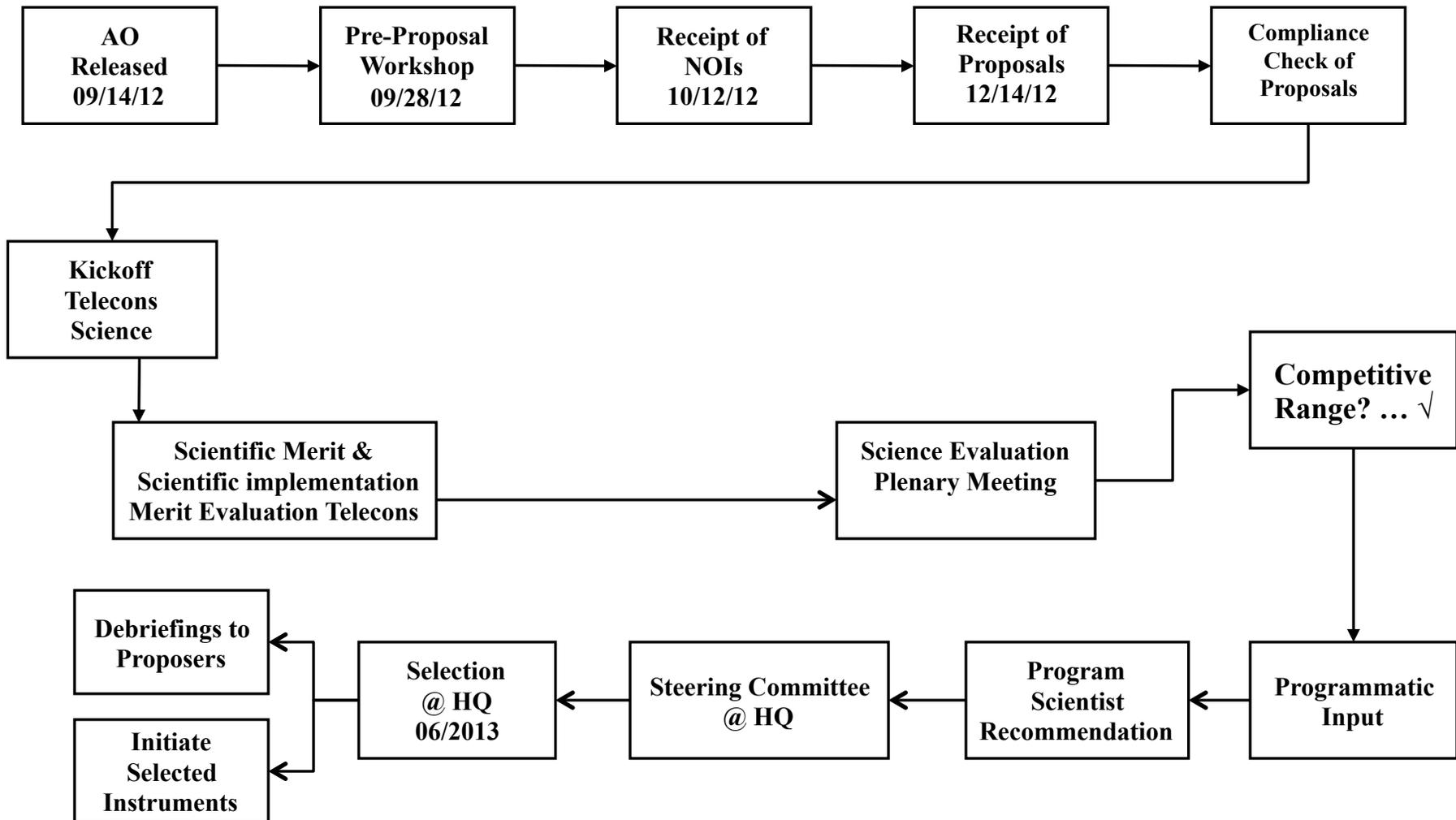
The NASA Science Mission Directorate (SMD) **Science Office for Mission Assessments (SOMA)** was established in 1996 by the Office of Space Science to support the Discovery and Explorer Programs. The office now supports also the New Frontiers, Mars Scout, Earth System Science Pathfinder (ESSP), and others.

