

Meteorology of Monteverde, Costa Rica 2006

Technical Report submitted to the Monteverde Institute



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Executive Summary

The meteorological station at the Monteverde Institute (MVI) in Monteverde, Costa Rica records precipitation, temperature, relative humidity, and solar radiation at 10-minute intervals throughout the day. For the period from 1 January 2006 through 31 December 2006, annual rainfall totaled 2607 mm. Seventy-six percent of the annual precipitation fell during the rainy season (May through October) and three percent during the dry season (February through April). There were 281 days with rain, and the mean depth of daily rainfall for days with rain was 9.3 mm. The average temperature was 17.8°C; the warmest day and the coolest day were 20.2°C and 12.7°C, respectively. The average relative humidity was 87%, and the average solar radiation was 179 W/m² or 15.5 MJ/m²/day. This report builds on and complements the 2004 meteorological report by Johnson et al. (2005) and the 2005 report by Guswa and Rhodes (2006).

Monthly meteorological summaries are available at www.science.smith.edu/~aguswa/research.html, and more information can be obtained from Prof. Andrew J. Guswa (aguswa@email.smith.edu).

1 Introduction

1.1 Climate

Monteverde, Costa Rica (84°48' W Long., 10°18' N Lat., see Figure 1) lies on the leeward side of the Continental Divide on the Cordillera de Tilarán. Its climate is characterized by three seasons: wet (May through October), transitional (November through January), and dry (February through April). Climate and weather are largely influenced by the migration of the Intertropical Convergence Zone (ITCZ), as well as by polar cold fronts, Pacific low-pressure systems, nearby tropical depressions, and the trade winds (Clark et al., 2000).

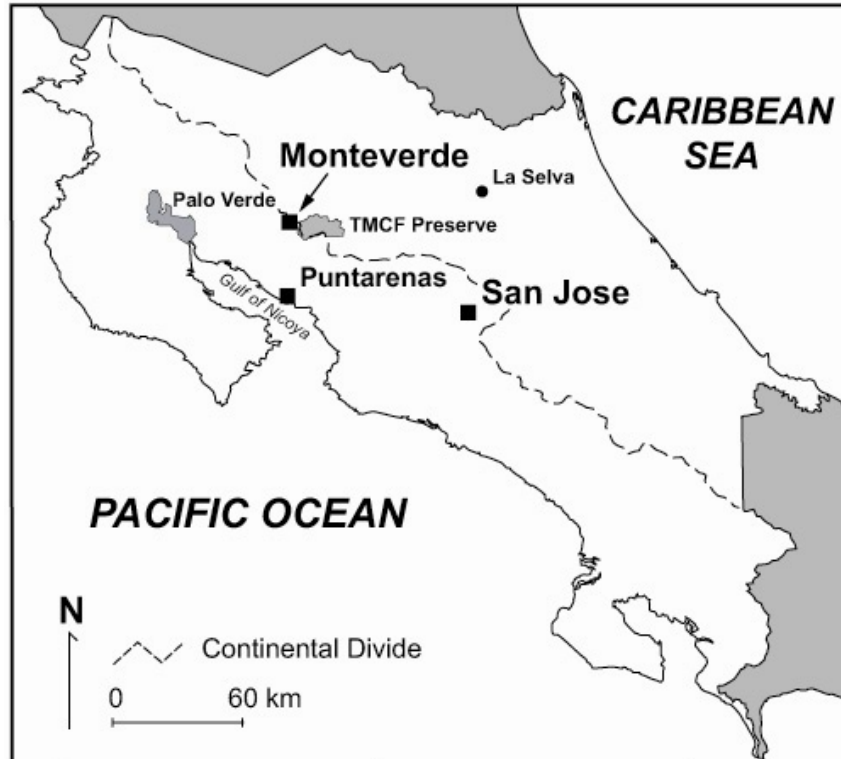


Figure 1. Monteverde, Costa Rica lies on the Continental Divide northwest of San Jose.

From May through October (the wet season), the ITCZ migrates over Costa Rica bringing intense convective precipitation events. Rainfall is heaviest during June and September-October and eases slightly during the veranillo or “little summer” in July and August. During the transitional and dry seasons, the ITCZ is located south of Costa Rica, and moisture is brought to the region via northeasterly trade winds from the Caribbean Sea (Clark et al., 2000). Orographic clouds spill over the continental divide, bringing fog and drizzle, and rainfall decreases rapidly going west into the rain shadow of the mountains.

1.2 Additional Meteorological Data Sources

The primary sources for historical meteorological information about Monteverde are daily rainfall records from J. Campbell and A. Pounds measured at the Campbell Farm (see Figure 2) since 1973 (published in Clark et al., 2000 and Pounds et al., 1999). Based on these rainfall data from 1973 to 2006 (Pounds, personal communication, 2007), mean annual precipitation is 2710 mm, with a minimum and maximum annual precipitation of 1973 mm (in 1994) and 3632 mm (in 2005), respectively.

The Organization for Tropical Studies (OTS) maintains meteorological stations within Palo Verde National Park (10°21' N, 85°21' W) adjacent to the Tempisque River on the Pacific side of Costa Rica and at La Selva (10°26' N, 83°59' W) on the Atlantic Side (see Figure 1). Data from the OTS sites indicate that La Selva receives an average of 4240 mm of annual precipitation, while Palo Verde receives 1017 mm. The two regions differ not only in precipitation totals but also in seasonal precipitation. Sixty percent of La Selva's annual precipitation and eighty-seven percent of Palo Verde's annual precipitation falls during the wet season. The average temperature at La Selva is 26°C while the average temperature at Palo Verde is 28°C. The station at Palo Verde also measures other variables including wind speed, relative humidity, and solar radiation. Average values for these variables are 0.8 m/s, 80%, and 233 W/m², respectively (Organization for Tropical Studies, 2005).

The World Meteorological Organization (2006) provides rainfall data for the cities of Puntarenas and Guapiles, Costa Rica. In Puntarenas, south of Monteverde on the Pacific coast at the mouth of the Gulf of Nicoya, the mean annual rainfall is 1600 mm (determined from records from 1936-2000) with 87% falling during the wet season. In Guapiles, east of Monteverde on the Caribbean side, the mean annual rainfall is 4577 mm (determined from records from 1964-1998) with 59% falling during the wet season.

1.3 Site Description

Since 11 June 2004, Profs. Andrew Guswa and Amy Rhodes from Smith College have operated a Campbell Scientific meteorological station on the roof of the Monteverde Institute (see Figures 2 and 3). This station records precipitation, temperature, relative humidity, and solar radiation at ten-minute intervals. From June 2003 through June 2004, the meteorological station was located in a forest clearing near the Monteverde Institute (Johnson et al., 2005).

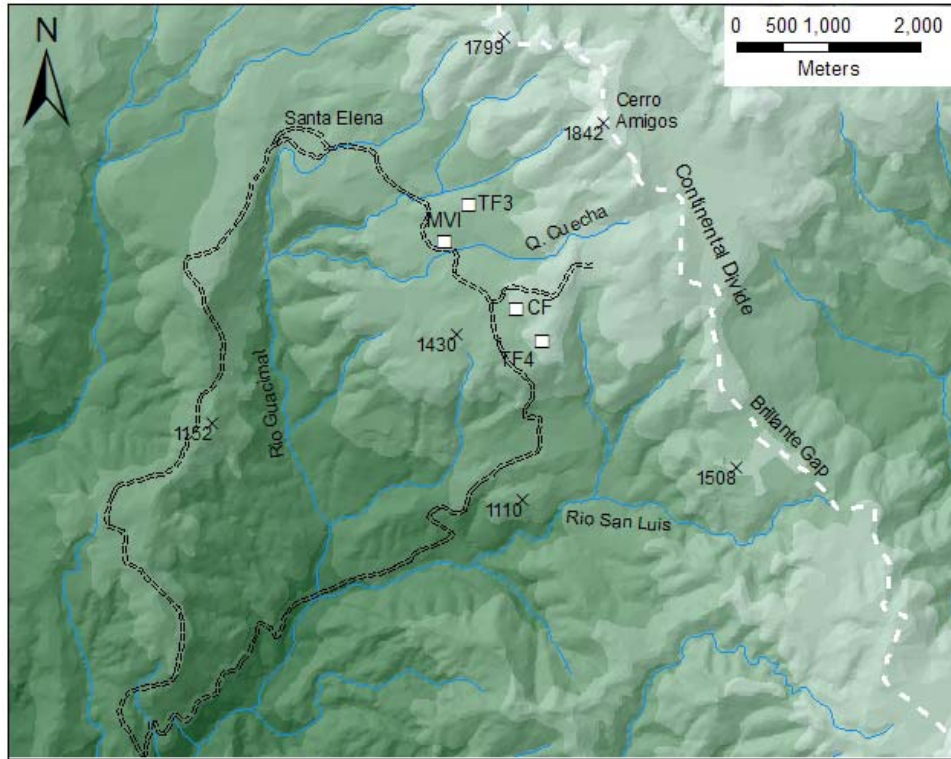


Figure 2. The met station is located on the roof of the Monte Verde Institute (indicated by “MVI”) in Monteverde, Costa Rica. Additional rain data are recorded at the Campbell Farm (indicated by “CF”, location approximate).



Figure 3. The red oval identifies the meteorological station at the Monte Verde Institute that has been in operation since 11 June 2004.

2 Meteorological Data: 2006

2.1 Precipitation

Precipitation at the Monteverde Institute is measured using a Campbell Scientific 8" siphoning tipping-bucket rain gauge. The bucket tips when 0.01 in (0.254 mm) of rainfall accumulates, and a data logger records rainfall depths over 10-minute intervals. The rain gauge has a precision of +/- 2% for rainfall intensities up to 19.7 in/hr (500 mm/hr). The rain gauge is not designed to measure cloud-water interception, and the recorded amounts may underestimate the total hydrologic input. The data from this recording rain gauge are compared with results from a manual gauge, with accumulations measured at approximately 8 am on regular work days by Marlene Leiton Campbell of the Monteverde Institute (see Appendix B for the complete record of manual measurements).

Rainfall measured at the met station in 2006 totaled 2607 mm, approximately 100 mm below the long-term average. From the period 1 January 2006 through 19 December 2006, the rainfall accumulation in the non-recording gauge totaled 2550 mm. This differs by 24 mm, less than 1%, from the 2574 mm measured by the recording gauge over the same period. In 2006, there were 281 days with rain, with a mean daily precipitation of 9.3 mm on those days. Rainfall during the rainy season was 1983 mm or 76% of the annual precipitation, while the dry season experienced 90 mm of precipitation.

Table 1 presents rainfall statistics for the dry and wet seasons; statistics for the transitional season are not included because the transitional-season months (January, November, December) are not contiguous within a calendar year. Table 2 presents monthly rainfall depths and number of days with rain (at least one tip). Figures 4 and 5 present the daily and monthly precipitation in Monteverde. These figures show clearly the seasonal variation in rainfall. Figure 4 also shows the close match between the recording and non-recording gauges at the Monteverde Institute. Figure 5 includes monthly rainfall as measured at the Campbell Farm (Pounds, personal communication, 2007). Over the year, precipitation measured at the Campbell Farm totaled 2851 mm, or 244 mm (9%) more than the depth recorded at the Monteverde Institute. The monthly differences are generally small but show an interesting seasonal pattern. The top graph in Figure 5 shows that the Campbell Farm, which lies closer to the Brillante Gap (see Figure 2), receives slightly more rainfall during the dry season and slightly less during the height of the wet season (June and Sept-Oct) when compared with what arrives at the Monteverde Institute.

Figure 6 displays a histogram showing the frequency of tipping-bucket tips within each hour of the day for the wet and dry seasons. The dry season is characterized by light mist and rain events that occur throughout the day. In 2006, the spike in precipitation from 4-7 am was due to a single event on 7 February that dropped 18.8 mm of rain (out of 90 mm total for the dry season). The wet season, in contrast, shows strong evidence of afternoon convection, with 58% of the wet-season rainfall arriving between the hours of 1 pm and 7 pm.

Table 1. Seasonal precipitation at the Monteverde Institute, Monteverde, Costa Rica, 2006.

Season	Months	Total rain (mm)	% of days with rain	Avg. rain on rainy days (mm)	Wettest day (mm)
Dry	Feb-Apr	90	55	1.8	19.6
Wet	May-Oct	1983	84	12.8	84.3
Annual	Jan-Dec	2607	77	9.3	84.3

Table 2. Monthly precipitation at the Monteverde Institute, Monteverde, Costa Rica. The first number represents the depth of rainfall in mm; the number in parentheses indicates the number of days with rain.

