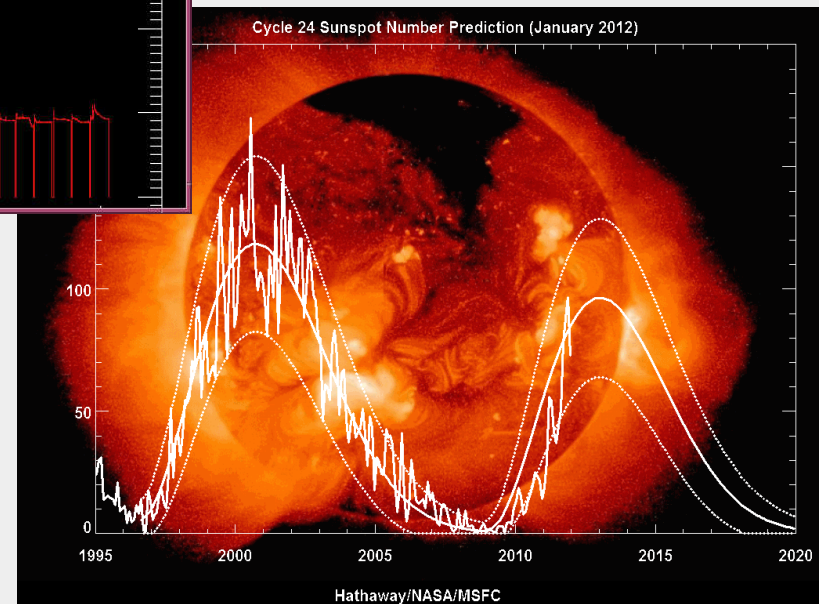
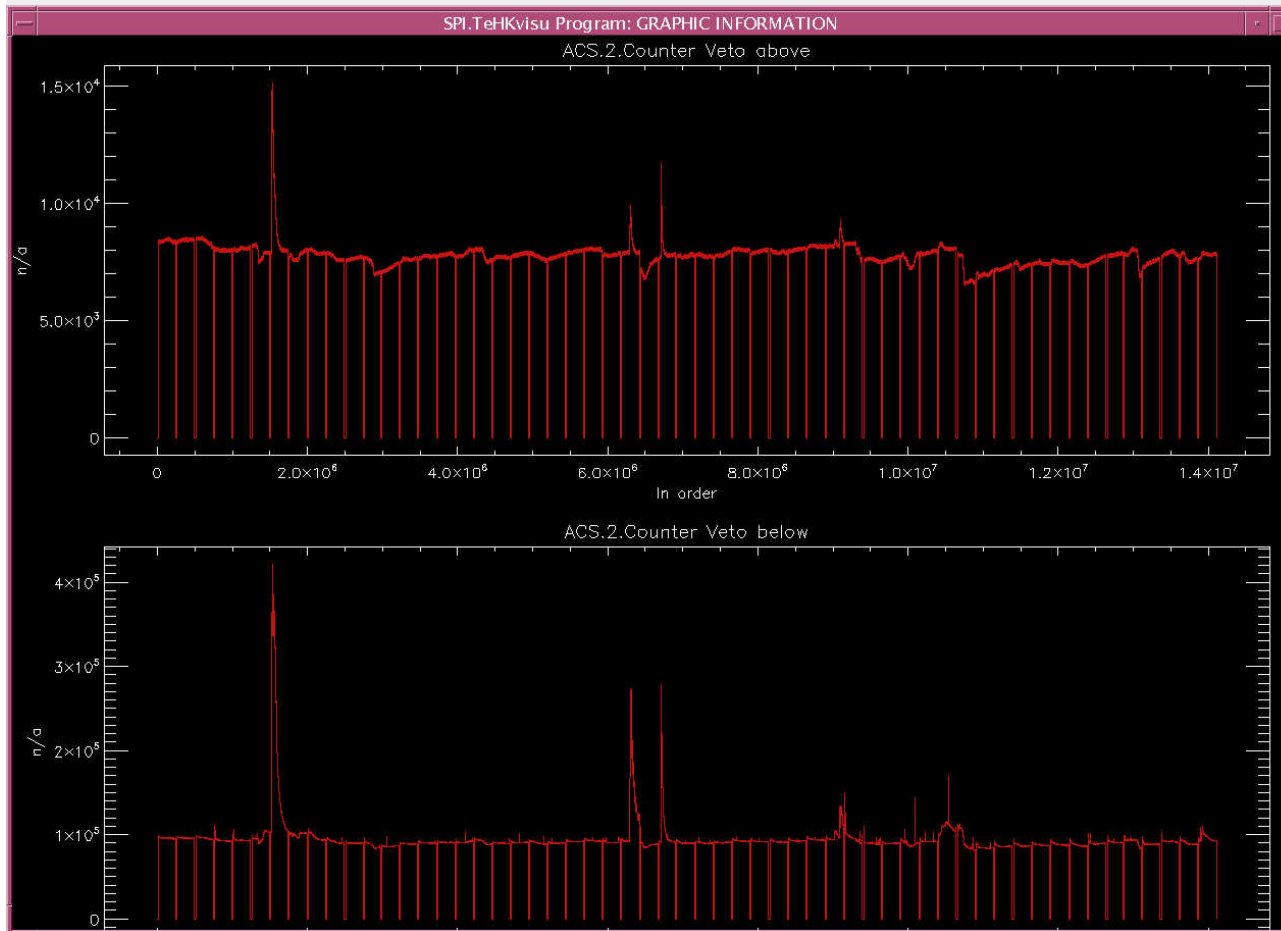


