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The dance of the bashful ballerina in 1926-2004

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We have recently shown using satellite observations of the heliospheric magnetic field (HMF) that the heliospheric current sheet (HCS) is shifted or coned southward for a few years close to the solar activity minima. This is a regular pattern (also called the bashful ballerina) during the last 40 years of direct HMF observations. The same pattern has also been found more recently for the last 25 years using observations and modelling of the solar magnetic field. Here we extend the study of the heliospheric current sheet by analysing the HMF polarity for the time before direct satellite measurements. We use several HMF polarity datasets inferred from the ground-based observations and compare them to direct HMF observations during the overlapping period. The longest dataset covers the years 1926-2003. We calculate the annually averaged HCS shift and the mean sector widths. The results of the HCS behaviour calculated with the different methods and from the different datasets are compared. We also estimate the reliability of the different datasets.