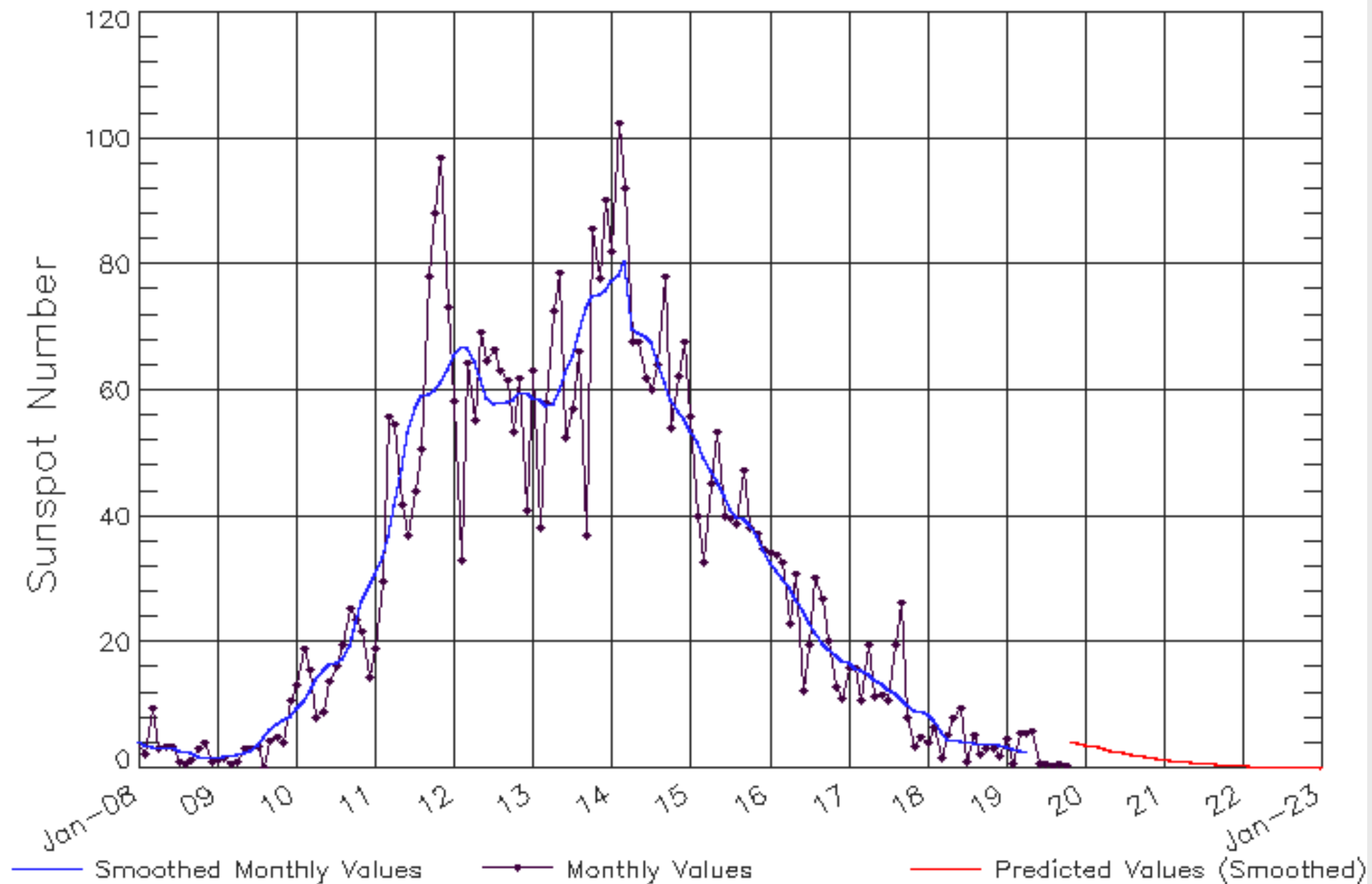


ISES Solar Cycle Sunspot Number Progression

Observed data through Oct 2019



SPI CAMERA STATUS

ANNEALING 33th

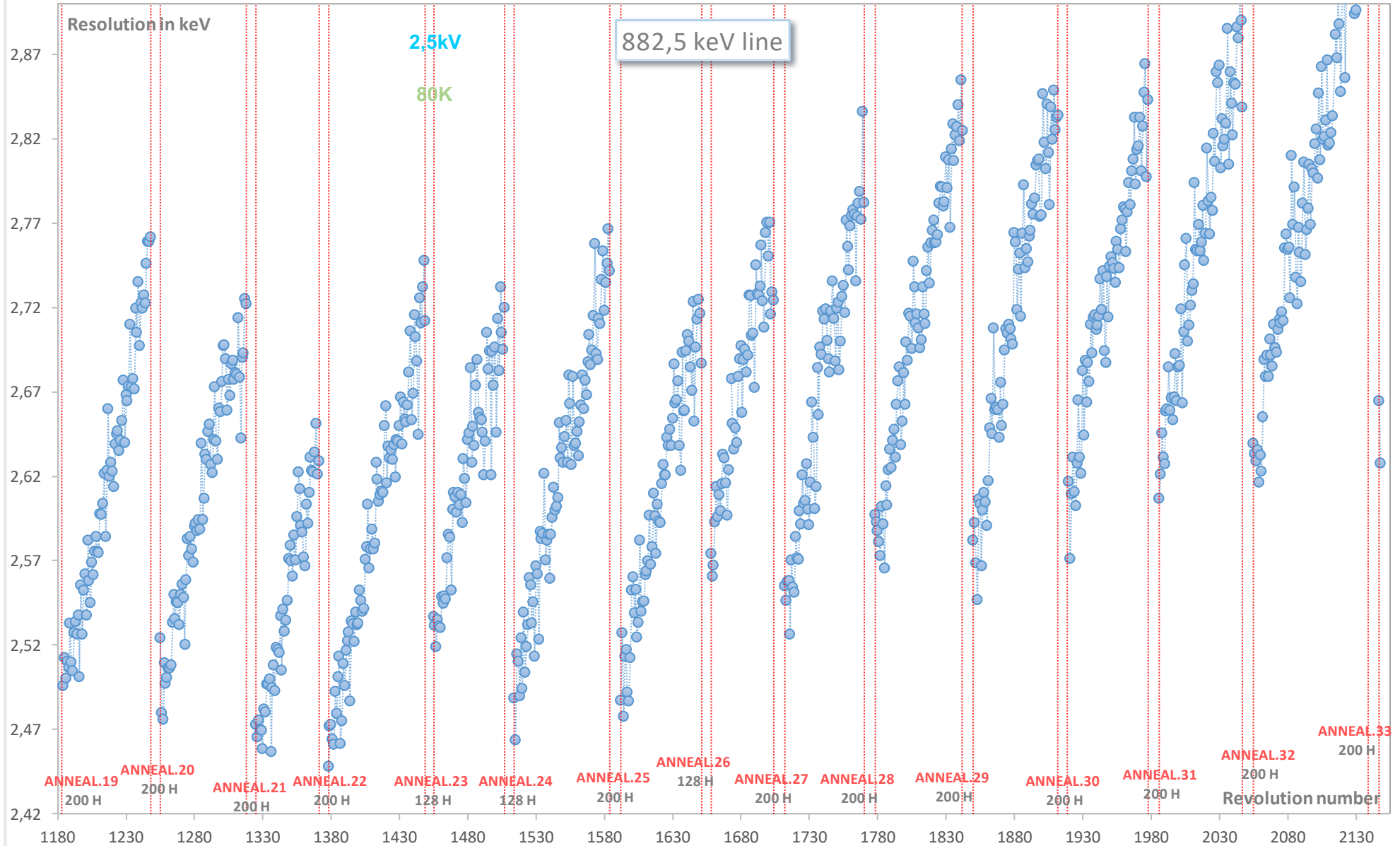
- Annealing 32th Sept 22 – Oct 9
- Duration 200hrs
- Cold box outgassing.

Behaviour of GeD 8 and GeD 14 during switch-on requires attention.

Detector	1.5kV 99K	2kV 98K	2.5kV 98K	2.5kV 86K	2.5kV 81.7K
0	2.3	2.18	2.25	2.21	2.24
1					
2					
3	2.45	2.28	2.19	2.18	2.14
4	2.50	2.48	2.48	2.39	2.36
5					
6	2.1	2.14	2.1	2.02	2.05
7	2.47	2.27	2.20	2.12	2.08
8	2.82	2.75	2.62	2.52	2.54
9	2.03	2.00	1.99	1.96	1.9
10	2.51	2.47	2.51	2.26	2.25
11	2.33	2.29	2.2	2.17	2.10
12	2.31	2.44	2.51	2.32	2.22
13	2.17	2.12	2.16	2.10	2.08
14	2.66	2.48	2.50	2.24	2.21
15	2.30	2.19	2.21	2.15	2.13
16	2.24	2.09	2.16	2.05	2.06
17					
18	2.15	2.05	2.11	2.07	2.16

