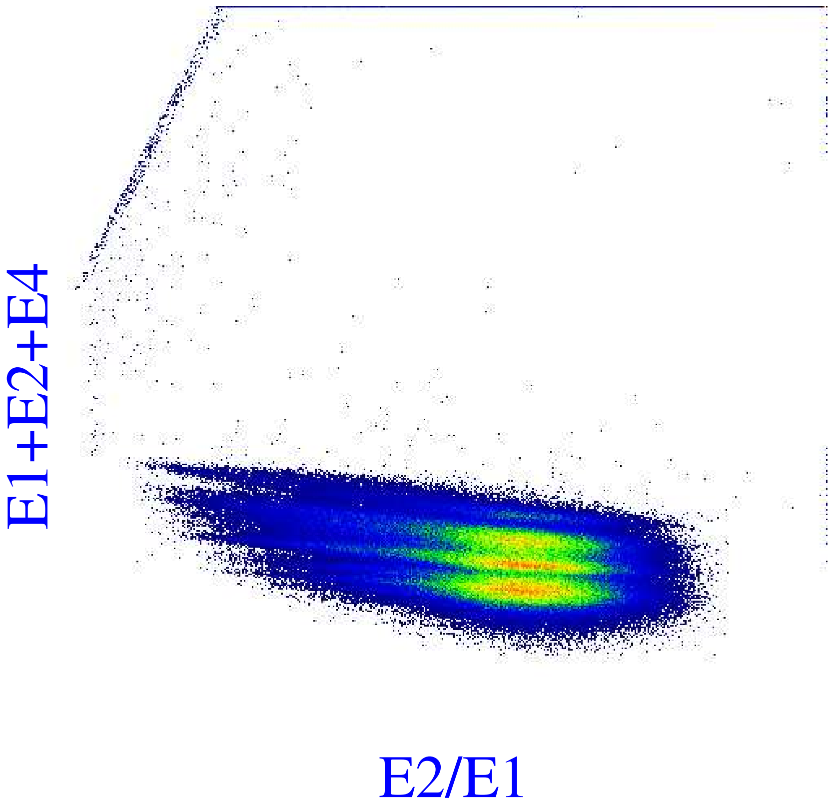
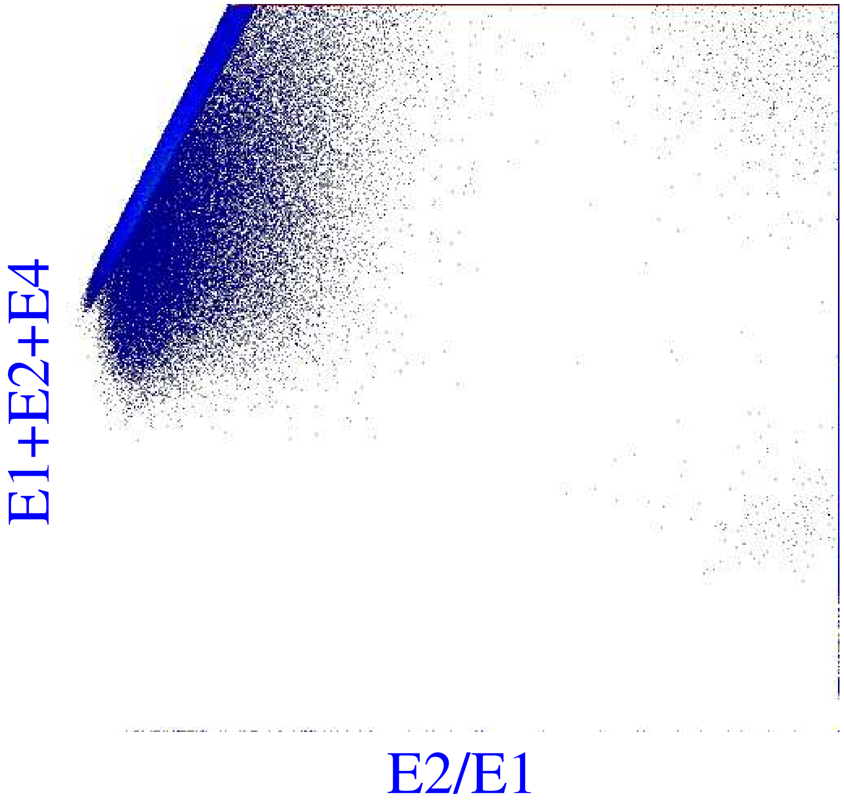
Selecting X–rays P31 from Cosmic Rays P31...



Distribution of ground calibration P31 (Peripix=7) X–ray events [3.7 : 12] keV.

