

Location-oriented search system for Hayabusa imaging data

Wataru Kawamae^{1*}, Hirohide Demura¹, Kohei Kitazato¹, Naru Hirata¹, Noriaki Asada¹,
Yoshiko Ogawa¹, Junya Terazono¹, Chikatoshi Honda¹

¹University of Aizu

Location-oriented search systems that allow us to obtain an imaging data of selecting location on a map has been widely used in data analysis supports in the research field of Planetary Sciences and for data release system to the public.

In this study, we constructed a data system to provide the Hayabusa imaging data with location-oriented search. Itokawa's 3D shape model was used to enable selecting the location on irregular-shaped body surfaces and the polygon IDs of the 3D model were used as a unique key to identify a certain location. The location-oriented search system consists of the database having information of polygon IDs that correspond to surface area in the image, and the data system was built with Java technologies including JOGL, JSP and Java servlet.

It can be applied to not only the Hayabusa mission but also other space mission of irregular-shaped small objects in the Solar System.