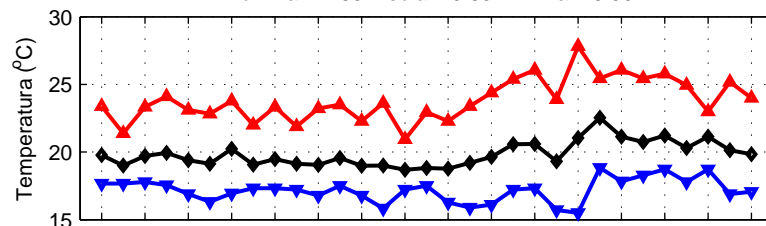


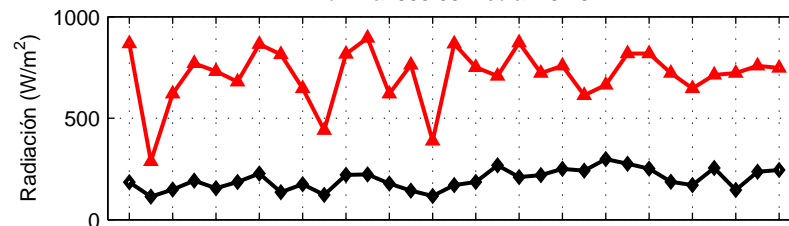
**Estación: Lago**  
**Fecha: Julio de 2008**  
**Registros: 31 de 31**

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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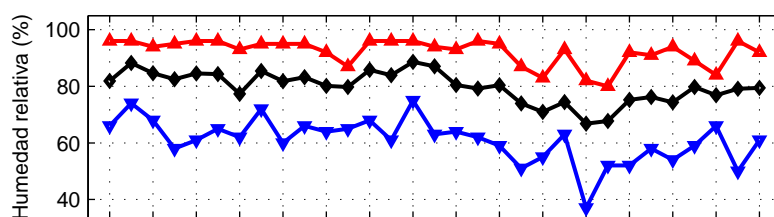
Máxima: 27.83 Media: 19.85 Mínima: 15.50



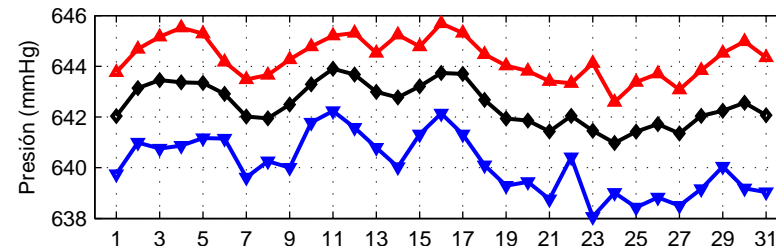
Máxima: 895.00 Media: 197.67



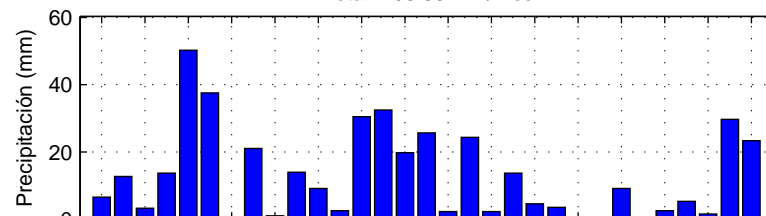
Máxima: 96.00 Media: 79.81 Mínima: 37.00



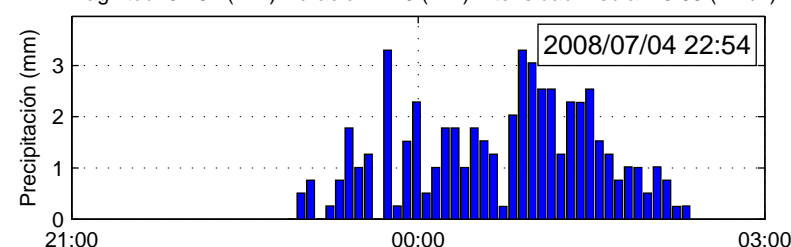
Máxima: 645.69 Media: 642.51 Mínima: 638.07



