



GLM Lightning Optical Energy Trending Tool

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Overview

- Analysis Period Demo
- Map Displays
- High Resolution Time Plots
- Daily Average Time Series
- Histograms



ANALYSIS PERIOD DEMO

- Intent of tool is to provide the best benchmark of energy values during PLPT
- Hence, this talk is just an initial exercise of the tool as a demo
- Tool to be applied more robustly after additional Vendor s/w fixes applied
- Analysis Period: **Apr 25 – May 15**
- 1st 4 files (80 s) of each day
- Sample sizes:
 - ✓ ~ **1.7M events**
 - ✓ ~ **607K groups**
 - ✓ ~ **64K flashes**
- Energies compare well with heritage, but are contaminated by false events
- Diurnal variability not accounted for in the short intervals examined

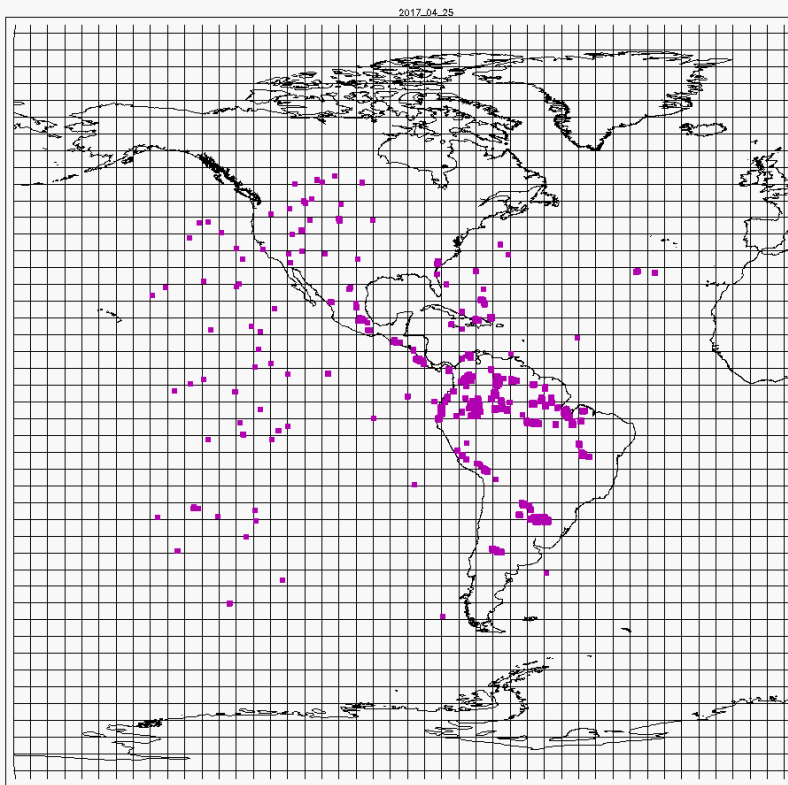


**... so, this talk is about the tool,
not the data going into the tool !**

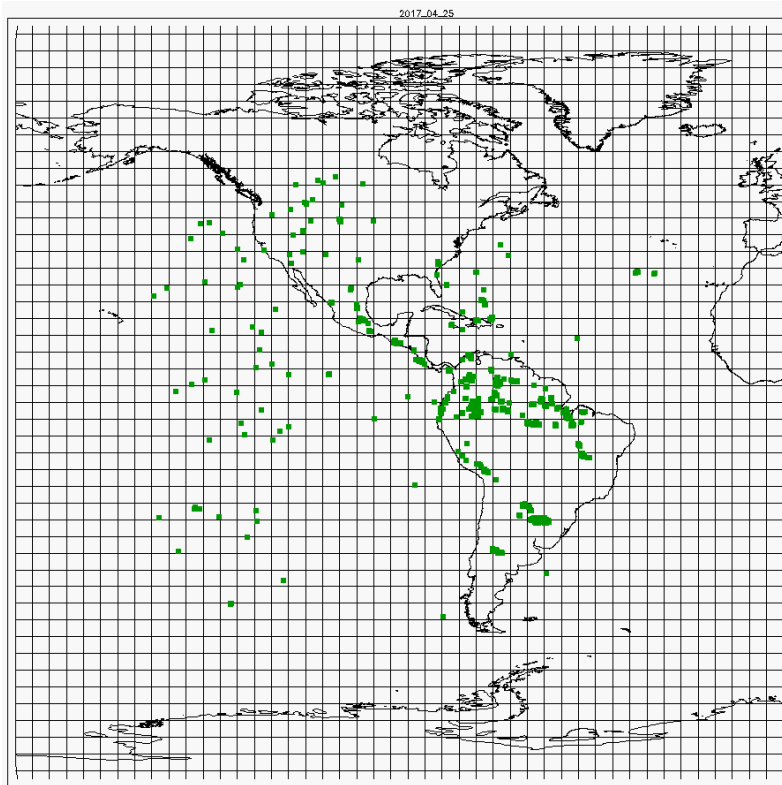
**These GOES-16 data are preliminary, non-operational data and are undergoing testing.
Users bear all responsibility for inspecting the data prior to use and for the manner in which the data are utilized.**

