Presently, the authors suggest that data for the 4xCO2 simulations be output over the final 40 years of the simulation. However, this will completely miss the initial response of the circulation to the abrupt "turning-on" of CO2 forcing. This initial response is very important for understanding how the troposphere and stratosphere may couple via eddy feedbacks, and provide dynamical mechanisms for the equilibrated response seen in the final years of the simulation. Thus, I would strongly recommend having data output in the first 30 (or 40) years of the 4xCO2 simulation and in the final 30 (or 40 years) of the simulation. This will allow the community to study both the adjustment of the system to the abrupt CO2 forcing, as well as its equilibrated response.
Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-80, 2016.