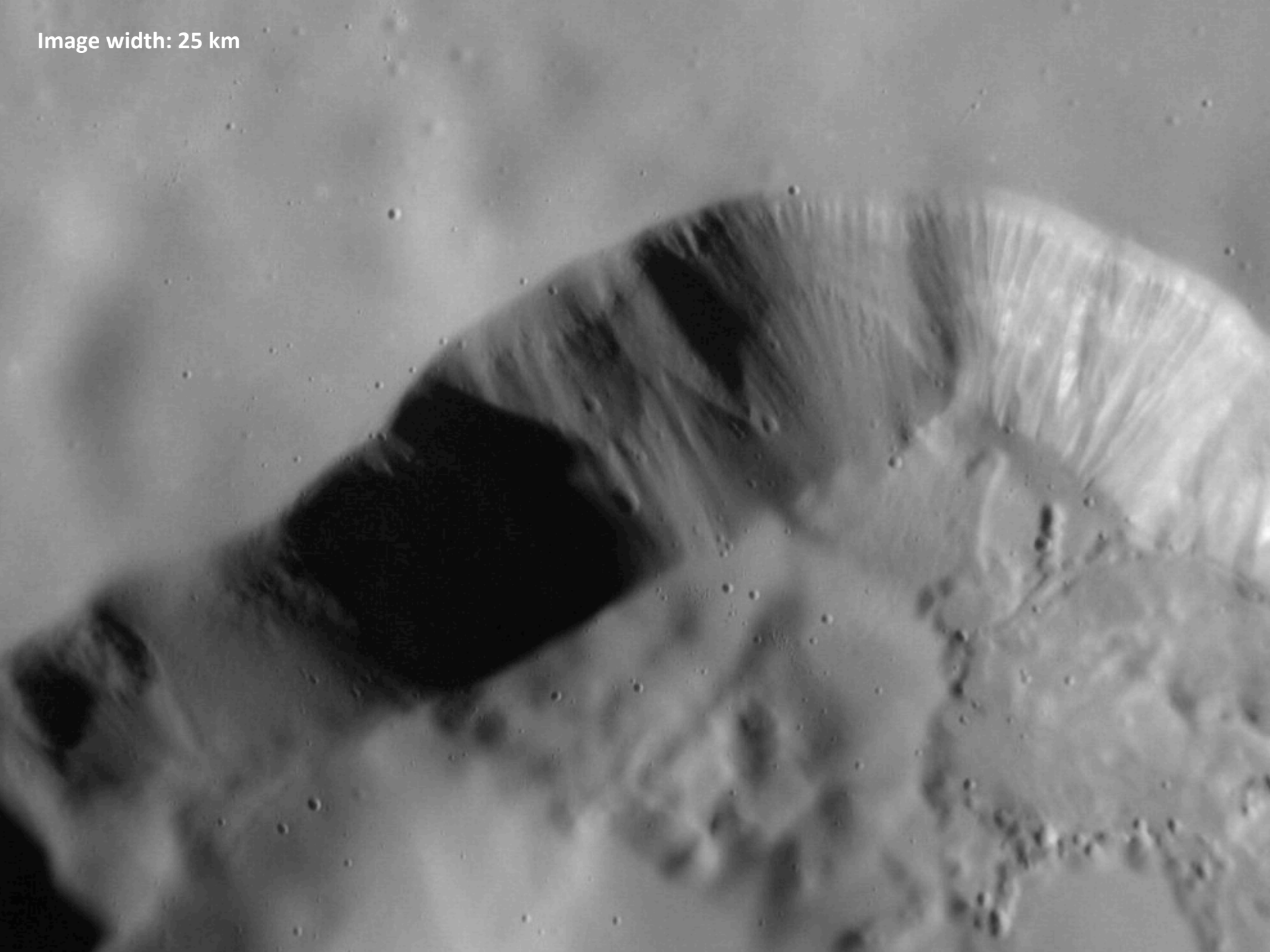
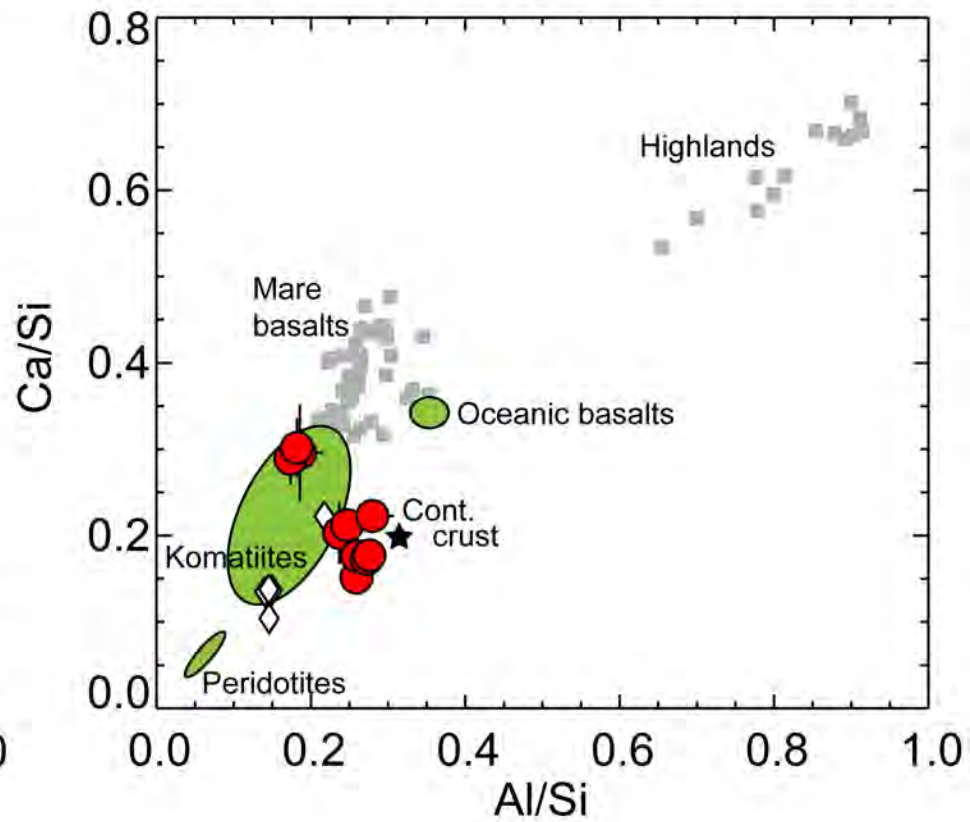
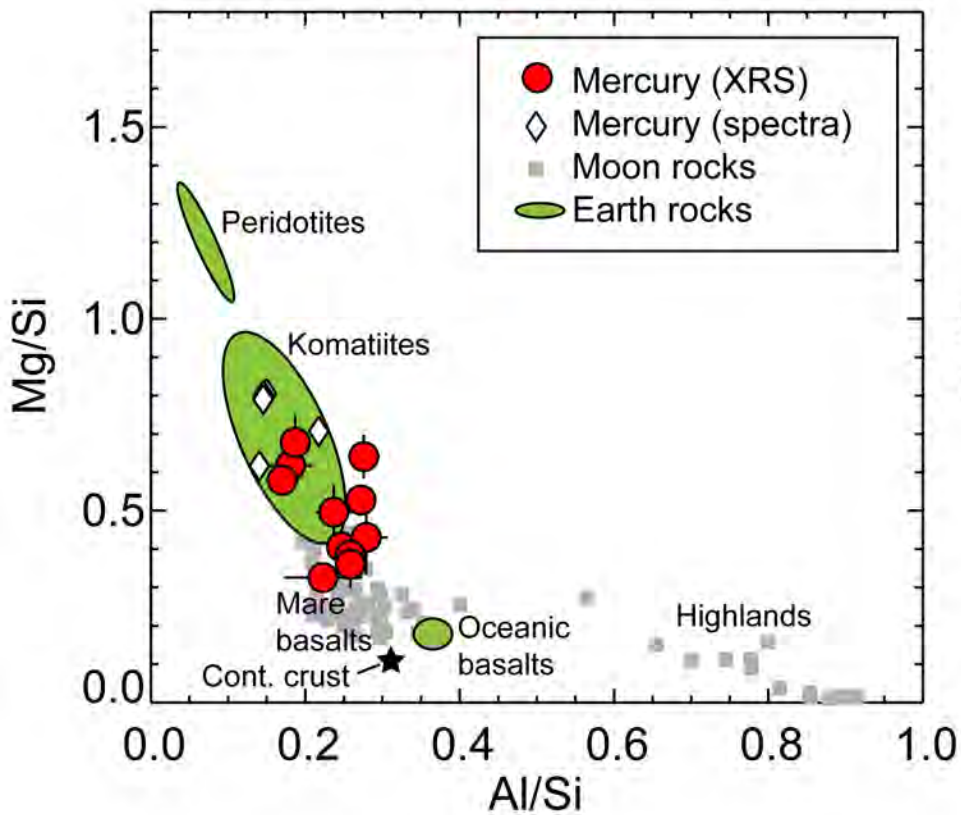


