



The stiffened shell was optimized by GENOPT with very tiny Mode 1 and 2 axisymmetric imperfections.

STAGS linear buckling mode 3, pcr= 1.3079 x 460 psi

BIGBOSOR4 gets pcr = 1.3113 x 460 psi

linear buckling of isogrid-stiffened perfect shell, optimized with very tiny mode 1 and 2 imperfections

Θ_x -35.84
 Θ_y -13.14
 Θ_z 35.63

y z x

Fig. 120 +Mode 1 axisymmetric linear buckling modal imperfection shape from STAGS for the optimized design of the “**perfect**” **isogrid-stiffened** equivalent ellipsoidal shell. The optimum design is listed in Table 33 under the heading, “isogrid-stiffened, perfect”. This STAGS buckling mode corresponds to eigenvalue no. 3. Compare with the BIGBOSOR4 prediction in Fig. 117.