ENERGY TRENDING TOOL: Map Displays

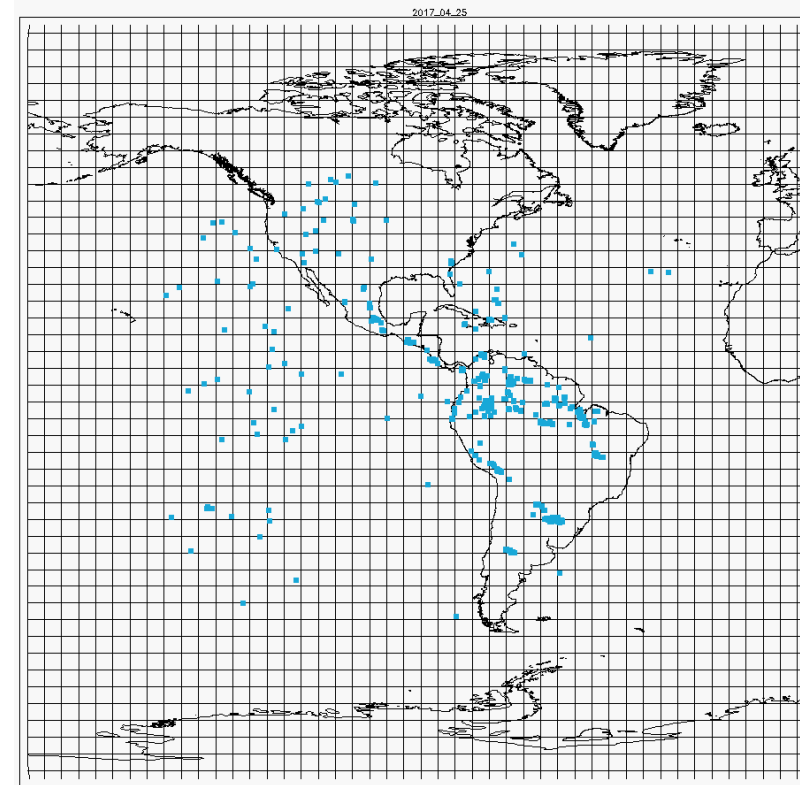
events



groups



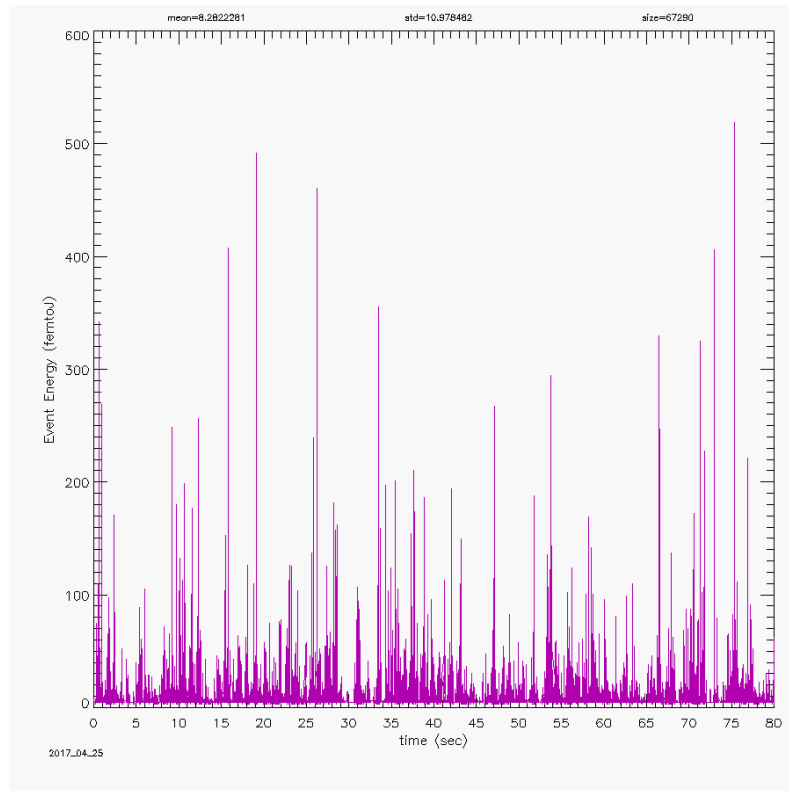
