



5th plenary meeting of the Subcommittee on Geodesy

NASA Update

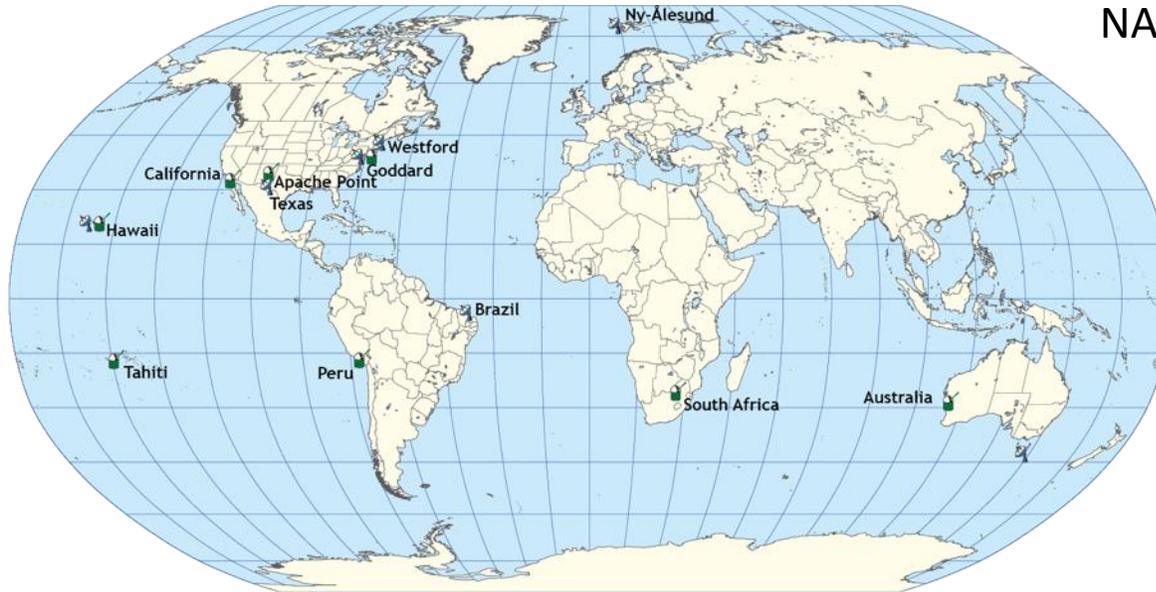
Stephen Merkowitz
Space Geodesy Project Manager

