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Supplement of

Wintertime aerosol measurements during the Chilean Coastal Orographic Precipitation Experiment

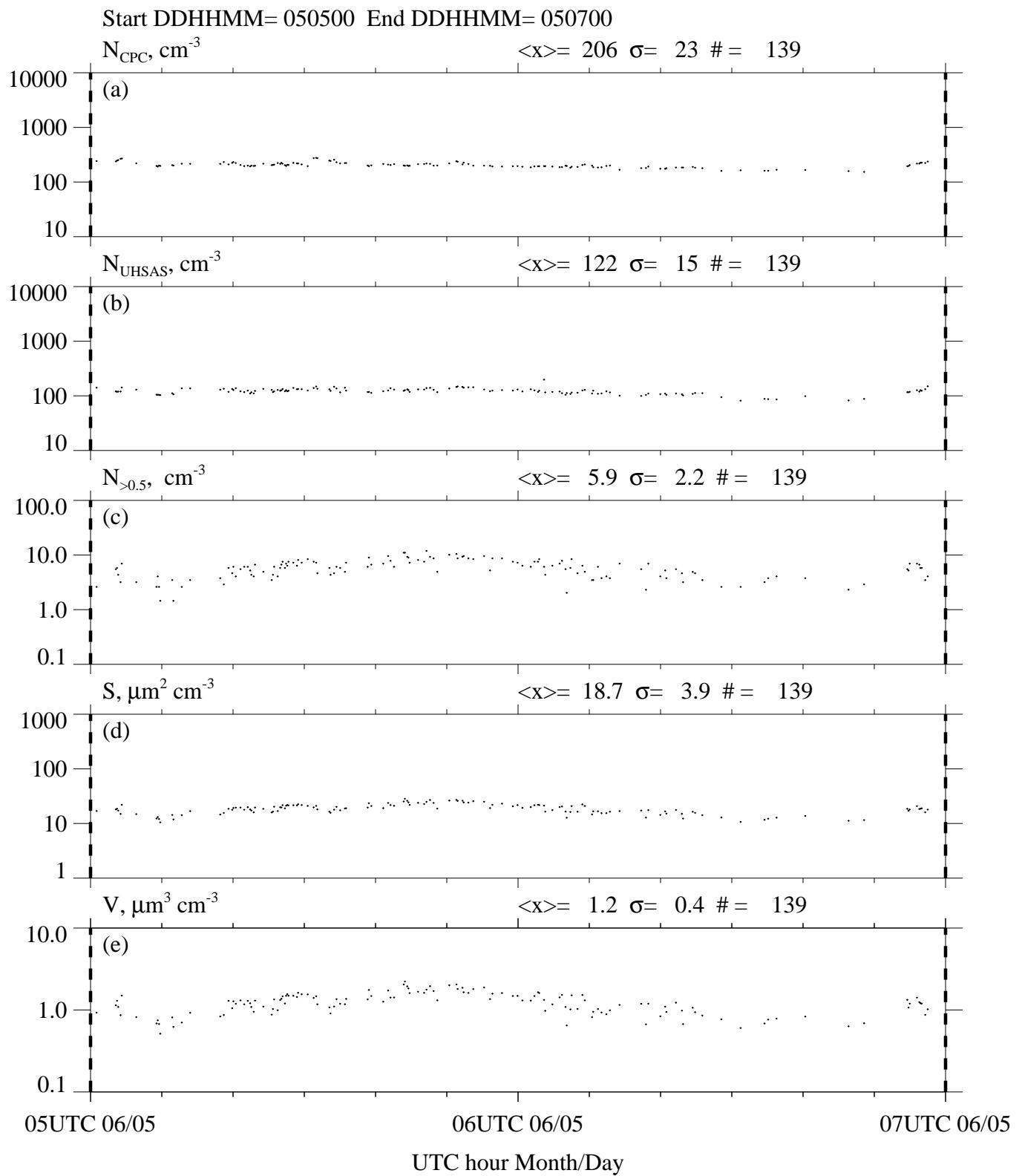
Sara Lynn Fults et al.

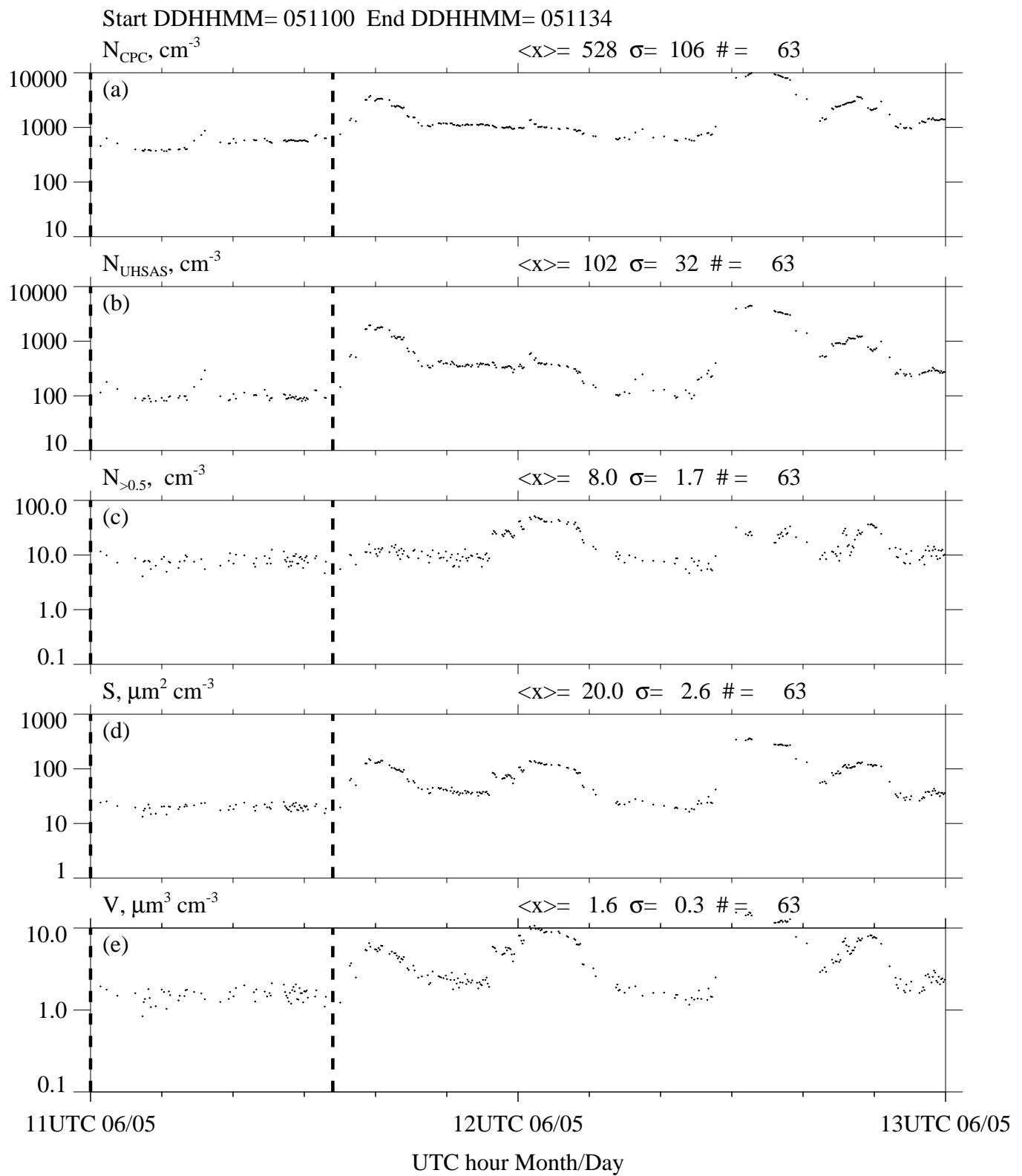
Correspondence to: Jefferson R. Snider (jsnider@uwyo.edu)