flashes



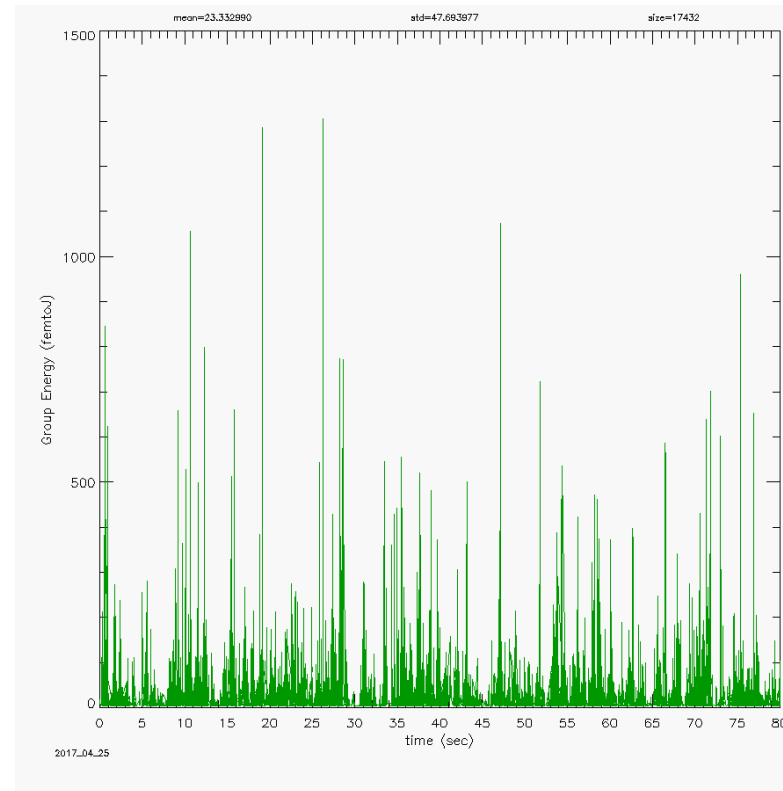


ENERGY TRENDING TOOL: High Resolution Time Plots

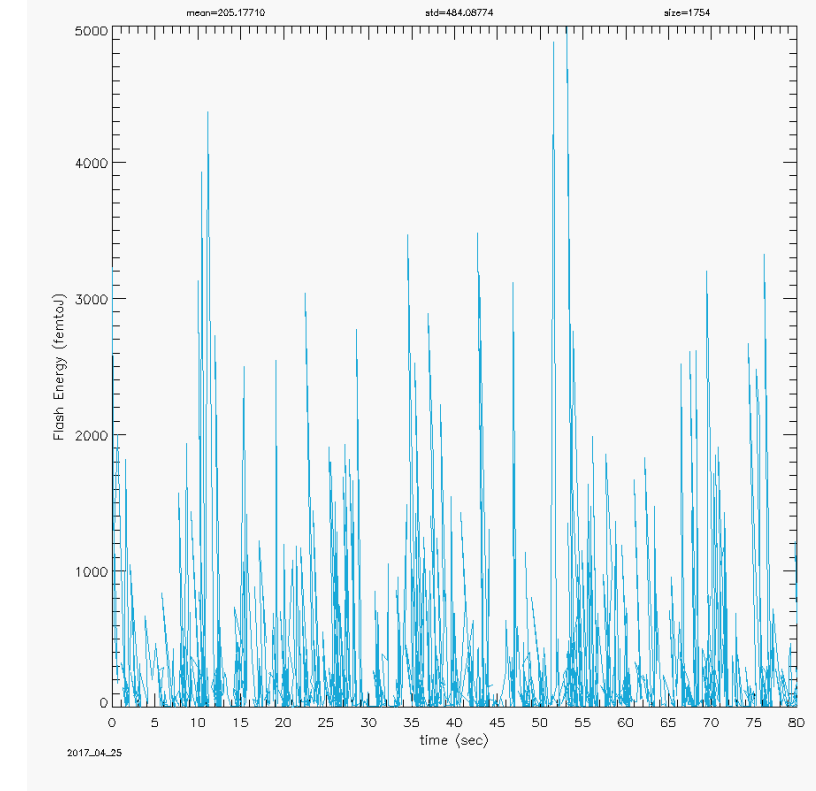
