

Fig. 27 STAGS prediction of **outer 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 (Figs. 9 and 11) with amplitude, Wimp = +0.2 inch and subjected to the external design pressure, p = 460 psi. Compare with the GENOPT (BIGBOSOR4) prediction of maximum effective stress, SKNMAX = 114380 psi, which occurs at the same meridional location, as listed in Table 43. NOTE: The BIGBOSOR4 prediction, listed in Table 43 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.