Dear Dr Sanders,

Thanks for taking into account the reviewers remarks very carefully. Your manuscript is (almost) ready for publication. I have however a question. The 11 figures A7-A17 in the appendix are only very briefly mentioned in the text:

"The analysis in ECCOv4-r4 set out in this paper was also repeated in ECCO Version 4 Release 3 (ECCOv4-r3, covering 1992-2015, see Forget et al., 2015a), with the same conclusions reached (Fig. A7-A17)."

Why are 11 figures needed to support this sentence? If these 11 figures are significant, you should explain why by adding text in the appendix. If each of them is not significant, they should be removed.

Please decide what you prefer to do for the final version of your manuscript, regarding these figures.

Best regards,

Anne Marie Treguier

Thank you for the comment. Four of these figures have now been removed from the appendix, with the remaining figures added to Appendix B: Analysis in ECCOv4-r3. Fig. B1-B7 are a repeat of the figures in the main text but computed using ECCOv4-r3 rather than ECCOv4-r4, in order to give further confidence in our conclusions of the drivers of the 2015 cold anomaly. Fig. B1-B2 show that the 2015 cold anomaly is well-represented in the earlier release of the model. Fig. B3-B7 show that the same processes that are shown to drive the cold anomaly in ECCOv4-r4 are also responsible for driving the anomaly in ECCOv4-r3. Text has now been added to Appendix B explaining the reasons for including these figures.