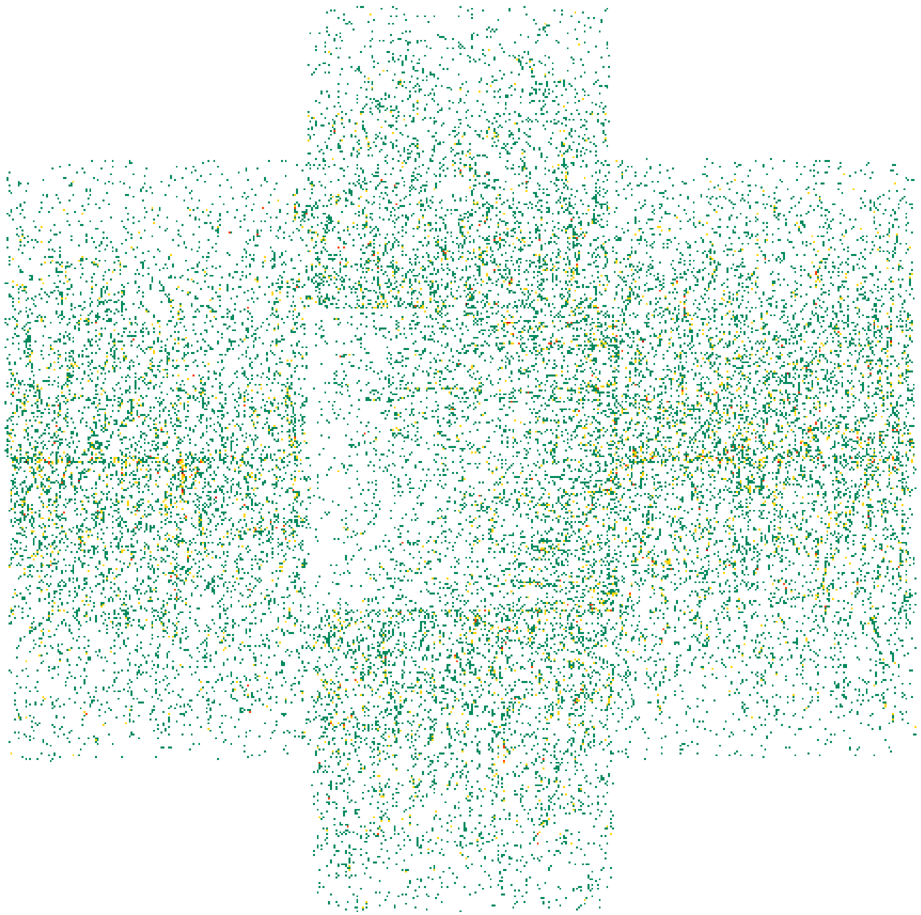


Distribution of on–flight P31 (Peripix=7) Cosmic ray background events.

