



Fig. a3 **The top part of the STAGS 180-degree “soccerball” model**, including the 180-degree “soccerball” spherical cap (STAGS Shell units 1 – 6 correspond to BIGBOSOR4 Shell Segment No. 1 shown in Fig. 2 and correspond to STAGS Shell Unit No. 1 shown in Fig. a1), plus the first rank of four equivalent ellipsoidal shell units (Shell units 7 – 10 correspond to Shell Segment 2 in the BIGBOSOR4 model shown in Fig. 2 and correspond to the STAGS Shell Unit No. 2 shown in Fig. a1), with finite element numbers. STAGS E480 finite elements are used in this particular STAGS 180-degree “soccerball” model. This top portion of the complete STAGS “soccerball” model includes what are called “Shell unit 1” and “Shell unit 2” in the 360-degree STAGS model displayed in Fig. a1. Most of the STAGS results presented in Figs. 169 – 276 are based on the STAGS 180-degree “soccerball” model, the top part of which is displayed here and the complete model of which is displayed in Fig. a2.