



Title

IC Engine Port Flow Simulation Report

Date

2019/05/04 00:10:58

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1. File Report

Table 1. File Information for ICE 1

Case	ICE 1
File Path	D:\Kuliah\TUGAS AKHIR\ANSYS\Port3_FINAL_files\dp0\ICE-1\Fluent\ICE-1-1-01253.dat.gz
File Date	27 April 2019
File Time	08:27:29 AM
File Type	FLUENT
File Version	17.2.0

2. Mesh Report

Table 2. Mesh Information for ICE 1

Domain	Nodes	Elements
ice fluid port	445542	1140938

3. Setup

Table 3. Models

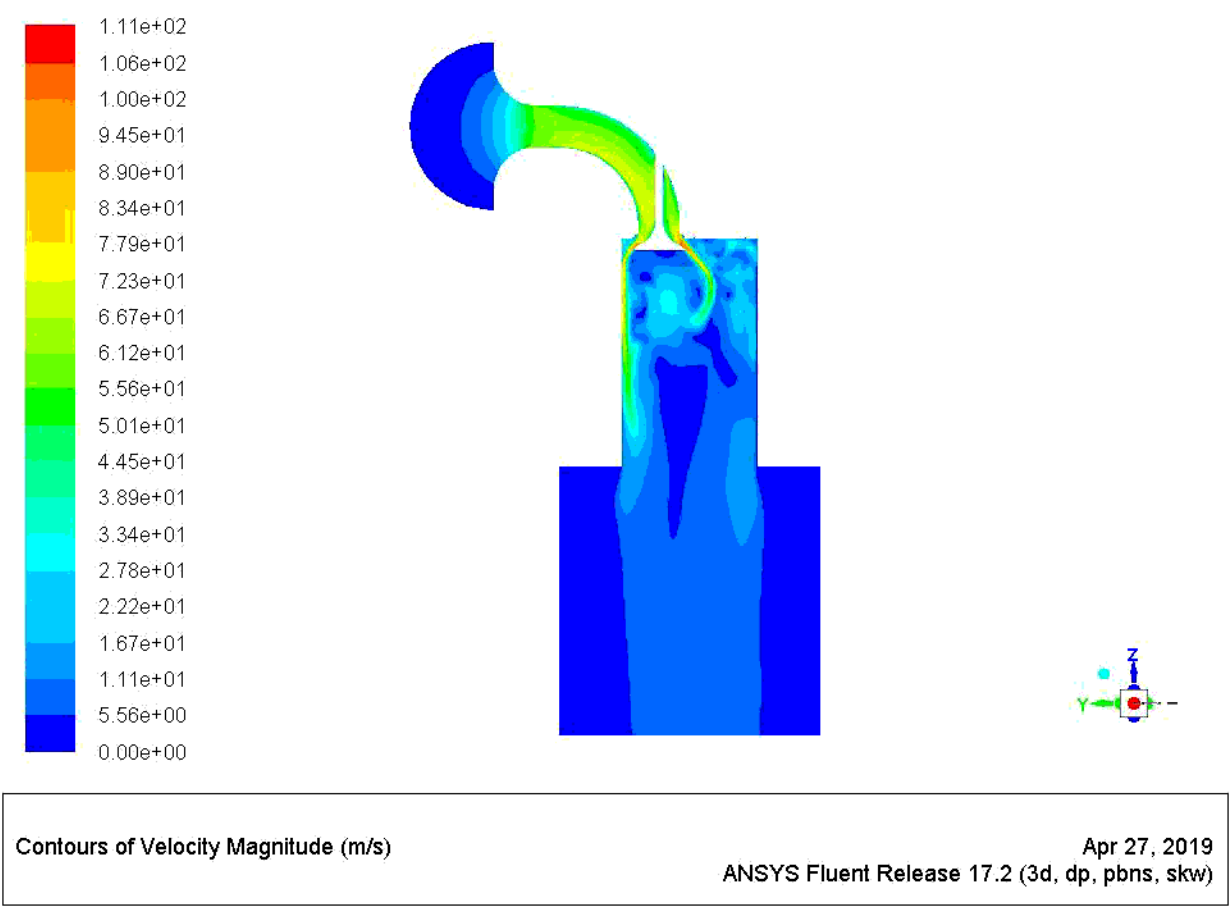
Model	Settings
Space	3D
Time	Steady
Viscous	Standard k-omega turbulence model

