

I would like to thank the Reviewer for their comments. These are the changes I have made in the manuscript in order to implement their suggestions:

- Added a new paragraph in section 2 called “The shift symmetry”, where I mention the origin of the initial condition for the derivative of  $\theta$ . In this paragraph I briefly discuss how this can change, and give references to papers on the so-called Kinetic Misalignment Mechanism.
- The restrictions of the code are made clearer. They are now mentioned in section 4.1.
- At the end of section 3.1.1 (near the top of page 12), I briefly explain what the meaning of local integration errors.
- Other minor corrections. Most importantly, removed the “<LD>” in Method template argument.