



Centro Regional de Agrometeorología

**BOLETIN AGROMETEOROLOGICO
DEL CENTRO-SUR DE LA
PROVINCIA DE BUENOS AIRES
PARTIDOS DE:
AZUL, B. JUAREZ, OLAVARRIA,
LAS FLORES y TANDIL**

Universidad Nacional del Centro de la Pcia. de Bs. As.

<http://www.faa.unicen.edu.ar/CentroRegional/CentroReg.html>

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BOLETIN AGROMETEOROLOGICO DE LOS PARTIDOS DE LAS FLORES, RAUCH, AZUL, OLAVARRIA, TANDIL, BENITO JUAREZ (PCIA. DE BS. AS.)

Este boletín es preparado por el Centro Regional de Agrometeorología (dependiente de la Facultad de Agronomía) en base a los datos aportados por las estaciones agrometeorológicas y la red pluviométrica del Centro Regional de Agrometeorología. También participan las estaciones del Servicio Meteorológico Nacional de Azul y Benito Juárez.

Director : Ing. Agr. Carlos Vilatte

Responsables : Ing. Laura Aguas

Servicio Meteorológico Nacional: García, Nidia (Jefe Estación Azul); Puccini, Celeste; Martinez, Loreley; Mora, Gabriela y Llabres, María.

ACLARACIONES :

TMAX : Temperatura Máxima ; *TMIN* : Temperatura Mínima ; *TMIN 5* : Temperatura Mínima a 5 cm. sobre el suelo ;

TS MED : Temperatura media del suelo a 5 cm. de profundidad. Todas las temperaturas están expresadas en °C.

HR MED : Humedad relativa media, en décimos de porcentaje.

VTO : Recorrido diario del viento a 2 metros de altura, en Km/día.

RAD : Radiación global en millones de joules por día (Mj/m²).

PP : Lluvia areal en milímetro por semana, y la acumulada anual.

La cantidad de agua llovida que es reportada en este boletín corresponde al período que va desde la 9 hs de un día hasta las 9 hs del día siguiente, ese volumen registrado se anota (por convención) en la fecha anterior al día de lectura.

I.T.H : Índice Temperatura - Humedad. Este índice cuantifica el nivel de estrés ambiental por la combinación de temperatura y humedad ambiente sobre la respuesta fisiológica en bovinos y seres humanos. La disminución en la producción de leche y carne en verano se asocia estrechamente al valor del ITH. Así, con valores por encima de 70 comienza los esfuerzos fisiológicos para defenderse del ambiente caluroso y cuando este llega a 73 la producción de leche y los aumento de peso se ven plenamente disminuidos.

FOTOP : Fotoperíodo, es la duración del día expresado en horas y minutos.

ETr : Evapotranspiración del cultivo de referencia, en este caso un césped corto. Este término es semejante al de evapotranspiración potencial. Está expresada en milímetros. El cálculo se lleva a cabo con la fórmula de PENMAN.

RN : Radiación neta, expresada en Mj/m² día.

AA : Déficit de humedad, cantidad de mb de vapor de agua necesarias para llegar a una humedad relativa de 100 %.

BH (Balance Hidrológico): Es la diferencia entre la lluvia y la evapotranspiración potencial (o del cultivo de referencia).

El BH está dividido en tres zonas, la correspondiente a la parte sur del partido, la cual involucra la sección alta del mismo con las siguientes estaciones pluviométricas: Chillar, Cerro del Aguila, Don Carlos, las estaciones de la zona central son: La Vanguardia, Chacra de la Facultad, estación Facultad y el sector norte se compone con: Cacharí.

Los datos se expresan como promedios semanales, almacenándose la información diaria en el Centro Regional de Agrometeorología.

BH : representa la suma algebraica de los balances (positivos o negativos) hidrológicos diarios, calculados semanal y mensualmente. También se hacen con referencia a las zonas antes mencionadas (sur - centro -norte).

CHU y *BASE 8 y 10 °C*: Son dos funciones de tiempo térmico para maíz. La primera es la que ha ajustado mejor en la Provincia de Buenos Aires, pero la segunda es más ampliamente difundida. Recordando lo ya explicado el año pasado, esta metodología nos permite predecir con mucha precisión los eventos fenológicos del cultivos y esto reporta enormes ventajas prácticas a los productores porque a partir de esta herramienta podrán efectuar sus cronogramas de actividades (siembra, aplicación de agroquímicos, cosecha) de tal manera optimizar sus recursos y los del medio ambiente (agua, radiación, temperatura) para obtener rendimientos mayores y menores riesgo de fracaso.

Los productores y profesionales que deseen información técnica con respecto a las técnicas tendientes a disminuir el riesgo climático en la producción de cultivos pueden contactarse con el Centro Regional de Agrometeorología dependiente de la Facultad de Agronomía de Azul.

MARCHA DE LOS ELEMENTOS AGROMETEOROLOGICOS

AZUL CENTRO (Estación de la Facultad de Agronomía)

