

**TABLA : HOJA DE DATOS - TEMPERATURA (°C)**



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : °C  
**Limite de Deteccion** : ---°C

**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

DIA \ HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	13.3	12.6	12.4	13.0	13.0	12.3	12.5	12.8	13.6	13.9	14.2	15.2	16.8	17.7	18.2	19.7	19.8	17.1	14.8	14.3	13.5	13.4	13.5	13.4	14.6	19.8	12.3
6/22/2024	13.4	13.0	12.5	12.4	12.2	12.1	11.8	11.8	12.1	13.4	15.5	17.1	18.4	19.0	20.5	20.7	18.7	16.8	14.5	13.9	13.4	13.3	13.2	12.9	14.7	20.7	11.8
6/23/2024	13.2	13.2	12.9	12.8	12.5	12.4	12.2	11.9	12.1	12.6	14.4	15.7	17.5	18.8	19.6	19.5	17.8	16.1	14.6	13.9	13.5	13.4	13.3	13.4	14.5	19.6	11.9
6/24/2024	13.1	12.9	12.9	12.8	12.7	12.8	12.9	13.2	13.2	13.8	13.8	14.2	15.1	16.3	16.8	17.7	17.3	16.3	14.4	13.9	13.4	13.4	13.1	13.0	14.1	17.7	12.7
6/25/2024	13.0	12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	13.1	13.7	14.7	15.8	16.3	16.9	17.5	17.0	15.5	14.3	13.6	13.1	12.9	12.7	12.8	14.0	17.5	12.7
6/26/2024	12.8	12.7	12.7	12.8	12.7	12.7	12.7	12.7	12.8	12.9	13.1	13.6	15.1	16.2	17.3	18.0	18.5	16.9	14.4	13.7	13.2	12.9	12.8	12.8	14.0	18.5	12.7
6/27/2024	13.0	12.9	12.5	12.4	12.5	12.3	12.0	11.9	11.9	12.2	12.7	14.2	16.0	17.4	19.1	20.4	19.6	17.0	14.8	13.6	13.2	12.6	12.3	12.2	14.1	20.4	11.9
6/28/2024	12.0	11.9	11.7	11.5	11.3	11.0	10.5	10.5	10.5	11.5	15.2	18.8	19.7	20.8	20.3	19.1	18.4	17.0	14.8	13.4	13.0	13.8	13.5	13.4	14.3	20.8	10.5
6/29/2024	11.9	11.8	11.9	10.9	10.4	10.3	10.1	10.1	10.8	11.1	16.0	17.2	17.7	18.5	18.7	18.2	18.5	20.6	16.2	13.1	15.1	12.3	12.6	14.0	14.1	20.6	10.1
6/30/2024	12.4	12.5	12.3	12.0	11.9	11.9	12.2	12.7	14.2	16.0	17.4	19.1	20.4	19.6	17.0	14.8	13.6	13.2	12.6	12.3	12.2	12.0	11.9	11.7	14.0	20.4	11.7
Prom.	12.9	12.7	12.5	12.4	12.3	12.1	11.9	12.0	12.2	12.7	14.3	15.6	16.9	17.9	18.6	19.0	18.4	17.0	14.8	13.7	13.5	13.1	13.0	13.1			
Max.	13.4	13.2	12.9	13.0	13.0	12.8	12.9	13.2	13.6	13.9	16.0	18.8	19.7	20.8	20.5	20.7	19.8	20.6	16.2	14.3	15.1	13.8	13.5	14.0			
Min.	11.9	11.8	11.7	10.9	10.4	10.3	10.1	10.1	10.5	11.1	12.7	13.6	15.1	16.2	16.8	17.5	17.0	15.5	14.3	13.1	13.0	12.3	12.3	12.2			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - HUMEDAD RELATIVA (%)



GRRNyGA  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

Ciudad : Tacna  
Nombre/Número de la Estación : EMCA-01  
Ubicación : PROL. HIPOLITO UNANUE 1269

Periodo : 21 al 30 de junio  
Año : 2024  
Responsable : GORE - TACNA  
Tipo de Data : Horario  
Unidades : %  
Limite de Deteccion : ---%

