



## **Radiative Transfer in the atmosphere of Venus : planned observations for VIRTIS/Venus Express**

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The VIRTIS instrument on Venus Express will record data providing a detailed study of the atmospheric structure and composition. The scientific topics to be covered in terms of radiative transfer studies concern the temperature structure of the atmosphere (on the night side of the planet and mainly above the cloud layers), the horizontal (and possibly vertical) distribution of both carbon monoxide and water vapor, oxygen night glow, non LTE emissions of oxygen, carbon monoxide and carbon dioxide, and the properties and vertical distribution of the cloud and haze particles.

In this poster, an overview will be given of how VIRTIS will address the above science goals. Also, the interaction with other instruments onboard Venus Express will be discussed. Taking advantage of the different observation geometries available from the spacecraft's orbit, an observation strategy is proposed which provides both long-term systematic global coverage and short campaigns targeting specific features.