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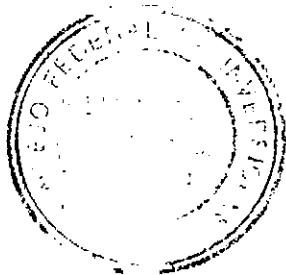
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CONSEJO FEDERAL DE INVERSIONES

ESTUDIO DE LOS YACIMIENTOS EVAPORITICOS DE  
SANTIAGO DEL ESTERO

"CARACTERIZACION CLIMATICA"



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A N E X O I

Buenos Aires, Septiembre de 1983.

"CARACTERIZACION CLIMATICA EN AREAS DE YACIMIENTOS EVAPORITICOS"

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## A N E X O I

CONSEJO FEDERAL DE INVERSIONES.

AREA DE INFRAESTRUCTURA HIDRICA.

PAGINA 1

EL PROGRAMA DE BALANCE HIDRICO - CLIMATICO SERIADO EN BASE AL METODO DE THORNTWHAITE - MATHER (1953) NO ESTA PREPARADO PARA CONTROLAR LA CALIDAD DE LOS DATOS QUE SE LE INGRESAN, NI PARA CONSISTIR LA INFORMACION DE ESTACIONES VECINAS ENTRE SI.

POR TRATARSE DE UNA TECNICA EVALUATIVA CON EXTREMOS TEMPORALES ABIERTOS, ES RESPONSABILIDAD PROFESIONAL DEL USUARIO DECIDIR SOBRE LA PRECISION NUMERICA CON QUE EXIGE EL CUMPLIMIENTO DE LA ECUACION DE CONTINUIDAD POSTULADA POR LOS AUTORES DEL METODO ORIGINAL. AL RESPECTO, LA SOLA EJECUCION DEL PROGRAMA NO BRINDA NINGUN INDICIO.

EL USUARIO AUTONOMO ESTA OBLIGADO A REFERIRSE AL MODO DE ACCESO AL PROGRAMA, SALVO QUE SE TRATE DE SU APLICACION EN EL AMBITO DEL CONSEJO FEDERAL DE INVERSIONES, DONDE SU USO ES LIBRE PARA EL ELENCO AFECTADO A TAREAS DE EVALUACION HIDROMETEOROLOGICA.

SE INVITA MUY CORDIALMENTE A SUGERIR CRITERIOS ALTERNATIVOS O CRITICAR LAS PRESTACIONES DEL PROGRAMA, A FIN DE PODER MEJORAR SUS APTITUDES INTERPRETATIVAS.

ESTA NOTA NO DEBE SER DESGLOSADA DE LOS LISTADOS CON RESULTADOS, PUESTO QUE FORMA PARTE DE CUANTO SE DEBE HACER CONOCER A QUIEN ANALICE LOS BALANCES EN FORMA CRITICA.

LA SIGUIENTE BIBLIOGRAFIA CONTIENE LA MAYOR PARTE DE LOS PROCEDIMIENTOS QUE EJECUTA EL PROGRAMA.

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 \* CONSEJO FEDERAL DE INVERSIONES.  
 \* AREA DE INFRAESTRUCTURA HIDRICA.  
 \* PAGINA 2  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91)-LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

METODO DE THORNTWAITE - MATHER (1955).

\*\*\* 1934/1935 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	70.0	33.0	129.0	29.0	5.0	6.0	4.0	21.0	23.0	19.0	139.0	178.0	656.0
LLUVIA - ETP POTENCIAL	-95.0	-99.0	21.0	-37.0	-42.0	-20.0	-21.0	-14.0	-37.0	-81.0	14.0	13.0	
ALMACENAMIENTO	50.0	18.0	39.0	27.0	18.0	15.0	12.0	10.0	7.0	3.0	17.0	30.0	
DELTA ALMACENAMIENTO	*****	-32.0	21.0	-12.0	-9.0	-3.0	-3.0	-2.0	-3.0	-4.0	14.0	13.0	
ETP REAL	*****	65.0	108.0	41.0	14.0	9.0	7.0	23.0	26.0	23.0	125.0	165.0	*****
EXCESO	*****	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*****
DEFICIT	*****	67.0	.0	25.0	33.0	17.0	18.0	12.0	34.0	77.0	.0	.0	*****
ETP REAL / ETP POTENCIAL	*****	49.2	100.0	62.1	29.8	34.6	28.0	65.7	43.3	23.0	100.0	100.0	
ESCURRIMIENTO	*****	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*****
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	36.0	308.0	154.0	6.0	.0	43.0	.0	1.0	.0	5.0	24.0	107.0	684.0
LLUVIA - ETP POTENCIAL	-129.0	176.0	46.0	-60.0	-47.0	17.0	-25.0	-34.0	-40.0	-95.0	-101.0	-58.0	
ALMACENAMIENTO	8.0	100.0	100.0	54.0	34.0	51.0	40.0	28.0	15.0	6.0	2.0	1.0	
DELTA ALMACENAMIENTO	-22.0	92.0	.0	-46.0	-20.0	17.0	-11.0	-12.0	-13.0	-9.0	-4.0	-1.0	
ETP REAL	58.0	132.0	108.0	52.0	20.0	26.0	11.0	13.0	13.0	14.0	28.0	106.0	583.0
EXCESO	.0	84.0	46.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	130.0
DEFICIT	107.0	.0	.0	14.0	27.0	.0	14.0	22.0	47.0	86.0	97.0	57.0	471.0
ETP REAL / ETP POTENCIAL	35.2	100.0	100.0	78.8	42.6	100.0	44.0	37.1	21.7	14.0	22.4	65.5	
ESCURRIMIENTO	.0	42.0	44.0	22.0	11.0	5.5	2.8	1.4	.7	.3	.2	.1	129.9

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

METODO DE THORNTWHAITE - MATHER (1955).

