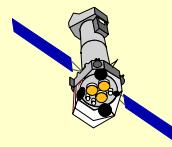


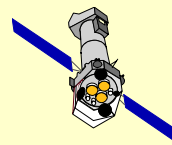
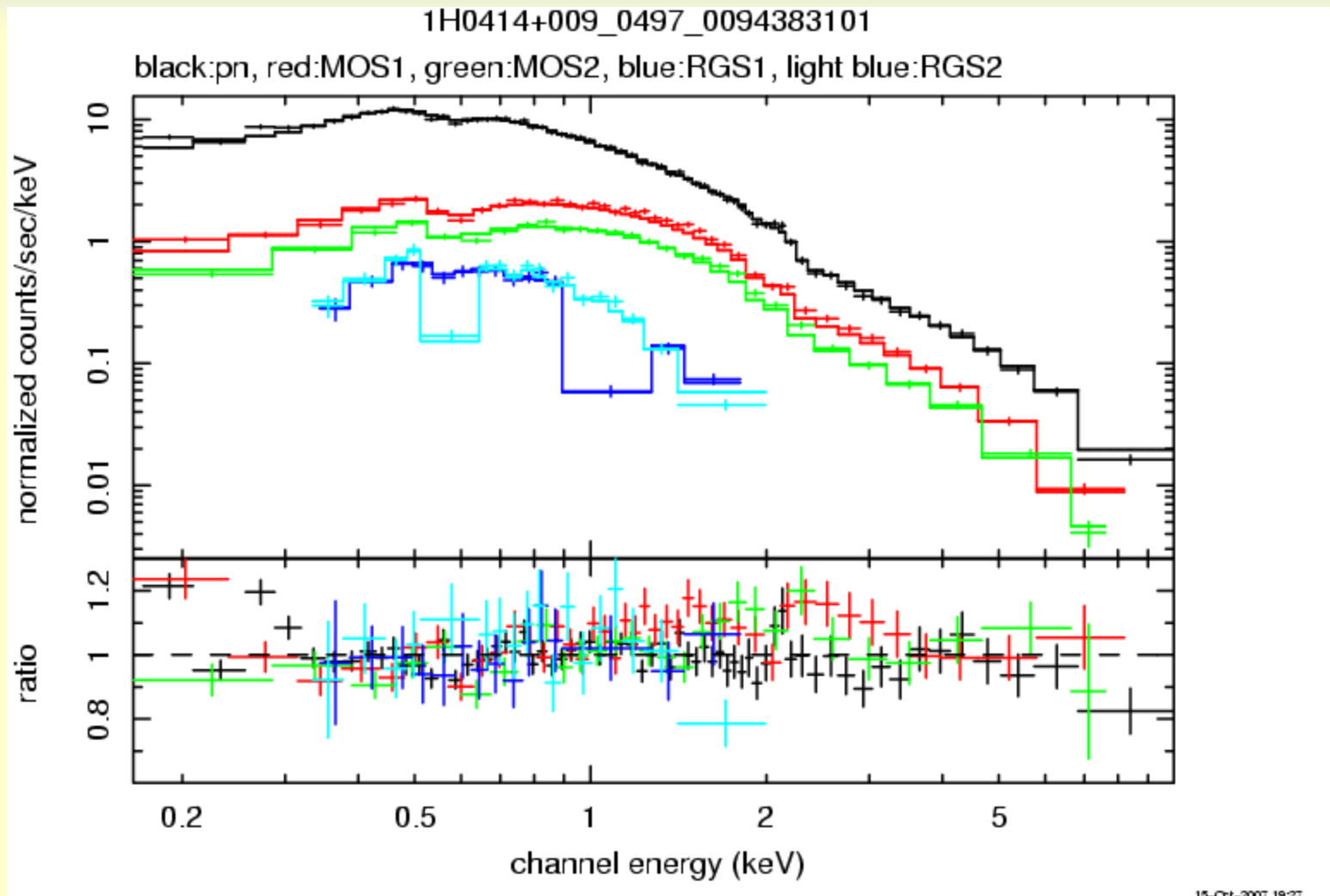
Status of XMM-Newton cross-calibration with SASv7.1

CAL Meeting Mallorca, 06.-07. November 2007

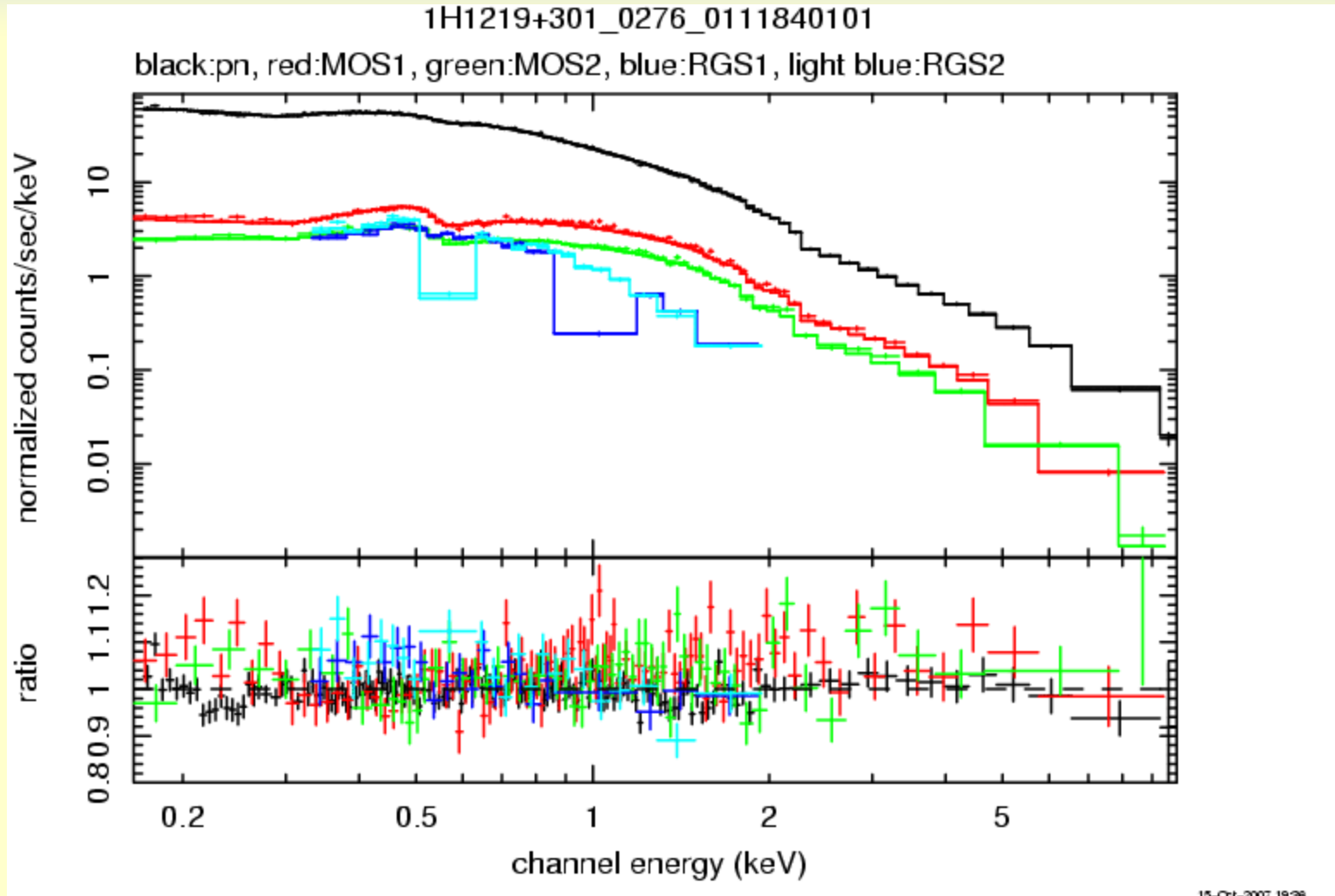
Martin Stuhlinger
with inputs/support from whole cross-calibration team



