

ATLANTA HARTSFIELD-JACKSON, GA, USA

WMO: 722190

Lat: 33.630N Lon: 84.442W Elev: 1010 StdP: 14.17 Time Zone: -5.00 (NAE) Period: 94-19 WBAN: 13874

Annual Heating, Humidification, and Ventilation Design Conditions

Coldest Month	Heating DB			Humidification DP/MCDB and HR						Coldest Month WS/MCDB				MCWS/PCWD to 99.6% DB		WSF	
	99.6%	99%	DP	99.6%		99%		DP	HR	MCDB	0.4%		1%		MCWS		PCWD
				DP	HR	WS	MCDB				WS	MCDB					
(a) 1	(b) 21.7	(c) 26.4	(d) 4.7	(e) 7.3	(f) 28.5	(g) 8.9	(h) 9.0	(i) 31.7	(j) 25.3	(k) 37.7	(l) 23.6	(m) 37.8	(n) 12.0	(o) 320	(p) 0.427		

Annual Cooling, Dehumidification, and Enthalpy Design Conditions

Hottest Month	Hottest Month DB Range	Cooling DB/MCWB						Evaporation WB/MCDB						MCWS/PCWD to 0.4% DB	
		0.4%		1%		2%		0.4%		1%		2%		MCWS	PCWD
		DB	MCWB	DB	MCWB	DB	MCWB	WB	MCDB	WB	MCDB	WB	MCDB		
(a) 7	(b) 16.5	(c) 93.7	(d) 73.8	(e) 91.6	(f) 73.6	(g) 89.7	(h) 73.3	(i) 77.2	(j) 88.1	(k) 76.3	(l) 86.4	(m) 75.3	(n) 84.8	(o) 8.6	(p) 330

DP	HR	MCDB	Dehumidification DP/MCDB and HR						Enthalpy/MCDB						Extreme Max WB
			0.4%		1%		2%		0.4%		1%		2%		
			DP	HR	MCDB	DP	HR	MCDB	DP	HR	MCDB	Enth	MCDB	Enth	
(a) 74.2	(b) 132.6	(c) 81.0	(d) 73.3	(e) 128.5	(f) 80.4	(g) 72.5	(h) 125.0	(i) 79.8	(j) 41.1	(k) 88.1	(l) 40.2	(m) 86.6	(n) 39.4	(o) 85.3	(p) 81.5

Extreme Annual Design Conditions

Extreme Annual WS			Extreme Annual Temperature				n-Year Return Period Values of Extreme Temperature									
1%	2.5%	5%	Mean		Standard Deviation		n=5 years		n=10 years		n=20 years		n=50 years			
(a)	(b)	(c)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		
21.1	18.8	16.9	14.8	96.4	4.7	3.6	11.4	98.9	8.7	101.0	6.0	103.0	2.6	105.6		
			DB	12.6	78.6	4.4	1.1	9.4	79.4	6.8	80.1	4.3	80.7	1.1	81.4	
			WB													