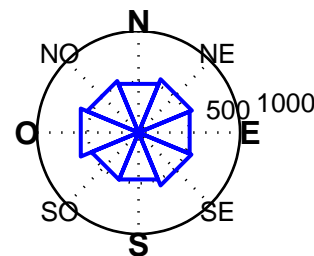
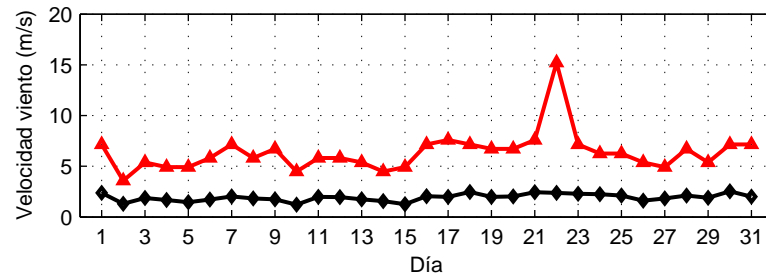
Total: 403.59 mm/mes



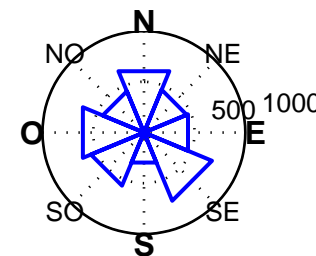
Magnitud: 54.87 (mm) Duración: 210 (min) Intensidad Media: 15.68 (mm/h)



Máxima: 15.21 Media: 1.93



Dirección del viento (Día)



Dirección del viento (Noche)