NASA Goddard Space Flight Center

March 11, 2026



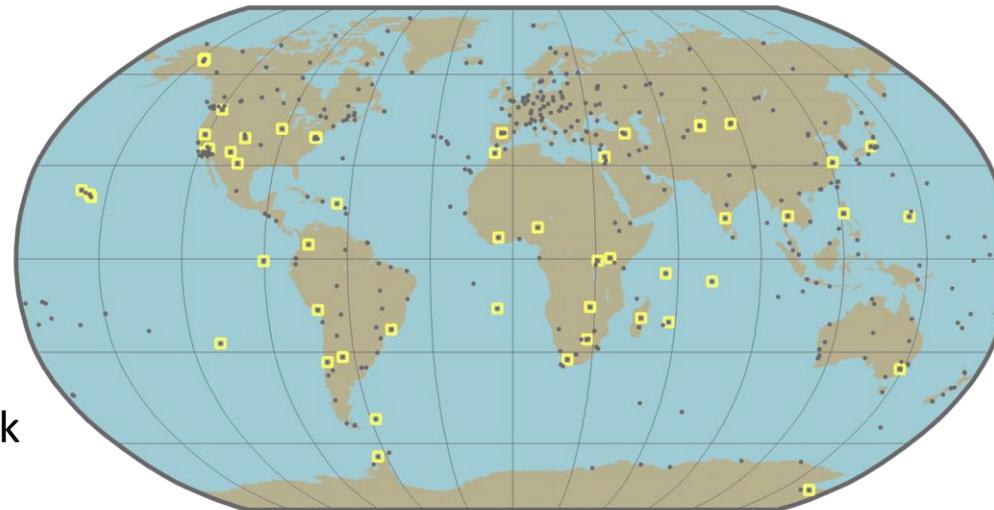
NASA Space Geodesy Program



NASA Space Geodesy Network



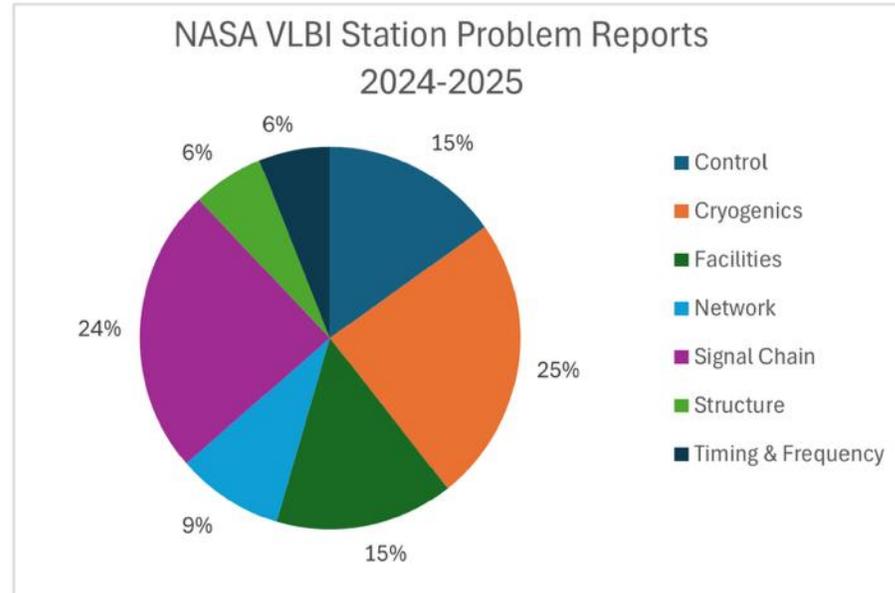
NASA Global GNSS Network





Sustaining the Network

Compressor replacement at MGO



Replacement of 15-year-old elevation motor at GGAO



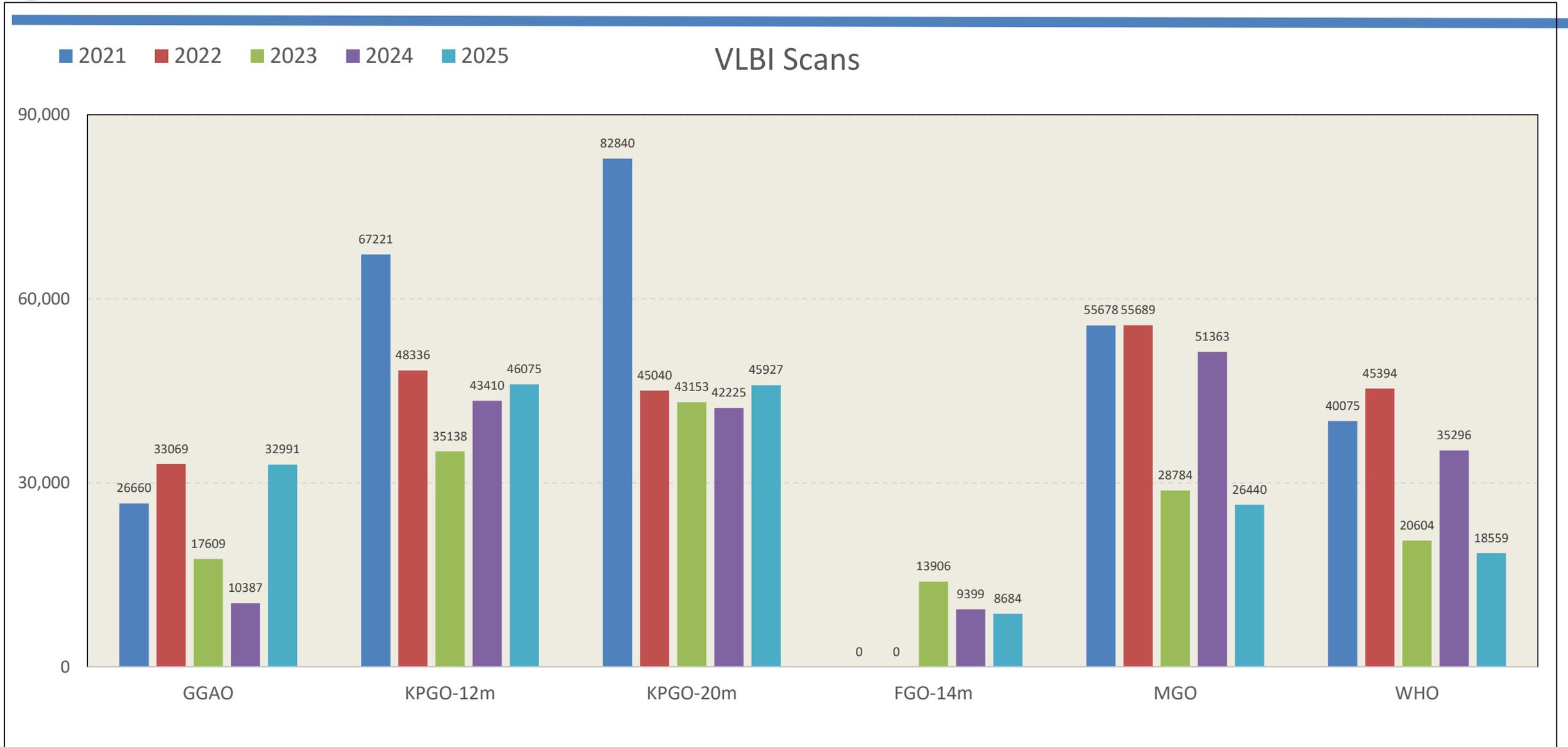
KPGO network fiber damaged during wildfires in August 2024 were finally repaired in July 2025



