Y-offsets of EIS spectra

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Wavelength dependent offsets of EIS spectra in North-South direction have been determined by using Mercury transit on November 8, 2006. Figure 1 presents the Mercury transit seen by EIS slot observations. Location of the Mercury was determined for each spectral window. The 40" slot data allowed to measure the location in Fe XI λ181.23, Fe XII λ193.51, Fe XII λ195.12, Fe XIII λ202.04, He II λ256.32, Fe XIV λ264.79, and Fe XIV λ274.20, while the 266" slot provided Fe XII λ195.12, Fe XIV λ264.79, Fe XIV λ274.20, and Fe XV λ284.20 as it required isolated emission lines.

Figure 2 shows wavelength dependent offsets with respect to Fe XII λ195.12. Results from 40" slot and 266" slot are in good agreement. The offset between short and long wavelength bands ranges from 15 to 20 pixel for usable emission lines of the EIS.

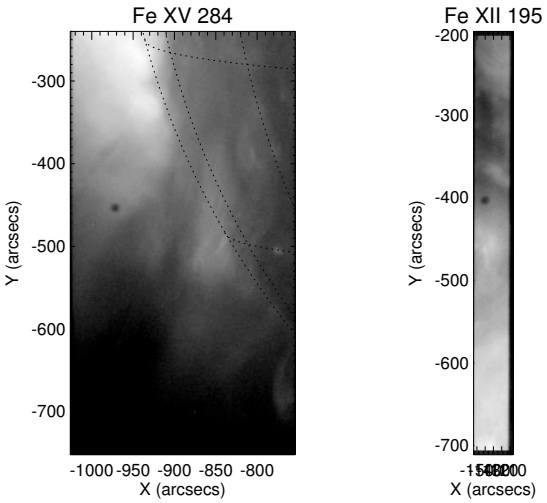

Figure 1: *Left:* Mercury approaching the Sun in the East limb. The radiance map in Fe XV λ284.16 was obtained with 266" wide slot at 18:52:16 UTC. *Right:* The shadow of Mercury on-disk. The image in Fe XII λ195.12 was obtained with 40" wide slot at 21:30:12 UTC.

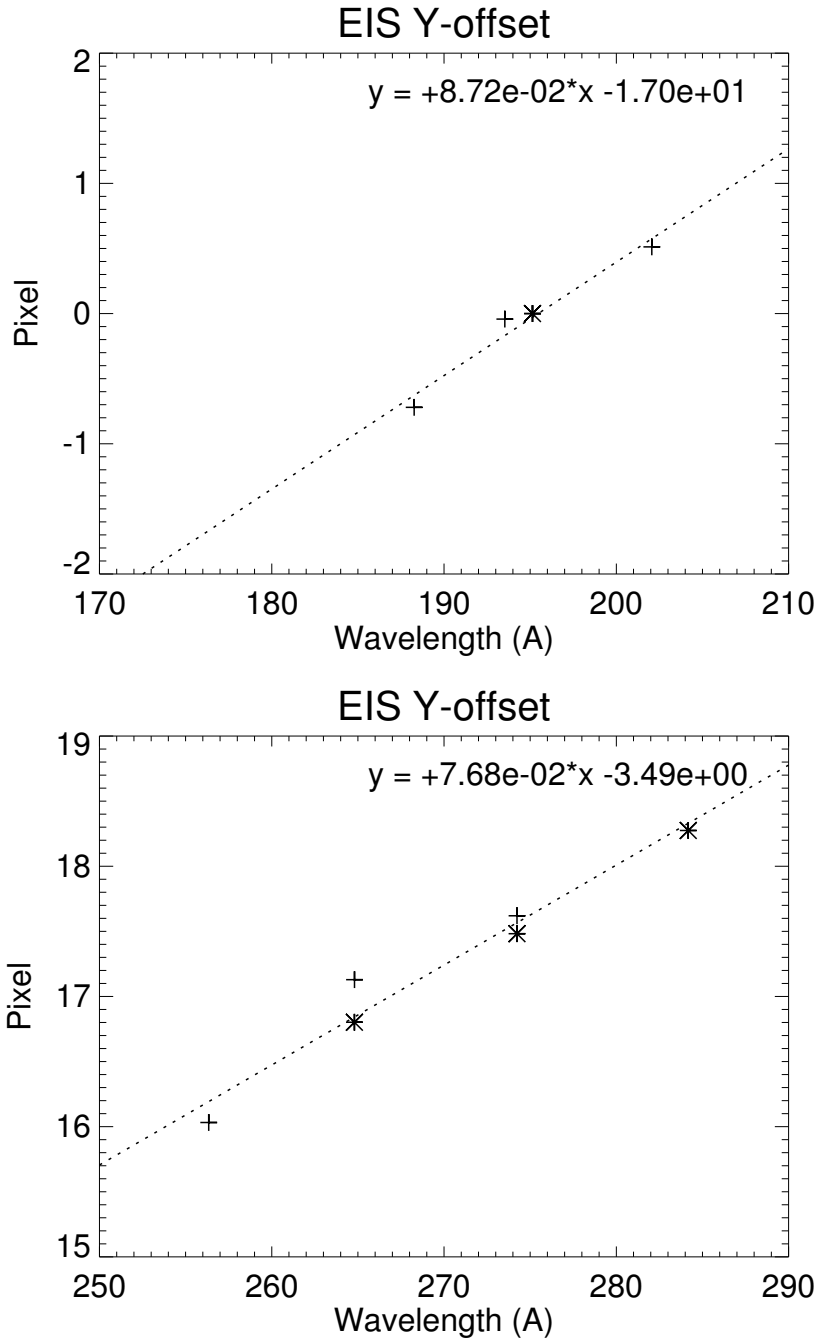

Figure 2: Y-offset with respect to the emission line in Fe XII λ 195.12 in the unit of EIS pixel (1 arcsec). Cross and asterisk indicate offsets inferred from 40" slot and 266" slot, respectively.