

## ***Interactive comment on “Technical Note: On the Matt–Shuttleworth approach to estimate crop water requirements” by J. P. Lhomme et al.***

### **Anonymous Referee #2**

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This paper gives a very clear viewpoint on the Matt-Shuttleworth (M-S) ‘one step’ approach to estimating irrigated crop evaporation. The work is valuable and interesting. I agree that using the Priestley–Taylor (P-T) approach with a fixed coefficient of 1.26 to replace the reference crop evapotranspiration (ET<sub>0</sub>) is questionable. However, I suggest the authors give a more detailed explanation, especially from the viewpoint of complementary relationship. Such as, under humid conditions, the difference between the P-T evaporation and ET<sub>0</sub> is small. However, as the surface dries without changing the available energy, ET<sub>0</sub> would depart from P-T evaporation. Then, the replace of ET<sub>0</sub> with P-T evaporation without adjustment of the coefficient would be questionable.

Only the situation that  $K_c=1$  and  $z_h=1\text{m}$  was discussed. It would be more convincing if some other situations are discussed.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 4217, 2014.

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