events



groups



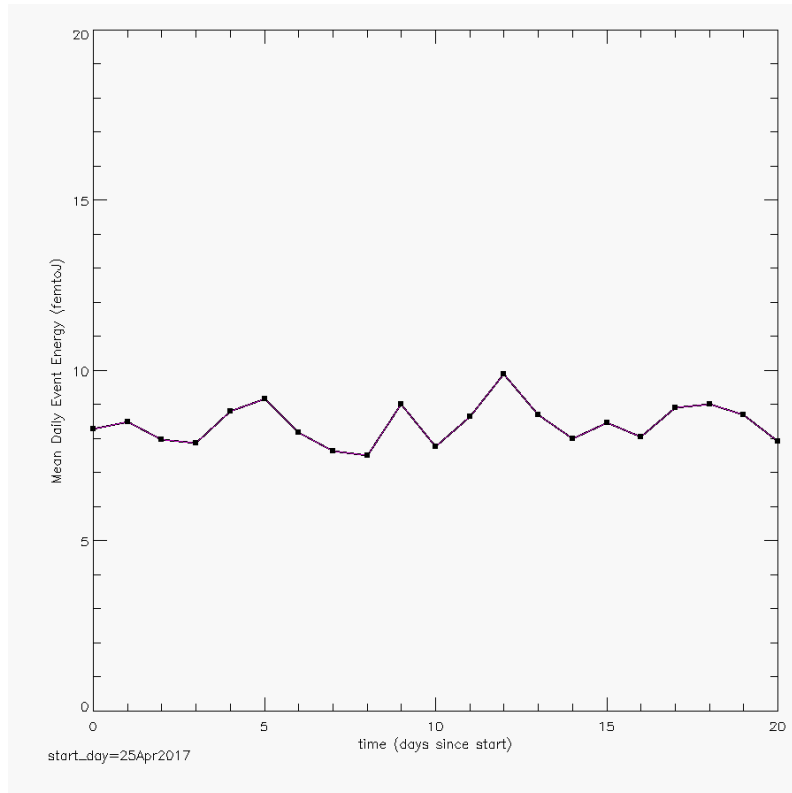
flashes



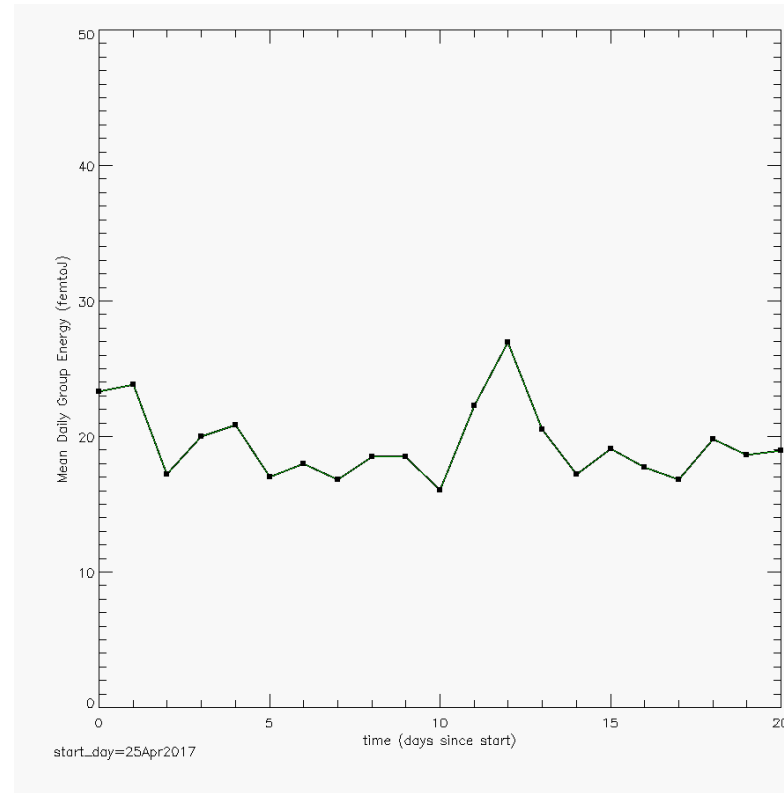


