



Fig. 4. An abridged terrain map of the Aram Chaos region (see Figure 3). Although massif remnants are not as well defined as those around Ladon, the concentric pattern of analogous terrains clearly indicate the influence of a buried 550 km-diameter multiringed basin reexpressed by endogenic modification.

east. The outer scarp is subdued on the east, and the fractured plains are poorly expressed. Knobby terrain characterizing the floor of the moat regions occurs where the fractured plains of the west occur but is high standing relative to adjacent plains materials. The plains regions display fluid-shaped features near the breach in the wall leading to Ares Vallis to the east. The eastern half of Aram Chaos interior to these features is a mottled plains crossed by shallow valleys and smaller but parallel elongate depressions. The boundary between the contrasting interior terrains is well defined by both terrain and albedo differences.

Outside Aram Chaos are two other major regions of chaotic terrain: Iani Chaos to the southeast and Hydaspsis Chaos to the west. Between the boundary scarp of Aram Chaos and these peripheral chaotic regions, the lightly cratered plains form a distinctive concentric zone of relatively unmodified terrain. The

chaotic terrains of Iani and Hydaspsis display many similarities. Regions of fractured plains grade into broken blocks, then into low-lying regions of chaotic hilly and knobby terrains. These terrains grade into channel floor materials having numerous parallel grooves, ridges, and fluid-shaped forms. Both Iani Chaos and Hydaspsis Chaos appear to be source regions for large outflow channels, Iani being the source for Ares Vallis. Both channels veer around Aram Chaos and merge to a single major channel to the north. Relatively subtle erosion of high-standing areas occurs along the margins of these channels.

The fracture patterns and deepest regions of chaos of northwest Iani Chaos form an arc concentric around Aram Chaos that is accentuated by the plan of Ares Vallis (see Figure 4). A less pronounced concentric pattern is displayed by the eastern boundary of Hydaspsis Chaos and the associated northeast trending channel, both of which are at about the same radial