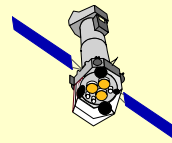
AGN

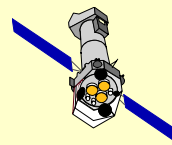
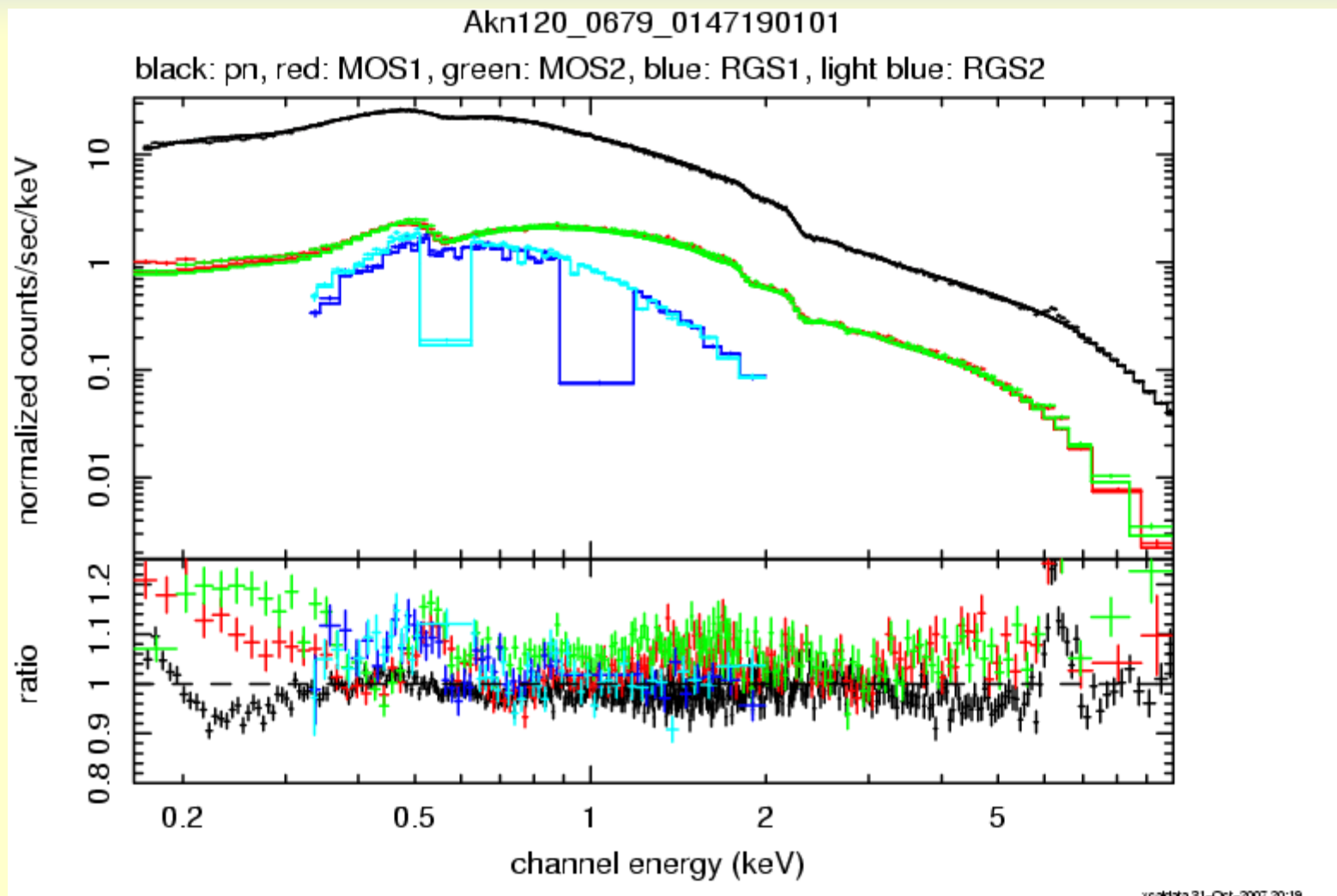


AGN

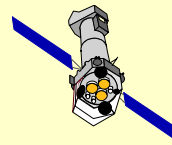
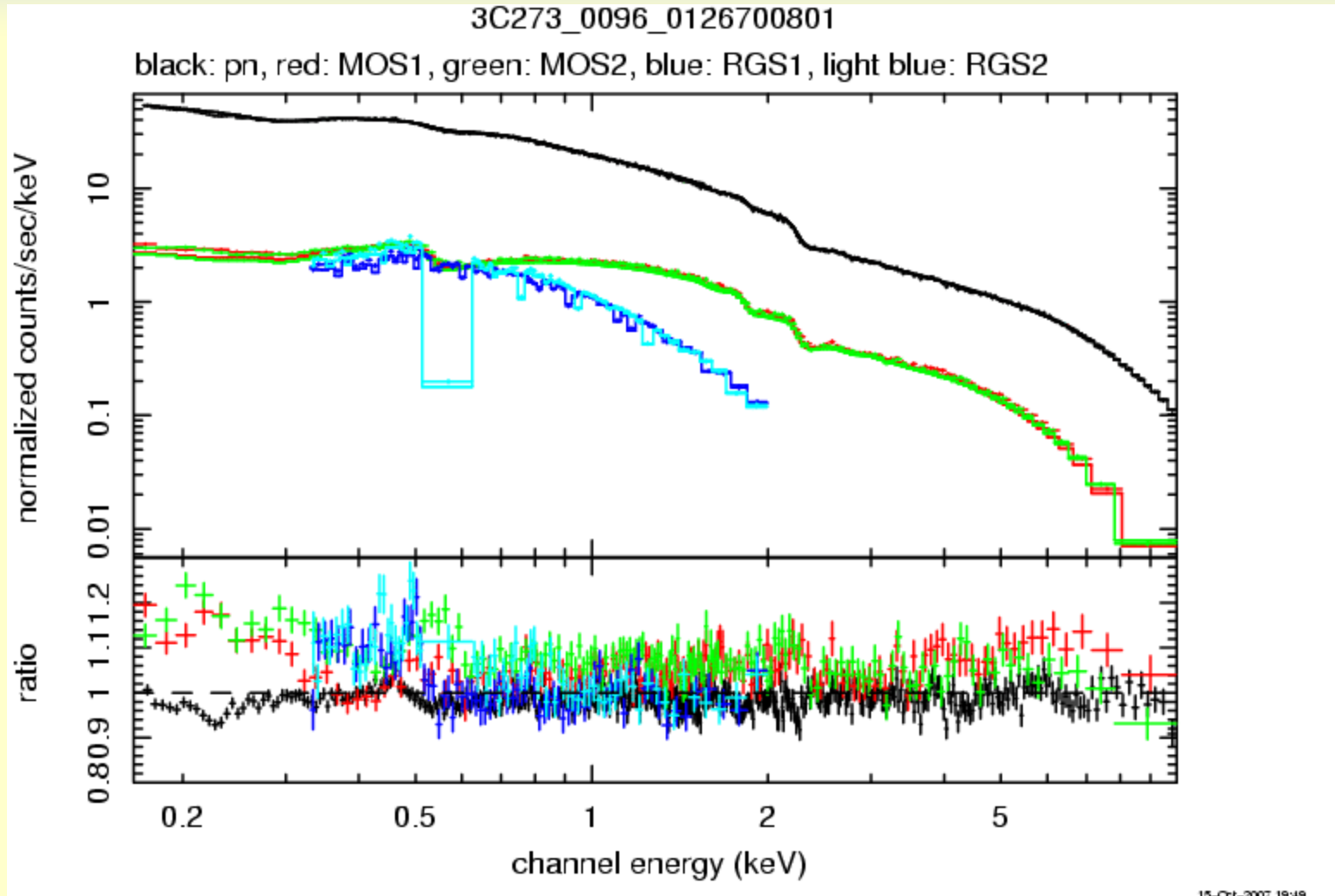


