PDS4/Mission Infusion

PDS 2010 System Review

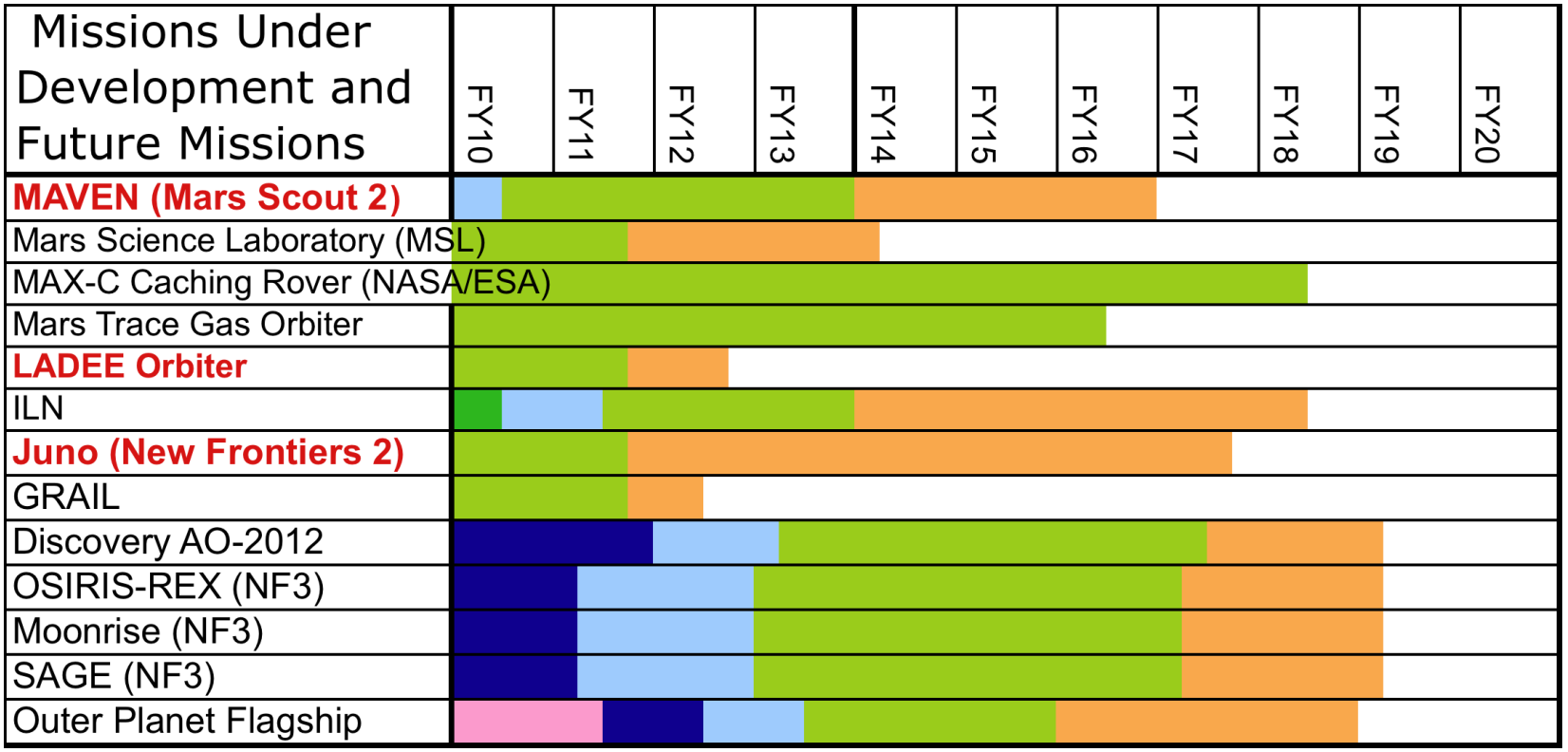
Reta Beebe

March 22-24, 2010

Overview

- A key principle for PDS is that PDS3 pipelines must remain intact
- PDS is currently targeting several “new starts” as opportunities to insert PDS4 into missions
  - LADEE, MAVEN and Juno, for example
  - LADEE is considered the key prototyping opportunity

Targeted Missions



LADEE/Maven/Juno

- MAVEN will carry a Particles & Fields package from Berkeley, a Goddard mass spectrometer and a U. of Colo. UV imaging spectrometer. Archival nodes are PPI and ATMOS.
- LADEE has 3 instruments that will produce archival products
  - Mass spectrometer (NMS) - Mahaffy/GSFC
  - Ultraviolet Spectrometer (UVS) - Colaprete/Ames
  - Dust detector (LDEX) - Horanyi/LASP
  - The Small Bodies Dust Node & Atmospheres Node have dealt with all 3 PIs on previous missions
  - Laser communication experiment (LLCD) – Boranson/MIT-LL will not generate products
- Juno may be interested as their team as expressed strong interest in adoption of XML-based data products and they have a long cruise period
- Reta Beebe as Chief Scientist and ATMOS PI is working the interfaces

Plan

- None of the missions are producing prototype products yet
- PDS expects to release a baseline PDS4 standard to support product definition of early candidate missions at the end of the FY
- After the PDS4 baseline release, we can begin working with missions to define the products
  - Between now and then, PDS is developing prototype products to validate the standard
- PDS will also begin delivering new validation and design tools for PDS4 which are critical