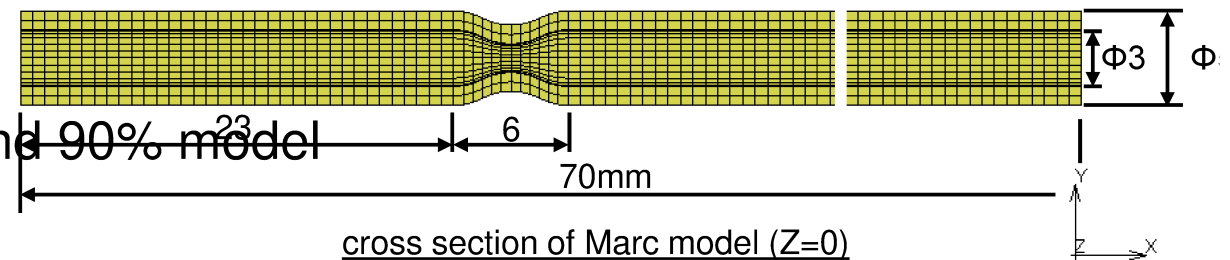
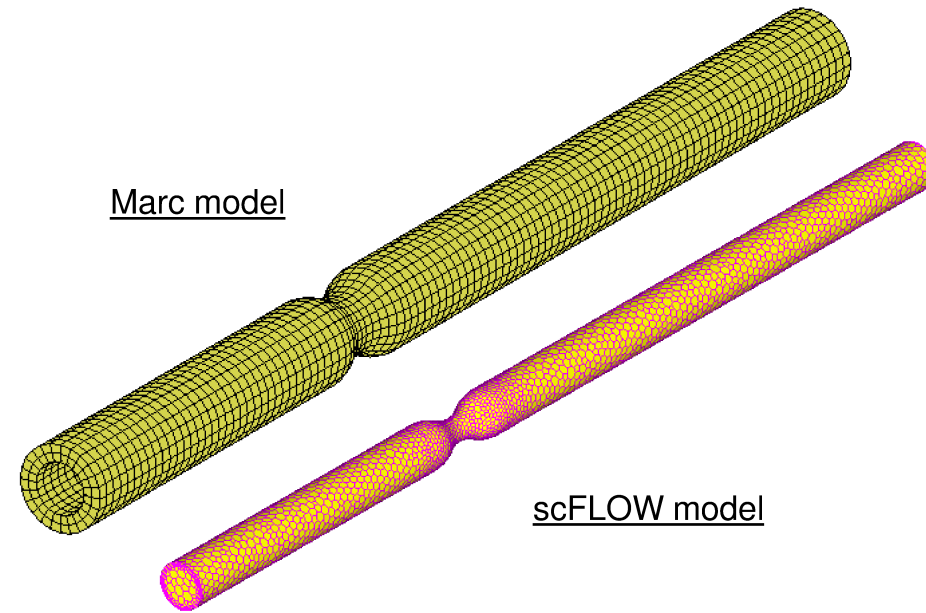


