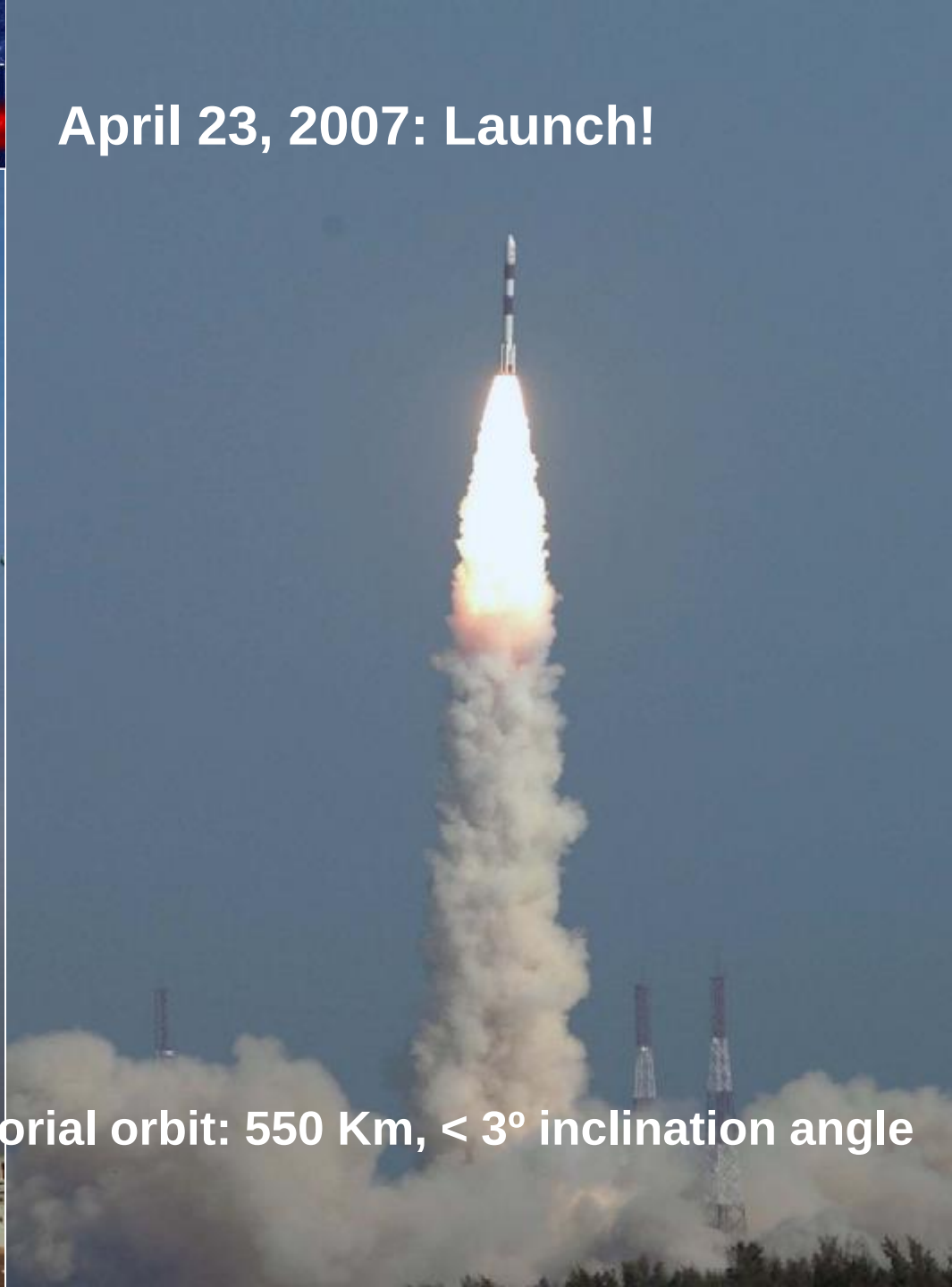
AGILE@ASDC

Carlotta Pittori, on behalf of the AGILE Data Center

11th AGILE Science Workshop, ASI HQ, May 16-17, 2013

April 23, 2007: Launch!



Equatorial orbit: 550 Km, < 3º inclination angle

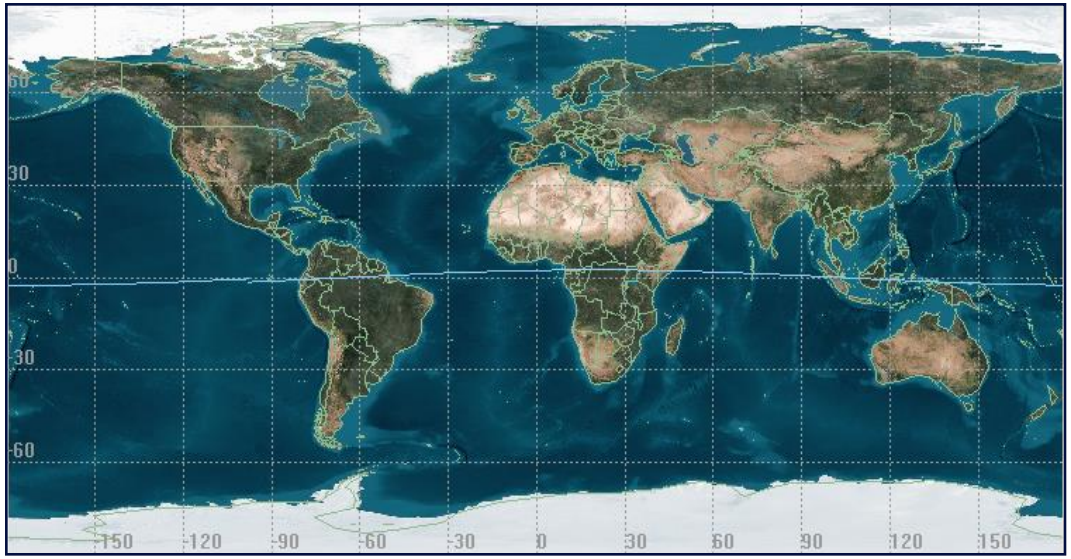
AGILE orbital parameters

Baseline equatorial orbit: 550 Km, 3º inclination

Semi-major axis: 6922.5 km (± 0.1 km)
Requirement: 6928.0 ± 10 km

Inclination angle: 2.48° (±0.04°)
Requirement: < 3°

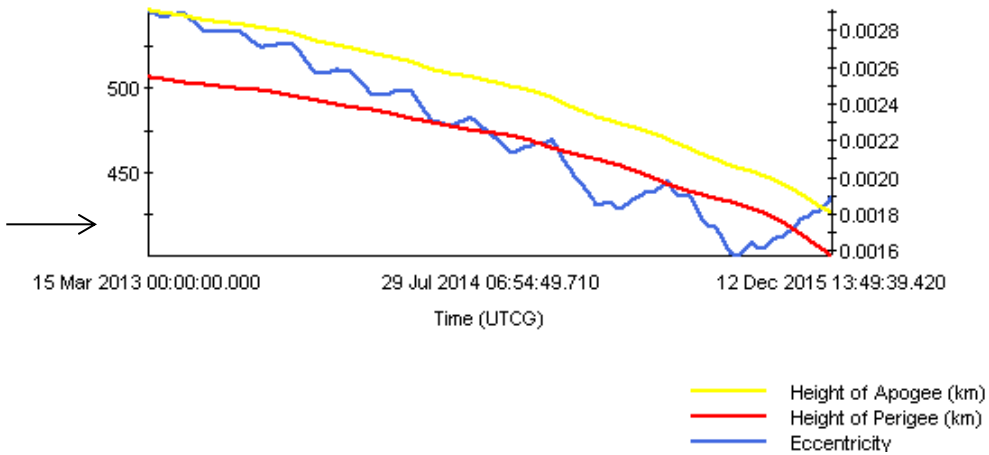
Eccentricity: 0.002 (±0.0015)
Requirement: < 0.1°



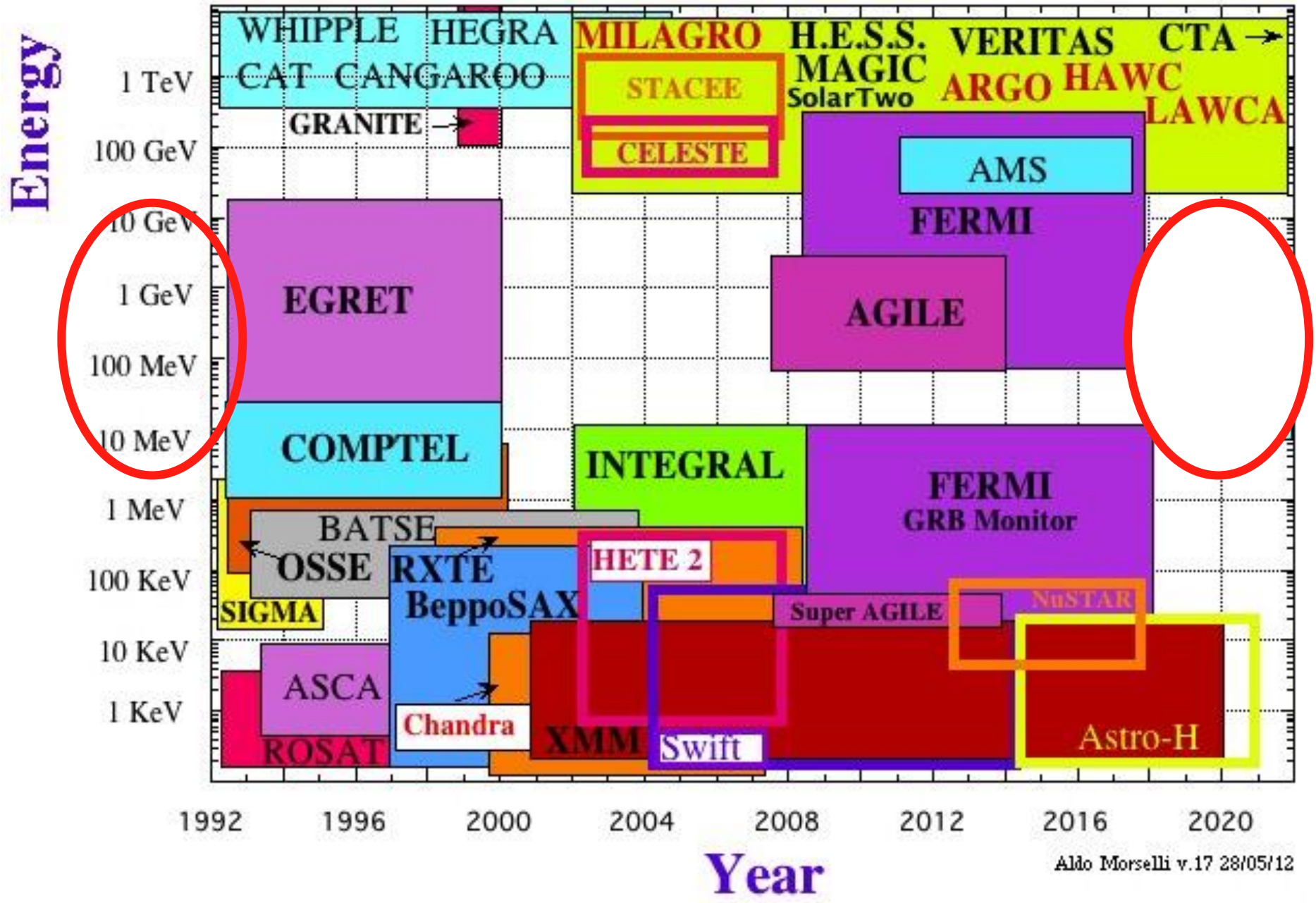
Satellite-AGILE - 28 Mar 2013 10:08:13

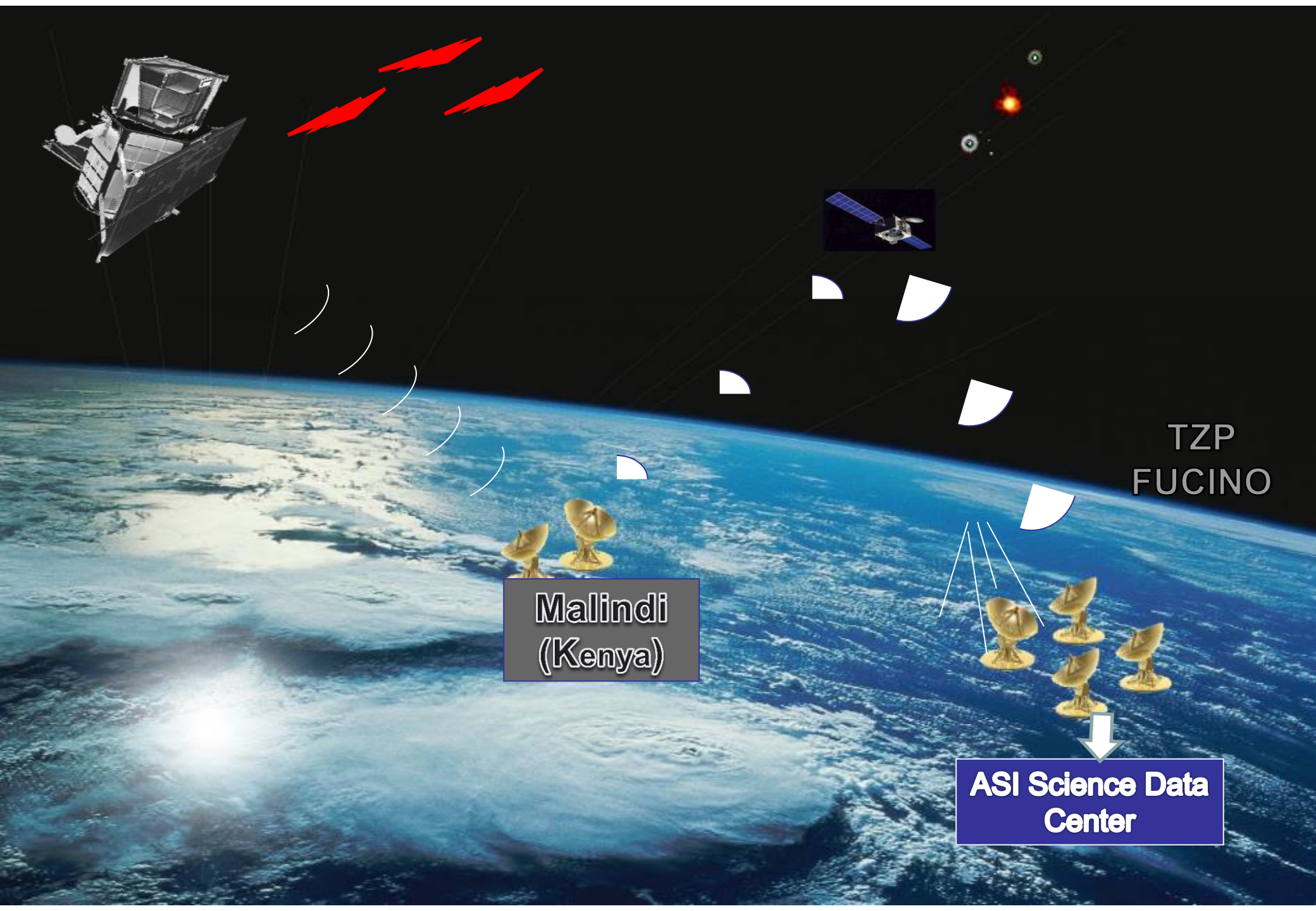
TPZ orbital decay estimate:

