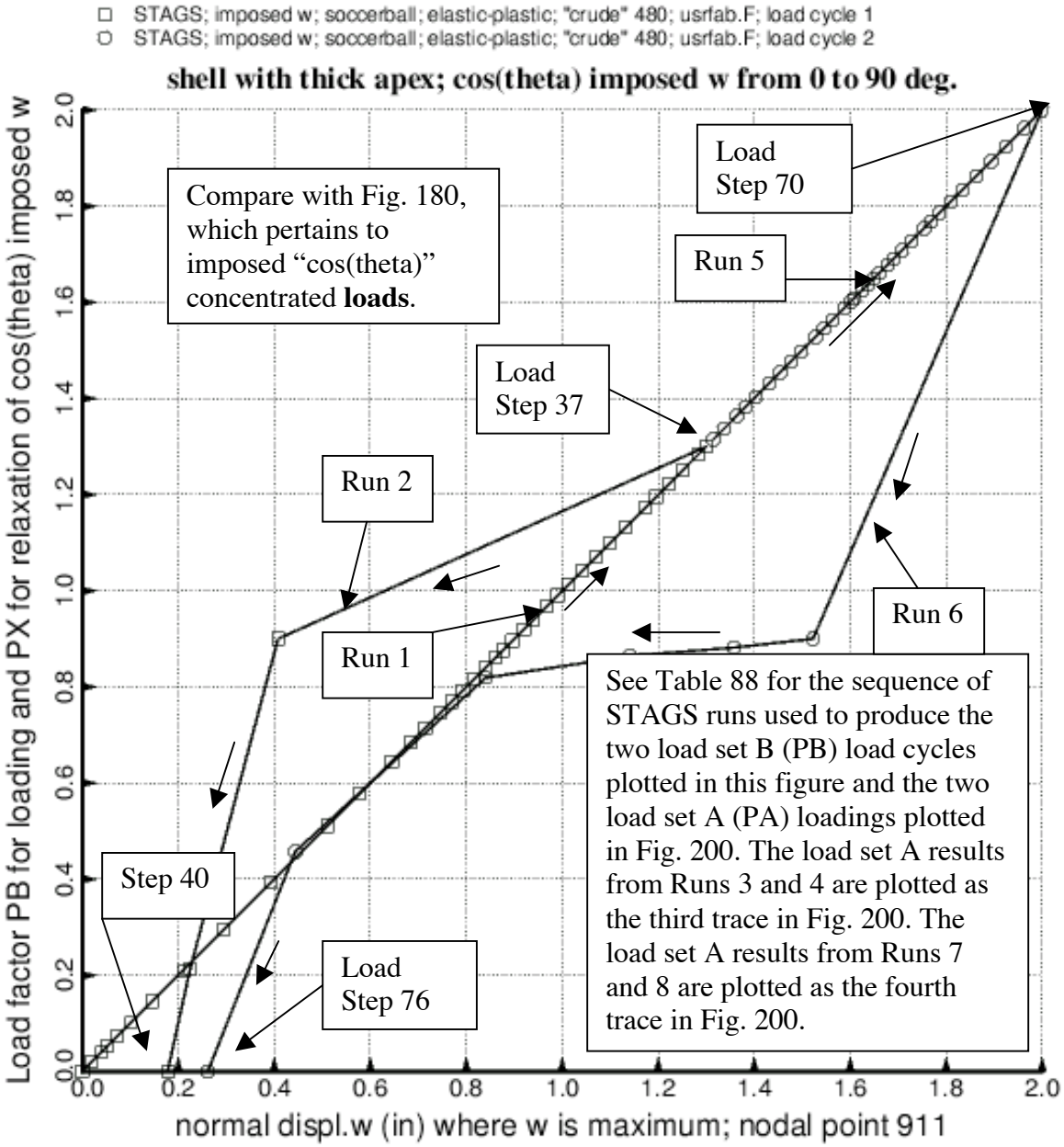

Fig. 193 Elastic-plastic analysis of the **optimized unstiffened equivalent ellipsoidal shell with thick apex, t(apex)=0.4 inch; Wimp=0.2 inch; the optimum design is listed in Table 78.** Shown here are **two load cycles** for load set B (load factor PB) that produce residual dents of two depths. The load set B consists of a number of concentrated normal inward-directed **displacements** applied along the junction of shell segments 3 and 4 that has a cos(theta) circumferential distribution from theta = 0 to 90 degrees. (See Shell units 11 and 12 listed in Table a40. Also see Figs. 2, 169, 181, and 190) This cos(theta) applied normal displacement distribution produces a dent similar to that produced by a cos(theta) distribution of normal inward-directed concentrated loads. However, the strategy used for the unloading phase of the dent-producing load cycle differs from that used to produce the results displayed in Fig. 180. (Compare Table a42 with soccerball.bin4 in Table 87.)