Data Intake Processing and Verification Report

Background Information

- **Original Dataset Name:** Gridded EPA U.S. Anthropogenic Methane Greenhouse Gas Inventory (gridded GHGI)
- **GHG Center Dataset Title:** Gridded Anthropogenic Methane Emissions Inventory
- **Dataset Provider:** EPA
- **Date Obtained:** August 2023
- **Location Obtained From:** https://doi.org/10.5281/zenodo.7672124
- **Data Location in GHG Center:** epa-ch4emission-grid-v2express
- **Data POC(s):** Dr. Erin McDuffie
- **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 shows all files were transferred successfully and no individual files had any transfer issues.

Data Intake Process

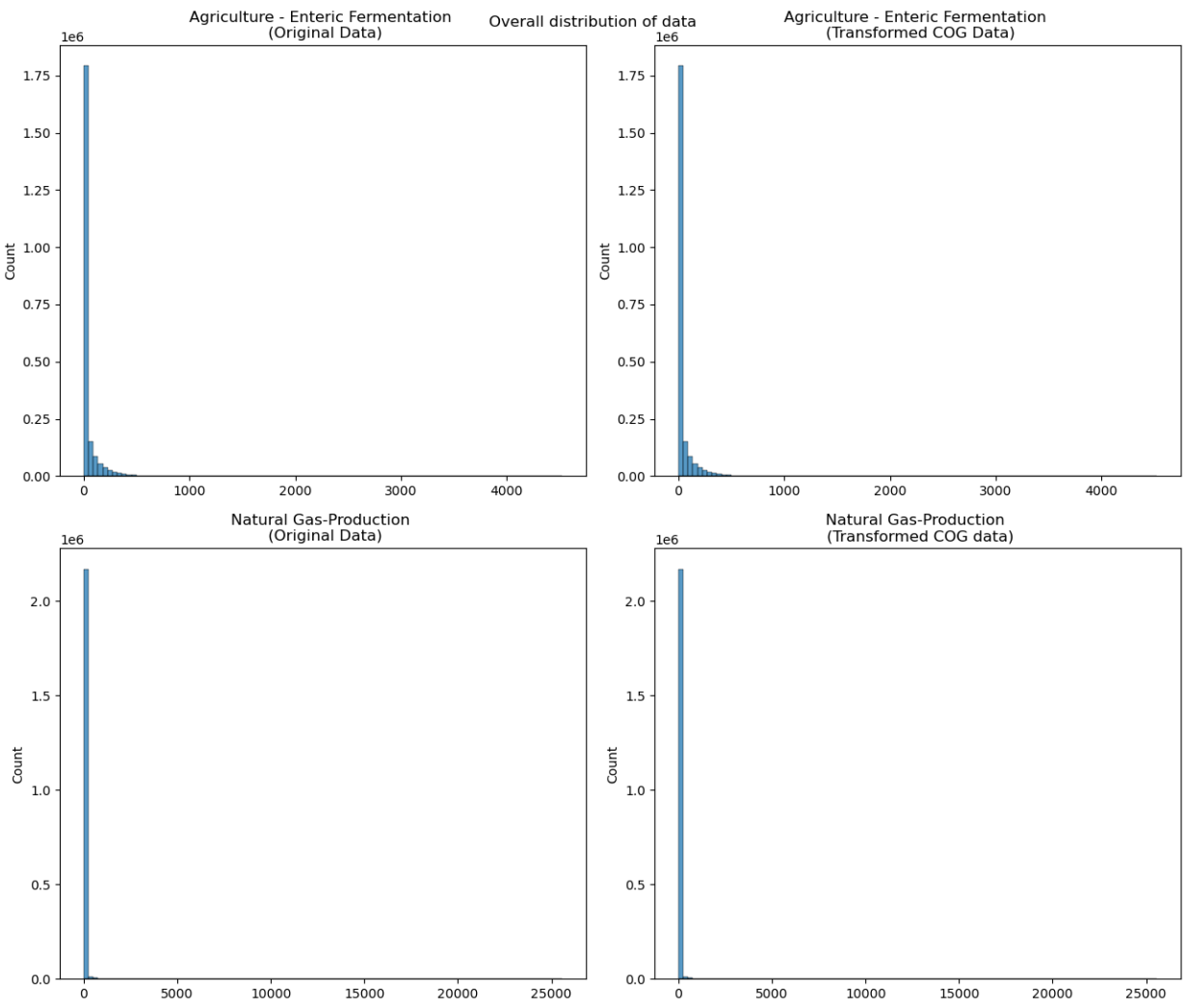
- https://us-ghg-center.github.io/ghgc-docs/data_workflow/epa-ch4emission-grid-v2express_Data_Flow.html

