



Datos de la Estación

ESTACIÓN:	32086
NOMBRE:	ZACATECAS (DGE)
ESTADO:	ZACATECAS
MUNICIPIO:	ZACATECAS
LATITUD (°):	22.7614
LONGITUD (°):	-102.5767
ALTURA (msn):	2,352
SITUACIÓN:	OPERANDO
DATOS DESDE:	1 de enero de 1961
HASTA:	31 de diciembre de 2018

Inventario de Registros por Década Año

Estacion		N° de Casos					
Decada	Año	Lluvia	Temp min	Temp max	Temp amb	Evaporación	
1960	1961	365	365	365	365	365	
	1962	365	365	365	365	364	
	1963	365	365	365	365	365	
	1964	366	366	366	366	366	
	1965	365	365	365	365	364	
	1966	365	365	365	365	365	
	1967	365	365	365	365	360	
	1968	366	366	366	366	363	
	1969	365	365	365	365	365	
	1970	365	365	365	365	365	
Total 1960		3,652	3,652	3,652	3,652	3,642	
1980	1986	244	244	244	244	244	
	1987	364	365	365	365	365	
	1988	366	366	366	366	366	
	1989	364	365	365	365	365	
	1990	365	365	365	365	365	
Total 1980		1,703	1,705	1,705	1,705	1,705	
1990	1991	365	365	365	365	365	
	1992	366	366	366	366	366	
	1993	365	365	365	365	365	
	1994	365	365	365	365	365	
	1995	365	365	365	365	365	
	1996	366	366	366	366	366	
	1997	365	365	365	365	346	
	1998	365	365	365	365	365	
	1999	323	335	335	335	304	
	2000	357	366	366	366	366	
	Total 1990		3,602	3,623	3,623	3,623	3,573
2000	2001	365	365	365	365	365	
	2002	365	365	365	365	365	
	2003	364	365	365	365	365	
	2004	305	305	305	305	305	
	2005	364	365	365	365	365	
	2006	365	365	365	365	365	
	2007	365	365	365	365	365	
	2008	366	366	366	336	366	
	2009	364	365	365	365	364	
	2010	232	228	227	228	226	
Total 2000		3,455	3,454	3,453	3,424	3,451	
2010	2011	272	273	273	273		
	2012	181	183	182	183	181	
	2013	334	334	334	334		
	2014	365	365	365	365		
	2015	365	365	365	365		
	2016	366	366	366	366		
	2017	365	364	365	364		
	2018	365	365	365	365		
Total 2010		2,613	2,615	2,615	2,615	181	
Total general		15,025	15,049	15,048	15,019	12,552	

Estacion	32086
NOMBRE	ZACATECAS (DGE)
ESTADO	ZACATECAS

Década	Año	Lluvia (mm)			
		Mín.	Prom.	Máx.	Desv. Est.
1960	1961	0.0	0.9	30.0	3.4
	1962	0.0	0.8	26.4	3.4
	1963	0.0	0.9	28.9	3.4
	1964	0.0	1.2	38.0	4.1
	1965	0.0	1.4	39.4	4.7
	1966	0.0	1.4	39.2	4.6
	1967	0.0	1.6	46.4	5.5
	1968	0.0	1.7	48.4	6.4
	1969	0.0	0.5	16.4	2.1
	1970	0.0	1.5	44.4	5.4
Total 1960		0.0	1.2	48.4	4.5
1980	1986	0.0	2.0	75.0	7.2
	1987	0.0	2.1	52.5	7.4
	1988	0.0	1.3	46.0	5.2
	1989	0.0	1.1	40.0	4.6
	1990	0.0	2.0	65.7	6.2
Total 1980		0.0	1.7	75.0	6.1
1990	1991	0.0	1.8	52.0	6.3
	1992	0.0	1.5	32.0	4.2
	1993	0.0	1.3	44.5	5.0
	1994	0.0	1.5	54.0	5.5
	1995	0.0	0.9	46.5	3.9
	1996	0.0	1.2	63.0	5.3
	1997	0.0	1.0	40.9	3.5
	1998	0.0	1.3	67.5	6.1
	1999	0.0	1.1	41.2	4.3
	2000	0.0	1.0	33.4	3.9
Total 1990		0.0	1.3	67.5	4.9
2000	2001	0.0	1.3	51.5	5.4
	2002	0.0	1.9	41.0	5.7
	2003	0.0	1.5	44.0	5.0
	2004	0.0	2.4	52.0	6.6
	2005	0.0	1.0	27.0	3.6
	2006	0.0	1.5	53.0	5.1
	2007	0.0	1.1	64.0	5.1
	2008	0.0	1.6	71.0	6.0
	2009	0.0	1.4	51.0	5.4
	2010	0.0	1.7	65.0	7.3
Total 2000		0.0	1.5	71.0	5.5
2010	2011	0.0	0.9	26.0	3.4
	2012	0.0	1.1	23.5	3.4
	2013	0.0	1.9	53.7	6.2
	2014	0.0	1.2	32.2	3.9
	2015	0.0	2.8	65.9	8.0
	2016	0.0	1.2	29.3	3.7
	2017	0.0	1.6	78.0	6.7
	2018	0.0	2.0	50.0	6.6
Total 2010		0.0	1.7	78.0	5.7
Total general		0.0	1.4	78.0	5.3

Estacion	32086
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Década	Año	Evap (mm)			
		Mín.	Prom.	Máx.	Desv. Est.
1960	1961	0.1	6.1	12.2	2.5
	1962	0.1	6.4	11.5	2.6
	1963	0.1	6.0	11.9	2.4
	1964	0.1	5.8	11.7	2.5
	1965	0.5	5.8	11.8	2.5
	1966	0.2	5.4	11.6	2.4
	1967	0.1	6.0	11.2	2.2
	1968	0.1	5.8	11.0	2.2
	1969	0.3	7.8	14.5	2.3
	1970	0.1	8.3	13.9	2.1
Total 1960		0.1	6.3	14.5	2.5
1980	1986	0.3	5.5	15.1	2.6
	1987	0.1	6.1	13.7	2.8
	1988	0.4	6.1	14.3	2.7
	1989	0.6	6.6	13.7	2.7
	1990	0.5	5.9	13.8	2.7
Total 1980		0.1	6.1	15.1	2.7
1990	1991	0.6	6.2	13.7	3.1
	1992	0.2	5.6	12.5	2.6
	1993	0.5	6.2	13.4	2.5
	1994	0.5	6.3	13.6	2.4
	1995	0.4	6.7	14.6	2.7
	1996	0.6	6.5	17.2	2.4
	1997	0.4	5.7	12.6	2.3
	1998	0.6	6.6	15.9	2.9
	1999	0.4	6.2	14.9	2.7
	2000	0.9	6.2	13.4	2.5
Total 1990		0.2	6.2	17.2	2.6
2000	2001	0.8	6.3	13.3	2.5
	2002	0.3	5.7	11.6	2.3
	2003	0.7	5.6	12.5	2.5
	2004	0.1	4.9	11.4	2.2
	2005	0.4	5.5	14.4	2.5
	2006	0.2	4.8	11.9	2.2
	2007	0.3	4.7	11.8	2.1
	2008	0.3	5.1	11.7	2.3
	2009	0.2	5.2	12.6	2.2
	2010	0.3	5.8	13.3	2.7
Total 2000		0.1	5.3	14.4	2.4
2010	2011				
	2012	0.3	5.5	14.4	2.7
	2013				
	2014				
	2015				
	2016				
	2017				
	2018				
Total 2010		0.3	5.5	14.4	2.7
Total general		0.1	6.0	17.2	2.6

