



Solar Wind Composition and Charge States with different Solar Magnetic Activity

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Using SoHO/CELIAS/MTOF data, ACE/SWICS charge states data, SoHO/MDI data and source surface extrapolations, we examine the evolution of the photospheric magnetic field in Carrington rotation 2033 and show how this evolution is reflected in the iron charge-states and the FIP bias of the *in-situ* solar wind. The different FIP-bias signature of two ICMEs (interplanetary Coronal Mass Ejections) originating from the same active region 10798 (one is a frontside halo CME at S13W65 on Aug 22th 17:30UT, the other is a backside halo CME at S15W150 on Aug 29th 1000UT based on SoHO helioseismology information) suggest that magnetic rising effect is very important in the FIP fractionation process when the solar magnetic activity is high.