

12th IACHEC meeting closure

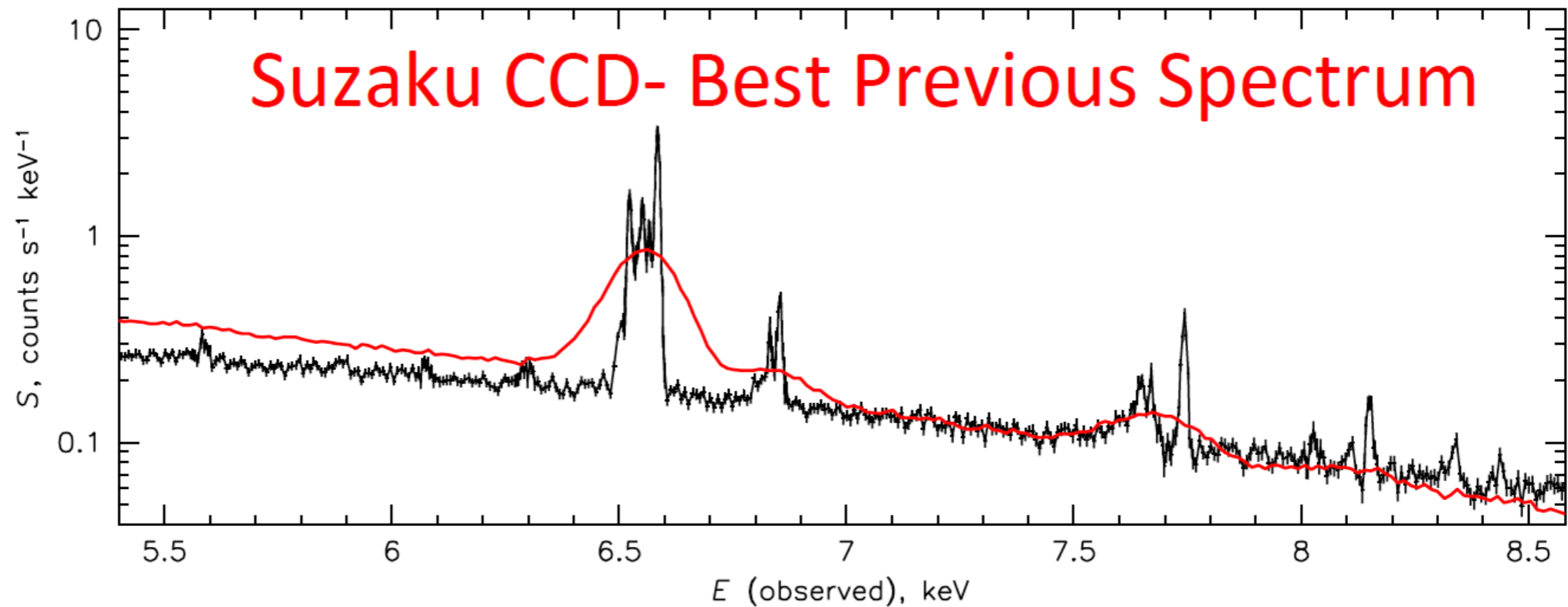
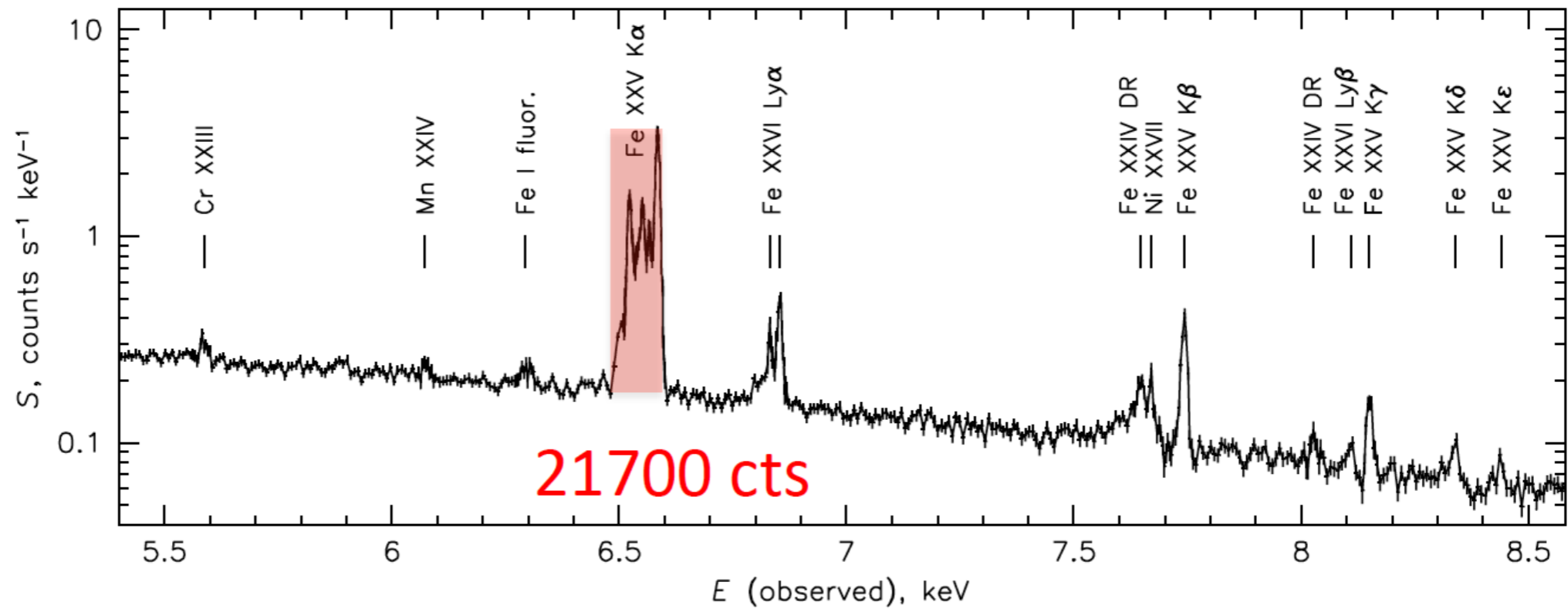
Matteo Guainazzi, SCI-S/ESA, ESTEC, Noordwijk, The Netherlands

