



Standard Operation Procedure for Reporting INST-CAL Missing Anomalies for CWG IPM Monitoring

2020-03

GOES-R Calibration Working Group (CWG) develops an Instrument Performance Monitoring (IPM) system integrated into GOES-R calibration website. This system provides timely monitoring on-orbit performance of GOES-16/17 with operational INST-CAL/INST-CAL-ENG files, including temperatures of critical components, calibration measurements and calibration parameters. CWG is normally using the operational INST-CAL/INST-CAL-ENG files from the NOAA STAR Central Data Repository (SCDR) servers, which is streaming these dataset from NESDIS OSPO Product Distribution and Access (PDA) servers with a latency about 30-60 minutes.

For CWG IPM monitoring and trending, an alternative of manually downloading the INST-CAL files can be available from Level Zero Storage Service (LZSS) servers, but time-consuming, especially with a large gap of data missing. The INST-CAL dataset missing are observed occasionally during the operation and shall be reported to PRO/GS to resolve. This document thus outlines the Standard Operation Procedure (SOP) for CWG members to report anomalies of operations, monitor its progress, approve its solution, and provide updates to other members of CWG.

Procedure

1. The anomaly of INST-CAL/INST-CAL-ENG files missing is normally defined as its period more than 12 hour. However, critical periods (e.g. solar calibration, yaw flip transition) with shorter missing gap might not need to meet this requirement.
2. IPM POC (Haifeng Qian) is responsible to collect the missing dataset information based on the IPM and an auto-alert system, check possibility of dataset delay from PDA and availability in LZSS and analyze the impact of anomaly.
3. POC evaluates the impact to decide whether it needs to report to radiometric calibration leader(Fangfang Yu). If necessary, notify radiometric calibration leader of the anomaly event.
4. Radiometric calibration leader reviews the report and acts to determine whether to report to PRO (Jon Fulbright) /GS (Crystal A Mcclide) and provides the suggestions/comments on the event. Discuss with CWG Lead (Xiangqian Wu) and the team if necessary.
5. If approved, POC will act to collect the evidence and report to PRO/GS and request PRO's coordination to resolve the issue. POC will track the status and inform the updates to the team.



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6. In case of critical periods, POC and radiometric calibration leader need to determine whether to retrieve the missing data by whom and when from LZSS.

Roles and Responsibility – Anomaly Report SME

The POC remains the responsibility of reporting, tracking and commutation for the anomaly event as well as collaborating with PRO/GS to resolve the anomaly and update the status to the team if need.

Roles and Responsibility – Anomaly Report Manager

CWG radiometric calibration lead may supports to the communication, notify CWG Lead (Xiangqian Wu) and the team if necessary.

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