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## The Extreme Ultraviolet and X-Ray Irradiance Sensors (EXIS) on GOES-16: Measurements, Data Products, and First Results

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Launched in November 2016, the NOAA GOES-16 satellite has the EXIS suite that consists of all new versions of the Extreme Ultraviolet Sensors (EUVS) and X-Ray Sensors (XRS) for monitoring the solar irradiance in the wavelength range that drives the thermosphere and ionosphere. The new XRS features updated technology, an increased dynamic range, and flare location capability, while continuing the longstanding historical record of solar soft X-ray measurements of flare variability. The previous version of the EUVS measured broad bandpasses, whereas the new EUVS measures specific solar line emissions selected to span the range of temperatures and variability in the solar atmosphere, allowing for the modeling of the full spectral range. In this presentation we will describe the measurements, models, validation, and first results for the GOES-16 EXIS.