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An Update on the GGOS Bureau of Networks and Observations

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The GGOS Bureau of Networks and Observations works with the IAG Services (IVS, ILRS, IGS, IDS, IGFS, IERS, and PSMSL) to advocate for the expansion and modernization of space geodetic networks for the maintenance and improvement of the reference frame and other applications, as well as for the integration of the techniques. Of particular interest is the integration of gravimetric and tide gauge networks in view of the forthcoming establishment of a new absolute gravity reference frame and of the International Height Reference System/Frame. New sites are being established following the GGOS concept of “core” and co-location sites, and new technologies are being implemented to enhance performance in data yield as well as accuracy.

The IAG Committees and Joint Working Groups play an essential role in the Bureau activity. The Standing Committee on Performance Simulations and Architectural Trade-offs (PLATO) uses simulation and analysis techniques to project future network capability and to examine trade-off options. The Committee on Data and Information is working on a strategy for a GGOS metadata system for data products and a more comprehensive long-term plan for an all-inclusive system. The Committee on Satellite Missions is working to enhance communication with the space missions, to advocate for missions that support GGOS goals and to enhance ground systems support. The IERS Working Group on Site Survey and Co-location (also participating in the Bureau)

is working to enhance standardization in procedures, outreach and to encourage new survey groups to participate and improve procedures to determine systems' reference points, a crucial aid in the detection of technique-specific systematic errors.

We will give a brief update on the status and projection of the network infrastructure for the next several years, and the progress and plans of the Committees/Working Groups in their critical role in enhancing data product quality and accessibility to the users, scientists and the general community.