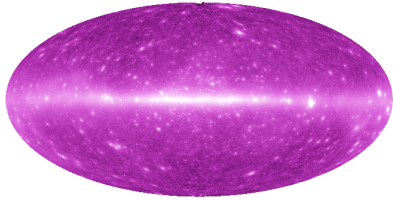


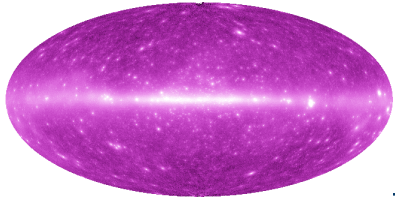
GLAST/GLAST25 Comparison

- ◆ Motivation
- ◆ Figures of Merit
- ◆ Schedule and Status



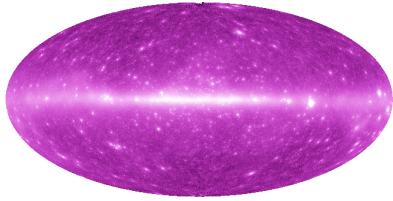
Motivation

- ◆ Informed decision between different configurations of GLAST
- ◆ Understanding of expected astronomical performance of the selected configuration

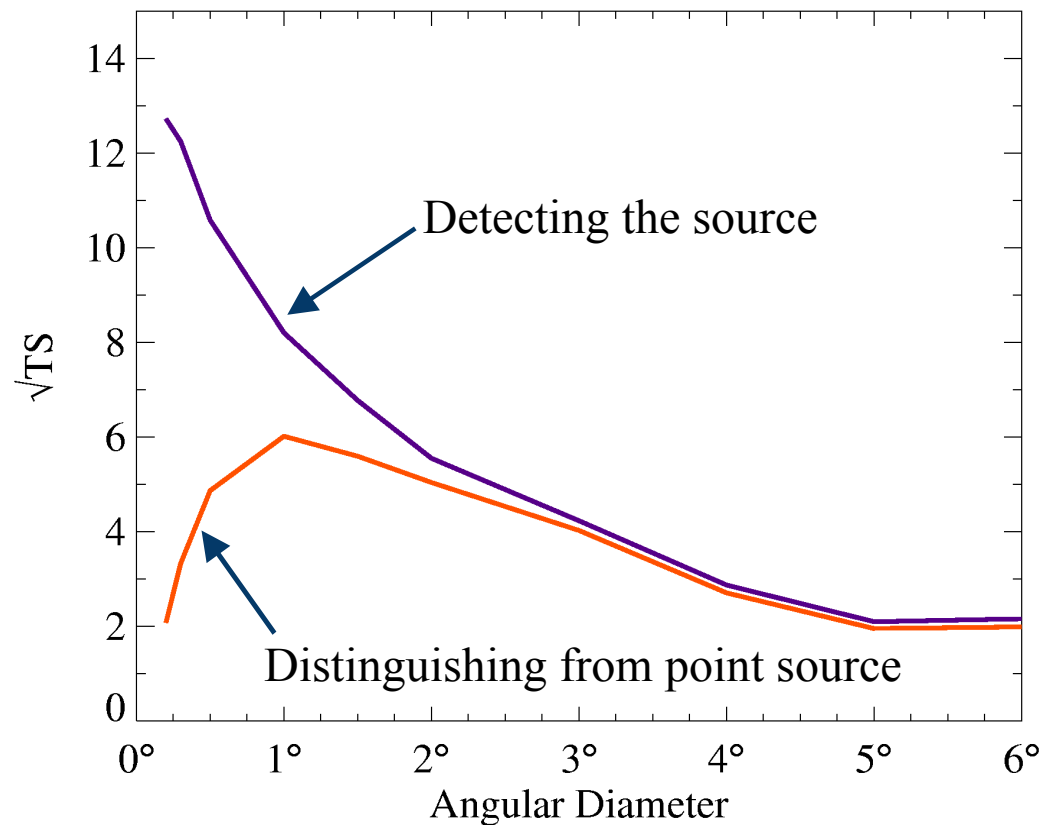


Figures of Merit for Performance

1. Flux limit and source localization areas at high and low latitudes.
2. Minimum angular separation for resolving closely-spaced point sources.
3. Precision of spectral measurement above 10 GeV in one week for a flaring AGN.
4. Precision of spectral measurement for a faint point source near a bright one.
5. Minimum angular size for resolving small extended sources.
6. Smallest timescale for detecting variability of flaring sources.



