Funding and Support: staff

- Calibration and operations support from INAF-IAPS Roma, **IASF-Palermo and OAS/Bologna**
- Funding INAF + ASI (INAF for Staff members and Clean Room)

INAF/IBIS 7+3.5 Permanent staff, expected to remain for duration of mission +3 postdoc for science ASI/IBIS Funded

- Agreement ASI/INAF still on going → **end of 6y contact money delivery end of June.**

New contract to cover November 2019-2022 ongoing with the same level of budget as in the past.

****contract for people running till May 2020 to June 2020 ****

Clearly, no discussion about post operation!

Funding and Support: contracts

- IBIS is supported with an ASI/INAF agreement till July 2019 (PI: A. Bazzano)

This support is mainly for non permanent positions, Clean Room maintenance and PI support for his duties/travels

- 9 FTE from INAF, all of them are on permanent contracts working on calibration, cross calibration, instrument health monitoring and operation, IBAS and science (GPS, AGN, Galactic Sources, GW etc)

- 2 FTE working 60% on INTEGRAL/XMM data

- 1 FTE shared 40% with the HEMERA H2020 program for GPS/Catalogue

- 1 Contract @IAPS for real time data flow and informatics support

Recent IBIS Activity

After a test performed during rev. 2025 (NO IBIS data requested by the P.I. of the observation) starting at **07:00oz on 23rd November** and, as reported by MOC team, initially there was **no obvious increase in the bandwidth usage**. Then, since the first slew after the modification S8 pkt increased from **5.5 to 10 pkt/cycle** while we anticipated **10-20** (thanks Giovanni La Rosa!)

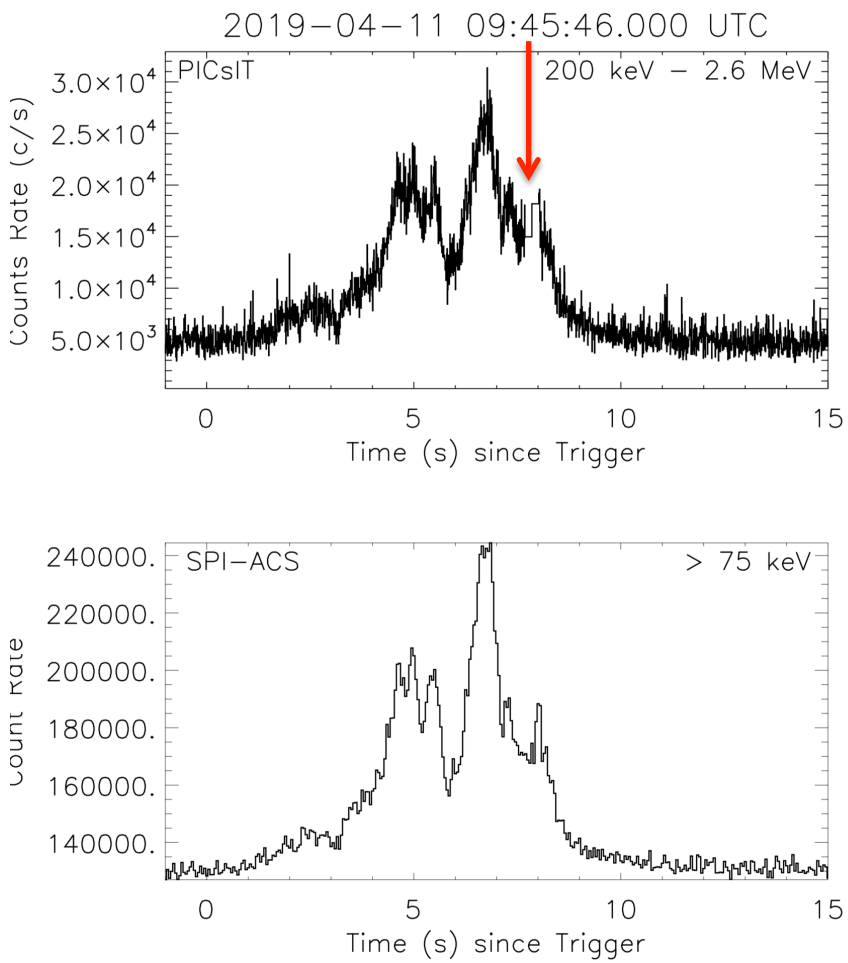
NO impact on the 128 pkt allocated to IBIS.

The OCR to modify the S8 mode time resolution has been then implemented in the middle of rev. 2051.