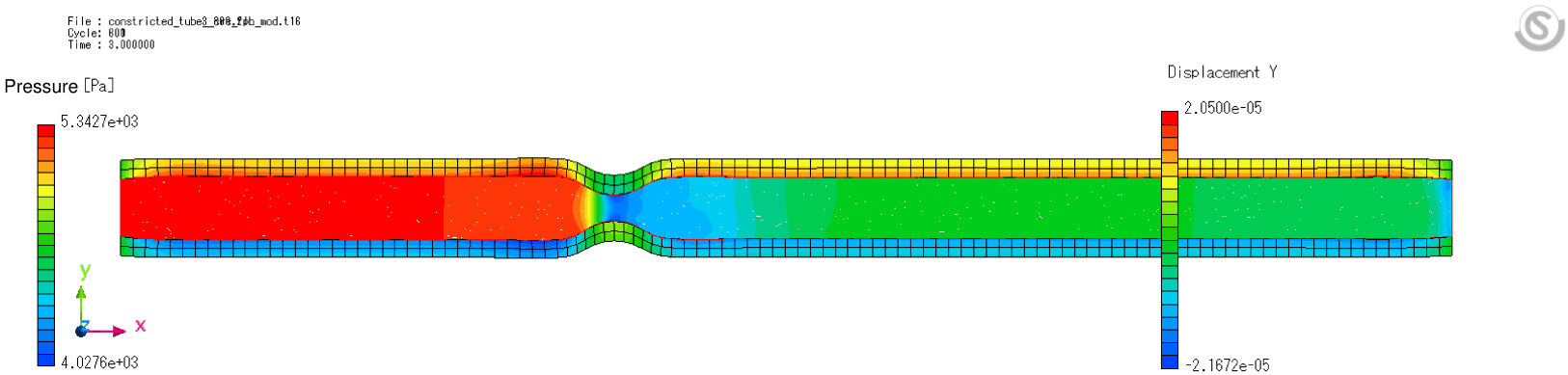
model

- Marc model (Silicon rubber vessel)
 - Analysis type Transient dynamics
 - Young's modulus 0.3 Mpa
 - Poisson's ratio 0.49
- scFLOW model (Water)
 - Analysis type Transient flow
 - Material model Incompressible water
- Co-Simulation condition
 - Time step 0.01 sec
 - Time period 3 sec
 - Stenosis area rate 75% model and 90% model