Table 4. Equations

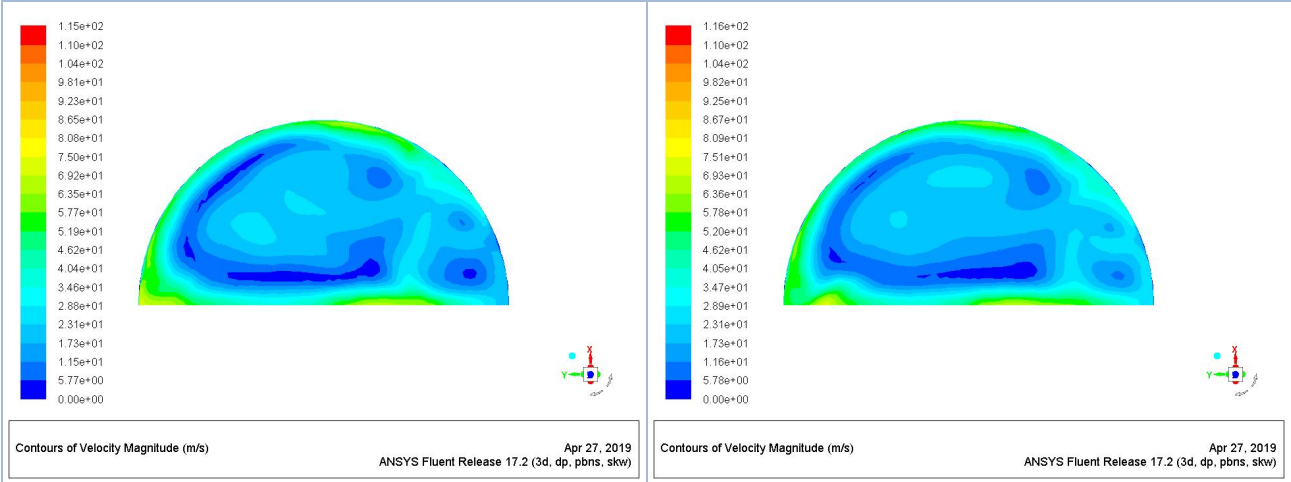
Equation	Solved
Flow	yes
Turbulence	yes
Energy	yes

4. Solution Data

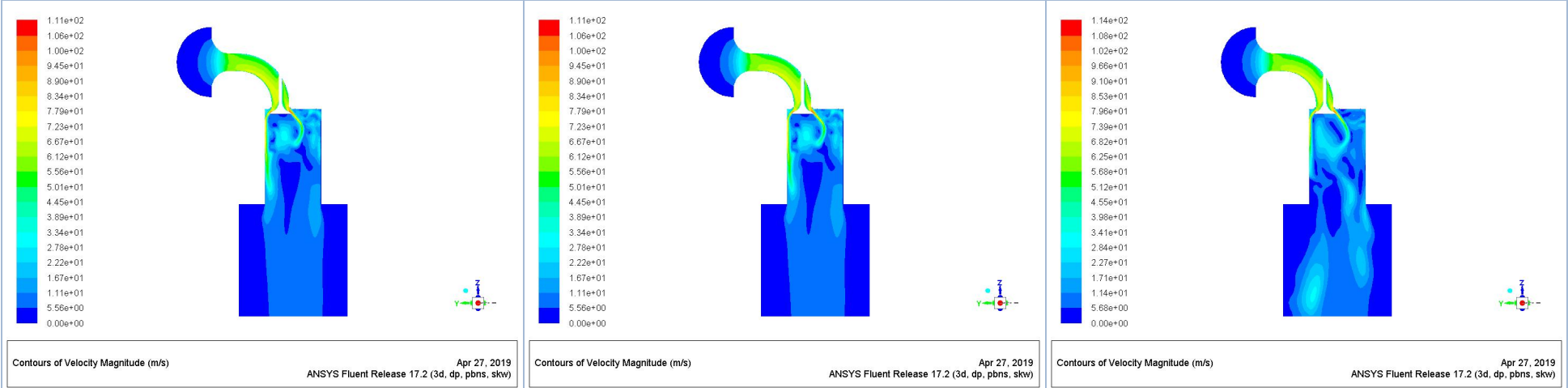
4.1. Animation: velocity-magnitude on ice\_cutplane\_1