JLSauvageot,SAp,CEA Saclay

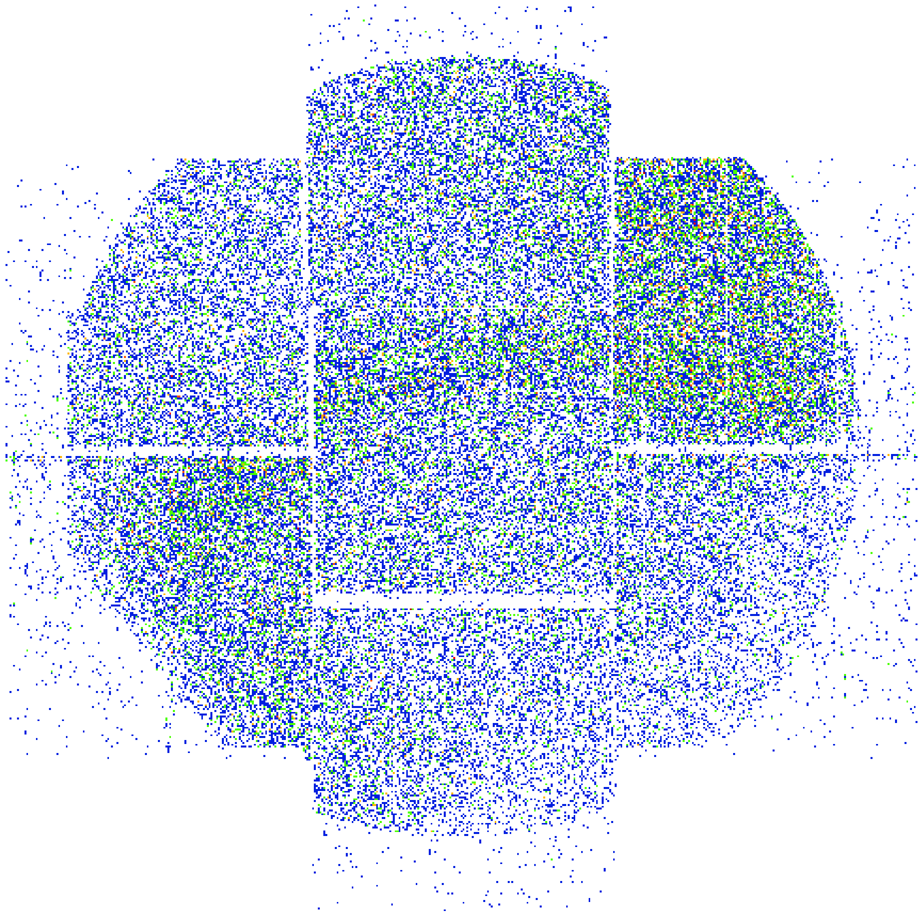
P31 from CAL Observation

Cosmic Rays Evts



E1+E2+E4 > 2500

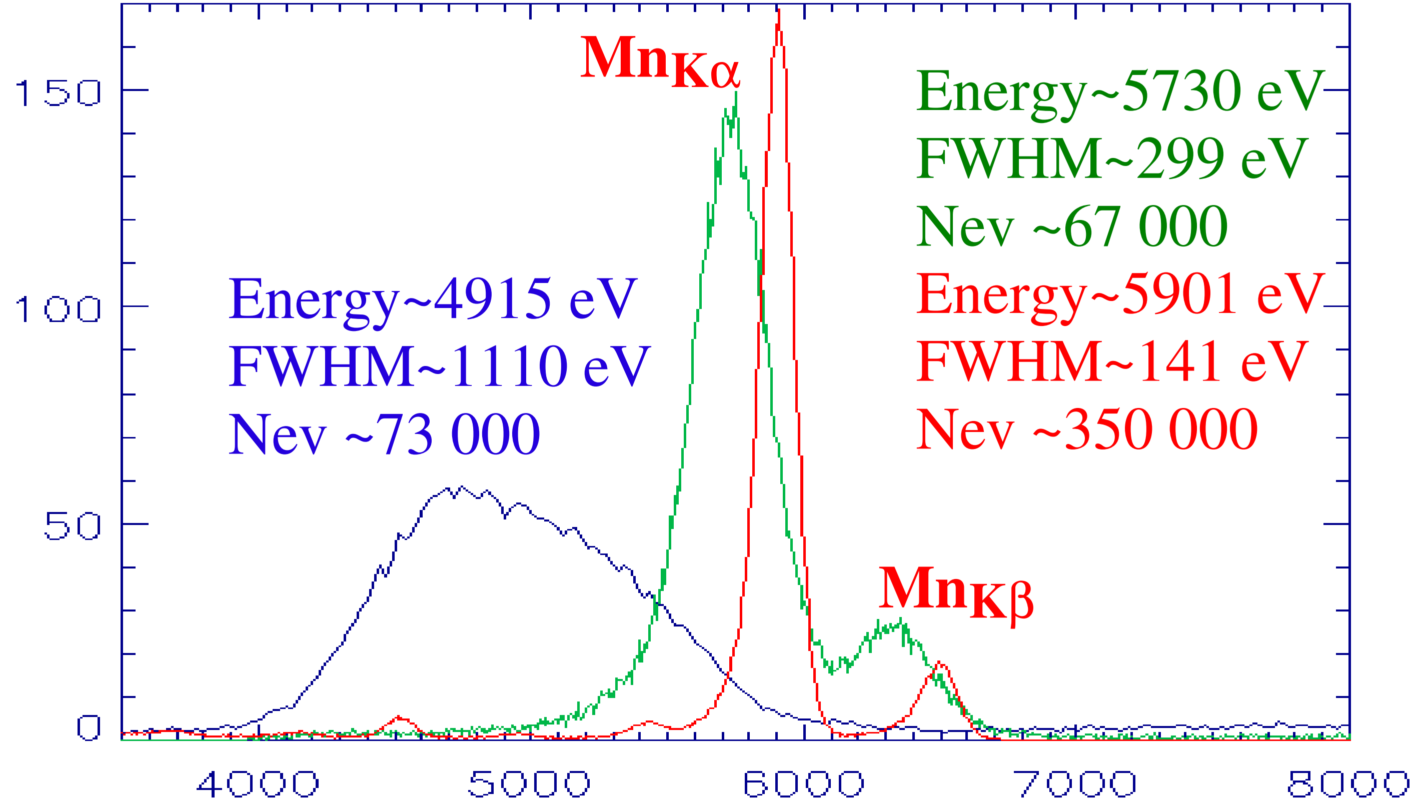
X–Rays Evts



E1+E2+E4 < 2300

JLSauvageot,SAp,CEA Saclay

Reconstruction the P31 X–rays Energy

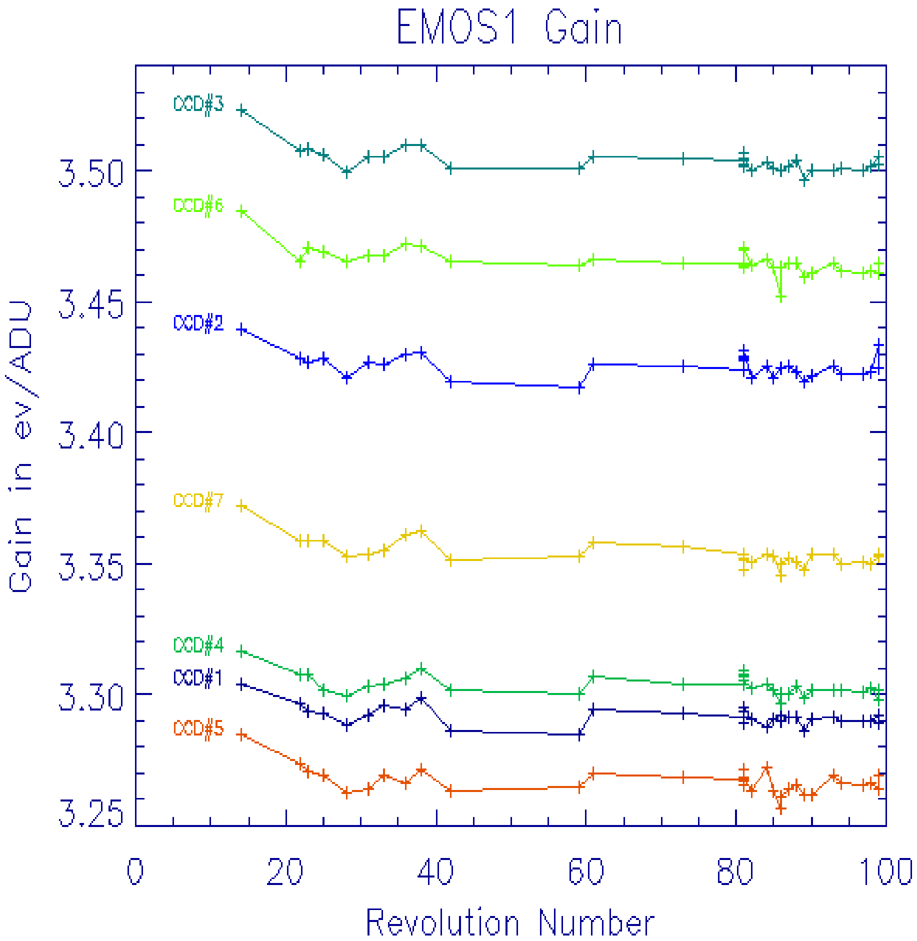


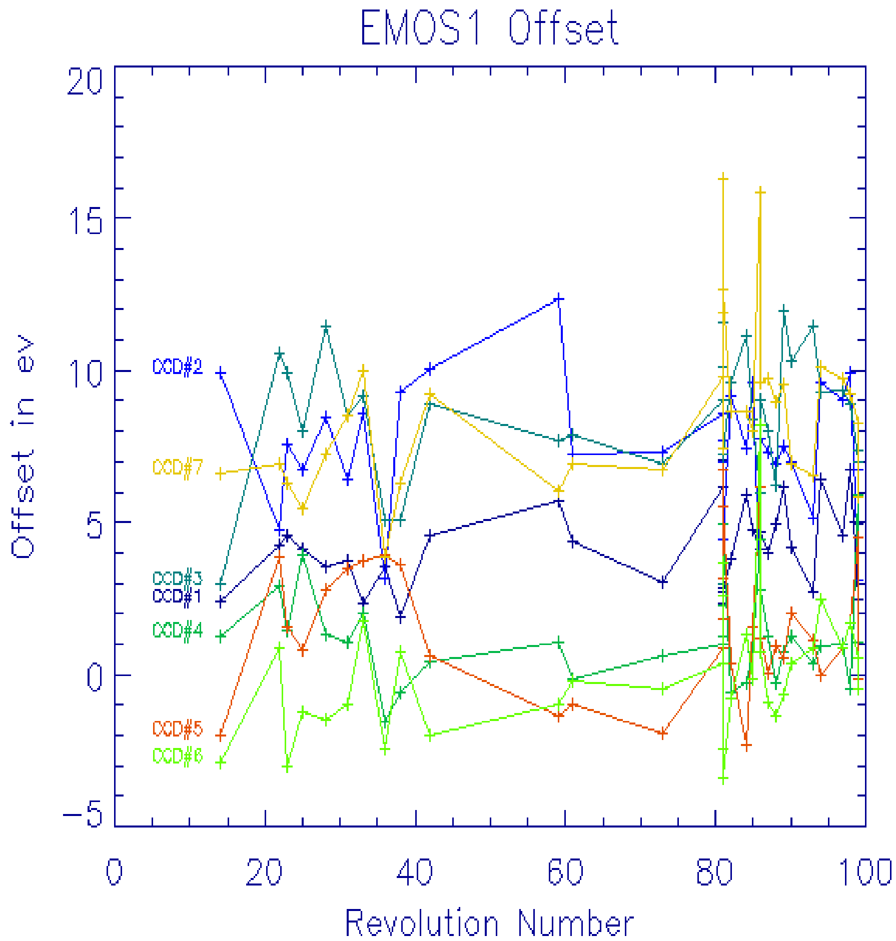
CloseCAL P31 Spectrum. Energy is reconstructed with E1+E2+E4

