ACT-REACT QuickMap

http://mare.actgate.com/qmap2/qmap.html

Simple Access to LROC and M³ data
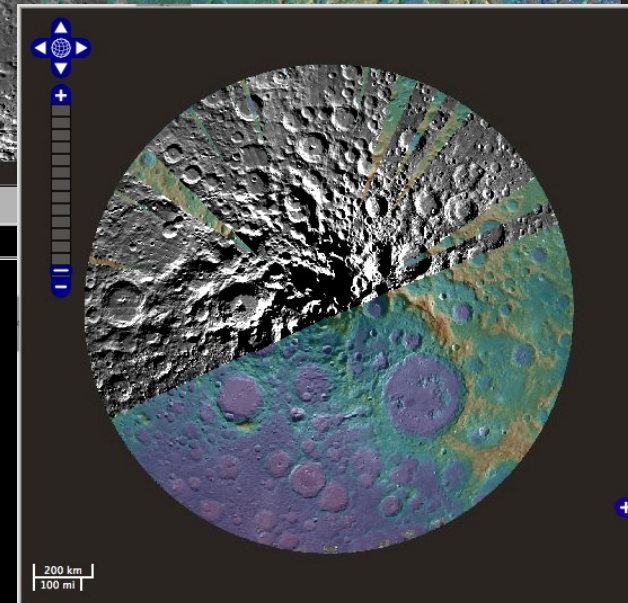
Highlights:

- **M^3 Mosaics for each OP sub-group:**
  (OP1A, OP1B, OP2A, OP2B, OP2C1, OP2C2, OP2C3)

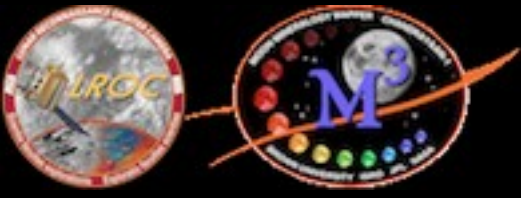- **Display/validate/compare M^3 spectra at any location**

- **Elevation profiles and 3D topography** (based on LROC WAC DTM, GLD100)

ACT-REACT QuickMap

Access mosaics by selecting the desired OP (Optical Period) sub-group

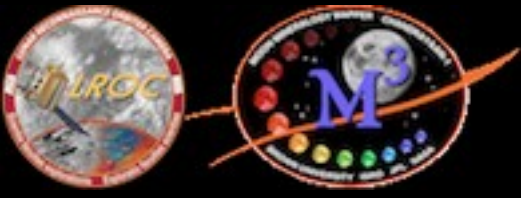L2 reflectance using actual topography (based on LOLA)

L2 reflectance using a sphere model (the local topography is not accounted)

