

# Data Intake Processing and Verification Report

## [Draft - In Progress]

### Background Information

- **Original Dataset Name:** CEOS Pilot Top-down methane emissions estimates by sector and country
- **GHG Center Dataset Title:** CEOS Methane Budgets
- **Dataset Provider:** CEOS, NASA/JPL
- **Date Obtained:** August 15, 2023
- **Location Obtained From:** [CMS-Flux \(nasa.gov\)](#)
  - [TopDownEmissions\\_GOSAT\\_GEOS\\_CHEM\\_2019.nc](#)
- **Data Location in GHG Center:** ceos-ch4budget-yeargrid-v1
- **Data POC(s):** Dr. Kevin Bowman
- **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

- Link the document with all steps identified

### 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
- Data comparison at a few specific locations

## 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:** <>