Coordenadas UTM (WGS 84)  
Este : 366893  
Norte : 8008890

DÍA HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	79.5	80.0	80.4	77.2	79.5	81.3	79.3	78.1	76.4	76.4	74.4	67.4	63.9	62.4	59.6	55.5	59.6	73.3	76.5	79.1	80.4	80.5	80.5	80.5	74.2	81.3	55.5
6/22/2024	80.8	81.3	81.6	82.8	83.4	83.9	82.7	81.0	78.9	71.7	63.8	56.9	57.8	54.9	49.7	58.1	61.8	72.1	77.1	79.1	80.4	80.7	81.0	79.2	73.4	83.9	49.7
6/23/2024	79.2	80.0	80.8	81.5	82.1	82.6	82.3	82.5	82.1	75.3	70.7	62.7	58.8	53.6	53.0	58.5	65.0	72.9	77.3	79.3	81.0	81.4	81.5	82.3	74.4	82.6	53.0
6/24/2024	82.8	83.0	83.1	83.4	83.0	82.1	79.7	76.9	75.2	75.5	75.4	71.2	68.6	66.0	62.9	62.7	64.8	71.8	75.2	78.3	80.2	81.7	82.7	83.0	76.2	83.4	62.7
6/25/2024	83.0	82.7	82.1	82.0	81.6	80.1	79.4	79.5	78.8	77.0	71.7	68.4	64.7	65.3	60.9	61.2	65.7	73.4	77.8	80.0	80.9	82.3	82.3	81.6	75.9	83.0	60.9
6/26/2024	81.2	80.8	80.5	80.7	81.0	80.3	80.2	79.7	78.9	78.7	77.8	73.5	66.2	62.2	59.0	55.7	58.7	71.1	76.4	78.6	79.7	80.4	81.0	80.9	75.1	81.2	55.7
6/27/2024	80.7	81.7	83.0	82.1	78.8	78.6	79.5	80.1	78.9	78.7	75.6	67.0	63.9	57.1	51.1	51.9	57.7	67.2	75.0	76.9	78.5	80.7	81.1	81.4	73.6	83.0	51.1
6/28/2024	82.2	82.0	82.7	83.0	83.1	83.7	84.1	84.6	84.2	75.4	57.5	53.0	46.8	48.6	53.4	57.3	60.1	70.4	76.5	79.7	80.1	77.6	74.9	78.6	72.5	84.6	46.8
6/29/2024	82.6	81.4	80.7	83.4	84.5	85.2	85.6	86.0	85.1	82.7	59.1	58.4	56.3	55.0	56.9	58.1	54.6	57.1	76.4	76.3	74.4	82.4	78.4	68.3	72.9	86.0	54.6
6/30/2024	82.1	78.8	78.6	79.5	80.1	78.9	78.7	75.6	67.0	63.9	57.1	51.1	51.9	57.7	67.2	75.0	76.9	78.5	80.7	81.1	81.4	82.2	82.0	82.7	73.7	82.7	51.1
Prom.	81.3	81.5	81.7	81.8	81.9	82.0	81.4	80.9	79.8	76.8	69.6	64.3	60.8	58.4	56.3	57.7	60.9	69.9	76.5	78.6	79.5	80.9	80.4	79.5			
Max.	83.0	83.0	83.1	83.4	84.5	85.2	85.6	86.0	85.1	82.7	77.8	73.5	68.6	66.0	62.9	62.7	65.7	73.4	77.8	80.0	81.0	82.4	82.7	83.0			
Min.	79.2	80.0	80.4	77.2	78.8	78.6	79.3	76.9	75.2	71.7	57.5	53.0	46.8	48.6	49.7	51.9	54.6	57.1	75.0	76.3	74.4	77.6	74.9	68.3			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - VELOCIDAD DEL VIENTO (m/s)



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

Ciudad : Tacna  
Nombre/Número de la Estación : EMCA-01  
Ubicación : PROL. HIPOLITO UNANUE 1269  
Equipo de Muestreo : Sensor de Velocidad y Dirección del Aire - WINDSONIC I  
Última Calibración del Equipo : octubre 2021  
Coordenadas UTM (WGS 84)  
Este : 366893  
Norte : 8008890

Periodo : 21 al 30 de junio  
Año : 2024  
Responsable : GORE - TACNA  
Tipo de Data : Horario  
Unidades : m/s  
Limite de Deteccion : ---m/s

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	1.1	1.0	0.8	1.0	1.4	1.0	1.2	0.9	1.0	1.5	1.1	1.8	1.5	2.0	1.4	1.3	1.9	2.2	1.4	1.4	1.3	0.7	1.4	0.9	1.3	2.2	0.7
6/22/2024	0.9	0.9	0.4	1.3	0.7	0.8	0.9	1.2	1.2	1.0	1.4	1.0	2.1	1.6	1.7	2.1	2.2	2.0	1.4	1.1	1.1	0.8	1.1	1.1	1.2	2.2	0.4
6/23/2024	0.7	1.0	0.9	0.8	0.8	1.1	0.8	1.0	0.9	0.7	1.7	1.1	1.7	1.6	1.9	2.2	2.3	1.9	1.7	1.5	1.5	1.3	1.0	1.2	1.3	2.3	0.7
6/24/2024	1.2	1.1	1.0	1.0	0.8	1.0	0.7	1.1	1.1	1.1	1.3	1.1	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.6	1.3	0.9	1.3	1.1	1.3	1.8	0.7
6/25/2024	1.1	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.8	0.8	1.4	1.7	1.8	1.6	1.7	2.0	2.0	1.7	1.5	1.4	1.4	1.2	1.0	1.3	2.0	0.8
6/26/2024	0.9	1.1	0.6	0.9	0.9	0.9	0.8	0.7	1.0	0.9	0.9	1.1	1.5	1.6	1.5	1.4	1.9	2.0	1.8	1.3	1.5	1.2	1.3	1.0	1.2	2.0	0.6
6/27/2024	1.2	1.1	1.1	0.9	0.9	1.1	0.9	1.0	0.8	0.9	0.8	1.3	1.7	1.3	1.4	1.5	2.3	2.0	1.4	1.1	1.0	0.9	0.7	0.6	1.2	2.3	0.6
6/28/2024	0.8	0.9	0.8	0.6	0.7	0.7	0.7	0.7	1.0	1.0	1.4	1.2	1.6	2.2	2.2	2.2	1.9	1.8	1.3	1.0	0.9	1.1	0.7	0.8	1.2	2.2	0.6
6/29/2024	0.7	0.7	0.7	0.9	0.9	0.9	0.7	0.7	1.6	1.2	1.0	1.9	1.8	1.7	2.0	2.0	1.1	1.4	2.6	0.9	1.4	1.5	1.3	0.9	1.3	2.6	0.7
6/30/2024	0.9	0.9	1.1	0.9	1.0	0.8	0.9	0.8	1.3	1.7	1.3	1.4	1.5	2.3	2.0	1.4	1.1	1.0	0.9	0.7	0.6	0.8	0.9	0.8	1.1	2.3	0.6
Prom.	1.0	1.0	0.8	1.0	0.9	1.0	0.9	0.9	1.1	1.0	1.2	1.3	1.7	1.7	1.7	1.8	1.9	1.9	1.7	1.3	1.3	1.1	1.1	0.9			
Max.	1.2	1.2	1.1	1.3	1.4	1.1	1.2	1.2	1.6	1.5	1.7	1.9	2.1	2.2	2.2	2.2	2.3	2.2	2.6	1.6	1.5	1.5	1.4	1.2			
Min.	0.7	0.7	0.4	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.8	1.0	1.5	1.3	1.4	1.3	1.1	1.4	1.3	0.9	0.9	0.7	0.7	0.6			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - RADIACIÓN SOLAR GLOBAL (kW/m<sup>2</sup>)



