

# Review of: "Numerical Simulation and Computational Fluid Dynamics Analysis of Two-Dimensional Lid-Driven Cavity Flow Within the Weapon Bay of an Autonomous Fighter Drone"

Amjid Khan<sup>1</sup>

<sup>1</sup> Oklahoma State University

Potential competing interests: No potential competing interests to declare.

I really enjoyed reading this paper, I hope to see this paper online soon after addressing the comments below:

1. Introduction paragraph 2, when you generally speak about the aerodynamics applications, then give some more common examples such as its application in compressors, wind turbines etc. Below are the citations you can use for making your point very clear, these are the examples known to me already.
  - Ullah, T.; Sobczak, K.; Liśkiewicz, G.; Khan, A. Two-Dimensional URANS Numerical Investigation of Critical Parameters on a Pitch Oscillating VAWT Airfoil under Dynamic Stall. *Energies***2022**, *15*, 5625. <https://doi.org/10.3390/en15155625>
  - Khan, A.; Irfan, M.; Niazi, U.M.; Shah, I.; Legutko, S.; Rahman, S.; Alwadie, A.S.; Jalalah, M.; Glowacz, A.; Khan, M.K.A. Centrifugal Compressor Stall Control by the Application of Engineered Surface Roughness on Diffuser Shroud Using Numerical Simulations. *Materials***2021**, *14*, 2033. <https://doi.org/10.3390/ma14082033>
2. In section "boundary conditions" first paragraph, it is not mentioned anywhere about which figure the author is talking about.
3. Please keep all the figures relevant to one topic, after or in the middle of the same topic.
4. why upwind difference scheme was used, knowing the fact that it is used for solving both convective-diffusive problems.
5. In results section, 3rd Paragraph, it is mentioned that Figure 4 shows the velocity profile, which is wrong as the velocity profiles are in Figure 5 & 6.
6. Through out the analysis, I did not see which turbulence model is being used. Correct me if I am wrong but I did not see it at all.
7. While reviewing the paper, I noticed that the ANSYS licence is not mentioned owned by NUST University.
8. The results section is really small and need a little more details to be added to it.