\*\*\* 1936/1937 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	71.0	92.0	90.0	10.0	5.0	26.0	.0	.0	.0	2.0	72.0	74.0	442.0
LLUVIA - ETP POTENCIAL	-94.0	-40.0	-18.0	-56.0	-42.0	.0	-25.0	-35.0	-60.0	-98.0	-53.0	-91.0	
ALMACENAMIENTO	4.0	3.0	2.0	1.0	1.0	1.0	1.0	1.0	4.0	2.0	1.0	4.0	
DELTA ALMACENAMIENTO	3.0	-1.0	-1.0	-1.0	.0	.0	.0	.0	3.0	-2.0	-1.0	3.0	
ETP REAL	165.0	93.0	91.0	11.0	5.0	26.0	.0	.0	60.0	4.0	73.0	165.0	693.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	.0	39.0	17.0	55.0	42.0	.0	25.0	35.0	.0	96.0	52.0	.0	361.0
ETP REAL / ETP POTENCIAL	100.0	70.5	84.3	16.7	10.6	100.0	.0	.0	100.0	4.0	58.4	100.0	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	50.0	33.0	19.0	47.0	13.0	3.0	.0	3.0	3.0	6.0	18.0	44.0	239.0
LLUVIA - ETP POTENCIAL	-115.0	-99.0	-89.0	-19.0	-34.0	-23.0	-25.0	-32.0	-57.0	-94.0	-107.0	-121.0	
ALMACENAMIENTO	1.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0	4.0	2.0	1.0	3.0	
DELTA ALMACENAMIENTO	-3.0	2.0	-2.0	.0	.0	.0	.0	.0	3.0	-2.0	-1.0	2.0	
ETP REAL	53.0	132.0	21.0	47.0	13.0	3.0	.0	3.0	60.0	8.0	19.0	165.0	524.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	112.0	.0	87.0	19.0	34.0	23.0	25.0	32.0	.0	92.0	106.0	.0	530.0
ETP REAL / ETP POTENCIAL	32.1	100.0	19.4	71.2	27.7	11.5	.0	9.6	100.0	8.0	15.2	100.0	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 4

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91). LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM  
METODO DE THORNTWAITE - MATHER (1955).

\*\*\* 1938/1939 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	191.0	91.0	145.0	16.0	58.0	6.0	2.0	6.0	.0	3.0	42.0	155.0	715.0
LLUVIA - ETP POTENCIAL	26.0	-41.0	37.0	-50.0	11.0	-20.0	-23.0	-29.0	-60.0	-97.0	-83.0	-10.0	
ALMACENAMIENTO	29.0	19.0	56.0	34.0	45.0	37.0	30.0	22.0	12.0	4.0	2.0	2.0	
DELTA ALMACENAMIENTO	26.0	-10.0	37.0	-22.0	11.0	-8.0	-7.0	-8.0	-10.0	-8.0	-2.0	.0	
ETP REAL	165.0	101.0	108.0	38.0	47.0	14.0	9.0	14.0	10.0	11.0	44.0	155.0	716.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	.0	31.0	.0	28.0	.0	12.0	16.0	21.0	50.0	89.0	81.0	10.0	338.0
ETP REAL / ETP POTENCIAL	100.0	76.5	100.0	57.6	100.0	53.8	36.0	40.0	16.7	11.0	35.2	93.9	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	101.0	115.0	233.0	20.0	3.0	4.0	.0	.0	42.0	70.0	35.0	103.0	746.0
LLUVIA - ETP POTENCIAL	-64.0	-17.0	145.0	-66.0	-44.0	-22.0	-25.0	-35.0	-14.0	-30.0	-90.0	-62.0	
ALMACENAMIENTO	1.0	1.0	100.0	62.0	40.0	32.0	25.0	18.0	15.0	11.0	4.0	2.0	
DELTA ALMACENAMIENTO	-1.0	.0	99.0	-38.0	-22.0	-8.0	-7.0	-7.0	-3.0	-4.0	-7.0	-2.0	
ETP REAL	102.0	115.0	108.0	58.0	25.0	12.0	7.0	7.0	45.0	74.0	42.0	105.0	700.0
EXCESO	.0	.0	46.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	46.0
DEFICIT	63.0	17.0	.0	8.0	22.0	14.0	18.0	23.0	15.0	26.0	83.0	60.0	354.0
ETP REAL / ETP POTENCIAL	61.8	87.1	100.0	87.9	53.2	46.2	28.0	20.0	75.0	74.0	33.6	63.6	
ESCURRIMIENTO	.0	.0	23.0	11.5	5.8	2.9	1.4	.7	.4	.2	.1	.0	46.0











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AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 9

