

Potential Flow Around Greenhouse

Group 7

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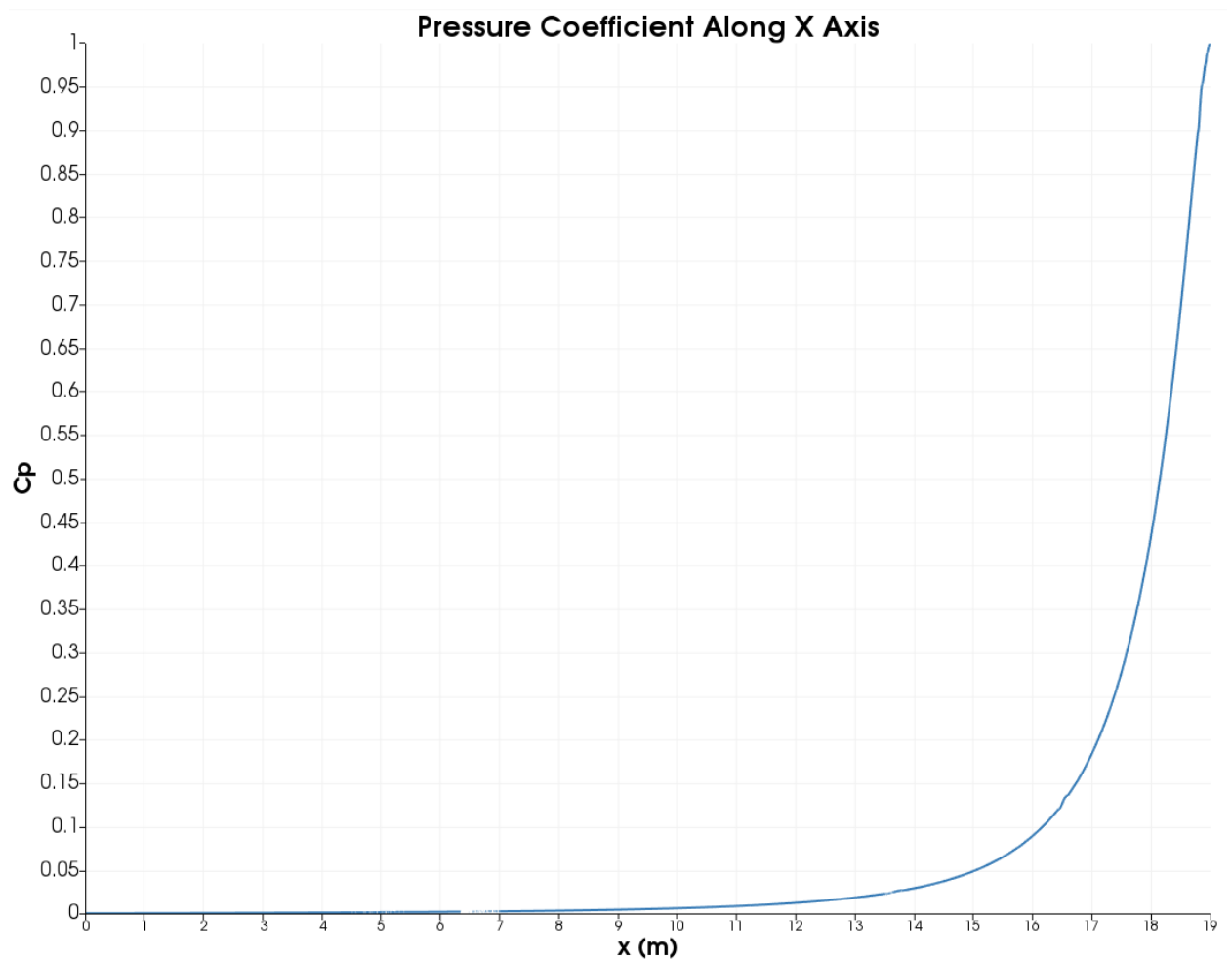
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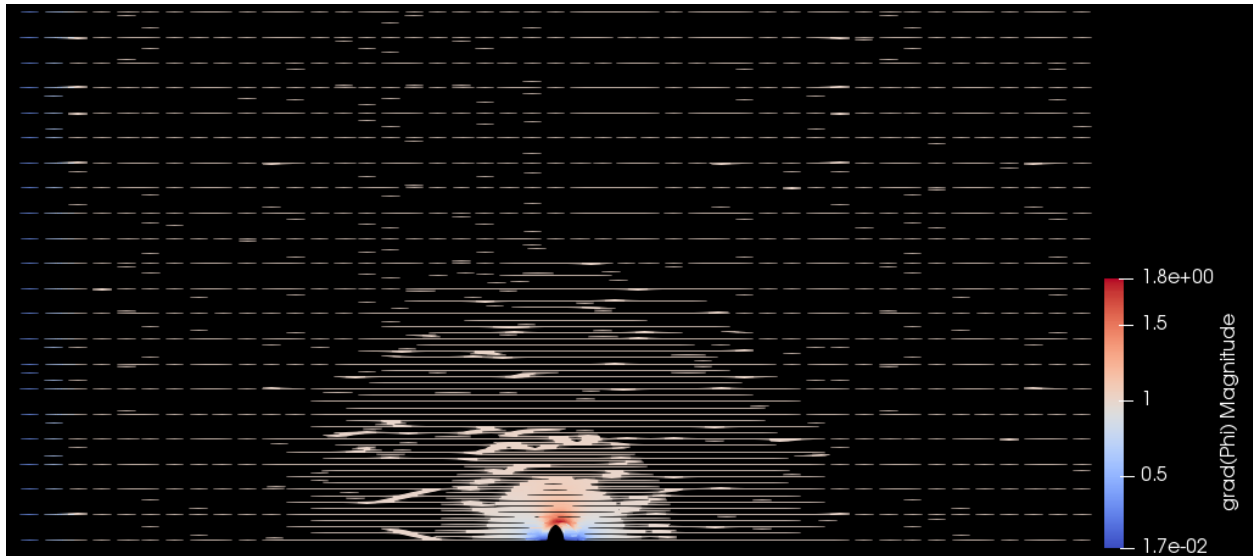
1. Force Coefficients

- $C_x = 9.73004 \times 10^{-4}$
- $C_y = -8.01344 \times 10^{-6}$
- $C_z = 7.75036$

2. Pressure Coefficient Plot



3. Greenhouse Flow Visualization



4. Mesh Cell Counts

Mesh	Cell Count
Mesh A	40,656
Mesh B	81,312
Mesh C	162,624

5. potentialFoam Execution Time

	potentialFoam Execution Time (seconds)		
Number of Cores	Mesh A	Mesh B	Mesh C
1	115.41	X	X
4	28.62	X	X
8	15.17	100.53	X
16	8.44	53.65	110.7
32	5.24	32.02	62.71
64	X	24.94	40.29
128	X	31.24	39.02
256	X	X	45.08