Azimuth and Elevation Motor replacements at TLRS-3 (Peru)

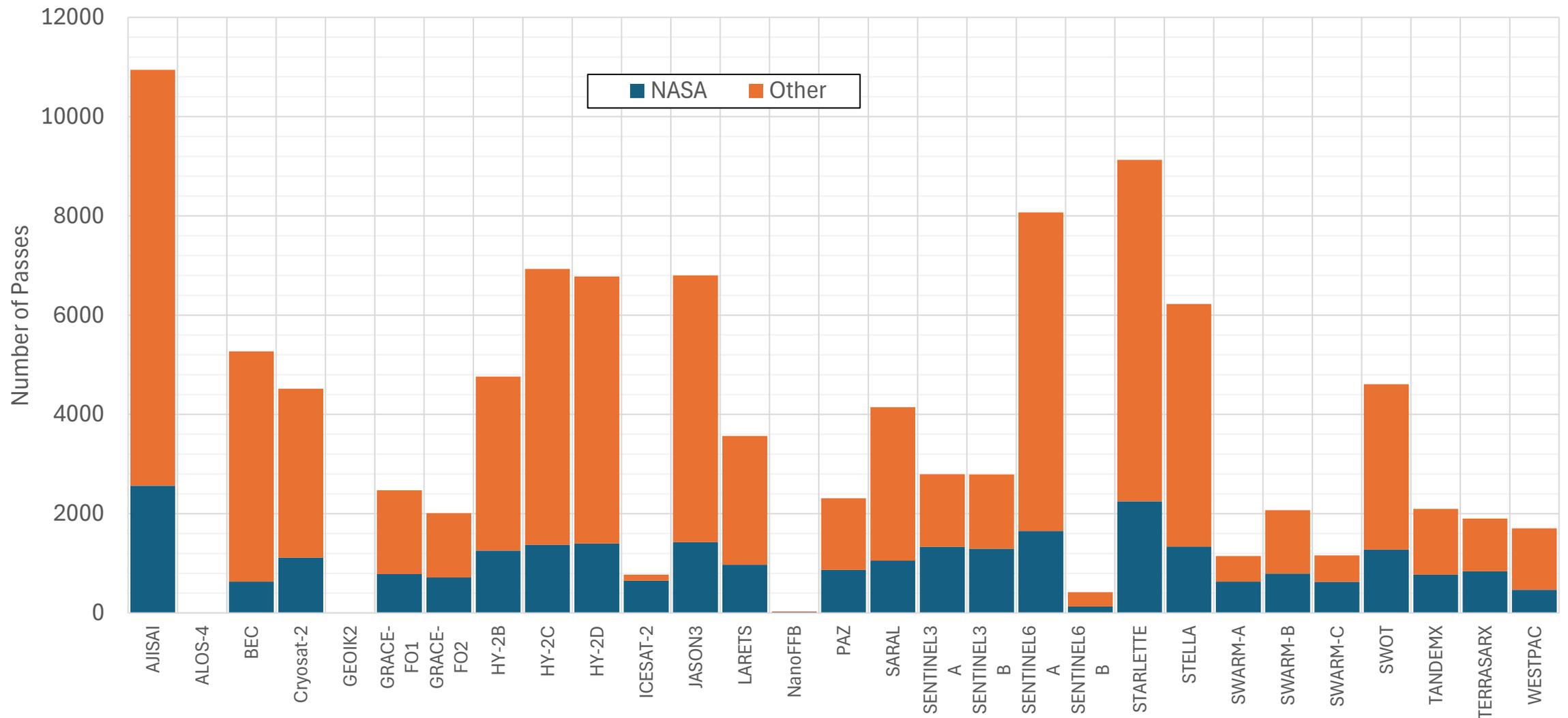


