



Fig. 1c. Structure of the tessera in central and northern Laima Tessera (centered on 48° , 53° N) [from *Basilevsky et al.* 1986]. 1, lavas; 2, ridges of linear belts; 3, lineaments in tessera; 4, circular blocks; 5, volcanoes; 6, impact craters; 7, main faults. Vertical white stripes are data gaps which were filled in later in the mission. Ausra Dorsa, upper left; Kamari Dorsa, right.

in width from about 8-30 km with most in the range of 10-12 km. In some cases the trough walls become irregular and convex outward, and a bead-like appearance results (Figures 1 and 2c, marked B). These bead-like or oval structures range in width from 15 to 45 km and in length from 30 to 50 km and appear to be more common in the southern part of Laima Tessera than in the northern. Often, the flat-floored trough narrows and the walls merge into a single linear valley, generally less than 8 km in width. A cross section across the strike of the troughs (Figure 2d) shows that the troughs average less than 500 m deep along this profile but that the most prominent trough (Baba-jaga Chasma) approaches 1 km depth where it crosses this profile. The range and frequency distribution of trough/lineament lengths are related in part to their preservation, since many can be seen to be embayed by plains units surrounding Laima Tessera (Figure 1). Several troughs completely cross the width of Laima Tessera, and one (Baba-jaga Chasma) extends for a distance of about 1400 km. Most of these features are less than 750 km in length, and there is a distinct difference in the length and continuity north and south of Baba-jaga Chasma (Figure 1).

The major troughs generally parallel each other (Figure 1) with the distance between any two being similar along their strike. The spacing between successive major trough/lineaments in a traverse normal to the strike of the features, however, is variable. A NNE oriented transect across eastern Laima Tessera shows that the spacing ranges from 20 to 100 km with an average spacing for 13 troughs of about 50 km.

Detailed examination of the areas between major troughs often reveals the presence of much more subtle linear features oriented parallel and subparallel to the troughs and producing minor disruptions in the orthogonal fabric (Figures 1 and 2b, marked D).

The second structural element occurs in the terrain between the troughs/lineaments and is characterized by parallel ridges and valleys oriented generally perpendicular to the troughs/lineaments, giving the impression of a corrugated appearance. The flanks of the ridges and valleys are often sharp and linear and are interpreted to be fault bounded, in contrast to the hills and swales typical of the mountain belts of Ishtar Terra which are interpreted to be anticlines and synclines [Crumpler *et al.*, 1986]. Therefore the hills and valleys of the corrugated terrain appear to be more similar to horsts and graben than to anticlines and synclines (Figure 2).

In many cases, particularly where the edge of the corrugated terrain is defined by a trough, individual linear elements do not appear to cross from one domain across trough/lineaments into the adjacent corrugated segment. In other cases, particularly where the edge of a portion of the corrugated terrain is defined by a lineament, many linear segments can be traced across the structure, whereas others terminate against it. Few corrugated elements carry further than across one trough/lineament zone (see map patterns in Figure 1). Many elements terminate against the more subtle lineaments between major troughs/lineaments (see particularly central Laima Tessera, Figure 1).