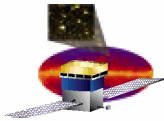


# Requirements for DC2

- Requirements:** - light curves for the 20 (18) sources mentioned in the Year 1 data release plan
- EBL study
  - 1 variable source which is neither an AGN/pulsar/ GRB

Source type	Source name	other name	Average or min. flux ( $10^{-8} \gamma \text{ cm}^{-2} \text{ s}^{-1}$ )	Latitude
Sources from 3 <sup>rd</sup> EGRET Catalog				
Blazar	0208-512	3EGJ0210-5055	$85.5 \pm 4.5$	-61.9
	PKS 0528+134	3EGJ0530+1323	$93.5 \pm 3.6$	-11.1
	0827+243	3EGJ0829+2413	$24.9 \pm 3.9$	31.7
	Mrk 421	3EGJ1104+3809	$13.9 \pm 1.8$	65.0
	3C 273	3EGJ1229+0210	$15.4 \pm 1.8$	64.5
	3C 279	3EGJ1255-0549	$74.2 \pm 2.8$	57.0
	1406-076	3EGJ1409-0745	$27.4 \pm 2.8$	50.3
	PKS 1622-297	3EGJ1625-2955	$47.4 \pm 3.7$	13.4
	1633+383	3EGJ1635+3813	$58.4 \pm 5.2$	42.3

	1730-130 NRAO 530	3EGJ1733-1313	$36.1 \pm 3.4$	10.6
	3C 454.3	3EGJ2254+1601	$53.7 \pm 4.0$	-38.3
HMXB	LSI +61 303/ 2CG135+01	3EGJ0241+6103	$69.3 \pm 6.1$	1.0
any source (except Crab, Vela and Geminga pulsars)			monitor if flux exceeds $2 \times 10^{-6} \text{ cm}^{-2} \text{ s}^{-1}$ and report flux down to $2 \times 10^{-7} \text{ cm}^{-2} \text{ s}^{-1}$	
After confirmed detection by LAT				
Blazar	Mrk 501			
	W Com 1219+285	3EG J1222+2841	$11.5 \pm 1.8$	83.5
	1ES 1959+650	TeV		
	1ES 2344+514	TeV		
	H 1426+428	TeV		
	PKS 2155-304	TeV		



## Crude light curves

Crude light curves were produced by:

- integrating the counts over a  $2 \times 2$  deg.<sup>2</sup> area
  - correcting for the energy dependent exposure (6 bins betw. 100 MeV and 100 GeV).
- Contributions from galactic and extragalactic diffuse emission have not been subtracted.

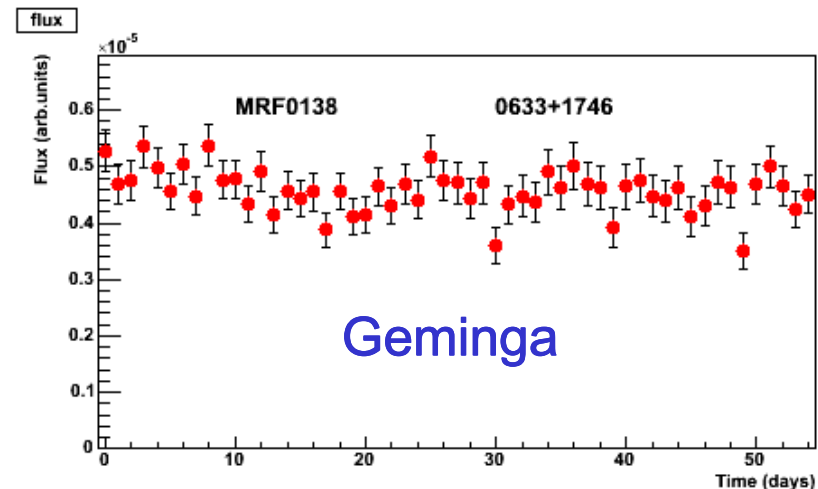
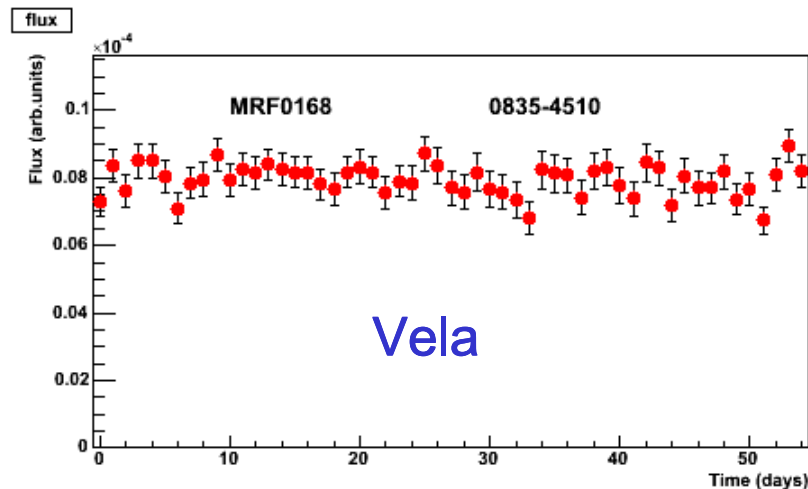
Available at:

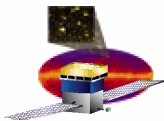
[http://www.cenbg.in2p3.fr/ftp/astropart/glast/DC2/light\\_curves/variable](http://www.cenbg.in2p3.fr/ftp/astropart/glast/DC2/light_curves/variable)

[http://www.cenbg.in2p3.fr/ftp/astropart/glast/DC2/light\\_curves/non\\_variable](http://www.cenbg.in2p3.fr/ftp/astropart/glast/DC2/light_curves/non_variable)

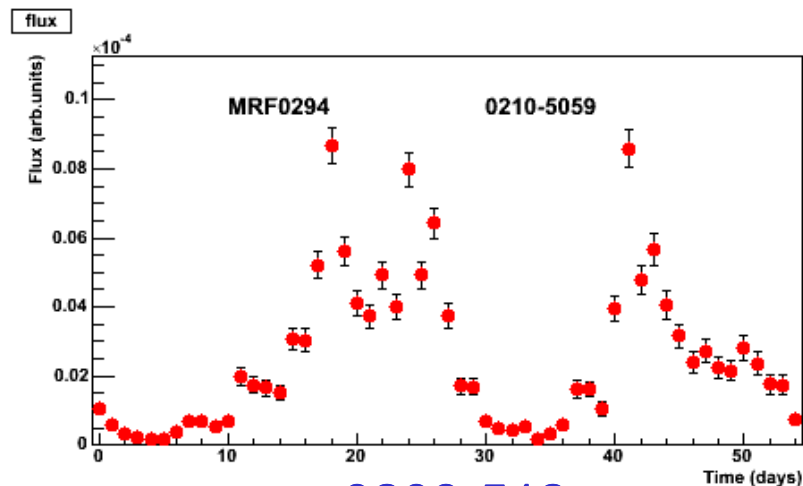
a crude variability criterion being implied.

The files are ordered according to ra and dec. These light curves are meant to help figure out which sources exhibit strong variability.