Monthly Climatic Design Conditions

		Annual	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
		(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
Temperatures, Degree-Days and Degree-Hours	DBAvg	63.3	44.2	48.3	55.2	63.1	71.0	77.6	80.2	79.7	74.5	64.2	53.9	47.1	
	DBStd	14.67	10.07	9.32	8.97	7.22	6.17	4.38	3.34	3.73	5.46	7.37	8.12	9.06	
	HDD50	648	237	133	53	5	0	0	0	0	0	3	52	165	
	HDD65	2578	644	470	318	118	22	1	0	0	0	5	103	342	555
	CDD50	5514	58	85	215	397	652	828	935	922	734	444	168	76	
	CDD65	1969	0	2	15	60	209	379	470	457	289	79	8	1	
	CDH74	17113	0	7	99	455	1641	3414	4513	4275	2214	466	28	1	
	CDH80	6416	0	0	9	68	471	1366	1902	1772	743	84	1	0	
Wind	WSAvg	8.0	9.2	9.2	9.3	8.6	7.6	7.0	6.7	6.6	7.4	7.6	8.0	8.6	
Precipitation	PrecAvg	50.2	4.7	4.6	5.2	4.0	3.9	3.9	4.9	4.0	3.7	3.0	3.9	4.4	
	PrecMax	70.1	10.2	12.8	11.7	11.9	9.9	10.0	17.7	8.7	13.7	8.7	10.0	12.5	
	PrecMin	31.8	0.8	0.8	1.0	0.5	0.4	0.2	0.6	0.5	0.0	0.0	0.9	0.7	
	PrecStd	8.7	1.9	2.2	2.4	2.0	2.1	2.3	3.2	2.1	2.6	2.1	2.0	2.6	
Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB	71.5	74.6	80.8	85.1	90.9	94.7	96.6	97.4	93.9	86.3	78.0	72.3	
		MCWB	61.1	62.9	62.6	66.9	70.9	73.0	74.6	74.3	71.1	69.9	63.9	62.6	
	2%	DB	66.9	69.7	76.7	82.0	87.5	92.0	93.3	93.5	90.0	82.0	73.5	69.0	
		MCWB	58.5	59.5	60.9	65.1	70.0	73.1	74.4	74.5	71.1	67.6	61.7	62.1	
	5%	DB	63.4	66.4	73.4	79.3	85.0	89.9	91.1	90.9	87.1	79.1	70.4	65.3	
		MCWB	57.9	58.0	59.3	63.6	69.0	72.7	74.4	74.1	70.9	65.5	60.7	59.5	
	10%	DB	59.9	63.2	69.9	76.3	82.5	87.6	88.9	88.4	84.5	76.1	67.2	61.7	
		MCWB	54.5	55.6	57.8	62.0	68.2	72.2	74.2	73.4	70.2	64.8	58.5	56.4	
Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB	64.2	66.0	66.4	70.9	74.5	77.3	78.4	78.3	75.4	73.6	69.4	66.8	
		MCDB	67.5	69.8	73.4	79.4	83.3	88.6	89.0	90.0	84.6	79.7	72.3	69.5	
	2%	WB	61.8	63.3	64.1	68.4	72.6	76.1	77.3	77.2	74.3	71.0	66.3	63.8	
		MCDB	65.2	67.7	71.5	76.4	82.5	87.0	88.1	88.1	82.9	78.3	70.1	66.9	
	5%	WB	59.0	60.5	62.2	66.6	71.3	75.0	76.3	76.2	73.3	69.3	63.6	60.8	
		MCDB	62.6	64.7	70.0	74.6	81.0	85.4	86.6	86.0	81.4	74.9	67.7	64.4	
	10%	WB	55.6	57.4	60.1	64.9	70.1	74.0	75.4	75.3	72.3	67.5	60.7	57.3	
		MCDB	58.9	61.2	67.2	72.8	79.1	83.5	84.9	84.2	80.0	73.0	65.7	61.0	
Mean Daily Temperature Range	5% DB	MDBR	17.5	18.0	19.1	19.6	18.2	17.0	16.5	16.3	16.4	18.0	18.5	16.3	
		MCDBR	19.3	20.2	22.1	21.5	19.8	19.9	19.3	19.2	19.2	20.1	20.3	18.6	
	5% WB	MCWBR	13.4	12.9	10.8	9.2	7.3	6.6	6.0	5.9	6.6	8.5	11.3	12.7	
		MCWBR	16.1	17.3	17.9	17.7	16.9	17.1	17.0	16.7	15.5	15.0	16.4	16.4	
		MCWBR	13.0	13.1	10.9	9.4	7.4	6.9	6.2	5.9	6.6	8.8	12.6	13.4	
Clear-Sky Solar Irradiance	taub	0.311	0.315	0.348	0.386	0.441	0.473	0.515	0.516	0.418	0.363	0.334	0.312		
	taud	2.537	2.520	2.452	2.324	2.212	2.168	2.065	2.051	2.312	2.460	2.483	2.553		
	Ebn at Noon	288	298	295	286	270	260	248	246	268	277	276	281		
	Edh at Noon	26	29	34	40	46	48	53	52	39	31	27	24		
All-Sky Solar Radiation	RadAvg	856	1036	1383	1744	1926	1955	1879	1726	1498	1269	951	726		
	RadStd	50	128	117	115	161	161	134	99	148	160	98	76		

Historical Trends

	DBAvg	Heating		Cooling			Degree-Days			
		99% DB	99% DP	1% DB	1% WB	1% DP	HDD50	HDD65	CDD50	CDD65
	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
(46) Station Only	+0.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+245	+194
(47) Regional (40 neighbors)	+0.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+265	+185

Nomenclature: See separate page