ACT-REACT QuickMap

M3 Global Mosaics at 125 meters/pixel generated by ACT

The global mosaics of M3 observations (apparent reflectance at 1489 nm) easily show how the degraded pointing accuracy (due to multiple S/C failures) affects:
• Spatial registration relative to trusted base maps (LROC WAC mosaic)
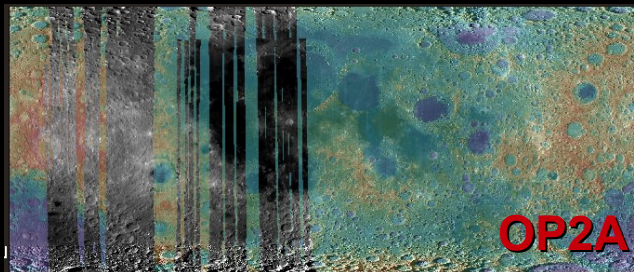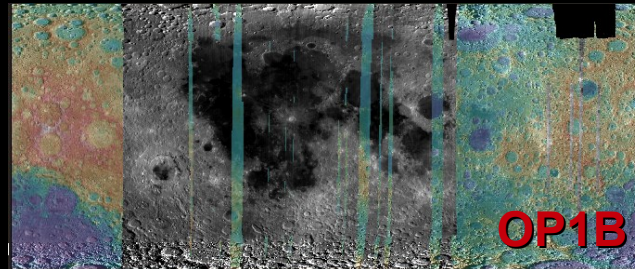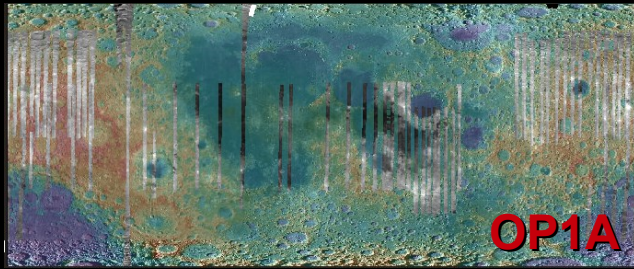