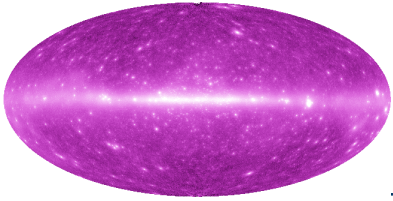
Small Extended Sources



Source flux $1 \times 10^{-8} \text{ cm}^{-2} \text{ s}^{-1}$ ($>100 \text{ MeV}$)

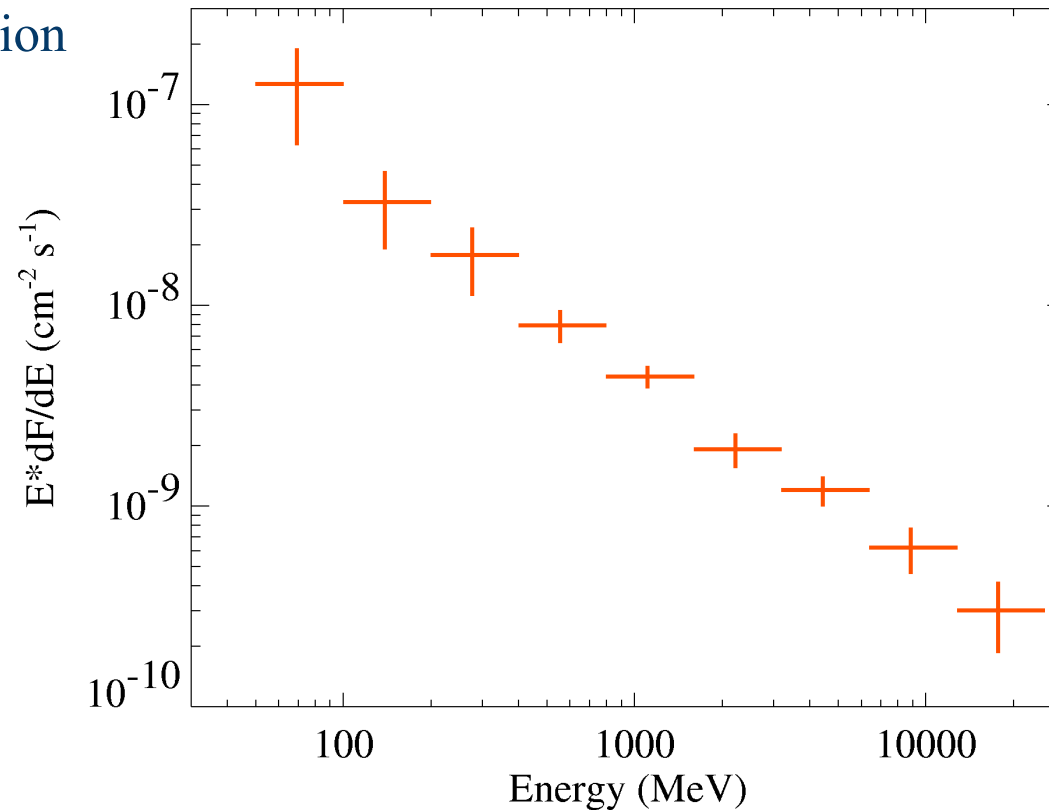
Background $2 \times 10^{-5} \text{ cm}^{-2} \text{ s}^{-1} \text{ sr}^{-1}$ ($>100 \text{ MeV}$)

One-year sky survey with GLAST25

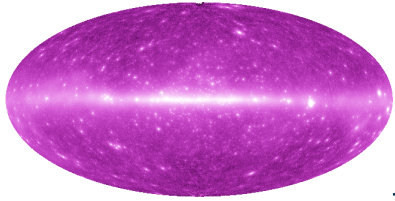


Faint Source Near Bright One

Preliminary illustration



Source flux $5 \times 10^{-8} \text{ cm}^{-2} \text{ s}^{-1}$ ($>100 \text{ MeV}$), E^{-2} ,
 0.5° from a source of flux $5 \times 10^{-7} \text{ cm}^{-2} \text{ s}^{-1}$ ($>100 \text{ MeV}$),
both against $2 \times 10^{-5} \text{ cm}^{-2} \text{ s}^{-1} \text{ sr}^{-1}$ background, one-year survey



Schedule and Status

- ◆ GLAST25 vs. GLAST Classic by May 1
- ◆ Actual deadline for freezing configuration is only “months” from now