**Introduction:** The Dawn spacecraft [1] is now approaching Ceres, the second of its targets. Ceres is the most massive body in the asteroid belt and was discovered in 1801 by Giuseppe Piazzi in the Palermo Observatory. It was catalogued by the IAU as a dwarf planet in 2006. Ceres (together with Vesta) represents the key to understand some important points relative to the role of the protoplanet size and the water content in determining the evolution of protoplanets and minor bodies. Ceres is thought to be differentiated, and hydrated minerals were proposed to exist on its surface [2,3,4]. Its low density [3] associated with the presence of transient water vapour, suggests a high content of ice inside the body and on its surface. Ceres seems to have been subject to differentiation and hydrothermal activity, and might host a liquid subsurface layer even today. Dawn is equipped with a Visible and InfraRed Mapping Spectrometer (VIR-MS) [5]. VIR-MS is an imaging spectrometer coupling high spectral and spatial resolution in the VIS (0.25-1-μm) and IR (0.95-5-μm) spectral ranges. The spectrometer (Fig.1) fully accomplishes its scientific and measurement objectives at Ceres.

**Ceres Surface composition:** The surface composition of Ceres is poorly understood through its nearly featureless visible spectrum. Its visible reflectance spectrum has a steep UV absorption edge that begins at a relatively short wavelength, around 0.4 μm, unlike many C-type asteroids where the UV drop-off begins around 0.6 to 0.7 μm [6].

The near-IR spectrum has a strong absorption band centered at about 3-μm. The absorption features in the 3-μm region were attributed to structural water in clay minerals [7,8] but could also be ammoniated clays [9]. [10] reported the discovery of carbonates and iron-rich clays from measurements of weak 3-μm features, and the results are consistent with the mid-IR spectra of clay minerals.

**VIR at Ceres:** The main VIR objectives at Ceres are:
- Identify ices, and map frost-covered regions
- Possibly detect the very weak atmosphere, and trace the vertical profile of abundance of its major species.
- Collect evidence of the existence of a subsurface liquid layer

On approach to Ceres, Dawn obtains images and hyperspectral data on different occasions, starting in January 2015. VIR data, with resolution larger than Hubble images will reveal the first details of the Ceres’ surface composition.

Here we report about the first data obtained by VIR during its approach to Ceres.

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