

EPIC real-time monitoring

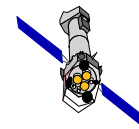
B. Altieri

EPIC TTD operations meeting # 6

Paris, 7/8 Feb. 2001



VilSpa, 16 October 2000



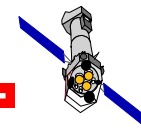
XMM-Newton

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EPIC real-time QLA monitoring

- **INSCON duties:**
 - live QLA exposure accumulation of MOSs & PN
 - print-outs of:
 - PN image
 - MOS image (noise diagnostics diagnose)
 - Count rate plots dropped since new EPIC derived parameters introduced (indicators of soft-protons)
 - Reports in the ODV for every EPIC exposure:
 - “performed time” versus “scheduled time”
 - count rate, CCD noise, and exposure comments (internal web only)



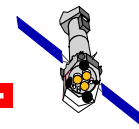
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EPIC r/t information: ODV

- **ODV : Observation Database Browser (ODV)**
 - real-time information is immediately available on the Web:
 - <http://xmm.vilspa.esa.es/xmmobs/>
 - More information available on the internal Web
 - Complete and filled systematically since rev 170.
 - Reduced search capabilities
- **Information also to be dumped into summary tables:**
 - <http://xmm.vilspa.esa.es/~xmmdoc/realtime/>
 - but at longer timescales (internal web)
- **Paper print-outs**
 - All EPIC exposures since the start of the mission in the operations room.



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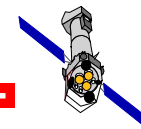
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EPIC radiation monitoring

- **INSCON monitors :**
 - the 2 RGS CCD9D above threshold counters
 - PN discarded line counters
 - the 2 MOS CCD2-7 event counters
- **An alarm of any of the above parameters trigger safing of the MOS's and PN**
- **Very safe and successful approach: reduced MOS CTI slope since last Nov. 2000 flare**
- **Very quite “soft-proton” activity November July.**



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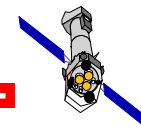
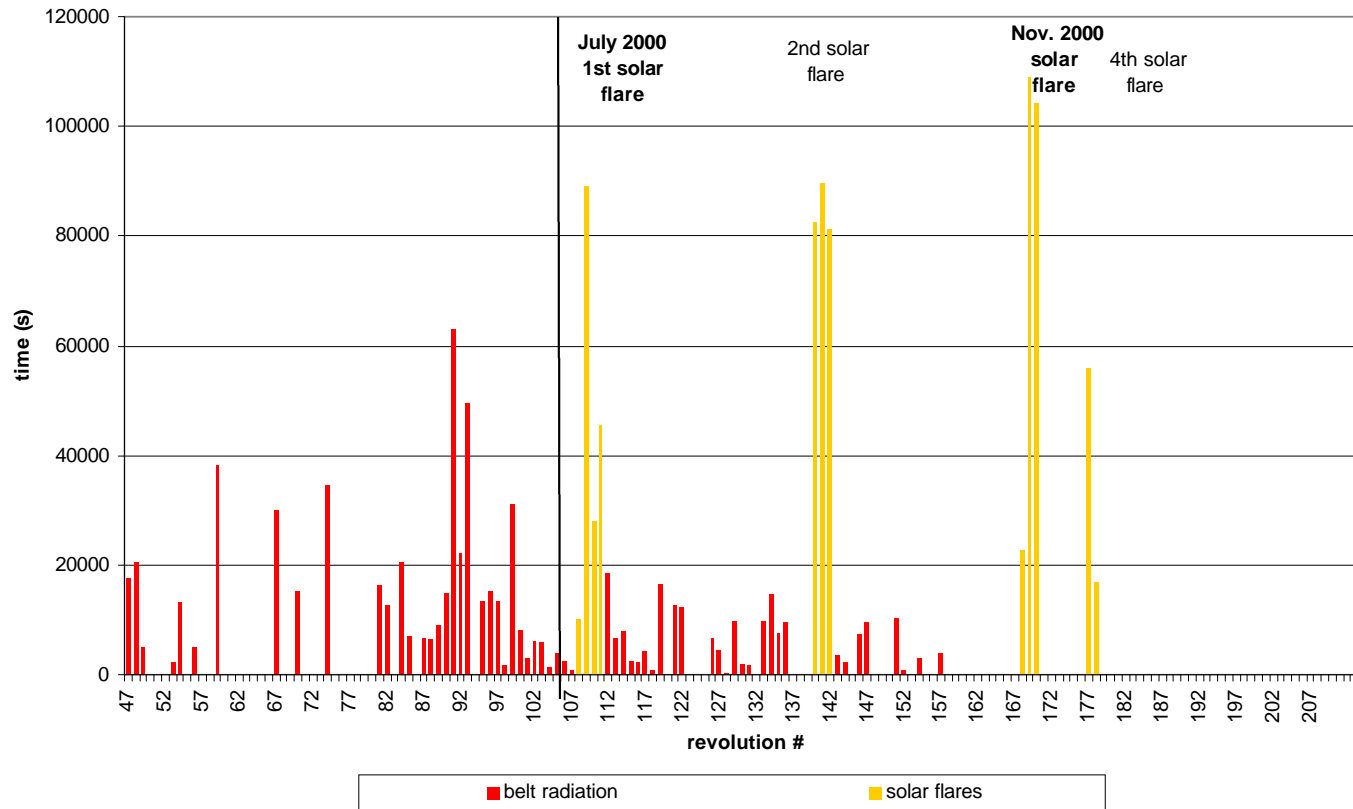
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EPIC radiation monitoring

Time lost due to radiations (MOS1)



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