

Science in aasteroid mission HAYABUSA

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Since asteroids are classified into a dozen of spectral classes, if meteorite species corresponding to each asteroid class are known, we can draw the material map of the whole asteroid region.

HAYABUSA is the first mission following this purpose, although it is an engineering spacecraft. It was launched in May 2003, arriving near an Apollo type asteroid 25143 Itokawa in June 2005. The asteroid size is about 600mx300m and the spectral type is S. During the stay nearthe asteroid the global map is made by remote sensing method and the sample of total amount about 1g from the asteroid surface is obtained by shooting a small projectile onto the asteroid surface and catching the ejecta. The capsle in which the sample is contained will return to the earth in June 2007. Preparation for constructing the curation facility and analysis plan are now underway.