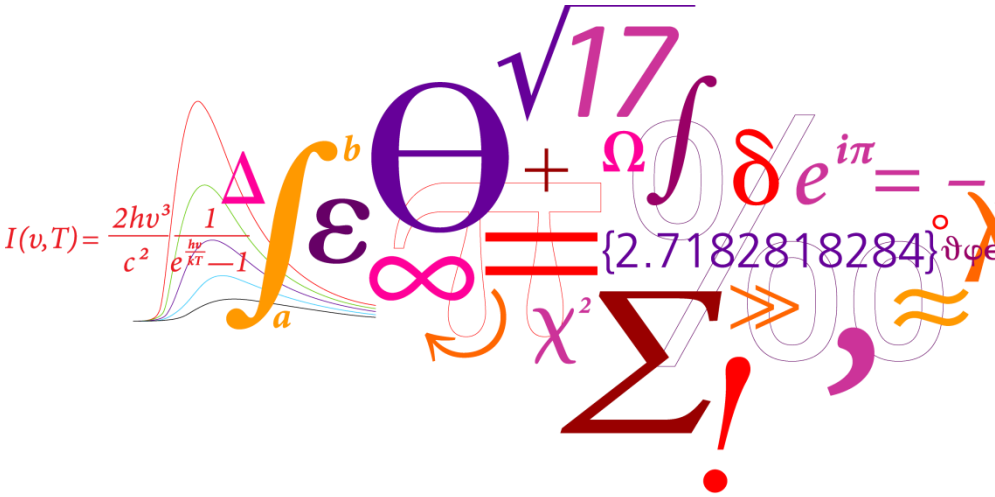
New software for interactive calibration of JEM-X

Carol Anne Oxborrow



DTU Space
Institut for Rumforskning og -teknologi

JCorrectGHtables.pro

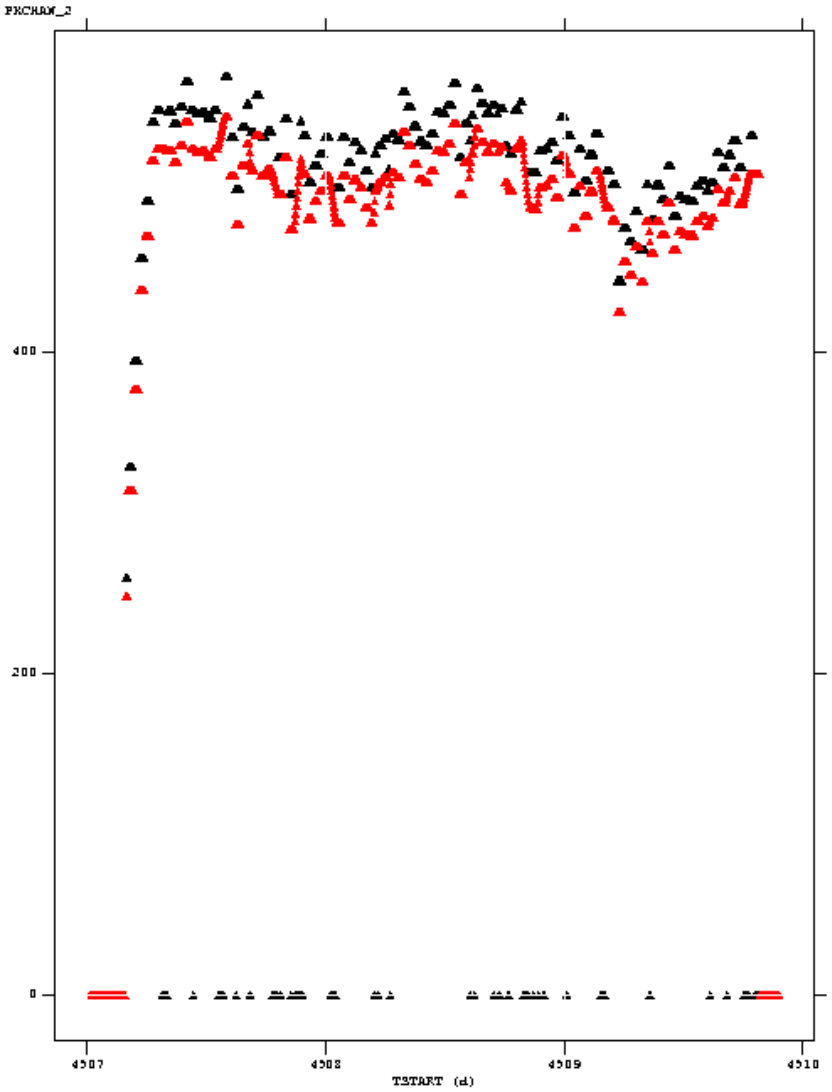
- IDL procedure to correct NRT gain history tables
- Warns if TSTART disordered
- Checks all anodes start and stop at same time
- Checks for ragged starts and stops
- Patch NULL values for weak sources
- Pad ends of valid data periods
- Corrects levels in selected time period

```
XE_CHAN =                   744 / ADC channel of Xe peak at reference time
PKCHAN_1=                   590 / ADC channel of peak in first spectrum
PKCHAN_2=                   570 / ADC channel of peak in second spectrum
PKCHAN_3=                   620 / ADC channel of peak in third spectrum
PKCHAN_4=                   740 / ADC channel of peak in fourth spectrum
BYTWEB  =                     1 / auto assigned by template parser
```

