

# The Ultraviolet Albedo of Venus from the era of Pioneer Venus to Venus Express and Akatsuki

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We have recently completed an effort to archive the entire Pioneer Venus Orbiter Ultraviolet Spectrometer data set at the publicly available Atmospheres Node of NASA's Planetary Data Archive. This multi-phased effort had begun in the late 20th Century with the recovery of the data from mission-original tape drives to VAX machines at the University of Colorado Boulder. It had continued into the early 2010's with a recovery of the data from the soon-to-be-obsolete VAX machines and data formats, leading to conversion of the data into modern IEEE data formats and long-term storage at LASP. The process has now been completed, with the entire dataset now available at the PDS -- with a handful of isolated exceptions. The public release of this dataset makes it now eligible for use in Research and Analysis proposals submitted to NASA and NSF, starting from six months after the archive publication date (which is close in time to -- but, alas, after -- the abstract submission deadline for this conference). Here, we illustrate a potential science application of the newly available dataset. The ultraviolet albedo of Venus is driven largely through variations in sulfur dioxide and the unknown ultraviolet / short wavelength absorber(s). The variability of these species has long been a target of investigation for the Venus atmosphere. Here, we present a preliminary assessment of the magnitude of the ultraviolet albedo variability at a selection of wavelengths during the Pioneer Venus era (1978 to 1992), and compare that observed variability with more recent observations by Venus Express and Akatsuki.

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