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M.- TABLA 100 MM  
METODO DE THORNTWAITE - MATHER (1955).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
*** 1948/1949 ***													
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	88.0	270.0	72.0	9.0	3.0	.0	1.0	.0	7.0	20.0	110.0	61.0	641.0
LLUVIA - ETP POTENCIAL	-77.0	138.0	-36.0	-57.0	-44.0	-26.0	-24.0	-35.0	-53.0	-80.0	-15.0	-104.0	
ALMACENAMIENTO	4.0	100.0	69.0	38.0	24.0	18.0	14.0	10.0	6.0	3.0	2.0	1.0	
DELTA ALMACENAMIENTO	3.0	96.0	-31.0	-31.0	-14.0	-6.0	-4.0	-4.0	-4.0	-3.0	-1.0	-1.0	
ETP REAL	165.0	132.0	103.0	40.0	17.0	6.0	5.0	4.0	11.0	23.0	111.0	62.0	679.0
EXCESO	.0	42.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	42.0
DEFICIT	.0	.0	5.0	26.0	30.0	20.0	20.0	31.0	49.0	77.0	14.0	103.0	375.0
ETP REAL / ETP POTENCIAL	100.0	100.0	95.4	60.6	36.2	23.1	20.0	11.4	18.3	23.0	88.8	37.6	
ESCURRIMIENTO	.0	21.0	10.5	5.3	2.6	1.3	.7	.3	.2	.1	.0	.0	42.0
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	56.0	45.0	111.0	15.0	4.0	16.0	2.0	.0	23.0	219.0	70.0	58.0	619.0
LLUVIA - ETP POTENCIAL	-109.0	-87.0	3.0	-51.0	-43.0	-10.0	-23.0	-35.0	-37.0	119.0	-55.0	-107.0	
ALMACENAMIENTO	3.0	1.0	4.0	2.0	1.0	1.0	1.0	1.0	1.0	100.0	57.0	19.0	
DELTA ALMACENAMIENTO	2.0	-2.0	3.0	-2.0	-1.0	.0	.0	.0	.0	99.0	-43.0	-38.0	
ETP REAL	165.0	47.0	108.0	17.0	5.0	16.0	2.0	.0	23.0	100.0	113.0	96.0	692.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.0	.0	.0	20.0
DEFICIT	.0	85.0	.0	49.0	42.0	10.0	23.0	35.0	37.0	.0	12.0	69.0	362.0
ETP REAL / ETP POTENCIAL	100.0	35.6	100.0	25.8	10.6	61.5	8.0	.0	38.3	100.0	90.4	58.2	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0	5.0	2.5	17.5





PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ALT. 199 M. TABLA 100 MM  
LONG. 64.18 W. 27.46 S. LAT. 19°16'-01"-LAT.

METODO DE THORNTWAITE - MATHER (1955).

1954/1955

[illegible]

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91). LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM  
METODO DE THORNTHWAITE - MATHER (1955).

[illegible]





CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 16

PRESTE ATENCION A LA NOTA DE LA PAGINA 1-

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91). LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM  
METODO DE THORNTHAITE - MATHER (1955).

1962/1963 \*\*\*

[illegible]











CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 21

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91). LAT. 27.46 S. LONG. 66.18 W. ALT. 199 M. TABLA 100 MM  
METODO DE THORNTHWAITE - MATHER (1955).

\*\*\* 1972/1973 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	60.0	15.0	46.0	60.0	10.0	2.0	3.0	.0	27.0	15.0	36.0	34.0	308.0
LLUVIA - ETP POTENCIAL	-105.0	-117.0	-62.0	-6.0	-37.0	-24.0	-22.0	-35.0	-33.0	-85.0	-89.0	-131.0	
ALMACENAMIENTO	1.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	4.0	2.0	5.0	
DELTA ALMACENAMIENTO	-3.0	2.0	-1.0	.0	-1.0	.0	.0	.0	.0	3.0	-2.0	3.0	
ETP REAL	63.0	132.0	47.0	60.0	11.0	2.0	3.0	.0	27.0	100.0	38.0	165.0	648.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	102.0	.0	61.0	6.0	36.0	24.0	22.0	35.0	33.0	.0	87.0	.0	406.0
ETP REAL / ETP POTENCIAL	38.2	100.0	43.5	90.9	23.4	7.7	12.0	.0	45.0	100.0	30.4	100.0	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	184.0	49.0	162.0	113.0	.0	47.0	6.0	.0	1.0	18.0	168.0	92.0	846.0
LLUVIA - ETP POTENCIAL	19.0	-83.0	54.0	47.0	-47.0	21.0	-19.0	-35.0	-59.0	-82.0	43.0	-67.0	
ALMACENAMIENTO	24.0	10.0	64.0	100.0	62.0	83.0	68.0	48.0	26.0	11.0	54.0	27.0	
DELTA ALMACENAMIENTO	19.0	-14.0	54.0	36.0	-38.0	21.0	-15.0	-20.0	-22.0	-15.0	43.0	-27.0	
ETP REAL	165.0	63.0	108.0	66.0	38.0	26.0	21.0	20.0	23.0	33.0	125.0	125.0	813.0
EXCESO	.0	.0	.0	11.0	.0	.0	.0	.0	.0	.0	.0	.0	11.0
DEFICIT	.0	69.0	.0	.0	9.0	.0	4.0	15.0	37.0	67.0	.0	40.0	241.0
ETP REAL / ETP POTENCIAL	100.0	47.7	100.0	100.0	80.9	100.0	84.0	57.1	38.3	33.0	100.0	75.8	
ESCURRIMIENTO	.0	.0	.0	5.5	2.8	1.4	.7	.3	.2	.1	.0	.0	11.0



CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 23

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERTADO EN SCO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM  
METODO DE THORNTWAITE - MATHYER (1955).