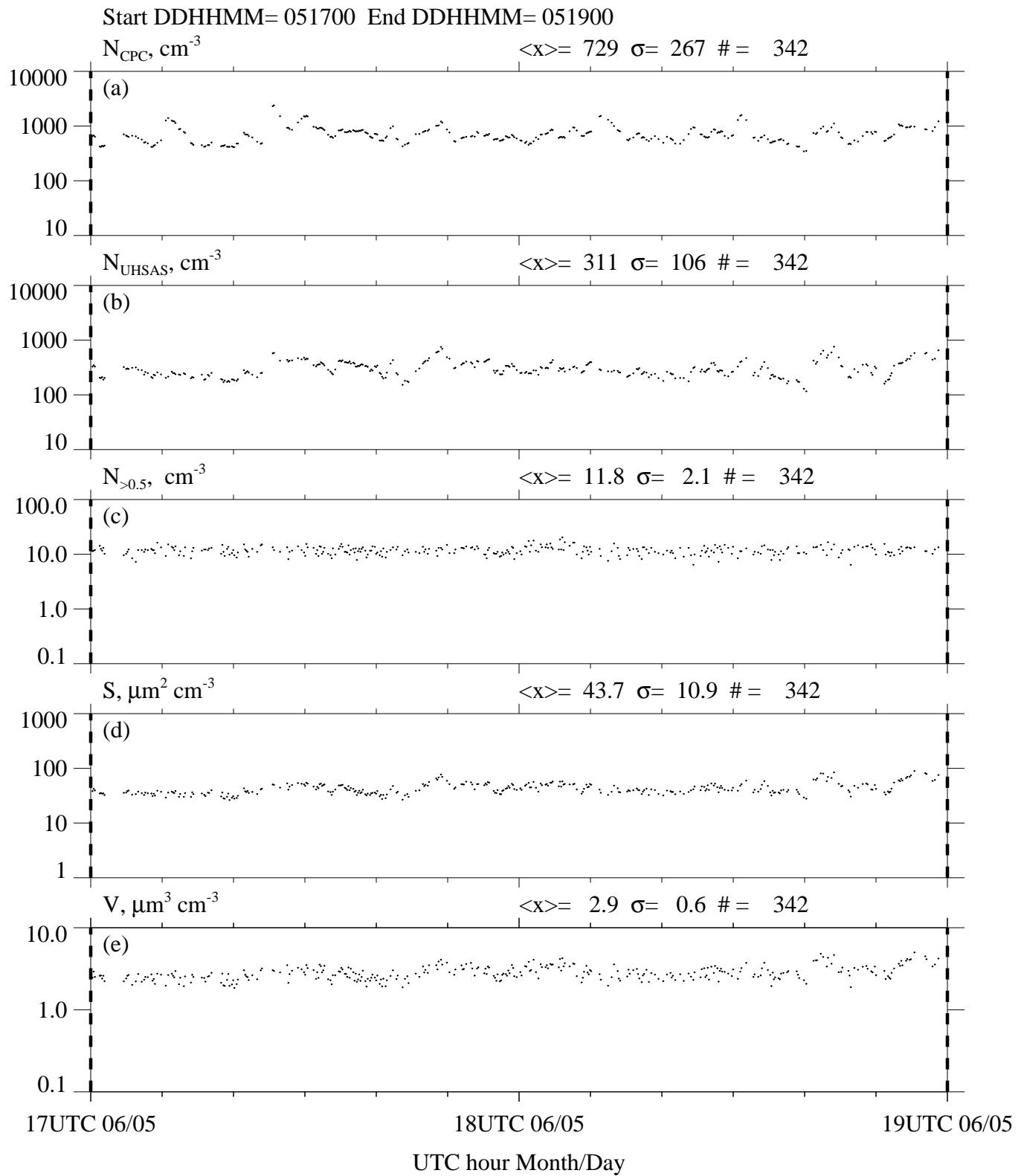
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Supplementary Material Explanation

This Supplementary Material has illustrations of 20 two-hour data segments. These segments are centered on the onshore trajectory arrival times. Start and end times of the segments are indicated on the abscissa of the graphs. Appendix B describes the numerical filter used to derive the illustrated aerosol properties. The filter attenuates aerosol property variability occurring on time scales shorter than 100 s. Four of the data segments were impacted aerosol variability occurring on time scales longer than 100 s; much of this variation was not attenuated by the numerical filter. In these instances we discarded (subjectively) portions of the two-hour segment. In each of the 20 illustrations, the vertical dashed lines delineate the subset of the two-hour segment we picked as being representative of onshore-moving air that was not affected, or only moderately affected, by emissions from continental Chilean sources.