Height < 400Km on **20/04/2017**
(A/M=0.009 sqm/Kg)
Worst case (A/M=0.012 sqm/Kg)**: 02/11/2015**
Best case (A/M=0.006 sqm/Kg): 29/04/2023

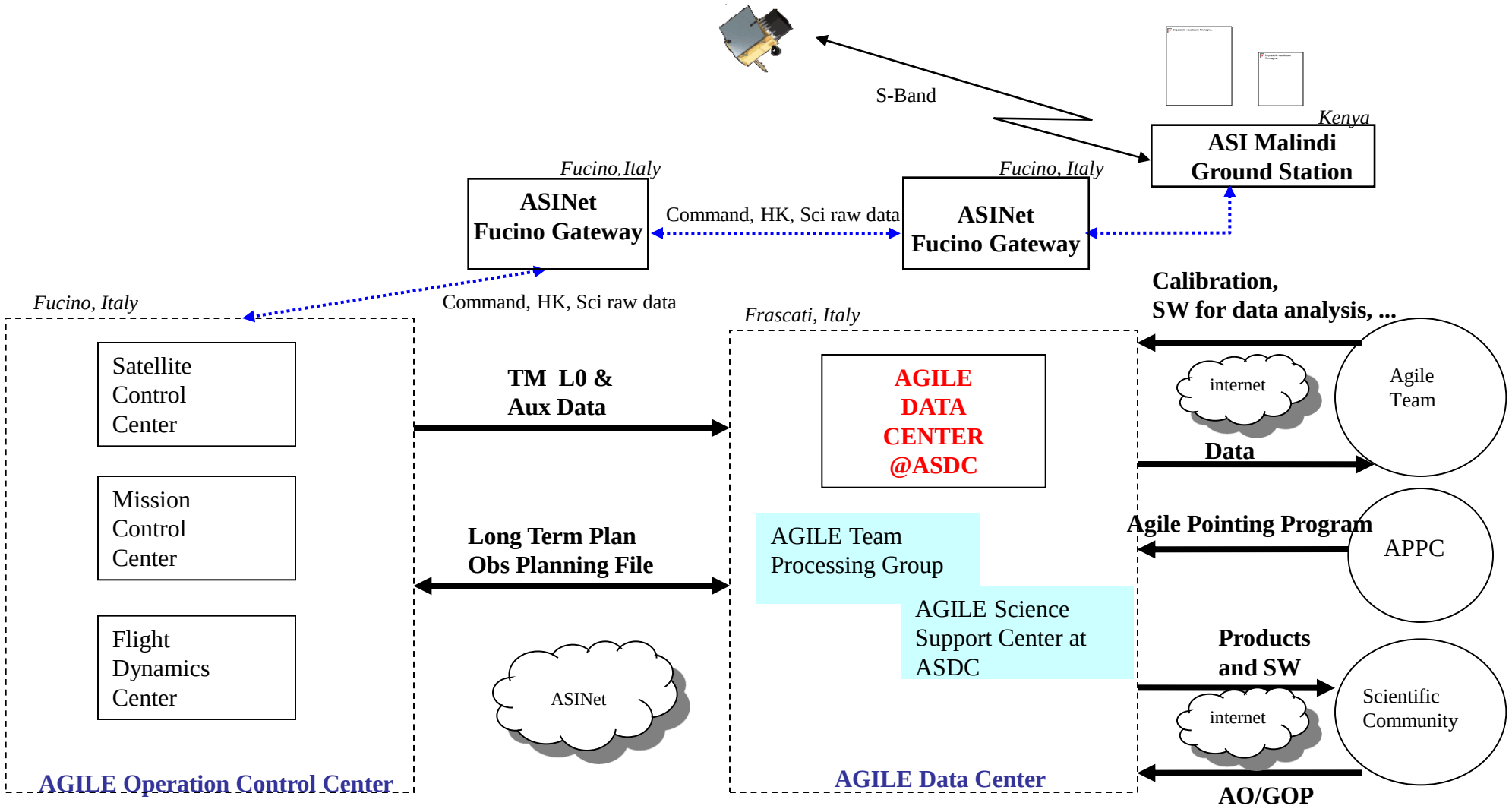


(March 2013 updated estimate, using recent solar flux "Schatten" forecasts + 2σ)


Energy
1 TeV
100 GeV
10 GeV
1 GeV
100 MeV
10 MeV
1 MeV
100 KeV
10 KeV
1 KeV
WHIPPLE
HEGRA
CAT
CANGAROO
GRANITE
MILAGRO
STACEE
CELESTE
H.E.S.S.
MAGIC
SolarTwo
VERITAS
ARGO
HAWC
CTA
LAWCA
AMS
FERMI
AGILE
EGRET
COMPTEL
INTEGRAL
FERMI
GRB Monitor
BATSE
OSSE
SIGMA
RXTE
BeppoSAX
HETE 2
Super AGILE
NuSTAR
ASCA
ROSAT
Chandra
XMM
Swift
Astro-H
1992
1996
2000
2004
2008
2012
2016
2020
Year
Aldo Morselli v.17 28/05/12


TZP
FUCINO
Malindi
(Kenya)
ASI Science Data
Center

AGILE GS Architecture

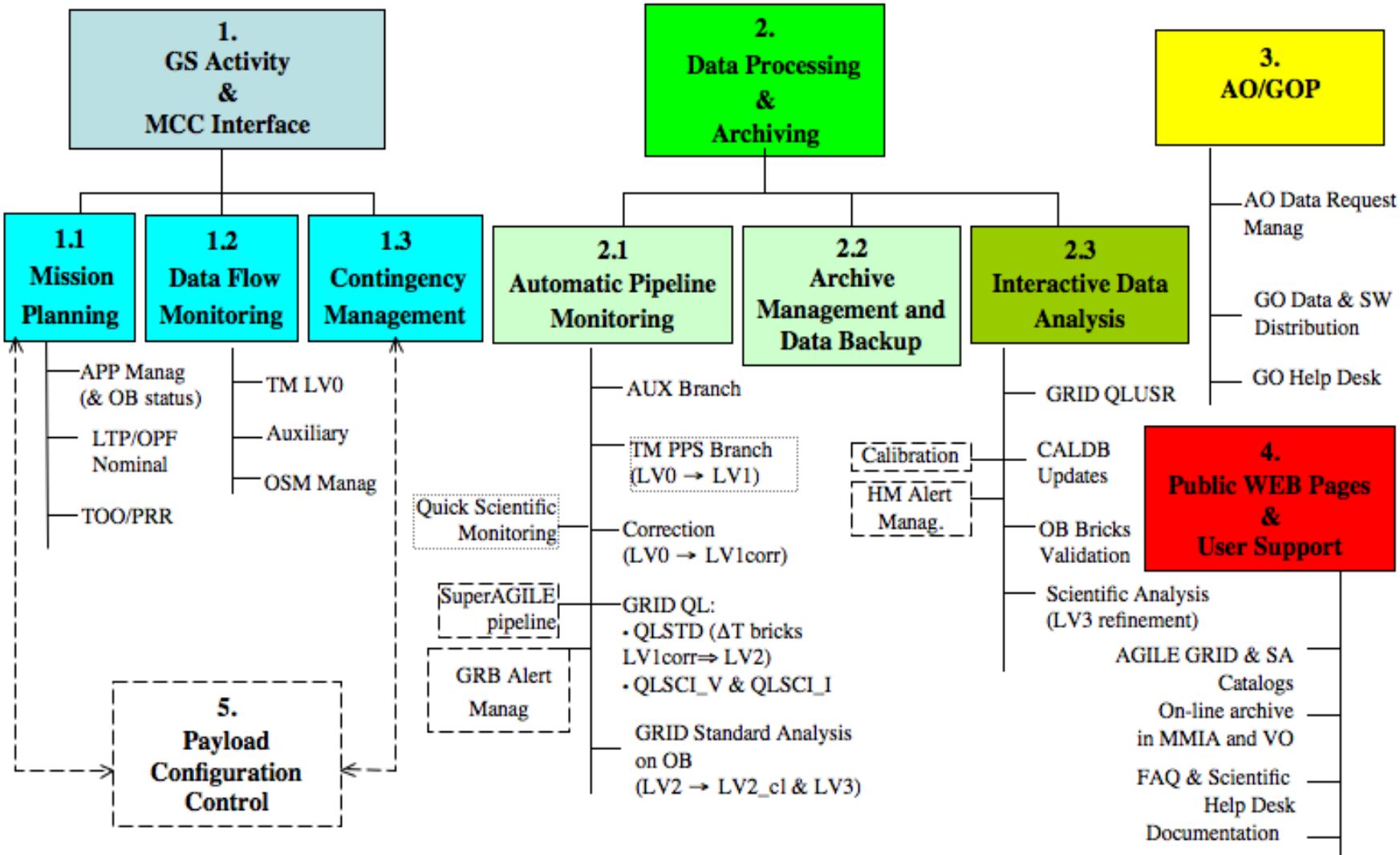


AGILE Telemetry raw data (Level-0) are down-linked every ⊟100 min to the ASI Malindi ground station in Kenya and transmitted first to the Telespazio Mission Control Center at Fucino, and then to the AGILE Data Center (ADC). Raw data are routinely received at ADC within ⊟5 min after the end of each contact.

ADC main tasks are:

- data processing (real-time and reprocessing) and production of the data archives (from raw data to scientific level data through calibration level data),
- preliminary data analysis (Quick Look Analysis),
- management of the Guest Observer Program and of the AOs
- management of the Mission Planning (Long Term Plan preparation and emission),
- data and software distribution to the scientific community

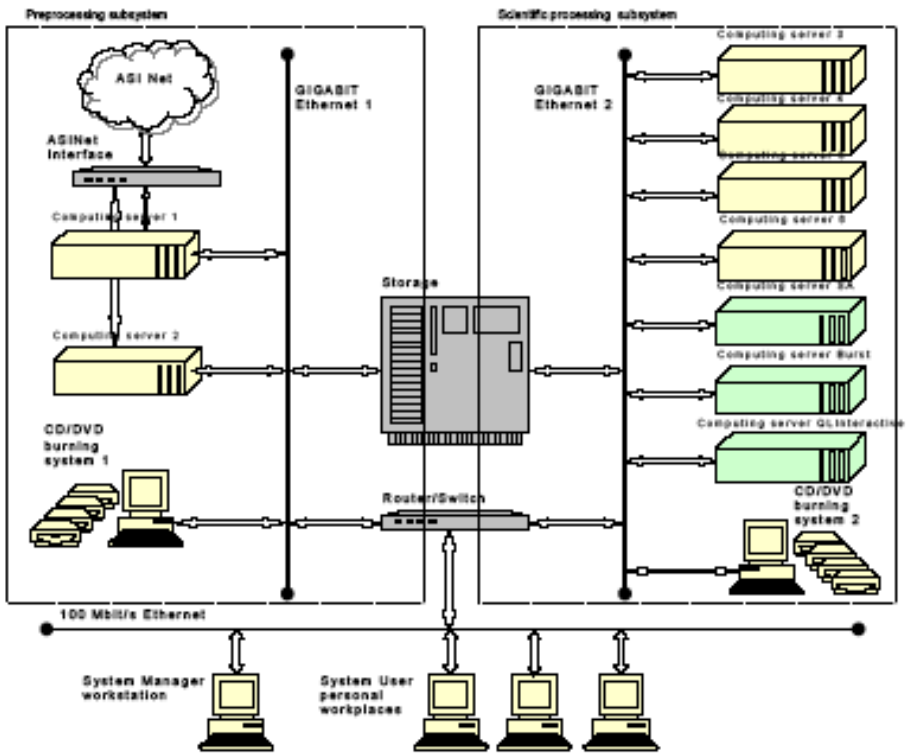
ADC operation scheme:



ADC HW Architecture (2009)

Responsabile HW ASDC: M. Ricci, Sistemista ASDC: P. D'Angeli

Hardware Architecture



The following is a symbol list for the figure:

➔ Server-class computer provided by ASDC

➔ Server-class computer provided by INAF

+ several virtual machines on ESXI 4.0 2U server (fast data reproc.)

- **6 Computing Server by ASDC**
- **1 WEB server + Storage by ASDC**
- **3 Computing Server by INAF**

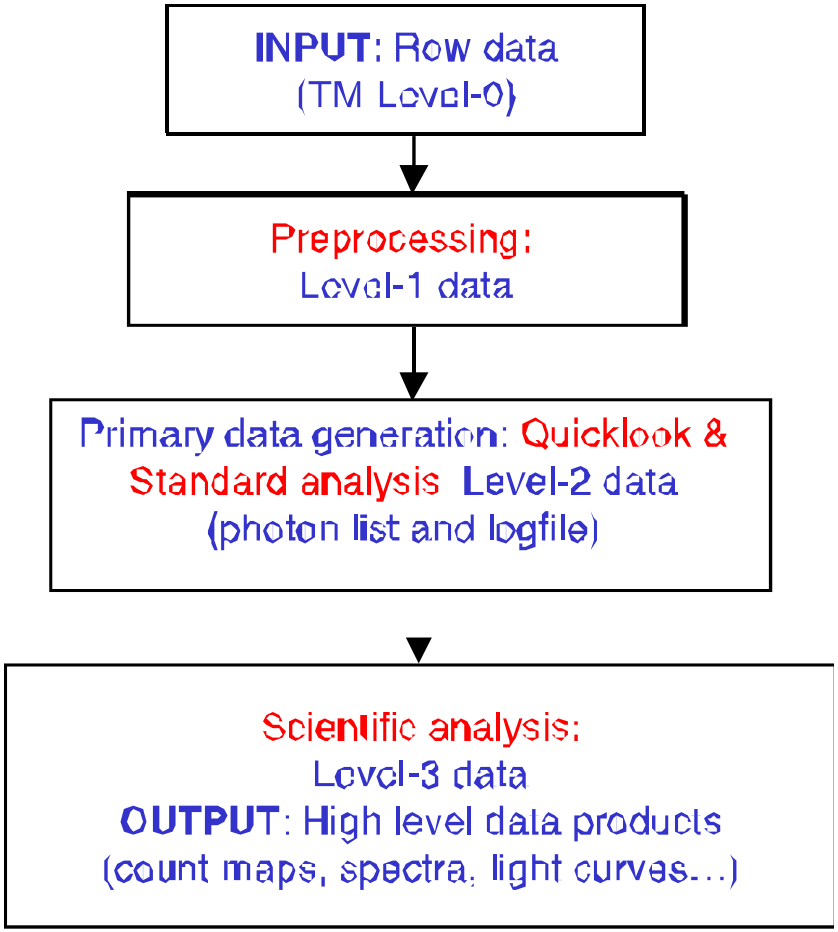
Nome	Funzione	O.S.	Modello
agiles1	Analisi utente o interattiva, sviluppo sw, tasks agile team	Suse Linux 9.2	HP DL380 G4
agiles3	Acquisizione dati, Archiviazione e Distribuzione, Pre-processamento	Suse Linux 9.2	HP DL380 G4
agiles4	Acquisizione dati, Archiviazione e Distribuzione, Pre-processamento	Suse Linux 9.2	HP DL380 G4
agiles5	Interfaccia web per pipeline2, Pipeline2 (tutte le elaborazioni dati), I/F con i cataloghi browse	Suse Linux 9.2	HP DL380 G4
agiles9	Server MySql con DB di progetto, AgileServices (I/F web, Correzione, Quicklook)	Suse Linux 9.2	HP DL380 G4
agiles10	Pipeline2 (tutte le elaborazioni dati), backup per agile5 e agiles9	Suse Linux 9.2	HP DL380 G4
agilehp4	Payload configuration control (INAF)	Suse Linux 9.2	HP DL380 G4
agilehp5	Analisi utente o interattiva, sviluppo sw	Suse Linux 9.2	HP DL380 G4
agilehp6	Super Agile (INAF)	Suse Linux 9.2	HP DL380 G4
storage2	Archivio Agile	Centos 64 bit	HP DL380 G4
web	I/F web per Proposal Management	Red Hat Enterprise 4	HP DL360 G5
agilevm9, agilevm9b, agiletest	Pipeline2 (tutte le elaborazioni dati)	Suse Linux 9.2	Computer Virtuale
agilehp4	Computer INAF, usato per		
agilehp5	Computer INAF installato e usato in ASDC dal Team Agile ASDC principalmente per test e elaborazioni scientifiche interattive		
agilehp6	Computer INAF, ora rimosso.	N.A.	N.A.

