

AC6 Curtain Update

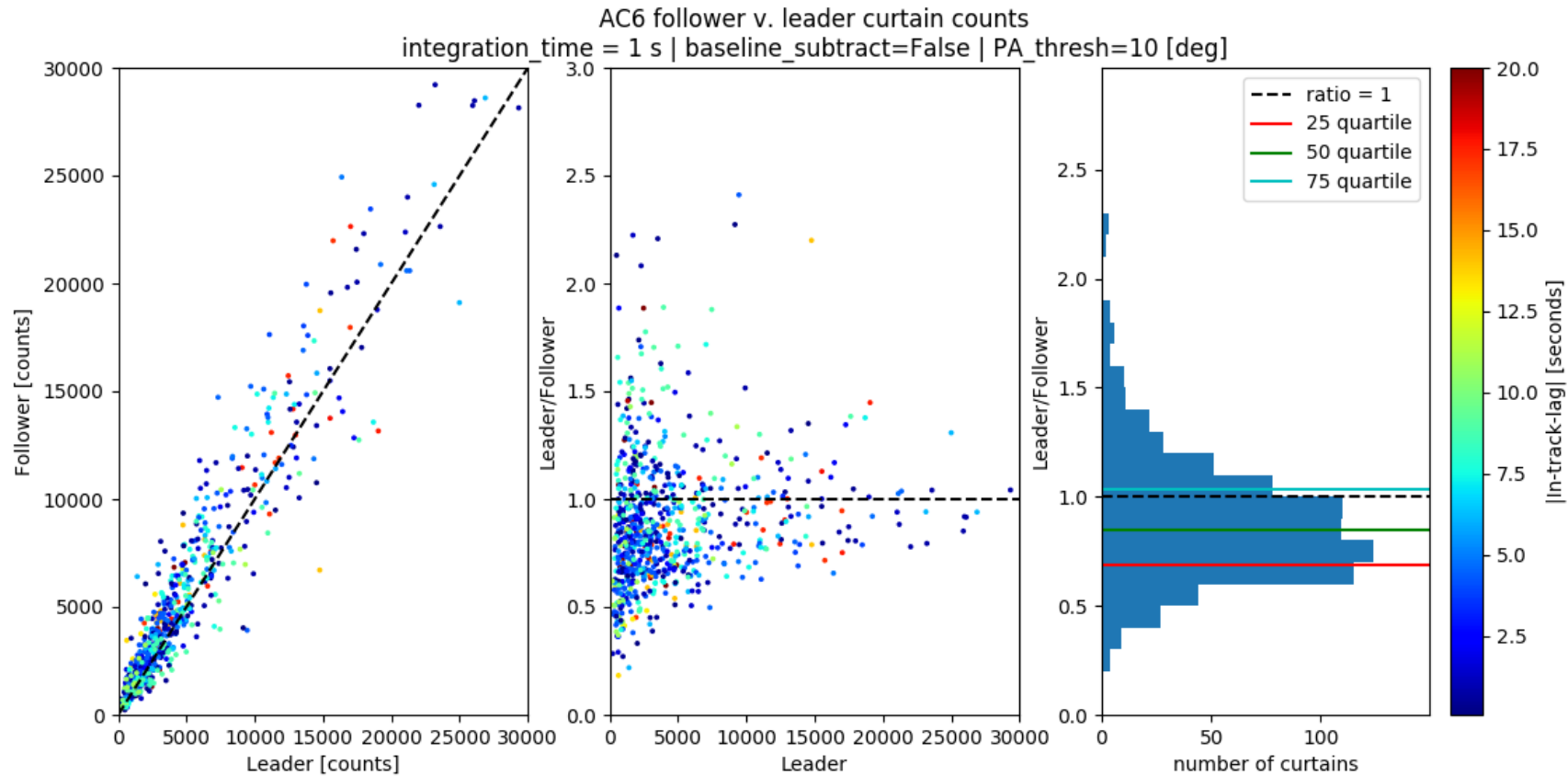
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5 December 2019

