Understanding Faint Aurora at Venus with Parker Solar Probe

- Parker Solar Probe measured the solar wind during the visit.
- Venus's aurora was measured from ground telescopes at the same time.
- The Wang-Sheeley-Arge (WSA) model was used to predict the solar wind conditions at the time of the Parker Solar Probe Venus encounter.
- The WSA solar wind prediction was in good agreement with the observations from Parker Solar Probe.
- These observations and prediction compared with the aurora observations confirm that these are the first observations of faint Venusian aurora that is not due to solar transients like coronal mass ejections and solar flares – instead this aurora was due to just the solar wind.