

Abstract Submitted
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Examining XMM Observations in the Galactic Bulge Survey Region¹ VICENTE ESTRADA-CARPENTER, Southwestern University — The VXMM catalog was created in an effort to help find low mass X-ray binaries (LMXBs) as part of the Galactic Bulge Survey (GBS). VXMM consists of XMM-Newton observations made in the GBS region, two 6x1 degree regions 1 degree above and below the galactic plane. The goal of the project was to find GBS X-ray sources that exist in XMM observations in order to classify them. The XMM data was downloaded from NASA's database. Source detection was conducted on the filtered data sets using the 2-XMM Serendipitous Survey as a guideline for the procedure. The sources detected make up the VXMM catalog, which was used to cross reference with the GBS catalog to find GBS sources in the XMM data. In total the VXMM catalog found 107 GBS sources in the data. The spectra of several of these sources were examined to see which could be classified in the time available. CX13 was picked as it was the brightest GBS source not classified that was present in the data. CX13 was determined to not be an active star as its temperature would be high. Using a power-law model fit LMXB was ruled out, as was background AGN after the power spectrum was analyzed. Leaving it to most likely be a cataclysmic variable.

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Vicente Estrada-Carpenter
Southwestern University

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