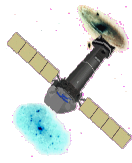


# Correlation between Line Centroids and HK parameters.

- Yes, this topic again.
- As a reminder, since launch we have witnessed scatter in our line centroids.
- This scatter is now present atop the clear trend of a shift to lower energies due to CTI degradation.
- PN have correlated against EPAE temperature.



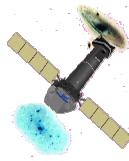
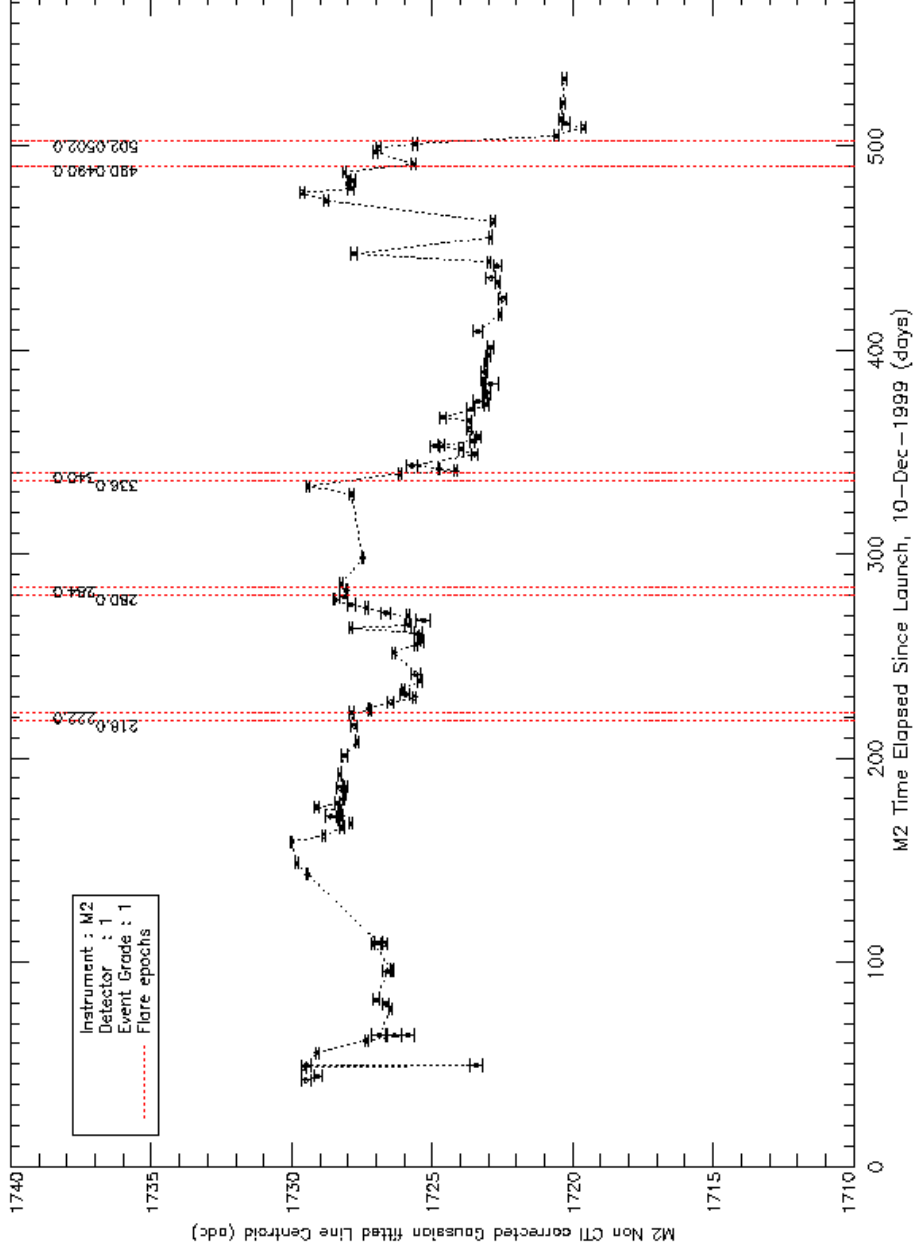
XMM  
EPIC  
MOS

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Monday, 11 June 2001



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# Raw Line Centroids vs Time.