	2004	2005	2006	Average
January		254.8 (27)	157.0 (26)	205.9 (27)
February		45.7 (24)	49.8 (23)	47.8 (24)
March		21.1 (11)	28.2 (16)	24.7 (14)
April		42.2 (10)	11.9 (10)	27.1 (10)
May		333.5 (20)	191.3 (23)	262.4 (22)
June		605.0 (29)	531.4 (23)	568.2 (26)
July	199.4 (29)	327.7 (30)	374.7 (28)	300.6 (29)
August	221.5 (26)	318.8 (27)	155.7 (27)	232.0 (27)
September	585.2 (27)	539.8 (29)	355.6 (27)	493.5 (28)
October	404.4 (28)	978.4 (30)	373.9 (27)	585.6 (28)
November	183.4 (24)	250.7 (27)	224.3 (27)	219.5 (26)
December	226.6 (21)	73.2 (22)	153.7 (24)	151.2 (22)
Total		3971 (286)	2607 (281)	3119 (283)

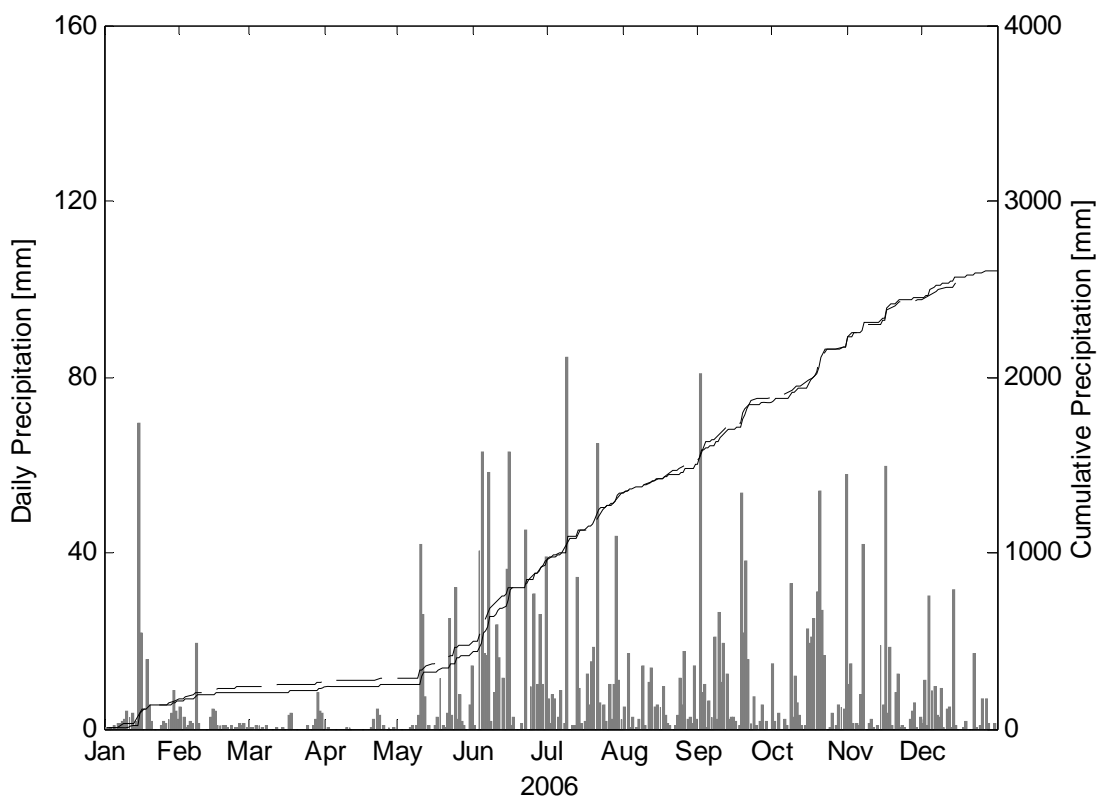


Figure 4. Daily and cumulative precipitation at the Monteverde Institute, Monteverde, Costa Rica from 1 January 2006 through 31 December 2006. The solid cumulative line and the daily values are data recorded by the meteorological station atop the Institute. The dashed cumulative line represents measurements from a manual gauge on the front lawn of the Institute, as measured by Marlene Leiton Campbell.

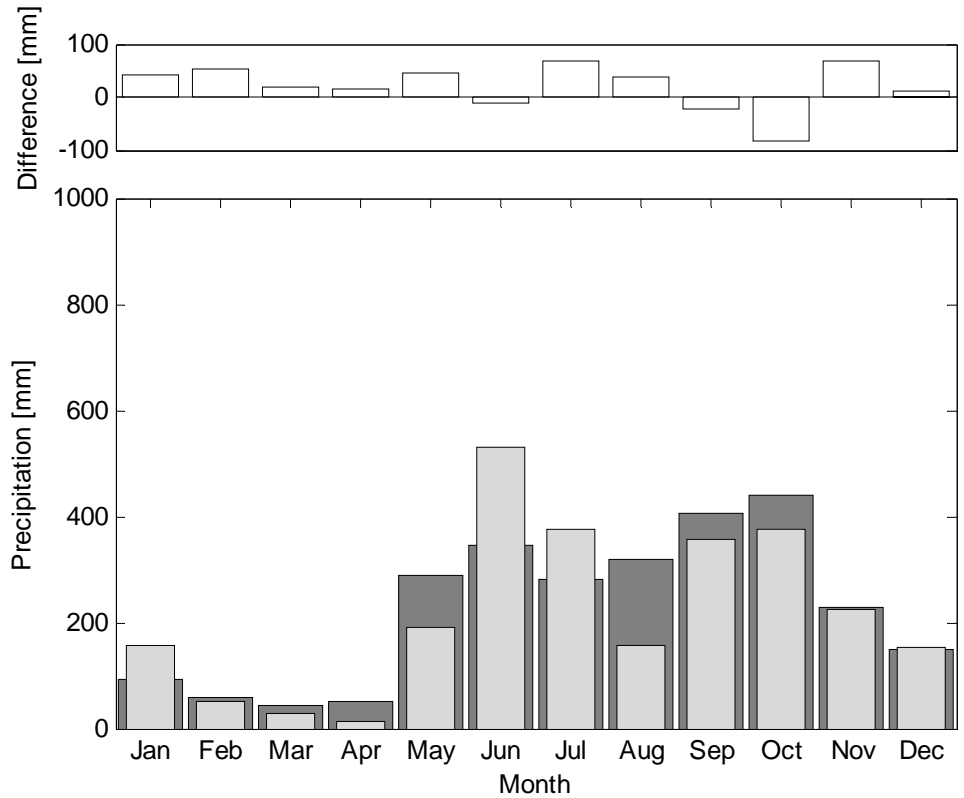


Figure 5. Monthly precipitation for Monteverde, Costa Rica. The light bars represent monthly precipitation for 2006 measured at the Monteverde Institute. The dark bars represent the average monthly precipitation from 1973-2006 measured at the Campbell Farm (Pounds, personal communication, 2007). The open bars in the top figure represent the differences in measured rainfall for 2006 between the Campbell Farm and the Monteverde Institute (quantified as CF-MVI).

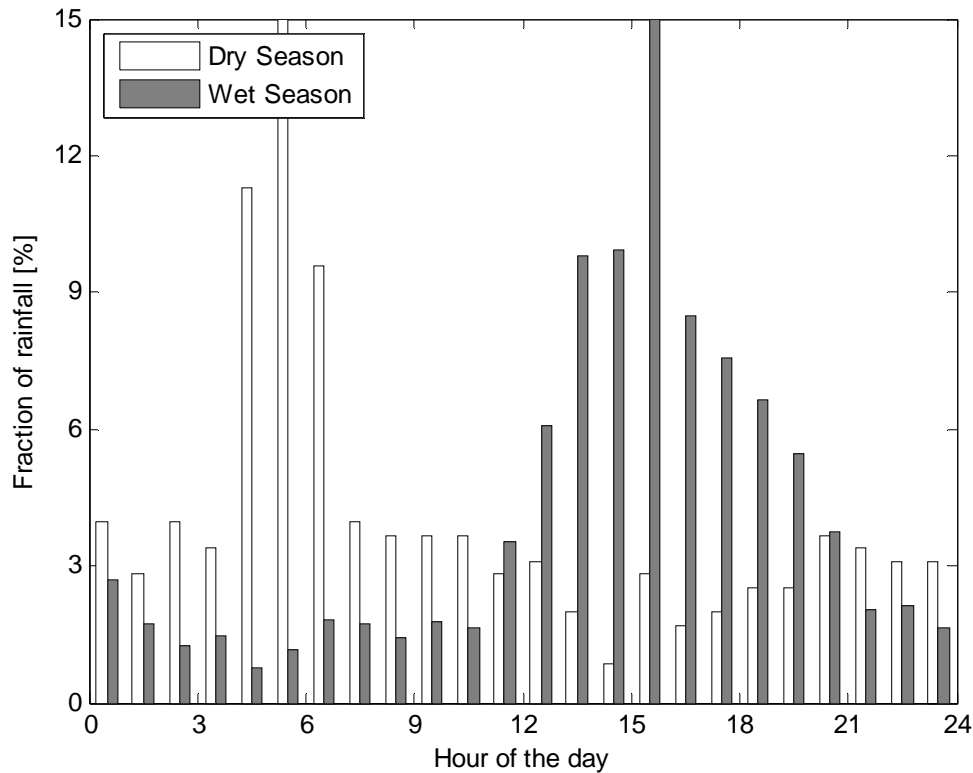


Figure 6. Timing of rainfall events at the Monteverde Institute, Monteverde, Costa Rica in 2006. Rainfall is measured with a tipping-bucket rain gauge that tips when 0.254 mm of rainfall accumulates. The histogram displays the fraction of tips that occurred within each hour for the dry and wet seasons.

2.2 Temperature and Humidity

Mean annual temperature in Monteverde during 2006 was 17.8°C. The warmest and coolest days were 20.2°C and 12.7°C, respectively. The mean relative humidity for the year was 87%. Figure 7 displays the average daily temperature, daily temperature range, and average daily humidity. Table 3 presents monthly climate data including mean temperature and warmest and coolest days. Daily temperature and humidity data can be found in Appendix A. The Vaisala temperature and relative humidity probe has a precision of $\pm 2\%$ for humidity between 10% and 90%, and $\pm 3\%$ for humidity greater than 90%.

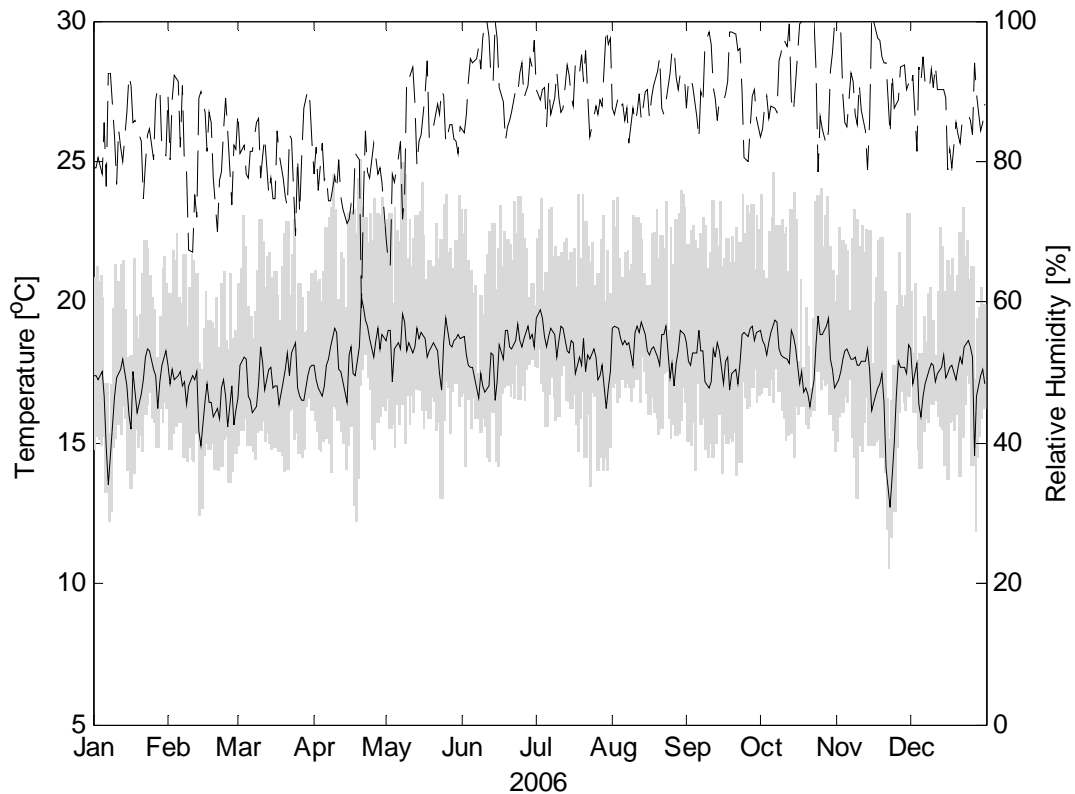


Figure 7. Daily mean temperature (solid line) and relative humidity (dashed line) for 2006 as measured at the Monteverde Institute, Monteverde, Costa Rica. The gray bars represent the temperature range for each day.

