



## Overview of Ceres mineralogy

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The Dawn spacecraft arrived at Ceres in early 2015 and since then the instruments on board performed a detailed study of the surface and internal properties of the dwarf planet of the asteroid belt. In particular, Dawn is equipped with a Visible and InfraRed Mapping Spectrometer (VIR) to study the surface composition of the Dawn targets. Here we report the main VIR results at Ceres.

The VIR instrument observed Ceres' surface at different spatial resolutions and revealed a variegated distribution of surface mineralogy. Phyllosilicates and carbonates are ubiquitous although the former are mostly homogeneous while the latter have a complex composition. Ammonium is also ubiquitous but while generally is bounded with phyllosilicates, it has been found also in salts. Organic molecules and water ice have been detected in localized regions.