

Figure 1. Global geologic maps of Mars. Left: North Polar Region map (1:500,000 scale). Middle: South Polar Region map (1:500,000 scale). Right: Global map (1:100,000,000 scale).
Figure 2. Detailed geologic maps of the North and South Polar Regions. Includes legends for diffuse deposits, flow units, patera floor units, plains units, and mountain units.

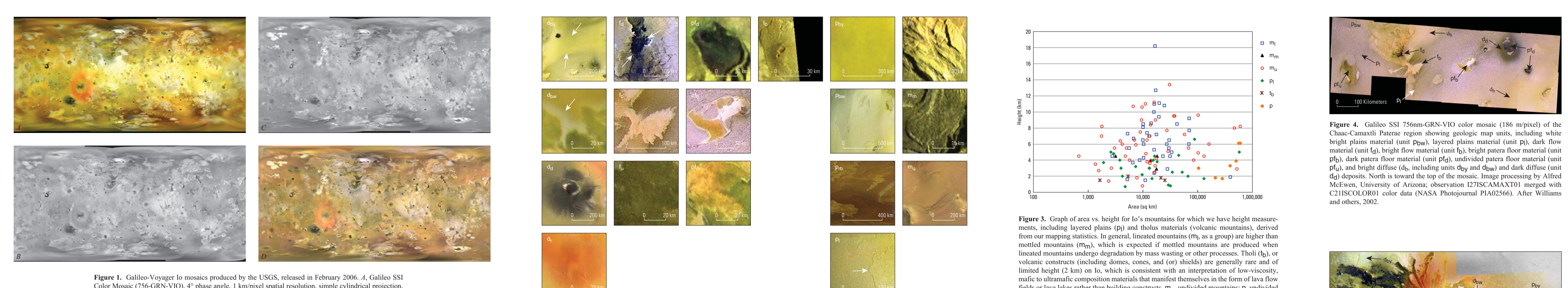


Figure 3. Graph of area vs. height for 16 mountains for which we have height measurements. Includes a scatter plot and a bar chart showing relative abundance of materials.

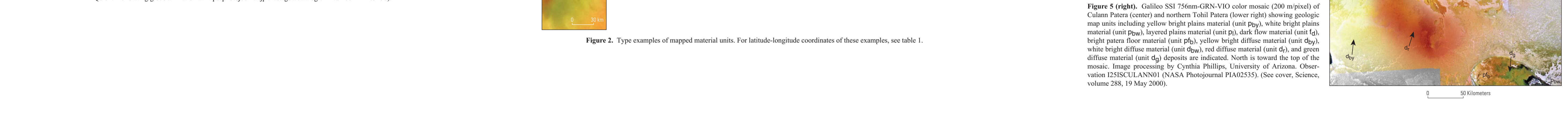


Figure 4. Galileo SSI 756m-GRN-VIO color mosaic (186 mpx/px) showing geologic map units.



Figure 5. Galileo SSI 756m-GRN-VIO color mosaic (200 mpx/px) showing geologic map units.