SPI STATUS

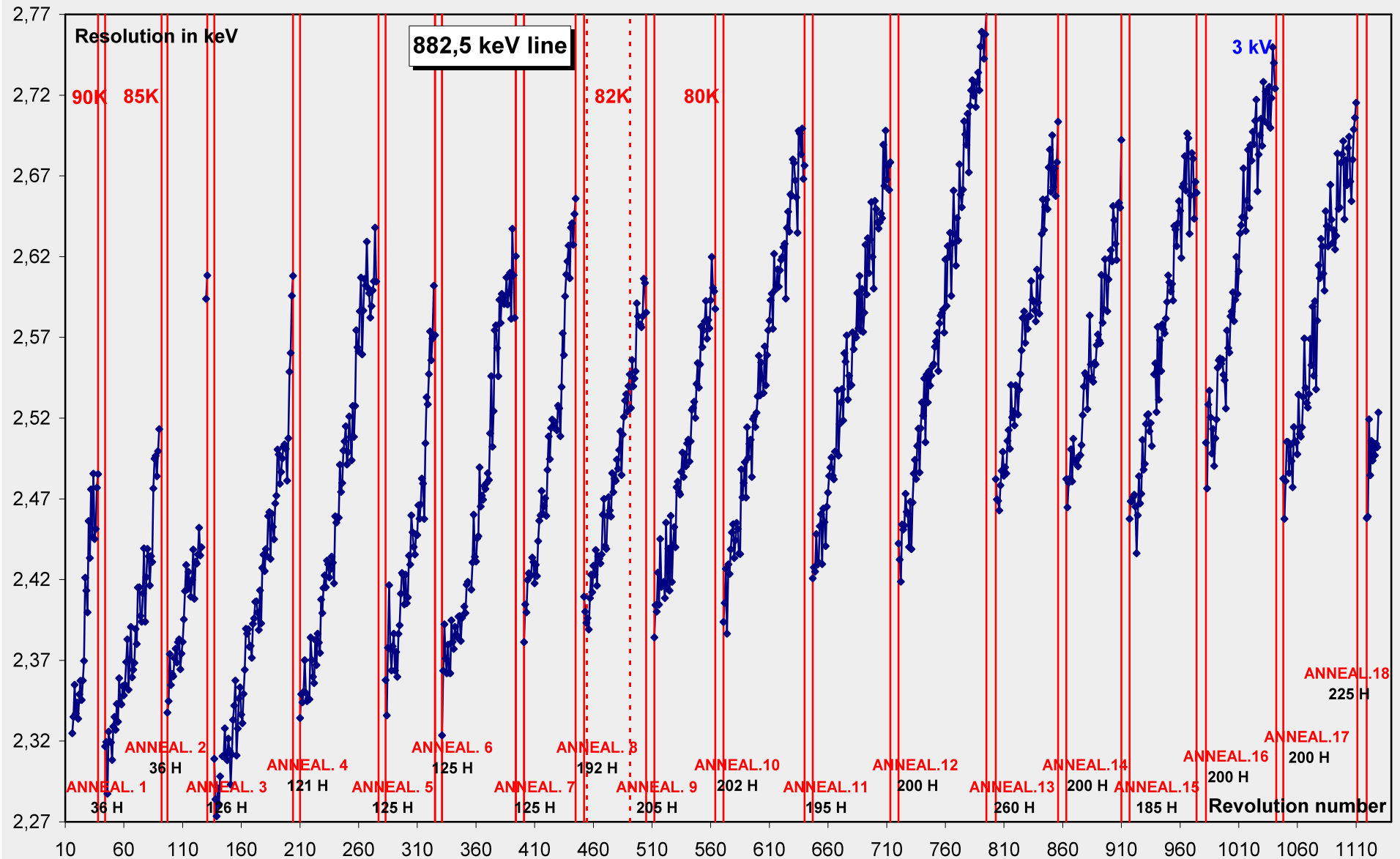


ANNEALING 18th

- Start: 2011, Nov 21th
- Camera switch on : 2011, Dec 9th
- Smooth reactivation
- Good recovery.
