

UNIVERSIDAD NACIONAL DE COLOMBIA SEDE MANIZALES

OBSERVATORIOS AMBIENTALES PARA EL DESARROLLO URBANO SOTENIBLE EN MANIZALES



RED DE ESTACIONES HIDROMETEOROLÓGICAS PARA PREVENCIÓN DE DESASTRES DE MANIZALES

ESTACIÓN METEOROLÓGICA CHEC URIBE

CÓDIGO: EMM-14

AGOSTO DE 2011

RESUMEN DIARIO Y MENSUAL DE VARIABLES METEOROLÓGICAS

Variables	Temper	atura del A	Aire (℃)	V.V. (m/s)	P.B. (HPa)	Humed	dad Relativ	va (%)	LI. (mm)	Radiación S	Solar (W/m²)	ET. (mm)
Día	Máxima	Media	Mínima	Máxima	Media	Media	Máxima	Media	Mínima	Suma	Máxima	Media	Suma
1	22.7	18.5	14.8	4.5	1.4	817.3	94.0	84.4	73.0	0.0	1273.0	371.4	3.1
2	23.6	18.5	16.0	4.5	2.0	816.2	93.0	83.6	72.0	3.6	1215.0	291.4	2.6
3	23.7	18.9	16.6	4.5	1.4	816.3	93.0	84.7	73.0	2.0	1232.0	375.2	2.8
4	23.9	19.4	14.9	3.6	1.3	816.3	90.0	82.3	71.0	0.0	1208.0	403.6	3.3
5	26.5	20.9	17.0	4.0	1.4	816.1	95.0	76.4	56.0	11.8	1164.0	498.2	4.2
6	26.8	20.7	16.2	4.5	1.6	815.6	79.0	68.0	42.0	0.0	1137.0	441.2	4.0
7	26.2	20.7	16.8	4.0	1.5	816.1	81.0	71.9	51.0	0.0	1060.0	407.3	3.7
8	26.6	21.0	16.3	4.5	1.7	816.2	81.0	67.5	46.0	0.0	1065.0	577.0	5.1
9	25.2	19.9	17.1	4.0	1.2	816.1	88.0	74.7	47.0	0.0	1160.0	247.9	2.4
10	26.4	20.6	16.3	4.5	1.6	815.3	86.0	73.6	48.0	0.0	1238.0	507.5	4.4
11	24.2	19.7	16.6	4.5	1.4	815.2	86.0	77.4	61.0	0.0	1085.0	272.4	2.4
12	20.9	18.4	16.9	2.7	0.4	815.9	97.0	90.2	75.0	1.0	700.0	179.2	1.4
13	24.5	19.3	16.2	3.1	1.2	815.9	91.0	80.9	55.0	0.0	849.0	332.7	2.8
14	23.2	19.2	16.7	4.0	0.9	814.9	96.0	83.5	66.0	2.2	1187.0	295.8	2.4
15	23.0	18.8	16.9	2.7	0.4	816.4	98.0	91.4	70.0	6.4	1093.0	207.3	1.8
16	23.1	19.0	16.7	3.6	1.1	817.3	95.0	87.0	63.0	3.0	909.0	310.3	2.3
17	24.7	18.9	16.2	4.0	1.7	817.1	92.0	81.2	61.0	1.0	1023.0	321.8	2.8
18	25.0	19.5	15.9	4.5	1.3	816.2	96.0	82.6	59.0	14.8	1281.0	524.0	4.2
19	23.7	19.2	15.4	5.4	0.9	815.9	97.0	83.5	59.0	2.4	1225.0	436.5	3.4
20	20.7	18.0	16.0	3.1	0.9	816.8	96.0	90.6	82.0	7.4	1229.0	197.6	1.5
21	21.1	18.1	14.9	3.6	1.3	817.9	93.0	87.4	76.0	1.0	1053.0	288.4	2.3
22	23.8	19.4	15.9	3.6	1.0	817.2	91.0	83.5	71.0	0.0	1245.0	339.3	2.8
23	23.2	18.5	16.1	4.9	1.0	816.5	97.0	89.1	73.0	32.8	1359.0	239.5	1.9
24	22.9	18.0	15.4	2.7	0.8	818.3	97.0	88.2	69.0	1.6	1013.0	303.9	2.2
25	24.1	19.5	15.3	4.0	1.5	818.1	90.0	81.0	66.0	0.0	1215.0	406.1	3.5
26	25.3	19.6	16.3	4.9	1.9	817.9	86.0	77.6	51.0	0.0	1137.0	395.7	3.4
27	25.4	20.1	15.8	3.6	1.2	817.0	94.0	78.7	62.0	3.2	1320.0	375.6	3.2
28	23.4	18.6	16.2	4.5	0.9	816.7	98.0	89.2	76.0	17.2	1329.0	364.7	2.8
29	25.4	19.8	16.7	4.0	1.3	816.5	93.0	80.4	58.0	0.0	1239.0	356.6	3.3
30	27.0	20.7	15.8	4.5	1.8	815.4	85.0	71.6	41.0	0.0	1151.0	574.2	5.0
31	26.4	21.2	17.6	4.0	1.3	815.2	86.0	71.4	49.0	0.0	1213.0	388.0	3.5
Mensual	27.0	19.4	14.8	5.4	1.3	816.4	98.0	81.1	41.0	111.4	1359.0	362.3	94.5

Convenciones: V.V.: Velocidad del Viento P.B.: Presión Barométrica Ll.: Lluvia diaria ET.: Evapotranspiración. Nota: Datos resaltados en rojo están incompletos.