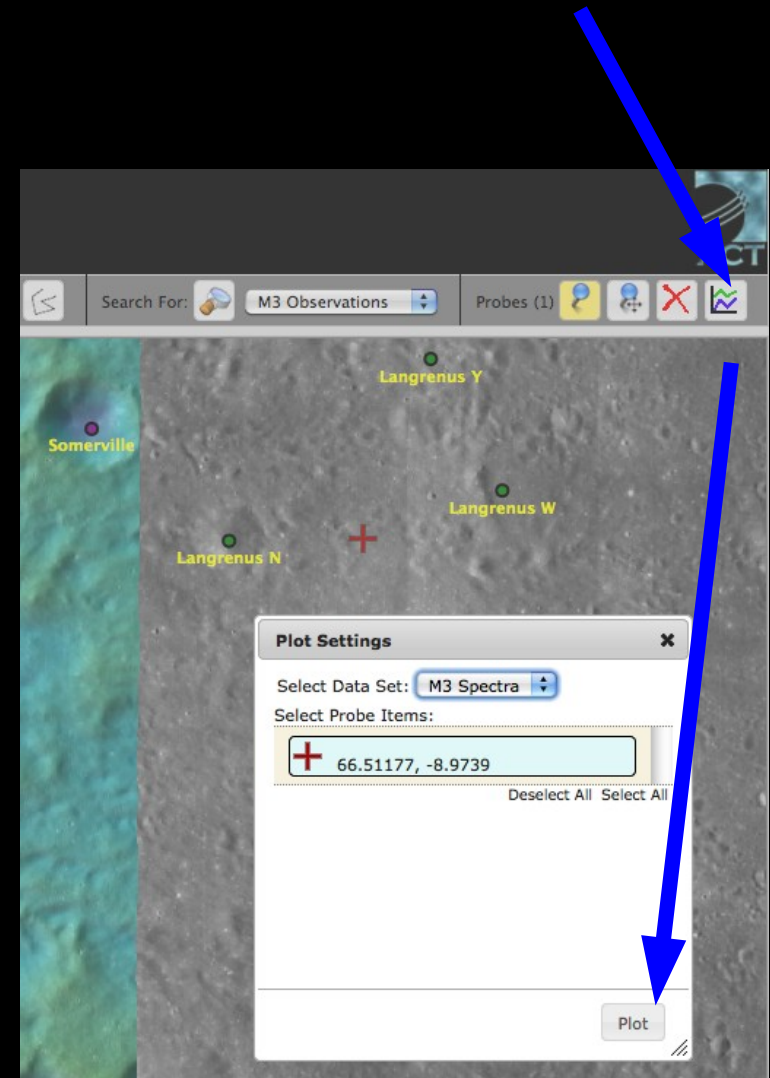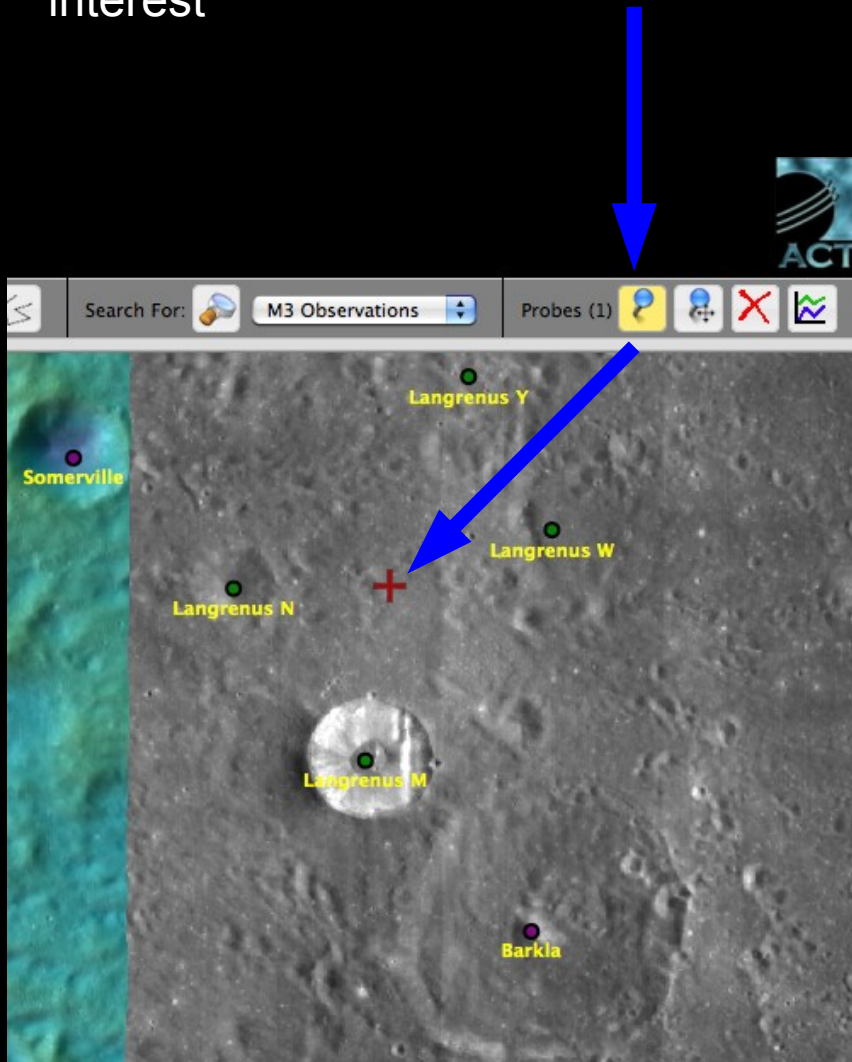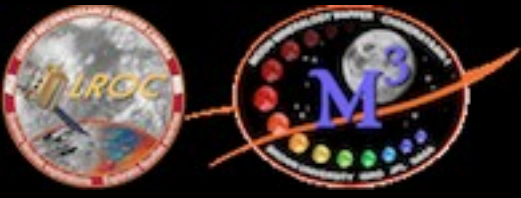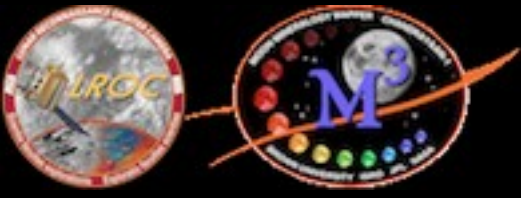• L2 processing: artefacts due to a poor estimation of the local topography
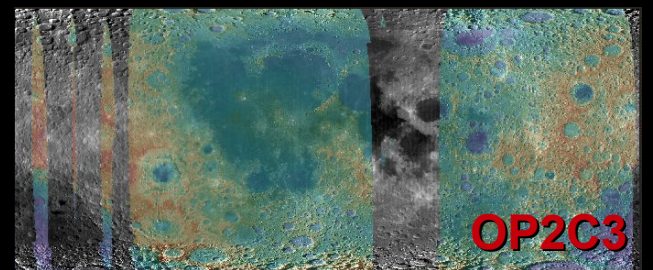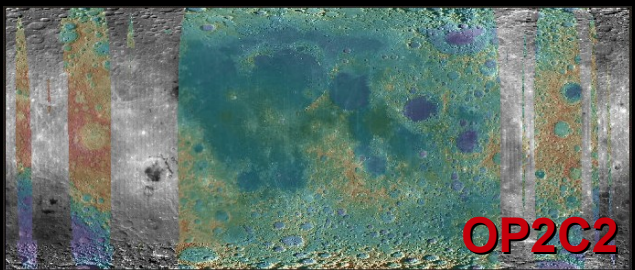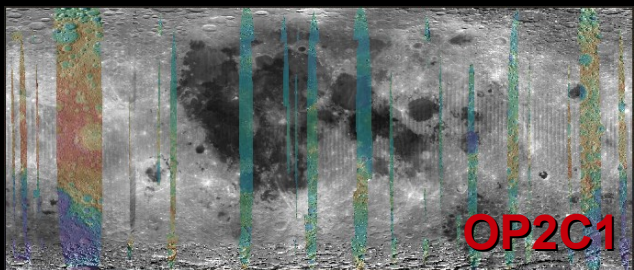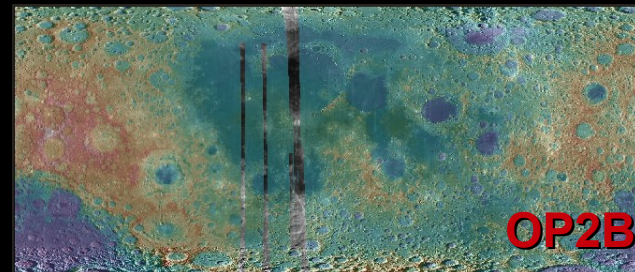
ACT-REACT QuickMap

