

Overall, the authors have done fair job addressing my comments. However, there are a couple issues that I am not completely satisfied with.

1. The issues of how/why CFSR was used has now been brought up by both reviewers and the editor. The editor has actually suggested a quick comparison between CFSR and other data sets and reviewer #2 has also suggested this. I agree that the overall spatial patterns of correlations ***might*** not change, but we don't know this for sure. I would also encourage the authors to provide a basic analysis to justify data choice. Simply stating that CFSR is used with ALEXI does not seem like enough.
2. I have to disagree with the authors regarding what period of record to use for standardization (see reviewer 1 comment #4). The authors state in the reply that it takes at least 30-years (that number is debatable to this day) for a stable SPI. So wouldn't at least 30 years be needed for a stable ESI? My main argument is that trends in the individual drivers will have a big impact on normalization when using different periods of record. This will be particularly important for things like temperature and dew point (and any other variables that are related to temperature). A "low" normalized temperature value with a record of 2001-2015 may not be low at all when using the 1979-2015 record. We all know the climate has been changing dramatically over the past several decades, so this is a big deal to make the study robust. For me, these periods need to be consistent for the paper to be published.

I will recommend the paper for publication once the normalization periods are consistent. The CFSR issue probably should be addressed but I realize that is a lot of extra work outside the scope of study. The authors also provide two new references pointing at CFSR validation studies.