XMM  
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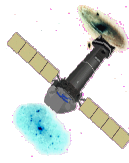
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# What Can We Bring To The Analysis That Is New ?

- In what concerns the line centroids, we have our set of 8 newly determined centroids created using ‘per column’ CTI correction.
- A new check for correlation against “nabove”, as we suspect that flux density has an uncorrected effect on line centroids.



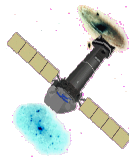
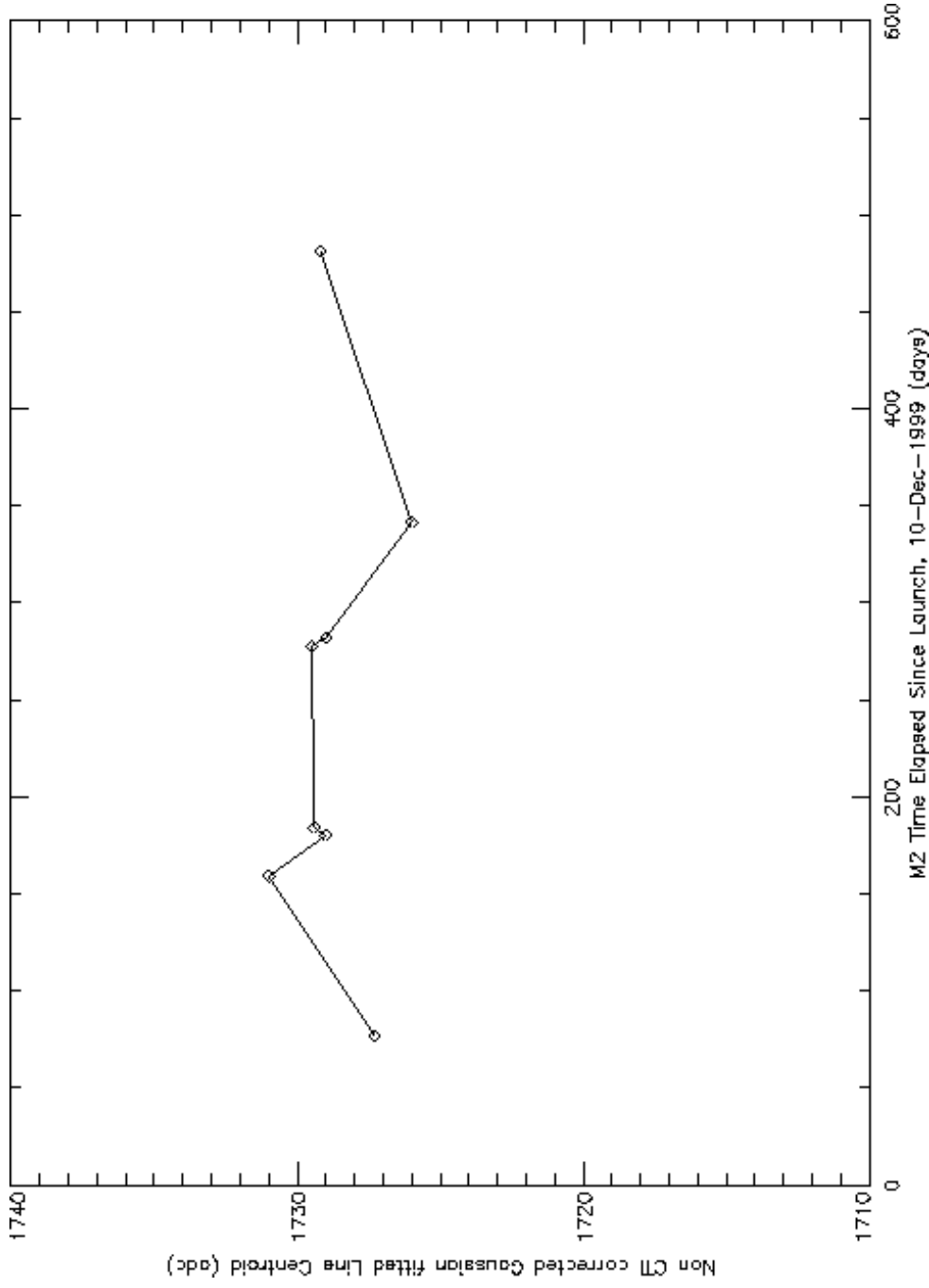
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# Raw line Centroids vs Time



