# Data Intake Processing and Verification Report

## Background Information

- **Original Dataset Name:** GEOS-Carb CASA-GFED Monthly Fire Fuel NPP Rh NEE Fluxes 0.5 degree x 0.5 degree V3 (GEOS_CASAGFED_M_FLUX) at GES DISC
- **GHG Center Dataset Title:** CASA-GFED3 Land Carbon Flux
- **Dataset Provider:** NASA
- **Date Obtained:** June 2023
- **Location Obtained From:** https://doi.org/10.5067/03147VMJE8J9
- **Data Location in GHG Center:** casagfed-carbonflux-monthgrid-v3
- **Data POC(s):** Dr. Lesley Ott
- **Dataset File Type(s):** NetCDF
- **Projection (if different from WGS84):** NA

## Data Intake Process

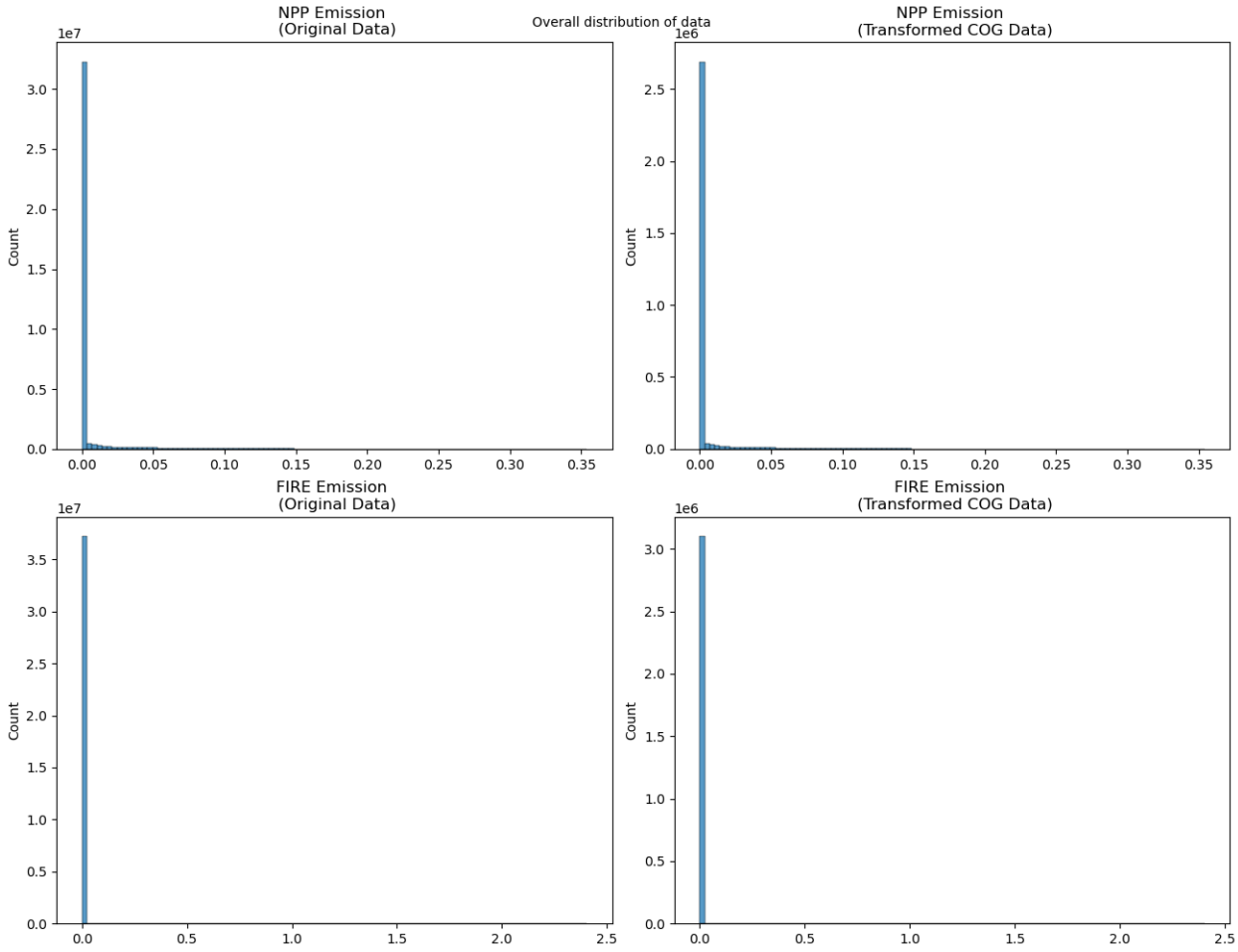
- https://us-ghg-center.github.io/ghgc-docs/data_workflow/casagfed-carbonflux-monthgrid-v3_Data_Flow.html