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : Equipo Sensor de Radiación Solar Global - CPM3  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : kW/m<sup>2</sup>  
**Limite de Deteccion** : ---kW/m<sup>2</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.6	0.8	0.7	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0
6/22/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.7	0.8	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0
6/23/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.7	0.8	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0
6/24/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.4	0.7	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.0
6/25/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.6	0.6	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.0
6/26/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.6	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.0
6/27/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.8	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0
6/28/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.7	0.8	0.7	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0
6/29/2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.7	0.7	0.7	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.0
6/30/2024	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.5	0.8	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0
Prom.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.7	0.7	0.6	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0			
Max.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.7	0.8	0.7	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0			
Min.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.6	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

**TABLA : HOJA DE DATOS - PRESIÓN ATMOSFÉRICA (mbar)**



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : Sensor Presión Atmosférica - CS106  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : mbar  
**Limite de Deteccion** : ---mbar

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/22/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/23/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/24/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/25/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/26/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/27/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/28/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/29/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
6/30/2024	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0
Prom.	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1		
Max.	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1		
Min.	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.0	500.0	500.0	500.0	500.0	500.1	500.1	500.1	500.1	500.1	500.1	500.1	500.1		

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

**TABLA : HOJA DE DATOS - MATERIAL PARTICULADO RESPIRABLE (PM<sub>10</sub>)**



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : THERMO SCIENTIFIC - TEOM 1405  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : ug/m<sup>3</sup>  
**Limite de Deteccion** : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	0.0	0.0	22.3	23.9	10.4	14.8	25.8	34.5	82.1	77.7	40.4	54.7	53.2	46.5	62.3	89.6	91.2	50.5	62.2	42.8	30.3	28.5	45.6	26.9	42.4	91.2	0.0
6/22/2024	29.1	55.0	47.9	20.3	22.5	19.4	23.2	40.8	18.2	23.6	40.6	41.8	50.3	27.0	51.4	39.1	37.0	54.2	54.4	47.0	44.8	34.4	36.8	40.0	37.5	55.0	18.2
6/23/2024	45.5	44.7	40.5	35.3	30.2	33.0	37.1	29.2	42.3	54.7	63.9	28.4	41.9	27.8	37.6	47.6	41.6	40.6	37.7	33.1	36.0	37.9	35.4	38.9	39.2	63.9	27.8
6/24/2024	35.6	34.9	24.3	19.2	23.8	22.8	18.8	36.2	71.2	64.2	56.8	40.7	65.3	64.8	43.1	39.1	63.1	58.1	38.7	32.7	35.5	27.1	23.5	7.0	39.4	71.2	7.0
6/25/2024	16.1	16.4	19.0	0.0	13.6	37.7	0.0	41.0	42.0	36.3	24.3	38.3	36.6	39.5	39.5	36.2	46.8	42.5	50.8	34.2	7.7	29.3	22.0	15.4	28.6	50.8	0.0
6/26/2024	9.5	18.4	6.0	22.7	48.6	29.0	27.5	29.3	36.2	52.4	47.2	60.3	57.2	31.4	28.4	22.8	32.5	40.0	31.2	43.6	35.4	28.0	27.8	22.4	32.8	60.3	6.0
6/27/2024	2.8	8.8	13.7	10.1	13.3	16.7	22.6	19.8	28.8	24.7	17.1	30.8	48.6	30.7	42.2	41.0	42.2	49.6	63.7	43.1	37.2	30.9	28.7	34.8	29.2	63.7	2.8
6/28/2024	33.2	31.9	30.5	28.4	46.9	40.8	41.9	35.7	10.3	67.5	95.6	77.0	71.0	61.2	71.4	49.8	64.4	58.7	73.7	56.4	24.4	77.5	71.9	78.8	54.1	95.6	10.3
6/29/2024	24.3	40.9	41.9	27.0	14.8	28.6	30.8	29.2	50.9	20.4	78.7	81.5	53.7	66.5	46.5	33.5	39.0	99.6	65.4	43.4	78.8	0.0	48.4	91.2	47.3	99.6	0.0
6/30/2024	48.6	29.0	27.5	29.3	36.2	52.4	47.2	60.3	57.2	31.4	28.4	22.8	32.5	40.0	31.2	43.6	35.4	28.0	27.8	22.4	2.8	8.8	13.7	10.1	31.9	60.3	2.8
Prom.	21.8	27.9	27.3	20.8	24.9	27.0	25.3	32.9	42.4	46.8	51.6	50.4	53.1	44.0	46.9	44.3	50.9	54.9	53.1	41.8	36.7	32.6	37.8	39.5			
Max.	45.5	55.0	47.9	35.3	48.6	40.8	41.9	41.0	82.1	77.7	95.6	81.5	71.0	66.5	71.4	89.6	91.2	99.6	73.7	56.4	78.8	77.5	71.9	91.2			
Min.	0.0	0.0	6.0	0.0	10.4	14.8	0.0	19.8	10.3	20.4	17.1	28.4	36.6	27.0	28.4	22.8	32.5	40.0	31.2	32.7	7.7	0.0	22.0	7.0			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - MATERIAL PARTICULADO RESPIRABLE (PM<sub>2.5</sub>)



Ciudad : Tacna  
Nombre/Número de la Estación : EMCA-01  
Ubicación : PROL. HIPOLITO UNANUE 1269  
Equipo de Muestreo : THERMO SCIENTIFIC - TEOM 1405  
Última Calibración del Equipo : octubre 2021  
Coordenadas UTM (WGS 84)  
Este : 366893  
Norte : 8008890

