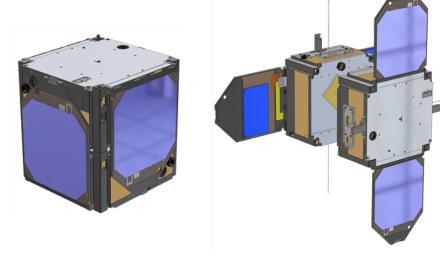
# Statistical Properties of Electron Curtain Precipitation Estimated with AeroCube-6

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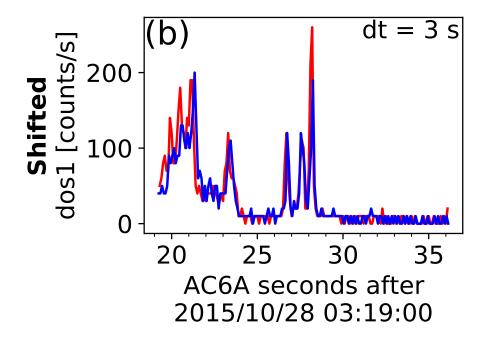
Blake and O'Brien 2016 discovered curtains: a latitudinally narrow and stationary form of precipitation with mysterious physical shape, statistical properties, and origin.

We investigated their statistical properties and began to unravel their mysterious origin.



Combined 1U

Separating into two 0.5U spacecraft

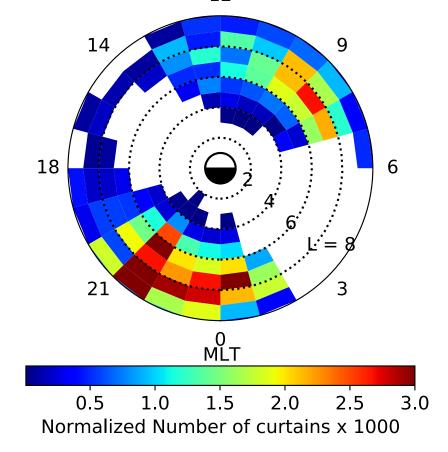


### 90% of curtains are narrower than 20 km in latitude

#### Width Distribution of > 35 keV curtains 0.07 0.06 Probability density 0.0 4 0.0 3 0.02 0.01 0.00 -10 30 40 50 20 In-track size [km]

## Curtains are observed predominately pre-midnight MLT and at high L shell

(b) Normalized AC6 curtain distribution



Surprisingly, we found curtains that continuously precipitated into the atmosphere. Could curtains be related to the aurora?

More details at: https://doi.org/10.1029/2020JA028462

#### **Questions?**

