Summary of Work

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Statement of Work

- **Support RO Level-1a data processing**
  - **Help for coding, error analysis in different schemes**
  - **Software installation, testing**
  - **Algorithm checking (from ROPP and papers).**
- **Support RO data product validation**
  - **Comparison of EXCESS phase/Bending Angle from UCAR and NOAA/STAR/UMD results, as well as other missions**
- **Support on Error analysis in POD/Excess phase**
  - **Check attitude information and equation for both LEO and GNSS satellites**
  - **Assess the Antenna errors due to difference in attitude coordinate systems.**

Current and Important Work

- Separate RO events from raw observations from OCC antennas
  - first step quality control using SNR
- Pair high rate RO events (OCC) with events from POD antennas
  - Used for single differencing to remove clock error in excess phase calculation
  - Low rate RINEX files (current C-2) and high rate POD observations (C-2 in near future and C-1).
- Process the GNSS Navigation bit data
  - Extract Navigation bit series from UCAR bitArc database
  - To be used in Cycle Slip detection in open-loop dataset

Papers

TBD with Bin Zhang