Hydrol. Earth Syst. Sci. Discuss., 7, C1769-C1770, 2010

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## **HESSD**

7, C1769-C1770, 2010

Interactive Comment

## Interactive comment on "Assessment of climate change impact on hydrological extremes in two source regions of the Nile River Basin" by M. T. Taye et al.

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We agree that the statement requires further clarification. We applied the methodology suggested by Allen et al. (1998, pp 58-64) to estimate the evapotranspiration with minimal data requirements of minimum and maximum temperature. This does not mean that the other variables (radiation, wind speed, rel. humidity, and air pressure) are not included in the calculation. Rather, they are approximated based on historical measurements and expert knowledge. FAO (Food and Agriculture Organization) has developed techniques for estimating the 'other' variables depending on the maximum

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and minimum temperatures and the geographical location. In our study we were limited to long term data access for the other variables. For this reason, we opted to use FAO Penman-Monteith method with its minimum requirement. We shall edit the statement to make it clearer.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 5441, 2010.

## **HESSD**

7, C1769-C1770, 2010

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