Earth Syst. Sci. Data Discuss., author comment AC1
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# Comment on essd-2020-312 Reviewer 1

Hannah C. Bloomfield et al.

Author comment on "Sub-seasonal forecasts of demand and wind power and solar power generation for 28 European countries" by Hannah C. Bloomfield et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-312-AC1, 2021

We thank Reviewer 1 for their positive feedback. We agree that the skill from these sub-seasonal forecast past 1 month is generally low (see Figure 2 showing no remaining skill for some variables past week 3, days 19-25). However we hope this work has shown that not all weather-driven energy variables have the same level skill at extended lead times, so depending on the region and country of consideration skill levels could be variable. Reviewer 2 has also highlighted an important point about windows of opportunity for increased skill at these extended ranges.

We have corrected any grammatical errors highlighted by your comments and revisited the section where the data is described to confirm that the description of differentiation is clear. We have also checked mathematically that this has been done correctly.

We agree that no single verification metric (or even set of metrics) can assess all aspects of forecast skill – this motivates the release of the data with the assessment here presented as a "preliminary" assessment of gross skill using common metrics.

We agree that the study of extreme events is very important, and hope that future work can examine these impacts in a more systematic way than the case studies presented here. The hindcasts contain 20 years (ECMWF) and 12 years (NCEP) respectively, so a study of the predictability and drivers of extreme events could be completed as future work. The aim here was to demonstrate the general skill levels within the dataset, to promote future collaboration. We agree that the novelty here is the dataset, and hope that it (and the described methods) can be useful to many pursuing scientific studies in the future.

A line-by-line response to your comments can be found in the supplement (attached).

Please also note the supplement to this comment:
https://essd.copernicus.org/preprints/essd-2020-312/essd-2020-312-AC1-supplement.pdf