**Estación: Lago**  
**Fecha: Julio de 2008**  
**Registros: 31 de 31**

Reporte climatológico mensual  
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| Día   | Temperatura (°C) |       |       | Vel. Viento (m/s) |       | Presión (mmHg) | Humedad (%) | Precipitación (mm) | Evap (mm) | Radiación solar (W/m <sup>2</sup> ) |        |
|-------|------------------|-------|-------|-------------------|-------|----------------|-------------|--------------------|-----------|-------------------------------------|--------|
|       | Máx              | Media | Mín   | Máx               | Media | Media          | Media       | Total              | Total     | Máx                                 | Media  |
| 1     | 23.39            | 19.78 | 17.67 | 7.16              | 2.37  | 642.03         | 81.91       | 6.60               | 1.73      | 868.00                              | 184.29 |
| 2     | 21.39            | 19.00 | 17.67 | 3.58              | 1.30  | 643.14         | 88.22       | 12.70              | 0.99      | 287.00                              | 113.57 |
| 3     | 23.33            | 19.71 | 17.78 | 5.37              | 1.88  | 643.45         | 84.62       | 3.30               | 1.37      | 621.00                              | 148.95 |
| 4     | 24.11            | 19.94 | 17.56 | 4.92              | 1.68  | 643.37         | 82.48       | 13.72              | 1.68      | 770.00                              | 191.83 |
| 5     | 23.11            | 19.40 | 16.89 | 4.92              | 1.46  | 643.34         | 84.58       | 50.29              | 1.30      | 731.00                              | 155.52 |
| 6     | 22.83            | 19.13 | 16.33 | 5.81              | 1.73  | 642.91         | 84.29       | 37.59              | 1.63      | 680.00                              | 186.05 |
| 7     | 23.78            | 20.24 | 16.94 | 7.16              | 2.03  | 642.02         | 77.29       | 0.00               | 2.26      | 865.00                              | 227.70 |
| 8     | 22.00            | 19.07 | 17.33 | 5.81              | 1.83  | 641.94         | 85.44       | 21.08              | 1.17      | 814.00                              | 134.74 |
| 9     | 23.33            | 19.48 | 17.33 | 6.71              | 1.74  | 642.49         | 81.82       | 1.02               | 1.50      | 647.00                              | 174.35 |
| 10    | 21.89            | 19.13 | 17.22 | 4.47              | 1.21  | 643.29         | 83.25       | 13.97              | 1.14      | 441.00                              | 121.87 |
| 11    | 23.22            | 19.05 | 16.78 | 5.81              | 1.99  | 643.90         | 80.14       | 9.14               | 2.19      | 816.00                              | 221.22 |
| 12    | 23.50            | 19.56 | 17.50 | 5.81              | 1.95  | 643.68         | 79.74       | 2.54               | 2.08      | 895.00                              | 222.56 |
| 13    | 22.28            | 18.99 | 16.78 | 5.37              | 1.74  | 642.99         | 85.81       | 30.48              | 1.63      | 621.00                              | 178.32 |
| 14    | 23.61            | 19.00 | 15.83 | 4.47              | 1.56  | 642.77         | 83.91       | 32.52              | 1.40      | 763.00                              | 142.42 |
| 15    | 20.94            | 18.70 | 17.22 | 4.92              | 1.26  | 643.21         | 88.66       | 19.81              | 0.94      | 388.00                              | 116.33 |
| 16    | 22.94            | 18.82 | 17.50 | 7.16              | 2.05  | 643.74         | 87.04       | 25.65              | 1.47      | 867.00                              | 170.27 |
| 17    | 22.28            | 18.78 | 16.28 | 7.60              | 1.98  | 643.70         | 80.50       | 2.29               | 1.83      | 751.00                              | 185.15 |
| 18    | 23.39            | 19.20 | 15.89 | 7.16              | 2.47  | 642.67         | 79.17       | 24.38              | 2.44      | 708.00                              | 268.07 |
| 19    | 24.39            | 19.65 | 16.11 | 6.71              | 1.99  | 641.94         | 80.39       | 2.29               | 1.93      | 872.00                              | 209.47 |
| 20    | 25.39            | 20.57 | 17.22 | 6.71              | 2.02  | 641.86         | 73.98       | 13.71              | 2.21      | 722.00                              | 219.06 |
| 21    | 26.06            | 20.60 | 17.33 | 7.60              | 2.44  | 641.43         | 70.97       | 4.58               | 2.77      | 758.00                              | 250.03 |
| 22    | 23.89            | 19.31 | 15.72 | 15.21             | 2.38  | 642.04         | 74.43       | 3.55               | 2.18      | 613.00                              | 241.86 |
| 23    | 27.83            | 21.03 | 15.50 | 7.16              | 2.29  | 641.46         | 66.81       | 0.76               | 3.23      | 664.00                              | 298.15 |
| 24    | 25.44            | 22.54 | 18.83 | 6.26              | 2.24  | 640.98         | 67.70       | 0.00               | 2.31      | 819.00                              | 275.97 |
| 25    | 26.06            | 21.14 | 17.83 | 6.26              | 2.12  | 641.42         | 75.20       | 9.14               | 2.49      | 819.00                              | 251.84 |
| 26    | 25.44            | 20.74 | 18.28 | 5.37              | 1.62  | 641.72         | 76.20       | 0.00               | 1.78      | 722.00                              | 187.24 |
| 27    | 25.78            | 21.22 | 18.72 | 4.92              | 1.84  | 641.35         | 74.37       | 2.54               | 1.85      | 647.00                              | 169.98 |
| 28    | 24.94            | 20.29 | 17.78 | 6.71              | 2.12  | 642.04         | 79.78       | 5.33               | 2.29      | 714.00                              | 254.30 |
| 29    | 23.00            | 21.14 | 18.72 | 5.37              | 1.89  | 642.24         | 76.85       | 1.53               | 1.15      | 722.00                              | 145.99 |
| 30    | 25.17            | 20.13 | 16.89 | 7.16              | 2.52  | 642.56         | 79.14       | 29.72              | 2.39      | 759.00                              | 236.09 |
| 31    | 24.00            | 19.85 | 17.06 | 7.16              | 2.01  | 642.07         | 79.44       | 23.36              | 2.24      | 747.00                              | 244.63 |
| TOTAL |                  |       |       |                   |       |                |             | 403.59             | 57.57     |                                     |        |
| PROM  | 23.83            | 19.85 | 17.18 | 6.35              | 1.93  | 642.51         | 79.81       |                    |           | 713.26                              | 197.67 |