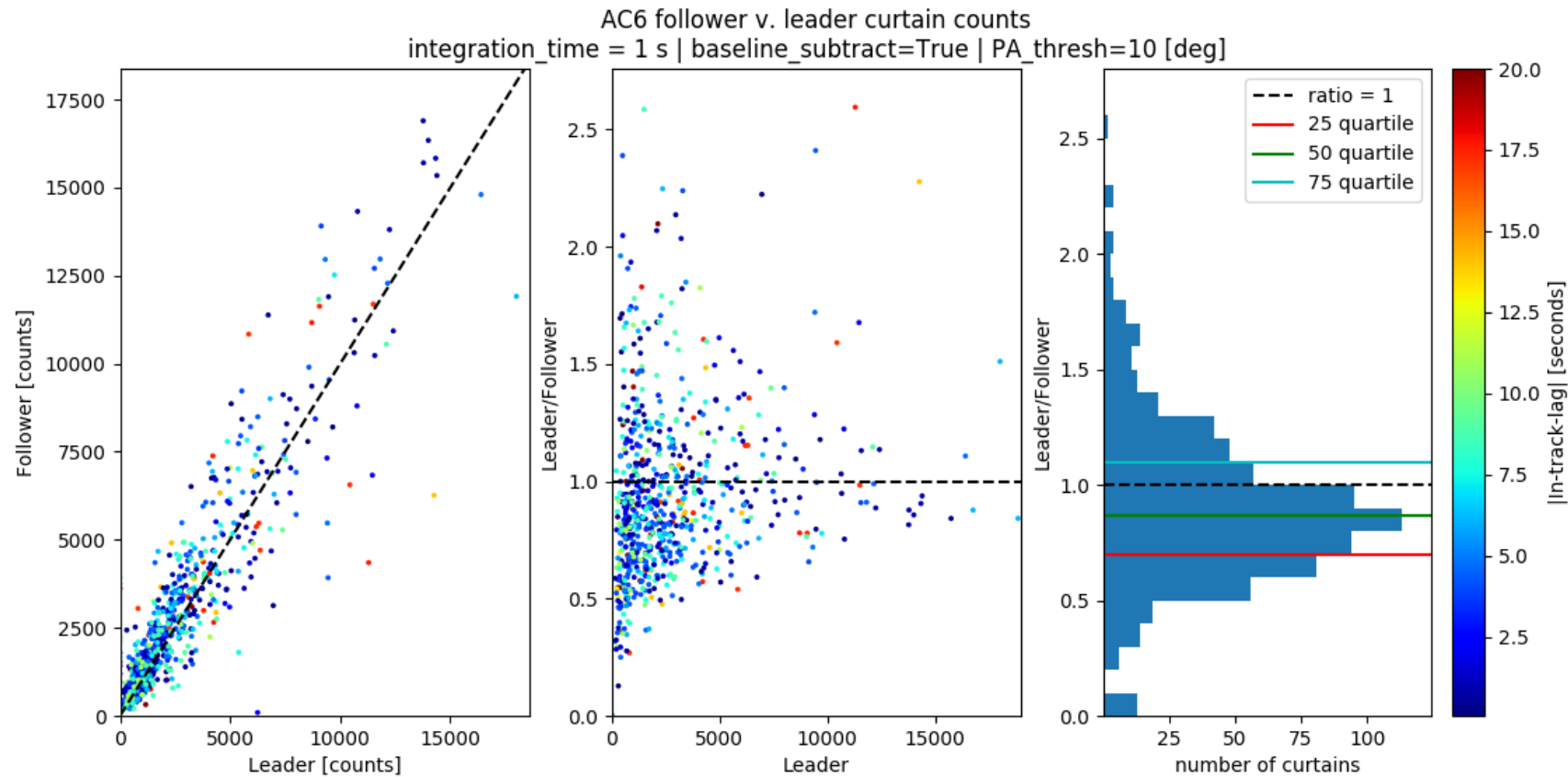
Idea

- If a curtain is drifting and it originally had a falling energy spectra, it should have more, slower drifting electrons
- On AC6 this will be observed by higher count rates for the trailing AC6 unit
- Implementation
 - Integrate the curtain count rates over 0.5 and 1 seconds, with and without background subtraction
 - Plot the integrated count ratio of the leading and following units

1 s integration time, no background subtraction, pitch angles within 10 degrees



1 s integration time, background subtraction,
pitch angles within 10 degrees



What about dos1 cross-calibration?

- On average, does one unit observe higher count rates?
- Implementation:
 - Get count rate statistics from every rad belt pass that AC6 got data together
 - For each shared pass, estimated the 25, 50, and 75 percentiles from each spacecraft.
 - Then, as shown here, took a ratio of the AC6A/AC6B median counts for every pass.
 - Max in-track lag of 10 seconds
 - AC6B (typically behind) observed more counts.