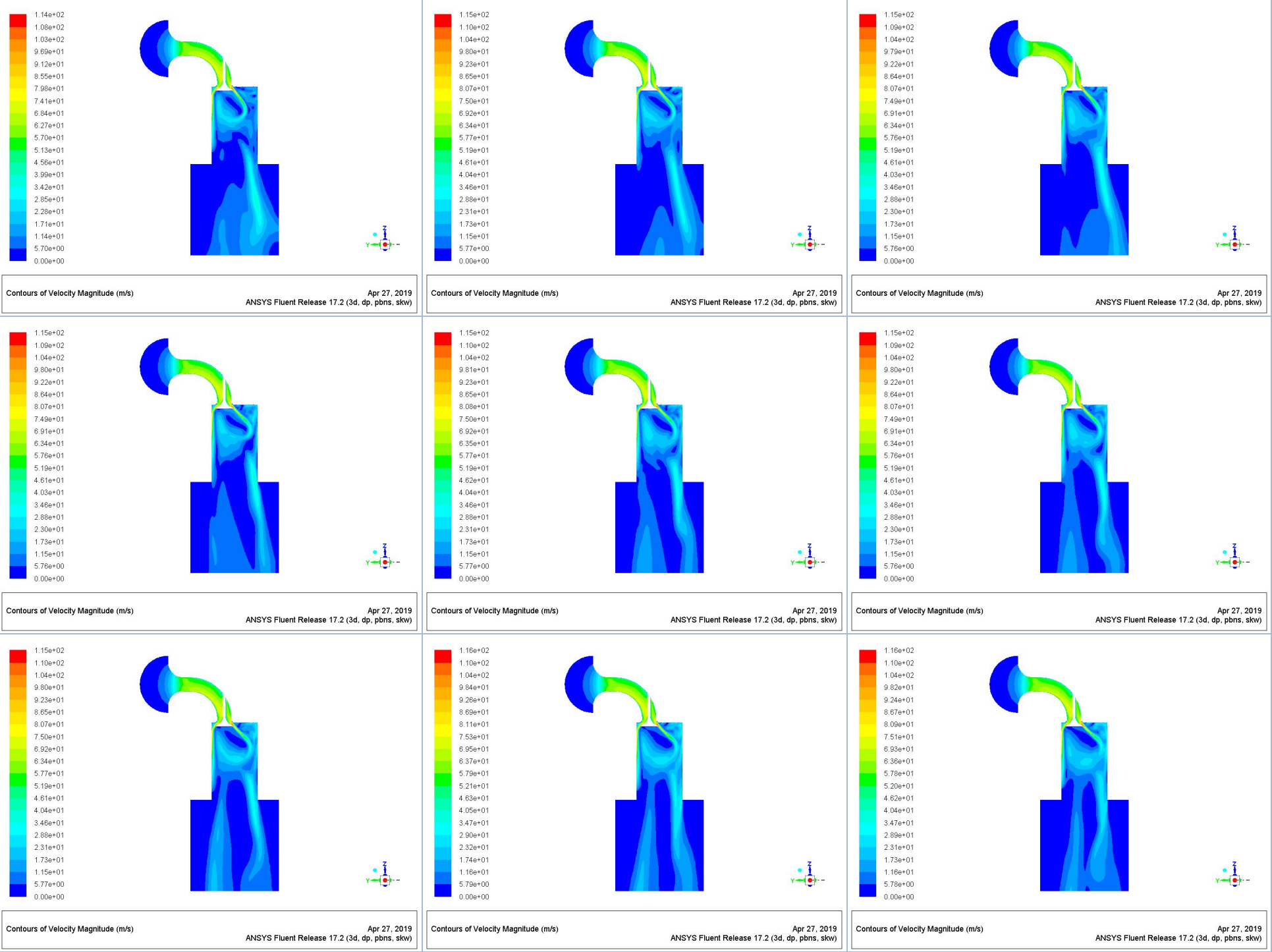


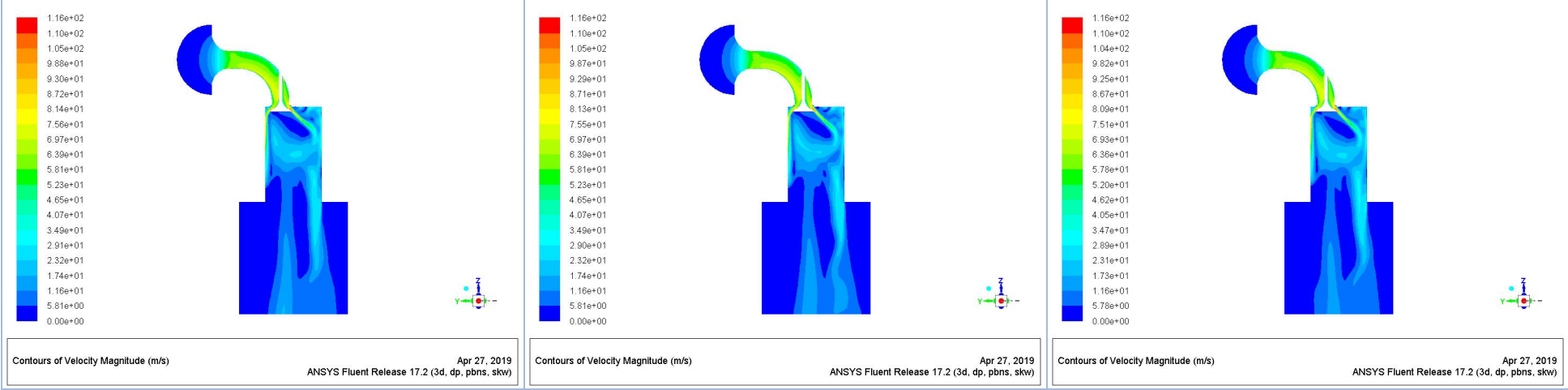
4.2. Table: velocity-magnitude on ice\_swirl\_plane\_1



4.3. Table: velocity-magnitude on ice\_cutplane\_1







