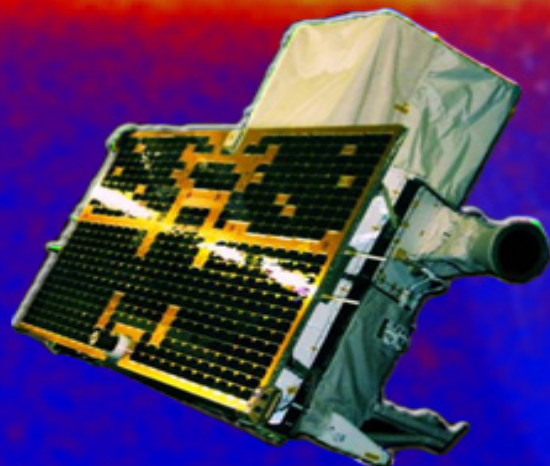


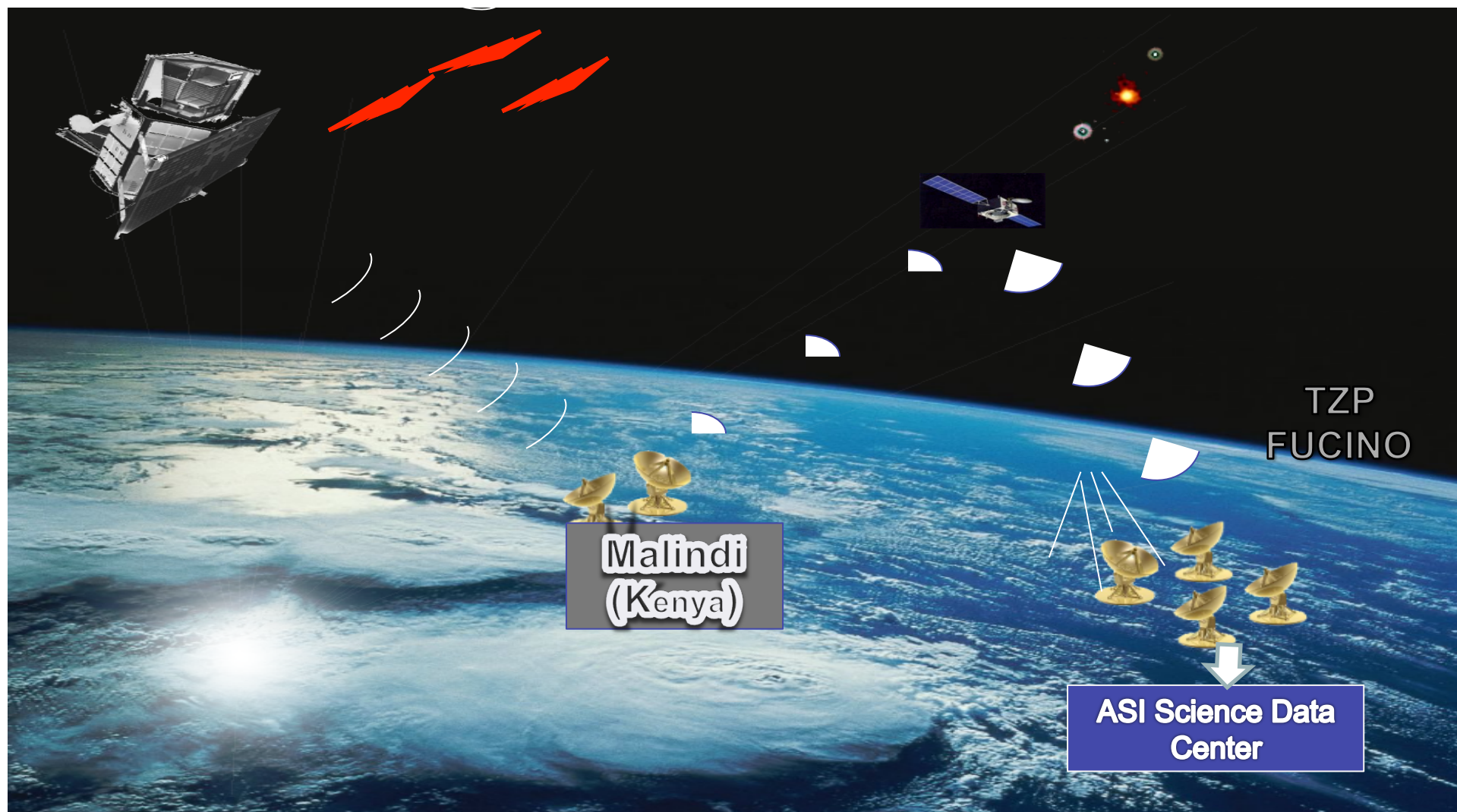


AGILE Data Center: Overview and the New Data Publication Policy



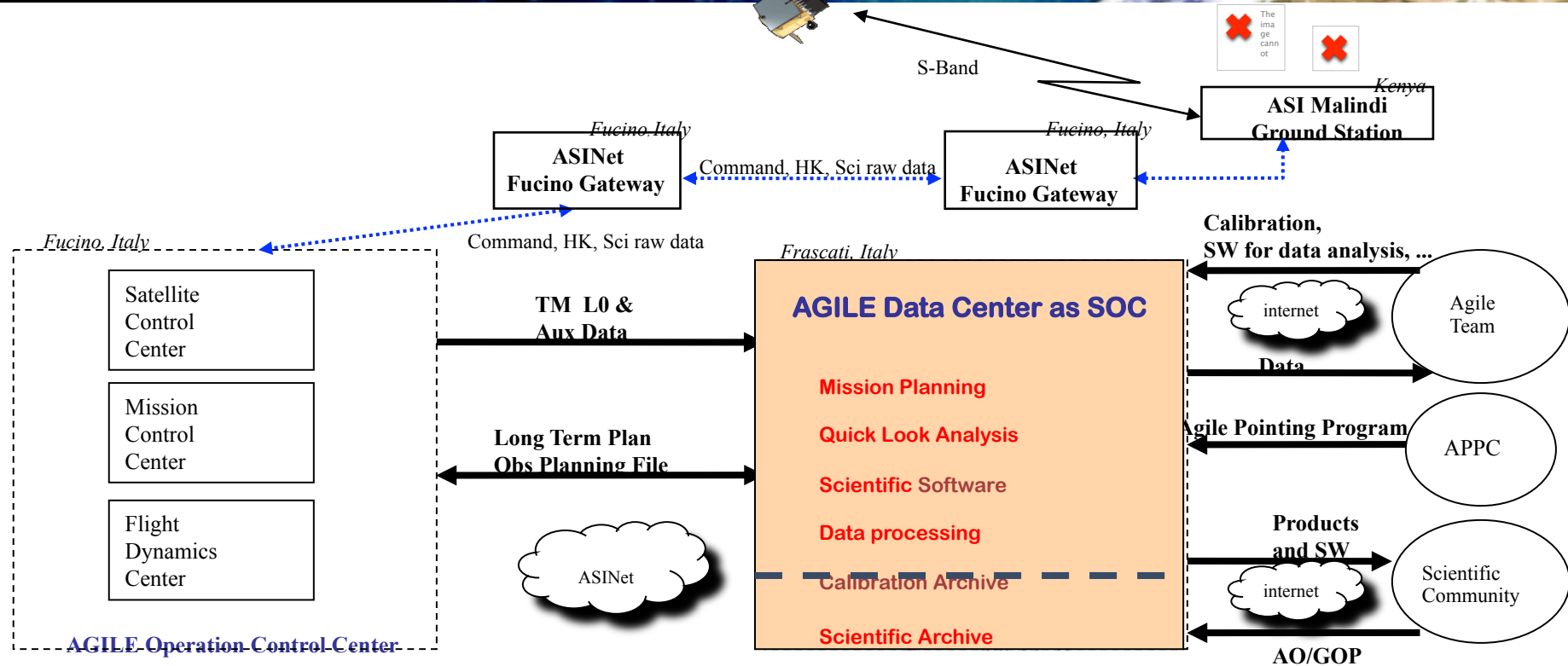
**Carlotta Pittori, ASDC
on behalf of the AGILE Data Center**

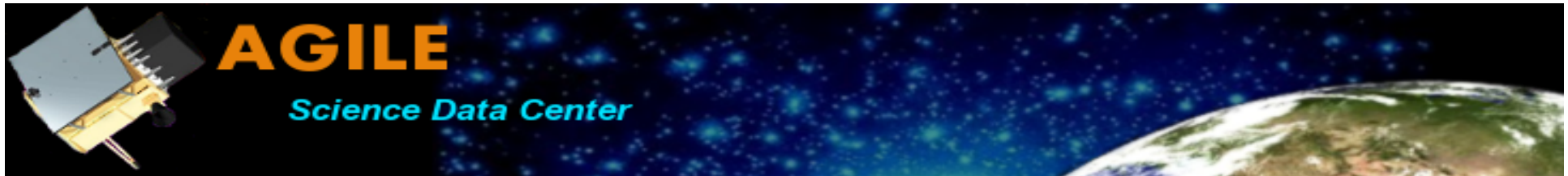
13th AGILE Science Workshop, May 25-26 2015