Green: Pattern 31 reconstructed using Leakage Estimate.
Brown: P0–12 standard reconstruction method. (Flux/10)

Cl: Much better, nearly usable but still need some improvement

Gain and Offset Monitoring of All CCDs EMOS1

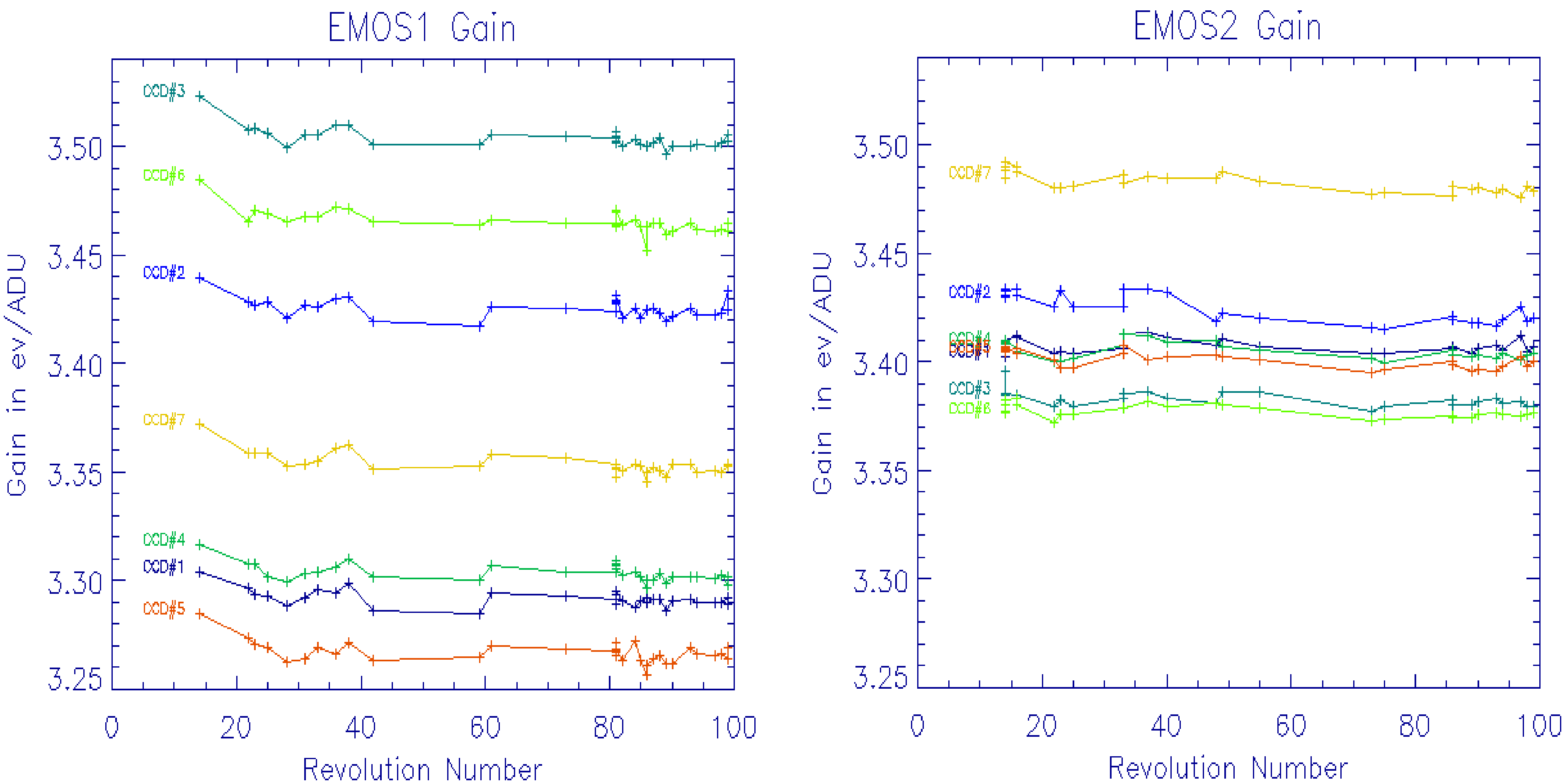




Are the Offset (determined with 3 lines > 1.47 keV) reliable ?
It seems that they varies more or less in phase ...