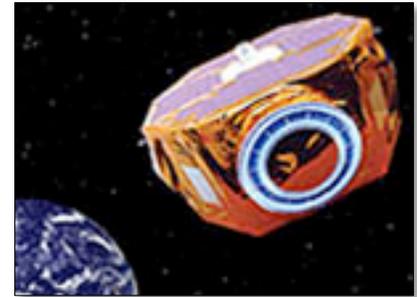
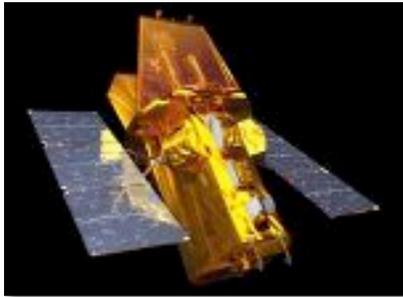
The TMC process is a standard process used by SOMA to support all SMD evaluations. Lessons learned from each evaluation are incorporated into the process for continuous improvement.

# Evaluation and Selection Overview for Astrophysics Explorer Mission of Opportunity SALMON-2 PEA



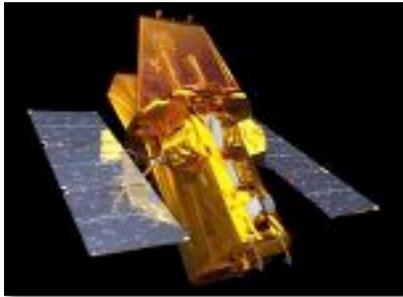
# Evaluation and Selection Overview for Astrophysics Explorer Mission of Opportunity APEX USPI ROSES-2012 PEA





- **Astrophysics Explorer MO PEA is Appendix L to the SALMON-2 AO.**
- **Requirements** are as given in SALMON-2, as amended by PEA L.
- **Evaluation Factors** are given in SALMON-2; numbered, and specific.
  - 4 for Science Merit
  - 6 for Scientific Implementation Merit and Feasibility
  - 5 for Feasibility of the Mission Implementation, Including Cost Risk
- SALMON-2 Appendix B has **Requirements for Proposal Preparation**

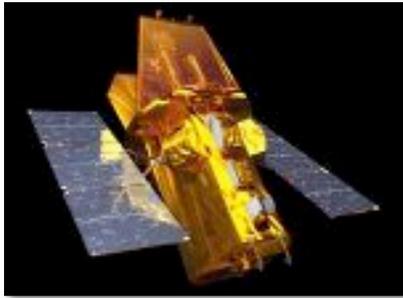
In the event of an apparent conflict between the guidelines, the order of precedence is: the PEA, then the SALMON-2 AO, then SALMON-2 Appendix B, then SALMON Appendix A.  
Q&A are clarifications, not guidelines or requirements.



- **Astrophysics Explorer USPI PE is an appendix to the ROSES NRA.**
- **Requirements** are as given in ROSES, as amended by PE.
  - Requirements for the ROSES USPI can be quite different from those for the MO PEA.
- **Evaluation Factors** are identified in the PE, numbered, and specific.
  - 3 for Science Merit
  - 3 for Scientific Implementation Merit and Feasibility (yes, we meant to number them that way)
- ROSES Appendix B has **requirements on Proposal Preparation**

In the event of an apparent conflict between the guidelines, the order of precedence is: the PE, then the ROSES NRA, then the *NASA Guidebook for Proposers*.

Q&A are clarifications, not guidelines or requirements.

