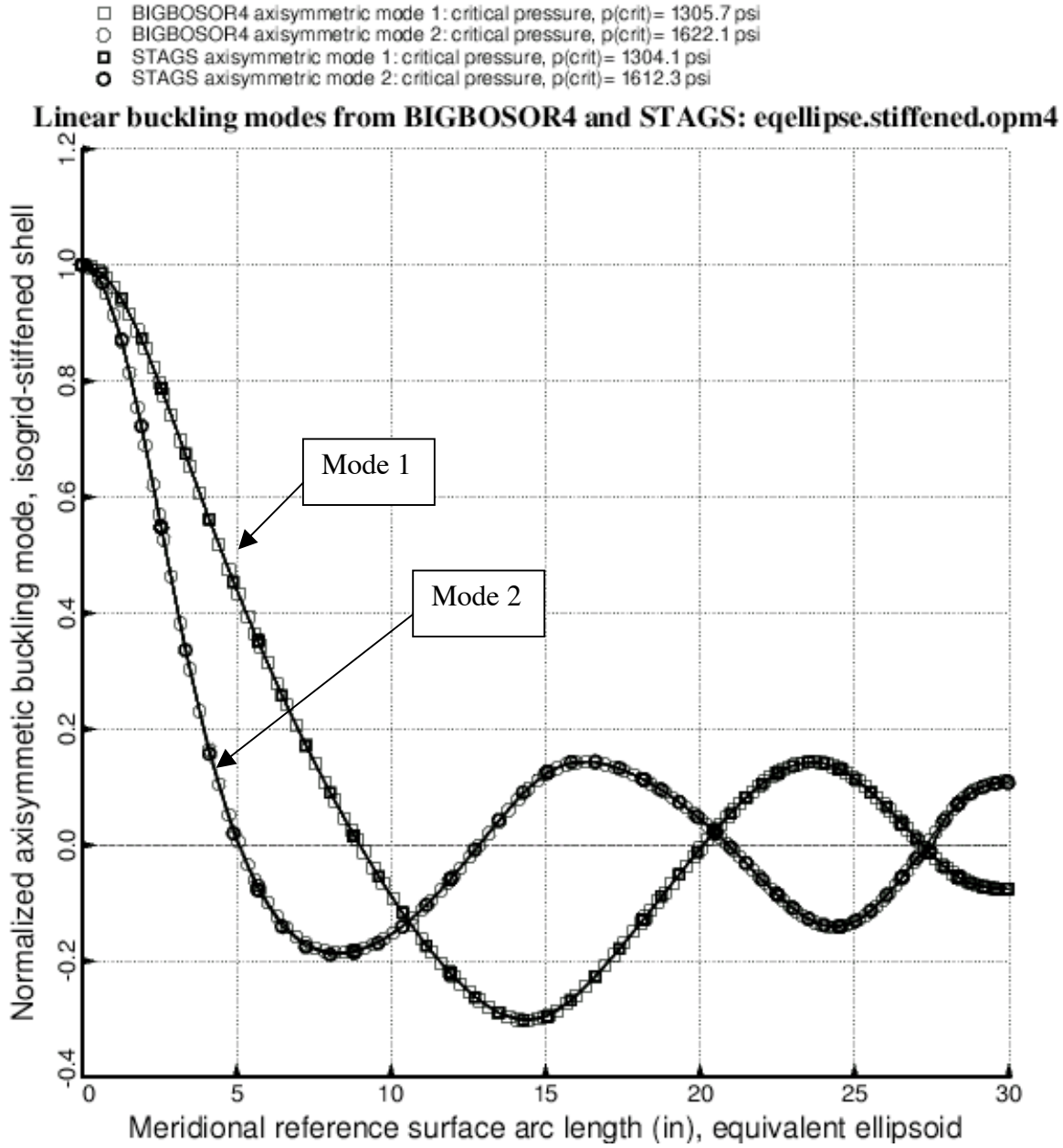

Fig. 11 Comparison of axisymmetric modes 1 and 2 as predicted by BIGBOSOR4 and as predicted by the 360-degree STAGS finite element model shown in Fig. a1 for the optimized **isogrid-stiffened** equivalent ellipsoidal shell. Plotted here is the normal linear buckling modal displacement w along a meridian from pole to equator. The excellent agreement between BIGBOSOR4 and STAGS of these axisymmetric linear bifurcation buckling mode shapes, which are used as initial imperfections in nonlinear analyses by BIGBOSOR4 and STAGS, leads to good agreement between BIGBOSOR4 and STAGS of the maximum load-bearing capability of the imperfect shells with plus and minus axisymmetric mode 1 and mode 2 imperfections. (See Fig. 16).