

# Data Intake Processing and Verification Report

## [Draft - In Progress]

### Background Information

- **Original Dataset Name:** OCO-2 GEOS Level 3 daily, 0.5x0.625 assimilated CO2 V10r (OCO2\_GEOS\_L3CO2\_DAY) at GES DISC
- **GHG Center Dataset Title:** OCO-2 GEOS Column CO<sub>2</sub> Concentrations
- **Dataset Provider:** NASA
- **Date Obtained:** August 2023
- **Location Obtained From:** <https://doi.org/10.5067/Y9M4NM9MPCGH>
- **Data Location in GHG Center:** oco2geos-co2-daygrid-v10r
- **Data POC(s):** Dr. Lesley Ott, Dr. Brad Weir
- **Dataset File Type(s):** NetCDF
- **Projection (if different from WGS84):** NA

### Data Transfer Confirmation

An SHA-256 checksum is used to detect high-level errors within data transmissions.

- Results from individual checksum file comparisons of pre-transfer and post-transfer
  - All files were transferred successfully

Filename	SHA 256 Original file	

- Report any individual file issues: NA

### Data Intake Process

- [https://us-ghg-center.github.io/ghgc-docs/data\\_workflow/oco2geos-co2-daygrid-v10r\\_Data\\_Flow.html](https://us-ghg-center.github.io/ghgc-docs/data_workflow/oco2geos-co2-daygrid-v10r_Data_Flow.html)

### Overall Dataset Statistics

- Data file reads confirmed:
- Mean, min, max across all files:
  - Original dataset:
  - COG transformed dataset:
- Distribution of values across all data (by variable)
  - Original dataset:
  - COG transformed dataset:

- File range (most cases will be all files)
- Bounding Box of all data
- Link to transformation record in Jupyter Notebook <>
- All values are in expected range (catches out of range values)

## Specific, Random Checks/Visual Confirmation

- Visual example and side by side comparison
- More detailed statistics for specific files (randomly chosen)
  - Statistics was performed for the following files:
    - TBD

## Summary

- We are confident that the transformation and display of data in the GHG Center is correct
- There were no problems identified in the data
- Link to user notebook <>
- Link to GHG Center data catalog overview page <>

**Report Completed on:**

**MSFC POC for questions:** <>