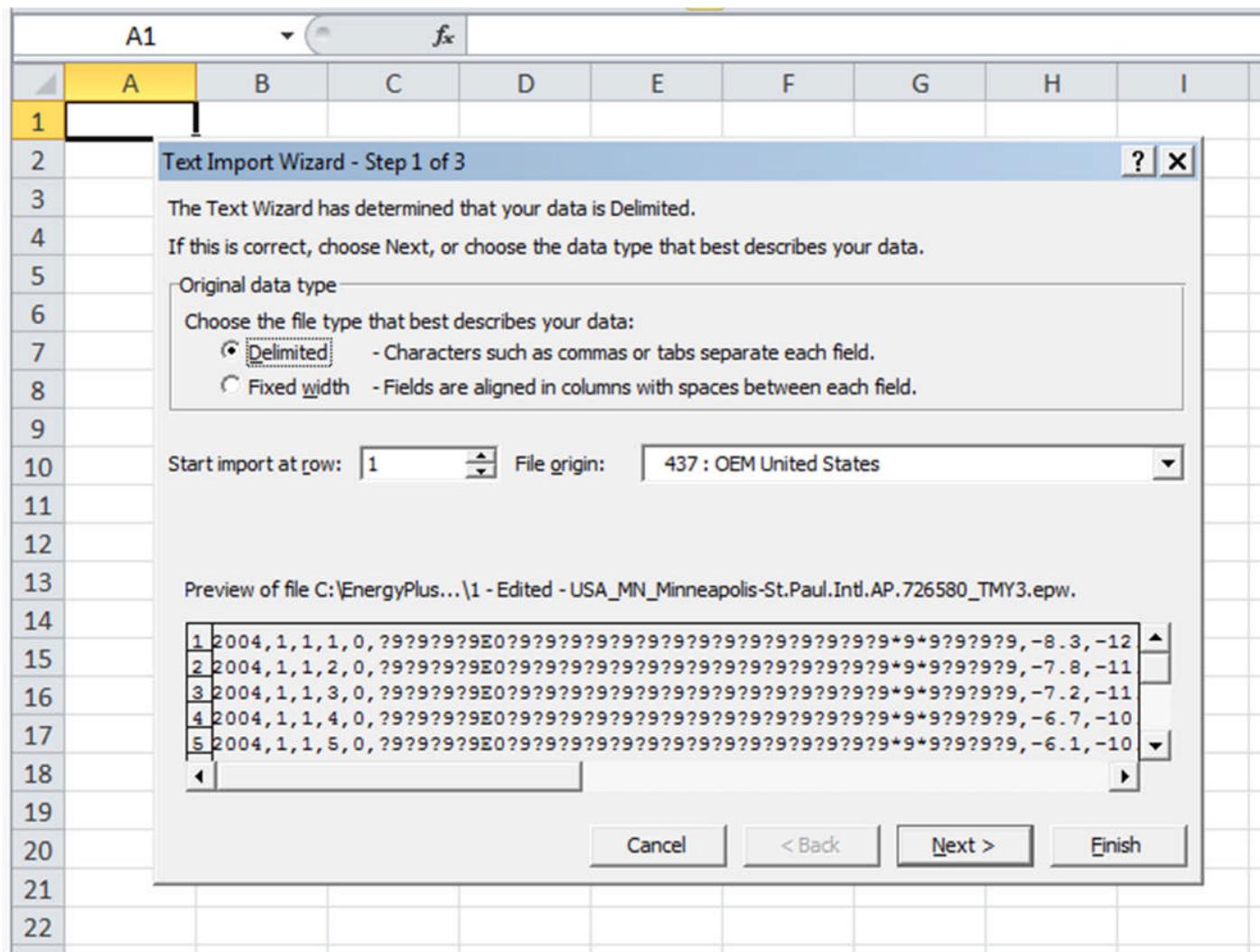


Original EPW Weather File

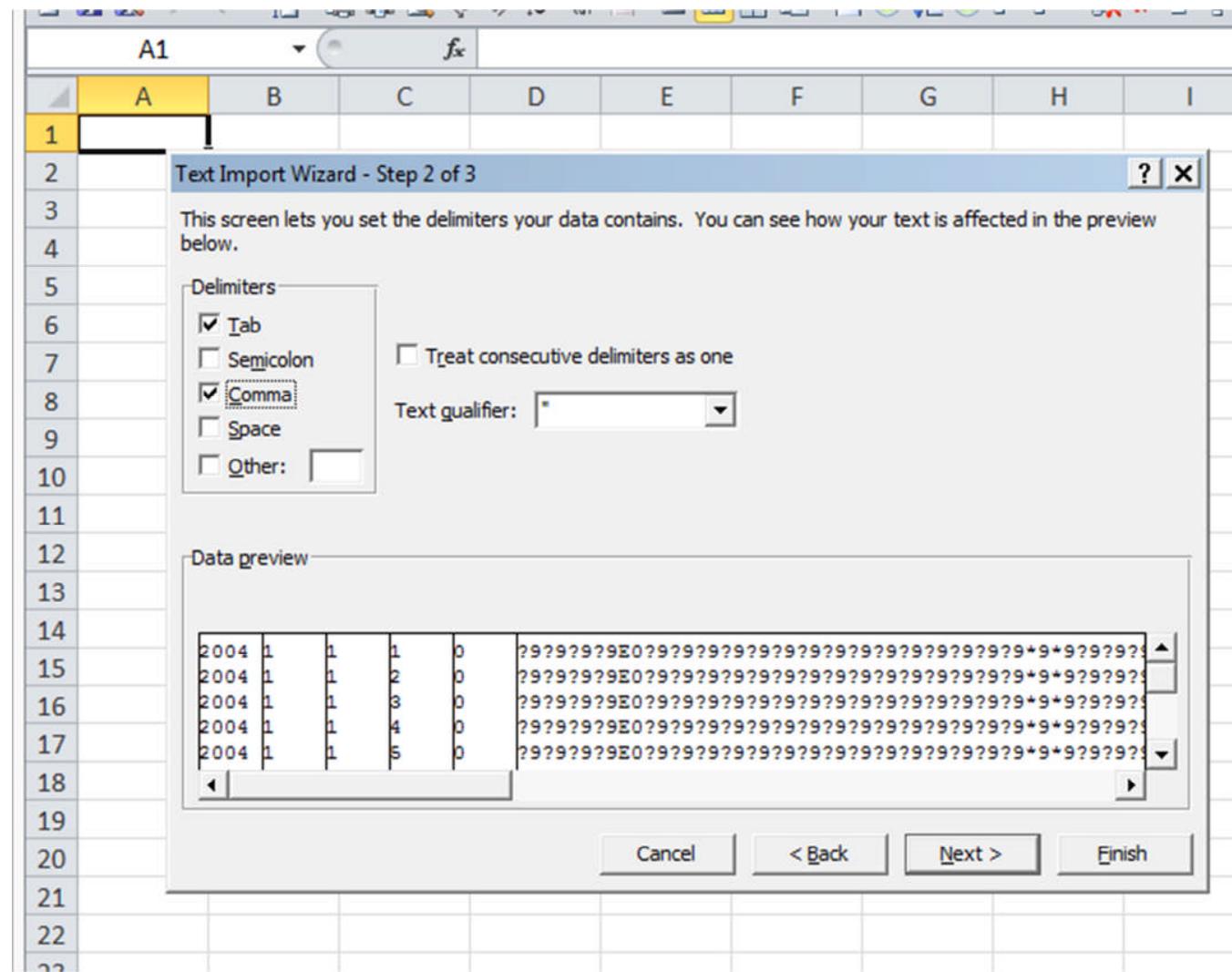
Edited EPW Text File

(Delete Lines up to first Hourly Record Jan 1st, 1:00 AM)

Open EXCEL and TEXT File (Click on All Files)

