

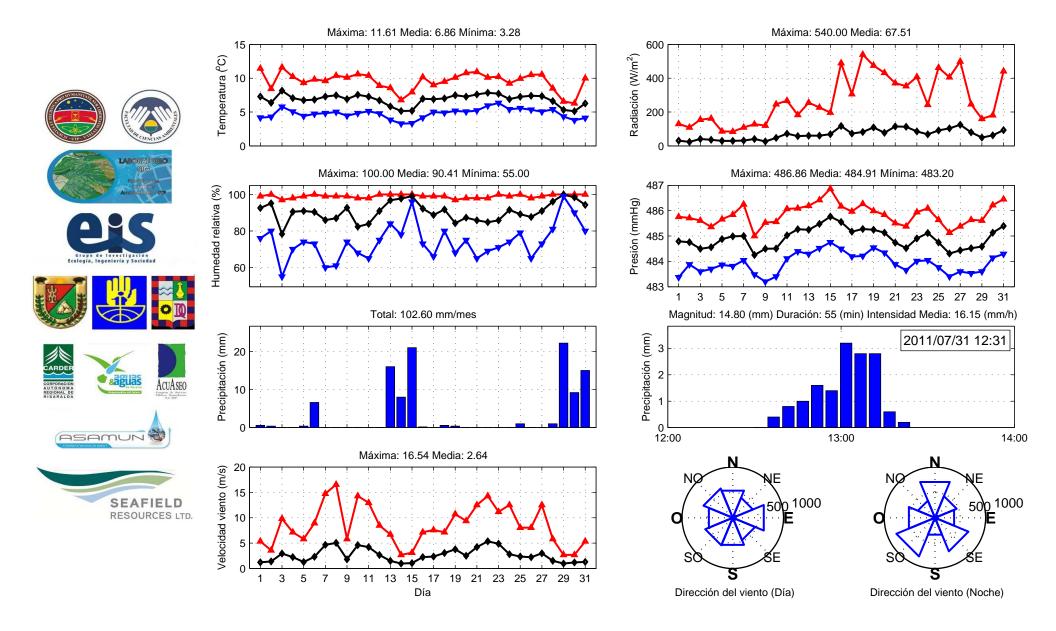
Estación: Cortaderal Fecha: Julio de 2011 Registros: 31 de 31 Reporte climatológico mensual

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.

