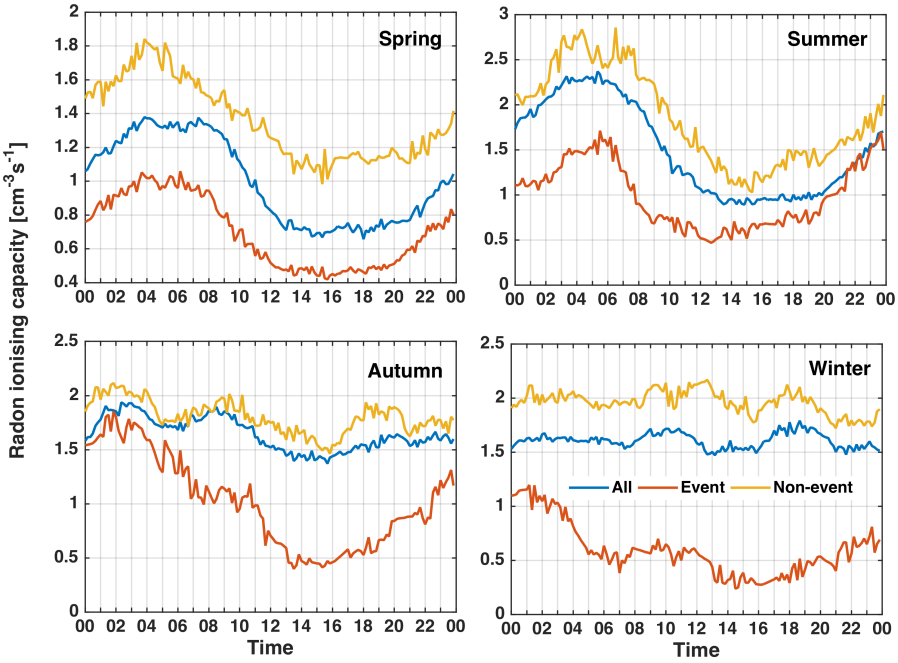
Supplementary

Figure S1. 10-min median radon ionising capacities on event and non-event days in different seasons over 2003-2006.

Figure S2. Relationship between the hourly ionising capacity and the 0.8-1 nm ion concentration when the condensation sink (CS) is below 0.001 s^{-1}. Upper panel: with relative humidity (RH) on the colour scale. Middle panel: with air temperature (*T*) on the colour scale. Lower panel: with condensational sink (CS) on the colour scale.

Figure S3. Diurnal relationship between median solar radiation intensities and ion concentrations in 0.8-1 nm, 1-1.2 nm and 1.2-1.7 nm sub-cluster size ranges in different seasons over 2003-2006.



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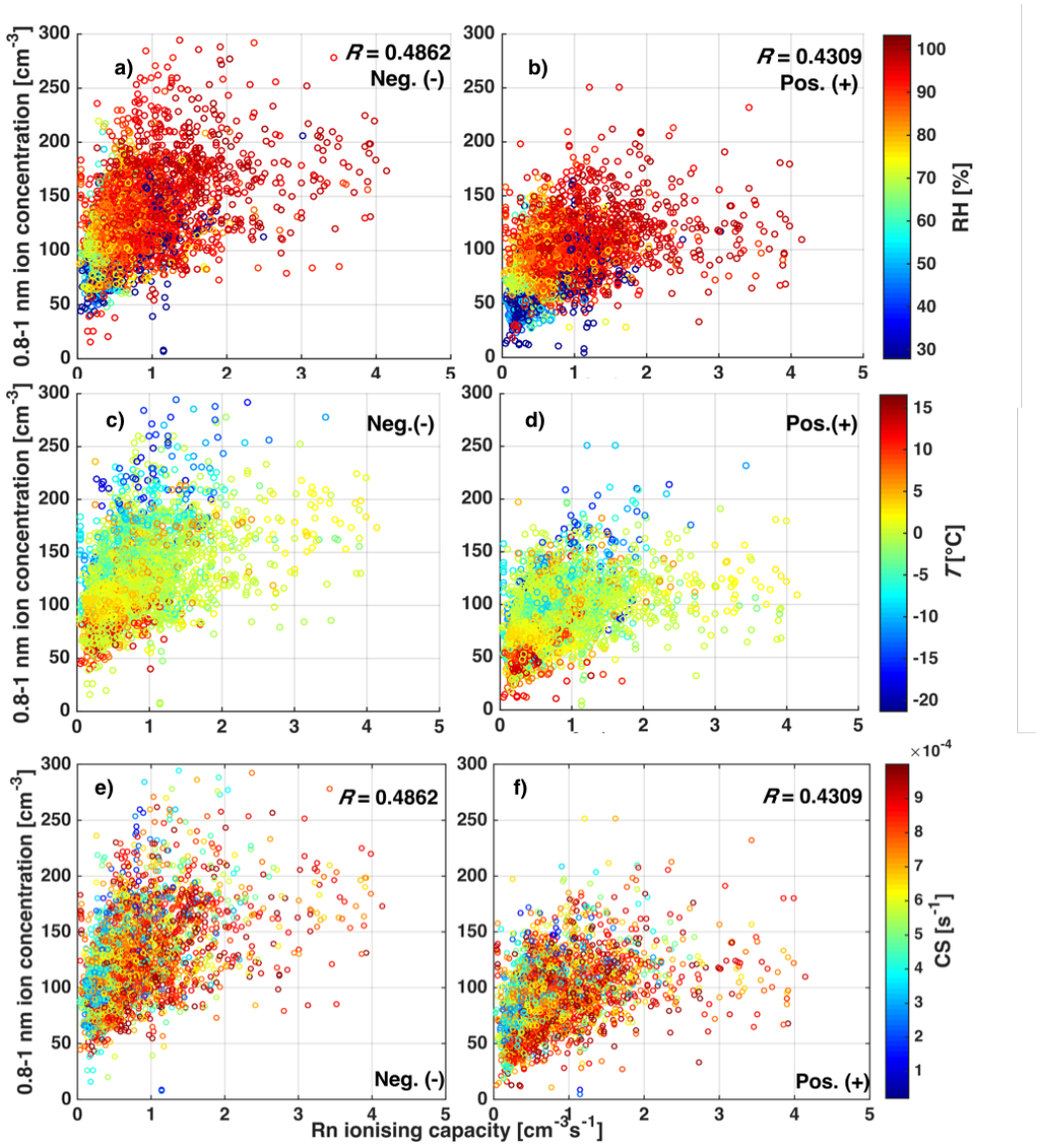