Table 3. Monthly data for temperature, humidity, and solar radiation at the Monteverde Institute, Monteverde, Costa Rica, 2006.

	Mean temperature (°C)	Warmest day (°C)	Coollest day (°C)	Mean humidity (%)	Mean solar radiation (W/m ²)
January	17.0	18.3	13.5	84	183
February	16.7	17.6	14.9	82	218
March	17.3	18.6	16.1	81	242
April	18.2	20.2	16.4	77	226
May	18.5	19.6	16.9	83	176
June	18.1	19.2	16.5	92	134
July	18.3	19.8	16.3	90	156
August	18.5	19.3	17.0	89	171
September	18.1	19.2	16.9	90	176
October	18.2	19.5	16.3	92	145
November	17.1	18.5	12.7	91	158
December	17.4	18.6	14.5	88	164
Annual	17.8	20.2	12.7	87	179

2.3 Solar Radiation

The average daily radiation in Monteverde during 2006 was 179 W/m^2 or $15.5 \text{ MJ/m}^2/\text{day}$. Figure 9 provides the average daily radiation rate (W/m^2) and the maximum daily radiation rate (W/m^2) as measured at the Monteverde Institute in 2006. Monthly data are available in Table 3, and daily data are presented in Appendix A. The Li-Cor silicon pyranometer has a precision of $\pm 3\%$.

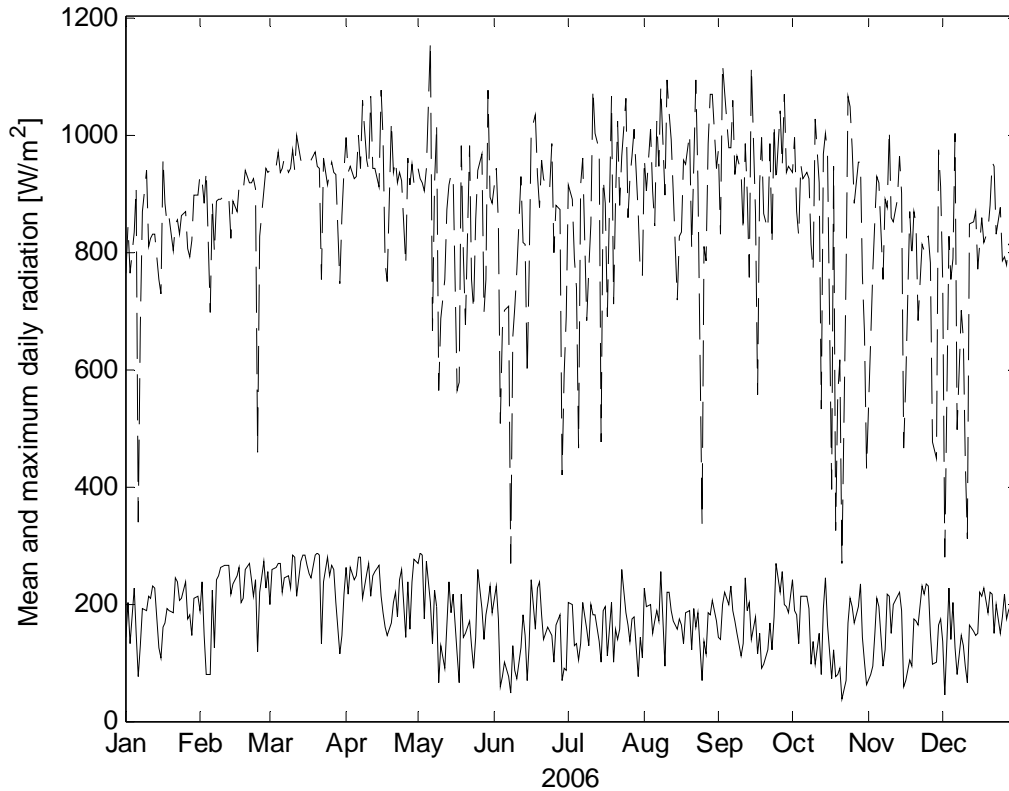


Figure 9. Daily average (solid line) and maximum (dashed line) solar radiation (W/m^2) at the Monteverde Institute, Monteverde, Costa Rica in 2006.

Acknowledgments

The authors wish to thank Ilona Johnson '06 for writing the first meteorological report (Johnson et al., 2005) and providing the template for this report, Marlene Leiton Campbell for measuring daily rainfall, Alan Pounds for providing the data from the Campbell Farm, and the Monteverde Institute for providing the physical space and power for the meteorological station.

References

Clark, K. L., Lawton, R. O., and Butler, P. R. 2000. Nadkarni, N. M., and Wheelwright, N. T. (eds), *Monteverde: Ecology and Conservation of a Tropical Cloud Forest*. New York: Oxford University Press.

Guswa, Andrew J., and A. L. Rhodes, 2006. Meteorology of Monteverde, Costa Rica, 2005, Technical Report submitted to the Monteverde Institute, 34 pages.

Johnson, Ilona J. ('06), A. J. Guswa, and A. L. Rhodes. 2005. Meteorology of Monteverde, Costa Rica: 1 November 2003 – 31 October 2004, Technical report submitted to the Monteverde Institute, 23 pages.

Organization for Tropical Studies. 2005. online. <http://www.ots.ac.cr/en/>

Pounds, J. A., Fogden, M. P. L., and Campbell, J. H. 1999. Biological response to climate change on a tropical mountain. *Nature*, 398, 611—615.

Pounds, J. A., 2007. personal communication on 27 April 2007.

World Meteorological Organization. 2006. online. <http://www.worldweather.org/171/m171.htm>

Appendix A: Monthly meteorological summaries

Monthly Climate Summary - January 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	17.4	20.9	1300	14.8	610	0.3	1.5	2010	79.0	92.4	1940	58.9	30	141	762	1250
2	17.4	21.3	1400	15.2	600	0.3	1.5	430	79.2	93.5	420	62.4	1350	201	845	1130
3	17.2	20.7	1220	15.1	300	0.3	1.5	40	80.7	90.7	1820	69.0	1210	132	762	1100
4	17.6	21.0	1400	14.9	330	0.0	0.0	2350	78.2	88.9	2230	66.5	1510	225	833	1140
5	16.7	20.2	950	15.2	2130	0.8	1.5	2030	85.5	94.4	2200	69.5	1040	148	910	1030
6	14.8	17.1	1420	13.3	210	1.3	1.5	2330	76.4	92.1	0	53.1	1850	75	338	1410
7	13.5	15.4	1500	12.2	820	1.0	1.5	2340	92.5	95.9	1810	85.3	40	129	671	1220
8	14.5	17.1	1320	12.6	330	1.5	1.5	2340	92.7	95.4	50	87.8	1330	190	868	1140
9	16.6	19.8	1350	14.9	300	2.3	1.5	2250	83.4	95.4	10	68.7	1350	186	939	1340
10	17.3	21.3	1410	15.1	510	4.1	1.5	2340	76.8	88.9	2300	60.9	1150	212	808	1200
11	17.5	20.8	1420	15.6	30	2.8	1.5	2320	84.7	92.3	420	68.9	1420	210	823	1150
12	17.6	21.3	1420	15.3	420	3.6	1.5	2220	82.1	92.1	40	68.7	1330	231	831	1240
13	18.0	21.5	1430	16.3	320	0.5	1.5	200	79.9	89.1	510	66.8	1430	228	830	1210
14	17.1	19.7	1040	15.8	240	1.5	1.5	2340	87.0	93.5	2000	76.0	1000	125	751	1010
15	16.0	18.1	1310	14.0	2350	69.3	6.1	2340	92.3	94.9	2350	89.9	1140	107	727	1020
16	15.5	18.1	1440	13.4	150	21.6	6.1	230	90.9	96.4	110	80.4	1440	159	961	1120
17	17.6	21.5	1040	13.9	500	0.0	0.0	2350	85.4	95.8	520	68.7	900	168	884	1040
18	16.8	19.5	1130	15.5	2120	15.7	4.6	1920	85.9	91.8	30	72.3	1130	190	847	1100
19	16.0	18.7	1350	14.8	1800	5.3	3.0	420	84.6	92.2	1940	69.1	1300	189	858	1210
20	16.7	19.6	1330	15.3	2350	1.5	1.5	1230	82.8	94.5	600	70.0	1350	183	800	1310
21	17.2	21.1	1450	14.7	200	0.0	0.0	2350	74.6	91.7	2350	62.2	1230	244	848	1200
22	18.0	22.2	1450	16.0	10	0.0	0.0	2350	79.6	92.5	10	60.4	1340	237	854	1150
23	18.3	21.9	1400	16.3	610	0.0	0.0	2350	83.7	92.7	610	69.4	1410	206	831	1250
24	18.3	21.0	1220	16.8	2310	0.8	1.5	2320	84.7	91.2	2240	74.4	1200	207	860	1230
25	17.6	20.2	1430	15.8	450	1.5	3.0	230	80.2	89.8	10	68.4	1130	235	867	1140
26	17.4	19.7	1430	15.7	2330	1.0	1.5	2140	88.6	92.7	2230	79.7	0	173	807	1200
27	16.2	18.1	1510	14.8	610	2.0	1.5	2150	90.4	93.2	240	84.0	1400	182	790	1210
28	17.2	19.5	1310	16.2	530	3.3	1.5	2320	90.6	94.6	2210	85.1	1340	147	819	1310
29	17.8	21.2	1220	15.7	410	8.6	1.5	2330	81.4	94.5	0	70.5	1220	209	898	1210
30	18.3	21.6	1220	16.4	520	3.8	1.5	2350	81.0	90.1	2230	65.7	1220	211	898	1210
31	17.8	20.6	1320	16.2	2350	2.3	1.5	2050	89.5	93.1	2330	80.2	1320	188	932	1300
Month Tot.	17.0	22.2		12.2		157.0	6.1		84.0	96.4		53.1		183	961	

Monthly Climate Summary - February 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	17.1	20.4	1340	14.8	640	5.1	1.5	2300	80.2	94.0	20	61.2	1230	236	922	1040
2	17.6	21.8	1130	15.4	610	2.8	1.5	730	88.6	95.3	2330	71.2	1130	145	882	1130
3	17.3	21.5	1110	15.6	140	0.3	1.5	1500	92.3	96.3	2350	68.4	1110	78	939	1040
4	17.4	22.4	1230	15.6	1810	0.8	1.5	2150	91.3	96.6	710	70.0	1240	77	695	1230
5	17.5	20.2	1520	15.7	2210	1.8	1.5	2310	82.0	92.3	2320	69.1	1430	221	886	1130
6	17.1	19.9	1230	15.7	1930	1.0	1.5	2300	90.9	95.1	1450	82.0	1210	124	797	1210
7	17.1	21.7	1440	14.5	640	19.6	12.2	440	79.0	88.8	2240	60.5	1210	240	887	1200
8	16.4	19.1	1500	14.3	450	1.3	1.5	1810	78.6	91.8	420	67.4	1000	248	888	1110
9	17.0	20.5	1400	14.8	430	0.0	0.0	2350	67.3	78.9	440	56.5	1700	261	891	1200
10	17.4	21.7	1310	14.4	2200	0.0	0.0	2350	67.0	88.4	2320	47.6	1250	266	898	1150
11	17.2	21.5	1050	14.3	430	0.0	0.0	2350	75.1	87.4	40	60.1	1440	264	889	1140
12	17.5	21.0	1410	15.3	2230	0.0	0.0	2350	72.2	83.0	620	62.5	1240	266	892	1150
13	15.4	17.8	1400	12.4	2330	2.5	1.5	2320	89.0	94.6	2340	67.1	0	216	824	1210
14	14.9	17.6	1350	12.7	250	4.3	1.5	2330	89.9	93.9	150	81.8	1400	234	886	1200
15	16.5	19.1	1440	14.6	0	4.1	1.5	2040	86.9	93.8	1930	73.0	1430	246	869	1250
16	17.1	20.4	1230	15.0	620	0.5	1.5	1430	81.4	92.3	540	66.7	1200	262	909	1140
17	16.4	19.3	1210	14.8	630	0.5	1.5	620	87.1	93.4	410	75.5	1210	200	904	1200
18	16.4	19.3	1400	15.0	840	0.5	1.5	1630	85.7	93.7	2350	71.4	1240	208	903	1120
19	15.9	19.1	1330	14.0	2340	0.5	1.5	1820	77.6	94.6	20	63.7	1350	256	939	1230
20	16.2	20.1	1400	14.1	430	0.3	1.5	350	70.0	83.0	2350	44.9	1530	270	919	1150
21	15.9	18.4	1410	14.0	2350	0.0	0.0	2350	77.4	87.6	550	60.6	1250	241	916	1220
22	17.0	20.7	1400	14.1	30	0.5	1.5	2350	78.5	92.8	940	54.7	250	212	923	1110
23	17.3	21.1	1340	15.2	640	0.3	1.5	600	84.4	93.0	50	67.7	1250	242	907	1230
24	16.7	18.6	1320	15.2	2350	0.3	1.5	620	89.0	92.4	1820	83.5	1320	118	459	1500
25	15.6	18.3	1420	13.6	2350	1.0	1.5	2210	84.3	91.1	230	72.7	1530	218	825	1100
26	17.0	21.1	1230	13.6	0	0.8	1.5	2150	73.9	93.1	1900	57.5	320	271	905	1150
27	15.6	18.7	1240	13.9	420	1.0	1.5	1940	82.3	92.1	0	70.4	1240	228	941	1130
28	16.1	19.0	1110	14.6	500	0.3	1.5	20	81.6	91.6	2310	66.7	1050	256	936	1150
Month Tot.	16.7	22.4		12.4		49.8	12.2		81.6	96.6		44.9		218	941	

