

Planned LAT data analysis using OSPEX

"To a hammer, everything looks like a nail."
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Fermi LAT through OSPEX

- Events and Aspect to Data Bins and DRM
- LLE Pha and Rsp - almost there
- Normal LAT - scripts and demo
- Optimizing Scripts - flux and noise
- Where is the science?

Kim's Scripts

```
adec = solephut(tpos)
sra = trim(radec[0])
sdec = trim(radec[1])
ts_met = trim(fermi_tim2met(ts), '(f18.4)')
te_met = trim(fermi_tim2met(te), '(f18.4)')
times = time2file(ts,/date)+'_'+time2file(te,/date)
evfile1 = 'lat_events1_'+times+suffix+'.fits'
evfile2 = 'lat_events2_'+times+suffix+'.fits'
specfile = 'lat_spectrum_'+times+suffix+'.fits'
lcfile = 'lat_LC_'+times+suffix+'.fits'

filter = ""DATA_QUAL==1 && LAT_CONFIG==1 && ABS(ROCK_ANGLE)<52""
roicut = "yes"

;filter = ""(DATA_QUAL==1) && (LAT_CONFIG==1) && (ABS(ROCK_ANGLE)<52 || (angsep('+sra+', '+sdec+', RA_ZENITH, DEC_ZENITH)
+'+scone+')<'+szmax+')"
;roicut = "no"

cmd_select = $
  [gtselect ' + $
  'infile=@ph_files.txt ' + $
  'outfile='+evfile1 +' ' + $
  'ra='+sra+ ' ' + $
  'dec='+sdec+ ' ' + $
  'rad='+scone+ ' ' + $
  'tmin='+ts_met+' ' + $
  'tmax='+te_met+' ' + $
  'emin=30 ' + $
  'emax=10000 ' + $
  'zmax='+szmax+' ' + $
  'evclass='+sevclass]
```

Demonstrations

LLE in OSPEX - 12 June 2010

Binned LAT - 7 March 2012