Fluidodinamica Computazionale Dipartimento di Scienze e Tecnologie Aerospaziali Politecnico di Milano

TITLE OF PROJECT

FIRST LAST FIRST LAST FIRST LAST



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1. Summary

[Briefly describe the goal of the project.]

2. Problem definition and background

[Introduce the problem and state the objective of your work. Briefly present the state of the art regarding the chosen topic and report a reference solution (i.e. numerical or experimental, or the exact one if available).]

2.1 Literature review

2.2 Reference solution

3. Design of Experiment

[Describe the process used to meet the project goal.]

4. Computational model

 $[Describe\ thoroughly\ the\ computational\ model/s\ used\ in\ the\ project]$

- 4.1 Problem geometry and setup
- 4.2 Mesh generation and description
- 4.3 Numerical schemes

5. Results

[Report the results of the simulations. Validate your work, i.e. show that the computational model (4) and the simulations you run (the DoE 3) were able to obtain the goal of the project]

5.1 Test 1

5.1.1 Grid convergence

6. Conclusions

Bibliography

[1] Thomas D Economon, Francisco Palacios, Sean R Copeland, Trent W Lukaczyk, and Juan J Alonso. Su2: An open-source suite for multiphysics simulation and design. *Aiaa Journal*, 54(3):828–846, 2015.

Appendix A: Resources

[Report the config files of the software used (i.e. SU2 [1] and the mesher). Also attach to this report an archive with the mesh files, solutions and the reference solution data (e.g. data points of a Cp plot ...)]

Mesh configuration files

SU2 configuration files