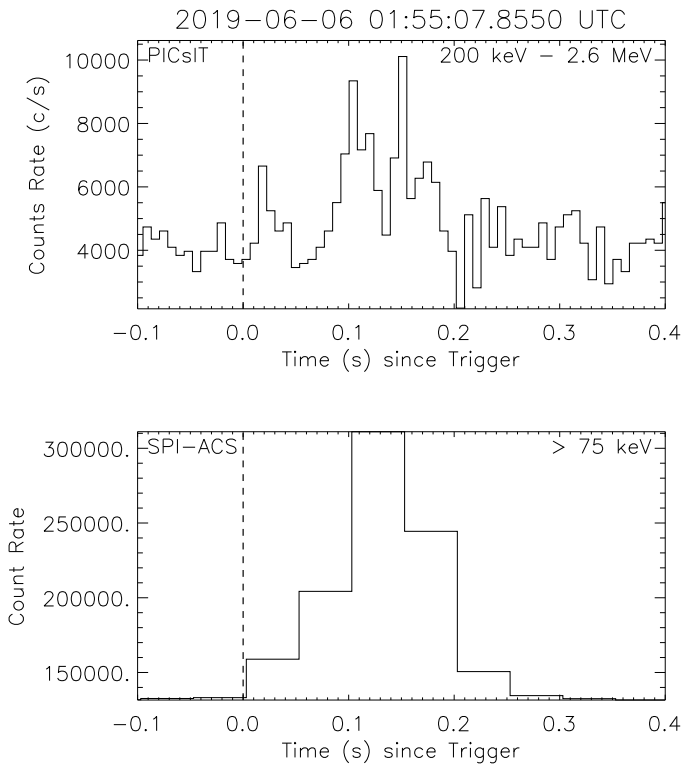
Also, it has been implemented the trasmission of S8 pkts during slews.

