

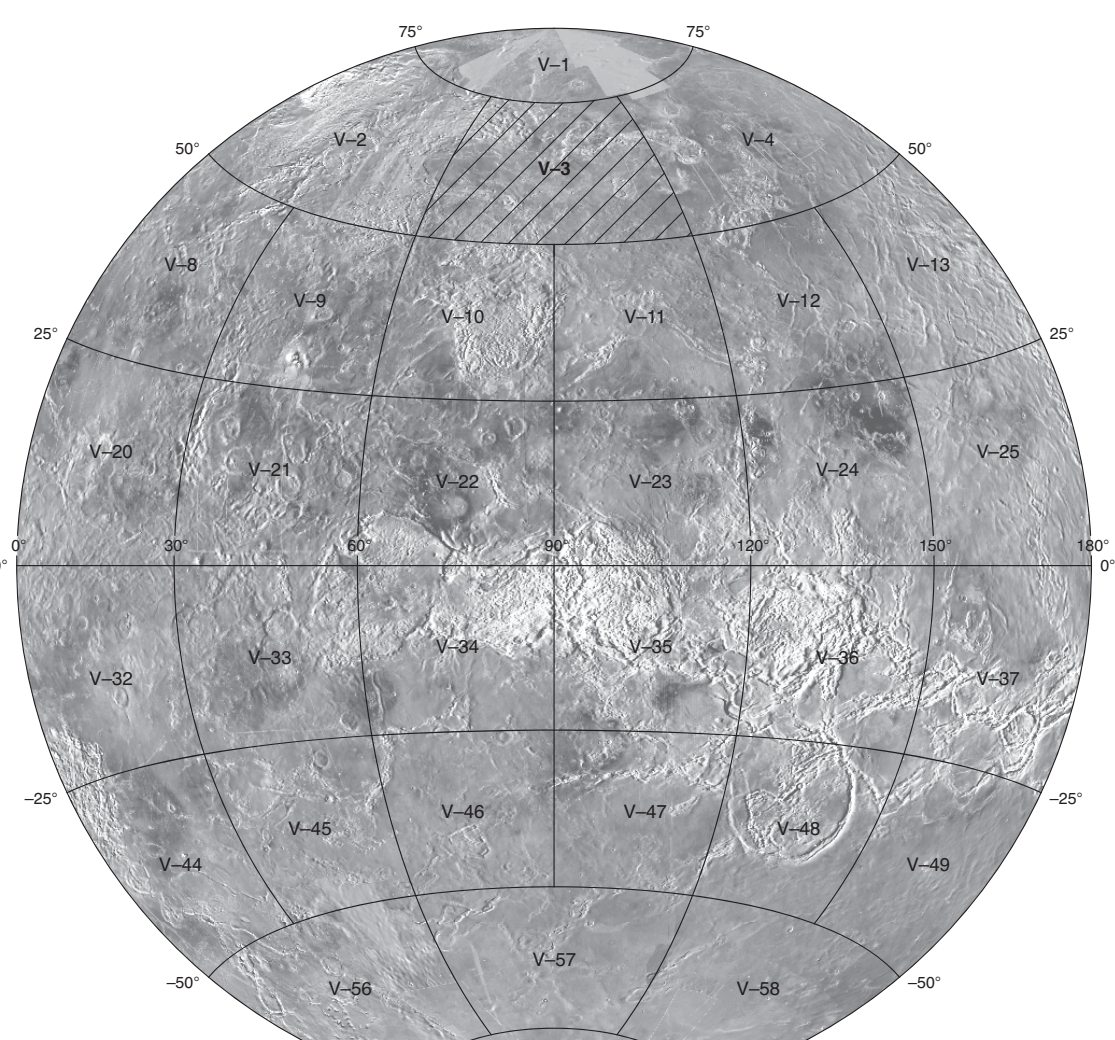


Figure 1. SAR image showing major physiographic features within the Meskhent Tessera quadrangle (V-3), Venus.

