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Ultraviolet and X-ray Properties of the Cycle 1 JWST Transiting Planet Host Stars

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Atmospheric spectroscopy of an exciting array of exoplanets is being obtained during JWST's Cycle 1. To accurately model and interpret observations of these planets' atmospheres, we must understand the high-energy spectral energy distribution of their host stars. FUV and NUV-driven photochemistry shapes an atmosphere's molecular abundances and the formation of hazes, EUV irradiation can erode a planet's gaseous envelope, and flares can affect long term atmospheric stability. We are undertaking a large joint Hubble Space Telescope (HST), Chandra X-ray Observatory, and XMM-Newton observing program to obtain temporally-resolved UV and X-ray stellar spectroscopy of the 22 JWST Cycle 1 targets without UV characterization data in the HST archive. We present a summary of the X-ray and UV luminosity and time variability of our observed stars and how these properties vary with stellar mass and age.