

Draft

Data Intake Processing and Verification Report

Background Information

- **Original Dataset Name:** Replication Data for: Geostationary satellite observations of extreme and transient methane emissions from oil and gas infrastructure
- **GHG Center Dataset Title:** Geostationary Satellite Observations of Extreme and Transient Methane Emissions from Oil and Gas Infrastructure
- **Dataset Provider:** NOAA, Harvard University
- **Date Obtained:** November 2024
- **Location Obtained From:** <https://doi.org/10.7910/DVN/EQWHCG>
 - Plume masks (for visualization purposes) delivered directly to the US GHG Center
- **Data Location in GHG Center:** goes-ch4plume-v1
- **Data POC(s):** Dr. Shobha Kondragunta, Dr. Daniel Varon, Dr. Tailong He
- **Dataset File Type(s):** NetCDF
- **Projection (if different from WGS84):** N/A

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 shows all files were transferred successfully and no individual files had any transfer issues.

Data Intake Process

- https://us-ghg-center.github.io/ghgc-docs/data_workflow/goes-ch4plume-v1_Data_Flow.html

Overall Dataset Statistics

- Statistics across all files:

	Minimum (mol CH ₄ /m ²)	Maximum (mol CH ₄ /m ²)	Mean (mol CH ₄ /m ²)	Standard Deviation
Original Data				

Transformed Data				
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Visual Comparison:

Original Data

Transformed Data

- Link to transformation record in [Jupyter Notebook](#)
- All values are in expected range

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 [Data Usage Notebook](#)
- Link to [US GHG Center Data Catalog overview page](#)

Report Completed on:

MSFC POC for questions: [Jeanné le Roux](#), [Siddharth Chaudhary](#)