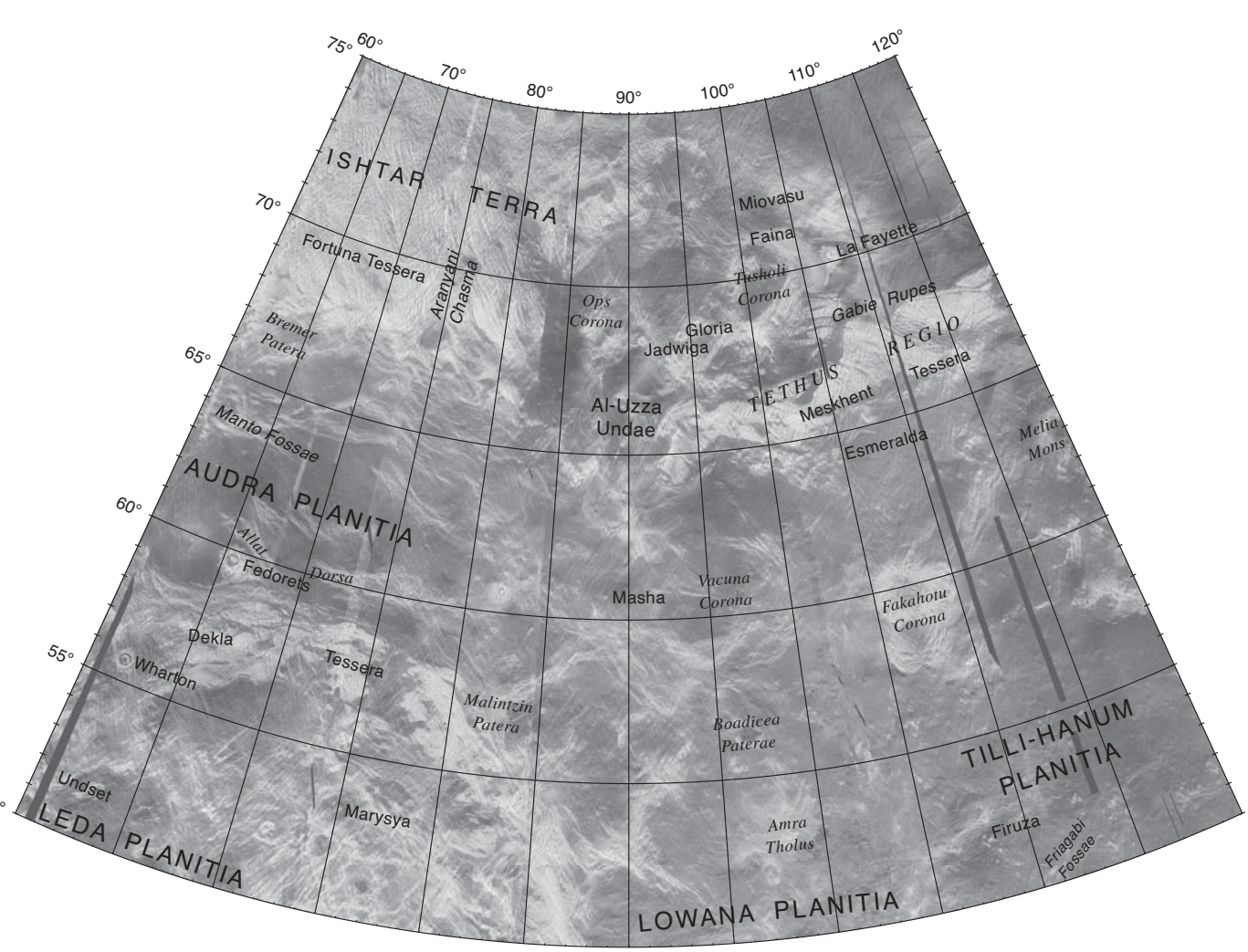


Figure 2. A partial northern hemisphere of Venus showing position of the Meskhent Tessera quadrangle (V-3) relative to some major topographic features of Venus. Magellan topography data, Lambert azimuthal equal-area projection. B. SAR image showing topography of the Meskhent Tessera quadrangle. Contour interval, 1 km. Magellan topography data, Lambert conformal projection.

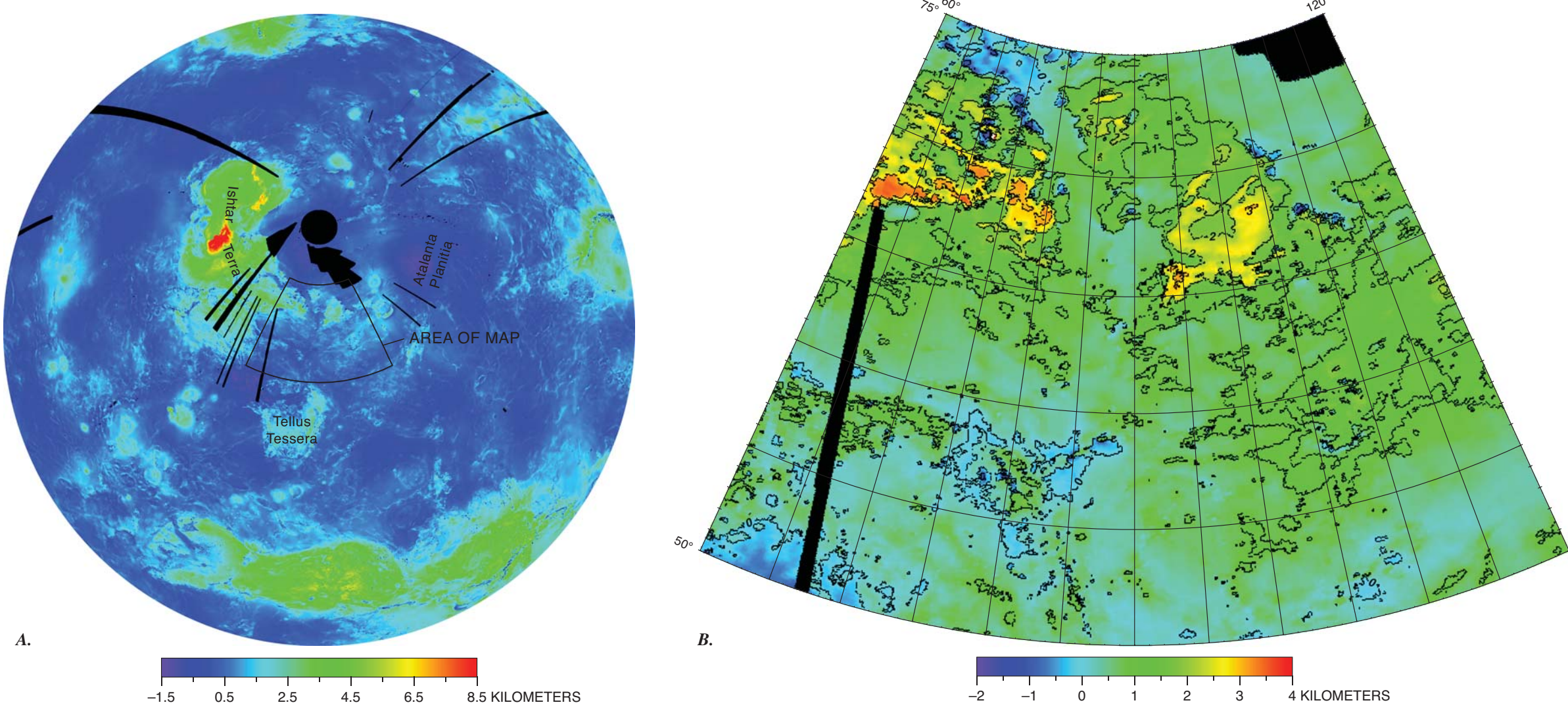


Figure 3. Map showing distribution of tessera material and main deformational belts in the Meskhent Tessera quadrangle (V-3), Venus. Lambert conformal projection.

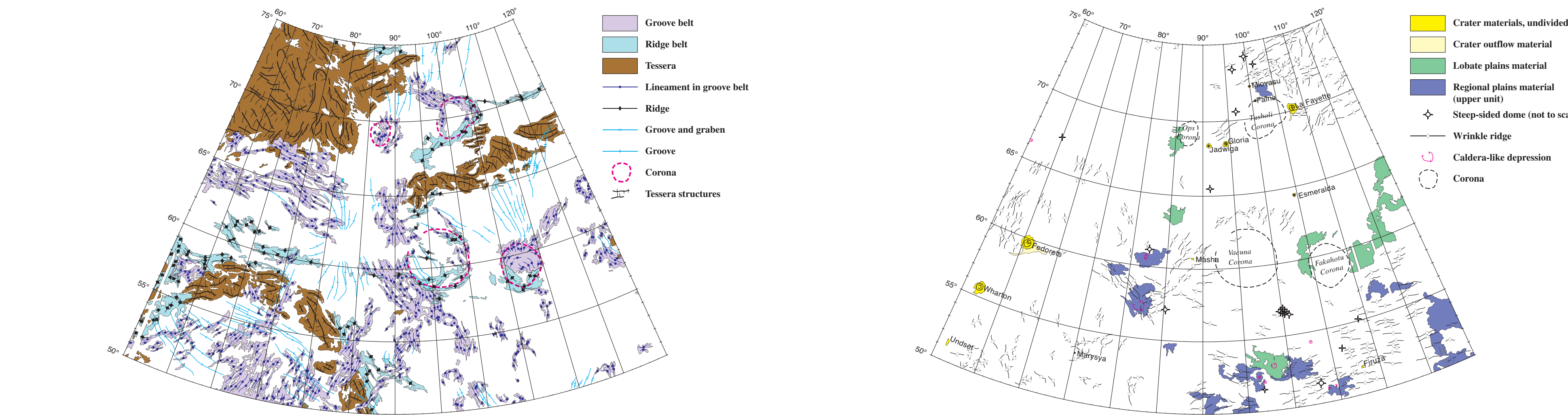


Figure 4. Map showing locations of impact craters and related deposits (units C, Cf), younger volcanic plains (units pl, p2, p3), coronae, steep-sided domes, caldera-like depressions, and wrinkle ridges in the Meskhent Tessera quadrangle (V-3), Venus. Lambert conformal projection.