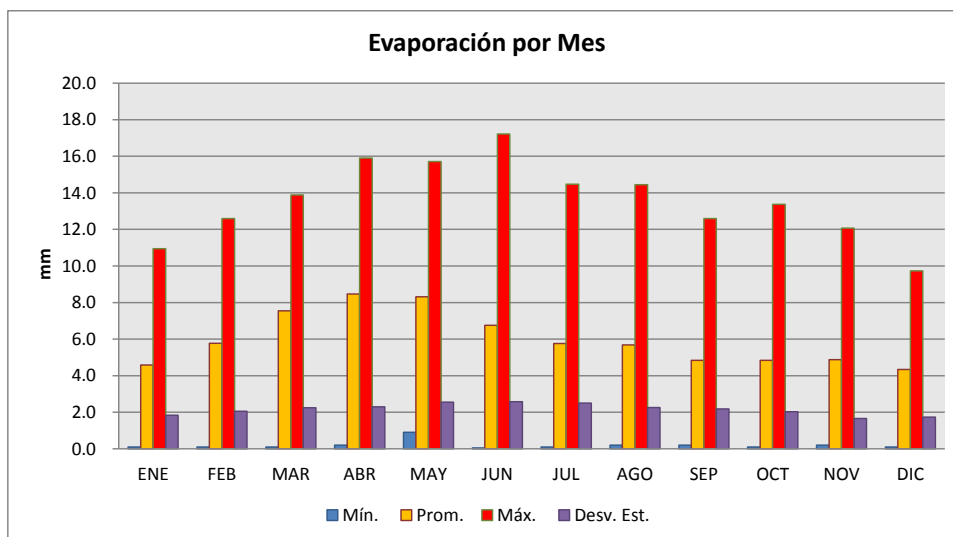
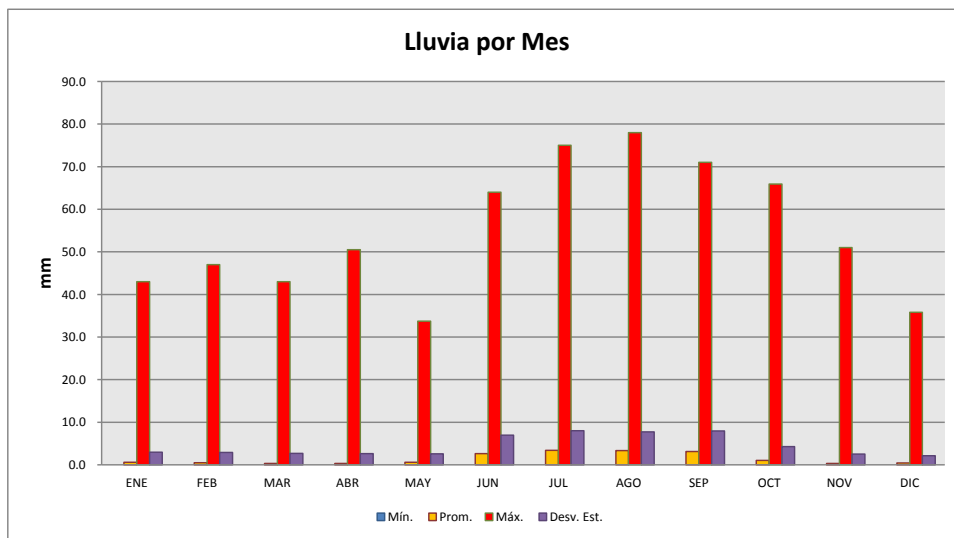


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NOMBRE	ZACATECAS (DGE)
ESTADO	ZACATECAS

