Fermi Special Time Critical Needs Or Why We Suspend Your Batch Jobs Every Three Hours

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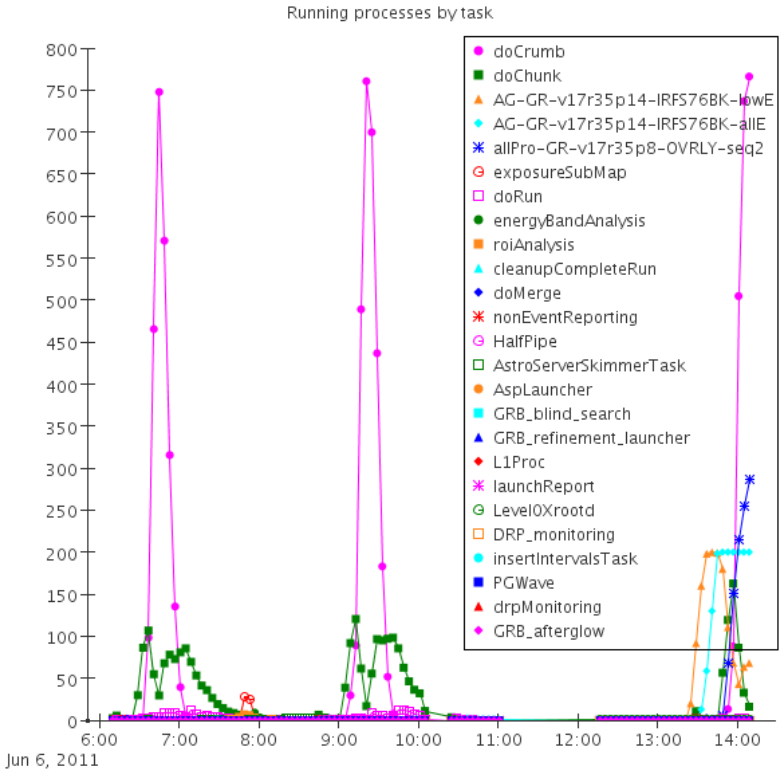
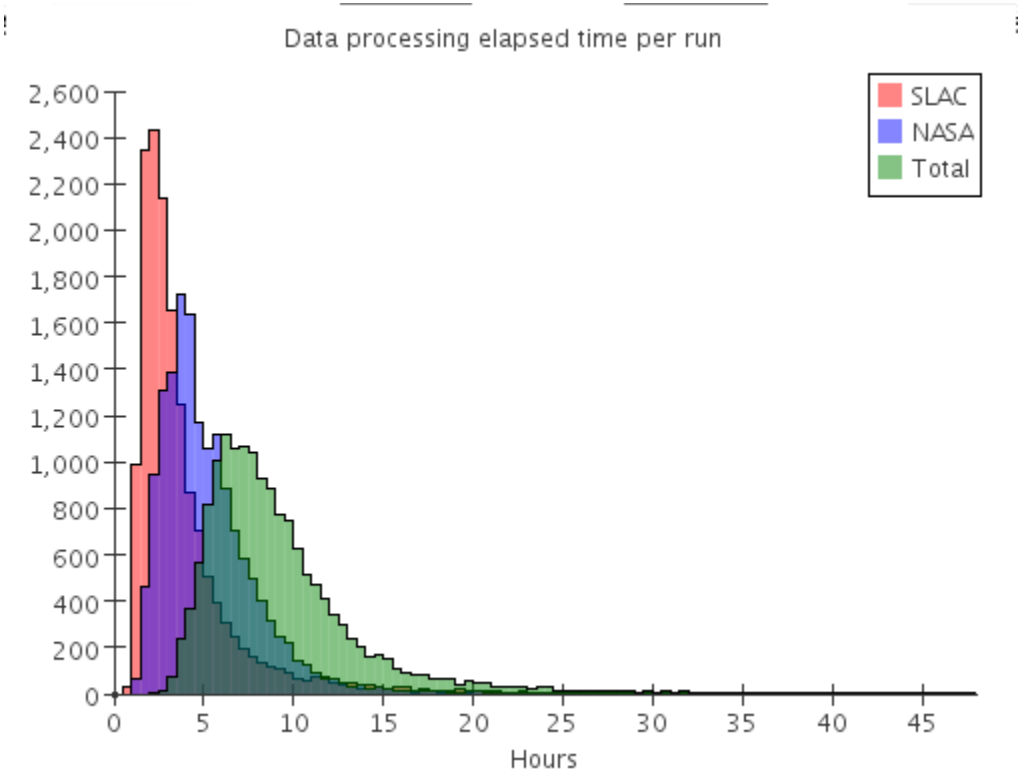
Suspend

