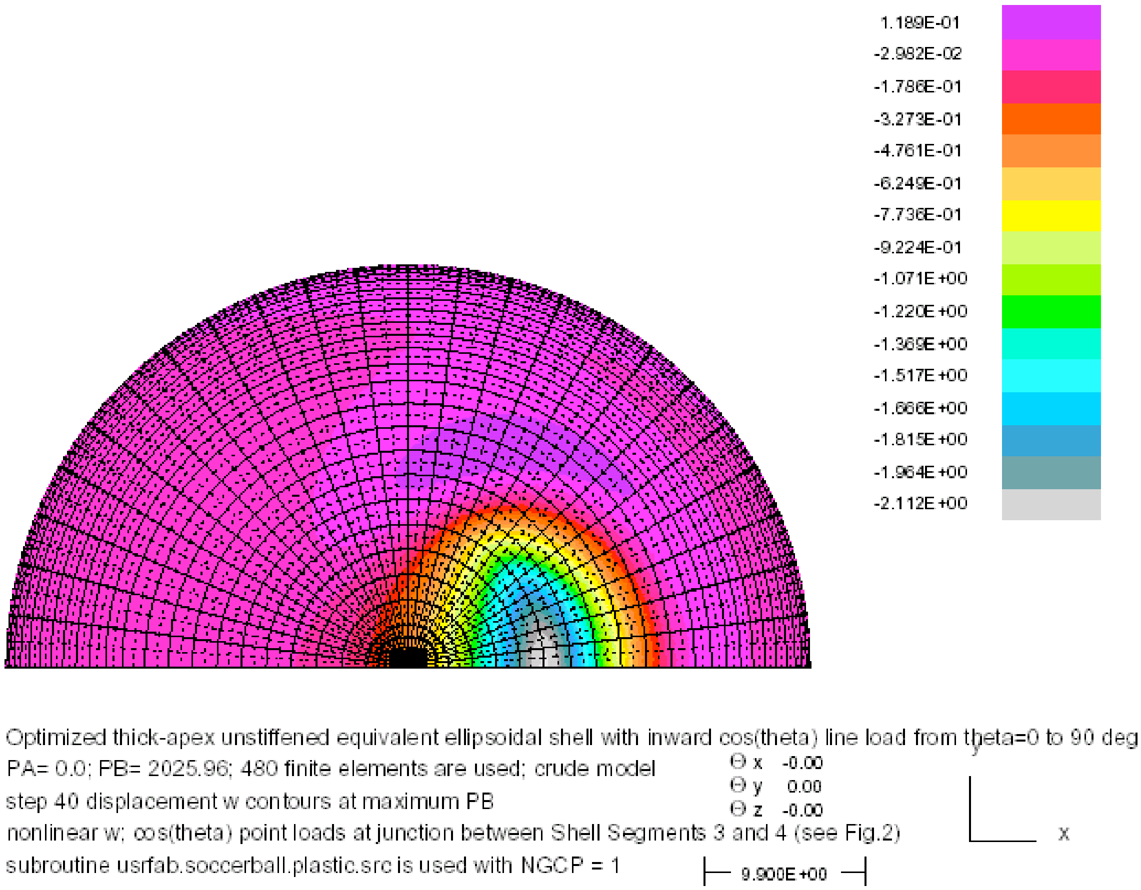

Fig. 185 Elastic-plastic analysis of the **optimized unstiffened equivalent ellipsoidal shell with the thick apex with t(apex) = 0.4 inch; Wimp=0.2 inch; the optimum design is listed in Table 78.** State of the shell at load set B (PB) step no. 40 at the end of Run 7. (See Fig. 180). Load set B consists of a number of concentrated inward directed normal loads applied along the junction of Shell segments 3 and 4 (Figs. 2, 169, 181, 190) distributed as cos(theta) from theta = 0 to 90 degrees in the circumferential coordinate along Row no. 5 in Shell Units 11 and 12. (See Table a40, except the input datum LT is +1 instead of –1). This load distribution is used because it generates a dent that locally resembles the negative of the deformation in Fig. 179, that is, the linear buckling modal imperfection with n = 1 circumferential wave. Compare with Fig. 196, for which the loading that produces the residual dent is by “cos(theta)” imposed normal inward displacements rather than by “cos(theta)” imposed normal inward-directed concentrated loads, as is the case here.