

15th IAA SYMPOSIUM ON SPACE DEBRIS (A6)
Interactive Presentations (IP)

Author: Mr. Jin Choi
University of Science & Technology, Korea, Republic of

Dr. Jung Jo
Korea Astronomy and Space Science Institute, Korea, Republic of
Dr. Myung-Jin Kim
Korea Astronomy and Space Science Institute, Korea, Republic of
Dr. Dong-Goo Roh
Korea Astronomy and Space Science Institute, Korea, Republic of
Dr. Hong-Suh Yim
Korea Astronomy and Space Science Institute, Korea, Republic of

ORBIT DETERMINATION RESULTS AND SPACE DEBRIS TEST OBSERVATION OF THE
OWL-NET**Abstract**

Korea Astronomy and Space Science Institute has developed the Optical Wide-field patrol-Net (OWL-Net) for maintaining the domestic Low Earth Orbit satellites' ephemeris and monitoring Geostationary Earth Orbit region. It also can be used to observe space debris or natural space objects like asteroid. The orbit determination process was planned with batch least square orbit estimator for every week. We attempted to compare the test operation results with Two Line Elements and CPF files to validate the system. This results can be used to estimate the performance of the OWL-Net operations. And also we present the photometric analysis result for observation of the Astro-H debris. We got the dozens of photometric data of main part of the Astro-H debris for a few seconds with the chopper system in 2016. We calculated the main rotation period and compared it with other's result.