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Poster
During solar minimum, the coronal structure is dominated by a tilted streamer belt, associated with the source of the slow solar wind. We use the 3D multi-fluid code COR3F3D described by Ofman et al. 2015, to model the streamer belt structure in multiple ions. In particular, we compute the intensities of H I Lyα and O VI ultraviolet spectral lines starting from the physical parameters obtained from the 3D three-fluid MHD model of the tilted coronal streamer belt for typical tilt angles. We compare the modeled emission in the extended corona from 1.5 to 4 solar radii to the UV spectroscopic data from the Ultraviolet Coronagraph Spectrometer (UVCS) onboard SOHO during the minimum of solar activity (1996). We discuss the differences in the 3D streamer belt structure as imaged in H I Lyα and O VI and in particular the core dimming in heavy ions of quiescent streamers. We investigate the line-of-sight (l.o.s) integration and projection effects in the UV spectroscopic observations, disentangled by the 3D multi-fluid model (see Abbo, Giordano, Ofman, A&A, 623, 95, 2019)
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