NASA VLBI Station Performance



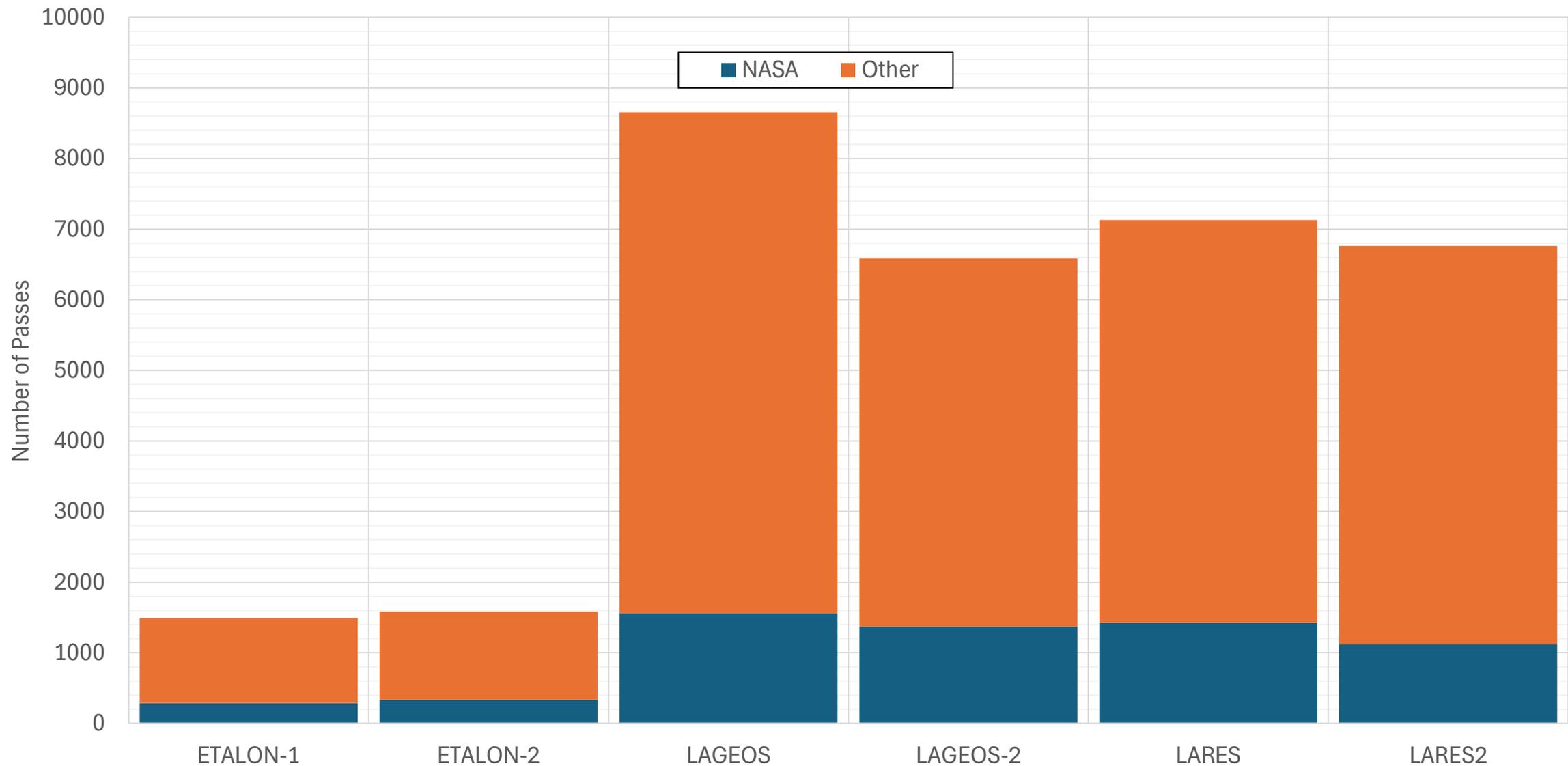


ILRS LEO Satellite Tracking (2025)



