

### **Pipeline Status**

Pedro Rodríguez on behalf of PPS team

XMM-Newton Users' Group Meeting ESAC, May 11, 2017





- Highlights of latest release
- Current development activities
- Under Analysis

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- Based on SAS16
- Source detection in slew exposures
- Update method to define background region for MOS source products
- Source and background regions to extract timeseries and spectra in a PNG
- Time bin in RGS lightcurves adjusted according to mean rate.
- Single plot file with all X-rays light curves for every source
- SSO observations processed with coordinates referred to the target location

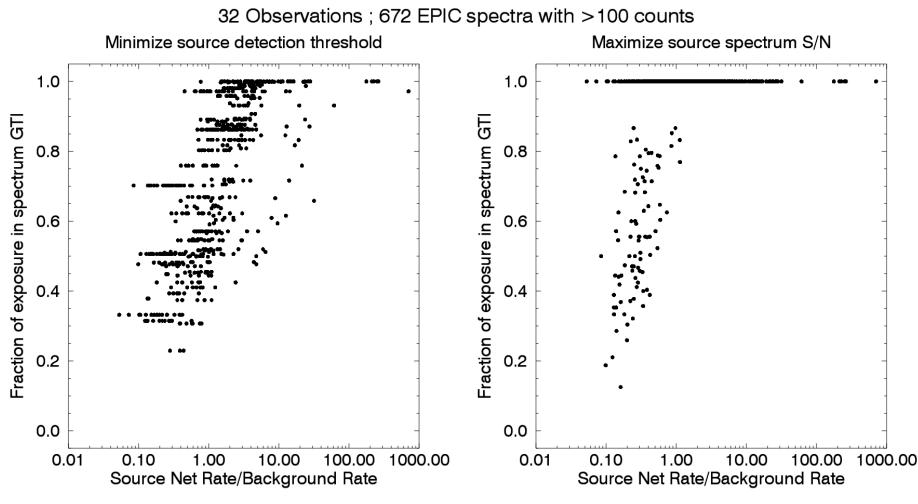




- EPIC footprints for XSA
- Delivery of EPIC response matrices from XSA
- Specific flaring background filtering per source spectrum
- Include pile-up level estimates in source products
- Apply barycentric correction to events arrival times
- "Shortest meaningful" time bin in EPIC lightcurves
- Compute EPIC light curves for different energy bands
- Collect all EPIC lightcurves for a single source into a single file
- Collect all OM lightcurves for a single source into a single file per filter
- Provide estimate of the instrumental background based on Filter Wheel Closed data
- RGS response matrices for second order spectra
- Extend stacking of OM data to Low/High resolution data

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# Optimized flaring background filtering per source



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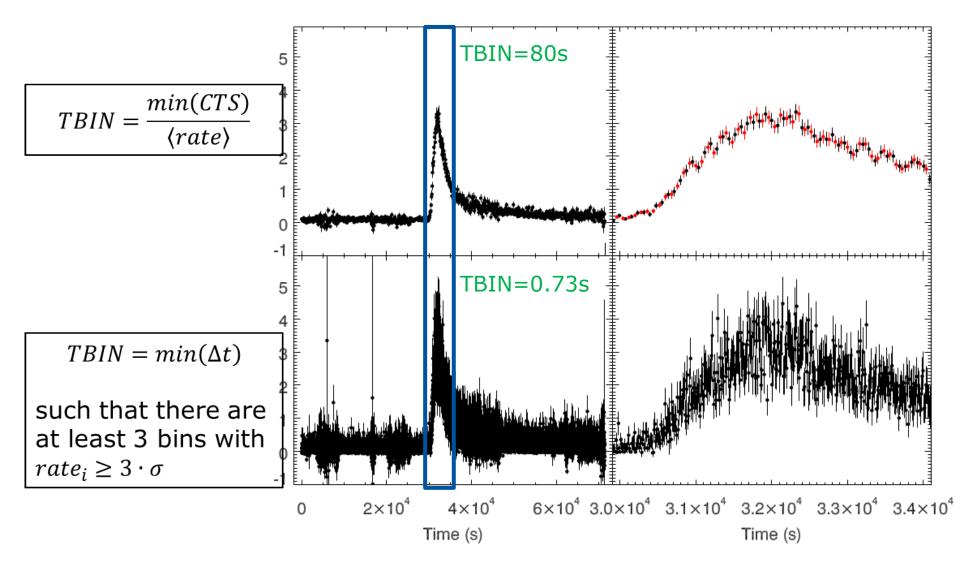
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**European Space Agency** 