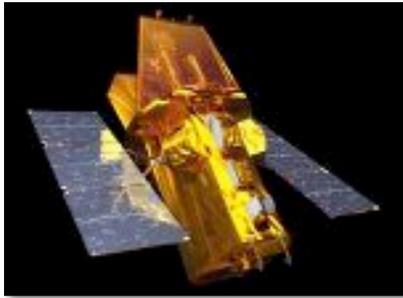


## Proposal Evaluation, Selection, and Implementation Section 7 (SALMON-2 MO), Section 2.3 (USPI PE)

### Overview of the Evaluation and Selection Process

#### Evaluation Criteria

- Scientific Merit of the Proposed Investigation
- Scientific Implementation Merit and Feasibility of the Investigation
- Feasibility of the Mission Implementation, Including Cost Risk ← not for USPI



## Evaluation Overview

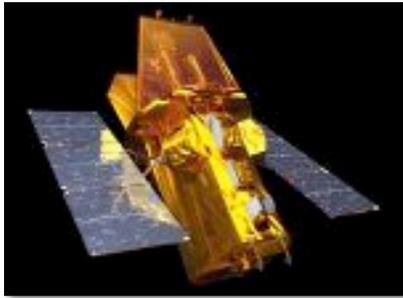
All proposals will be initially screened to determine their compliance to requirements and constraints of the applicable AO or NRA.

Proposals that do not comply may be declared noncompliant and returned to the proposer without further review. A submission compliance checklist is provided in Appendix F of the SALMON-2 AO.

USPI proposals must adhere to the standard ROSES compliance requirements (ROSES Section IV(a)).

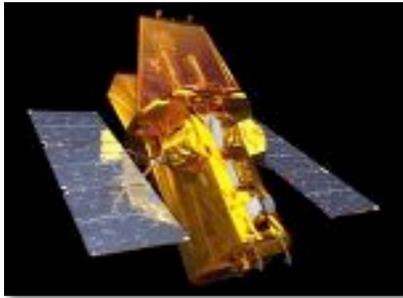
**APEXMO SALMON-2 and APEX USPI investigations will be evaluated and selected through a one-step competitive process.**

- Step 1 is the solicitation, submission, evaluation, and selection of proposals prepared in response to the AO or NRA.
- As the outcome of Step 1, NASA intends to select one or more proposals and issue awards to the selected proposers.



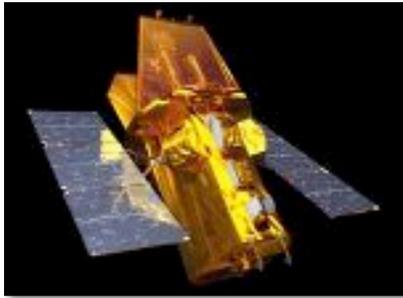
Compliant proposals will be evaluated against the criteria specified in Section 7.2 of the SALMON-2 AO or Section 2.3 of the USPI PE by panels of individuals who are peers of the proposers.

SALMON-2 MO Proposals will be evaluated by more than one panel (e.g., a science panel and a technical/management/cost panel); each panel will evaluate proposals against different criteria.



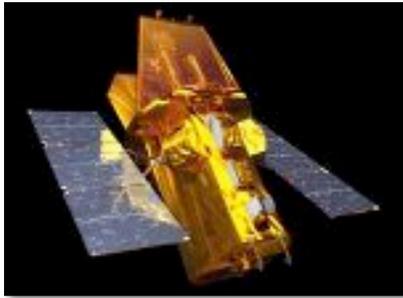
Panel members will be instructed to evaluate every proposal independently without comparison to other proposals.

These panels may be augmented through the solicitation of nonpanel external reviews, which the panels have the right to accept in whole or in part, or to reject.



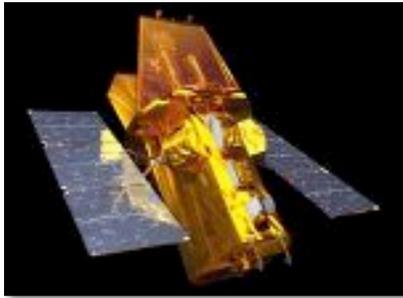
Proposers should be aware that, during the evaluation and selection process, NASA may request clarification of specific points in a proposal.

