Referee comment on
"Technical note: Improving the AWAT filter with interpolation schemes for advanced processing of high resolution data"

General comments

The technical note show that the step interpolation scheme used in the AWAT filter, which reflects the resolution of the measuring system, can lead to unrealistic prediction of P and ET, if they are required in high temporal resolution (hourly or shorter time steps). Linear and spline interpolation schemes are introduced to overcome these problems.

The presented methods are very useful in estimating precise values for P and ET from weighing lysimeter measurements with a high mass and temporal resolution if the diurnal course of P and ET must be known, e.g. if root water uptake processes shall be simulated using physically based models, or macro pore flow and solute transport due to heavy but short precipitation events shall be simulated under realistic conditions.

Specific comments

In the AWAT filter the δ-value is set to the resolution of the measuring system, which leads to a step interpolation scheme. That means that values given below the resolution of the measuring system are random and are not allowed to be interpreted as measured data. Therefore in my opinion the methods presented in the paper are not part of the data evaluation process but at the starting point of data interpretation.

Although the presented improvement of the AWAT filtering method is of very high importance for further interpretation of lysimeter data and of their use in process oriented numerical modeling, I suggest the authors to remark on the point where data evaluation ends and data interpretation is going to start.

Technical corrections

P2 L32: …derivative of **the** cumulative…

P3 L29: Between 2 and 8 April, …

P6 L14: On February 16 and 17, the evapotranspiration rates were only approximately 0.35 mm d^{-1}, whereas the ET rates were estimated at the 5 mm d^{-1} level at the end of May.

P6 L23: … cumulative fluxes are **negligible** except that the …

P11 Fig. 1: Please check, if the presented window for the starting point of a rainfall event (07 July 2014 13:30 to 15:30) is at the correct position in the graph of the cum. upper boundary flux.

P12 Fig. 2: Mai → May