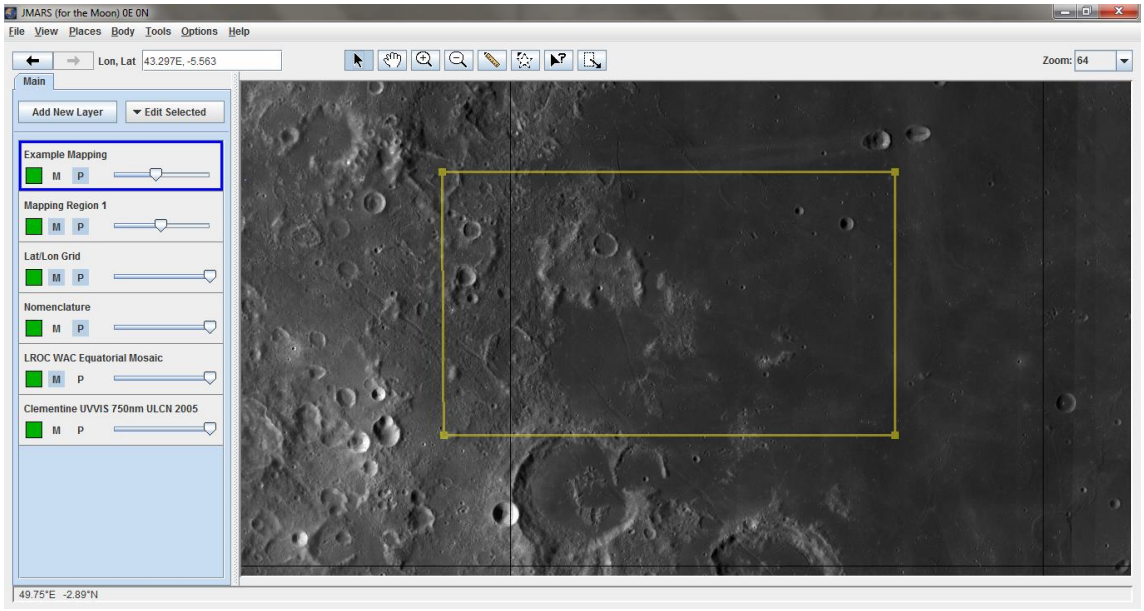
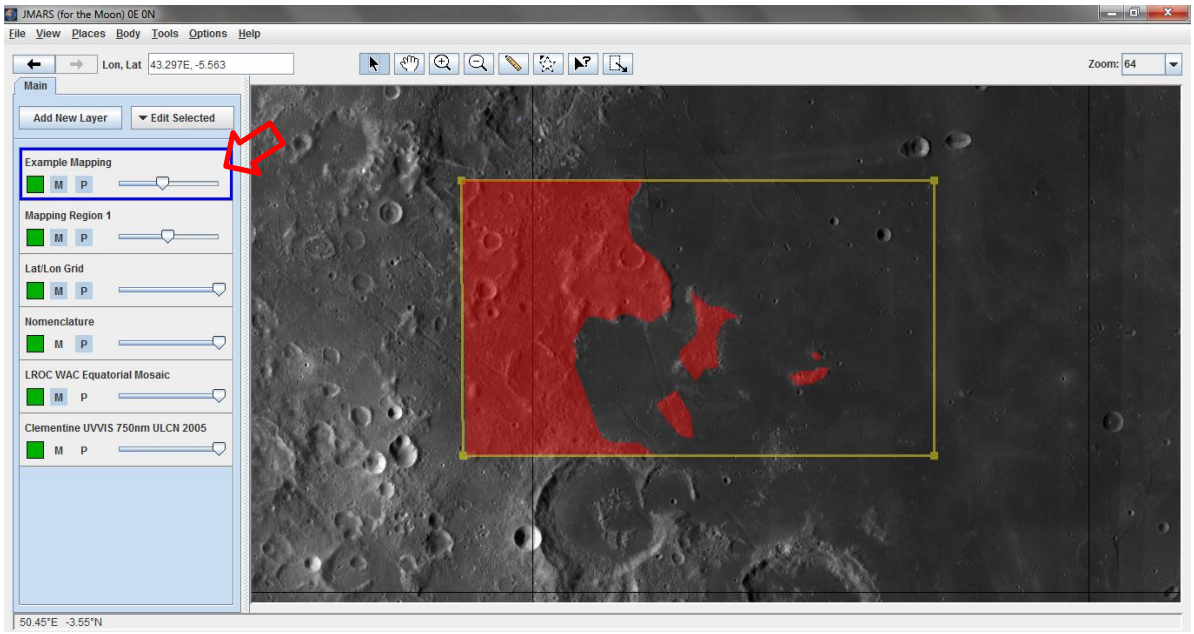
Example Mapping in JMARS

