

New software for interactive calibration of JEM-X

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$$I(v,T) = \frac{2hv^3}{c^2} \int_a^b \frac{1}{e^{\frac{hv}{kT}} - 1} dv$$

Mathematical symbols and equations are overlaid on the slide, including:

- A purple integral symbol with a yellow upper limit b and a blue lower limit a .
- A purple theta symbol with a red plus sign.
- A purple infinity symbol with a red equals sign followed by the value $\{2.7182818284\}$.
- A purple sigma symbol with a red double arrow.
- A purple exclamation mark symbol.
- A purple dot symbol.
- A purple infinity symbol with a red equals sign followed by the value $e^{i\pi} = -1$.

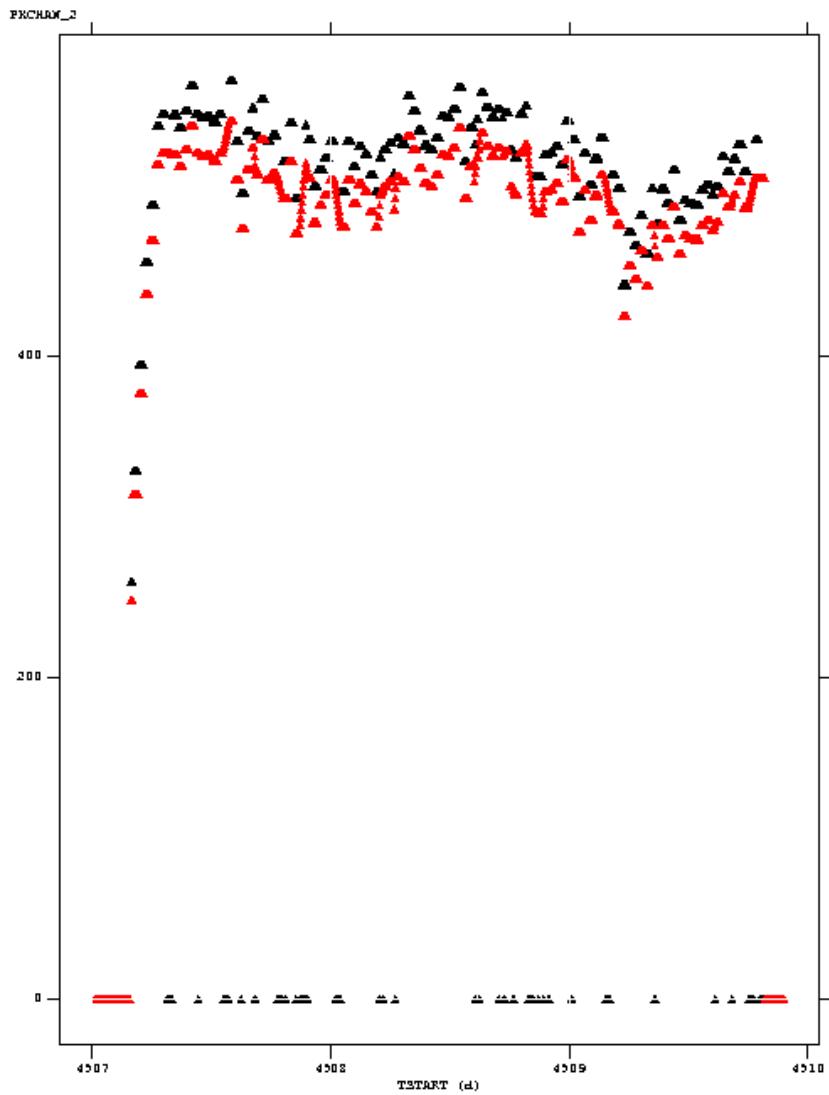
JCorrectGHTables.pro

- 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

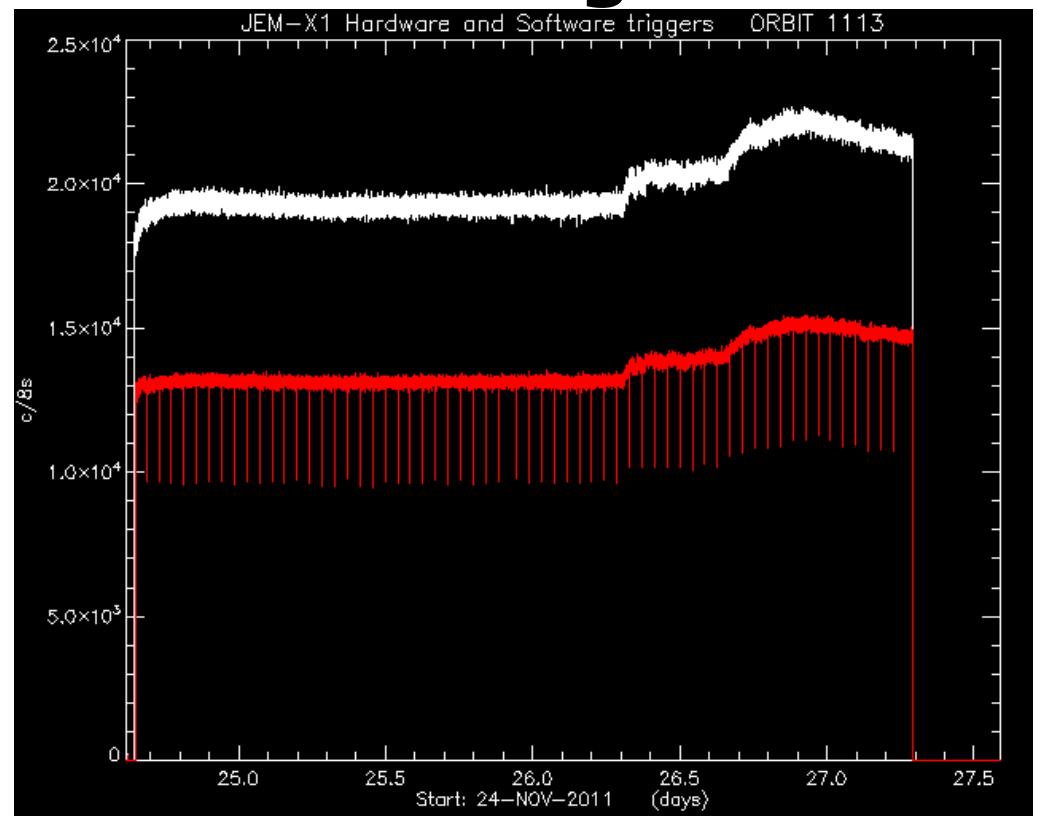
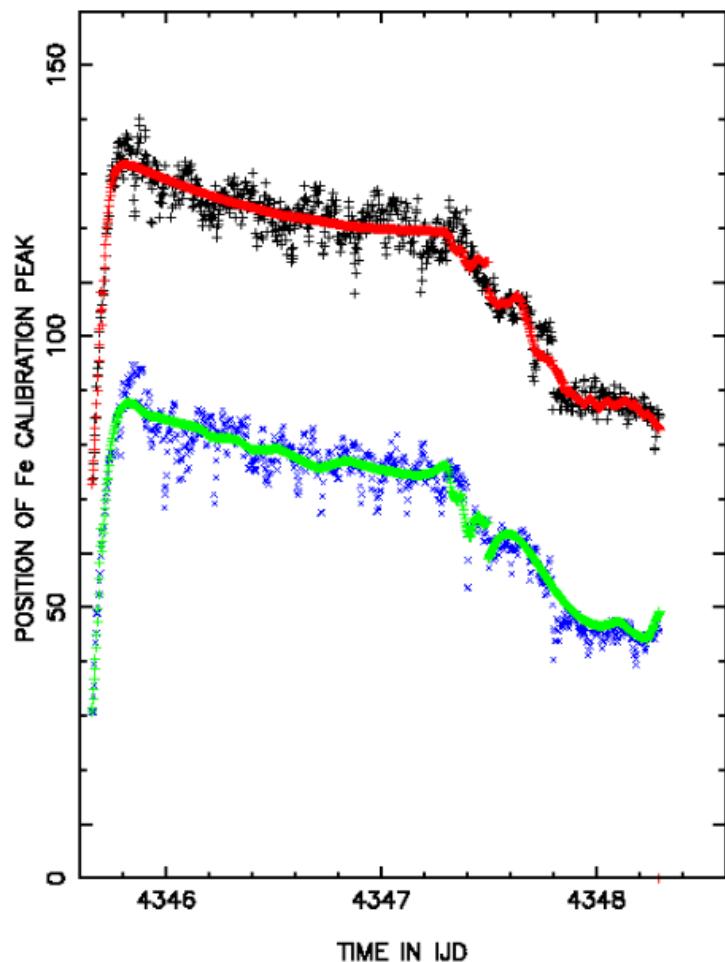
```
XE_CHAN = 744 / ADC channel of Xe peak at reference time
