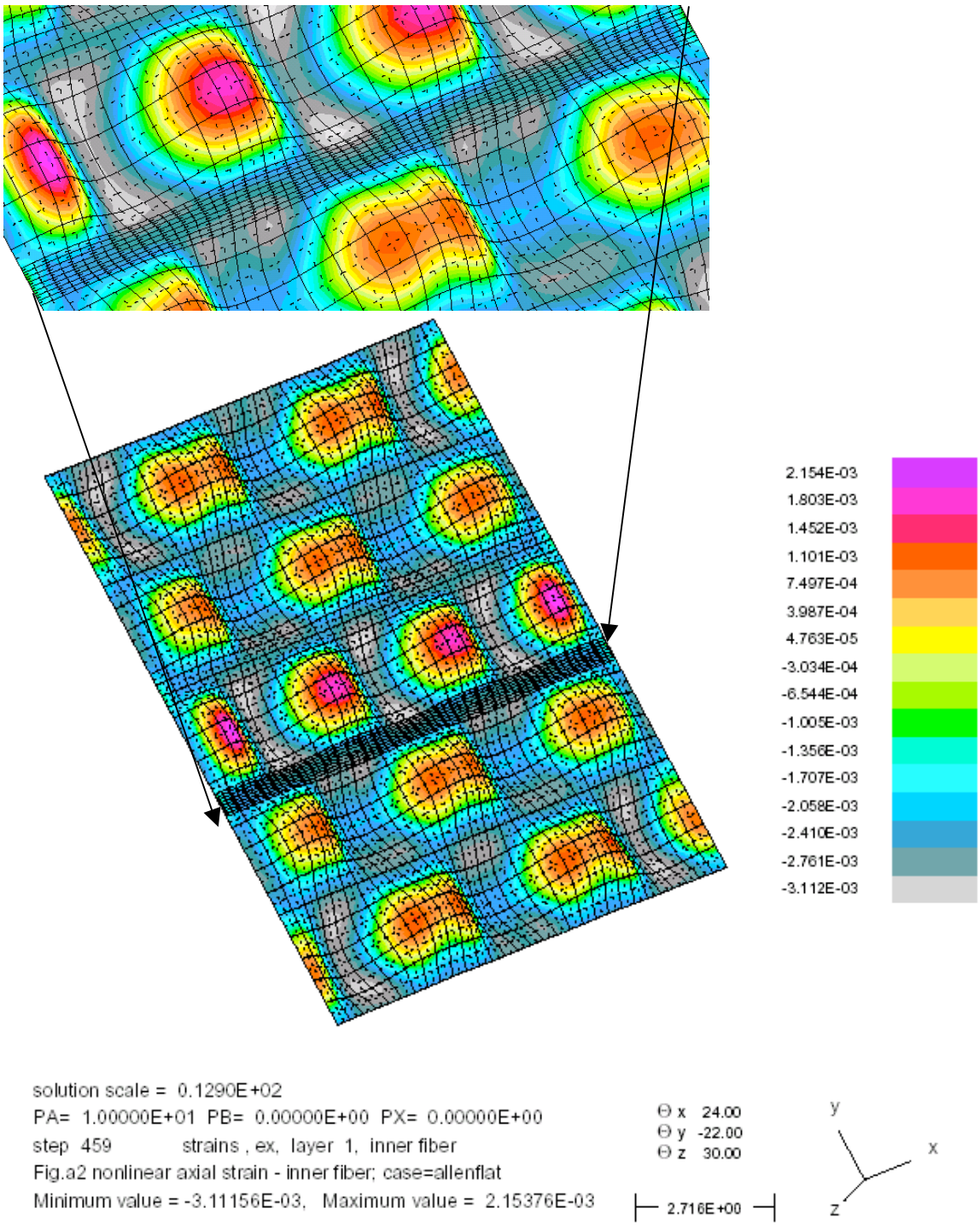

Fig. a2 STAGS prediction of inner fiber axial strain in the flat panel skin at the design load, PA = 10.0 (Nx = -1000 lb/in). In the STAGS model the value of skin end shortening at x=0 at the third stringer, numbering stringers from the bottom right-hand edge, is 0.023172 inch at the design load, PA = 10.0. This end shortening corresponds to an average axial strain, epsx(ave) = 0.023172/9.7793 = 0.0023694. This value of epsx(ave) seems a bit too small when compared with the average of inner fiber ex along x at the midwidth of the region where the finite elements are concentrated in the expanded insert.