Guide
Dr Marlene Bamberg
March 2015

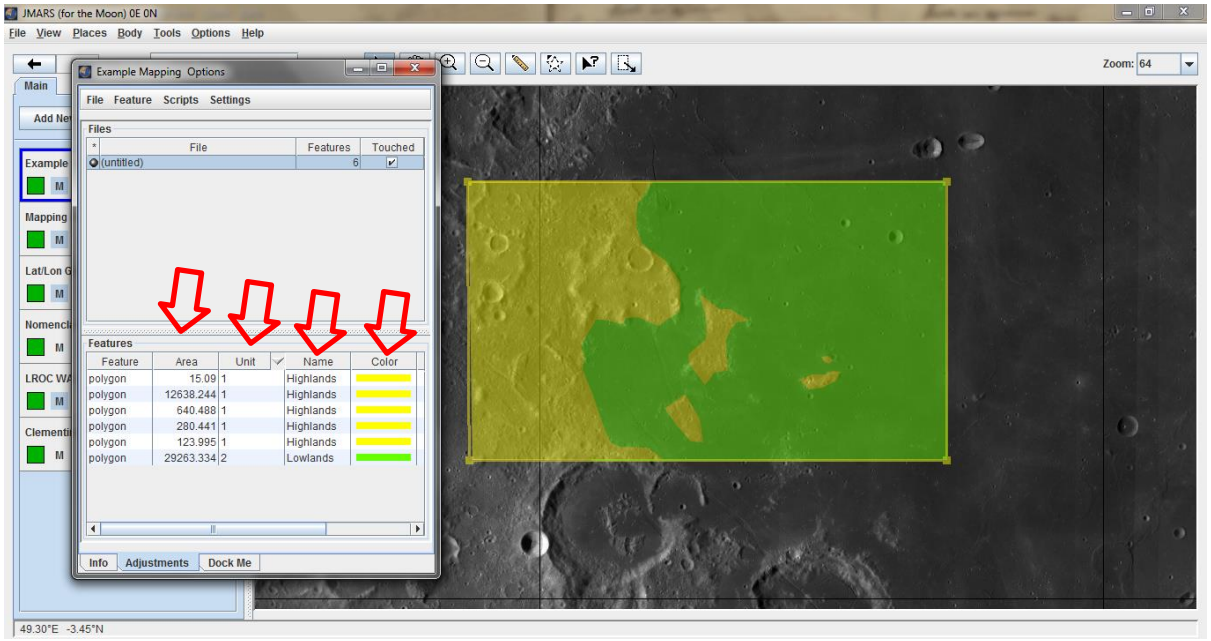
Open all data you need for a geological mapping in JMARS. LROC is a useful dataset for high resolution coverage of Lunar regions. Create a New Shape Layer to start your mapping. The mapping region is shown in yellow. It is recommended to zoom in for mapping the region, but be aware that some high resolution details might not be seen, when you look at your entire mapping. It is important that mappers do not get lost in details, but also provide a good and consistent quality of the map.