Tabella 3-1: Piattaforma HW AGILE

- The ADC, based at ASDC-ESRIN, is in charge of all the scientific oriented activities related to the analysis and archiving of AGILE data:

From scientific telemetry (TM) Level–0:

- ✓ Preprocessing → Level-1 data
- ✓ Quick-Look Analysis (transient detection)
- ✓ Standard analysis → Level-2 data (photon list)
- ✓ Scientific analysis (source detection, diffuse gamma-ray background)
- ✓ Archiving and distributing all scientific AGILE data



AGILE Data Center at ASDC (up to June, 2012):

Carlotta Pittori *coordinator*, Patrizia Santolamazza, Francesco Verrecchia, Fabrizio Lucarelli (INAF), G. Fanari and S. Stellato (TPZ)

Paolo Giommi
ASDC Director

F. Tamburelli

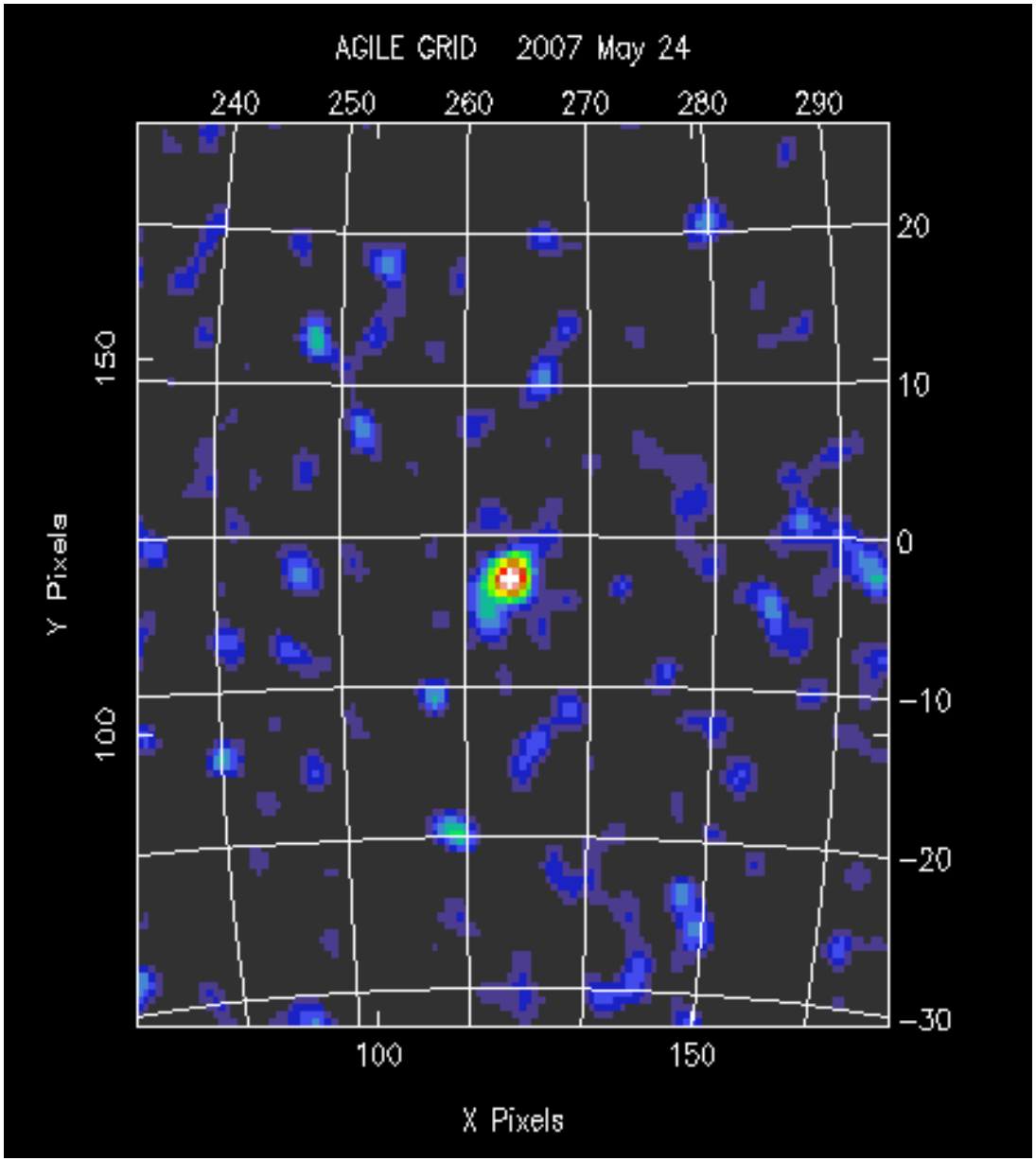
(AGILE in calibrazione @ LNF)

First AGILE GRID light ADC 24/5/2007

Commissioning Phase:

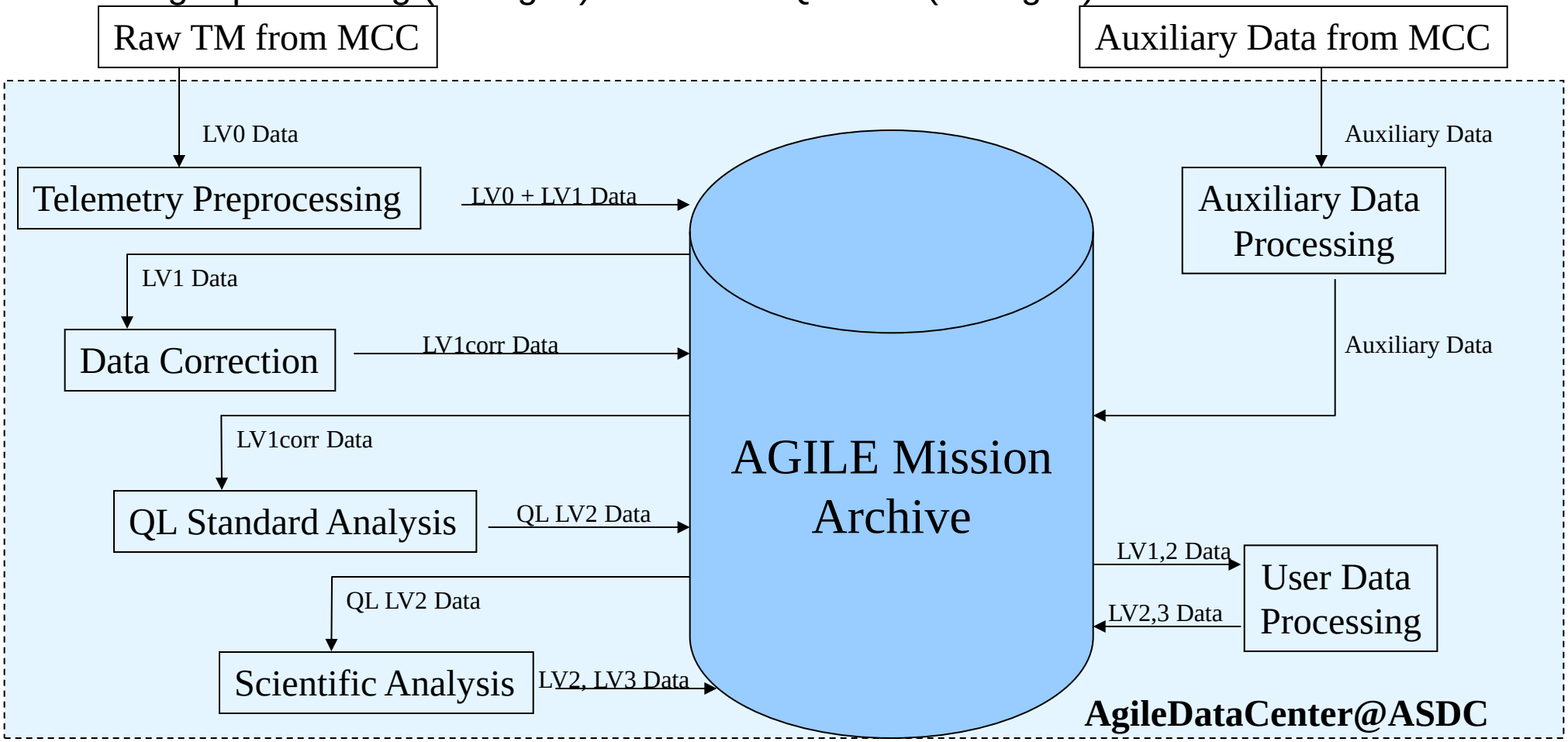
AGILE Vela PSR Count Map

(~ 20000 s)



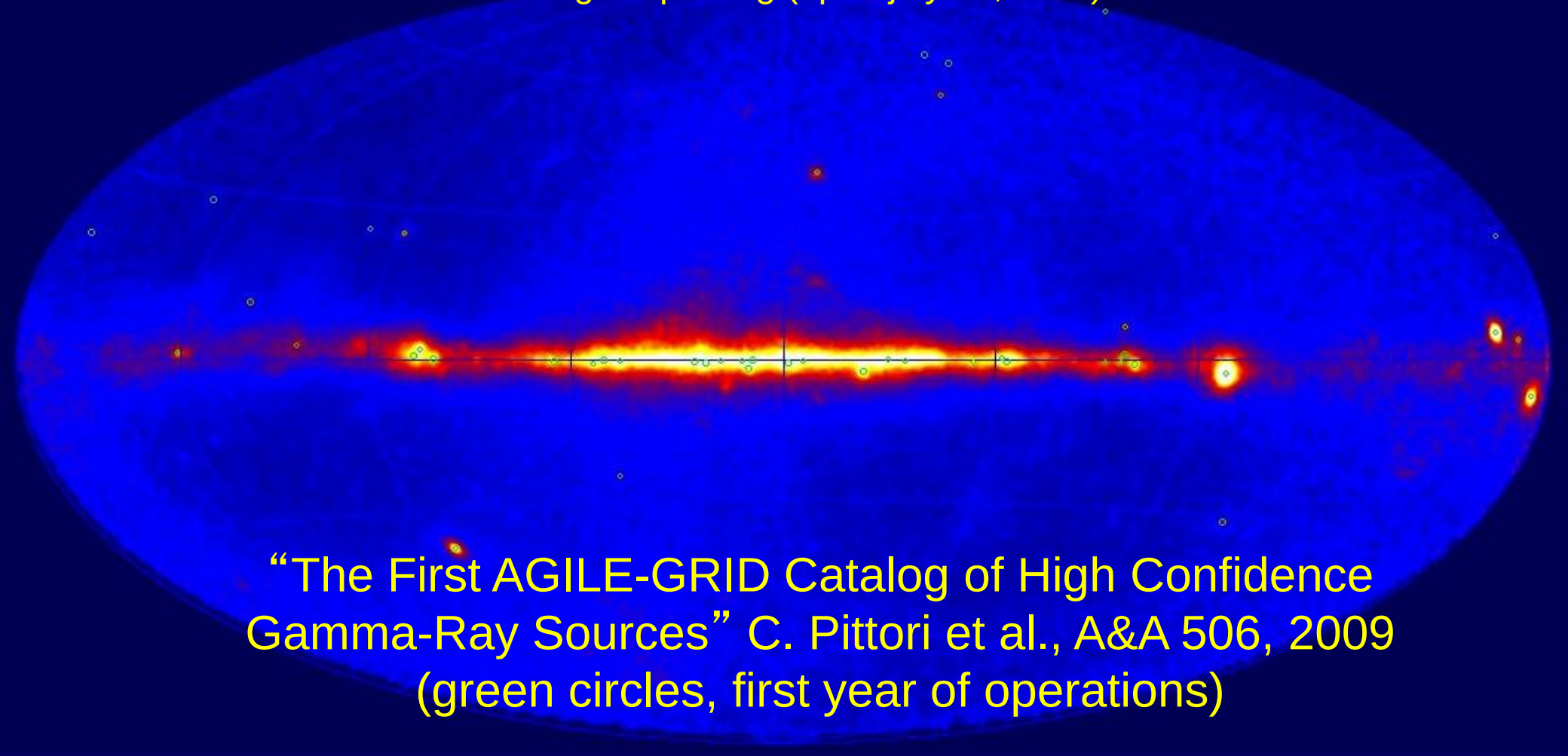
AGILE Scientific Data Flow

Total AGILE data storage: ~1.3 TB/year. Consolidated archive (7-6-2102) including reprocessing (storage2) ~ 6.5 TB + QL data (storage1) ~ 550 GB

