

## Stress balance on the plasmasheet in the distant tail

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We have statistically studied Stress Balance on the Plasmasheet in the distant tail using data obtained by GEOTAIL. First of all, we selected 195 events where the spacecraft transversed neutral sheet from one lobe within 15 minutes. Theoretically, the stress balance can be examined by the following relations:

- a) Firehose stability condition is established in x direction.
- b) Magnetic pressure with thermal pressure is constant in z direction.

We have first studied the relation b) for the 195 events, and found that the total pressure in the plasmasheet tends to be lower than the magnetic pressure in the lobe.

Thermal pressure of electron and magnetic tension may contribute to it.