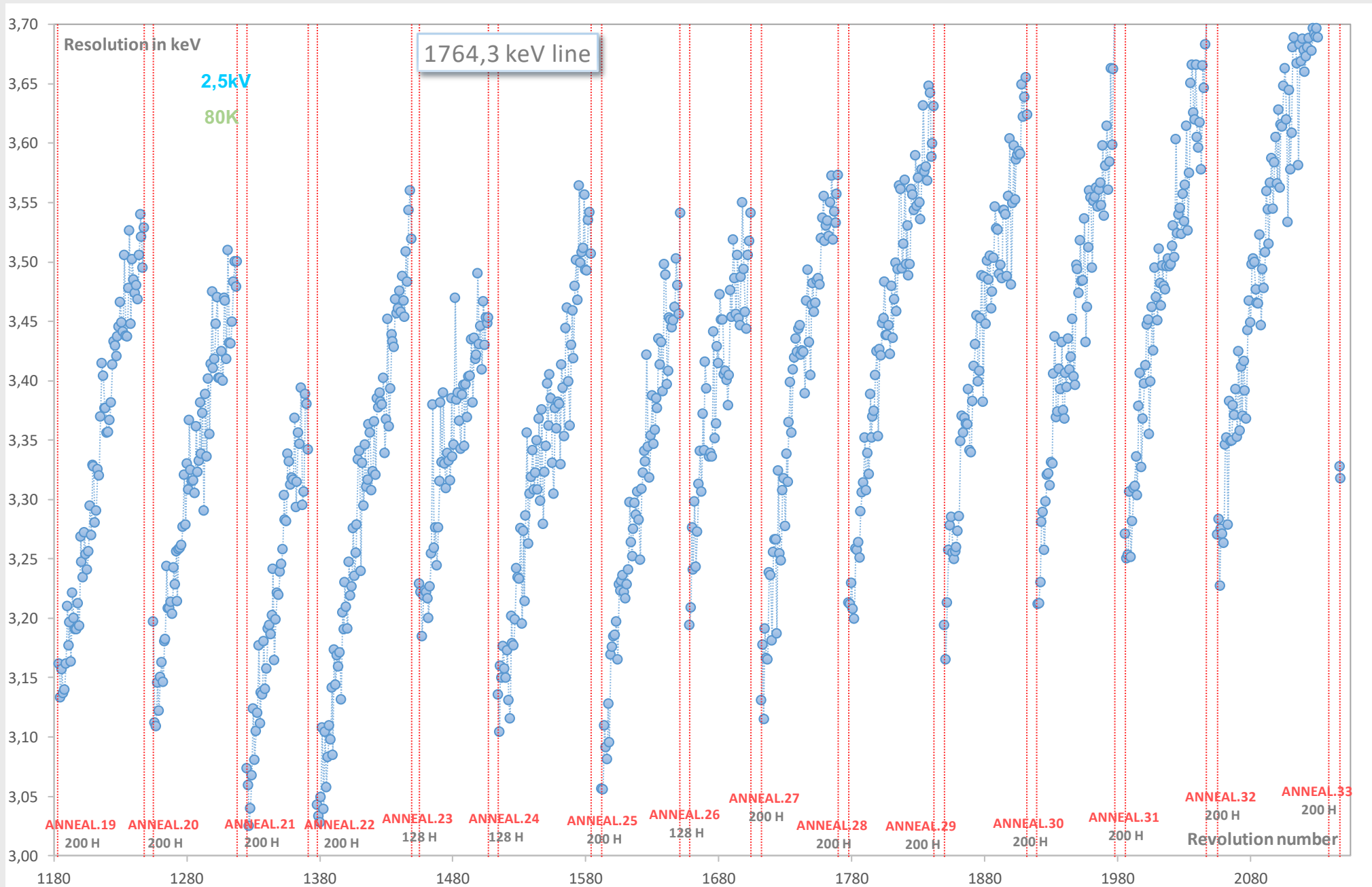
ENERGY RESOLUTION HISTORY: 882.5 keV

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



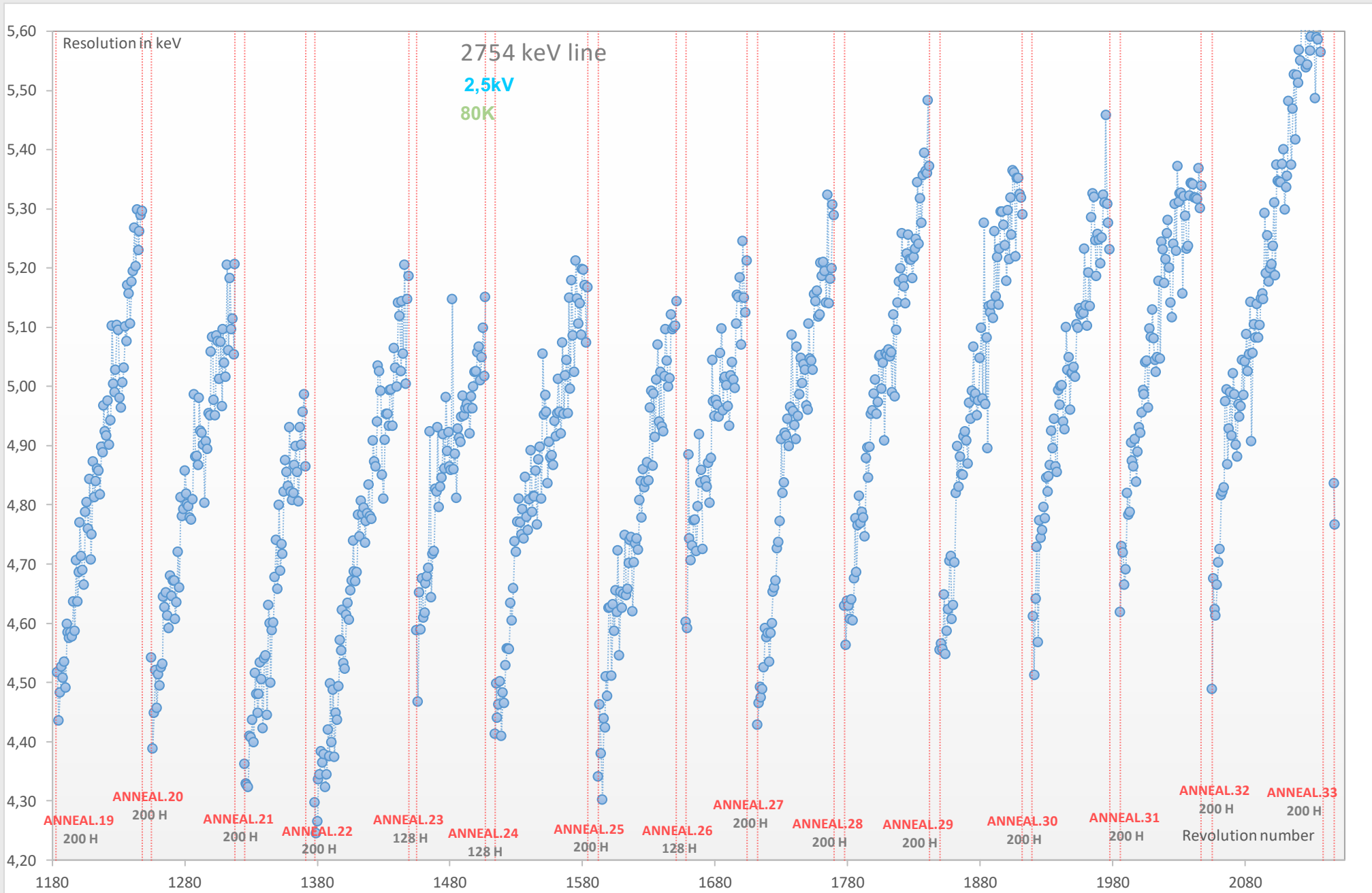
ENERGY RESOLUTION HISTORY: 1764.3 keV

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



ENERGY RESOLUTION HISTORY: 2754 keV

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



HV TESTS

-
- Measure of energy resolution at 198 keV function of the HV at nominal, 80 K, temperature.
- Main purpose: is the 2.5 kV setting always good.
 - 1hr acquisition at 1.5 – 2 – 2.3 - 2.5 – 3 kV
 - 2.3 kV has been tested in case we need a “small” reduction.
- Conclusion:
 - No substantial “noise” increase with the HV.
 - No clear need for HV reduction.

SPI TELEMETRY STATUS

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- SPI telemetry is saturating occasionally.
- 3-5 pkts missing....