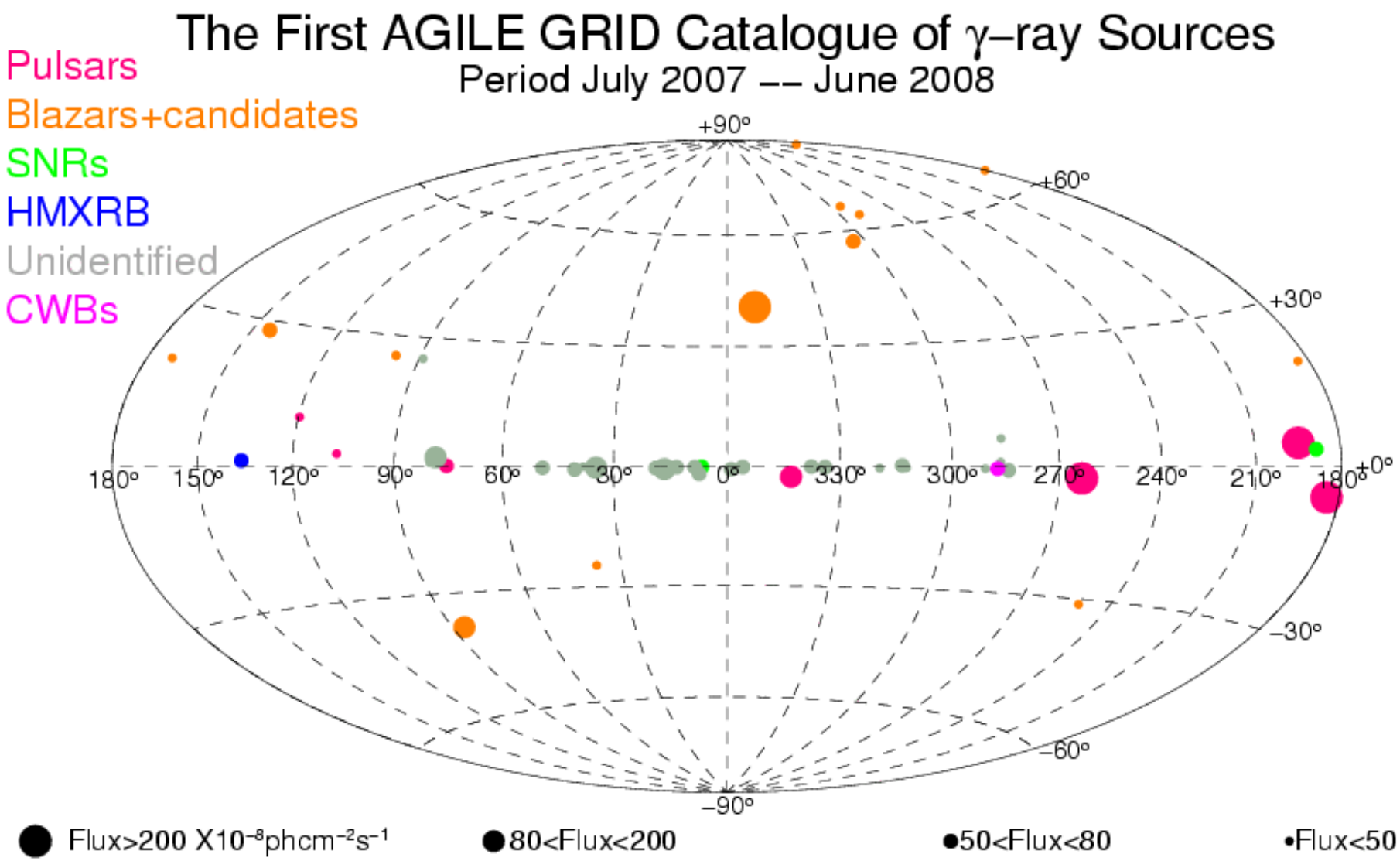


AGILE Total Intensity Map (E> 100 MeV):

Pointing + Spinning (up to july 30, 2011)



"The First AGILE-GRID Catalog of High Confidence Gamma-Ray Sources" C. Pittori et al., A&A 506, 2009 (green circles, first year of operations)



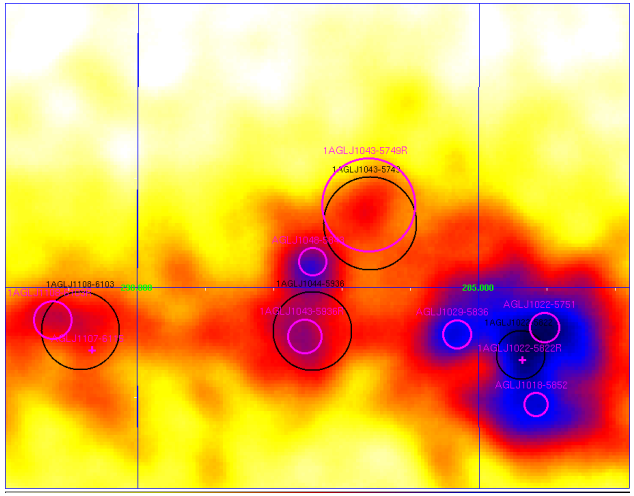
- **C. Pittori et al., A&A 506, 2009 - arXiv:0902.2959**

WORK IN PROGRESS:

- **A revised AGILE bright gamma--ray sources list and its variability study in pointing mode (F. Verrecchia et al., submitted to A&A)**

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

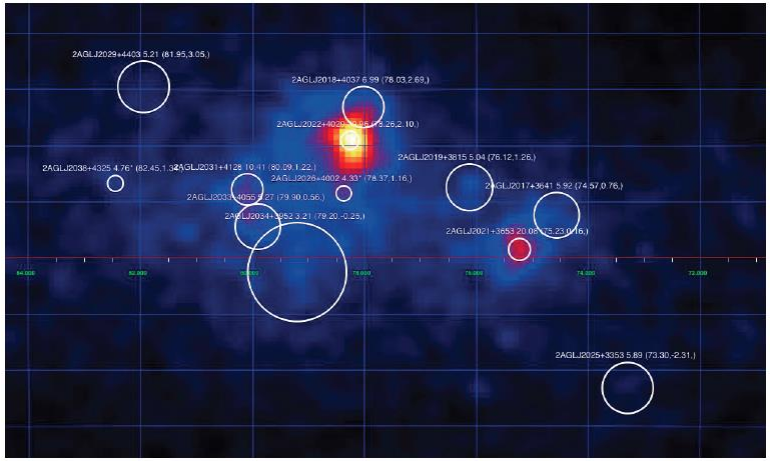
Refined positioning of some 1AGL sources: the Carina region →



- **The second AGILE Catalog (A. Bulgarelli et al.)**

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

More than 180 sources on the galactic plane only: the Cygnus region →



ASDC interactive catalogs webpages

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

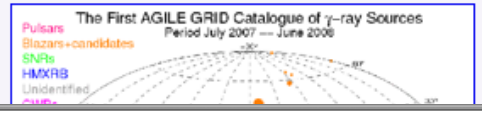
C. Pittori, F. Verrecchia, A. Chen, A. Bulgarelli, A. Pellizzoni, A. Giuliani, S. Vercellone, F. Longo, M. Tavani, P. Giommi et al.
A&A 506, 1563-1574 (2009)

Revised version - July 30, 2009.

...sing AGILE-GRID data from July 9, 2007, end of the Satellite Commissioning phase, to June 30, 2008. Users can also download the First AGILE Catalog in FITS format here.

...h-confidence sources, compared to the 40 sources of the first version. Previous preliminary versions were published on this webpage to allow AGILE AO2 guest observers to benefit of the Catalog in the preparation of their proposals.

...AGILE Catalog data are used in publications, please acknowledge the AGILE Collaboration efforts by the following sentence:
...edge the use of The First AGILE Catalog of High Confidence Gamma-ray Sources, C. Pittori et al. 2009, A&A 506, 1563-1574 (2009), and on-line version available from the ADC web pages at ASDC."



asdc ASI Science Data Center VO Tools
VO mode: off (turn on) Help
Cone Search
Source Name
Resolve name
RA, Dec L,B Clear

Print complete table
Reset all filters

Entry 1AGL J0634+1748 --- GEMINGA
R.A.(J2000) = 06 34 15.9 (98.5662 deg) l=195.14
Dec (J2000) = +17 48 27.8 (17.8077 deg) b=4.36
Galactic nH = 3.50E+21 (cm^-2)

Error circle *EXPLORER* | Source Details

TUTORIAL HELP

arcmin
sources list

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

Source Details
Source # 1 Ra =06 34 16.0 Dec =+17 48 27.7
name: 1AGL J0634+1748
Dist from img center =1.2 arcsecs
AGLGRD1CAT flux=0.0000032 ph/cm2/s (100 MeV)

Position selected for the analysis: R.A.=06 34 15.9 (98.5662 deg) l=195.14 Dec=+17 48 27.8 (17.8077 deg) b=4.36
Reset Position
Galactic nH= 3.50E+21 (cm^-2)
SED Builder

Entry number		
1	ASDC data Explorer	1AGL
2	ASDC data Explorer	1AGL
3	ASDC data Explorer	1AGL
4	ASDC data Explorer	1AGL
5	ASDC data Explorer	1AGL
6	ASDC data Explorer	1AGL
7	ASDC data Explorer	1AGL
8	ASDC data Explorer	1AGL
9	ASDC data Explorer	1AGL
10	ASDC data Explorer	1AGL
11		

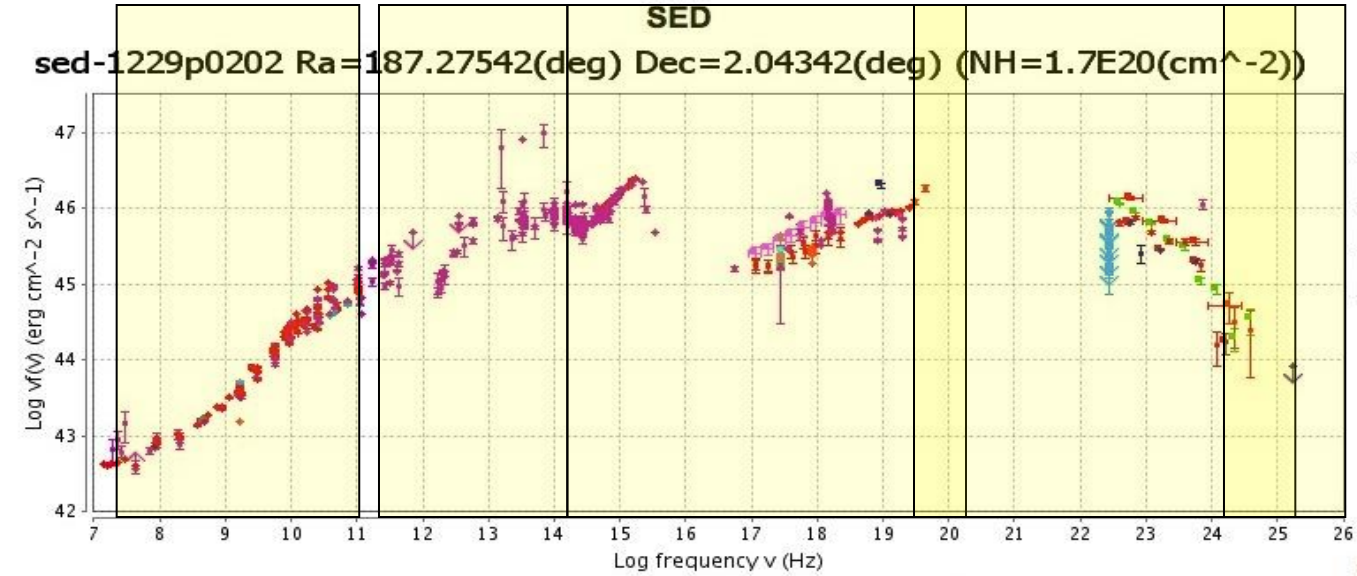
o-rivelat... AITOFF GTB Agile QL Catalog

Pulsar	CTA1	---
RB	LSI+61303	---
ar	Crab	---
BLLac	PKS0537-441	BZBJ0538-4405
R	IC443	---
ar	GEMINGA	---
ar	---	BZUJ0654+4514
ar	---	BZUJ0719+3307
BLLac	S50716+714	BZBJ0721+7120
ar	VelaPSR	---
ified	---	---
B	---	---

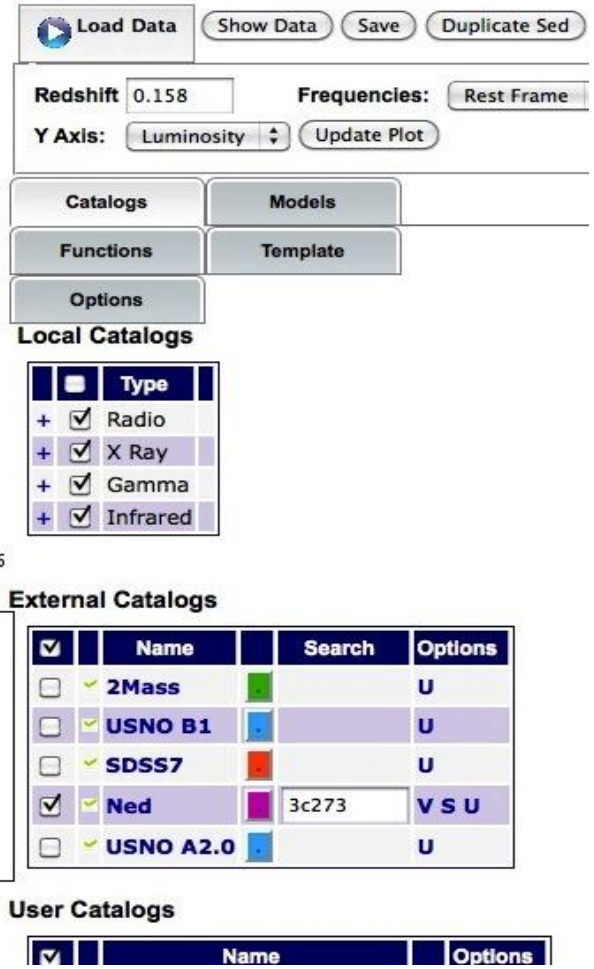
The ASDC SED Builder

New SED(t) v2.2: VO tools and TIME domain

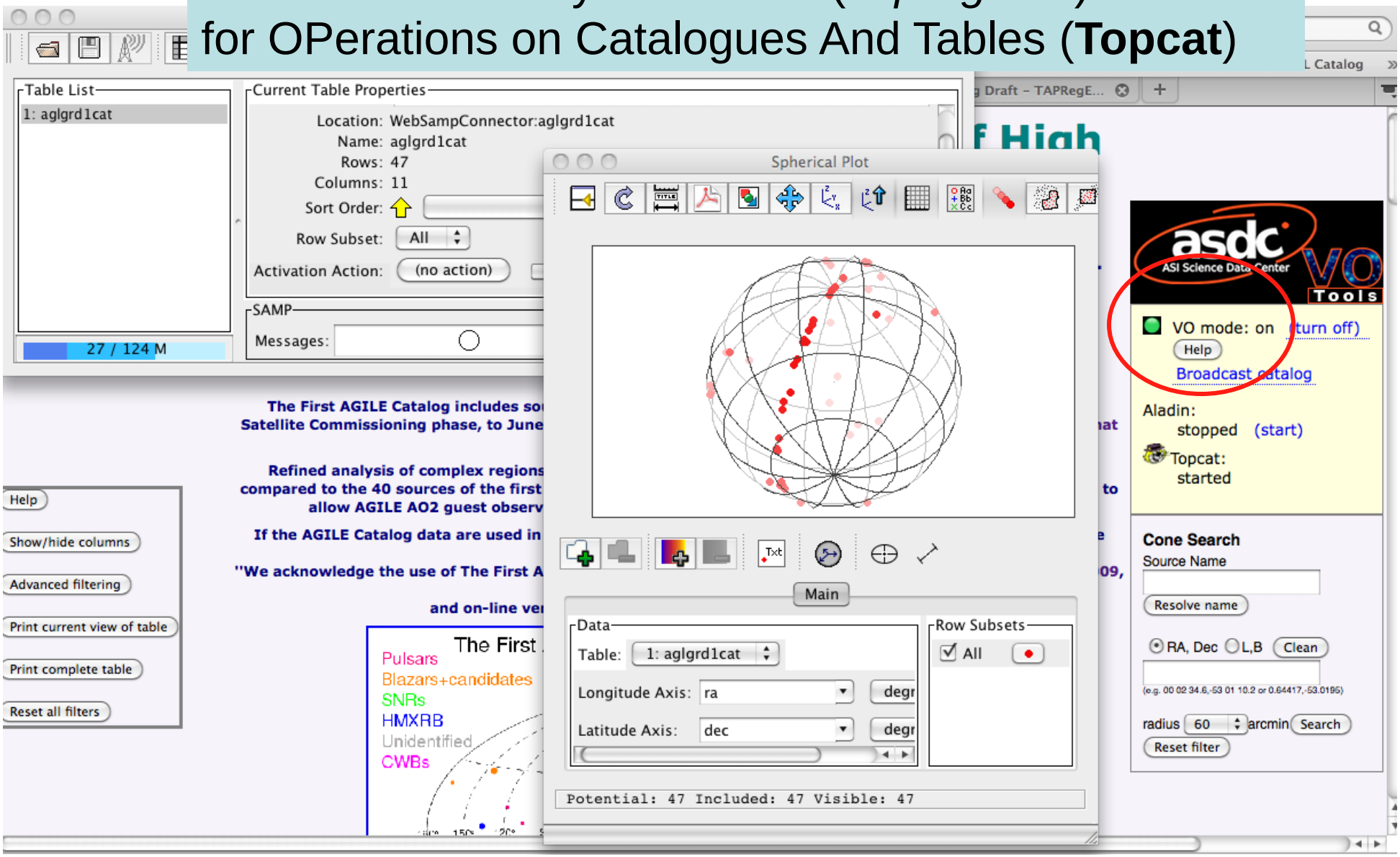
Radiotelescopes and Planck Swift AGILE and Fermi TeV/CTA