Thanks to: Adam, Eric, Hiromitsu, Hiroyuki,
Kenjia, Kouichi, Koji, Ikuyuki, Masahiro,
Maurice, Megan, Rob, Shinya, Shu, Toshiki,
Yukikatsu

"Be rough and razorable; she that from whom
We all were sea-swallow'd, though some cast again
(And by that destiny) to perform an act
Whereof what's past is prologue, what to come
In yours and my discharge."

William Shakespeare, "The Tempest", Act 2, Scene 1

Residual instrumental background ~16 cts



Full array

3/28/17

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1. Understand *and* document the cross-calibration status of our instruments
2. [Get new ideas on how to] Improve the calibration of our instruments, achieving at the same time a better agreement among them
3. Promote the definition of good standard and practise on ground- and in-flight calibration, and support new missions (and the community at large) to pick them up

Goals of calibration management

I. To provide **good calibration** of instruments

Definition of **good calibration**:

“provide ability to utilise Poisson statistics in data”

II. To discourage publication of **wrong** science results

Remaining open question:

how can this be achieved?



IACHEC paper status

green = progress

Paper	Status last year	Status this year
1E0102-72	close to submission	published
3C273 + PKS2155-304	close to submission	published
C/X blazar sample	wrapping up	wrapping up
Crab	advanced draft	in preparation
G21.5-0.9	-	to be started
N132D	not discussed	in preparation
Concordance Project	-	in preparation
MMS (galaxy clusters)	to be started	in preparation
RXJ1856-3754	-	under consideration
Timing (Crab)	-	under consideration
Crab phase-resolved	-	under consideration

Helping Calibration Teams to understand their systematics

The Matrix (p. 1)

	Chandra ACIS	Chandra HETGS	XMM pn	XMM MOS1	XMM MOS2	Swift WT	Suzaku XIS0
.15-.33							
.33-.54							
.54-.8							
.8-1.2							
1.2-1.8							
1.8-2.2							
2.2-3.5							
3.5-5.5							
5.5-10							