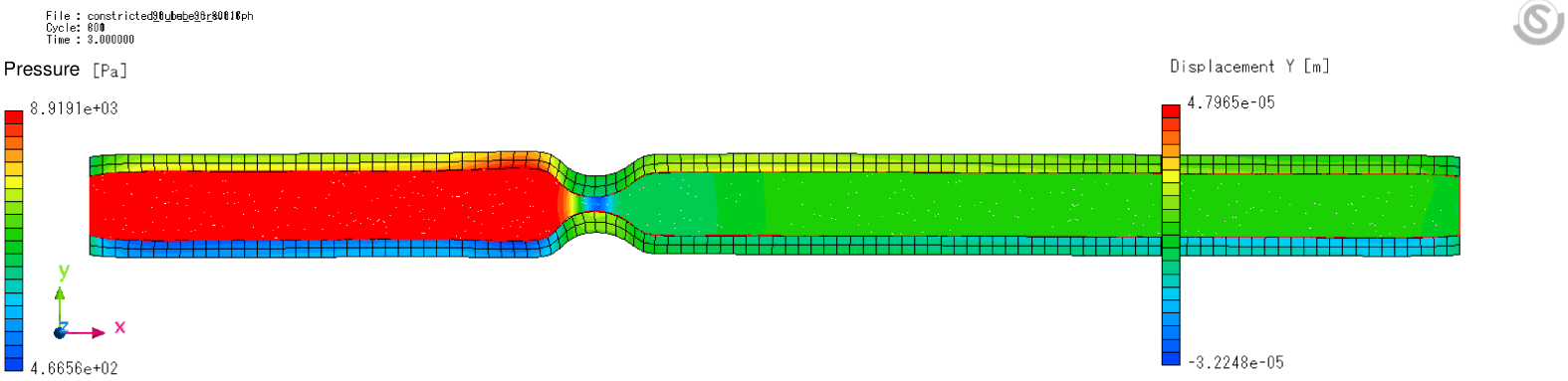


result

Stenosis rate 75%

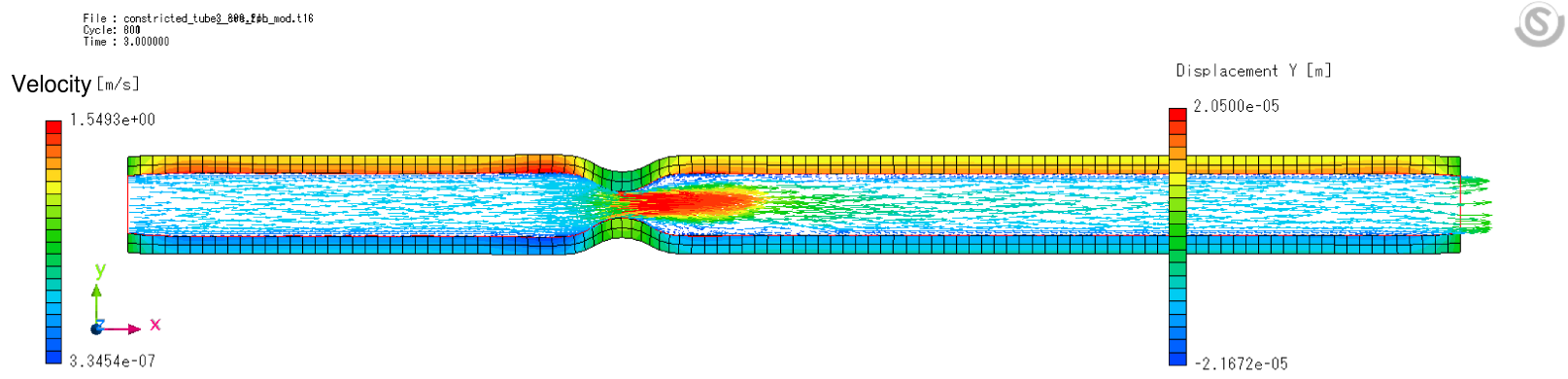


Stenosis rate 90%

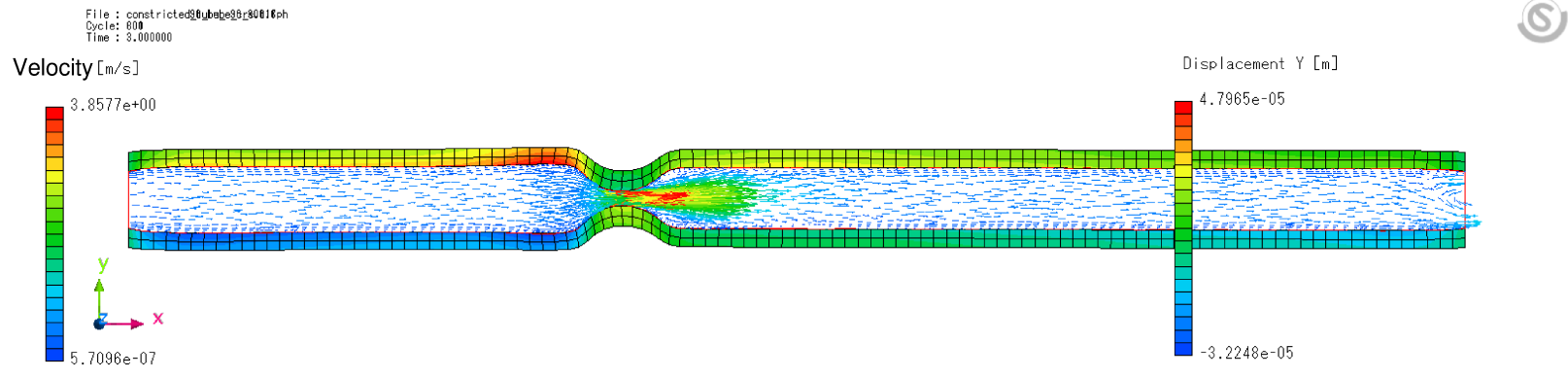


result

Stenosis rate 75%



Stenosis rate 90%



result

- Pressure history
 - Experimental result and co-simulation result comparison, 75% stenosis rate
 - Good agreement in peak pressure at inlet
 - Experimental result includes pump noise pressure turbulence

