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6, S463–S464, 2009

Interactive Comment

## Interactive comment on "Simulation of the soil water balance of wheat using daily weather forecast messages to estimate the reference evapotranspiration" by J. Cai et al.

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In the reply to question 11 of Referee#1 posted yesterday part of the reply is missing. Therefore I reproduce below the complete comment and authors reply.

11) Irrigation depths between treatments are very different, as discussed (page 703, line 21) due to the different distribution of rainfall. While in 2007 there is more rainfall (with a rainfall of 40 mm on May 15 at the end of the cycle) in the second year mentioned the need for greater irrigation depths in all treatments except for treatment W4. Why? Why do you apply four irrigation in 2006-07 and three in 2005-06? Is it relative to fertirrigation?. This situation can be influence in the results (over- or underestimation).





Reply: Yes, changes in 2006-07 relative to 2005-06 were due to fertigation and to adopting different irrigation schedules with irrigation thresholds defined for different soil water contents, say 70%, 60% and 50% of the field capacity for T1<sup>-</sup>T3; using a canopy temperature as threshold for T4 and following the local farmer practice for T5. Because of less water application in early stages, there was a little more water application in mid-season. However, the weather was not more humid in 2007 despite a rain of 25 mm (not 40) by May 15. This is less clear in Figure 2 because different scales for precipitation were used. The text will include better information on the 4 treatments for 2005-06 and the five ones in 2006-07. This responds also to a comment by referee#2. That information was not included because the intention of the paper was not to analyse impacts of different irrigation schedules but to analyse the performance of the model when ETo was computed from weather forecast messages.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 697, 2009.

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