Lat. 36° 45'S Long. 59° 57'W Alt. 137m.s.n.m

Período: Junio 2021

| | DIA | TMIN | TMAX | TMED | TMIN 5cm | HR MED | VTO | RADIAC | RN | FOTOP. |
|----------|-------|-------|------|------|-------------|--------|--------|-----------|-----------|---------|
| | | °C | °C | °C | °C | % | km/día | mj/m2/día | mj/m2/día | hs.min |
| SEMANA 1 | 1 | 11.2 | 15.2 | 12.7 | 7.7 | 78.5 | 180.8 | 10.40 | 0.41 | 9:40:00 |
| | 2 | 4.4 | 13.1 | 8.3 | 1.0 | 71.3 | 115.3 | 10.15 | 0.27 | 9:40:00 |
| | 3 | 7.1 | 17.6 | 11.5 | 3.6 | 65.5 | 218.8 | 7.82 | -0.90 | 9:40:00 |
| | 4 | 8.1 | 19.4 | 12.4 | 4.6 | 76.0 | 68.1 | 2.82 | 0.67 | 9:37:00 |
| | 5 | 5.2 | 16.3 | 9.7 | 1.7 | 73.5 | 100.9 | 9.95 | 0.89 | 9:35:00 |
| | 6 | -2.1 | 13.3 | 5.2 | -5.5 | 73.8 | 102.2 | 7.41 | 0.73 | 9:34:00 |
| | 7 | 3.6 | 12.2 | 8.0 | 0.2 | 82.8 | 70.7 | 6.45 | -0.25 | 9:34:00 |
| SEMANA 2 | 8 | 2.6 | 17.2 | 9.5 | -0.8 | 88.0 | 183.4 | 8.55 | 0.86 | 9:34:00 |
| | 9 | 10.2 | 15.2 | 12.6 | 6.7 | 94.0 | 83.8 | 7.60 | 0.52 | 9:34:00 |
| | 10 | 6.5 | 14.6 | 11.2 | 3.0 | 72.0 | 129.7 | 4.82 | 1.11 | 9:33:00 |
| | 11 | -1.9 | 15.2 | 6.4 | -5.3 | 74.5 | 176.9 | 7.38 | 1.55 | 9:32:00 |
| | 12 | 7.1 | 21.4 | 12.5 | 3.6 | 75.0 | 144.1 | 2.44 | -1.08 | 9:30:00 |
| | 13 | 6.2 | 21.0 | 21.5 | 2.7 | 80.0 | 162.4 | 8.94 | -0.26 | 9:30:00 |
| | 14 | 4.8 | 13.0 | 9.0 | 1.4 | 79.0 | 167.7 | 7.29 | 0.54 | 9:31:00 |
| SEMANA 3 | 15 | 1.0 | 11.0 | 4.9 | -2.4 | 75.0 | 112.7 | 9.24 | 0.24 | 9:31:00 |
| | 16 | 0.3 | 9.4 | 3.2 | -3.1 | 83.0 | 40.6 | 8.56 | -0.97 | 9:30:00 |
| | 17 | -2.5 | 9.4 | 2.5 | -5.9 | 80.5 | 35.4 | 6.38 | -0.41 | 9:30:00 |
| | 18 | 0.2 | 9.4 | 2.7 | -3.2 | 82.0 | 22.3 | 9.50 | 0.86 | 9:29:00 |
| | 19 | -1.9 | 10.4 | 4.1 | -5.3 | 78.8 | 79.9 | 4.41 | -0.87 | 9:29:00 |
| | 20 | 1.2 | 13.7 | 6.9 | -2.2 | 52.6 | 65.5 | 7.10 | -1.32 | 9:29:00 |
| | 21 | -1.5 | 10.6 | 4.5 | -4.9 | 91.8 | 99.6 | 6.56 | 1.29 | 9:29:00 |
| SEMANA 4 | 22 | 5.6 | 11.0 | 7.7 | 2.1 | 92.5 | 200.4 | 8.57 | -0.27 | 9:29:00 |
| | 23 | 6.0 | 12.7 | 10.5 | 2.5 | 94.8 | 120.5 | 7.09 | 0.39 | 9:29:00 |
| | 24 | 6.0 | 16.7 | 10.0 | 2.5 | 74.3 | 145.4 | 4.19 | 0.87 | 9:29:00 |
| | 25 | 4.6 | 16.0 | 9.4 | 1.2 | 74.0 | 100.9 | 2.46 | 1.06 | 9:30:00 |
| | 26 | 4.8 | 10.4 | 7.6 | 1.4 | 82.8 | 175.6 | 0.96 | 0.47 | 9:30:00 |
| | 27 | 3.7 | 8.0 | 5.5 | 0.3 | 85.0 | 212.2 | 8.81 | -1.40 | 9:30:00 |
| | 28 | 4.6 | 9.0 | 6.0 | 1.2 | 85.8 | 239.7 | 5.47 | 0.58 | 9:30:00 |
| | 29 | 3.2 | 12.1 | 6.6 | -0.2 | 78.5 | 51.1 | 3.70 | 0.47 | 9:30:00 |
| | 30 | -4.3 | 8.9 | 3.1 | -7.7 | 87.3 | 327.5 | 4.11 | -1.14 | 9:31:00 |
| | 31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0:00:00 |
| T | SUM | | | | | | 199.1 | 4.91 | | |
| O | PROM. | 3.5 | 13.4 | 8.2 | 0.0 | 79.4 | 131.1 | 6.6 | 0.2 | |
| T | DESV. | 3.8 | 3.6 | 4.0 | 3.8 | 8.7 | 67.9 | 2.5 | 0.8 | |
| . | C.V. | 110.4 | 26.6 | 48.6 | ##### | 10.9 | 51.7 | 38.0 | 504.7 | |

MARCHA DE LOS ELEMENTOS AGROMETEOROLOGICOS
AZUL SUR (CHILLAR Estación de Fac. de Agr. y Coop. Agraria)
 Lat. 37° 19'S Long. 59° 59'W Alt. 161 m.s.n.m

Período : Junio 2021

| | DIA | TMIN | TMAX | TMED | TMIN 5cm | HR MED | VTO | FOTOP. |
|----------------------------|--------|-------|------|------|-------------|--------|--------|---------|
| | | °C | °C | °C | °C | % | km/día | hs.min |
| SEMANA 1 | 1 | 8.2 | 14.1 | 11.6 | 4.8 | 81.5 | 180.8 | 9:34:00 |
| | 2 | 4.2 | 11.0 | 7.3 | 0.5 | 65.0 | 115.3 | 9:35:00 |
| | 3 | 5.0 | 16.8 | 10.4 | 1.4 | 65.0 | 218.8 | 9:34:00 |
| | 4 | 7.0 | 15.2 | 11.6 | 3.6 | 70.0 | 68.1 | 9:32:00 |
| | 5 | 4.2 | 14.5 | 8.8 | 0.5 | 64.0 | 100.9 | 9:30:00 |
| | 6 | -2.0 | 11.4 | 5.6 | -5.9 | 68.5 | 102.2 | 9:28:00 |
| | 7 | 4.6 | 11.0 | 7.8 | 1.0 | 80.5 | 70.7 | 9:28:00 |
| SEMANA 2 | 8 | 5.4 | 15.6 | 10.1 | 1.9 | 84.0 | 183.4 | 9:29:00 |
| | 9 | 10.6 | 14.5 | 12.2 | 7.3 | 93.5 | 83.8 | 9:29:00 |
| | 10 | 3.7 | 12.6 | 9.9 | 0.1 | 70.0 | 129.7 | 9:28:00 |
| | 11 | -1.5 | 14.1 | 5.7 | -5.4 | 67.5 | 176.9 | 9:26:00 |
| | 12 | 4.2 | 19.0 | 10.1 | 0.5 | 67.0 | 144.1 | 9:25:00 |
| | 13 | 8.6 | 19.4 | 12.3 | 5.3 | 76.0 | 162.4 | 9:24:00 |
| | 14 | 2.9 | 11.4 | 7.9 | -0.8 | 72.0 | 167.7 | 9:25:00 |
| SEMANA 3 | 15 | -0.2 | 9.4 | 4.3 | -4.0 | 65.5 | 40.6 | 9:25:00 |
| | 16 | 1.2 | 7.8 | 3.9 | -2.6 | 77.0 | 35.4 | 9:25:00 |
| | 17 | -1.5 | 7.8 | 3.5 | -5.4 | 72.5 | 22.3 | 9:24:00 |
| | 18 | -1.5 | 7.0 | 3.0 | -5.4 | 73.5 | 79.9 | 9:23:00 |
| | 19 | -1.1 | 9.8 | 3.8 | -4.9 | 71.5 | 65.5 | 9:23:00 |
| | 20 | 2.5 | 11.4 | 6.2 | -1.2 | 48.7 | 99.6 | 9:23:00 |
| | 21 | 0.7 | 10.2 | 5.5 | -3.1 | 89.0 | 65.5 | 9:23:00 |
| SEMANA 4 | 22 | 5.4 | 9.8 | 7.5 | 1.9 | 91.0 | 200.4 | 9:23:00 |
| | 23 | 7.0 | 10.6 | 9.1 | 3.6 | 93.5 | 120.5 | 9:23:00 |
| | 24 | 2.0 | 12.2 | 8.3 | -1.7 | 67.0 | 145.4 | 9:24:00 |
| | 25 | -1.5 | 9.4 | 4.3 | -5.4 | 73.5 | 100.9 | 9:24:00 |
| | 26 | -2.9 | 9.0 | 3.4 | -6.9 | 80.0 | 175.6 | 9:24:00 |
| | 27 | 1.2 | 11.4 | 5.6 | -2.6 | 81.0 | 212.2 | 9:24:00 |
| | 28 | 4.2 | 14.5 | 8.5 | 0.5 | 84.5 | 239.7 | 9:24:00 |
| | 29 | 5.0 | 7.8 | 6.4 | 1.4 | 76.0 | 51.1 | 9:24:00 |
| | 30 | 0.7 | 7.8 | 4.5 | -3.1 | 84.5 | 327.5 | 9:26:00 |
| | 31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0:00:00 |
| T O T . | SUM | | | | | | | |
| | PROM. | 2.9 | 11.9 | 7.3 | -0.8 | 75.1 | 129.6 | |
| | DES.V. | 3.5 | 3.2 | 2.8 | 3.7 | 9.9 | 68.8 | |
| | C.V. | 120.8 | 27.2 | 38.5 | -456.6 | 13.2 | 53.1 | |

