

Butterfly-neutral sheet effect on solar activity and earth's magnetospheric disturbances

Takao Saito [1]

[1] No

Both of solar activity and terrestrial magnetospheric disturbances in solar inclining phase are different from these in declining phase. The difference is interpreted by a combining effect of the butterfly diagram and rotational reversing of the neutral sheet.

Large-scale structure of the solar wind makes a 22-year period rotational reversing with reversing of the heliospheric neutral sheet. Nevertheless, both of the solar and terrestrial disturbances in sunspot rising phase are different from those in declining phase.

This difference is explained by a combining effect of the butterfly diagram and the rotational reversing of the neutral sheet.