Overall Dataset Statistics

- Statistics across all files for all variable:

	Minimum	Maximum	Mean	Standard Deviation
Original Data	0	223732.66	39.1966	263.9056
Transformed Data	0	223732.66	39.1966	263.9056

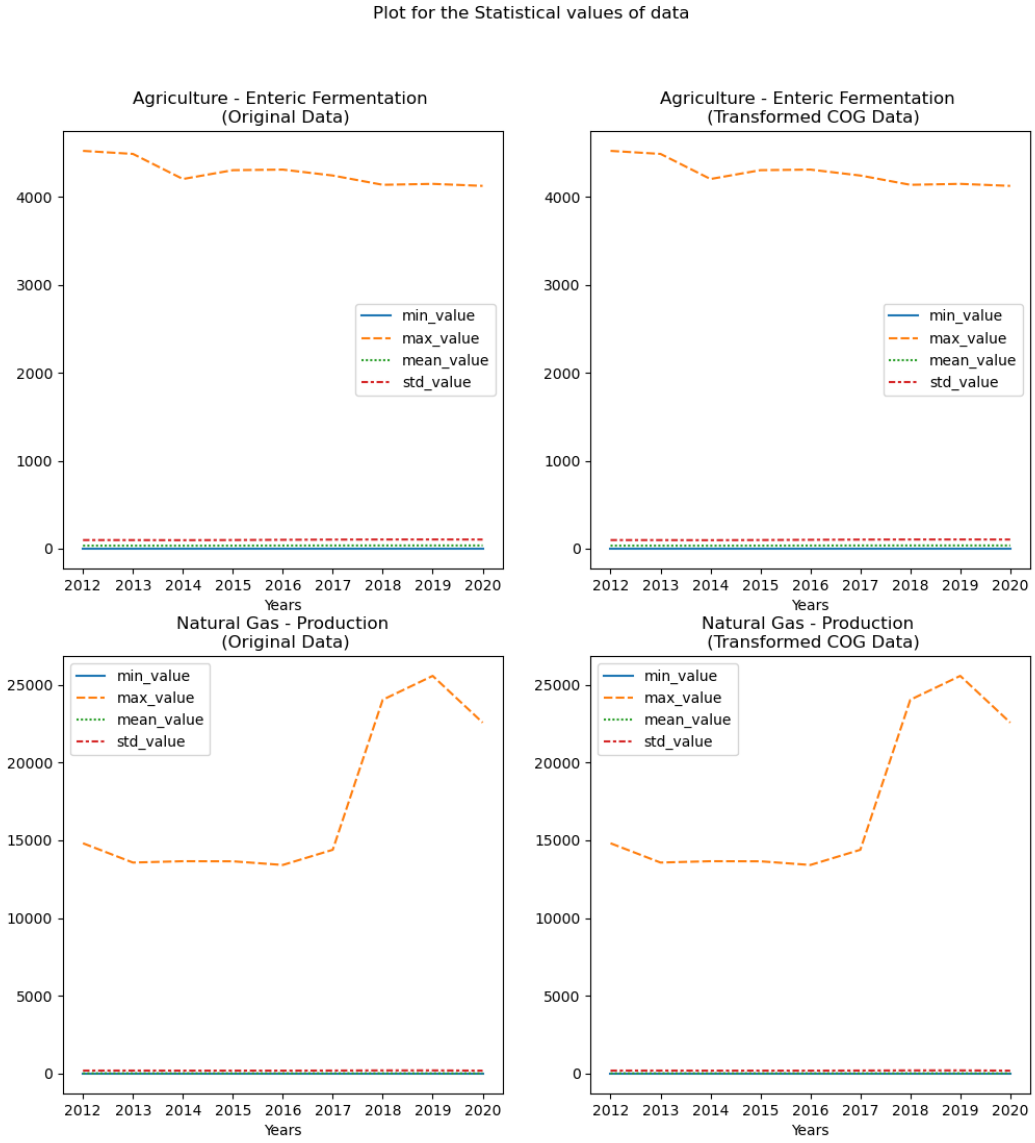
- Distribution of values in across all files for Agriculture - Enteric Fermentation variable and Natural Gas - Production variable:



- Statistics for Agriculture - Enteric Fermentation CH_4 emission in 2020:

	Minimum	Maximum	Mean	Standard Deviation
Original Data	0.0	4126.09	35.6323	103.2175
Transformed Data	0.0	4126.09	35.6323	103.2175

- Statistics for Agriculture - Enteric Fermentation and Natural Gas - Production CH_4 emission:



- 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 user notebook
- Link to GHG Center data catalog overview page

Report Completed on:
MSFC POC for questions: Deborah Smith, Siddharth Chaudhary