

Poloidal component of Pi2 in the meridian planes

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It is well known that Pi2s demonstrate the reversal of the H amplitudes and polarization in H-D plane in auroral zone. Recently, it is shown that these characteristic Pi2 properties are attributed to the poloidal component (*). We emphasize:

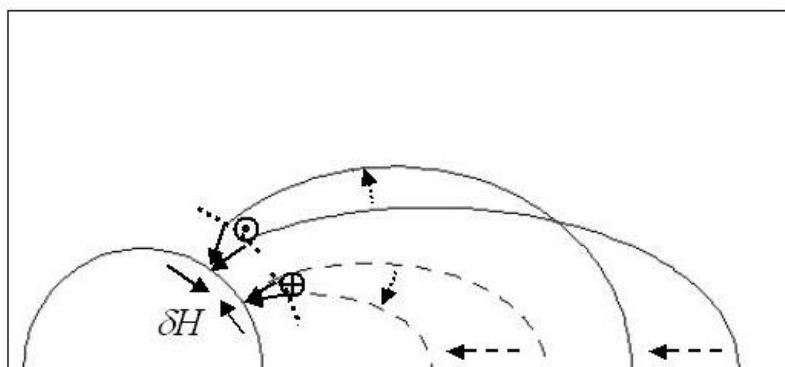
(1) The poloidal component related to the H amplitude reversal on the ground was excited by the diamagnetic currents in the magnetosphere flowing eastward.

(2) The onset latitudes of the poleward expansion inferred from auroral observations and diamagnetic currents in the magnetosphere are correlated.

References

* Saka, Hayashi, Koga, (JGR, 2012).

Keywords: Pi2 pulsation, aurora breakup, substorm, poloidal component



Deformation of field lines in the meridian planes