

Thursday, March 24, 2016 [R638]
POSTER SESSION II: MARS GEOMORPHOLOGY: METHODS AND TECHNIQUES
6:00 p.m. Town Center Exhibit Area

Cohen J. P. Lo H. Z. Lu T. Ding W. *POSTER LOCATION #557*
[Crater Detection via Convolutional Neural Networks](#) [#1143]

We present a state of the art automatic crater detection method using advanced machine learning to deal with the large amount of satellite imagery collected.

Smith C. L. Moores J. E. *POSTER LOCATION #558*
[Geometric Shielding of Surface Rocks on Mars](#) [#1644]

This abstract details the models and methods used to examine whether geometric shielding could contribute to the orientation bias of surface cracks on Mars.

Mayer D. P. Kite E. S. *POSTER LOCATION #559*
[An Integrated Workflow for Producing Digital Terrain Models of Mars from CTX and HiRISE Stereo Data Using the NASA Ames Stereo Pipeline](#) [#1241]

CTX, HiRISE / Make DEMs step-by-step / ASP, we show you how.

Tao Y. Sidiropoulos P. Muller J.-P. *POSTER LOCATION #560*
[Automated DTM Generation and Super-Resolution Restoration from NASA MRO Cameras and in Future from TGO16 CASSIS](#) [#2074]

An automated MRO camera DTM production pipeline for planetary mapping and separate pipeline for repeat imaging based super-resolution restoration is introduced.

Allender E. J. Stepinski T. F. *POSTER LOCATION #561*
[Automatic, Exploratory Mineralogical Mapping of CRISM Imagery Containing Gully Features](#) [#1518]

We use our automated, exploratory, mineralogical mapping pipeline to preliminarily explore 100 CRISM images containing gully features for deposits of interest.

McGuire P. C. Audouard J. Dumke A. Dunker T. Gross C. et al. *POSTER LOCATION #562*
[True- and False-Color HRSC+OMEGA Image Mosaics of Mars](#) [#1031]

We use a new approach for mosaicking RGB/NGB color HRSC images, and present both true-color and false-color versions of the MC11E map-tile around Mawrth Vallis.

Sidiropoulos P. Muller J.-P. *POSTER LOCATION #563*
[Large-Scale Co-Registration of Mars High-Resolution NASA Images to HRSC: A Case-Study of the MC11-E Quadrangle](#) [#2034]

In this abstract we present recent work that exploits HRSC MC11-E mosaic as a baseline to co-register all high-resolution NASA images.

Walter S. H. G. Li J.-Y. Kneissl T. van Gassel S. *POSTER LOCATION #564*
[Photometric Hapke Correction for Global-Scale Mosaicking of HRSC Image Data](#) [#1633]

We present Hapke parameter modeling for HRSC data for the purpose of constructing homogeneous image mosaics. The result is compared to a Lambertian correction.