KUEHR · PKSCAT90 · DIXON · GB6 · NVSS · FIRST · VLSS · CRATES · PMN · NORTH20CM (flux 20 cm)
NORTH20CM (flux 6 cm) · NORTH20CM (flux 80 cm) · Ned · WMAP3 (Freq. 23e9) · WMAP3 (Freq. 33e9)
WMAP3 (Freq. 41e9) · WMAP3 (Freq. 61e9) · WMAP3 (Freq. 94e9) · WMAP5 (Freq. 23e9) · WMAP5 (Freq. 33e9)
WMAP5 (Freq. 41e9) · WMAP5 (Freq. 61e9) · WMAP5 (Freq. 94e9) · IPCSLEW · IPC · RASS · WGACAT2 · WFCCAT
XRTSRC · EGRET3 · BAT39MCAT (15-30keV) · BAT39MCAT (14-150keV) · Fermi1FGL (200 Mev) · Fermi1FGL (600 Mev)
Fermi1FGL (2Gev) · Fermi1FGL (6Gev) · Fermi1FGL (60Gev) · IBISSG4CAT (20-40 keV) · IBISSG4CAT (40-100 keV)
3C273_simultaneous · 3C273_BATAjello · 3C273_AGILE · 3C273_simul2 · 3C273_GASP · 3C273_SAGILE · GTLIKE_P6v3
RATAN · OVRO_MAX_MIN · 3C273_Claudia_Unfolding_18M · swift_obs00035017300 · Fermi_1yr



Virtual Observatory Standards (*in progress*) and Tool for OPerations on Catalogues And Tables (**Topcat**)



NEW: MCAL GR
(M. Galli et al., 2
ADC interactive

The AGILE MCAL Gamma-ray Burst Catalog

GRB observed from An

The Mini-Calorimeter (MCAL) of the AGILE s

Entry number		GRB Name
Selection mode: Include All		Stats
58	GRB Explorer	090328
59	GRB Explorer	090328B

ASDC

Entr
R.A.(J2000) = 22 14 12
Dec (J2000) = -26 36 0
Galactic nH = 1.66E+2

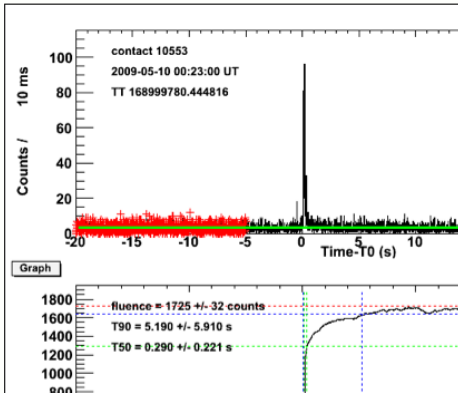
AGILE MCAL Data Products | GRB EXPLORER | Source Details

Standard Products

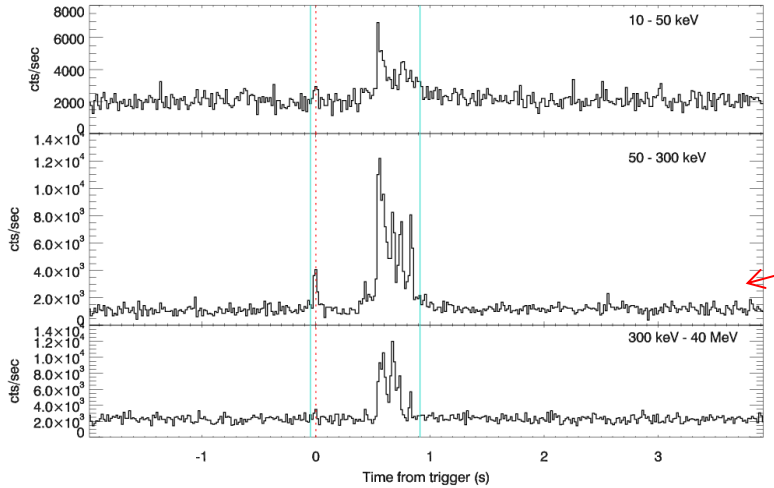
Light Curve 10ms binning

Light Curve broader binning (20-200 msec)

Energy Spectrum



090510016



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

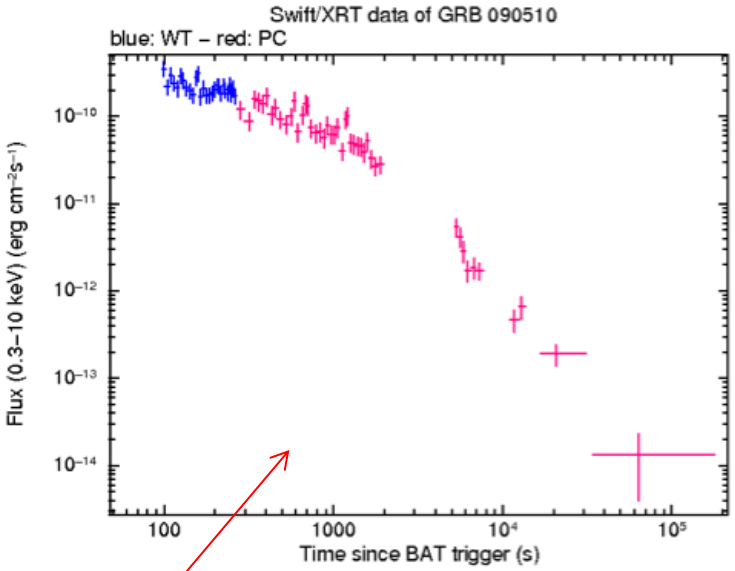
Rebin this light curve | About these products.

Flux Light Curve

For this burst, 1 count = 4.0 x 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.



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

AGILE: 6th year in orbit

- AGILE demonstrates for the first time the covering of ~ 1/5 of the entire gamma-ray sky (FoV ~ 2.5 sr) with excellent angular resolution and competitive sensitivity.
- AGILE shows for the first time an optimal performance of its gamma-ray and hard X-ray imagers.
- **> 31280 orbits, May 15, 2013**
- **Pointing observation** mode up to October 18, 2009 and **spinning observation mode** since October 2009.
- **Very good scientific performance, especially at ~ 100 MeV**
- **Guest Observer Program open to the scientific community:**

  Cycle-1: completed, Dec. 1, 2007 – Nov 30, 2008

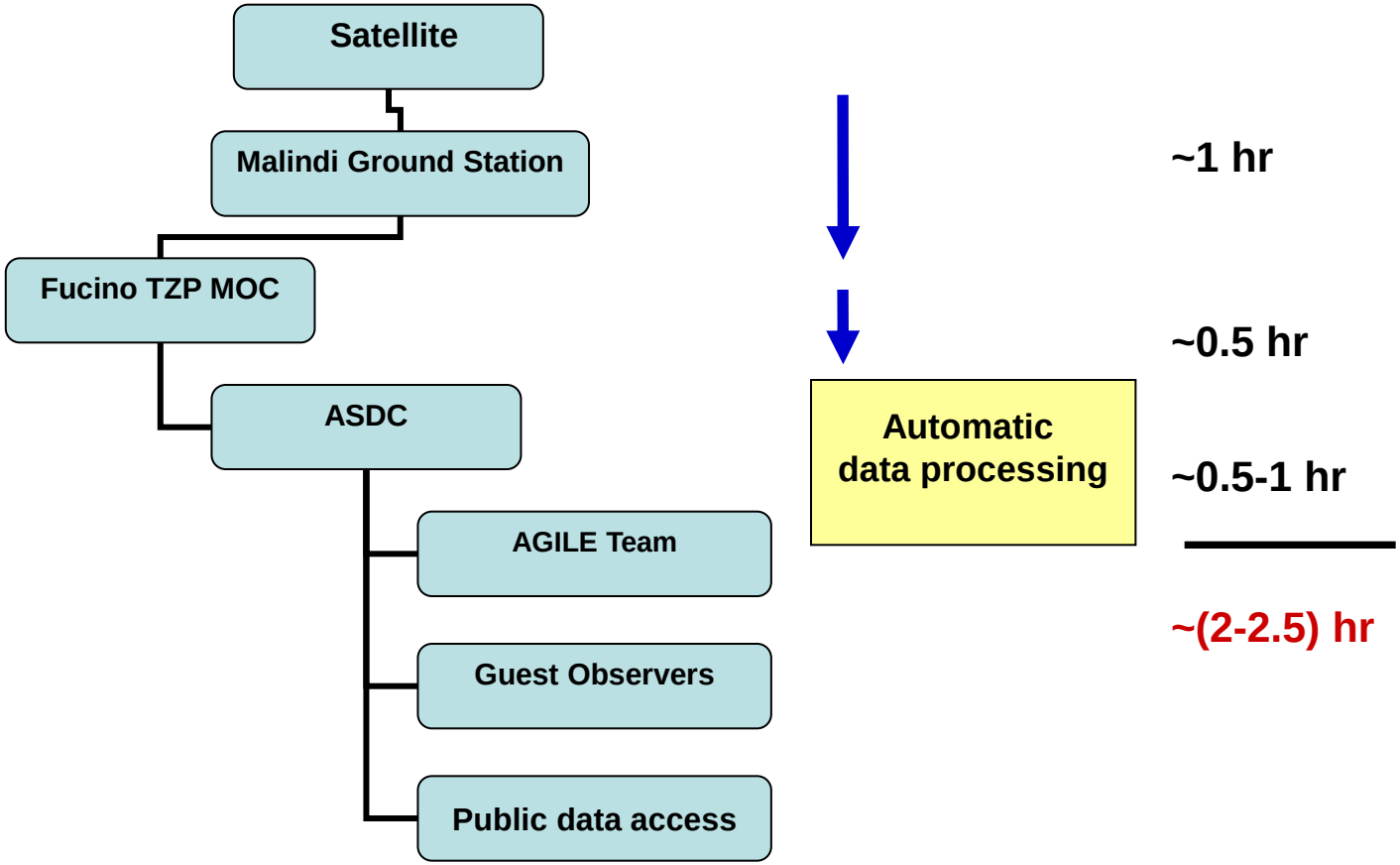
  Cycle-2: completed, Dec. 1, 2008 – Nov 30, 2009

  Cycle-3: completed, Dec. 1, 2009 – Nov 30, 2010

  Cycle-4: completed, Dec. 1, 2000 – Nov 30, 2011

  Cycle-5 and Cycle-6: on-going data taking

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



Record for a gamma-ray mission!

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 min (SA) and T_0 + 100 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)

- **104 ATel** (48 in pointing + 56 in spinning) and **40 GCN** published up to May, 2013

Home | About ASDC | Public Outreach | Quick Look | Missions | Multimission Archive | Catalogs | Tools | Links | Bibliographic services | Helpdesk

AGILE
Science Data Center

AGILE Home | About AGILE | ASI HQ AGILE | AGILE News | AGILE Data Archive | Public Software | AGILE Pointings | AGILE Catalogs | Restricted Area
Guest Observer Program | User Feedback Form | AGILE Workshops | Agile Helpdesk

Welcome to the AGILE Data Center Home Page at ASDC

These pages provide updated information and services in support to the general scientific community for the mission AGILE, which is a small Scientific Mission of the Italian Space Agency (ASI) with participation of INFN, IASF/INAF and CIFS .

AGILE is devoted to gamma-ray astrophysics and it is a first and unique combination of a gamma-ray (AGILE-GRID) and a hard X-ray (SuperAGILE) instrument, for the simultaneous detection and imaging of photons in the 30 MeV - 50 GeV and in the 18 - 60 keV energy ranges.

The AGILE Mission Board (AMB) has executive power overseeing all the scientific matters of the AGILE Mission and is composed of:

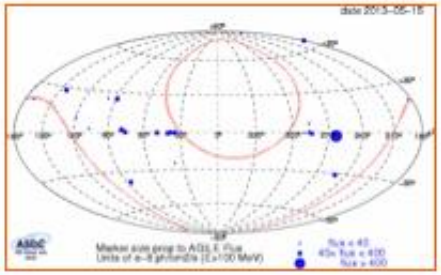
- AGILE Principal Investigator: Marco Tavani, INAF/IASF Rome (Chair)
- ASI Project Scientist: Paolo Giommi, ASDC
- ASI Mission Director: Giovanni Valentini, ASI
- Former ASI Mission Director: Luca Salotti, ASI (up to September 20, 2010)
- AGILE Co-Principal Investigator: Guido Barbiellini, INFN Trieste
- 1 ASI representative: Elisabetta Tommasi di Vignano
- Former ASI representative: Sergio Colafrancesco (up to June, 2010)

As specified in the Announcement of Opportunity Cycle-4, it is not possible to propose for ToO observations in response to AGILE Announcement of Opportunity.

Latest Agile Top Results

AGILE current spinning sky view

(Click here for previous pointing details)



Click here to access to AGILE Spinning FOV plotter

AGILE Events

Latest AGILE News

- **(Apr 30, 2013)** GRB 130427A: high energy gamma-ray detection by AGILE and Fermi
- **(Apr 11, 2013)** AGILE-MCAL Gamma-ray Burst Catalog on-line at ASDC
- **(Mar 28, 2013)** GRB 130327B: gamma-ray detection by AGILE
- **(Mar 12, 2013)** Sustained gamma-ray emission from the Crab Nebula and hard X-ray and Optical follow up reported

ADC Quick-Look Interface

(from AGILE Services restricted area)

Agile Services: user pittori

Agile Servic

Data Coverage Monitoring

Legenda

Processamenti QL Scientif

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Quick Access to QL Data Results

R.A. or Gal. Longitude:	
Dec or Gal. Latitude:	
Equinox:	J2000 / B1950
Coordinates:	Celestial (RA-Dec) / Galactic (lii-bii)
	Submit / Reset

Declination and Galactic coordinates can be entered either as degrees and decimal fraction (format ddd.ddd), or as degrees, minutes, seconds (dd mm ss.ss format).
Right ascension can be entered either as degrees and fraction (ddd.ddd), or as hours, minutes, seconds (hh mm ss.ss format).