- HV set at 3KV
- Good recovery

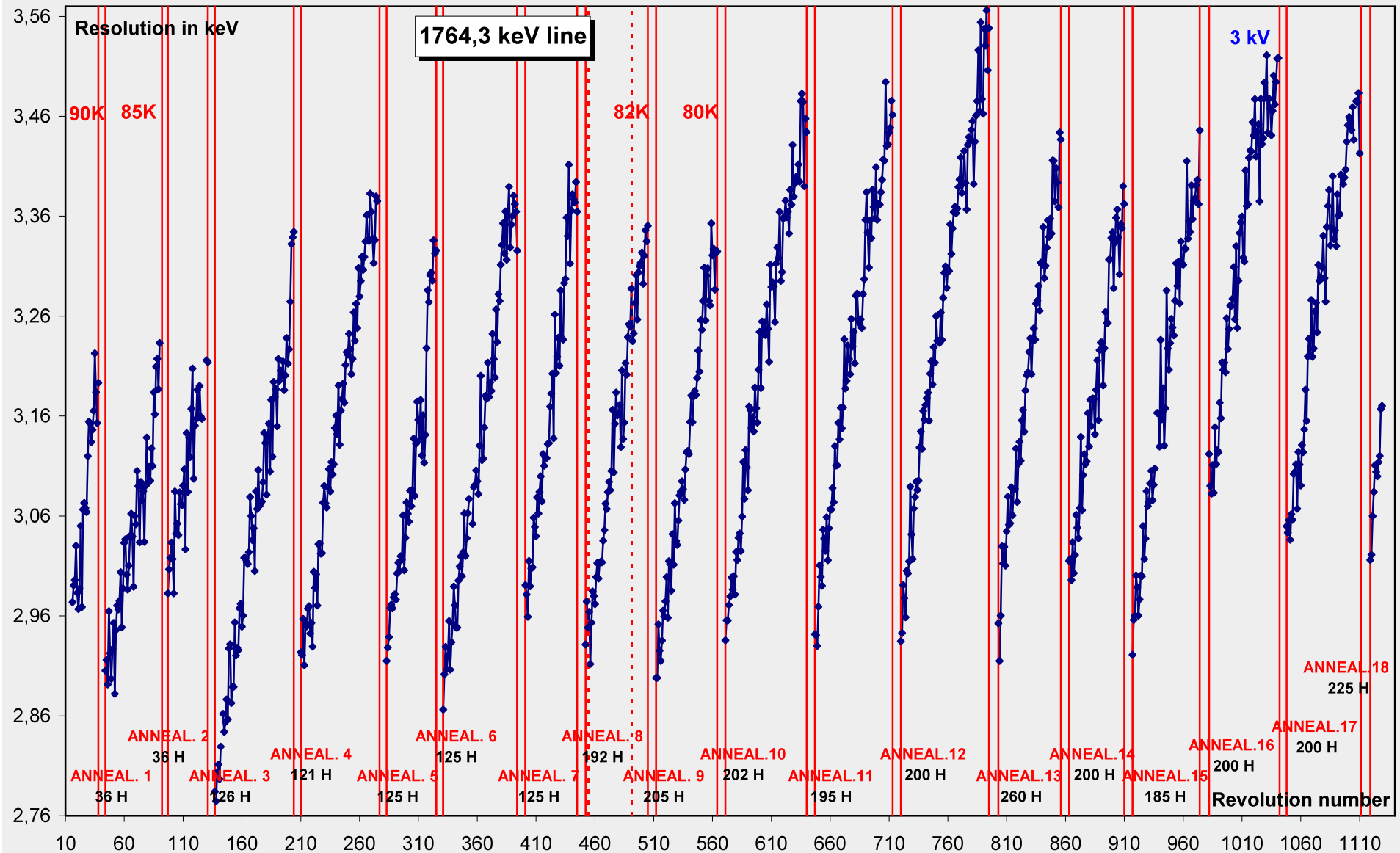
ENERGY RESOLUTION HISTORY: 882.5 keV

- Regular annealing (GeD at 105C) restore GeD energy resolution.