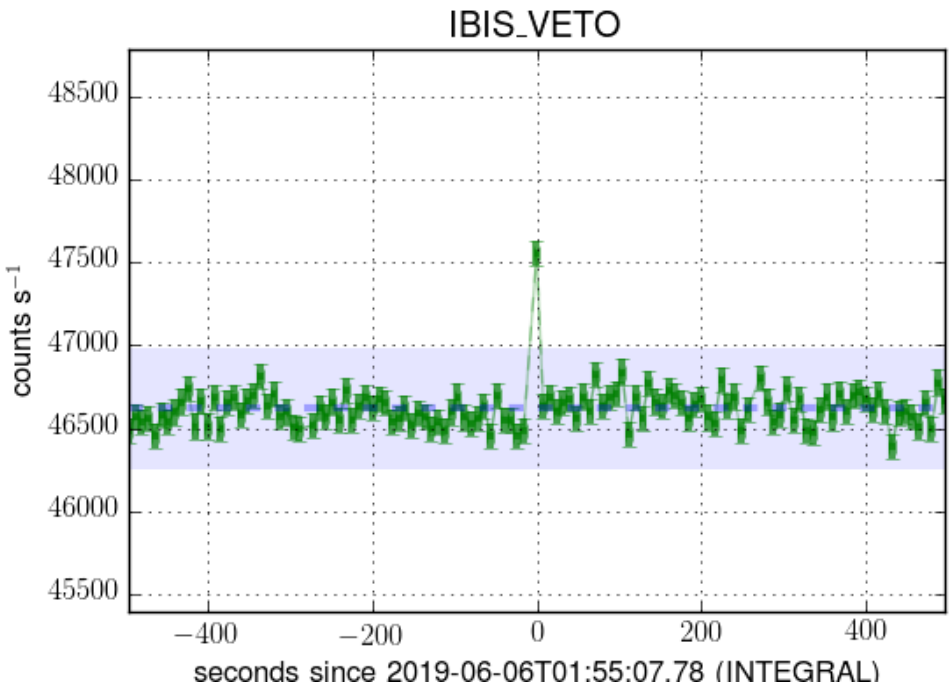
GRB with a time resolution of 7.8 ms

there is a gap after 8 s from trigger



GRB with a time resolution of 7.8 ms

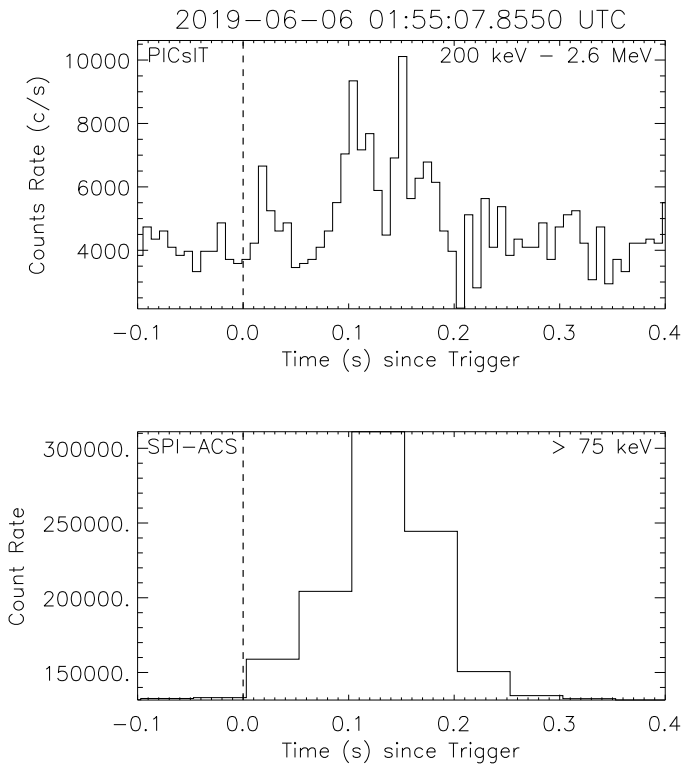


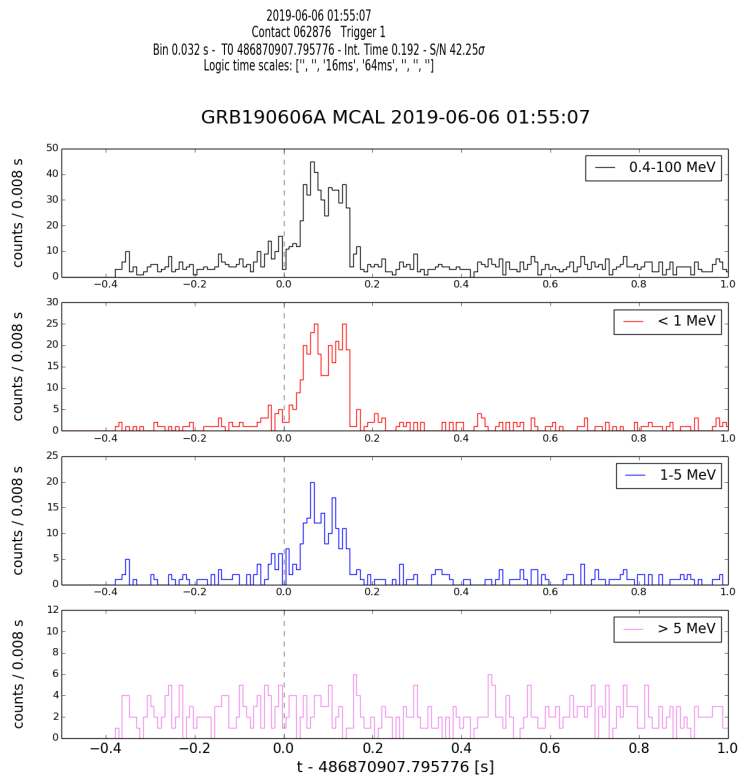


PICsIT detected this GRB this morning. It's not as bright as the event that is already in the IUG presentation, but it's shorter and shows at least two peaks maybe a third at the beginning that could show the benefits of having 7.8-ms resolution better than the event we already have.

