

# Magnetic field measurements

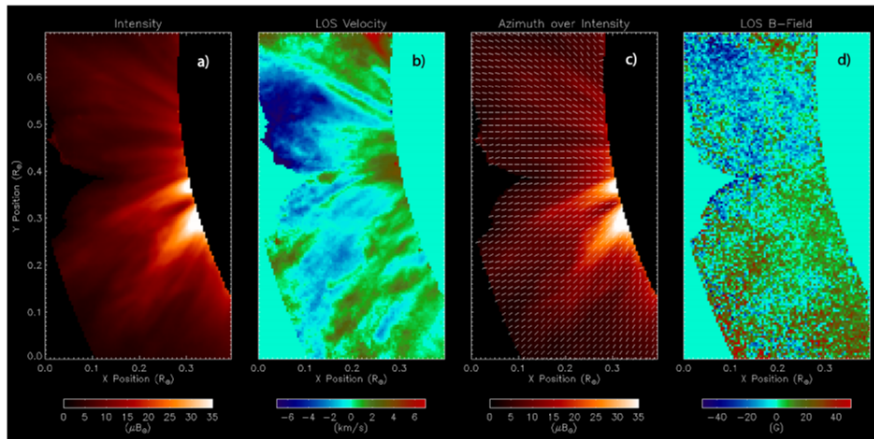
first vector magnetic field inferences along an individual, resolved coronal loop structure extending up to heights of 70 Mm (0.1 R<sub>Sun</sub> ), and the first polarimetric measurements of coronal loops located on disk

off limb measurements

Tomczyk et al. 2008

- azimuth of the magnetic field from linear polarization(ambiguity in orientation):  
$$\phi = 0.5 \arctan(U/Q)$$
- strength of L.O.S magnetic field from zeeman shift

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**Figure 8** Map of inferred values of coronal parameters over the subarray shown in Figure 7. (a) The intensity of the Fe XIII 1074.7 nm emission line; (b) The LOS velocity; (c) The intensity with superimposed vectors showing the plane-of-sky direction of the magnetic field; (d) The LOS component of the coronal magnetic field.

Figure 1: Tomczyk et al. 2008 measurements

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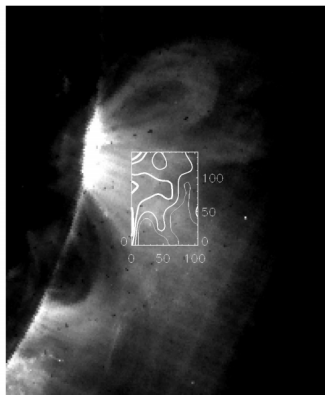


FIG. 3.—Contour map (based on  $20''$  pixels) of the measured coronal magnetic field strength using Fe XIII overlotted on the EIT Fe XV image. The thick contour corresponds to 4 G, with additional contours corresponding to flux densities of 2, 0, and  $-2$  G. Tick marks indicate the spatial scale in units of arcseconds.

Figure 2: Lin et al. 2004 measurements