AGILE Science Data Center

AGILE GS Architecture





- The ADC, based at ASDC-ESRIN, is in charge of **all the scientific oriented activities**

From scientific

- ✓ Preprocessing
- ✓ Quick-Look
- ✓ Standard (list)
- ✓ Scientific analysis (source detection, diffuse gamma-ray background)
- ✓ Archiving and distributing **all scientific AGILE data**

Different kinds of users:

- **Internal ADC operators**
- **AGILE Team scientists**
- **AGILE Guest Observers**
- **Scientific Community**

AGILE data:

data

:

Quicklook &
Level-2 data
(gfile)



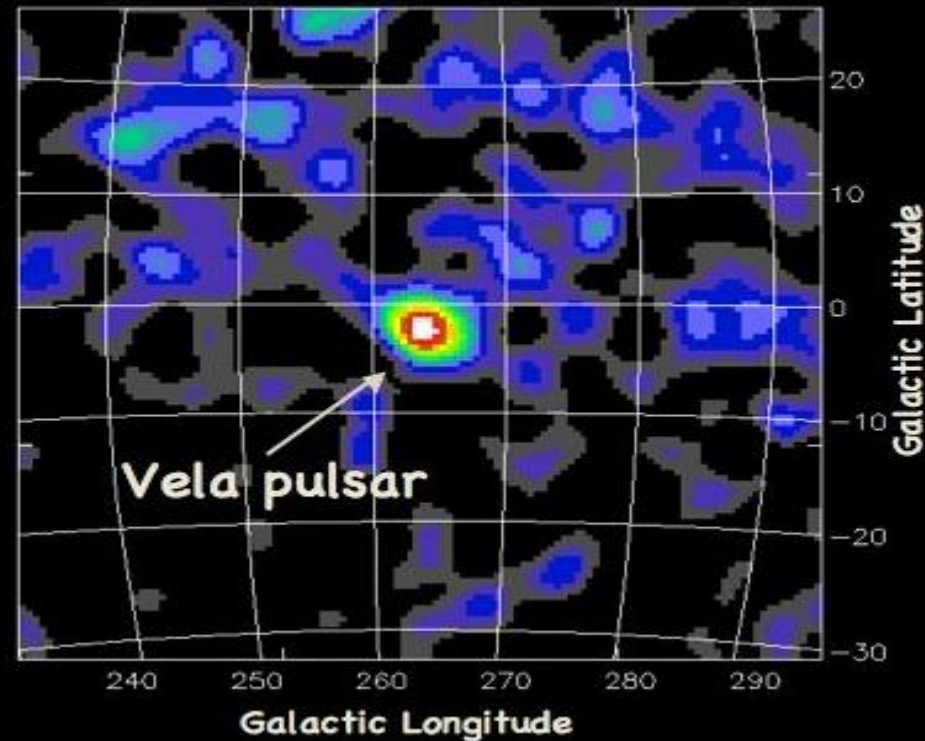
Scientific analysis:

Level-3 data

OUTPUT: High level data products
(count maps, spectra, light curves...)

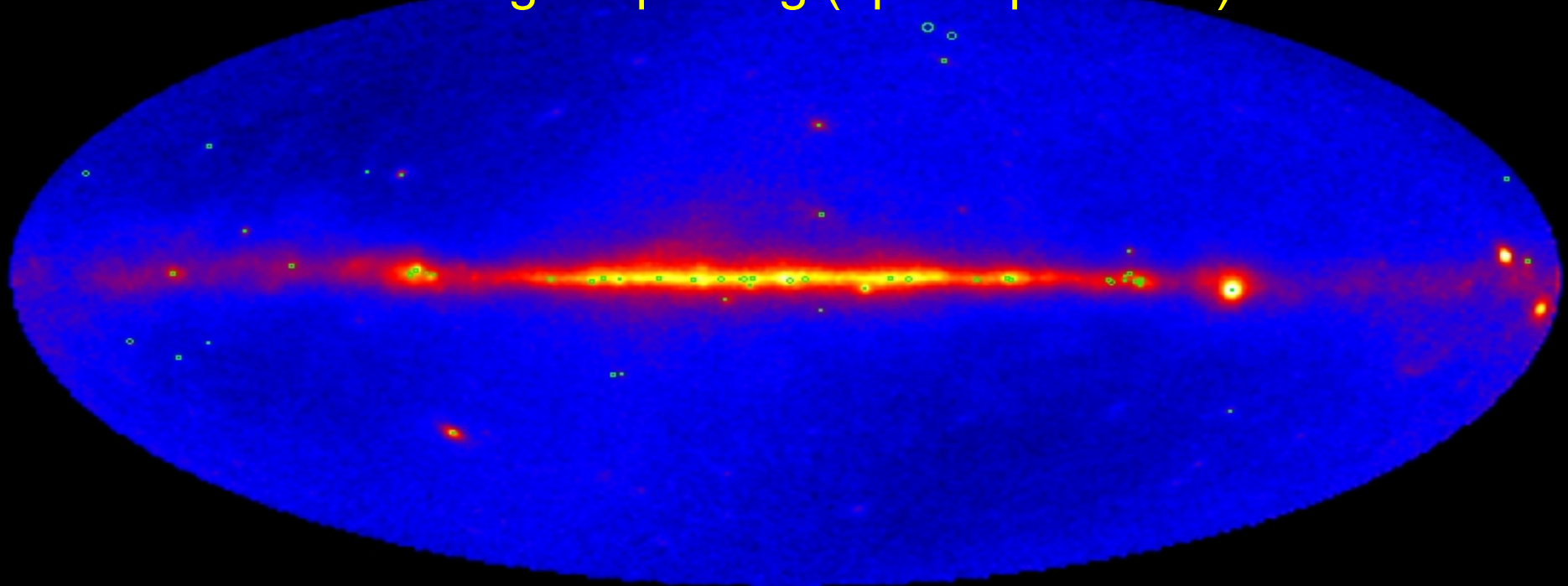
AGILE first detection of a cosmic source: the Vela Pulsar

(7 orbits between May 29 and 30, 2007)



AGILE Total Intensity Map ($E > 100$ MeV)

Pointing + Spinning (up to April 2015)



(green circles: AGILE sources, first year of operations)

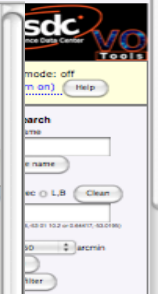
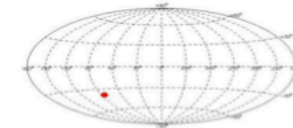
“The First AGILE-GRID Catalog of High Confidence Gamma-Ray Sources”, C. Pittori et al., A&A 506, 2009 and

“An updated list of AGILE bright γ -ray sources and their variability in pointing mode”, F. Verrecchia et al., A&A 558, 2013

The First AGILE-GRID Catalog of High Confidence Gamma-Ray Sources



Entry 1AGL J2254+1602 --- 3C454.3
 R.A.(J2000) = 22 54 10.4 (343.5433 deg) l=86.09
 Dec (J2000) = +16 02 32.6 (16.0424 deg) b=-38.30
 Galactic nH = 6.56E+20 (cm⁻²)

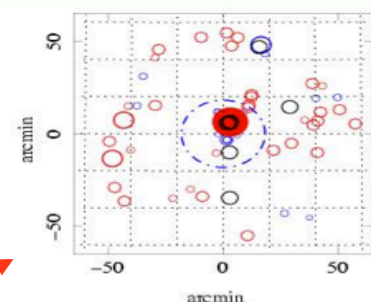


ASDC interactive
catalogs webpage

Error circle EXPLORER

Source Details

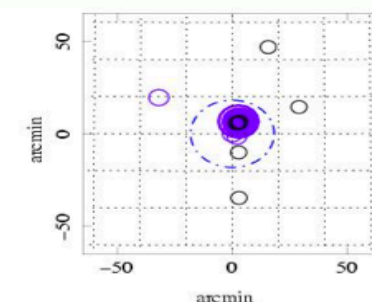
Feedback



[show sources list](#)
[download image in ps format](#)

TUTORIAL HELP

- Default catalogs** (always selected)
Selectable catalogs:
 Default selection [i] ☐
 Radio [select] ☐
 Infrared [select] ☐
 Optical [select] ☐
 X-Ray [select] ☐
 Gamma [select] ☒
 Source Catalogs [select] ☐
 [Selected catalog List >>]
 size (arcmin) 60 ±
 Create new image



[show sources list](#)
[download image in ps format](#)

Position selected for the analysis:
 R.A.=22 54 10.4 (343.5433 deg) l=86.09
 Dec=+16 02 32.6 (16.0424 deg) b=-38.30
 Galactic nH= 6.56E+20 (cm⁻²)

[Reset Position](#)

[SED Builder](#) [Source Names](#)

Additional Services - ?

Search ASDC Catalogs ?

Search Other Services ?

