

Dear editor,

We thank you for your assessment. To avoid confusion about the title of the manuscript (as pointed out by referee 3 and yourself), we revised the manuscript and included in the abstract that we are referring to a proverb

In this study, ~~we examine different methods to reduce uncertainty in simulations of the carbon cycle in Australia arising from biases in climate projections~~, *we open the proverbial Pandora's Box, and peer under the lid of strategies to tackle climate model ensemble uncertainty*.

We further explain the myth and link it to the narrative of our paper in the introduction

*Here, we examine multiple methods to constrain regional projections of the carbon cycle by opening Pandora's box, famous in Greek mythology. When Pandora could not resist opening the lid on her box, she allowed all the evils of the world to escape. Similarly, we could not resist testing the impact of various approaches to constraining the carbon cycle, and the challenges we identify are not easily resolvable. However, we hope that by highlighting these challenges we at least begin the process of resolving them.*

and in the implications

*To conclude, when Pandora opened the lid on her box she released the evils of the world, and these could never be put back into the box. We fear that we have also made the challenge of constraining the future regional-scale carbon budgets more difficult. We have, for example, raised more questions than answers, identified limitations of existing approaches and ultimately provided a challenge to the community to find more robust strategies to reduce the uncertainty in the projection of regional carbon stores. We acknowledge we have not provided easy answers, but we hope that by highlighting the challenges, strategies may be developed that can robustly constrain regional estimates of carbon storage.*

We hope that these adjustments address the concern about the title sufficiently.