Atmosphere Observing System – Cloud Announcement of Opportunity

Questions & Answers

Questions & Answers (Q&As) associated with the Atmosphere Observing System – Cloud (AOS-Cloud) Announcement of Opportunity (AO) and Community Announcement (CA). Please check this website periodically as the list of Q&As will be updated when questions are received and answered.

Change Log		
Community Announcement		
Revision	**Date**	**Description of Changes**
00	4/19/2024	No Questions have been submitted to date.
01	10/11/2024	Added Q&As 1-6 CA.
02	10/31/2024	Added Q&As 7-12 CA.
03	11/25/2024	Updated A3 CA and A10 CA for clarity.

AOS-Cloud Community Announcement Questions & Answers

Q1 CA : What type of funding vehicle does NASA intent to use for the investigations selected to perform Phase A concept studies?

A1 CA : NASA intents to provide funding to NASA Centers via intra-Agency funding mechanisms, to non-NASA institutions via award contracts, or utilize other funding vehicles as applicable.

Q2 CA : Does NASA plan to award a single contract for the selected investigation?

A2 CA : NASA plans to require proposals to specify the proposed teaming arrangements for the Phase A concept study, including any special contracting mechanisms that are advantageous for specific partners in the team. If more than one contractual arrangement between NASA and the proposing team is required, NASA plans to require proposals to identify how funds are to be allocated among the partnering organizations.

Q3 CA : Will suborbital science and/or Calibration/Validation (Cal/Val) be supported as part of an overall Atmosphere Observing System (AOS) funding mechanism as discussed during the Aerosol and the Aerosol and Cloud, Convection and Precipitation (ACCP) study phase? or are cal/val activities for AOS-Cloud to be funded from the AOS-Cloud budget?

A3 CA : Suborbital activities for instrument calibration and validation that are required to achieve the proposed science objectives must be funded by the AOS-Cloud investigation as part of the PI-Managed Mission Cost (PIMMC). It is expected that there will be suborbital opportunities under AOS Integrated Science. The vision for the suborbital elements of AOS Integrated Science will be described in the AOS Integrated Science document that is planned to be made available in the AOS-Cloud Library.

Q4 CA : Will a data management plan be required?

A4 CA : Yes.

Q5 CA : Will NASA expect contributions to be a minority of the project element costs, with the total value of all contributions not exceeding one-third of the PIMMC?

A5 CA : Yes.

Q6 CA : How will NASA treat contributions?

A6 CA : Contributions from both U.S. and non-U.S. sources other than the Earth Systematic Missions Program and other NASA Science Mission Directorate (SMD) programs are welcome. The benefits of proposed contributions will be assessed as they contribute to scientific and technical merit and feasibility. The stability and reliability of proposed partners, and the appropriateness of any proposed contribution, will be assessed outside of the evaluation process, as a programmatic risk element in the proposal. Proposals are expected to be required to include institutional Letters of Commitment from all organizations offering contributions.

Q7 CA: What are the development and operations durations expected for proposed AOS-Cloud investigations?

A7 CA: Phase A will be conducted following Step-1 selections. AOS –Cloud investigations will be required to complete the mission development phases (Phase B-D) in no more than five years and support a target Launch Readiness Date (LRD) in 2031-2032. Investigation teams must propose an operations period (Phase E) necessary to achieve the full science objectives of the mission while staying within the AO cost cap; however, AOS-Cloud investigations are expected to have no less than three years of prime mission operations and no less than a five-year mission design lifetime.

Q8 CA: What will be the Project Category and the Payload Risk Classification of the projects selected from the AOS-Cloud AO?

A8 CA: AOS-Cloud projects planned to be selected as a result of the AOS-Cloud AO have been determined to be Category 2 projects (per NPR 7120.5) with Class C payloads (per NPR 8705.4). Investigations teams can propose reasonable tailoring of these standards to leverage commercial best practices for flight systems.

Q9 CA: How should integrated science as part of the Atmospheric Observing System (AOS) and, more broadly, the Earth System Observatory (ESO) be addressed in the proposal?

A9 CA: It is expected that integrated science across AOS and across ESO will be handled outside of the PIMCC. The science specific to the AOS-Cloud mission will be funded under the PIMCC. It is expected that the contributions of AOS-Cloud to integrated AOS science will be addressed as part of the scientific justification for the mission.

An overview of the AOS architecture and expectations for AOS integration will be available in the AOS-Cloud Library that will be made accessible upon release of the draft AO.

Broader integrated science across the entire ESO will not be required as part of the science justification for the proposal.

Q10 CA: Will AOS-Cloud proposed investigations be required to achieve the science objectives as a stand-alone/independent investigation or can it be dependent on other AOS architecture elements that are expected to be operational during the same period?

A10 CA: Proposed AOS-Cloud missions are expected to be predominantly stand-alone science investigations although data from other instruments/investigations may be used. If any science objective of an AOS-Cloud investigation depends on data that is not within the control of the PI, these data must be identified in the proposal. Data dependencies from instruments external to the proposed investigation must be clearly addressed, including details on the data products to be utilized and/or commitments outside of the proposed investigation to fund the collection of those data during operations. The proposal will be expected to also describe the implications to meeting the science objectives if such data do not become available.

Q11 CA: To achieve the proposed science objectives, can an AOS-Cloud investigation propose formation flying with other missions that may be cancelled or delayed since they are not under the control of the PI?

A11 CA: The AOS mission concept was decoupled in Spring 2024. Although decoupled, NASA has an objective to maximize integrated AOS science. Investigation teams are encouraged to propose solutions that will enable coordinated data collection with other components of AOS.

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Q12 CA: Will NASA firewall NASA Centers and JPL personnel working on the AOS formulation from NASA Centers and JPL teams intending to propose to the AOS-Cloud AO?

A12 CA: Yes