DEMANDA ATMOSFERICA DE AGUA

Período: Junio 2021

PARTIDO DE AZUL

| | | ZONA CENTRO | | | | ZONA SUR | | | |
|-----------------|-------|-------------|-----------|-------|------|----------|-----------|-------|------|
| | DIA | ETr | RN | FU*AA | AA | ETr | RN | FU*AA | AA |
| | | mm | mj/m2/día | mm | mb | mm | mj/m2/día | mm | mb |
| SEMANA 1 | 1 | 0.4 | 0.41 | 0.9 | 2.5 | 0.3 | 0.41 | 0.9 | 2.5 |
| | 2 | 0.5 | 0.27 | 1.6 | 3.0 | 0.5 | 0.28 | 1.6 | 3.0 |
| | 3 | 0.1 | -0.90 | 1.0 | 1.8 | 0.1 | -0.96 | 0.9 | 1.7 |
| | 4 | 0.3 | 0.67 | 0.5 | 1.2 | 0.4 | 1.13 | 0.7 | 1.7 |
| | 5 | 0.4 | 0.89 | 0.8 | 2.1 | 0.5 | 1.22 | 1.1 | 2.8 |
| | 6 | 0.4 | 0.73 | 1.3 | 2.5 | 0.4 | 0.56 | 1.1 | 2.2 |
| | 7 | 0.1 | -0.25 | 0.5 | 1.5 | 0.0 | -0.67 | 0.4 | 1.1 |
| SEMANA 2 | 8 | 0.5 | 0.9 | 1.3 | 2.5 | 0.3 | 0.5 | 0.9 | 1.8 |
| | 9 | 0.6 | 0.5 | 1.8 | 3.5 | 0.6 | 0.7 | 2.1 | 4.1 |
| | 10 | 0.7 | 1.1 | 1.9 | 4.5 | 0.7 | 1.0 | 1.8 | 4.2 |
| | 11 | 0.6 | 1.6 | 1.3 | 2.5 | 0.6 | 1.4 | 1.1 | 2.1 |
| | 12 | 0.6 | -1.1 | 3.5 | 4.4 | 0.6 | -1.1 | 3.6 | 4.5 |
| | 13 | 1.0 | -0.3 | 3.4 | 5.6 | 1.2 | -0.1 | 4.6 | 7.6 |
| | 14 | 0.8 | 0.5 | 2.3 | 3.5 | 0.9 | 0.8 | 3.0 | 4.6 |
| SEMANA 3 | 15 | 0.6 | 0.2 | 2.3 | 3.2 | 0.6 | 0.3 | 2.4 | 3.3 |
| | 16 | 0.1 | -1.0 | 1.0 | 1.3 | 0.1 | -1.1 | 0.9 | 1.2 |
| | 17 | 0.1 | -0.4 | 0.9 | 1.3 | 0.1 | -0.9 | 1.0 | 1.4 |
| | 18 | 0.8 | 0.9 | 2.4 | 4.7 | 0.6 | 0.5 | 1.8 | 3.4 |
| | 19 | 0.0 | -0.9 | 0.4 | 1.2 | 0.0 | -0.8 | 0.5 | 1.2 |
| | 20 | 0.0 | -1.3 | 0.6 | 1.5 | 0.0 | -1.3 | 0.6 | 1.5 |
| | 21 | 0.6 | 1.3 | 1.1 | 2.4 | 0.6 | 1.4 | 1.2 | 2.6 |
| SEMANA 4 | 22 | 0.1 | -0.3 | 0.5 | 0.8 | 0.2 | 0.3 | 0.8 | 1.2 |
| | 23 | 0.4 | 0.4 | 1.3 | 3.4 | 0.4 | 0.2 | 1.1 | 3.0 |
| | 24 | 0.5 | 0.9 | 1.4 | 2.9 | 0.5 | 0.7 | 1.2 | 2.5 |
| | 25 | 0.6 | 1.1 | 1.6 | 2.7 | 0.6 | 0.9 | 1.4 | 2.4 |
| | 26 | 0.5 | 0.5 | 1.1 | 2.8 | 0.4 | 0.4 | 1.0 | 2.5 |
| | 27 | -0.1 | -1.4 | 0.3 | 0.7 | -0.1 | -1.3 | 0.3 | 0.8 |
| | 28 | 0.4 | 0.6 | 1.1 | 1.6 | 0.6 | 1.0 | 1.8 | 2.5 |
| | 29 | 0.4 | 0.5 | 1.7 | 1.6 | 0.4 | 0.4 | 1.6 | 1.5 |
| | 30 | 0.0 | -1.1 | 0.8 | 0.7 | 0.0 | -1.3 | 0.6 | 0.6 |
| | 31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| T | SUM | 11.8 | 4.91 | | | 12.0 | 4.53 | | |
| O | PROM. | 0.4 | 0.2 | 1.3 | 2.4 | 0.4 | 0.1 | 1.4 | 2.4 |
| T | DESV. | 0.3 | 0.81 | 0.8 | 1.3 | 0.3 | 0.85 | 1.0 | 1.5 |
| . | C.V. | 74.9 | 513.33 | 61.8 | 54.4 | 78.8 | 580.10 | 70.3 | 60.4 |