ENERGY TRENDING TOOL: Daily Average Time Series

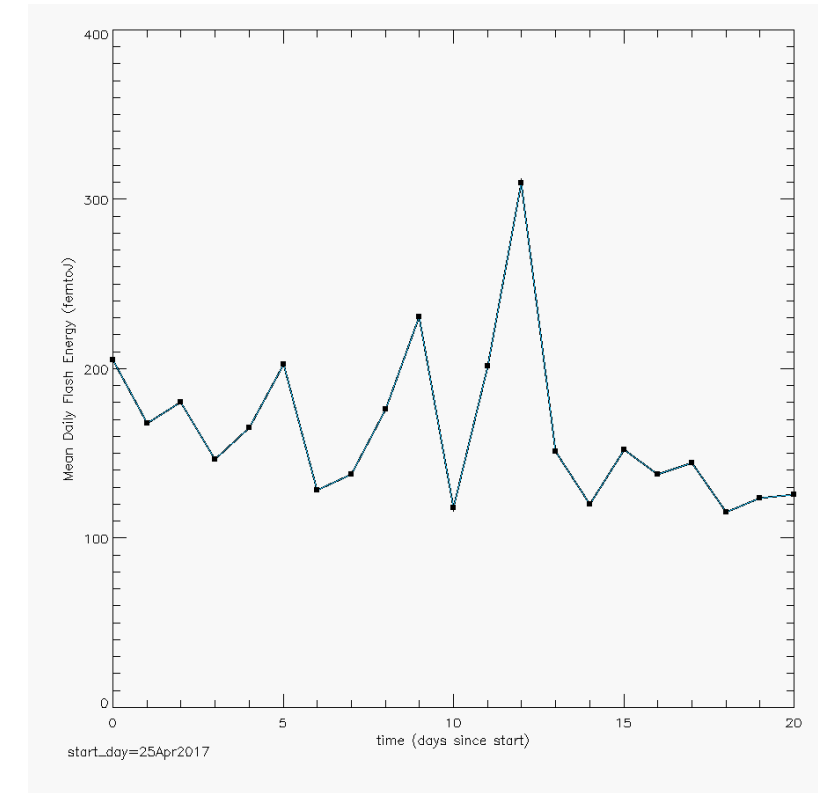
events



groups



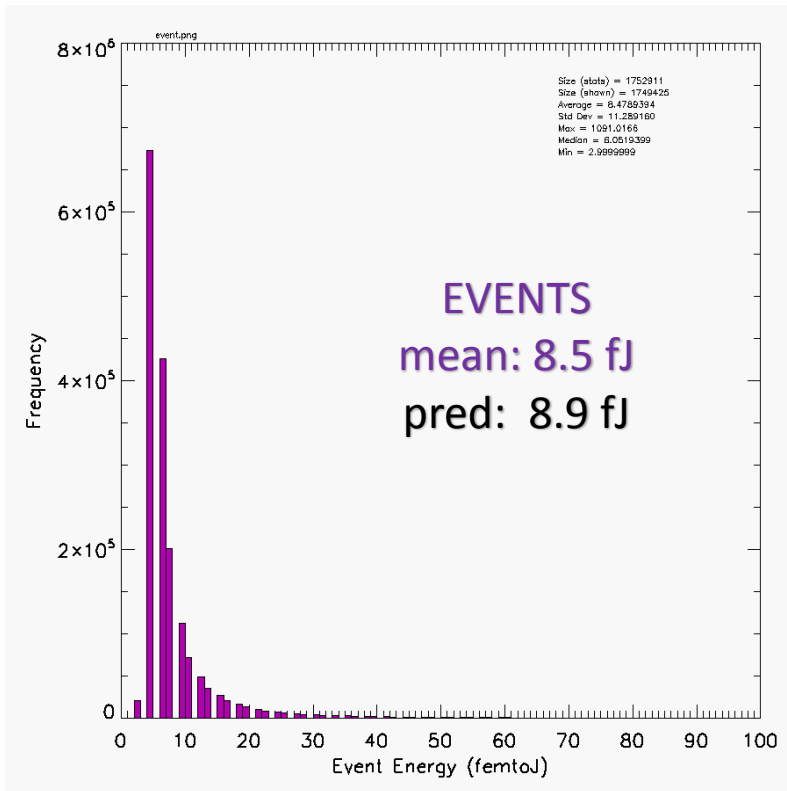
