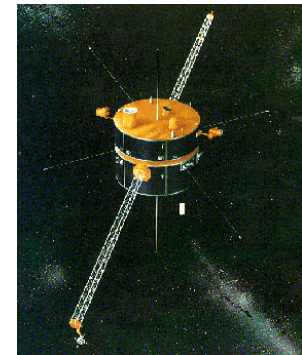
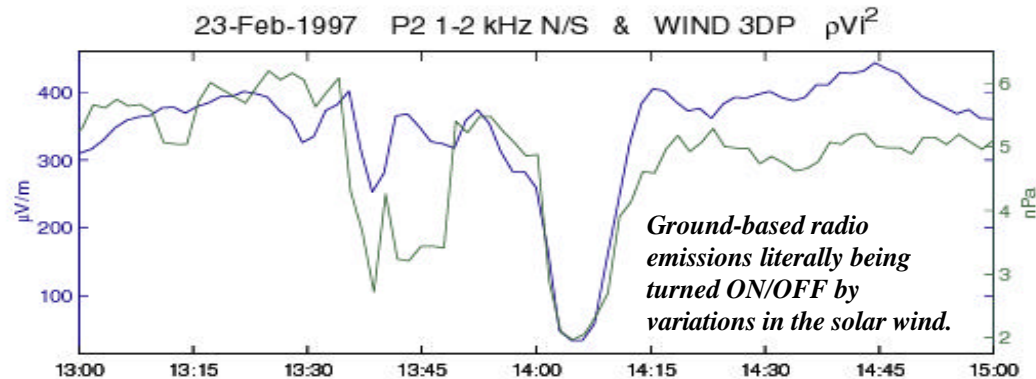


Solar-Wind Control of Intense ELF/VLF Chorus

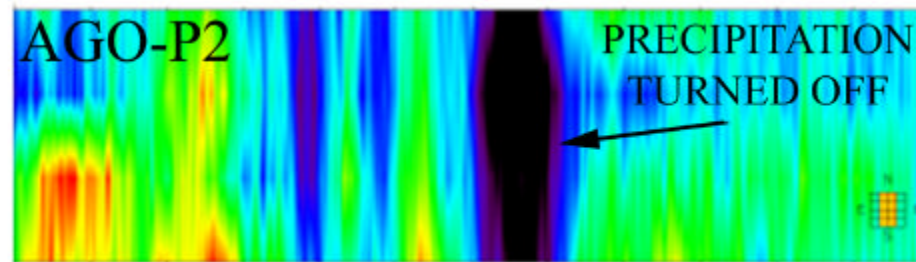
ELF/VLF chorus is by far the most intense plasma wave that permeates the magnetospheric regions between the plasmopause and the magnetopause and has long been believed to be the driver of intense particle precipitation in these regions, including pulsating aurora and the morningside discrete aurora.

- Simultaneous observations of the effect on four AGO sites indicates that the solar wind control takes place in a wide region.



The WIND Satellite

- Simultaneous turn-off of riometer absorption confirms that much of the precipitation in this region is indeed driven by chorus.



Riometer Observation of Electron Precipitation

- The new AGO result indicates that chorus wave emission is controlled (literally turned ON/OFF) by the dynamic pressure exerted on the magnetospheric boundary by the solar wind.



Automatic Geophysical Observatory (AGO) in Antarctica

Conclusion: *This finding is crucially important in understanding the generation mechanisms of this most intense plasma wave form, which is now also known to occur on other magnetized planets, such as Jupiter, Saturn, Uranus and Neptune.*