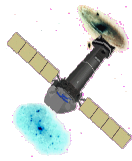
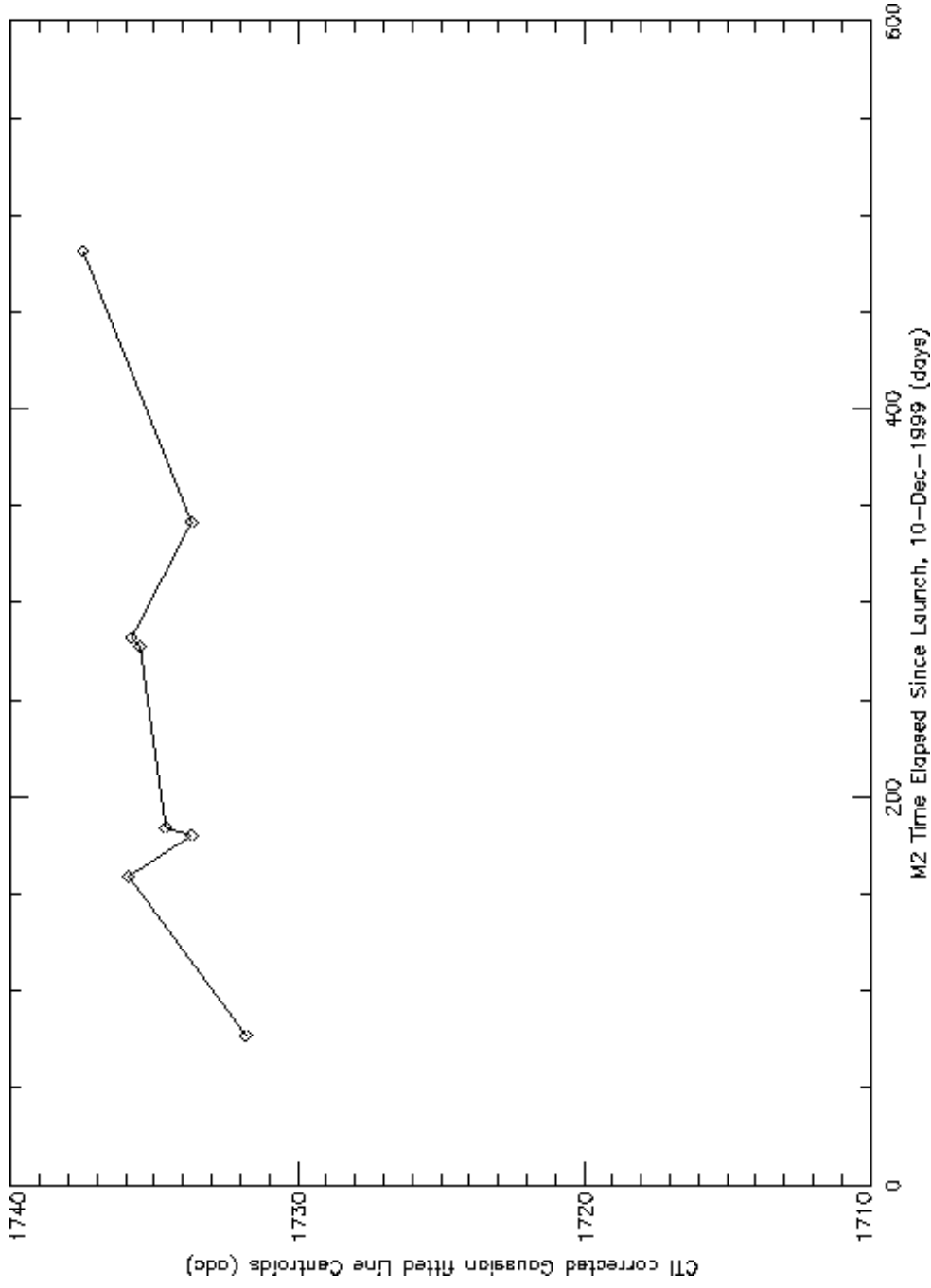
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# “Best” Line Centroids vs Time.