Estación	32086
NOMBRE	ZACATECAS (DGE)
ESTADO	ZACATECAS

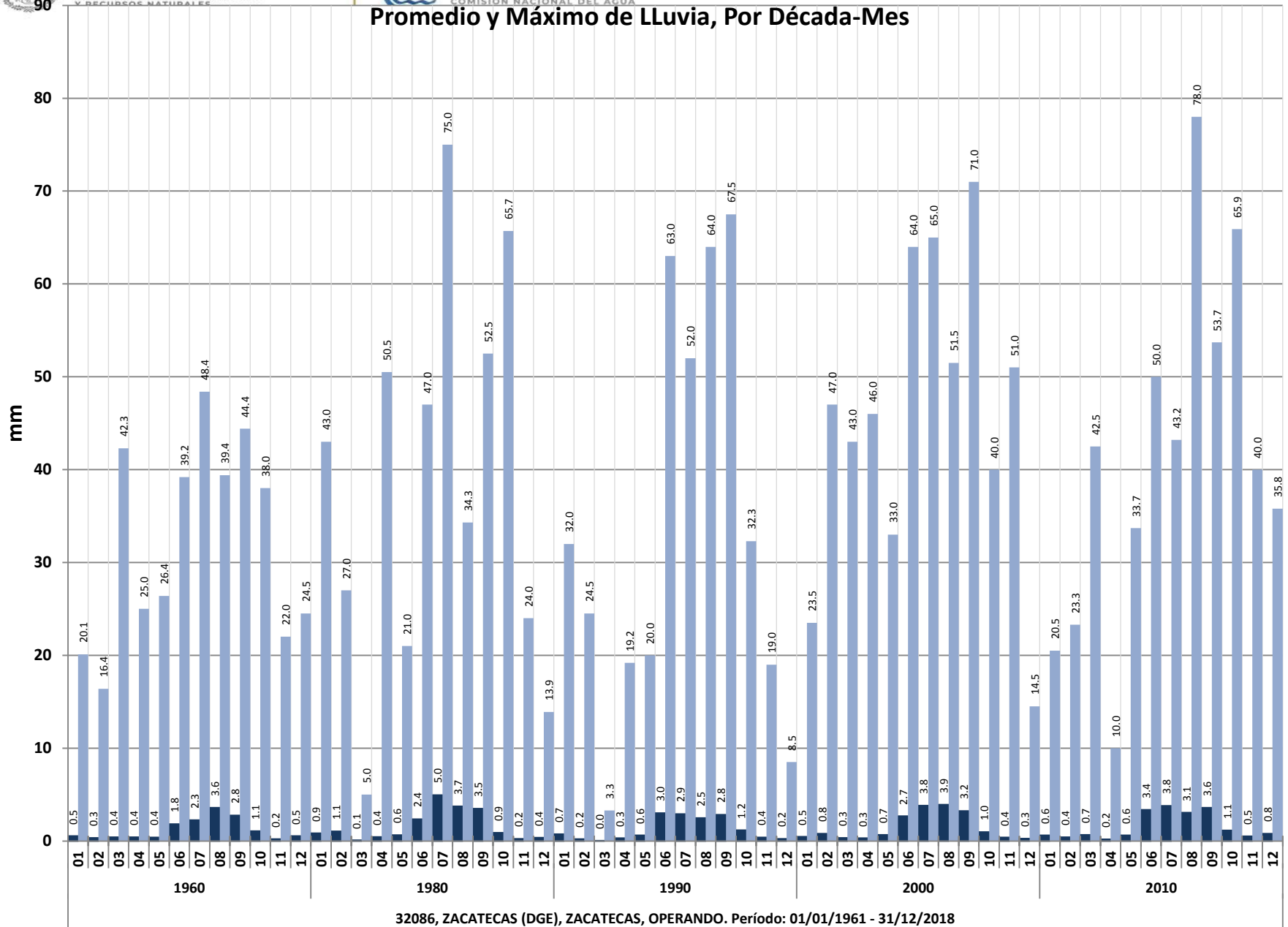
Lluvia (mm)					
Mes	Mín.	Prom.	Máx.	Desv. Est.	
ENE	0.0	0.6	43.0	3.0	
FEB	0.0	0.5	47.0	2.9	
MAR	0.0	0.3	43.0	2.7	
ABR	0.0	0.3	50.5	2.7	
MAY	0.0	0.6	33.7	2.6	
JUN	0.0	2.6	64.0	7.0	
JUL	0.0	3.4	75.0	8.0	
AGO	0.0	3.3	78.0	7.7	
SEP	0.0	3.1	71.0	8.0	
OCT	0.0	1.1	65.9	4.3	
NOV	0.0	0.4	51.0	2.5	
DIC	0.0	0.4	35.8	2.2	
Total general	0.0	1.4	78.0	5.3	

Evap (mm)					
Mes	Mín.	Prom.	Máx.	Desv. Est.	
ENE	0.1	4.6	10.9	1.8	
FEB	0.1	5.8	12.6	2.1	
MAR	0.1	7.6	13.9	2.2	
ABR	0.2	8.5	15.9	2.3	
MAY	0.9	8.3	15.7	2.6	
JUN	0.1	6.7	17.2	2.6	
JUL	0.1	5.8	14.5	2.5	
AGO	0.2	5.7	14.4	2.3	
SEP	0.2	4.8	12.6	2.2	
OCT	0.1	4.8	13.4	2.0	
NOV	0.2	4.9	12.1	1.7	
DIC	0.1	4.3	9.7	1.7	
Total general	0.1	6.0	17.2	2.6	

