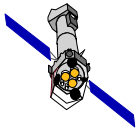
EPIC PN Monitoring

Provided by Michael Smith



PN Bad Pixel & Offset Monitoring

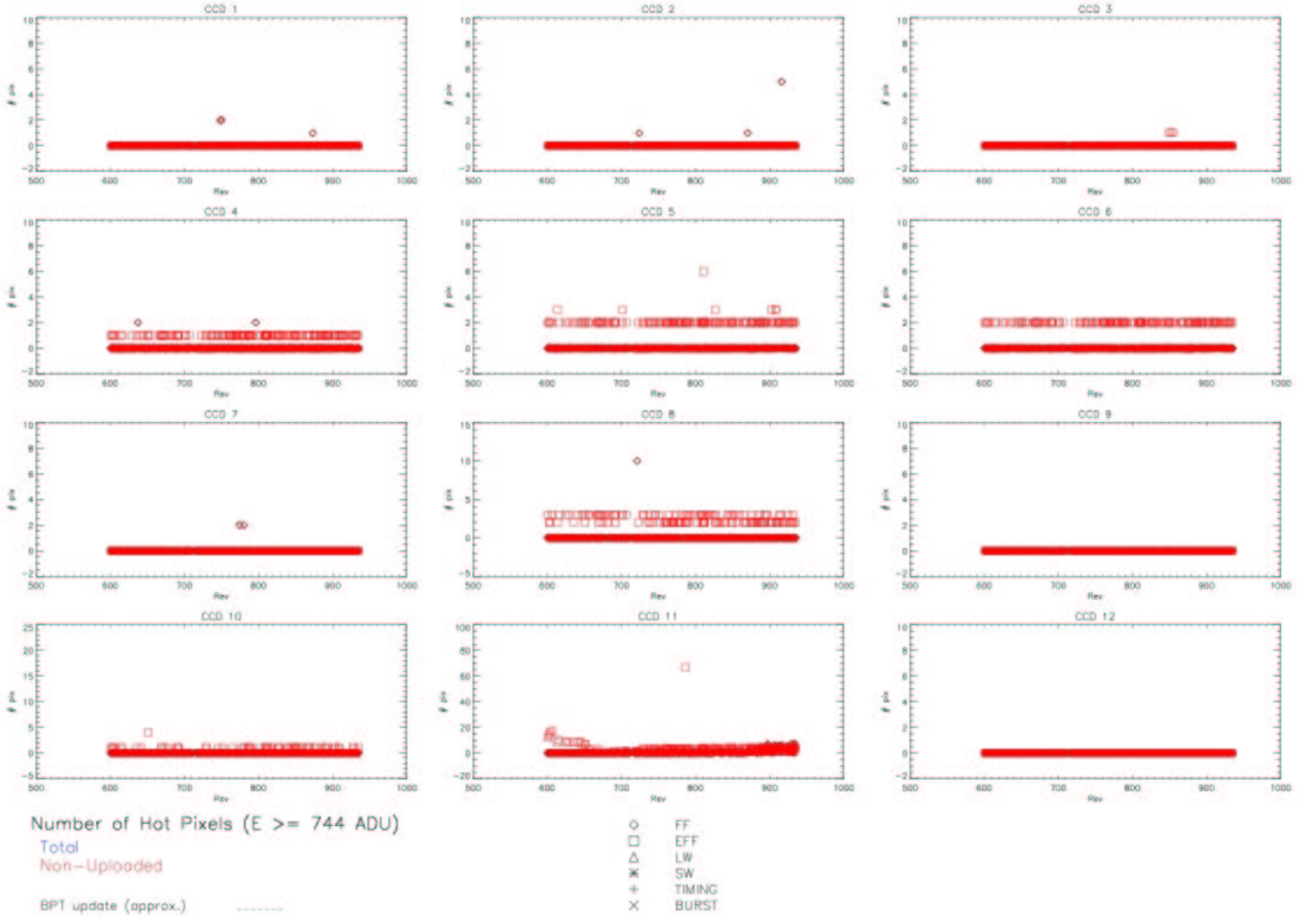
Since last meeting:

- FF offset map calculation using 50 frames (as opposed to 100) since ~ rev 842.