Image width: 25 km

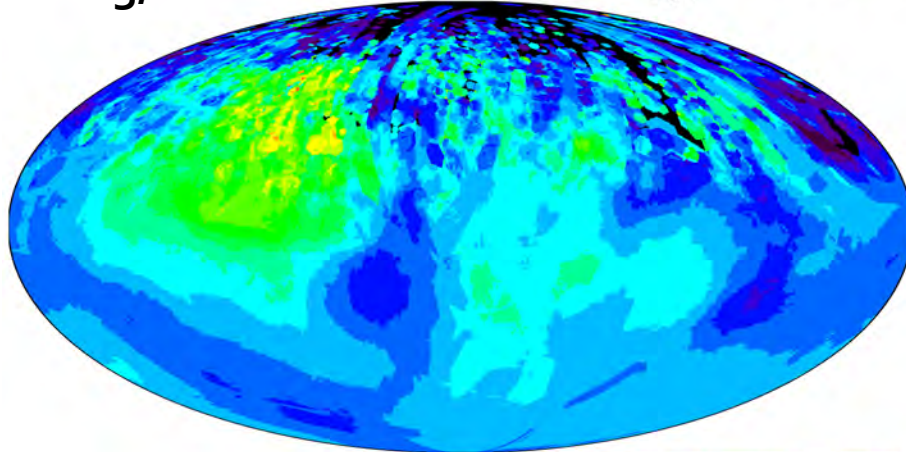
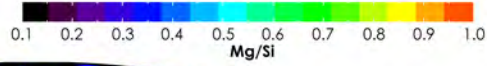