Geologic Map of the Meskhent Tessera Quadrangle (V-3), Venus

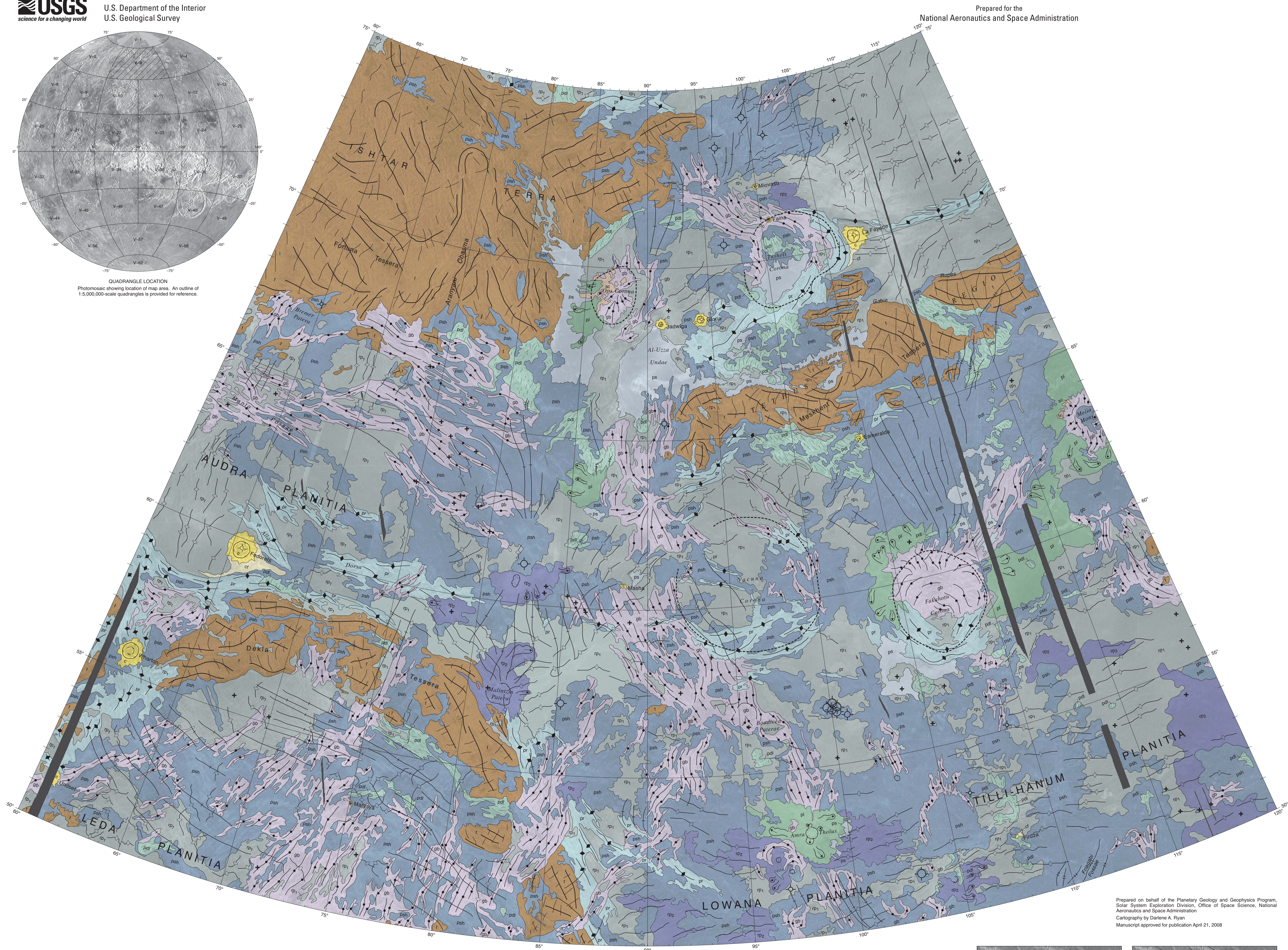
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2008