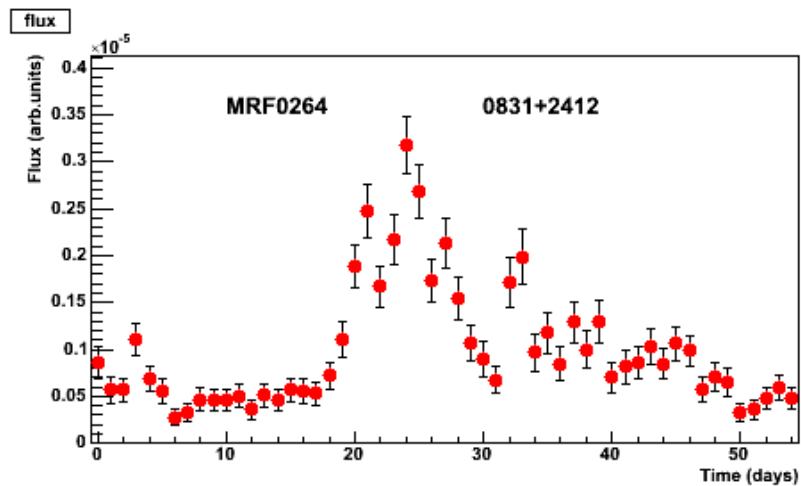




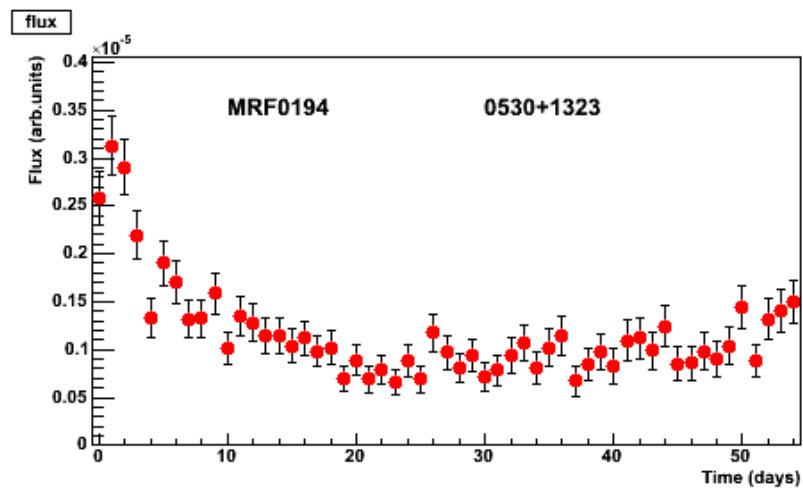
## First four sources in the Year1 data release plan