Cuadro 1: Resumen de análisis climatológico

**Estación: Lago**  
**Fecha: Julio de 2008**  
**Registros: 31 de 31**

Reporte climatológico mensual  
 Red Hidroclimatológica del Departamento de Risaralda  
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| Día   | Lluvias por intensidad |    |    |    | Lluvias por jornada |    |    |    | CLL | PT (mm) | DP    |       | DM (min) | MM (mm) | IMM (mm/h) | IM5 (mm/h) |
|-------|------------------------|----|----|----|---------------------|----|----|----|-----|---------|-------|-------|----------|---------|------------|------------|
|       | F                      | M  | L  | LL | Md                  | Mñ | T  | N  |     |         | (h)   | (%)   |          |         |            |            |
| 1     | 1                      | 0  | 2  | 0  | 1                   | 0  | 2  | 0  | 3   | 6.60    | 0.83  | 3.47  | 30.00    | 5.08    | 8.71       | 24.36      |
| 2     | 1                      | 1  | 5  | 0  | 2                   | 2  | 3  | 0  | 7   | 12.70   | 2.42  | 10.07 | 35.00    | 4.57    | 6.86       | 33.60      |
| 3     | 0                      | 1  | 2  | 0  | 0                   | 0  | 1  | 2  | 3   | 3.30    | 0.83  | 3.47  | 55.00    | 2.03    | 2.03       | 3.12       |
| 4     | 1                      | 0  | 0  | 0  | 0                   | 0  | 0  | 1  | 1   | 13.72   | 0.92  | 3.82  | 70.00    | 13.72   | 10.98      | 39.60      |
| 5     | 2                      | 0  | 6  | 0  | 4                   | 3  | 0  | 1  | 8   | 50.29   | 3.50  | 14.58 | 140.00   | 41.15   | 17.03      | 39.60      |
| 6     | 2                      | 2  | 0  | 0  | 3                   | 0  | 1  | 0  | 4   | 37.59   | 3.25  | 13.54 | 125.00   | 21.34   | 9.85       | 36.60      |
| 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     | 1                      | 0  | 3  | 0  | 1                   | 1  | 2  | 0  | 4   | 21.08   | 2.00  | 8.33  | 55.00    | 17.53   | 17.53      | 42.60      |
| 9     | 0                      | 0  | 3  | 0  | 3                   | 0  | 0  | 0  | 3   | 1.02    | 0.33  | 1.39  | 30.00    | 0.51    | 0.87       | 3.12       |
| 10    | 1                      | 0  | 2  | 0  | 1                   | 1  | 1  | 0  | 3   | 13.97   | 1.92  | 7.99  | 75.00    | 11.68   | 8.76       | 30.48      |
| 11    | 1                      | 1  | 1  | 0  | 0                   | 0  | 2  | 1  | 3   | 9.14    | 0.67  | 2.78  | 35.00    | 8.13    | 12.20      | 33.60      |
| 12    | 0                      | 2  | 2  | 0  | 0                   | 0  | 4  | 0  | 4   | 2.54    | 0.67  | 2.78  | 20.00    | 1.01    | 2.42       | 6.12       |
| 13    | 1                      | 0  | 4  | 0  | 3                   | 0  | 2  | 0  | 5   | 30.48   | 2.50  | 10.42 | 135.00   | 27.94   | 11.97      | 42.60      |
| 14    | 2                      | 0  | 3  | 0  | 1                   | 2  | 1  | 1  | 5   | 32.52   | 2.42  | 10.07 | 90.00    | 18.29   | 11.55      | 48.84      |
| 15    | 0                      | 2  | 3  | 0  | 2                   | 0  | 1  | 2  | 5   | 19.81   | 3.75  | 15.63 | 135.00   | 10.16   | 4.35       | 15.24      |