JLSauvageot,SAp,CEA Saclay

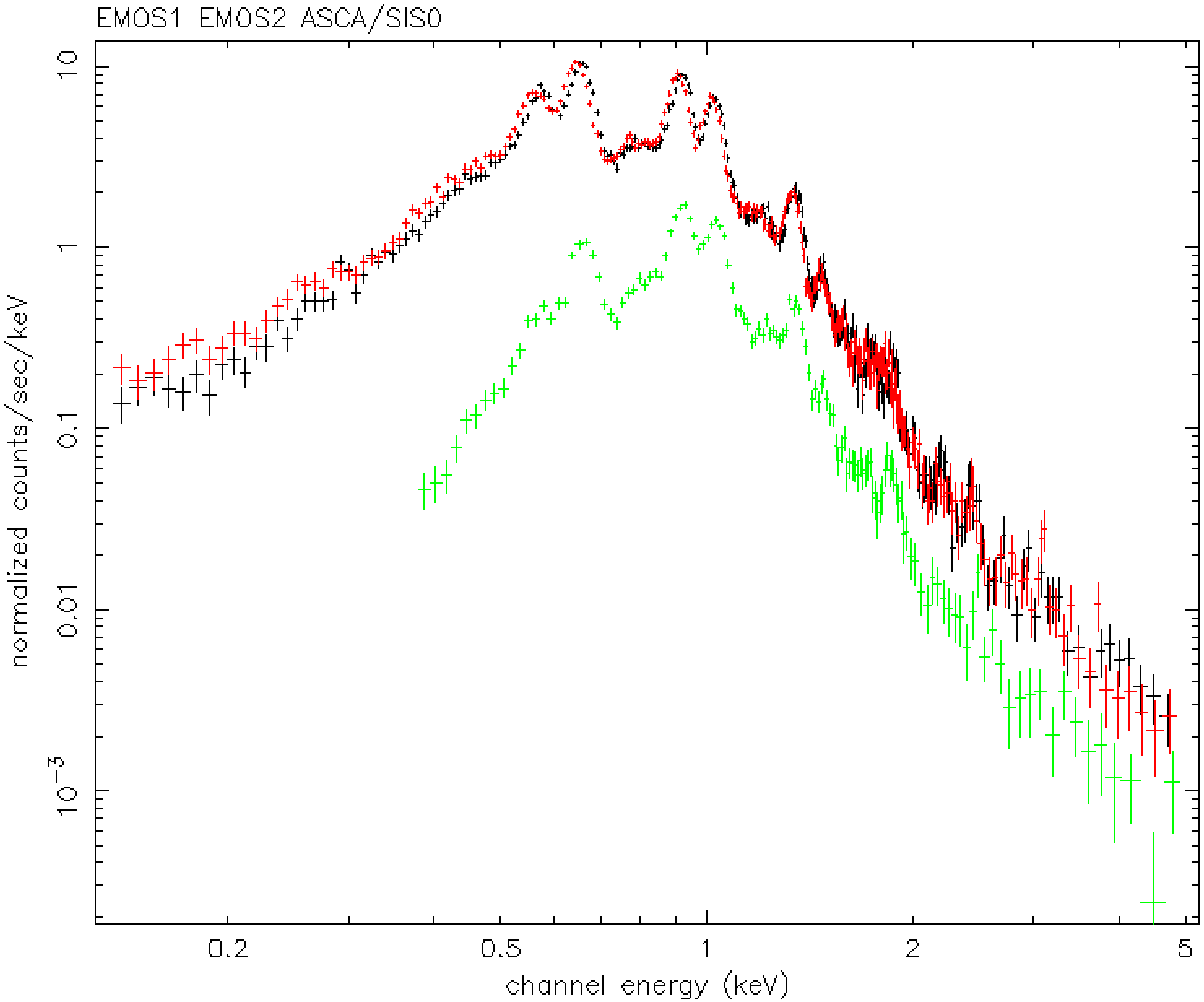
Gain Monitoring of All CCDs



N.B. Same Y range in both plots. EMOS2 Gain more homogeneous ?
Could we interpolate Gain between missing CAL Observation
or is it better to consider that gains are stables after REV30 ?

