

The relation between the direction of the initial movement of Pi 2 and the propagation of Pi 2

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In the last meeting, we showed the observational characteristics of ground Pi 2 magnetic energy propagation. In order to understand the characteristics, the initial perturbation of the Pi 2 magnetic oscillation is mapped onto the equatorial plane by using the Tyganenko 96 model. As a result, we have found that the azimuthal component is dominant in the post mid-night through dawn sector. We discuss the propagation characteristics of Alfvén and fast mode waves in the inhomogeneous field, including their propagation times, and examine if the above-stated characteristics is successfully explained.

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