ACCESS TO THE MARS GLOBAL SURVEYOR DATA THROUGH THE PLANETARY IMAGE ATLAS. A. B. Ivanov, E. D. Duxbury, S. K. La Voie, M. McAuley, P. J. Woncik, *MS168-414, Jet Propulsion Laboratory, Caltech, Pasadena, CA, 91109, USA, anton.ivanov@jpl.nasa.gov.*

The Planetary Image Atlas (PIA) has been developed by the Imaging Node of the Planetary Data System (PDS) at JPL and USGS Flagstaff with support from the Solar System Visualization (SSV) task and the Multimission Image Processing Laboratory (MIPL) at JPL. The Atlas is designed to be a single interface, through which a user can search for, display, and download images and other ancillary data for many planetary missions. It will eventually replace existing Imaging Node image browsers and catalog search engines. The Atlas is available at

http://www-pdsimage.jpl.nasa.gov/PDS/public/Atlas/

Currently, the Atlas supports Galileo and Mars Pathfinder. New Imaging Node browsers, which are now being incorporated into the Atlas, include Clementine, Magellan, Mariner 9, Viking Landers and Viking Orbiters along with several new features which will be accessible by the end of year 2001.

New datasets being introduced to the Atlas in 2001 and 2002 are from the Mars Global Surveyor spacecraft. Namely, they are : Mars Orbiter Camera (MOC) images, Mars Orbiter Laser Altimeter (MOLA) topography and a subset of the Thermal Emission Spectrometer data (Lambert albedo), which are released to PDS on a regular schedule. We plan to add some other products such as MOLA gridded datasets and pulse widths, TES thermal inertia and dust opacity, as they become available through PDS.

We plan to release the following new features in the PIA : search on MOLA and TES data based inside latitude-longitude boundaries, search on MOLA and TES data in time domain (e.g. data corresponding to a MOC image or a particular event such as a dust storm). The users will receive output in text form. Some plotting services will also be availble. Currently, MOLA topography data search corresponding to a MOC images is operational (Fig. 1). The databases are updated as soon as new data is released to PDS from the instrument teams.

In the long run, the Atlas will be able to output data in formats compatible with some of the Geographic Information Systems (GIS), such as ArcView.

This resource can be extensively used by anyone interested in Mars data research and analysis.

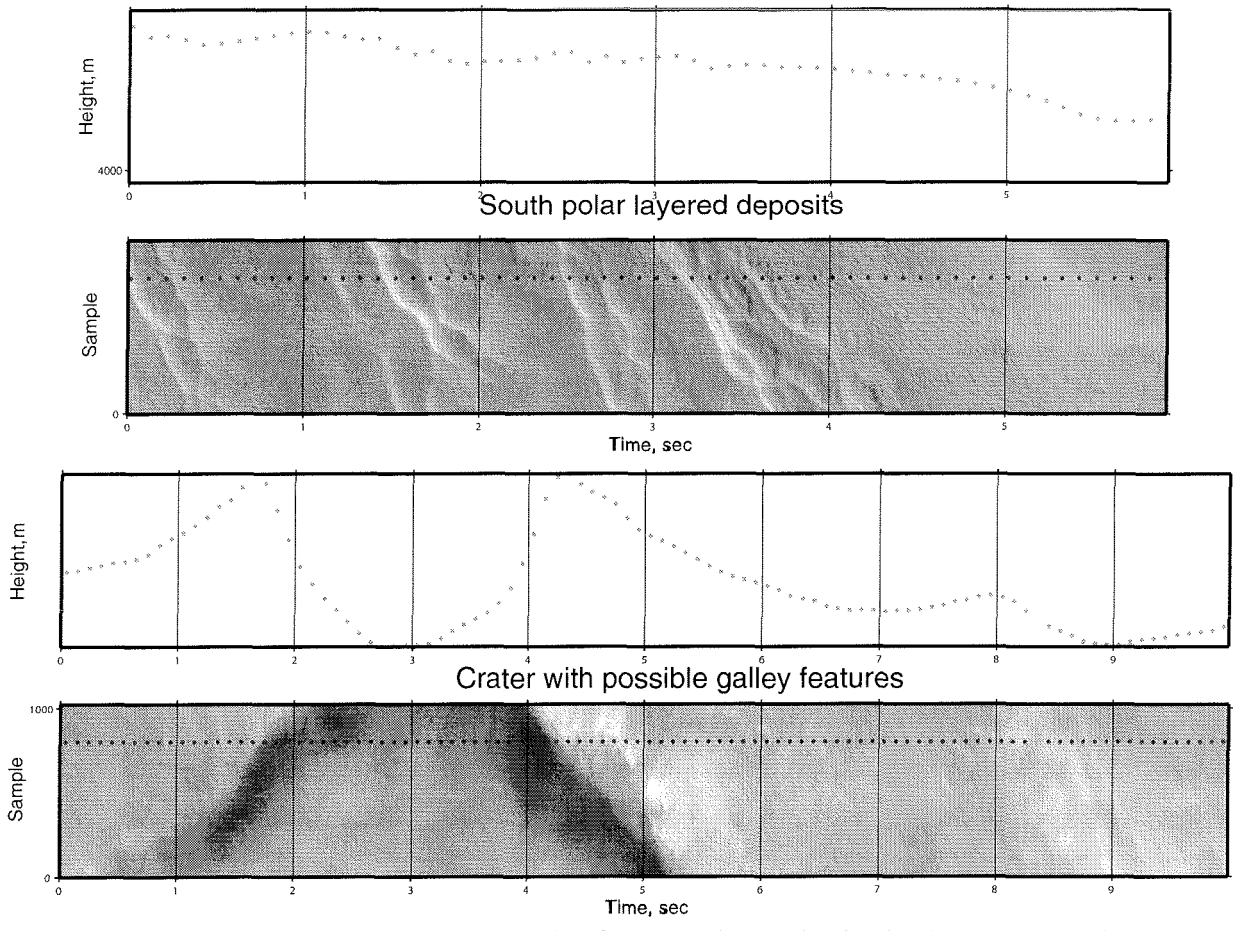

Figure1. Two examples from the MOC/MOLA interface, currently operational at the Planetary Image Atlas. This interface retrieves MOLA topography (actual shots) for the corresponding MOC image.