



16th International Workshop on Laser Raging. 13 – 17 October 2008 Poznan, Poland

SLR Coverage Analysis for STSAT-2

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Motivation



- STSAT-2 (Science and Technology of Satellite 2) which will be launched in 2009 is a low earth elliptical orbit. The perigee is 300km, the apogee is 1500km, and the inclination is 80 degree.
- STSAT-2 has three attitude status according to the concept of the mission operation.
- •That means LRA always is not toward a SLR station.
 - LRA (+Z axis) is toward the ground station in Korea
 - The solar panel is toward the sun
 - LRA is toward the nadir point of the earth
- This topic is to analyze LRA coverage to measure the returned photons from the satellite to the SLR station in their attitude status.
 - How the field of view of the LRA can be changed at the SLR observatory in *Shanghai* and *Herstmonceux* about the attitude status during the contact time.