ESTADISTICAS SEMANALES DEL PARTIDO DE AZUL

Período: Junio 2021

| SEM | CENTRO | | | SUR | | | BALANCE HIDRICO | |
|--------------|--------|-----------|-----|-----|-----------|-----|-----------------|--------|
| | ETr | RN | AA | ETr | RN | AA | CENTRO | SUR |
| | mm | mj/m2/día | mb | mm | mj/m2/día | mb | mm/sem | mm/sem |
| 1 | 0.3 | 0.3 | 2.1 | 0.3 | 0.3 | 2.1 | (2.0) | (2.2) |
| 2 | 0.7 | 0.5 | 3.8 | 0.7 | 0.5 | 4.1 | (4.6) | (4.8) |
| 3 | 0.3 | (0.2) | 2.2 | 0.3 | (0.3) | 2.1 | (2.0) | (1.9) |
| 4 | 0.3 | 0.1 | 1.9 | 0.3 | 0.2 | 1.9 | 4.4 | 7.2 |
| TOTAL | | | | | | | -4.3 | -1.7 |

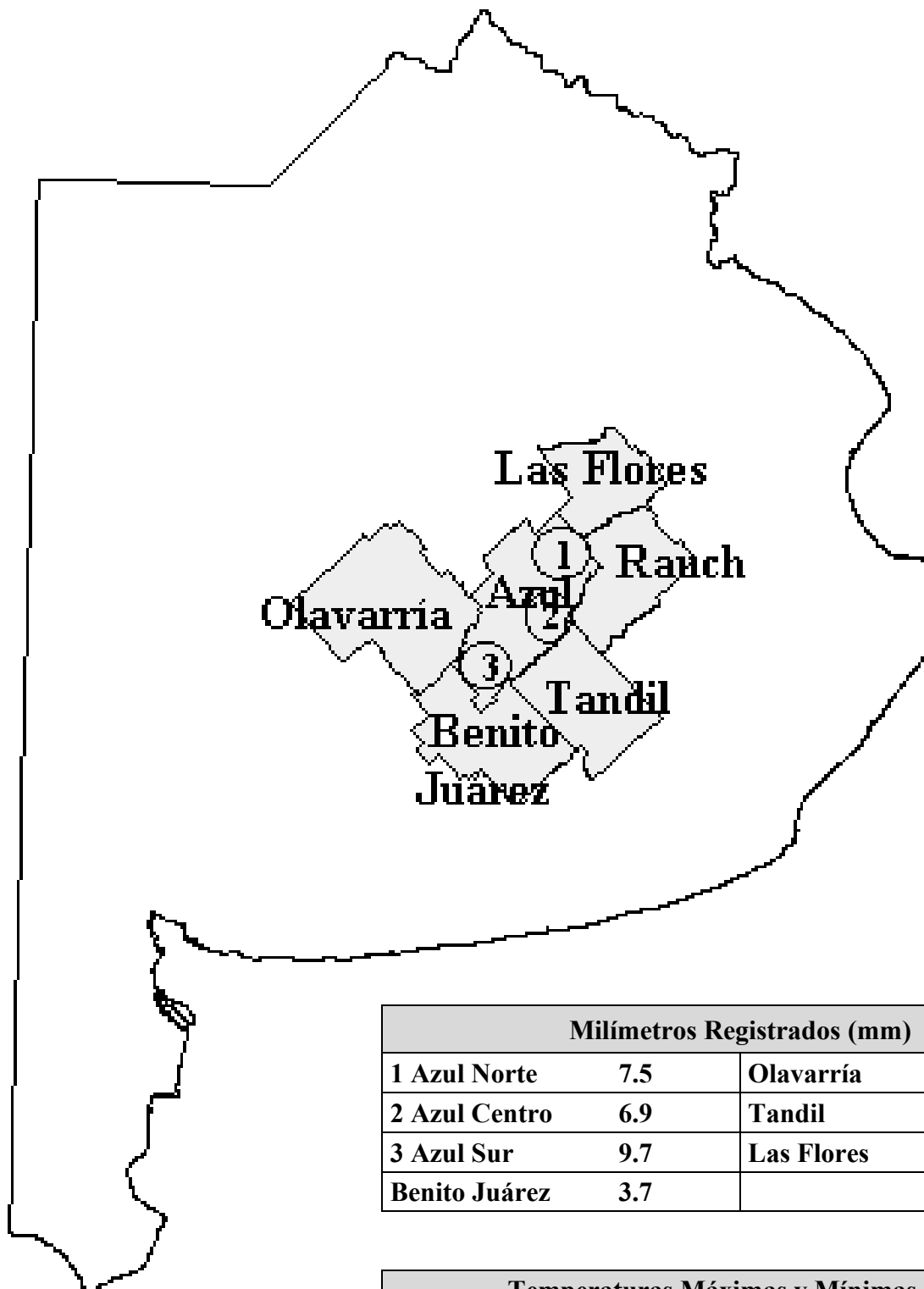
LLUVIAS REGISTRADAS EN LOS DISTINTOS SECTORES DEL PARTIDO DE AZUL

Período: Junio 2021

| | DIA | Facultad mm | Chacra mm | SMN mm | Don José mm | Cerro Aguila mm | Don Carlos mm | Chillar mm | El Mirador mm |
|-----------------|-----|----------------|--------------|------------|----------------|-----------------------|------------------|---------------|------------------|
| SEMANA 1 | 1 | | | 0.3 | | | | | |
| | 2 | | | | | | | | |
| | 3 | | | | | | | | |
| | 4 | | | | | | | | |
| | 5 | | | | | | | | |
| | 6 | | | | | | | | |
| | 7 | | | | | | | | |
| SEMANA 2 | 8 | | 0.2 | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| | 9 | | 0.2 | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| | 10 | | | | | | | | |
| | 11 | | | | | | | | |
| | 12 | | | | | | | | |
| | 13 | | | | | | | | |
| | 14 | | | | | | | | |
| SEMANA 3 | 15 | | | | | | | | |
| | 16 | | | | | | | | |
| | 17 | | | | | | | | |
| | 18 | | | | | | | | |
| | 19 | | | | | | | | |
| | 20 | | | | | | | | |
| | 21 | | | | | | | | |
| SEMANA 4 | 22 | | | | | | | | |
| | 23 | | 0.2 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 24 | | 0.2 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | 25 | 4.0 | | 6.2 | | | | | |
| | 26 | | 8.4 | | 9.2 | 8.9 | 7.9 | 8.2 | 9.2 |
| | 27 | | | 0.5 | | | | | |
| | 28 | | 0.4 | | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| | 29 | | | | | | | | |
| | 30 | | | | | | | | |
| | 31 | | | | | | | | |
| Total | | 4.0 | 9.6 | 7.0 | 10.3 | 10.0 | 8.8 | 9.2 | 10.3 |

