Alenia

IBIS team@IAPS & ASI Contract

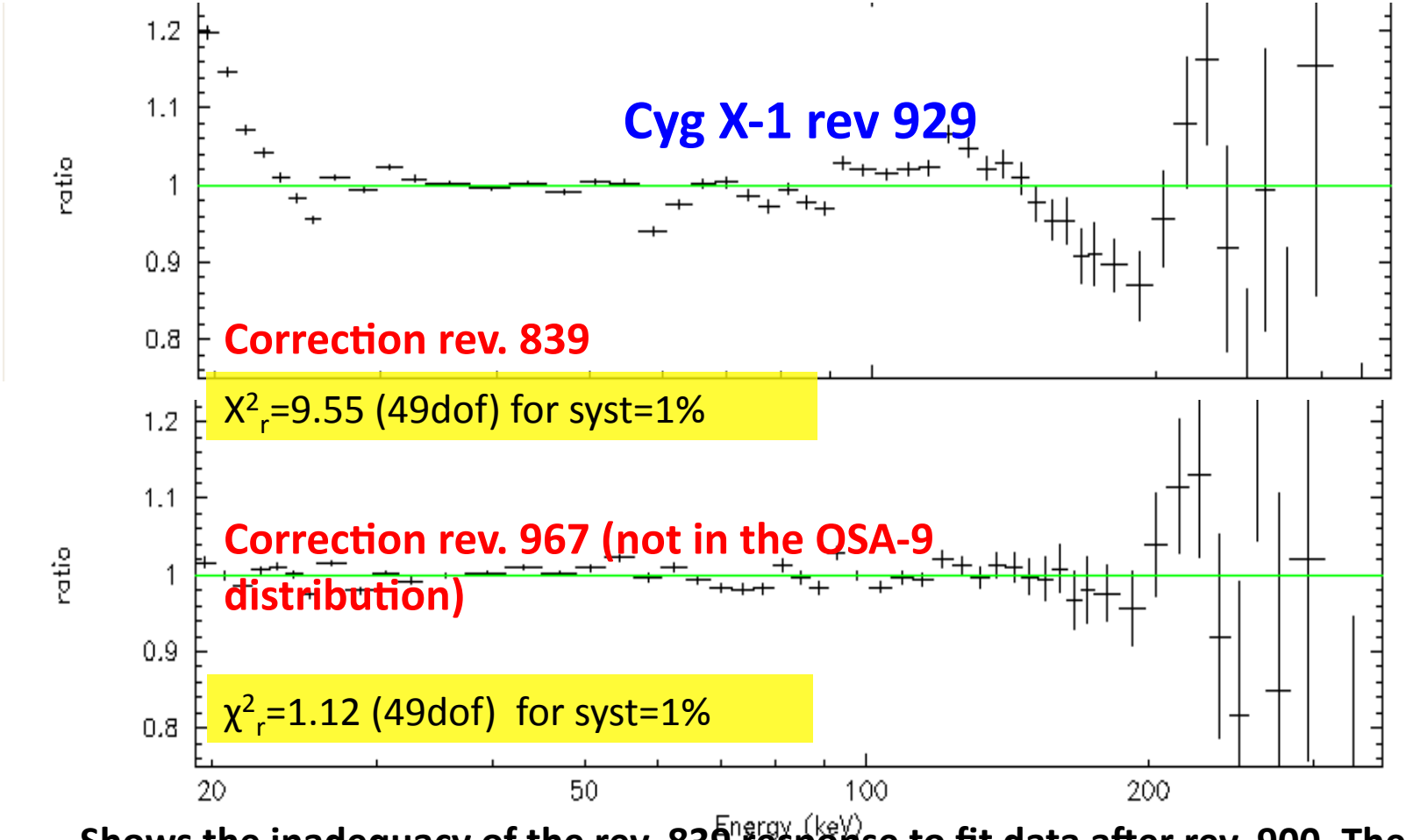
Istituto di Astrofisica e Planetologia Spaziali
Institute for Space Astrophysics and Planetology

- The new ASI/INAF contract for INTEGRAl will expire in August 2013
- Actually there are 4 researchers (not staff member, M. Fiocchi, R. Landi, F. Panessa, A. Tarana) based on this contract with the main task for:
  - -scientific (3) and calibration (1) data explotation
  - -P.I. support for all activities
- There are also two postdoc fellowships (P. Parisi, M. Molina) for Follow-up of INTEGRAL/SWIFT newly discovered sources and for the AGN complete sample study plus one for PICSIST monitoring (V. Bianchin)
- Furthermore 8 researchers and 2 engineers (archive and hardware maintainance) are fully involved on science almost full time plus 4 part of the time within the INAF Institutes in Milano, Bologna e Roma.
- G. La Rosa continues as IBIS operation manager
- M. Quadrini retired in June 2011

Calibration status OSA-9

- No update to the calibration files since last IUG meeting
- The latest ARF delivered is based on rev. 839; good coverage up to rev. ~900. The main problem is related an instrumental feature below ~25 keV
- A response file (ARF) for revolution 967 has been sent from Rome to Saclay for testing on June 17th, 2011
- A discrepancy has been reported by the Saclay team, disagreement of OSA-9 Crab count rate spectra of the Crab
- Several tests have been done in Rome, the issue is still open
- OSA-9 spectra may be affected at low energies by an uncorrect treatment of the ISGRI low threshold → decision to be taken…

OSA-9, fitting of Cyg X-1 spectrum



Shows the inadequacy of the rev. 839 response to fit data after rev. 900. The effect is mainly limited below 25 keV

Calibration status OSA-10

- Main issue: a new energy correction software (see Report by the Saclay Team)
- A test ARF OSA-10 has been sent from Rome to Saclay on June 7th, 2011
- A plan is agreed on Sept 2011, that the Saclay Team will produce Crab spectra to be sent to Rome for new ARF computation
- The issue is complicated by the need to implement a new Nomex correction (on- and off-axis response of the coded mask), task of the ISDC
- A new version of energy correction and low threshold S/W has been delivered by the Saclay Team to the ISDC on October 12th (*email by CF*)
- The issue of the Nomex correction is still open → action to be completed!
- A breakthrough is necessary for the IBIS calibration activity in preparation for the next extension….