

Estación: Cortaderal Fecha: Septiembre de 2011

Registros: 30 de 30

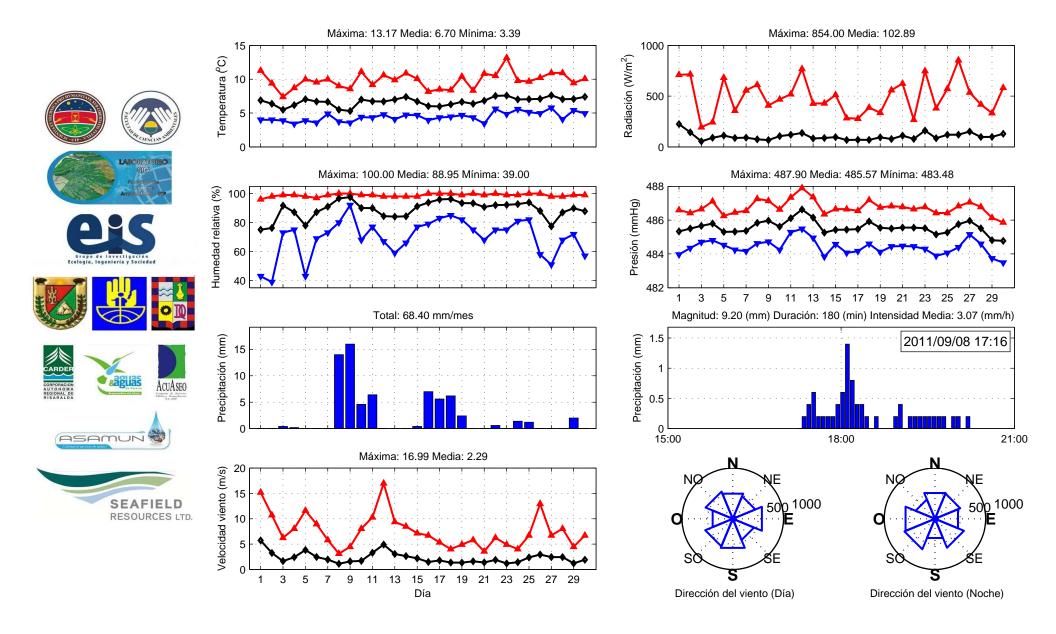
Reporte climatológico mensual

Red Hidroclimatológica del Departamento de Risaralda

Revisó: Adm. Ambiental Victor Manuel Bermúdez Marín. Operador REDH

Aprobó: Ing Ph.D. Juan Mauricio Castaño Rojas. Director REDH.

Contáctenos: http://www.utp.edu.co/hidroclimatologica



Estación: Cortaderal Fecha: Septiembre de 2011

Registros: 30 de 30

Reporte climatológico mensual

Red Hidroclimatológica del Departamento de Risaralda

Revisó: Adm. Ambiental Victor Manuel Bermúdez Marín. Operador REDH

Aprobó: Ing Ph.D. Juan Mauricio Castaño Rojas. Director REDH.

