



## 1 VIRTIS for Venus Express: summary results from the VIRTIS-M calibration

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VIRTIS is the imaging spectrometer of the Venus Express spacecraft. VIRTIS is a key instrument in the study of surfaces and atmospheres, it enables the acquisition of a spectrally resolved image of a two dimensional scene. The advantage of such technique is that all spectral data for a given point is collected at one time providing highly spatial and spectrally resolved images. On the contrary, VIRTIS needs a very detailed calibration campaign in order to characterize the response of the instrument to the stimulus from the target and consequently to prevent any possible mistakes in the scientific interpretation of the data.

VIRTIS combines three data channels in one compact instrument. Two of them are devoted to spectral mapping (Mapper optical subsystem: -M), the third channel is devoted to spectroscopy (High resolution optical subsystem:-H). VIRTIS-M has a FOV of (64\*64)mrad while the spatial sampling is (250\*250)  $\mu$ rad. The spectral range is from 283.85nm to 1098.44nm with a spectral sampling of 1.89nm for the visible channel and from 1060.01nm to 5141.58nm with a spectral sampling of 9.47nm for the infrared channel. The different channels have been first independently calibrated at the LESIA in Meudon (VIRTIS-H) and at the Galileo Avionica in Firenze (VIRTIS-M), and, subsequently, after the final VIRTIS assembly, at the IAS calibration facility in Orsay. The paper will focus on the results of the calibration activities at the VIRTIS-M level.