Group of Catalogs

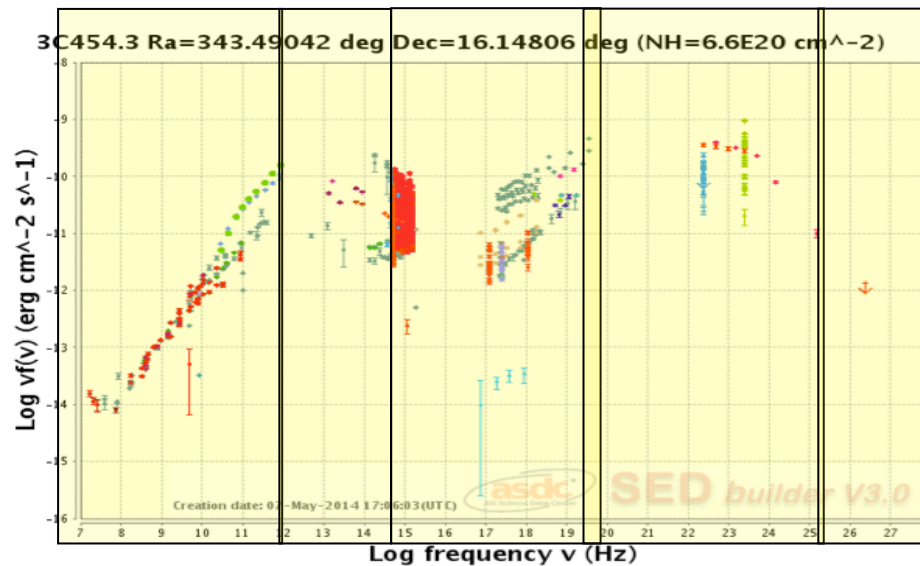
Selected Catalogs

VIZIER(X-R-G) VIZIER(O-IR) NED SIMBAD

ASDC Data Explorer Tool

The new ASDC SED Builder

SED^(t) builder V3.0
 Radioteleskop, Swift, AGILE and Fermi
 A tool to build and handle Spectral Energy Distributions, time-resolved SEDs
 and multi-frequency light-curves



Version 3.0.22
 pittori (C) 2010-2014
 Tutorial DATA EXPLORER
 User Data Existing SEDs
 Current SED Search and build new SEDs



Load Data Show Data
 Save Duplicate Sed

Redshift: 0.0 Frame: Observed
 X Axis: Frequency (Hz) Y Axis: nuFnu (erg/cm2/s)
 Plot Type: Default
 Update Plot

Input Data Time Filtering Energy Filtering Models
 Fit Functions Templates Instr Sensitivity Plot options
 Existing SEDs Export VO Tools

ASDC Catalogs

Expand all Collapse all

Name			Options	Help
Radio	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Infrared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Optical UV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Soft X Ray	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Hard X Ray	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Gamma Ray	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
VHE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

External Catalogs

Name	<input checked="" type="checkbox"/>		Credits	Search	Options
2MASS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	V S U
Catalina RTS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	V S U
NED	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	V S U

3C454.3

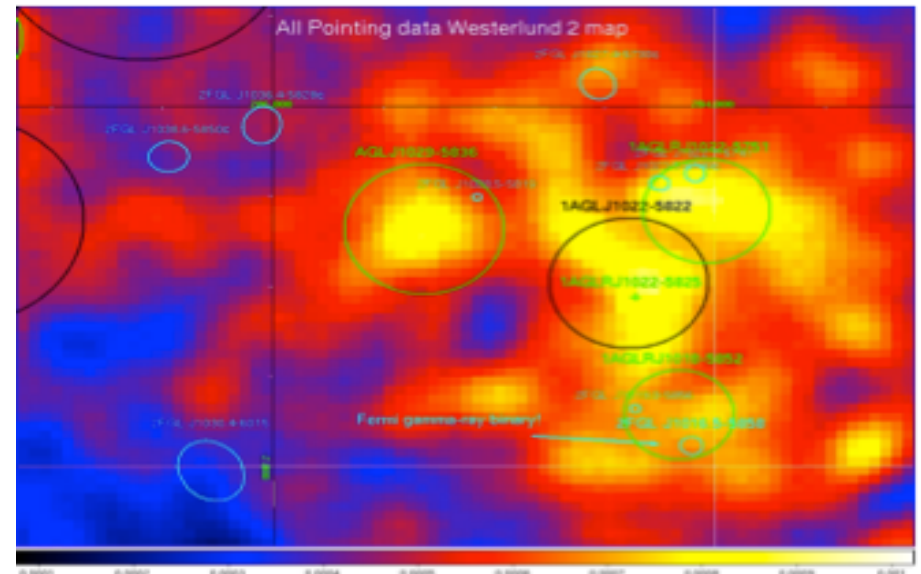
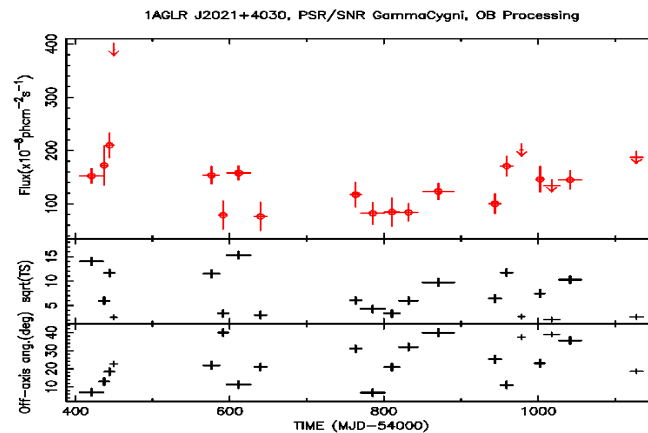
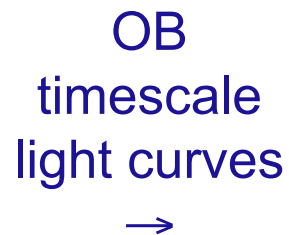
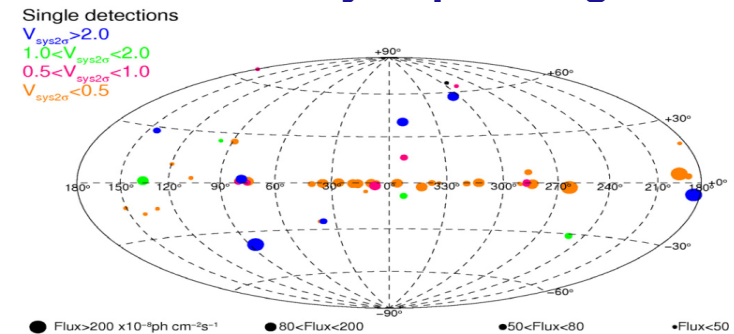
NEW AGILE CATALOGS:

- An updated list of AGILE bright γ -ray sources and their variability in pointing mode: “1AGLR Catalog”

(F. Verrecchia et al., A&A, 558, A137, 2013)

Variability study of an improved 1AGL source list (54 sources) on the timescale of the AGILE pointed observations (Observation Blocks)

Refined positioning of some 1AGL sources: the Carina region →



1AGLR Catalog interactive web page

http://www.asdc.asi.it/agile1rcat

An updated list of AGILE bright γ -ray sources and their variability in pointing mode*

F. Verecchia^{1,2}, C. Pittori^{1,2}, A. W. Chen¹, A. Bulgarelli⁴, M. Tavani^{5,6,7,8}, F. Lucarelli^{1,2}, P. Giommi^{1,9}, S. Vercellone^{1,1}, A. Pellizzoni¹, A. Chiantera¹, E. J. ...
 T. Contesi¹, E. Costa¹, E. Del Monte¹, G. Fenucci¹, M. Feroci¹, A. Feroci¹, C. Labanti¹, I. Lapshov³, F. Lazza¹, A. Mauri², F. Mauri^{1,4}, S. Mereghetti¹, P. Piccirilli^{1,1}, M. Pilia^{1,10}, C. Pout¹, A. Rappoldi^{1,4}, E. Rossi⁴, A. R. Tamburelli¹, A. Traci⁴, A. Trois

An updated list of AGILE bright γ -ray sources and their variability in pointing mode - Mozilla Firefox

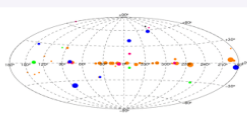
File Edit View History Bookmarks Tools Help

An updated list of AGILE bright...

An updated list of AGILE bright γ -ray sources and their variability in pointing mode

F. Verecchia, C. Pittori, A. Chen, A. Bulgarelli, M. Tavani, F. Lucarelli, P. Giommi, et al., A&A, 558, 137 (2013), arXiv:1310.0423

Help
 Show/hide columns
 Advanced filtering
 Print current view of table
 Print complete table
 Reset all filters



All Blazars DL Lacs PSRqs Pulsars XRB & MicroQSO Others Unassociated

This is the first catalog of AGILE bright γ -ray sources and their variability in pointing mode. It is based on the data from the AGILE mission, which was launched on October 23, 2007. The catalog includes information on the sources' positions, energies, and variability. The sources are classified into different categories based on their spectral and temporal properties.

