Welcome & Report

SBAG 4, Washington DC
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What is SBAG?

The NASA Small Bodies Assessment Group was chartered by SMD in 2008 to provide a conduit for the planetary community to identify scientific priorities and opportunities for the exploration of asteroids, comets, interplanetary dust, small satellites, and Trans-Neptunian Objects. SBAG also provides scientific input on the utility of asteroids and comets in support of human space activities. Discussions are underway regarding chartering SBAG by ESMD.
Findings from SBAG 3 (August 2-3, 2010)
(very summarized)

• Flyby opportunities of comets and asteroids should be sought as a matter of policy for all mission classes (begin with EJSM, JUNO).

• NEO space-based survey telescope needed to identify adequate number of potential human mission targets.

• Greater launch date certainty needed for Discovery and New Frontiers

• Scheduling IPEWG.
Activities Since SBAG 3 (Aug 2-3, 2010, Pasadena)

• SBAG Roadmap Draft, Ongoing
• ESMD Explore NOW Workshop, Aug 10-11, 2010
• PSS R&A Traceability Matrix, Sept - ongoing
• PSS Planetary Community Survey on R&A Programs, Sept 14 – Oct 11, 2010
• PSS RA WG Meeting, Oct 12, 2010
• PSS RA WG Meeting, Dec 6, 2010
New Focus: Roadmap for Small Bodies Exploration

• GOAL: To generate a primary source document for the future of small bodies robotic and human exploration by NASA.

• A living document laying out where we are, where we want to go and what is needed to get there in the exploration of small bodies.

• Updated with the availability of new studies, such as the decadal survey, and new discoveries.

• The generation and maintenance of the document is transparent and open to community participation.
Roadmap for Small Bodies Exploration

• Science Issues
• Population Identification and Characterization
• In-situ Study
• Sample Return
• Laboratory Studies
• Theoretical Studies
• Human Exploration
• Technology Capabilities and Needs
• Data Archiving and Access
SBAG4: Technology Forum on Small Body Scientific Exploration

1) What science opportunities for both near-term (< 10y) missions and longer-term (> 10y) missions are enabled by existing technologies? How are these science opportunities limited by existing technology?

2) What science goals are or should be driving what technology development? What technology synergies and cross-cutting technologies have the potential for changing the way small body science is done? How should we prioritize technology development?

3) How might technologies discussed enable small bodies science support for human exploration/activities?

4) Identify holes (if any) in the technology developments due to lack of communication between scientists and technologists, hampering the achievement of science goals?
SBAG4: Roadmap Activities

1) Review and discuss section drafts. What needs to be added/pared?
2) Assign subsection assignments for modifications.
3) Establish a deadline for completion and posting.

The goal is to end up with a document that is managed in an open-ended fashion.
FYI – What’s coming up

• Planetary Decadal Survey release this March at LPSC.

• IPEWG meeting now scheduled for August (adjust SBAG 5 date to accommodate?)