15-Oct-2007 19:38

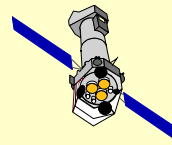
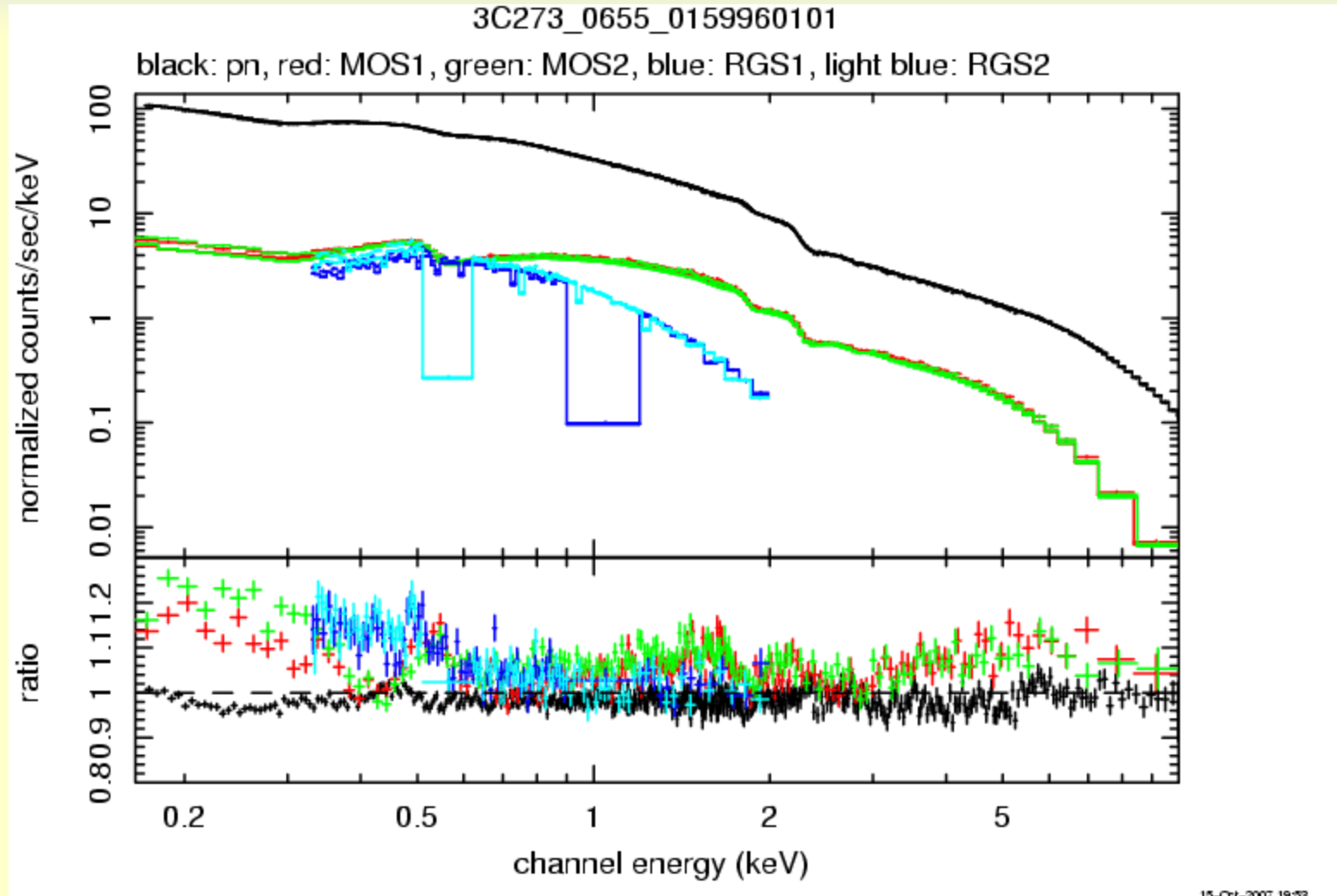




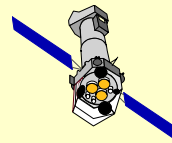
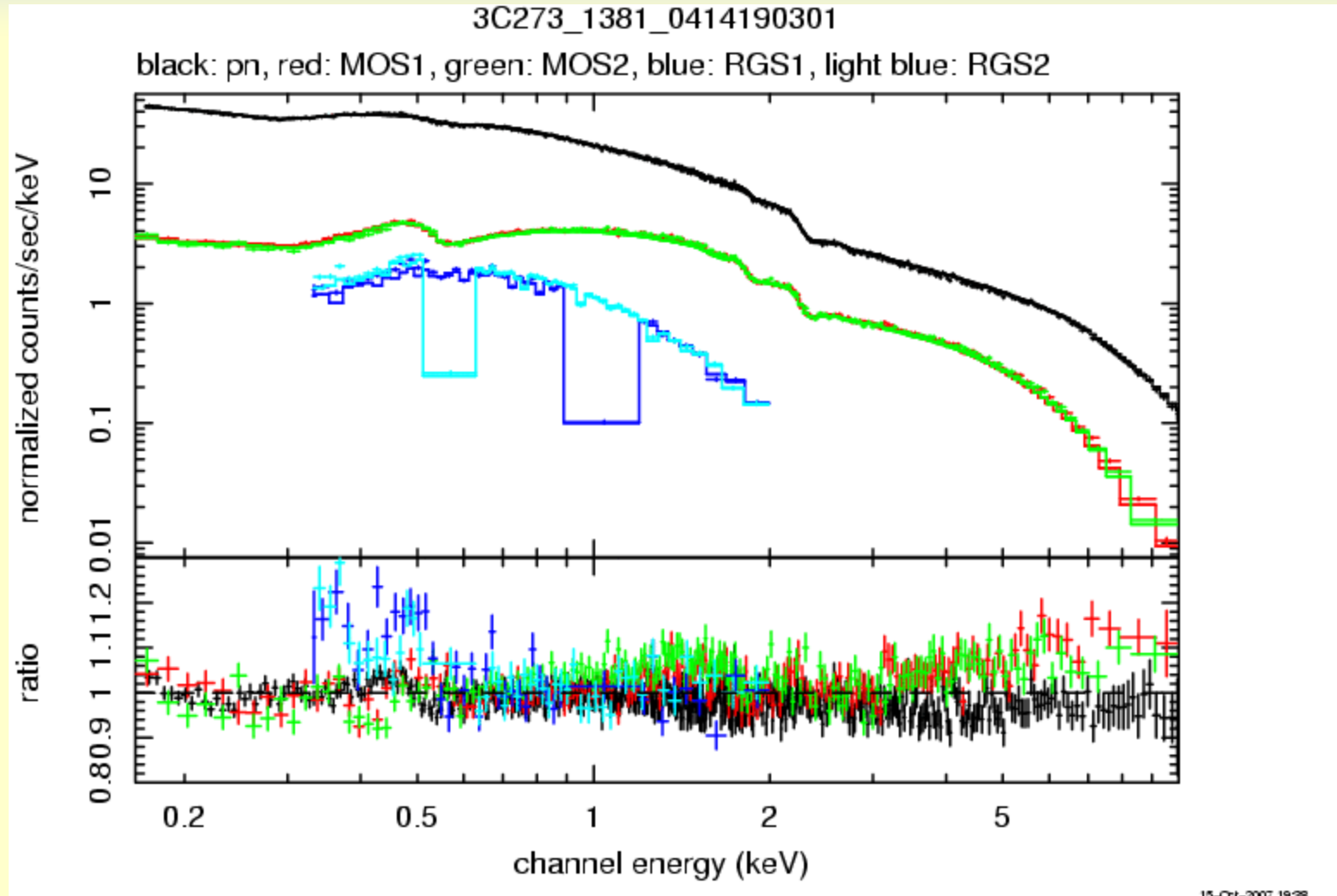
AGN



