

## ***Interactive comment on “Comment on “Technical Note: On the Matt–Shuttleworth approach to estimate crop water requirements” by Lhomme et al. (2014)” by W. J. Shuttleworth***

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The last interactive comment by Shuttleworth clearly recognizes that deriving surface resistance from the  $K_c$  values of the FAO tables with the “true” value of the PT coefficient is problematic, since the effective weather conditions under which  $K_c$  values were determined are not specified. I think there is now an agreement between Lhomme et al. (2014) and Shuttleworth (2014) on the main points emphasized in their respective comments, namely: (1) the use of the preferred value  $r_{clim\ pref}$  derived from  $E_0 = E_{PT}$  is a default assumption recommended when the meteorological conditions under which the value of  $K_c$  was determined are unknown; (2) the Matt-Shuttleworth approach is

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easily adaptable to fine tune estimates of surface resistance by using the value of  $r_{clim\ pref}$  relevant in the conditions when the value of  $K_c$  was calibrated; (3) if UN-FAO decides to update Irrigation and Drainage Paper 56 using the Matt-Shuttleworth approach, a preliminary work should document the specific conditions under which crop coefficients were defined (temperature, radiation, humidity...).

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