

The article entitled, “Extending seasonal predictability of Yangtze River summer floods” by Wang and Yuan explores the seasonal predictability of both moisture flux and precipitation in the CFSv2 forecast system. The study aims to determine whether moisture flux forecasts can be used to better predict for summer flood prediction (compared to precipitation). I found the study interesting and potentially useful to decision-makers and end-users in the region. However, I have several major concerns that I hope the authors will address, as well as a number of minor comments.

Major comments:

1. While much of the study is well written, there are numerous places in the text where there are grammatical issues. These range from simple subject-verb agreement (as in the first sentence, “was” should be replaced with “were”), to passages where the language is misleading and it is not clear what the authors mean to say. The paper (and its corresponding conclusions) would benefit greatly from a thorough proofread by a colleague who can help address and correct the language issues.
2. A major conclusion of the study is that the moisture flux can be better predicted than precipitation in summers directly following ENSO events, and particularly El Niño. However, there is very limited discussion of how and why El Niño impacts this area and therefore lends itself as a potential predictor of moisture flux and hence, flooding in the region. Without providing some further discussion to the paragraph that begins on line 220 that speaks directly to how ENSO is understood to impact the area and how the plots shown in Figure 6 are consistent with this, I find that the major conclusions are not fully supported by the study at present. For example, are the moisture flux vectors shown in Figure 6 related to the anomalous high, and is that known to be forced by El Niño? Some more explanation and discussion is needed.

Minor comments:

1. Line 39-40, the sentence that mentions model precipitation being influenced by “meso-scale convections” is unclear. Here, are the authors referring to mesoscale (local) circulation patterns that impact precipitation? Also, it might be worth noting that convection schemes themselves (used to parameterize finer scale processes) would also impact forecasted precipitation.
2. Line 75: The pressure levels of the variables studied should be identified.
3. In Figure 1, is there a reason why the AC is higher for the moisture flux at 1.5 months lead-time compared to 0.5 months? It would be good if the authors could provide some understanding of why this is the case or if they believe it to be spurious because it is surprising.
4. Line 124: There is no “b” in the equation on line 123.
5. Lines 132-134: This sentence is awkward, particularly the use of the word “pummeled,” please rewrite.
6. The sentence on Lines 174-177 is also awkward and does not clearly explain the results from Figure 4.
7. Line 206: This sentence is a bit contradictory as it says “To explore the impacts of preceding El Nino signals...” and then tells us that “hit rates conditional on

- different ENSO phases...” are shown in Figure 6. Figure 6 shows both El Niño and La Niña hit rates, so really the authors are showing the impacts of preceding ENSO events (not just El Niño as is written). Please switch “El Niño” in the beginning of the sentence with “ENSO” and in the second mention of “ENSO” phases, could add “(i.e. El Niño and La Niña)”.
8. Lines 228-230 conclude that the different circulation patterns predicted for the two ENSO phases determine a higher predictability for extreme hydrologic events in post-El Niño summers. However, why is it necessarily higher predictability and not just a different signal that is predicted because of the different ENSO events? This conclusion seems like a bit of a stretch to me without understanding of **why** the El Niño signal would translate to higher predictability than La Niña based solely on the evidence presented in the manuscript.
 9. Line 373 references the “middle and lower reaches of Yangtze River basin.” However, these areas are not previously defined in the text. I assume they may be the boxes outlined in Figure 2a, but this needs to be clarified.
 10. The legend for Figure 2c defines the 850 hPa moisture flux vectors in $\text{g/cm}^2\text{hPa}\cdot\text{s}$. I have never seen this unit used before for moisture flux and would recommend it be converted to $\text{m/s kg}\cdot\text{kg}$.
 11. Figure 3: the different columns are plotted with a different longitudinal domain. It would be helpful in comparing the precipitation to the moisture flux if all panels were plotted using the same longitude bounds.
 12. Figure 4 seems to contradict what is shown in Figure 1 (see Minor Comment #3). The correlation maps shown in Figure 4 indicate that Wuhan City has a lower AC value for lead-time 1.5 than lead time 0.5, but Figure 1d indicates that the AC is 0.44 for 1.5 month lead but only 0.33 for 0.5 month lead. Why is there a discrepancy?
 13. While the methods employed are interesting and the figures generally informative, I would encourage some reorganization of Figures 2-6. Figures 2-3 examine the anomalous 2016 event that the text implies is related to the El Niño that occurs that year so when it is followed up by Figure 4 which shows the potential predictability based on all years (1982-2016), it is a bit misleading. I would recommend putting Figure 4 directly after Figure 1 and then continuing on to the Figures detailing the 2015-2016 event.