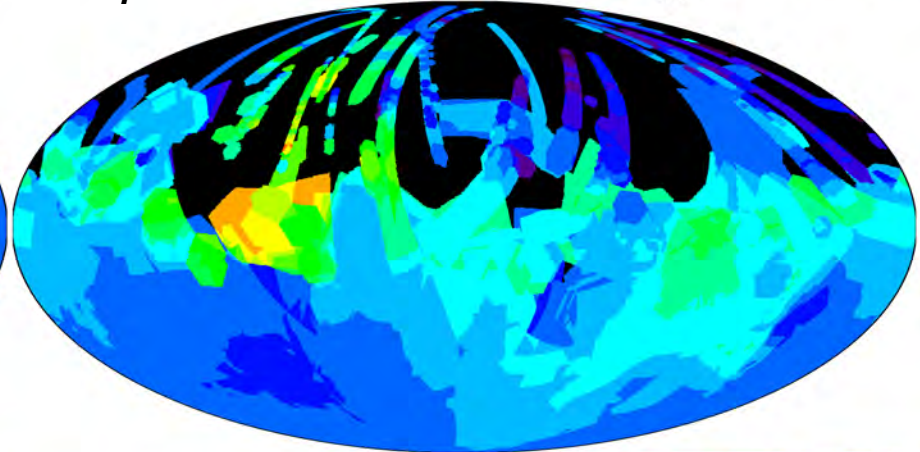
# XRS global mapping



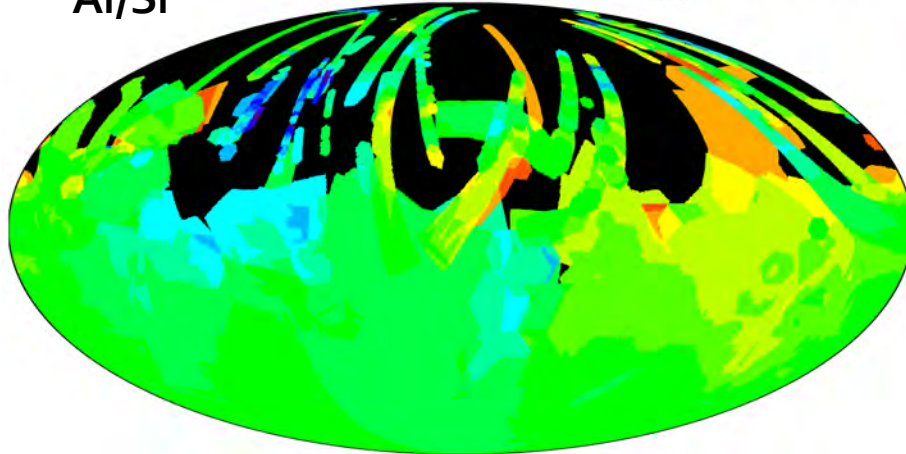
Mg/Si



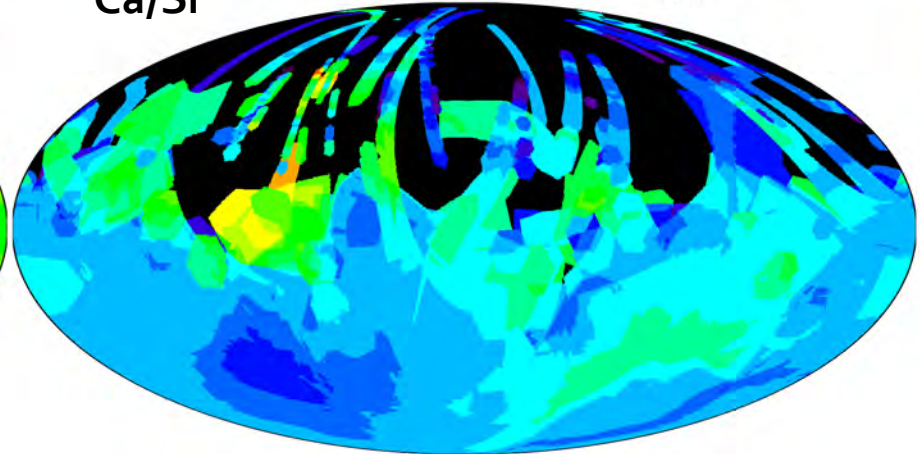
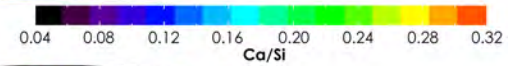
S/Si



Al/Si



Ca/Si

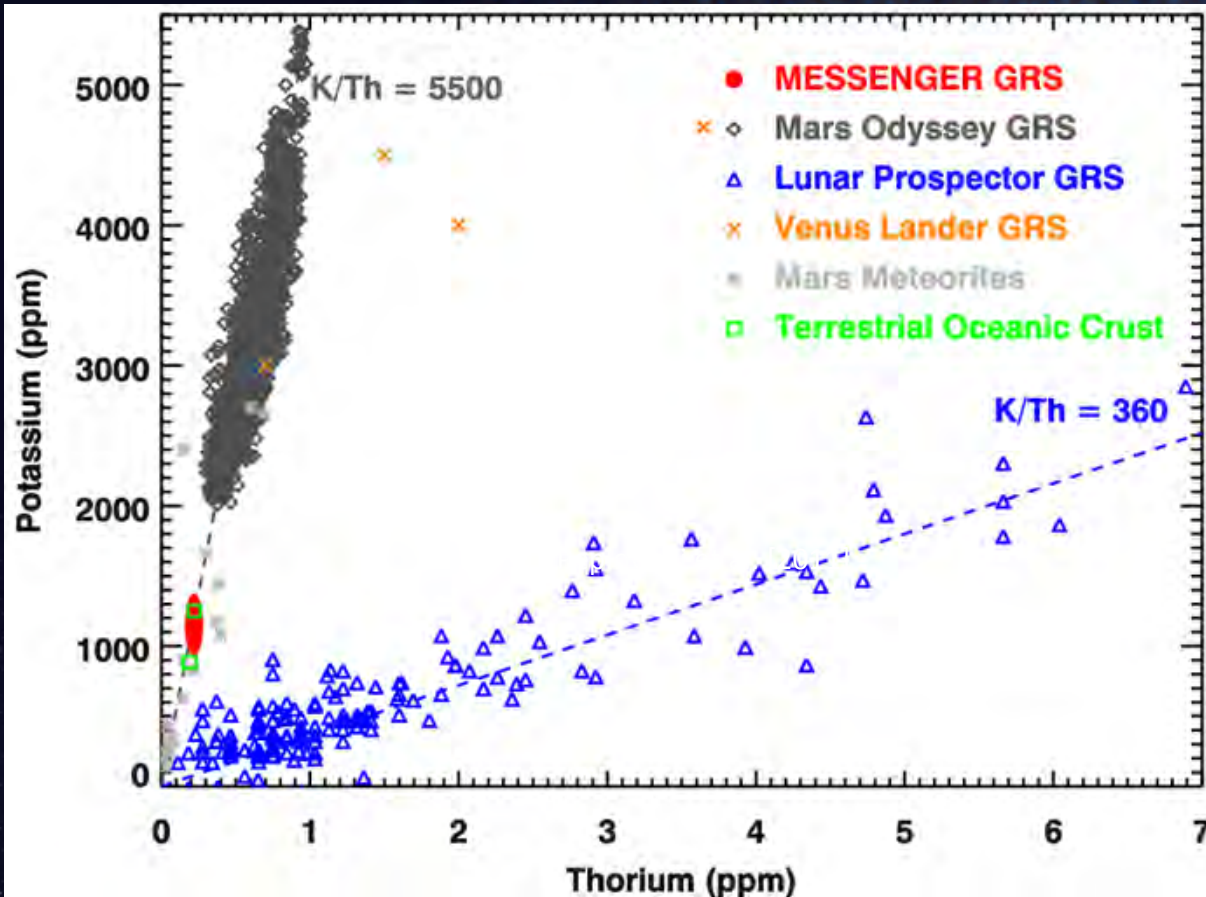
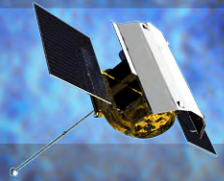




