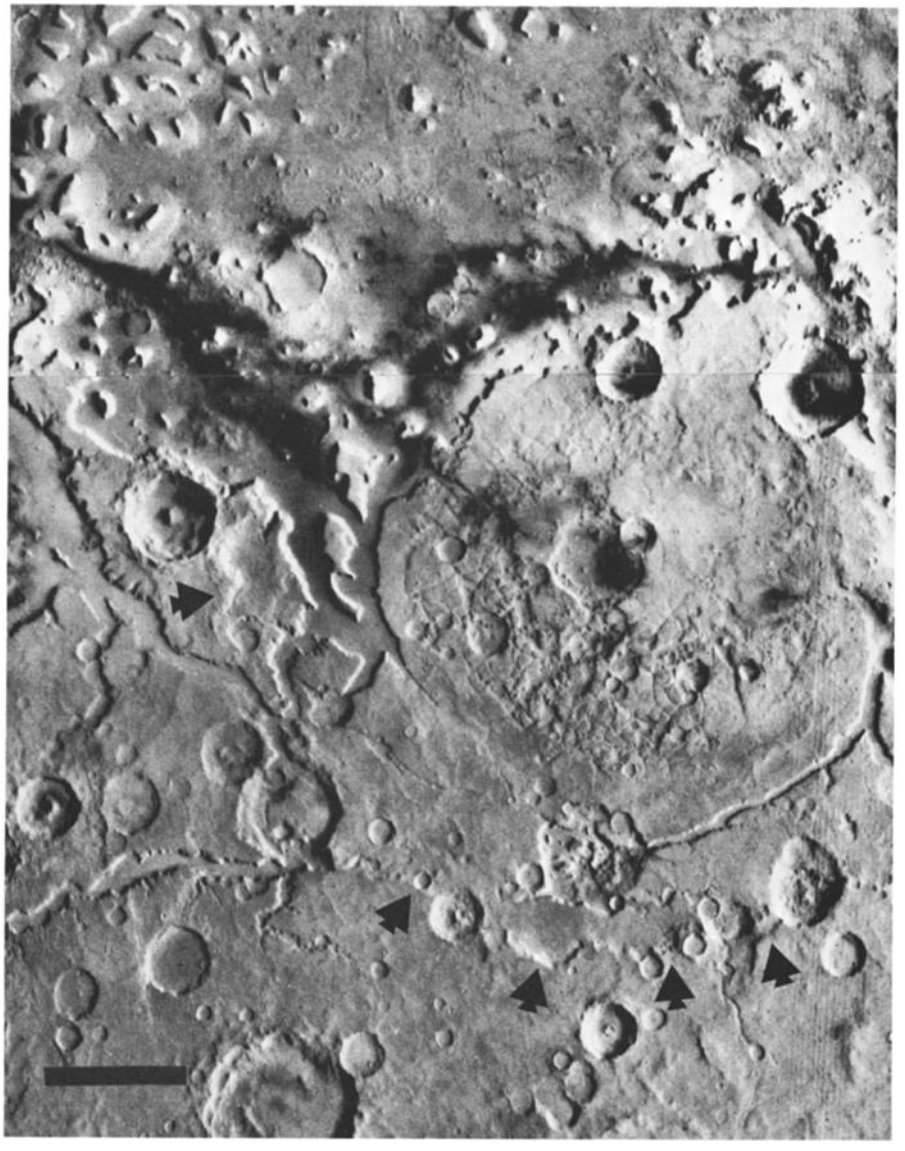

Fig. 5. A large unnamed multiringed structure along the margins of the fretted terrains of Deuteronilus Mensae. An obvious arcuate scarp forms the outermost major ring, 570 km in diameter (arrows). Concentrically arranged valleys, fractured terrains, and massifs suggest the existence of an ancient impact basin, degraded to the south and differentially eroded to the north. Bar scale represents 100 km. Viking frames 756A05, 07.

distance from Aram Chaos as Iani Chaos and Ares Vallis. A floor-fractured crater (MC-11, Nz) also falls within this zone. Consequently, the circular patterns within Aram Chaos appear to be repeated in a concentric zone of fracturing, chaos, and channel path outside Aram Chaos. In contrast with the interior of Aram Chaos, the exterior pattern is incomplete—particularly to the southwest. Additional, but less certain, concentric patterns of larger radius are delineated by fractures and scarps. These outer patterns do not appear to form a single ring; rather, they define a zone of influence.

In summary, Aram Chaos is interpreted as the inner zone of an old multiringed impact basin, called here 'Aram Basin.' The inner rings are expressed by deep concentric depressions, massifs, scarps, and channel source regions. The outer rings are revealed by narrow sinuous valleys, topographic control of Ares Vallis and other major outflow channels, channel source regions (Iani and Hydaspis Chaos), arcuate patterns of chaotic terrains, fractures, and floor-fractured craters. The channel source regions, in particular, occur near the inner portion of the topographic ring in close analogy with Ladon and the source regions of sinuous rilles on the moon.

Unnamed (42° N, 322° W). The third example is situated along the fretted terrains of Deuteronilus Mensae (Figure 5). *Lucchitta* [1978] first mapped this 250-km-diameter circular structure. Here it is interpreted as the central remnants of a major 500-km-diameter buried basin that has been resurrected by differential erosion. Figure 6 shows a simplified terrain map that bears many similarities with Aram Basin. The innermost region (60 km diameter) is characterized by low-lying hummocky plains surrounded by a well-defined, inward-facing scarp. It is not certain if this depression represents a basin-related structure or a remnant of a superposed impact crater. However, a reasonable geometric fit can be made where this rimless depression forms the center of a concentric pattern of common terrain types (Figure 6) resembling Aram Basin. A higher standing plains unit with relatively minor fracturing sur-