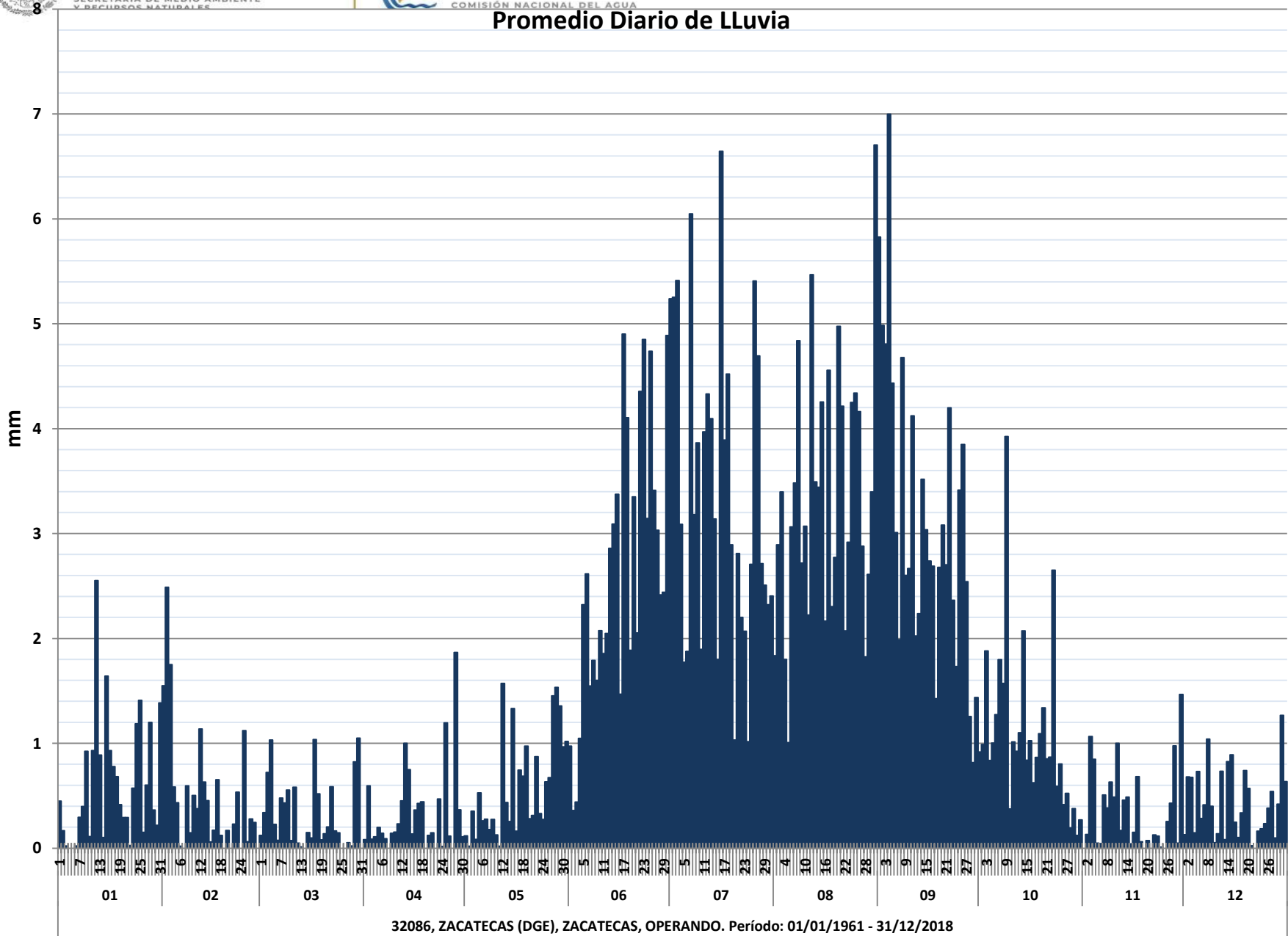


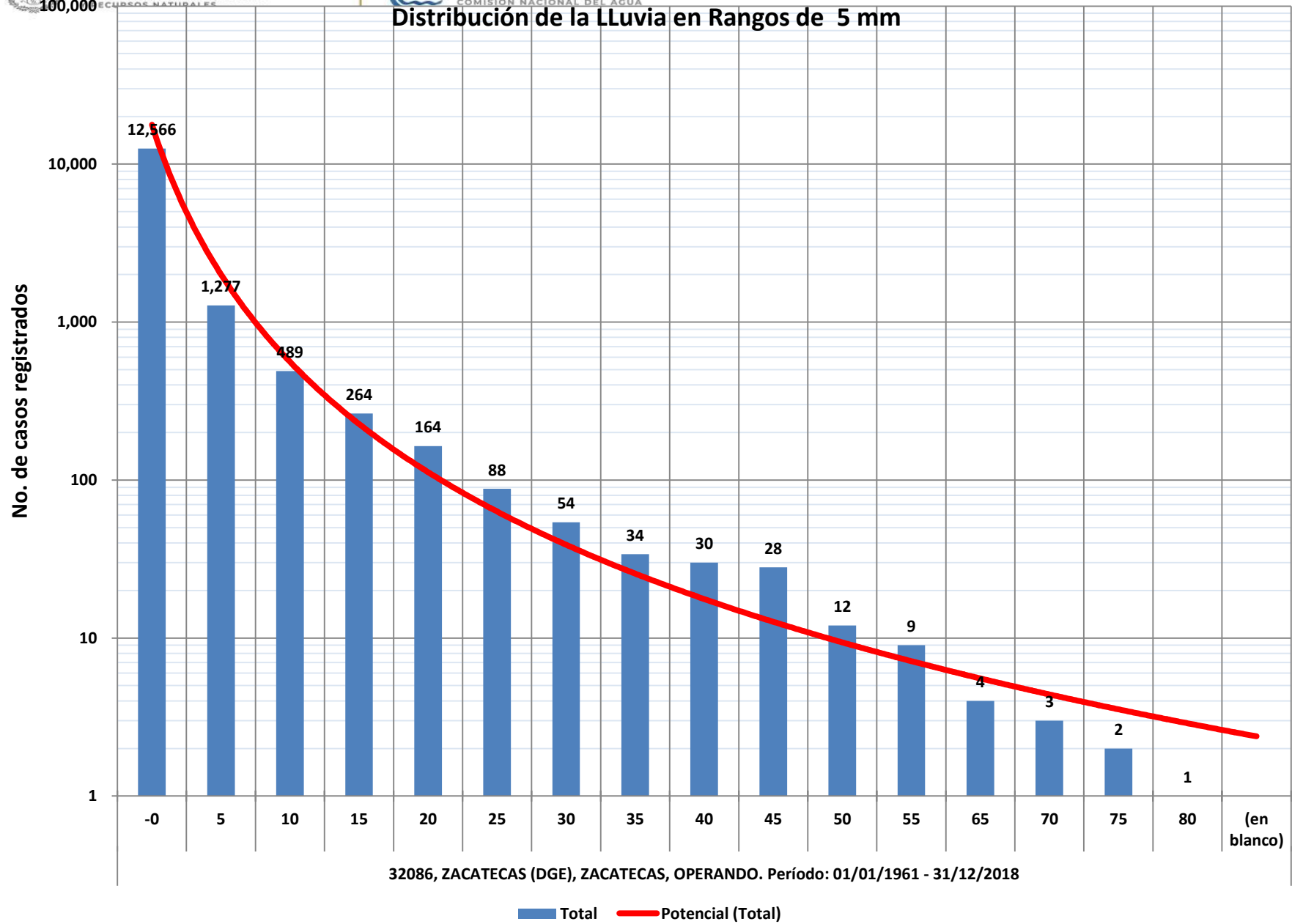


Promedio y Máximo de Lluvia, Por Década-Mes



32086, ZACATECAS (DGE), ZACATECAS, OPERANDO. Período: 01/01/1961 - 31/12/2018





Estacion	32086
NOMBRE	ZACATECAS (DGE)
ESTADO	ZACATECAS

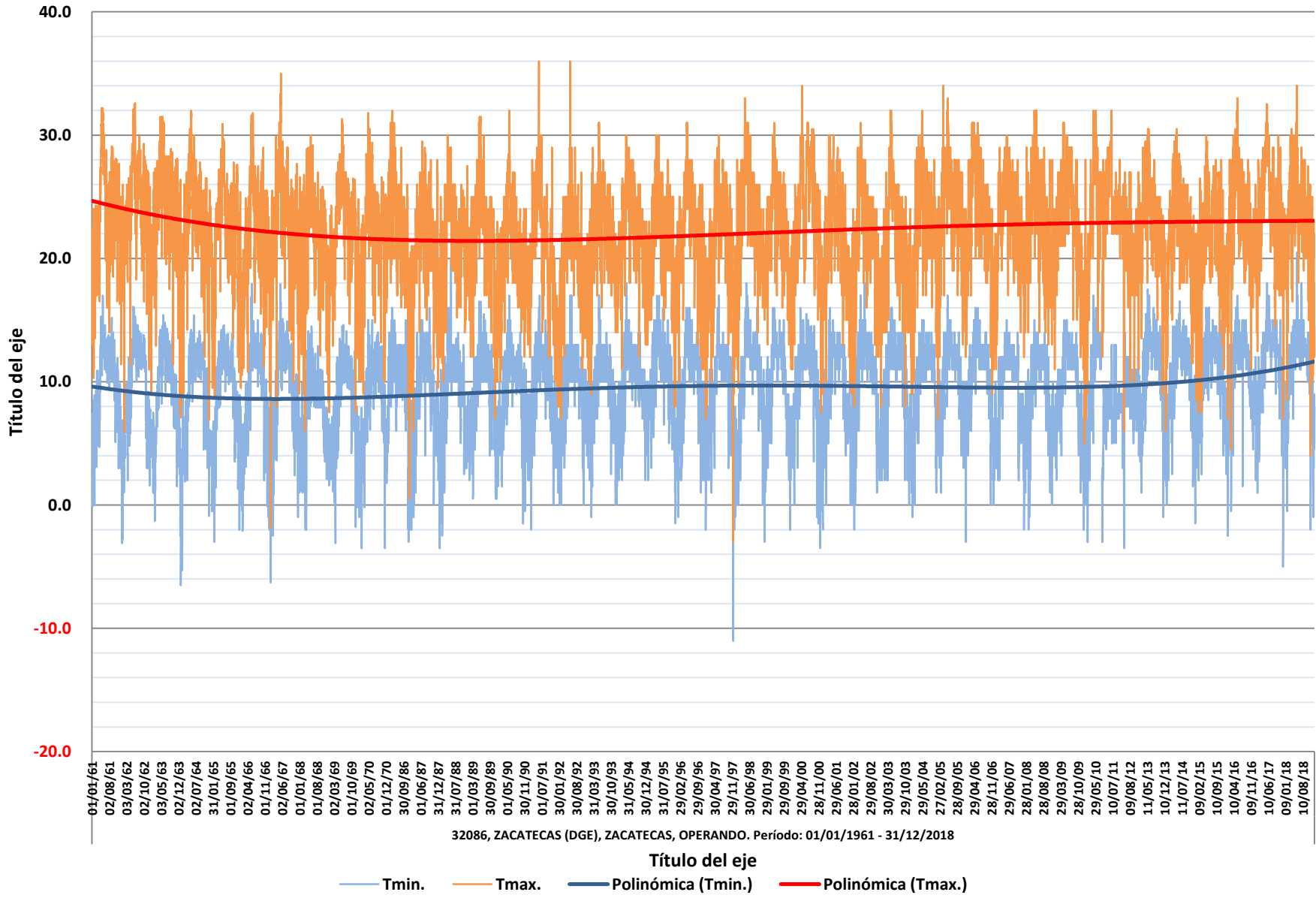
		Temp Min (°C)				
Década	Año	Mín.	Prom.	Máx.	Desv. Est.	
1960	1961	-0.1	9.4	17.0	3.5	
	1962	-3.1	9.3	16.1	3.6	
	1963	-6.5	9.0	15.4	3.8	
	1964	-5.3	8.8	15.4	3.7	
	1965	-3.0	8.9	14.6	3.8	
	1966	-2.1	8.8	17.9	4.2	
	1967	-6.3	9.0	17.9	4.1	
	1968	-2.0	7.8	14.5	3.2	
	1969	-3.1	8.1	14.6	3.5	
	1970	-3.5	8.2	15.0	3.8	
Total 1960		-6.5	8.7	17.9	3.7	
1980	1986	-2.0	10.8	16.0	2.2	
	1987	-3.0	8.6	16.0	3.5	
	1988	-3.5	9.0	20.0	3.4	
	1989	0.5	9.3	16.5	3.2	
	1990	-1.5	9.4	17.0	3.1	
Total 1980		-3.5	9.3	20.0	3.2	
1990	1991	-2.0	9.5	17.0	3.2	
	1992	0.0	9.0	17.0	3.2	
	1993	-1.0	9.3	17.0	3.1	
	1994	0.0	10.0	18.0	2.9	
	1995	1.0	10.1	17.0	3.1	
	1996	-1.5	9.5	16.0	3.4	
	1997	-11.0	8.7	17.0	3.9	
	1998	-1.0	9.9	18.0	3.7	
	1999	-3.0	9.5	16.0	3.6	
	2000	-3.5	9.5	16.0	3.8	
	Total 1990		-11.0	9.5	18.0	3.4
2000	2001	-2.0	9.6	16.0	3.2	
	2002	-2.0	9.8	18.0	3.6	
	2003	0.0	9.9	16.0	3.5	
	2004	-1.0	9.9	15.0	3.3	
	2005	1.0	9.8	17.0	3.1	
	2006	-3.0	10.1	16.0	3.3	
	2007	2.0	9.5	15.0	2.8	
	2008	-2.0	8.9	15.0	3.4	
	2009	1.0	9.6	15.0	3.1	
	2010	-3.0	9.1	17.0	4.4	
	Total 2000		-3.0	9.6	18.0	3.4
2010	2011	-3.5	7.3	13.0	2.4	
	2012	4.0	9.6	14.0	1.7	
	2013	-1.0	10.8	17.5	3.3	
	2014	-1.5	10.6	16.5	3.2	
	2015	2.0	10.7	16.0	2.9	
	2016	-2.5	10.4	17.0	3.4	