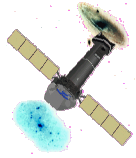
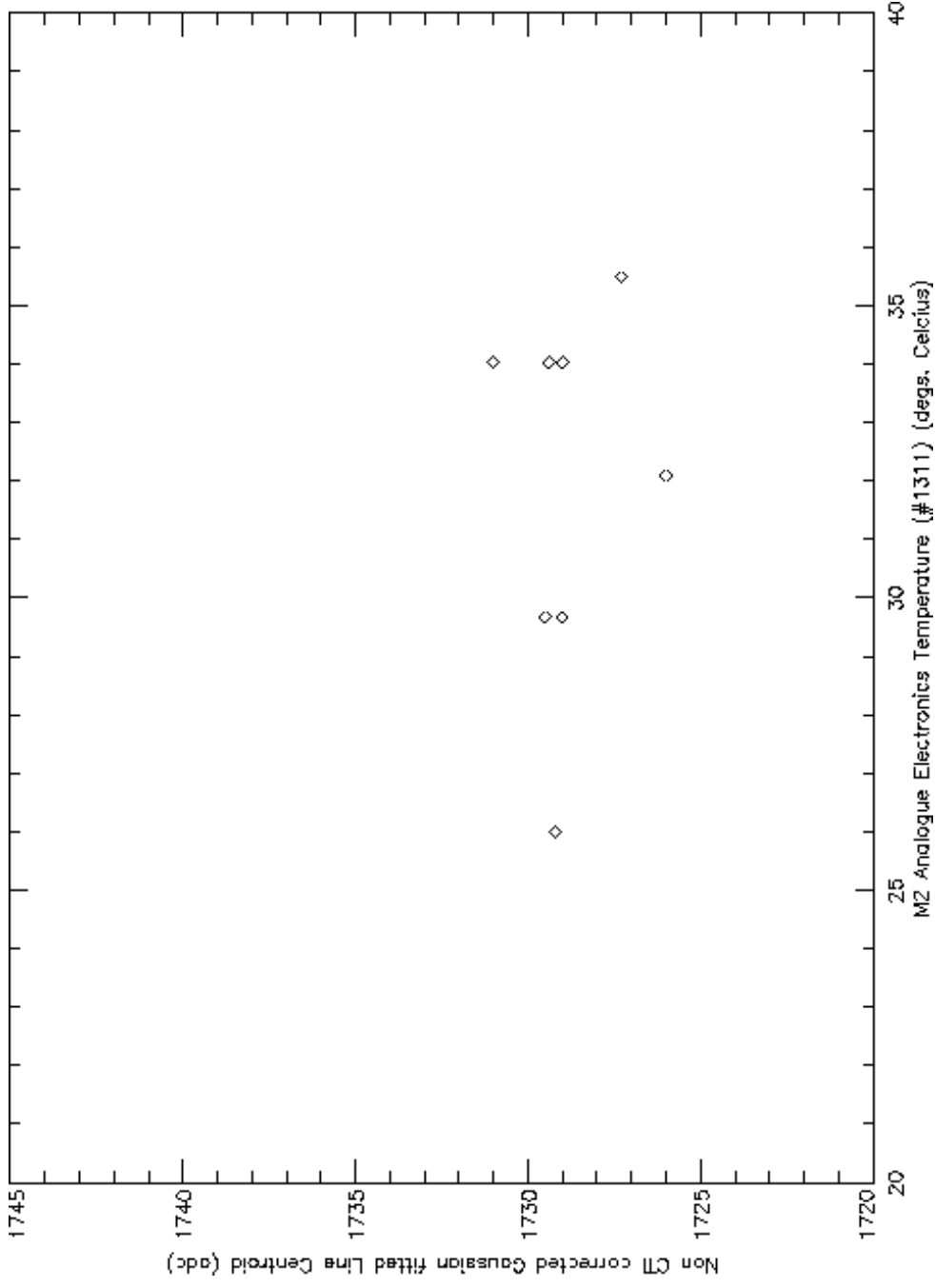
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# Raw Line Centroids vs EMAE T.