**Temperaturas máximas y mínimas medias mensuales (°C) y
lluvias areales (mm)**

Mes Junio 2021



| Milímetros Registrados (mm) | | | |
|-----------------------------|-----|------------|-----|
| 1 Azul Norte | 7.5 | Olavarria | 7.4 |
| 2 Azul Centro | 6.9 | Tandil | 5.3 |
| 3 Azul Sur | 9.7 | Las Flores | s/d |
| Benito Juárez | 3.7 | | |

| Temperaturas Máximas y Mínimas (°C) | | | |
|-------------------------------------|----------|------------|----------|
| 2 Azul Centro | 14.3/3.5 | Olavarria | 13.1/3.6 |
| 3 Azul Sur | 11.9/2.9 | Las Flores | s/d |
| Benito Juárez | 12.8/2.9 | Tandil | 7.6/1.3 |

MARCHA DE LOS ELEMENTOS AGROMETEOROLOGICOS

OLAVARRIA

Lat.: 37° 41' 10" S Long.: 59° 46' 50" W Alt. 214 m.s.n.m

Período : Junio 2020

| | DIA | TMIN | TMAX | TMED | HR MED | VTO | RADIAC | RN | FOTOP. | |
|----------|-------|-------|------|------|--------|--------|-----------|-----------|---------|--|
| | | °C | °C | °C | % | km/día | mj/m2/día | mj/m2/día | hs.min | |
| SEMANA 1 | 1 | 10.7 | 15.7 | 12.4 | 86.3 | 53.7 | 5.6 | -0.1 | 9:38:00 | |
| | 2 | 3.3 | 13.1 | 8.3 | 70.3 | 121.8 | 6.5 | 0.1 | 9:35:00 | |
| | 3 | 4.9 | 19.1 | 11.3 | 78.0 | 116.6 | 4.0 | -0.7 | 9:33:00 | |
| | 4 | 6.2 | 18.5 | 12.6 | 75.3 | 78.6 | 7.3 | 0.8 | 9:32:00 | |
| | 5 | 4.2 | 15.6 | 9.1 | 69.0 | 57.6 | 8.8 | 0.8 | 9:33:00 | |
| | 6 | -1.9 | 12.9 | 6.8 | 72.3 | 110.0 | 4.9 | -0.1 | 9:33:00 | |
| | 7 | 4.1 | 11.6 | 8.0 | 86.3 | 39.3 | 3.0 | -0.8 | 9:33:00 | |
| SEMANA 2 | 8 | 3.3 | 16.8 | 11.1 | 89.7 | 117.9 | 7.3 | 0.8 | 9:31:00 | |
| | 9 | 9.9 | 16.1 | 13.2 | 92.0 | 108.7 | 9.1 | 0.5 | 9:30:00 | |
| | 10 | 8.6 | 14.1 | 9.7 | 74.3 | 70.7 | 9.7 | 1.0 | 9:29:00 | |
| | 11 | -1.5 | 16.1 | 7.9 | 69.3 | 114.0 | 10.9 | 1.8 | 9:29:00 | |
| | 12 | 3.9 | 21.5 | 13.0 | 76.7 | 224.0 | 6.0 | -0.2 | 9:29:00 | |
| | 13 | 6.3 | 20.6 | 13.2 | 81.3 | 145.4 | 11.3 | 0.3 | 9:29:00 | |
| | 14 | 4.8 | 12.3 | 8.0 | 77.0 | 167.7 | 11.0 | 0.5 | 9:29:00 | |
| SEMANA 3 | 15 | 1.1 | 10.2 | 5.4 | 69.7 | 192.6 | 8.5 | -0.2 | 9:28:00 | |
| | 16 | 0.6 | 9.1 | 4.7 | 74.0 | 214.8 | 2.9 | -0.9 | 9:28:00 | |
| | 17 | -1.6 | 9.4 | 4.1 | 76.3 | 176.9 | 9.3 | 2.3 | 9:28:00 | |
| | 18 | -0.3 | 8.3 | 4.3 | 74.7 | 112.7 | 9.6 | 1.1 | 9:28:00 | |
| | 19 | 1.7 | 9.5 | 5.1 | 79.0 | 51.1 | 5.1 | -0.3 | 9:28:00 | |
| | 20 | 3.2 | 13.1 | 6.6 | 72.0 | 73.4 | 9.3 | 0.7 | 9:28:00 | |
| | 21 | 0.4 | 10.3 | 7.4 | 87.7 | 86.5 | 10.3 | 1.2 | 9:28:00 | |
| SEMANA 4 | 22 | 6.1 | 11.3 | 8.7 | 89.3 | 161.1 | 5.3 | -0.4 | 9:28:00 | |
| | 23 | 6.6 | 12.1 | 11.0 | 98.3 | 56.3 | 6.5 | 0.2 | 9:29:00 | |
| | 24 | 6.2 | 16.8 | 10.7 | 66.0 | 96.9 | 6.2 | -0.2 | 9:29:00 | |
| | 25 | 2.7 | 13.7 | 9.8 | 79.7 | 133.6 | 10.1 | 0.8 | 9:28:00 | |
| | 26 | 4.3 | 9.6 | 6.6 | 80.3 | 61.6 | 8.7 | 0.1 | 9:28:00 | |
| | 27 | 3.6 | 7.5 | 5.4 | 87.0 | 59.0 | 3.3 | -1.4 | 9:29:00 | |
| | 28 | 4.0 | 8.6 | 6.0 | 80.7 | 184.7 | 9.2 | 0.6 | 9:30:00 | |
| | 29 | 3.8 | 11.9 | 6.8 | 76.0 | 327.5 | 6.2 | 0.1 | 9:32:00 | |
| | 30 | -2.1 | 8.6 | 4.0 | 86.3 | 327.5 | 3.0 | -1.2 | 9:32:00 | |
| | 31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0:00:00 | |
| TOTAL | SUM | 218.9 | | | | | | 7.1 | | |
| | PROM. | 3.6 | 13.1 | 8.4 | 79.2 | 128.1 | 7.3 | 0.2 | | |
| | DESV. | 3.3 | 3.9 | 2.9 | 7.7 | 73.1 | 2.6 | 0.8 | | |
| | C.V. | 91.0 | 29.3 | 34.4 | 9.8 | 57.1 | 35.2 | 346.6 | | |

