

The cross section in Fig. 11.66 is area balanced, based on the linear area-depth relationship (Fig. 11.66A). The lower detachment is at -3451.5 ft below sea level and the displacement that formed the graben is 262.3 ft. This is the same structure described in Fig. 11.21 with a different reference level. The predicted strain in each layer is 1 = -1.6%; 2 = -1.4%; 3 = 0.6%; 4 = 11.8%; 5 = 32.8%; 6 = 36.1%; 7 = 40.3%. The small strain magnitudes inferred for layers 1–3 probably represent the magnitude of the uncertainty associated with the measurements. The large values of extension calculated for layers 4–7 indicate significant sub-resolution deformation. The deeper layers in the graben almost certainly contain additional sub-resolution normal faults.

Fig. 11.66A.
Area-depth graph for the full
graben in Fig. 11.66. Depth
in ft, area in ft²

