**Grid Statistics directly from VGRID:**

**Coarse tetrahedral node based:**

Boundary points = 193592

 Boundary faces = 387180

 Total number of points = 6322777

 Total number of cells = 37274955

**Coarse tetrahedral cell-centered:**

Boundary points = 100624

 Boundary faces = 201244

 Total number of points = 2903101

 Total number of cells = 17093239

**Medium tetrahedral node based:**

Boundary points = 509326

 Boundary faces = 1018648

 Total number of points = 18970008

 Total number of cells = 111845678

**Medium tetrahedral cell-centered:**

Boundary points = 254979

 Boundary faces = 509954

 Total number of points = 8296758

 Total number of cells = 48885854

**Fine tetrahedral node based:**

Boundary points = 1337972

 Boundary faces = 2675940

 Total number of points = 56103683

 Total number of cells = 330845815

**Fine tetrahedral cell-centered:**

Boundary points = 668533

 Boundary faces = 1337062

 Total number of points = 24052524

 Total number of cells = 141763003

Mixed element grids were constructed by merging tetrahedral elements in the boundary layer into prisms. The merging reduces number of elements in the boundary layer by approximately factor of three.