4.4. Charts

5. Design Points Report

Chart 1. Monitor: Mass Flow Rate (ice-inlet-inplenum1 ice-outlet)

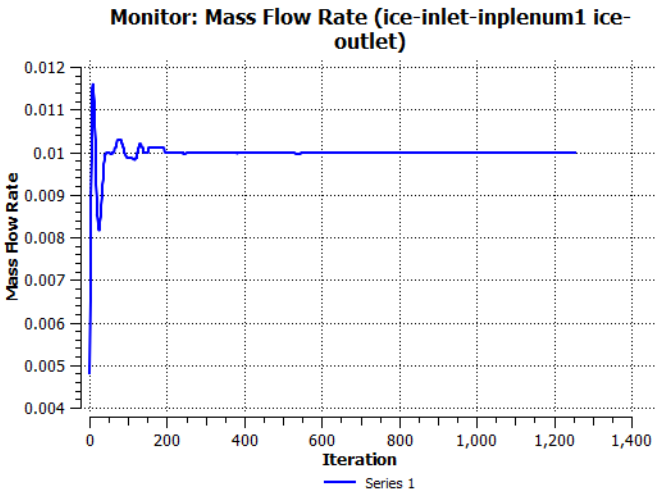


Chart 2. Monitor: Flow Rate swirl1 (ice\_swirl\_plane\_1)