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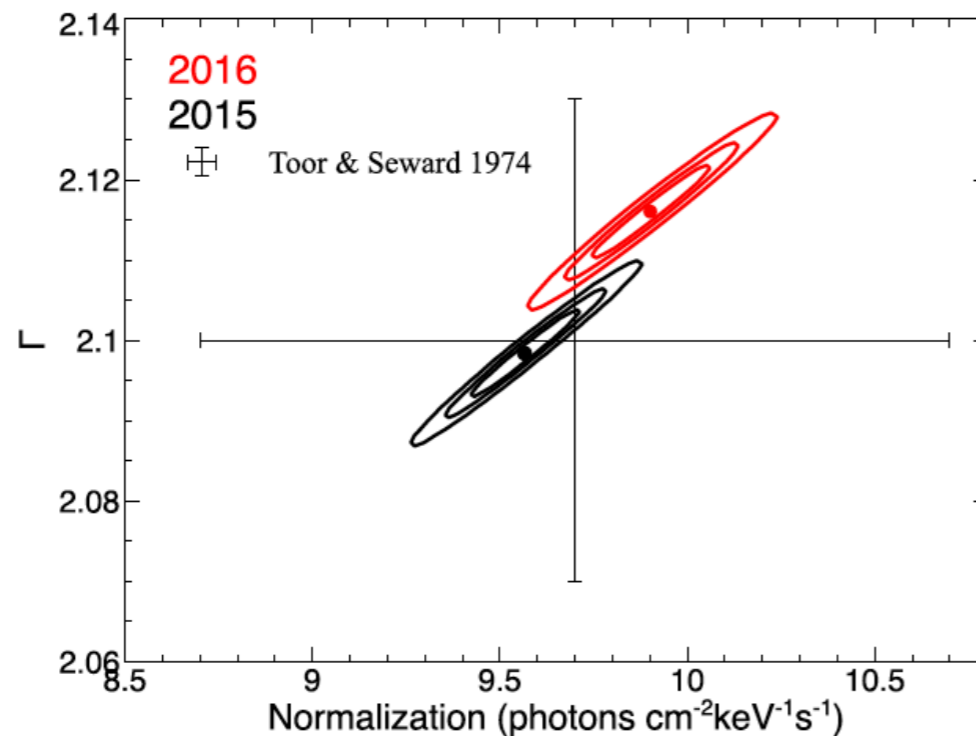
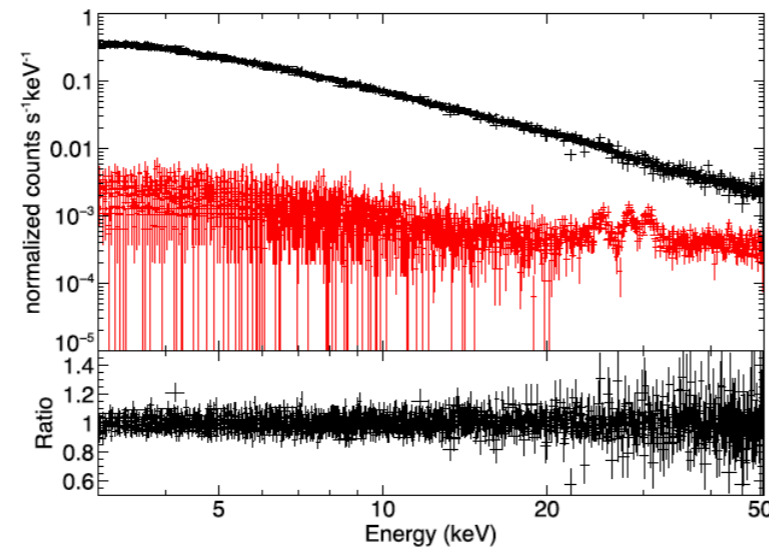
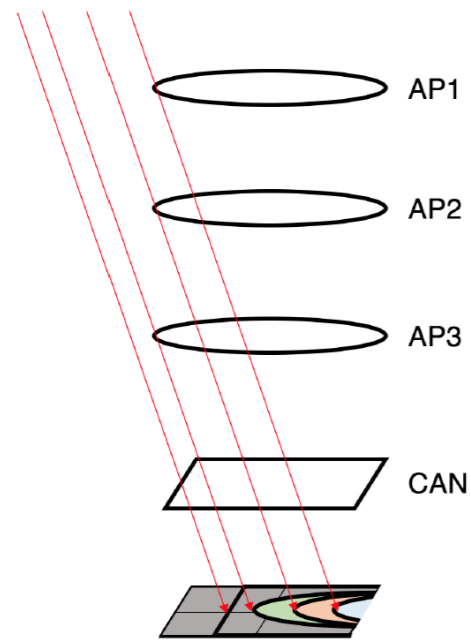
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Journey to an uncharted territory ...