In particular, before finalizing the evaluations of the proposals, NASA will request clarification on specific, potential major weaknesses that have been identified in the proposal.

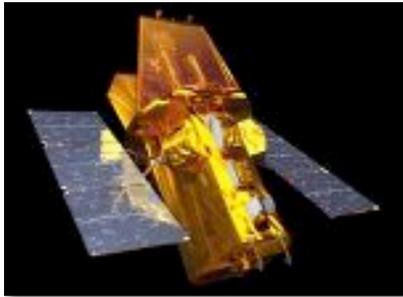


Proposers will receive a letter in advance of the clarification round with notification of the schedule, requirements, and limitations.

On the day of the clarification round, proposers will receive a second letter with the potential major weaknesses and instructions for responding. Proposers will have approximately 24 hours to respond.

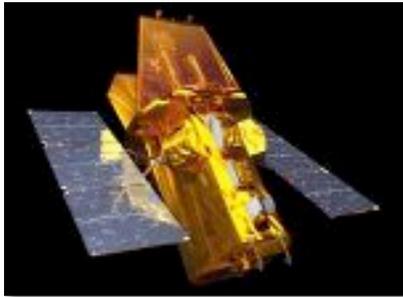


- In order to prevent proposal teams from improving their proposal, thereby requiring NASA to allow all proposal teams to improve their proposals, the format of any clarification is highly constrained.
- The clarification provided for each preliminary major weakness is constrained to be one of the following four formats. Any responses that go beyond the permitted response format will be deleted and will not be provided to the evaluation panels.



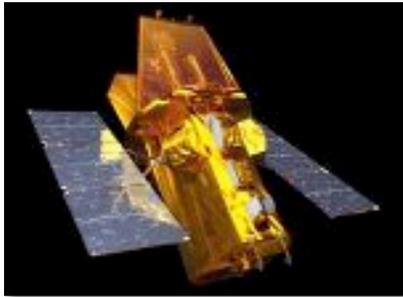
- **Response Type 1:** You may identify a place in your proposal where information relevant to this preliminary TMC major weakness may be found.

You may identify the location by Section number, page number, paragraph number, line number, Table number, Figure number, or any other pointer. You may not provide any other feedback other than a pointer to one or more specific locations in your proposal. You may not provide a sentence or a paragraph of explanation as to why you think these places in the proposal address the preliminary TMC major weakness. Any such explanation could be considered an improvement to the proposal and will be deleted.



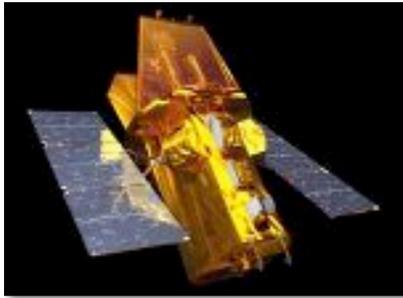
- **Response Type 2:** You may confirm that the preliminary TMC major weakness is not addressed in your proposal.

You may not provide a sentence or a paragraph of explanation as to why you think this is okay or why the preliminary TMC major weakness is invalid. Any such explanation could be considered an improvement to the proposal and will be deleted.



- **Response Type 3:** You may state that the preliminary TMC major weakness is invalidated by information that is common knowledge or state-of-the-art and is therefore not included in the proposal.