APL

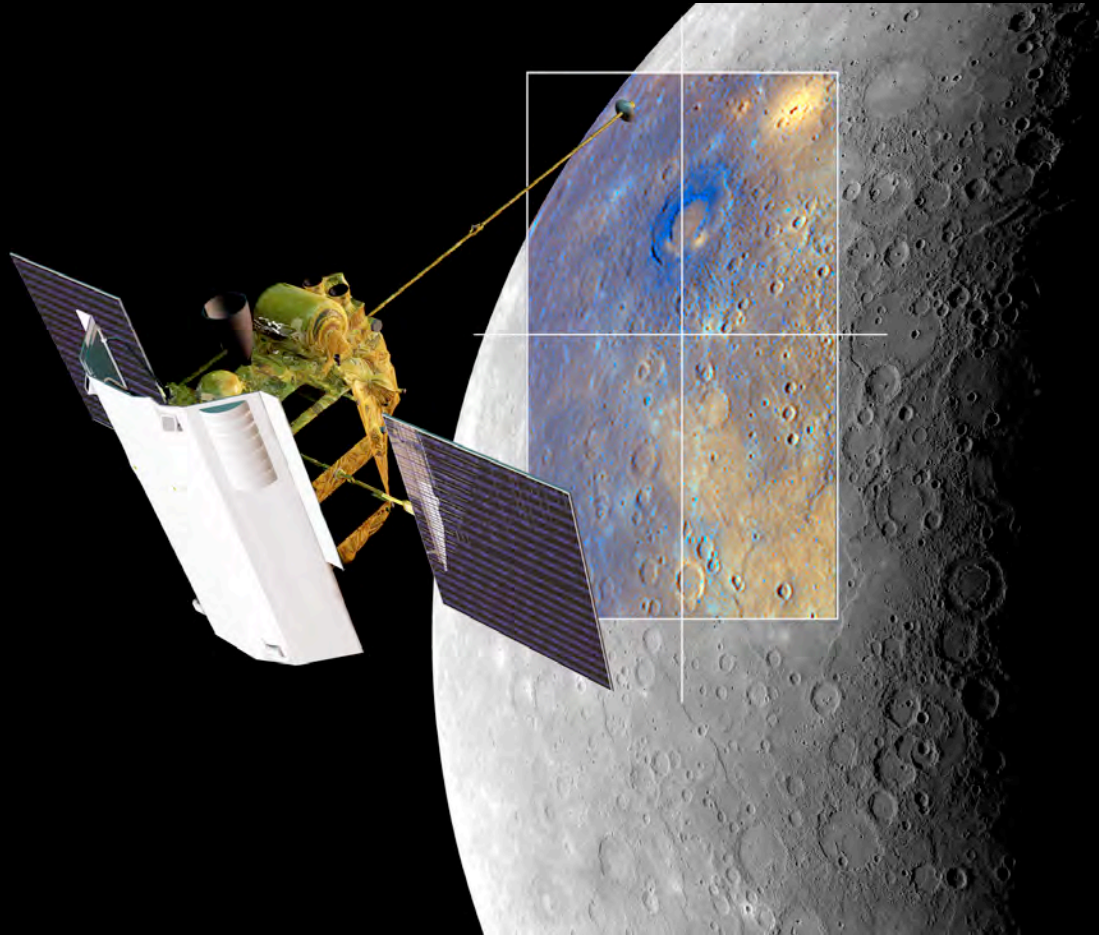
# MESSENGER

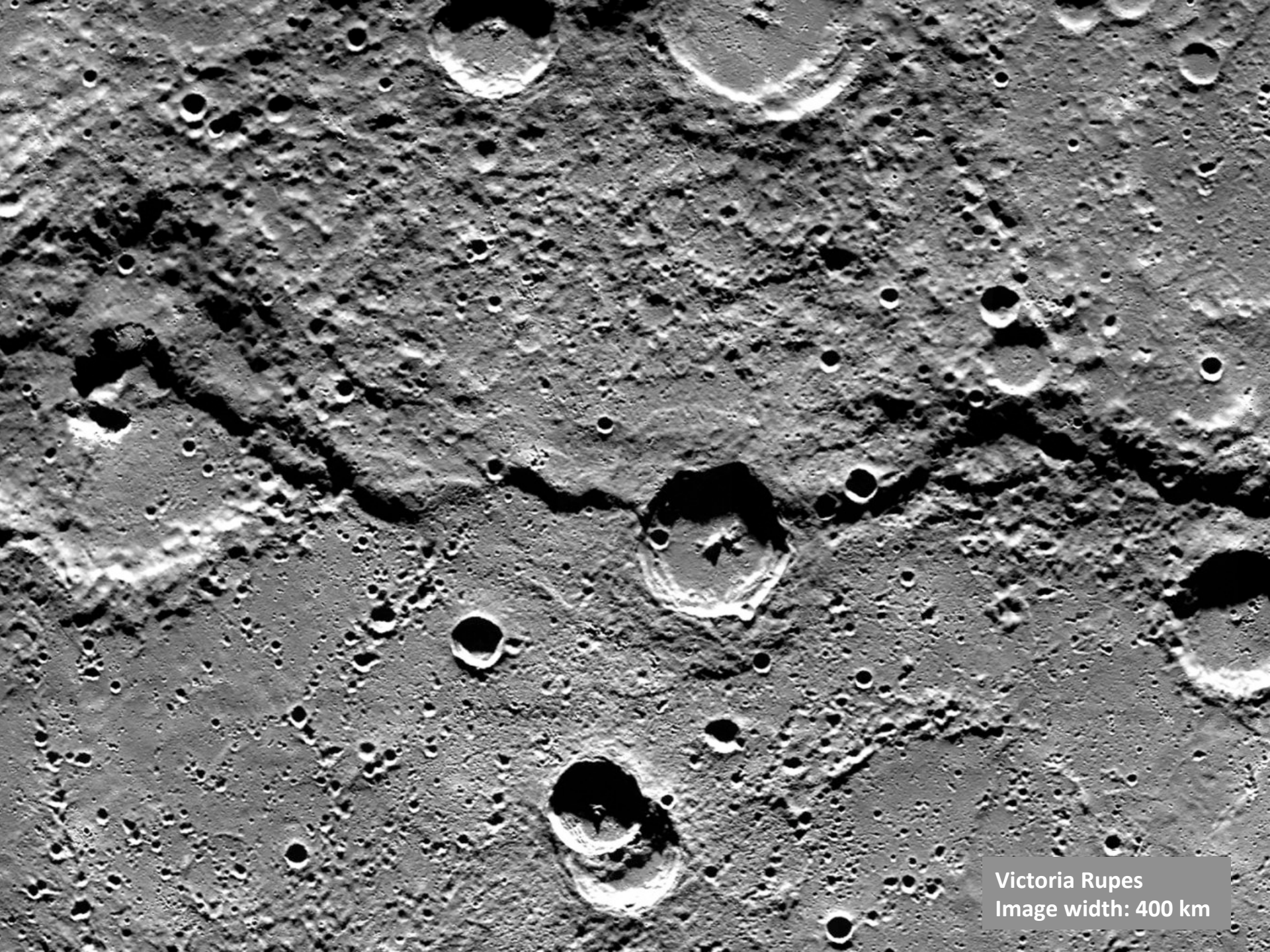
MErcury Surface, Space ENvironment, GEochemistry, and Ranging