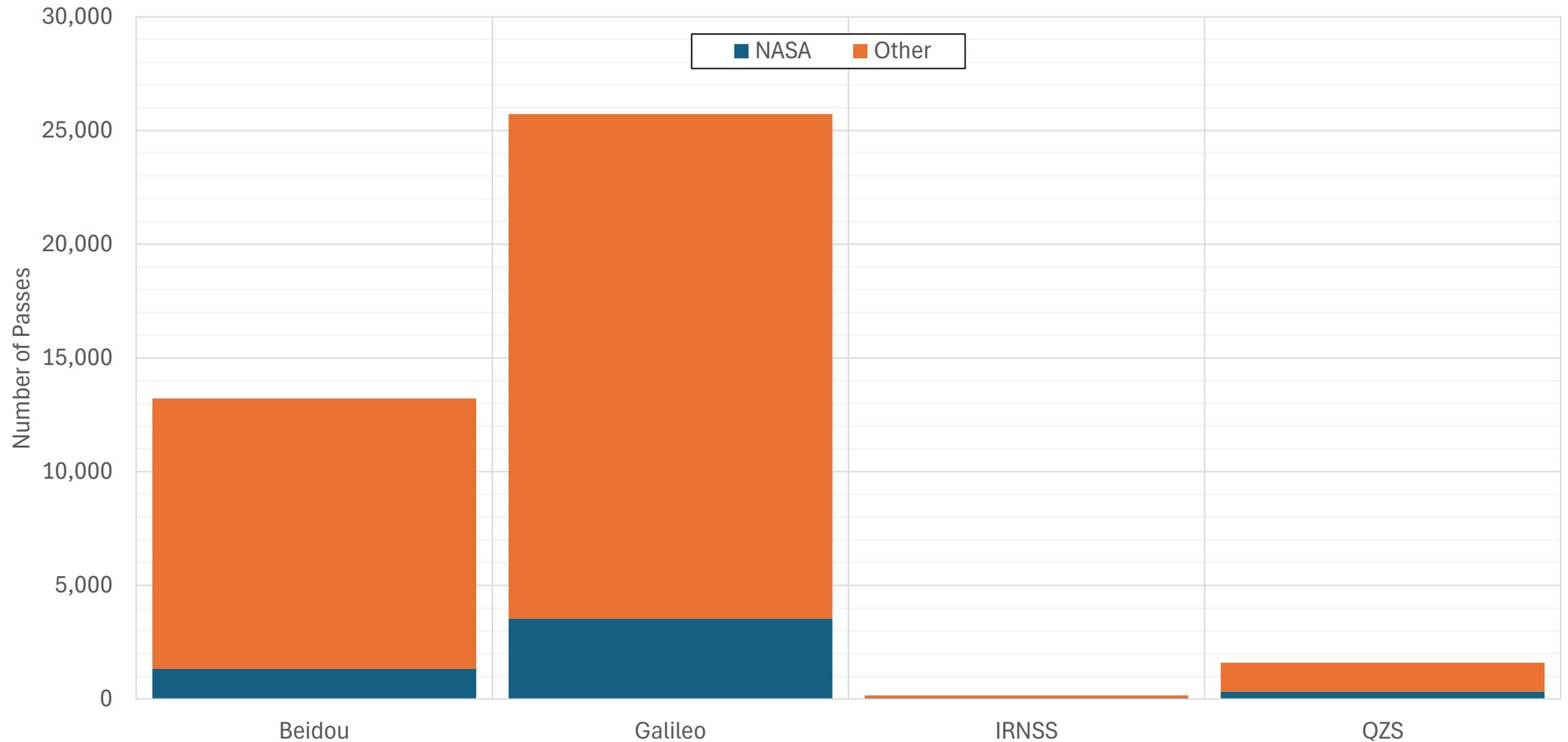


ILRS Reference Frame Satellite Tracking (2025)





ILRS GNSS Satellite Tracking (2025)





Laser Ranging to GPS is Back!



Successful launch
Jan 27, 2026



GPS III vehicles 9 & 10 and all GPS IIIF vehicles will have NASA provided laser retroreflectors.