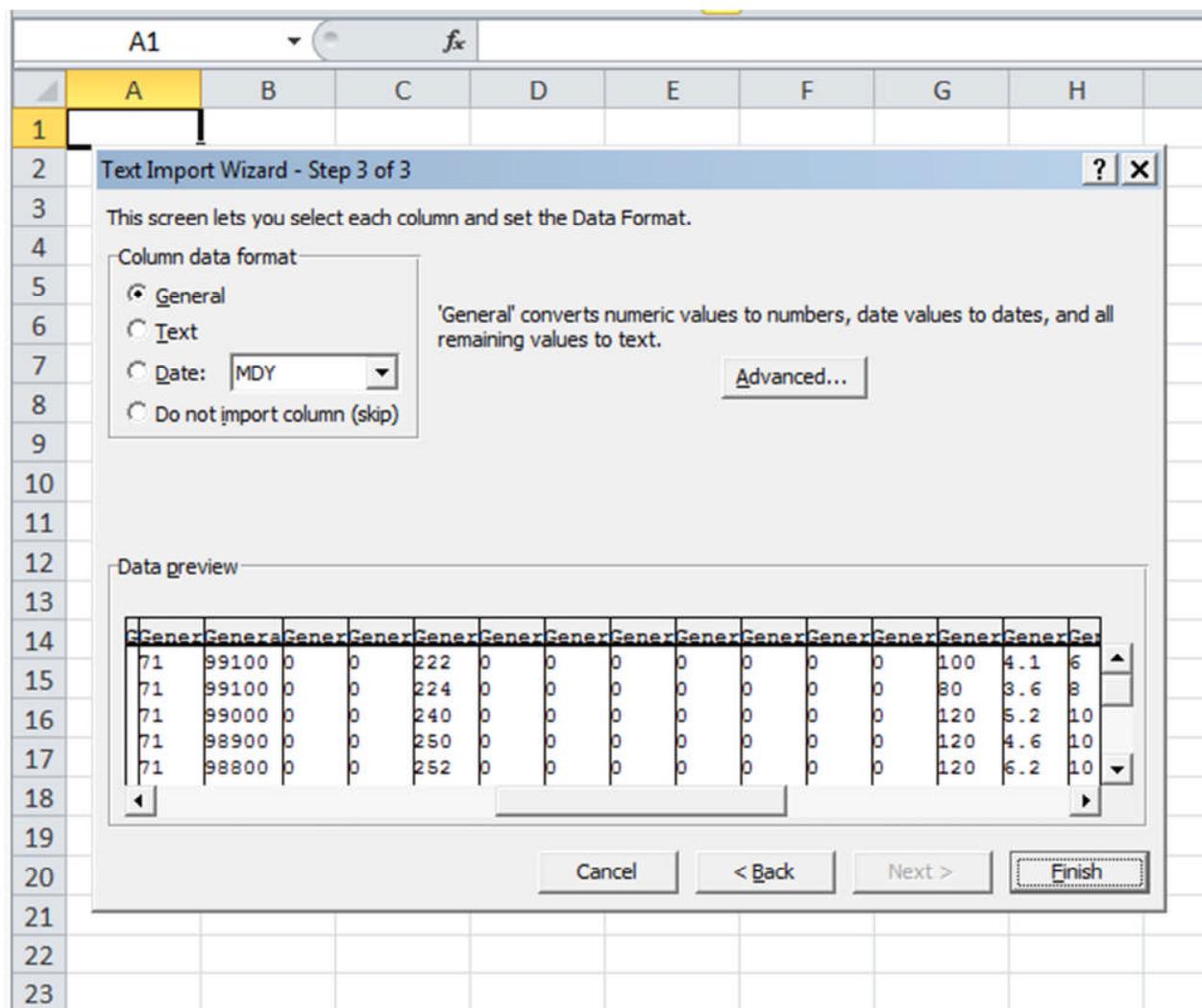


Values (Data) separated by TAB and COMMA



Check Columns and Finish

(To Adjust Separators - Drag and Move Vertical Line Separators. Double Click to Insert Separators)