DEMANDA ATMOSFERICA DE AGUA

OLAVARRIA

Período: Junio 2020

| | | Olavarría | | | |
|-----------------|-------|-----------|-----------|-------|------|
| | DIA | ETr | RN | FU*AA | AA |
| | | mm | mj/m2/día | mm | mb |
| SEMANA 1 | 1 | 0.2 | -0.1 | 0.8 | 1.9 |
| | 2 | 0.5 | 0.1 | 1.6 | 2.5 |
| | 3 | 0.2 | -0.7 | 1.1 | 1.7 |
| | 4 | 0.3 | 0.8 | 0.6 | 1.2 |
| | 5 | 0.4 | 0.8 | 1.0 | 2.3 |
| | 6 | 0.2 | -0.1 | 1.0 | 1.6 |
| | 7 | -0.1 | -0.8 | 0.4 | 1.1 |
| SEMANA 2 | 8 | 0.4 | 0.8 | 1.0 | 1.6 |
| | 9 | 0.7 | 0.5 | 2.6 | 4.4 |
| | 10 | 0.7 | 1.0 | 1.6 | 3.4 |
| | 11 | 0.8 | 1.8 | 1.8 | 2.9 |
| | 12 | 0.8 | -0.2 | 3.5 | 3.6 |
| | 13 | 1.0 | 0.3 | 2.9 | 4.0 |
| | 14 | 0.9 | 0.5 | 2.7 | 3.4 |
| SEMANA 3 | 15 | 0.9 | -0.2 | 3.7 | 4.3 |
| | 16 | 0.0 | -0.9 | 0.8 | 0.8 |
| | 17 | 0.6 | 2.3 | 0.8 | 1.0 |
| | 18 | 0.8 | 1.1 | 2.4 | 4.0 |
| | 19 | 0.2 | -0.3 | 0.8 | 1.8 |
| | 20 | 0.5 | 0.7 | 1.3 | 2.7 |
| | 21 | 0.6 | 1.2 | 1.4 | 2.7 |
| SEMANA 4 | 22 | 0.1 | -0.4 | 0.7 | 0.9 |
| | 23 | 0.4 | 0.2 | 1.4 | 3.3 |
| | 24 | 0.5 | -0.2 | 1.9 | 3.4 |
| | 25 | 0.6 | 0.8 | 1.6 | 2.4 |
| | 26 | 0.4 | 0.1 | 1.0 | 2.3 |
| | 27 | 0.0 | -1.4 | 0.7 | 1.5 |
| | 28 | 0.5 | 0.6 | 1.4 | 1.6 |
| | 29 | 0.5 | 0.1 | 2.6 | 2.0 |
| | 30 | 0.0 | -1.2 | 0.8 | 0.6 |
| | 31 | 0.6 | 0.4 | 1.6 | 2.4 |
| Total | SUM | 13.8 | 7.5 | | |
| | PROM. | 0.4 | 0.2 | 1.5 | 2.4 |
| | DESV. | 0.3 | 0.8 | 0.9 | 1.1 |
| | C.V. | 62.7 | 333.7 | 57.0 | 45.5 |

ESTADISTICAS SEMANALES

OLAVARRIA

Período: Junio 2020

| SEM | ETr | RN | AA | BALANCE HIDRICO |
|-----|-----|-----------|-------|-----------------|
| | mm | mj/m2/día | mb | mm/semana |
| 1 | 0.2 | 0.0 | 1.8 | -1.5 |
| 2 | 0.7 | 0.7 | 3.3 | -4.9 |
| 3 | 0.5 | 0.5 | 2.5 | -3.5 |
| 4 | 0.3 | (0.2) | 2.0 | 3.5 |
| | | | TOTAL | -6.4 |

LLUVIAS REGISTRADAS

Período: Junio 2020

| | DIA | Olavarría mm |
|--------------|-----|-----------------|
| SEMANA 1 | 1 | 0.2 |
| | 2 | |
| | 3 | |
| | 4 | |
| | 5 | |
| | 6 | |
| | 7 | |
| SEMANA 2 | 8 | |
| | 9 | 0.2 |
| | 10 | |
| | 11 | |
| | 12 | |
| | 13 | |
| | 14 | |
| SEMANA 3 | 15 | |
| | 16 | |
| | 17 | |
| | 18 | |
| | 19 | |
| | 20 | |
| | 21 | |
| SEMANA 4 | 22 | |
| | 23 | 0.5 |
| | 24 | |
| | 25 | 6.3 |
| | 26 | |
| | 27 | 0.2 |
| | 28 | |
| | 29 | |
| | 30 | |
| | 31 | |
| Total | | 0.0 |