JLSauvageot,SAp,CEA Saclay

1ES0102–72 EMOS1&2+ASCA

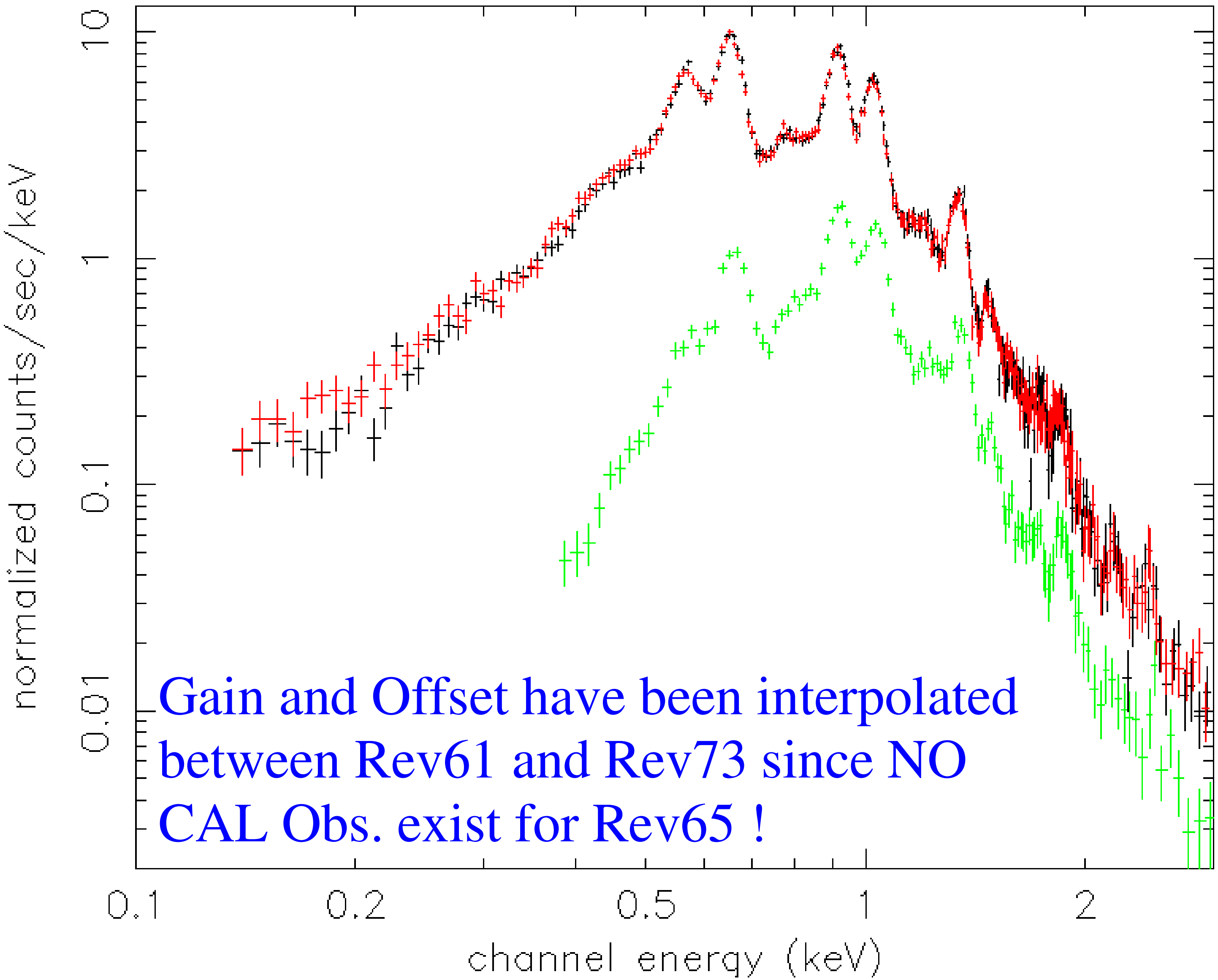


No Gain Monitoring Correction. Gain evaluated from Rev 23

JLSauvageot,SAp,CEA Saclay

1ES0102−72 EMOS1&2+ASCA

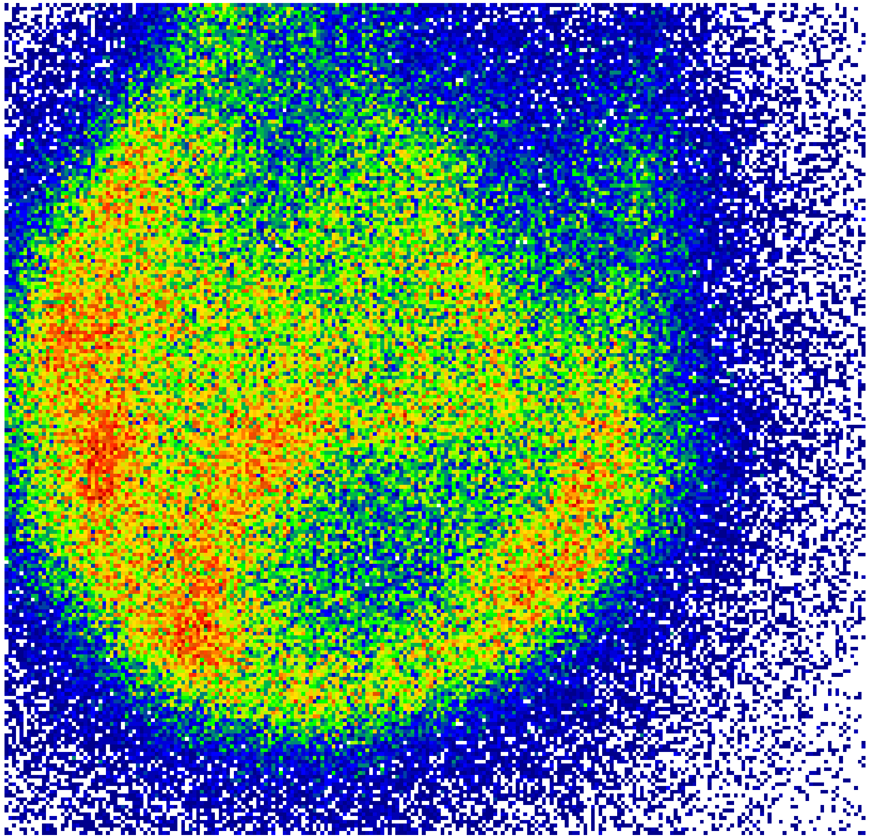
EMOS1 EMOS2 AFTER Gain Monitoring Correction