Record List for AgileQLCat

Config ID	Config Name	Duration	Run Status	Start	Stop	QL Imag								
337	Global_Ximage AM	2	Actual	2011-12-09 01:00:00	2011-12-11 01:00:00		TBD	File Log	Data File	OK	QL_V	FM	2011-12-11 05:30:49	2011-12-11 06:06:45
328	B19 QLV Spinning (80,0) Cygnus FM	2	Actual	2011-12-09 02:31:00	2011-12-11 02:31:00		QL Catalog Link	File Log	Data File	OK	QL_V	FM	2011-12-11 05:32:23	2011-12-11 05:38:06
304	B19 QL_V Spinning FM 2dd R29 - bis_1	2	Actual	2011-12-09 02:40:00	2011-12-11 02:40:00		QL Catalog Link	File Log	Data File	OK	QL_V	FM	2011-12-11 05:32:55	2011-12-11 05:38:58
310	B19 QL Variabilita' Spinning FT3ab TEST (190,0)	2	Actual	2011-12-09 02:46:00	2011-12-11 02:46:00		QL Catalog Link	File Log	Data File	OK	QL_V	FT3ab	2011-12-11 05:33:27	2011-12-11 05:38:59
311	B19 QL Variabilita' Spinning FM TEST (190,0)	2	Actual	2011-12-09 02:46:00	2011-12-11 02:46:00		QL Catalog Link	File Log	Data File	OK	QL_V	FM	2011-12-11 05:38:08	2011-12-11 05:44:17
307	B19 QL Variabilita' Spinning FT3ab TEST (290,-85)	2	Actual	2011-12-09 02:48:00	2011-12-11 02:48:00		QL Catalog Link	File Log	Data File	OK	QL_V	FT3ab	2011-12-11 05:38:59	2011-12-11 05:47:48

AGILE Quick Look catalog (Test) at ASDC

Variability 11-12-09 02:31 11-12-11 02:31 FM

Available parameters: Name, Ra, Dec, Gal, Iso, Cnts, Cnts Err, Sqrt(TS), XimageId, Flux, Flux Err, Distance from FOVCent., Ximage SNR, Sp_Index, Err_sp_index, Other_name1, Other_name2, Other_name3

Reset | GO

AGILE GRID 2011 Dec 9

Entry number		AGILE name	RA (J2000.0) hh mm ss.d	Dec (J2000.0) dd mm ss.d	Gal	Iso	Cnts	Sqrt(TS)	Flux
Selection mode: inclusive									
1	Data Explorer	AGL J2030+3929	20 30 02.4	+39 29 16.8	0.484	9.53	19.5	2.65	244
2	Data Explorer	AGL J2039+4242	20 39 15.1	+42 42 25.2	0.975	0.744	4.08	0.59	50
3	Data Explorer	AGL J2104+5207	21 04 39.4	+52 07 44.4	0.572	7.09	8.43	1.61	97

ASDC Data Explorer

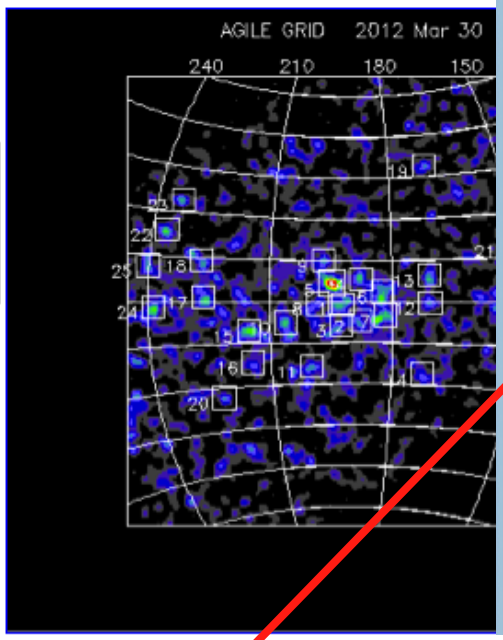
Quick Look AGILE da

Variability

Available parameters

- Name
- Ra Dec
- Gal Iso
- Cnts Cnts
- Err.
- Sqrt(TS)
- XimageId
- Flux Flux
- Err
- Distance from FOVCent.
- Ximage SNR
- Sp_Index
- Err_sp_index
- Other_name1
- Other_name2
- Other_name3

GO



The ASDC Multi-frequency Data Explorer: Web and VO data access and tools

http://www.asdc.asi.it/showEntry.php#

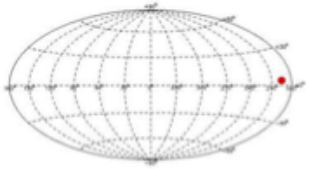
Entry ---

R.A.(J2000) = 06 34 44.2 (98.6842 deg) l=194.77

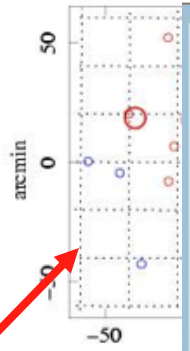
Dec (J2000) = +18 16 07.5 (18.2688 deg) b=4.67

Galactic nH = 3.32E+21 (cm^-2)

Source Names



Access to agile data products | Error circle EXPLORER | Source Details



Positio
for the

Res

Access to agile grid data products | Error circle EXPLORER | Source Details

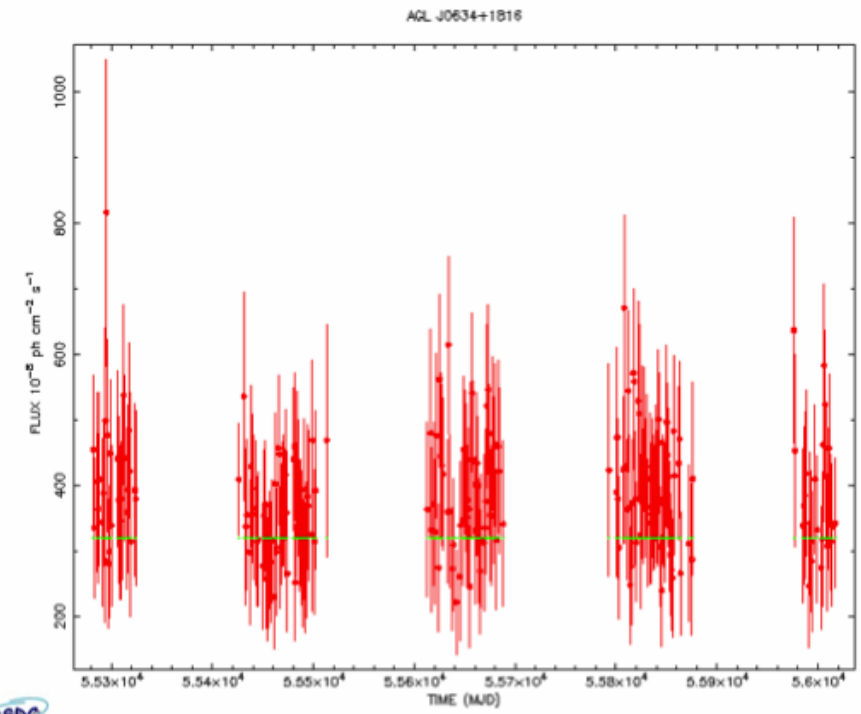
Catalog aglqlvrcat Radius 90 Start Time End Time DATE MJD

(Select DATE to input time range in DD-MM-AAAA format or MJD to input time range in mjd format)

Duration (days) 2 Filter FM Sqrt(TS) > 4 Additional Y plot sqrtts SUBMIT

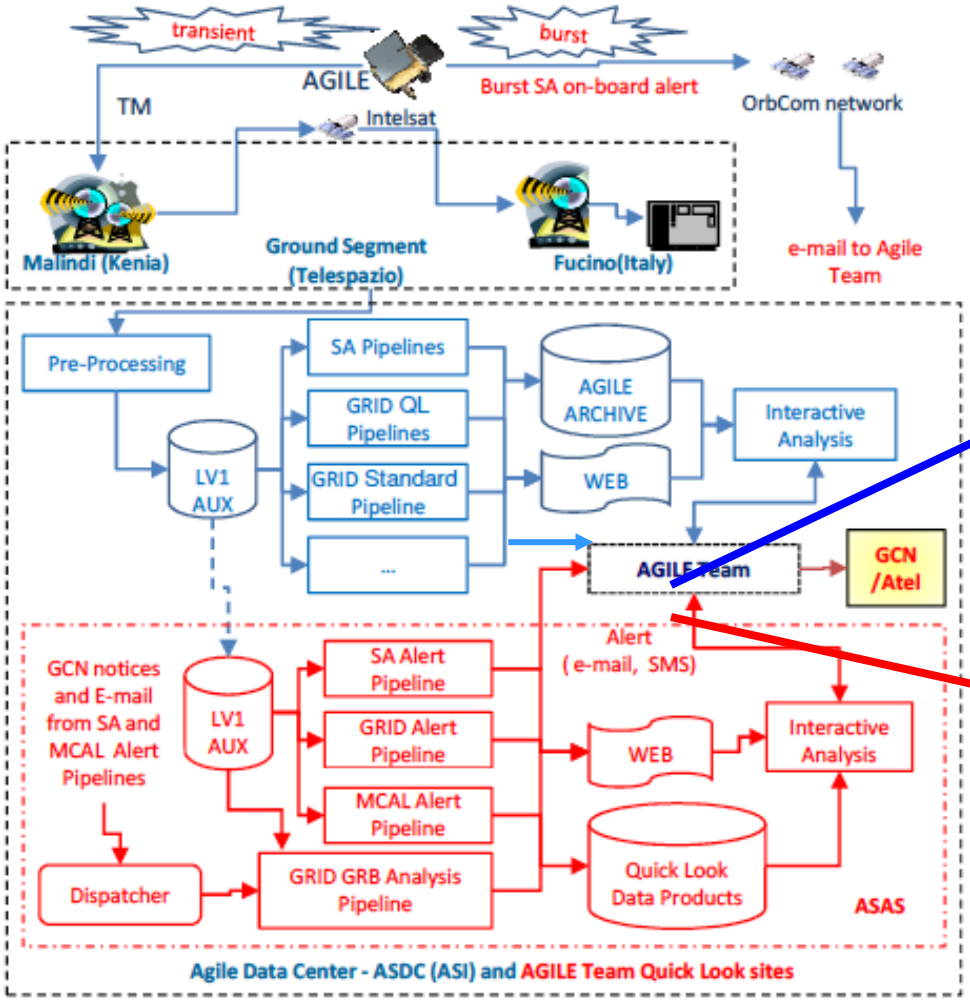
'AGL J0634+1816' LC Data Table

'AGL J0634+1816' LC Data qdp



Entry number		AGILE name	RA (J2000.0)	Dec (J2000.0)	C
Selection mode: inclusive		Stat	LII	BII	
1 Select	ASDC Data Explorer	AGL J0634+1816	194.78	4.67	0.
2 Select	ASDC Data Explorer	AGL J1049+8055	128.53	34.83	
3 Select	ASDC Data Explorer	AGL J0832-1236	236.49	15.76	1

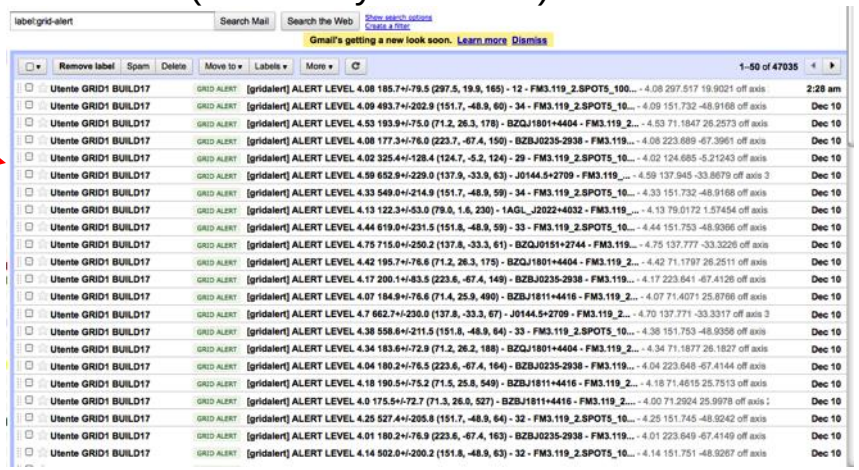
Selected **alerts** sent via email, sms



(Figure adapted from M. Trifoglio et al.)

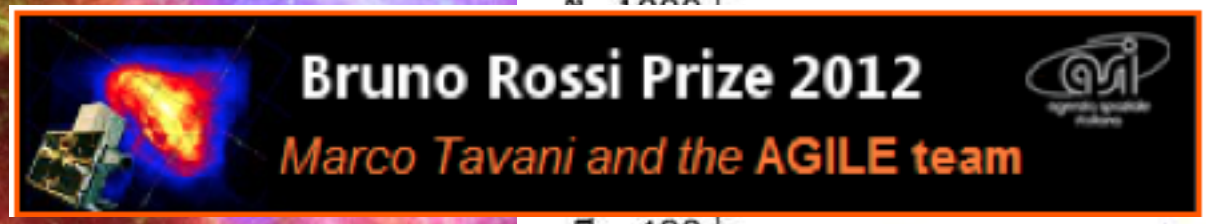
Daily reports on a 48h time scale (sent twice a day)

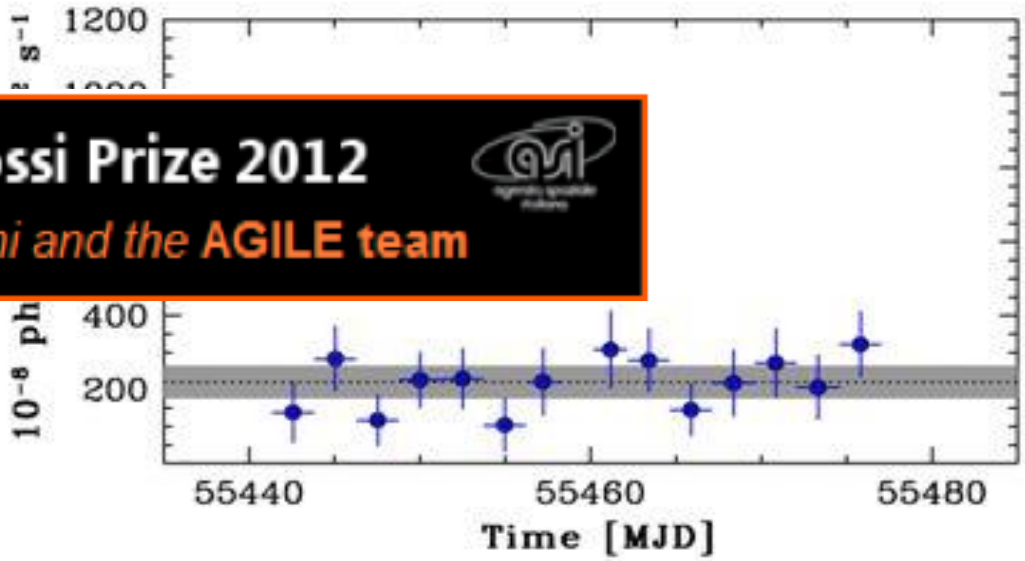
Contact-by-contact alerts on a 48h time scale (sent every ~100 min)



The variable Crab Nebula!

