



## **Southward shift of the coronal neutral line and the heliospheric current sheet: Evidence for radial evolution of hemispheric asymmetry**

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We study the hemispheric asymmetry of the heliospheric current sheet, which has been observed to be southward shifted in the late declining to minimum phase of the solar cycle. Here we compare this asymmetry in the heliosphere with the coronal magnetic field.

We use the synoptic maps of the photospheric field at WSO and MWO, together with the PFSS model, to calculate the coronal magnetic field and compare it with the heliospheric magnetic field data from NASA/NSSDC OMNI 2 dataset. We divide the magnetic field into the two sectors, towards and away from the Sun, and calculate how often the sectors at 1 AU and in corona match each other. We calculate these occurrence ratios using sector division made at 1 AU and in corona.

We verify that the HCS/neutral line is southward shifted both in the corona and heliosphere. We also find that the coronal shift is larger than the heliospheric shift.