Print Current view of Table | Table Format | Table Format | CSV Text Format

Previous Page | Next Page | Print Size | Refresh page | Reset all filters | Show all entries

Entry number	Source Name	AGILE Name	RA (J2000)	Dec (J2000)	LE (deg)	BL (deg)	PSRQs	Pulsars	XRB & MicroQSO	Others	Unassociated	Confirmed Catalog	Possible Association	2FGL
1	AGILE J0007+7307	J0007+7307	00 07 03.5	+73 06 31.5	11.5 67	10.52	5.1	3.23	0.45	0.05	6.41	PSR J0007+7303	—	2FGL J0007
2	AGILE J0130+0147	J0130+0147	01 30 01.6	+17 36 35.6	1.30 43	-3.4 26	3.7	2.05	0.64	0.13	5.58	—	SAG J0130+0147	2FGL J0130
3	AGILE J0222+4305	J0222+4305	02 22 12.1	+43 04 37.6	1.40 05	1.6 76	4	3.26	1.02	0.22	4.55	—	3C 464	2FGL J0222
4	AGILE J0440+1515	J0440+1515	04 40 10.6	+15 14 44.5	1.35 43	1.08	10.5	1.11	1.11	1.11	1.11	L59+45 303	—	2FGL J0440
5	AGILE J0501+4137	J0501+4137	05 01 37.3	+41 37 11.7	1.35 43	-3.505	3.4	2.3	0.85	0.14	1.33	—	NGC 1275	2FGL J0501
6	AGILE J0535+0519	J0535+0519	05 35 05.9	+02 05 41.7	1.45 56	-5.43	27.5	41.66	3.48	3.42	63.1	Crab*	—	2FGL J0535
7	AGILE J0535+4206	J0535+4206	05 35 35.4	+42 05 23.4	2.45 54	-38.12	6	9.45	1.33	1.4	11.44	PSR J0537+4451	—	2FGL J0535
8	AGILE J0617+2136	J0617+2136	06 17 21.7	+22 36 14.3	1.35 43	-5.43	27.5	41.66	3.48	3.42	63.1	Crab*	—	2FGL J0617
9	AGILE J0634+1748	J0634+1748	06 34 15.6	+17 48 27.7	1.35 43	4.36	28.6	38.14	2.37	2.37	25.48	CGR 204	—	2FGL J0634
10	AGILE J0713+3024	J0713+3024	07 12 43.2	+30 23 47.6	1.44 26	1.6 66	3.5	3.92	1.24	0.11	3.21	—	—	—

1AGLR table

1AGLR Name: 1AGLR J0007+7307 Confirmed Counter.: 2009-01-19 Possible Assoc: PSR J0007+7303

Number of detections: 13

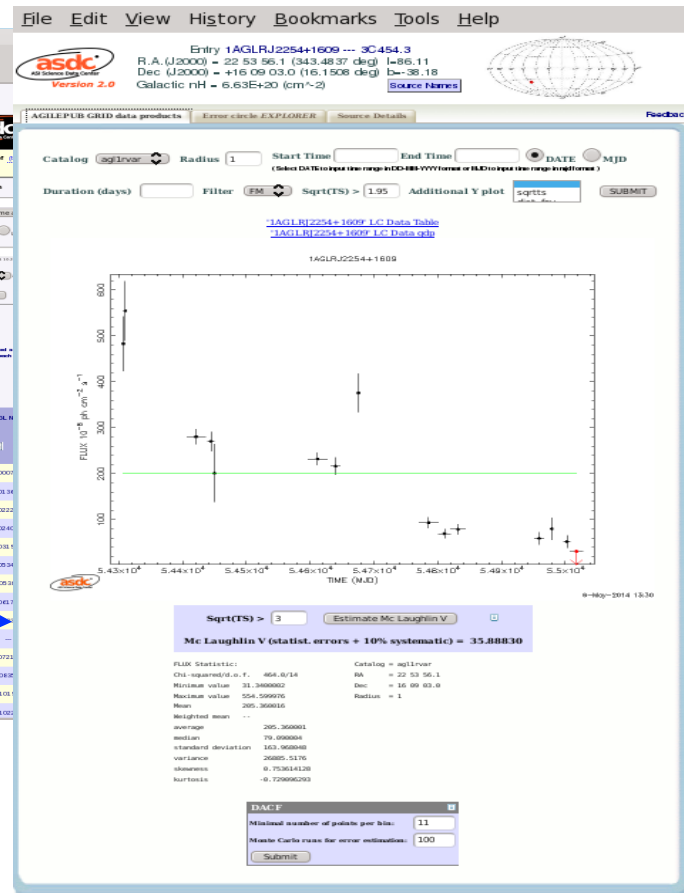
Show / hide columns

Show 10 entries

1AGLR Name	MJDStart (day)	MJDEnd (day)	OBNum	MeanOBSExpo. (cm ² s)	TStart (s)	TStop (s)	sqr(TS)	(Flux ± err) × 10 ⁻⁷ (ph cm ⁻² s ⁻¹)	Off-axis angle (degrees)
J0007+7307	54309.5	54311.5	1150	21.8	112622336	112881336	4.55	9.30 ± 2.5	35.4
J0007+7307	54347.5	54355.5	2300	59.7	115991936	116683136	3.68	3.00 ± 1.0	17.3
J0007+7307	54439.4	54449.5	4910	74.4	123929936	124804736	3.89	3.50 ± 1.1	38.3
J0007+7307	54586.5	54596.5	5700	75.6	136641536	137505536	5.32	4.70 ± 1.1	29.1
J0007+7307	54596.5	54626.7	5800	201.1	137505536	140119136	4.82	3.10 ± 0.8	43.5
J0007+7307	54626.5	54647.5	5820	214.5	140015536	141911936	5.22	3.10 ± 0.7	29.2
J0007+7307	54678.5	54693.5	5920	110.6	144590336	145895336	3.62	2.70 ± 0.9	37.8
J0007+7307	54709.5	54719.5	6110	72.3	147268736	148132736	3.21	2.70 ± 1.1	41.6
J0007+7307	54820.5	54843.7	6600	153.4	156859136	158867936	5.24	2.80 ± 0.7	29.2
J0007+7307	54850.7	54890.5	6720	256.2	159472736	162907136	9.12	3.20 ± 0.5	2.4

Showing 1 to 10 of 13 entries

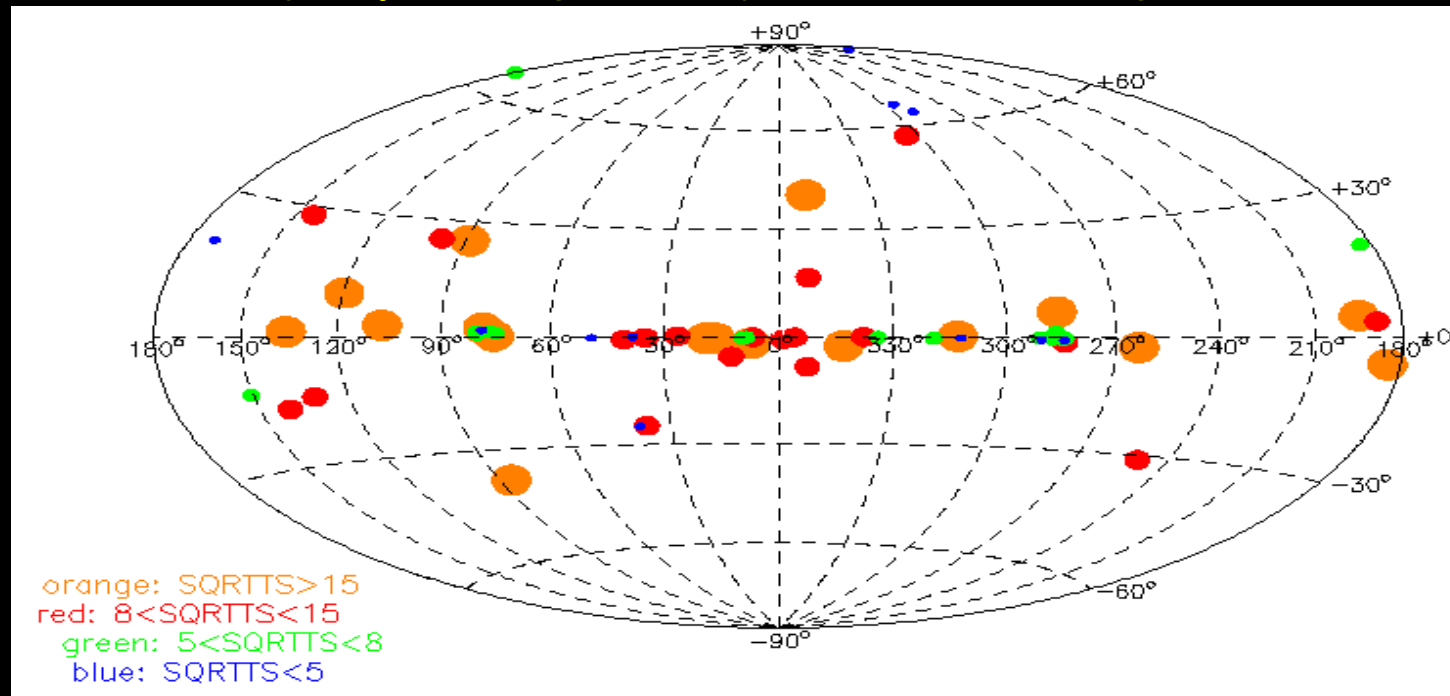
Previous Next



New ASDC Light Curve Explorer Tool (ALCE Tool):