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|       | Temperatura |       |      | Viento | Presión | Humedad  | Precipitación | Evap   | l                   | Radiación solar |        |
|-------|-------------|-------|------|--------|---------|----------|---------------|--------|---------------------|-----------------|--------|
| Día   | (°C)        |       | ,    | /s)    | (mmHg)  | (%) (mm) |               | (mm)   | (W/m <sup>2</sup> ) |                 |        |
|       | Máx         | Media | Mín  | Máx    | Media   | Media    | Media         | Total  | Total               | Máx             | Media  |
| 1     | 11.44       | 7.29  | 4.17 | 5.36   | 1.22    | 484.79   | 92.58         | 0.60   | 0.20                | 130.00          | 30.69  |
| 2     | 8.44        | 6.36  | 4.28 | 3.58   | 1.39    | 484.76   | 95.10         | 0.40   | 0.08                | 109.00          | 23.42  |
| 3     | 11.61       | 8.15  | 5.78 | 9.83   | 2.95    | 484.50   | 78.37         | 0.00   | 0.81                | 155.00          | 40.26  |
| 4     | 10.22       | 7.06  | 5.06 | 7.15   | 2.24    | 484.56   | 90.48         | 0.00   | 0.36                | 162.00          | 35.80  |
| 5     | 9.33        | 6.74  | 4.39 | 5.81   | 1.29    | 484.88   | 90.91         | 0.40   | 0.25                | 86.00           | 29.35  |
| 6     | 9.83        | 6.82  | 4.72 | 8.94   | 2.31    | 484.99   | 90.40         | 6.60   | 0.23                | 84.00           | 29.41  |
| 7     | 9.61        | 7.29  | 4.83 | 14.75  | 4.65    | 485.00   | 85.96         | 0.00   | 0.66                | 109.00          | 30.91  |
| 8     | 10.39       | 7.47  | 5.00 | 16.54  | 5.05    | 484.25   | 86.98         | 0.00   | 1.10                | 128.00          | 40.37  |
| 9     | 10.11       | 6.91  | 4.44 | 5.81   | 1.81    | 484.50   | 92.69         | 0.00   | 0.23                | 120.00          | 26.21  |
| 10    | 10.61       | 7.54  | 4.83 | 14.30  | 4.61    | 484.51   | 82.38         | 0.00   | 0.96                | 246.00          | 47.30  |
| 11    | 10.39       | 7.26  | 5.11 | 12.96  | 4.21    | 485.02   | 83.85         | 0.00   | 1.00                | 267.00          | 72.16  |
| 12    | 8.89        | 6.72  | 4.78 | 8.49   | 2.66    | 485.27   | 90.91         | 0.00   | 0.48                | 183.00          | 57.71  |
| 13    | 8.56        | 5.82  | 3.83 | 6.71   | 1.49    | 485.25   | 96.82         | 16.00  | 0.33                | 255.00          | 60.43  |
| 14    | 6.78        | 5.15  | 3.28 | 2.68   | 0.98    | 485.48   | 97.71         | 8.00   | 0.30                | 227.00          | 60.23  |
| 15    | 7.94        | 5.18  | 3.33 | 3.13   | 1.07    | 485.77   | 98.99         | 21.00  | 0.28                | 197.00          | 68.53  |
| 16    | 10.17       | 6.95  | 4.17 | 7.15   | 2.25    | 485.55   | 92.19         | 0.20   | 0.72                | 489.00          | 117.09 |
| 17    | 9.00        | 6.89  | 5.00 | 7.60   | 2.36    | 485.17   | 88.72         | 0.00   | 0.61                | 306.00          | 72.29  |
| 18    | 9.50        | 7.00  | 4.89 | 7.15   | 3.05    | 485.28   | 91.80         | 0.60   | 0.64                | 540.00          | 81.62  |
| 19    | 10.11       | 7.49  | 5.17 | 10.73  | 3.77    | 485.25   | 84.24         | 0.40   | 1.07                | 475.00          | 108.55 |
| 20    | 10.78       | 7.27  | 5.06 | 9.39   | 2.52    | 485.13   | 87.28         | 0.00   | 0.69                | 432.00          | 77.01  |
| 21    | 10.94       | 7.60  | 5.22 | 12.52  | 4.21    | 484.74   | 85.82         | 0.00   | 1.14                | 371.00          | 114.96 |
| 22    | 10.11       | 7.85  | 5.94 | 14.30  | 5.36    | 484.52   | 84.81         | 0.00   | 1.37                | 353.00          | 112.50 |
| 23    | 10.22       | 7.72  | 6.33 | 11.18  | 4.88    | 484.90   | 85.84         | 0.00   | 1.04                | 408.00          | 85.26  |
| 24    | 9.22        | 6.91  | 5.39 | 12.52  | 2.83    | 485.12   | 91.55         | 0.00   | 0.54                | 243.00          | 68.01  |
| 25    | 9.94        | 7.26  | 5.56 | 8.05   | 2.36    | 484.75   | 89.17         | 1.00   | 0.69                | 462.00          | 91.13  |
| 26    | 10.50       | 7.39  | 5.33 | 8.05   | 2.23    | 484.31   | 87.64         | 0.00   | 0.81                | 406.00          | 103.26 |
| 27    | 10.56       | 7.36  | 5.06 | 12.52  | 2.99    | 484.43   | 90.90         | 0.00   | 0.86                | 499.00          | 124.83 |
| 28    | 8.50        | 6.62  | 5.39 | 5.81   | 1.52    | 484.52   | 96.07         | 1.00   | 0.41                | 246.00          | 79.90  |
| 29    | 6.56        | 5.32  | 4.33 | 2.68   | 0.98    | 484.59   | 99.94         | 22.20  | 0.20                | 160.00          | 48.72  |
| 30    | 6.28        | 5.12  | 3.78 | 2.68   | 1.20    | 485.13   | 98.42         | 9.20   | 0.30                | 181.00          | 61.80  |
| 31    | 10.00       | 6.27  | 4.11 | 5.36   | 1.30    | 485.39   | 94.27         | 15.00  | 0.46                | 441.00          | 93.02  |
| TOTAL |             |       |      |        |         |          |               | 102.60 | 18.82               |                 |        |
| PROM  | 9.57        | 6.86  | 4.79 | 8.51   | 2.64    | 484.91   | 90.41         | 1 7 7  |                     | 273.23          | 67.51  |
|       |             |       |      | I .    | 1       |          |               |        |                     |                 |        |