Text File read into Excel. Save as Excel File

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	2004	1	1	1	0	97979	-8.3	-12.2	71	99100	0	0	222	0	0	0	0	0	0	0	100	4.1	6	5	16	7620	9	1E+09	89	0.06	0	88	0.42	0	1	
2	2004	1	1	2	0	97979	-7.8	-11.7	71	99100	0	0	224	0	0	0	0	0	0	0	80	3.6	8	5	16	3962	9	1E+09	89	0.06	0	88	0.42	0	1	
3	2004	1	1	3	0	97979	-7.2	-11.1	71	99000	0	0	240	0	0	0	0	0	0	0	120	5.2	10	9	16	3353	9	1E+09	89	0.06	0	88	0.42	0	1	
4	2004	1	1	4	0	97979	-6.7	-10.6	71	98900	0	0	250	0	0	0	0	0	0	0	120	4.6	10	10	16	3353	9	1E+09	89	0.06	0	88	0.42	0	1	
5	2004	1	1	5	0	97979	-6.1	-10	71	98800	0	0	252	0	0	0	0	0	0	0	120	6.2	10	10	16	3353	9	1E+09	89	0.06	0	88	0.42	0	1	
6	2004	1	1	6	0	97979	-6.1	-10	71	98800	0	0	230	0	0	0	0	0	0	0	120	7.2	9	4	16	3962	9	1E+09	89	0.06	0	88	0.42	0	1	
7	2004	1	1	7	0	97979	-5.6	-10	68	98600	0	0	233	0	0	0	0	0	0	0	120	7.2	8	5	16	3962	9	1E+09	89	0.06	0	88	0.42	0	1	
8	2004	1	1	8	0	97979	-5	-10	65	98500	1	177	244	0	0	0	0	0	0	0	110	7.7	9	8	16	4572	9	1E+09	89	0.06	0	88	0.42	0	1	
9	2004	1	1	9	0	97979	-4.4	-9.4	65	98400	121	1415	247	0	0	0	0	0	0	0	120	7.2	10	8	16	4572	9	1E+09	89	0.06	0	88	0.42	0	1	
10	2004	1	1	10	0	97979	-3.3	-8.9	62	98400	300	1415	252	68	0	68	7656	0	7656	2421	120	5.7	9	8	16	4572	9	1E+09	100	0.06	0	88	0.42	0	1	
11	2004	1	1	11	0	97979	-2.2	-7.8	62	98300	434	1415	270	112	0	112	12588	0	12588	4076	130	6.7	10	10	16	1036	9	1E+09	100	0.06	0	88	0.42	0	1	
12	2004	1	1	12	0	97979	-1.7	-7.2	63	98100	512	1415	272	87	0	87	10164	0	10164	3640	140	7.2	10	10	16	732	9	1E+09	100	0.06	0	88	0.42	0	1	
13	2004	1	1	13	0	97979	-0.6	-5.6	66	97900	529	1415	278	90	0	90	10526	0	10526	3791	110	6.2	10	10	16	549	9	1E+09	100	0.06	0	88	0.42	0	1	
14	2004	1	1	14	0	97979	0	-4.4	69	97800	484	1415	282	69	0	69	8157	0	8157	2942	150	5.2	10	10	16	549	9	1E+09	100	0.06	0	88	0.42	0	1	
15	2004	1	1	15	0	97979	0.6	-2.8	76	97900	379	1415	286	96	6	95	10847	318	10761	3406	150	4.1	10	10	12.8	427	9	1E+09	110	0.06	0	88	0.42	0	1	
16	2004	1	1	16	0	97979	0.6	-1.1	87	97800	223	1415	288	55	5	54	6112	101	6096	1822	160	4.6	10	10	12.8	213	9	1E+09	100	0.06	0	88	0.42	0	1	
17	2004	1	1	17	0	97979	0.6	-1.1	87	97800	44	955	288	3	0	3	384	0	384	121	180	3.1	10	10	8	213	9	1E+09	89	0.06	0	88	0.42	0	1	
18	2004	1	1	18	0	97979	0.6	-1.1	87	97900	0	0	288	0	0	0	0	0	0	0	220	2.6	10	10	9.6	335	9	1E+09	89	0.06	0	88	0.42	0	1	
19	2004	1	1	19	0	97979	0.6	-1.1	87	97900	0	0	288	0	0	0	0	0	0	0	10	10	8	457	9	1E+09	80	0.06	0	88	0.42	0	1			
