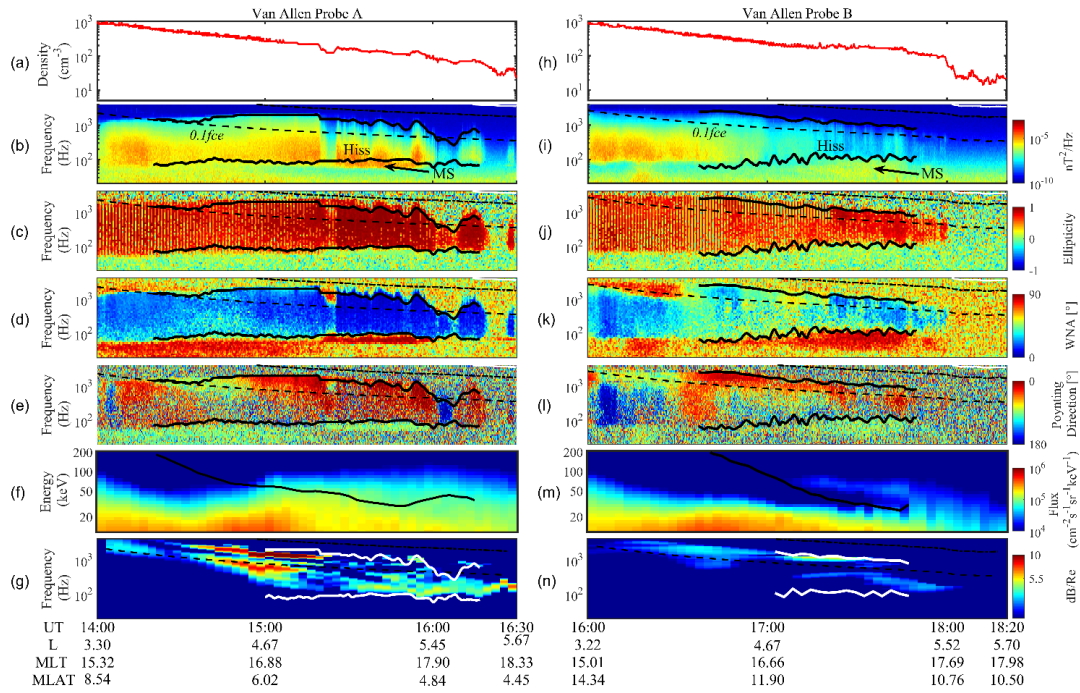
1:Figure 2: my main concern is whether a clear separation between hiss prior to ~15UT at RBSP-A (claimed to be externally driven) and those afterwards at RBSP-A (claimed to be locally generated) can be drawn in RBSP observations. Wave properties between these two groups of waves are rather similar (ellipticity, WNA) actually, even the Poynting fluxes are similar for the former group before ~14:30UT. So it may be worth to show the Emin during the entire interval presented, to support that these waves cannot be supported by local electron population (Emin above the energy of high fluxes, I suppose).

Answer: Thank you very much for your suggestion. As you advised, it is better to identify a clear separation of observed hiss waves between time intervals before and after 15:00 UT. In the new version of manuscript, both the E_{min} for the lower cutoff frequencies of hiss waves before and after 15:00 UT ($L < 4.67$) are indicated in Figure 2a. It seems that the calculated E_{min} is higher than the measured electron energies before 15:00 UT ($L > 4.67$), which suggests that the hiss waves are hardly locally generated. On the other hand, the E_{min} agrees well with the measured electron energies after 15:00 UT at higher L shells ($L > 4.67$), which implies that the hiss waves in the outer plasmasphere tend to be locally amplified.

In order to make it clearer, in the version of new manuscript, the sentences have been revised as follows:

On lines 93-96 'There is a clear characteristic separation between hiss waves at lower L shells ($L < 4.67$) and those at higher L shells ($L > 4.67$). The calculated E_{min} is higher than the measured electron energies before 15:00 UT ($L > 4.67$), which suggests that the hiss waves are hardly locally generated. By contrast, the E_{min} agrees well with the measured electron energies at higher L shells ($L > 4.67$). It supports that the hiss waves at higher L shells may be locally amplify.'

The Figure 2 has been revised as follows:

2:Line 172: please specify the time interval used as initial distribution. Supposing it should be >2hrs, how will the possible temporal evolution within the interval affect your simulation results?

Answer: Thank you very much for your suggestion. Since it is very hard to obtain the real global distribution at the start time of simulation, the observed flux distribution of energetic electron (at each specific energy level measured by Probe A from ~14:00 UT to 16:10 UT) as a function of L shell is fitted with the summation of several Maxwellian functions. And then, the fitted flux distribution is interpolated by 1 keV step. The distribution achieved by above method is considered as the initial energetic electron distribution. As the reviewer kindly mention, there may be temporal evolution of energetic electron within the time interval from 14:00 UT to 16:10 UT. However, we consider that the variation during this time interval is relatively smaller, because the E_{sw} is very low in most time of this time interval. Only in the period from 16:00 UT to 16:10 UT (10 mins), the E_{sw} reached ~1mv/m. The simulation can generally reflect the variation of energetic electron fluxes during the interval between probe A and B pass through the same region around MLT~18.

In order to make it clearer, the sentences have been revised as follows:

On lines 174-179: 'In order to obtain the initial electron flux distribution function, the observed flux distribution of energetic electron (at each energy channel measured by Probe A from ~14:00 UT to 16:10 UT) as a function of L shell is fitted with the summation of several Maxwellian functions. And then, the fitted flux distribution is interpolated by 1 keV step. The distribution achieved by above method is considered as the initial energetic electron distribution. There may be temporal evolution of

energetic electron within the time interval from 14:00 UT to 16:10 UT. However, we consider that the variation during this time interval is relatively smaller, because the E_{SW} is very low in most time of this time interval.'

3:Figure 4: it is not immediately clear to me why the electron flux evolution is such highly energy dependent. Can you include short discussions in the manuscript when describing this figure or in the conclusion section, to help the readers better understand the importance of convection electric field in electron dynamics over different energies?

Answer: Thank you very much for your suggestion. In the study, the electron flux evolution around the orbit of Van Allen Probe is highly energy dependent. It is because

In order to make it clearer, the sentences have been added in the conclusion section as follows:

On lines 214-226 'The result of test particle simulation is consistent with the observed distribution of electron flux from Van Allen Probes, showing decreased electron flux along the orbit of the Van Allen Probes after the enhanced convection and substorm. Furthermore, the electron flux is highly energy dependent, the decline of electron flux at the energies from 51 to 61 keV is more significant than that at energies from 11 to 21 keV. For the electron at energies from 11 to 21 keV, there are stronger sunward and outward motions, because their velocity of gradient and curvature drift (rotation around the Earth) are lower. However, under the supplement of electron from lower L shells which are also owing to the convection, the electron fluxes around the orbit of Probe at these energies decrease slower. For the electron at energies from 51 to 61 keV, there is a distinct slot region around $L\sim4$. The inner belt remains stable and changes little during the interval of evolution, because the motions of energetic electrons within $L<3.5$ are mainly controlled by the relatively stable co-rotating electric field and magnetic field in the substorm. By contrast, under the action of enhanced convection electric field, the outer belt on the duskside clearly moves farther away from the Earth. The extended slot region for the electrons covers the orbit of Probe, which result in significant decrease of measured flux for the electron at energies from 51 to 61 keV.'