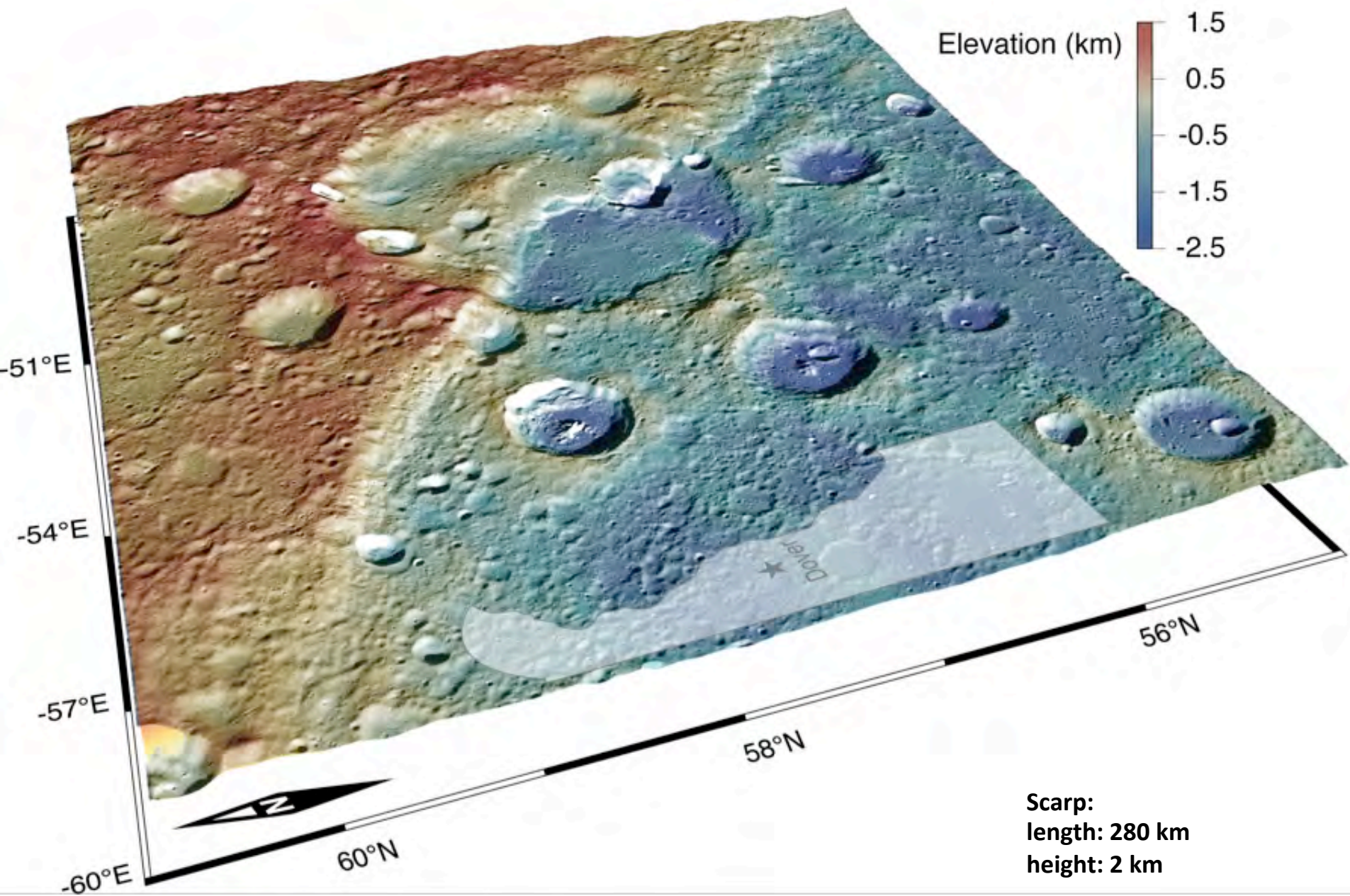
- MESSENGER measurements:
  - $K = 1150 \pm 220$  ppm (GRS)
  - $0.05 < S/Si < 0.15$  (XRS)
  - $Th/U = 2.5 \pm 0.9$  (GRS)
- Formation models with evaporation in a hot solar nebula, high-temperature condensates, or some giant impact scenarios are inconsistent with observed S and K abundances