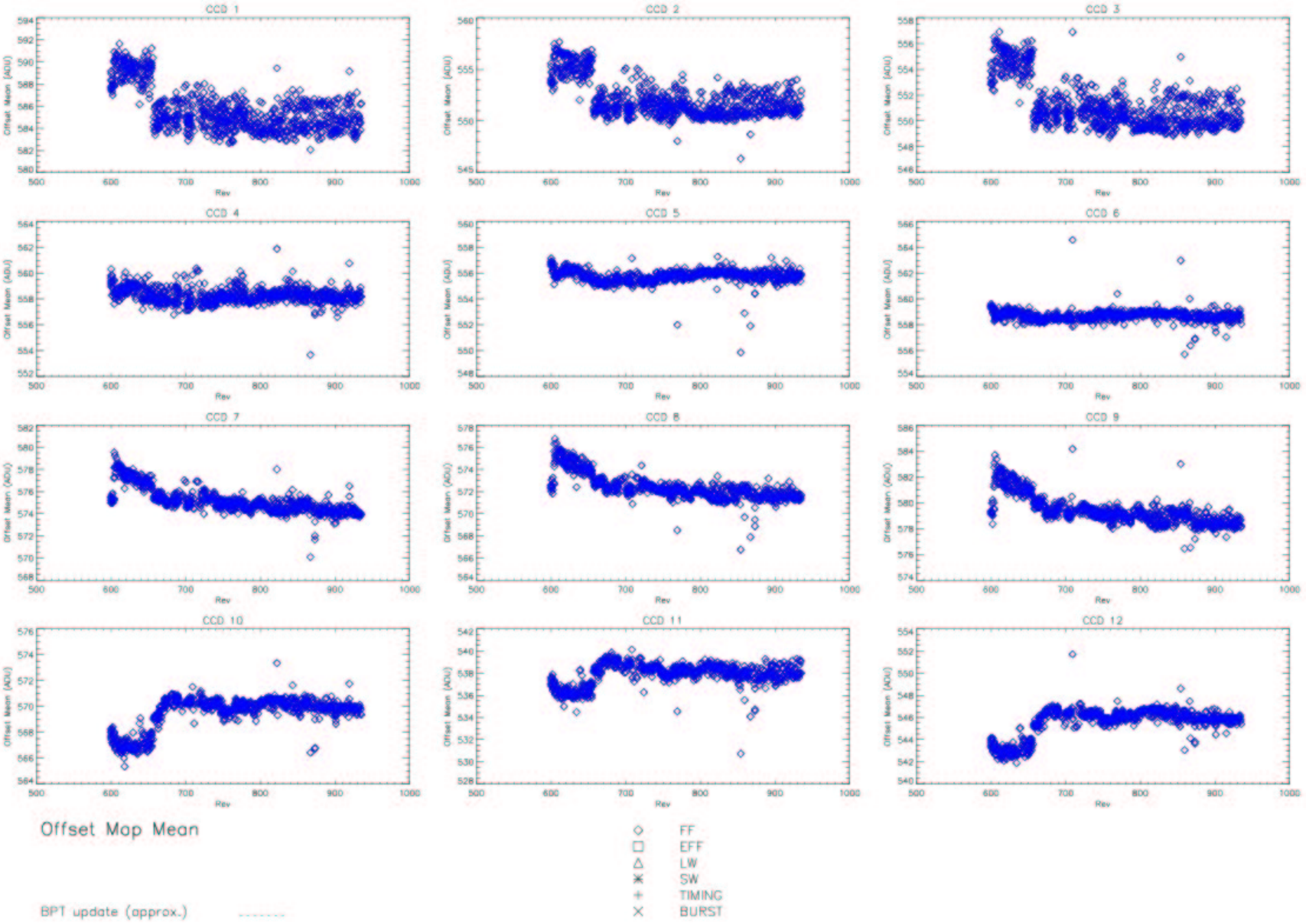
- Additional bad pixel (type ‘H’, i.e. not up-linked) included in EPN_BADPIX CCFs:

  CCD 1, (RAWX,RAWY) = (56,75)

