

2025 Astrophysics Small Explorer Announcement of Opportunity Community Announcement

The NASA Science Mission Directorate (SMD) has released a Community Announcement via a www.SAM.gov special notice NNH24ZDA008L stating its intention to solicit investigations for the Astrophysics Explorers Program.

SMD's Astrophysics Division's (APD) Explorer Program plans to release draft text for comment for a future Announcement of Opportunity (AO) entitled "2025 Astrophysics Small Explorer (SMEX)". The planned selection process has two steps. In Step 1, it is anticipated that approximately two or three investigations will be selected to conduct nine-month, \$3.0M/each Phase A concept studies. In Step 2, NASA will conduct a review of the Phase A concept study reports. At the conclusion of the study report review, it is anticipated that up to one SMEX investigation will be down-selected to continue into Phase B and subsequent mission phases.

No Missions of Opportunity (MO) proposals will be solicited.

When available, the draft and final AO text will be posted on the NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES):
<https://nspires.nasaprs.com/external/>.

AO participation will be open to all categories of U.S. organizations, including educational institutions, industry, not-for-profit organizations, Federally Funded Research and Development Centers, NASA Centers, and other Government agencies and non-U.S. organizations with some restrictions.

Cost Cap: The Principal Investigator-Managed Mission Cost (PIMMC) for Phases A-F of investigations will be capped at \$170M (Fiscal Year 25 dollars), excluding NASA-provided launch services. The cost of any mission specific and special launch services is the responsibility of the PI and must be included within the PIMMC. Lower-cost investigations and cost-efficient operations are encouraged.

Access to Space: The standard launch performance capability will be consistent with the available certified Launch Vehicles on the NASA Launch Services II (NLS II) contract. The cost of mission specific and special launch services will be charged against the PIMMC. **PI-provided access to space may not be proposed.**

Space Communications: The NASA Tracking and Data Relay Satellite System (TDRSS) will not be available to support missions proposed to this AO. Missions may propose the use of Direct-To-Earth (DTE) communication services through NASA's Near Space Network (NSN) with the charges reflected as a reduction to the cost cap. Alternatively, proposers may choose to procure commercial services, either for DTE or as space relay communications, as an expense against the PIMMC. As information becomes available regarding NASA communication services, it will be provided in the "2025

Astrophysics SMEX Acquisition Program Library” to be hosted by the NASA Langley Research Center (LaRC) website.

Contributions: Contributions, including contributions from foreign partners, are welcome and will not be counted against the PIMMC, but the value of such contributions is constrained. The sum of contributions of any kind to the entirety of the investigation is not to exceed one-third (1/3) of the proposed PIMMC.

Additional Opportunities: Proposals for Student Collaborations and their evaluation are deferred to the Step-2 mission concept study. Proposals for Science Enhancement Options and their evaluation are deferred to the Step-2 mission concept study. Technology Demonstration Opportunities may not be proposed.

NASA is committed to a culture of inclusion, diversity, equity, and accessibility where all employees feel welcome, valued, respected, and engaged. The AO will require an “Inclusion Plan” to capture the project vision for operating in an inclusive, equitable, and safe manner, and to improve the work environment over the course of the project. SMD provides general information about inclusion plans at:

<https://science.nasa.gov/researchers/inclusion>.

The time frame for the solicitation is intended to be:

Release of draft AO	December 2024
Release of final AO.....	March 2025
Pre-proposal conference.....	~3 weeks after final AO release
Notice of Intent	NET 45 days after AO release
Proposals due	NET 90 days after AO release
Step 1 Selection announced	1 st Quarter CY2026 (target)
SMEX Down-selection	Fall CY2027 (target)
SMEX launch readiness date	NLT 2 nd Quarter CY 2031

NASA has not approved the issuance of the Astrophysics Division’s 2025 SMEX AO, and this community announcement does not obligate NASA to solicit proposals. Any costs incurred by prospective investigators in preparing submissions in response to this community announcement (CA) are incurred at the submitter's own risk. The forthcoming draft and final AOs may contain provisions that differ from this preliminary notice, in which case the provisions in the AO will take precedence. The draft and final AOs will be based on the Standard PI-led Mission AO Template available at https://soma.larc.nasa.gov/standardao/sao_templates.html.

Additional information will be posted, as it becomes available, by the NASA Langley Research Center (LaRC) Science Office for Mission Assessments (SOMA) on its 2025 Astrophysics SMEX Acquisition website at <https://explorers.larc.nasa.gov/APSMEX25/SMEX/index.html>.

Questions or comments about this intention to release an Astrophysics SMEX AO may be addressed via email only to Doris Daou, Astrophysics Small Explorers Program Lead Scientist, SMD, Doris.Daou@nasa.gov and E. Lucien Cox, Astrophysics Small Explorers

Program Executive, SMD, elbert.l.cox@nasa.gov using subject line “APD 2025 SMEX CA”. Email questions/comments no later than September 20, 2024, 11:59 p.m. Eastern time. Depending on the nature of the question(s), NASA may respond on an individual basis by email or may post responses to inquiries on the Questions and Answers (Q&A) pages on the SOMA Explorer Program Acquisition website. Anonymity of persons or institutions submitting questions will be preserved.