



GLAST activities at ASDC and in the Rome area

P. Giommi Agenzia Spaziale Italiana, ASI

28-31 August 2006





GLAST The Gamma Ray Large Area Space Telescope

Collaboration led by E. Massaro





The catalogue of known blazars.



Reset



Multi-frequency Catalogue of BLAZARS



GO

(A)

E. Massaro, S. Sclavi, P. Giommi, M. Perri and S. Piranomonte 2005, Aracne Editrice, A02-26 Volume I (0h-6h). On-line table

141	100	124		
B	L Lacs BL	Lac candidates	FSRQs	Uncertain

Entry number		Source name	RA (J2000.0)	Dec (J2000.0) dd mm ss.d 🛟	Redshift Z ‡	Vmag	Source classification Browse Classif
Subset selection mode: inclusive		1	*	1	1	* \$ Sigi	* *
1 Select	Show SED	BZQJ0003+2129	00 03 19.2	+21 29 44.1	0.45	19.7	QSO RLoud flat radio sp.
2 Select	Show SED	BZQJ0004+4615	00 04 16.1	+46 15 18.0	1.81	20.4	QSO RLoud flat radio sp
3 Select	Show SED	BZQJ0004+2019	00 04 35.7	+20 19 41.8	0.677	20.2	QSO RLoud flat radio sp
ASelect	Show SED	BZQJ0006-0623	00 06 13.8	-06 23 35.1	0.347	17.8	QSO RLoud flat radio sp
5 Select	Show SED	BZBCJ0006+1051	00 06 20.2	+10 51 51.1	0.168	14.6	BL Lac candidate
6 Select	Show SED	BZBJ0007+4712	00 07 59.9	+47 12 06.8	0.28	18.2	BL Lac
7 ^{Select}	Show SED	BZBCJ0008-2339	00 08 35.3	-23 39 28.0	0.147	16.8	BL Lac candidate

28-31 August 2006





The Swift XRT serendipitous survey



- Systematic pipeline analysis of all XRT fields at ASDC
- Several thousand pointings with typical expos 4-5,000 s, (flim ~3x10⁻¹⁴ erg/cm2/s in the ROSAT band).

Merging of multiple exposures will lead to hundreds of X-ray images with exposure in excess of 100,000 s

-> flim $\sim 10^{-15}$ erg/cm2/s (ROSAT band)

28-31 August 2006





The Swift XRT serendipitous survey- 2



911 exposures processed so far (>3,000 by end of 2006)
13,000 X-ray detections (8400 distinct sources);

~9000 sources (5300 distinct) at |bII| > 20,

~200 radio sources (NVSS+SUMSS, including targets).

- Unbiassed survey of serendipitous X-ray sources around deep GRB pointings will lead to a sample of 150-200 blazars
- 3-400 blazars altogether

28-31 August 2006 Collaboration meeting, Stockholm







28-31 August 2006











The ROXA sample: on-line table

www.asdc.asi.it/roxa

9	000			The ASDC RO	OSAT-NVSS-SE	DSS_DR4 Blaz	ar Sample				
100	▲ ► 🙆 🛛	L C + 🧕	kttp://www.asdc.asi.it/roxa/					◦ Q+ Google			
	🛱 asdc Oth	er archives 🔻 ASDO	C ASI Webmail Virtual Room 3.4 (VRVS) Apple Notizie (258) ▼ Surv				Surveys ▼ C	urveys ▼ GLAST ▼ Viaggi/mappe ▼ Bibliography services ▼			
	The ASDC ROSAT	-NVSS-SD									
	Available parameters Name Ka Dec Z Z Kmag Bjimag Vmag Gmag 20cm Radio flux X-ray flux Class ax Z aro arx Ix Lradio Alpha_r		The Radio Optical X-ray ASDC (ROXA) blazar sample Turriziani, Cavazzuti & Giommi, 2006 (A&A) BL Lacs Radio Galaxies FSRQs SSRQs QSORadioLoud Reset							dioLoud	0
0	Entry number		Source name ROXA name	RA (J2000.0)	Dec (J2000.0) dd mm ss.d 🛟	Redshift Z	Rmag	Radio flux 1.4GHz(mJy)	X-ray flux microjy 🗘	Source classification Browse Classif	1
	Subset selection mode: inclusive		* *	*	* +	🎓 🔻 Stat	🔒 🐥 डाहा	1 4 55	* * 571	* Ŧ	
	1 Select	Entry details	ROXA J000345.1- 110817.9	00 03 45.1	-11 08 17.9	1.57	19.6	354.1	0.044	QSO RLoud steep radio sp.	
	2 ^{Select}	Entry details	ROXA J000416.6- 290235.0	00 04 16.6	-29 02 35.0	0.55	0	16.1	0.144	QSO RLoud	
	3 Select	Entry details	ROXA J000559.2+160948.9	00 05 59.2	+16 09 48.9	0.45	15.5	805.3	1.049	QSO RLoud steep radio sp.	
	4 Select	Entry details	ROXA J000558.4- 275858.0	00 05 58.4	-27 58 58.0	0.62	0	309,1	0.12	QSO RLoud flat radio sp.	
	5 Select	Entry details	ROXA J000622.6- 000423.9	00 06 22.6	-00 04 23.9	1.04	19.5	3898.2	0.074	QSO RLoud steep radio sp.	
	6 Select	Entry details	ROXA J001130.4+005751.0	00 11 30.4	+00 57 51.0	1.49	20.3	167.3	0.065	QSO RLoud flat radio sp.	
~	7 Select	Entry details	ROXA J001339.1- 322442.9	00 13 39.1	-32 24 42.9	0.26	0	155.7	0.056	Radio Galaxy /BLtransition obj.	
2	8 Select	Entry details	ROXA J002300.7+144655.9	00 23 00.7	+14 46 55.9	0.39	18.4	7.5	0.1	BL Lac	4
	Emport		BOXA J002430.1-								i L





SSC spectral models vs data



28-31 August 2006