## Supporting Information for:

## Transient ionospheric upflow driven by poleward moving auroral forms observed during the Rocket Experiment for Neutral Upwelling 2 (RENU2) campaign

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Additional Supporting Information (Files uploaded separately):

2018GL081886\_modeledPMAFmovie.avi

Description:

The Supporting Information (file uploaded separately) included with this manuscript is a video of the model results from the full PMAF sequence simulation. The six panels include (starting with the top row, left to right) brightness data from the imager's field of view (sounding rocket trajectory – blue line), electron density, ratio of  $O^+$  to electron density, (and on the bottom row, left to right) the normalized brightness keogram, electron temperature, and field aligned ion velocity. The tilted-dipole grid that the model uses can be seen in the "tilt" of the data contained in the four rightmost panels. This video allows for the spatiotemporal variability of the ionospheric response to the transient PMAFs to be observed as the simulation evolves over time.

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