

## ILRS: Current Status and Future Plans

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The International Laser Ranging Service (ILRS) has supported the global scientific community for twenty years, coordinating laser ranging observations to a diverse set of orbiting satellites equipped with retroreflectors. In recent years, the service has faced several challenges, most notably an aging network tasked to support an ever-increasing list of targets. Progress is being made in several areas. The ILRS network is expanding with new stations and upgrades to current stations. Capabilities are evolving, including stations with higher repetition rates and more efficient detection to better enable interleaving of satellite passes. New GNSS constellations, as well as other retroreflector-equipped satellites, now bring the total roster to over 100 satellites, requiring the ILRS to consider new tracking strategies. New applications of one-way and two-way laser ranging include ps-accurate time transfer and laser transponders for interplanetary ranging. Analysis centers continue refining ILRS data products, including satellite orientation, gravity field products, and characterizations of the quality of data and station performance.

This talk will summarize current status, recent progress, upcoming challenges , and plans for the future of the ILRS.