20	2004	1	1	20	0	97979	0	-1.7	87	97900	0	0	258	0	0	0	0	0	0	0	130	2.1	3	3	8	7777	9	1E+09	69	0.06	0	88	0.42	0	1	
21	2004	1	1	21	0	97979	-1.1	-2.2	91	97900	0	0	242	0	0	0	0	0	0	0	150	1.5	0	0	8	7777	9	1E+09	60	0.06	0	88	0.42	0	1	
22	2004	1	1	22	0	97979	-1.7	-2.2	96	98000	0	0	240	0	0	0	0	0	0	0	190	2.1	0	0	0	64	7777	9	1E+09	60	0.06	0	88	0.42	0	1
23	2004	1	1	23	0	97979	-2.2	-2.8	95	98000	0	0	238	0	0	0	0	0	0	0	190	2.1	0	0	4	7777	9	1E+09	60	0.06	0	88	0.42	0	1	
24	2004	1	1	24	0	97979	-3.9	-4.4	96	98000	0	0	245	0	0	0	0	0	0	0	0	0	5	5	4	7777	9	1E+09	60	0.06	0	88	0.42	0	1	
25	2004	1	2	1	0	97979	-4.4	-5	95	97900	0	0	242	0	0	0	0	0	0	0	190	1.5	5	5	16	7777	9	1E+09	69	0.06	0	88	0.42	0	1	
26	2004	1	2	2	0	97979	-4.4	-4.4	100	98000	0	0	239	0	0	0	0	0	0	0	160	1.5	3	3	32	7777	9	1E+09	69	0.06	0	88	0.42	0	1	
27	2004	1	2	3	0	97979	-5.6	-6.1	96	97900	0	0	231	0	0	0	0	0	0	0	0	0	2	2	8	7777	9	1E+09	80	0.06	0	88	0.42	0	1	
28	2004	1	2	4	0	97979	-6.1	-6.7	95	97900	0	0	233	0	0	0	0	0	0	0	150	2.1	5	4	64	7777	9	1E+09	80	0.06	0	88	0.42	0	1	
29	2004	1	2	5	0	97979	-5	-6.1	91	97800	0	0	239	0	0	0	0	0	0	0	80	3.6	8	5	6.4	4572	9	1E+09	89	0.06	0	88	0.42	0	1	
30	2004	1	2	6	0	97979	-3.9	-5	91	97800	0	0	246	0	0	0	0	0	0	0	70	4.1	8	6	9.6	3658	9	1E+09	100	0.06	0	88	0.42	0	1	
31	2004	1	2	7	0	97979	-3.9	-4.4	96	97700	0	0	247	0	0	0	0	0	0	0	60	3.6	9	6	9.6	3658	9	1E+09	100	0.06	0	88	0.42	0	1	
32	2004	1	2	8	0	97979	-3.3	-3.9	95	97700	1	177	245	0	0	0	0	0	0	0	80	3.6	8	4	8	3658	9	1E+09	100	0.06	0	88	0.42	0	1	
33	2004	1	2	9	0	97979	-2.2	-3.3	91	97600	121	1415	261	0	0	0	0	0	0	0	100	6.2	10	8	4.8	4572	9	1E+09	100	0.06	0	88	0.42	0	1	
34	2004	1	2	10	0	97979	-1.7	-2.8	91	97600	300	1415	263	181	390	97	18100	29900	11700	18500	120	7.7	9	8	4.8	6096	9	1E+09	100	0.06	0	88	0.42	0	1	
35	2004	1	2	11	0	97979	-1.1	-2.2	91	97500	435	1415	262	238	334	135	25000	30400	15600	27900	120	5.7	9	7	8	4572	9	1E+09	110	0.06	0	88	0.42	0	1	
36	2004	1	2	12	0	97979	0	-1.7	87	97300	514	1415	264	181	67	156	19800	6400	17400	42100	120	5.7	8	6	8	4572	9	1E+09	110	0.06	0	88	0.42	0	1	
37	2004	1	2	13	0	97979	1.7	-11	81	97100	531	1415	279	263	234	175	28400	22600	19900	40500	110	6.2	9	8	8	4572	9	1E+09	129	0.06	0	88	0.42	0	1	
38	2004	1	2	14	0	97979	1.7	-0.6	84	97000	486	1415	293	69	0	69	8200	0	8200	29500	120	5.2	10	10	8	549	9	1E+09	150	0.06	0	88	0.42	0	1	
39	2004	1	2	15	0	97979	1.7	-0.6	84	97000	382	1415	293	113	41	101	12300	3600	11300	26300	120	5.2	10	10	4.8	549	9	1E+09	170	0.06	0	88	0.42	0		