Monthly Climate Summary - March 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	16.6	20.6	1310	14.9	330	0.3	1.5	2200	87.0	93.0	1720	73.5	1340	199	938	1210
2	17.8	21.2	1410	15.4	600	0.3	1.5	540	81.0	93.2	420	64.7	1350	258	930	1150
3	18.1	23.1	1340	15.4	440	0.0	0.0	2350	82.2	92.9	2010	62.9	1340	261	947	1140
4	18.0	22.0	1430	15.9	530	0.5	1.5	2310	78.3	89.2	2200	65.4	1300	270	970	1210
5	16.7	19.9	1420	14.9	650	0.5	1.5	1610	77.7	88.5	2350	65.5	1400	267	936	1210
6	16.5	19.5	1420	14.9	400	0.3	1.5	720	81.4	92.7	600	66.4	1410	218	943	1230
7	16.1	18.7	1150	14.7	2250	0.0	0.0	2350	81.6	90.6	2220	68.0	1510	244	958	1120
8	16.3	19.7	1410	14.4	800	0.8	1.5	750	85.4	94.4	710	69.7	1330	246	934	1230
9	17.1	21.1	1440	15.4	640	0.0	0.0	2350	86.0	94.3	640	69.2	1430	228	943	1220
10	18.4	22.9	1020	15.4	0	0.0	0.0	2350	77.7	90.3	2040	61.2	1020	283	973	1200
11	17.8	22.2	1300	15.8	540	0.0	0.0	2350	80.9	91.8	2150	63.2	1220	277	940	1140
12	16.9	20.6	1400	15.1	410	0.3	1.5	610	83.6	92.6	340	71.3	1400	212	998	1210
13	17.6	21.6	1520	15.4	2350	0.0	0.0	2350	75.4	86.7	2050	62.6	1330	272	956	1230
14	17.7	21.8	1510	15.0	520	0.0	0.0	2350	77.5	91.0	450	61.2	920	283	952	1220
15	16.9	20.9	1430	14.7	540	0.3	1.5	210	74.7	87.7	0	56.9	1140	281	955	1150
16	17.1	21.1	1420	14.8	450	0.0	0.0	2350	74.8	87.2	2350	54.7	1300	265	958	1200
17	17.0	20.2	1310	14.7	540	3.0	1.5	2310	84.2	92.9	510	68.0	1250	252	954	1150
18	16.4	19.4	1130	14.7	2330	3.3	1.5	720	81.2	91.7	320	68.5	1040	243	956	1220
19	17.1	21.2	1420	14.6	200	0.0	0.0	2350	77.6	88.8	240	61.0	1330	283	970	1130
20	17.6	22.4	1340	14.0	2310	0.0	0.0	2350	74.9	91.8	2040	58.8	830	285	947	1150
21	18.2	22.9	1310	14.1	120	0.0	0.0	2350	73.4	87.1	2000	57.3	750	284	943	1150
22	17.4	20.2	1540	16.2	140	0.0	0.0	2350	83.8	89.8	610	69.6	1540	133	752	940
23	18.2	21.7	1450	16.3	320	0.0	0.0	2350	83.3	91.6	310	68.8	1500	235	961	1040
24	18.6	23.0	1350	15.1	330	0.0	0.0	2350	69.5	88.9	30	37.1	620	280	914	1140
25	17.0	19.0	1350	15.3	2350	0.5	1.5	910	80.6	90.0	850	70.9	1540	246	935	1230
26	16.7	20.6	1250	14.6	600	0.0	0.0	2350	72.8	83.1	420	54.9	1300	264	953	1210
27	16.5	20.1	1150	14.4	530	0.5	1.5	2200	80.8	92.0	2340	61.1	1010	259	934	1230
28	16.5	18.9	1440	14.8	410	2.0	1.5	2230	87.6	92.9	2100	79.0	1440	203	933	1230
29	17.4	19.0	1330	16.3	450	8.4	3.0	1010	90.3	93.2	2320	84.2	1000	116	747	1030
30	17.7	20.4	1150	16.6	2310	4.1	1.5	2350	88.5	94.3	2210	78.3	1330	144	863	1310
31	17.7	21.0	1250	16.2	2250	3.3	1.5	1010	82.6	91.7	820	71.3	1300	215	937	1220
Month Tot.	17.3	23.1		14.0		28.2	3.0		80.5	94.4		37.1		242	998	

Monthly Climate Summary - April 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	17.8	21.1	1320	15.8	2350	0.0	0.0	2350	78.2	88.3	120	66.4	1330	261	996	1200
2	17.3	20.7	1200	15.4	2200	0.3	1.5	2020	82.1	93.9	2000	65.8	1030	215	936	1040
3	17.0	20.8	1400	14.8	320	0.0	0.0	2350	75.7	87.6	0	60.9	1200	263	947	1210
4	16.7	20.0	1200	14.7	400	0.0	0.0	2350	82.7	92.5	1810	67.5	120	241	925	1100
5	17.0	21.1	1320	15.0	550	0.0	0.0	2350	77.4	88.3	0	57.0	1230	249	929	1150
6	17.7	22.6	1340	15.2	610	0.0	0.0	2350	78.0	88.1	520	60.9	1400	279	999	1210
7	18.0	23.0	1350	14.9	610	0.0	0.0	2350	74.5	87.1	50	50.3	1020	280	943	1150
8	18.4	23.4	1320	14.0	630	0.0	0.0	2350	74.4	90.1	2340	54.0	920	208	1058	1310
9	19.0	24.5	1430	16.3	400	0.0	0.0	2350	78.1	92.2	2030	57.8	1340	252	955	1110
10	18.9	23.3	1310	16.2	510	0.3	1.5	2220	76.0	89.6	2140	62.6	1420	268	940	1220
11	17.6	20.1	1040	15.8	1720	0.3	1.5	640	80.3	90.8	410	67.8	1440	212	1065	1320
12	17.5	21.8	1310	15.4	2300	0.0	0.0	2350	75.1	82.1	1930	59.3	1250	247	942	1150
13	17.2	21.6	1510	15.0	320	0.0	0.0	2350	73.2	84.5	1900	54.9	1350	256	941	1210
14	16.4	19.8	1430	14.0	740	0.0	0.0	2350	71.3	89.8	740	55.8	2350	266	911	1200
15	18.1	23.2	1200	14.9	420	0.0	0.0	2350	71.7	87.2	2150	48.7	1130	212	1076	1210
16	18.4	23.2	1210	15.6	2340	0.0	0.0	2350	73.9	86.0	2150	54.0	1140	184	993	1100
17	17.5	23.3	1310	12.8	540	0.0	0.0	2350	72.1	92.5	2240	48.6	1300	159	782	1040
18	17.4	22.5	1250	12.2	540	0.0	0.0	2350	81.0	92.5	2300	55.3	820	147	750	930
19	18.4	24.4	1110	13.7	420	0.0	0.0	2350	80.1	92.4	150	55.2	1110	166	1022	1110
20	20.2	25.1	1220	17.0	350	0.3	1.5	2000	59.4	87.8	1820	41.3	830	200	936	1200
21	19.8	23.4	1150	17.6	610	2.3	1.5	2320	75.4	92.2	1910	52.2	20	220	956	1140
22	19.4	23.0	1420	18.1	550	4.6	1.5	2330	84.3	91.6	600	68.0	1420	177	918	1220
23	19.2	22.1	1300	17.3	2350	3.0	1.5	1510	78.6	89.4	440	64.7	1520	240	934	1240
24	18.7	23.1	1420	16.9	520	0.0	0.0	2350	77.7	90.1	1930	63.2	1230	259	920	1040
25	18.0	22.2	1430	15.1	2340	0.5	1.5	1250	82.6	90.9	2350	63.1	1440	144	777	1400
26	18.7	23.7	1250	14.8	110	0.0	0.0	2350	80.6	92.5	210	61.8	1250	237	958	1010
27	19.1	23.2	1500	15.7	600	0.3	1.5	1710	78.2	89.9	600	60.0	1510	157	915	920
28	18.4	23.1	1210	15.9	340	0.0	0.0	2350	79.2	90.0	2010	62.7	1220	236	950	1130
29	18.8	23.8	1410	16.3	650	0.3	1.5	10	77.1	87.7	2140	57.5	1410	275	919	1140
30	18.6	22.7	1200	16.2	640	0.0	0.0	2350	69.1	83.8	20	55.9	2350	268	943	1150
Month Tot.	18.2	25.1		12.2		11.9	1.5		76.6	93.9		41.3		226	1076	

Monthly Climate Summary - May 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	19.0	22.9	1340	16.6	520	0.0	0.0	2350	66.0	83.3	1930	53.5	1350	284	923	1140
2	19.0	23.1	1110	15.5	510	0.0	0.0	2350	65.1	87.9	2030	43.1	1040	284	917	1150
3	17.2	20.0	1320	15.7	2350	0.0	0.0	2350	78.1	91.6	1630	64.9	430	175	904	1300
4	18.3	23.4	1330	14.9	540	0.0	0.0	2350	77.1	89.4	2250	60.4	1330	272	943	1140
5	18.6	22.6	1450	16.4	2330	0.0	0.0	2350	80.6	89.7	730	66.2	1230	200	1161	1150
6	18.3	22.2	1030	15.6	130	0.3	1.5	2140	83.0	92.3	2040	63.5	1030	132	666	1030
7	19.6	25.0	1400	16.4	0	0.8	1.5	840	71.7	88.0	2230	51.5	1350	224	916	1240
8	19.3	24.6	1200	15.0	510	0.8	1.5	2220	75.3	94.0	2350	53.3	1150	194	1014	1150
9	18.3	21.5	1120	16.6	2350	3.0	3.0	2350	92.1	95.0	2350	79.9	830	63	562	1130
10	18.5	22.9	1020	15.7	520	41.7	27.4	30	91.7	95.5	550	71.5	1010	129	685	1100
11	18.2	21.2	930	16.6	510	25.9	13.7	1720	93.4	95.2	2230	84.6	930	91	752	1320
12	18.4	22.3	1140	16.1	350	7.1	7.6	1310	88.3	95.3	250	70.4	1140	163	873	1020
13	19.0	23.1	1340	16.9	540	0.5	1.5	800	79.3	91.5	1820	61.7	1340	238	915	1240
14	18.7	23.2	1310	16.9	20	0.0	0.0	2350	82.8	93.5	2140	63.5	1310	185	932	1100
15	18.9	24.3	1330	16.2	2340	0.0	0.0	2350	83.9	94.2	2350	59.9	1320	216	932	1200
16	18.7	22.4	840	15.5	420	0.5	1.5	2240	89.7	95.0	2350	70.3	840	113	565	1150
17	18.1	20.9	830	16.2	2350	2.8	1.5	2330	94.3	95.5	2350	86.7	900	66	579	830
18	18.3	21.5	1150	15.9	100	11.7	4.6	630	83.2	95.6	130	64.6	1430	214	981	1140
19	18.4	21.2	840	16.6	2350	0.5	1.5	2210	83.9	92.0	2350	74.7	840	141	793	830
20	18.6	21.3	1330	16.4	50	0.3	1.5	320	84.9	93.2	110	75.5	1250	150	676	1020
21	18.3	22.8	1200	15.4	320	3.6	1.5	2350	88.3	95.6	2340	71.0	1200	171	982	1230
22	17.5	21.6	1220	15.7	2150	24.9	6.1	1220	86.6	95.5	120	67.9	1040	129	751	1220
23	16.9	22.2	830	13.0	350	3.0	1.5	2350	90.3	95.7	2350	64.6	840	89	699	920
24	18.5	23.4	1320	15.8	300	32.0	6.1	610	89.2	95.9	630	70.7	1520	144	855	1300
25	19.4	23.8	1300	17.1	2350	2.3	1.5	2310	82.7	94.7	2210	65.7	1400	258	938	1300
26	18.5	21.8	1150	17.0	20	7.6	1.5	1920	85.3	92.0	10	72.7	1100	191	966	1200
27	18.4	21.9	1300	15.4	1840	1.8	1.5	2330	85.3	93.8	1850	73.7	1300	139	696	1140
28	18.6	21.2	1420	16.8	240	0.5	1.5	230	83.2	91.9	2200	72.0	1400	181	752	1150
29	18.7	22.2	1320	17.1	500	0.0	0.0	2350	82.9	91.2	340	69.9	1320	203	1075	1320
30	18.8	23.8	1330	16.3	330	5.3	3.0	2140	81.2	92.6	1820	63.9	1330	231	892	1150
31	18.7	23.3	1320	16.6	510	14.5	6.1	2050	84.9	95.2	2350	67.2	920	185	882	1310
Month Tot.	18.5	25.0		13.0		191.3	27.4		83.4	95.9		43.1		176	1161	

