BELTS OF EMBRYONIC COLLISIONAL MOUNTAIN RANGES IN THE VICINITY OF THE TANOVA - UPDOMING, MARS ?

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In earlyer papers the author has indicated the possibility that the relief of Mars reveals hints for large-scale compression (Orcus Patera) and even for overthrusting (1,2). Detailed studies of the suspected zone which reveals such features and of the adjacent uplands display additional hints for (?plate and/or ?block) movements on Mars in the surroundings of the TaNoVa - updoming(3).

The most important hints for a probable zone of collision are indicated by: a) compressional features, b) so called flat irons, c) features of overthrusting, and d) a cuesta landscape which runs parallel to the latter features (Fig.1). The importance of these features is accentuated by a row of old volcanoes and volcano-like mountains which form an arcuate row in the same area (4). It is noteworthy that the features mentioned above are arranged concentrically with respect to the centre of the TaNoVa-updoming, being accumulated along an arc which is situated between the Valles Marineris and the Claritas Fossae.

The western continuation of that arc is indicated by prominent, long, arcuate linear features (obviously fractures), and by numerous very old volcanoes which form rows along these fractures. It is noteworthy that the features described above which occur east of the Claritas Fossae are distributed west of the Claritas Fossae as well, together with deformed impact structures (Fig. 2).

Due to the spatial distribution of the described features (concentrically with respect to Syria Planum the highest part of the TaNoVa - updoming with a maximum elevation of about 10 000m) the supposition seems to be justified that the whole set of concentric features can be interpreted as a fossil embryonic (?collisional) mountain range which probably indicates plate and/or block boundaries in the surroundings of the TaNoVa - updoming (5).

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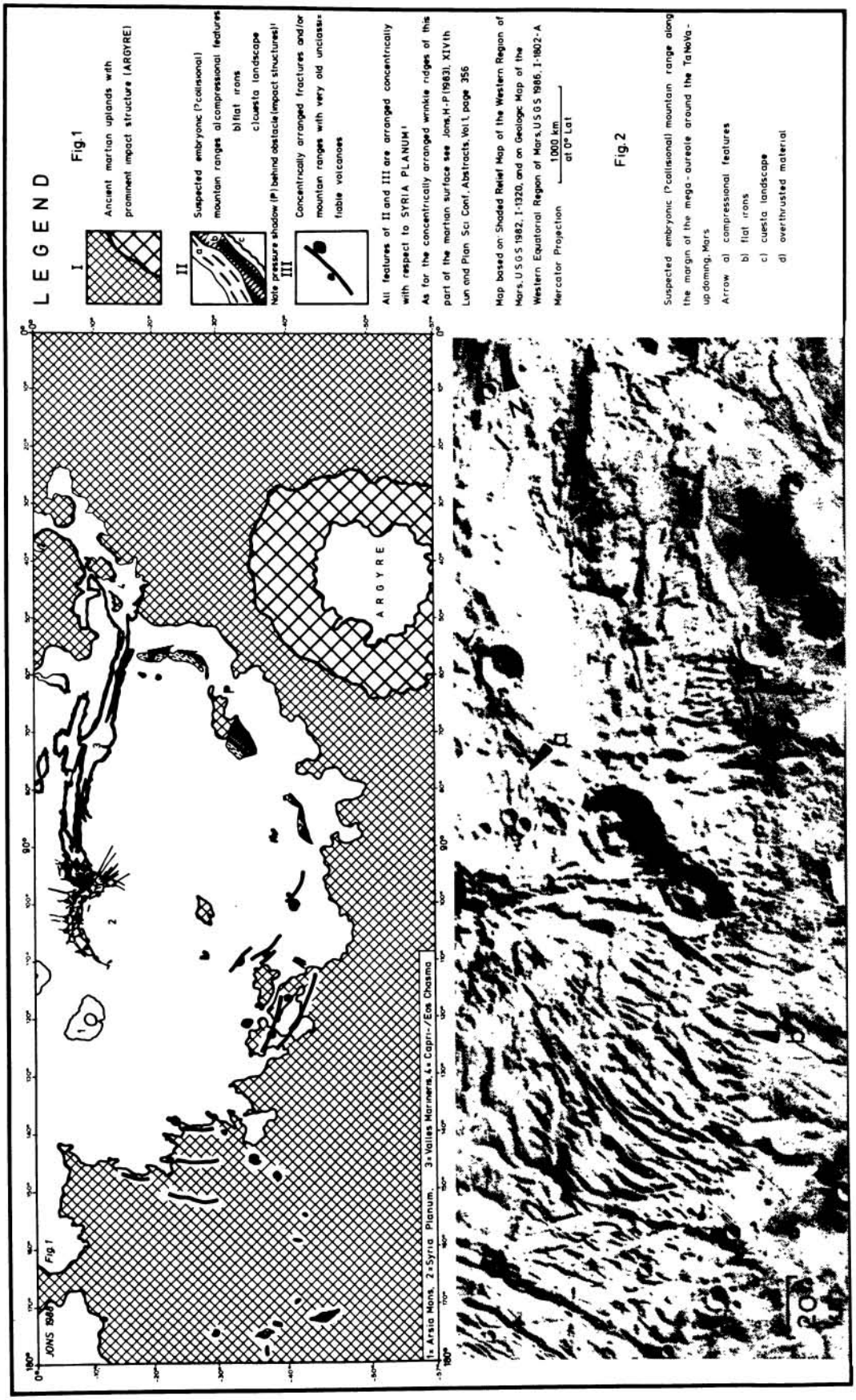

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