Earth Science Subcommittee Report June 4, 2012 NASA Headquarters

From: The NASA Earth Science Subcommittee – Byron Tapley (Chair, NAC ESS), Daniel Jacob, (Vice Chair NAC ESS), John Christy, Judith Curry, Kathleen Green, Efi Foufoula-Georgiou, James Hansen, Gregory Jenkins, William Large, Mahta Moghaddam, Patrick McCormick, Anna Michalak, Jean-Bernard Minster, Steve Running, David A. Siegel, Hank Shugart, Mark Simons, Konrad Steffen, Lucia Tsaoussi (Earth Science Subcommittee Executive Secretary)

To: Wes Huntress (Chair, NAC Science Committee)

Cc: Jens Feeley (NAC Science Committee Executive Secretary), Michael Freilich (ESD Director), Peg Luce (ESD Deputy Director), Jack Kaye (ESD Associate Director for Research), Stephen Volz (ESD Associate Director for Flight Programs), Lawrence Friedl (Associate Director for Applied Sciences), Lucia Tsaoussi (Earth Science Subcommittee Executive Secretary)

Dear Wes:

The Earth Science Subcommittee (ESS) met by telecom on June 4, 2012. The objective of the meeting was to obtain a briefing on the recently published National Research Council report entitled <u>An Assessment of NASA's Earth Science Programs. The report was prepared</u> as the mid-decadal review and assessment called for in the 2005 NASA Authorization Act The briefing was presented by Dennis Hartman, Chair of the NRC Mid-term Assessment Committee. Art Charo, the Study Director, and Committee Members, Bill Townsend and Stacy Boland participated in the briefing.

The midterm review committee was charged with assessing how well NASA's current program addresses the strategies, goals, and priorities outlined in the 2007 Decadal Survey for Earth Science and other relevant NRC reports; the progress made toward realizing the strategies, goals and priorities set in the report and in the context of current and forecast resources, the actions that could be taken to optimize the science value of the program.

The briefing summarized eleven findings and five recommendations in the Midterm Report. It is important to note that the report found that NASA responded favorably and aggressively to the decadal survey, embracing its overall recommendations for Earth observations, missions, technology investments, and priorities for the underlying science. The review noted that significant portions of the recommended program elements have been implemented and, as a consequence, the scientific and applications communities have made significant progress over the past 5 years

However, the funding profile envisioned by the 2007 report has not materialized and this fact, coupled with additional non-funded national interest requirements placed on the program and the evolving problem with launch vehicle cost and reliability have lead to significant concern about the future constellation of Earth observing satellites and the sensors that they will carry.

Following the briefing, the ESS discussed the findings and recommendations. Following a detailed consideration of several of the recommendations at a future meeting, the ESS will forward any relevant recommendations to the NAC.

Sincerely,

The Earth Science Subcommittee Byron Tapley, Chair