



On the energy released in the extreme ultraviolet range by solar flares

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As the result of different physical processes taking place at various heights in the solar atmosphere, solar flares radiate energy at all wavelengths with different contrast and absolute energy. Because of the lack of simultaneous observations for many flares, the spectral distribution of the flare energy and its dependence on the flare magnitude are still poorly known. In this work, we perform a statistical analysis of many flares observed by the SDO/EVE instrument, which measures the Sun-as-a-star extreme-ultraviolet spectrum with unprecedented temporal and spectral resolution. In particular, we will estimate the energy released in various parts of the EUV spectrum and look at its dependence on the flare magnitude.