IBIS-Veto, 8s integration time; E=50keV-2.5MeV

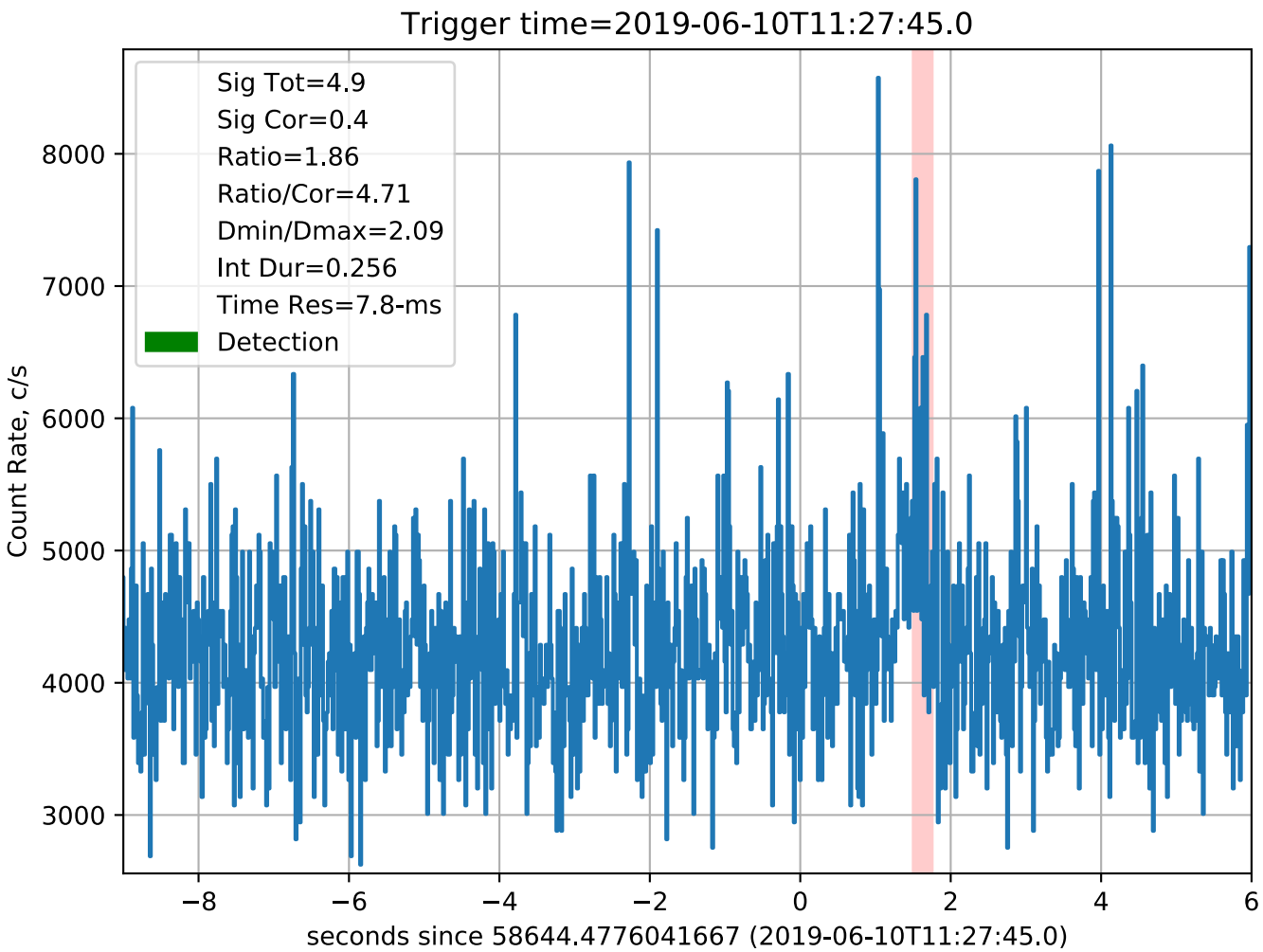
GRB with a time resolution of 7.8 ms





PICsIT detected this GRB this morning. It's not as bright as the event that is already in the IUG presentation, but it's shorter and shows at least two peaks maybe a third at the beginning that could show the benefits of having 7.8-ms resolution better than the event we already have.

SUBJECT: Fermi trigger No 581478912 / GRB 190606A: AGILE/MCAL observations


Trigger time=2019-06-10T11:27:45.0
Sig Tot=4.9
Sig Cor=0.4
Ratio=1.86
Ratio/Cor=4.71
Dmin/Dmax=2.09
Int Dur=0.256
Time Res=7.8-ms
Detection
Count Rate, c/s
8000
7000
6000
5000
4000
3000
−8
−6
−4
−2
0
2
4
6
seconds since 58644.4776041667 (2019-06-10T11:27:45.0)

GWs related activity @IAPS

- **We have developed software to analyze the PiCsIT Spectral Timing data as part of the INTEGRAL Multi-Messenger Team Dashboard that analyzes INTEGRAL data from multiple detectors as soon as a GW trigger is reported.**

- **Currently, able to perform spectral analysis on moderate/faint GRBs with Spectral Timing data in the 200 - 2600 keV with 7.8ms time resolution in 8 energy channels**

- **Direct interaction with Agile to cross-correlate GRB events, in particular for GW triggers**

