

MARTIN DE VIVIES (ILE AMST.), French Southern TerritoriesWMO#: **619960**Lat: **37.80S**Long: **77.50E**Elev: **95**StdP: **14.65**Time Zone: **5 (ASW)**Period: **88-10**WBAN: **99999****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)
8	43.5	44.8	32.5	27.1	46.9	34.3	29.1	47.2	41.3	55.4	37.9	54.9	16.7	200

Annual Cooling, Dehumidification, and Enthalpy Design Conditions

Hottest Month	Hottest Month	Cooling DB/MCWB						Evaporation WB/MCDB						MCWS/PCWD to 0.4% DB	
		0.4%		1%		2%		0.4%		1%		2%			
	DB Range	DB	MCWB	DB	MCWB	DB	MCWB	WB	MCDB	WB	MCDB	WB	MCDB	MCWS	PCWD
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
2	9.3	72.3	67.1	70.7	65.8	69.3	64.8	68.7	70.7	67.5	69.4	66.4	68.3	13.9	300

Dehumidification DP/MCDB and HR									Enthalpy/MCDB						Hours 8 to 4 & 55/69
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)	
67.9	102.8	69.9	66.7	98.8	68.9	65.6	94.7	67.7	32.9	70.8	31.9	69.5	31.1	68.4	2360

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)
35.8	32.5	29.9	77.0	40.8	77.9	1.2	5.5	40.0	81.9	39.3	85.2	38.7	88.3	37.8	92.3

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	57.3	63.2	63.3	62.4	59.8	56.5	53.9	52.4	51.9	53.4	54.1	56.5	60.6
	Sd		3.57	3.43	3.65	3.19	3.62	3.59	2.97	2.79	2.61	2.85	2.76	3.52
	HDD50	49	0	0	0	0	2	10	13	15	5	4	0	0
	HDD65	2879	78	68	96	157	263	332	391	407	349	339	256	143
	CDD50	2710	410	371	384	294	204	128	86	73	106	130	194	330
	CDD65	68	24	20	16	1	0	0	0	0	0	0	0	7
	CDH74	10	6	2	1	0	0	0	0	0	0	0	0	1
(13) Precipitation	CDH80	0	0	0	0	0	0	0	0	0	0	0	0	0
	PrecAvg	43.4	3.3	2.8	2.8	4.2	4.4	4.4	4.1	3.7	3.3	3.4	3.7	3.3
	PrecMax	83.9	13.5	21.5	19.7	9.1	8.2	9.3	5.0	5.0	3.1	4.7	11.7	18.9
	PrecMin	18.0	1.1	1.1	1.1	1.3	1.3	0.6	1.6	1.1	0.4	0.4	0.2	0.8
(17) Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	PrecSD	14.9	3.6	6.2	5.1	2.2	2.4	2.3	0.9	0.9	0.8	1.2	2.4	4.9
	0.4%	DB	74.9	73.9	72.5	68.3	65.3	61.9	59.8	58.4	60.0	61.6	65.3	73.0
		MCWB	70.4	68.6	66.7	63.3	61.4	58.2	55.6	55.0	56.5	57.4	59.3	68.0
	2%	DB	72.3	71.9	70.6	66.6	63.8	60.9	58.4	57.5	58.9	60.3	63.3	69.8
		MCWB	67.4	66.6	65.8	62.7	60.4	57.8	55.6	54.5	55.7	56.5	58.9	64.5
	5%	DB	70.6	70.3	68.9	65.6	62.8	60.0	57.5	56.8	58.0	59.4	62.1	67.7
		MCWB	66.0	65.4	64.9	62.1	60.2	57.2	54.9	54.1	55.1	56.0	58.1	63.5
	10%	DB	68.9	69.0	67.5	64.6	61.8	59.1	56.8	56.2	57.1	58.4	61.0	66.1
		MCWB	64.8	64.7	64.1	61.6	59.2	56.6	54.3	53.6	54.5	55.4	57.4	62.0
(25) Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB	70.8	70.3	68.2	65.5	63.5	60.3	57.9	56.7	57.6	59.4	61.9	68.8
		MCDB	73.7	72.6	70.2	66.9	64.4	60.8	58.5	57.1	58.6	60.3	63.1	71.8
	2%	WB	68.9	68.6	67.1	64.3	62.1	59.2	56.7	55.8	56.7	58.2	60.3	66.8
		MCDB	70.9	70.5	69.0	65.4	63.0	60.0	57.7	56.6	57.7	59.1	61.9	68.9
	5%	WB	67.5	67.5	66.2	63.5	61.1	58.0	55.9	55.2	56.2	57.3	59.4	64.8
		MCDB	69.3	69.2	67.9	64.8	62.2	59.2	57.1	56.2	57.3	58.4	60.9	66.4
	10%	WB	66.0	66.1	65.2	62.6	59.9	56.9	55.0	54.4	55.5	56.4	58.4	63.5
		MCDB	68.0	68.1	67.1	64.2	61.2	58.5	56.4	55.8	56.6	57.8	60.1	65.1
(33) Mean Daily Temperature Range	5% DB	MDBR	8.7	9.3	8.1	7.2	6.5	6.4	6.6	6.7	6.6	7.5	7.8	8.4
		MCDBR	9.8	10.2	9.0	7.7	6.4	6.5	6.4	6.6	6.7	7.6	8.3	9.1
		MCWBR	6.6	7.3	6.7	6.9	5.9	6.5	6.8	6.6	6.2	6.2	6.5	6.6
	5% WB	MCDWR	8.6	8.7	7.4	6.8	5.9	6.1	5.8	5.7	6.2	6.8	6.9	8.0
		MCWBR	6.4	7.3	6.3	7.1	6.0	6.8	6.8	6.5	6.4	6.5	6.0	6.9
(38) Clear Sky Solar Irradiance	taub		0.381	0.373	0.373	0.381	0.364	0.341	0.363	0.381	0.408	0.374	0.389	0.389
	taud		2.679	2.668	2.592	2.443	2.384	2.388	2.308	2.318	2.295	2.546	2.574	2.638
	Ebn,noon		302	297	284	259	241	238	237	253	267	293	298	301
	Edh,noon		30	29	29	30	27	25	29	33	38	32	33	32

[Nomenclature:](#)

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