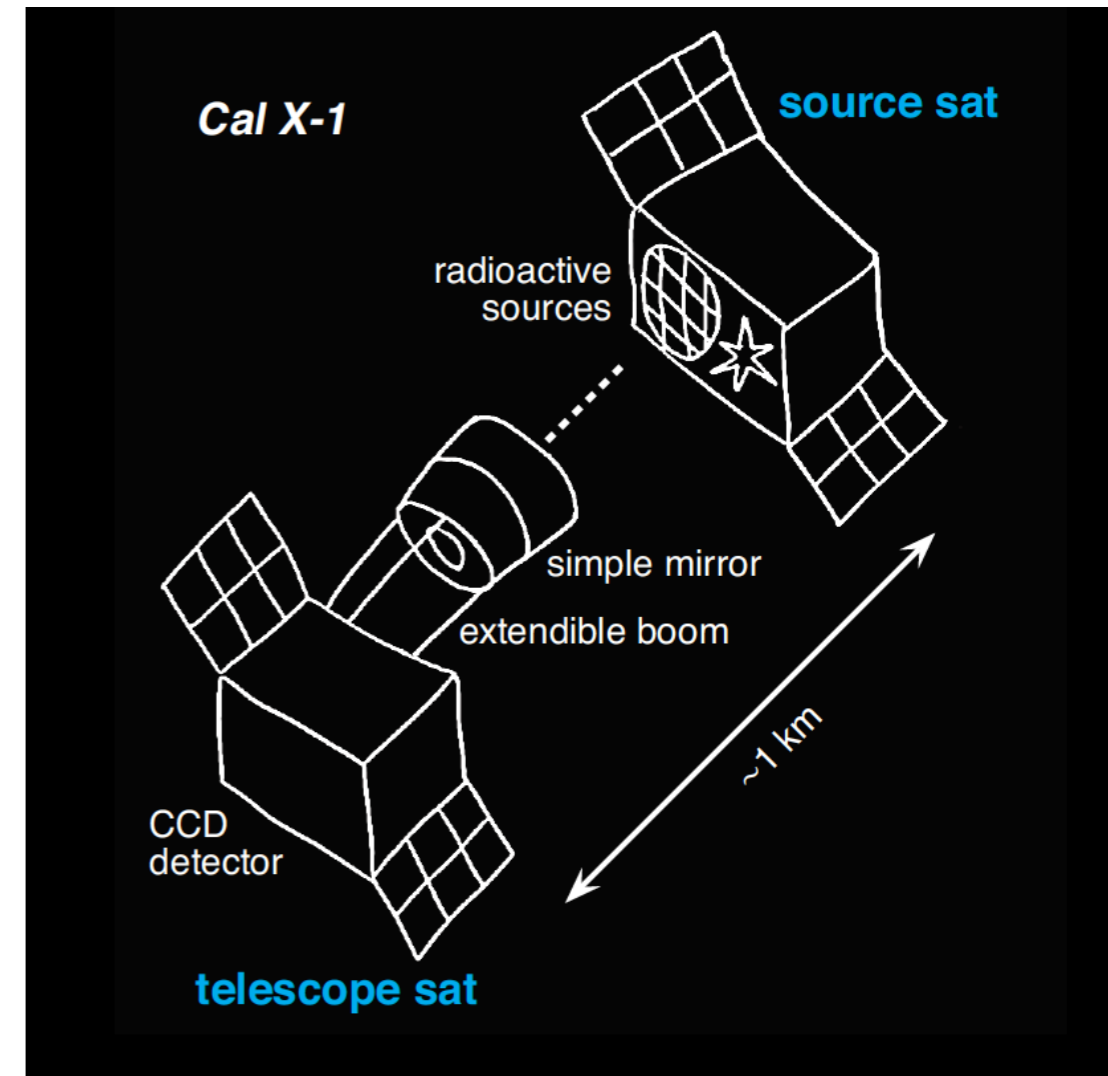
from K.Madsen's presentation

from M.Markevitch's presentation

The absolute flux of the Crab

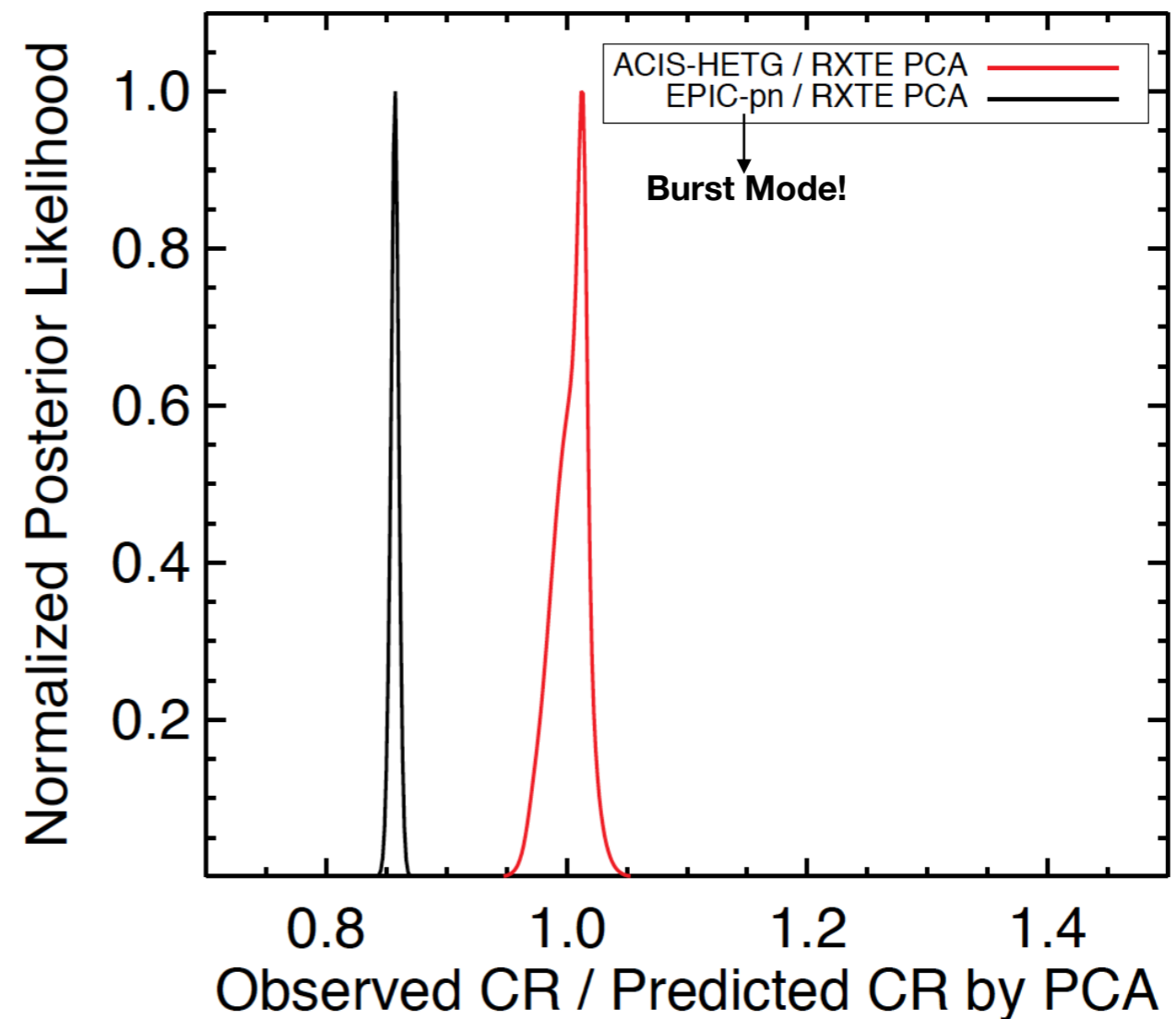