Monthly Climate Summary - June 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	18.8	22.4	1100	16.7	320	0.8	1.5	520	84.2	95.4	350	67.0	2340	228	942	1320
2	18.1	23.3	1140	14.2	400	0.0	0.0	2350	86.6	94.2	450	63.6	1150	172	846	1130
3	17.8	21.5	940	16.5	2040	40.6	9.1	1210	91.5	95.8	2350	76.1	940	59	507	930
4	17.7	21.1	1140	15.5	500	63.0	16.8	1500	94.7	96.1	550	81.7	1140	77	669	1120
5	17.7	20.3	1220	16.6	1910	17.0	4.6	2040	94.0	96.1	740	84.5	1230	100	699	1000
6	17.0	20.6	1050	15.8	540	16.8	3.0	1950	94.6	96.2	720	80.2	1050	75	706	1040
7	16.6	17.5	1540	15.9	10	58.2	4.6	1550	96.3	96.4	2310	96.2	1700	47	269	1340
8	17.5	20.3	1200	15.4	550	1.5	1.5	2340	93.1	96.5	600	78.5	1200	128	653	1150
9	17.0	19.6	1210	15.8	2350	8.4	6.1	2130	97.5	101.3	2340	87.6	1210	85	702	1120
10	16.8	21.0	1100	15.5	2100	23.6	9.1	1600	100.8	101.9	2350	86.1	1100	72	766	1050
11	17.1	21.7	1100	14.4	630	16.3	24.4	1320	97.9	102.0	710	72.6	1050	125	927	1040
12	18.2	22.5	1010	14.4	420	0.0	0.0	2350	91.6	101.9	450	73.0	1010	181	815	950
13	18.1	22.8	1310	16.1	1920	11.7	33.5	1440	91.4	101.7	2330	68.5	1310	145	813	1230
14	16.5	20.5	1030	14.3	2330	36.1	56.4	1300	100.2	101.9	2350	88.0	930	69	587	930
15	17.2	21.9	1500	14.2	140	63.0	48.8	1550	97.5	102.1	320	79.4	1040	130	766	1250
16	18.5	23.4	1340	15.3	20	0.5	1.5	2300	90.5	101.4	0	67.8	1340	240	1005	1250
17	18.0	21.3	1140	16.8	2100	2.8	4.6	1450	88.5	96.8	350	74.0	1750	157	1034	1140
18	19.0	22.5	1300	17.0	450	0.0	0.0	2350	82.9	91.3	350	72.1	1300	225	931	1140
19	19.0	22.2	1330	17.0	600	0.0	0.0	2350	84.9	93.3	2310	71.8	1250	237	874	1150
20	18.4	22.1	1550	16.7	2230	1.0	1.5	1050	85.7	96.6	2030	64.2	1540	182	956	1040
21	18.3	21.5	1300	17.1	2040	0.0	0.0	2350	87.0	95.2	820	70.6	1810	137	924	1120
22	18.6	23.6	1140	16.6	1900	45.0	80.8	1450	90.2	101.0	1720	67.8	1140	161	902	1120
23	19.2	22.5	1410	17.8	540	0.0	0.0	2350	89.7	99.0	2350	75.1	1410	152	909	1210
24	18.7	23.7	1240	16.5	1620	9.4	16.8	1520	92.4	100.7	1800	70.6	1240	146	985	1210
25	18.4	23.1	930	17.0	2050	30.5	38.1	1420	94.1	100.9	1640	73.5	920	99	797	930
26	18.7	22.3	1330	16.5	610	0.0	0.0	2350	89.1	96.8	610	76.6	1330	164	880	1120
27	19.2	21.9	1240	17.6	130	10.2	33.5	1700	90.8	99.2	1830	79.5	1000	182	872	1230
28	18.7	20.1	1310	17.8	650	25.9	27.4	600	94.5	99.9	850	85.9	1310	67	418	1340
29	18.8	20.6	1530	18.0	920	10.2	10.7	850	93.3	98.9	2350	83.8	1530	91	593	1540
30	18.4	19.9	1420	17.6	350	39.1	19.8	340	97.2	99.1	520	93.6	2210	87	689	1410
Month Tot.	18.1	23.7		14.2		531.4	80.8		92.1	102.1		63.6		134	1034	

Monthly Climate Summary - July 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	19.5	22.3	1350	17.7	220	6.6	1.5	930	90.1	98.7	920	75.1	1410	202	915	1150
2	19.8	22.6	1450	18.3	2350	1.0	3.0	700	88.6	96.6	620	74.8	1240	199	891	1210
3	19.5	23.7	1400	17.1	110	7.9	21.3	1520	90.3	100.0	110	71.8	1350	129	787	1340
4	18.8	20.4	1040	16.8	2350	6.6	15.2	940	90.4	98.6	2140	80.4	1440	130	738	1020
5	18.4	21.1	1320	15.6	110	2.8	3.0	130	84.9	98.6	150	72.5	2230	103	464	850
6	18.8	23.3	1120	16.7	2210	8.6	16.8	1920	91.0	99.7	1350	70.2	1120	132	914	1110
7	19.0	23.4	950	17.4	200	0.0	0.0	2350	86.6	94.2	1910	70.9	950	202	958	1120
8	18.8	21.6	1330	16.6	320	1.0	1.5	2020	89.0	99.4	2250	76.8	1520	154	682	910
9	18.0	22.0	1010	15.8	2030	84.3	64.0	1600	92.9	101.2	2310	73.8	1010	126	770	950
10	18.6	21.6	1300	15.9	40	0.0	0.0	2350	89.0	101.1	50	77.3	1300	199	847	1100
11	19.2	21.8	1250	17.4	710	0.5	1.5	630	87.1	95.0	300	74.1	1320	182	1080	1200
12	19.1	22.1	1320	17.7	520	0.5	1.5	2210	87.5	96.9	2210	76.5	1320	181	1000	1200
13	18.3	22.3	1250	16.5	1740	34.3	33.5	2220	93.7	100.3	2310	74.1	1250	136	974	1240
14	18.2	21.5	1250	16.4	2110	8.9	6.1	120	92.4	100.6	200	81.2	1320	101	476	1330
15	18.6	21.8	1250	16.2	410	1.0	1.5	2150	89.4	99.6	400	74.5	230	186	925	1140
16	18.5	21.9	1320	16.7	550	1.5	1.5	500	87.9	96.9	2300	74.8	1130	196	883	1310
17	17.5	20.6	1150	15.7	500	12.2	7.6	1300	94.0	100.7	2350	76.9	900	111	688	1000
18	18.0	23.8	1230	14.7	440	5.3	19.8	1900	92.7	101.1	720	70.1	1230	202	1065	1250
19	17.8	21.5	950	15.9	40	15.2	19.8	1340	95.1	100.9	100	77.5	950	99	712	1050
20	18.7	23.8	1410	16.8	2350	18.5	35.1	1920	91.5	100.2	2040	69.2	1410	157	887	1250
21	17.5	22.8	1120	14.4	1930	65.0	80.8	1540	95.7	101.0	2120	72.0	1120	140	1024	1210
22	18.1	22.0	1210	16.0	40	5.8	27.4	1650	89.5	99.1	50	73.8	1400	156	879	1200
23	18.0	21.4	1240	13.5	410	0.0	0.0	2350	83.4	94.6	100	73.0	540	256	963	1120
24	18.4	22.1	1210	16.8	30	5.6	7.6	1530	86.5	97.7	1800	75.3	1210	185	1061	1210
25	18.0	20.6	1340	16.7	2050	1.8	1.5	1540	88.0	95.6	350	77.1	1330	165	859	1300
26	17.2	21.0	1150	14.0	2020	10.2	12.2	1830	86.8	98.2	1850	70.6	1230	134	925	1110
27	17.4	22.2	1240	14.5	2350	2.3	7.6	1610	88.9	100.7	2350	65.8	1240	174	964	1130
28	17.7	23.1	1300	14.0	50	10.2	6.1	2040	87.9	100.8	120	64.9	1230	177	1008	1250
29	16.2	20.0	1240	14.4	500	43.7	47.2	1400	99.1	100.9	2040	87.5	950	77	866	1230
30	17.0	21.9	910	14.0	550	10.9	9.1	1930	96.8	101.1	700	61.7	920	142	758	940
31	17.6	20.3	1220	14.8	540	2.3	7.6	1320	97.4	100.8	720	87.4	900	108	759	1210
Month Tot.	18.3	23.8		13.5		374.7	80.8		90.4	101.2		61.7		156	1080	

Monthly Climate Summary - August 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	19.1	23.6	1500	16.9	450	5.1	7.6	1730	87.6	98.0	1750	70.3	1500	227	961	1210
2	19.2	22.7	1400	17.1	430	0.0	0.0	2350	86.6	97.8	2220	73.2	1400	195	904	1110
3	19.0	23.8	1210	16.4	2250	17.3	16.8	1910	89.4	100.3	2130	68.2	1210	200	1009	1200
4	18.7	21.6	1300	16.6	20	0.3	1.5	220	87.7	96.3	0	77.9	1450	149	902	1250
5	18.5	20.9	1330	17.3	700	2.5	6.1	540	88.0	96.8	710	77.0	1440	171	844	1100
6	18.6	21.8	1410	17.0	300	0.3	1.5	850	85.9	94.7	720	75.4	1410	188	1024	1250
7	18.5	21.8	1250	17.1	1900	2.0	3.0	1740	87.6	95.9	1810	75.1	1300	170	944	1240
8	18.5	21.1	1250	16.9	600	0.0	0.0	2350	82.5	92.3	2140	69.5	1530	255	1081	1250
9	17.8	21.4	1030	16.4	1420	14.2	18.3	1210	87.7	97.5	1510	74.9	1030	91	895	1030
10	18.9	23.1	1310	16.9	510	0.5	1.5	1940	85.4	94.8	50	70.2	1210	220	1093	1200
11	19.1	23.0	1440	17.3	2020	10.7	18.3	1830	86.9	97.8	1930	69.6	1440	218	1036	1020
12	18.9	22.8	1150	16.5	410	13.7	35.1	1800	89.5	98.5	2030	71.3	1120	187	991	1150
13	19.3	22.2	1230	18.1	100	0.0	0.0	2350	85.7	92.6	40	74.7	1230	171	899	1220
14	18.9	21.0	1130	17.5	2250	4.8	3.0	2030	90.0	96.7	1940	79.5	1140	155	717	1100
15	18.3	20.6	1600	16.7	530	5.6	3.0	410	90.2	96.6	500	77.2	1550	172	825	1030
16	18.1	20.6	1210	16.0	1850	4.8	6.1	230	86.1	97.4	250	69.3	2120	161	835	1240
17	18.3	22.4	1250	16.6	1800	9.4	15.2	1640	88.9	98.6	1900	73.2	1250	133	957	1240
18	18.4	22.5	1400	16.1	2340	3.0	7.6	2040	90.7	100.8	2350	74.4	1340	185	949	1350
19	18.1	23.3	1310	15.8	240	1.0	3.0	1450	92.7	100.9	20	70.6	1310	186	1001	1200
20	17.8	21.6	850	15.3	550	0.5	1.5	1800	94.8	99.5	1800	75.8	920	120	806	850
21	18.8	22.4	1410	15.5	540	0.0	0.0	2350	87.6	100.1	600	74.6	1110	190	946	1120
22	18.9	21.9	1400	17.5	320	0.5	1.5	1110	86.7	94.1	230	70.6	1350	161	1093	1300
23	19.1	23.6	1340	17.5	240	3.0	4.6	910	88.3	97.9	110	71.6	1340	185	922	1340
24	17.3	19.0	840	15.8	2150	11.7	18.3	910	92.5	99.1	2350	85.0	1550	69	335	1240
25	17.8	22.7	1040	15.1	600	5.3	4.6	1950	95.8	100.6	650	70.8	1040	133	810	1030
26	17.0	21.3	1310	15.7	1940	17.5	22.9	1420	96.0	100.6	340	76.4	1310	112	785	1310
27	17.8	23.0	1150	15.3	400	2.0	1.5	2030	91.8	100.5	130	67.8	1150	185	985	1130
28	18.3	23.2	1110	15.4	300	2.5	4.6	2110	90.2	100.5	120	65.9	1130	181	1069	1130
29	19.0	24.0	1140	15.8	300	1.0	3.0	2140	92.5	100.5	320	67.9	1240	205	1070	1130
30	18.8	23.8	1410	16.9	2350	14.2	24.4	1500	92.1	100.1	120	70.8	1300	171	941	1140
31	18.5	23.4	1140	16.4	740	2.0	4.6	1610	87.6	98.8	1740	66.9	1140	142	973	1130
Month Tot.	18.5	24.0		15.1		155.7	35.1		89.2	100.9		65.9		171	1093	

