Geophysical Research Abstracts
Vol. 17, EGU2015-4564, 2015
EGU General Assembly 2015

BepiColombo MMO status update

Hajime HAYAKAWA, Hironori MAEJIMA, and the BepiColombo MMO Project Team
ISAS/JAXA, Department of Solar System Sciences, Kanagawa, Japan (hayakawa@isas.jaxa.jp)

BepiColombo is a ESA-JAXA joint mission to Mercury with the aim to understand the process of planetary formation and evolution as well as to understand similarities and differences between the magnetospheres of Mercury and Earth.
The baseline mission consists of two spacecraft, i.e. the Mercury Planetary Orbiter (MPO) and the Mercury Magnetospheric Orbiter (MMO). The two orbiters will be launched in 2016 by an Ariane-5 and arrive at Mercury in Jan. 2024. JAXA is responsible for the development and operation of MMO, while ESA is responsible for the development and operation of MPO as well as the launch, transport, and the insertion of two spacecraft into their dedicated orbits. The main objectives of MMO are to study Mercury's magnetic field and plasma environment around Mercury.
MMO is designed as a spin-stabilized spacecraft to be placed in a 600 km x 11,400 km polar orbit. The spacecraft will accommodate instruments mostly dedicated to the study of the magnetic field, waves, and particles near Mercury.
CDR for MMO was finished in 2011. Spacecraft CDR for ESA modules was finished in Nov. 2013. Mission CDR is scheduled in Mar this year.
Each modules of BepiColombo is now in Final phase of standalone AIV. Final AIV of MMO is expected to be finished in Mar. this year. MMO will be tranported to ESA/ESTEC in early Apr. and join final AIV for MCS (Mercury Cruise System). After MCS final AIV, MMO will be transported to launch site with other modules and will be launch in July 2016.

11th BepiColombo science working team (SWT) meeting, which discusses BepiColombo science related matters, was held in Sep. 2014 at Tokyo. 12th SWT will be held in Sep. this year at UK. In this paper, we will report the latest information of MMO project
status.