

SPACE EXPLORATION SYMPOSIUM (A3)
Small Bodies Missions and Technologies (5)

Author: Dr. Junichiro Kawaguchi

Japan Aerospace Exploration Agency (JAXA), Japan, Kawaguchi.Junichiro@jaxa.jp

Dr. Makoto Yoshikawa

Japan Aerospace Exploration Agency (JAXA), Japan, yoshikawa.makoto@jaxa.jp

Dr. Abe Masanao

Japan Aerospace Exploration Agency (JAXA), Japan, abe@planeta.sci.isas.jaxa.jp

Dr. Akio Fujimura

Japan Aerospace Exploration Agency (JAXA), Japan, fujimura.akio@jaxa.jp

Dr. Toshifumi Mukai

Japan Aerospace Exploration Agency (JAXA), Japan, mukai@stp.isas.jaxa.jp

STATUS OF CURATION AND INITIAL ANALYSIS FOR SAMPLE RETURNED BY HAYABUSA

Abstract

JAXA is now ready to have the sample container at the curation facility in Japan. The container was brought back to the ground in the reentry capsule carried by the Hayabusa spacecraft, which had continued thrusting since it departed the NEO Itokawa in 2007.

The curation facility was built at Sagami-hara campus of JAXA, where the initial curation activity is deployed for initial key analysis performed in various facilities and laboratories in Japan. The analysis is participated not only by Japanese scientists but also by Australian scientists defined under the MOU or a certain relevant agreements.

While the sampling was not performed via the nominal method shooting a projectile, since the spacecraft touches down two times, there is not a small possibility for fine particles to be captured inside the sample catcher aboard the spacecraft. The size of those fine particles is assumed very small and examining the particles will take a lot of time at the Sagami-hara curation facility.

The curation facility of JAXA was newly built in 2006 after the successful Hayabusa's mission deployed around Itokawa at the end of 2005. The facility is where the joint cross-university collaborative efforts are assumed. As soon as the capsule was recovered in Australia, the capsule was transported here and firmly under the custodianship. The first curation and also the first sample analysis are just at the initial steps.

The paper will introduce the latest information about the curation as well as the project status.