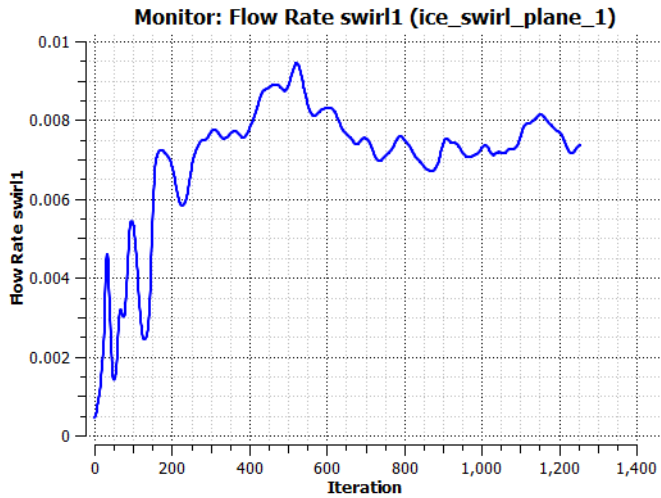


Chart 3. Monitor: Volume Flow Rate (ice-inlet-inplenum1 ice-outlet)

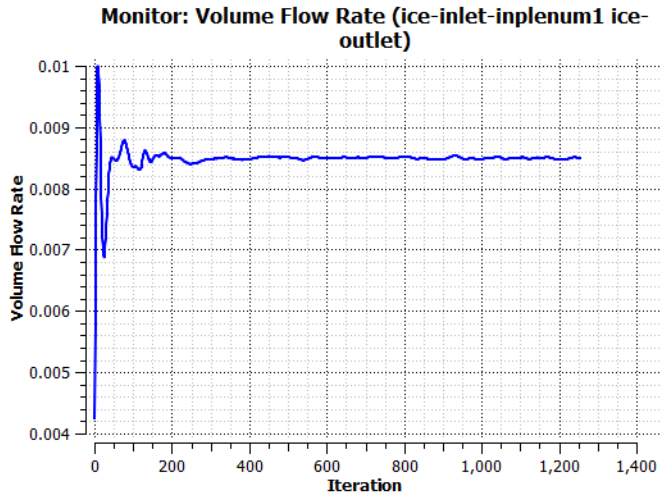
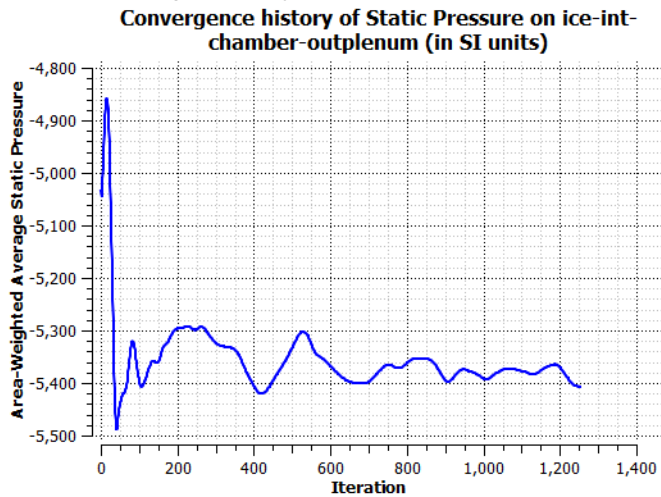


Chart 4. Convergence history of Static Pressure on ice-int-chamber-outplenum (in SI units)



