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Solar Wind Overview of Cycle 24

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The STEREO observatories were commissioned in early 2007, near the end of solar cycle 23, and has continued (outside of the solar conjunction blackout period) providing data into the present phase of cycle 24. During the approach to solar minimum (2007-2008), there are two well-delineated regions of higher speed solar wind (> 500 km/s), associated with the central meridian passage of coronal holes and correlated with lower densities, lower iron ionic charge states, and uniform magnetic polarity. Preceding these regions are higher density ridges associated with stream interaction regions. During the recent solar minimum (2008-2010) there were significant intervals of slow speed solar wind, including small transients (Yu et al., 2016) and slow interplanetary coronal mass ejections. ICMEs characterized by higher speeds and higher iron charge states became more prevalent as the cycle reached solar maximum (2013-2014). We are currently in the declining phase of solar activity in this cycle, though ICME events are still being observed. We present overview synoptic solar wind data as seen at STEREO A for the mission to date and frequency distributions of solar wind iron charge states over time.