Periodo : 21 al 30 de junio  
Año : 2024  
Responsable : GORE - TACNA  
Tipo de Data : Horario  
Unidades : ug/m<sup>3</sup>  
Limite de Deteccion : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	0.0	0.0	16.7	11.7	0.0	5.3	10.4	14.2	29.4	26.0	8.0	20.2	22.4	0.0	30.8	41.3	27.0	11.4	34.0	11.1	5.4	7.5	28.1	10.7	15.5	41.3	0.0
6/22/2024	12.8	37.1	27.8	2.8	11.9	12.5	14.5	17.9	8.8	10.5	14.0	16.9	12.4	4.1	20.5	3.4	0.0	18.9	20.9	18.4	17.5	15.3	19.3	23.6	15.1	37.1	0.0
6/23/2024	29.0	28.9	25.6	21.6	20.0	18.6	25.9	16.3	22.8	37.3	36.3	3.3	17.5	1.4	13.2	18.7	16.3	15.7	18.2	11.2	16.8	18.9	21.8	23.7	20.0	37.3	1.4
6/24/2024	21.2	18.2	8.7	8.3	11.0	11.4	9.9	23.6	44.8	34.2	27.2	18.4	40.2	38.9	17.5	15.6	30.9	25.5	15.9	12.9	18.0	11.7	11.7	0.0	19.8	44.8	0.0
6/25/2024	7.2	9.9	13.0	0.0	4.4	30.4	0.0	17.4	21.8	24.0	0.0	8.5	14.2	16.8	17.0	15.8	22.2	18.0	30.3	13.4	0.0	17.9	10.0	4.3	13.2	30.4	0.0
6/26/2024	0.3	9.6	0.0	13.5	39.8	18.1	19.9	18.8	17.4	29.2	26.5	35.9	32.3	11.5	9.3	6.4	8.9	11.1	3.7	19.5	18.4	11.4	11.0	9.8	15.9	39.8	0.0
6/27/2024	0.0	0.0	7.4	5.8	12.1	14.4	17.9	12.2	17.7	14.8	11.1	14.8	25.7	8.2	13.6	11.8	16.1	19.8	21.6	15.9	17.5	10.7	12.4	13.9	13.1	25.7	0.0
6/28/2024	19.7	12.8	15.3	18.3	31.9	27.1	23.9	17.3	0.0	40.6	48.0	25.5	31.3	15.9	29.1	11.1	28.1	21.5	31.9	24.9	0.0	27.5	21.9	18.9	22.6	48.0	0.0
6/29/2024	12.0	18.7	14.5	17.1	10.3	23.8	29.1	16.5	26.8	0.0	20.8	34.4	19.8	24.4	14.1	6.5	10.7	26.2	22.9	25.5	23.1	0.0	18.1	37.1	18.8	37.1	0.0
6/30/2024	5.8	12.1	14.4	17.9	12.2	17.7	14.8	11.1	14.8	25.7	8.2	13.6	11.8	16.1	19.8	21.6	15.9	17.5	10.7	12.4	13.9	19.7	12.8	15.3	14.8	25.7	5.8
Prom.	11.4	15.0	14.3	11.0	15.7	17.9	16.8	17.1	21.1	24.1	21.3	19.8	24.0	13.5	18.3	14.5	17.8	18.7	22.1	17.0	13.0	13.4	17.1	15.8			
Max.	29.0	37.1	27.8	21.6	39.8	30.4	29.1	23.6	44.8	40.6	48.0	35.9	40.2	38.9	30.8	41.3	30.9	26.2	34.0	25.5	23.1	27.5	28.1	37.1			
Min.	0.0	0.0	0.0	0.0	0.0	5.3	0.0	12.2	0.0	0.0	0.0	3.3	12.4	0.0	9.3	3.4	0.0	11.1	3.7	11.1	0.0	0.0	10.0	0.0			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - DIÓXIDO DE NITRÓGENO (NO<sub>2</sub>)



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

Ciudad : Tacna  
Nombre/Número de la Estación : EMCA-01  
Ubicación : PROL. HIPOLITO UNANUE 1269  
Equipo de Muestreo : THERMO SCIENTIFIC - ANALIZADOR 42i  
Última Calibración del Equipo : octubre 2021  
Coordenadas UTM (WGS 84)  
Este : 366893  
Norte : 8008890

