



AMMOS Automatic Fusion of Image Data System

What is the problem?

Many Scientists are using labor-intensive manual tiepoint processes to co-register and stack Mars orbital images.

What is the solution?

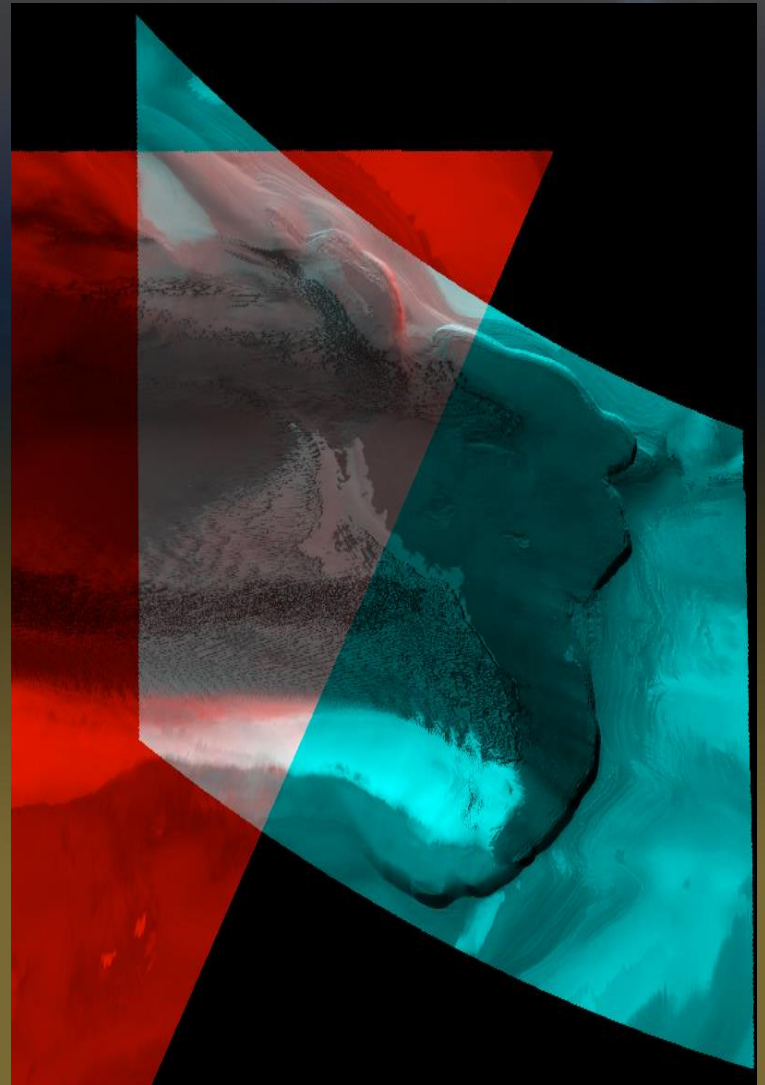
Software that automatically finds tiepoints using smart Fast Fourier Transforms (FFTs) and produces a co-registered image product with sub-pixel accuracy.

Who are our customers?

- Mars Missions utilizing orbital imagery (e.g. CTX, HRSC, Themis)
- Missions requiring the fusion of images from historic cross-mission archives, and images with varying dates, scales, pixel resolutions, projections, and visible band wavelengths.
- Missions needing to build landing site models.
- Missions needing to perform time series analysis from stacked imagery.

What is the technology?

- Leveraged from 20+ years of NASA and DoD Earth image registration and mapping software development.
- Utilizes advanced AFIDS and GEOCAL software subsystems.
- Includes options for co-registering orbital images with weak map georeference quality.
- Adaptable to handle various hard-body planetary imagery.



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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