

## ATLANTA MUNICIPAL, GA, USA

WMO#: 722190

Lat: **33.64N** Long: **84.43W** Elev: **313** StdP: **97.62** Time Zone: **-5.00 (NAE)** Period: **86-10** WBAN: **13874**

## Annual Heating and Humidification Design Conditions

Coldest Month	Heating DB		Humidification DP/MCDB and HR						Coldest month WS/MCDB				MCWS/PCWD to 99.6% DB	
			99.6%			99%			0.4%		1%			
	99.6%	99%	DP	HR	MCDB	DP	HR	MCDB	WS	MCDB	WS	MCDB	MCWS	PCWD
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
1	-5.8	-3.1	-15.5	1.0	-1.9	-12.7	1.3	0.1	11.1	4.4	10.5	4.4	5.3	320

## 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%			
		DB	MCWB	DB	MCWB	DB	MCWB	WB	MCDB	WB	MCDB	WB	MCDB	MCWS	PCWD
(a)		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
7	9.4	34.4	23.4	33.1	23.3	32.1	23.0	25.2	31.4	24.7	30.4	24.1	29.4	3.9	300

Dehumidification DP/MCDB and HR									Enthalpy/MCDB						Hours 8 to 4 & 12.8/20.6
0.4%			1%			2%			0.4%		1%		2%		
DP	HR	MCDB	DP	HR	MCDB	DP	HR	MCDB	Enth	MCDB	Enth	MCDB	Enth	MCDB	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
23.5	19.0	27.4	23.0	18.4	26.8	22.6	17.9	26.5	78.3	31.4	76.0	30.4	74.0	29.8	800

## Extreme Annual Design Conditions

Extreme Annual WS			Extreme Max WB	Extreme Annual DB				n-Year Return Period Values of Extreme DB							
				Mean		Standard deviation		n=5 years		n=10 years		n=20 years		n=50 years	
1%	2.5%	5%		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
9.6	8.5	7.7	28.0	-10.0	35.9	2.5	1.8	-11.7	37.3	-13.2	38.3	-14.5	39.4	-16.3	40.7

## Monthly Climatic Design Conditions

		Annual (d)	Jan (e)	Feb (f)	Mar (g)	Apr (h)	May (i)	Jun (j)	Jul (k)	Aug (l)	Sep (m)	Oct (n)	Nov (o)	Dec (p)
(5) Temperatures, Degree-Days and Degree-Hours	Tavg	17.1	6.9	8.7	12.7	16.9	21.4	25.1	26.8	26.4	23.2	17.3	12.3	7.6
	Sd	5.23	5.06	4.95	4.27	3.27	2.51	1.92	2.18	3.08	3.94	4.52	4.95	
	HDD10.0	373	123	77	31	4	0	0	0	0	2	29	107	
	HDD18.3	1484	354	269	183	75	12	1	0	0	4	66	186	334
	CDD10.0	2983	28	42	113	210	352	454	521	509	396	230	97	32
	CDD18.3	1052	0	1	7	31	106	204	263	251	151	35	4	1
	CDH23.3	9169	0	3	54	259	807	1851	2548	2342	1103	186	15	1
(13) Precipitation	CDH26.7	3477	0	0	5	47	217	744	1116	978	348	21	1	0
	PrecAvg	1289	121	122	147	108	109	90	127	93	87	77	98	110
	PrecMax	1649	258	324	296	301	213	187	216	220	154	191	182	252
	PrecMin	958	44	20	62	38	10	25	19	13	18	2	23	17
(17) Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	PrecSD	182.9	53.7	69.8	68.5	61.4	59.2	45.6	56.0	56.9	40.7	52.7	39.5	60.1
	0.4%	DB	21.4	23.0	27.1	29.9	32.2	34.7	36.6	36.3	33.7	28.7	25.4	22.3
		MCWB	15.4	16.5	16.9	18.9	22.0	22.8	23.7	23.9	22.5	20.8	17.7	17.2
	2%	DB	18.9	20.7	24.8	28.0	30.5	33.2	34.7	34.1	31.6	27.1	23.1	19.7
		MCWB	14.5	15.0	15.6	17.9	21.0	22.7	23.7	23.7	21.9	19.2	16.7	16.1
	5%	DB	17.1	18.8	22.9	26.4	29.0	32.2	33.3	32.7	30.1	25.6	21.6	17.6
		MCWB	13.6	14.0	14.9	17.1	20.4	22.5	23.5	23.6	21.6	18.2	16.1	14.7
	10%	DB	15.1	17.1	21.0	24.5	27.6	30.9	32.0	31.4	28.7	23.8	19.8	15.7
		MCWB	11.7	12.7	14.1	16.4	19.7	22.1	23.5	23.2	21.4	17.8	15.2	12.2
(25) Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB	17.8	18.6	19.1	21.6	23.9	25.1	26.0	25.8	24.6	22.6	20.7	18.9
		MCDB	19.6	19.8	22.9	26.2	28.6	31.4	32.1	32.3	29.9	26.6	22.4	20.6
	2%	WB	16.1	17.0	17.8	20.0	22.7	24.3	25.2	25.2	23.6	21.4	19.2	17.3
		MCDB	17.8	19.2	22.0	24.6	28.0	30.3	31.4	31.5	28.3	24.5	21.3	18.8
	5%	WB	14.4	15.5	16.7	19.0	21.8	23.8	24.7	24.6	23.1	20.5	17.8	15.5
		MCDB	16.4	17.9	20.8	23.4	26.9	29.4	30.5	30.3	27.3	23.1	20.0	17.5
	10%	WB	12.5	13.6	15.5	17.9	21.0	23.2	24.1	24.1	22.5	19.4	16.3	12.9
		MCDB	14.5	15.9	19.1	22.3	25.7	28.3	29.5	29.2	26.5	22.2	18.8	14.7
(33) Mean Daily Temperature Range	5% DB	MDBR	9.6	10.1	10.8	11.2	10.3	9.6	9.4	9.2	9.1	10.1	10.2	9.3
		MCDBR	11.3	11.6	12.8	12.7	11.3	11.2	11.4	10.8	10.6	11.3	11.5	11.0
		MCWBR	7.9	7.2	6.3	5.4	4.3	3.6	3.5	3.3	3.8	5.0	6.5	7.7
	5% WB	MCDWR	9.3	9.6	10.0	10.2	9.6	9.6	9.8	9.5	8.6	8.2	9.1	9.5
		MCWBR	7.8	7.4	6.4	5.6	4.3	3.8	3.6	3.4	3.9	4.9	6.9	7.9
(38) Clear Sky Solar Irradiance	taub		0.334	0.324	0.355	0.383	0.379	0.406	0.440	0.427	0.388	0.358	0.354	0.335
	taud		2.614	2.580	2.474	2.328	2.324	2.270	2.202	2.269	2.428	2.514	2.523	2.618
	Ebn,noon		884	932	922	904	907	877	846	852	875	879	847	861
	Edh,noon		77	87	105	127	129	136	144	133	109	92	84	73

## Nomenclature:

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