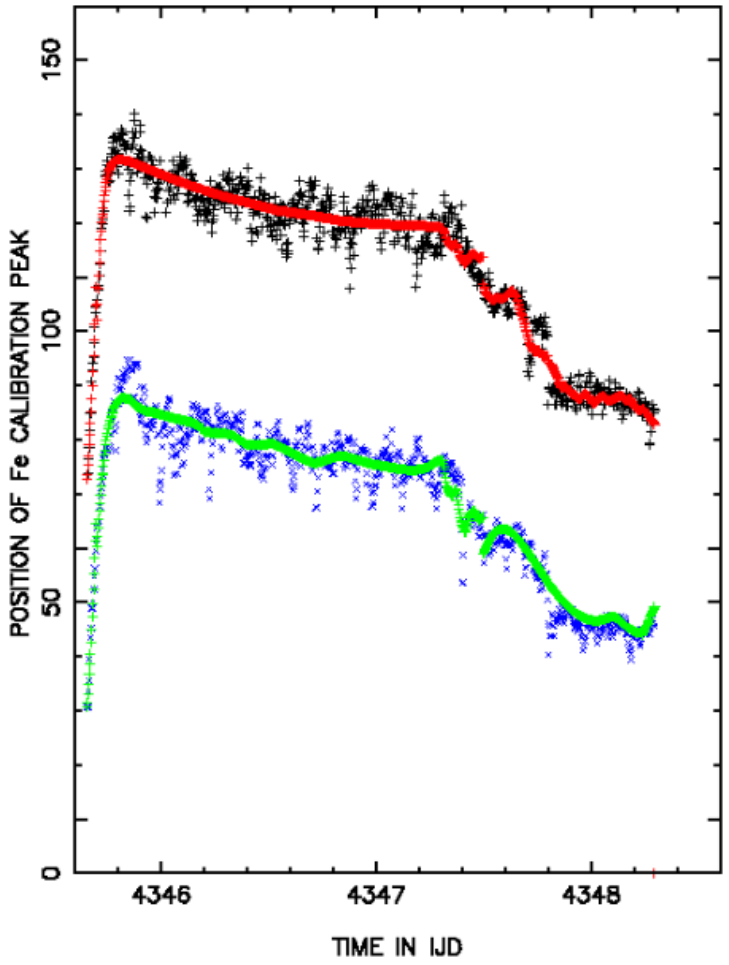
Corrected Gain History Tables

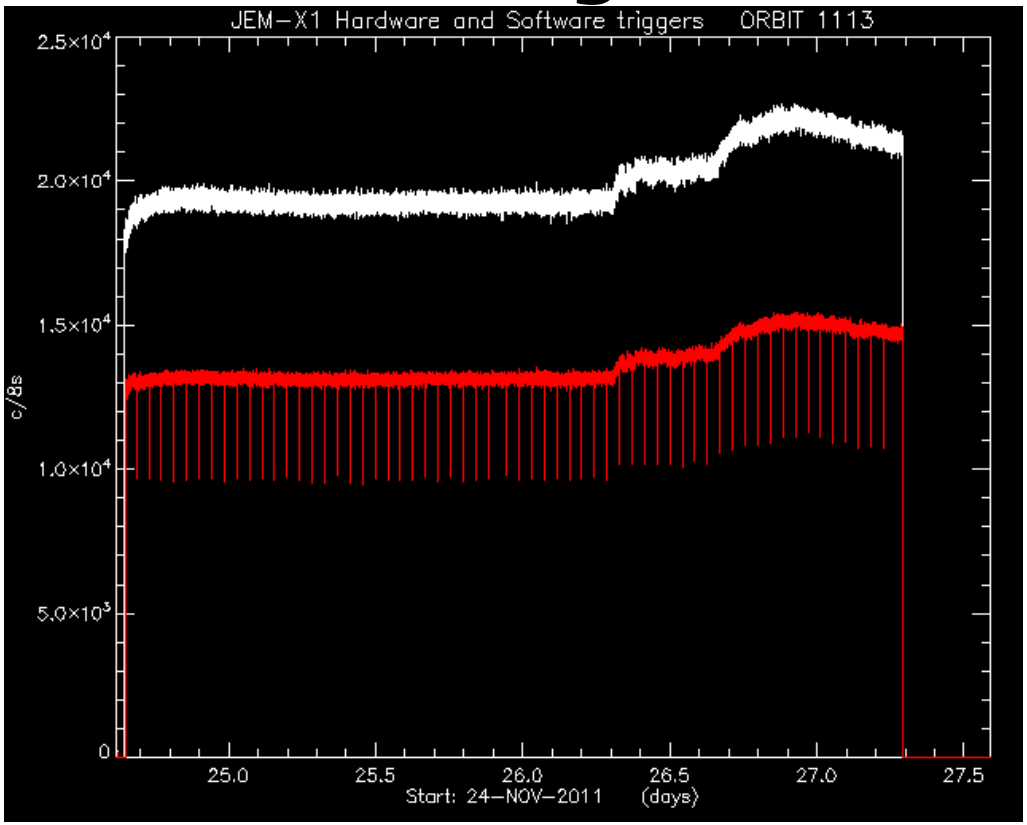
JEM-X 1

2nd source



j_cor_gain v 9.0: countrate-dependent smoothing





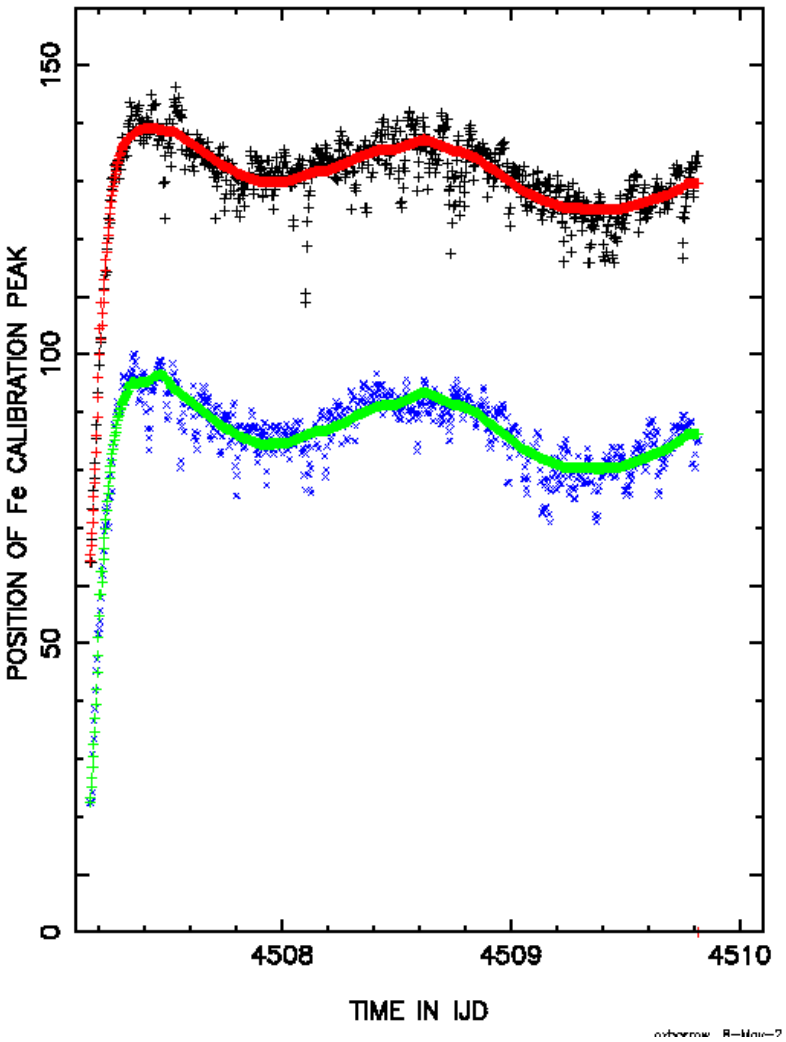
Revolution 1113

Countrate model

- Model 4
- Defaults to model 3 if no significant variation in countrate
- Hardware triggers read from OSM averaged HK data
- Model 4 only default model after revolution 500
- Will fail if instrument is saturated

J_cor_gain v 9.0 : ICAL smoothing zones

- 'Minor curve'
  - for linear start to revolution
- Periods of different temperature dependence, etc.



Still have difficult revolutions: 1171