



Supplement of

Sunlight-absorbing aerosol amplifies the seasonal cycle in low-cloud fraction over the southeast Atlantic

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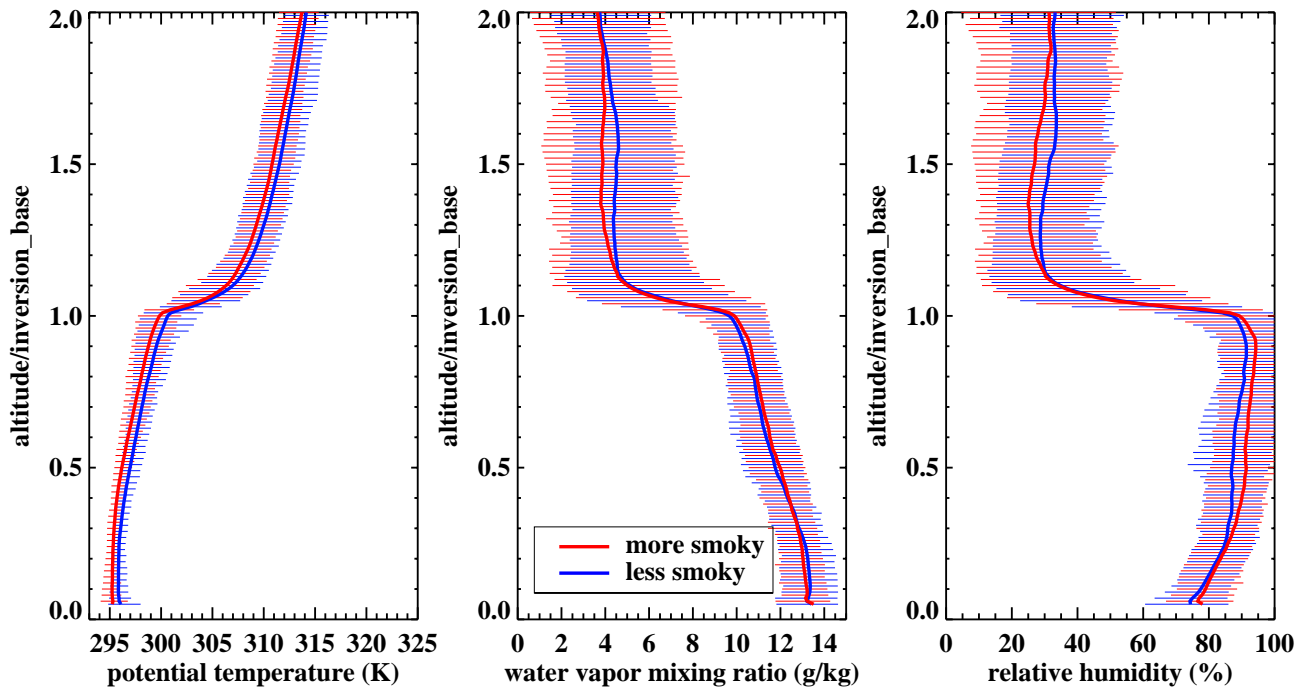


Figure S1. Radiosonde profiles (altitude above sea level normalized by inversion base height) of potential temperature (θ), water vapor mixing ratio (q_v), relative humidity (RH), composited by more and less smoky conditions, for July, 2016 and 2017 combined. Horizontal bars indicate 10th and 90th percentile values.

