

## ***Interactive comment on “Changes in the simulation of instability indices over the Iberian Peninsula due to the use of 3DVAR data assimilation” by Santos J. González-Rojí et al.***

### **Anonymous Referee #1**

Received and published: 28 April 2020

#### General comments:

This manuscript is very well-written and presents the results in a straight-forward manner. It is clear that assimilating various retrievals improves model representation of the three instability variables described. I only have a couple comments outlined below regarding the methodology details

#### Comments:

Section 2.3.2: This section is very brief on the details of the bootstrapping technique. Perhaps include more details and some references?

C1

What is exactly being verified? Model analyses after assimilation cycling or forecasts? This is not abundantly clear. If these are forecasts being verified, how do the statistics vary with lead time?

---

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-53>, 2020.

C2