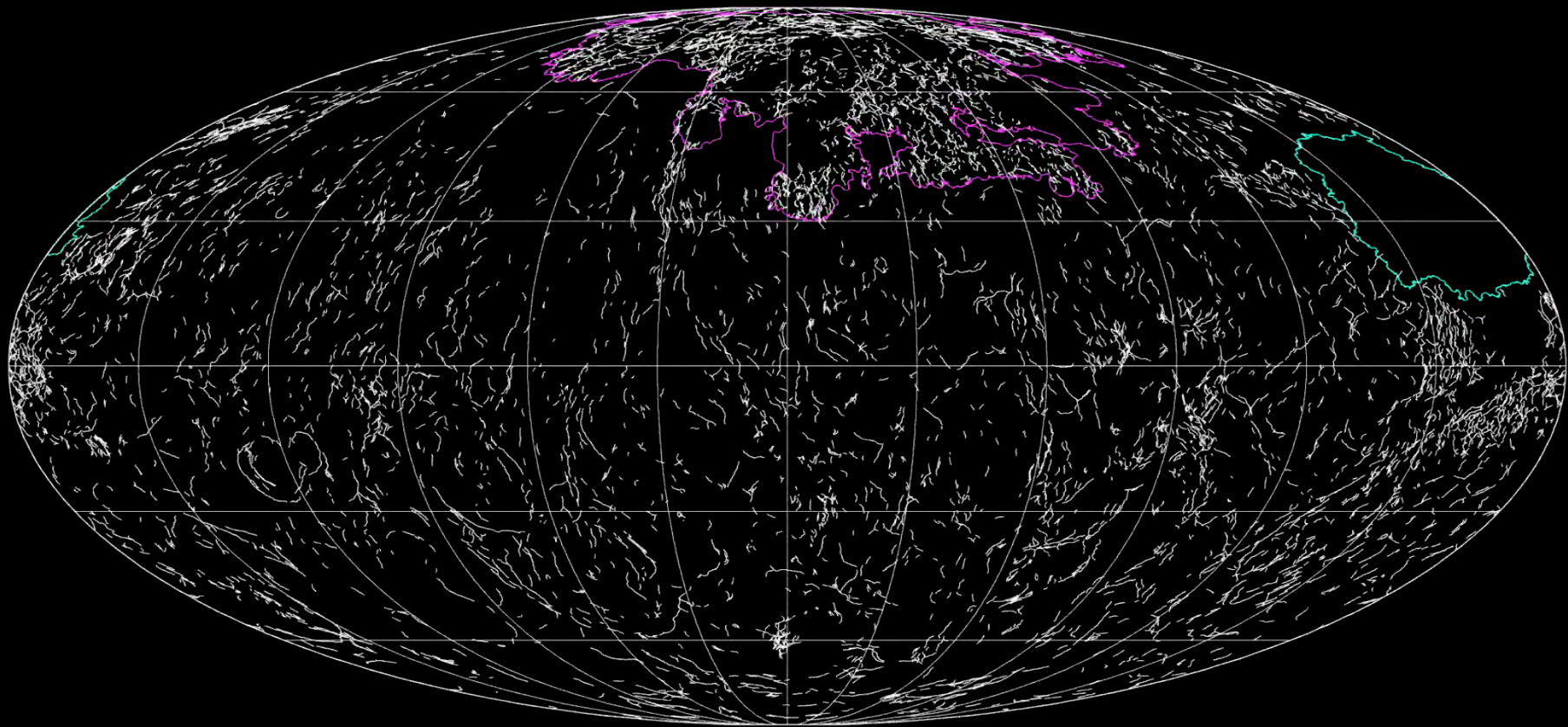
# *Tectonics*



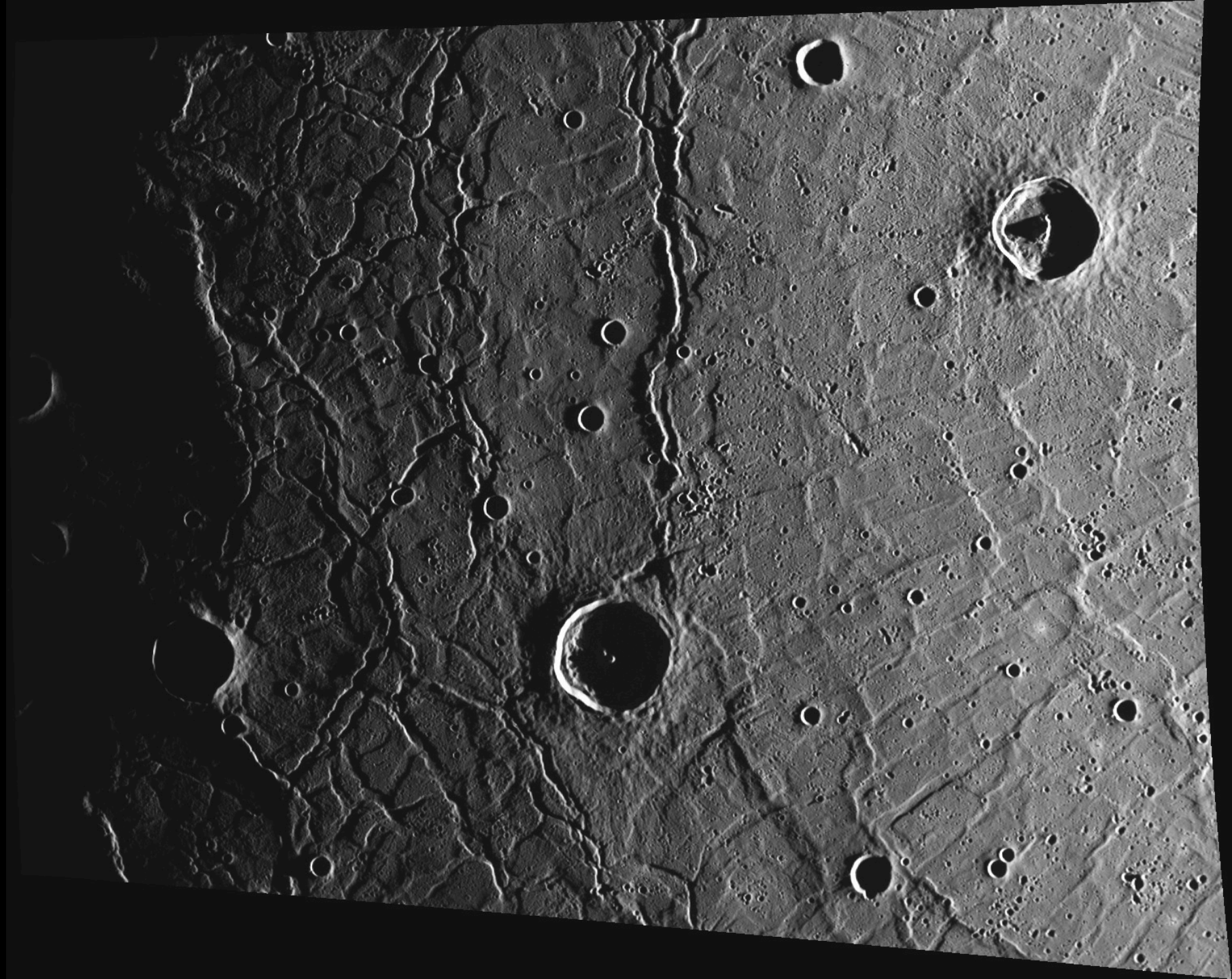


Victoria Rupes  
Image width: 400 km