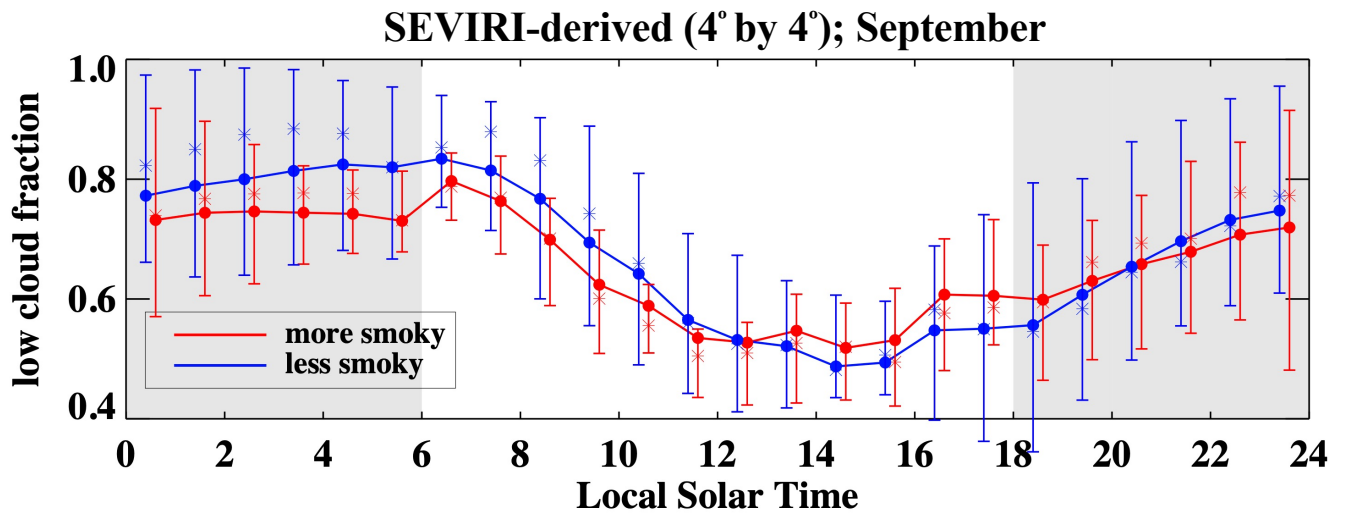


Figure S2. Diurnal cycle of SEVIRI-derived areal-mean low-cloud fraction (4° by 4°), composited by more and less smoky conditions. Means, medians, and inter-quartile range are indicated by filled-circles, asterisks, and error bars, respectively.

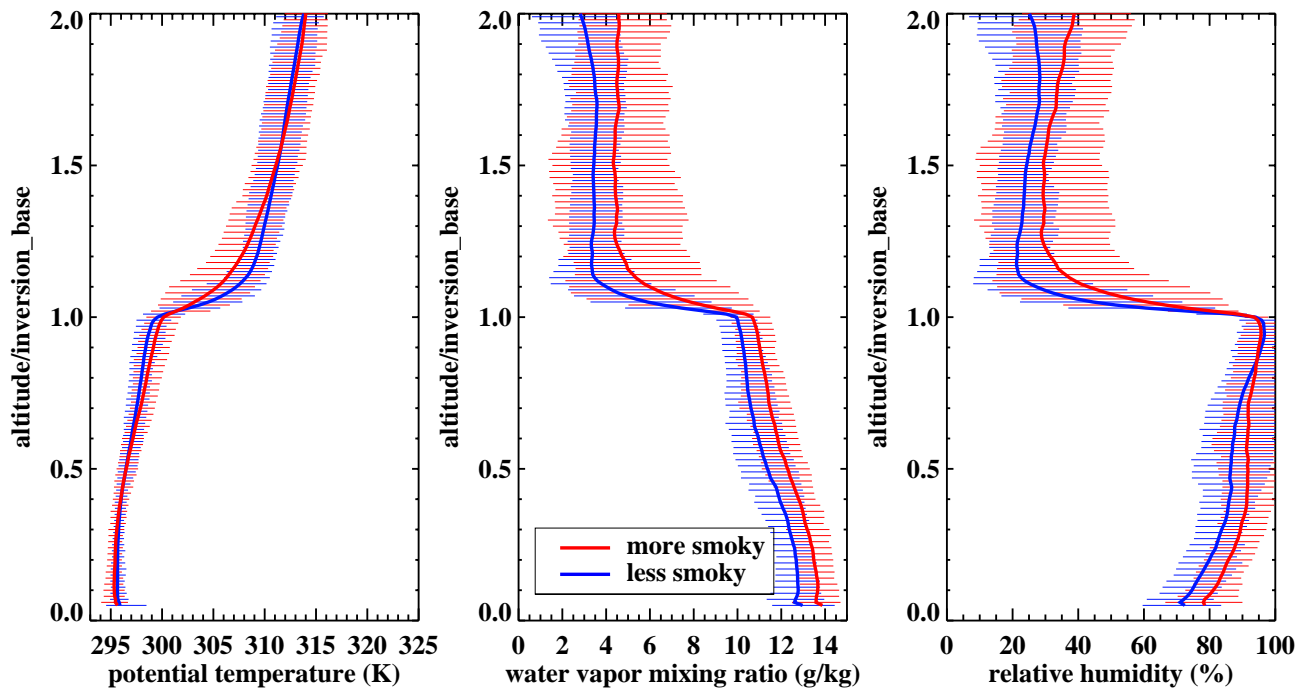


Figure S3. As in Fig. S1, but for September.