- **Weekly call with VIRGO HQ to check low-latency events**

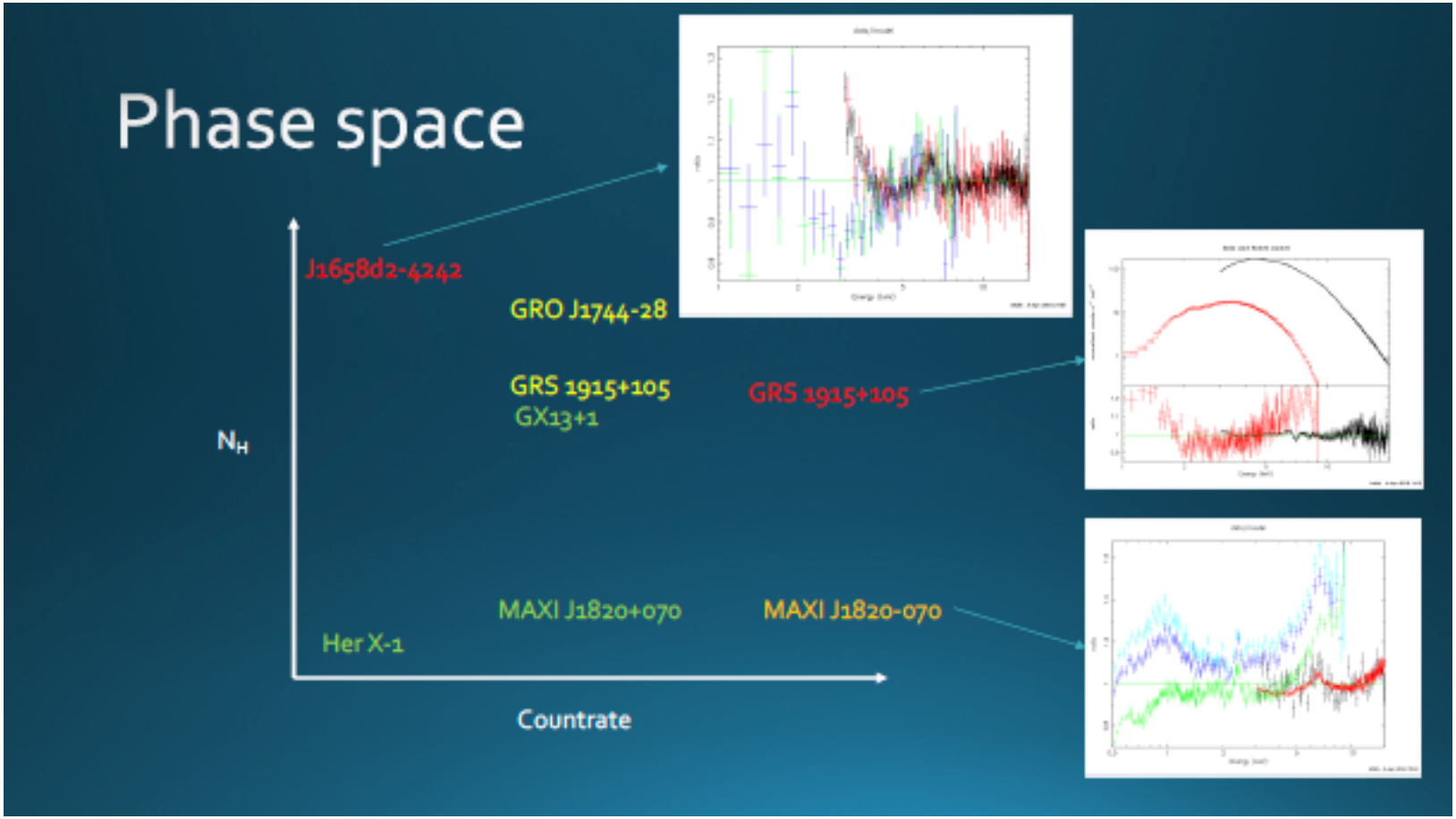
Cross-Calibration/IACHEC

- IACHEC meeting in Shonan Village Center, Japan 19-23 May 2019

Some topics relevant to INTEGRAL:

- Crab SPI Band model fit (25 keV - ~1 MeV)
- Crab and 3C273 cross-calibration papers
- Issues in Swift/NuSTAR joint analysis of bright sources and/or high absorption
- IACHEC/AHEAD cross-calibration database -J. Rodi responsible for this activity

NuSTAR/XRT Issues



- Disagreements at **both high count rate and high n_H** (Kristin K. Madsen)

Urgent IBIS related to do list (IUG#21)

• Implement the 8ms OCR	ESA/ESOC	**Done**
• Full real time data display at IAPS	IAPS	**Dashboard**
• Implement Advocate GW scientists scheme	ISDC	**Done**

To increase the INTEGRAL appeal:

• Release to ISDC PICsIT Timing SW	IAPS	**Ongoing**
• Release to ISDC IBIS Compton Mode SW	SACLAY	**See PL pres.**
• …more?		

Urgent IBIS related to do list (IUG#21)

The 18years INTEGRAL Workshop:

Place Santa Margherita (Ca), Sardinia, Italy

14-18 Sept. 2020

Final decisoin after IUG # 22…