

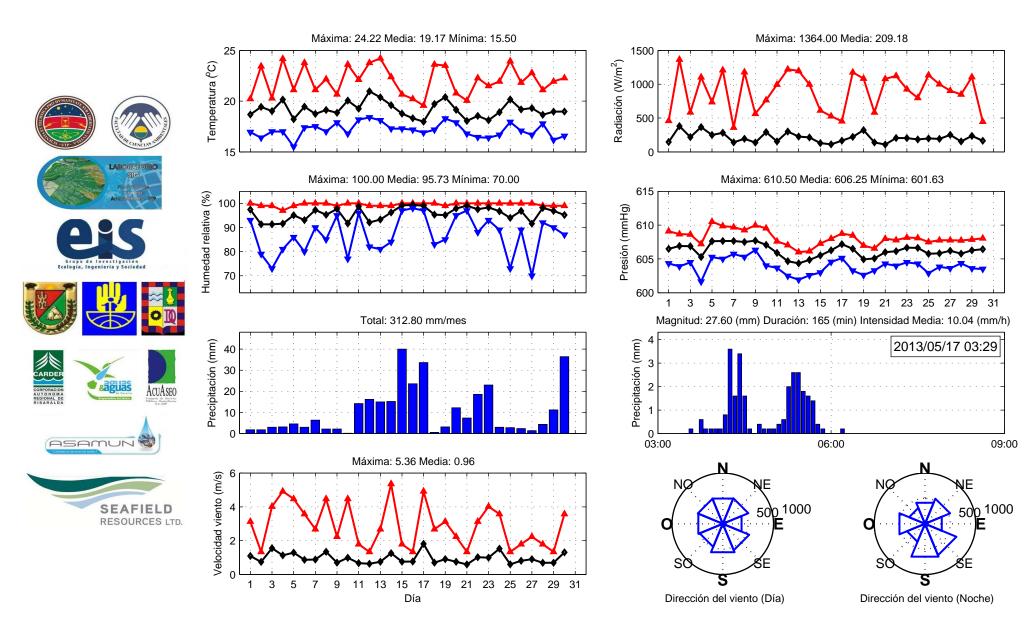
Estación: El Nudo Fecha: Mayo de 2013 Registros: 30 de 31 Reporte climatológico mensual

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 |       | ra    | Vel. 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     | 20.22       | 18.67 | 16.94 | 3.13        | 1.09   | 606.48  | 97.44   | 1.80          | 1.02     | 459.00          | 145.85 |
| 2     | 23.44       | 19.43 | 16.39 | 1.34        | 0.75   | 606.90  | 91.32   | 1.80          | 2.74     | 1364.00         | 380.66 |
| 3     | 20.28       | 19.01 | 17.00 | 4.02        | 1.55   | 606.88  | 91.32   | 3.00          | 1.47     | 584.00          | 217.22 |
| 4     | 24.17       | 20.16 | 17.00 | 4.92        | 1.13   | 605.28  | 91.58   | 3.20          | 2.85     | 1104.00         | 366.02 |
| 5     | 21.11       | 18.21 | 15.50 | 4.47        | 1.29   | 607.61  | 95.08   | 4.60          | 1.80     | 735.00          | 248.71 |
| 6     | 23.78       | 19.45 | 17.39 | 3.58        | 0.87   | 607.65  | 93.07   | 3.00          | 2.34     | 1209.00         | 281.09 |
| 7     | 21.11       | 18.74 | 17.50 | 2.68        | 0.88   | 607.64  | 97.24   | 6.40          | 0.99     | 359.00          | 140.82 |
| 8     | 22.17       | 19.13 | 17.00 | 4.47        | 1.34   | 607.49  | 95.25   | 2.20          | 1.40     | 1179.00         | 192.69 |
| 9     | 20.67       | 18.84 | 17.89 | 2.24        | 0.70   | 607.70  | 97.65   | 2.20          | 0.99     | 563.00          | 137.89 |
| 10    | 23.61       | 20.06 | 16.78 | 4.47        | 0.99   | 607.07  | 91.68   | 0.20          | 2.24     | 765.00          | 291.03 |
| 11    | 22.11       | 19.25 | 18.17 | 1.79        | 0.67   | 605.88  | 98.66   | 14.20         | 1.09     | 995.00          | 154.18 |
| 12    | 23.78       | 20.96 | 18.39 | 1.34        | 0.63   | 604.66  | 92.09   | 16.20         | 2.01     | 1220.00         | 300.24 |
| 13    | 24.22       | 20.37 | 18.11 | 2.68        | 0.75   | 604.35  | 93.29   | 15.00         | 1.65     | 1197.00         | 225.78 |
| 14    | 22.39       | 19.59 | 17.28 | 5.36        | 1.26   | 604.85  | 96.24   | 15.20         | 1.60     | 997.00          | 212.94 |
| 15    | 20.67       | 18.76 | 17.28 | 1.79        | 0.76   | 605.50  | 99.15   | 40.00         | 0.81     | 612.00          | 129.10 |
| 16    | 20.22       | 18.31 | 17.17 | 1.34        | 0.77   | 606.26  | 99.38   | 23.60         | 0.89     | 527.00          | 111.63 |
| 17    | 19.56       | 17.97 | 16.89 | 4.92        | 1.81   | 607.17  | 98.98   | 33.60         | 1.12     | 452.00          | 164.74 |
| 18    | 23.61       | 19.72 | 17.17 | 2.68        | 0.70   | 606.49  | 95.33   | 0.60          | 1.65     | 1176.00         | 221.59 |