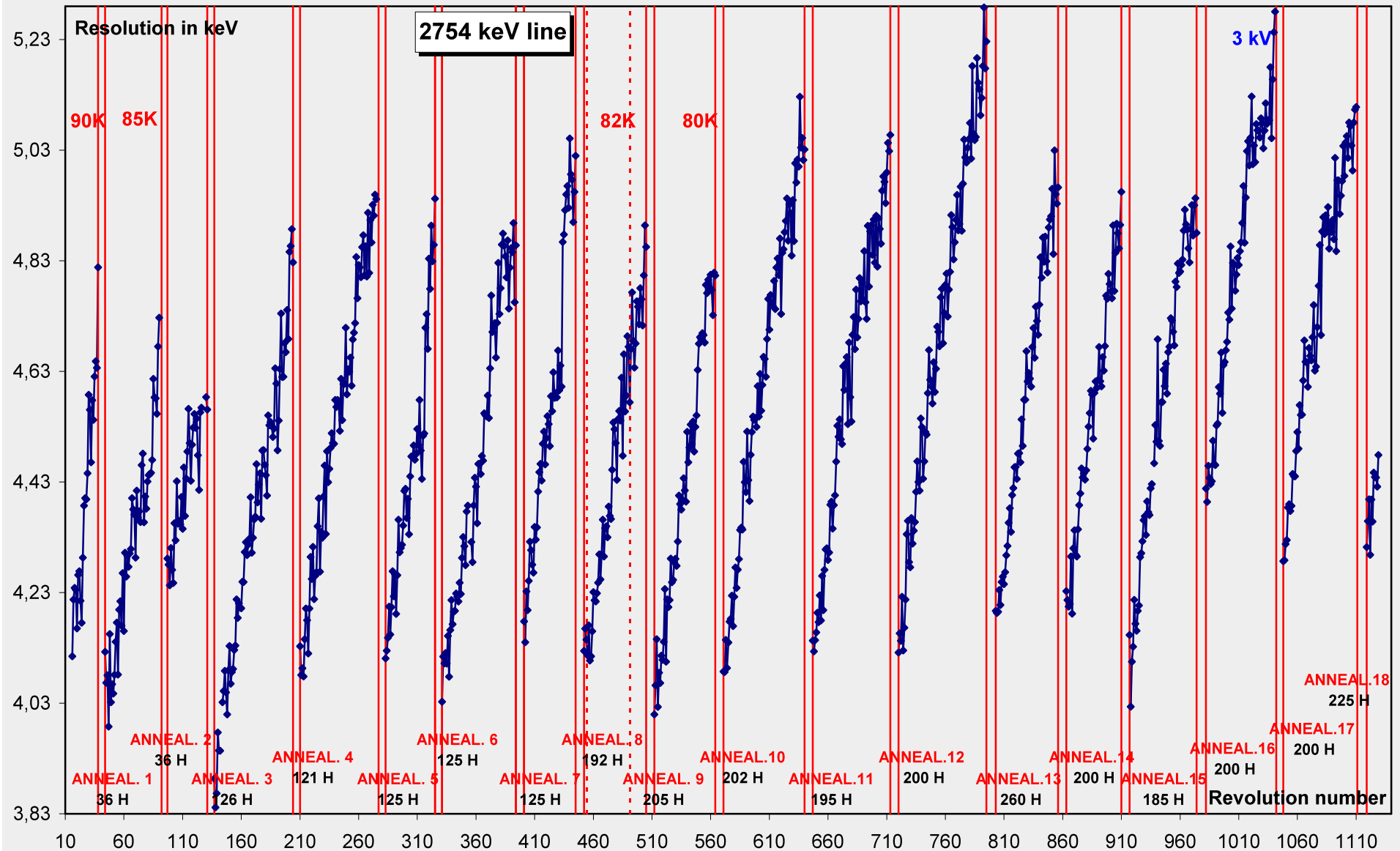
ENERGY RESOLUTION HISTORY: 1764.3 keV

- Regular annealing (GeD at 105C) restore GeD energy resolution.



