



Conversion latent heat flux into evaporation

Given values: latent heat flux λE in $[\text{W m}^{-2}]$ for a day

Searched value: E in mm

Calculation: λ $[\text{W m}^{-2} \text{ mm}^{-1}]$ is dependent on airtemperatur T $[\text{°C}]$ calculated according to (DVWK 1996), P.3

$$\lambda = 28.9 - 0.028 * T$$

λ is the heat needed for the evaporation of 1 mm.

λ for chosen temperatures

T $[\text{°C}]$	λ $[\text{W m}^{-2} \text{ mm}^{-1}]$
-20	29.46
-10	29.18
0	28.90
10	28.62
20	28.34
30	28.06
40	27.78

Reference

DVWK (1996). Ermittlung der Verdunstung von Land- und Wasserflächen. Bonn, Wirtschafts- und Verlagsgesellschaft Gas und Wasser mbH Bonn.