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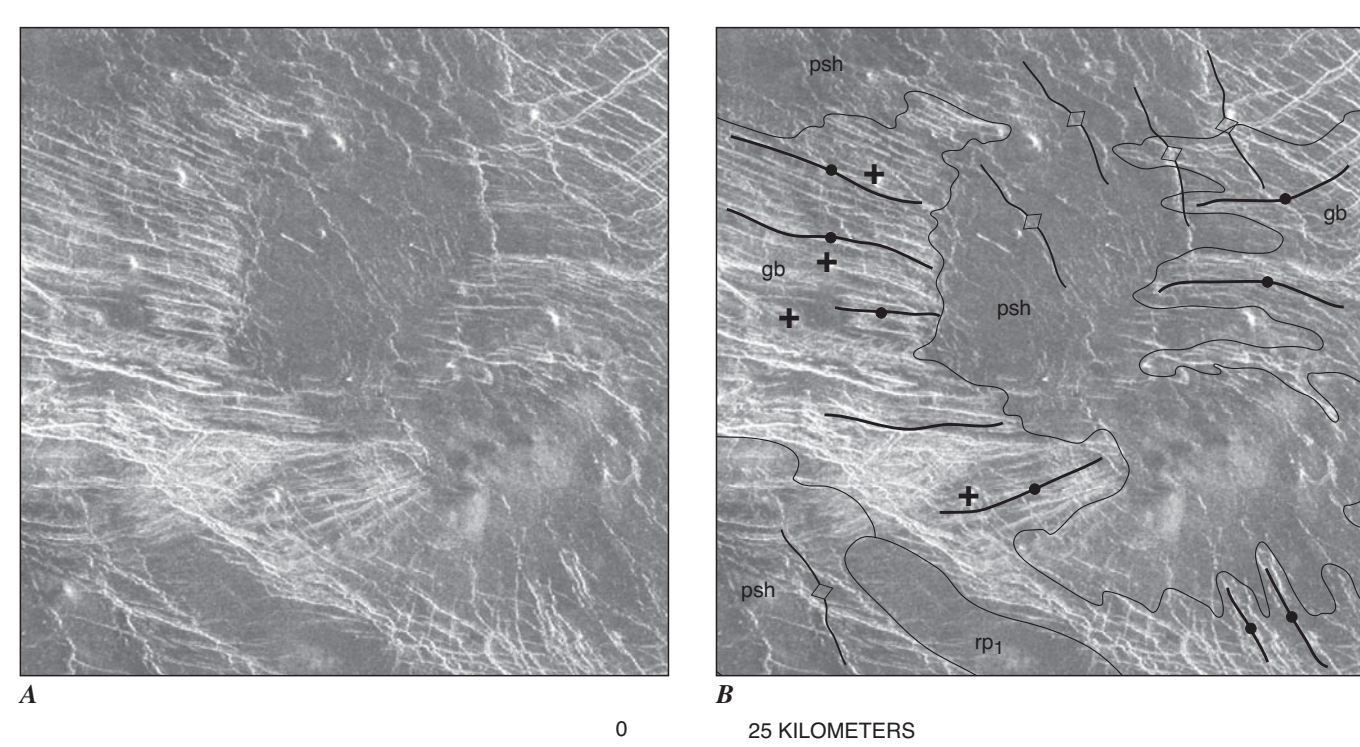
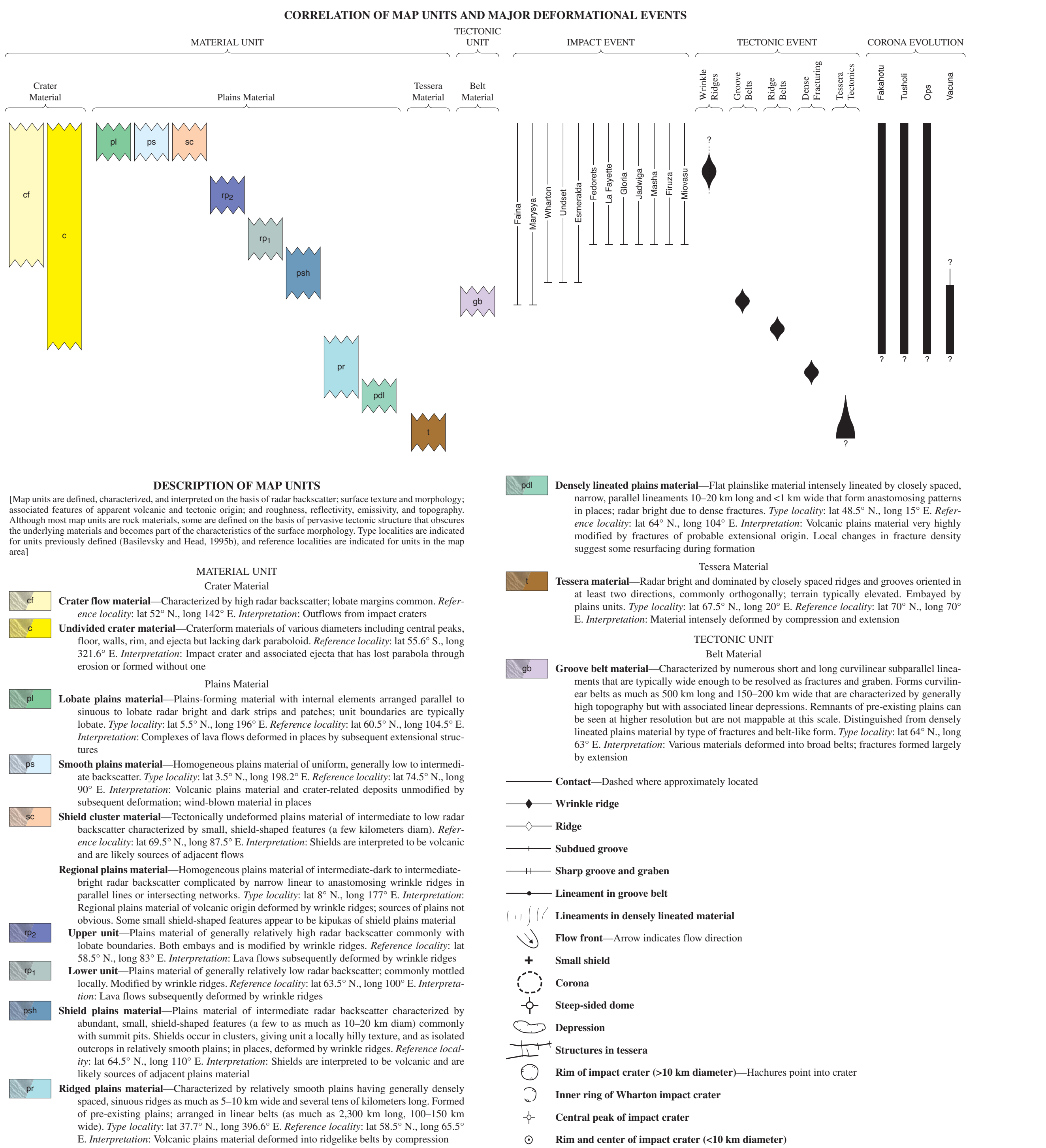


Figure 7. SAR image (A) showing relations (B) between ridge plains material (unit pr) and shield plains material (unit psh) in the Meskhent Tessera quadrangle (V-3), Venus. Both plains units truncate structures of a groove belt and sometimes penetrate into the belt center. (right). Technically undeformed small shields (crosses) are visible within the belt. Wrinkle ridges (lines with open diamonds) cut through units psh, pr, and p2. Fragment of C1-MIDR 60N070; cycle 20; center of image, -lat 62.7° N, long 78.8° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