| 19    | 23.50       | 20.39 | 18.28 | 3.13        | 0.91   | 604.94  | 95.13   | 3.20          | 2.41     | 1083.00         | 321.27 |
| 20    | 20.78       | 19.14 | 17.89 | 2.24        | 0.75   | 605.07  | 97.91   | 12.20         | 1.07     | 582.00          | 138.15 |
| 21    | 20.06       | 18.06 | 16.78 | 1.34        | 0.60   | 605.98  | 99.01   | 7.40          | 0.76     | 1078.00         | 107.15 |
| 22    | 22.28       | 18.54 | 16.44 | 3.13        | 1.02   | 606.14  | 97.55   | 18.60         | 1.50     | 1123.00         | 204.94 |
| 23    | 21.50       | 18.12 | 16.39 | 4.02        | 0.99   | 606.66  | 98.28   | 23.00         | 1.45     | 925.00          | 202.68 |
| 24    | 21.94       | 18.91 | 16.67 | 3.58        | 1.53   | 606.64  | 96.72   | 3.00          | 1.37     | 798.00          | 183.68 |
| 25    | 23.94       | 20.17 | 17.94 | 1.34        | 0.60   | 605.77  | 93.97   | 2.80          | 1.60     | 1134.00         | 198.57 |
| 26    | 21.83       | 19.18 | 17.06 | 1.79        | 0.81   | 605.83  | 96.86   | 2.40          | 1.42     | 1000.00         | 192.17 |
| 27    | 22.78       | 19.31 | 16.67 | 2.24        | 0.90   | 606.20  | 91.61   | 1.40          | 2.01     | 905.00          | 250.94 |
| 28    | 21.11       | 18.65 | 17.78 | 1.79        | 0.69   | 605.77  | 98.14   | 4.40          | 1.09     | 849.00          | 153.95 |
| 29    | 21.94       | 18.96 | 16.17 | 1.34        | 0.70   | 606.26  | 96.90   | 11.20         | 1.65     | 1106.00         | 236.35 |
| 30    | 22.28       | 18.97 | 16.56 | 3.58        | 1.31   | 606.44  | 95.17   | 36.40         | 1.22     | 446.00          | 163.28 |
| 31    |             |       |       |             |        |         |         |               |          |                 |        |
| TOTAL |             |       |       |             |        |         |         | 312.80        | 46.21    |                 |        |
| PROM  | 22.04       | 19.17 | 17.15 | 2.89        | 0.96   | 606.25  | 95.73   |               |          | 884.20          | 209.18 |
|       |             |       |       |             |        |         |         |               | <u> </u> |                 |        |

Cuadro 1: Resúmen de análisis climatológico

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| Día   | Lluvias por intensidad |    |     |    | Lluvias por<br>jornada |    |    | CLI | PT  | Б      | DP    |       | MM     | IMM   | IM5    |        |
|-------|------------------------|----|-----|----|------------------------|----|----|-----|-----|--------|-------|-------|--------|-------|--------|--------|