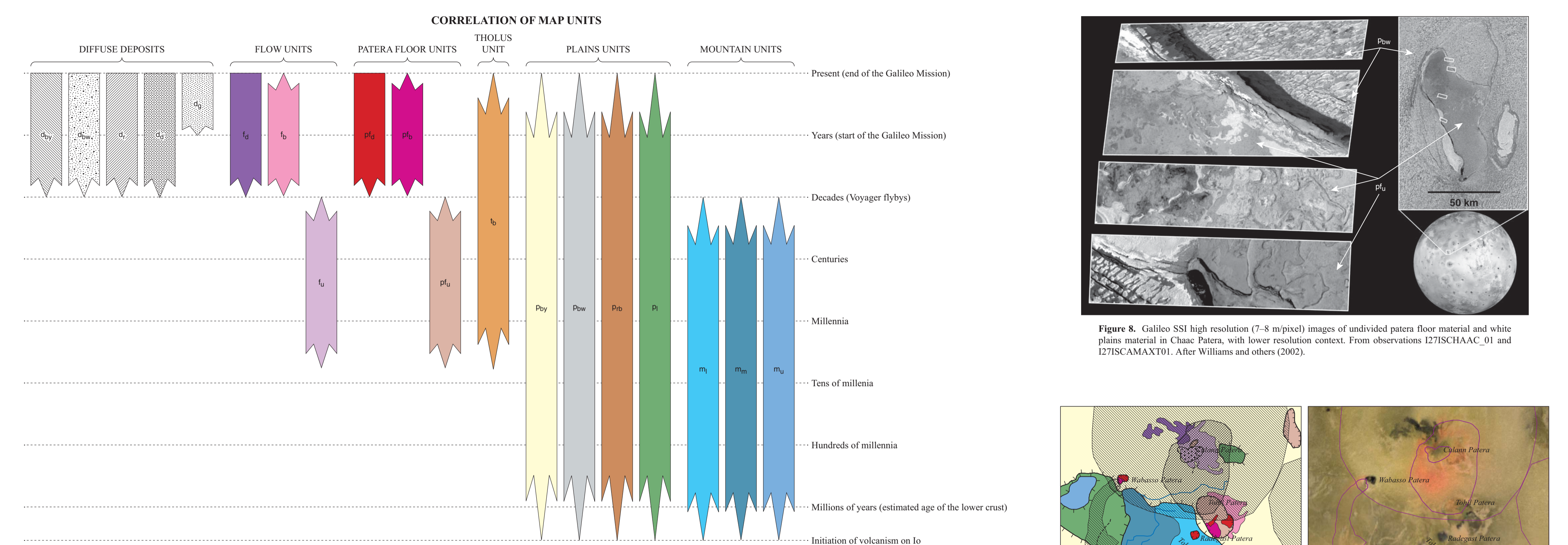


Figure 6. Correlation of map units. A vertical timeline showing the relative ages of various geological units from billions of years ago to the present.

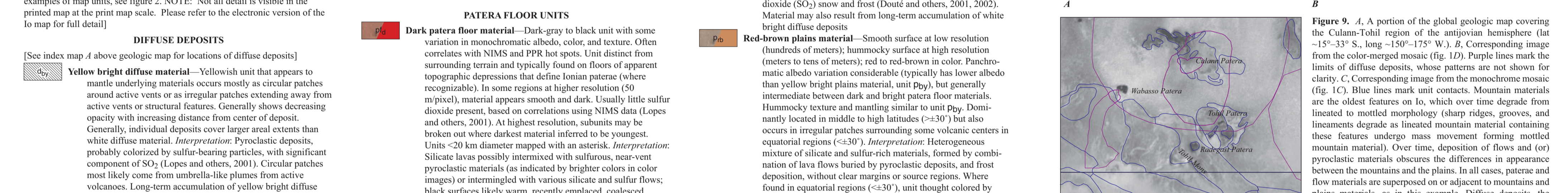


Figure 7. Galileo SSI image (9 mpx/px) showing undivided mountain materials.

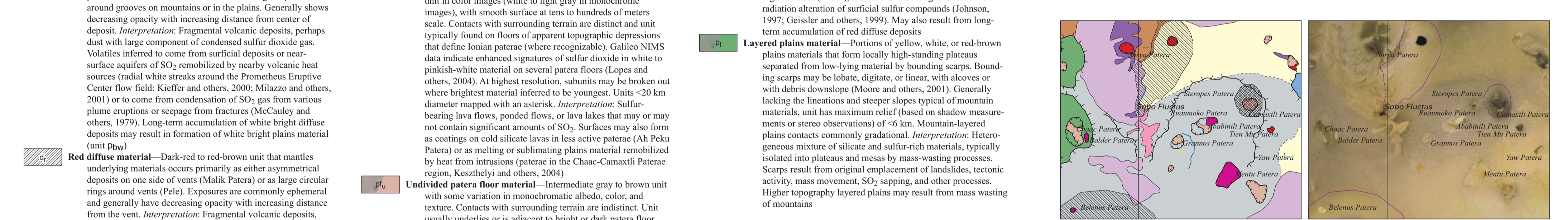


Figure 8. Galileo SSI image (7.4 mpx/px) showing individual patera flow material and white plains material.

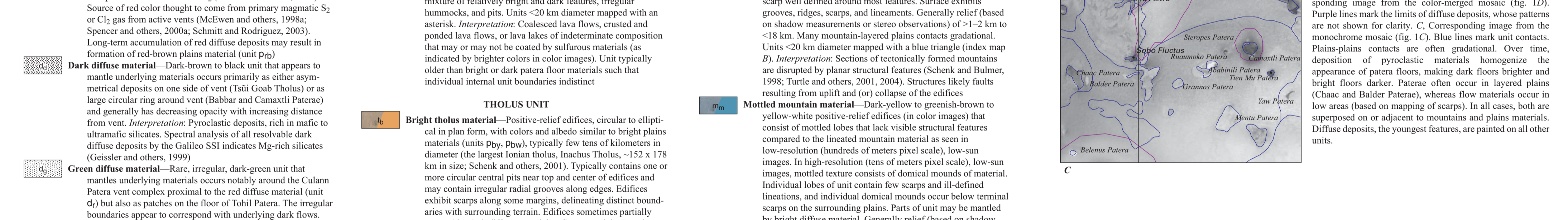


Figure 9. A portion of the global geologic map covering the Chaotus-Toll region.