MARCHA DE LOS ELEMENTOS AGROMETEOROLOGICOS

BENITO JUAREZ

Lat.: 37° 41' 10" S Long.: 59° 46' 50" W Alt. 214 m.s.n.m

Período : Junio 2021

| | DIA | TMIN | TMAX | TMED | HR MED | VTO | RADIAC | RN | FOTOP. |
|----------|------|-------|------|------|--------|--------|-----------|-----------|---------|
| | | °C | °C | °C | % | km/día | mj/m2/día | mj/m2/día | hs.min |
| SEMANA 1 | 1 | 9.3 | 16.7 | 13.0 | 83.5 | 180.8 | 5.12 | -0.35 | 9:34:00 |
| | 2 | 4.0 | 11.7 | 7.9 | 72.5 | 151.0 | 7.96 | 0.28 | 9:31:00 |
| | 3 | 5.5 | 17.2 | 11.4 | 71.0 | 286.6 | 4.35 | -0.61 | 9:29:00 |
| | 4 | 7.9 | 15.7 | 11.8 | 83.0 | 89.2 | 7.78 | 0.47 | 9:28:00 |
| | 5 | 2.9 | 15.0 | 9.0 | 69.5 | 132.1 | 10.74 | 1.55 | 9:28:00 |
| | 6 | -2.0 | 12.7 | 5.4 | 65.0 | 133.9 | 5.85 | 0.38 | 9:29:00 |
| | 7 | 4.6 | 12.2 | 8.4 | 81.0 | 92.7 | 3.38 | -0.80 | 9:29:00 |
| SEMANA 2 | 8 | 3.3 | 16.3 | 9.8 | 88.0 | 240.3 | 8.40 | 1.02 | 9:27:00 |
| | 9 | 10.6 | 14.7 | 12.7 | 92.5 | 109.8 | 10.27 | 0.85 | 9:25:00 |
| | 10 | 2.9 | 12.8 | 7.9 | 70.0 | 169.9 | 9.45 | 0.63 | 9:25:00 |
| | 11 | -2.2 | 14.8 | 6.3 | 68.0 | 231.7 | 9.67 | 0.98 | 9:24:00 |
| | 12 | 7.4 | 20.8 | 14.1 | 69.5 | 188.8 | 5.71 | -0.17 | 9:25:00 |
| | 13 | 6.8 | 19.3 | 13.1 | 78.0 | 212.8 | 10.21 | 0.51 | 9:25:00 |
| | 14 | 2.2 | 11.3 | 6.8 | 75.5 | 219.7 | 10.35 | -0.45 | 9:24:00 |
| SEMANA 3 | 15 | -1.2 | 11.0 | 4.9 | 75.0 | 147.6 | 3.62 | -1.74 | 9:23:00 |
| | 16 | 0.1 | 10.0 | 5.1 | 73.5 | 53.2 | 3.78 | -0.54 | 9:23:00 |
| | 17 | -2.6 | 9.5 | 3.5 | 81.5 | 46.3 | 3.77 | -0.18 | 9:23:00 |
| | 18 | -4.8 | 8.2 | 1.7 | 84.5 | 29.2 | 3.68 | -1.03 | 9:23:00 |
| | 19 | -1.0 | 10.2 | 4.6 | 71.5 | 104.7 | 7.30 | 0.07 | 9:23:00 |
| | 20 | 3.4 | 12.7 | 8.1 | 65.0 | 85.8 | 2.92 | -1.61 | 9:23:00 |
| | 21 | -1.0 | 12.0 | 5.5 | 85.0 | 130.4 | 10.23 | 1.18 | 9:23:00 |
| SEMANA 4 | 22 | 5.6 | 10.6 | 8.1 | 87.5 | 262.6 | 2.92 | -1.52 | 9:24:00 |
| | 23 | 4.0 | 12.2 | 8.1 | 97.0 | 157.9 | 6.70 | 0.45 | 9:24:00 |
| | 24 | 3.8 | 15.7 | 9.8 | 67.0 | 190.5 | 3.93 | -0.74 | 9:24:00 |
| | 25 | 2.7 | 13.5 | 8.1 | 82.0 | 132.1 | 10.07 | 0.91 | 9:24:00 |
| | 26 | 5.0 | 10.0 | 7.5 | 80.5 | 230.0 | 9.40 | 0.38 | 9:24:00 |
| | 27 | 2.3 | 8.0 | 5.2 | 87.0 | 278.0 | 2.93 | -1.44 | 9:25:00 |
| | 28 | 3.2 | 8.2 | 5.7 | 85.5 | 314.0 | 5.89 | -0.58 | 9:26:00 |
| | 29 | 3.8 | 12.2 | 8.0 | 77.5 | 66.9 | 4.97 | -0.61 | 9:27:00 |
| | 30 | -0.5 | 8.4 | 4.0 | 82.0 | 429.0 | 2.94 | -1.23 | 9:27:00 |
| | 31 | | | | | | | | |
| T | SUM | | | | | 194.3 | | -3.9 | |
| O | PROM | 2.9 | 12.8 | 7.8 | 78.3 | 169.9 | 6.5 | -0.1 | |
| T | DESV | 3.7 | 3.3 | 3.1 | 8.4 | 89.6 | 2.8 | 0.9 | |
| . | C.V. | 128.5 | 25.7 | 39.7 | 10.7 | 52.7 | 43.6 | -689.9 | |

DEMANDA ATMOSFERICA DE AGUA

Período: Junio 2021

| | | Benito Juárez | | | |
|-----------------|-------|---------------|-----------|-------|------|
| | DIA | ETr | RN | FU*AA | AA |
| | | mm | mj/m2/día | mm | mb |
| SEMANA 1 | 1 | 0.1 | -0.4 | 0.7 | 1.6 |
| | 2 | 0.5 | 0.3 | 1.6 | 2.6 |
| | 3 | 0.1 | -0.6 | 0.6 | 1.0 |
| | 4 | 0.3 | 0.5 | 0.8 | 1.5 |
| | 5 | 0.6 | 1.6 | 1.3 | 3.0 |
| | 6 | 0.2 | 0.4 | 0.7 | 1.1 |
| | 7 | 0.0 | -0.8 | 0.4 | 1.2 |
| SEMANA 2 | 8 | 0.5 | 1.0 | 1.2 | 2.0 |
| | 9 | 0.7 | 0.9 | 1.9 | 3.2 |
| | 10 | 0.7 | 0.6 | 2.3 | 4.8 |
| | 11 | 0.7 | 1.0 | 2.4 | 3.8 |
| | 12 | 0.7 | -0.2 | 3.5 | 3.6 |
| | 13 | 0.6 | 0.5 | 1.6 | 2.3 |
| | 14 | 1.0 | -0.5 | 4.0 | 5.1 |
| SEMANA 3 | 15 | 0.5 | -1.7 | 3.2 | 3.7 |
| | 16 | 0.1 | -0.5 | 1.0 | 1.0 |
| | 17 | 0.1 | -0.2 | 0.4 | 0.5 |
| | 18 | 0.3 | -1.0 | 1.8 | 3.0 |
| | 19 | 0.4 | 0.1 | 1.4 | 3.3 |
| | 20 | 0.0 | -1.6 | 1.0 | 2.0 |
| | 21 | 0.5 | 1.2 | 1.1 | 2.0 |
| SEMANA 4 | 22 | 0.0 | -1.5 | 0.7 | 0.9 |
| | 23 | 0.3 | 0.5 | 0.7 | 1.5 |
| | 24 | 0.0 | -0.7 | 0.4 | 0.8 |
| | 25 | 0.5 | 0.9 | 1.2 | 1.8 |
| | 26 | 0.4 | 0.4 | 0.9 | 1.9 |
| | 27 | -0.2 | -1.4 | 0.2 | 0.5 |
| | 28 | 0.3 | -0.6 | 1.4 | 1.7 |
| | 29 | 0.3 | -0.6 | 1.9 | 1.4 |
| | 30 | -0.1 | -1.2 | 0.4 | 0.3 |
| | 31 | | | | |
| Total | SUM | 10.1 | -3.94 | | |
| | PROM. | 0.3 | -0.1 | 1.3 | 2.1 |
| | DESV. | 0.3 | 0.89 | 0.9 | 1.2 |
| | C.V. | 85.3 | -678.26 | 69.5 | 59.2 |

ESTADISTICAS SEMANALES

BENITO JUAREZ

Período: Junio 2021

| SEM | ETr | RN | AA | BALANCE HIDRICO |
|-----|-----|-----------|--------------|-----------------|
| | mm | mj/m2/día | mb | mm/semana |
| 1 | 0.3 | 0.1 | 1.7 | -1.9 |
| 2 | 0.7 | 0.5 | 3.5 | -4.9 |
| 3 | 0.3 | (0.6) | 2.2 | -1.9 |
| 4 | 0.2 | (0.5) | 1.2 | 2.2 |
| | | | TOTAL | -6.4 |