Cuadro 1: Resúmen de análisis climatológico

Estación: Cortaderal Fecha: Julio de 2011 Registros: 31 de 31

Reporte climatológico mensual

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|       | Lluvias por |   |    |    | Lluvias por |    |    | CLL | PT   | D       | nD    | DM    | MM       | IMM     | IM5         |             |
|-------|-------------|---|----|----|-------------|----|----|-----|------|---------|-------|-------|----------|---------|-------------|-------------|
| Día   | intensidad  |   |    |    | jornada     |    |    |     | (mm) |         |       | (min) | (mm)     | (mm/h)  | (mm/h)      |             |
|       | F           | M | L  | LL | Md          | Mñ | T  | N   |      | (11111) | (h)   | (%)   | (111111) | (11111) | (111111/11) | (111111/11) |
| 1     | 0           | 0 | 1  | 0  | 0           | 0  | 1  | 0   | 1    | 0.60    | 0.17  | 0.69  | 20.00    | 0.60    | 1.44        | 4.80        |
| 2     | 0           | 0 | 2  | 0  | 0           | 1  | 1  | 0   | 2    | 0.40    | 0.17  | 0.69  | 10.00    | 0.20    | 0.80        | 2.40        |
| 3     | 0           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 4     | 0           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 5     | 0           | 0 | 1  | 0  | 0           | 0  | 1  | 0   | 1    | 0.40    | 0.08  | 0.35  | 10.00    | 0.40    | 1.60        | 4.80        |
| 6     | 0           | 1 | 2  | 0  | 1           | 0  | 2  | 0   | 3    | 6.60    | 1.67  | 6.94  | 70.00    | 4.60    | 3.68        | 7.20        |
| 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           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 9     | 0           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 10    | 0           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 11    | 0           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 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    | 2           | 0 | 8  | 0  | 2           | 1  | 6  | 1   | 10   | 16.00   | 2.83  | 11.81 | 50.00    | 6.60    | 7.20        | 19.20       |
| 14    | 0           | 1 | 8  | 0  | 0           | 1  | 5  | 3   | 9    | 8.00    | 2.83  | 11.81 | 55.00    | 2.40    | 2.40        | 4.80        |
| 15    | 0           | 4 | 1  | 2  | 4           | 1  | 2  | 0   | 7    | 21.00   | 6.17  | 25.69 | 180.00   | 7.60    | 2.46        | 7.20        |
| 16    | 0           | 0 | 1  | 0  | 0           | 0  | 1  | 0   | 1    | 0.20    | 0.08  | 0.35  | 10.00    | 0.20    | 0.80        | 2.40        |
| 17    | 0           | 0 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 18    | 0           | 0 | 2  | 0  | 0           | 0  | 0  | 2   | 2    | 0.60    | 0.17  | 0.69  | 10.00    | 0.40    | 1.60        | 4.80        |
| 19    | 0           | 0 | 1  | 0  | 1           | 0  | 0  | 0   | 1    | 0.40    | 0.17  | 0.69  | 20.00    | 0.40    | 0.96        | 2.40        |
| 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 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 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 | 0  | 0  | 0           | 0  | 0  | 0   | 0    | 0.00    | 0.00  | 0.00  | 0.00     | 0.00    | 0.00        | 0.00        |
| 25    | 0           | 0 | 2  | 1  | 1           | 0  | 2  | 0   | 3    | 1.00    | 0.33  | 1.39  | 10.00    | 0.40    | 1.60        | 4.80        |
| 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 | 3  | 0  | 0           | 0  | 2  | 1   | 3    | 1.00    | 0.33  | 1.39  | 15.00    | 0.60    | 1.80        | 4.80        |
| 29    | 0           | 2 | 8  | 1  | 3           | 2  | 5  | 1   | 11   | 22.20   | 6.25  | 26.04 | 290.00   | 13.20   | 2.68        | 9.60        |
| 30    | 0           | 0 | 10 | 2  | 3           | 5  | 1  | 3   | 12   | 9.20    | 3.75  | 15.63 | 215.00   | 4.40    | 1.20        | 2.40        |
| 31    | 1           | 0 | 1  | 0  | 0           | 1  | 1  | 0   | 2    | 15.00   | 0.92  | 3.82  | 55.00    | 14.80   | 14.80       | 38.40       |
| MAX   | 2           | 4 | 10 | 2  | 4           | 5  | 6  | 3   | 12   | 22.20   | 6.25  | 26.04 | 290.00   | 14.80   | 14.80       | 38.40       |
| TOTAL | 3           | 8 | 51 | 6  | 15          | 12 | 30 | 11  | 68   | 102.60  | 25.92 | 3.48  |          |         |             |             |

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 |

| Cantidad de Lluvias                  |
|--------------------------------------|
| Precipitación total (mm)             |
| Duración precipitacion diaria        |
| Duración máxima lluvia aislada (min) |
| Magnitud máx. lluvia aislada (mm)    |
| Intensidad media máxima (mm/h)       |
| Intensidad máx. en 5 minutos (mm/h)  |
|                                      |