



Fig. 34 STAGS and PANDA2 predictions for inward (minus) and outward (plus) buckles for the curved panel. Overall axial bending is not permitted in the STAGS model. (IBCX0XL = 1 in the *.STG file that, via execution of the PANDA2 processor, STAGSUNIT, generates the *.bin and *.inp input files for STAGS.) In-plane warping of the panel skin along the four panel edges is prevented in the STAGS model. The two PANDA2 traces are derived from the data in Fig. 4. The quantity, WMDTOT, referred to in the two PANDA2 traces, is the uniform Poisson ratio radially outward normal displacement induced by the uniform axial compression. In the PANDA2 model for local post-buckling behavior [3,22] there is no overall axial bending nor in-plane warping of the two longitudinal edges of the single discretized module model displayed in Figs. 5-7, and inward and outward amplitudes of the buckles are always equal because the post-buckling deformations are assumed to vary sinusoidally in the axial direction.