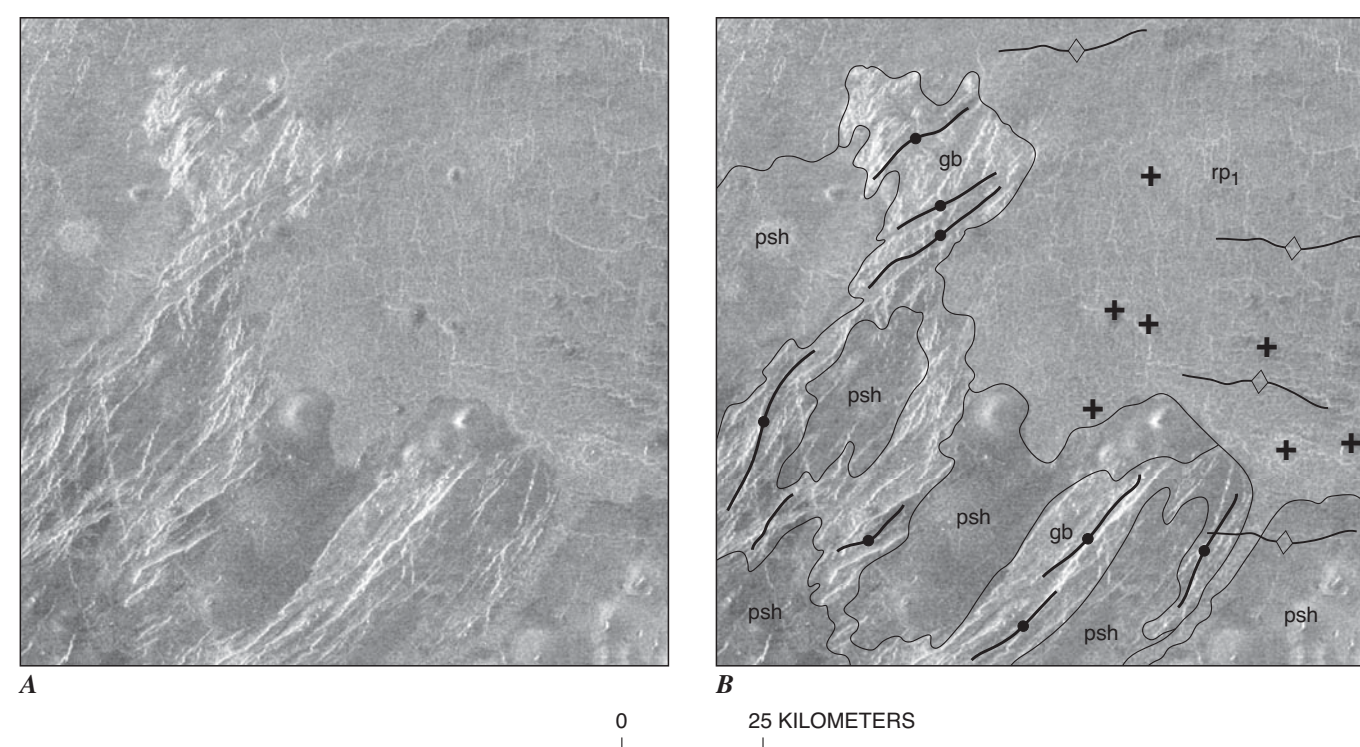


Figure 8. SAR image (A) showing relations (B) of shield plains material (unit psh) and the lower unit of regional plains material (unit pr) in the Meskhent Tessera quadrangle (V-3), Venus. Shield plains material forms a contiguous area and embays structures of groove belts (unit gb) and is embayed by the surrounding regional plains, the material that penetrates into shield plains (lower right) and embays individual shields at the edge of unit psh (center). Some small and dispersed shieldlike features (crosses) are visible within regional plains. These structures likely represent lipikas of the underlying shield plains. Wrinkle ridges (lines with open diamonds) cut through unit pr. Fragment of C1-MIDR 60N070; cycle 2; center of image, -lat 57.5° N, long 88° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

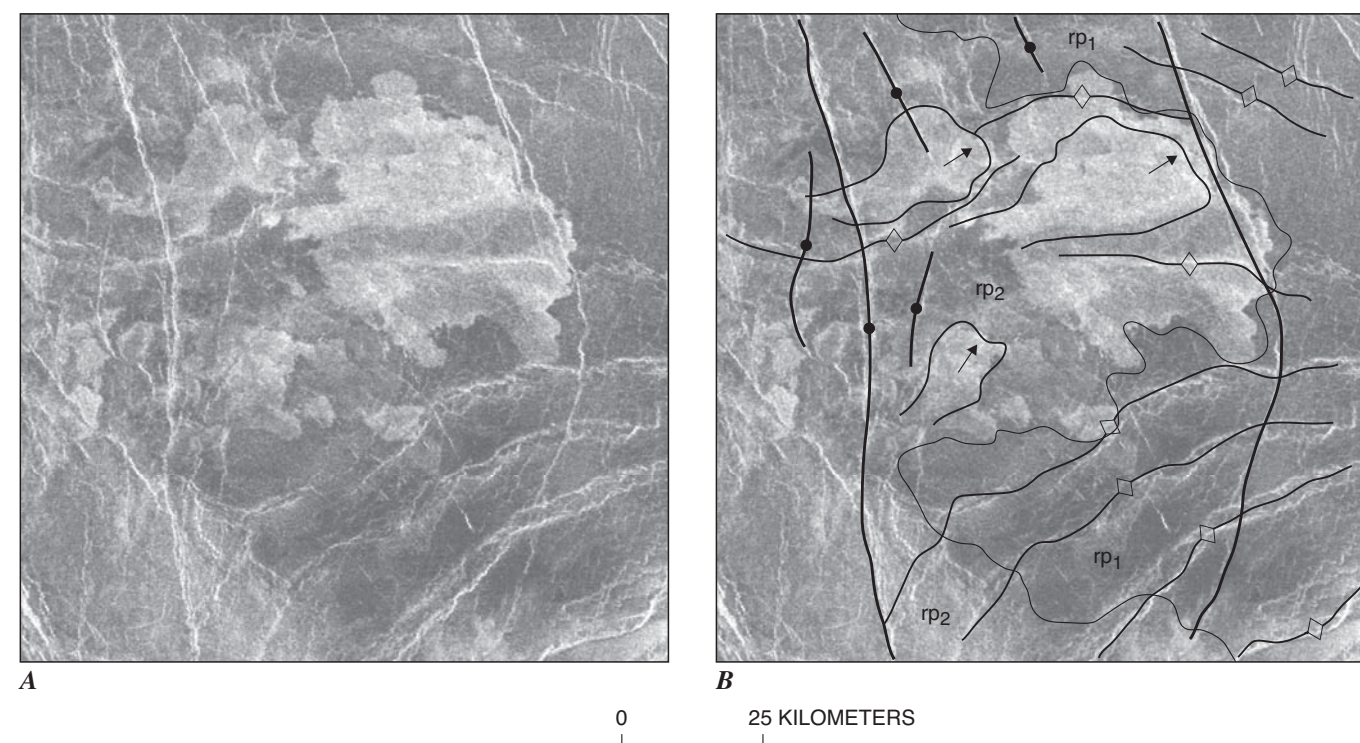


Figure 9. SAR image (A) showing relations (B) between two units of regional plains in the Meskhent Tessera quadrangle (V-3), Venus. Material of the lower unit (unit pr) makes up the background of the image on which flowlike features (curves contain arrows, unit p2) of the upper unit containing lineaments (lines with solid circles) are superposed. Wrinkle ridges (lines with open diamonds), which have approximately constant density, deform both units of the plains. Fragment of C1-MIDR 60N070; cycle 20; center of image, -lat 58.2° N, long 87° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