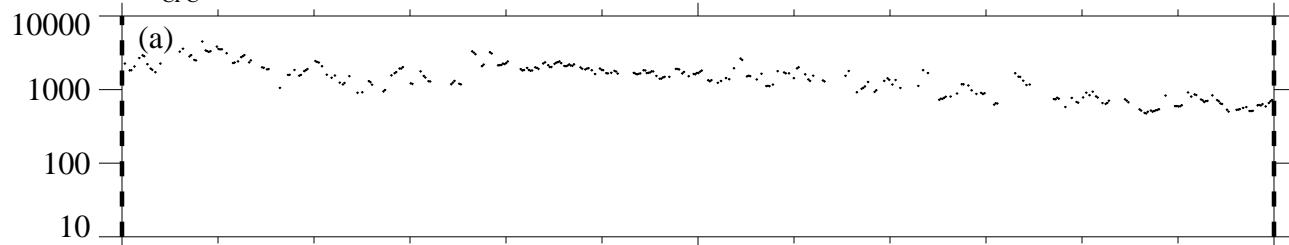




Start DDHHMM= 052300 End DDHHMM= 060100

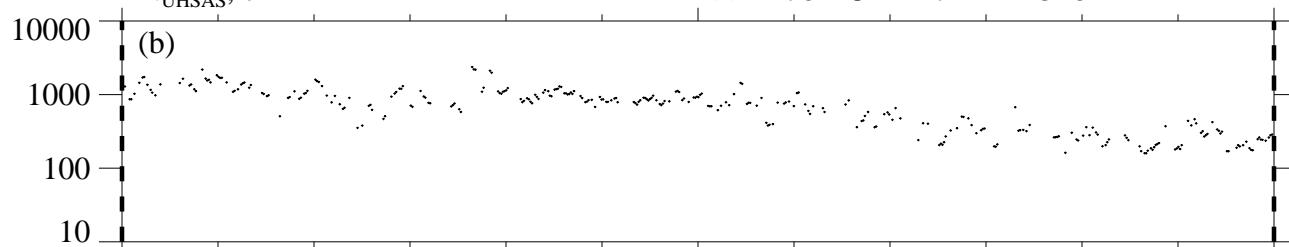
N_{CPC} , cm^{-3}

$\langle x \rangle = 1548 \ \sigma = 751 \ # = 316$



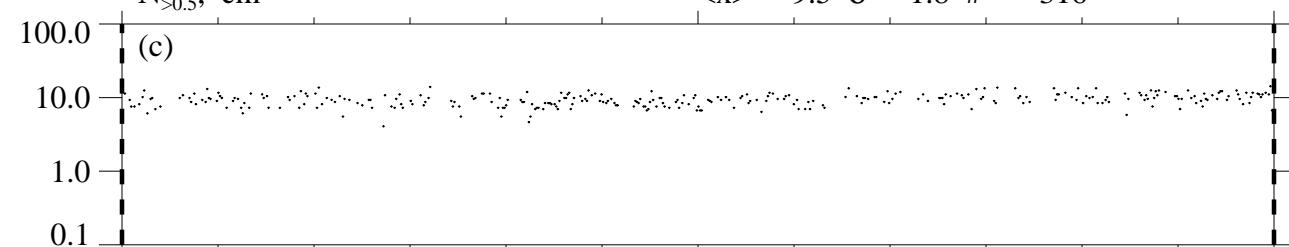