AGN



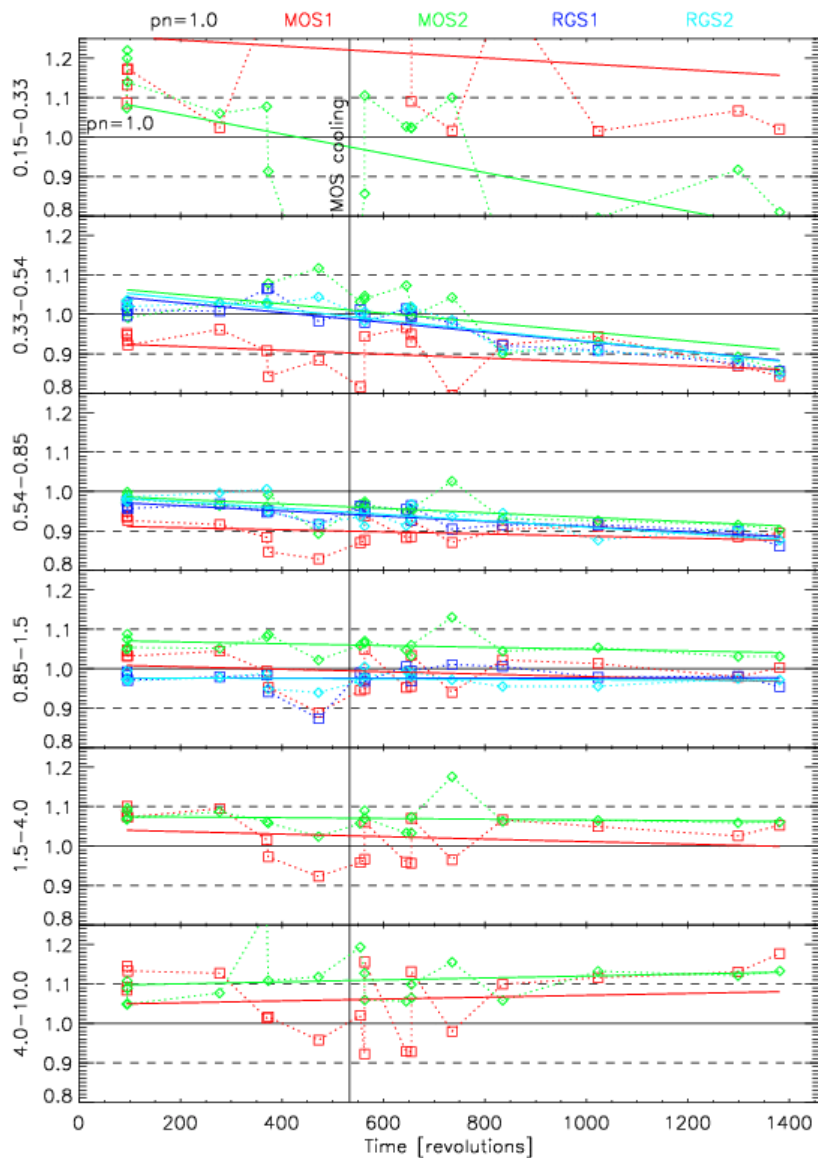
AGN



Flux ratios using 3C273

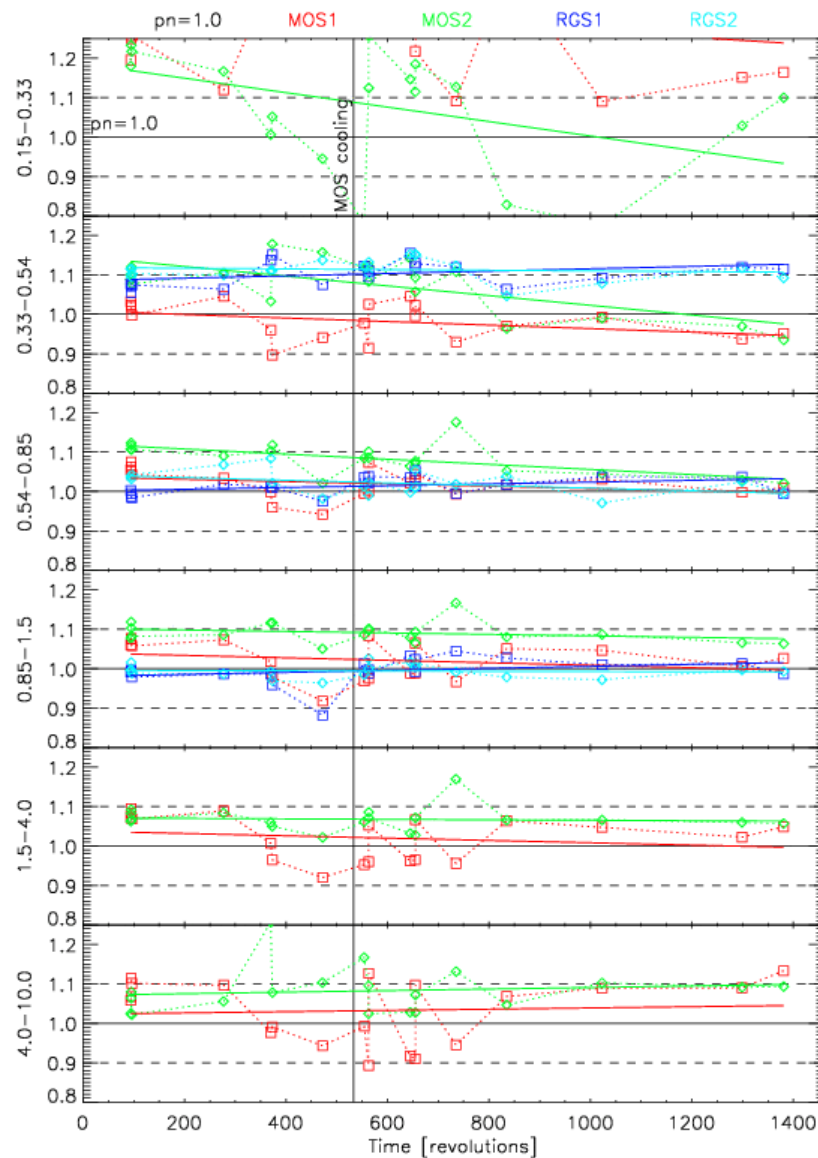
SASv7.0

3C 273 flux ratios



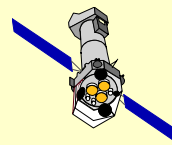
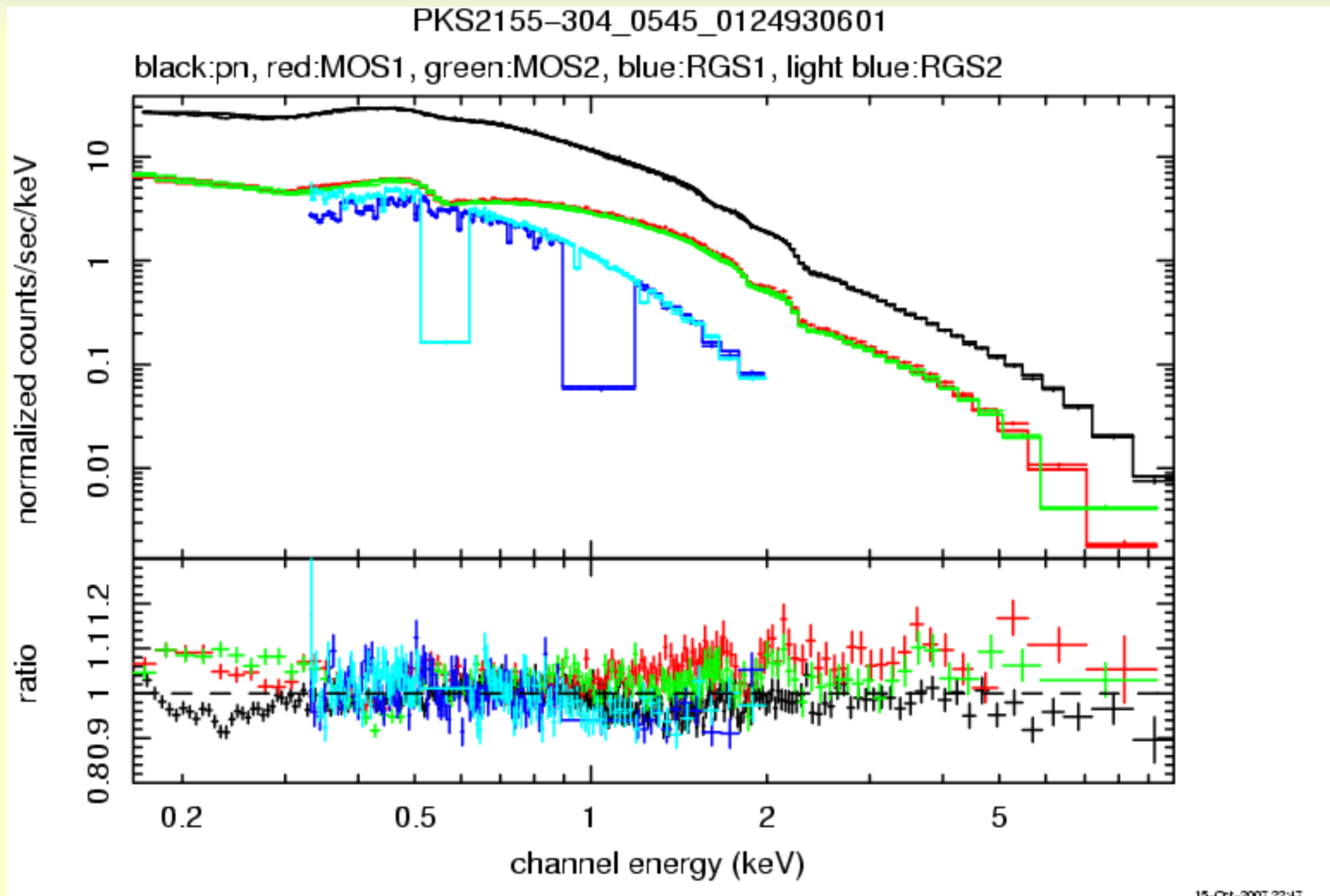
SASv7.1

