Japan Geoscience Union Meeting 2014
(28 April - 02 May 2014 at Pacifico YOKOHAMA, Kanagawa, Japan)

U06-P07 Room:Poster Time:April 28 18:15-19:30

Hayabusa 2/SCI: calibration impact experiments

KADONO, Toshihiko[1*] ; ARAKAWA, Masahiko[2] ; TSUJIDO, Sayaka[2] ; YASUI, Minami[3] ; HASEGAWA, Sunao[4] ; KUROSAWA, Kosuke[5] ; SHIRAI, Kei[4] ; HAYAKAWA, Masahiko[4] ; OKAMOTO, Chisato[4] ; SAIKI, Takanao[4] ; IMAMURA, Hiroshi[4] ; YANO, Hajime[4] ; NAKAZAWA, Satoru[4] ; OGAWA, Kazunori[4] ; IIJIMA, Yuichi[4] ; HIRATA, Naru[6] ; TAKAGI, Yasuhiko[7] ; WADA, Koji[5]

[1]University of Occupational and Environmental Health, [2]Graduate School of Science, Kobe University, [3]Organization of Advanced Science and Technology, Kobe University, [4]Japan Aerospace Exploration Agency, [5]Planetary Exploration Research Center, Chiba Institute of Technology, [6]Dep. of Computer Science and Engineering, Univ. of Aizu, [7]Aichi Toho University

SCI (Small Carryon Impactor" boarded on "Hayabusa 2" is a hollow Cu sphere with a mass of 15 kg, a diameter of 15 cm, which will impact a surface of asteroid 1999JU3. To estimate the conditions of the surface of the asteroid, such as composition and structure, we should investigate the results of the impact experiments with similar projectiles and various targets. We carried out impact experiments with gypsum and basalt targets and small hollow projectiles accelerated by a two-state light-gas gun at ISAS/JAXA, and sand targets and real scale projectiles at Kamioka. We report a summary of the results of these experiments.

Keywords: Hayabusa 2, Small Carryon Impactor, Impact experiments