\*\*\* 1976/1977 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	181.0	199.0	110.0	.0	6.0	.0	1.0	3.0	3.0	26.0	83.0	43.0	655.0
LLUVIA - ETP POTENCIAL	16.0	67.0	2.0	-66.0	-41.0	-26.0	-24.0	-32.0	-57.0	-74.0	-42.0	-122.0	
ALMACENAMIENTO	17.0	84.0	86.0	44.0	29.0	22.0	17.0	12.0	7.0	3.0	2.0	1.0	
DELTA ALMACENAMIENTO	16.0	67.0	2.0	-42.0	-15.0	-7.0	-5.0	-5.0	-5.0	-4.0	-1.0	-1.0	
ETP REAL	165.0	132.0	108.0	42.0	21.0	7.0	6.0	8.0	8.0	30.0	84.0	44.0	655.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	.0	.0	.0	24.0	26.0	19.0	19.0	27.0	52.0	70.0	41.0	121.0	399.0
ETP REAL / ETP POTENCIAL	100.0	100.0	100.0	63.6	44.7	26.9	24.0	22.9	13.3	30.0	67.2	26.7	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	208.0	268.0	85.0	188.0	16.0	.0	3.0	29.0	34.0	7.0	19.0	158.0	1015.0
LLUVIA - ETP POTENCIAL	43.0	136.0	-23.0	122.0	-31.0	-26.0	-22.0	-6.0	-26.0	-93.0	-106.0	-7.0	
ALMACENAMIENTO	44.0	100.0	79.0	100.0	73.0	56.0	45.0	43.0	33.0	13.0	4.0	4.0	
DELTA ALMACENAMIENTO	43.0	56.0	-21.0	21.0	-27.0	-17.0	-11.0	-2.0	-10.0	-20.0	-9.0	.0	
ETP REAL	165.0	132.0	106.0	66.0	43.0	17.0	14.0	31.0	44.0	27.0	28.0	158.0	831.0
EXCESO	.0	80.0	.0	101.0	.0	.0	.0	.0	.0	.0	.0	.0	181.0
DEFICIT	.0	.0	.0	.0	4.0	9.0	11.0	4.0	16.0	73.0	97.0	7.0	223.0
ETP REAL / ETP POTENCIAL	100.0	100.0	98.1	100.0	91.5	65.4	56.0	88.6	73.3	27.0	22.4	95.8	
ESCURRIMIENTO	.0	40.0	20.0	60.5	30.2	15.1	7.6	3.8	1.9	.9	.5	.2	180.8





CONSEJO FEDERAL DE INVERSIONES.-  
 AREA DE INFRAESTRUCTURA HIDRICA.  
 PAGINA 25

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM  
 METODO DE THORNTWAITE - MATHER (1955).

\*\*\* 1980/1981 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	44.0	113.0	171.0	20.0	14.0	6.0	.0	2.0	22.0	111.0	256.0	47.0	806.0
LLUVIA - ETP POTENCIAL	-121.0	-19.0	63.0	-46.0	-33.0	-20.0	-25.0	-33.0	-38.0	11.0	131.0	-112.0	
ALMACENAMIENTO	17.0	14.0	77.0	48.0	34.0	28.0	22.0	16.0	11.0	22.0	100.0	30.0	
DELTA ALMACENAMIENTO	-41.0	-3.0	63.0	-29.0	-14.0	-6.0	-6.0	-6.0	-5.0	11.0	78.0	-70.0	
ETP REAL	85.0	116.0	108.0	49.0	28.0	12.0	6.0	3.0	27.0	100.0	125.0	117.0	781.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	53.0	.0	53.0
DEFICIT	80.0	16.0	.0	17.0	19.0	14.0	19.0	27.0	33.0	.0	.0	48.0	273.0
ETP REAL / ETP POTENCIAL	51.5	87.9	100.0	74.2	59.6	46.2	24.0	22.9	45.0	100.0	100.0	70.9	
ESCURRIMIENTO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26.5	13.2	39.7
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	214.0	95.0	67.0	50.0	11.0	5.0	2.0	1.0	1.0	6.0	125.0	50.0	627.0
LLUVIA - ETP POTENCIAL	49.0	-37.0	-41.0	-16.0	-36.0	-21.0	-23.0	-3.0	-59.0	-94.0	.0	-115.0	
ALMACENAMIENTO	79.0	54.0	36.0	31.0	22.0	18.0	14.0	10.0	6.0	2.0	2.0	1.0	
DELTA ALMACENAMIENTO	49.0	-25.0	-18.0	-5.0	-9.0	-4.0	-4.0	-4.0	-4.0	-4.0	.0	-1.0	
ETP REAL	165.0	120.0	85.0	55.0	20.0	9.0	6.0	5.0	5.0	10.0	125.0	51.0	656.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	.0	12.0	23.0	11.0	27.0	17.0	19.0	30.0	55.0	90.0	.0	114.0	398.0
ETP REAL / ETP POTENCIAL	100.0	90.9	78.7	83.3	42.6	34.6	24.0	14.3	8.3	10.0	100.0	30.9	
ESCURRIMIENTO	6.6	3.3	1.7	.8	.4	.2	.1	.1	.0	.0	.0	.0	13.2

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 26

PRESTE ATENCION A LA NOTA DE LA PAGINA 1-

BALANCE HIDROLOGICO - CLIMATICO SERIADO EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 HM  
METODO DE THORNTWAITE - MATHER (1955).

