

IAF SPACE EXPLORATION SYMPOSIUM (A3)  
Small Bodies Missions and Technologies (Part 1) (4A)

Author: Dr. Yasuhiro Kawakatsu  
Japan Aerospace Exploration Agency (JAXA), ISAS, Japan

LAUNCH YEAR CHANGE OF MARTIAN MOONS EXPLORATION (MMX) AND ITS RECENT  
STATUS**Abstract**

Martian Moons eXploration (MMX) is a mission under development in JAXA in cooperation with NASA, CNES, ESA, and DLR. MMX aims to reveal the origin of the Martian moons and then to make progress in our understanding of planetary system formation and primordial material transport in the early solar system. Furthermore, the mission is to survey two Martian moons and return samples from Phobos. Add to MMX's contribution to the planetary science field mentioned above, MMX's contribution to future human Mars exploration is also considered an essential aspect of the program. MMX was initially planned to be launched in FY2024. However, the failure of the H3 rocket in March 2023 led to a significant revision of Japan's launch program. As a result, the launch of MMX was changed by two years from the original plan, and MMX will be launched in FY2026. This paper assesses the impact of the launch year change on the MMX mission value and reports on the changes in the mission plan resulting from the launch year change. In addition, this paper will also provide an update on the program's status. The status of MMX has been reported in this conference in recent years, and the program is now continuing its Phase D activities. The paper will provide the results of the manufacturing and testing of the mission instruments' flight models, the spacecraft system integration and initial test, the ground system development, and the preparation for spacecraft operations.