

Fig. 6. General terrain types associated with large unnamed multiring structure shown in Figure 5. Alternating concentric annuli of stable and unstable regions bear resemblance with Aram Basin (Figure 4). Erosion has removed the northwest section of the structure, leaving resistant knobs, plateaus, and massifs. Plateaus appear to be remnants of stable regions backwashed from concentric valleys and result in an inversion of relief relative to the patterns to the south.

rounds the central depression out to 70 km from the center and is bounded by an irregular ring depression. The third major ring marks the outer limit of extensive polygonal fracturing 130 km from the center. To the northeast, this ring is coincident with an inward-facing scarp and massifs. To the west, it corresponds to the outward-facing scarp formed by removal of the next exterior annulus. Another poorly defined ring may exist between the second and third rings at around 100 km from the center, where a transition occurs between extensive polygonal fracture patterns and less extensive, more concentric fractures. The fourth major ring extends 200 km from the center and is delineated by a prominent ring graben to the south and east, an erosional scarp to the southwest, the outer limit of insular knobs and mesas to the west and northwest, and the outward-facing erosional scarp to the northeast. Between the third and fourth rings, the structural pattern is generally concentric and poorly expressed. The fifth ring extends about 480 km from the center and is represented by a well-defined, inward-facing scarp from the southwest to east and by high-standing massifs to the north. A sixth possible ring at 570 km from the center may be indicated by a concentric pattern of canyons and channels.

The five annuli encircling the central depression form a pattern of progressively more stable (less fractured) zones with distance from the center. The correspondence of these annuli with rings of a multiringed basin can be determined by identi-

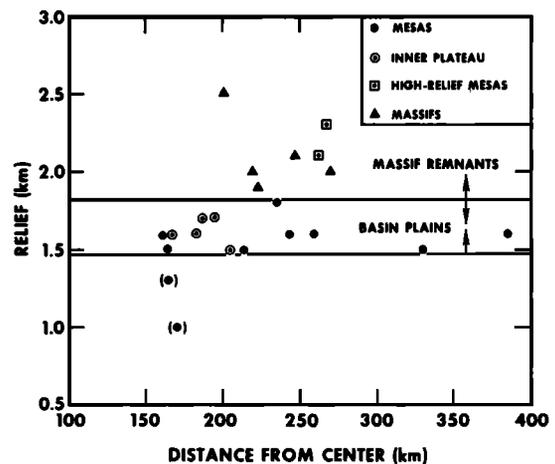


Fig. 7. Relief of selected features associated with multiringed structure shown in Figures 5 and 6. Relief was determined from shadow lengths under relatively low sun conditions. Measurements are referenced to adjacent low-lying plains. The selected mesas near 160 km from the center of the structure appear to become lower in relief. This trend reflects the effect of the sloping reference plain (low-lying plains) for these examples as it approaches and embays the highland terrains. The inner plateau and mesas appear to exhibit similar relief relative to the plains, whereas massifs and high-relief mesas are significantly higher. The latter structures are believed to indicate remnants of basin massifs.