

Earth Science Advisory Committee Report
November 4th, 2021 Meeting
Via Teleconference

From: The NASA Earth Science Advisory Committee – Sara Tucker (Chair, sara.tucker@ballaerospace.com), Indrani Das, Belay Demoz, Nancy Glenn, Daven Henze, Lucy Hutyra, 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 (Earth Science Advisory Committee Executive Secretary), Dan Woods (ESD Deputy Director, Acting), Jack Kaye (ESD Associate Director for Research), Charles Webb (ESD Associate Director for Flight Programs), Lawrence Friedl (Associate Director for Applied Sciences), Pamela Millar (Associate Director Earth Science Technology Office)

Date: November 16, 2021

Dear Dr. St. Germain,

The entire reconstituted Earth Science Advisory Committee met on November 4, 2021 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, Carbon Cycle, Water Cycle, Climate, 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 2021.

The committee was particularly impressed with the dedication and overall performance of the Earth Science community, especially during the challenges presented by the COVID-19 pandemic. 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.

I am attaching the ESD GPRA 2021 annual report for background and details of our deliberations.

The next committee meeting is planned for Winter 2022.

Sincerely,

A handwritten signature in cursive script that reads "Sara C. Tucker".

Sara C. Tucker, Chair
Earth Science Advisory Committee