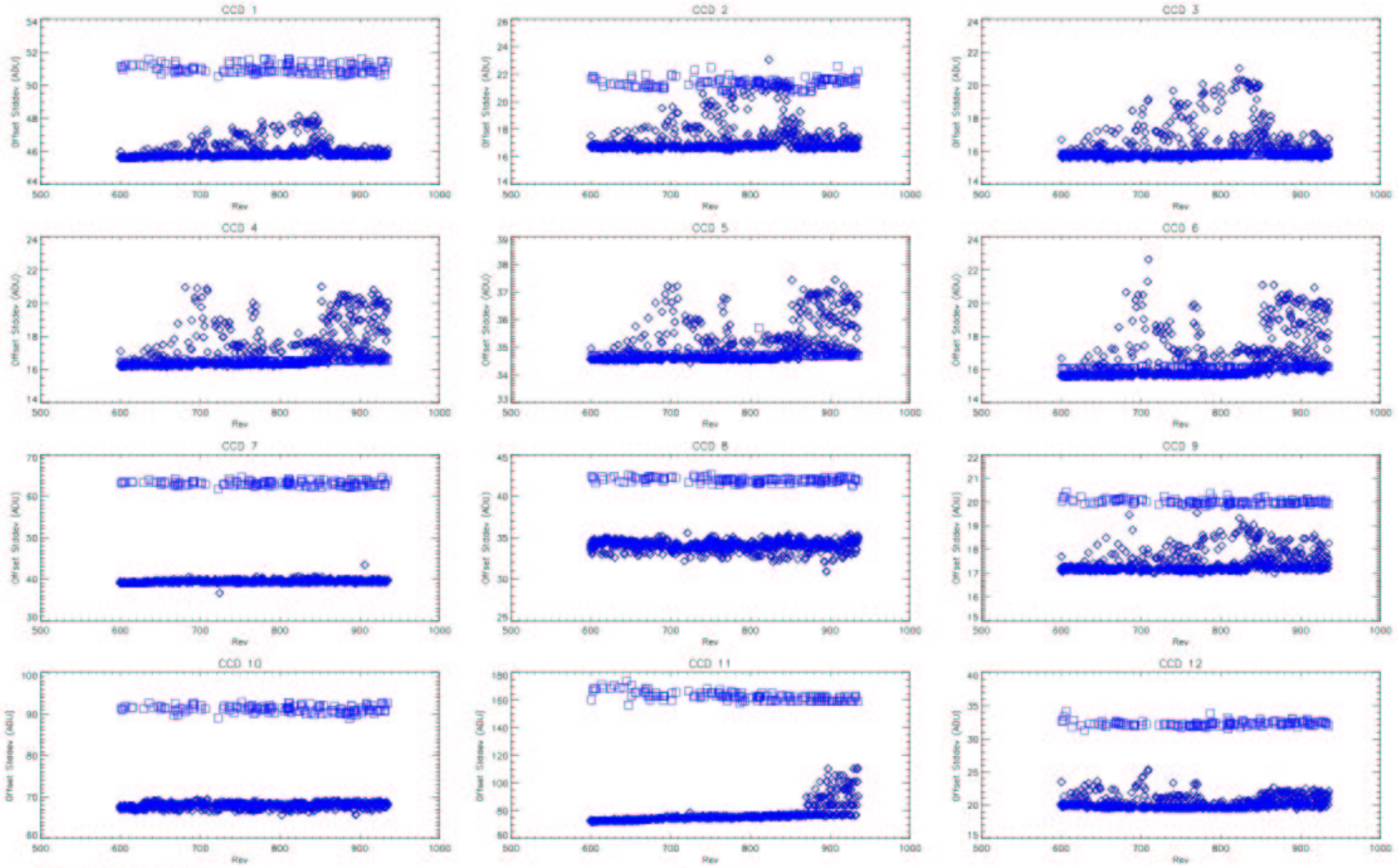
Hot Pixels (E > 744 ADU in Offset Map)