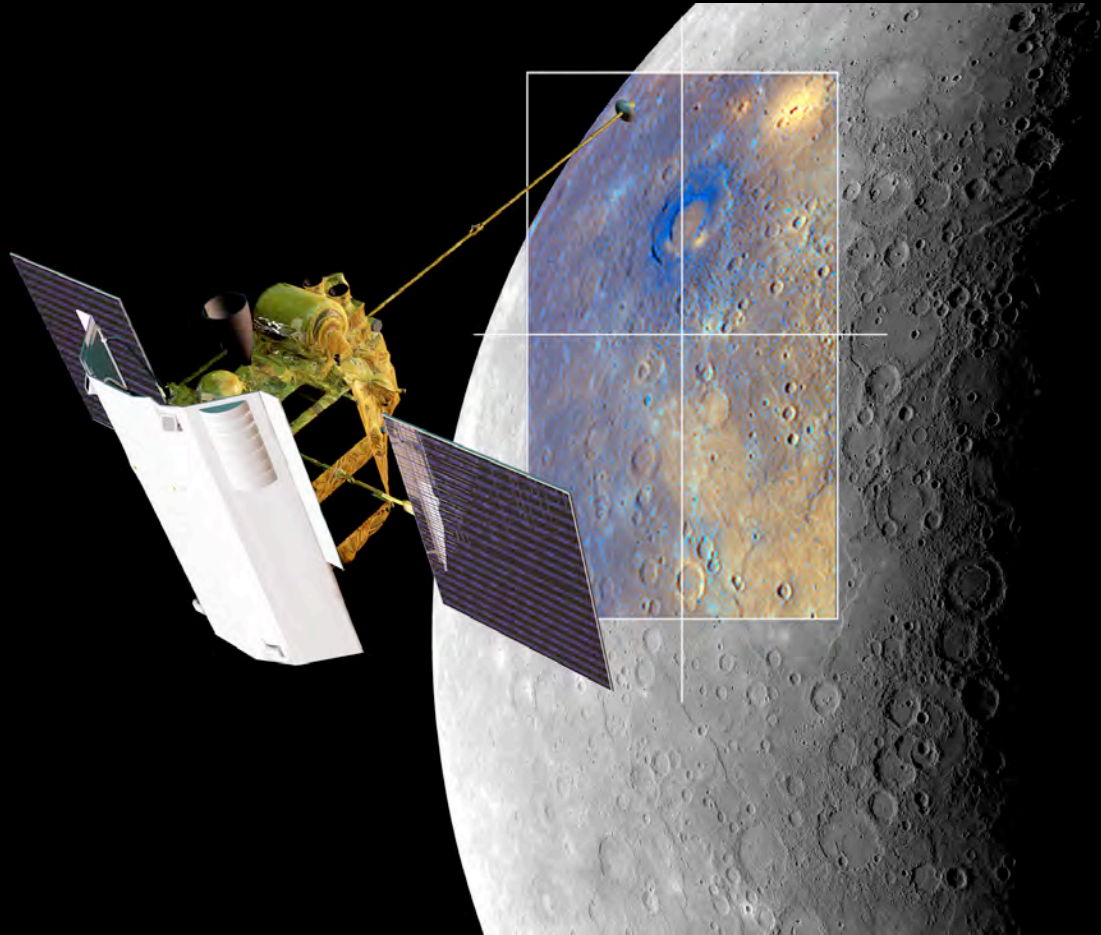








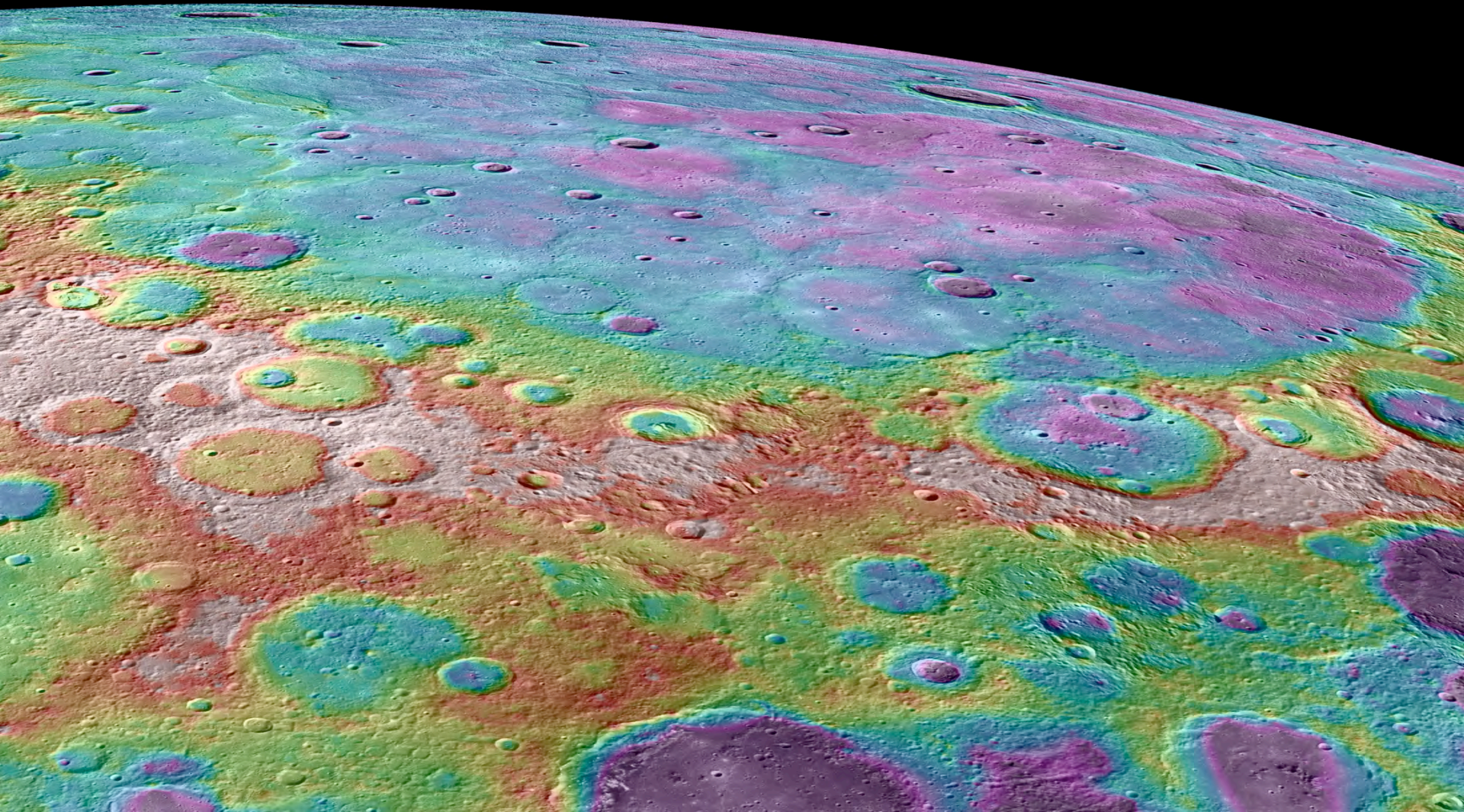
# *Topography*

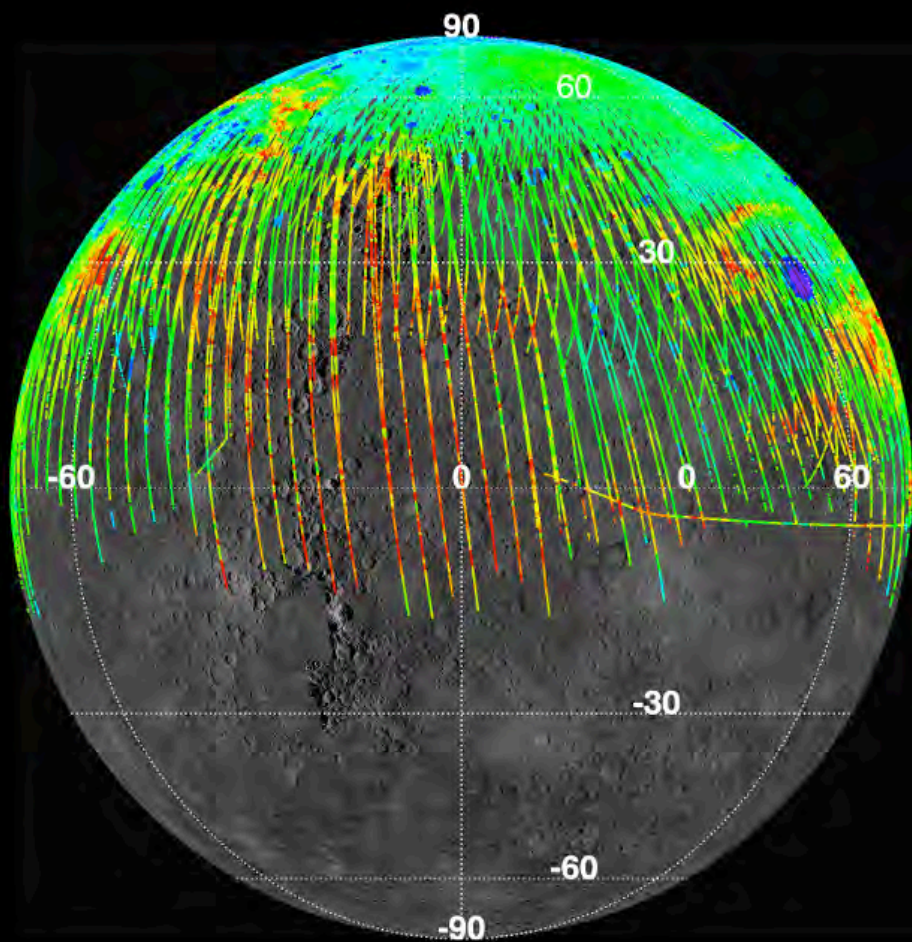
