

## Interactive comment on "Operational river discharge forecasting in poorly gauged basins: the Kavango River Basin case study" by P. Bauer-Gottwein et al.

## **Anonymous Referee #1**

Received and published: 13 November 2014

1) Probably, the focus of this paper is more in hydrologic engineering than hydrologic science. We do not propose a new scientific hypothesis or method. We combine different datasets and methods into an operational forecasting system for poorly gauged basins. There is some innovative value in doing this, as recognized, for instance, by reviewer 2. We agree that the scientific discussion lacks detail in places and will address that in the revision, following your detailed comments below.

If the focus (hypothesis/experimental setup etc) will not change the paper is not suitable for publication in HESS, as the study presents only an incremental scientific contribution. Other journals might be more appropriate (e.g. J of Hydrologic Engineering) in

C5051

that case.

2)The data was downloaded from http://nomads.ncdc.noaa.gov/data.php#hires\_weather\_dat The most recent data is online on the server, the older data is archived offline but can be ordered for FTP download.We hope this answers the question, we could provide detailed technical descriptions of what exactly was done on the web interface but this would probably be beyond the scope of this discussion forum.

I will check this, do the authors know if the data set is homogeneous (regarding model changes etc)

3)We report the persistence index (cf table 4) in order to compare the performance of our system to the persistence reference (i.e. last available observation). We do not see how to compute CRPS of the persistence reference, as this would require an estimate of the standard deviation of the persistence which we do not have. Additional input as to how to understand/address this comment would be very helpful.

See http://www.eumetcal.org/resources/ukmeteocal/verification/www/english/msg/ver\_prob\_

For hydrologic examples see

A comparison between ensemble and deterministic hydrological forecasts in an operational context Adv. Geosci., 29, 85–94, 2011 www.adv-geosci.net/29/85/2011/doi:10.5194/adgeo-29-85-2011

and

The use of MOGREPS ensemble rainfall forecasts in operational flood forecasting systems across England and Wales Adv. Geosci., 29, 77–84, 2011 www.adv-geosci.net/29/77/2011/ doi:10.5194/adgeo-29-77-2011

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 11071, 2014.