- **Fermi data downlinked and delivered to SLAC every 3h:**
  - **Fermi put 800 cores in the general batch queues**
  - **We use them for <1h every 3h:**
    - **The rest of the time you can use them**
  - **But when we need them we suspend any job already running on our cores.**
    - **Why?**



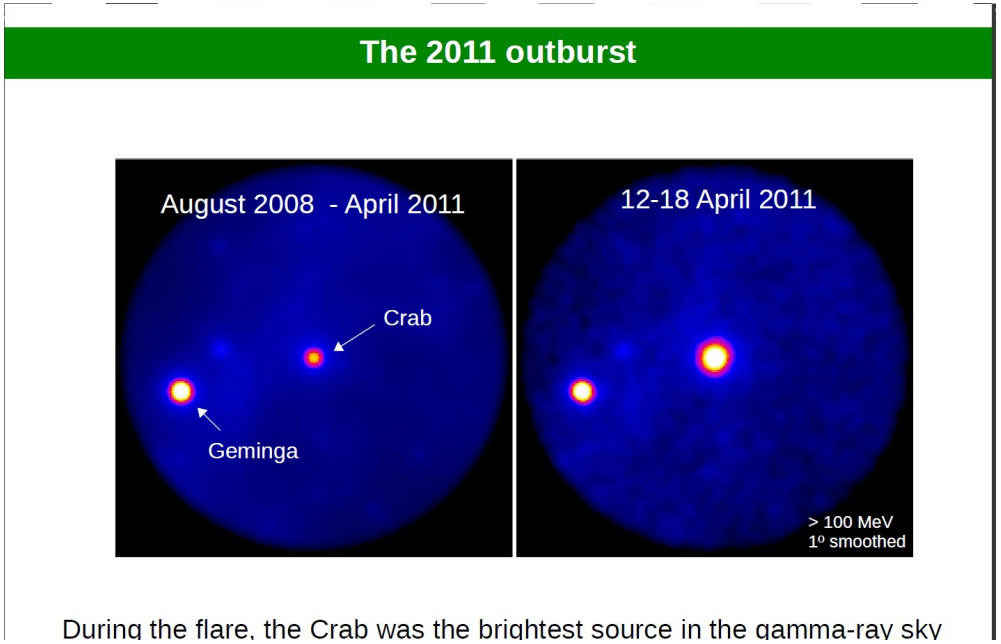
Time scale

- **From raw data on the satellite to the final analysis data for the end user:**
  - **~8h**
  - **Includes downlink, data transfer to SLAC, data processing here (reconstruction, photon identification etc)**



Dynamic Sky

- The sky is dynamic on very short time scales:
  - From seconds to hours to days
- One instrument (wave-length) alone is not enough!
  - Need multi-wavelength campaigns to study objects
  - Need to alert other observatories/telescopes asap
- Example:
  - Flaring Crab (Rolf Buehler, KIPAC):



Summary

- **Time is critical for the Fermi data processing!**
  - **So we suspend your jobs!**
  - **But remember:**
    - **You get access to 800 Fermi cores!**
      - » **Most of the time ….**
    - **And you can chose not to run on these cores!**
      - » **Bsub -R "-preempt"**