Periodo : 21 al 30 de junio  
Año : 2024  
Responsable : GORE - TACNA  
Tipo de Data : Horario  
Unidades : ug/m<sup>3</sup>  
Limite de Deteccion : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	27.2	16.9	18.5	24.8	28.9	27.6	36.0	52.4	65.3	60.7	48.8	40.2	35.8	46.3	31.8	50.6	62.8	48.4	53.0	50.3	44.3	40.8	41.3	38.7	41.3	65.3	16.9
6/22/2024	32.7	41.1	44.4	30.4	24.2	26.7	39.2	54.3	36.0	34.4	43.1	42.6	48.3	37.8	41.0	43.6	47.2	50.1	55.2	52.9	51.1	43.2	41.3	40.8	41.7	55.2	24.2
6/23/2024	37.6	35.8	32.3	28.2	26.6	35.9	31.2	31.6	39.6	36.0	42.9	34.0	35.0	35.2	34.9	39.3	34.7	42.3	45.6	46.6	38.6	39.8	32.6	36.6	36.4	46.6	26.6
6/24/2024	28.6	23.0	20.2	19.1	30.1	39.3	37.4	38.6	47.2	51.1	51.8	45.4	48.5	45.9	40.5	42.4	48.8	55.0	51.5	48.1	46.7	44.0	37.4	38.8	40.8	55.0	19.1
6/25/2024	25.7	20.7	21.6	21.1	29.0	42.3	45.0	48.7	48.7	43.2	52.9	51.2	41.8	39.3	39.3	43.7	50.3	50.4	51.0	48.9	41.0	38.9	40.1	35.1	40.4	52.9	20.7
6/26/2024	24.6	23.7	20.3	20.9	29.1	38.6	32.7	32.2	50.8	53.5	52.0	54.3	46.4	40.6	39.2	39.2	49.9	56.5	58.4	58.0	48.8	45.1	43.5	30.1	41.2	58.4	20.3
6/27/2024	27.2	24.8	24.0	20.8	23.1	28.5	35.1	38.5	41.5	40.2	32.8	37.4	40.0	41.8	47.3	47.9	54.0	57.6	68.5	59.4	55.5	59.4	58.0	59.9	42.6	68.5	20.8
6/28/2024	52.3	55.6	45.7	33.9	46.7	49.6	54.8	55.1	49.1	56.2	73.4	73.8	53.9	59.3	58.4	55.6	57.5	60.7	73.0	64.6	56.8	74.8	74.0	74.1	58.7	74.8	33.9
6/29/2024	44.6	51.3	54.8	46.7	44.8	53.6	59.1	62.4	69.9	60.7	91.7	69.5	58.1	54.8	52.4	47.7	49.7	79.6	52.3	48.8	67.1	37.2	57.0	63.9	57.4	91.7	37.2
6/30/2024	20.8	23.1	28.5	35.1	38.5	41.5	40.2	32.8	37.4	40.0	41.8	47.3	47.9	54.0	57.6	68.5	59.4	55.5	59.4	58.0	59.9	52.3	55.6	45.7	45.9	68.5	20.8
Prom.	33.4	32.6	31.3	27.3	31.4	38.0	41.2	46.0	49.8	48.4	54.4	49.8	45.3	44.5	42.7	45.6	50.5	55.6	56.5	53.1	50.0	47.0	47.2	46.5			
Max.	52.3	55.6	54.8	46.7	46.7	53.6	59.1	62.4	69.9	60.7	91.7	73.8	58.1	59.3	58.4	55.6	62.8	79.6	73.0	64.6	67.1	74.8	74.0	74.1			
Min.	24.6	16.9	18.5	19.1	23.1	26.7	31.2	31.6	36.0	34.4	32.8	34.0	35.0	35.2	31.8	39.2	34.7	42.3	45.6	46.6	38.6	37.2	32.6	30.1			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA



TABLA : HOJA DE DATOS - DIOXIDO DE AZUFRE (SO<sub>2</sub>)



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : THERMO SCIENTIFIC - ANALIZADOR 450i  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : ug/m<sup>3</sup>  
**Limite de Deteccion** : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	0.7	1.2	1.0	0.2	1.5	0.6	1.0	1.7	3.3	3.9	4.1	1.8	1.0	2.6	2.1	3.0	3.9	2.4	3.4	2.1	1.3	0.5	0.9	1.6	1.9	4.1	0.2
6/22/2024	0.6	1.2	1.8	1.4	0.8	0.8	1.1	2.5	1.1	0.9	1.9	2.1	2.4	1.8	3.5	2.0	2.2	2.8	2.8	2.6	3.2	1.6	1.6	0.9	1.8	3.5	0.6
6/23/2024	0.2	0.3	0.9	1.2	0.6	1.5	0.7	1.0	1.5	1.1	1.8	1.7	1.0	1.8	2.3	1.2	1.0	1.4	1.4	0.7	2.1	1.1	1.1	0.9	1.2	2.3	0.2
6/24/2024	0.7	0.7	0.5	1.2	0.6	0.7	0.7	0.2	2.1	1.4	1.6	2.1	1.5	3.7	2.0	3.4	3.0	1.4	2.3	1.4	0.6	0.5	1.4	0.9	1.4	3.7	0.2
6/25/2024	0.8	0.0	0.5	1.1	0.0	0.5	1.3	1.5	1.6	1.6	1.1	1.4	1.5	1.5	0.7	1.1	1.4	1.1	2.0	0.2	0.0	0.6	1.0	0.0	0.9	2.0	0.0
6/26/2024	0.0	1.1	0.5	0.0	0.3	0.6	1.0	0.1	0.9	1.3	1.8	1.5	0.9	1.4	0.8	1.6	3.0	0.7	2.0	1.1	1.4	0.7	0.4	0.5	1.0	3.0	0.0
6/27/2024	0.0	0.2	0.3	0.0	0.0	0.0	0.2	0.0	0.2	0.4	0.5	0.7	1.1	1.0	2.5	2.3	3.3	2.3	2.2	0.2	1.1	2.2	1.1	2.2	1.0	3.3	0.0
6/28/2024	0.9	0.9	1.7	0.7	1.6	0.6	1.2	2.6	1.5	1.4	3.0	2.0	3.6	3.1	5.0	4.6	4.4	2.7	2.3	1.9	1.6	3.7	2.7	4.1	2.4	5.0	0.6
6/29/2024	2.4	1.7	1.8	2.6	1.1	2.2	2.9	2.9	3.4	2.9	4.3	3.9	4.2	4.0	3.6	3.7	2.1	3.3	2.8	1.2	2.9	1.2	1.8	3.2	2.8	4.3	1.1
6/30/2024	0.3	0.6	1.0	0.1	0.9	1.3	1.8	1.5	0.9	1.4	0.8	1.6	3.0	0.7	2.0	1.1	1.4	0.7	0.4	0.5	0.0	0.2	0.3	0.0	0.9	3.0	0.0
Prom.	0.7	0.8	1.0	0.9	0.7	0.8	1.1	1.4	1.7	1.6	2.2	1.9	1.9	2.3	2.5	2.5	2.7	2.0	2.3	1.3	1.6	1.3	1.3	1.6			
Max.	2.4	1.7	1.8	2.6	1.6	2.2	2.9	2.9	3.4	3.9	4.3	3.9	4.2	4.0	5.0	4.6	4.4	3.3	3.4	2.6	3.2	3.7	2.7	4.1			
Min.	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.2	0.4	0.5	0.7	0.9	1.0	0.7	1.1	1.0	0.7	1.4	0.2	0.0	0.5	0.4	0.0			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