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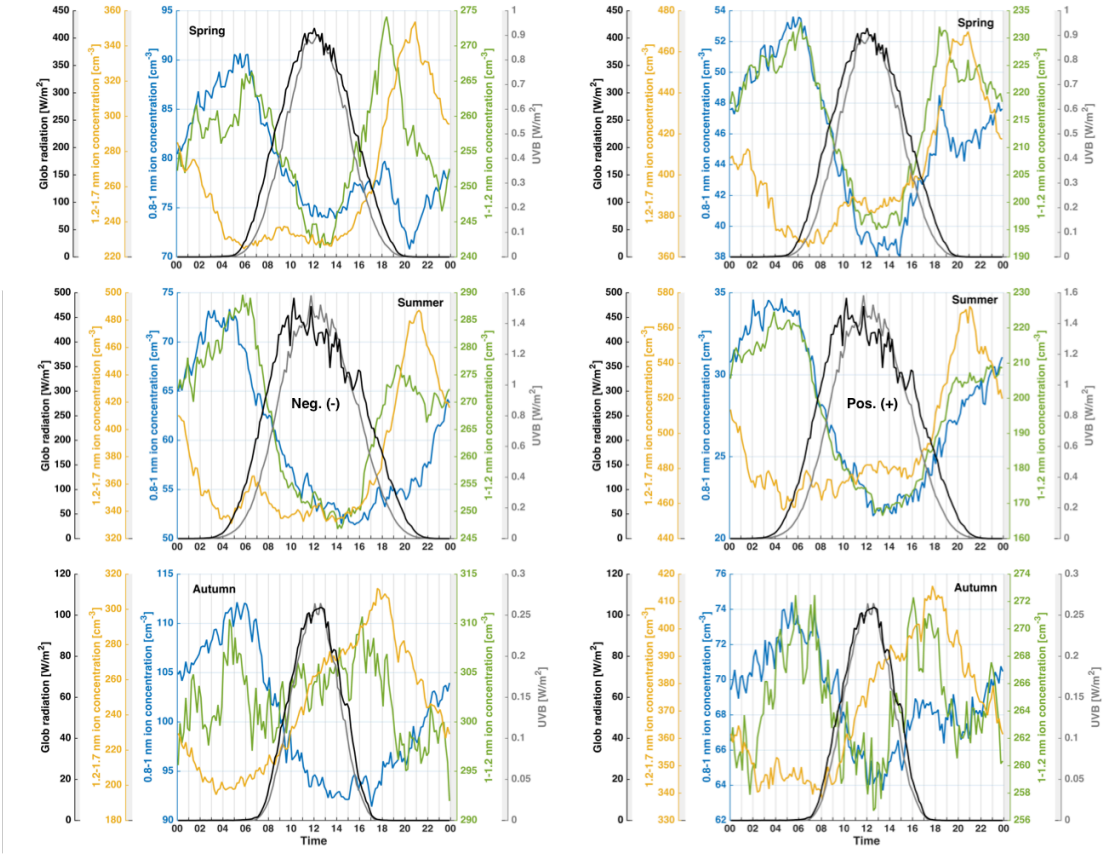

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