

## Correction to Supplementary Information

Dear editor,

we have discovered an inconsistency in the supplementary information (SI) between Equ. S67 (page 13) and Equ. S68 (page 14). The original version of Equ. S67 stated (in Latex notation):

$$S = c_w \frac{W_s^{\text{eff}}}{W_{s,\text{max}}} \quad (\text{S67})$$

whereas Equ. S68 defined

$$f_{\text{soil}}^{\text{eff}} = \dots \quad (\text{S68})$$

This is incorrect and Equ. S67 has been changed to

$$S = c_w f_{\text{soil}}^{\text{eff}} \quad (\text{S67})$$

This change has been applied to the latest version of the SI as sent to the typesetter. See below the changes applied to the Latex version of the SI.

Thank you for your understanding

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lead author

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967 A different approach is therefore chosen here, following Federer's model: The
968 empirical constant  $b_e$  is redefined at each daily integration such that at the
969 time of the highest transpirational demand,  $E_{t,\text{max}}$ , assumed at 13:00 hours
970 in the model, the transpiration rate from Equ. \ref{EvEt} is less or equal to
971 a supply rate,  $S$ . This rate is constant over a day and depends on soil water
972 content and root density. Without detailed knowledge of soil hydrology and root
973 distribution, a reasonable approximation according to \cite{federer82} is
974 \begin{equation} \label{S}
975 S = c_w f_{\text{soil}}^{\text{eff}} \frac{W_s^{\text{eff}}}{W_{s,\text{max}}}
976 \end{equation}
977 with values for  $c_w$  in the range of 0.5 to 2.0-mm/hour and an effective
978 soil water content ratio,  $\frac{W_s^{\text{eff}}}{W_{s,\text{max}}}$  (Equ. \ref{Weff}). In particular,  $b_e=0$  if
979 demand,  $E_{t,\text{max}}$ , is less than  $S$  throughout the day.
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