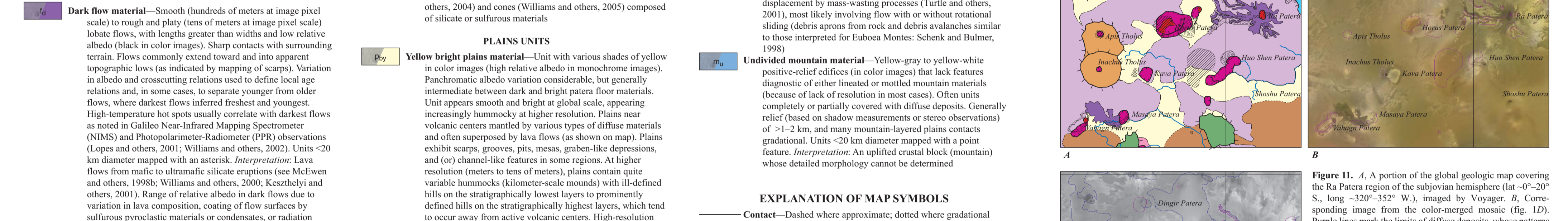


Figure 10. A portion of the global geologic map covering the Chaotus-Toll region.

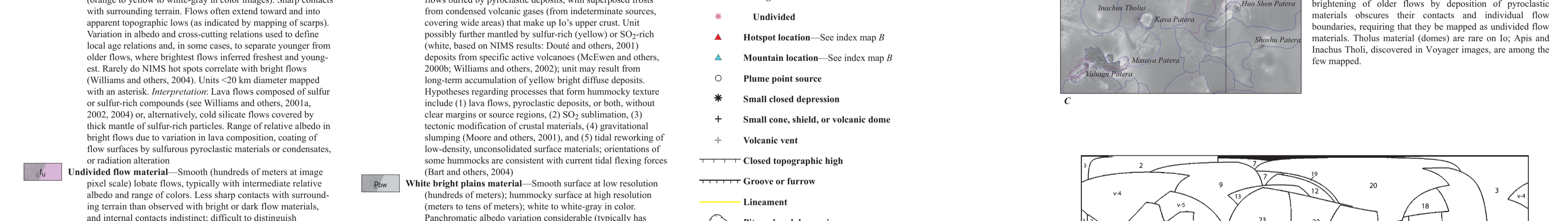


Figure 11. A portion of the global geologic map covering the Chaotus-Toll region.

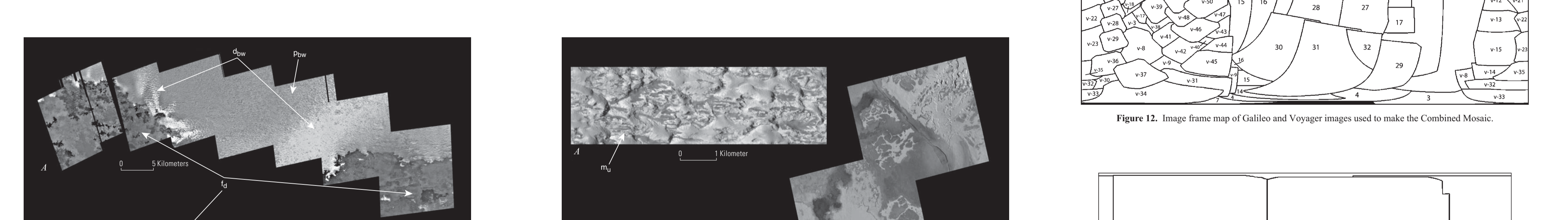


Figure 12. Image frame map of Galileo and Voyager images used to make the Combined Mosaic.

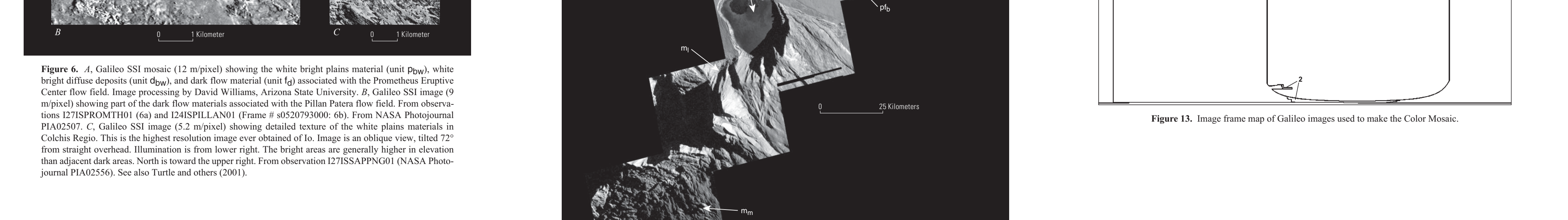


Figure 13. Image frame map of Galileo images used to make the Color Mosaic.

Figure 14. Galileo SSI image (12 mpx/px) showing the white bright plains material (unit P₁), white bright diffuse material (unit D₁), and dark flow material (unit F₁) associated with the Prometheus Center flow field. Includes a legend for map symbols.

School of Earth and Space Exploration, Arizona State University, Tempe, AZ
U.S. Geological Survey, Flagstaff, AZ
Planetary Science Institute, Tucson, AZ
Lunar and Planetary Institute, Houston, TX

Geologic Map of Io

By
David A. Williams,¹ Laszlo P. Keszthelyi,² David A. Crown,³ Jessica A. Yff,⁴ Windy L. Jaeger,² Paul M. Schenk,⁴ Paul E. Geissler,² and Tammy L. Becker²
2011