



## NOAA Joint Polar Satellite System Scientific, Engineering, Analytical, and Management

### Project Highlights

#### Services:

- Program Science Support
- Outreach and User Engagement
- PGRR Budget Management
- LEO Office Communications Support
- Satellite Training Support
- OSPO Logistics and Supply Support
- RF Engineering Support

#### Accomplishments:

- Drafted, coordinated, and published the inaugural LEO User Engagement Plan.
- Managed the LEO PGRR Programs including 11 joint developer and user initiatives. The GST Team facilitates six of these initiatives.

#### Impacts:

- Leveraging training workshops, forecasters in Central America and the Caribbean are using LEO data and products more frequently to respond to environmental challenges.
- Better weather forecasting by NWS using new LEO-based products

### GST Support for NOAA JPSS SEAM

Through the JPSS SEAM contract, GST provides technical, scientific, engineering, and programmatic support for NOAA's Office of Low Earth Orbit (LEO) Observations as well as programmatic and engineering support for the Office of Satellite and Product Operations (OSPO).

#### LEO PGRR and UE Support

The LEO Office is charged with managing the current Joint Polar Satellite System (JPSS) Program and developing the Next Generation of Polar-Orbiting and Low-Earth-Orbiting Operational Environmental Satellites designated the Near Earth Orbit Network (NEON). This is a collaborative effort between NOAA, NASA, and their industry partners. JPSS gathers and delivers critical observations for accurate weather and severe storm forecasting, and global measurements of atmospheric and oceanic conditions such as ozone and sea surface temperatures. GST's support has focused on two primary areas. We play a key role in the LEO Proving Ground Risk Reduction program, empowering improved user applications through cooperative projects, and we created and now support the LEO Office User Engagement (UE) framework and UE Plan and organize and execute UE activities.

- **LEO PGRR Program:** The GST Team created the PGRR Program and used new Call for Proposals, every three years, to refine user-focused projects to optimize their operational application of LEO capabilities. The continued success of the PGRR program has been the collaboration between satellite developers and the key LEO user communities. Frequent communication through the PGRR Initiatives allow new ideas to be identified and tested in stakeholder environments to ensure that transition from research to operations is quick and effective. GST worked with the projects to identify funding mechanisms and then assist in executing the PGRR Budget to ensure that project funding is available when needed. GST worked closely with the LEO Communications Team to capture and communicate the societal benefits of the use of current and new LEO data and products. The LEO Annual Science Digest is a critical resource showing how NOAA and other government, industry, and public users put the LEO capabilities to use. These applications have provided key training resources in national and international conferences and workshops, which have brought new forecasters into the LEO user community.
- **LEO UE:** The GST Team has led the Office of LEO response to the US Government UE Focus. We are key members of the NESIS User Engagement Council ensuring that the LEO concerns are well represented. GST led the LEO team's effort to draft, coordinate, and publish the first-ever LEO User Engagement Plan, which provides the strategic guidance for the LEO UE activities. These activities focus on LEO capabilities but GST has also worked with NOAA's Geostationary Program to coordinate a joint LEO-GEO group to identify UE events. GST helps create a dynamic and flexible UE structure that has been applied for both national and international conferences.

#### Engineering and Programmatic Support

**Radio Frequency Engineering:** GST manages the RF testing and installation of numerous power amplifiers and frequency converters in the L- and S-band frequency range. We collaborate closely with industry leaders to address challenges during the manufacturing process. We support and upgrade GOES antennas, and traveled to Australia to upgrade the GOES Indian Ocean facility antennas.

**Logistics:** GST supports NESDIS contracting officers, including Acquisitions and Grants Office (AGO), DOC Enterprise Services (DOC-ES), Field Delegates, and Purchase Card holders. We schedule and arrange logistics and record meeting minutes and provide pre-award contract functions that include market research, solicitations, cost/price analysis for research, and development of contracts/task orders. We collaborate with CORs, mission leads, and budget analysts to ensure that all requirements are included in the budget. We track purchases and follow up with the status of the contracts/purchases via the Contracting Specialists and Contracting Officers. Our specialists support the development of short/mid/long-term tech refresh hardware plans, trades, parts lists, cost estimates, and spending profiles, along with hardware maintenance and software plus software licenses and subscriptions.