Monthly Climate Summary - September 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	17.9	22.1	1140	15.1	2350	80.5	128.0	1510	91.3	100.8	2350	66.1	0	140	829	1150
2	17.8	22.6	1250	14.9	140	8.4	12.2	1820	92.1	101.0	430	72.1	1210	200	1122	1240
3	18.2	22.7	1340	15.7	2150	10.2	32.0	1620	90.7	100.6	2220	74.9	1350	221	1073	1250
4	18.2	22.2	950	14.0	520	0.3	1.5	550	86.3	100.3	600	52.2	2350	200	976	1120
5	19.0	21.9	1400	17.1	440	6.1	10.7	1000	83.2	98.9	2130	43.3	0	231	976	1200
6	18.3	22.4	1310	15.7	2240	2.5	6.1	1750	89.9	100.1	2240	69.2	1330	188	1059	1150
7	18.3	23.1	1310	15.9	2110	20.8	39.6	1540	88.1	100.5	2350	68.2	1300	170	930	1040
8	17.2	22.7	1150	14.8	530	2.3	3.0	1400	96.7	100.9	730	72.5	1140	148	964	950
9	17.0	21.2	850	14.5	500	26.4	21.3	1510	98.5	101.0	620	79.6	850	111	935	1310
10	17.1	21.8	1100	15.0	350	10.4	15.2	1210	96.6	101.0	710	76.0	1100	132	834	1100
11	18.3	23.6	1400	14.5	540	19.3	61.0	2000	90.4	101.1	630	69.4	1400	242	984	1210
12	18.0	22.6	1300	15.0	2310	12.4	25.9	1440	89.0	100.7	1950	72.7	1400	186	899	1030
13	18.5	22.0	1440	16.0	20	2.3	1.5	2100	85.9	99.8	1950	75.1	1120	201	755	1340
14	18.3	23.6	1210	16.0	620	2.5	9.1	1340	88.8	98.8	620	69.5	1210	137	1117	1200
15	17.1	21.3	1120	13.9	250	2.5	7.6	1150	88.5	98.6	2100	72.8	1810	179	866	1110
16	17.9	21.6	1100	15.3	2350	1.5	1.5	1650	89.6	99.8	800	73.1	1100	115	557	830
17	18.0	22.3	1040	14.9	40	0.5	1.5	1850	91.4	100.2	2330	68.1	1010	148	918	1000
18	16.9	21.4	810	15.1	2250	53.3	67.1	1310	98.4	101.0	2350	78.8	810	90	996	1210
19	17.4	22.4	1140	15.1	120	21.8	30.5	1250	98.5	101.1	740	77.9	1140	97	866	1000
20	17.6	21.4	1000	15.3	2350	38.1	36.6	1210	98.1	101.1	650	79.4	1010	121	837	950
21	17.1	22.7	1330	13.8	530	15.5	15.2	1540	95.6	101.3	640	70.7	1330	168	984	1120
22	17.9	22.1	830	14.4	520	1.0	1.5	2230	96.1	101.3	630	74.5	830	122	812	920
23	18.8	23.9	1340	17.2	1850	7.4	15.2	1830	89.9	98.5	2100	68.8	1340	177	1019	1150
24	19.0	22.5	1400	16.6	300	0.5	1.5	240	80.5	94.4	300	60.4	1320	269	917	1200
25	18.7	23.5	1230	16.2	2350	0.0	0.0	2350	80.1	94.3	2340	61.5	1050	218	1040	1230
26	19.1	23.2	1340	16.3	120	1.8	3.0	1940	84.8	98.4	100	67.7	1350	256	946	1120
27	19.2	23.5	1140	16.9	300	5.3	6.1	1840	89.4	98.7	2010	72.0	1300	197	1069	1250
28	18.6	21.2	1350	17.6	1900	1.8	1.5	800	90.4	98.0	650	80.6	1120	193	935	1240
29	18.9	23.1	1230	16.4	2320	0.0	0.0	2350	86.0	98.7	2300	72.2	1230	185	946	1130
30	19.0	22.6	1410	16.7	2210	0.0	0.0	2350	83.4	97.4	0	67.0	2350	242	936	1220
Month Tot.	18.1	23.9		13.8		355.6	128.0		90.3	101.3		43.3		176	1122	

Monthly Climate Summary - October 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	18.6	23.8	1150	16.8	240	14.7	15.2	1610	84.6	98.9	1600	64.0	1150	187	995	1030
2	18.5	21.1	1240	16.9	420	1.5	1.5	2110	87.8	97.0	2000	74.0	1010	182	867	1020
3	18.1	20.8	1020	16.9	1150	3.3	3.0	1110	89.4	95.2	1130	82.2	1330	130	825	1320
4	18.6	22.5	1220	16.6	50	0.0	0.0	2350	86.0	93.4	1620	70.4	1220	211	950	1140
5	18.9	23.0	1320	17.2	410	0.0	0.0	2350	87.7	98.9	1900	71.2	1320	211	925	1100
6	19.4	24.6	1330	16.4	220	2.3	4.6	1710	87.6	99.2	300	65.9	1330	213	936	1100
7	19.3	22.8	1350	17.6	2350	0.5	1.5	720	86.9	97.1	2230	73.1	1350	192	925	1100
8	18.3	22.7	820	16.8	2350	32.8	32.0	1100	94.3	100.5	2350	66.4	820	95	812	900
9	18.1	22.9	1100	16.2	200	2.5	6.1	1230	95.4	100.6	250	73.0	1100	136	768	920
10	18.0	22.4	1100	15.9	210	11.9	22.9	1820	97.6	100.4	2350	80.1	1050	95	1027	1100
11	18.0	22.6	940	15.1	350	5.8	10.7	1330	96.4	100.7	2350	72.1	940	149	918	1200
12	17.9	21.1	910	15.3	340	3.0	3.0	2040	99.4	100.9	620	87.8	840	79	532	750
13	19.0	23.3	1250	15.3	2350	0.5	1.5	1830	88.8	100.8	250	68.7	1340	192	967	1050
14	18.7	23.9	1410	14.4	300	0.8	1.5	2120	87.0	99.8	410	65.9	1230	242	1001	1100
15	18.4	23.0	1130	16.3	2350	22.9	16.8	1740	91.2	100.8	2230	71.0	1040	162	968	1130
16	17.1	17.9	1300	16.0	20	19.6	10.7	710	99.6	101.3	2350	92.1	250	73	393	910
17	17.6	20.8	1130	16.3	1940	20.8	9.1	1300	99.9	102.0	740	87.5	1110	122	944	1130
18	16.8	17.6	900	16.3	1830	24.9	6.1	1220	101.6	101.7	2350	101.4	0	76	325	1330
19	17.0	19.8	840	15.6	430	31.2	24.4	1300	100.9	101.9	700	91.1	840	80	556	1010
20	16.7	18.4	1000	15.5	440	53.8	29.0	1540	101.0	102.0	520	91.6	1130	88	615	1120
21	16.3	16.9	1410	15.9	1810	26.9	13.7	1030	101.9	102.0	2000	101.8	1430	36	270	1350
22	17.2	19.5	900	16.1	420	16.8	32.0	1210	101.0	102.0	630	94.6	950	70	762	850
23	18.5	23.6	1200	16.2	110	0.0	0.0	2350	93.1	101.8	320	70.5	1200	166	1064	1200
24	19.5	23.8	1210	17.6	2350	0.3	1.5	2040	78.6	94.1	2050	63.6	1210	210	1049	1140
25	18.9	24.0	1210	16.9	210	3.6	10.7	1400	86.5	99.9	2130	66.4	1200	195	977	1130
26	18.8	22.0	1150	17.2	2330	0.0	0.0	2350	84.7	94.0	520	70.1	2130	166	882	1100
27	19.1	23.1	1440	17.0	300	0.5	1.5	1910	82.3	98.2	1850	65.2	950	195	951	1110
28	19.4	23.8	1350	17.1	1850	5.6	12.2	1810	84.3	98.4	2120	65.2	1240	235	952	1110
29	18.0	22.0	1120	16.0	420	4.8	21.3	230	92.9	100.5	450	75.1	1120	141	758	1110
30	17.6	21.1	1100	15.4	2350	4.6	6.1	1650	95.4	101.3	2350	78.1	1040	101	661	1050
31	17.0	20.0	1110	14.7	530	57.9	61.0	1330	99.6	101.7	620	88.8	1110	63	431	840
Month Tot.	18.2	24.6		14.4		373.9	61.0		92.4	102.0		63.6		145	1064	

Monthly Climate Summary - November 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	17.2	21.0	1100	15.1	400	10.2	15.2	1400	99.2	101.7	720	83.7	1100	79	651	1040
2	17.5	22.7	920	15.9	0	14.7	24.4	1600	98.3	101.6	300	69.1	920	92	765	930
3	18.0	22.2	1320	16.1	300	1.0	1.5	1830	89.5	100.4	30	73.2	1300	148	854	1250
4	18.3	22.1	1040	16.7	320	1.0	1.5	1740	85.5	95.8	1800	72.3	1050	208	929	1140
5	18.4	21.8	1230	16.4	510	0.5	1.5	2040	85.1	96.0	1910	72.3	1240	194	917	1110
6	18.0	19.7	1150	17.2	1920	7.9	13.7	1220	92.7	98.5	1820	82.7	740	92	752	1010
7	17.9	22.3	1130	15.2	2350	41.9	53.3	1630	91.5	100.6	1700	74.5	1140	120	891	1110
8	18.1	23.3	1310	14.5	110	0.0	0.0	2350	86.7	100.0	120	68.9	1310	214	877	1220
9	17.7	22.9	1140	13.0	300	1.0	1.5	1830	85.3	98.1	2220	65.5	1000	213	1008	1130
10	17.8	22.0	1200	14.9	2350	2.0	3.0	1810	91.1	101.4	2350	73.8	1210	151	859	950
11	17.9	22.7	1140	14.7	150	0.3	1.5	1500	87.2	102.2	400	60.3	2230	198	851	1150
12	17.9	21.7	1250	15.7	140	0.0	0.0	2350	84.4	91.1	500	74.8	1250	213	891	1140
13	18.4	22.6	1330	16.6	2220	0.5	3.0	1550	78.8	92.4	1720	66.3	1520	219	963	1130
14	17.6	22.6	1250	14.9	400	18.8	12.2	1820	85.7	101.3	2350	65.1	1300	188	901	1110
15	16.2	17.9	950	14.9	510	5.6	10.7	1230	100.3	101.5	2310	92.7	820	56	465	940
16	16.4	20.0	840	14.9	100	59.7	35.1	1550	99.9	101.8	2110	85.7	840	70	576	810
17	17.0	20.9	1050	15.0	340	3.3	3.0	1230	97.4	100.7	520	78.6	1100	104	869	1050
18	17.1	22.2	850	15.2	420	18.5	32.0	1400	97.2	101.7	1940	73.4	850	92	787	850
19	17.5	22.3	1330	14.4	500	0.8	1.5	2340	95.0	101.9	610	76.3	1330	174	868	1030
20	16.4	20.4	1300	13.9	1950	8.1	3.0	1750	94.1	99.9	0	78.3	1300	169	849	1250
21	14.1	16.6	1400	11.9	2200	12.2	3.0	1000	93.9	99.7	710	83.8	1400	163	682	1350
22	12.7	15.1	1350	10.5	420	0.3	1.5	410	83.7	93.5	2320	74.1	940	231	811	1130
23	13.8	16.5	1350	11.6	450	0.8	1.5	2320	92.4	96.5	550	83.2	1410	215	802	1220
24	15.0	17.8	1250	12.6	530	0.3	1.5	50	87.4	97.0	1810	74.6	830	232	824	1140
25	16.6	19.9	1410	14.8	530	0.0	0.0	2350	88.1	95.5	1900	73.4	1410	228	825	1130
26	17.9	21.8	1330	16.1	550	2.0	1.5	2340	88.7	98.2	2250	74.3	1010	151	781	1020
27	17.6	20.2	1450	16.8	0	4.1	1.5	1140	93.5	98.5	440	83.4	1450	97	475	1440
28	17.7	19.9	1230	16.4	2350	5.8	3.0	1550	93.7	98.3	1550	85.3	1220	102	447	1300
29	17.5	20.2	1240	16.1	530	0.3	1.5	600	90.3	98.0	0	80.3	1250	162	975	1200
30	18.5	23.2	1250	16.6	430	2.8	3.0	1750	91.1	98.2	500	72.4	1250	172	911	1230
Month Tot.	17.1	23.3		10.5		224.3	53.3		90.9	102.2		60.3		158	1008	