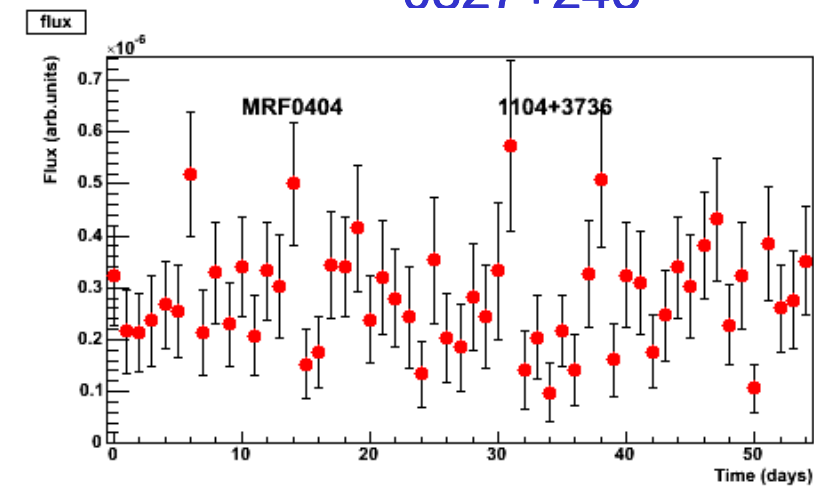
0208-512



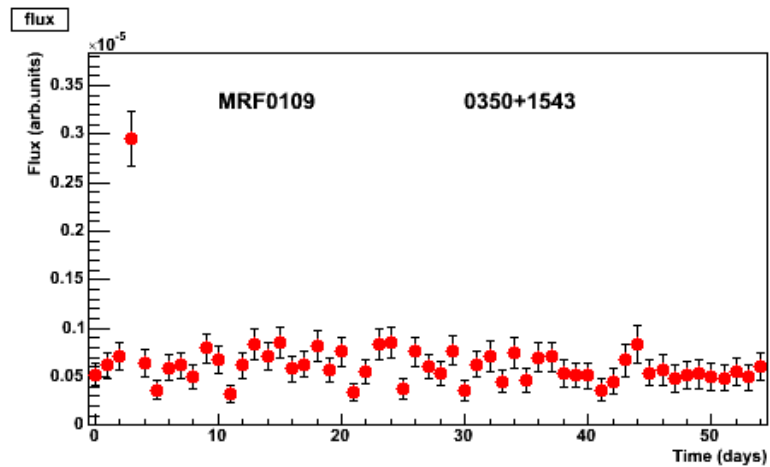
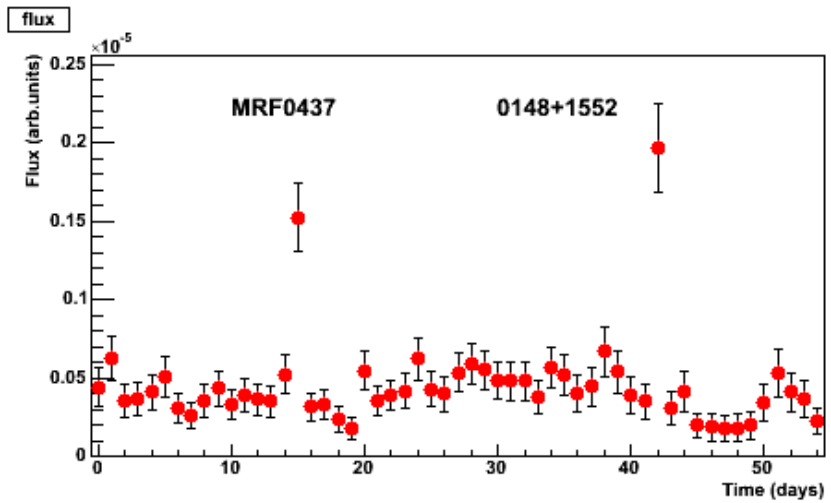
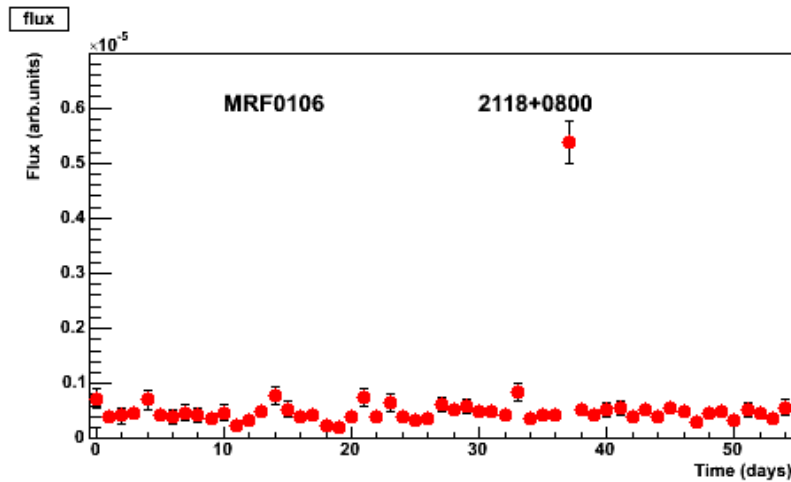
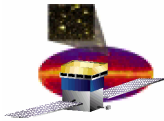
0827+243



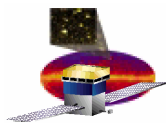
0528+134



Mkn 421



Some sources are GRB-like.



## Finding DC2 source counterparts in 3EG

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Use of **gtsrcid** (J. Knoedlseder, V. Lonjou)

LATSourceCatalog\_v0r2.fits

3EG.fits (code/sourcelidentify/v1r0p3/data)

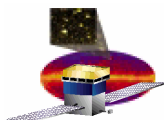
The tool runs fine but there is a slight bug:

RA, DEC in the fits file must be changed into RAJ2000 and DECJ2000

("No position information for MRF\*\*\*" in gtsrcid.log)

Simple position coincidence: ThreshProb=0.2

**204 EGRET sources** found in the **DC2 catalog**



DC2 source name

3EG counterpart

fv: Binary Table of result.fits[1] in /a/surrey01/vol/vol2/g.glast\_users/ground/lot/ST/DC2/

