Calibration Issues

- HEXTE Collimator Response and Alignment

  -- Made slow scans across Crab in orthogonal directions to measure collimator alignment and shape with 2500 μs XULD delay setting.

    * Collimator centroids same as in IOC relative to S/C look direction.

    * Fits made to collimator shape for use in ARF (plot of counting rate versus angle in scanning across Crab).

  -- HEXTE Deadtime

    * Data taken and correction parameters estimated for all settings of XULD delay setting used to date.

    * Data taken with Test Pulse Generator still under analysis.

    * Use of ^{241}Am calibration source to test deadtime parameters under study.

  -- PCA/HEXTE Normalization

    * First want to understand effect of HEXTE collimator shape.

    * Next need to work with PCA group on defining observations.

  -- HEXTE Response Matrix

    * PSA measurements made for each detector.

    * NaI deadlayer absorption model for XSPEC written

    * Next release expected for HEAD meeting in November.

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Instrument Status

- No Change From Last RXTEUG Meeting

  -- Ex post facto analysis of IOC data shows one 1/2" shield PMT died on launch, but since shields have two PMTs each, no effect has been seen.

  -- Aperture modulation has passed $3x10^6$ cycles without incident

  -- Housekeeping Rates remain nominal.

- Changed HEXTE RTS for occults to "do nothing".

  * Eliminated problem with commanding on exit of SAA sometimes leaving HEXTE in OCCULT configuration.

- Changed timing on HEXTE commands at start of observation

  * Eliminated collision of New Observation commands with Reload Overall Configuration commands.
  * Drastically reduced alarms in SOC

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HEXTE Instrument Status

XTE Users Group Meeting, September 15,16 1997

Summary: HEXTE is performing well. The FTOOLS for HEXTE analysis are also performing well.

Topics to be Covered:

- Instrument Status
- Calibration Issues
- FTOOL Status
- Operations Status

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