STAGS elastic-plastic soccerball model: loading phase of dent production; node 1938
STAGS elastic-plastic soccerball model: unloading phase from Step 67; node 1938

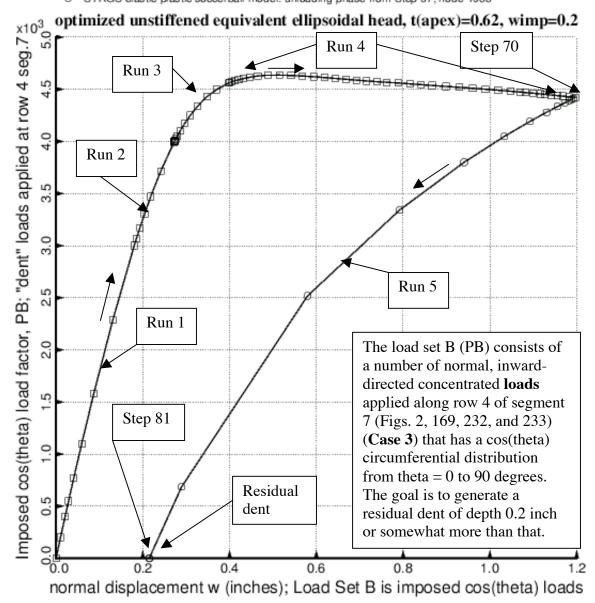


Fig. 250 Optimized unstiffened equivalent ellipsoidal shell with thick apex, t(apex)=0.61996 inch; Wimp=0.2 inch; this figure pertains to the shell design listed in Table 93. Shown here are the load cycles for load set B (load factor PB) that produce a residual "cos(theta)" dent of depth just above 0.2 inch. Compare with Fig. 245. These results correspond to what is called Case 3 in Fig. 232: the "cos(theta)" line load is applied along Row 4 of Shell Segment 7 from circumferential coordinate, theta = 0 to 90 degrees. This load distribution is used because it generates a residual dent that locally resembles the negative of the deformation in Figs. 232 and 233, that is, the negative of the linear buckling modal imperfection with n = 1 circumferential wave.