| Dia   | F                      | M  | L   | LL | Md                     | Mñ | T  | N   | CLL | (mm)   | (h)   | (%)   | (min)  | (mm)  | (mm/h) | (mm/h) |
| 1     | 0                      | 0  | 9   | 0  | 1                      | 1  | 3  | 4   | 9   | 1.80   | 0.75  | 3.13  | 10.00  | 0.20  | 0.80   | 2.40   |
| 2     | 0                      | 0  | 9   | 0  | 2                      | 4  | 3  | 0   | 9   | 1.80   | 0.75  | 3.13  | 10.00  | 0.20  | 0.80   | 2.40   |
| 3     | 1                      | 0  | 11  | 0  | 0                      | 3  | 5  | 4   | 12  | 3.00   | 1.00  | 4.17  | 5.00   | 0.80  | 4.80   | 9.60   |
| 4     | 0                      | 0  | 16  | 0  | 1                      | 2  | 7  | 6   | 16  | 3.20   | 1.33  | 5.56  | 10.00  | 0.20  | 0.80   | 2.40   |
| 5     | 0                      | 0  | 23  | 0  | 6                      | 5  | 7  | 5   | 23  | 4.60   | 1.92  | 7.99  | 10.00  | 0.20  | 0.80   | 2.40   |
| 6     | 0                      | 1  | 12  | 0  | 5                      | 4  | 4  | 0   | 13  | 3.00   | 1.08  | 4.51  | 10.00  | 0.60  | 2.40   | 7.20   |
| 7     | 0                      | 1  | 2   | 0  | 0                      | 1  | 1  | 1   | 3   | 6.40   | 0.92  | 3.82  | 60.00  | 6.00  | 5.54   | 19.20  |
| 8     | 0                      | 1  | 0   | 0  | 0                      | 0  | 1  | 0   | 1   | 2.20   | 0.33  | 1.39  | 25.00  | 2.20  | 4.40   | 9.60   |
| 9     | 0                      | 1  | 2   | 1  | 1                      | 1  | 2  | 0   | 4   | 2.20   | 0.67  | 2.78  | 15.00  | 1.00  | 3.00   | 9.60   |
| 10    | 0                      | 0  | 1   | 0  | 1                      | 0  | 0  | 0   | 1   | 0.20   | 0.08  | 0.35  | 10.00  | 0.20  | 0.80   | 2.40   |
| 11    | 2                      | 0  | 3   | 0  | 2                      | 1  | 2  | 0   | 5   | 14.20  | 1.33  | 5.56  | 40.00  | 7.40  | 9.87   | 45.60  |
| 12    | 0                      | 2  | 0   | 0  | 0                      | 1  | 1  | 0   | 2   | 16.20  | 2.50  | 10.42 | 125.00 | 14.40 | 6.65   | 19.20  |
| 13    | 1                      | 1  | 1   | 0  | 0                      | 0  | 1  | 2   | 3   | 15.00  | 1.17  | 4.86  | 60.00  | 13.80 | 12.74  | 38.40  |
| 14    | 1                      | 0  | 4   | 0  | 4                      | 0  | 1  | 0   | 5   | 15.20  | 1.83  | 7.64  | 90.00  | 13.80 | 8.72   | 24.00  |
| 15    | 2                      | 1  | 6   | 0  | 0                      | 3  | 2  | 4   | 9   | 40.00  | 4.25  | 17.71 | 150.00 | 24.40 | 9.45   | 67.20  |
| 16    | 1                      | 1  | 5   | 1  | 5                      | 0  | 2  | 1   | 8   | 23.60  | 4.58  | 19.10 | 80.00  | 12.40 | 8.75   | 31.20  |
| 17    | 1                      | 0  | 5   | 1  | 3                      | 2  | 2  | 0   | 7   | 33.60  | 4.08  | 17.01 | 165.00 | 27.60 | 9.74   | 43.20  |