N_{UHSAS} , cm^{-3}

$\langle x \rangle = 762 \ \sigma = 447 \ # = 316$



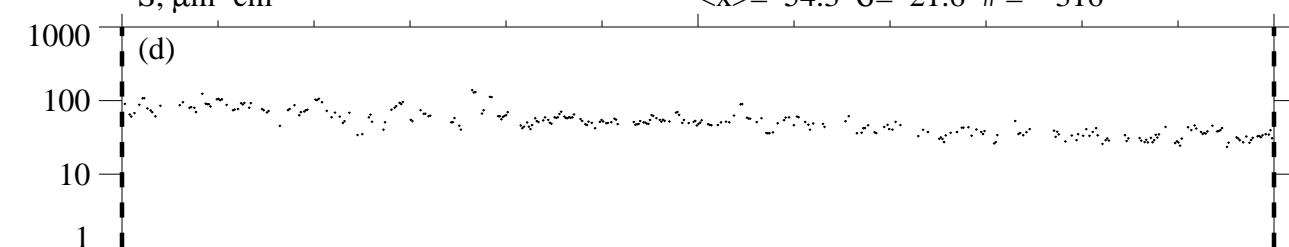
$N_{>0.5}$, cm^{-3}

$\langle x \rangle = 9.5 \ \sigma = 1.8 \ # = 316$



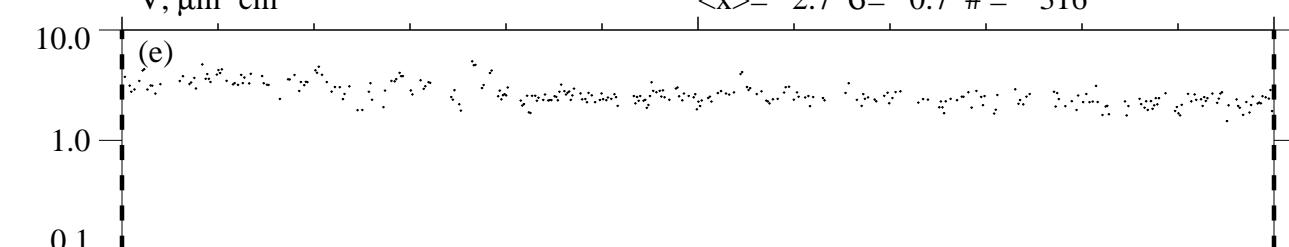
S , $\mu\text{m}^2 \text{cm}^{-3}$