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(Locate cursor in Cell B-9 and Copy)

Calculations in IP Units

Summary Reports in IP and SI Units

E39		=EPW-Calculations in IP-Units!E41																																				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM
Minneapolis		EPW - Energy Plus Weather File - SI Units														Minneapolis														EPW - Energy Plus Weather File - IP Units								
		1 ft3/lb =	0.06243000	m3/kg		1 lb/ft3 =	16.01846344	kg/m3		1 Btu/lb =	2.32444623	kJ/kg			1 m3/kg =	16.01846352	ft3/lb		1 kg/m3 =	0.06242796	lb/ft3			1 kl/kg =	0.43020999	Btu/lb												
5	Hour of Year	Year	Month	Day	Hour	Dry-Bulb DB (C)	Dew-Point DP (C)	Rel-Humidity RH (%)	Wet-Bulb WB (C)	Atmos. Press. P (Pa)	Humid Ratio W (kg/kg)	Spec. Volume V (m3/kg)	Density D (kg/m3)	Enthalpy H (kJ/kg)	Normal Rad (Wh/m2)	Sky Rad (Wh/m2)	Wind Direction	Wind Speed (m/s)	Hour of Year	Year	Month	Day	Hour	Dry-Bulb DB (F)	Dew-Point DP (F)	Rel-Humidity RH (%)	Wet-Bulb WB (F)	Atmos. Press. P (psi)	Humid Ratio W (lbs/lb)	Spec. Volume V (ft3/lb)	Density D (lbs/ft3)	Enthalpy H (btu/lb)	Normal Rad (btuh/sqft)	Sky Rad (btuh/sqft)	Wind Direction	Wind Speed (mph)		
6	1	2004	1	1	1	-8.3	-12.2	71	-9.3	99100	0.0015	0.768	1.303	13.2	0	222	100	4.1	1	2004	1	1	1	17.1	10.0	71	15.2	14.4	0.0015	12.294	0.081	5.7	0	70	100	9		
7	2	2004	1	1	2	-7.8	-11.7	71	-8.9	99100	0.0015	0.769	1.300	13.9	0	224	80	3.6	2	2004	1	1	2	18.0	10.9	71	16.0	14.4	0.0015	12.318	0.081	6.0	0	71	80	8		
8	3	2004	1	1	3	-7.2	-11.1	71	-8.3	99000	0.0016	0.772	1.296	14.6	0	240	120	5.2	3	2004	1	1	3	19.0	12.0	71	17.0	14.4	0.0016	12.360	0.081	6.3	0	76	120	12		
9	4	2004	1	1	4	-6.7	-10.6	71	-7.9	98900	0.0017	0.774	1.292	15.3	0	250	120	4.6	4	2004	1	1	4	19.9	12.9	71	17.9	14.3	0.0017	12.397	0.081	6.6	0	79	120	10		
10	5	2004	1	1	5	-6.1	-10.0	71	-7.3	98800	0.0018	0.777	1.288	16.1	0	252	120	6.2	5	2004	1	1	5	21.0	14.0	71	18.9	14.3	0.0018	12.439	0.080	6.9	0	80	120	14		
11	6	2004	1	1	6	-6.1	-10.0	71	-7.3	98800	0.0018	0.777	1.288	16.1	0	230	120	7.2	6	2004	1	1	6	21.0	14.0	71	18.9	14.3	0.0018	12.439	0.080	6.9	0	73	120	16		
12	7	2004	1	1	7	-5.6	-10.0	68	-7.0	98600	0.0018	0.780	1.283	16.6	0	233	120	7.2	7	2004	1	1	7	21.9	14.0	68	19.5	14.3	0.0018	12.488	0.080	7.1	0	74	120	16		
13	8	2004	1	1	8	-5.0	-10.0	65	-6.5	98500	0.0018	0.782	1.279	17.2	177	244	110	7.7	8	2004	1	1	8	23.0	14.0	65	20.2	14.3	0.0018	12.529	0.080	7.4	56	77	110	17		
14	9	2004	1	1	9	-4.4	-9.4	65	-6.0	98400	0.0018	0.785	1.274	18.0	1415	247	120	7.2	9	2004	1	1	9	24.1	15.1	65	21.2	14.3	0.0018	12.571	0.080	7.8	449	78	120	16		
15	10	2004	1	1	10	-3.3	-8.9	62	-5.1	98400	0.0019	0.788	1.269	19.3	1415	252	120	5.7	10	2004	1	1	10	26.1	16.0	62	22.8	14.3	0.0019	12.624	0.079	8.3	449	80	120	13		
16	11	2004	1	1	11	-2.2	-7.8	62	-4.1	98300	0.0021	0.792	1.262	20.9	1415	270	130	6.7	11	2004	1	1	11	28.0	18.0	62	24.6	14.3	0.0021	12.692	0.079	9.0	449	86	130	15		
17	12	2004	1	1	12	-1.7	-7.2	63	-3.6	98100	0.0022	0.796	1.257	21.7	1415	272	140	7.2	12	2004	1	1	12	28.9	19.0	63	25.5	14.2	0.0022	12.744	0.078	9.3	449	86	140	16		
