FGI and NASA Sign Space Geodesy Agreement

The Finnish Geospatial Research Institute (FGI) of the National Land Survey and the National Aeronautics and Space Administration (NASA) have signed an agreement to confirm their mutual interest in cooperation in the field of space geodesy.

The contract includes among other things Satellite Laser Ranging (SLR), Very Long Baseline Interferometry (VLBI), and Global Navigation Satellite Systems (GNSS).

Earth orientation in space

The collaboration includes the development of space geodetic techniques, data sharing from local and global geodetic observing networks, improved analysis capability, and research on crustal motion, global reference frames, Earth orientation in space, and the interactions of the Earth systems.

"This collaboration will strengthen the global geodetic infrastructure, improve research and development in the global Earth observation system, and facilitate exchange and discussion of challenging geodetic issues," said deputy director-general Jarkko Koskinen from FGI.

For more than a decade, FGI has hosted a NASA GNSS receiver which is a part of NASA Global GNSS Network (GGN) in Metsähovi Geodetic Observatory. This network improves geophysical observations across the Earth's Polar Regions and provide data to study interaction between the atmosphere, oceans, polar ice sheets and the Earth's crust and mantle.

New SLR and VLBI systems are currently being built in Metsähovi. It is estimated that they will be operational next year. The agreement with NASA will strengthen their role and participation in the global network of geodetic observatories.