Monthly Climate Summary - December 2006

Day	Mean Temp Deg.C	Max Temp Deg.C	Time Max Temp	Min Temp Deg.C	Time Min Temp	Daily Rain (mm)	Max Rain Rate (mm/hr)	Time Max Rain	Mean Rel. Humid (%)	Max Rel. Humid (%)	Time Max Humid	Min Rel. Humid (%)	Time Min Humid	Mean Solar Rad (W/m2)	Max Solar Rad (W/m2)	Time Max Rad
1	18.3	20.4	1230	17.7	20	1.3	1.5	2310	90.1	94.8	2350	82.5	1230	137	749	1410
2	17.1	18.2	1110	16.1	1450	11.2	3.0	1010	92.3	96.8	320	82.4	1830	44	280	1100
3	17.8	20.7	1450	16.1	510	0.8	1.5	2350	81.5	94.0	2350	66.3	1300	228	825	1130
4	16.3	17.6	1100	14.8	2350	30.2	4.6	2040	93.4	96.8	640	84.5	1340	140	752	1140
5	15.9	18.2	1210	14.1	40	8.6	3.0	20	91.2	96.8	2030	83.4	430	203	786	1110
6	16.7	19.5	1240	15.4	640	9.7	3.0	820	94.7	99.2	710	84.3	1240	125	1003	1230
7	17.1	18.6	950	15.8	530	3.0	1.5	1030	91.2	96.5	530	84.1	1410	80	496	950
8	17.6	20.3	1220	15.7	530	2.5	3.0	40	90.2	98.2	50	77.1	1230	147	699	1200
9	17.8	20.5	1510	16.4	500	8.9	9.1	220	93.2	98.6	2220	81.3	1010	129	649	1200
10	17.7	19.4	1220	16.4	30	0.3	1.5	1820	90.6	99.3	120	80.3	1440	93	442	1150
11	17.2	18.1	1320	16.5	1910	4.3	1.5	1420	93.7	97.3	2140	88.3	1700	67	312	1230
12	17.4	20.4	1330	15.9	450	5.1	10.7	240	90.2	98.8	330	63.8	1340	162	848	1220
13	17.7	22.6	1150	15.6	340	0.3	1.5	130	90.3	98.3	2240	65.5	1150	152	852	1140
14	18.1	22.0	1250	15.5	330	31.5	70.1	1850	90.2	98.6	1910	74.5	1350	146	869	1230
15	17.3	20.4	1330	14.2	2350	0.8	1.5	1830	89.0	97.8	2320	70.4	1110	149	771	1320
16	17.5	21.5	1240	13.7	50	0.0	0.0	2350	78.8	96.2	0	63.6	1350	221	811	1200
17	17.7	21.0	1320	15.7	50	0.0	0.0	2350	81.8	89.9	520	70.3	1420	213	857	1130
18	17.8	21.5	1350	15.8	2350	0.3	1.5	2340	79.1	92.6	2340	60.0	1320	228	816	1150
19	17.3	20.4	1340	15.4	510	1.5	1.5	440	85.6	94.2	120	70.8	1340	184	838	1120
20	17.7	21.0	1220	16.0	630	0.0	0.0	2350	83.7	92.7	2230	71.6	1250	219	880	1030
21	18.0	22.5	1050	13.8	350	0.0	0.0	2350	82.6	97.6	2350	64.1	1050	217	953	1110
22	17.8	23.4	1210	15.2	150	17.0	33.5	2050	85.6	98.4	2100	63.1	1210	149	945	1210
23	18.4	21.6	1410	16.4	50	0.3	1.5	220	86.1	93.7	430	71.5	1410	198	831	1150
24	18.6	22.2	1150	17.4	620	0.0	0.0	2350	86.7	96.5	1820	70.7	1150	150	874	1100
25	18.4	20.9	1420	17.1	520	0.5	1.5	1040	85.8	96.8	1040	75.4	1420	177	785	1200
26	18.0	21.2	1220	14.2	2350	6.9	4.6	2120	83.9	96.5	2230	64.5	1200	215	791	1150
27	14.5	17.3	1240	11.8	640	6.6	1.5	2200	93.9	97.8	2050	83.6	1330	175	778	1130
28	16.6	19.4	1300	14.4	340	1.0	1.5	600	89.6	96.0	150	80.8	1600	189	813	1250
29	17.4	19.8	1150	15.2	620	0.0	0.0	2350	84.4	92.0	440	74.4	1410	206	805	1140
30	17.6	20.6	1150	15.9	520	0.0	0.0	2350	85.6	92.7	1820	70.8	1120	219	814	1150
31	17.1	19.9	1420	16.3	2340	1.3	1.5	1100	88.1	94.2	1120	74.7	1340	113	776	1330
Month Tot.	17.4	23.4		11.8		153.7	70.1		87.8	99.3		60.0		164	1003	

Appendix B: Manual rain-gauge measurements

Fecha Date	Hora Time	Cantidad - Amount (inches)	(mm)	Notes
1/3/2006	8:00 a.m	0.01	0.3	
1/4/2006	8:00 a.m	0.02	0.5	
1/5/2006	8:00 a.m	0	0.0	
1/6/2006	8:00 a.m	0.22	5.6	
1/7/2006	8:00 a.m			weekend
1/8/2006	8:00 a.m			weekend
1/9/2006	8:00 a.m	0.82	20.8	
1/10/2006	8:00 a.m	0.02	0.5	
1/11/2006	8:00 a.m	0.04	1.0	
1/12/2006	8:00 a.m	0.06	1.5	
1/13/2006	8:00 a.m	0.02	0.5	
1/14/2006	8:00 a.m			weekend
1/15/2006	8:00 a.m			weekend
1/16/2006	8:00 a.m	3.3	83.8	
1/17/2006	8:00 a.m	0.04	1.0	
1/18/2006	8:00 a.m	0.01	0.3	
1/19/2006	8:00 a.m	0.1	2.5	
1/20/2006	8:00 a.m	0.66	16.8	
1/21/2006	8:00 a.m			weekend
1/22/2006	8:00 a.m			weekend
1/23/2006	8:00 a.m	0.02	0.5	
1/24/2006	8:00 a.m	0	0.0	
1/25/2006	8:00 a.m	0.04	1.0	
1/26/2006	8:00 a.m	0.02	0.5	
1/27/2006	8:00 a.m	0.41	10.4	
1/28/2006	8:00 a.m			weekend
1/29/2006	8:00 a.m			weekend
1/30/2006	8:00 a.m	0.6	15.2	
1/31/2006	8:00 a.m	0.07	1.8	
2/1/2006	8:00 a.m	0.37	9.4	
2/2/2006	8:00 a.m	0.04	1.0	
2/3/2006	8:00 a.m	0.03	0.8	
2/4/2006	8:00 a.m			weekend
2/5/2006	8:00 a.m			weekend
2/6/2006	8:00 a.m	0.9	22.9	
2/7/2006	8:00 a.m	0.2	5.1	
2/8/2006	8:00 a.m	0.04	1.0	
2/9/2006	8:00 a.m	0.01	0.3	
2/10/2006	8:00 a.m	0	0.0	
2/11/2006	8:00 a.m			weekend
2/12/2006	8:00 a.m			weekend
2/13/2006	8:00 a.m	0.27	6.9	
2/14/2006	8:00 a.m	0.24	6.1	
2/15/2006	8:00 a.m	0.15	3.8	
2/16/2006	8:00 a.m	0.05	1.3	
2/17/2006	8:00 a.m	0.17	4.3	
2/18/2006	8:00 a.m			weekend
2/19/2006	8:00 a.m			weekend
2/20/2006	8:00 a.m	0.17	4.3	
2/21/2006	8:00 a.m	0.01	0.3	
2/22/2006	8:00 a.m	0	0.0	
2/23/2006	8:00 a.m	0	0.0	
2/24/2006	8:00 a.m	0.18	4.6	
2/25/2006	8:00 a.m			weekend

Fecha Date	Hora Time	Cantidad - Amount (inches) (mm)		Notes
2/26/2006	8:00 a.m			weekend
2/27/2006	8:00 a.m			
2/28/2006	8:00 a.m			
3/1/2006	8:00 a.m	0.18	4.6	
3/2/2006	8:00 a.m	0.08	2.0	
3/3/2006	8:00 a.m	0	0.0	
3/4/2006	8:00 a.m			weekend
3/5/2006	8:00 a.m			weekend
3/6/2006	8:00 a.m	0	0.0	
3/7/2006	8:00 a.m	0.04	1.0	
3/8/2006	8:00 a.m	0.02	0.5	
3/9/2006	8:00 a.m	0.02	0.5	
3/10/2006	8:00 a.m	0	0.0	
3/11/2006	8:00 a.m			weekend
3/12/2006	8:00 a.m			weekend
3/13/2006	8:00 a.m	0.02	0.5	
3/14/2006	8:00 a.m	0	0.0	
3/15/2006	8:00 a.m	0.02	0.5	
3/16/2006	8:00 a.m	0	0.0	
3/17/2006	8:00 a.m	0.05	1.3	
3/18/2006	8:00 a.m			weekend
3/19/2006	8:00 a.m			weekend
3/20/2006	8:00 a.m	0.18	4.6	
3/21/2006	8:00 a.m	0.01	0.3	
3/22/2006	8:00 a.m	0	0.0	
3/23/2006	8:00 a.m	0.01	0.3	
3/24/2006	8:00 a.m	0	0.0	
3/25/2006	8:00 a.m			weekend
3/26/2006	8:00 a.m			weekend
3/27/2006	8:00 a.m	0	0.0	
3/28/2006	8:00 a.m	0.18	4.6	
3/29/2006	8:00 a.m	0.27	6.9	
3/30/2006	8:00 a.m	0.18	4.6	
3/31/2006	8:00 a.m	0.12	3.0	
4/1/2006	8:00 a.m			weekend
4/2/2006	8:00 a.m			weekend
4/3/2006	8:00 a.m	0.03	0.8	
4/4/2006	8:00 a.m	0	0.0	
4/5/2006	8:00 a.m	0.02	0.5	
4/6/2006	8:00 a.m	0.02	0.5	
4/7/2006	8:00 a.m	0	0.0	
4/8/2006	8:00 a.m			weekend
4/9/2006	8:00 a.m			weekend
4/10/2006	8:00 a.m	0.02	0.5	
4/11/2006	8:00 a.m	0.02	0.5	
4/12/2006	8:00 a.m	0	0.0	
4/13/2006	8:00 a.m	0	0.0	
4/14/2006	8:00 a.m	0	0.0	
4/15/2006	8:00 a.m			weekend
4/16/2006	8:00 a.m			weekend
4/17/2006	8:00 a.m	0	0.0	
4/18/2006	8:00 a.m	0.01	0.3	
4/19/2006	8:00 a.m	0	0.0	
4/20/2006	8:00 a.m	0	0.0	