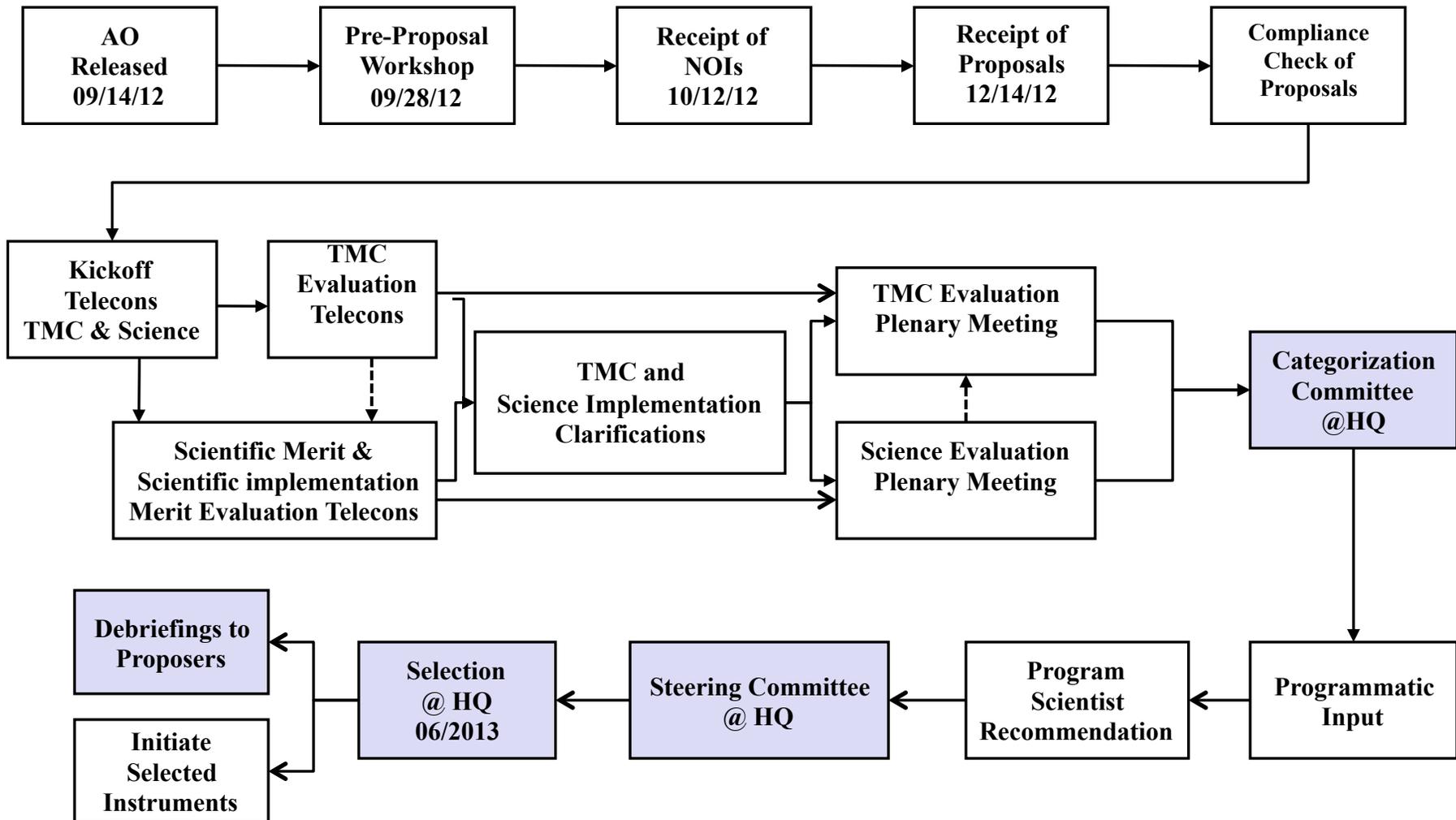
You may suggest a commonly known topic that the evaluators should be familiar with in order to properly evaluate this aspect of your proposal. Topic titles must be limited to a few words (subject title only, no explanations) so that evaluators may, on their own, consult the public literature for information and references that are not contained in your proposal.



- **Response Type 4:** You may state that a numerical calculation is wrong, where such a numerical calculation has been carried out by the evaluation team and is included or referenced in a preliminary TMC major weakness.