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AGOSTO DE 2011

JORNADA DIURNA - DIRECCIÓN DEL VIENTO SEGÚN LA ROSA DE LOS VIENTOS (Frecuencia relativa)

Día	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSO	so	oso	0	ONO	NO	NNO
1	4%	2%	1%	1%	1%	5%	10%	10%	2%	1%	2%	3%	8%	14%	24%	12%
2	5%	3%	2%	2%	6%	17%	17%	11%	1%	0%	1%	2%	6%	9%	12%	6%
3	3%	6%	1%	2%	4%	13%	15%	10%	1%	1%	1%	1%	4%	10%	21%	6%
4	7%	8%	0%	1%	1%	3%	6%	3%	1%	1%	0%	3%	12%	13%	27%	14%
5	6%	10%	3%	0%	3%	8%	13%	6%	0%	1%	1%	4%	6%	13%	20%	6%
6	14%	6%	1%	1%	3%	1%	8%	13%	0%	0%	1%	3%	10%	7%	20%	13%
7	10%	8%	2%	1%	1%	4%	13%	0%	1%	0%	1%	3%	10%	14%	17%	14%
8	15%	10%	6%	1%	1%	2%	10%	4%	1%	1%	3%	3%	6%	11%	16%	11%
9	3%	6%	3%	3%	1%	7%	1%	7%	0%	1%	1%	2%	6%	13%	26%	19%
10	8%	12%	6%	5%	1%	3%	4%	5%	0%	0%	0%	6%	7%	13%	20%	9%
11	6%	9%	3%	0%	1%	7%	8%	6%	0%	0%	2%	2%	6%	17%	22%	10%
12	3%	3%	0%	1%	0%	0%	5%	3%	0%	0%	1%	4%	5%	22%	33%	21%
13	4%	5%	1%	1%	5%	12%	8%	7%	0%	0%	0%	4%	10%	13%	17%	12%
14	6%	3%	3%	0%	5%	8%	13%	6%	1%	0%	2%	1%	9%	9%	26%	9%
15	33%	1%	0%	0%	0%	1%	7%	1%	1%	1%	0%	2%	3%	11%	29%	10%
16	8%	2%	1%	1%	2%	5%	21%	8%	1%	0%	1%	1%	11%	12%	19%	8%
17	7%	3%	1%	3%	2%	11%	19%	13%	1%	0%	1%	3%	8%	10%	8%	10%
18	8%	8%	4%	2%	2%	5%	8%	6%	1%	1%	2%	1%	8%	14%	23%	9%
19	11%	6%	4%	1%	0%	2%	6%	6%	2%	1%	2%	4%	8%	10%	22%	13%
20	10%	2%	1%	0%	0%	6%	9%	6%	1%	0%	1%	1%	3%	17%	35%	8%
21	7%	2%	0%	0%	1%	4%	16%	17%	0%	1%	1%	1%	6%	11%	26%	8%
22	8%	3%	1%	0%	2%	6%	10%	3%	0%	0%	0%	2%	8%	10%	30%	17%
23	6%	5%	1%	0%	1%	6%	19%	5%	1%	0%	1%	4%	6%	9%	29%	8%
24	4%	6%	0%	1%	1%	6%	17%	8%	0%	0%	1%	1%	2%	12%	35%	6%
25	13%	2%	3%	2%	2%	2%	13%	4%	0%	0%	1%	5%	8%	14%	17%	14%
26	17%	1%	0%	0%	1%	6%	12%	4%	0%	0%	0%	1%	5%	8%	21%	24%
27	11%	6%	2%	0%	1%	3%	14%	10%	0%	0%	1%	3%	8%	12%	21%	8%
28	7%	5%	0%	0%	1%	5%	6%	6%	1%	0%	0%	3%	10%	13%	26%	18%
29	6%	4%	1%	1%	0%	4%	6%	4%	1%	2%	2%	6%	11%	13%	27%	13%
30	5%	8%	3%	1%	2%	3%	6%	5%	1%	0%	3%	6%	8%	17%	18%	13%
31	8%	1%	3%	2%	4%	1%	5%	10%	1%	0%	1%	5%	14%	13%	21%	11%
Mensual	8%	5%	2%	1%	2%	5%	10%	7%	1%	0%	1%	3%	7%	12%	23%	12%

	DIRECCIÓN DEL VIENTO EN EL MES ORDENADA DE MAYOR A MENOR PREDOMINANCIA															
R. V.	NO	ONO	NNO	SE	N	0	SSE	ESE	NNE	OSO	NE	Е	ENE	SO	S	SSO
F. R.	23%	12%	12%	10%	8%	7%	7%	5%	5%	3%	2%	2%	1%	1%	1%	0%

Convenciones: R. V.: Rosa de los Vientos F. R.: Frecuencia Relativa. Nota: Datos resaltados en rojo están incompletos.