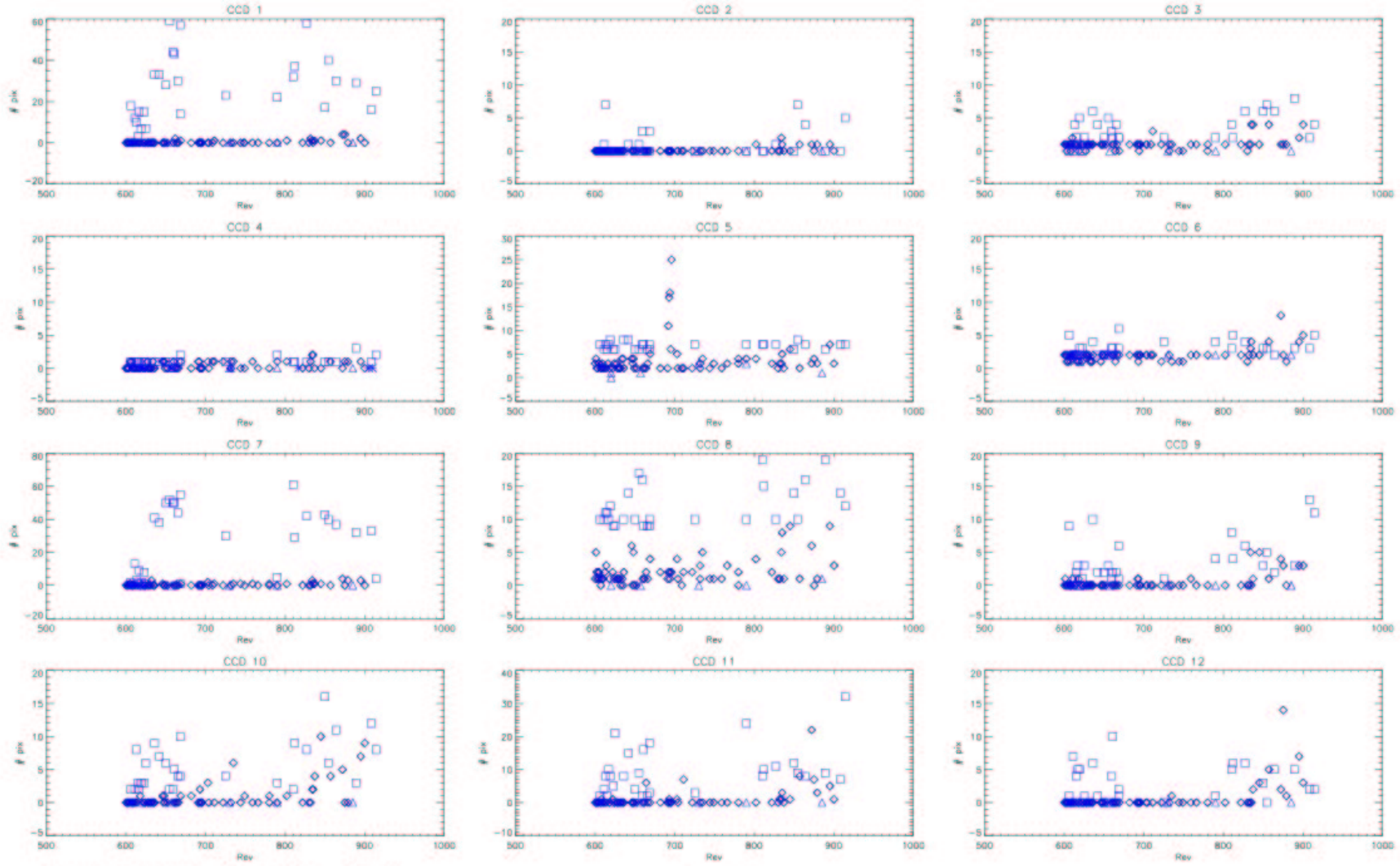
Offset Map Mean

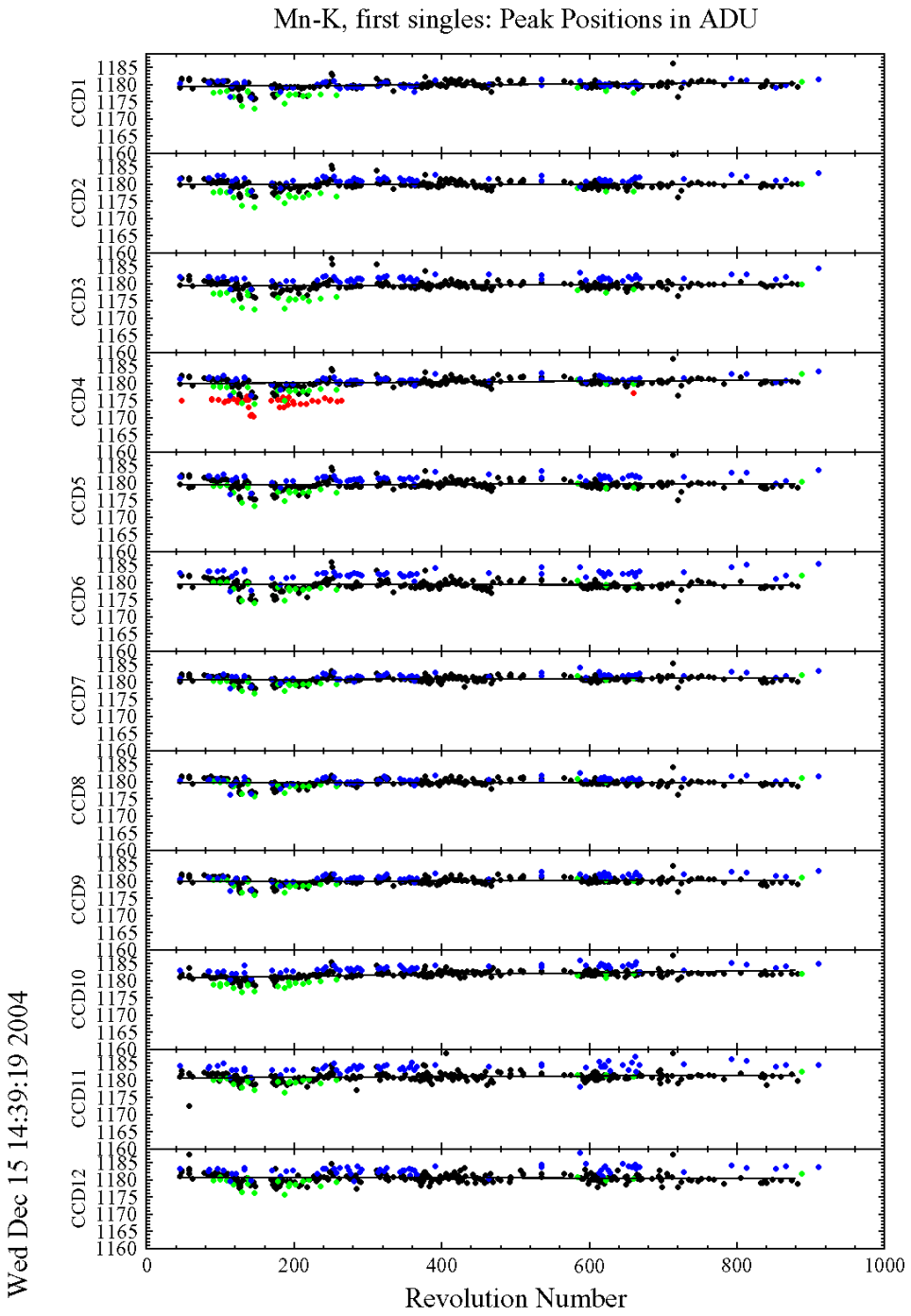


Offset Map Variance



Noisy Pixels (> 1% Occurrence in CalClosed)





Energy monitoring

- over-correction with time tailed out with new CTI CCF (13) for all modes
- eFF mode over-correction improved (see talk M.Pilar Esquej)
- Still not understood problem of SW mode (CC data not applicable for SW, however in first approximation a over correction would be expected: we see an under-correction ???

Conclusions

- Hot pixel situation is stable.

- Offset Map mean is stable again after small excursions around rev 600 (mentioned in previous Ops meetings).

- Offset Map variance for FF mode has changed after ~ rev 842; probably related to the introduction of 50 frame offset calculation.

  The change is more pronounced in some CCDs (e.g. Quadrant 1 and CCD11) than in others.

- Noisy pixel situation is stable.

Current Bad Pixel Table still valid.