| 18    | 0                      | 0  | 2   | 0  | 0                      | 1  | 1  | 0   | 2   | 0.60   | 0.17  | 0.69  | 10.00  | 0.40  | 1.60   | 4.80   |
| 19    | 1                      | 0  | 1   | 0  | 0                      | 1  | 1  | 0   | 2   | 3.20   | 0.25  | 1.04  | 15.00  | 3.00  | 9.00   | 33.60  |
| 20    | 1                      | 1  | 2   | 1  | 1                      | 0  | 2  | 2   | 5   | 12.20  | 2.17  | 9.03  | 45.00  | 7.20  | 8.64   | 48.00  |
| 21    | 0                      | 0  | 10  | 0  | 3                      | 3  | 2  | 2   | 10  | 7.40   | 2.58  | 10.76 | 155.00 | 5.40  | 2.03   | 4.80   |
| 22    | 0                      | 2  | 6   | 1  | 4                      | 2  | 1  | 2   | 9   | 18.60  | 4.50  | 18.75 | 90.00  | 8.40  | 5.31   | 16.80  |
| 23    | 1                      | 1  | 6   | 0  | 3                      | 1  | 3  | 1   | 8   | 23.00  | 3.50  | 14.58 | 130.00 | 17.00 | 7.56   | 21.60  |
| 24    | 0                      | 1  | 3   | 0  | 2                      | 0  | 1  | 1   | 4   | 3.00   | 0.58  | 2.43  | 20.00  | 2.20  | 5.28   | 14.40  |
| 25    | 0                      | 1  | 1   | 0  | 2                      | 0  | 0  | 0   | 2   | 2.80   | 0.92  | 3.82  | 50.00  | 2.60  | 2.84   | 4.80   |
| 26    | 0                      | 0  | 3   | 0  | 0                      | 0  | 0  | 3   | 3   | 2.40   | 0.75  | 3.13  | 60.00  | 1.80  | 1.66   | 4.80   |
| 27    | 0                      | 0  | 2   | 0  | 1                      | 0  | 1  | 0   | 2   | 1.40   | 0.58  | 2.43  | 60.00  | 1.20  | 1.11   | 2.40   |
| 28    | 0                      | 0  | 5   | 1  | 1                      | 2  | 2  | 1   | 6   | 4.40   | 1.67  | 6.94  | 70.00  | 2.00  | 1.60   | 7.20   |
| 29    | 0                      | 2  | 4   | 0  | 2                      | 0  | 3  | 1   | 6   | 11.20  | 1.83  | 7.64  | 65.00  | 8.00  | 6.86   | 19.20  |
| 30    | 1                      | 2  | 3   | 0  | 2                      | 0  | 0  | 4   | 6   | 36.40  | 3.17  | 13.19 | 70.00  | 22.20 | 17.76  | 60.00  |
| 31    |                        |    |     |    |                        |    |    |     |     |        |       |       |        |       |        |        |
| MAX   | 2                      | 2  | 23  | 1  | 6                      | 5  | 7  | 6   | 23  | 40.00  | 4.58  | 19.10 | 165.00 | 27.60 | 17.76  | 67.20  |
| TOTAL | 13                     | 19 | 157 | 6  | 52                     | 38 | 61 | 44  | 195 | 312.80 | 51.25 | 6.89  |        |       |        |        |

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)  |
|                                      |