

Necessity of neutral wind measurement in the Venus thermosphere

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The structure in the Venus thermosphere has been observed mainly by Pioneer Venus Orbiter. However, the parameter related to neutral particle measured by PVO is only number density of neutral particles. In order to explain unresolved phenomena in this region, a measurement of the fundamental parameters such as neutral temperature and wind velocity are essential.

We have started a development of a instrument to measure neutral wind(velocity, direction and temperature) and ion drift for the future Venus mission.