To facilitate the usage of the dataset, several python functions are provided in mdssd.py.

The program needs scipy, numpy and matplotlib to be installed in python.

Download MDSSD from https://doi.org/10.7910/DVN/0XB6KN and the MDGM from https://doi.org/10.7910/DVN/U3766S. gunzip & untar the downloaded files as necessary.

Note, to get the correct orientation for the MDGMs, the images read from the .jpg files may need to be flipped vertically, depending on the software used. The (0,0) pixel is at the south pole (90S, 180W). In IDL, it is usually displayed at the lower left corner. However, in python matplotlib, it is usually at the upper left corner.

Assume mdssd.py is in the current directory, along with individual data files (in .jpg and .sav format) downloaded from the websites. The following example demonstrates how to use the python program.

Type “python” at the prompt.

>python

Within python, type the following commands:

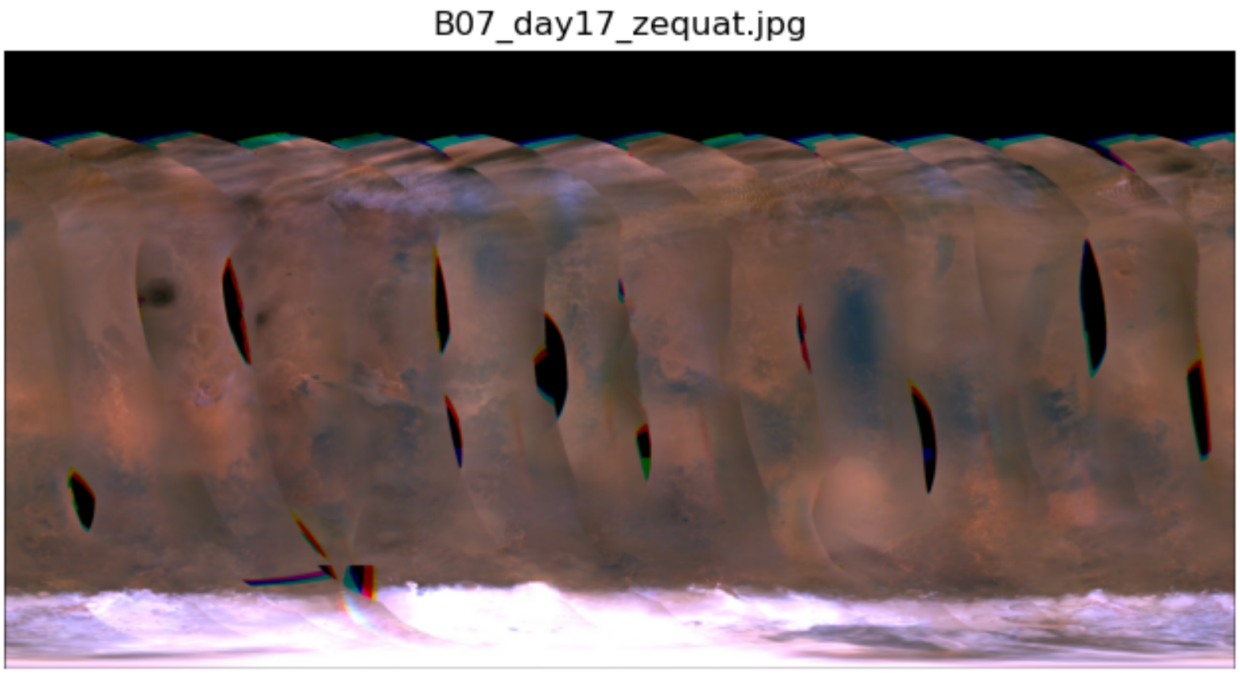
>>>import mdssd

>>>mdgmfnm=’B07_day17_zequat.jpg’

#if mdgmfnm is in a different directory, include the full path in front of the filename

#display the MDGM stored in mdgmfnm

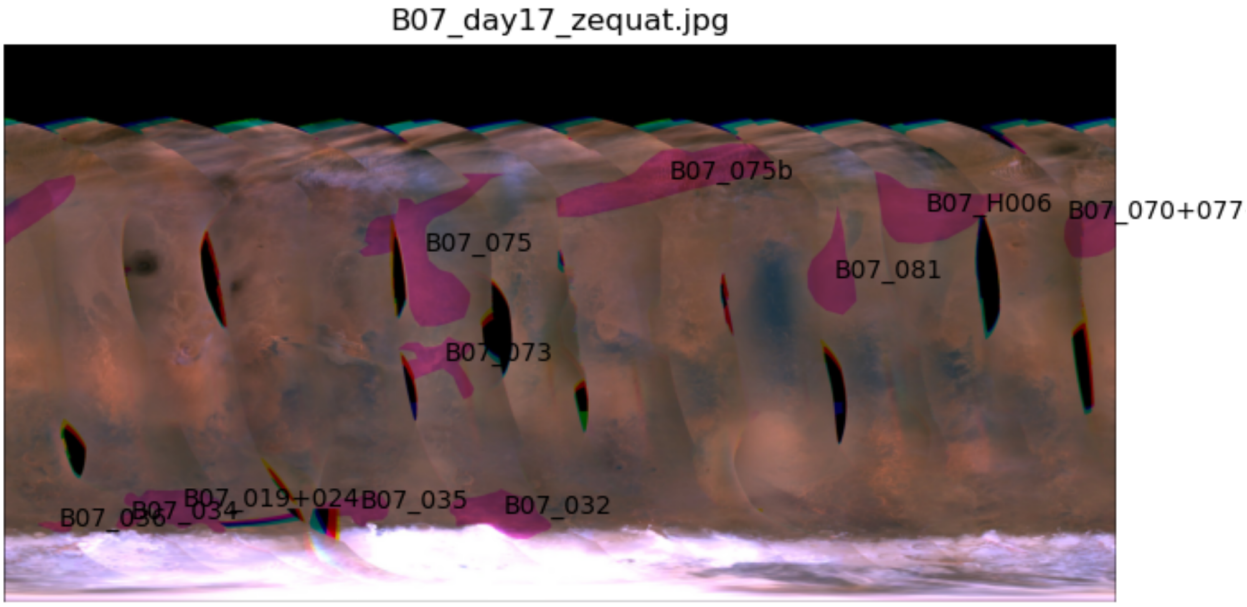
>>>mdssd.display_mdgm(mdgmfnm)



#highlight MDSSD objects over the MDGM

>>>mdssdfnm='B07_day17_roi.sav'

>>>mdssd.highlight_mdssd(mdgmfnm,mdssdfnm)



exit python

>>>exit()