File Edit Tools Help

☐ POS\_ERR\_MIN   ☐ POS\_ERR\_ANG   ☐ PROB   ☐ @LAT\_Source\_Name   ☐ @LAT\_RAJ2000   ☐ @3EG\_3EG  
 Select   1E   1E   1E   18A   1E   0A  
   deg   deg   probability   deg   deg  
☐ All  

1	0.000000E+00	0.000000E+00	9.749321E-01	MRF0001	2.418830E+02	J1607-1101
2	0.000000E+00	0.000000E+00	7.341251E-01	MRF0005	2.789520E+02	J1835+5918
3	0.000000E+00	0.000000E+00	8.249997E-01	MRF0006	2.476640E+02	J1631-1018
4	0.000000E+00	0.000000E+00	9.414825E-01	MRF0008	2.825600E+02	J1850+5903
5	0.000000E+00	0.000000E+00	8.309309E-01	MRF0010	2.620990E+02	J1727+0429
6	0.000000E+00	0.000000E+00	8.796525E-01	MRF0011	2.598450E+02	J1719-0430
7	0.000000E+00	0.000000E+00	2.860518E-01	MRF0013	3.013320E+02	J1959+6342
8	0.000000E+00	0.000000E+00	8.044887E-01	MRF0016	2.617320E+02	J1726-0807
9	0.000000E+00	0.000000E+00	4.360361E-01	MRF0017	2.752700E+02	J1822+1641
10	0.000000E+00	0.000000E+00	5.823702E-01	MRF0019	9.385870E+01	J0613+4201
11	0.000000E+00	0.000000E+00	7.198024E-01	MRF0020	2.633670E+02	J1733-1313
12	0.000000E+00	0.000000E+00	8.586382E-01	MRF0021	2.685700E+00	J0010+7309
13	0.000000E+00	0.000000E+00	7.131149E-01	MRF0022	2.662860E+02	J1746-1001
14	0.000000E+00	0.000000E+00	4.594913E-01	MRF0023	7.852120E+01	J0510+5545
15	0.000000E+00	0.000000E+00	8.468012E-01	MRF0024	6.914280E+01	J0435+6137
16	0.000000E+00	0.000000E+00	8.948289E-01	MRF0026	3.152030E+02	J2100+6012
17	0.000000E+00	0.000000E+00	8.021092E-01	MRF0027	2.693520E+02	J1757-0711
18	0.000000E+00	0.000000E+00	3.826421E-01	MRF0028	8.329770E+01	J0533+4751
19	0.000000E+00	0.000000E+00	4.299217E-01	MRF0029	3.319590E+02	J2206+6602
20	0.000000E+00	0.000000E+00	3.442186E-01	MRF0030	2.766750E+02	J1828+0142
21	0.000000E+00	0.000000E+00	8.842295E-01	MRF0032	2.725580E+02	J1810-1032
22	0.000000E+00	0.000000E+00	7.897350E-01	MRF0033	2.654110E+02	J1741-2312
23	0.000000E+00	0.000000E+00	5.489761E-01	MRF0035	3.371970E+02	J2227+6122
24	0.000000E+00	0.000000E+00	7.776116E-01	MRF0036	3.086590E+02	J2035+4441
25	0.000000E+00	0.000000E+00	8.466060E-01	MRF0039	2.731700E+02	J1812-1316
26	0.000000E+00	0.000000E+00	8.217764E-01	MRF0041	2.665360E+02	J1746-2851
27	0.000000E+00	0.000000E+00	8.209609E-01	MRF0043	3.752250E+01	J0229+6151
28	0.000000E+00	0.000000E+00	5.908844E-01	MRF0045	2.791970E+02	J1837-0423
29	0.000000E+00	0.000000E+00	3.331840E-01	MRF0046	2.794460E+02	J1837-0606
30	0.000000E+00	0.000000E+00	9.021779E-01	MRF0048	3.041060E+02	J2016+3657
31	0.000000E+00	0.000000E+00	9.484183E-01	MRF0049	3.052840E+02	J2021+3716

Go to:   Edit cell:

Blazar Group face-to-face meeting, March 04, 2006