



## **Atmospheric dynamics on Venus: planned observations for VIRTIS/VenusX**

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The VIRTIS instrument on Venus Express will allow study of the dynamics of the atmosphere of Venus in unprecedented detail. The scientific topics that will be covered with this instrument include super-rotation of the atmosphere, meridional circulation, waves and jets, polar vortices, cloud dynamics and convection cells. These will be addressed by global mapping of temperature fields (above cloud deck and at surface), global mapping of chemical tracers and airglow, as well as cloud tracking at different wavelengths. We review how VIRTIS will address the above science goals. Taking advantage of the different observation geometries allowed by the Venus Express orbit, an observation strategy is proposed which provides both long-term systematic global coverage, and short campaigns targeting specific dynamical phenomena.

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