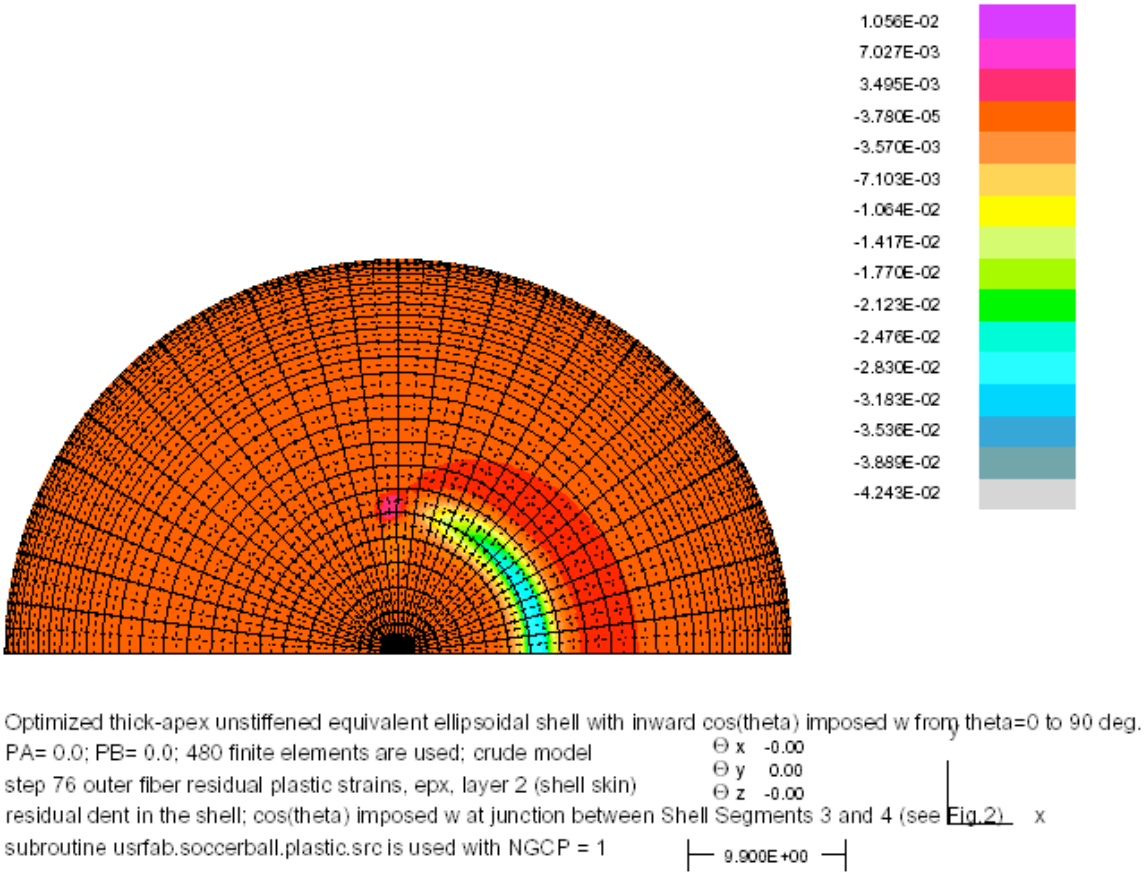

Fig. 199 Elastic-plastic analysis of the **optimized unstiffened equivalent ellipsoidal shell with the thick apex with t(apex) = 0.4 inch; Wimp=0.2 inch; the optimum design is listed in Table 78.** State of the shell at load set B (PB) step no. 76 at the end of Run 6. (See Fig. 193). This is the **outer fiber** meridional plastic strain, epx, associated with the residual dent shown in Fig. 197. Load set B consists of a number of concentrated normal inward-directed imposed **displacements** 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). This imposed normal displacement distribution is used because it generates a dent that **locally** resembles the deformation in Figs. 190 and 191, that is, the linear buckling modal imperfection with n = 1 circumferential wave. Compare with Fig. 187, for which a cos(theta) distribution of concentrated normal inward-directed loads generates the dent rather than normal inward-directed imposed displacements.