



The Panoramic Camera (PanCam) instrument for the ESA ExoMars rover

A. Griffiths (1), A. Coates (1), R. Jaumann (2), J-L. Josset (5), H. Michaelis (2), G. Paar (3), D. Barnes (4), and J-P, Muller (1)

1) UCL, Mullard Space Science Laboratory, Surrey, UK, (2), Institut für Planetenforschung, DLR, Berlin, Germany, (3) Institute of Digital Image Processing, Joanneum Research, Graz, Austria, (4) Department of Computer Science, University of Wales Aberystwyth, UK, (5) Institute for Space Exploration, Neuchâtel, Switzerland (adg@mssl.ucl.ac.uk / Phone: +441483204288)

The recently approved ExoMars rover is the first element of the ESA Aurora programme and is slated to deliver the Pasteur exobiology payload to Mars by 2013. The 0.7 kg Panoramic Camera will provide multispectral stereo images with 65 deg field-of-view (1.1 millirad/pixel) and high resolution (135 microrad/pixel) monoscopic “zoom” images with 8 deg field-of-view. The stereo Wide Angle Cameras (WAC) are based on Beagle 2 Stereo Camera System heritage (Griffiths, et al, 2005). The Panoramic Camera instrument is designed to fulfil the digital terrain mapping requirements of the mission (Paar, et al, 2007) as well as providing multispectral geological imaging, colour and stereo panoramic images, solar images for water vapour abundance and dust optical depth measurements and to observe retrieved subsurface samples before ingestion into the rest of the Pasteur payload. Additionally the High Resolution Camera (HRC) can be used for high resolution imaging of interesting targets detected in the WAC panoramas and of inaccessible locations on crater or valley walls.

References:

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