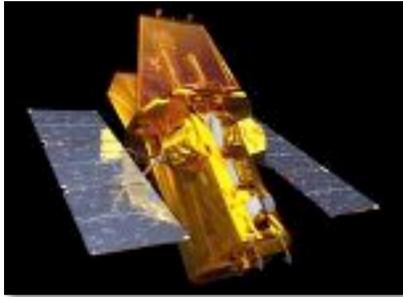
You may identify the location of data relevant to the numerical calculation by Section number, page number, paragraph number, line number, Table number, Figure number, or any other pointer. You may not provide any other feedback other than a pointer to one or more specific locations in your proposal.

# Categorization and Selection Overview for Astrophysics Explorer Mission of Opportunity



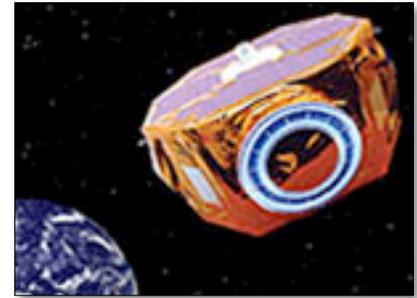
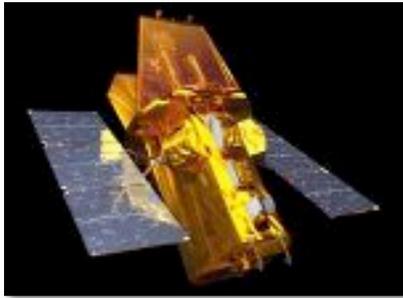
An *ad hoc* **categorization subcommittee**, appointed by the Associate Administrator for the Science Mission Directorate, will convene to **consider the peer review results** and, based on the evaluations, categorize the proposals in accordance with procedures required by NFS 1872.403-1(e).

The **SMD AO Steering Committee** will then review the results of the evaluations and categorizations. The AO Steering Committee **will conduct an independent assessment of the evaluation and categorization processes** regarding their compliance to established policies and practices, as well as the completeness, self-consistency, and adequacy of all supporting materials.



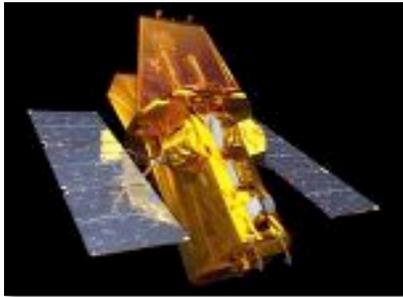
## Selection Process

- After the review by the AO Steering Committee, the final evaluation results will be presented to the Associate Administrator for the Science Mission Directorate, who will make the final selection(s).
- As the Selection Official, the SMD Associate Administrator may consult with senior members of SMD and the Agency concerning the selections.



## Post-Selection

- Proposers of investigations will be notified in writing and offered oral debriefings for themselves and representatives from each of their main partners (if any).
- Written debriefing materials will be provided at the time of the oral debriefing. Such debriefings may be in person at NASA Headquarters or by telephone if the proposal PI prefers.



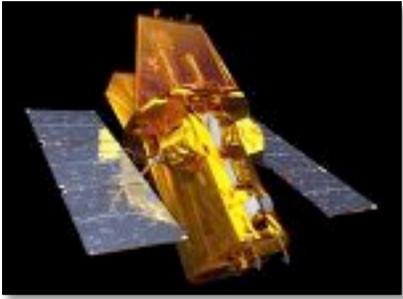
## References

### **Explorer Acquisition Home Page**

An Astrophysics Explorer Acquisition Homepage, available at <http://soma.larc.nasa.gov/astrophysics/>, will provide updates and any AO addenda during the Astrophysics Explorer MO solicitation process. It provides links to the Program Library, a list of potential teaming partners, and questions and answers regarding the AO.

### **Program Library**

The Astrophysics Explorer Program Library provides additional regulations, policies, and background information on the Astrophysics Explorer Program. The Astrophysics Explorer Program Library is accessible at <http://soma.larc.nasa.gov/astrophysics/programlibrary.html>



**Questions?**