\*\*\* 1982/1983 \*\*\*

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTALES
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	68.0	52.0	194.0	86.0	186.0	17.0	1.0	.0	72.0	10.0	71.0	209.0	966.0
LLUVIA - ETP POTENCIAL	-97.0	-80.0	86.0	20.0	139.0	-9.0	-24.0	-35.0	12.0	-90.0	-54.0	44.0	
ALMACENAMIENTO	3.0	1.0	87.0	100.0	100.0	9291.0	78.0	54.0	66.0	26.0	15.0	59.0	
DELTA ALMACENAMIENTO	2.0	-2.0	86.0	13.0	.0	9191.0	-9213.0	-24.0	12.0	-40.0	-11.0	44.0	
ETP REAL	165.0	54.0	108.0	66.0	47.0	26.0	25.0	24.0	60.0	50.0	82.0	165.0	872.0
EXCESO	.0	.0	.0	7.0	139.0	.0	9189.0	.0	.0	.0	.0	.0	9335.0
DEFICIT	.0	78.0	.0	.0	.0	.0	.0	11.0	.0	50.0	43.0	.0	182.0
ETP REAL / ETP POTENCIAL	100.0	40.9	100.0	100.0	100.0	100.0	100.0	68.6	100.0	50.0	65.6	100.0	
ESCURRIMIENTO	.0	.0	.0	3.5	71.3	35.6	4612.3	2306.2	1153.1	576.5	288.3	144.1	9190.9
ETP POTENCIAL	165.0	132.0	108.0	66.0	47.0	26.0	25.0	35.0	60.0	100.0	125.0	165.0	1054.0
LLUVIA	206.0	70.0	46.0	23.0	30.0	7.0	12.0	3.0	2.0	32.0	44.0	127.0	602.0
LLUVIA - ETP POTENCIAL	41.0	-62.0	-62.0	-43.0	-17.0	-19.0	-13.0	-32.0	-58.0	-68.0	-81.0	-38.0	
ALMACENAMIENTO	100.0	53.0	28.0	18.0	15.0	12.0	11.0	8.0	4.0	2.0	1.0	1.0	
DELTA ALMACENAMIENTO	41.0	-47.0	-25.0	-10.0	-3.0	-3.0	-1.0	-3.0	-4.0	-2.0	-1.0	.0	
ETP REAL	165.0	117.0	71.0	33.0	33.0	10.0	13.0	6.0	6.0	34.0	45.0	127.0	660.0
EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DEFICIT	.0	15.0	37.0	33.0	14.0	16.0	12.0	29.0	54.0	66.0	80.0	38.0	394.0
ETP REAL / ETP POTENCIAL	100.0	88.6	65.7	50.0	70.2	38.5	52.0	17.1	10.0	34.0	36.0	77.0	
ESCURRIMIENTO	72.1	36.0	18.0	9.0	4.5	2.3	1.1	.6	.3	.1	.1	.0	144.1









CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 31

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 105 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	165.00	132.00	108.00	66.00	47.00	26.00	25.00	35.00	60.00	100.00	125.00	165.00
LLUVIAS	112.84	100.60	87.53	33.26	19.24	8.69	3.64	3.43	11.31	32.62	64.47	37.36
ETP REAL	134.95	92.90	88.47	39.31	20.81	10.43	6.45	6.43	30.45	40.93	74.83	120.45
EXCEDENTES	.79	10.29	2.69	2.03	2.40	.00	158.43	.00	.00	.34	.91	.91
DEFICIT	30.05	39.10	19.53	26.69	26.19	15.57	18.55	28.57	29.55	59.07	50.17	44.55
ETP REAL / ETP POT.	81.79	70.38	81.91	59.56	44.28	40.12	25.79	18.37	50.75	40.93	59.86	73.00
ESCURRIMIENTOS	2.04	6.15	4.42	3.24	2.82	1.41	79.92	39.96	19.98	10.16	5.54	3.23

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	63.03	84.47	51.93	31.79	27.86	9.83	5.11	8.29	15.00	36.89	45.32	63.18
ETP REAL	40.57	37.43	25.04	18.56	14.38	7.93	6.51	7.64	21.75	31.29	38.58	46.02
EXCEDENTES	5.57	53.30	11.78	13.33	18.25	.00	1206.58	.00	.00	2.63	6.96	6.96
DEFICIT	40.57	37.43	25.04	18.56	14.38	7.93	6.51	7.64	21.75	31.29	38.58	46.02
ETP REAL / ETP POT.	24.59	28.36	23.18	28.12	30.59	30.50	26.04	21.84	36.24	31.29	30.67	29.11
ESCURRIMIENTOS	10.02	26.22	15.92	12.13	10.97	5.49	605.57	302.79	151.39	75.69	37.94	19.22