PKCHAN_1= 590 / ADC channel of peak in first spectrum
PKCHAN_2= 570 / ADC channel of peak in second spectrum
PKCHAN_3= 620 / ADC channel of peak in third spectrum
PKCHAN_4= 740 / ADC channel of peak in fourth spectrum
PYTREFD = 1 / auto assigned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

JEM-X 1
2nd source



j_cor_gain v 9.0: countrate-dependent smoothing



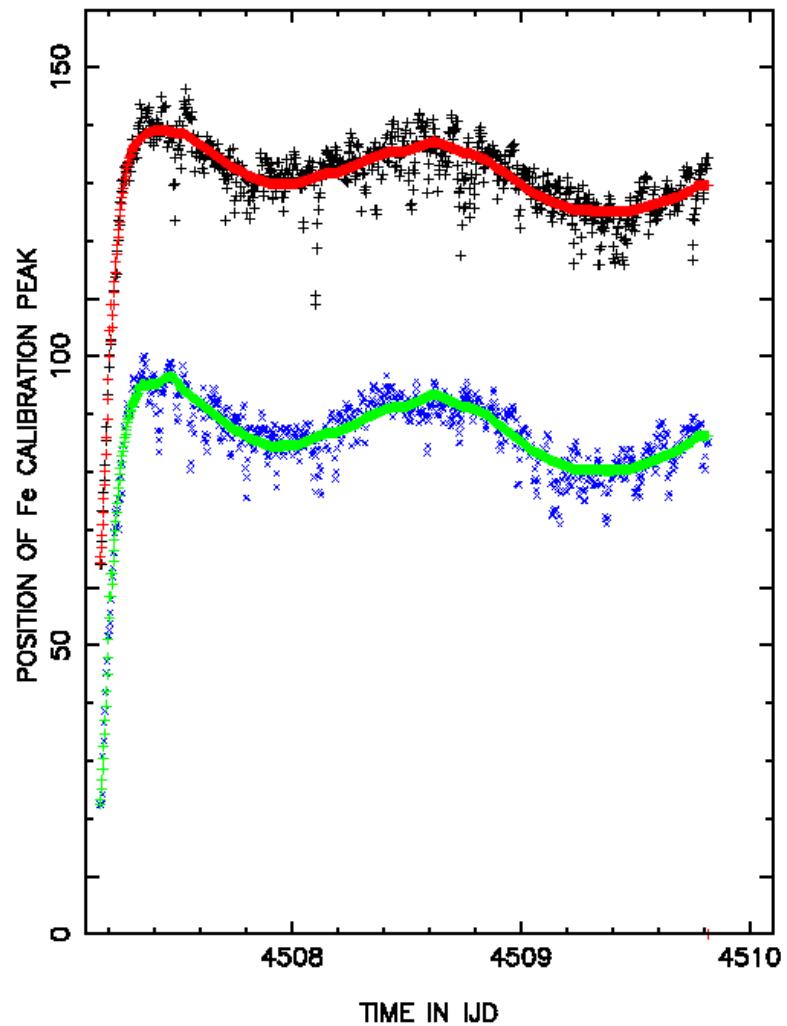
Revolution 1113

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