1) Place a probe by selecting the probe icon and clicking on a point of interest

2) Click on the plot icon, and then on the 'Plot' button

ACT-REACT QuickMap

Results: all the Observations covering the point of interest are listed and can be explored separately or all in one page

ACT-REACT QuickMap

For each M³ observation, the result page shows:

A 15km by 15km context preview for the selected region of interest

Links to additional visualization, validation and download options:
- Inspect and interact with the selected sub-region
- Validate the M3 ↔ LROC spatial registration
- Links to download data from PDS

Basic geometric (I, E, P) and other relevant parameters (e.g. detector temperature)

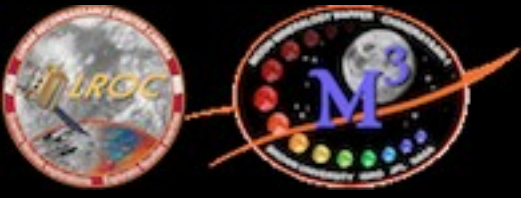|									
		(19.982, 4.573, 18.663)	111062.859	M3G20090104T062425_V01_L2_MAP.IMG.vrt using as input M3G20090104T062425_V03_L1B.LBL [Preview/Download mapped sub-cube] [Check registration against LROC/WAC] [Download L2 cube from PDS]	(169, 4963) (169, 4963)	163.95	OP1A	(4775, 139)	(66.51297, -8.97942)

ACT-REACT QuickMap

For each M³ observation, the result page shows:

L1B Radiance plot
(at probe location)
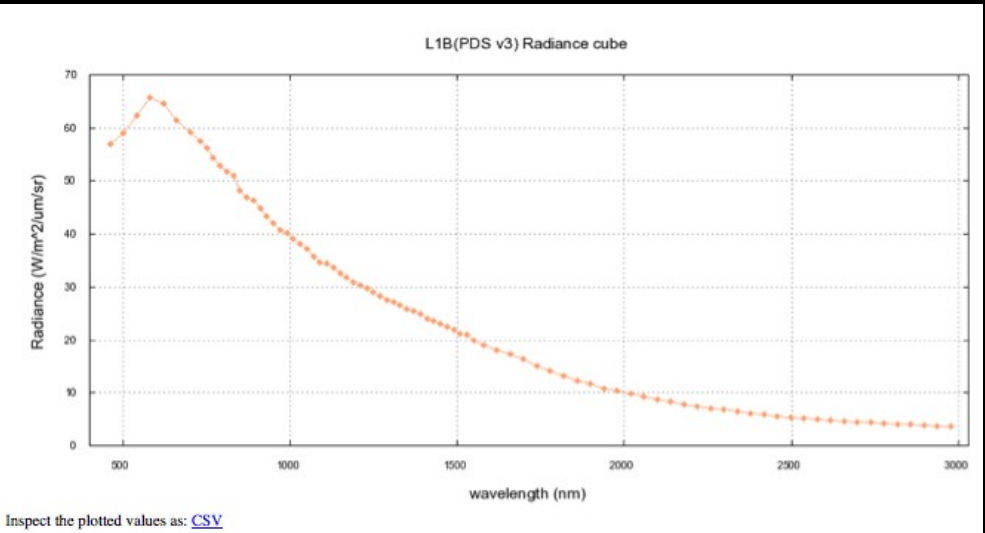
L2 Reflectance plot
(at probe location)
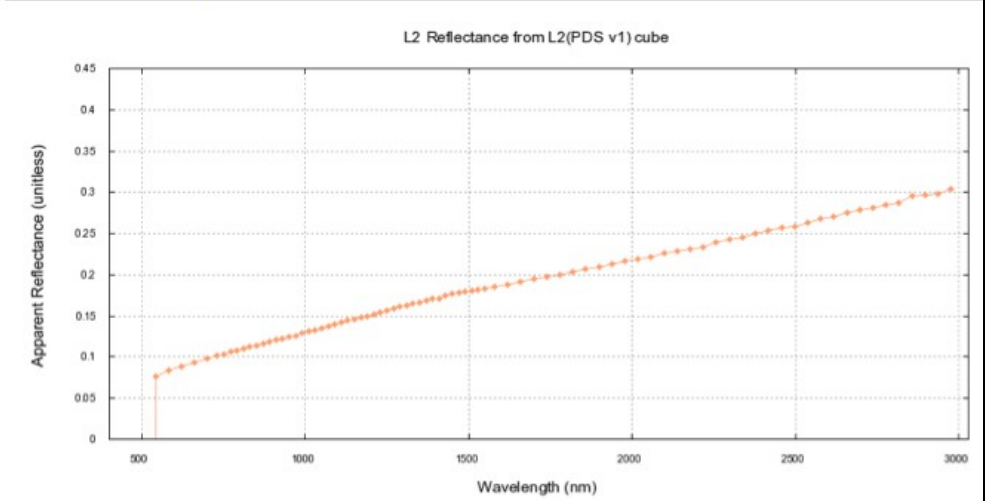
Option to generate additional plots to validate the L2 calibration steps

ACT-REACT QuickMap

Interactive access to M³ sub-cubes:

Interactive spectra plots

Choose spectral bands

Sub-cube download

Interactive access to LROC WAC global DTM (GLD100)

