

**Earth Science Advisory Committee Report**  
**19th October 2023 Meeting**  
**Via Teleconference**

**From:** The NASA Earth Science Advisory Committee – Sara Tucker (Chair, sara.tucker@ballaerospace.com), Indrani Das, Belay Demoz, Jasmeet Judge, Venkataraman Lakshmi, Jennifer Logan, Rowena Lohman, Colleen Mouw, Beth Plale, Anastasia Romanou, Robert Wright, and Lisan Yu.

**To: Karen St. Germain** (Director, Earth Science Division, SMD)

**Cc:** Lucia Tsaoussi (Executive Secretary, Earth Science Advisory Committee), Julie Robinson (Deputy Director, ESD), Jack Kaye (ESD Associate Director for Research), Scott Schwinger (ESD Associate Director for Flight Programs), Katie Baynes (ESD Earth Data Officer for Earth Science Data Systems), Thomas Wagner (ESD Associate Director for Earth Action), Michael Seablom (Associate Director Earth Science Technology Office).

**Date:** October 20, 2023

Dear Dr. St. Germain,

The entire reconstituted Earth Science Advisory Committee met on October 19, 2023 by teleconference to do the annual performance review (APR) of the Earth Science Division as required by the Government Performance and Results Act Modernization Act (GPRAMA). The Science Mission Directorate (SMD) criteria for GPRAMA voting are as follows:

- Green – Expectations for the research program fully met in context of resources invested.
- Yellow – Some notable or significant shortfalls, but some worthy scientific advancements achieved.
- Red – Major disappointments or shortfalls in scientific outcomes, uncompensated by other unusually positive results.

The ESD Science Annual Performance Goals (APG) are:

*1.1.8: NASA shall demonstrate progress in characterizing the behavior of the Earth system, including its various components and the naturally-occurring and human-induced forcings that act upon it; and*

*1.1.9: NASA shall demonstrate progress in enhancing understanding of the interacting processes that control the behavior of the Earth system, and in utilizing the enhanced knowledge to improve predictive capability.*

These are related to the six Focus Areas within NASA’s Earth Science Division: Atmospheric composition, Weather and Atmospheric Dynamics, Carbon Cycle and Ecosystems, Water and Energy Cycle, Climate Variability and Change, and Earth Surface & Interior.

After reviewing and discussing pertinent documentation, the committee unanimously voted Green for both APGs, indicating that the committee found the science objectives fully met for 2023.

The committee was impressed with the dedication and overall performance of the Earth Science research community, particularly on matters related to our changing climate. Earth science continues to be a vital part of NASA's mission and the committee is very pleased with the progress and trajectory of the Earth Science Division.

The meeting also included a presentation to ESAC summarizing the report prepared by the Unidentified Aerial Phenomena Independent Study Team (UAPIST), a subcommittee formed under the ESAC. Daniel Evans (UAPIST Designated Federal Officer) and David Spergel (UAPIST Chair) provided the briefing. After deliberation, the ESAC provided the following Findings and Recommendation.

**Findings:**

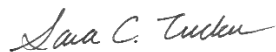
- The ESAC finds that the UAPIST Subcommittee has addressed the questions outlined in the Statement of Task, and thereby has met its Terms of Reference.
- The ESAC finds that the scope of the Subcommittee report, including any recommendations, is beyond NASA's Earth Science program.

**Procedural Recommendation**

- The ESAC does not have the expertise to make detailed recommendations to ESD regarding the report. The ESAC accordingly recommends that the report be conveyed to agency leadership.

I am attaching the ESD GPRA 2023 annual report. The next ESAC meeting is planned for early 2024.

Sincerely,



Sara C. Tucker, Chair  
Earth Science Advisory Committee