3C 273 flux ratios



ntre

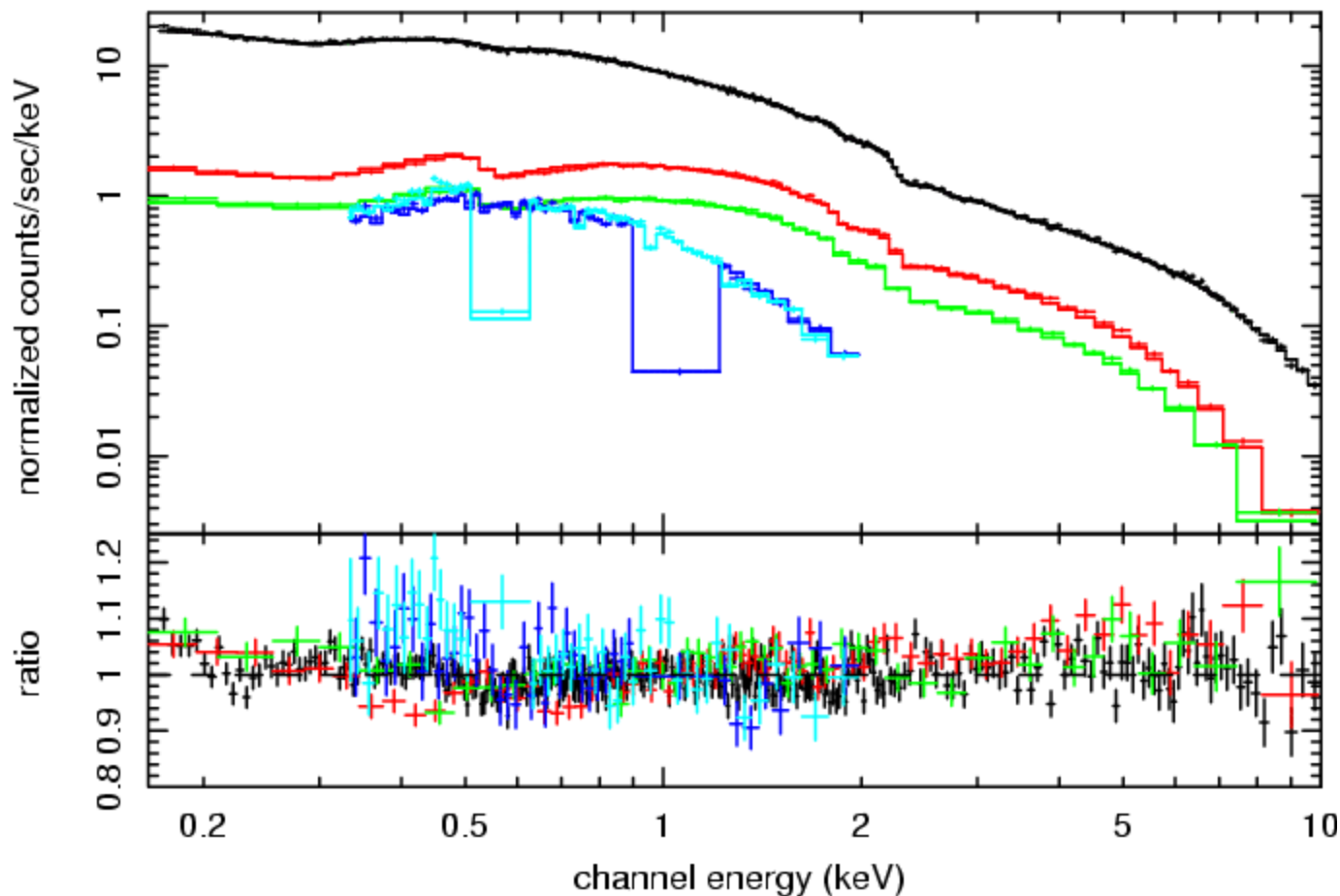
AGN



H1426+428: Single Power Law

H1426+428_0278_0111850201

black: pn, red: MOS1, green: MOS2, blue: RGS1, light blue: RGS2



mstuhlin 31-Oct-2007 17:28

PL. Index

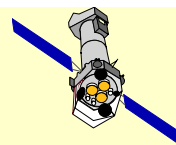
PN: 1.812
±0.003

MOS1: 1.773
±0.006

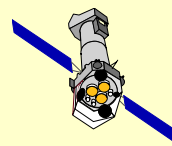
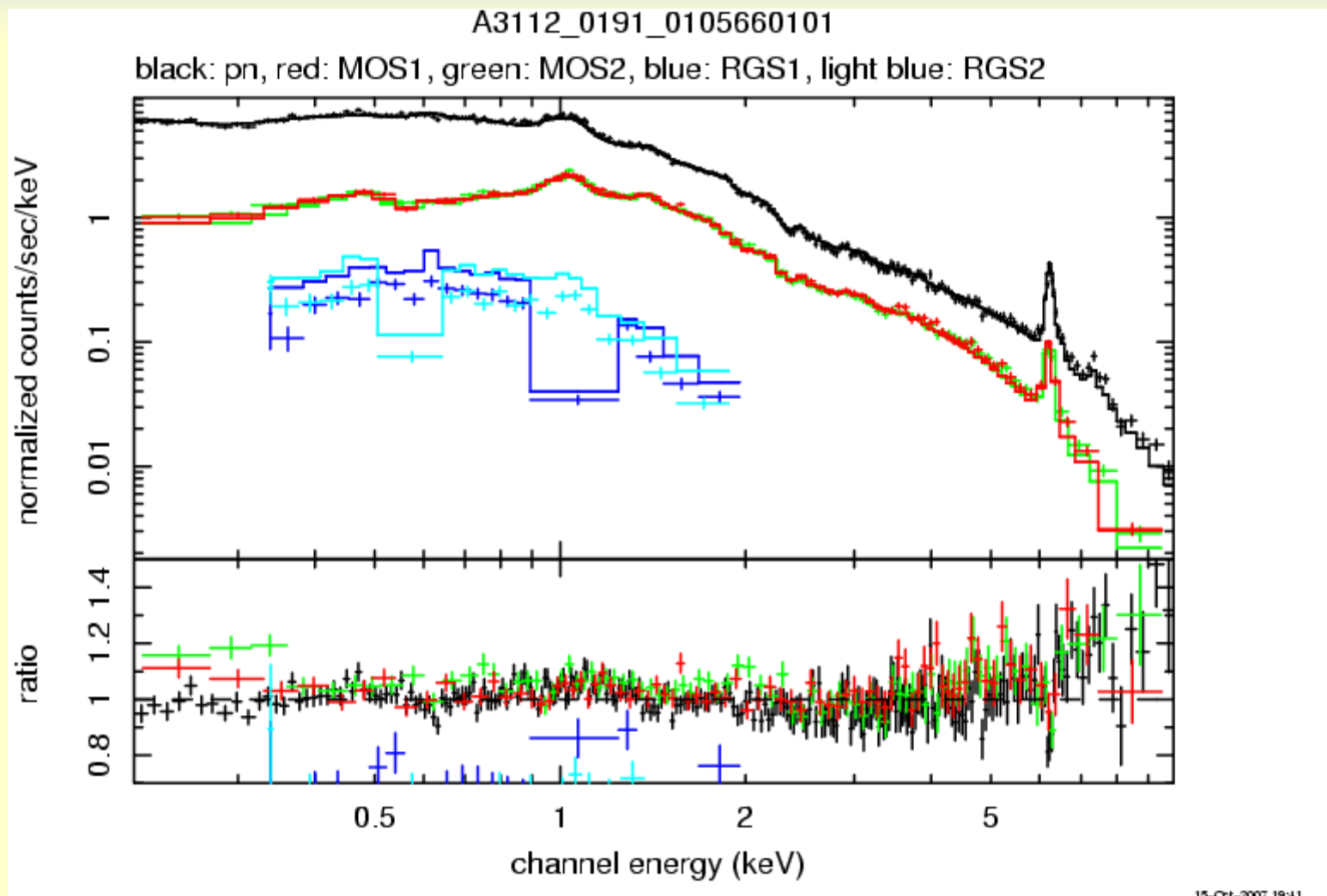
MOS2: 1.801
±0.008