Elevation profiles along paths:
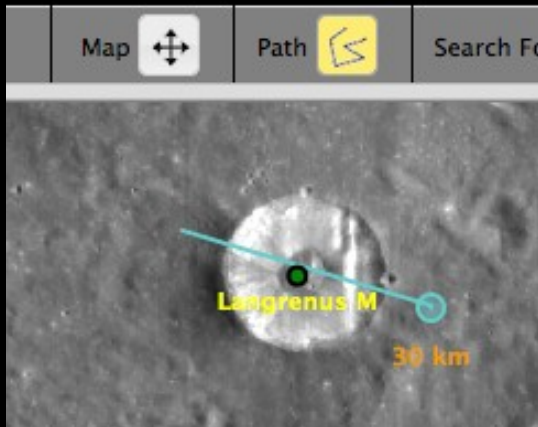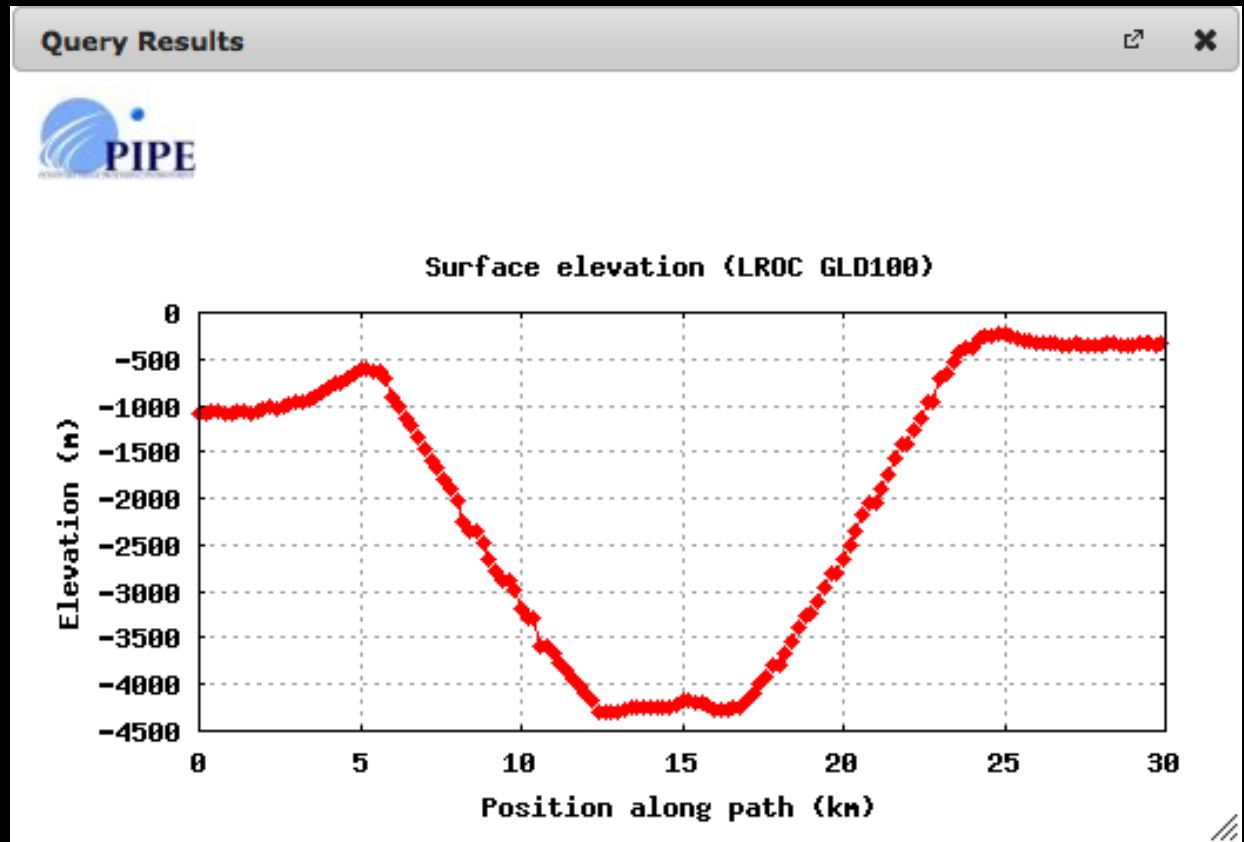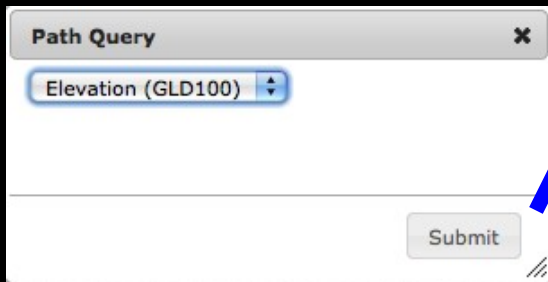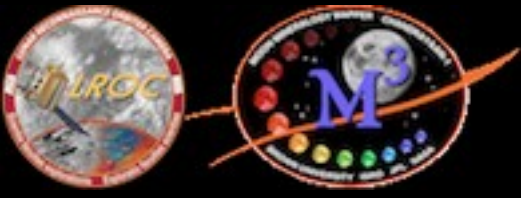
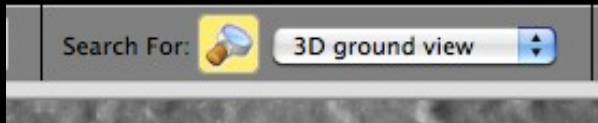1) Click on the Path icon and draw a path

2) Click Submit

ACT-REACT QuickMap

Interactive access to LROC WAC global DTM (GLD100)

3D grounds views:

1) Click on the lens icon
and select '3D ground view'

2) draw a rectangle around
a region of interest

WAC monochrome mosaic draped on top of the global
WAC-derived elevation model (GLD100).
Scene elevation (meters): min = -4318.00, max = -285.00