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Interactive Comment

Interactive comment on "The WACMOS-ET project – Part 1: Tower-scale evaluation of four remote sensing-based evapotranspiration algorithms" by D. Michel et al.

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We thank Kevin Tu for his comments and his interest in improving the article. We added the following lines (bold) to the text:

p10752. L10: "As the SEBS and PM-MOD models have typically been used with MODIS vegetation products, a rescaling between our TIP-derived LAI and *f*APAR products against the MODIS product has been undertaken. For running the models at the tower scale, a local rescaling is conducted by a linear regression between the MOD15A2 and the TIP values co-registered at each tower. For global model





simulations, individual rescaling per biome/climate classification is conducted. For PT-JPL, given the model internal relationships between these variables and the vegetation indexes used as model inputs (see Table 1 in Fisher et al., 2008), it can be discussed whether the original TIP LAI/f APAR or the rescaled LAI/f APAR are the most appropriate to be used as model inputs. For simplicity we will apply also the rescaled LAI/f APAR, but this choice will be further evaluated in future applications of the model with the TIP LAI/f APAR inputs."

p10748. L10: "...where f wet is the relative surface wetness, f_g is green canopy fraction, fAPAR (fIPAR) is the Fraction of Absorbed (Intercepted) Photosynthetically Active Radiation, f_M is a plant moisture constraint, fAPAR_{max} is the maximum of fAPAR, f_{sm} is a soil moisture constraint, f_T is a plant temperature constraint and T_{opt} is the optimum plant growth temperature, estimated as the air temperature at the time of peak canopy activity when the highest fAPAR and minimum VPD occur. Note that as the input data set does not include fIPAR, fIPAR is derived from the rescaled project LAI by inverting the model original relationships between LAI and fIPAR."

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 10739, 2015.

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