Contáctenos: www.utp.edu.co/hidroclimatologica

|       | Temperatura |       |       | Vel. V | Viento | Presión | Humedad | Precipitación | Evap  | Radiación solar |        |
|-------|-------------|-------|-------|--------|--------|---------|---------|---------------|-------|-----------------|--------|
| Día   | (°C)        |       | (m/s) |        | (mmHg) | (%)     | (mm)    | (mm)          | ` '   |                 |        |
|       | Máx         | Media | Mín   | Máx    | Media  | Media   | Media   | Total         | Total | Máx             | Media  |
| 1     | 11.28       | 6.88  | 4.00  | 15.20  | 5.74   | 485.33  | 75.14   | 0.00          | 2.36  | 710.00          | 223.89 |
| 2     | 9.39        | 6.36  | 4.00  | 10.73  | 3.25   | 485.50  | 76.24   | 0.00          | 1.48  | 715.00          | 143.41 |
| 3     | 7.39        | 5.49  | 3.89  | 6.26   | 1.65   | 485.66  | 91.70   | 0.40          | 0.40  | 193.00          | 53.68  |
| 4     | 8.72        | 6.16  | 3.39  | 8.05   | 2.41   | 485.79  | 87.14   | 0.20          | 0.64  | 243.00          | 88.93  |
| 5     | 10.00       | 7.04  | 3.89  | 11.62  | 3.85   | 485.30  | 77.92   | 0.00          | 1.30  | 682.00          | 111.23 |
| 6     | 9.56        | 6.70  | 3.56  | 8.94   | 2.47   | 485.31  | 87.19   | 0.00          | 0.71  | 357.00          | 86.73  |
| 7     | 10.00       | 6.65  | 4.89  | 5.81   | 1.95   | 485.36  | 90.94   | 0.00          | 0.58  | 557.00          | 90.91  |
| 8     | 9.00        | 5.50  | 3.72  | 3.13   | 1.13   | 485.83  | 96.62   | 14.00         | 0.38  | 612.00          | 73.97  |
| 9     | 8.56        | 5.31  | 3.56  | 4.47   | 1.59   | 485.97  | 97.55   | 16.00         | 0.25  | 408.00          | 66.47  |
| 10    | 11.11       | 6.99  | 4.39  | 8.05   | 1.70   | 485.61  | 90.06   | 4.60          | 0.64  | 468.00          | 105.74 |
| 11    | 9.17        | 6.72  | 4.33  | 10.28  | 3.29   | 486.11  | 89.93   | 6.40          | 0.86  | 519.00          | 118.74 |
| 12    | 10.61       | 6.70  | 4.78  | 16.99  | 4.92   | 486.63  | 84.42   | 0.00          | 1.17  | 768.00          | 136.26 |
| 13    | 9.89        | 6.99  | 4.06  | 9.39   | 3.05   | 486.15  | 84.03   | 0.00          | 0.76  | 427.00          | 82.53  |
| 14    | 10.89       | 7.38  | 4.72  | 8.49   | 2.65   | 485.26  | 84.26   | 0.00          | 0.89  | 429.00          | 87.10  |
| 15    | 10.06       | 6.71  | 4.67  | 7.15   | 2.19   | 485.43  | 91.14   | 0.40          | 0.61  | 512.00          | 95.82  |
| 16    | 8.17        | 6.03  | 3.94  | 6.71   | 1.47   | 485.43  | 93.77   | 7.00          | 0.33  | 283.00          | 67.35  |
| 17    | 8.50        | 5.97  | 4.33  | 5.36   | 1.78   | 485.46  | 95.92   | 5.60          | 0.36  | 278.00          | 70.07  |
| 18    | 8.39        | 6.27  | 4.44  | 4.02   | 1.37   | 485.92  | 96.24   | 6.20          | 0.30  | 387.00          | 68.10  |
| 19    | 10.39       | 6.64  | 4.67  | 4.92   | 1.35   | 485.54  | 93.39   | 2.40          | 0.41  | 336.00          | 93.67  |
| 20    | 8.33        | 6.37  | 4.33  | 5.81   | 1.62   | 485.50  | 93.29   | 0.00          | 0.41  | 559.00          | 77.10  |
| 21    | 10.83       | 6.83  | 3.44  | 3.58   | 1.38   | 485.56  | 90.69   | 0.00          | 0.71  | 624.00          | 109.66 |
| 22    | 10.50       | 7.54  | 5.61  | 6.26   | 1.90   | 485.55  | 92.04   | 0.60          | 0.51  | 267.00          | 77.94  |
| 23    | 13.17       | 7.59  | 4.83  | 4.92   | 1.20   | 485.52  | 92.20   | 0.00          | 0.94  | 747.00          | 159.93 |
| 24    | 9.78        | 7.01  | 5.56  | 4.02   | 1.44   | 485.15  | 92.72   | 1.40          | 0.45  | 381.00          | 84.61  |
| 25    | 9.67        | 7.04  | 5.11  | 6.71   | 2.38   | 485.27  | 93.86   | 1.20          | 0.74  | 571.00          | 119.28 |
| 26    | 10.22       | 7.09  | 4.94  | 12.96  | 2.94   | 485.76  | 88.06   | 0.00          | 0.94  | 854.00          | 119.74 |
| 27    | 10.94       | 7.62  | 5.78  | 6.71   | 2.44   | 485.96  | 77.42   | 0.00          | 1.48  | 536.00          | 151.13 |
| 28    | 10.94       | 7.04  | 4.06  | 8.05   | 2.44   | 485.52  | 86.94   | 0.00          | 0.68  | 418.00          | 96.70  |
| 29    | 9.44        | 7.07  | 5.39  | 4.47   | 1.21   | 484.81  | 89.85   | 2.00          | 0.53  | 332.00          | 97.64  |
| 30    | 10.06       | 7.40  | 4.94  | 6.71   | 1.91   | 484.77  | 87.83   | 0.00          | 0.89  | 582.00          | 128.35 |
| TOTAL |             |       |       |        |        |         |         | 68.40         | 22.71 |                 |        |
| PROM  | 9.83        | 6.70  | 4.44  | 7.53   | 2.29   | 485.57  | 88.95   |               |       | 491.83          | 102.89 |