5.1. Design Points Parameter values Charts

5.2. Table: velocity-magnitude on ice\_swirl\_plane\_1 for Design Points DP 0, DP 1, DP 2

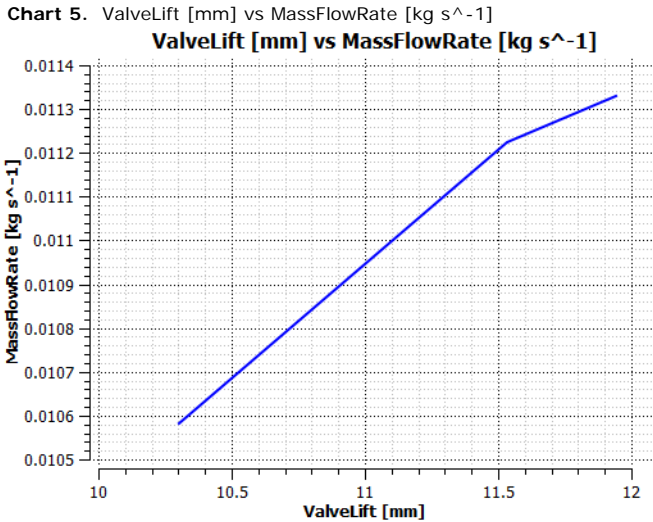
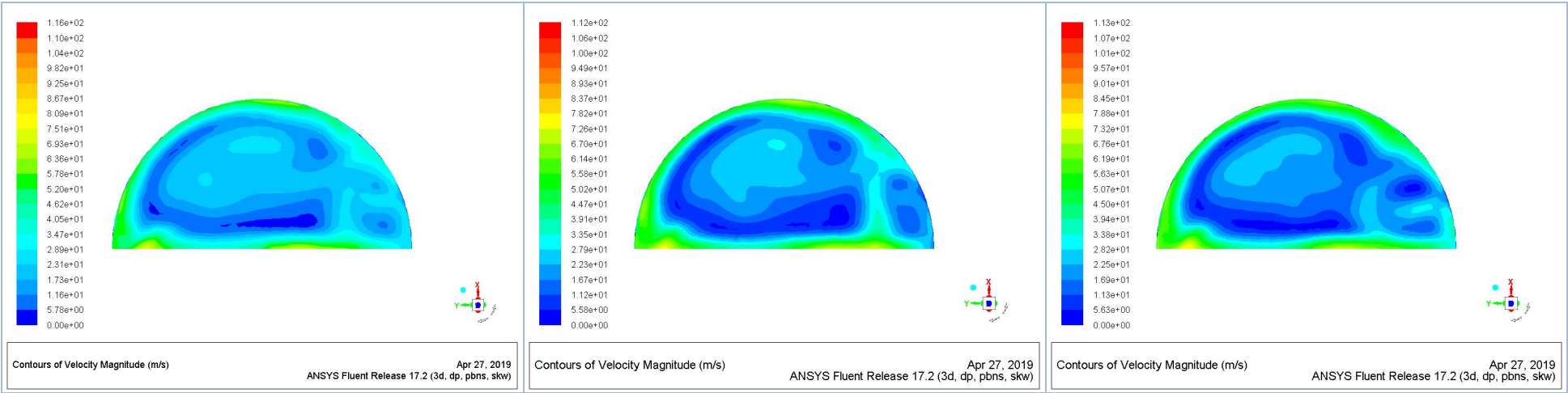
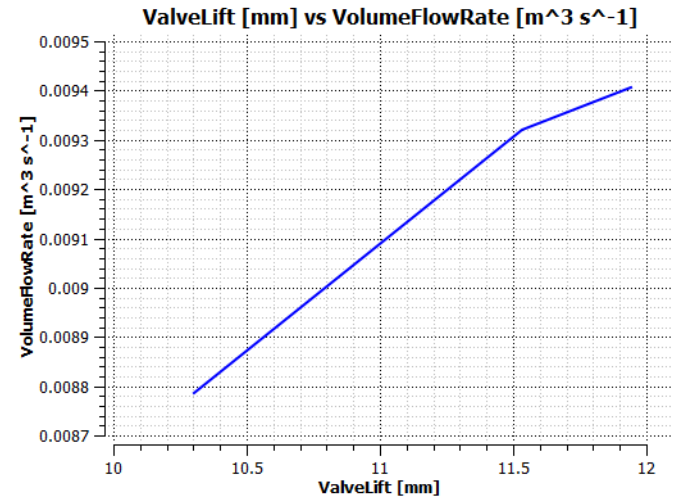


Chart 6. ValveLift [mm] vs VolumeFlowRate [m<sup>3</sup> s<sup>-1</sup>]



5.3. Table: velocity-magnitude on ice\_cutplane\_1 for Design Points DP 0, DP 1, DP 2