18	13	2004	1	1	13	-0.6	-5.6	66	-2.5	97900	0.0025	0.801	1.249	23.5	1415	278	110	6.2	13	2004	1	1	13	30.9	21.9	66	27.5	14.2	0.0025	12.827	0.078	10.1	449	88	110	14		
19	14	2004	1	1	14	0.0	-4.4	69	-1.8	97800	0.0027	0.804	1.244	24.7	1415	282	150	5.2	14	2004	1	1	14	32.0	24.1	69	28.8	14.2	0.0027	12.874	0.078	10.6	449	89	150	12		
20	15	2004	1	1	15	0.6	-2.8	76	-0.8	97900	0.0031	0.805	1.242	26.3	1415	286	150	4.1	15	2004	1	1	15	33.1	27.0	76	30.6	14.2	0.0031	12.897	0.078	11.3	449	91	150	9		
21	16	2004	1	1	16	0.6	-1.1	87	-0.2	97800	0.0036	0.807	1.240	27.4	1415	288	160	4.6	16	2004	1	1	16	33.1	30.0	87	31.7	14.2	0.0036	12.919	0.077	11.8	449	91	160	10		
22	17	2004	1	1	17	0.6	-1.1	87	-0.2	97800	0.0036	0.807	1.240	27.4	955	288	180	3.1	17	2004	1	1	17	33.1	30.0	87	31.7	14.2	0.0036	12.919	0.077	11.8	303	91	180	7		
23	18	2004	1	1	18	0.6	-1.1	87	-0.2	97900	0.0036	0.806	1.241	27.4	0	288	220	2.6	18	2004	1	1	18	33.1	30.0	87	31.7	14.2	0.0036	12.906	0.077	11.8	0	91	220	6		
24	19	2004	1	1	19	0.6	-1.1	87	-0.2	97900	0.0036	0.806	1.241	27.4	0	288	0	0.0	19	2004	1	1	19	33.1	30.0	87	31.7	14.2	0.0036	12.906	0.077	11.8	0	91	0	0		
25	20	2004	1	1	20	0.0	-1.7	87	-0.7	97900	0.0034	0.804	1.244	26.4	0	258	130	2.1	20	2004	1	1	20	32.0	28.9	87	30.7	14.2	0.0034	12.874	0.078	11.3	0	82	130	5		
26	21	2004	1	1	21	-1.1	-2.2	91	-1.6	97900	0.0033	0.800	1.250	24.9	0	242	150	1.5	21	2004	1	1	21	30.0	28.0	91	29.1	14.2	0.0033	12.819	0.078	10.7	0	77	150	3		
27	22	2004	1	1	22	-1.7	-2.2	96	-2.0	98000	0.0033	0.798	1.254	24.3	0	240	0	0.0	22	2004	1	1	22	28.9	28.0	96	28.5	14.2	0.0033	12.778	0.078	10.5	0	76	0	0		
28	23	2004	1	1	23	-2.2	-2.8	95	-2.5	98000	0.0031	0.796	1.256	23.4	0	238	190	2.1	23	2004	1	1	23	28.0	27.0	95	27.5	14.2	0.0031	12.752	0.078	10.1	0	75	190	5		
29	24	2004	1	1	24	-3.9	-4.4	96	-4.2	98000	0.0028	0.791	1.265	20.8	0	245	0	0.0	24	2004	1	1	24	25.0	24.1	96	24.5	14.2	0.0028	12.665	0.079	9.0	0	78	0	0		
30	25	2004	1	2	1	-4.4	-5.0	95	-4.7	97900	0.0026	0.790	1.266	20.0	0	242	190	1.5	25	2004	1	2	1	24.1	23.0	95	23.6	14.2	0.0026	12.651	0.079	8.6	0	77	190	3		
31	26	2004	1	2	2	-4.4	-4.4	100	-4.5	98000	0.0028	0.789	1.267	20.3	0	239	160	1.5	26	2004	1	2	2	24.1	24.1	100	23.9	14.2	0.0028	12.641	0.079	8.7	0	76	160	3		
32	27	2004	1	2	3	-5.6	-6.1	96	-5.8	97900	0.0024	0.786	1.272	18.3	0	231	0	0.0	27	2004	1	2	3	21.9	21.0	96	21.5	14.2	0.0024	12.591	0.079	7.9	0	73	0	0		
33	28	2004	1	2	4	-6.1	-6.7	95	-6.4	97900	0.0023	0.784	1.275	17.5	0	233	150	2.1	28	2004	1	2	4	21.0	19.9	95	20.6	14.2	0.0023	12.565	0.080	7.5	0	74	150	5		
34	29	2004	1	2	5	-5.0	-6.1	91	-5.4	97800	0.0024	0.789	1.268	18.9	0	239	80	3.6	29	2004	1	2	5	23.0	21.0	91	22.2	14.2	0.0024	12.632	0.079	8.1	0	76	80	8		
35	30	2004	1	2	6	-3.9	-5.0	91	-4.4	97800	0.0026	0.792	1.263	20.5	0	246	70	4.1	30	2004	1	2	6	25.0	23.0	91	24.1	14.2	0.0026	12.688	0.079	8.8	0	78	70	9		
36	31	2004	1	2	7	-3.9	-4.4	96	-4.2	97700	0.0028	0.793	1.261	20.9	0	247	60	3.6	31	2004	1	2	7	25.0	24.1	96	24.5	14.2	0.0028	12.704	0.079	9.0	0	78	60	8		

