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Supporting Information for

Electrification Within Wintertime Stratiform Regions Sampled During the 2020/2022 NASA IMPACTS Field Campaign

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**Contents of this file**

Movie S1

**Additional Supporting Information (Files uploaded separately)**

Captions for Movie S1

**Introduction**

This supporting information contains a specific movie/video regarding sensitivity testing for Figure 4 by varying the collection efficiency from 0.01 to 1. It demonstrates that varying the collection efficiency does alter the output of the theoretical model that is highlighted in the manuscript.

Movie S1. The ice crystal growth regime based on the theoretical LWC, observed LWC (lime green line) and ice supersaturation (red line), and median mass-weighted hydrometeor radius (orange line) but using various collection efficiencies (as denoted by E:X in the title). Black lines represent LIP observations while the dashed line represents the spatiotemporally adjusted electric fields to account for offsets between the NASA ER-2 and P-3.