

# Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

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PPS022-P02

Room:Convention Hall

Time:May 26 14:00-16:30

## MASCOT, a small lander on Hayabusa-2

Tatsuaki Okada<sup>1\*</sup>, Naru Hirata<sup>2</sup>, Hirohide Demura<sup>2</sup>, Takashi Kubota<sup>1</sup>, Hajime Yano<sup>1</sup>, Yu-ichi Tsuda<sup>1</sup>, Tra-Mi Ho<sup>3</sup>, Lars Witte<sup>3</sup>, Jean-Pierre Bibring<sup>4</sup>

<sup>1</sup>JAXA, <sup>2</sup>University of Aizu, <sup>3</sup>DLR, <sup>4</sup>IAS

The small lander MASCOT (Mobile Asteroid Surface Scout) is being developed for HAYABUSA-2 under the international collaboration among DLR (Germany), CNES (France), and JAXA (Japan). It aims to investigate with high accuracy and spatial resolution the surface geomorphology, the minute structure, texture and composition of rocks, and the thermal and mechanical properties of C-class asteroid. Characteristics and status of the lander is briefly reported.

A 10kg-class lander is being considered with 3kg max. for science instruments. A wide angle multi-band imager WAC and a visible-infrared macro-imaging spectrometer will be equipped. Other candidates are laser induced breakdown spectrometer LIBS and small, light, high-performance instrument such as thermal probe or magnetometer. With these instruments, the lander will conduct its stand-alone surface science of geology and geophysics, obtain geologic context for sample return, and measure composition and mineralogy as groundtruth for remote sensing. The lander will strengthen and complete the science of HAYABUSA-2 complementary to remote sensing and analysis of returned samples.

Keywords: Hayabusa2, asteroid, surface exploration, lander, microscopy, elemental analysis