Network and Station Performance Session Summary
Chairs: Vincenza Luceri, Mark Torrence

The papers in the session can be roughly divided into three main topics:

1) On-site data quality control

   Some stations reported their effort in reaching and keeping the best data quality. Herstmonceux focussed on the separation of the range bias and height signals using other on-site geodetic techniques (GNSS, absolute gravity); the time-of-flight counter effects are evident and the cause still under investigation

   The Next Generation Satellite Laser Ranging System (NGSLR) was collocated with MOBLAS-7 at GGAO to calibrate the NGSLR event timer and processor. High energy returns were used to calibrate the longer-pulse transmit system built for LRO

   Starting from the need to trace and correct the unmodeled range bias in 2007, MLRO set a quality control loop in cooperation with data analysts, engineers, operators at the station. A control infrastructure and web based information system was defined to enable a constant monitor of the system parameters

   Mt. Stromlo SLR upgraded its laser power. The station is operated unmanned in all weather conditions and still at its productivity levels.

2) Data quality control at Analysis Centers

   A routine quality control system for the ILRS global network is provided by the Hitotsubashi University and numerical tables are available via web, ftp and email. Stations are directly contacted when a bias is evident and encouraged to reply.

   Data analysis activities are carried out at the Changchun site: a bridge between theoretical research and observational work. The LAGEOS 1/2 range and time biases are evaluated

3) Models

   The SLR data from Jason1, Lageos1/2, and TOPEX SLR data have been processed using the latest and most accurate POD models and SLRF2005. Individual SLR station performance and systematic signals have been evaluated and several stations updated in SLRF2005 to obtain LPOD2005.

   Model update is under discussion in the SLR analysis standards. In the near future, a proposal will be done by ILRS to IERS for modification of the analysis standards related to the products contributing to the establishment of the future ITRFxx.

4) Network

   An analysis of the correlation between the TRF datum and the ILRS network geometry has been done with the aim to explain the discontinuity in the SLR scale: further investigation to be done using data simulation

   In September 2009 TanDEM-X was launched to fly with TerraSAR-X in a very close formation.

   Difficulties in the tracking are shown conclusions together with possible remedies for the various station types.