



North-South Asymmetry of the Heliospheric Current Sheet

Peter Israelevich

Tel Aviv University, Porter School of the Environment and Earth Sciences, Tel Aviv, Israel (peteri@post.tau.ac.il)

Interplanetary Magnetic Field sector structure is observed because of the inclination of the heliomagnetic equator plane to the ecliptic plane. As a result, the spacecraft measuring solar wind parameters appears above or below the heliospheric current sheet. Accordingly, the magnetic field is directed toward the Sun or away from the Sun. Usually, two sectors are observed near the Solar Maximum and four sectors near the Minimum. Periodicity of the sectors also depends on solar activity. This means that the current sheet rotation period differs from that of the Sun. Asymmetry of the current sheet with respect to the solar equator exists since the probabilities that the spacecraft flies above and below the current sheet are not equal during Solar Minima.