

## NASA Earth Science Division End of Prime Mission Review

The End of Prime Mission (EOPM) review is a technical and scientific assessment by an independent panel of how well the mission met its original science objectives. The product of the review is documentation of actual mission performance, a formal assessment of mission success with respect to the science products available to the community, a baseline for lessons-learned, and predictions of future performance.

The review is an internal NASA Science Mission Directorate (SMD) Earth Science Division (ESD) review; it is not a NASA project management procedural requirement (i.e. not a KDP in NPR 7120.5D NID).

The approach is to perform a systematic review of performance vs. specifications at the spacecraft and Mission Operations Center subsystem level for the technical engineering assessment, and at the data product level for the scientific assessment. A summary page/chart should be prepared for each subsystem/sensor that includes on-orbit performance over time (e.g. trending data). For data products, assessments of data maturity should include version history, release dates, accessibility, calibration and error estimates, in addition to estimates of community use and publication history. These subsystem and product assessments should be summarized and related to Level 1 requirements to provide a quantitative assessment of how well the Level 1 requirements have been met.

A top-level summary of actual schedule and cost performance should also be provided.

The EOPM review will be co-chaired by the Flight and Research Program Directors of the ESD; panel members will include spacecraft, ground operations, and instrument engineering experts as well as recognized researchers in the appropriate scientific disciplines.

Relationship to the Senior Review: the EOPM review is a one-time occurrence and provides a formal documentation of mission success and achievement of Level 1 requirements. It is focused on past accomplishments and lessons-learned. The ESD Senior Review solicits proposals from operating missions that are subject to a programmatic review to assess future operation. The assessment of performance factors includes quality and demonstrated/anticipated scientific utility of the mission datasets, contributions to national objectives, technical status, and budget efficiency. Although the EOPM and the Senior Review are separate reviews, there will be overlap in some areas such as the health and status assessment of the spacecraft and sensors.