	2017	-5.0	11.0	18.0	3.2	
	2018	-2.0	11.0	20.5	3.4	
Total 2010		-5.0	10.3	20.5	3.2	
Total general		-11.0	9.5	20.5	3.5	

Estacion	32086
NOMBRE	ZACATECAS (DGE)
ESTADO	ZACATECAS

		Temp Max (°C)				
Década	Año	Mín.	Prom.	Máx.	Desv. Est.	
1960	1961	10.3	23.7	32.2	4.1	
	1962	5.9	24.2	32.6	4.1	
	1963	7.1	24.1	31.5	4.3	
	1964	6.9	22.7	32.0	4.3	
	1965	8.6	22.4	30.9	4.0	
	1966	9.2	21.9	31.8	4.4	
	1967	-1.9	22.5	35.0	4.9	
	1968	6.0	21.4	30.0	4.2	
	1969	7.5	22.6	31.3	3.8	
	1970	9.0	22.2	31.8	4.0	
Total 1960		-1.9	22.8	35.0	4.3	
1980	1986	12.0	22.9	32.0	3.4	
	1987	0.5	20.4	29.5	4.3	
	1988	10.0	21.1	30.0	3.7	
	1989	7.0	21.7	31.5	4.0	
	1990	10.0	20.7	32.0	3.7	
Total 1980		0.5	21.3	32.0	3.9	
1990	1991	10.0	21.0	36.0	4.2	
	1992	7.0	20.3	36.0	4.6	
	1993	9.0	21.7	31.0	3.5	
	1994	11.0	22.3	30.0	3.4	
	1995	8.0	21.9	30.0	4.0	
	1996	8.0	21.8	31.0	3.9	
	1997	-3.0	21.0	30.0	4.6	
	1998	9.5	22.9	33.0	4.1	
	1999	11.0	22.2	31.0	3.7	
	2000	7.5	24.0	34.0	4.2	
	Total 1990		-3.0	21.9	36.0	4.2
2000	2001	9.0	21.6	30.0	4.1	
	2002	8.0	21.6	31.0	4.1	
	2003	8.0	21.6	32.0	3.9	
	2004	9.0	22.9	32.0	4.2	
	2005	7.0	23.6	34.0	4.2	
	2006	9.0	23.6	31.0	4.1	
	2007	11.0	22.9	30.0	3.5	
	2008	12.0	22.5	32.0	3.9	
	2009	11.0	23.1	31.0	4.1	
	2010	5.0	22.4	32.0	5.5	
	Total 2000		5.0	22.6	34.0	4.2
2010	2011	6.0	24.1	32.0	3.6	
	2012	10.0	21.2	27.0	2.9	
	2013	6.0	22.8	30.5	4.2	
	2014	8.5	22.2	30.5	3.6	
	2015	7.5	21.8	30.0	4.1	
	2016	4.5	23.0	33.0	4.1	
	2017	7.0	24.0	32.5	4.0	
	2018	4.0	23.5	34.0	4.1	
Total 2010		4.0	22.9	34.0	4.0	
Total general		-3.0	22.4	36.0	4.2	