**TABLA : HOJA DE DATOS - SULFURO DE HIDRÓGENO (H<sub>2</sub>S)**



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : THERMO SCIENTIFIC - ANALIZADOR 450i  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : ug/m<sup>3</sup>  
**Limite de Deteccion** : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	5.3	3.6	1.1	4.0	6.6	6.7	4.3	4.0	4.9	2.4	12.8	8.1	1.2	2.0	5.5	2.6	3.4	7.3	0.0	0.0	0.5	0.5	1.2	0.6	3.7	12.8	0.0
6/22/2024	1.0	0.2	0.7	2.0	11.6	10.1	3.8	2.3	2.1	2.3	1.3	1.0	1.0	0.6	0.1	1.8	3.8	4.8	4.2	4.2	8.3	6.4	5.1	2.9	3.4	11.6	0.1
6/23/2024	2.8	2.6	2.7	2.9	3.1	2.0	2.8	3.0	2.7	3.4	2.8	1.8	0.9	2.1	0.9	2.7	4.0	4.4	1.0	2.6	6.0	8.5	2.8	4.6	3.1	8.5	0.9
6/24/2024	0.9	2.5	14.2	17.0	8.2	4.8	1.2	1.7	0.8	2.3	3.6	5.7	9.0	6.3	5.3	3.4	2.4	8.1	8.8	4.6	0.9	2.9	0.0	0.9	4.8	17.0	0.0
6/25/2024	2.4	5.6	14.7	7.7	6.0	3.3	3.0	2.1	2.7	2.9	3.0	3.2	3.8	5.3	1.2	0.9	3.0	4.9	2.4	0.6	0.6	7.8	11.1	9.4	4.5	14.7	0.6
6/26/2024	10.0	9.1	9.2	4.3	1.7	2.3	2.4	2.2	3.1	4.3	2.7	3.1	3.8	1.1	2.1	1.6	0.1	4.9	6.8	1.4	0.4	9.3	8.6	3.5	4.1	10.0	0.1
6/27/2024	12.1	16.7	10.7	3.7	1.1	0.2	0.7	0.8	0.4	2.9	4.6	3.1	4.3	4.0	1.7	2.6	3.1	8.6	8.2	3.5	3.8	0.8	2.7	1.7	4.2	16.7	0.2
6/28/2024	1.9	2.0	2.4	3.1	2.4	2.2	2.9	2.3	0.0	2.2	2.2	2.1	1.6	4.4	5.2	6.7	7.7	7.9	7.8	1.0	2.1	1.4	2.3	4.1	3.2	7.9	0.0
6/29/2024	5.8	5.1	5.1	5.5	7.3	7.5	6.7	7.0	6.1	4.7	3.7	2.1	6.0	4.3	5.3	3.0	0.7	2.3	1.5	0.0	3.4	13.6	4.9	3.7	4.8	13.6	0.0
6/30/2024	1.7	2.3	2.4	2.2	3.1	4.3	2.7	3.1	3.8	1.1	2.1	1.6	0.1	4.9	6.8	1.4	0.4	9.3	8.6	3.5	12.1	16.7	10.7	3.7	4.5	16.7	0.1
Prom.	4.7	5.3	6.8	5.6	5.3	4.4	3.1	2.8	2.5	3.0	4.1	3.4	3.5	3.3	3.0	2.8	3.1	5.9	4.5	2.0	2.9	5.7	4.3	3.5			
Max.	12.1	16.7	14.7	17.0	11.6	10.1	6.7	7.0	6.1	4.7	12.8	8.1	9.0	6.3	5.5	6.7	7.7	8.6	8.8	4.6	8.3	13.6	11.1	9.4			
Min.	0.9	0.2	0.7	2.0	1.1	0.2	0.7	0.8	0.0	2.2	1.3	1.0	0.9	0.6	0.1	0.9	0.1	2.3	0.0	0.0	0.4	0.5	0.0	0.6			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - MONOXIDO DE CARBONO (CO PROMEDIO DE UNA HORA)



Ciudad	: Tacna	Periodo	: 21 al 30 de junio
Nombre/Número de la Estación	: EMCA-01	Año	: 2024
Ubicación	: PROL. HIPOLITO UNANUE 1269	Responsable	: GORE - TACNA
Equipo de Muestreo	: THERMO SCIENTIFIC - ANALIZADOR 48i	Tipo de Data	: Horario
Última Calibración del Equipo	: octubre 2021	Unidades	: ug/m <sup>3</sup>
Coordenadas UTM (WGS 84)		Limite de Deteccion	: --- ug/m <sup>3</sup>
Este	: 366893		
Norte	: 8008890		