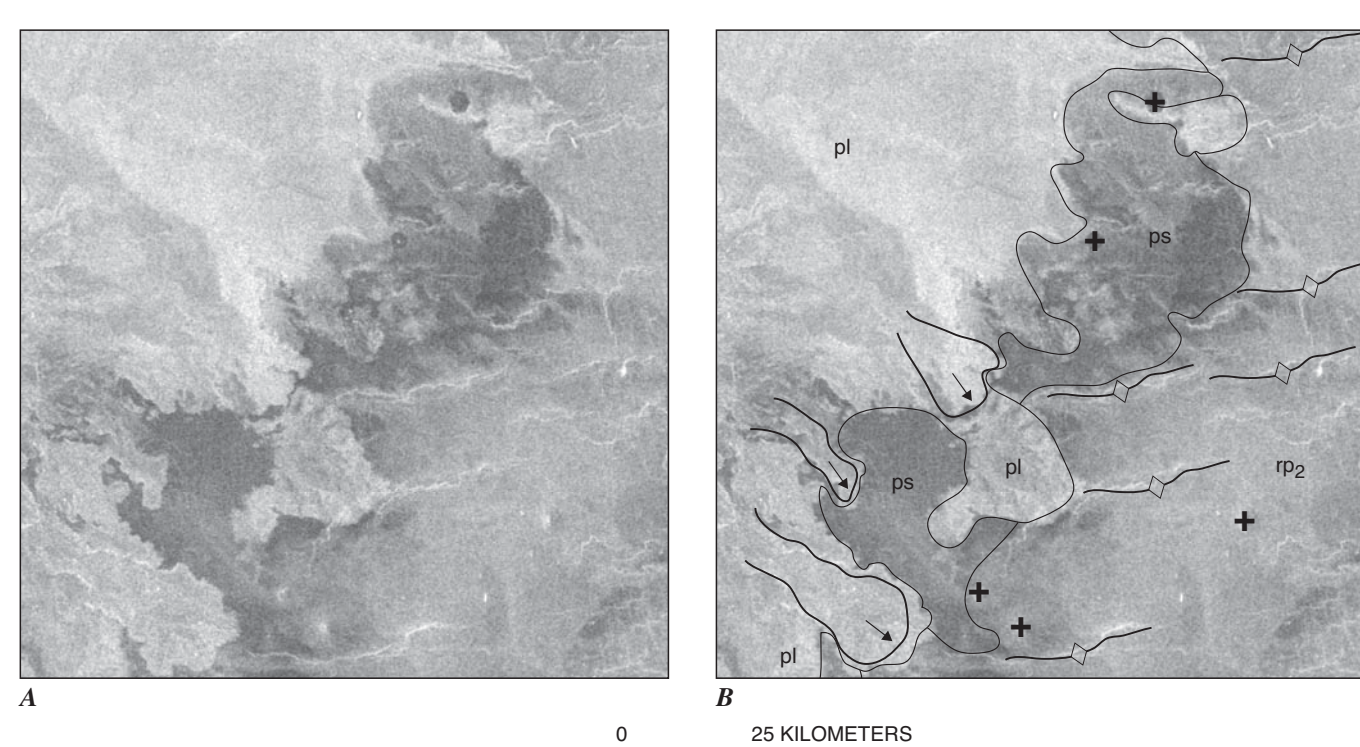


Figure 10. SAR image (A) showing relations (B) between the upper member of regional plains (unit pr2) and lobate plains material (unit pl) in the Meskhent Tessera quadrangle (V-3), Venus. Lobate plains material is technically undeformed and characterized by flowlike features (curves contain arrows, center and lower left). It is superposed on the surface of the upper unit of regional plains (unit pr2), which is cut by wrinkle ridges (lines with open diamonds). Small patches of smooth plains material (unit p3) are also undeformed and probably superposed by flows of the unit pr2. Small shields, crosses. Fragment of C1-MIDR 60N070; cycle 2; center of image, -lat 52.8° N, long 99.5° E. (see fig. 5 for location); look direction, left; image area -115 x 115 km.

