

Increment (°F) for Wind in THSW Index										
Temp (°F)	Wind Speed (mph)									
	0	5	10	15	20	25	30	35	40	
50	0	-2	-4	-5	-6	-7	-8	-9	-9	
55	0	-1	-3	-5	-6	-7	-8	-9	-9	
60	0	-1	-3	-5	-6	-7	-8	-9	-9	
65	0	0	-3	-5	-6	-7	-8	-9	-9	
70	0	0	-2	-4	-5	-6	-7	-8	-9	
75	0	0	-2	-3	-4	-5	-6	-7	-7	
80	0	0	-1	-2	-3	-5	-5	-6	-6	
85	0	0	-1	-2	-3	-3	-4	-4	-4	
90	0	0	0	-1	-2	-2	-2	-2	-2	
95	0	0	0	0	0	0	1	1	1	
100	0	0	0	0	1	2	3	3	3	
105	0	0	0	1	2	3	4	5	5	
110	0	0	0	2	3	4	5	5	6	
115	0	0	0	1	2	3	4	6	6	
120	0	0	0	1	1	2	3	4	4	
125	0	0	0	0	0	1	1	1	1	
130	0	0	0	0	0	0	0	0	0	

Increment (°F) for Wind in THSW Index																
Temp (°F)	Wind Speed (mph)															
	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	
50	-9	-10	-11	-12	-12	-13	-13	-14	-14	-15	-15	-15	-16	-16	-16	
55	-9	-10	-10	-11	-11	-12	-12	-13	-13	-13	-13	-14	-14	-14	-14	
60	-9	-10	-10	-10	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-12	
65	-9	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-11	-11	-11	
70	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	

Sun

The third term is sun. This term, Q_g , is actually a combination of four terms (direct incoming solar, indirect incoming solar, terrestrial, and sky radiation). The term depends upon wind speed to determine how strong an effect it is (discussed later).

It is assumed that a flat, fixed position sensor is being used as in the Vantage Pro Plus system.

$$Q_g = Q_1 + Q_2 + Q_3 - Q_4$$

Direct Incoming Solar Radiation Term (Q_1)

First, calculate what the solar radiation reading would be if the sensor were tilted normal to the sun. The following parameters are calculated in the same manner as for the ET formula (see ET section).

- Sky cover, c
- Solar Zenith Angle, θ