



Lori Feaga, SBAG Steering Committee Chair  
<https://www.lpi.usra.edu/sbag/>

PAC Meeting, November 14, 2023

## Priority Findings from SBAG #29

- Finding #1 – SBAG urges NASA to define an appropriate path forward for spacecraft that are delivered to storage without a launch date.
- Finding #3 – In alignment with a top priority investigation identified in the Apophis Specific Action Team Report, SBAG encourages NASA to pursue a mission opportunity, achievable within available resources, to explore Apophis prior to its close Earth approach, whether initiating its own effort or via collaboration with foreign and domestic partners.
- *Finding #2 – SBAG encourages NASA and NSF to request that the National Academies release Origins, Worlds, and Life (OWL): A Decadal Strategy for Planetary Science and Astrobiology 2023-2032 in its full form, including all figures, without further delay.*
- *Finding #4 – SBAG encourages NASA to establish a viable path forward for funding New Horizons flyby operations and science if a new Kuiper Belt close flyby target is discovered.*

DONE!



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## Back-up slide: Complete text of Findings 1 & 3

### Finding #1

- There is currently a clear pathway for the end of active missions, however, the fate of shelved missions remains uncertain. Some missions in NASA's PSD portfolio are economical, efficient, and innovative but due to lack of launch opportunities, budgetary pressures, etc., these missions are at higher risk of being delayed or shelved. SBAG suggests that NASA recognize the resources and efforts that have already been spent on the development of the shelved missions (e.g., Janus) and encourages NASA to define a process to be used when putting flight hardware into storage that will establish the criteria for exiting storage. Following a process with clearly documented criteria will increase transparency and enable the community to help find alternative paths forward, including as international or private collaborations or redirecting the missions to other suitable targets.

### Finding #3

- The mission effort should focus on exploring the asteroid Apophis prior to its close flyby of the Earth in 2029, leveraging the natural laboratory experiment afforded by this unique and rare close approach opportunity, to complement the data to be collected by the OSIRIS-APEX spacecraft after Apophis' close flyby of the Earth. The collected data will provide a complete investigation of this remarkable opportunity to quantify and understand in real time the consequences of planetary tides on the evolution of asteroids and glean important information on Apophis' interior structure, which is otherwise unobtainable.