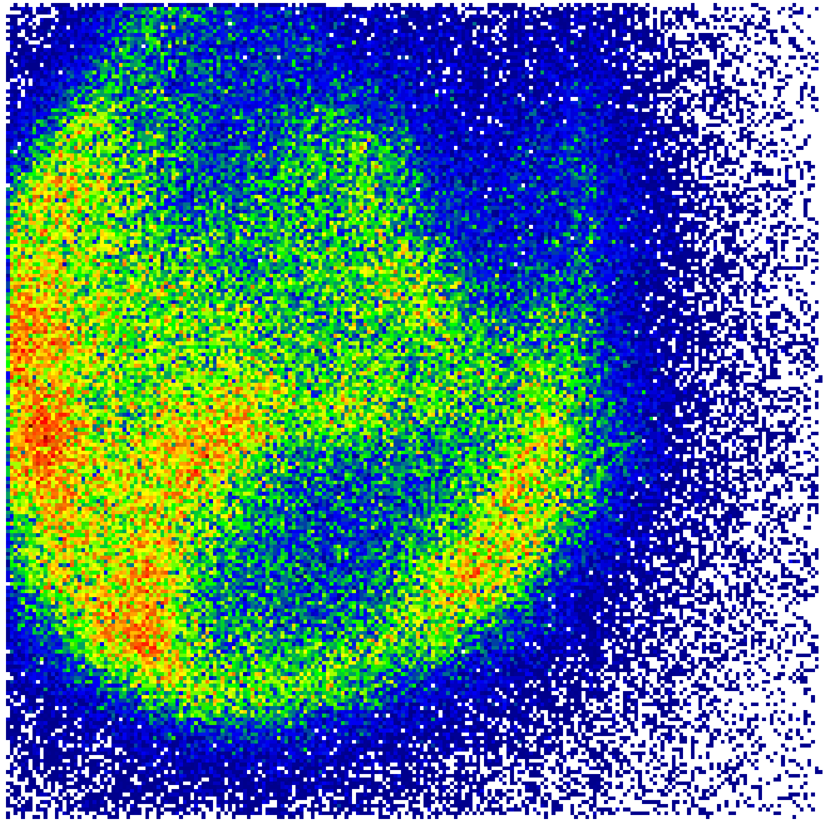
JLSauvageot,SAp,CEA Saclay

N132D LMC SNR

EMOS1 Full Window mode



EMOS2 Small Window Mode



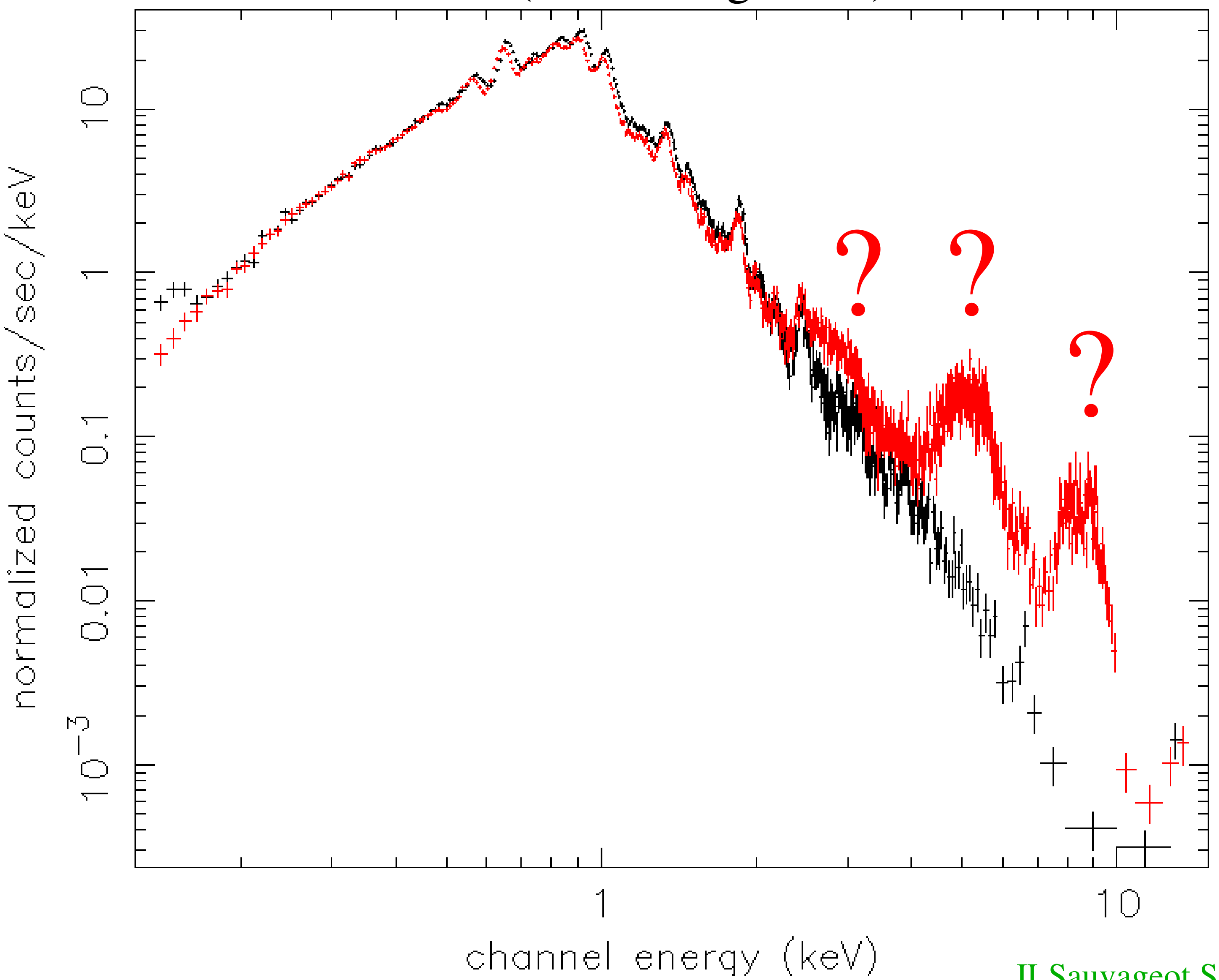
All Cleaned Events

At first glance, they look similar, except the first column of EMOS2

JLSauvageot,SAp,CEA Saclay

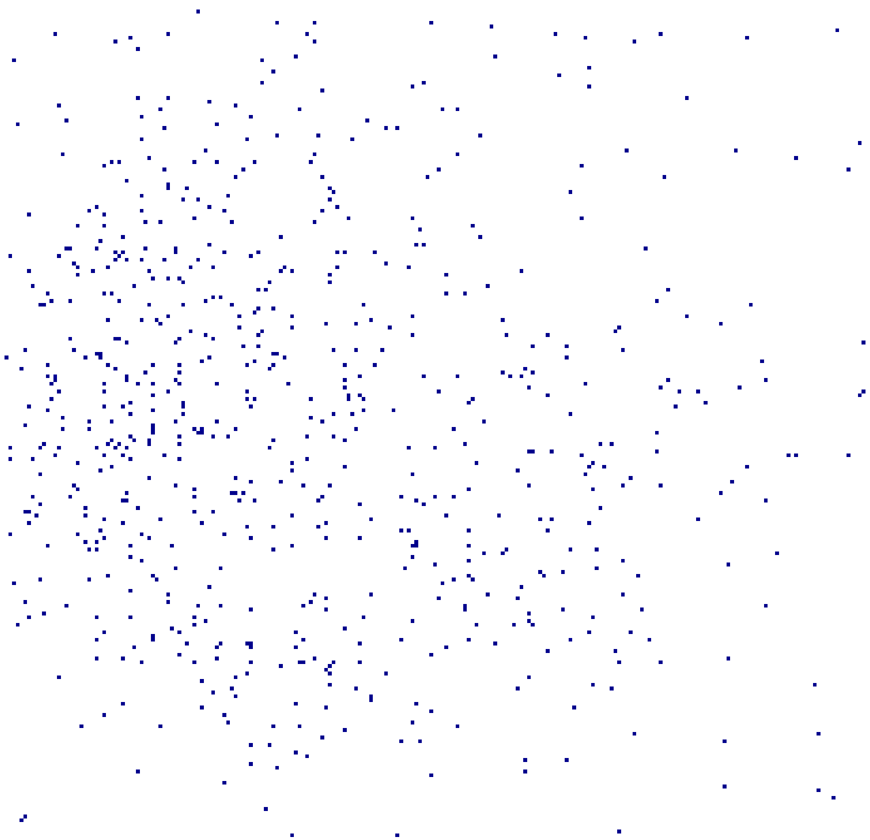
Spectra of the whole N132D

EMOS1 EMOS 2 (Rev0023 gains...)

