

Nonlin. Processes Geophys. Discuss., referee comment RC2  
<https://doi.org/10.5194/npg-2022-15-RC2>, 2022  
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## Reply on RC1

Tamas Bodai (Referee)

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Referee comment on "The Role of Internal Variability in Regional Climate Change" by Clara Deser and Adam S. Phillips, Nonlin. Processes Geophys. Discuss.,  
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On my statement that "a sound conditional climate change [...] might not be entirely forced, but the evolution of the slow system could introduce an unforced component." i have some update. The now accepted paper by Singh et al. (J Clim, 2022?)

<https://doi.org/10.1175/JCLI-D-21-0176.1>

indicates that this would happen to the Southern Ocean surface climate in the CAN-ESM2 model. So, maybe your analysis in the European region is safe. Although, according to experience, models disagree on many things. Furthermore, their methodology is still to be scrutinised; it is different from our proposal for an initialisation scheme aimed at assessing the question of background/initialisation-dependence of climate/some E-statistics. I've written now a blog about it:

<https://www.linkedin.com/pulse/background-dependent-climate-tamas-bodai/>