

Long duration radial IMF events

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Near the Earth, direction of IMF is approximately 45 degrees against the Sun-Earth line due to balance between rotation speed of the Sun and solar wind speed. However, radial IMFs with long duration were sometimes observed in the solar wind near the Earth. Here we studied the long duration radial IMF events using hourly values of solar wind parameters. According to our analysis, such radial IMF events tended to be observed in the solar wind of lower temperature than expected from solar wind speed. The radial IMF events were often observed in flux ropes or tail parts of interplanetary disturbances. However, the radial IMF events sometimes observed even in quiet solar wind.