

## ***Interactive comment on “OpenIFS@home version 1: a citizen science project for ensemble weather and climate forecasting” by Sarah Sparrow et al.***

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This article is a straightforward description of the OpenIFS@home version 1 system that leverages an older version of ECMWF’s forecast model at reduced resolution. My comments are minor.

1. Line 77: is an intended goal to contribute to understanding of the IFS system? Perhaps not, given the model version is older, but if so, mention here.
2. Line 169 and line 268. Which is it, 6 days or 8 days? Correct one or the other.
3. Line 179: So there are only 250 unique initial conditions, but 2000 forecasts by virtue of different stochastic noise via SPPT, correct? Some clarification here would be helpful.

4. Lines 224-228. Since in Figs. 4-5 you title panels with "IFS@ECMWF" and "Operational" it would be useful to the reader to clearly define these here. It's implied, but not explicit.

5. Line 282: I'm intrigued by the possibility that the large ensemble might be used for studying potential multi-modality. This seems to occur relatively frequently in small ensembles, but may be sampling variability. How often this persists with large ensembles would be useful to determine. Is multi-modality commonly real, or a sampling artifact?

6. Line 288: Any discussion of an update strategy? Eventually the model will lag so far behind ECMWF operations as to become less relevant as a tool.

7. Figure 1: this might be easier to see and interpret on a different map projection such as Lambert Conic Conformal.

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Discussion paper

