

Second Review of “A New Perspective and Explanation to the Formation of Plasmaspheric Shoulder Structure” by Zhang et al

The paper provides an interesting contribution to the discussion of shoulder formation.

Suggested language edits for the abstract are provided below. I appreciate the challenge of expressing thoughts in a non-native language. Significant editing is required for language usage throughout the text. I do not see the need to capitalize the first letter of Structure or Plume anywhere in the text other than in the first word of a sentence or in a title. I highlight text using the color red to indicate suggested language edits in the title and abstract.

- Line 1, the title, “A New Perspective and Explanation **for** the Formation of Plasmaspheric Density Structures”
- Line 11,” and a **post-noon** plume-like structure ~~straddling in the between-noon-and-dusk region.~~
- Line 15, “reduction and spatial **non-uniformity in the** dawn-dusk convection electric field intensity.”
- Lines 16-18, “A TPM modeled event is found to develop an initial **pre-dawn asymmetric bulge that becomes a shoulder as a result of increased “co-rotation” rate with increasing L-shell that is preceded by localized outward convection.**”
- Lines 18-20, “The **shoulder** rotates eastward toward 12h MLT and develops **into a** single or double plume structure during **an active times period.**