

A CRITICAL TABLE FOR THORNTHWAITE'S POTENTIAL EVAPOTRANSPIRATION

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A considerable amount of time can be saved in determining potential evapotranspiration by the Thornthwaite method by transforming tables such as those given in *Hydrological Procedure No. 14* (Toebe, 1968) into critical tables. By this is meant tables which show only where the value of the unadjusted potential evapotranspiration changes.

For example, the critical table for heat index 40.0 would be:

Temperature (°F)	Unadjusted potential evapotranspiration (in.)
32.0 to 34.0	0.00
34.5 to 36.5	0.01
37.0 to 40.5	0.02
41.0 to 42.5	0.03
43.0 to 46.0	0.04
46.5 to 48.0	0.05
48.5 to 51.5	0.06
52.0 to 54.5	0.07
55.0 to 56.5	0.08
57.0 to 59.5	0.09
60.0 to 61.5	0.10
62.0 to 64.5	0.11
65.0 to 66.5	0.12
67.0 to 69.5	0.13
70.0 to 71.5	0.14
72.0 to 74.5	0.15
75.0 to 76.0	0.16
76.5 to 79.0	0.17
79.5 to 80.0	0.18

This has the effect of reducing the table from 96 entries to 19 entries.

REFERENCE

Toebe, C. 1968: *Computation of the potential evapotranspiration by the Thornthwaite method*. Handbook of Hydrological Procedures: Procedure No. 14. Wellington, N.Z. Ministry of Works. 13 pp.

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