Analyze EnergyPlus EPW files for Summary Reports

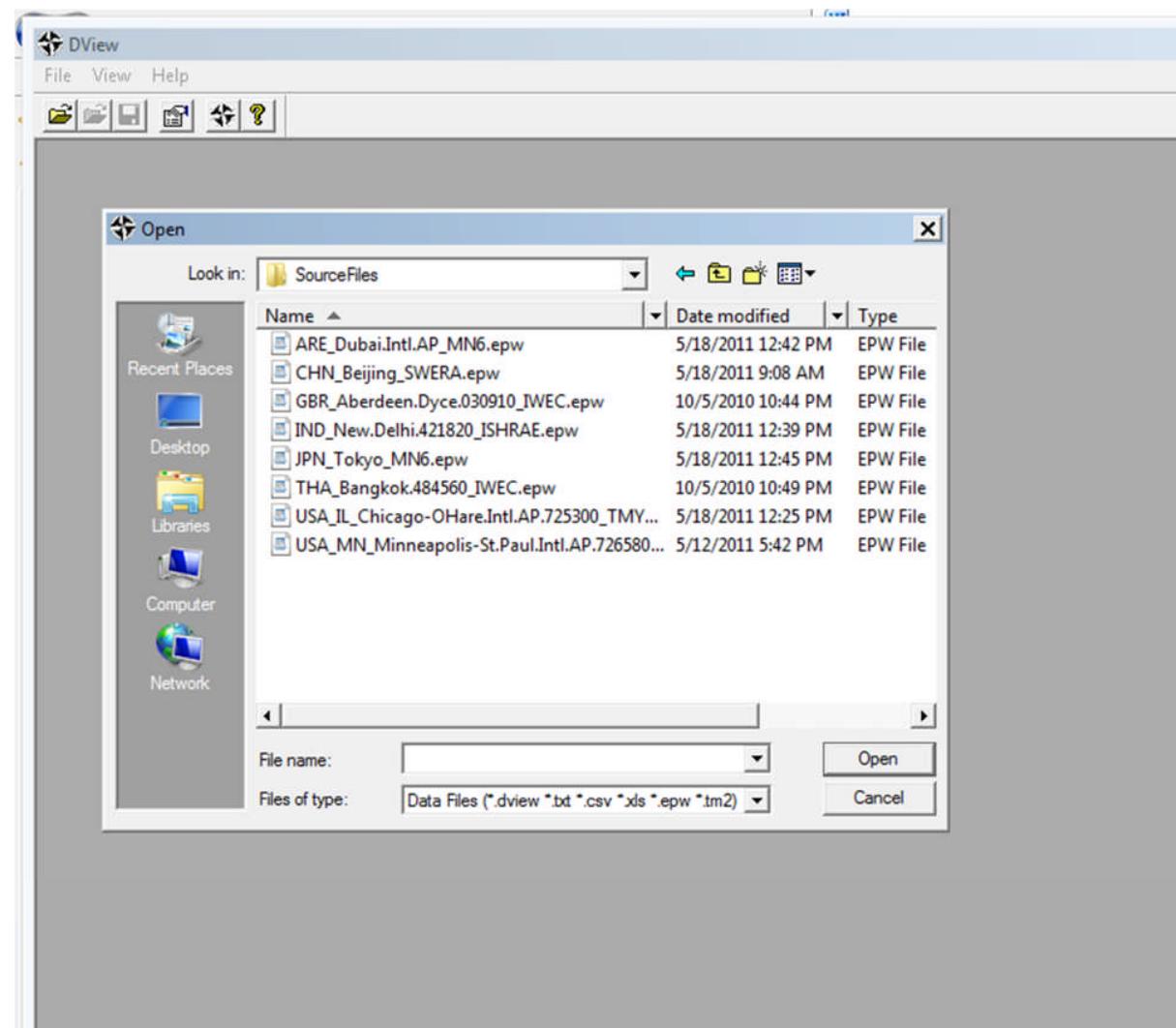
Download and Install Programs

D-View <http://www.mistaya.ca/software/dview.htm>

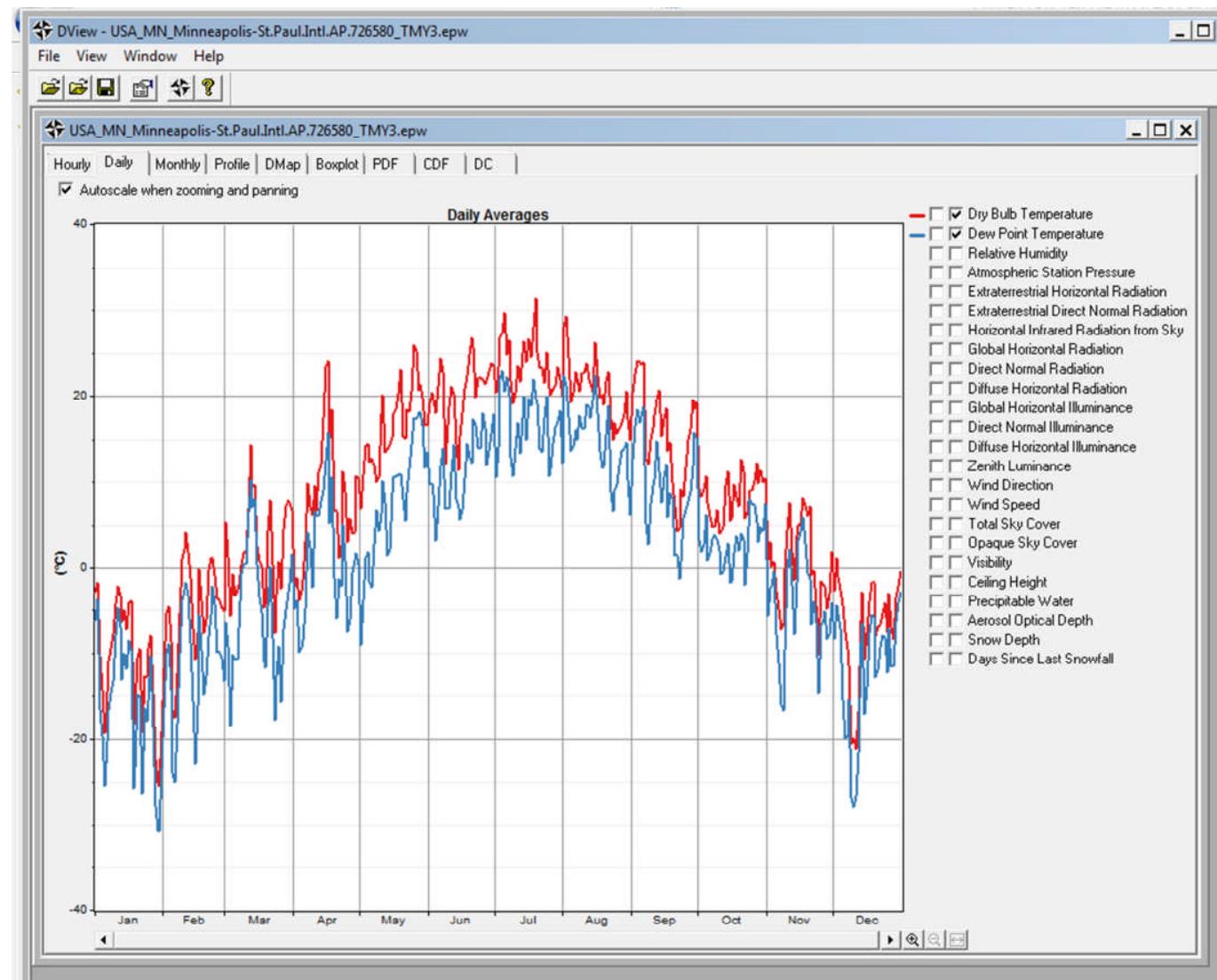
Climate Consultant 5 <http://www.energy-design-tools.aud.ucla.edu/>

D-View

Open EPW Weather File



D-View - Dry Bulb & Dew Point Temperature Chart



Climate Consultant 5 – Weather Summary

Climate Consultant 5.0 (Build 3, Oct 19, 2010)