flashes



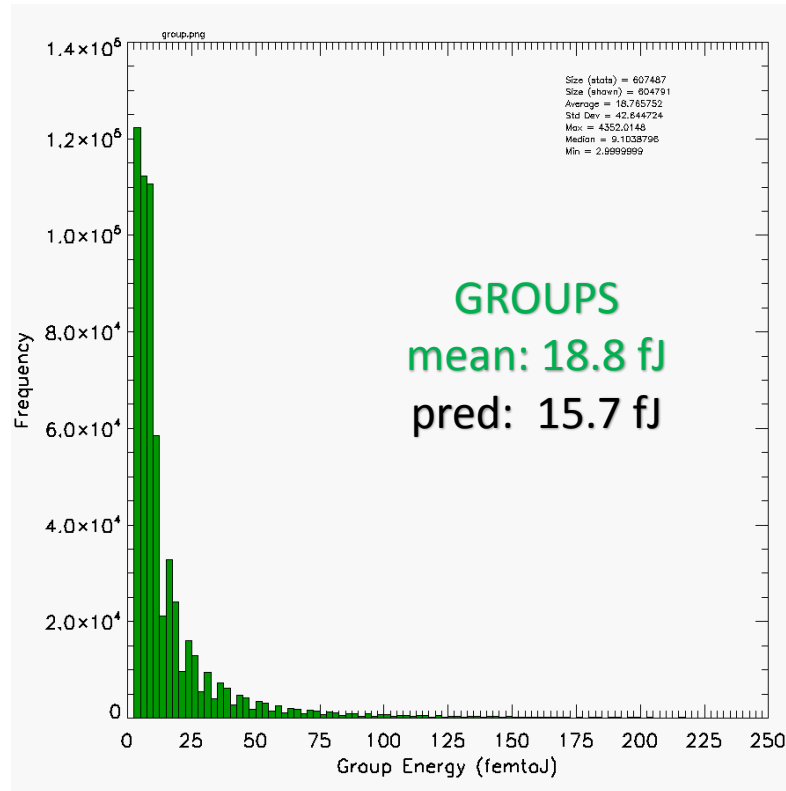


ENERGY TRENDING TOOL: Histograms

events



groups



flashes

