

The PanCam instrument for the ExoMars 2018 rover: science objectives and instrument characteristics

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Abstract

The scientific objectives of the ExoMars 2018 rover are designed to answer several key questions in the search for life on Mars. The PanCam instrument will set the geological and morphological context for the mission. Here, we will describe the PanCam scientific objectives in geology, atmospheric science and 3D vision. We will also describe the design of PanCam, which includes a stereo pair of Wide Angle Cameras (WACs), each of which has a filter wheel, and a High Resolution Camera for close up investigations. The cameras are housed in an optical bench and electrical interface is via the PanCam Interface Unit (PIU). We also discuss some results from PanCam testing during field trials.