Registro Diario de Temperaturas Mínima y Máxima



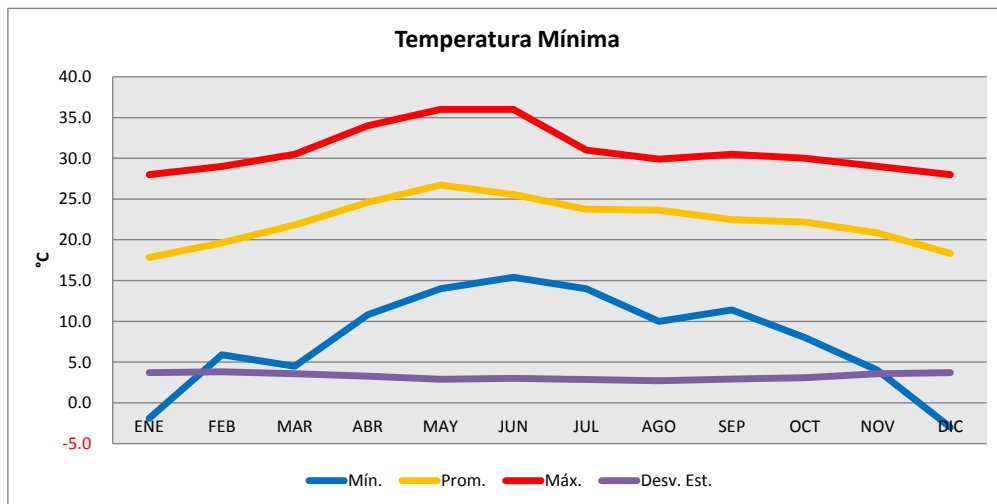
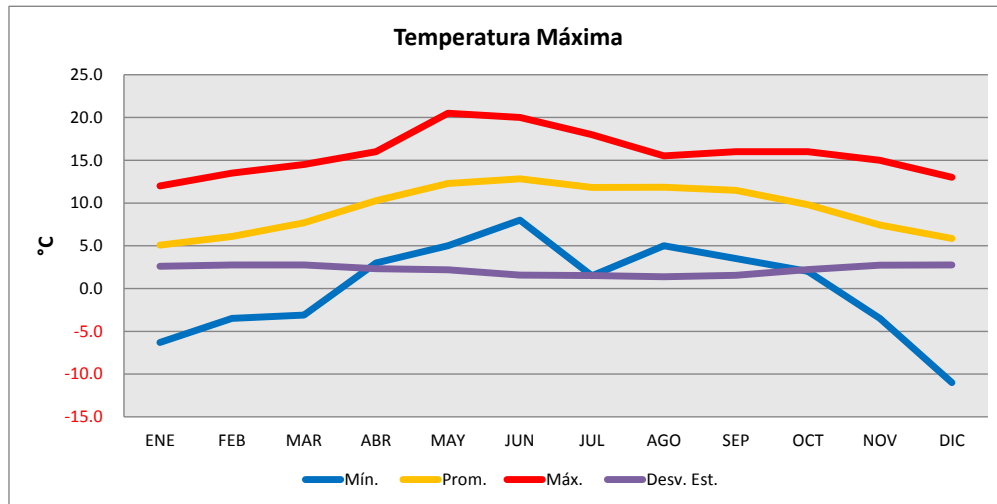


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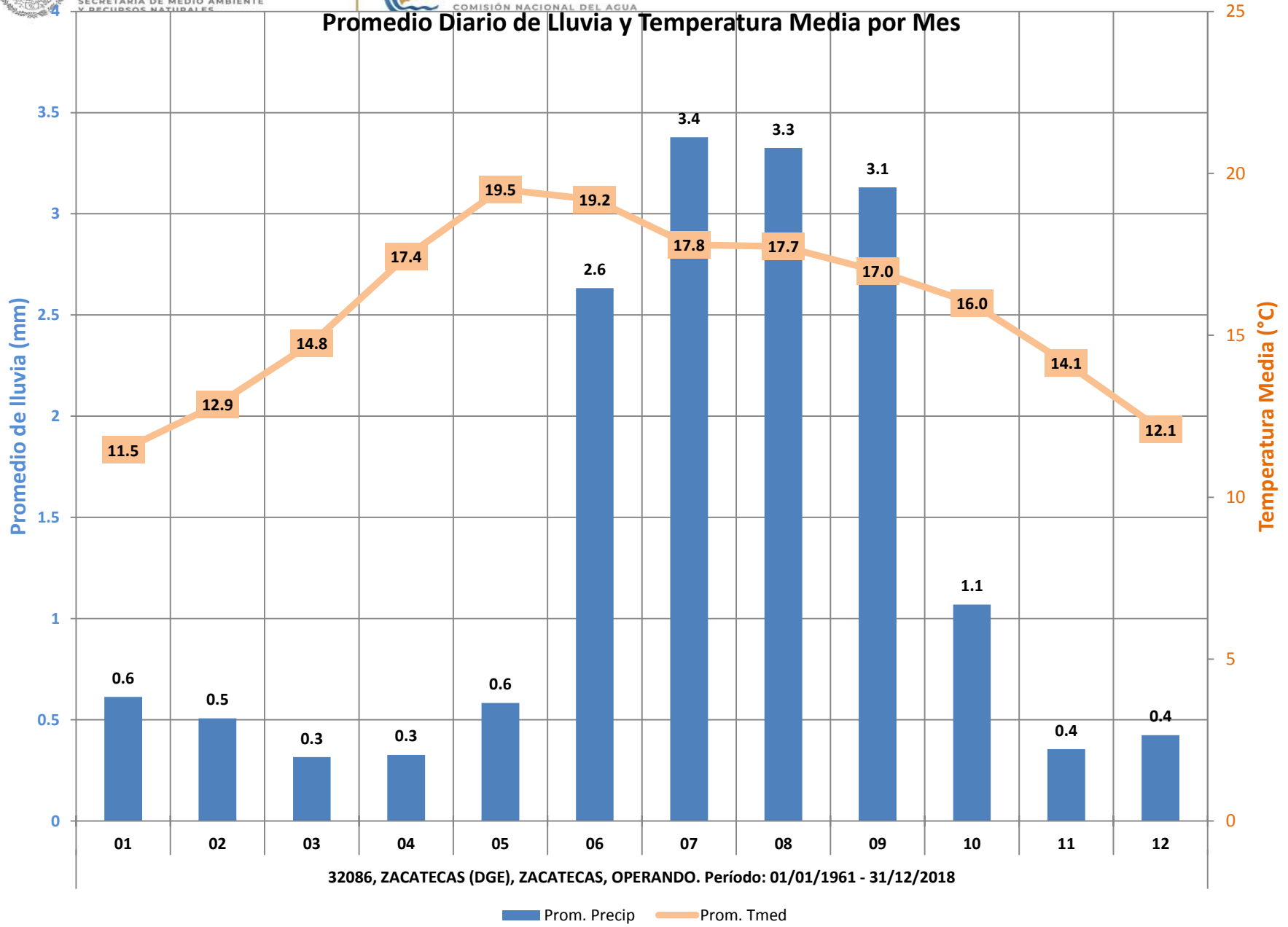
Mes	Temp Min (°C)			
	Mín.	Prom.	Máx.	Desv. Est.
ENE	-6.3	5.1	12.0	2.6
FEB	-3.5	6.1	13.5	2.8
MAR	-3.1	7.7	14.5	2.8
ABR	3.0	10.3	16.0	2.3
MAY	5.0	12.3	20.5	2.2
JUN	8.0	12.8	20.0	1.6
JUL	1.5	11.8	18.0	1.5
AGO	5.0	11.9	15.5	1.4
SEP	3.5	11.5	16.0	1.5
OCT	2.0	9.8	16.0	2.2
NOV	-3.5	7.4	15.0	2.7
DIC	-11.0	5.8	13.0	2.7
Total general	-11.0	9.5	20.5	3.5