Cuadro 1: Resúmen de análisis climatológico

Estación: Cortaderal Fecha: Septiembre de 2011

Registros: 30 de 30

Reporte climatológico mensual

Red Hidroclimatológica del Departamento de Risaralda

Revisó: Adm. Ambiental Victor Manuel Bermúdez Marín. Operador REDH

Aprobó: Ing Ph.D. Juan Mauricio Castaño Rojas. Director REDH.

Contáctenos: www.utp.edu.co/hidroclimatologica

|       | Lluvias por |   |    |         | Lluvias por |    |     |      | PT |       | P     | DM    | MM     | IMM    | IM5        |            |
|-------|-------------|---|----|---------|-------------|----|-----|------|----|-------|-------|-------|--------|--------|------------|------------|
| Día   | intensidad  |   |    | jornada |             |    | CLL | (mm) |    |       | (min) | (mm)  | (mm/h) | (mm/h) |            |            |
|       | F           | M | L  | LL      | Md          | Mñ | T   | N    |    |       | (h)   | (%)   | . ,    |        | (11111/11) | (11111111) |
| 1     | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 2     | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 3     | 0           | 0 | 1  | 0       | 0           | 0  | 1   | 0    | 1  | 0.40  | 0.08  | 0.35  | 10.00  | 0.40   | 1.60       | 4.80       |
| 4     | 0           | 0 | 1  | 0       | 0           | 0  | 1   | 0    | 1  | 0.20  | 0.08  | 0.35  | 10.00  | 0.20   | 0.80       | 2.40       |
| 5     | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 6     | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 7     | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 8     | 0           | 2 | 3  | 0       | 0           | 0  | 4   | 1    | 5  | 14.00 | 3.83  | 15.97 | 180.00 | 9.20   | 2.98       | 16.80      |
| 9     | 0           | 2 | 6  | 0       | 1           | 1  | 2   | 4    | 8  | 16.00 | 3.92  | 16.32 | 55.00  | 5.80   | 5.80       | 16.80      |
| 10    | 0           | 0 | 3  | 1       | 2           | 0  | 0   | 2    | 4  | 4.60  | 1.92  | 7.99  | 195.00 | 3.60   | 1.08       | 2.40       |
| 11    | 0           | 1 | 1  | 0       | 1           | 0  | 0   | 1    | 2  | 6.40  | 1.67  | 6.94  | 120.00 | 6.20   | 2.98       | 7.20       |
| 12    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 13    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 14    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 15    | 0           | 0 | 1  | 0       | 1           | 0  | 0   | 0    | 1  | 0.40  | 0.08  | 0.35  | 10.00  | 0.40   | 1.60       | 4.80       |
| 16    | 0           | 2 | 0  | 0       | 0           | 0  | 1   | 1    | 2  | 7.00  | 1.00  | 4.17  | 35.00  | 4.20   | 6.30       | 16.80      |
| 17    | 0           | 1 | 3  | 0       | 2           | 2  | 0   | 0    | 4  | 5.60  | 1.92  | 7.99  | 140.00 | 3.20   | 1.32       | 4.80       |