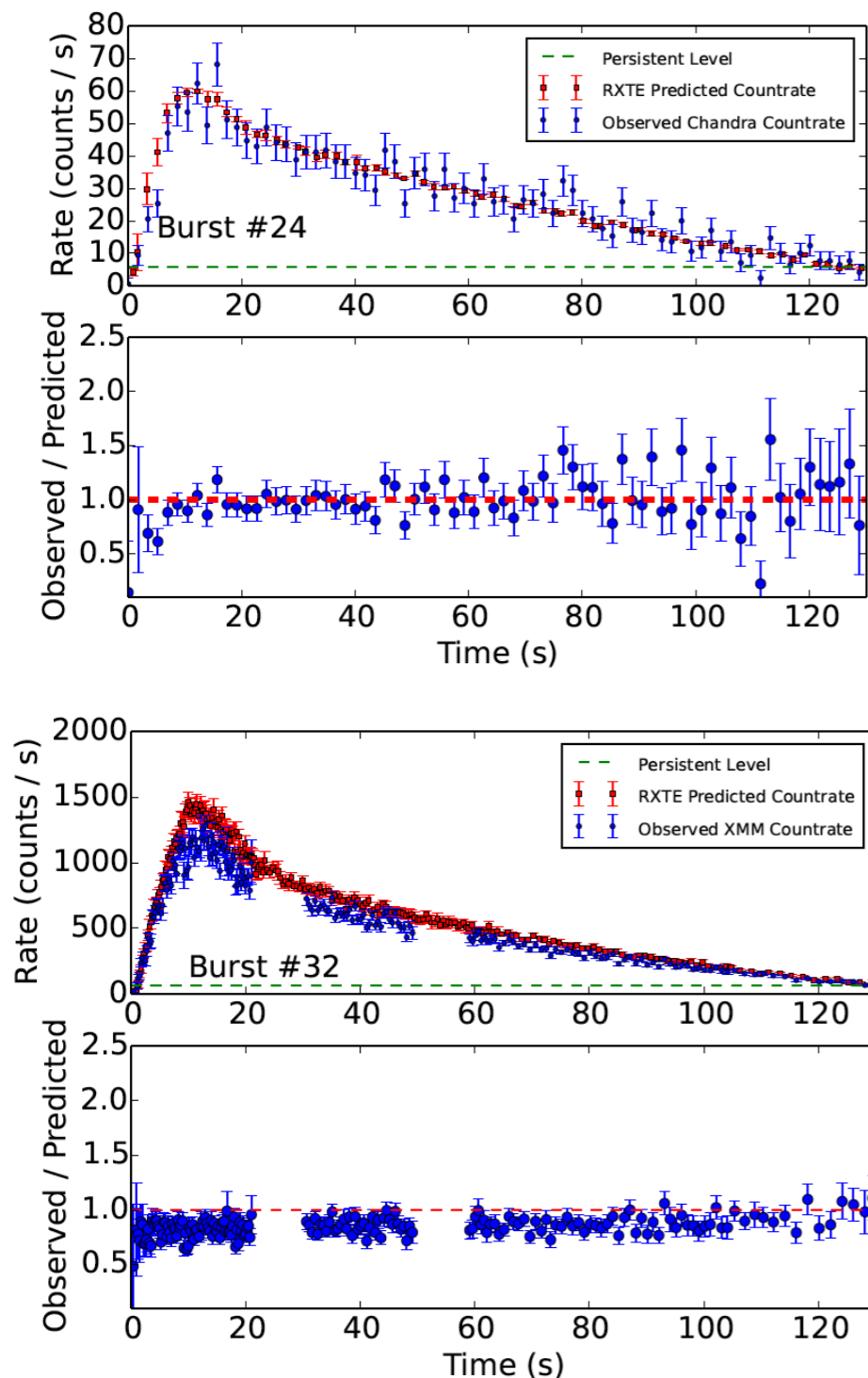


The absolute flux of everything



Quest for absolute flux calibrators

NS thermonuclear X-ray bursts as absolute flux calibrators



Agreements on cross-calibration status at 9th IACHEC

1. Compile a list of astronomical topics for which calibration uncertainties are a limiting factor

see M.Markevitch's presentation. Closed?