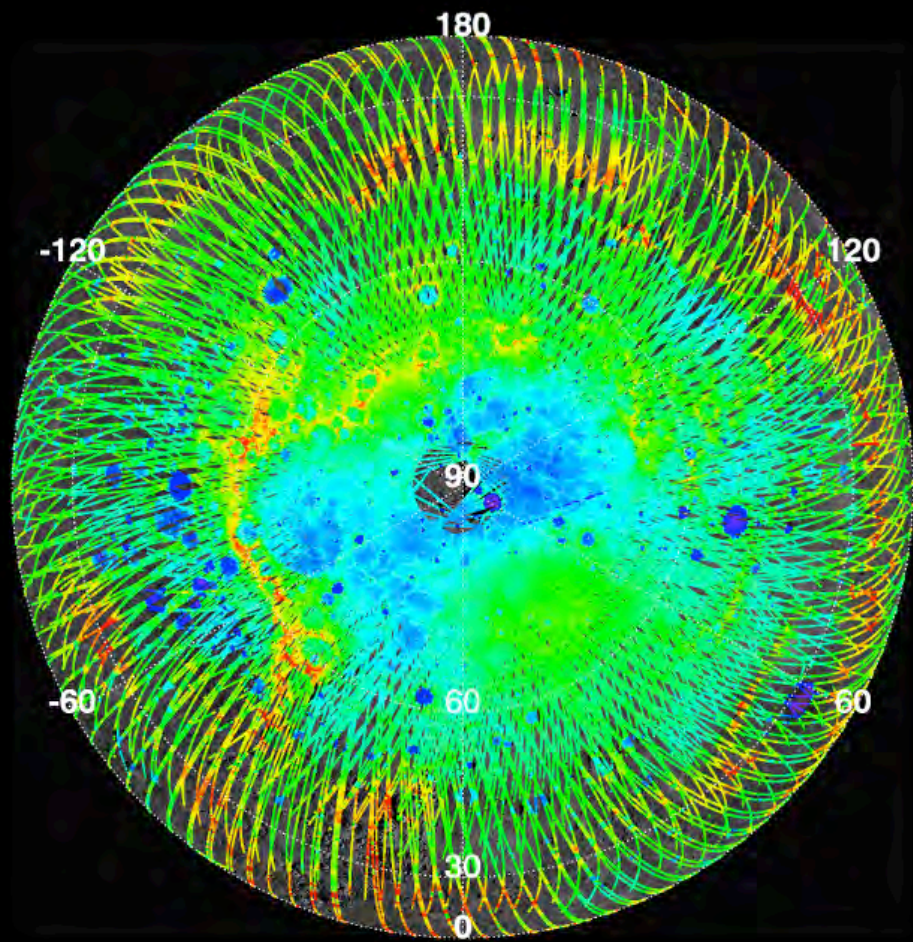


Colored by height

Purple (low) to white (high): ~10 km

Bottom of image across: 700 km





Largest crater: 17 km diameter