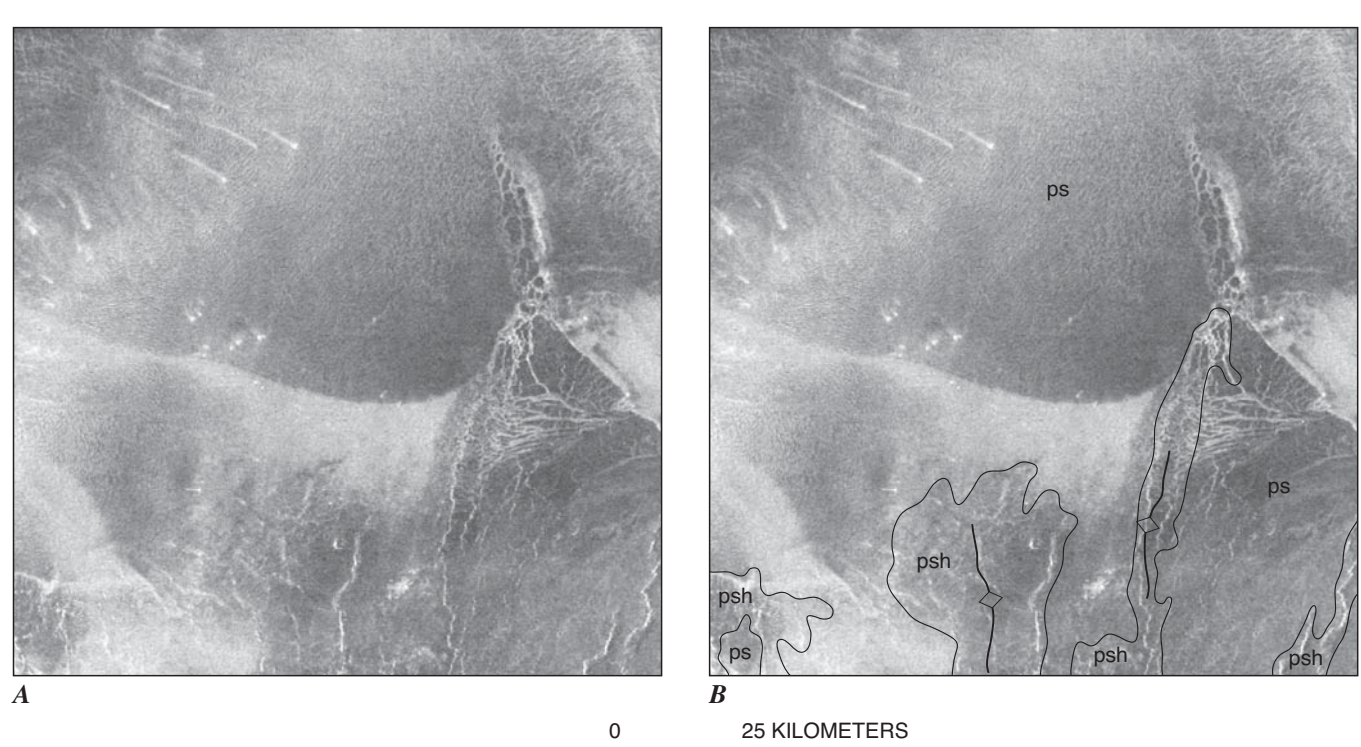


Figure 11. SAR image (A) showing relations (B) of shield cluster material (unit sc) that occurs in close spatial association with lobate plains material (unit pl) and a groove belt (unit gb). Lines with dots indicate trends of the groove belt lineaments in the Meskhent Tessera quadrangle (V-3), Venus. Material of the shield cluster is superposed on the groove belt and sometimes displays small flowlike features (lower left) that are typical of lobate plains. Fragment of C1-MIDR 60N070; cycle 1; center of image, -lat 69.6° N, long 87° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

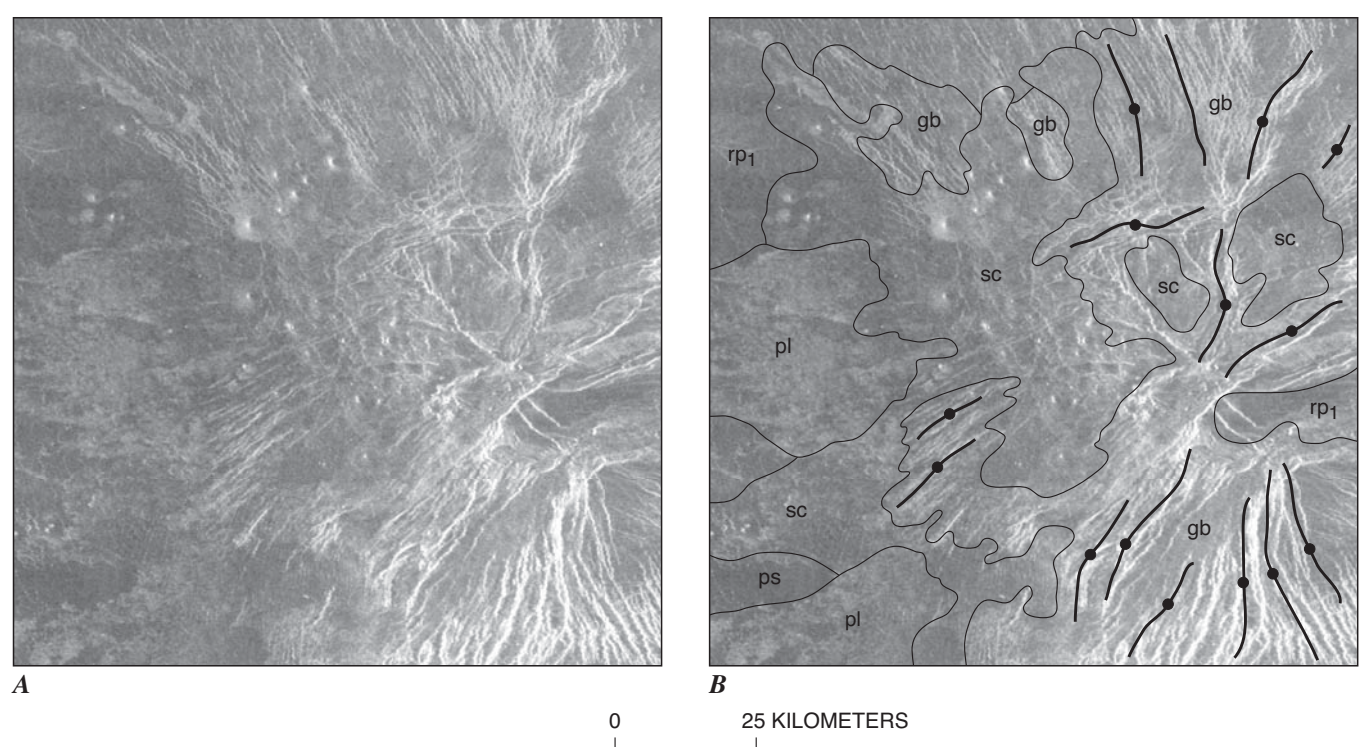


Figure 12. SAR image (A) showing relations (B) between two units of regional plains in the Meskhent Tessera quadrangle (V-3), Venus. Material of the lower unit (unit pr) makes up the background of the image on which flowlike features (curves contain arrows, unit p2) of the upper unit containing lineaments (lines with solid circles) are superposed. Wrinkle ridges (lines with open diamonds), which have approximately constant density, deform both units of the plains. Fragment of C1-MIDR 60N070; cycle 20; center of image, -lat 58.2° N, long 87° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

