

The authors have done a great job in modifying and correcting the article. However, there are still some (minor) issues that I would like them to consider.

- The paper is at places unnecessary complicated to read and comprehend. I suggest that the authors take a critical look and add some sentences to guide the reader more easily through the paper. An example of this is eqs. (5) – (7) on page 5, where eq. (5) is a relation and (6) and (7) are terms, and then it states that ‘Equations (5) and (6) can be combined to give..(7)’. This is confusing, how can a relationship (5) and a term (6) be combined to give a term (7)?
- As far as I can see, eq. (12) is only valid along a horizontal stream surface. But that implies that there is no expansion, and then the whole idea breaks down about formulating an alternative version of the momentum theory, as without expansion there are no influence of the pressure on the lateral part of the stream surfaces, and therefore the axial momentum equation can be use without any problems.
- To be honest, then I have a problem in accepting eq. (24). Why should the integral of the radial velocity squared be equal to the integral of the axial induction squared at any arbitrary cross section upstream the rotor? I understand that this is a direct consequence of eq. (19). But, again, as far as I can see, the elimination of the vorticity is based on eq. (12) that assumes no expansion. With no expansion eq. (24) is clearly satisfied as here $v=a=0$. However, since eq. (28) is correct, as it can very easily be derived from the unsteady Bernoulli equation, I suggest that the point is that the right hand side of eq. (24) is outbalanced by the neglected vorticity terms. This, I think is still interesting, and deserves to be reported. In the opposite case, it would be an easy task numerically to show if eq. (24) is valid or not. Furthermore, the argument that eq. (25) is correct if a and v is continuous is somewhat vague, as it foremost demands that eq. (24) is correct at any cross section upstream of the rotor.
- I am not sure that I understand the content of Appendix C. Could you try to explain what control volumes you are using, what is $x_{0, BE}$ and what is the purpose of the appendix?