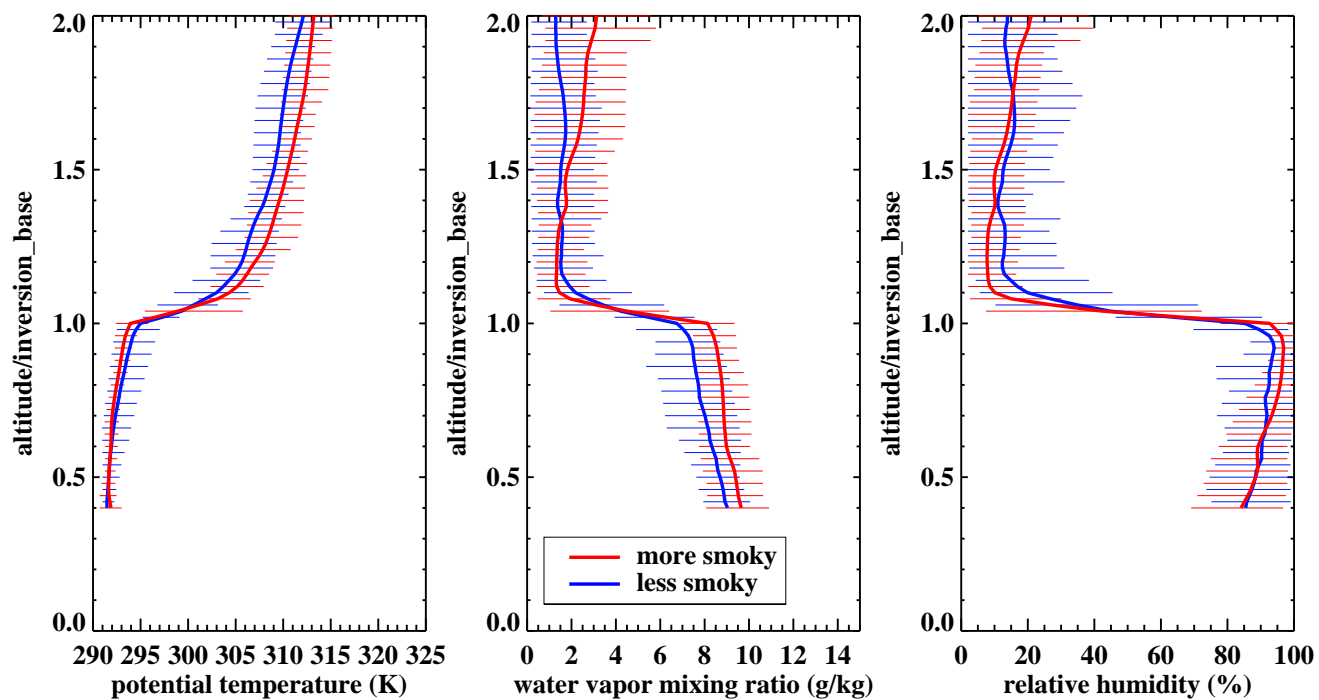


Figure S4. As in Fig. S3, but for St. Helena Island from 2 days prior to those with high and low smoke loadings at Ascension.

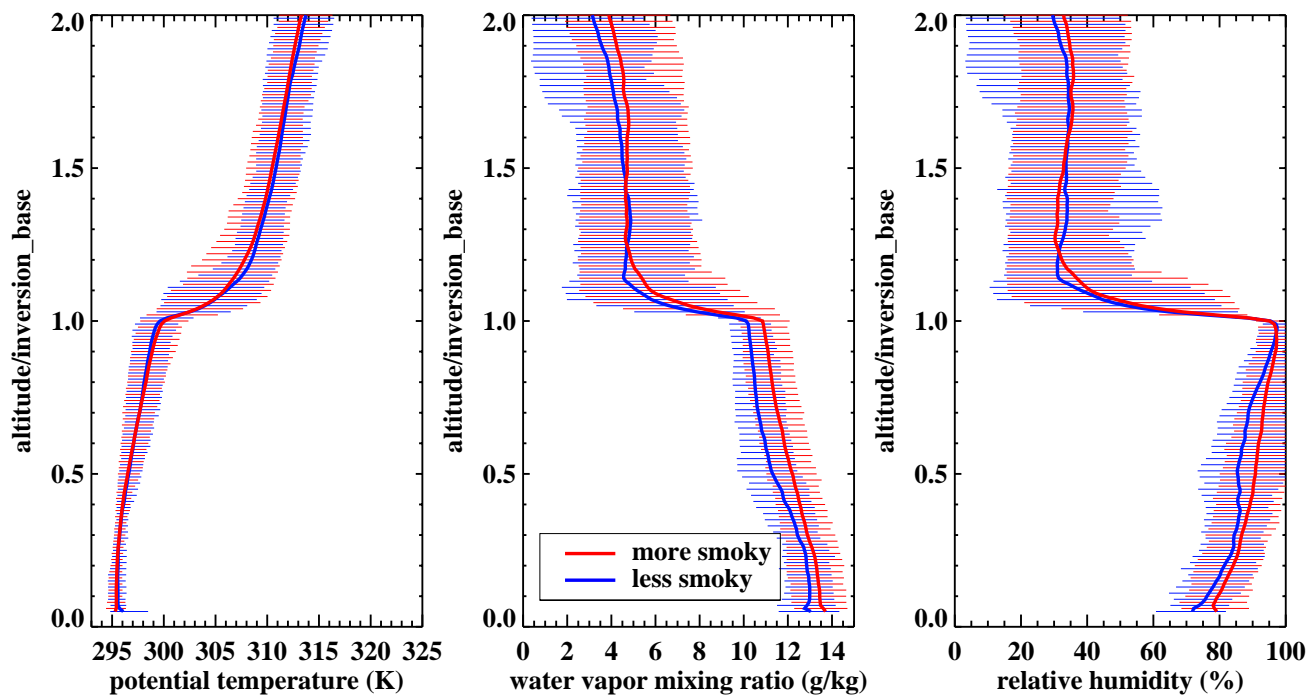


Figure S5. As in Fig. S1, but for October.