



## **Height measurements on HRSC stereo-image data by making use of a high-precision stereo comparator**

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Digital Terrain Models (DTMs) derived from Mars HRSC data are generated by automated area based matching and show significantly less spatial resolution (approx. 200m) than the stereo images they have been derived from. In the analog approach described here parallax differences between stereo images are measured using a high-precision stereo comparator (ZEISS) by making use of human 3D viewing capabilities. The measured parallax differences are calibrated with MOLA data to achieve absolute height information.

By this method height information for discrete points with a spatial resolution comparable to that of stereo image (10-20m) data can be obtained, which enables height measurements on small features below DTM resolution. Results for a number of areas will be discussed.