## Overall Dataset Statistics

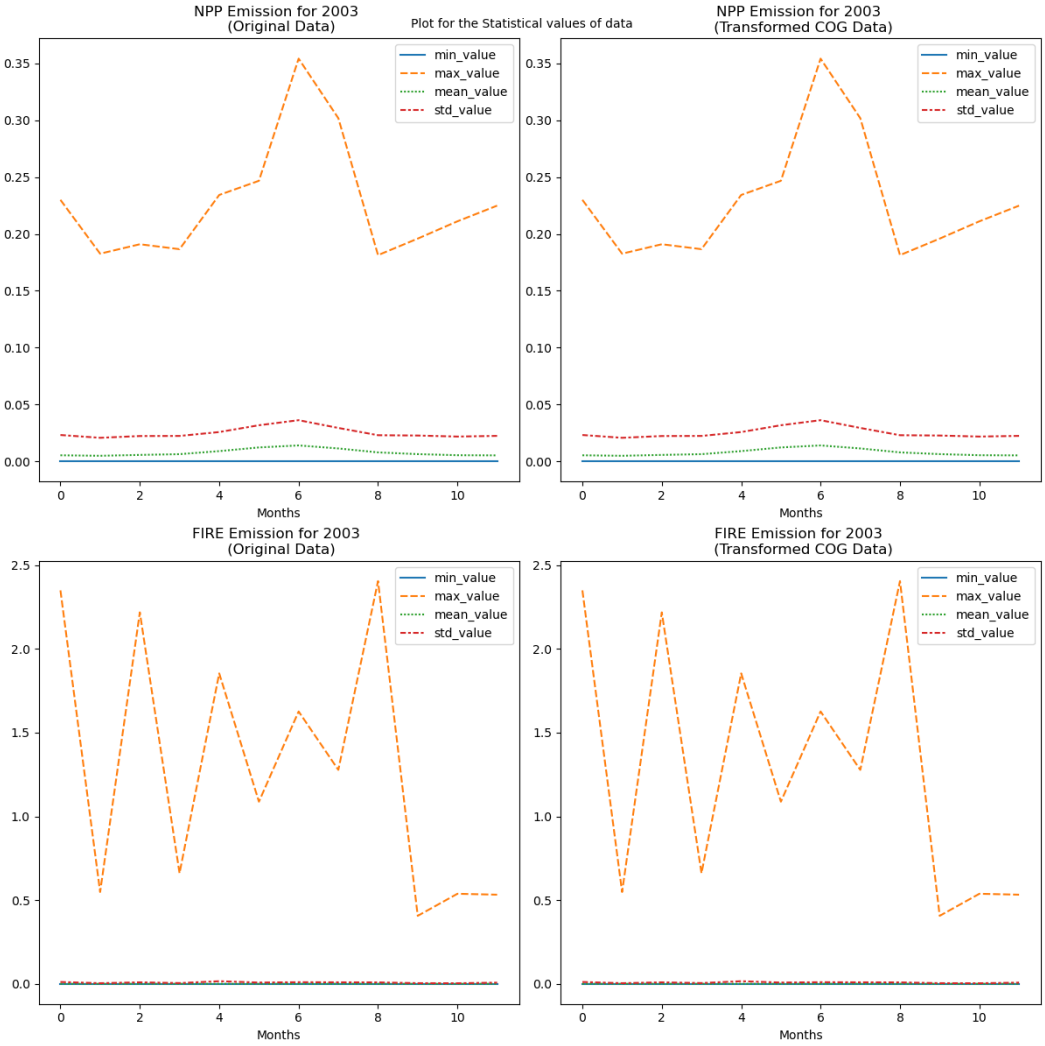
- Statistics across all files for all variable:

| | Minimum (kg C/m²/month) | Maximum (kg C/m²/month) | Mean (kg C/m²/month) | Standard Deviation |
|---|---|---|---|---|
| Original Data | -0.23226 | 6.50496 | 0.003157 | 0.01709 |
| Transformed Data | -0.23226 | 6.50496 | 0.003157 | 0.01709 |

- Distribution of values in g $CH_4$/m²/year across all files for Total $CH_4$ emission variable and Microbial $CH_4$ emission variable:


Overall distribution of data
NPP Emission
(Original Data)
1e7
Count
NPP Emission
(Transformed COG Data)
1e6
Count
FIRE Emission
(Original Data)
1e7
Count
FIRE Emission
(Transformed COG Data)
1e6
Count

- Statistics for NPP emission and FIRE emission variable in 2003:




- 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:** 10/31/2023
**MSFC POC for questions:** Deborah Smith, Siddharth Chaudhary