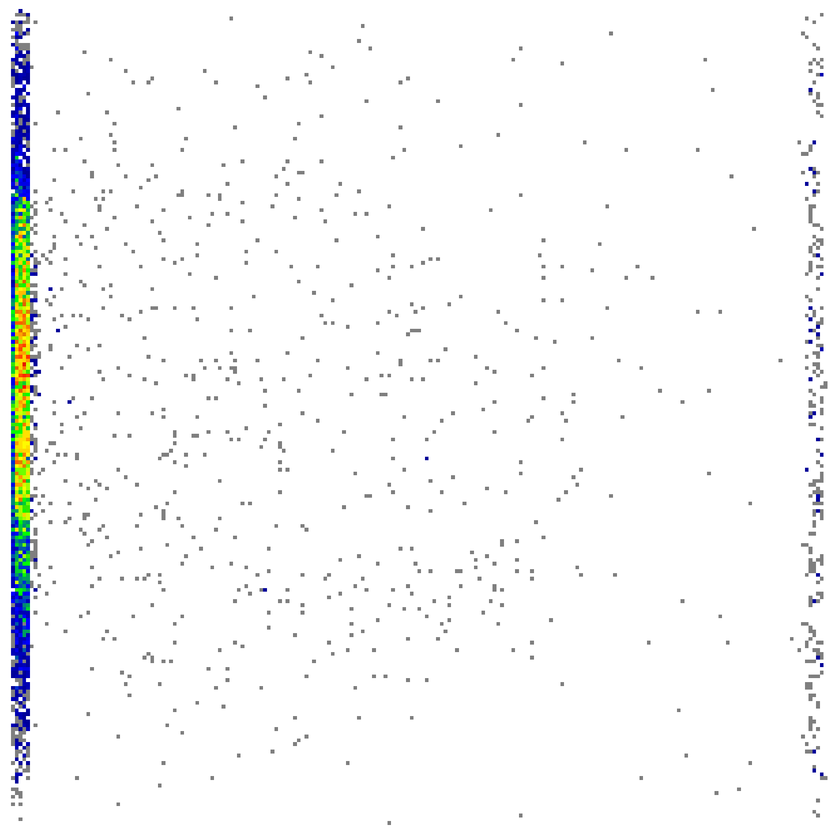


JLSauvageot,SAp,CEA Saclay

All cleaned Events above 4 keV



EMOS1
Full window mode



?

EMOS2
Small Window Mode

?

JLSauvageot,SAp,CEA Saclay

Summary ...

- Pattern 31 may be usable for Science ...
  - still need some work in gain ...
- Gain : What shall we do and when shall we know what it is happening ?
- Small Window Mode : Quiz for AFA ?