

Fig. 10a. Venera image of possible gravity slide feature southwest of Lakshmi Planum. Image is centered on 59.5°N, 310°E.

model for gravity sliding and suggested that the process should result in significant surface deformation on Venus. None of these models specifically consider the deformational pattern that would be expected to result from gravity sliding. To evaluate this model, we first consider the pattern of deformation expected to result from gravity sliding, then describe a potential example of gravity sliding, and finally compare observed tessera structures with the predicted pattern

of deformation. Based on this evaluation, we suggest that gravity sliding is not a significant process in trough and ridge terrain (T_{tr}) but might have occurred in regions where subparallel ridged (T_{sr}) lies downslope from disrupted terrain (T_{ds}).

Downslope movement of a wedge of material would be expected to produce extensional features in the upslope region and compressional features near the toe of the wedge (Figure 9,

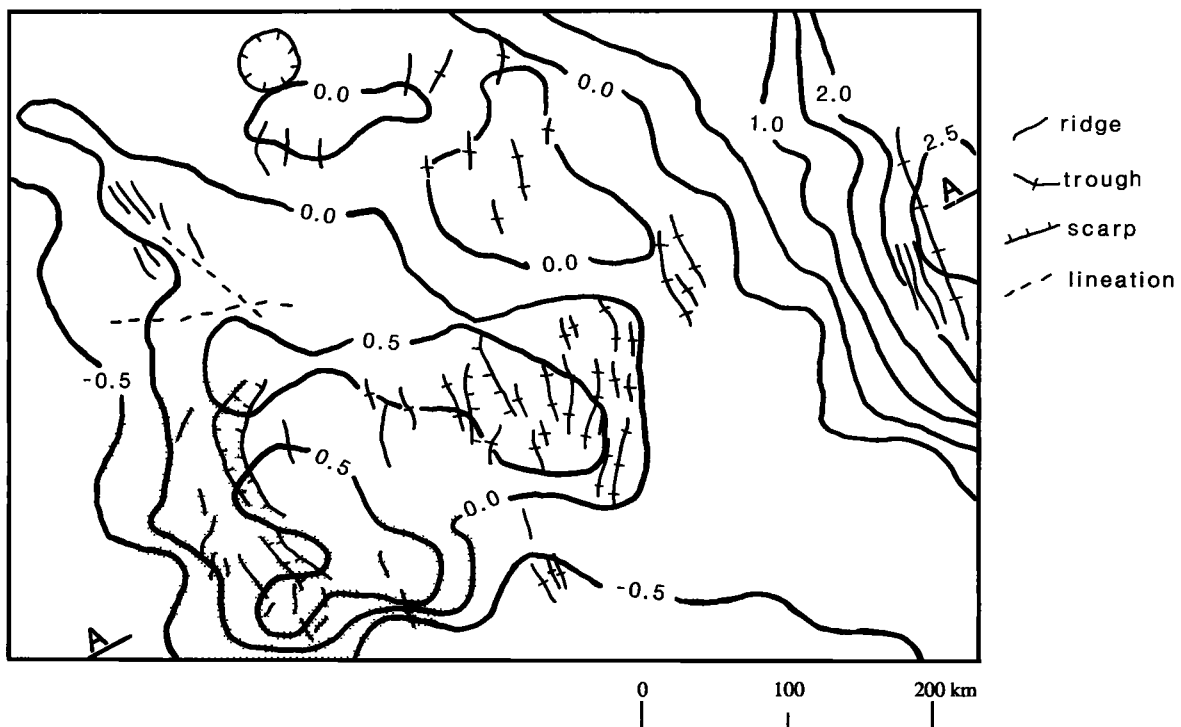


Fig. 10b. Sketch map showing structures and topographic contours of possible gravity slide. Topography taken from Venera data; contour interval is 500 m. Stippled region represent the distinctive lobate region which is similar to the structures surrounding some coronae.