Mes	Temp Max (°C)			
	Mín.	Prom.	Máx.	Desv. Est.
ENE	-1.9	17.8	28.0	3.7
FEB	5.9	19.6	29.0	3.8
MAR	4.5	21.8	30.5	3.6
ABR	10.8	24.6	34.0	3.3
MAY	14.0	26.7	36.0	2.9
JUN	15.4	25.6	36.0	3.0
JUL	14.0	23.8	31.0	2.9
AGO	10.0	23.6	29.9	2.7
SEP	11.4	22.5	30.5	2.9
OCT	8.0	22.2	30.0	3.1
NOV	4.0	20.8	29.0	3.6
DIC	-3.0	18.3	28.0	3.7
Total general	-3.0	22.4	36.0	4.2





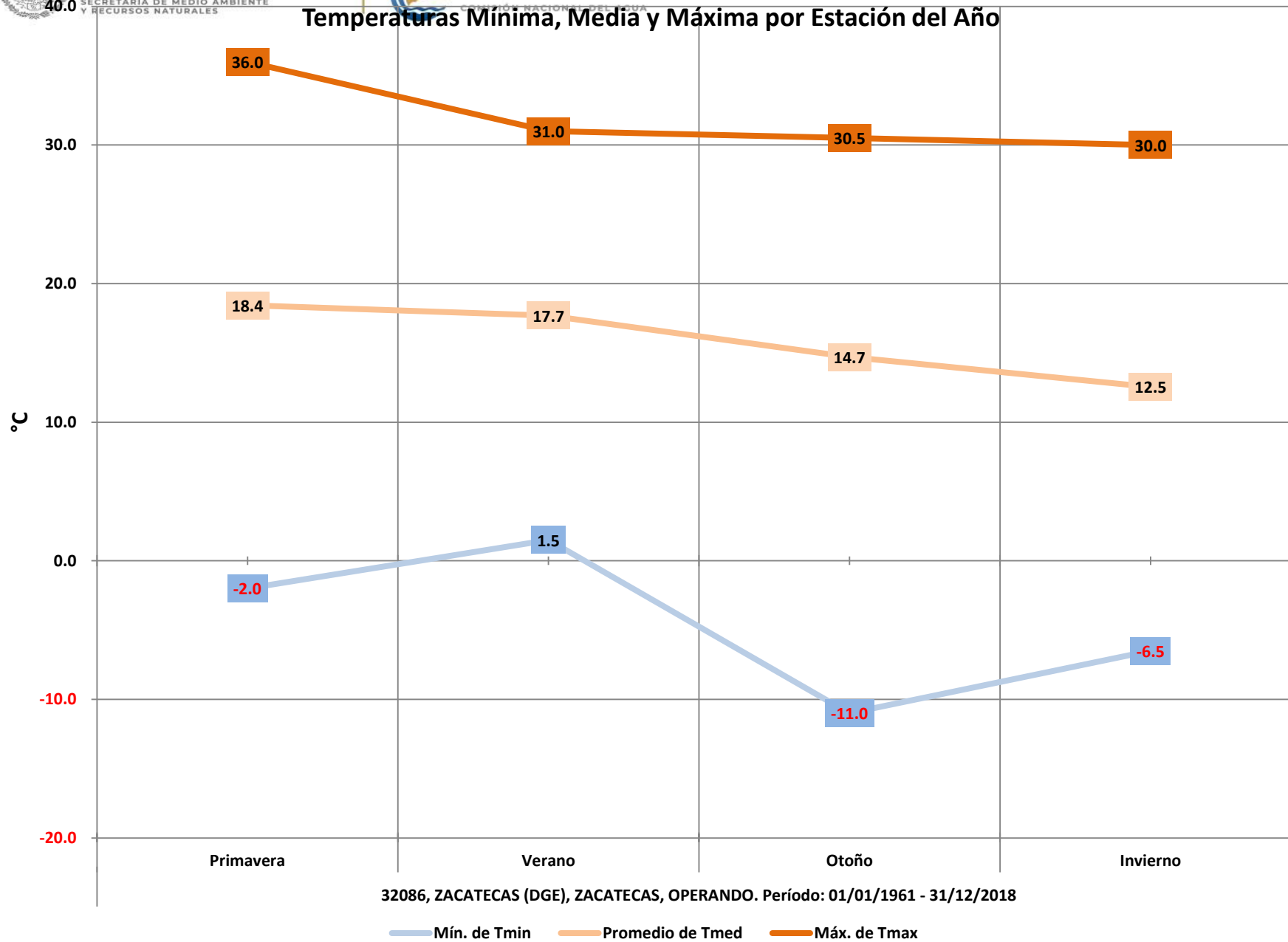
Promedio Diario de Lluvia y Temperatura Media por Mes