File Criteria Charts Help

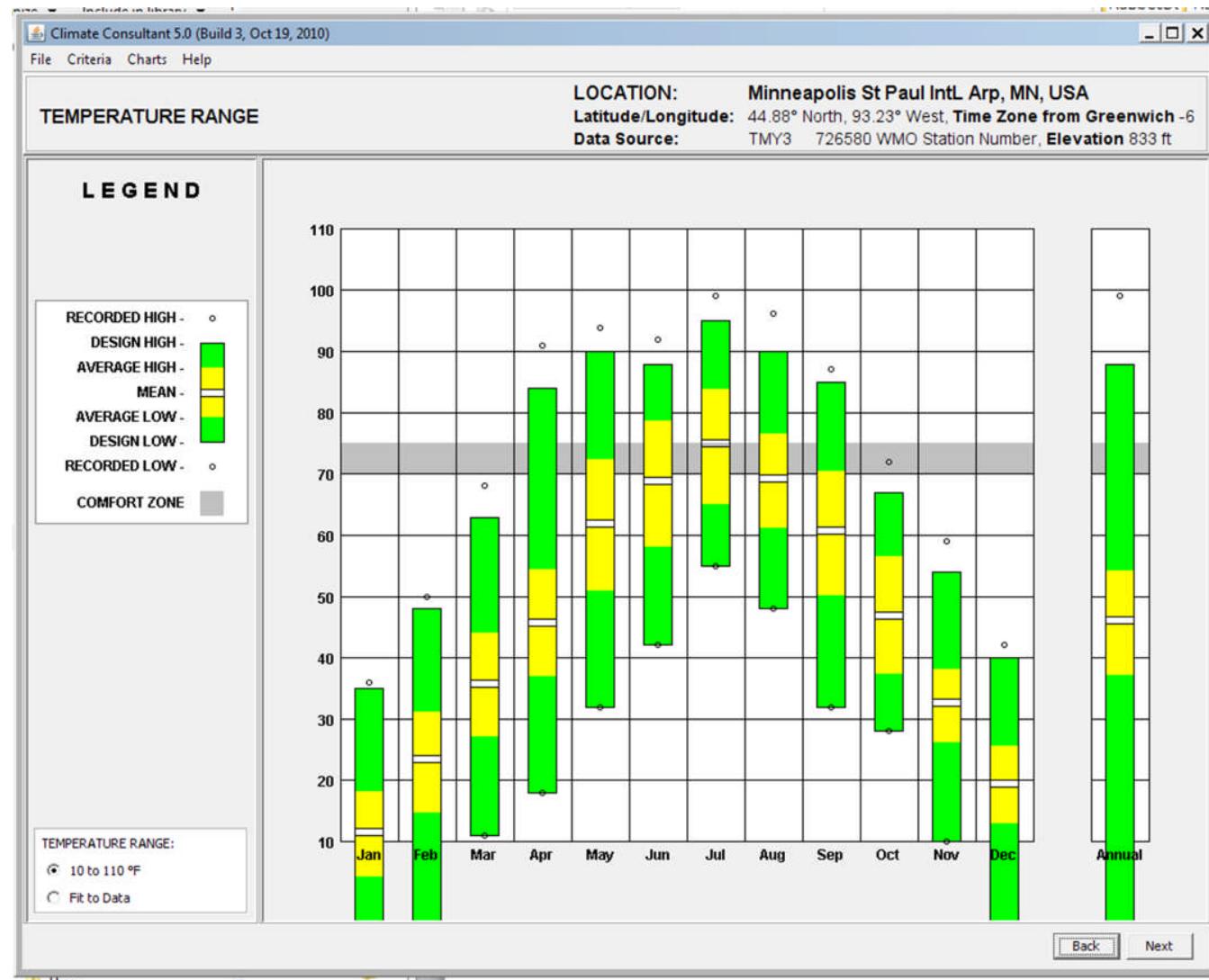
WEATHER DATA SUMMARY

LOCATION: Minneapolis St Paul IntL Arp, MN, USA
Latitude/Longitude: 44.88° North, 93.23° West, **Time Zone from Greenwich** -6
Data Source: TMY3 726580 WMO Station Number, **Elevation** 833 ft

MONTHLY MEANS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Global Horiz Radiation (Avg Hourly)	74	96	117	132	142	154	144	136	119	96	66	52	Btu/sq.ft
Direct Normal Radiation (Avg Hourly)	126	128	130	125	128	133	126	119	122	115	98	96	Btu/sq.ft
Diffuse Radiation (Avg Hourly)	33	42	47	53	55	61	57	59	48	41	30	23	Btu/sq.ft
Global Horiz Radiation (Max Hourly)	146	208	252	290	305	310	301	283	251	213	149	119	Btu/sq.ft
Direct Normal Radiation (Max Hourly)	273	314	317	289	306	289	295	287	288	285	263	278	Btu/sq.ft
Diffuse Radiation (Max Hourly)	71	96	114	126	147	148	142	142	143	96	68	61	Btu/sq.ft
Global Horiz Radiation (Avg Daily Total)	546	820	1169	1510	1870	2034	1908	1637	1275	892	505	383	Btu/sq.ft
Direct Normal Radiation (Avg Daily Total)	964	1161	1335	1504	1719	1804	1710	1478	1345	1120	785	722	Btu/sq.ft
Diffuse Radiation (Avg Daily Total)	248	364	479	623	741	817	766	726	524	391	239	172	Btu/sq.ft
Global Horiz Illumination (Avg Hourly)	2292	3034	3702	4145	4486	4844	4555	4290	3768	2993	2076	1652	footcandles
Direct Normal Illumination (Avg Hourly)	3302	3583	3724	3634	3740	3901	3700	3464	3531	3243	2650	2491	footcandles
Dry Bulb Temperature (Avg Monthly)	11	23	35	45	61	68	75	69	60	46	32	19	degrees F
Dew Point Temperature (Avg Monthly)	2	12	22	33	45	52	62	58	49	37	23	10	degrees F
Relative Humidity (Avg Monthly)	64	63	62	64	59	59	65	70	68	71	68	65	percent
Wind Direction (Avg Monthly)	204	246	193	190	168	183	195	193	185	190	204	207	degrees
Wind Speed (Avg Monthly)	10	10	11	11	10	9	10	8	10	10	10	10	mph
Snow Depth (Avg Monthly)													inches
Ground Temperature (Avg Monthly of 3 Depths)	28	24	25	29	42	53	62	66	64	58	47	37	degrees F

Back Next

Climate Consultant 5 – Temperature Range



Climate Consultant 5 – Radiation Range