RGS1: 1.86±0.03

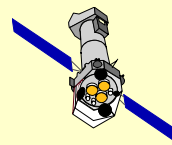
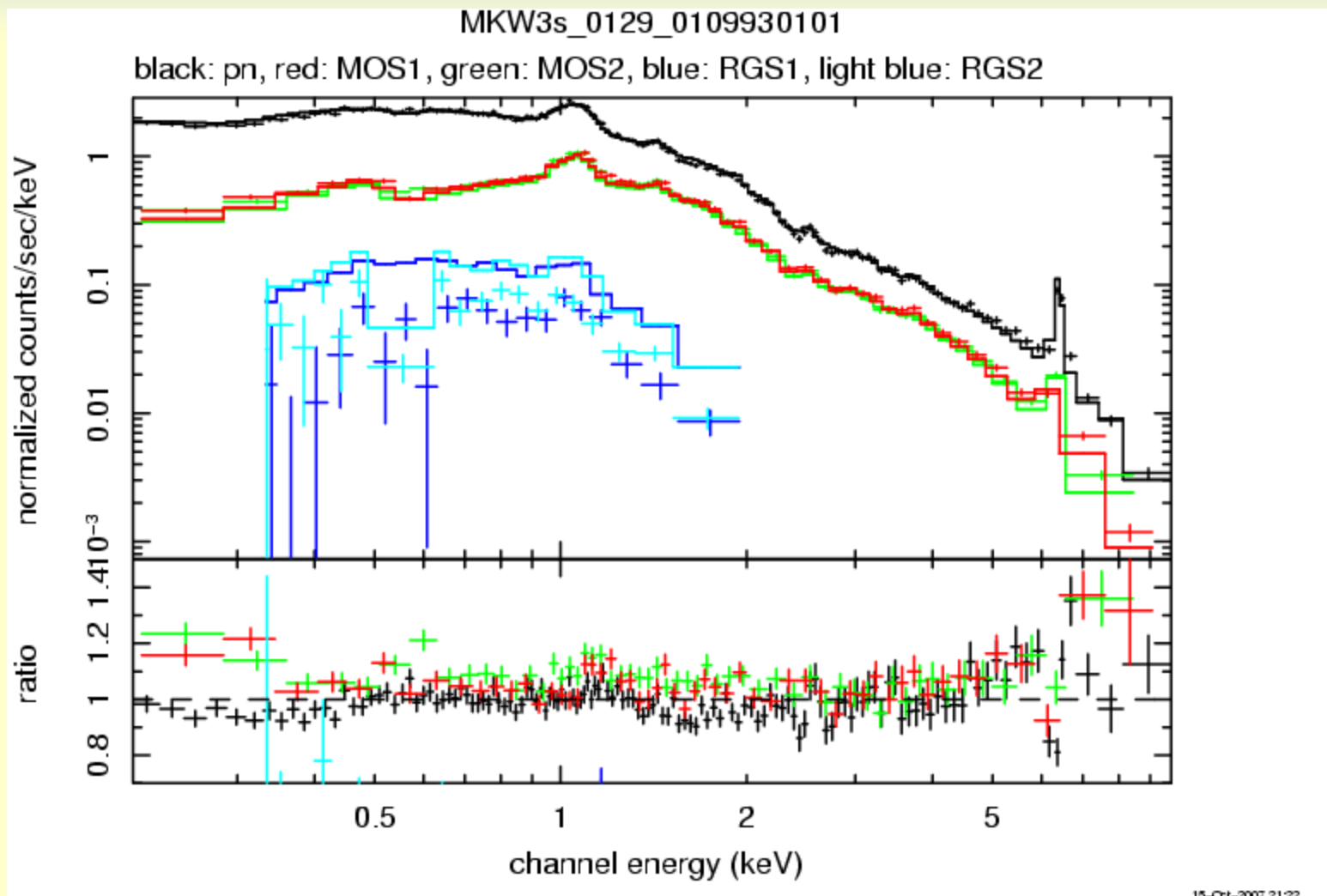
RGS2: 1.88±0.03



Galaxy Clusters

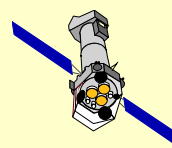


Galaxy Clusters



Galaxy Cluster: Temperatures

	A3112	MKW3s
PN	4.06 ± 0.05 keV	3.23 ± 0.05 keV
MOS1	4.29 ± 0.09 keV	3.32 ± 0.07 keV
MOS2	4.14 ± 0.09 keV	3.16 ± 0.07 keV



Low Energy Stability: RXJ1856-3754

RXJ1856.6-3754 EPIC MOS1

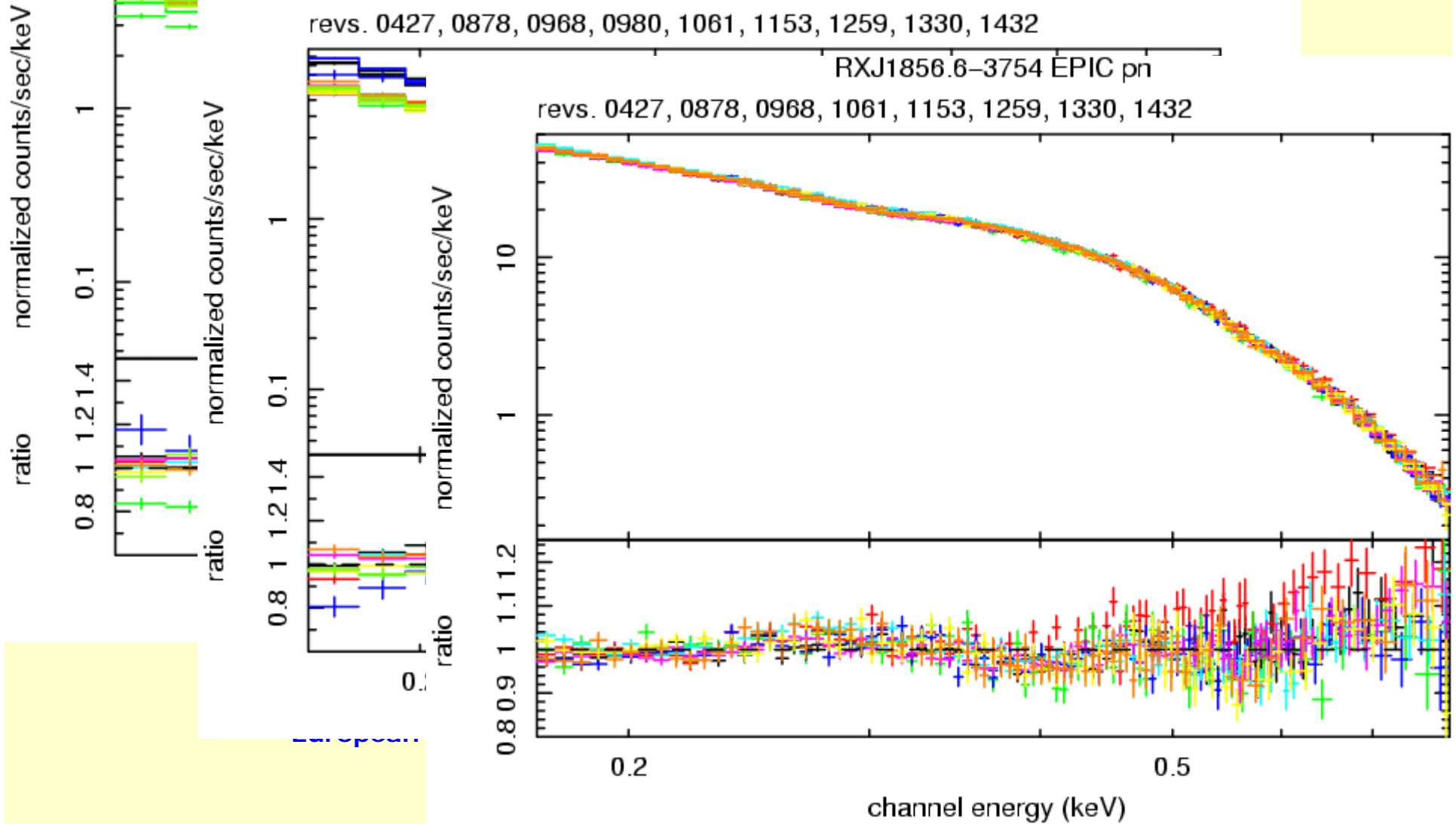
revs. 0427, 0878, 0968, 0980, 1061, 1153, 1259, 1330, 1432

