

## The Development of the Philippines First Microsatellite for Earth Observation: PHL MICROSAT 1

### The Development of the Philippines First Microsatellite for Earth Observation: PHL MICROSAT 1

PULUTAN, Doreena karmina<sup>1\*</sup> ; MARCIANO, Joel joseph<sup>1</sup> ; BAYONA, Michael gringo angelo<sup>1</sup>  
PULUTAN, Doreena karmina<sup>1\*</sup> ; MARCIANO, Joel joseph<sup>1</sup> ; BAYONA, Michael gringo angelo<sup>1</sup>

<sup>1</sup>University of the Philippines

<sup>1</sup>University of the Philippines

By 2016, the Philippines will launch its first Earth-observing microsatellite, PHL-MICROSAT-1. This is under the program, "Development of Philippine Scientific Earth Observation Microsatellite (PHL-MICROSAT)", funded by the Philippines' Department of Science and Technology (DOST). It is a collaboration among scientists, engineers and professors from the University of the Philippines, the Advanced Science and Technology Institute (ASTI) of the DOST, and from Japan, the Hokkaido University and Tohoku University. The aim is to build, launch and effectively utilize the Philippines' first microsatellite for multi-spectral, high precision earth observation, focusing on applications in land and aquatic resource monitoring and assessment, and disaster risk management. It addresses the need to develop capacity through intensive study leading to the development of the microsatellite.

The components of the PHL-MICROSAT program include (1) the microsatellite bus development in Japan and the Philippines; (2) the establishment of the ground receiving station in the Philippines; (3) the creation of a data access, archiving and distribution mechanism and facility; (4) calibration and validation of remote sensing instruments and (5) development of remote sensing products from the microsatellite images.