[2.06] Observations of the South coronal hole from EIT and Yohkoh


The Extreme ultraviolet Imaging Telescope (EIT) on board the SOHO spacecraft is capable of studying solar transition region, chromospheric and coronal plasmas over bandpasses optimized for He II 304 Å (0.08 MK), Fe IX/X 171, 173 Å (0.8 - 1.0 MK), Fe XII 195 Å (1.5 MK), and Fe XV 284 Å (2.0 - 2.5 MK) with 2.5 arcsecond spatial resolution. This telescope in concert with the Yohkoh/SXT instrument allows us to simultaneously observe solar structures at temperatures ranging from less than 0.1MK in the transition region to over 3MK in the solar corona.

EIT has had several opportunities to observe the South coronal hole with high spatial and temporal resolution. We compare observations from EIT and SXT with an eye towards correlating temporal variations over the range of wavelengths, activity of polar crown filament systems and relating large-scale morphology of the X-ray corona to the transition region in He II.