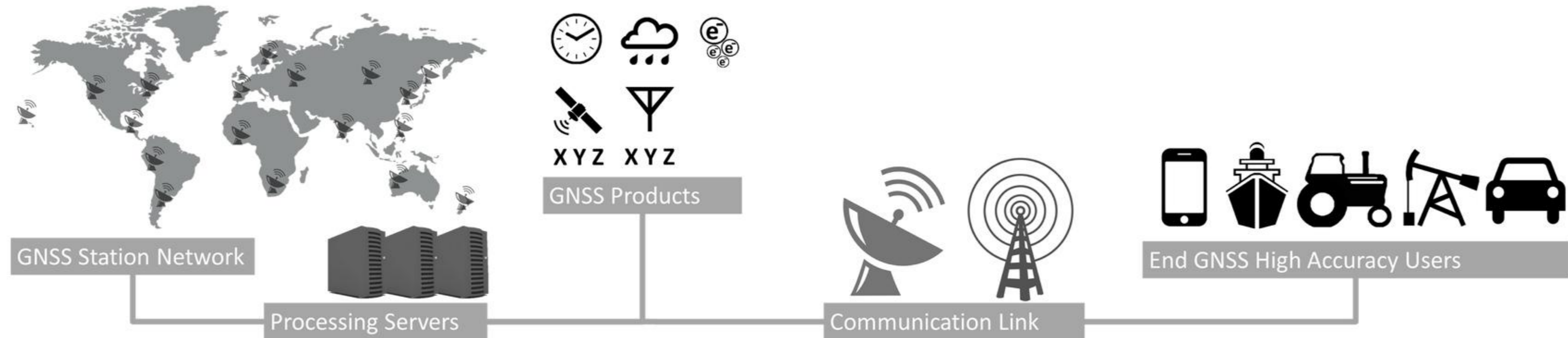


magicGNSS' CONTRIBUTION TO REAL TIME IGS SERVICE

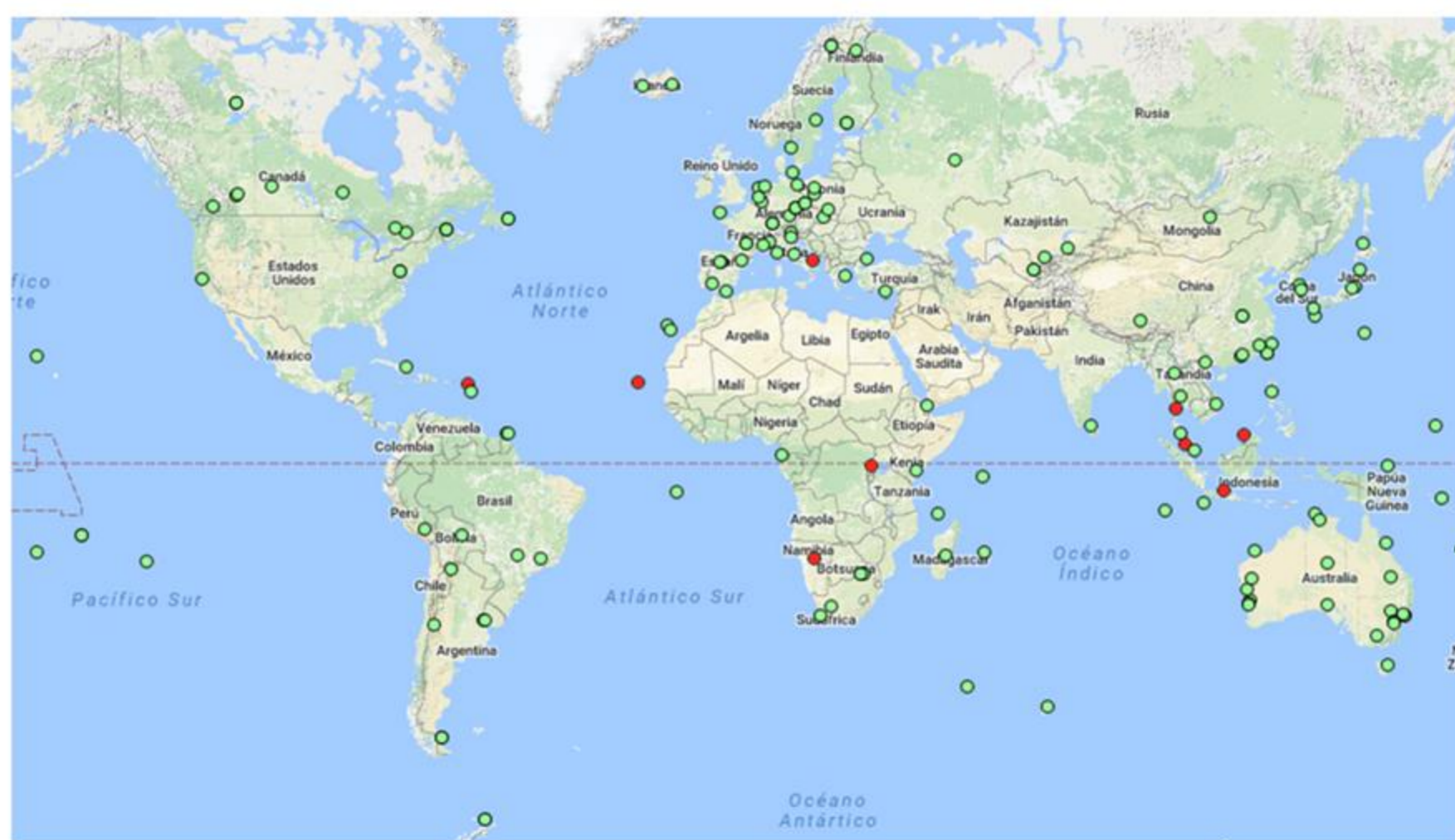
GUILLERMO TOBIAS, PEDRO F. NAVARRO, IRMA RODRIGUEZ/ GMV

magicPPP INFRASTRUCTURE



MULTI-GNSS SOLUTION

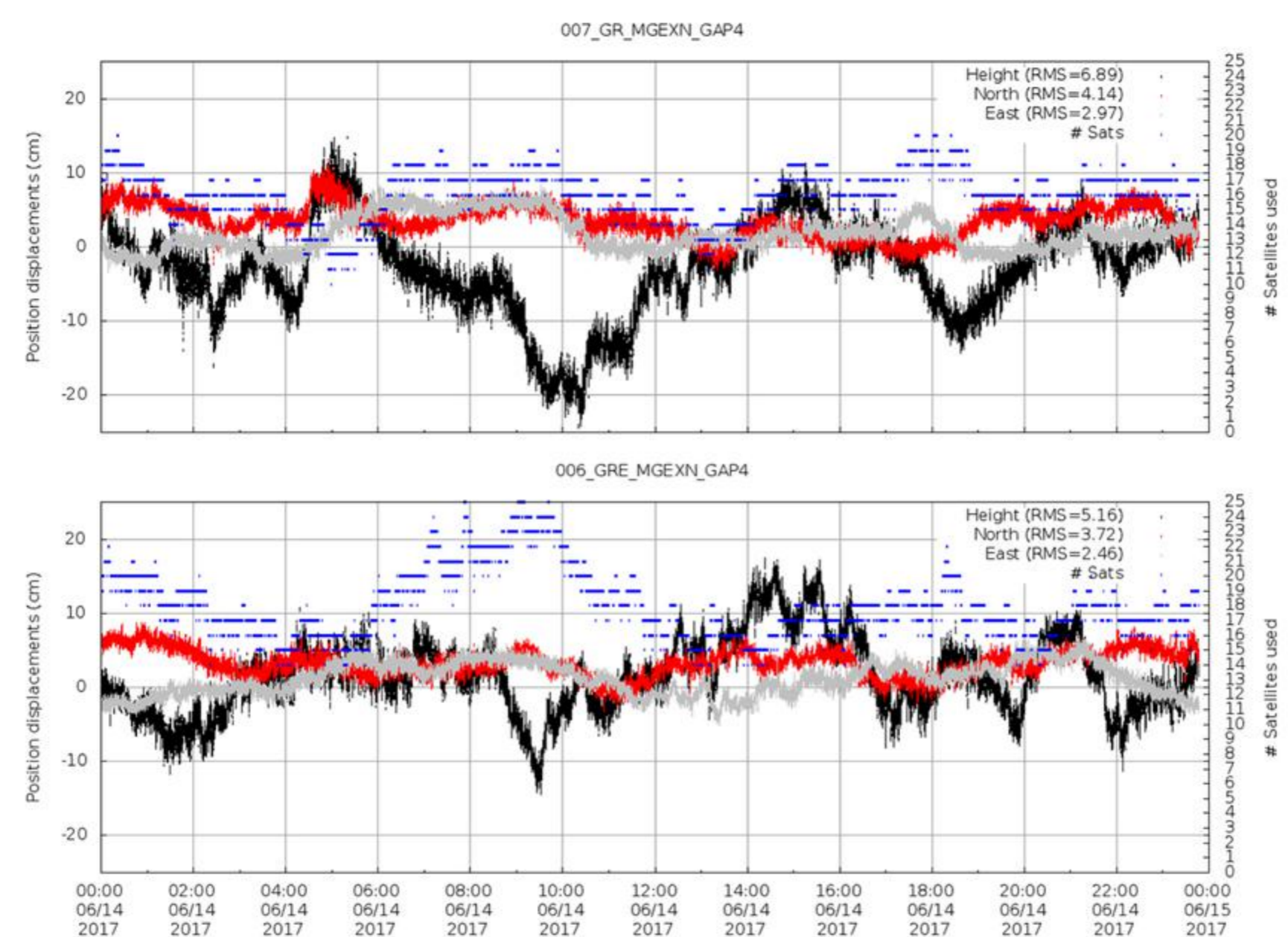
- Multi-GNSS solution based on RTCM MGEX data processing
- GPS + GLONASS + Galileo + BeiDou + QZSS** combined process
- Sequential constellation processing approach for computation time reduction
- Usage of **draft RTCM messages** for BeiDou ephemeris and Galileo ephemeris corrections



REAL-TIME PPP PERFORMANCES

End performances evaluated at user level both for:

- Nominal G+R RTIGS Contribution:** 4cm HRMS, 7cm VRMS
- Multi-GNSS MGEX-based Solution:** 3cm HRMS, 5cm VRMS



MONITORING SYSTEM

Real-Time monitoring of the reference GNSS station network data to prevent RTIGS contribution performance degradation.

Key features monitored:

- Data availability / Data quality
- Position stability
- GNSS receiver clock stability
- Tropospheric Zenith Delay stability
- Configurable Alert Thresholds