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.5585	.8396	.5933	.9558	1.4480	1.1313	1.4042	2.4159	1.3264	1.1306	.7108	.7232
ETP REAL	.3006	.4029	.2830	.4722	.6909	.7602	1.0097	1.1886	.7142	.7644	.5156	.3987
EXCEDENTES	7.0555	5.1786	4.3794	6.4965	7.6158	*****	7.6158	*****	*****	7.6158	7.6158	7.6158
DEFICIT	1.3499	.9572	1.2818	.6955	.5490	.5093	.3510	.2675	.7359	.5297	.7690	1.0779
ETP REAL / ETP POT.	.3006	.4029	.2830	.4722	.6909	.7602	1.0097	1.1886	.7142	.7644	.5156	.3987
ESCURRIMIENTOS	4.9213	4.5915	4.2825	3.7482	3.8962	3.8962	7.5773	7.5773	7.5773	7.4476	6.8508	5.9579

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 32

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTIADO.  
LLUVIAS MEDIAS MENSUALES EN SGO. DEL ESTERO (1934-91)-LAT. 27-46 S. LONG. 64-18 W. ALT. 199 M. TABLA 100 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	70.0	33.0	129.0	29.0	5.0	6.0	4.0	21.0	23.0	19.0	139.0	(178.0)	456.0
1935	36.0	(308.0)	154.0	6.0	-0	43.0	-0	1.0	-0	5.0	24.0	107.0	684.0
1936	71.0	( 92.0)	90.0	10.0	5.0	26.0	-0	-0	-0	2.0	72.0	74.0	442.0
1937	( 50.0)	33.0	19.0	47.0	13.0	3.0	3.0	3.0	3.0	6.0	18.0	44.0	239.0
1938	(191.0)	91.0	145.0	16.0	58.0	6.0	2.0	6.0	-0	3.0	42.0	135.0	715.0
1939	101.0	113.0	(253.0)	20.0	3.0	4.0	-0	-0	42.0	70.0	35.0	103.0	746.0
1940	60.0	70.0	73.0	46.0	56.0	21.0	13.0	9.0	10.0	32.0	77.0	(122.0)	569.0
1941	67.0	(142.0)	103.0	29.0	33.0	6.0	7.0	4.0	2.0	28.0	24.0	34.0	461.0
1942	47.0	(160.0)	51.0	89.0	14.0	2.0	2.0	1.0	10.0	7.0	42.0	42.0	478.0
1943	24.0	39.0	(168.0)	42.0	36.0	18.0	7.0	1.0	13.0	62.0	156.0	39.0	605.0
1944	55.0	95.0	(129.0)	6.0	2.0	5.0	-0	7.0	2.0	60.0	55.0	46.0	460.0
1945	72.0	(172.0)	44.0	16.0	16.0	-0	-0	-0	-0	6.0	130.0	18.0	476.0
1946	(209.0)	39.0	128.0	22.0	30.0	11.0	12.0	9.0	-0	22.0	104.0	19.0	603.0
1947	( 69.0)	60.0	24.0	26.0	19.0	2.0	1.0	2.0	25.0	61.0	5.0	44.0	359.0
1948	88.0	(270.0)	72.0	9.0	3.0	16.0	1.0	-0	7.0	20.0	110.0	61.0	641.0
1949	56.0	45.0	111.0	15.0	4.0	2.0	2.0	-0	23.0	(219.0)	70.0	58.0	619.0
1950	50.0	16.0	40.0	28.0	37.0	5.0	-0	-0	2.0	36.0	28.0	(114.0)	362.0
1951	50.0	61.0	58.0	34.0	2.0	8.0	-0	-0	-0	26.0	66.0	34.0	390.0
1952	72.0	31.0	( 97.0)	1.0	17.0	1.0	-0	7.0	8.0	25.0	61.0	48.0	451.0
1953	(135.0)	61.0	111.0	24.0	7.0	19.0	-0	-0	-0	19.0	16.0	18.0	322.0
1954	(111.0)	63.0	57.0	27.0	5.0	2.0	2.0	1.0	1.0	42.0	53.0	26.0	364.0
1955	24.0	(127.0)	99.0	7.0	6.0	-0	-0	4.0	1.0	121.0	97.0	48.0	670.0
1956	(177.0)	116.0	45.0	30.0	4.0	16.0	-0	-0	18.0	9.0	42.0	(138.0)	528.0
1957	130.0	54.0	108.0	28.0	4.0	6.0	-0	1.0	10.0	26.0	78.0	98.0	619.0
1958	139.0	70.0	39.0	83.0	2.0	21.0	17.0	-0	1.0	26.0	24.0	(118.0)	603.0
1959	(196.0)	123.0	72.0	16.0	20.0	11.0	16.0	-0	1.0	100.0	47.0	(104.0)	424.0
1960	36.0	66.0	55.0	58.0	4.0	7.0	6.0	-0	-0	10.0	33.0	(108.0)	552.0
1961	96.0	55.0	84.0	51.0	28.0	1.0	10.0	-0	-0	8.0	35.0	(113.0)	337.0
1962	91.0	27.0	33.0	9.0	13.0	-0	10.0	-0	-0	8.0	117.0	101.0	683.0
1963	103.0	(156.0)	131.0	17.0	4.0	19.0	7.0	-0	-0	48.0	12.0	44.0	428.0
1964	66.0	(106.0)	58.0	12.0	22.0	4.0	3.0	-0	33.0	68.0	72.0	80.0	504.0
1965	(187.0)	84.0	65.0	7.0	1.0	9.0	3.0	2.0	1.0	24.0	(109.0)	35.0	433.0
1966	105.0	76.0	29.0	51.0	8.0	-0	-0	-0	1.0	16.0	42.0	4.0	404.0
1967	100.0	(140.0)	66.0	-0	9.0	2.0	2.0	2.0	34.0	3.0	70.0	99.0	708.0
1968	(266.0)	40.0	87.0	11.0	14.0	16.0	5.0	53.0	2.0	45.0	58.0	(131.0)	596.0
1969	56.0	127.0	58.0	46.0	54.0	4.0	-0	-0	3.0	5.0	92.0	77.0	576.0
1970	109.0	66.0	(127.0)	10.0	61.0	3.0	1.0	3.0	43.0	13.0	58.0	8.0	604.0
1971	(184.0)	167.0	46.0	34.0	2.0	-0	6.0	-0	10.0	74.0	73.0	34.0	308.0
1972	( 60.0)	15.0	46.0	60.0	10.0	2.0	3.0	-0	27.0	15.0	35.0	30.0	846.0
1973	(184.0)	49.0	162.0	113.0	-0	47.0	6.0	-0	1.0	18.0	163.0	98.0	1157.0
1974	280.0	(223.0)	172.0	38.0	52.0	1.0	12.0	5.0	4.0	26.0	14.0	30.0	461.0
1975	71.0	( 85.0)	58.0	54.0	5.0	3.0	-0	8.0	34.0	13.0	60.0	64.0	655.0
1976	181.0	(199.0)	110.0	-0	6.0	-0	1.0	3.0	3.0	26.0	83.0	43.0	1015.0
1977	208.0	(268.0)	85.0	188.0	16.0	-0	3.0	29.0	34.0	7.0	19.0	158.0	523.0
1978	(145.0)	35.0	62.0	-0	6.0	4.0	-0	-0	27.0	54.0	73.0	122.0	523.0