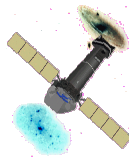
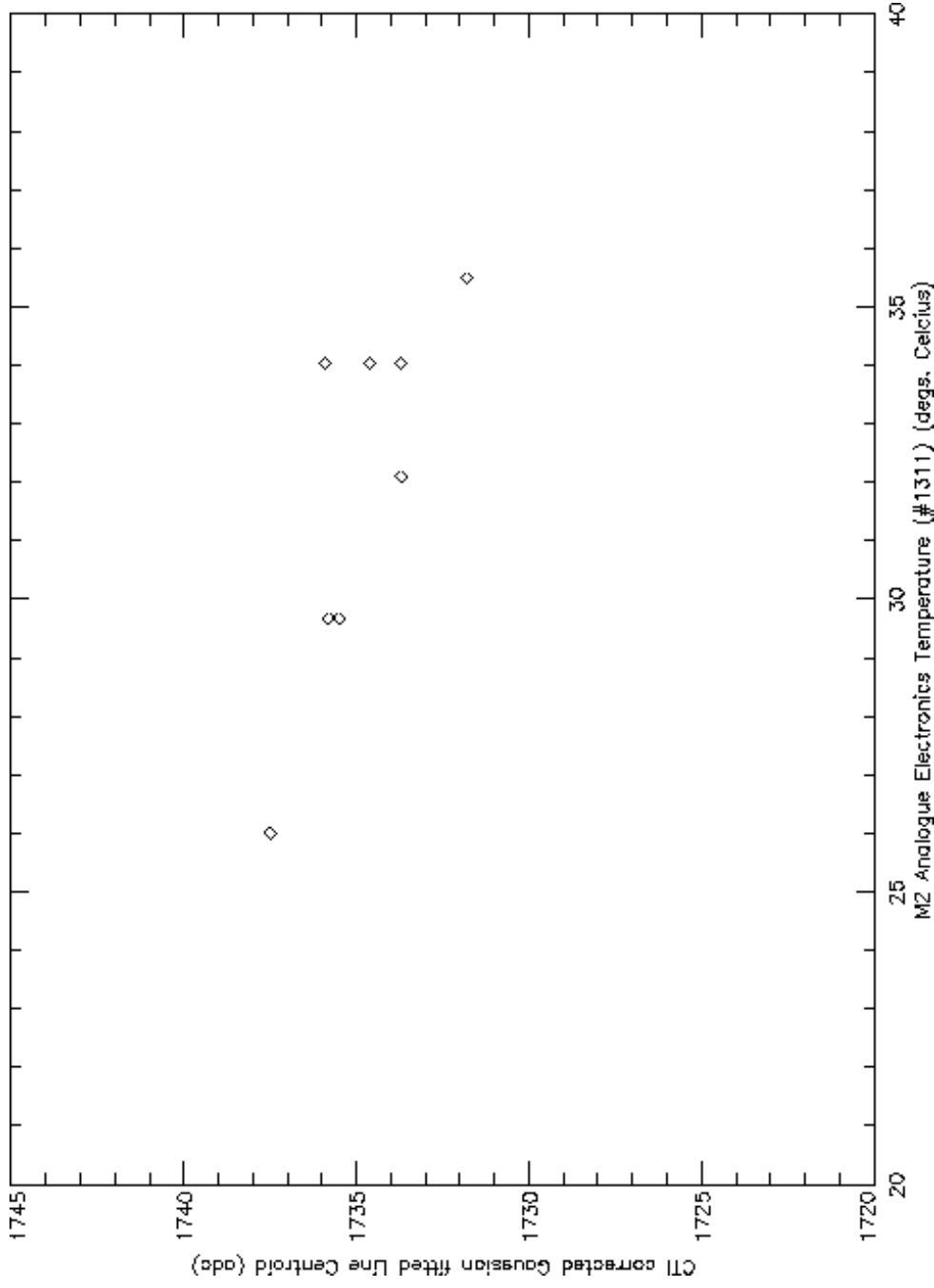
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# Best Line Centroids vs EMAE T.



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MOS

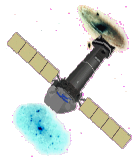
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# Conclusions.

- Until we are sure that we have a \*full\* set of line centroids that have all CTI effects accurately detrended, searching for further correlations against HK is pointless.
- ... however, I \*am\* confident that eventually a clear and simple correlation with EMAE temperature will emerge.



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