RXJ1856.6-3754 EPIC MOS2

revs. 0427, 0878, 0968, 0980, 1061, 1153, 1259, 1330, 1432

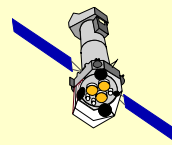
RXJ1856.6-3754 EPIC pn

revs. 0427, 0878, 0968, 1061, 1153, 1259, 1330, 1432



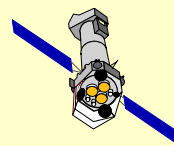
RXJ1856-3754: Absorbed black body

Energy band 0.15-0.8 keV	N_H [10^{19}cm^{-2}]	Temperature [eV]	Norm. 1keV [10^{-4}]
PN	6.7 ± 0.2	62.2 ± 0.1	2.88 ± 0.03
MOS1	$4.3^{+0.4}_{-0.7}$	64.5 ± 0.3	$2.51^{+0.04}_{-0.06}$
MOS2	< 1	64.4 ± 0.1	2.67 ± 0.01

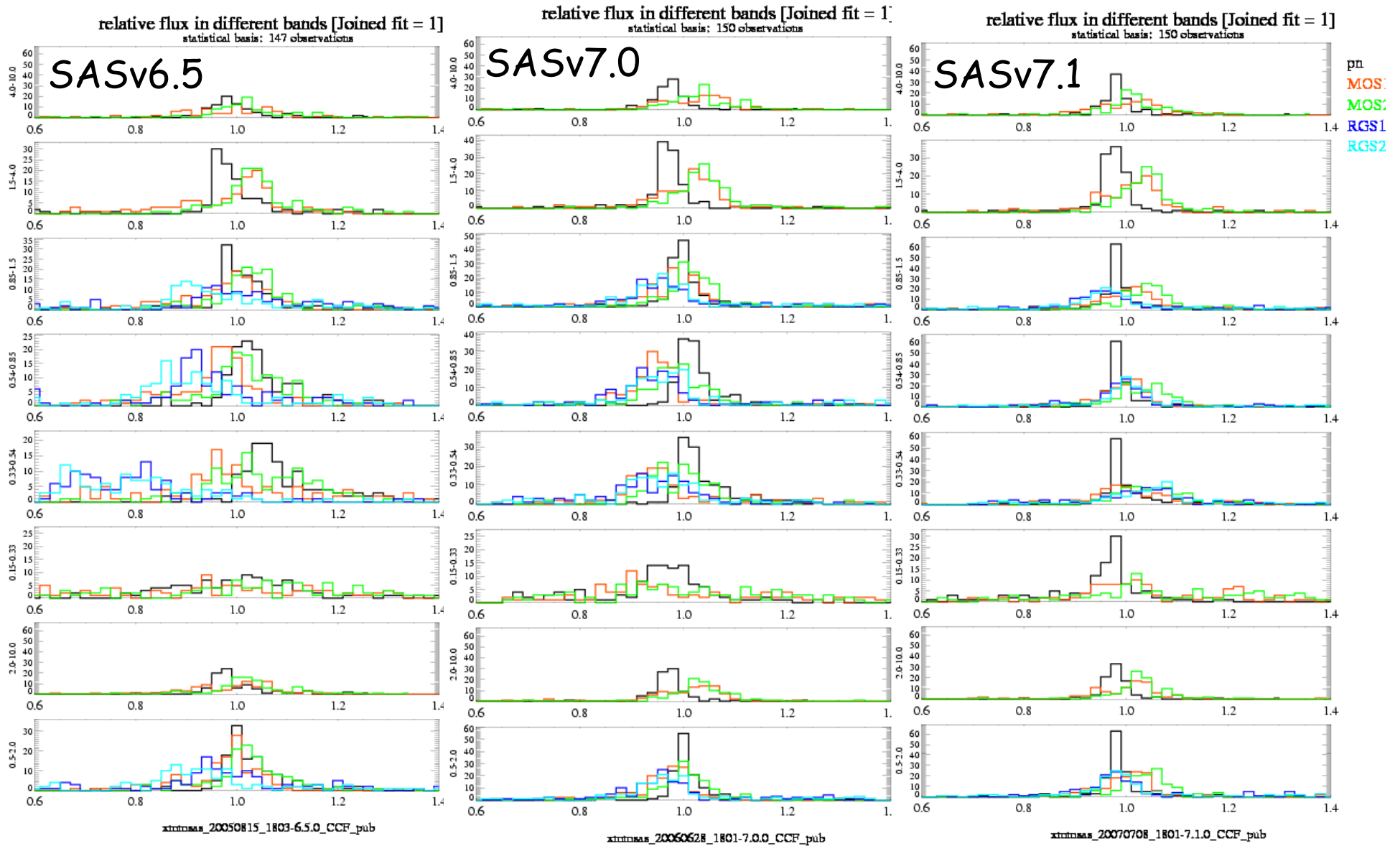


Cross-calibration archive

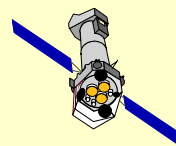
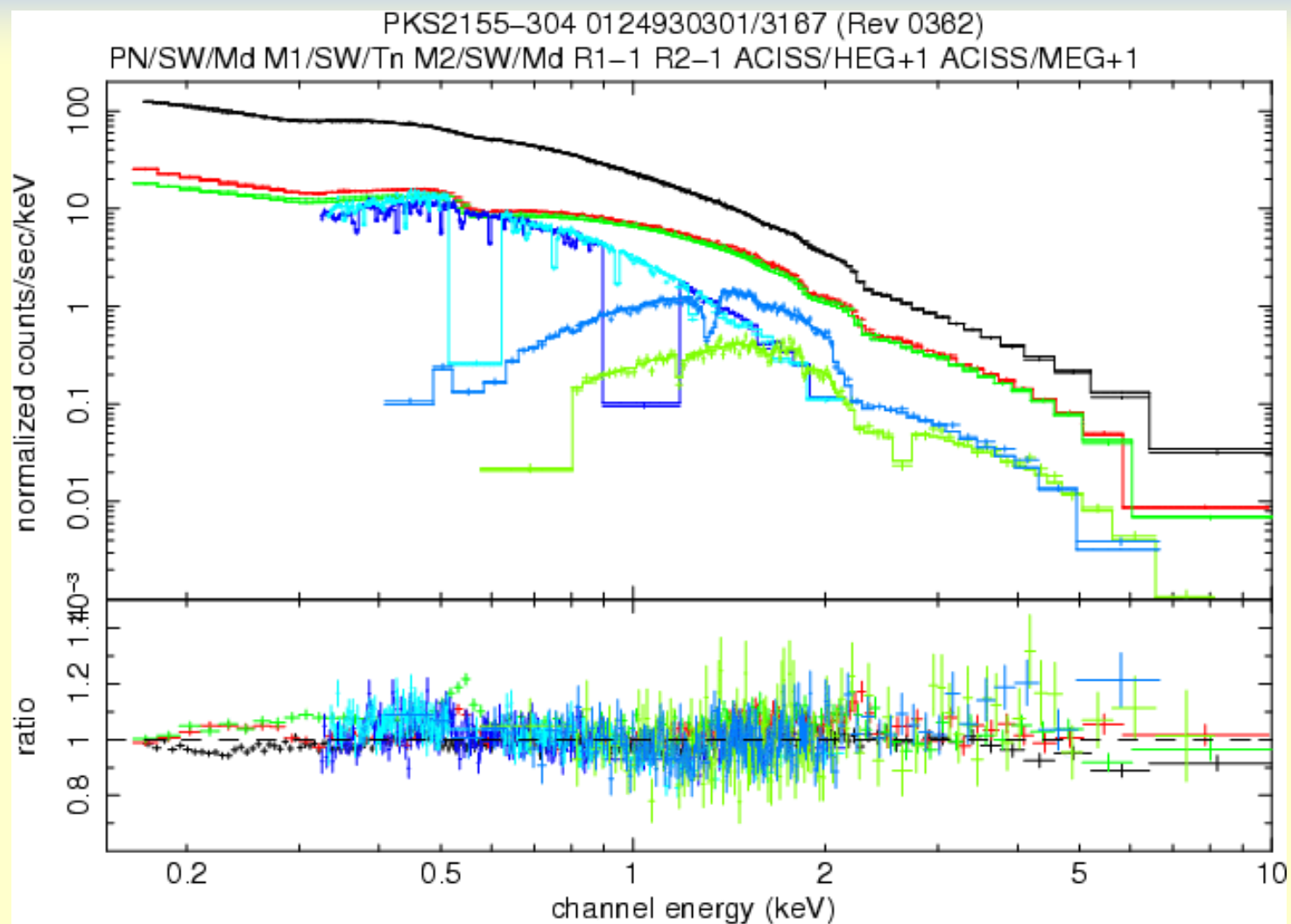
- to go public by end 2007
- Current content:
 - ~ 250 observations
 - ~ 150 checked in for automated processing (XMM only)
 - ~ 20 checked in for automated processing (XMM-Chandra)
 - all will be checked in by end 2007 (definition of extraction region/times and check for pile up needs to be checked and iterated ONCE manually)
- Using ESAC grid:
 - 10 nodes so far, each node has 2 CPUs Intel(R) Xeon(TM) 3.00GHz with 6GB of memory
 - ➔ process and fit **150 Observations /24 hours**