1979	161.0	153.0	32.0	58.0	.0	1.0	2.0	26.0	13.0	74.0	(218.0)	739.0
1980	44.0	113.0	171.0	20.0	14.0	.0	2.0	22.0	111.0	(256.0)	47.0	806.0
1981	(214.0)	95.0	67.0	50.0	11.0	2.0	1.0	1.0	6.0	125.0	50.0	627.0
1982	68.0	52.0	194.0	86.0	186.0	17.0	.0	72.0	10.0	71.0	(209.0)	966.0
1983	(206.0)	70.0	46.0	23.0	30.0	7.0	3.0	2.0	32.0	44.0	127.0	602.0
1984	(132.0)	91.0	150.0	4.0	14.0	11.0	.0	16.0	30.0	38.0	49.0	558.0
1985	109.0	98.0	34.0	40.0	12.0	12.0	3.0	5.0	28.0	59.0	(227.0)	627.0
1986	(134.0)	108.0	8.0	44.0	10.0	7.0	4.0	33.0	16.0	43.0	32.0	461.0
1987	(173.0)	7.0	73.0	47.0	8.0	.0	.0	1.0	24.0	103.0	120.0	558.0
1988	(124.0)	79.0	31.0	11.0	.0	1.0	.0	.0	7.0	14.0	6.0	276.0
1989	30.0	10.0	67.0	12.0	30.0	16.0	2.0	10.0	41.0	58.0	(316.0)	593.0
1990	(148.0)	126.0	52.0	30.0	58.0	4.0	.0	6.0	22.0	17.0	71.0	534.0
1991	105.0	63.0	(179.0)	41.0	16.0	12.0	1.0	3.0	66.0	15.0	151.0	652.0
PROM.	112.8	100.6	87.5	33.3	19.2	8.7	3.6	11.3	32.6	64.3	87.4	565.0
MAX.	280.0	523.0	253.0	188.0	186.0	47.0	22.0	72.0	219.0	256.0	316.0	1157.0
MIN.	24.0	7.0	8.0	.0	.0	.0	.0	.0	2.0	9.0	4.0	239.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 33