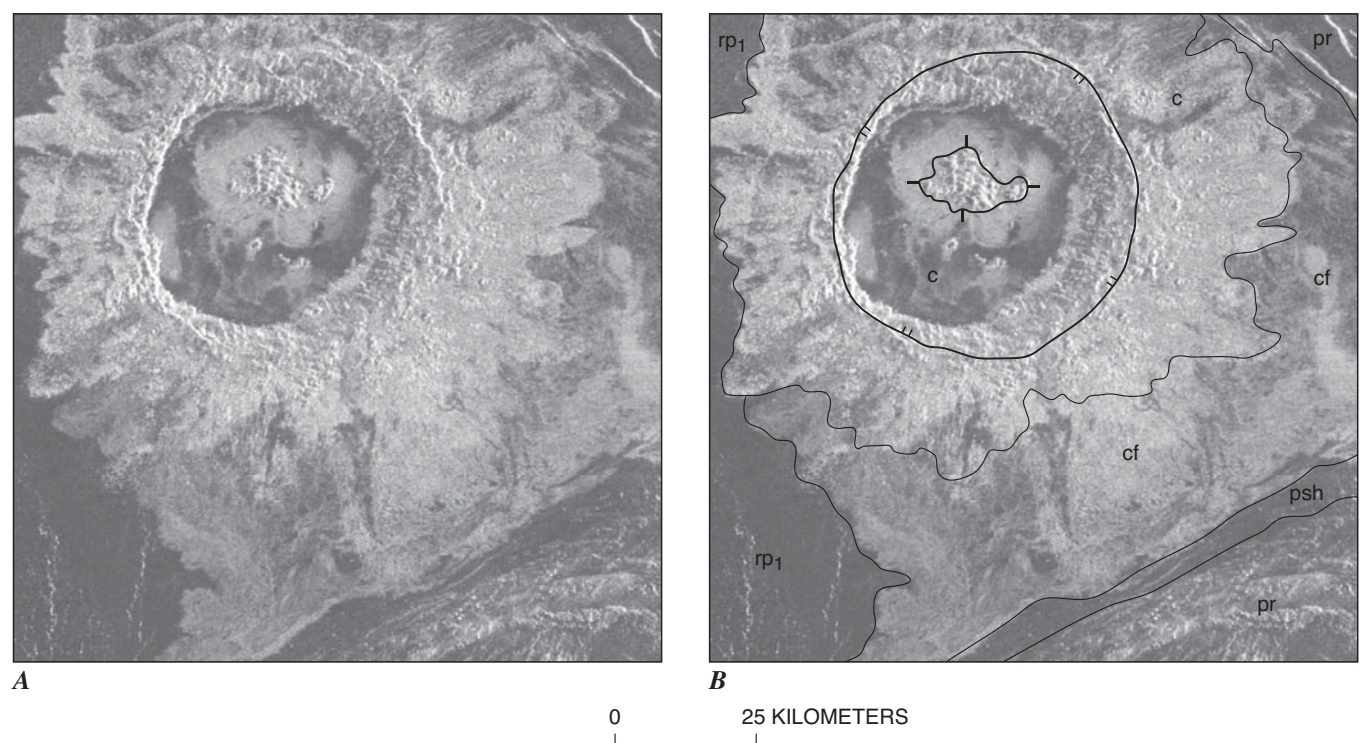


Figure 13. SAR image (A) showing relations (B) between two units of regional plains in the Meskhent Tessera quadrangle (V-3), Venus. Material of the lower unit (unit pr) makes up the background of the image on which flowlike features (curves contain arrows, unit p2) of the upper unit containing lineaments (lines with solid circles) are superposed. Wrinkle ridges (lines with open diamonds), which have approximately constant density, deform both units of the plains. Fragment of C1-MIDR 60N070; cycle 20; center of image, -lat 58.2° N, long 87° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

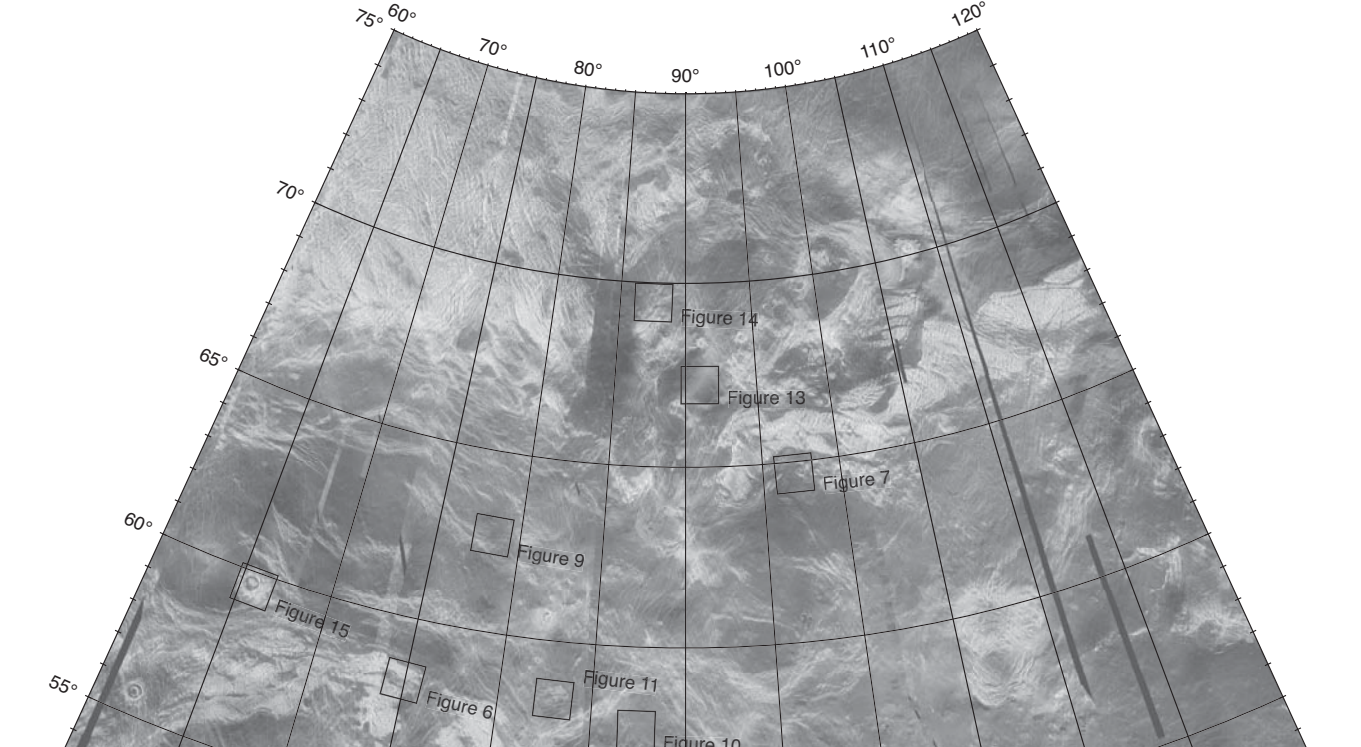


Figure 14. SAR image (A) showing relations (B) between two units of regional plains in the Meskhent Tessera quadrangle (V-3), Venus. Material of the lower unit (unit pr) makes up the background of the image on which flowlike features (curves contain arrows, unit p2) of the upper unit containing lineaments (lines with solid circles) are superposed. Wrinkle ridges (lines with open diamonds), which have approximately constant density, deform both units of the plains. Fragment of C1-MIDR 60N070; cycle 20; center of image, -lat 58.2° N, long 87° E. (see fig. 5 for location); look direction, left; image area, -115 x 115 km.

Figure 15. SAR image of Meskhent Tessera quadrangle (V-3), Venus, showing locations of figures 6-15, which provide examples of mapped units and relations among the units. Lambert conformal projection.