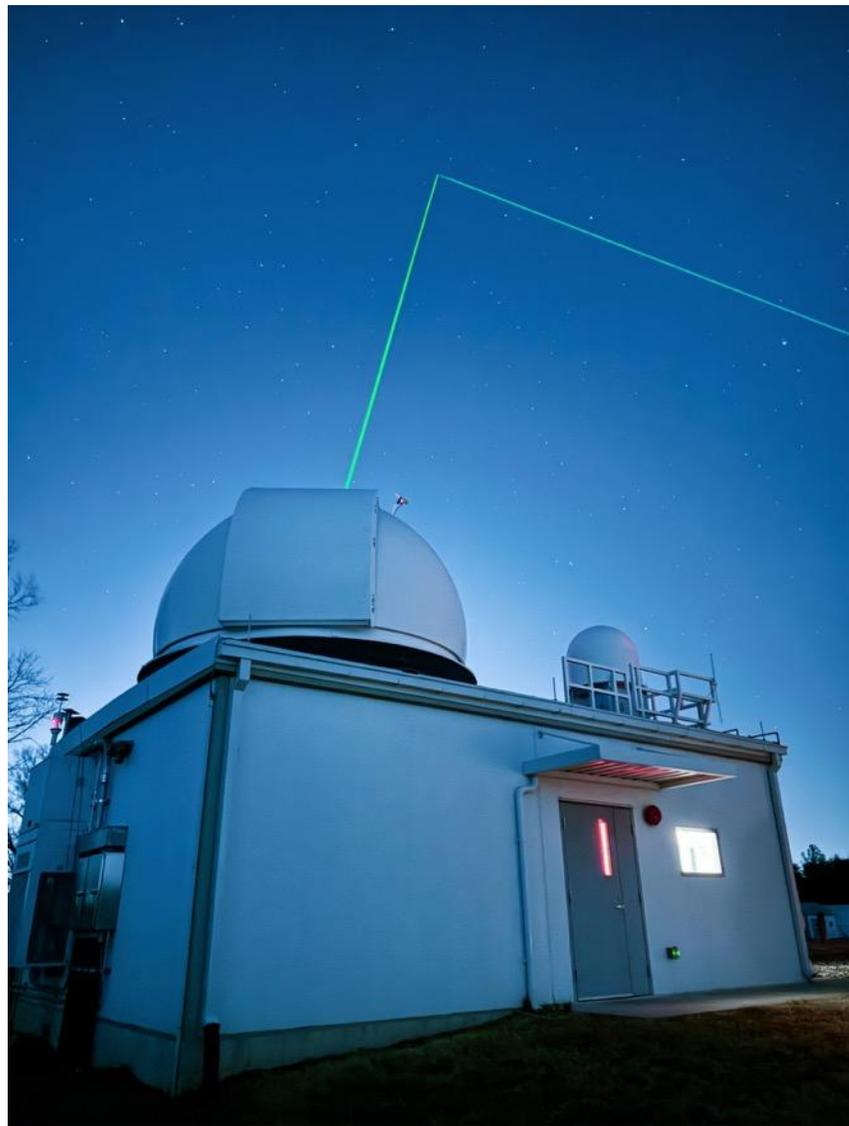
Svalbard SLR Station Deployment



Completed Testing of NASA's Space Geodesy Satellite Laser Ranging Ny-Ålesund system at NASA Goddard. Pre-Ship Review scheduled for April 2026 with planned operations by October 2026.



