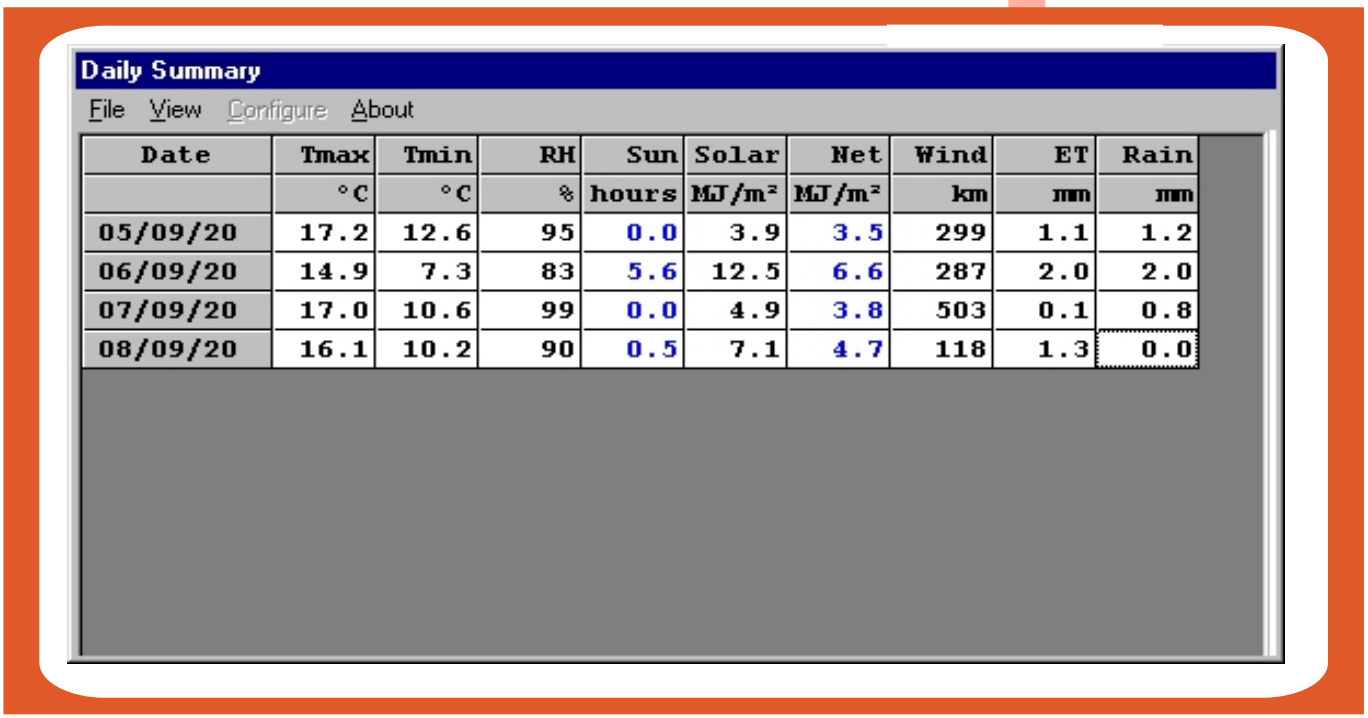
MINIMET

Reference Evapotranspiration for Automatic Weather Stations (AWSET)

This program will read data files generated by an automatic weather station and calculate reference Evapotranspiration (Eto) and Evaporation either daily or for each timestep of the data. The minimum required input data are: Air temperature, Humidity, Solar Radiation and Windspeed. Rainfall measurments are also required, this data can either be taken from the automatic weather station or entered manually.

The user can configure the program to accept data in a range of units and formats, thus the software will work with most automatic weather stations as long as they produce an ASCII format output file. The software is fully compatible with Skye DataHog and MiniMet dataloggers.

ET can be calculated by three methods; Penman-Monteith method (daily or for each timestep), Penman method (daily) or FAO Modified Penman method (daily) Open water evaporation is calculated using the Penman method.



Date	Tmax	Tmin	RH	Sun	Solar	Net	Wind	ET	Rain
	°C	°C	%	hours	MJ/m²	MJ/m²	km	mm	mm
05/09/20	17.2	12.6	95	0.0	3.9	3.5	299	1.1	1.2
06/09/20	14.9	7.3	83	5.6	12.5	6.6	287	2.0	2.0
07/09/20	17.0	10.6	99	0.0	4.9	3.8	503	0.1	0.8
08/09/20	16.1	10.2	90	0.5	7.1	4.7	118	1.3	0.0

Output

The ET, evaporation, rainfall and the daily summary of the met data can be viewed on the screen or saved in an ASCII format file that can be printed, loaded into a spreadsheet or used as input for other programs.

Technical

Penman Monteith method follows the FAO Irrigation and Drainage Paper Number 56 (1998)

32-bit (Windows 95 or higher) operating system

Y2K Compliant (conforms to BSI DISC PD2000-1:1998)

Further Information

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