Hydrol. Earth Syst. Sci. Discuss., 12, C466–C467, 2015 www.hydrol-earth-syst-sci-discuss.net/12/C466/2015/
© Author(s) 2015. This work is distributed under the Creative Commons Attribute 3.0 License.



## Interactive comment on "Early warning of drought in Europe using the monthly ensemble system from ECMWF" by C. Lavaysse et al.

## **Anonymous Referee #1**

Received and published: 6 March 2015

General comments This paper discusses the forecast of the ECMWF seasonal (SEAS) and their monthly ensemble forecasts to forecast drought which is measured by the standardized precipitation index (SPI1). The paper is long on statistics. There is not a lot of physical explanation. The paper is well written and should be published. Specific comments: 1. Drought usually indicates persistent lack of precipitation. In general, it means negative SPI (SPI< -1 as the indicator used by authors) for three months or longer. Therefore, the 3-months or 6-month SPIs are used to indicate drought instead of SPI1. Is there any reason that you use SPI1? 2. If you use SPI3 or SPI6, do your conclusions change? 3. You use SPI1 so how well is your system to predict drought onset? (the first time in a time series that SPI1 is below -1) 4. Do forecasts have higher skill after a drought onset? 5. It will be nice to show examples that SPI1 has high/low

C466

skill.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 1973, 2015.