AGILE sources 1AGL and 1AGLR

(first year of operations) See F. Verrecchia poster



"The First AGILE-GRID Catalog of High Confidence Gamma-Ray Sources", C. Pittori et al., A&A 506, 2009 and

"An updated list of AGILE bright γ -ray sources and their variability in pointing mode", F. Verrecchia et al., A&A 558, 2013

NEW AGILE CATALOGS:

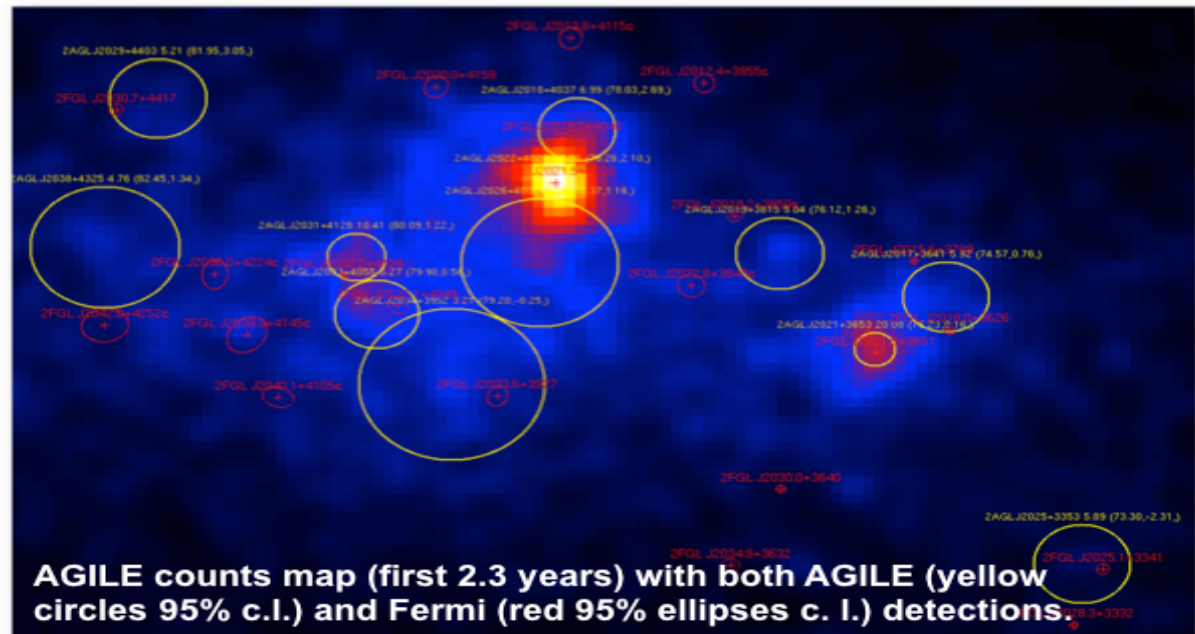
- The second AGILE Catalog: 2AGL *in progress* (A. Bulgarelli et al.,)
See Bulgarelli TALK, day 1

New AGILE-GRID source catalog over the whole period of AGILE **pointed observations** (first 2.3 years), with improved event filter and updated calibrations.

More than 350 sources, >180 on the galactic plane only.

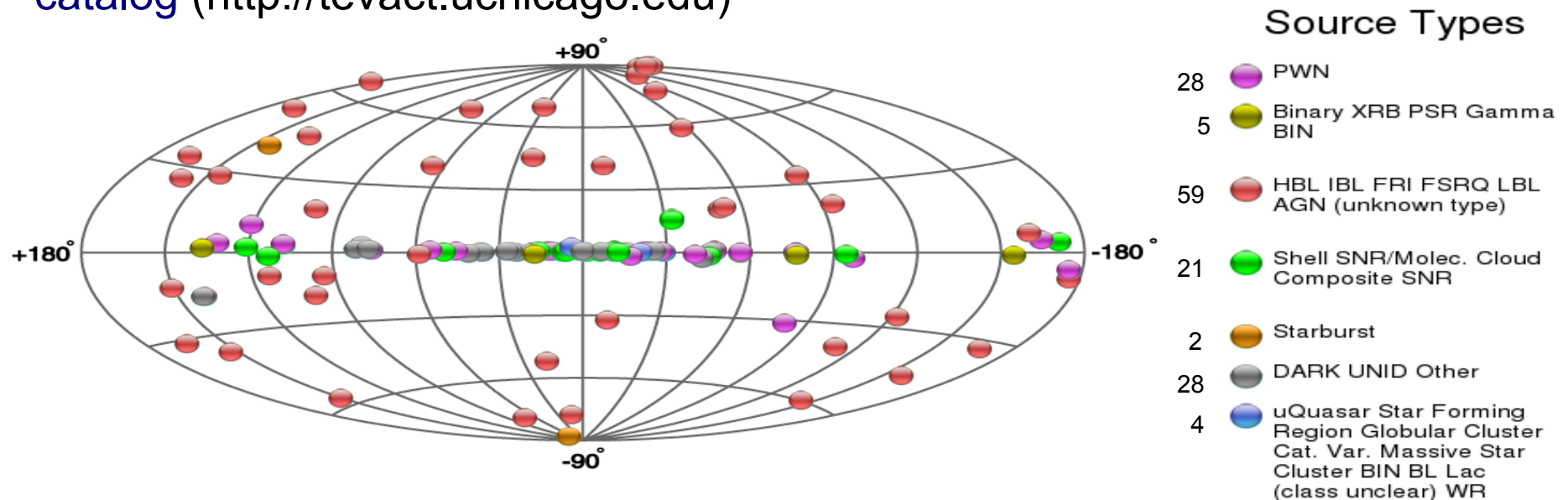
The Cygnus region →

Galactic Center region:
very complicate data
analysis, ***in progress***.
(Fioretti et al.)



Search for GeV counterparts of TeV sources with AGILE in pointing mode (A. Rappoldi et al.)

INPUT: **147** TeV source positions taken from the **TeVCat** Web based catalog (<http://tevact.uchicago.edu>)



see A. Rappoldi poster

Results: known and new sources

In total, **52** TeV sources show a significant *count excess* in the **AGILE** data covering the pointed observation period, corresponding to 35% of the original sample

Among them, **26** have a spatial association with already known **AGILE** sources from 1AGL/1AGLR catalogs (within 95% C.L. *error radius*):
15 galactic, **6** extra-galactic, **5** unassociated

The other **26** detections represent **new AGILE** sources (with respect to the reference catalogs): **15** galactic, **7** extra-galactic, **4** unidentified

see A. Rappoldi poster

The AGILE MCAL Gamma-ray Burst Catalog

MCAL GRB Catalog
(M. Galli et al., 2011)
ADC interactive website
www.asdc.asi.it/mcal

The Mini-Calorimeter (MCAL) of the AGILE satellite
This interactive web table contains all the data



GRB observed from Ag
Enti
R.A.(J2000) = 22 14 12
Dec (J2000) = -26 36 0
Galactic nH = 1.66E+21

Swift-XRT light curves of GRB 090510

Last updated after receiving ObsID 00351588001, version 19

Related pages: [Burst Analyser](#) | [Enhanced position](#) | [Spectrum](#) | [GRB Region information](#) | [XRT Catalogue entry](#) | [Download obs data](#) | [GCN Notices](#) | [GCN Circulars](#)

[Rebin this light curve](#) | [About these products.](#)

Flux Light Curve

For this burst, 1 count = 4.0×10^{-11} erg cm⁻² (observed flux) ([Automatic spectrum](#)).

Note that this is an average conversion factor: the true value may evolve with time.