| 16    | 2                      | 1  | 1  | 0  | 0                   | 0  | 3  | 1  | 4   | 25.65   | 1.75  | 7.29  | 40.00    | 18.04   | 24.05      | 51.84      |
| 17    | 0                      | 0  | 7  | 0  | 1                   | 0  | 3  | 3  | 7   | 2.29    | 0.75  | 3.13  | 25.00    | 0.51    | 1.02       | 3.12       |
| 18    | 1                      | 0  | 7  | 0  | 5                   | 0  | 1  | 2  | 8   | 24.38   | 2.08  | 8.68  | 80.00    | 21.08   | 14.88      | 48.84      |
| 19    | 0                      | 0  | 5  | 0  | 4                   | 0  | 1  | 0  | 5   | 2.29    | 0.75  | 3.13  | 55.00    | 1.02    | 1.02       | 3.12       |
| 20    | 1                      | 0  | 0  | 0  | 0                   | 0  | 1  | 0  | 1   | 13.71   | 0.42  | 1.74  | 30.00    | 13.71   | 23.50      | 76.20      |
| 21    | 1                      | 0  | 2  | 0  | 1                   | 0  | 1  | 1  | 3   | 4.58    | 0.58  | 2.43  | 30.00    | 4.06    | 6.96       | 18.24      |
| 22    | 1                      | 0  | 0  | 0  | 0                   | 0  | 1  | 0  | 1   | 3.55    | 0.17  | 0.69  | 15.00    | 3.55    | 10.65      | 36.48      |
| 23    | 0                      | 0  | 2  | 0  | 1                   | 0  | 1  | 0  | 2   | 0.76    | 0.25  | 1.04  | 15.00    | 0.51    | 1.53       | 3.12       |
| 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    | 1                      | 1  | 0  | 0  | 0                   | 1  | 1  | 0  | 2   | 9.14    | 0.92  | 3.82  | 50.00    | 7.36    | 8.03       | 27.48      |
| 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                      | 1  | 0  | 0  | 0                   | 0  | 0  | 1  | 1   | 2.54    | 0.42  | 1.74  | 40.00    | 2.54    | 3.39       | 12.24      |
| 28    | 0                      | 1  | 3  | 0  | 1                   | 0  | 3  | 0  | 4   | 5.33    | 1.08  | 4.51  | 60.00    | 4.31    | 3.98       | 15.24      |
| 29    | 0                      | 0  | 4  | 0  | 0                   | 0  | 3  | 1  | 4   | 1.53    | 0.42  | 1.74  | 20.00    | 0.77    | 1.85       | 6.12       |
| 30    | 2                      | 1  | 1  | 0  | 1                   | 2  | 0  | 1  | 4   | 29.72   | 2.75  | 11.46 | 75.00    | 15.24   | 11.43      | 48.72      |
| 31    | 1                      | 0  | 2  | 0  | 2                   | 0  | 0  | 1  | 3   | 23.36   | 1.83  | 7.64  | 85.00    | 20.82   | 13.88      | 106.68     |
| MAX   | 2                      | 2  | 7  | 0  | 5                   | 3  | 4  | 3  | 8   | 50.29   | 3.75  | 15.63 | 140.00   | 41.15   | 24.05      | 106.68     |
| TOTAL | 23                     | 14 | 70 | 0  | 37                  | 12 | 39 | 19 | 107 | 403.59  | 40.17 | 5.40  |          |         |            |            |

Cuadro 1: Análisis mensual de lluvias

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

|    |           |               |
|----|-----------|---------------|
| 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 precipitación 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