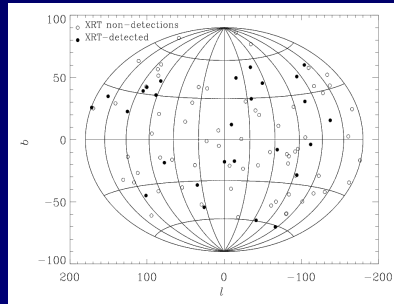
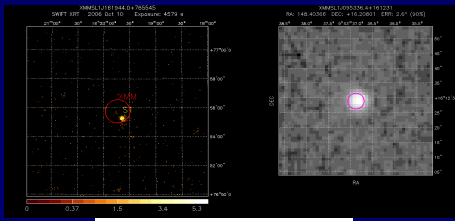


# Completing the identifications of XMM-Newton Slew Survey sources

Rhaana Starling (University of Leicester, UK)  
 rlcs1@le.ac.uk



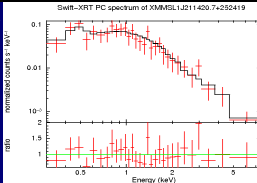
A knowledge of the source types detected in surveys such as the XMM–Newton Slew Survey is important for investigation of the log N–log S and completing studies of the X-ray background that cannot be done with pointed observations alone. Up to a quarter of Slew Survey sources are bright, yet have no catalogued X-ray detections suggesting they are highly variable, transient or spurious. We followed up 94 Slew detections with Swift and WHT/ACAM to probe their origins.



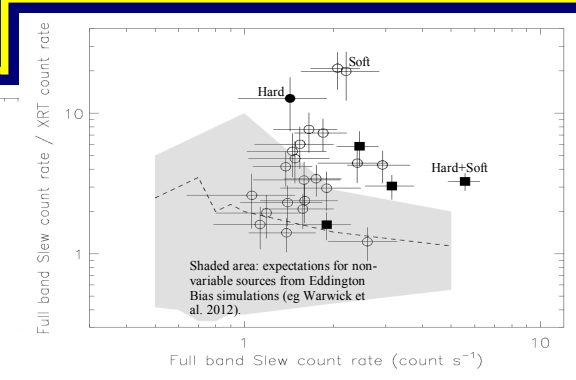
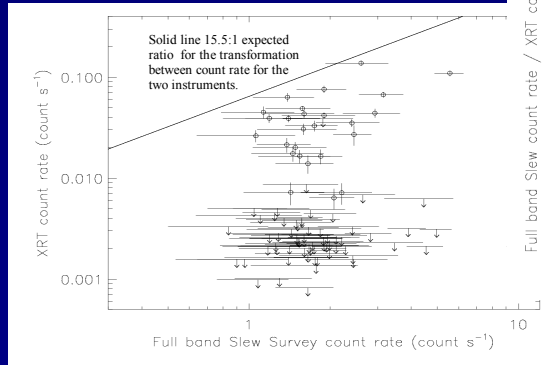
29% of the XMM Slew sample were detected with Swift XRT. We use BAT ( $\gamma$ -ray), UVOT,  $F_X/F_R$ , WISE+2MASS colours, Slew hardness and variability to classify over 2/3 of them.

First paper: Starling et al. 2011, MNRAS 412, 1853

Examples of Swift XRT and UVOT images and spectra, typically  $T_{exp} = 2$ ks.



We identify a roughly equal split between confirmed stars(10) and AGN (11), plus 3 candidate AGN, 1 candidate Galactic hard X-ray flash and 5 remain unidentified (including our 2 most variable sources).



Among the Swift-undetected objects, we suggest most if not all are extragalactic, though unlikely to be highly absorbed sources in the X-rays such as Compton thick AGN.

Spurious detections were estimated most common among hard-band-only Slew detections and rare in soft/soft+hard bands.

With WHT ACAM we obtained optical spectroscopy of 7 candidate AGN to complete the northern redshifts. Our AGN redshift range is  $0.08 < z < 0.9$ .

