



Fig. 34 STAGS prediction of **inner fiber effective stress seff (psi) in the skin** of the optimized **imperfect isogrid-stiffened** equivalent ellipsoidal shell with an axisymmetric **-mode 2** linear buckling modal imperfection (negative of the mode displayed in Figs. 9 and 11) with amplitude, $W_{imp} = -0.2$ inch and subjected to the external design pressure, $p = 460$ psi. Compare with the GENOPT (BIGBOSOR4) prediction of effective stress, $SKNMAX = 105050$ psi, which occurs at the same meridional location, as listed in Table 45. NOTE: The BIGBOSOR4 prediction, listed in Table 45 for the -mode 2 imperfection, only gives the maximum value of the extreme fiber effective stress in each shell segment, not both the maximum **inner** fiber effective stress and maximum **outer** fiber effective stress.