FIRST PUBLIC ANNOUNCEMENT
Sept. 22, 2010: AGILE issues the Astronomer's Telegram n. 2855

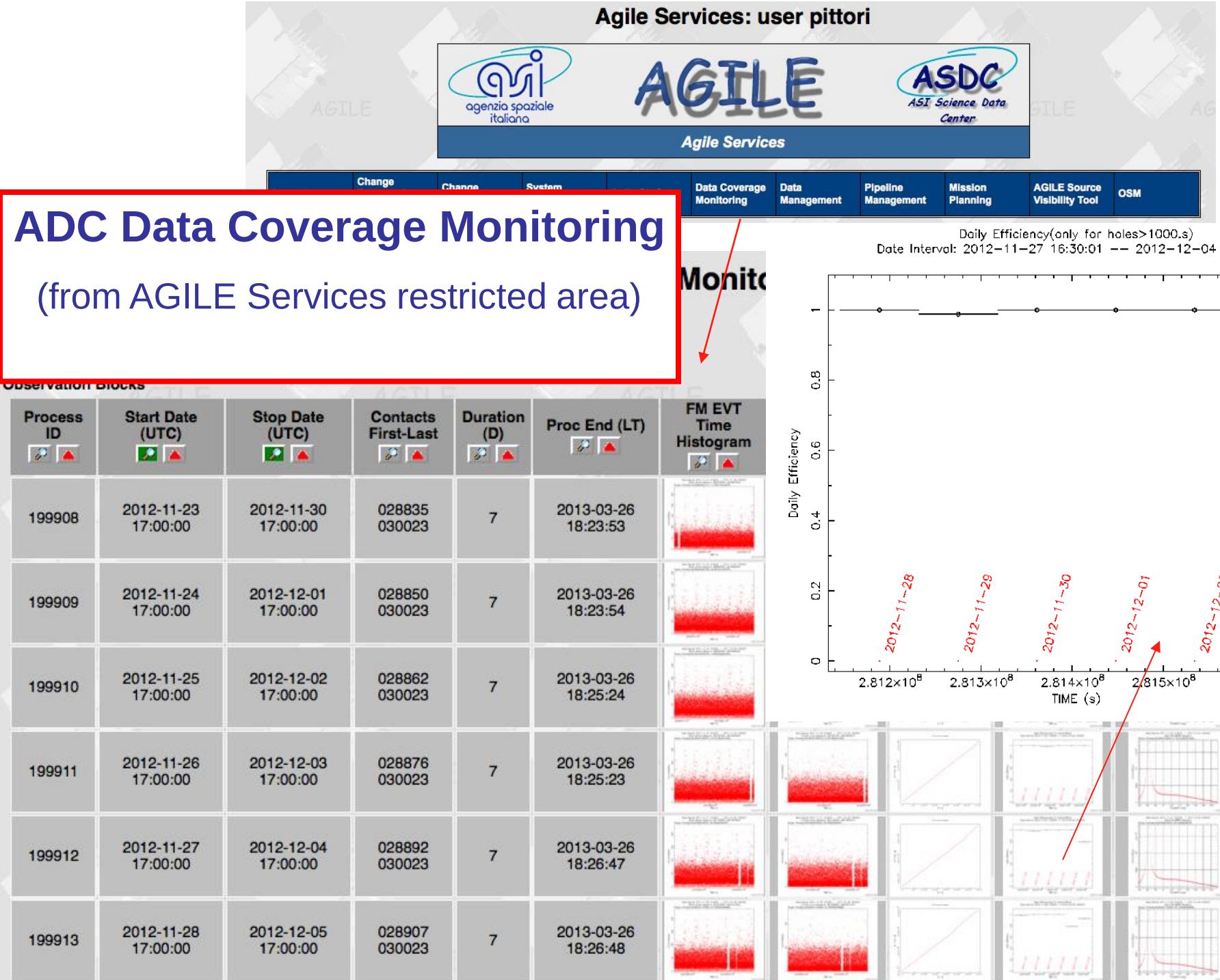




***Science Express* (6 January 2011)**

ADC Data Coverage Monitoring

(from AGILE Services restricted area)

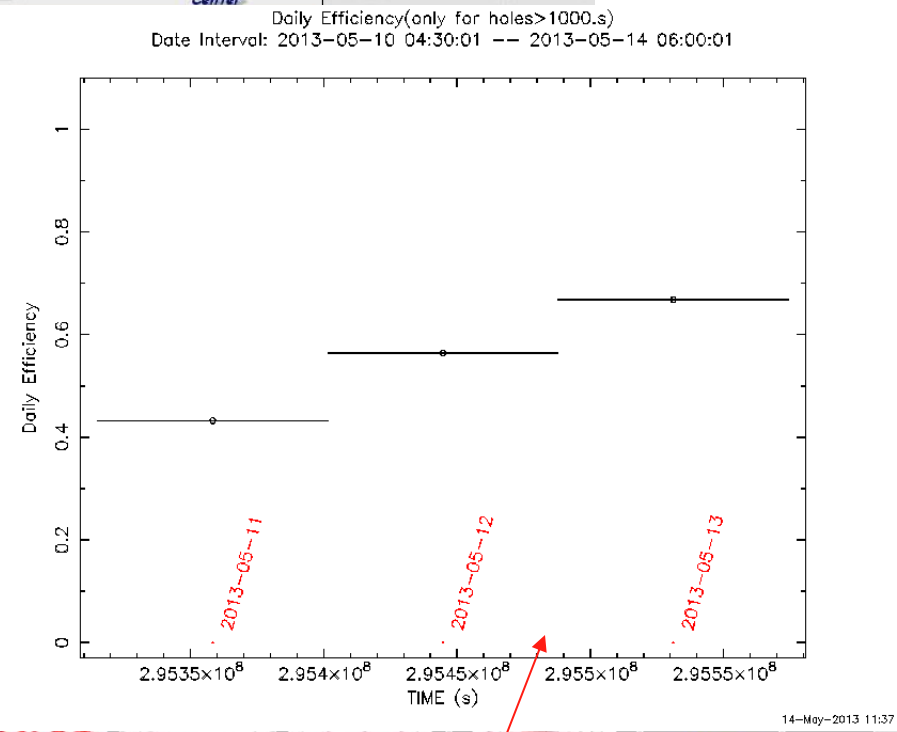


Agile Services: user pittori

Malindi Ground station problems impact on AGILE telemetry download

Due to ASI's Malindi ground station technical problems, the acquisition of telemetry data from the AGILE satellite has been significantly reduced since December 21, 2012.

All AGILE payload functions are nominal, and normal operations will be resumed as soon as the Malindi antenna system problems are solved.



Report OK

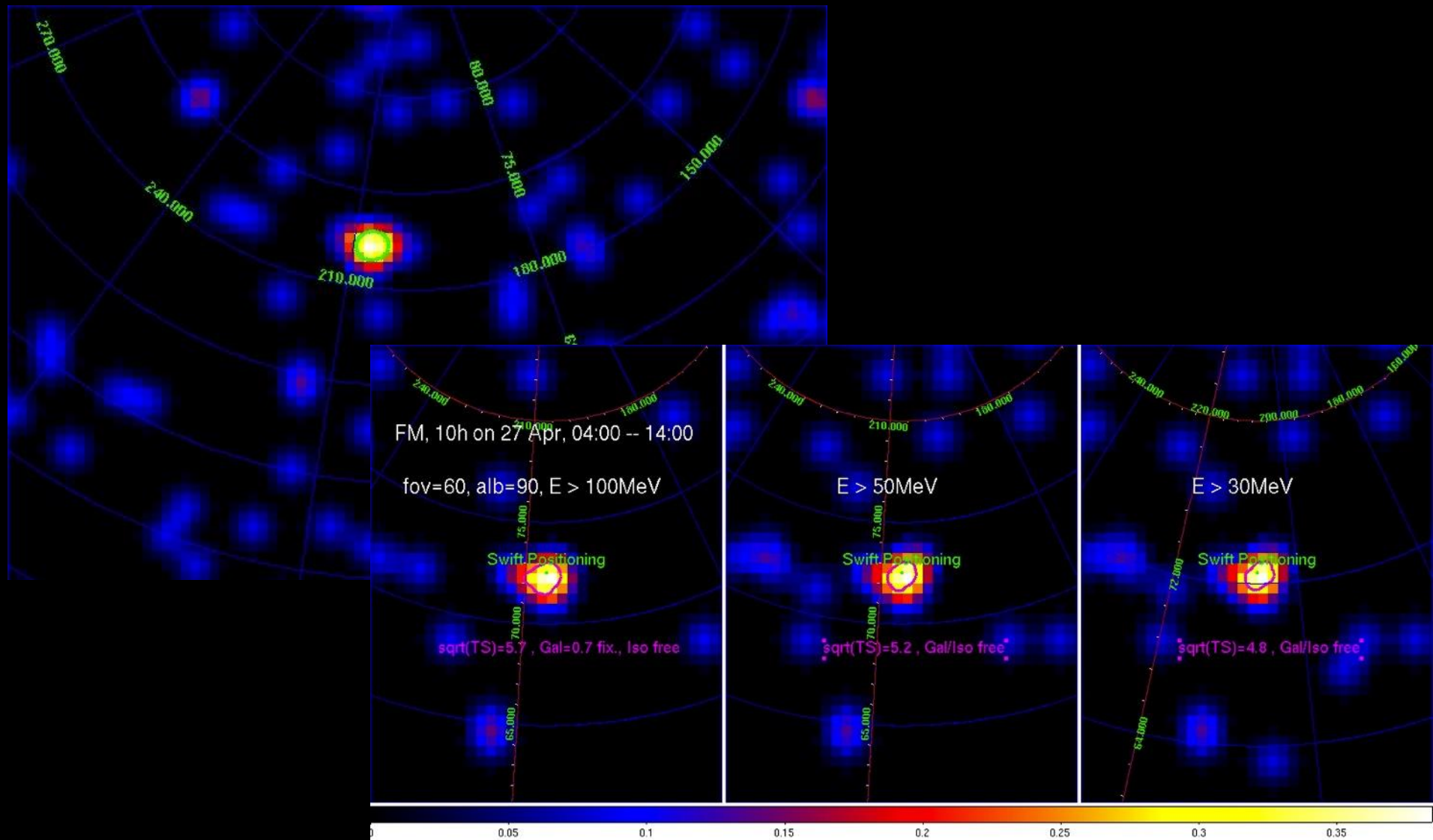
Report OK

Report OK

WAIT

Back to last menu Logout Jump to page top

Despite recent low Malindi dowlink efficiency, AGILE detected **GRB 130427A: the most energetic gamma-ray burst yet!**

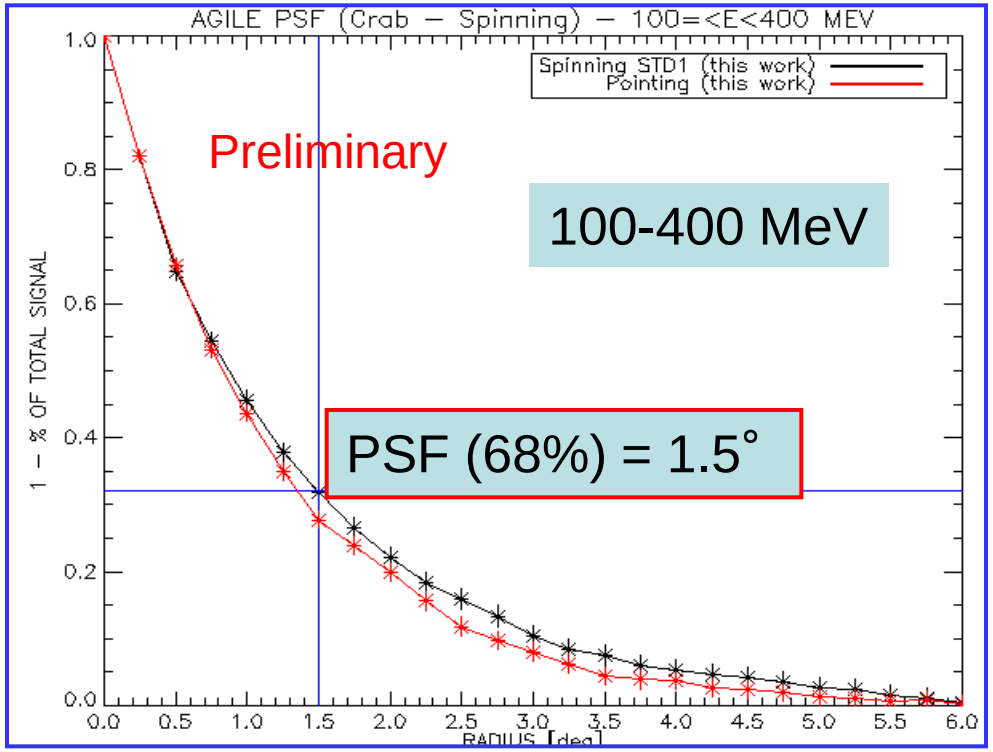


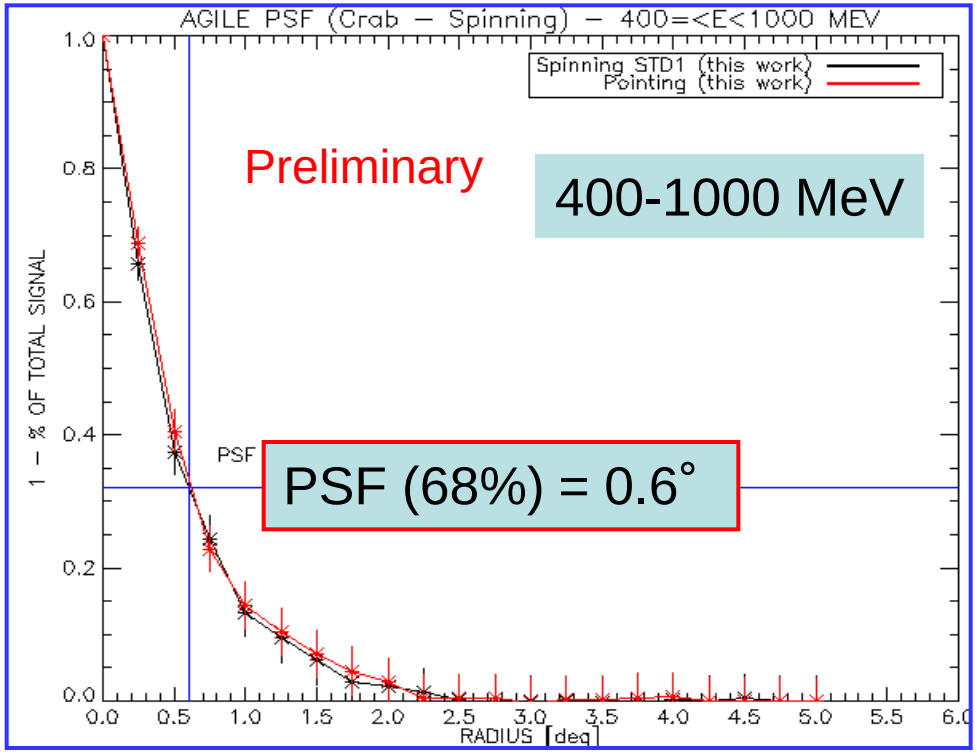
Other works in progress

Check of GRID PSF in Spinning

Lucarelli, Pittori

- Using aperture photometry technique, we evaluated the AGILE-GRID PSF from in-flight data taken with AGILE in Spinning (Pointing data used as comparison).
- Check on gamma-ray events above 100 MeV detected from the Crab Nebula.