Estacion	32086
NOMBRE	ZACATECAS (DGE)
ESTADO	ZACATECAS

Década	Año	Estación Promedios											
		Primavera			Verano			Otoño			Invierno		
		Lluvia (mm)	T min (°C)	T max (°C)	Lluvia (mm)	T min (°C)	T max (°C)	Lluvia (mm)	T min (°C)	T max (°C)	Lluvia (mm)	T min (°C)	T max (°C)
1960	1961	0.8	11.9	26.5	2.2	11.8	24.1	0.5	8.1	24.1	0.1	5.6	20.1
	1962	0.8	11.0	26.8	1.7	12.2	25.4	0.5	8.5	23.7	0.4	5.5	20.8
	1963	0.8	12.0	27.5	1.5	11.9	25.4	1.3	7.1	21.7	0.1	4.8	21.6
	1964	0.6	11.3	26.2	2.7	12.1	24.0	1.0	7.1	20.6	0.4	4.8	19.7
	1965	0.9	11.6	25.4	3.2	11.7	23.2	1.3	7.6	21.8	0.2	4.5	19.2
	1966	0.8	11.3	24.4	3.4	12.3	23.2	0.8	6.7	22.5	0.6	4.8	17.3
	1967	0.9	11.7	25.9	3.5	12.0	23.0	1.6	7.6	21.0	0.6	4.4	20.2
	1968	0.3	10.2	25.1	4.6	9.8	21.8	0.8	6.5	20.1	1.2	4.7	18.7
	1969	0.0	9.6	25.9	1.3	11.2	23.5	0.4	7.1	21.3	0.3	4.3	19.5
	1970	0.2	10.3	26.1	4.1	11.4	22.2	1.4	6.9	21.6	0.3	4.1	18.9
Total 1960		0.6	11.1	26.0	2.8	11.6	23.6	1.0	7.3	21.8	0.4	4.7	19.6
1980	1986	0.7	11.8	25.4	3.9	11.0	22.9	0.9	9.4	20.2			
	1987	1.6	9.5	22.5	3.4	11.8	23.1	1.8	8.1	20.1	1.6	4.7	16.0
	1988	0.7	11.1	24.1	4.2	11.5	21.3	0.2	8.3	21.0	0.2	5.2	18.0
	1989	0.3	11.0	24.7	2.9	11.8	22.9	1.2	8.0	19.4	0.0	6.4	19.5
	1990	0.8	11.8	24.4	5.1	11.3	21.3	1.1	8.3	19.6	0.9	6.4	17.3
	Total 1980		0.8	11.0	24.2	3.9	11.5	22.3	1.0	8.4	20.0	0.7	5.7
1990	1991	0.7	11.9	25.4	5.9	11.6	21.1	0.6	8.1	18.5	0.2	6.5	18.7
	1992	1.2	10.1	23.0	1.0	11.7	23.7	1.8	8.4	18.8	1.9	5.7	15.7
	1993	0.5	10.4	23.7	3.5	11.8	23.3	0.8	9.1	21.7	0.4	5.7	18.3
	1994	1.4	11.8	24.7	4.0	11.6	23.5	0.6	10.1	21.8	0.1	6.5	19.0
	1995	0.3	12.2	25.1	2.9	12.1	22.7	0.5	9.3	21.3	0.1	6.7	18.3
	1996	0.8	11.0	24.6	3.0	12.0	23.4	0.8	8.6	19.9	0.2	6.3	19.4
	1997	0.6	9.9	22.3	1.6	11.7	24.1	0.9	7.9	20.0	0.7	5.4	17.5
	1998	0.3	12.3	26.9	3.9	12.4	24.3	1.0	9.6	21.4	0.0	5.3	19.0
	1999	1.2	12.1	25.8	2.9	12.3	23.7	0.2	7.5	20.3	0.0	6.9	20.0
	2000	1.7	11.8	25.0	1.7	12.5	27.9	0.6	7.5	23.1	0.0	6.3	19.9
	Total 1990		0.8	11.3	24.6	3.0	12.0	23.8	0.8	8.6	20.7	0.4	6.1
2000	2001	1.5	11.6	24.7	2.8	12.2	24.1	0.8	8.3	19.3	0.1	6.3	18.1
	2002	1.4	12.4	25.6	4.7	12.3	22.6	0.8	8.6	19.7	0.7	6.0	18.3
	2003	0.8	12.1	25.3	4.5	12.2	22.2	0.7	8.6	20.0	0.2	6.7	18.8
	2004	2.1	10.7	25.2	4.2	12.0	24.4	2.1	11.4	22.7	0.7	5.7	18.5
	2005	0.1	11.3	27.1	2.8	12.3	25.3	0.3	9.1	22.5	0.7	6.5	19.5
	2006	0.6	12.2	27.4	3.8	12.2	24.4	1.2	8.8	21.2	0.3	7.0	21.2
	2007	1.5	11.1	25.3	2.5	11.5	23.9	0.2	8.6	22.2	0.3	6.7	20.1
	2008	0.8	10.9	26.4	5.3	11.6	23.4	0.3	7.4	20.2	0.1	5.6	20.0
	2009	0.3	11.0	26.0	3.8	12.2	25.1	1.2	8.5	20.4	0.1	6.8	20.8
	2010	0.2	11.2	26.1	4.1	12.6	24.4				1.6	4.1	16.7
	Total 2000		0.9	11.4	25.9	3.8	12.1	24.0	0.8	8.7	20.8	0.4	6.2
2010	2011	0.0	8.5	27.5	2.6	7.6	23.7	0.4	6.8	22.3	0.0	5.5	22.2
	2012	0.0	10.8	24.3	2.1	10.0	21.4	0.2	8.6	19.9			
	2013	0.6	12.4	26.6	4.6	12.9	22.8	1.0	10.0	20.8	1.4	6.5	19.9
	2014	0.6	12.7	25.1	3.1	12.7	23.4	0.9	9.6	20.3	0.3	7.2	19.9
	2015	2.7	12.1	23.9	4.7	12.9	23.4	1.6	10.1	21.6	2.1	7.5	18.1
	2016	0.6	12.5	26.4	2.8	12.8	24.3	1.0	9.6	21.1	0.4	6.8	20.0
	2017	0.2	13.0	28.0	5.5	13.1	24.2	0.7	9.9	22.1	0.1	8.0	21.6
	2018	1.8	13.3	26.8	4.5	13.1	24.4	0.8	9.5	21.3	0.9	8.0	21.6
	Total 2010		0.9	12.1	26.2	3.8	12.0	23.4	0.8	9.4	21.2	0.8	7.2
Total general		0.8	11.4	25.5	3.4	11.9	23.5	0.9	8.4	21.0	0.5	5.9	19.2

Temperaturas Mínima, Media y Máxima por Estación del Año





Lluvia Promedio y Máxima, por Estación del Año

