

Announcement about the end of HORYU-II operation

The HORYU-II satellite has been developed and operated at Kyushu Institute of Technology (Kyutech). It was launched from Tanegashima Space Center as a piggy-back satellite of an H-IIA F21 rocket at 1:39(JST) on May 18, 2012 and released into a sun synchronous sub-recurrent orbit at 2:29(JST). After the satellite was released from the rocket, we could receive its first CW beacon signal at Kyurech ground station at 3:28(JST). During the operation period, HORYU-II suffered anomaly modes several times due to Single Event Latch-ups. Although the satellite was unstable, we kept operating it and succeeded in various missions including high voltage (>300V) photovoltaic power generation. From November 19th, 2016, however, we could not receive any CW beacon signal from HORYU-II. This anomaly mode was the first time in the four years of operation and we suspected a permanent failure and total satellite loss. But, fortunately, we could receive a CW beacon signal from HORYU-II again on January 28th, 2017. As a result of discussions among the project members, we decided to send the kill command and finish the HORYU-II operation.

At 17:59:12(JST) on January 28th 2017, we sent kill command 1. At 17:59:52(JST) on the same day, we sent kill command 2. At the pass from 04:21(JST) on January 29th, we still could receive CW beacon signals from HORYU-II at Kyutech ground station, but at the pass from 05:49(JST), we could not receive a CW beacon signal. As of today, we cannot receive any signal. Therefore, we confirm that the satellite power was completely shut down.

Finally, we would like to thank you very much for all of your great support and guidance in development and operation of HORYU-II. Kyutech has several on-going satellite projects. We appreciate your continued support and guidance in the future.

February 24th, 2017

Kyushu Institute of Technology HORYU-II project members