

The observations presented in this paper that show the appearance of >30 keV electrons in the "forbidden" region during quiet times is very interesting and worthy of publications. I thank the authors for attempting to respond to my earlier criticisms, but I remained unconvinced of their claims relating the low L injections to dayside magnetosheath jet activity, which, through a complicated chain of events, is supposed to enhance the low latitude electric field on the nightside. I attempt to summarize my objections as follows.

As I see it, these facts are supported by the evidence presented manuscript, all of which I agree with:

- >30 keV electrons were observed at very low L,  $L < 1.2$  during a quiet interval
- They were likely injected from the nightside in the 2-5 MLT region
- They were not associated with substorm injection/activity
- There were global magnetic field perturbations observed throughout the dayside magnetosphere (GOES, THEMIS, ground mags) around the same time
- These global field perturbations were likely related to upstream foreshock activity/waves
- The field perturbations were too weak to produce radial transport of >30 keV electrons and were not the cause of the low L injections
- Foreshock pulses and associated magnetosheath jets were observed on the dayside

These represent very interesting and intriguing observations, particularly the appearance of electrons at very low L during quiet time. However, it is then argued that the magnetosheath jets cause hot plasma (50 eV - 10 keV) to precipitate into the dayside auroral region ( $L = 7 - 15$ ) and that the jet-related magnetosheath plasma can produce significant additional ionization and increase conductivity of the high-latitude ionosphere on the dayside. It is then argued that this enhanced dayside conductivity enhances dayside currents in the ionosphere which "should in turn promote generation of transient localized electric fields on the nightside and especially in the postmidnight sector, where the conductivity is weak." I do not follow this logic and there are no additional arguments/calculations/references to support these claims. It is then hypothesized that "the induced nightside electric field might penetrate from high to low latitudes (very low L shells) and results in ExB drift of electrons to lower L-shells." I do not understand the mechanism that would allow this localized nightside electric field to penetrate from high to low latitudes. Again, there are no additional arguments/ calculations /references to support these claims. It is then argued that it is this electric field that produces the electron injections at very low L. In summary, I find these final arguments regarding the last chain in the (complicated) proposed scenario to be weak and unconvincing.

I will also comment that I see no relationship in Figure 11 between the magnetic field perturbations and the NOAA/POES/TED precipitation signatures. It is not demonstrated whether these TED precipitation signatures are exceptional or the norm. What do the TED measurements show before and after this interval? When the magnetic field is quiet, are these plasma precipitations observed? I suspect that the TED measurements always look like this, but one cannot be sure from the manuscript. If they are, then that begs the question why does the mechanism proposed by the authors only occur in this event, and not all of the time? What is so unique about the magnetospheric state and the observations that allow access of >30 keV electrons down to very low L values in this rare event?

In summary, while I think that the appearance of electrons at very low L during quiet time is a very interesting question, the authors have not convinced me that their proposed scenario is plausible, and thus I cannot recommend this article for publication.