HQ Responses to Findings from 3rd SBAG Meeting

Small Bodies Assessment Group (SBAG)
4th Formal Meeting
Washington, DC
Jan 24-26, 2011
(1) NASA policy should be to maximize the science return of all missions by identifying and executing opportunities to fly by asteroids and comets. In the near term this should be incorporated into planning for EJSM and JUNO. This policy should apply to all mission classes. PIs should be encouraged to pursue such opportunities.

Comments: It is Planetary Science Division (PSD) policy to look for small body close approach opportunities during cruise once a mission is launched and its trajectory known. For PI led missions, they will be encouraged to incorporate sufficient flexibility in their planning to pursue any identified opportunities, providing the additional risk to the prime mission is assessed as minimal.
(2) Human mission plans to an NEO are threatened by a dearth of known reasonable targets. This can only be mitigated by a significant increase in the number of NEOs in low-energy orbits relative to Earth. The success of the WISE mission as an asteroid detection system supports the concept of a $500M$-class IR telescope in a heliocentric orbit interior to that of the Earth, as the optimum means by which target asteroids enabling a human mission can be discovered. Such a facility should be given serious consideration and study as the first robotic precursor mission by ESMD in support of a human NEO mission.

Comments: PSD has provided significant input to ESMD for serious study of this concept for a “precursor” mission, and this is under consideration along with other factors
(3) The need for greater certainty in launch date periods for Discovery and New Frontiers proposals continue to be a major issue with the small bodies community. AOs should not be released until NASA can commit to specific date periods and provide proposers 12 months between AO and proposal due date. Once missions are selected, the same long-term budget commitments must be provided. It takes more than a year to develop a credible Discovery or New Frontiers mission proposal, which represents a substantial investment in time and resources by proposing institutions, industry partners, and NASA centers. Uncertain and shifting AO dates result in a waste of time and money as well as degradation and loss of potential science return as targets move and may no longer be available. It is the desire of the small bodies community that the PSS make a similar finding in order to move this issue up to the NAC Science Committee and the attention of the AA for Space Science, since it is our understanding that this policy is made at this level.

Comments:  Discovery 2010 AO Step 1 proposals are in the evaluation phase. We know it was not pretty getting there and understand the problems and frustrations uncertainty causes, particularly in dealing with small body orbits. Much of it was driven by budget uncertainties, which is a perennial challenge. We are always open to comments on how to do it better. The Decadal Survey is also an important avenue for input.
Comments on Findings from SBAG-3

(4) The 2nd IPEWG Meeting should be held after the EPOXI encounter with Hartley 2 (November 10, 2010) and the Stardust-NEXT encounter with Tempel 1 (February 14, 2011). It is assumed that the duration of the meeting should be 3 days, corresponding to the length of the first meeting. The meeting time should avoid the LPSC conference in Houston, therefore, we propose to hold it the last week of March, nominally March 29–31 at the Ventana Canyon or other resort in Tucson, Arizona.

Comments: Due to additional scheduling constraints, the 2nd IPEWG will be held week of 22 Aug, 2011, hosted by Cal Tech on their campus in Pasadena, CA.