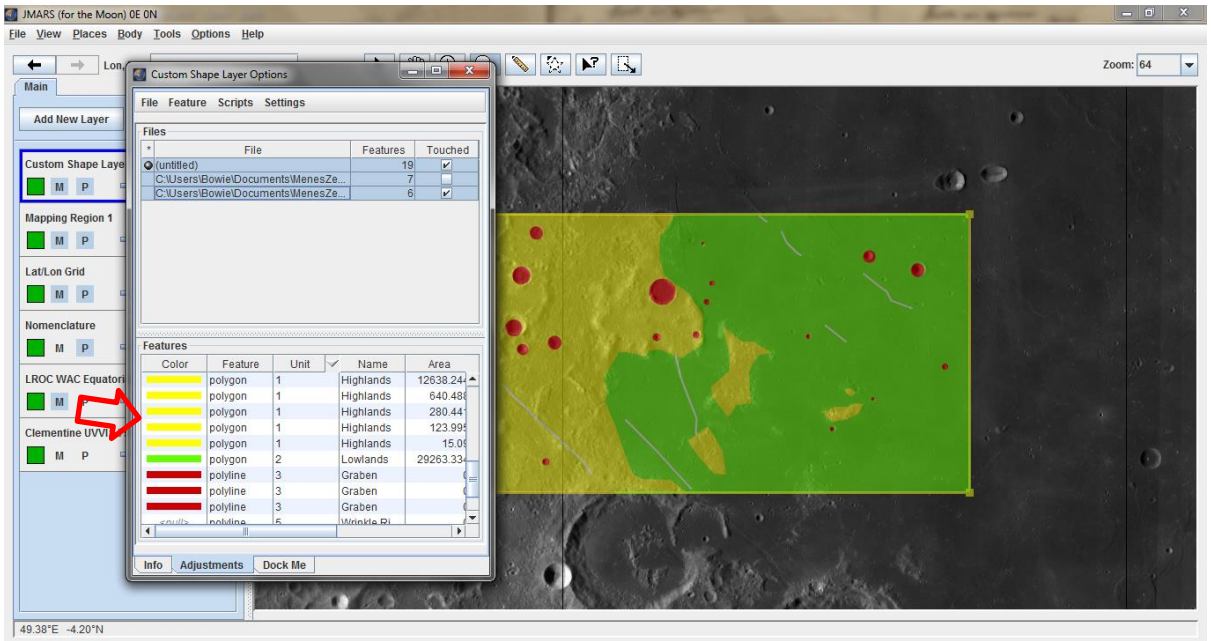
It is important that you spend some time studying the region you are going to map. This will help you identify changes on the surface and therefore, different units. Just get started! It is important to have the layer on the left selected, that you want to store your mapping in.



When clicking your new layer you can make adjustments to your mapping. Add new columns to the table to store important information (e.g. name, unit, area, description, notes). You can fill in the table by double clicking the fields. You can also change the color and outlines of each polygon, line, and point.



Add more details to your map as you go. You can also switch to line and point features. Use polygons, lines, or points as you think it is useful! Keep track of the different units!



When you are done with your mapping you should add a scale bar (new layer) and adapt the coordinate system to a scale useful for the map. You can also export your mapping database.