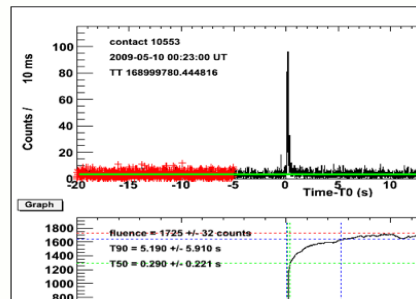
[Rescale fluxed light curve.](#)

Standard Products

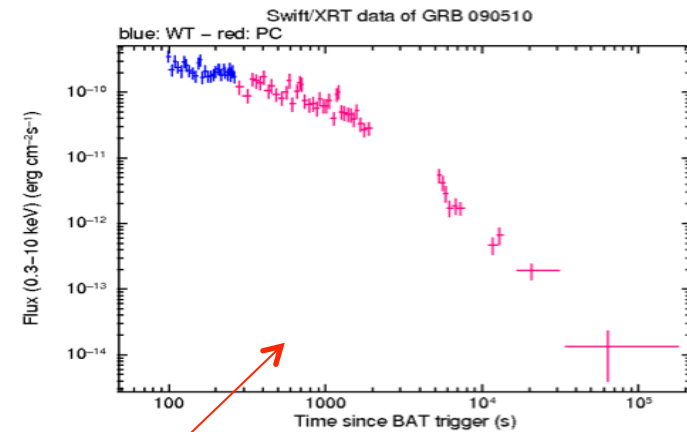
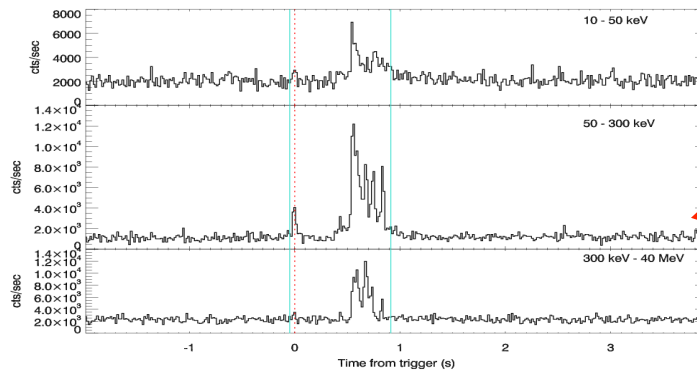
[Light Curve 10ms binning](#)

[Light Curve broader binning \(100-500 msec\)](#)

[Energy Spectrum](#)



090510016



Products
[Swift-XRT light curve repository at Leicester](#)

[Swift-BAT](#)

[Quicklook GBM lightcurve](#)

[GCN](#)

[Blog for Gamma Ray Bursts](#)

[Articles](#)

[SAO/NASA Astrophysics Data System](#)

GRID

SA

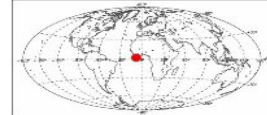
SA

Properties of Terrestrial Gamma-Ray Flashes detected by AGILE MCAL below 30 MeV

TGF (5-30 MeV) observed from March 2009 to July 2012



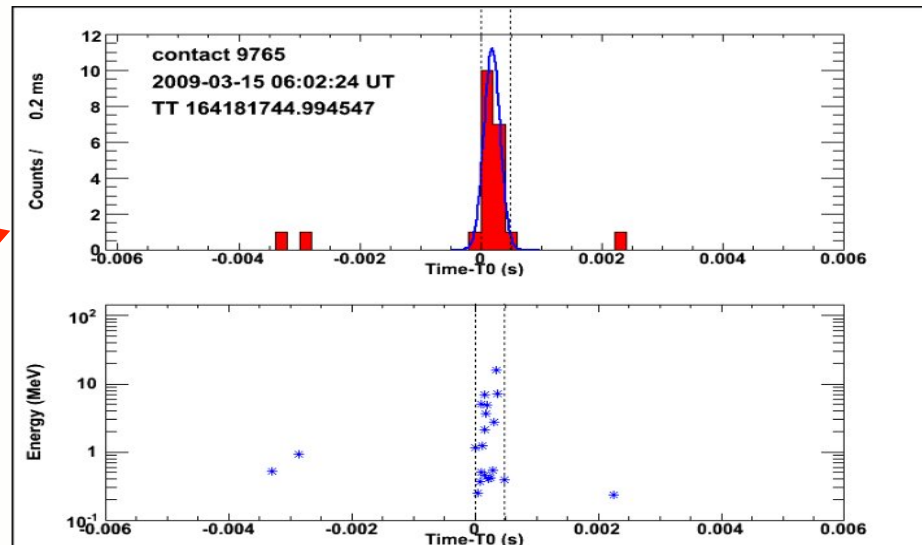
Entry 090315
GeoLong. = -8.08
GeoLat. = 1.73



AGILE MCAL Data Products Source Details

Standard Products

Light Curve broader binning (200 microsec)



MCAL TGF Catalog
(M. Marisaldi et al., 2013)
ADC interactive webpage
www.asdc.asi.it/mcalt

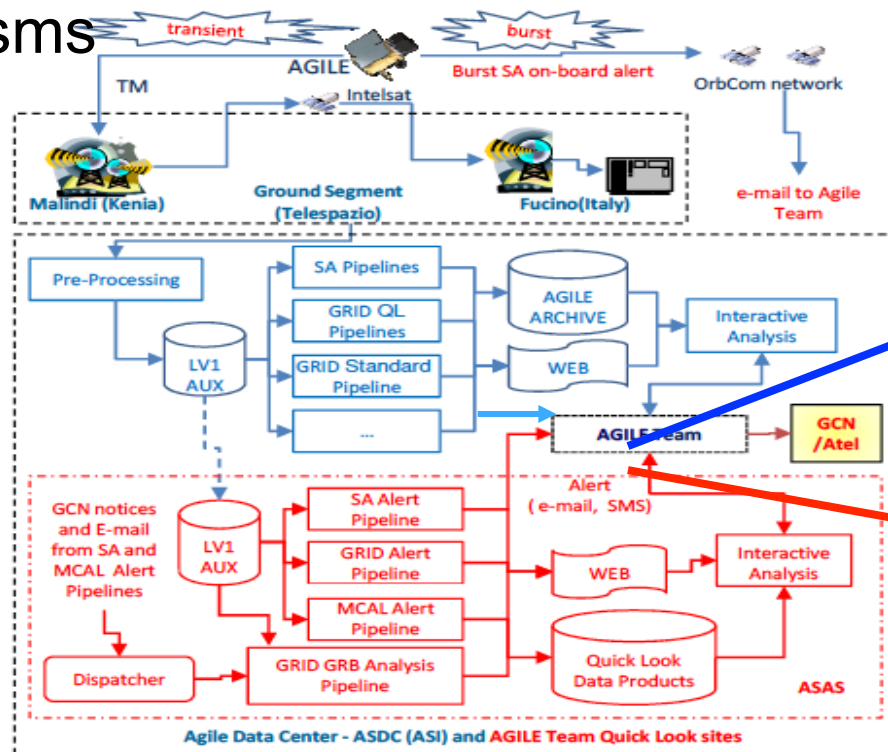
Entry number	TGF ID	GeoLon	GeoLat
1	TGF LC 090302.71821	17.42	-1.73
2	TGF LC 090308.40378	110.96	-2.13
3	TGF LC 090308.61530	106.13	-1.73
4	TGF LC 090309.25894	136.68	-1.73
5	TGF LC 090309.37239	-6.65	1.73
6	TGF LC 090309.37239	-6.65	1.73
7	TGF LC 090315.25166	-8.08	1.73
8	TGF LC 090315.64738	78.98	-1.73

See Fuschino and URSI
talks this morning

AGILE Science Alert System

- The system is distributed among the ADC @ ASDC and the AGILE Team Institutes (Trifoglio, Bulgarelli, Gianotti et al.)
- Automatic Alerts to the AGILE Team are generated within $T_0 + 45 \text{ min}$ (SA) and $T_0 + 100 \text{ min}$ (GRID)
- GRID Alerts are sent via email (and sms) both on a contact-by-contact basis and on a daily timescale
- Refined manual analysis on most interesting alerts performed every day (daily monitoring)
- **123 ATel** (48 in pointing + 75 in spinning) and **44 GCN** published up to May, 2015

Selected **alerts** sent via email,
sms



(Figure adapted from M. Trifoglio et al.)

+ App for mobile devices!

label: agile-daily-report

The label "AGILE Daily Report" has been removed from the conversation. [Learn more](#) [Undo](#)

no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report 11/12/2011 (ok)	AGILE Daily Report 11/12/2011 (MJD:55908) ## ## FM Filter ...	10:12 am
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 11/12/2011 (ok)	AGILE Daily Report Global Proc. 11/12/2011 (MJD:559	9:49 am
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 10/12/2011 noon (ok)	AGILE Daily Report Multi2 Results 10/12/2011 (Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 10/12/2011 noon (ok)	AGILE Daily Report Global Proc. 10/12/2011 (MJD:556	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 10/12/2011 (ok)	AGILE Daily Report Multi2 Results 10/12/2011 (MJD:556	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report 10/12/2011 (ok)	AGILE Daily Report 10/12/2011 (MJD:55908) ## ## FM Filter ...	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 10/12/2011 (ok)	AGILE Daily Report Global Proc. 10/12/2011 (MJD:556	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 09/12/2011 noon (ok)	AGILE Daily Report Global Proc. 09/12/2011 (MJD:556	Dec 9
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 09/12/2011 (ok)	AGILE Daily Report Multi2 Results 09/12/2011 (MJD:556	Dec 9
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 09/12/2011 (ok)	AGILE Daily Report Global Proc. 09/12/2011 (MJD:556	Dec 9
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 08/12/2011 noon (ok)	AGILE Daily Report Multi2 Results 08/12/2011 (Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 08/12/2011 noon (ok)	AGILE Daily Report Global Proc. 08/12/2011 (MJD:556	Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 08/12/2011 (ok)	AGILE Daily Report Multi2 Results 08/12/2011 (MJD:556	Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 08/12/2011 (ok)	AGILE Daily Report Global Proc. 08/12/2011 (MJD:556	Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 07/12/2011 noon (ok)	AGILE Daily Report Global Proc. 07/12/2011 (MJD:556	Dec 7
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 07/12/2011 (ok)	AGILE Daily Report Multi2 Results 07/12/2011 (MJD:556	Dec 7
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 07/12/2011 (ok)	AGILE Daily Report Global Proc. 07/12/2011 (MJD:556	Dec 7
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 06/12/2011 noon (ok)	AGILE Daily Report Global Proc. 06/12/2011 (MJD:556	Dec 6
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 06/12/2011 (ok)	AGILE Daily Report Multi2 Results 06/12/2011 (MJD:556	Dec 6

