

# PRediction Of Geospace Radiation Environment and Solar wind parameterS

Task 6.3



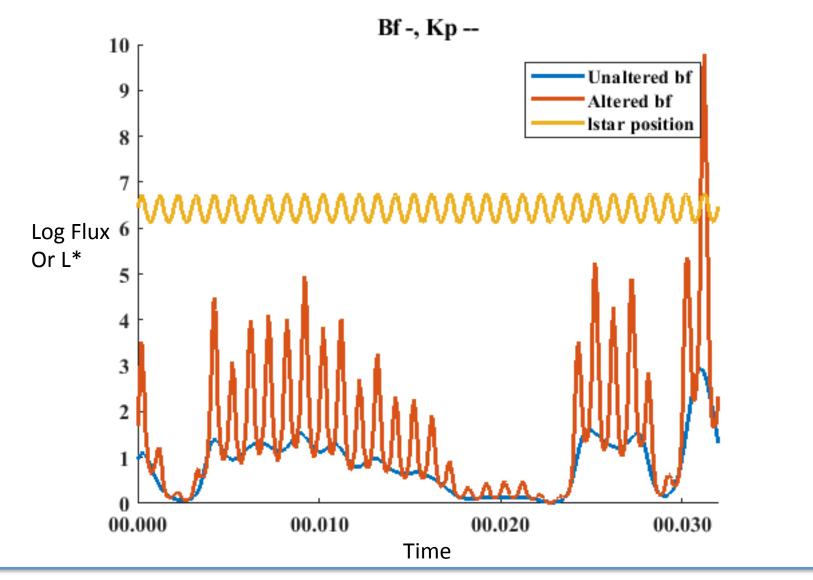
# Overview



- VERB requires a value for the electron flux at its outer boundary.
- Value may be fixed or variable (from file).
- Task 6.1 has produced models that generate accurate estimates of the electron fluxes at GEO.
- These estimates can be used to produce the outer boundary flux required by VERB.
- However, these values need translating from GEO (L=6.6) to L\*=7
- Initial model coupling assumed fixed value of L\* for GEO (L\*=6.2)
- The value of L\* for GEO is not constant, and can vary with geomagnetic activity
- Task 6.3 investigated effects of introducing a variable L\*

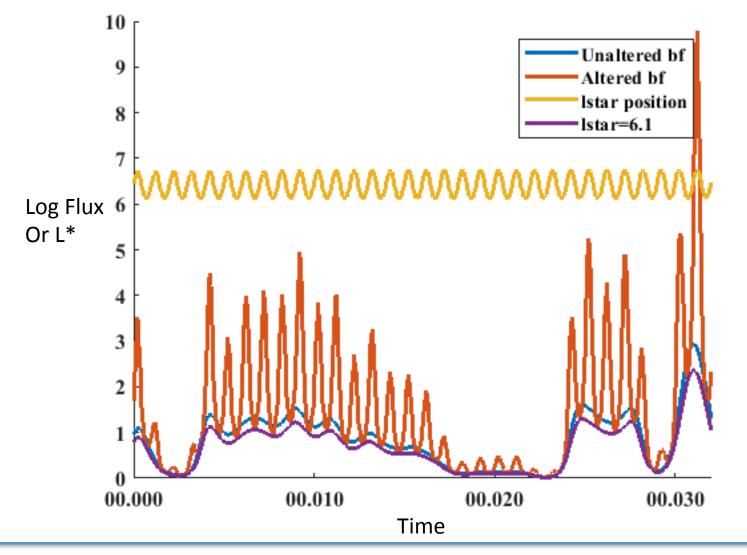






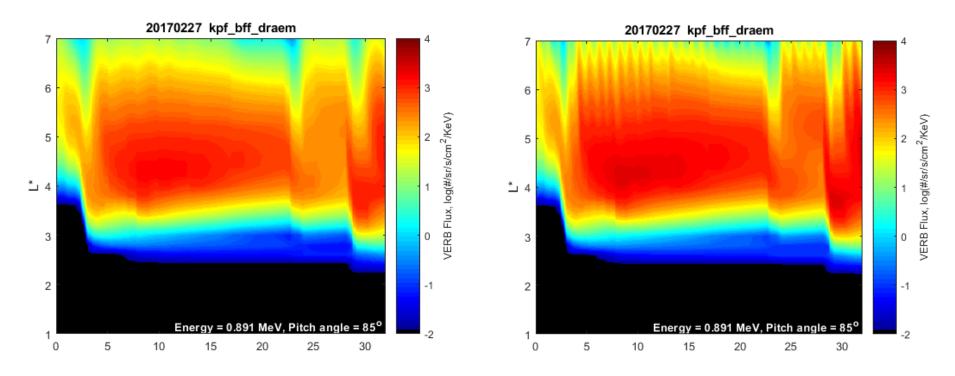










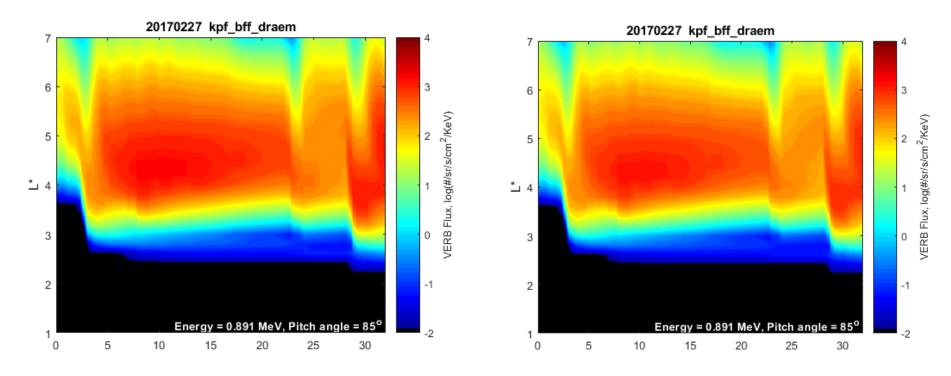


Variable L\*

Fixed  $L^*=6.2$ 







Fixed L\*=6.1

Fixed  $L^*=6.2$