$\langle x \rangle = 54.3 \ \sigma = 21.6 \ # = 316$



V , $\mu\text{m}^3 \text{cm}^{-3}$

$\langle x \rangle = 2.7 \ \sigma = 0.7 \ # = 316$

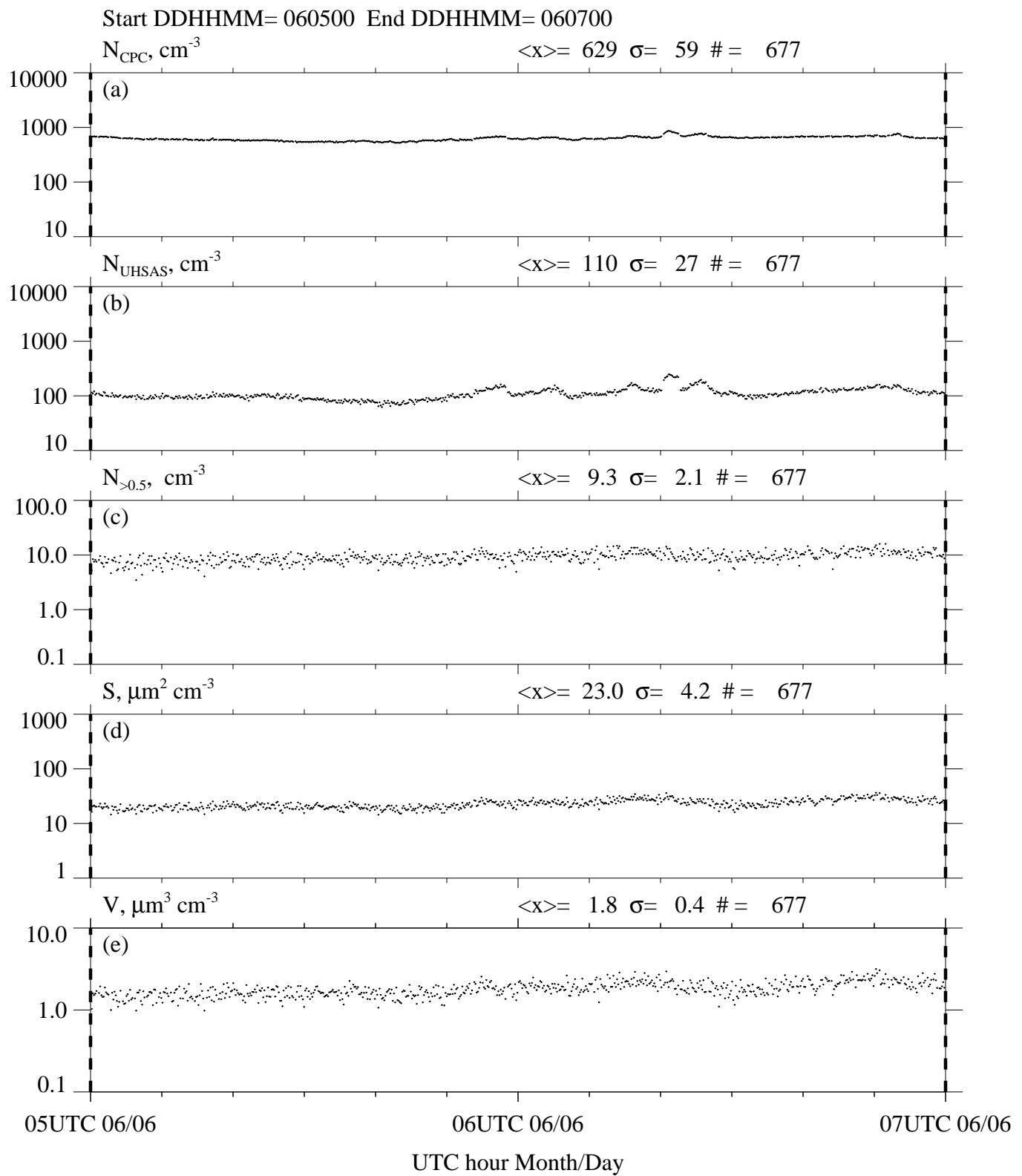


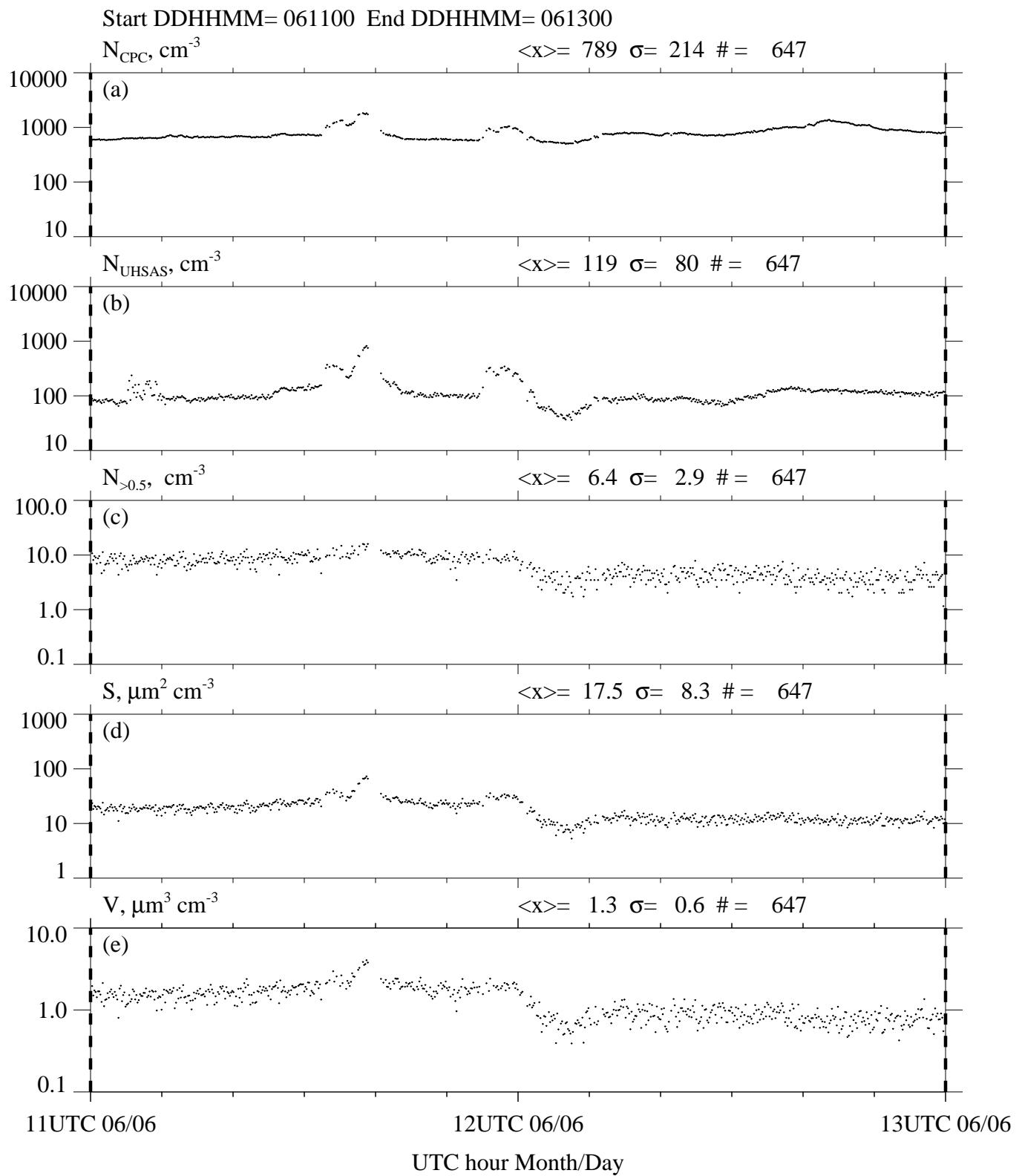
23UTC 06/05

