



AMMOS 3D Surface Reconstruction

Software toolkit for terrain generation and analysis.

What is the problem?

Surface operation and science analysis of in-situ acquired data products requires 3D Surface Reconstruction of terrain environment

What is the solution?

A software toolkit that generates 3D Terrain products from stereo and multi-view imaging products.

Who are our customers?

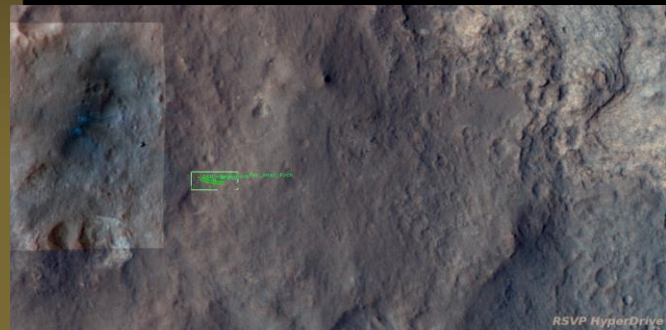
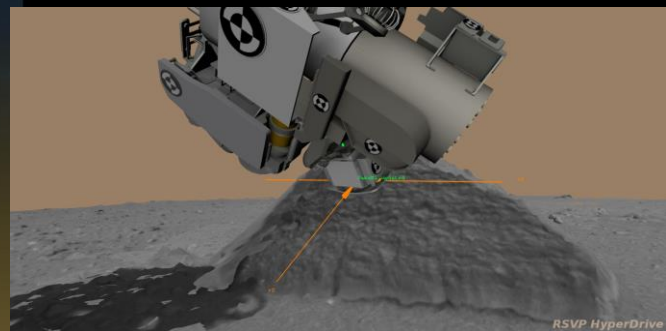
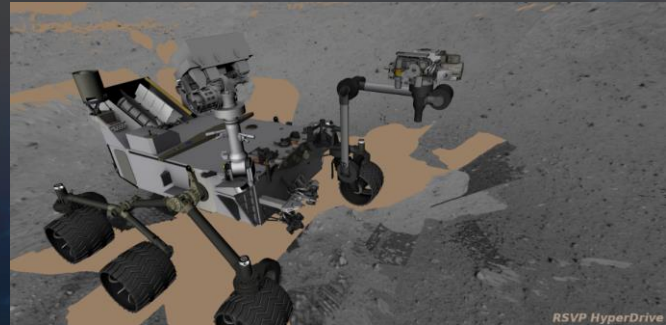
- Mission planners for traverse planning and robotic arm operation
- Scientists analyzing geomorphology, photometry etc.
- Public Outreach

What capabilities are on offer?

- Polygonal mesh generation using Point Cloud (XYZ images) data.
- Texture Mapping using Camera Models
- DEM product generation with metadata to co-register with polygonal mesh.
- Terrain generation from orbital DEMs in matching coordinate frame.
- Multiple output formats: Open Inventor and Wavefront .OBJ

What is included?

- C++ libraries and executables
- Command line interface
- Process automation scripts



AMMOS – Advanced Multimission Operations System, a NASA-sponsored set of products and services for mission operations systems

For more information and access to the AMMOS catalog – <https://ammos.nasa.gov>

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