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JORNADA NOCTURNA - DIRECCIÓN DEL VIENTO SEGÚN LA ROSA DE LOS VIENTOS (Frecuencia relativa)

DÍA	N	NNE	NE	ENE	Е	ESE	SE	SSE	S	SSO	so	oso	0	ONO	NO	NNO
1	0%	0%	0%	0%	2%	19%	48%	28%	1%	0%	0%	0%	0%	0%	3%	0%
2	0%	0%	0%	0%	0%	15%	58%	26%	1%	0%	0%	0%	0%	0%	0%	0%
3	0%	0%	0%	2%	3%	15%	48%	30%	1%	0%	0%	0%	0%	0%	1%	0%
4	7%	0%	1%	0%	3%	10%	52%	27%	1%	0%	0%	0%	0%	0%	0%	0%
5	0%	2%	1%	3%	4%	17%	52%	15%	2%	0%	0%	0%	0%	0%	3%	0%
6	1%	0%	0%	0%	2%	10%	53%	28%	1%	1%	0%	0%	0%	0%	5%	0%
7	8%	0%	0%	1%	2%	19%	44%	25%	1%	0%	0%	0%	0%	0%	0%	0%
8	2%	0%	0%	0%	1%	10%	49%	33%	0%	0%	0%	0%	0%	0%	0%	4%
9	1%	0%	0%	0%	3%	14%	49%	22%	1%	0%	0%	0%	1%	6%	1%	3%
10	2%	3%	0%	0%	4%	21%	42%	27%	0%	0%	0%	0%	0%	0%	0%	1%
11	8%	0%	0%	0%	2%	15%	44%	30%	0%	0%	0%	1%	0%	0%	0%	0%
12	1%	6%	0%	1%	8%	22%	27%	6%	1%	1%	0%	0%	1%	7%	16%	3%
13	1%	1%	0%	1%	1%	15%	49%	27%	0%	0%	0%	0%	0%	0%	0%	5%
14	28%	3%	0%	1%	5%	10%	19%	18%	0%	0%	0%	0%	1%	2%	8%	5%
15	45%	1%	0%	0%	1%	20%	28%	1%	0%	0%	0%	0%	1%	0%	1%	2%
16	15%	0%	0%	0%	2%	8%	53%	15%	0%	0%	0%	0%	0%	0%	8%	0%
17	0%	0%	0%	0%	3%	14%	51%	31%	1%	0%	0%	0%	0%	0%	0%	0%
18	3%	6%	1%	0%	4%	15%	40%	18%	0%	1%	0%	1%	2%	1%	3%	4%
19	12%	1%	0%	8%	6%	14%	27%	13%	0%	0%	0%	0%	0%	1%	8%	10%
20	0%	0%	0%	0%	3%	34%	50%	13%	0%	0%	0%	0%	0%	0%	0%	0%
21	0%	0%	0%	0%	3%	17%	61%	19%	0%	0%	0%	0%	0%	0%	0%	0%
22	6%	1%	0%	0%	1%	15%	38%	22%	1%	4%	0%	0%	0%	0%	4%	9%
23	3%	2%	2%	0%	6%	15%	28%	23%	1%	0%	0%	1%	0%	1%	6%	10%
24	2%	1%	0%	3%	3%	19%	32%	35%	0%	0%	0%	1%	0%	0%	2%	2%
25	2%	0%	0%	7%	3%	16%	48%	24%	0%	0%	0%	0%	0%	0%	0%	0%
26	0%	0%	0%	0%	1%	13%	48%	37%	1%	0%	0%	0%	0%	0%	0%	0%
27	2%	6%	1%	0%	1%	17%	33%	22%	1%	0%	1%	0%	1%	0%	3%	12%
28	4%	5%	1%	1%	1%	13%	40%	10%	2%	0%	1%	0%	1%	1%	15%	3%
29	0%	0%	0%	3%	1%	15%	49%	25%	0%	0%	0%	0%	0%	3%	1%	3%
30	0%	0%	0%	0%	1%	13%	50%	31%	0%	0%	0%	0%	0%	0%	6%	0%
31	1%	1%	1%	1%	6%	13%	53%	25%	0%	0%	0%	0%	0%	0%	0%	0%
Mensual	5%	1%	0%	1%	3%	16%	44%	23%	1%	0%	0%	0%	0%	1%	3%	2%

	DIRECCIÓN DEL VIENTO EN EL MES ORDENADA DE MAYOR A MENOR PREDOMINANCIA															
R. V.	SE	SSE	ESE	N	NO	Е	NNO	NNE	ENE	ONO	S	0	NE	SSO	OSO	SO
F. R.	44%	23%	16%	5%	3%	3%	2%	1%	1%	1%	1%	0%	0%	0%	0%	0%

Convenciones: R. V.: Rosa de los Vientos F. R.: Frecuencia Relativa. Nota: Datos resaltados en rojo están incompletos.