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## Sampling time in EPIC light curves





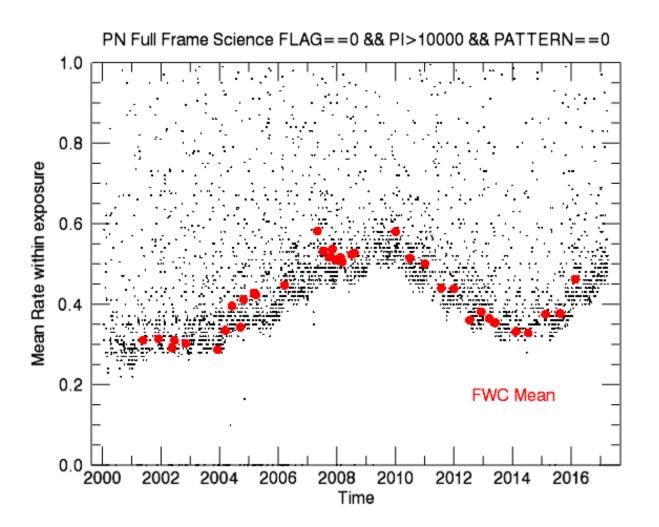
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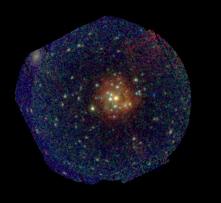


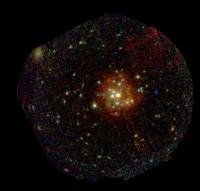


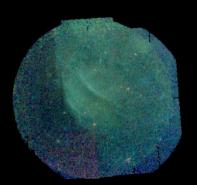


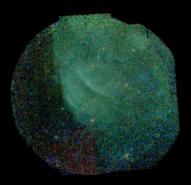
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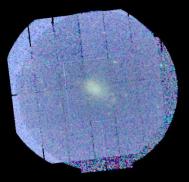
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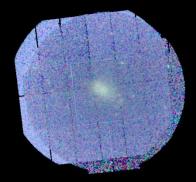


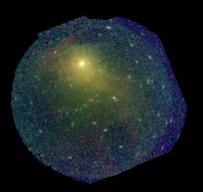


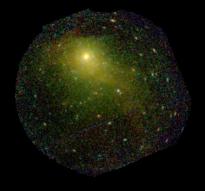


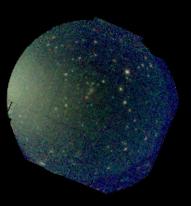






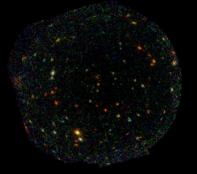














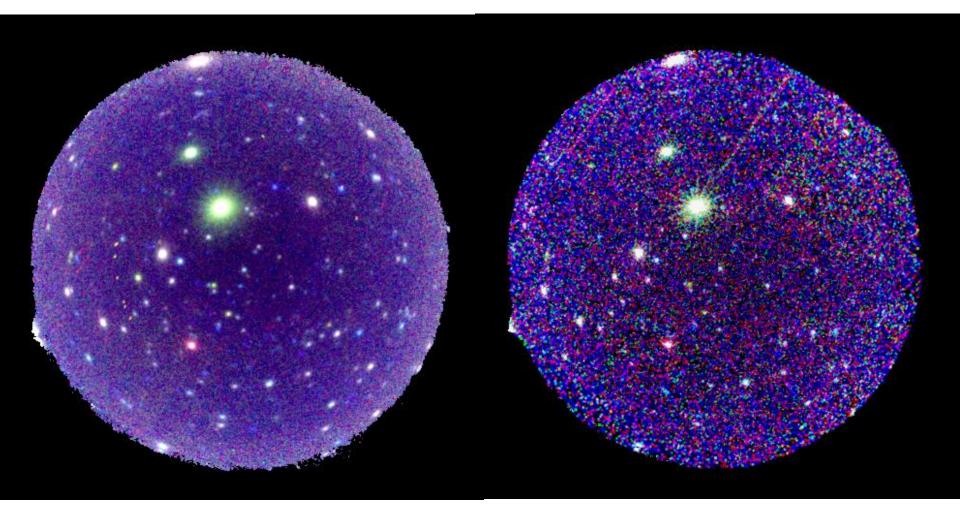


- Treatment of noisy MOS CCDs
- Model independent counts to flux conversion factors
- Production of "fluxed" images
- Response matrices for piled-up sources
- Source detection on stacked observations

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