First SLR Operation in Korea using TROS
(Chinese Transportable Ranging System)

2008. 10.

Hyung-Chul Lim\textsuperscript{1)}, Guo Tangyong\textsuperscript{2)}, Wang Peiyuan\textsuperscript{2)}, Hyeon-Seok Jeon\textsuperscript{1)}, Yoon-Kyung Seo\textsuperscript{1)}, Jong-Uk Park\textsuperscript{1)}, Zou Tong\textsuperscript{2)}

\textsuperscript{1)}Korea Astronomy and Space Science Institute
\textsuperscript{2)}Institute of Seismology, China Earthquake Administration
Background

- **TROS Status from 2005 to 2008**
  - **Upgrades for KHz laser ranging** (2005 – 2007)
    - KHz laser system
    - FPGA including range gate generation, servo system, event timer, time and frequency reference
    - Experiments of KHz laser ranging in Beijing (April 2008)

- **Korean SLR Project from 2008**
  - First development of SLR system in Korea
  - Needs of TROS operation
    - Get operation experience for the future Korean SLR system
    - Understand technologies related to SLR system
    - Laser tracking for Korean satellite (STSAT-2) with LRA which will be launched in 2009

- **TROS operation in Korea**
  - Contract MoA (June 2008)
    - KASI (Korea Astronomy Space Science Institute) and ISCEA (Institute of Seismology, China Earthquake Administration)
    - Mission: collaborative operation of TROS
  - TROS movement from China to Korea (Aug. 21, 2008)
  - TROS operation in KASI headquarters (Daejeon city) from Aug. 2008 to Aug. 2009