Applications of Future NASA Decadal Missions for Observing Earth’s Land & Water Processes


Phase

Phase C/D entered 12/2012

Design and Development - This phase involves building the hardware and software, testing and verification, and ends with the launch of the satellite.

Mission Objective

To collect altimetry data of the Earth’s surface optimized to measure ice sheet elevation change and sea ice thickness, while also generating an estimate of global vegetation biomass.

Applications

NASA Applications Program Areas:
Ecological Forecasting, Water Resources, Agriculture, Climate, Oceans

NASA Applications Program Areas:
Ocean-Atmosphere-Sea Ice, Fisheries & Aquaculture, Climate

Applications:
Ecological Forecasting, Water Resources, Agriculture, Climate, Oceans

NASA Applications Program Areas:
Disasters, Ecological Forecasting, Health & Air Quality, Water Resources, Agriculture, Climate, Oceans

Applications:
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Phase A

Definition: The project creates a preliminary design and proof of concept specifying instrument design, orbit, altitude, ground data systems and other details. The publication of the preliminary costing plan marks the completion of Phase A.

Phase A Preliminary Analysis - The project creates a preliminary design and proof of concept specifying instrument design, orbit, altitude, ground data systems and other details. The publication of the preliminary costing plan marks the completion of Phase A.

Applications:
Ecological Forecasting, Water Resources, Agriculture, Climate, Oceans

Application Plan written, has been posted to website, and was included in the Preliminary Analysis Report. Newsletters, articles, and other details. The publication of the preliminary costing plan marks the completion of Phase A.

Website establishment and database of user community individual begins. Application Plan written and posted to website. "important society decisions that will be made with mission science products" Early Adopters Identified, description of the intersection of mission requirements and needs of potential applications has been provided.

Call for Proposals and collaboration with test data. Thematic groups are created and Focus groups are planned.

Partners/Decision Support Systems

National Ice Center, US Forest Service, US & State Departments of Agriculture, US Coast Guard,

Environmental Protection Agency (EPA), NOAA, the US Geological Survey (USGS)-Water Resources, Federal Aviation Administration, the US Navy

Sebal North America, Western Governors Association, NOAA’s Center for Coastal Monitoring & Assessment, Pan American Health Organization, USDA, National Oceanic and Atmospheric Administration, NASA

References: