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Nonlinear Processes in Geophysics
Discussions
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Interactive comment on "A methodology to obtain model-error covariances due to the discretization scheme from the parametric Kalman filter perspective" *by* Olivier Pannekoucke et al.

Anonymous Referee #2

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1, Please discuss the condition that the assumption of the decorrelation between the analysis error and the model error is valid. 2, Since the prediction error is obtained from the tangent linear model, its validity depends on the error magnitude and the forecast range. Thus the method proposed in this paper also depends on the error magnitude and the forecast range? Please discuss. 3, There are many formulas in the paper, please make sure all the symbols have been explained. For example, what is the meaning of subscript "q"? 4, To what extend can the PKF approximation provide the estimation of model-error covariance characteristics? Will it depend on the complexity of the model?

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