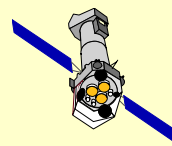
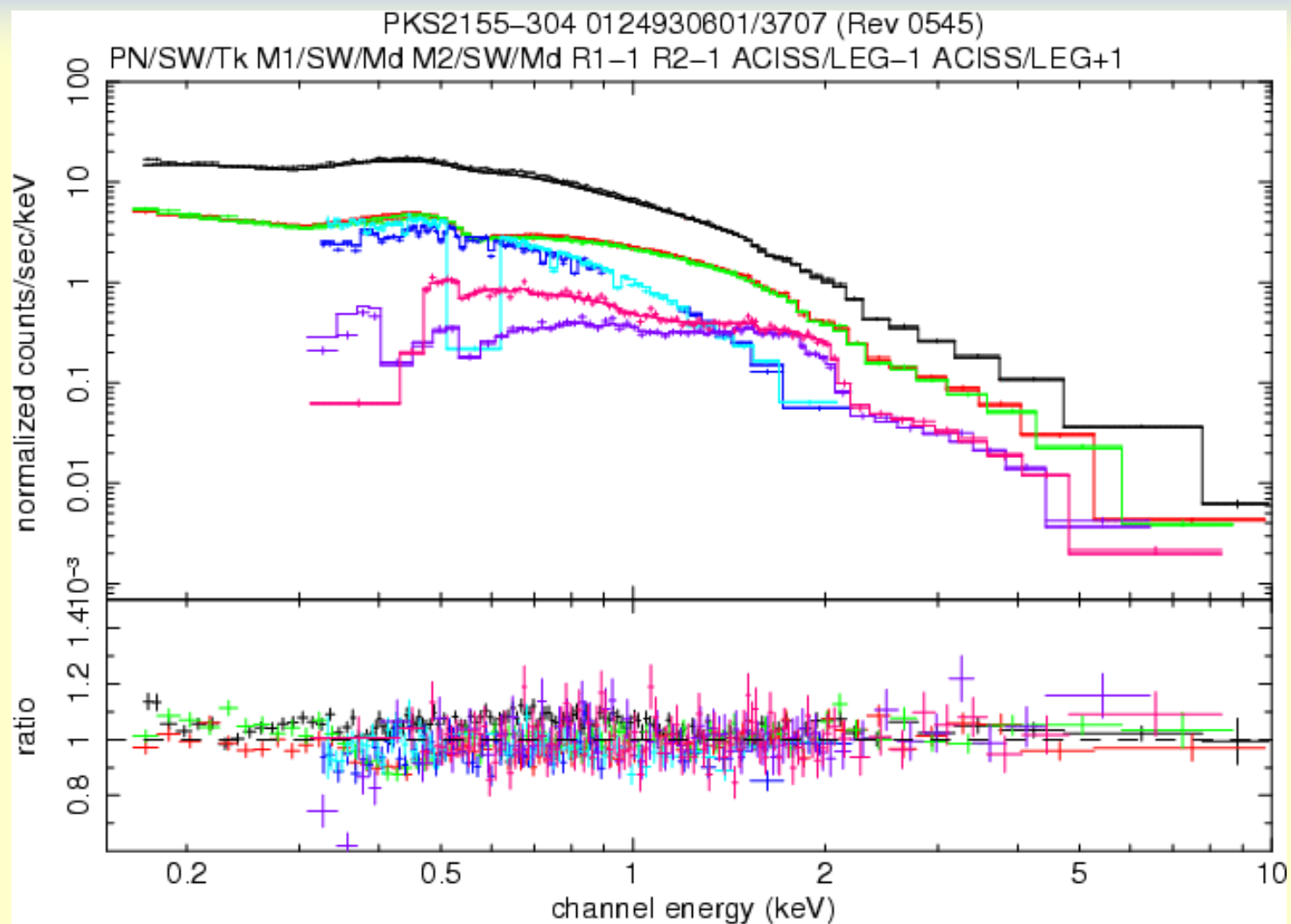
Cross-calibration: Statistics

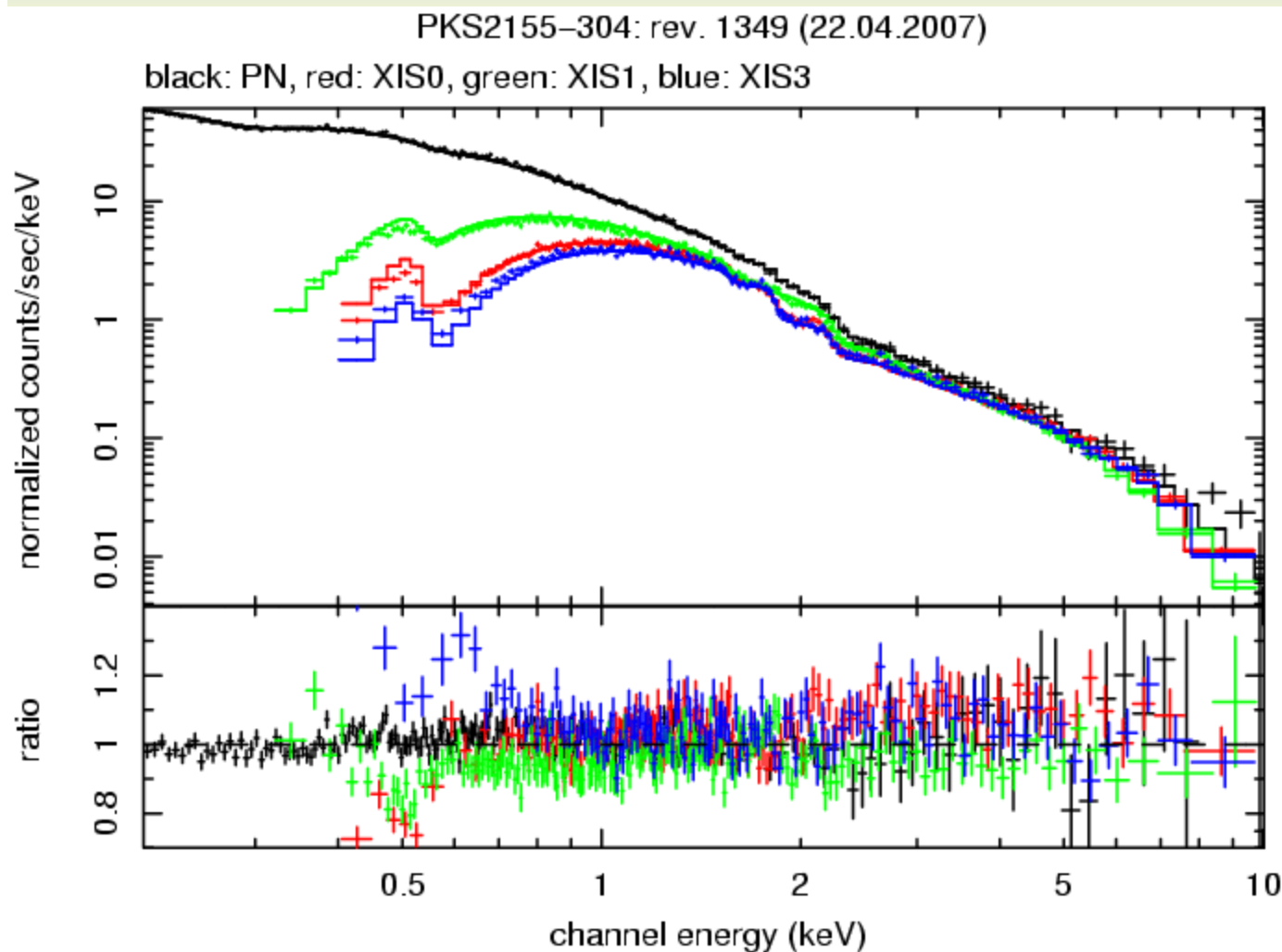


XMM-Newton / Chandra



XMM-Newton / Chandra



XMM-Newton / Suzaku

Suzaku extraction
script ready.

Spectral slopes
agree well.

Correct
normalisation still
slightly unclear
due to open
questions on data
extraction.