Daily reports on a 48h time scale
(sent twice a day) FAST

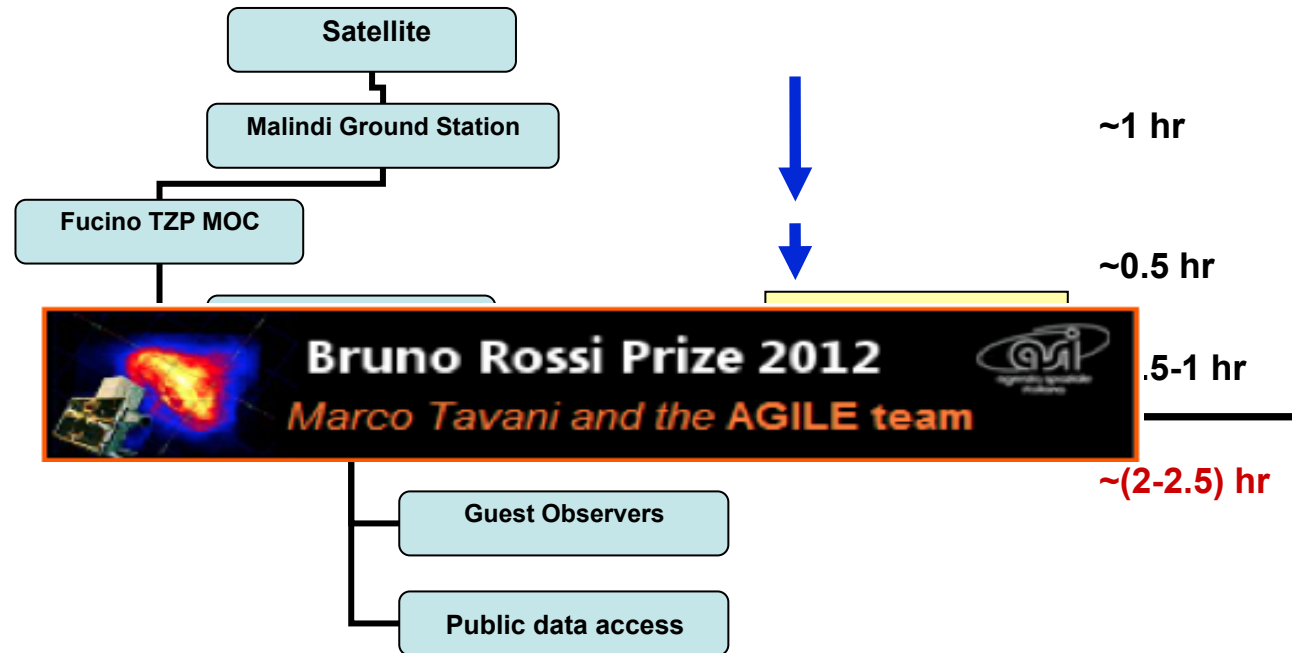
Contact-by-contact alerts on a 48h time scale
(sent every ~100 min) VERY FAST

label: grid-alert

Gmail's getting a new look soon. [Learn more](#) [Dismiss](#)

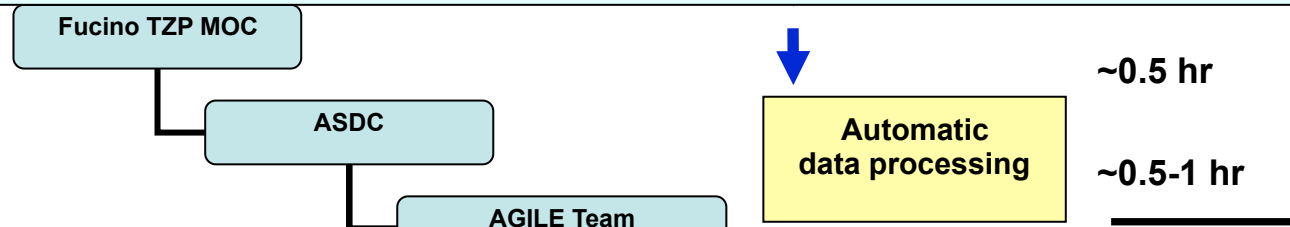
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report 11/12/2011 (ok)	AGILE Daily Report 11/12/2011 (MJD:55908) ## ## FM Filter ...	10:12 am
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 11/12/2011 (ok)	AGILE Daily Report Global Proc. 11/12/2011 (MJD:559	9:49 am
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 10/12/2011 noon (ok)	AGILE Daily Report Multi2 Results 10/12/2011 (Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 10/12/2011 noon (ok)	AGILE Daily Report Global Proc. 10/12/2011 (MJD:556	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 10/12/2011 (ok)	AGILE Daily Report Multi2 Results 10/12/2011 (MJD:556	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report 10/12/2011 (ok)	AGILE Daily Report 10/12/2011 (MJD:55908) ## ## FM Filter ...	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 10/12/2011 (ok)	AGILE Daily Report Global Proc. 10/12/2011 (MJD:556	Dec 10
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 09/12/2011 noon (ok)	AGILE Daily Report Global Proc. 09/12/2011 (MJD:556	Dec 9
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 09/12/2011 (ok)	AGILE Daily Report Multi2 Results 09/12/2011 (MJD:556	Dec 9
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 09/12/2011 (ok)	AGILE Daily Report Global Proc. 09/12/2011 (MJD:556	Dec 9
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 08/12/2011 noon (ok)	AGILE Daily Report Multi2 Results 08/12/2011 (Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 08/12/2011 noon (ok)	AGILE Daily Report Global Proc. 08/12/2011 (MJD:556	Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 08/12/2011 (ok)	AGILE Daily Report Multi2 Results 08/12/2011 (MJD:556	Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 08/12/2011 (ok)	AGILE Daily Report Global Proc. 08/12/2011 (MJD:556	Dec 8
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 07/12/2011 noon (ok)	AGILE Daily Report Global Proc. 07/12/2011 (MJD:556	Dec 7
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 07/12/2011 (ok)	AGILE Daily Report Multi2 Results 07/12/2011 (MJD:556	Dec 7
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 07/12/2011 (ok)	AGILE Daily Report Global Proc. 07/12/2011 (MJD:556	Dec 7
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Global Proc. 06/12/2011 noon (ok)	AGILE Daily Report Global Proc. 06/12/2011 (MJD:556	Dec 6
no_reply	AGILE Daily Report	Index	GridAlert	AGILE Daily Report Multi2 Results 06/12/2011 (ok)	AGILE Daily Report Multi2 Results 06/12/2011 (MJD:556	Dec 6

AGILE: “very fast” Ground Segment (with contained costs)



Record for a gamma-ray mission!

**FUTURE: A NEW Real Time Pipeline to
Link Meteorological Information
and TGFs Detected by AGILE
(see also A. Ursi Talk)**



**Extend also to Terrestrial data
the ASDC expertise on web based
interactive tools and cross-correlations
among different DBs and archives**



AGILE Public Data Distribution from the ASDC MMIA

- *First Cycle-1 public delivery (17 OBs): Jun 10, 2009 (data_release_note_v1)*

**The public AGILE archive now contains
all data from Dec 2007 up to Nov 2013
(from Cycle-1 to Cycle-6)**

- *Cycle-3, 4, 5 and 6 (spinning) public deliveries: Nov 9 - Dec 21, 2011 and Nov 21, 2012, Sep 30 and Nov 22, 2013, Oct 1 and Dec 22, 2014 (data_release_note_v6, v7, v8, v8.1, v9.0 and v10.0)*

AGILE: 8th year in orbit

- **Pointing observation** mode up to October 18, 2009 and **spinning observation mode** since October 2009.
- **Very good scientific performance, especially at ~ 100 MeV**
- **40000 orbits around the Earth** completed on January 19, 2015
- **All AGILE functions are NOMINAL**
- **Guest Observer Program open to the scientific community:**
 - 4 ASI AO from Cycle-1 to Cycle-4: completed, Dec. 1, 2007 – Nov 30, 2011**
 - Cycle-5, 6 and 7: completed, Dec.1, 2011 – Dec. 31 2014.**
 - Cycle-8 on-going data taking.**
 - FUTURE? Waiting for (imminent) ASI funding decisions**

AGILE: 8th year in orbit

NEW Data Publication Policy for FUTURE data taking Cycles:

The AGILE Mission Board suggested to **eliminate the one year proprietary period**. Data will be published as soon as they will be processed and validated **about 4 times a year**.