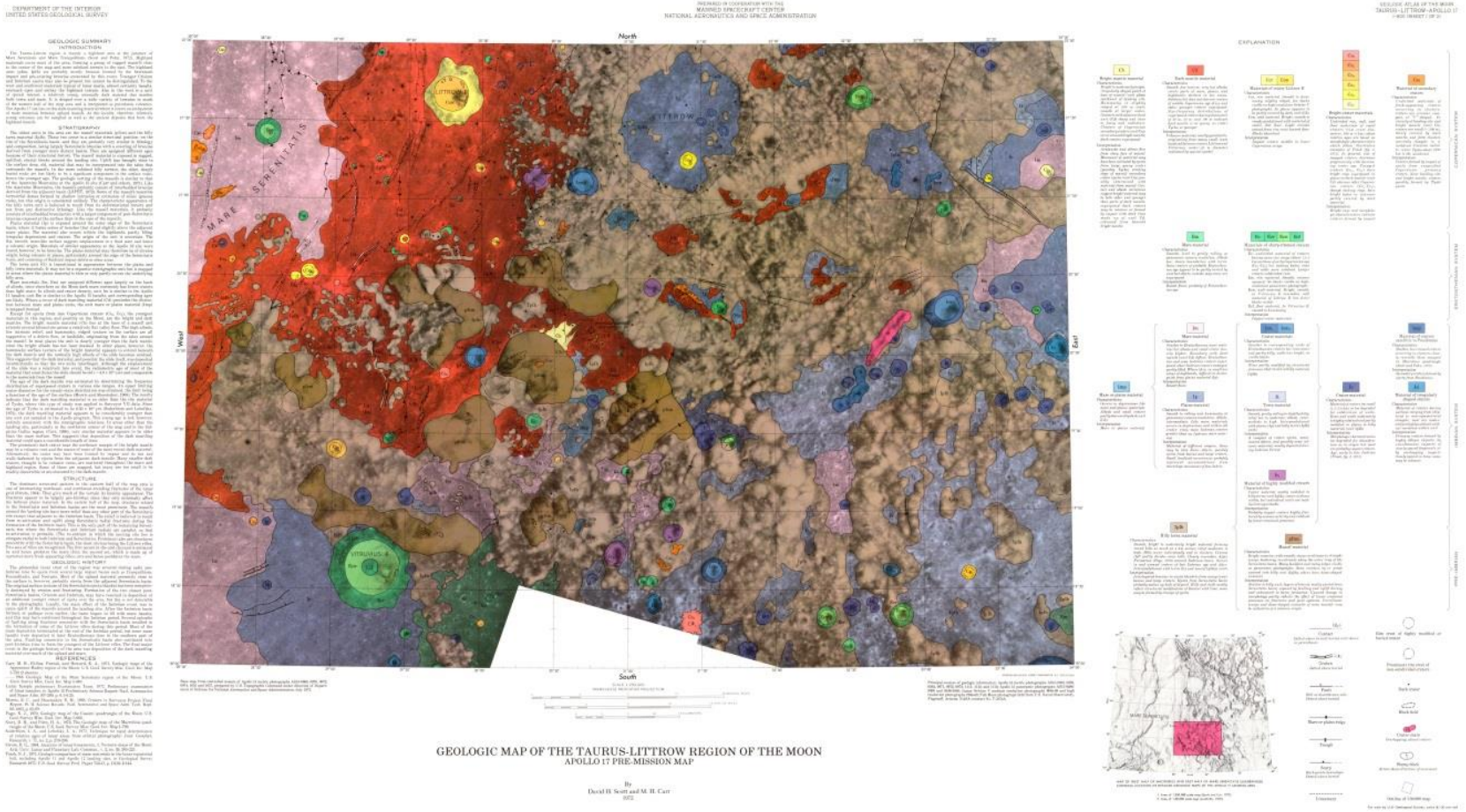
Further advanced mappings contain even more information, such as:

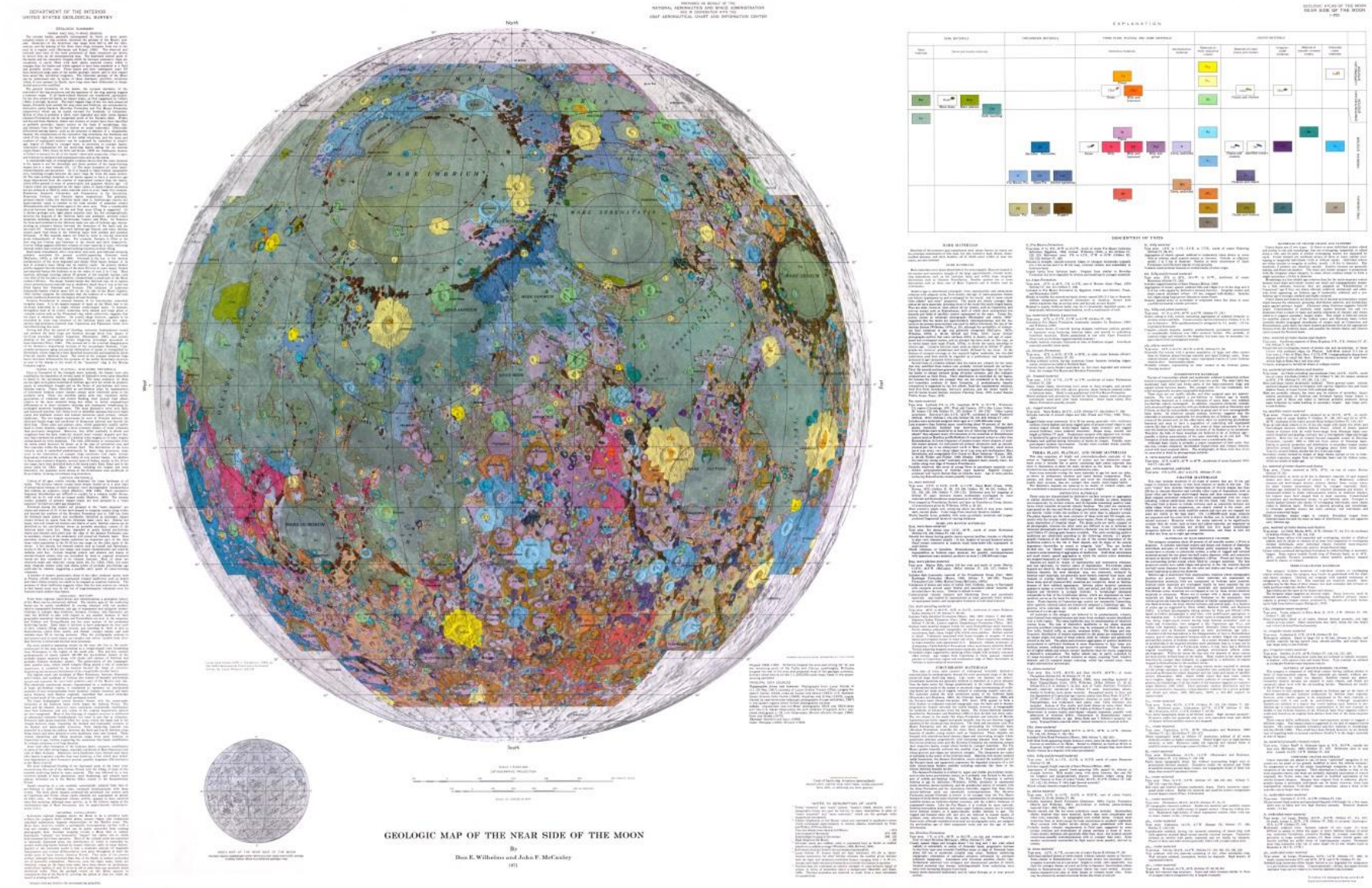
- Title
- Area Description
- Global Map for Context
- Map!
- North Arrow
- Used Data
- Scale Bar
- Resolution
- Coordinate System
- Author
- Date
- Legend
- Timeline
- Different Projections

Below a geological map of the Taurus-Littrow region and a global map of the Moon are shown. Both maps were not created in JMARS, but rather in ArcGIS.

Example Mapping in JMARS

Guide
Dr Marlene Bamberg
March 2015




DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
PREPARED IN BEHALF OF THE
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND IN COOPERATION WITH THE
USAF AERONAUTICAL CHART AND INFORMATION CENTER
GEOLOGIC ATLAS OF THE MOON
NEAR SIDE OF THE MOON
I–703
North
West
East
South
MARE IMBRIUM
MARE SERENITATIS
MARE CRISIUM
MARE FECUNDITATIS
MARE NECTARIS
MARE TRANQUILLITATIS
MARE HUMORUM
MARE NUBIUM
OCEANUS PROCELLARUM
EXPLANATION
DESCRIPTION OF UNITS
GEOLOGIC MAP OF THE NEAR SIDE OF THE MOON
By
Don E. Wilhelms and John F. McCauley
1971