

Present status of curation of Hayabusa-returned samples

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The extraterrestrial sample curation team (ESCuTe) of JAXA has continued to perform initial description of Hayabusa-returned samples since 2010, when they had been returned to the Earth (Yada et al., 2014). A sample catcher of Hayabusa is mainly composed of room A and B, and a rotational cylinder. Since 2010 until 2013, we recovered particles from the room A and B of the catcher using synthetic quartz glass disks on which we let them fall down. On the contrast, the cover of room B is a part of the catcher which was disassemble from the catcher, so it should not suffer biases such as the fall-down process and the handpicking process. Since the end of 2013, we started describing all particles larger than 15 microns on a cover of room B of a catcher with an electron microscope, utilizing a specific holder newly developed for introducing the room B's cover directly into the electron microscope. So far, we finished to observe particles on 2/3 of area of the cover to count up more than 1800 of particles on it. Among them, those consist mainly of silicate and are considered to be Itokawa origin count up to more than 400.

Adding more than 100 of newly described particles among them to a list of distributable ones, we published the 3rd international announcement of opportunity (AO) for research of Hayabusa-returned samples in this January and are now waiting for research proposals until this March. Then committee of the 3rd AO will review submitted proposals and the selected proposals will be announced in this June. We will start distributing the allocated particles from this July.

We are now scheduling to finish describing particles on room B's cover in the first half of the fiscal year of 2015. In the second half of FY2015, we will recover particles from the rotational cylinder, from which particles has not been recovered yet.

Reference: Yada T. et al. (2014) *Meteoritics Planet. Sci.* 49, 135.

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