| 18    | 0           | 0 | 8  | 0       | 0           | 2  | 4   | 2    | 8  | 6.20  | 2.17  | 9.03  | 50.00  | 1.80   | 1.96       | 4.80       |
| 19    | 0           | 0 | 5  | 1       | 0           | 2  | 3   | 1    | 6  | 2.40  | 0.92  | 3.82  | 40.00  | 1.20   | 1.60       | 4.80       |
| 20    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 21    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 22    | 0           | 0 | 2  | 0       | 0           | 0  | 2   | 0    | 2  | 0.60  | 0.17  | 0.69  | 10.00  | 0.40   | 1.60       | 4.80       |
| 23    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 24    | 0           | 0 | 4  | 0       | 0           | 0  | 4   | 0    | 4  | 1.40  | 0.50  | 2.08  | 25.00  | 0.80   | 1.60       | 4.80       |
| 25    | 0           | 0 | 2  | 1       | 2           | 0  | 0   | 1    | 3  | 1.20  | 0.50  | 2.08  | 55.00  | 0.80   | 0.80       | 2.40       |
| 26    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 27    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 28    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| 29    | 0           | 0 | 1  | 0       | 0           | 0  | 1   | 0    | 1  | 2.00  | 0.58  | 2.43  | 55.00  | 2.00   | 2.00       | 4.80       |
| 30    | 0           | 0 | 0  | 0       | 0           | 0  | 0   | 0    | 0  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00   | 0.00       | 0.00       |
| MAX   | 0           | 2 | 8  | 1       | 2           | 2  | 4   | 4    | 8  | 16.00 | 3.92  | 16.32 | 195.00 | 9.20   | 6.30       | 16.80      |
| TOTAL | 0           | 8 | 41 | 3       | 9           | 7  | 23  | 13   | 52 | 68.40 | 19.33 | 2.69  |        |        |            |            |

Cuadro 1: Análisis mensual de lluvias

| F  | Fuerte   | $7.6 \text{ (mm/h)} \leq \text{intensidad}$                     |
|----|----------|-----------------------------------------------------------------|
| M  | Moderada | $2.5 \text{ (mm/h)} < \text{intensidad} \le 7.6 \text{ (mm/h)}$ |
| L  | Ligera   | $1.0 \text{ (mm/h)} < \text{intensidad} \le 2.5 \text{ (mm/h)}$ |
| LL | Llovizna | $1.0 \text{ (mm/h)} \ge \text{intensidad}$                      |

| Md | Madrugada | 00:00 - 05:59 |
|----|-----------|---------------|
| Mñ | Mañana    | 06:00 - 11:59 |
| T  | Tarde     | 12:00 - 17:59 |
| N  | Noche     | 18:00 - 23:59 |

| CLL | Cantidad de Lluvias                  |
|-----|--------------------------------------|
| PT  | Precipitación total (mm)             |
| DP  | Duración precipitacion diaria        |
| DM  | Duración máxima lluvia aislada (min) |
| MM  | Magnitud máx. lluvia aislada (mm)    |
| IMM | Intensidad media máxima (mm/h)       |
| IM5 | Intensidad máx. en 5 minutos (mm/h)  |

Cuadro 2: Convenciones y Unidades