PSF consistent with the one found in Pointing mode (same as Fermi)

Systematic search for GeV counterparts of TeV sources

LONGO, F. , **LUCARELLI, F., PITTORI, C.,** RAPPOLDI, A., **VERRECCHIA,F.**

- Automated search for E>100 MeV sources spatially correlated with known TeV sources, using GRID Pointing data (2.3 yrs) (ADC public data archive).
- Data analysis criteria: multi-source Maximum Likelihood (ML) analysis around the TeV position
- Input catalogue: revised source list built from the TeVCat catalogue (see TGevCat Catalogue @ ASDC).

Source Class	TeV Catalog	Detections sqrt(TS>4)
AGN (HBL, LBL, …)	45	10
Starburst	2	--
PWN	24	3
SNR	14	5
XRB	3	1
UNID	25	6
Other Galactic	3	1

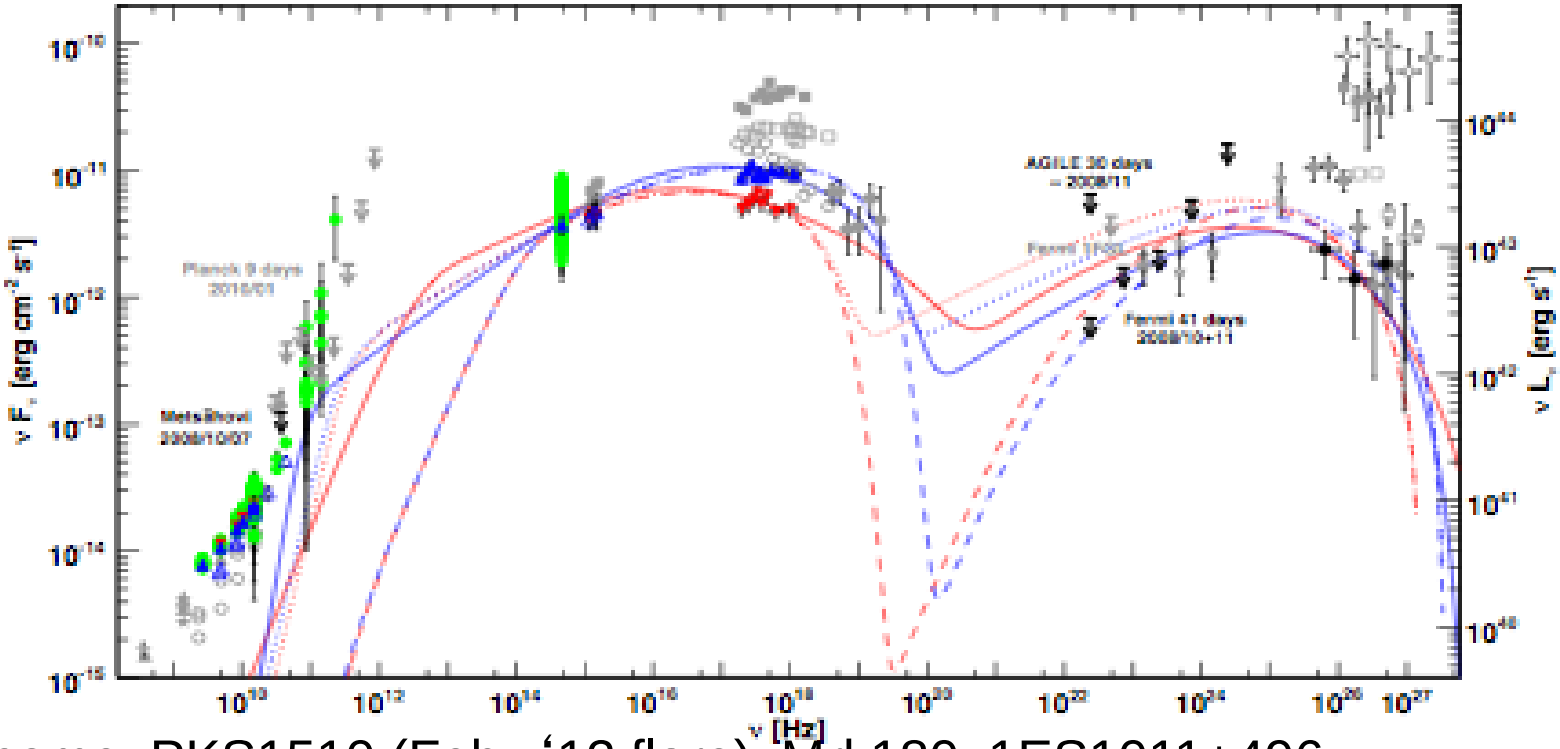
Preliminary

- ~30% of TeV sources show counterparts in AGILE first 2.3yrs data.
- Few GRID detections (1-2 HBL, few Galactic) not in 2FGL Cat.
- Upgrade is ongoing (latest calib. matrices (I0023) and updated TeV input list).

Rappoldi et al. (2009), Lucarelli et al.(2011)

MWL campaigns on TeV sources

- **1ES2344+514 (Rugamer et al., arXiv:1211.2608v1)**



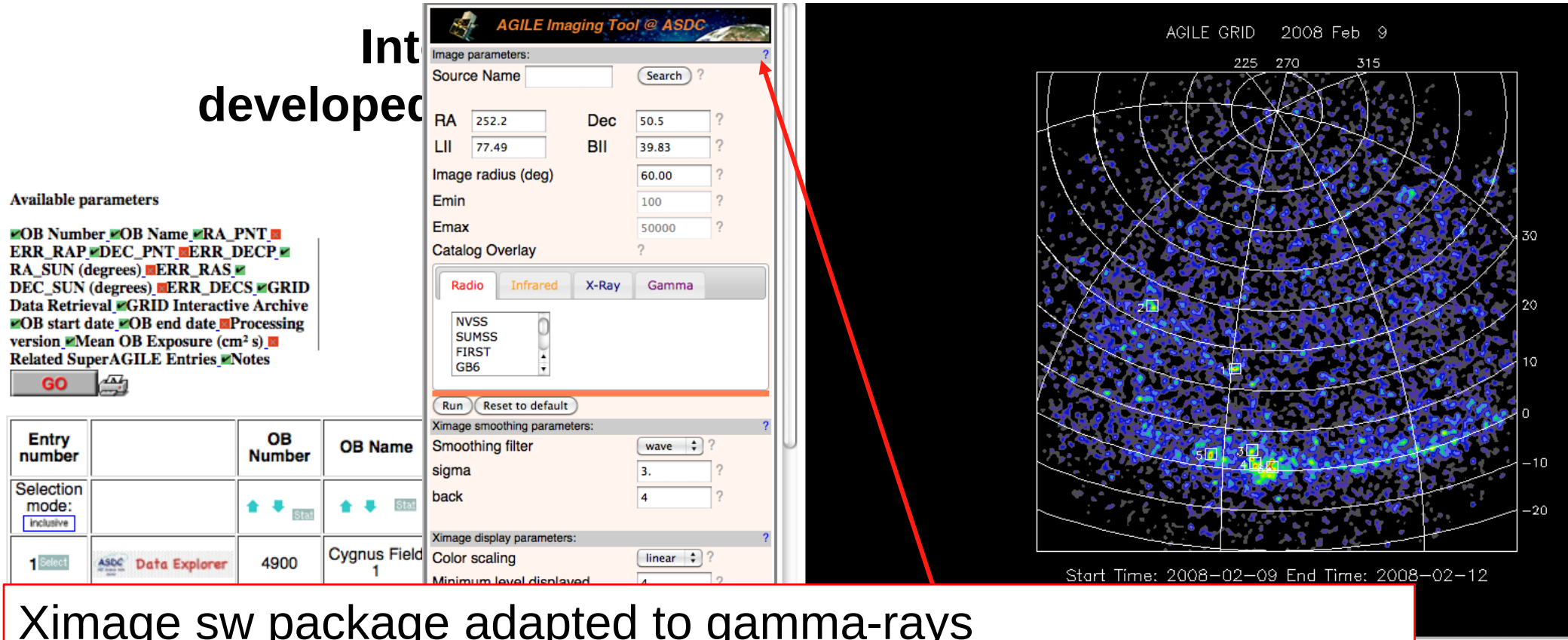
More to come: PKS1510 (Feb. ‘12 flare), Mrk180, 1ES1011+496.

<u>GRID Level 3 Archive</u> (1-day integration EXP, COUNTS and GAS maps) helps to investigate flaring activity over > 5 years of data in a very short computing time.

AGILE Public Data Distribution from the ASDC MMIA

- ***First Cycle-1 public delivery*** *(17 OBs):* ***Jun 10, 2009*** *(data_release_note_v1)*
- ***Second Cycle-1 public delivery*** *(3 OBs):* ***July 17, 2009***
- ***Publication of a reprocessed Cycle-1*** *(20 OB)* ***dataset: Oct 6, 2009*** *(data_release_note_v2)*
- ***Complete Cycle-1 public data release*** *(29 OB):* ***Dec 22, 2009*** *(data_release_note_v3)*
- ***Cycle-2 public delivery*** *(22 OB)* ***and reprocessed Cycle-1 dataset****:* ***Oct 6, 2010*** *(data_release_note_v4)*
- ***Complete Cycle-1 and Cycle-2 (pointing) reprocessed data release: Dec 21, 2010*** *(data_release_note_v5)*
- ***Cycle-3 and Cycle-4 (spinning) public deliveries****:* ***Nov 9 - Dec 21, 2011 and Nov 21, 2012*** *(data_release_note_v6 and data_release_note_v7)*

Int
developed



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

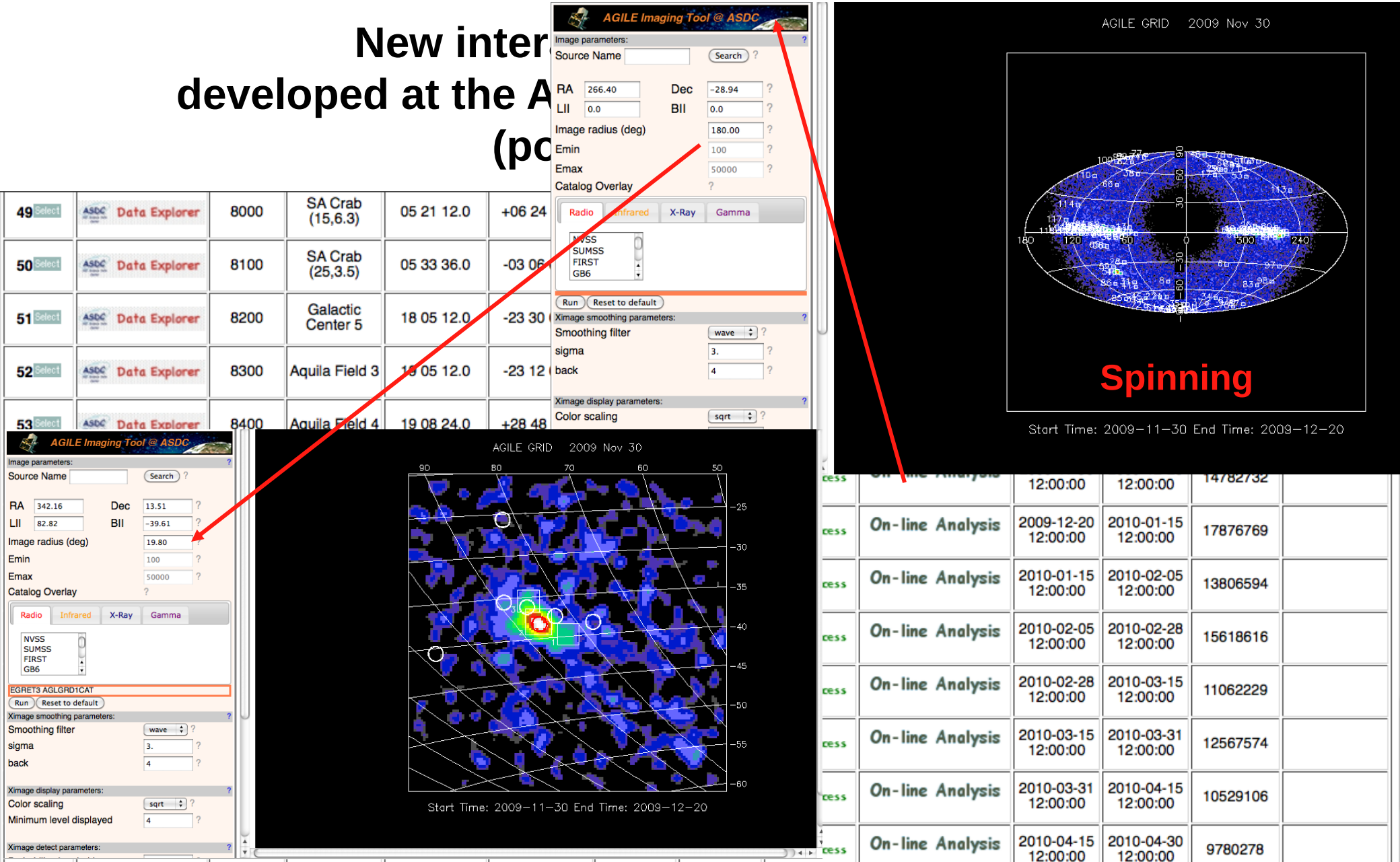
GO

Entry number		OB Number	OB Name										
Selection mode: inclusive													
1 Select	ASDC Data Explorer	4900	Cygnus Field 1										ToO
													Baseline
													Baseline
													Baseline
7 Select	ASDC Data Explorer	5210	TOO MKN 421	16 48 48.0	+50 30 00.0	-	-	Public access	On-line Analysis	2008-02-09 09:00:00	2008-02-12 12:00:00	5703449	ToO
8 Select	ASDC Data Explorer	5220	South Gal Pole Resumed	04 27 12.0	-35 48 00.0	-	-	Public access	On-line Analysis	2008-02-12 12:00:00	2008-02-14 12:00:00	3398061	Baseline

Ximage sw package adapted to gamma-rays

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

New inter
developed at the A
(pc



Warning: use imaging tool only as a preview of the AGILE γ-ray field. To perform your own scientific analysis, please **download data and use the 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 interactive on-line ML analysis on AGILE on legacy (LV3) data archive under construction!! Stay tuned!