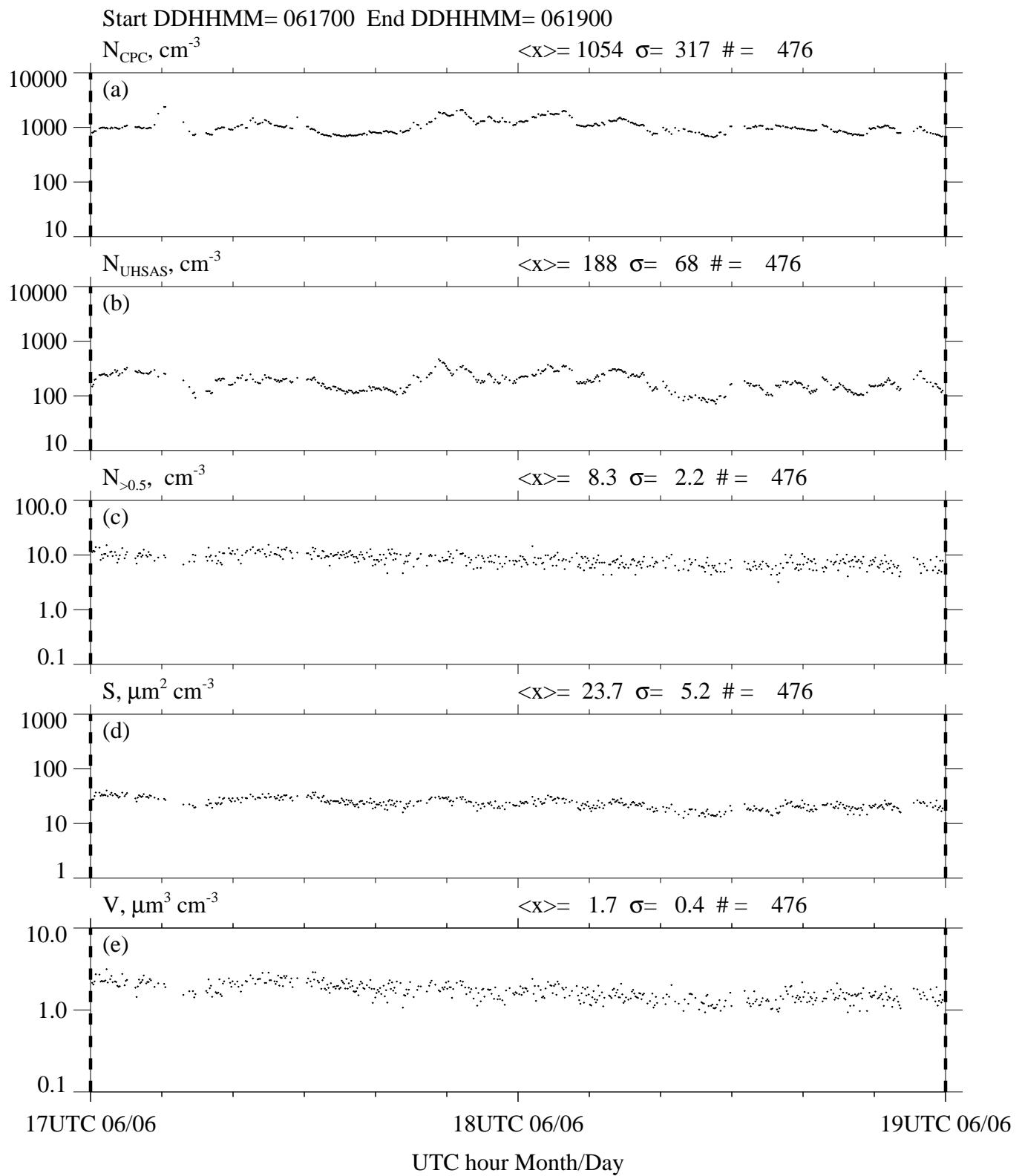
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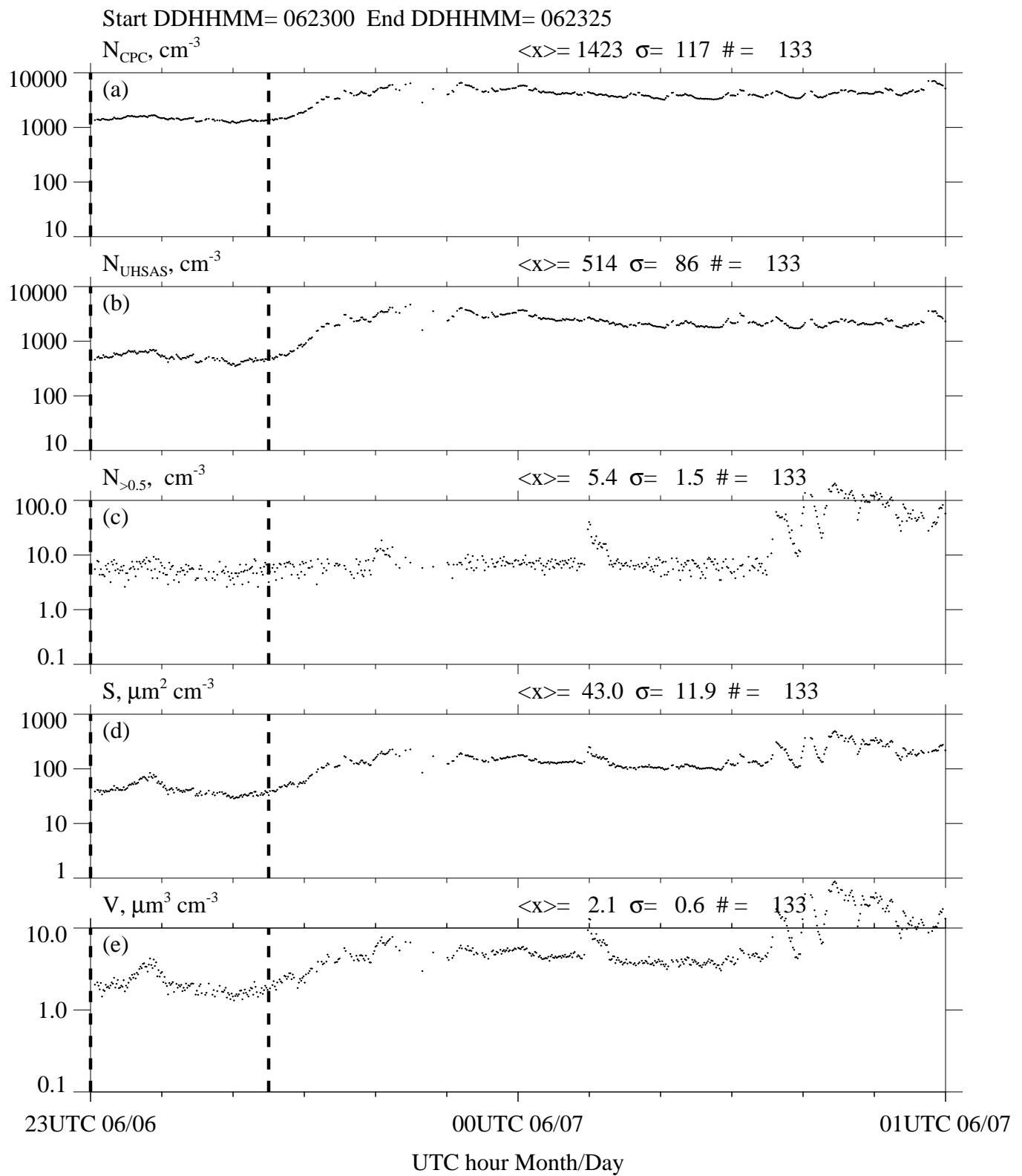
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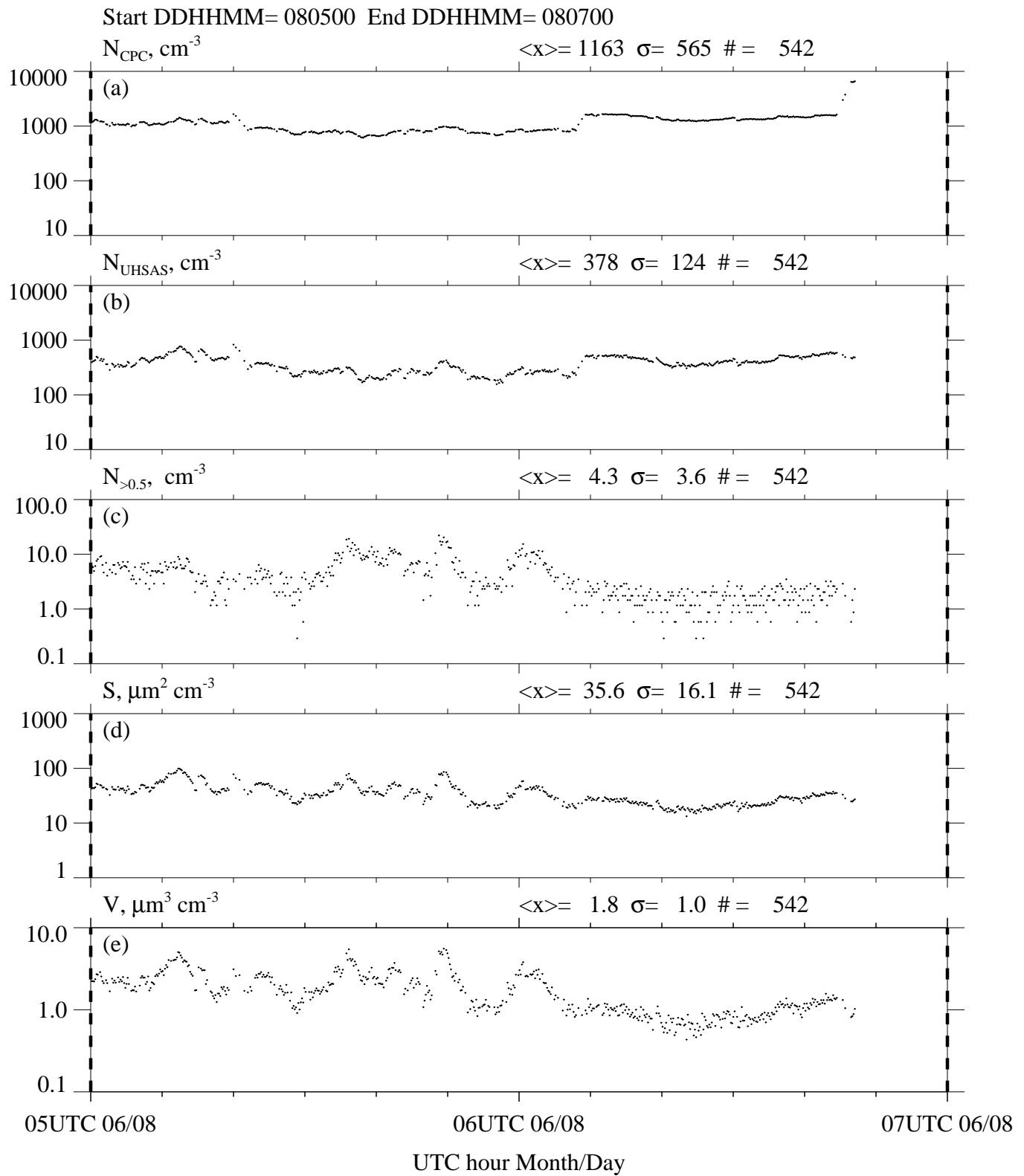
UTC hour Month/Day