LLUVIAS REGISTRADAS

Período: Junio 2021

| | DIA | Benito Juárez mm |
|--------------|-----|---------------------|
| SEMANA 1 | 1 | |
| | 2 | |
| | 3 | |
| | 4 | |
| | 5 | |
| | 6 | |
| | 7 | |
| SEMANA 2 | 8 | |
| | 9 | |
| | 10 | |
| | 11 | |
| | 12 | |
| | 13 | |
| | 14 | |
| SEMANA 3 | 15 | |
| | 16 | |
| | 17 | |
| | 18 | |
| | 19 | |
| | 20 | |
| | 21 | |
| SEMANA 4 | 22 | |
| | 23 | |
| | 24 | |
| | 25 | 2.7 |
| | 26 | |
| | 27 | 0.4 |
| | 28 | 0.6 |
| | 29 | |
| | 30 | |
| | 31 | |
| Total | | 3.7 |

MARCHA DE LOS ELEMENTOS AGROMETEOROLOGICOS

TANDIL

Lat.: 37° 17' 34" S Long.: 59° 5' W Alt. 178 m.s.n.m

Período : Junio 2019

| | DIA | TMIN | TMAX | TMED | RADIAC | Etr | FOTOP. |
|----------|-------|-------|------|------|-----------|--------|---------|
| | | °C | °C | °C | mj/m2/día | mm/día | hs.min |
| SEMANA 1 | 1 | 7.9 | 12.7 | 10.3 | 6.1 | 0.3 | 9:38:00 |
| | 2 | 4.1 | 9.6 | 6.9 | 6.2 | 0.4 | 9:38:00 |
| | 3 | 4.0 | 8.7 | 6.4 | 10.8 | 0.7 | 9:39:00 |
| | 4 | 5.6 | 13.1 | 9.4 | 8.6 | 0.7 | 9:38:00 |
| | 5 | 4.5 | 10.8 | 7.7 | 3.2 | 0.1 | 9:36:00 |
| | 6 | -1.0 | 5.7 | 2.4 | 3.0 | -0.1 | 9:34:00 |
| | 7 | 2.0 | 7.4 | 4.7 | 11.1 | 1.0 | 9:32:00 |
| SEMANA 2 | 8 | 0.0 | 7.4 | 3.7 | 11.0 | 1.1 | 9:32:00 |
| | 9 | 6.0 | 12.1 | 9.1 | 10.9 | 0.9 | 9:33:00 |
| | 10 | 6.8 | 12.1 | 9.5 | 9.7 | 0.8 | 9:33:00 |
| | 11 | -0.8 | 6.7 | 3.0 | 4.1 | 0.4 | 9:32:00 |
| | 12 | 2.5 | 12.1 | 7.3 | 4.3 | 0.1 | 9:30:00 |
| | 13 | 2.5 | 10.7 | 6.6 | 2.9 | 0.0 | 9:29:00 |
| | 14 | 6.2 | 10.4 | 8.3 | 9.4 | 0.4 | 9:29:00 |
| SEMANA 3 | 15 | 1.4 | 5.4 | 3.4 | 3.1 | 0.2 | 9:29:00 |
| | 16 | -3.7 | 2.9 | -0.4 | 2.9 | 0.2 | 9:29:00 |
| | 17 | -5.5 | 1.9 | -1.8 | 2.9 | 0.1 | 9:29:00 |
| | 18 | -6.5 | 2.1 | -2.2 | 2.9 | 0.0 | 9:28:00 |
| | 19 | -6.2 | 2.6 | -1.8 | 10.6 | 0.5 | 9:28:00 |
| | 20 | -3.7 | 3.8 | 0.0 | 7.9 | 0.4 | 9:28:00 |
| | 21 | -4.3 | 3.2 | -0.6 | 2.9 | 0.1 | 9:28:00 |
| SEMANA 4 | 22 | -1.4 | 6.6 | 2.6 | 8.6 | 0.3 | 9:28:00 |
| | 23 | 3.0 | 9.9 | 6.5 | 5.6 | 0.2 | 9:28:00 |
| | 24 | 6.5 | 11.3 | 8.9 | 3.5 | 0.1 | 9:28:00 |
| | 25 | -0.4 | 8.9 | 4.3 | 10.9 | 0.5 | 9:28:00 |
| | 26 | 5.5 | 7.9 | 6.7 | 10.9 | 0.8 | 9:29:00 |
| | 27 | 2.6 | 5.6 | 4.1 | 5.3 | 0.5 | 9:29:00 |
| | 28 | 3.7 | 6.1 | 4.9 | 8.7 | 0.6 | 9:28:00 |
| | 29 | 2.4 | 7.3 | 4.9 | 2.9 | 0.6 | 9:28:00 |
| | 30 | -5.5 | 2.2 | -1.7 | 3.3 | 0.0 | 9:29:00 |
| | 31 | | | | | | |
| T | SUM | | | | | | |
| O | PROM. | 1.3 | 7.6 | 4.4 | 6.5 | 0.4 | |
| T | DESV. | 4.2 | 3.5 | 3.7 | 3.2 | 0.3 | |
| . | C.V. | 331.9 | 45.7 | 84.6 | 50.1 | 80.9 | |

ESTADISTICAS SEMANALES

TANDIL**Período: Junio 2019**

| SEM | ETr | BALANCE HIDRICO |
|--------------|------------|----------------------------|
| | mm | mm/sem |
| 1 | 0.4 | -2.27 |
| 2 | 0.5 | -3.19 |
| 3 | 0.2 | -1.37 |
| 4 | 0.4 | 0.41 |
| TOTAL | | -6.41 |

LLUVIAS REGISTRADAS**Período: Junio 2019**

| | DIA | Tandil mm |
|-----------------|------------|----------------------|
| SEMANA 1 | 1 | 0.8 |
| | 2 | |
| | 3 | |
| | 4 | |
| | 5 | |
| | 6 | |
| | 7 | |
| SEMANA 2 | 8 | |
| | 9 | |
| | 10 | 0.5 |
| | 11 | |
| | 12 | |
| | 13 | |
| | 14 | |
| SEMANA 3 | 15 | |
| | 16 | |
| | 17 | |
| | 18 | |
| | 19 | |
| | 20 | |
| | 21 | |
| SEMANA 4 | 22 | |
| | 23 | |
| | 24 | 3.0 |
| | 25 | |
| | 26 | |
| | 27 | |
| | 28 | 1.0 |
| | 29 | |
| | 30 | |
| 31 | | |
| Total | | 5.3 |

Colaboradores del Boletín del Centro Regional de
Agrometeorología de los Partidos de
Azul, Benito Juárez, Olavarría, Las Flores, Tandil

- ✓ Sr. Delegado Municipal de Cacharí.
- ✓ Estancia La Esther
- ✓ S.M.N de Benito Juárez
- ✓ Estancia “Don Carlos”
- ✓ Estancia “Cerro del Aguila”