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	254.5	186.9	153.2	231.1	267.5	234.7	318.7	465.7	1088.7	688.9	472.5	383.7	323.7	382.2	229.9	396.2	459.8	348.8	455.3	449.3	325.6	289.7	339.5	288.3	376.4	1088.7	153.2
6/22/2024	237.8	333.7	532.0	255.5	170.3	201.9	405.1	730.2	341.8	290.9	421.3	365.5	375.5	256.3	275.7	255.7	294.8	338.1	442.5	457.8	468.0	321.2	284.6	317.0	348.9	730.2	170.3
6/23/2024	299.2	290.9	243.2	197.9	164.2	276.7	246.7	279.6	375.0	339.4	455.9	281.2	244.2	204.9	202.1	179.4	183.4	275.0	295.3	317.5	271.6	336.2	269.3	305.7	272.3	455.9	164.2
6/24/2024	218.2	136.0	118.7	106.6	186.2	253.7	276.5	365.0	563.6	614.0	483.6	401.6	436.9	397.4	262.5	249.3	349.9	394.1	347.0	336.2	307.4	288.9	246.5	230.8	315.4	614.0	106.6
6/25/2024	148.3	104.6	94.7	103.2	155.0	307.4	370.6	382.5	420.2	313.1	598.1	425.7	324.2	271.5	242.1	248.2	341.7	317.7	337.7	302.3	286.1	277.4	238.7	208.3	284.1	598.1	94.7
6/26/2024	142.3	116.5	97.9	102.3	182.0	253.0	222.4	191.2	489.6	561.1	394.1	438.0	371.8	301.3	258.1	226.5	356.4	353.5	380.3	425.0	385.7	326.9	302.4	186.2	294.4	561.1	97.9
6/27/2024	151.6	139.3	148.4	128.6	140.7	170.2	271.8	346.4	359.1	354.2	250.4	319.4	315.1	359.7	310.7	290.9	326.4	349.5	562.4	460.8	373.4	490.5	417.1	528.2	315.2	562.4	128.6
6/28/2024	406.8	444.5	362.8	243.9	391.5	428.0	674.1	573.1	460.9	660.1	813.8	654.3	357.5	396.9	354.7	352.8	427.2	439.6	695.6	610.8	493.4	897.5	1128.8	1236.7	562.7	1236.7	243.9
6/29/2024	102.3	182.0	253.0	222.4	191.2	489.6	561.1	394.1	438.0	371.8	301.3	258.1	226.5	356.4	353.5	380.3	425.0	385.7	326.9	302.4	186.2	151.6	139.3	148.4	297.8	561.1	102.3
6/30/2024	128.6	140.7	170.2	271.8	346.4	359.1	354.2	250.4	319.4	315.1	359.7	310.7	290.9	326.4	349.5	562.4	460.8	373.4	490.5	417.1	528.2	406.8	444.5	362.8	347.5	562.4	128.6
Prom.	217.9	214.9	222.6	176.8	205.4	290.6	371.9	414.2	504.1	465.9	465.7	391.9	330.6	325.2	276.6	286.6	351.6	355.8	427.0	406.9	344.1	375.5	374.0	383.3			
Max.	406.8	444.5	532.0	255.5	391.5	489.6	674.1	730.2	1088.7	688.9	813.8	654.3	436.9	397.4	354.7	396.2	459.8	439.6	695.6	610.8	493.4	897.5	1128.8	1236.7			
Min.	102.3	104.6	94.7	102.3	140.7	170.2	222.4	191.2	341.8	290.9	250.4	258.1	226.5	204.9	202.1	179.4	183.4	275.0	295.3	302.3	186.2	151.6	139.3	148.4			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

TABLA : HOJA DE DATOS - MONOXIDO DE CARBONO (CO MEDIA MOVIL DE 8 HORAS)



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : THERMO SCIENTIFIC - ANALIZADOR 48i  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : ug/m<sup>3</sup>  
**Limite de Deteccion** : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	****	****	****	****	****	221.3	232.0	264.1	368.3	431.1	471.0	490.0	497.1	515.5	504.4	495.7	417.1	374.6	372.5	380.7	380.9	369.3	383.0	369.5	396.7	515.5	221.3
6/22/2024	341.8	339.9	349.5	325.3	305.8	294.9	303.1	358.3	371.3	366.0	352.1	365.9	391.5	398.3	382.1	322.8	317.0	322.9	325.5	337.1	348.6	356.7	357.8	365.5	345.8	398.3	294.9
6/23/2024	366.1	360.2	335.2	302.8	264.8	259.2	254.5	249.8	259.3	265.3	291.9	302.3	312.3	303.3	297.8	285.2	261.3	253.3	233.2	237.7	241.2	257.6	266.0	281.8	280.9	366.1	233.2
6/24/2024	286.1	268.7	246.7	220.3	209.6	199.3	200.2	207.6	250.8	310.5	356.2	393.0	424.4	442.3	440.6	426.1	399.4	371.9	354.8	346.6	330.5	316.9	314.9	312.6	317.9	442.3	199.3
6/25/2024	287.4	251.2	219.6	190.5	171.5	173.8	189.3	208.3	242.3	268.3	331.3	371.6	392.7	388.2	372.2	355.4	345.6	346.2	313.6	298.2	293.4	294.2	293.7	288.7	287.0	392.7	171.5
6/26/2024	263.8	238.7	208.7	183.7	170.7	167.6	165.6	163.4	206.9	262.4	299.5	341.4	365.2	371.2	375.6	380.1	363.4	337.5	335.7	334.1	335.9	339.0	344.6	339.5	287.3	380.1	163.4
6/27/2024	314.0	287.2	258.2	221.1	190.5	170.9	167.1	187.1	213.1	239.9	252.7	276.5	298.3	322.0	326.9	319.9	315.8	315.3	354.3	371.9	379.2	395.6	408.9	438.5	292.7	438.5	167.1
6/28/2024	448.6	460.5	435.5	408.4	410.7	402.8	435.0	440.6	447.3	474.3	530.6	581.9	577.7	573.8	533.9	506.4	502.2	474.6	459.8	454.4	471.4	533.9	630.7	741.2	497.3	741.2	402.8
6/29/2024	730.7	740.0	737.7	726.4	721.1	697.0	659.6	635.0	735.1	769.4	824.7	842.4	844.1	805.6	750.1	662.0	559.2	541.9	451.9	413.4	442.6	430.2	454.9	570.6	656.1	844.1	413.4
6/30/2024	221.1	190.5	170.9	167.1	187.1	213.1	239.9	252.7	276.5	298.3	322.0	326.9	319.9	315.8	315.3	354.3	371.9	379.2	395.6	408.9	438.5	448.6	460.5	435.5	312.9	460.5	167.1
Prom.	379.8	368.3	348.9	322.3	305.6	287.4	289.6	301.6	343.8	376.4	412.2	440.6	455.9	457.8	442.6	417.1	386.8	370.9	355.7	352.7	358.2	365.9	383.8	412.0			
Max.	730.7	740.0	737.7	726.4	721.1	697.0	659.6	635.0	735.1	769.4	824.7	842.4	844.1	805.6	750.1	662.0	559.2	541.9	459.8	454.4	471.4	533.9	630.7	741.2			
Min.	263.8	238.7	208.7	183.7	170.7	167.6	165.6	163.4	206.9	239.9	252.7	276.5	298.3	303.3	297.8	285.2	261.3	253.3	233.2	237.7	241.2	257.6	266.0	281.8			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA

**TABLA : HOJA DE DATOS - OZONO TROPOSFÉRICO (O<sub>3</sub>)**



**GRRNyGA**  
GERENCIA REGIONAL  
DE RECURSOS NATURALES  
Y GESTIÓN AMBIENTAL

**Ciudad** : Tacna  
**Nombre/Número de la Estación** : EMCA-01  
**Ubicación** : PROL. HIPOLITO UNANUE 1269  
**Equipo de Muestreo** : THERMO SCIENTIFIC - ANALIZADOR 48i  
**Última Calibración del Equipo** : octubre 2021  
**Coordenadas UTM (WGS 84)**  
**Este** : 366893  
**Norte** : 8008890

**Periodo** : 21 al 30 de junio  
**Año** : 2024  
**Responsable** : GORE - TACNA  
**Tipo de Data** : Horario  
**Unidades** : ug/m<sup>3</sup>  
**Limite de Deteccion** : --- ug/m<sup>3</sup>

HORA	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Prom.	Max.	Min.
6/21/2024	****	****	****	****	****	19.9	19.6	16.8	15.0	12.3	10.5	11.1	13.3	13.7	16.4	20.2	22.6	24.0	23.6	22.3	19.9	18.3	15.2	12.5	17.2	24.0	10.5
6/22/2024	11.8	10.1	8.9	9.1	10.3	10.9	10.4	9.4	9.2	10.7	12.5	13.5	13.4	14.7	17.5	21.1	22.8	23.0	22.3	20.9	19.2	17.1	14.8	11.8	14.4	23.0	8.9
6/23/2024	9.8	8.8	9.2	10.0	11.3	11.3	11.1	11.0	10.7	10.9	11.0	12.1	13.4	15.6	18.7	21.9	24.8	25.9	26.2	25.0	23.6	21.9	20.0	17.7	15.9	26.2	8.8
6/24/2024	16.5	17.2	18.6	20.3	20.5	20.1	19.2	18.5	16.5	14.0	11.5	9.6	8.9	9.8	11.5	13.4	15.8	17.2	17.8	17.9	17.9	17.2	16.3	15.2	15.9	20.5	8.9
6/25/2024	15.3	16.8	18.6	20.4	21.3	20.8	19.6	18.5	16.5	14.1	11.7	9.7	9.5	11.2	13.2	15.4	17.0	18.0	18.7	19.0	18.7	18.1	17.1	16.3	16.5	21.3	9.5
6/26/2024	16.9	18.2	20.2	22.1	22.7	22.4	22.9	23.3	21.1	18.9	16.5	14.3	14.1	15.5	16.4	17.2	19.0	20.3	20.6	20.6	20.0	18.8	17.4	17.2	19.0	23.3	14.1
6/27/2024	17.8	18.8	20.7	23.0	24.5	25.3	25.1	23.8	21.9	20.5	20.0	19.1	18.7	19.6	21.0	22.5	24.2	24.6	22.8	21.3	19.6	16.8	14.2	10.9	20.7	25.3	10.9
6/28/2024	8.4	6.0	5.7	6.3	5.4	4.6	3.9	3.8	4.5	5.3	5.9	6.0	9.3	13.4	17.9	21.9	23.8	25.3	24.8	23.6	21.0	16.9	12.4	8.4	11.9	25.3	3.8
6/29/2024	6.7	4.8	3.9	3.4	2.8	2.8	2.8	2.8	1.4	1.7	2.7	4.6	7.0	10.7	14.3	17.8	21.1	22.0	23.0	22.3	19.4	17.7	14.2	10.7	10.0	23.0	1.4
6/30/2024	23.0	24.5	25.3	25.1	23.8	21.9	20.5	20.0	19.1	18.7	19.6	21.0	22.5	24.2	24.6	22.8	21.3	19.6	16.8	14.2	10.9	8.4	6.0	5.7	19.1	25.3	5.7
Prom.	12.9	12.6	13.2	14.3	14.9	15.3	15.0	14.2	13.0	12.1	11.4	11.1	12.0	13.8	16.3	19.1	21.2	22.2	22.2	21.4	19.9	18.1	15.7	13.4			
Max.	17.8	18.8	20.7	23.0	24.5	25.3	25.1	23.8	21.9	20.5	20.0	19.1	18.7	19.6	21.0	22.5	24.8	25.9	26.2	25.0	23.6	21.9	20.0	17.7			
Min.	6.7	4.8	3.9	3.4	2.8	2.8	2.8	2.8	1.4	1.7	2.7	4.6	7.0	9.8	11.5	13.4	15.8	17.2	17.8	17.9	17.9	16.8	12.4	8.4			

Observaciones : Corte de Luz ( \* ), Mantenimiento ( \*\* ), Calibracion ( \*\*\* ) y Otros ( \*\*\*\* )

Reporta: SGGA - GRRNyGA