ENERGY RESOLUTION HISTORY: 2754 keV

- Regular annealing (GeD at 105C) restore GeD energy resolution.

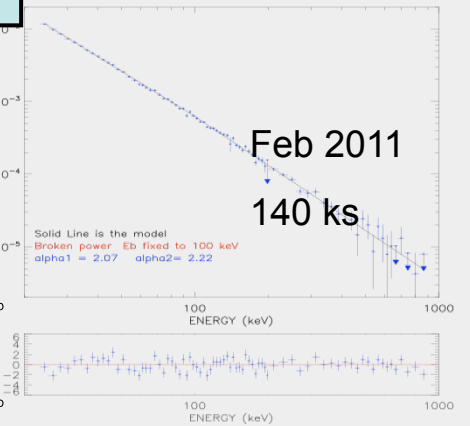
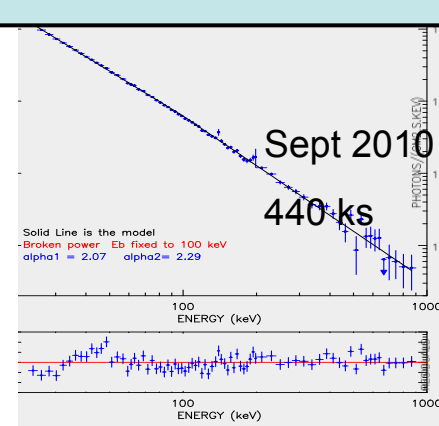
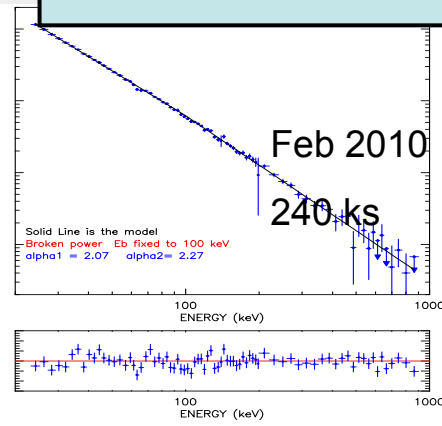
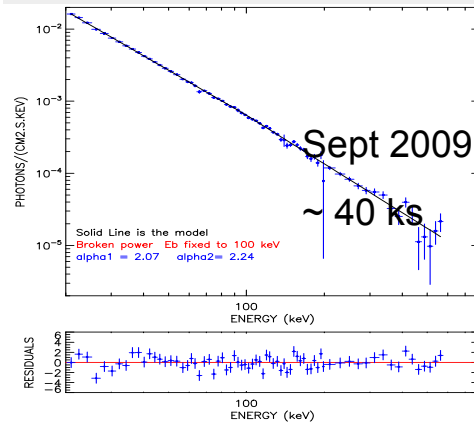


ANNEALING 18th: Anomalies

- Preamp. DC output voltage goes OOL during warming up of the cold-box: Det#8 and Det#11.
- Return to normal after cooling down
- After post-annealing tests, GeD8 and GeD11 are nominal....
- HV decrease:
 - One revolution at 2.5 KV
 - Then HV decrease is reasonable....

