



Newest results from SPICAV on-board *Venus Express*

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Venus Express is now entering its eighth year of operation in Venusian orbit. Among the still working instruments, all three channels of the SPICAV [Bertaux et al., 2007] spectrometer are still fully working and routinely provide new insights on the Venusian atmosphere. We propose to review and highlight the results and the work in progress, among which (non-exhaustive list):

- a new mapping of the nightside airglow of nitric oxide (NO) using the nadir mode of SPICAV-UV ;
- the first detection of the dayglow due to CO and CO₂⁺ using limb observations of SPICAV-UV [Chaufray et al., 2012] ;
- the secular evolution of SO₂ column density above Venus' cloud top using SPICAV-UV in nadir mode [Marcq et al., 2013] ;
- polarimetric and phase function studies of the upper clouds of Venus using SPICAV-IR.

Bibliography:

- Bertaux et al., SPICAV on Venus Express: Three spectrometers to study the global structure and composition of the Venus atmosphere, PSS (2007)
- Chaufray et al., First observation of the Venus UV dayglow at limb from SPICAV/VEX, Geophys. Res. Let. (2012)
- Marcq et al., Variations of sulphur dioxide at the cloud top of Venus's dynamic atmosphere, Nature Geoscience (2013)