

GOES calibration update

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As far as the GOES wavelength range is concerned, CHIANTI 5.2 produces spectra identical to those of 5.1.

The calibration data for the XRS detectors on GOES 11, whose data are now being reported by NOAA in place of those from GOES 10, were supplied by Rodney Viereck of NOAA (the GOES 13 calibration has not yet been verified and has not been released). The figure compares the wavelength responses for GOES 10, 11, and 12 (a couple of obvious but insignificant typos for GOES 10 and 12 have also been corrected): while the 0.5-4 Å channels are essentially identical for all three telescopes, the 1-8 Å responses are significantly different, with GOES 11 being over 10% more sensitive than GOES 10. This is reflected in the wavelength–averaged "G factors": they are 3.824, 4.377 and 4.090 × 10⁻⁵ for the GOES 10, 11 and 12 1-8 Å channels, respectively. GOES 11 and 12 are relatively more sensitive than GOES 10 above 8 Å (by up to a factor of 2), but this is in a region that contributes little to the overall response.