Inter

AGILE Imaging Tool @ ASDC

Image parameters:

Source Name Search ?

RA Dec ?

LII BII ?

Image radius (deg) ?

Emin ?

Emax ?

Catalog Overlay ?

Radio Infrared X-Ray Gamma

NVSS
SUMSS
FIRST
GB6

Run Reset to default

Ximage smoothing parameters:

Smoothing filter wave ?

sigma 3. ?

back 4 ?

Ximage display parameters:

Color scaling linear ?

Minimum level displayed 4 ?

Available parameters

☒ OB Number ☒ OB Name ☒ RA_PNT ☒ ERR_RAP ☒ DEC_PNT ☒ ERR_DECP ☒ RA_SUN (degrees) ☒ ERR_RAS ☒ DEC_SUN (degrees) ☒ ERR_DECS ☒ GRID Data Retrieval ☒ GRID Interactive Archive ☒ OB start date ☒ OB end date ☒ Processing version ☒ Mean OB Exposure (cm² s) ☒ Related SuperAGILE Entries ☒ Notes

GO

Entry number	Selection mode	OB Number	OB Name
1 Select	ASDC Data Explorer	4900	Cygnus Field 1

AGILE GRID 2008 Feb 9

225 270 315

30 20 10 0 -10 -20

Start Time: 2008-02-09 End Time: 2008-02-12

ToO

Baseline

Baseline

Baseline

ToO

Baseline

Ximage sw package adapted to gamma-rays

Public tool allows web users to have a **preview** of the AGILE public data fields and perform an interactive **preliminary analysis** around a chosen sky position.

Warning: use imaging tool only as a preview of the AGILE γ -ray field.
To perform your own scientific analysis, up to now please **download data and official public AGILE software** available at:
<http://agile.asdc.asi.it/public/> following the AGILE Software User Manual

Index of /public/AGILE_SW_5.0_SourceCode

Icon	Name	Last modified	Size	Description
[DIR]	Parent Directory		-	
[]	AGILE-IFC-OP-009 Build-21.pdf	22-Nov-2011 18:24	928K	
[]	BUILD GRID 5.0.tgz	22-Nov-2011 16:56	121M	
[TXT]	SoftwareReleaseNote 5.0.txt	25-Nov-2011 16:01	16K	
[TXT]	readme 5.0.txt	22-Nov-2011 16:57	5.2K	
[]	test dataset 5.0.tgz	22-Nov-2011 16:57	346M	

Apache Server at agile.asdc.asi.it Port 80

NEW: web interface for **official interactive on-line ML analysis on AGILE on legacy (LV3) data archive under validation!**



Working prototype
(password restricted access)

**Multimission
Archive**

Mission Selected
AGILE-LV3
AGILE-LV3 Tutorial

Enter source name or coordinates: ☒ RA, DEC ☐ L, B ☐ Lon, Lat
(e.g. CYGX-1 or 19 58 21.7, +35 12 05.8 or 299.590333, 35.201611 or 71.334960, 3.066917)

Name Resolver: ☒ Local ☒ SIMBAD ☒ NED

Start Date: << >> (dd-mm-yyyy)

End Date: << >> (dd-mm-yyyy)

Duration: Day(s)

Min EXP: (cm² s sr)

Max lines retrieved:

Equinox: ☒ 2000 ☐ 1950

Submit

Duration:
1, 2, 7, 28
days

AGILE-LV3 Data

Query results for: PKS1510-089(LOCAL)

Details: query by **COORDINATE & TIME** with **RA** = 228.210417; **DEC** = -9.100000; **L** = 351.289081; **B** = 40.138799; **Lon** = 228.293839; **Lat** = 8.496066; **EQUINOX** = 2000; **RADIUS** = 30 degrees; **Start date** = 01-12-2007; **End date** = 07-05-2014; **Duration** = 28 day(s); **Min EXP** = 100 cm² s sr; sort by **START DATE**; max lines retrieved 1000;

Make Light Curve: **LC likelihood**

Export Current view of Table in:

◀ Previous Page Next Page ▶ Page Size (# of lines) 200 Refresh page Reset all filters Show all entries

Entry number		GRID LV3 data retrieval	GRID Interactive Analysis	START DATE	STOP DATE	RA (J2000)	DEC (J2000)	EXP (cm ² s sr)	Dist. from searched position
Selection mode:						hh mm ss.d	dd mm ss.d		degrees
<input type="button" value="Include"/>									
<input checked="" type="checkbox"/> All									
1	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
2	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
3	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
4	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
5	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
6	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
7	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
8	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
9	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
10	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
11	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
12	<input checked="" type="checkbox"/> Select	ASDC Data Explorer	Data Access						
13									
14									

Official AGILE GRID
Maximum Likelihood
analysis tool

AGILE Imaging Tool @ ASDC

Set image parameters:

Image Centered On:

RA (deg) 228.21 Dec (deg) -9.10

LII (deg) 351.29 BII (deg) 40.14

Source name: Search

Image half size (deg) 10.00

Emin (MeV) 100

Emax (MeV) 50000

Catalog Overlay

Radio IR X-Ray Gamma Sources cats

AT20G ATCAPMN 13 GRATES

Ximage display parameters:

Run (Ximage) Reset to default

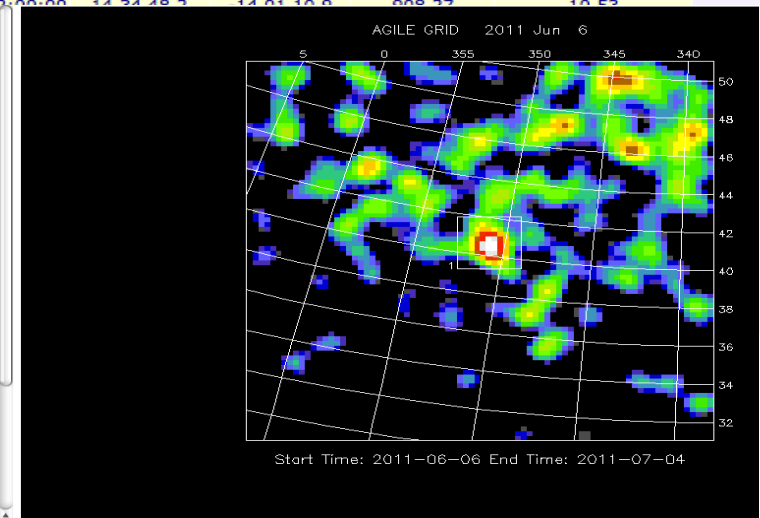
GRID ML Interactive Analysis

Reference AGILE catalog aglall

Spectral index -2.1

Galactic -999

Isotropic -999



On-line science ready ML results (no need to install any software)

484bbaf2138d5e8b1d947c7efd6e749f/1AGLRJ1513-0906-ORIG.out

2) Source light curve in few minutes

AG_Multi4 1.4 - Wed May

Input

Psf /data/agile/agile3/pa
Raeff /data/agile/agile3/pa
Edp /data/agile/agile3/pa

Gal Mode Iso Mode Radi
1 1 10

Map Name
1 /data/agile/agile3/lv3

Map Counts Date start
1 5933 2011-06-06 1

Source
1AGLRJ1513-0906-ORIG

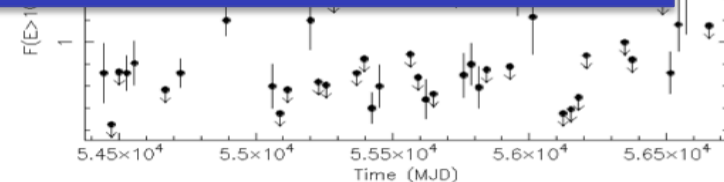
Output

DiffName	Coeff	Err
Galactic	0.7	0
Isotropic	13.8561	0.8887

SrcName	sqrt(TS)	L	B	Radius	Exp	Counts	Err	Flux	Err	Flux UL	Index	Err
1AGLRJ1513-0906-ORIG	4.89402	351.373	40.091	0	2.26688e+07	41.3843	11.6043	1.82561e-06	5.11906e-07	2.95956e-06	2.1	0

AGILE Legacy Archive and online tools designed and maintained to optimize science and discovery potential in the years to come

1) Source detection significance, average gamma-ray flux (or flux upper limit) in the chosen timebin in few sec (html format)



DOWNLOAD: [1AGLRJ1513-0906-ORIG_28dd-timebin_input_for_SED.dat](#)
Total number of GOOD bins in the lightcurve: 45/69

Download GRID ML results

ASDC SED Builder access:
(click below to include SED data points)

Add data to SED