Fecha Date	Hora Time	Cantidad - Amount (inches)	(mm)	Notes
4/21/2006	8:00 a.m	0.02	0.5	
4/22/2006	8:00 a.m			weekend
4/23/2006	8:00 a.m			weekend
4/24/2006	8:00 a.m	0.42	10.7	
4/25/2006	8:00 a.m	0.01	0.3	
4/26/2006	8:00 a.m	0.02	0.5	
4/27/2006	8:00 a.m	0	0.0	
4/28/2006	8:00 a.m	0.02	0.5	
4/29/2006	8:00 a.m			weekend
4/30/2006	8:00 a.m			weekend
5/1/2006	8:00 a.m	0.02	0.5	
5/2/2006	8:00 a.m	0.01	0.3	
5/3/2006	8:00 a.m	0	0.0	
5/4/2006	8:00 a.m	0	0.0	
5/5/2006	8:00 a.m	0	0.0	
5/6/2006	8:00 a.m			weekend
5/7/2006	8:00 a.m			weekend
5/8/2006	8:00 a.m	0.07	1.8	
5/9/2006	8:00 a.m	0.09	2.3	
5/10/2006	8:00 a.m	1.42	36.1	
5/11/2006	8:00 a.m	0.25	6.4	
5/12/2006	8:00 a.m	1.07	27.2	
5/13/2006	8:00 a.m			weekend
5/14/2006	8:00 a.m			weekend
5/15/2006	8:00 a.m	0.32	8.1	
5/16/2006	8:00 a.m	0.02	0.5	
5/17/2006	8:00 a.m	0.32	8.1	
5/18/2006	8:00 a.m	0.31	7.9	
5/19/2006	8:00 a.m	0.01	0.3	
5/20/2006	8:00 a.m			weekend
5/21/2006	8:00 a.m			weekend
5/22/2006	8:00 a.m	1.3	33.0	
5/23/2006	8:00 a.m	0.02	0.5	
5/24/2006	8:00 a.m	1.62	41.1	
5/25/2006	8:00 a.m	0.05	1.3	
5/26/2006	8:00 a.m	0.4	10.2	
5/27/2006	8:00 a.m			weekend
5/28/2006	8:00 a.m			weekend
5/29/2006	8:00 a.m	0.11	2.8	
5/30/2006	8:00 a.m	0	0.0	
5/31/2006	8:00 a.m	0.22	5.6	
6/1/2006	8:00 a.m	0.66	16.8	
6/2/2006	8:00 a.m	0.01	0.3	
6/3/2006	8:00 a.m			weekend
6/4/2006	8:00 a.m			weekend
6/5/2006	8:00 a.m	4.25	108.0	
6/6/2006	8:00 a.m	0.64	16.3	
6/7/2006	8:00 a.m	2.23	56.6	
6/8/2006	8:00 a.m	0.65	16.5	
6/9/2006	8:00 a.m			
6/10/2006	8:00 a.m			weekend
6/11/2006	8:00 a.m			weekend
6/12/2006	8:00 a.m	2.25	57.2	
6/13/2006	8:00 a.m	0.01	0.3	

Fecha Date	Hora Time	Cantidad - (inches)	Amount (mm)	Notes
6/14/2006	8:00 a.m	0.47	11.9	
6/15/2006	8:00 a.m	1.4	35.6	
6/16/2006	8:00 a.m	0.01	0.3	
6/17/2006	8:00 a.m			weekend
6/18/2006	8:00 a.m			weekend
6/19/2006	8:00 a.m	0.14	3.6	
6/20/2006	8:00 a.m	0.01	0.3	
6/21/2006	8:00 a.m	0.02	0.5	
6/22/2006	8:00 a.m	0.01	0.3	
6/23/2006	8:00 a.m	1.74	44.2	
6/24/2006	8:00 a.m			weekend
6/25/2006	8:00 a.m			weekend
6/26/2006	8:00 a.m	1.5	38.1	
6/27/2006	8:00 a.m	0.01	0.3	
6/28/2006	8:00 a.m	1.14	29.0	
6/29/2006	8:00 a.m	0.48	12.2	
6/30/2006	8:00 a.m	0.82	20.8	
7/1/2006	8:00 a.m			weekend
7/2/2006	8:00 a.m			weekend
7/3/2006	8:00 a.m	0.94	23.9	
7/4/2006	8:00 a.m	0.3	7.6	
7/5/2006	8:00 a.m	0.34	8.6	
7/6/2006	8:00 a.m	0.02	0.5	
7/7/2006	8:00 a.m	0.32	8.1	
7/8/2006	8:00 a.m			weekend
7/9/2006	8:00 a.m			weekend
7/10/2006	8:00 a.m	3.24	82.3	
7/11/2006	8:00 a.m	0.03	0.8	
7/12/2006	8:00 a.m	0.02	0.5	
7/13/2006	8:00 a.m	0.22	5.6	
7/14/2006	8:00 a.m	1.53	38.9	
7/15/2006	8:00 a.m			weekend
7/16/2006	8:00 a.m			weekend
7/17/2006	8:00 a.m	0.12	3.0	
7/18/2006	8:00 a.m	0.5	12.7	
7/19/2006	8:00 a.m	0.21	5.3	
7/20/2006	8:00 a.m	0.59	15.0	
7/21/2006	8:00 a.m	0.75	19.1	
7/22/2006	8:00 a.m			weekend
7/23/2006	8:00 a.m			weekend
7/24/2006	8:00 a.m	2.7	68.6	
7/25/2006	8:00 a.m	0.7	17.8	
7/26/2006	8:00 a.m	0.07	1.8	
7/27/2006	8:00 a.m	0.4	10.2	
7/28/2006	8:00 a.m	0.07	1.8	
7/29/2006	8:00 a.m			weekend
7/30/2006	8:00 a.m			weekend
7/31/2006	8:00 a.m	2.45	62.2	
8/1/2006	8:00 a.m			Vacation
8/2/2006	8:00 a.m			Vacation
8/3/2006	8:00 a.m			Vacation
8/4/2006	8:00 a.m			Vacation
8/5/2006	8:00 a.m			weekend
8/6/2006	8:00 a.m			weekend

Fecha Date	Hora Time	Cantidad - Amount (inches) (mm)		Notes
8/7/2006	8:00 a.m			Vacation
8/8/2006	8:00 a.m			Vacation
8/9/2006	8:00 a.m			Vacation
8/10/2006	8:00 a.m			Vacation
8/11/2006	8:00 a.m			Vacation
8/12/2006	8:00 a.m			weekend
8/13/2006	8:00 a.m			weekend
8/14/2006	8:00 a.m	2.53	64.3	
8/15/2006	8:00 a.m	0.35	8.9	
8/16/2006	8:00 a.m	0.15	3.8	
8/17/2006	8:00 a.m	0.1	2.5	
8/18/2006	8:00 a.m	0.29	7.4	
8/19/2006	8:00 a.m			weekend
8/20/2006	8:00 a.m			weekend
8/21/2006	8:00 a.m	1.53	38.9	
8/22/2006	8:00 a.m	0.02	0.5	
8/23/2006	8:00 a.m	0.12	3.0	
8/24/2006	8:00 a.m	0.11	2.8	
8/25/2006	8:00 a.m	0.53	13.5	
8/26/2006	8:00 a.m			weekend
8/27/2006	8:00 a.m			weekend
8/28/2006	8:00 a.m	0.92	23.4	
8/29/2006	8:00 a.m	0.15	3.8	
8/30/2006	8:00 a.m	0.03	0.8	
8/31/2006	8:00 a.m	0.57	14.5	
9/1/2006	8:00 a.m	0.11	2.8	
9/2/2006	8:00 a.m			weekend
9/3/2006	8:00 a.m			weekend
9/4/2006	8:00 a.m	3.8	96.5	
9/5/2006	8:00 a.m	0.01	0.3	
9/6/2006	8:00 a.m	0.28	7.1	
9/7/2006	8:00 a.m	0.07	1.8	
9/8/2006	8:00 a.m	0.8	20.3	
9/9/2006	8:00 a.m			weekend
9/10/2006	8:00 a.m			weekend
9/11/2006	8:00 a.m	1.52	38.6	
9/12/2006	8:00 a.m	0.71	18.0	
9/13/2006	8:00 a.m	0.5	12.7	
9/14/2006	8:00 a.m	0.05	1.3	
9/15/2006	8:00 a.m	0.01	0.3	
9/16/2006	8:00 a.m			weekend
9/17/2006	8:00 a.m			weekend
9/18/2006	8:00 a.m	0.31	7.9	
9/19/2006	8:00 a.m	2.05	52.1	
9/20/2006	8:00 a.m	1	25.4	
9/21/2006	8:00 a.m	1	25.4	
9/22/2006	8:00 a.m	0.8	20.3	
9/23/2006	8:00 a.m			weekend
9/24/2006	8:00 a.m			weekend
9/25/2006	8:00 a.m	0.38	9.7	
9/26/2006	8:00 a.m	0.01	0.3	
9/27/2006	8:00 a.m			
9/28/2006	8:00 a.m	0.16	4.1	
9/29/2006	8:00 a.m	0.01	0.3	

Fecha Date	Hora Time	Cantidad (inches)	- Amount (mm)	Notes
9/30/2006	8:00 a.m			weekend
10/1/2006	8:00 a.m			weekend
10/2/2006	8:00 a.m	0.55	14.0	
10/3/2006	8:00 a.m	0.01	0.3	
10/4/2006	8:00 a.m	0.02	0.5	
10/5/2006	8:00 a.m	0.01	0.3	
10/6/2006	8:00 a.m	0.18	4.6	
10/7/2006	8:00 a.m			weekend
10/8/2006	8:00 a.m			weekend
10/9/2006	8:00 a.m	1.32	33.5	
10/10/2006	8:00 a.m	0.1	2.5	
10/11/2006	8:00 a.m	0.48	12.2	
10/12/2006	8:00 a.m	0.02	0.5	
10/13/2006	8:00 a.m			
10/14/2006	8:00 a.m			weekend
10/15/2006	8:00 a.m			weekend
10/16/2006	8:00 a.m	1.25	31.8	
10/17/2006	8:00 a.m	0.52	13.2	
10/18/2006	8:00 a.m	0.74	18.8	
10/19/2006	8:00 a.m	0.89	22.6	
10/20/2006	8:00 a.m	2.32	58.9	
10/21/2006	8:00 a.m			weekend
10/22/2006	8:00 a.m			weekend
10/23/2006	8:00 a.m	2.54	64.5	
10/24/2006	8:00 a.m	0.01	0.3	
10/25/2006	8:00 a.m	0.02	0.5	
10/26/2006	8:00 a.m	0.08	2.0	
10/27/2006	8:00 a.m	0.01	0.3	
10/28/2006	8:00 a.m			weekend
10/29/2006	8:00 a.m			weekend
10/30/2006	8:00 a.m	0.35	8.9	
10/31/2006	8:00 a.m	0.15	3.8	
11/1/2006	8:00 a.m	2.12	53.8	
11/2/2006	8:00 a.m	0.35	8.9	
11/3/2006	8:00 a.m	0.58	14.7	
11/4/2006	8:00 a.m			weekend
11/5/2006	8:00 a.m			weekend
11/6/2006	8:00 a.m	0.08	2.0	
11/7/2006	8:00 a.m	0.35	8.9	
11/8/2006	8:00 a.m	1.58	40.1	
11/9/2006	8:00 a.m	0.01	0.3	
11/10/2006	8:00 a.m	0.12	3.0	
11/11/2006	8:00 a.m			weekend
11/12/2006	8:00 a.m			weekend
11/13/2006	8:00 a.m	0.01	0.3	
11/14/2006	8:00 a.m	0.04	1.0	
11/15/2006	8:00 a.m	0.7	17.8	
11/16/2006	8:00 a.m	0.13	3.3	
11/17/2006	8:00 a.m	2.33	59.2	
11/18/2006	8:00 a.m			weekend
11/19/2006	8:00 a.m			weekend
11/20/2006	8:00 a.m	0.94	23.9	
11/21/2006	8:00 a.m	0.44	11.2	
11/22/2006	8:00 a.m	0.15	3.8	

Fecha Date	Hora Time	Cantidad (inches)	- Amount (mm)	Notes
11/23/2006	8:00 a.m	0.03	0.8	
11/24/2006	8:00 a.m	0.03	0.8	
11/25/2006	8:00 a.m			weekend
11/26/2006	8:00 a.m			weekend
11/27/2006	8:00 a.m	0.25	6.4	
11/28/2006	8:00 a.m	0.03	0.8	
11/29/2006	8:00 a.m	0.23	5.8	
11/30/2006	8:00 a.m	0.03	0.8	
12/1/2006	8:00 a.m	0.02	0.5	
12/2/2006	8:00 a.m			weekend
12/3/2006	8:00 a.m			weekend
12/4/2006	8:00 a.m			
12/5/2006	8:00 a.m			
12/6/2006	8:00 a.m			
12/7/2006	8:00 a.m	2.03	51.6	
12/8/2006	8:00 a.m	0.12	3.0	
12/9/2006	8:00 a.m			weekend
12/10/2006	8:00 a.m			weekend
12/11/2006	8:00 a.m	0.44	11.2	
12/12/2006	8:00 a.m	0.35	8.9	
12/13/2006	8:00 a.m	0.05	1.3	
12/14/2006	8:00 a.m	0.01	0.3	
12/15/2006	8:00 a.m	1.34	34.0	
12/16/2006	8:00 a.m			weekend
12/17/2006	8:00 a.m			weekend
12/18/2006	8:00 a.m	0.02	0.51	
12/19/2006	8:00 a.m	0.03	0.8	