

Decadal Survey Update to SSB

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2nd NRC Decadal Survey in Earth Science and Applications from Space

- Fundamental considerations
 - Consensus recommendations on an integrated approach
 - Covers 2019-2028
 - Programs carried out by NASA, NOAA, and USGS
 - Consider
 - Science priorities
 - Implementation costs
 - New technologies and platforms
 - Interagency partnerships
 - International partners

In Addition To Tight Budgets...

- Consider the issues associated with continuity
 - Balance of new vs. continuing measurements
 - Climate-centric architecture
 - And more climate measurements shifted from NOAA to NASA
- Role of the “National Plan for Civil Earth Observations”
- Weather and climate missions
- Future approaches to land imaging

Elements of the Draft SOT

- Assess scientific progress since first Survey
 - Balance of science and applications
- Assess gaps and opportunities
- Prioritize measurements for key science “targets”
 - Open up the scope of mission concepts
 - Identify criteria that may warrant re-examination of priorities
- Realistic budget scenarios

SOT, continued

- Develop a robust, resilient, and balanced portfolio
 - Decision rules to help navigate the unexpected
 - Include R&A as well as data management
- Expect agency-specific tasks from NOAA and USGS
 - For example
 - New approaches to research-to-operations transitions
 - Risk assessment and tolerance
 - Etc.

Status

- NASA, NOAA, and USGS have had the draft SOT for about a month
 - Expect a unified response in the near future.
- Other parts of the NRC (Boards covering atmospheric sciences, oceans, hydrology, and the solid Earth) will be collaborators to the SSB
 - Includes membership and staffing
- Earliest start for the survey now appears to be March 2015
 - Nominations cannot be processed until there is a contract and an approved study.

The Passover and Other Questions

- Why is this survey different from all other surveys?
 - Requires study of the Earth as a system
 - Research driven by user needs
 - Science informs policy
 - Inherently multiagency; R2O is a perennial issue
- How will this survey differ from the inaugural survey?
 - No longer appropriate to recommend towards an aspirational budget
 - CATE for big ticket items
 - Likely that the science to be “valued” to avoid having one recommended activity grow at expense of all others
 - Increased opportunities to consider “new space” ideas