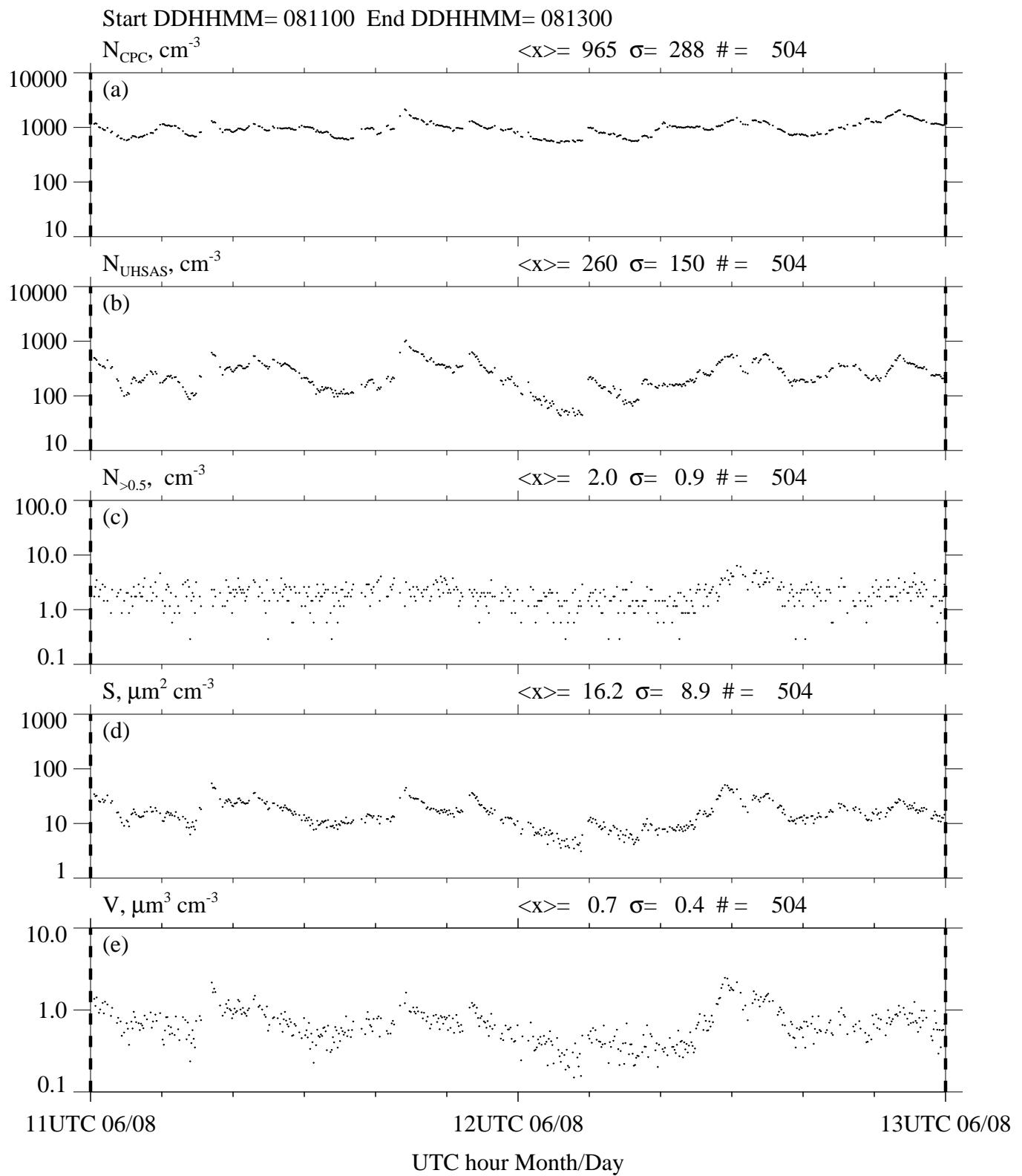


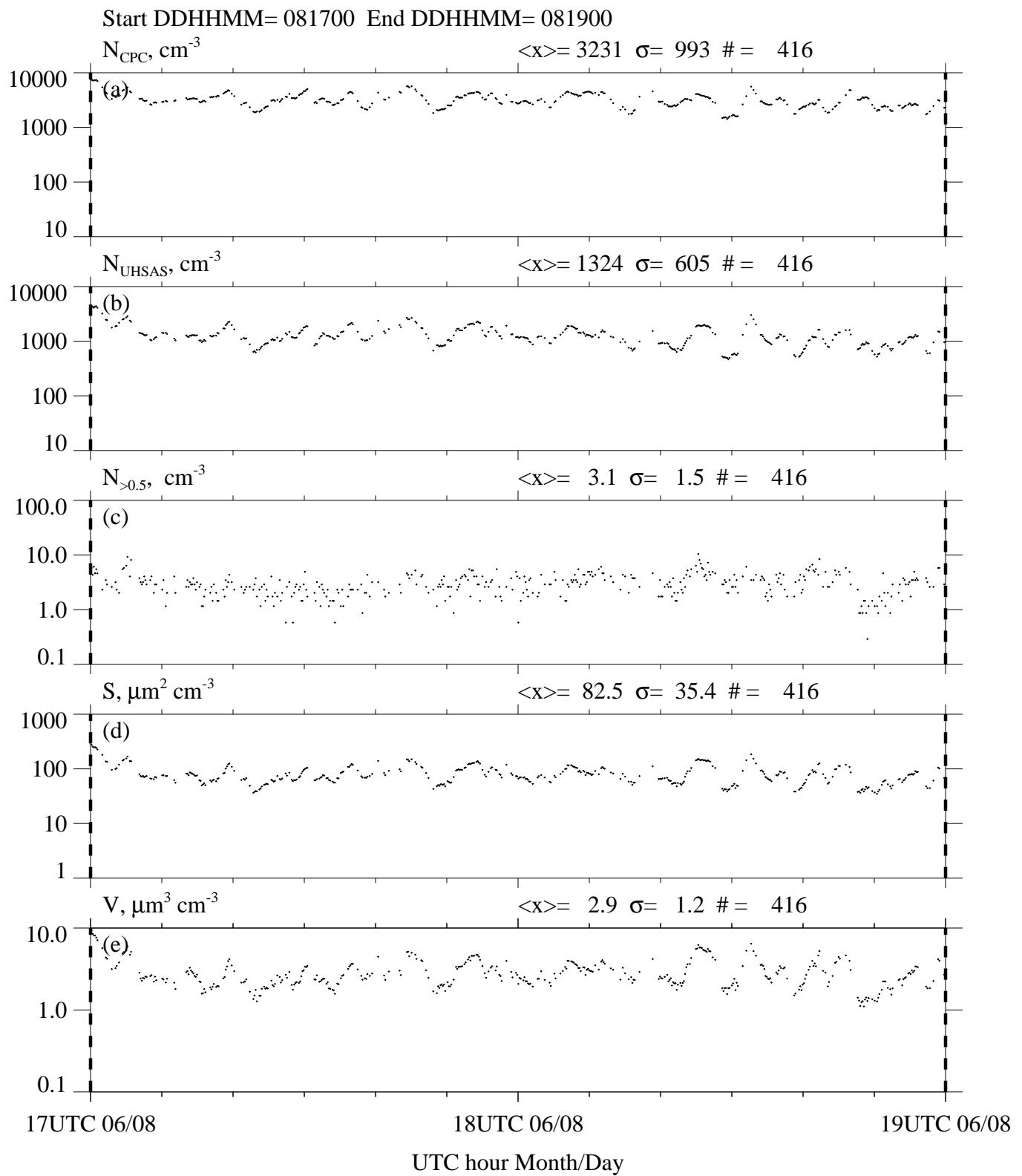


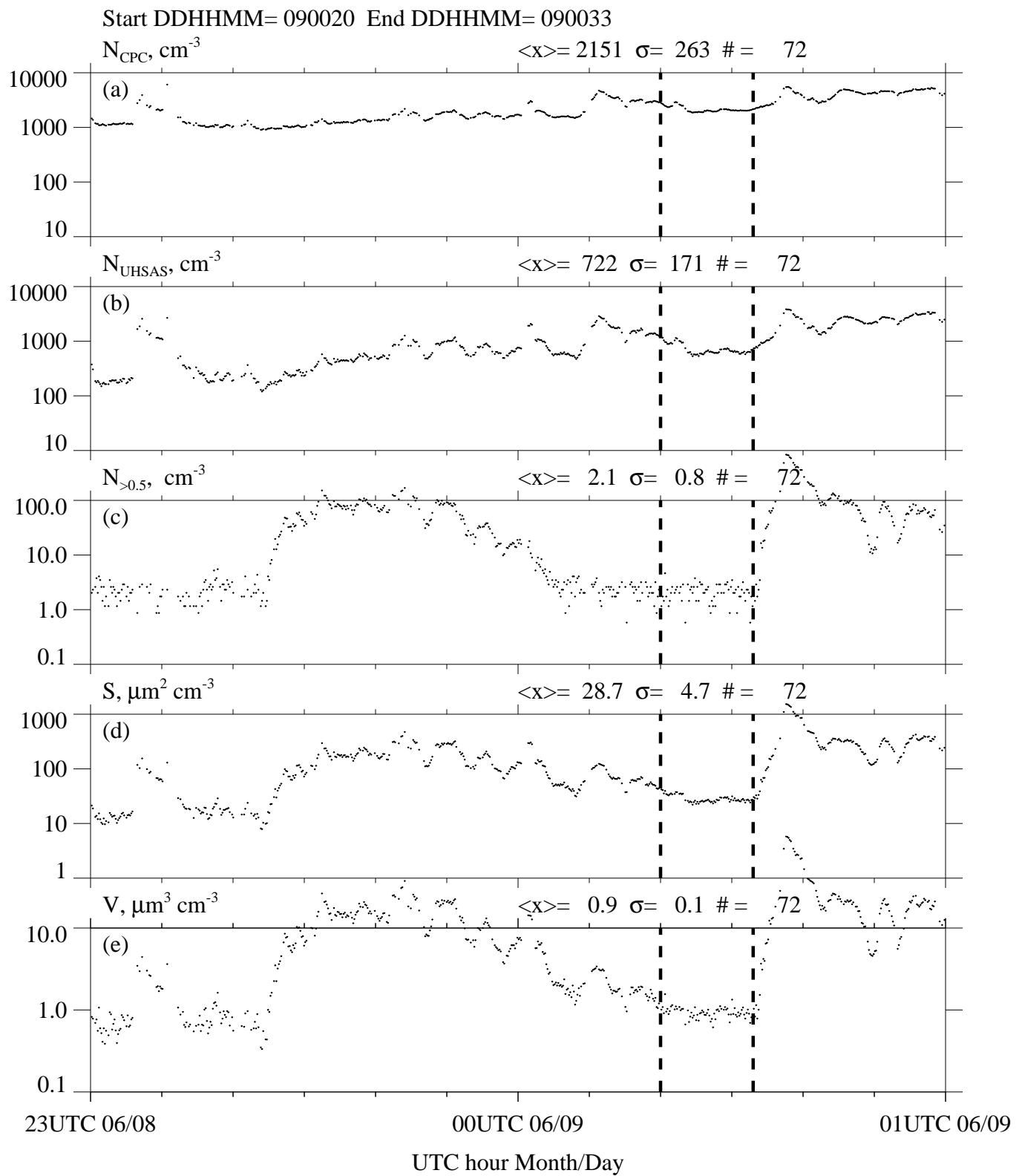












Start DDHHMM= 090500 End DDHHMM= 090700

N_{CPC} , cm^{-3}

$\langle x \rangle = 1074 \ \sigma = 237 \ # = 554$