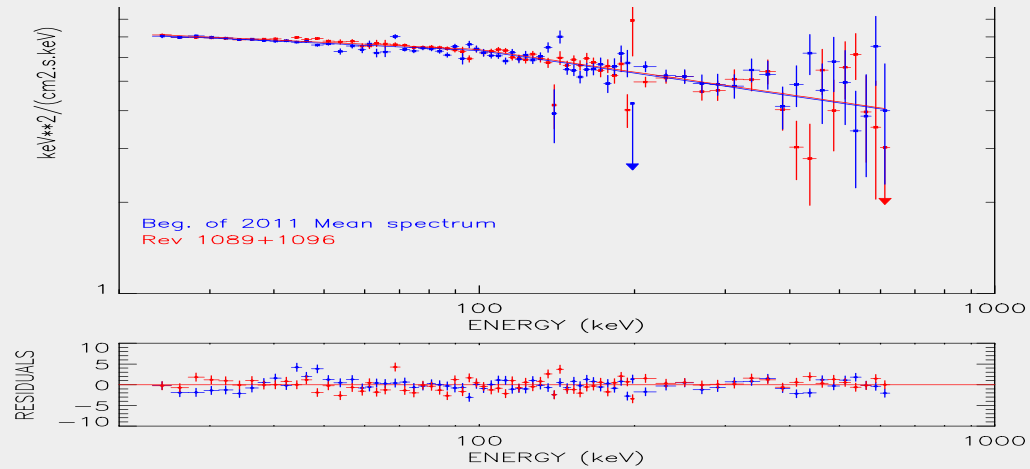
Crab calibration

Then



Rev #	Index 1	Ebreak	Index 2	Norme @ 100 keV
839	2.07	100 keV	2.24	6.45 10 ⁻⁴ ph/cm ² s.keV
902-903	2.07	100 keV	2.27	6.25 10 ⁻⁴ ph/cm ² s.keV
966-970	2.07	100 keV	2.29	6.3 10 ⁻⁴ ph/cm ² s.keV
1019	2.07	100 keV	2.22	6.3 10 ⁻⁴ ph/cm ² s.keV

CRAB-2011



- 100KeV flux and shape stable

Next Step: Multiple events

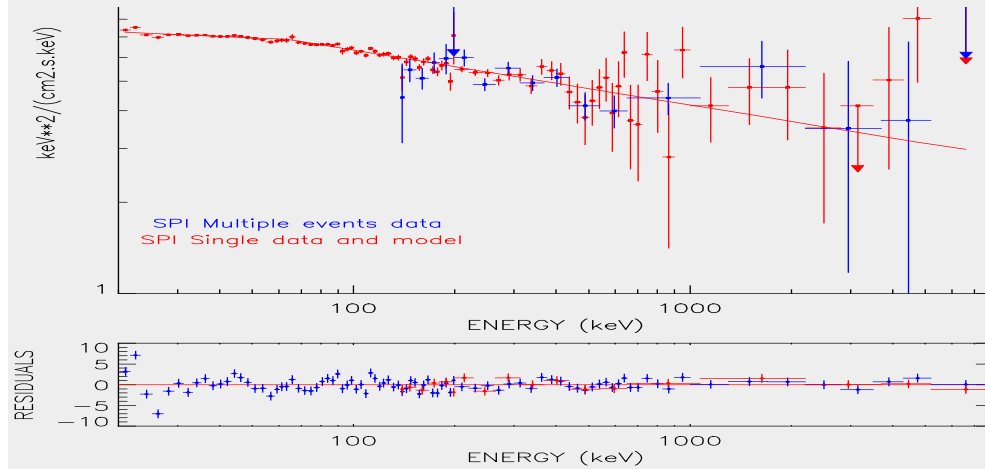
When the energy deposit concerns 2 or more detectors, we have to

- Reconstruct the total energy, attributed to a « pseudo-detector » (42 for double events)
- Use the corresponding responses

Interest:

- very low background
- Increase the SPI sensitivity at high energy
- Polarisation studies

Crab rev 43-45 - simple and multiples



Good agreement
from 130-160 keV

Multiples

- Next step in the high energy part will come from the use of the multiple events
- Will improve high energy science results
- Polarisation studies is on-going:
 - bugs correction of PIMP simulation (origin Southampton) : veto and mass model problems.....

FUTURE CALIBRATIONS

- 4 Revs allows a good control of SPI up to ~ 2 MeV
- Last “4 rev in 5x5” calibration has been done in 2008 !
- **NEED FOR
RELIABLE DATA UP TO A FEW MEV
IN THE STANDARD 5X5 PATTERN
AND
HIGH ENERGY CALIBRATION IS CRUCIAL.....**

SPI WEB SITE at CESR

- Still improving !
- Data access:
- On request, access to the original consolidated TM data (image of MOC CDROM's)
- Standard scientific data products:
 - Production of “standard” fits products ready for use by SPIROS – SPIMODFIT....
 - Produced by CESR pipeline.
 - Contains flat_field data for SPIROS mode 3 usage.
 - No scw selection....

SPI WEB SITE at CESR: Next

- Propose science products for all public data
- Feedback needed
- Display of HK data will be available very soon.
- Data analysis tool has been designed and will be available:
 - Data selection
 - Energy bands selection
 - Sky model selection: point sources – variability
 - Fit quality indicators
 - Spectral extraction
 - Xspec-ready files production
 - Is available for test through an account in CESR
 - Send me an e-mail.....!