Verifying SGSLR with MOBBLAS-7 at GSFC





Texas SLR Station Deployment





NASA VGOS Station Brazil Deployment

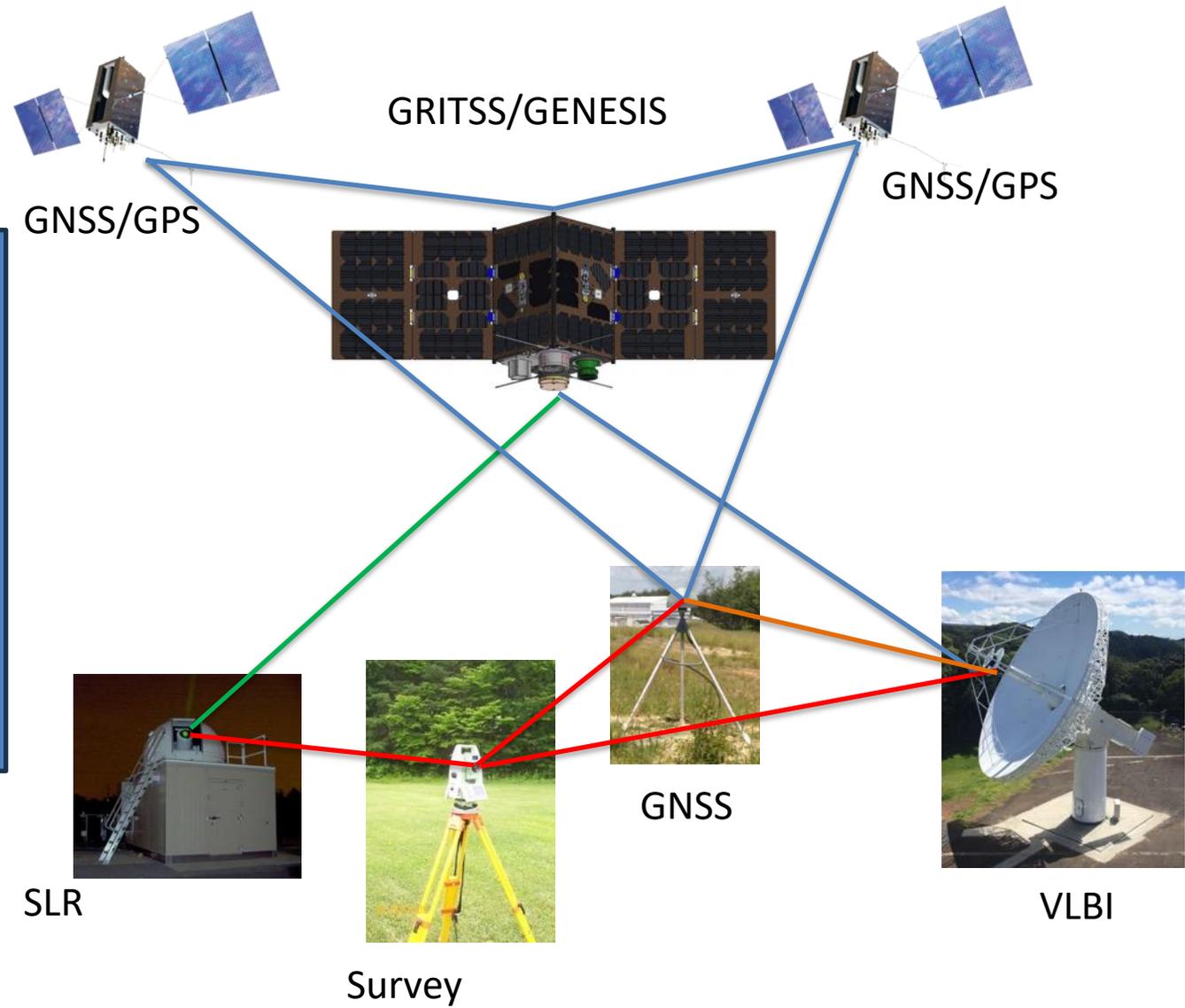


Installation complete. New VGOS station should become operational by May 2026



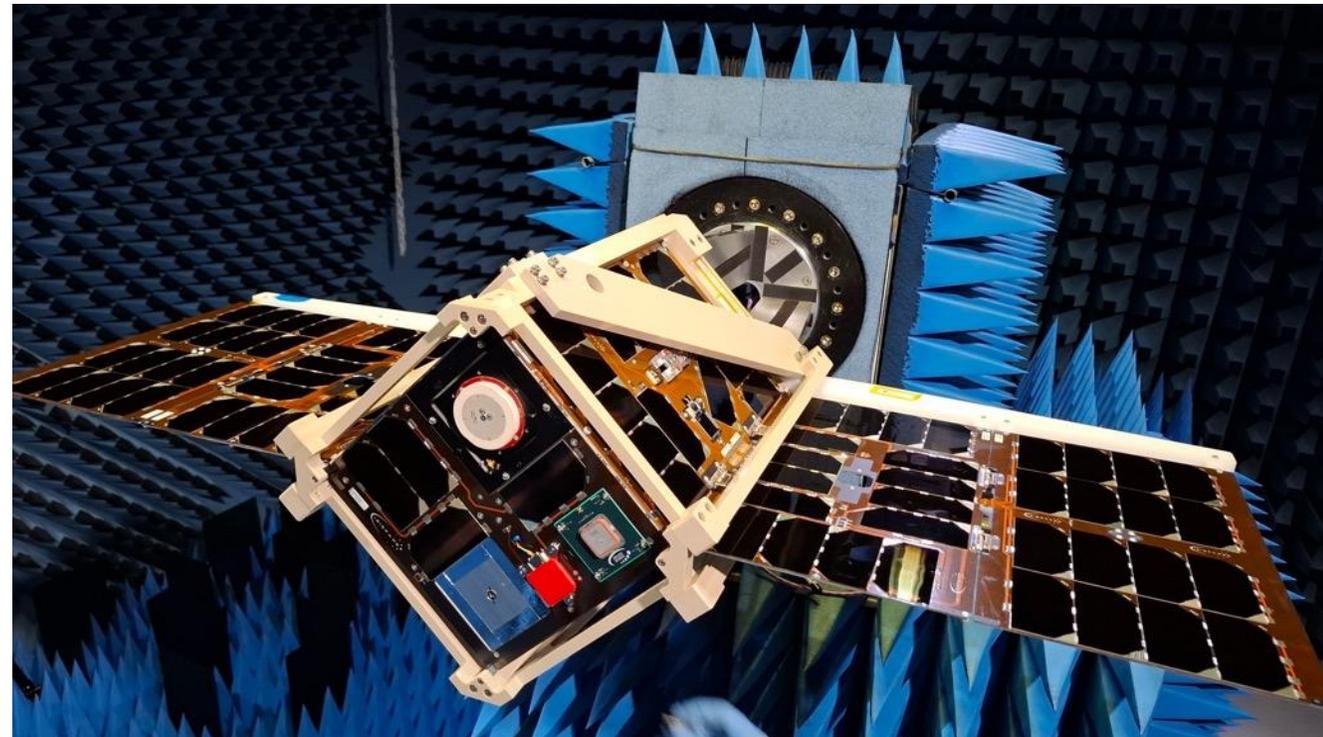
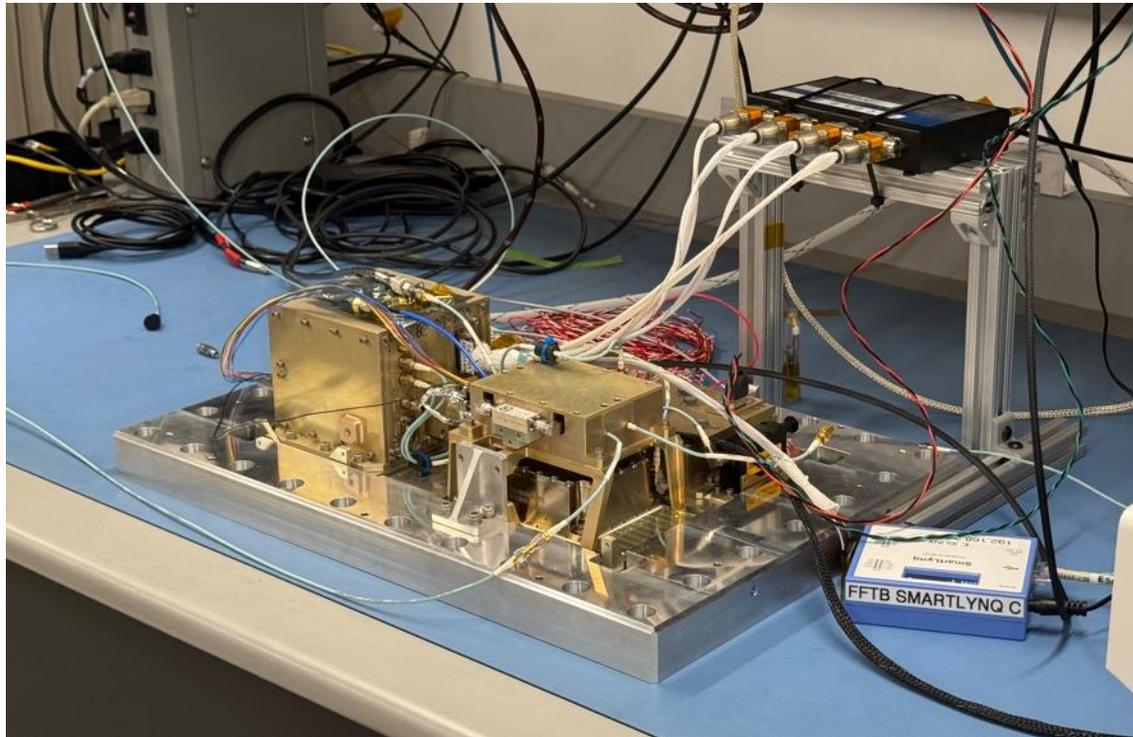
Geodetic Colocation In Space

Observations of a common space-based reference has the potential for reducing the uncertainty in the local-ties to the mm level thus improving the ITRF combination.





Geodetic Reference Instrument Transponder for Small Satellites (GRITSS)



Final GRITSS testing ongoing at ISISpace in the Netherlands. Scheduled to launch on SpaceX Transporter-17 in June 2026.



IAG Services Updates

◆ ILRS Central Bureau

- Dr. Michael Pearlman retired; Dr. Michael Croteau (NASA/GSFC) appointed Director

◆ IGS Central Bureau

- Camille Martire (JPL) Acting Director