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	49.2	100.0	62.1	29.8	34.6	28.0	65.7	43.3	23.0	100.0	100.0	1934
1935	35.2	100.0	100.0	78.8	42.6	100.0	44.0	37.1	21.7	14.0	22.4	65.5	1935
1936	100.0	70.5	84.3	16.7	10.6	100.0	-0	-0	100.0	4.0	58.4	100.0	1936
1937	32.1	100.0	19.4	71.2	27.7	11.5	-0	8.6	100.0	8.0	15.2	100.0	1937
1938	100.0	76.5	100.0	57.6	100.0	53.8	36.0	40.0	16.7	11.0	35.2	93.9	1938
1939	61.8	87.1	100.0	87.9	53.2	46.2	28.0	20.0	75.0	74.0	33.0	63.6	1939
1940	37.0	100.0	68.5	71.2	100.0	84.6	56.0	31.4	21.7	34.0	62.4	73.9	1940
1941	100.0	100.0	97.2	50.0	72.3	30.8	32.0	16.3	6.7	29.0	100.0	21.8	1941
1942	100.0	100.0	60.2	100.0	53.2	65.4	28.0	17.1	26.7	12.0	35.2	26.1	1942
1943	100.0	31.1	100.0	83.3	87.2	80.8	56.0	31.4	36.7	66.0	100.0	41.8	1943
1944	37.6	72.7	100.0	25.8	14.9	26.9	4.0	22.9	3.3	61.0	100.0	29.7	1944
1945	100.0	100.0	60.2	37.9	42.6	7.7	8.0	5.7	6.7	7.0	100.0	13.9	1945
1946	100.0	100.0	100.0	54.5	72.3	53.8	56.0	36.3	10.0	25.0	84.0	100.0	1946
1947	43.0	46.2	100.0	37.9	42.6	84.6	4.0	8.6	41.7	61.0	100.0	27.9	1947
1948	100.0	100.0	95.4	60.6	36.2	23.1	20.0	11.4	18.3	23.0	88.8	37.6	1948
1949	100.0	35.6	100.0	25.8	10.6	61.5	8.0	-0	38.3	100.0	90.4	58.2	1949
1950	41.8	15.2	38.0	42.4	78.7	19.2	-0	-0	100.0	38.0	23.2	100.0	1950
1951	32.1	47.0	100.0	53.0	8.5	30.8	-0	2.9	100.0	4.0	35.2	86.1	1951
1952	100.0	47.7	89.8	3.0	36.2	3.8	-0	20.0	100.0	29.0	53.5	100.0	1952
1953	82.4	24.2	100.0	37.9	17.0	73.1	-0	2.9	100.0	27.0	65.6	100.0	1953
1954	67.9	48.5	100.0	43.9	12.8	7.7	8.0	5.7	100.0	21.0	13.6	100.0	1954
1955	100.0	96.2	91.7	13.6	14.9	-0	-0	-0	100.0	44.0	43.2	100.0	1955
1956	100.0	89.4	47.2	48.5	34.0	61.5	4.0	14.3	3.3	100.0	82.4	35.8	1956
1957	73.9	42.4	100.0	42.4	8.5	23.1	-0	2.9	30.0	100.0	35.2	83.6	1957
1958	84.2	53.8	100.0	100.0	21.3	84.6	72.0	8.6	21.7	12.0	63.2	91.5	1958
1959	100.0	195.5	75.0	36.4	48.9	46.2	68.0	5.7	5.0	28.0	100.0	60.0	1959
1960	100.0	52.3	51.9	87.9	8.5	26.9	24.0	-0	100.0	28.0	38.4	71.5	1960
1961	100.0	43.2	77.8	77.3	59.6	3.8	-0	2.9	100.0	120.0	28.0	63.6	1961
1962	100.0	22.7	100.0	16.7	29.8	-0	40.0	-0	100.0	8.0	28.8	100.0	1962
1963	63.6	100.0	100.0	66.7	40.4	80.8	44.0	20.0	11.7	13.0	93.6	61.8	1963
1964	40.6	80.3	100.0	21.2	48.9	15.4	12.0	2.9	55.0	68.0	100.0	27.9	1964
1965	100.0	70.5	64.8	16.7	6.4	38.5	12.0	8.6	100.0	26.0	33.6	100.0	1965
1966	66.7	58.3	100.0	78.8	19.1	-0	-0	2.9	100.0	19.0	87.2	100.0	1966
1967	61.8	100.0	64.8	4.5	21.3	11.5	8.0	8.6	56.7	100.0	35.2	100.0	1967
1968	100.0	76.5	87.0	37.9	40.4	65.4	28.0	100.0	25.0	51.0	59.2	61.8	1968
1969	34.5	96.2	100.0	71.2	100.0	23.1	8.0	5.7	8.3	7.0	73.6	91.5	1969
1970	100.0	51.5	100.0	28.8	100.0	46.2	24.0	22.9	75.0	19.0	48.0	47.3	1970
1971	100.0	100.0	66.7	63.6	21.3	11.5	32.0	5.7	20.0	100.0	59.2	100.0	1971
1972	38.2	100.0	43.5	90.9	23.4	7.7	12.0	-0	45.0	100.0	30.4	100.0	1972
1973	100.0	47.7	100.0	100.0	80.9	100.0	84.0	57.1	38.3	33.0	100.0	75.8	1973
1974	100.0	100.0	100.0	95.5	100.0	73.1	80.0	54.3	35.0	38.0	16.8	20.0	1974
1975	100.0	63.9	54.6	81.8	10.6	11.5	-0	22.9	56.7	100.0	54.4	39.4	1975
1976	100.0	100.0	100.0	63.6	44.7	26.9	24.0	22.9	13.3	30.0	67.2	26.7	1976
1977	100.0	100.0	98.1	100.0	91.5	65.4	56.0	88.6	73.3	27.0	22.4	95.8	1977
1978	88.5	28.0	57.4	100.0	14.9	19.2	-0	2.9	45.0	54.0	100.0	75.2	1978
1979	97.6	100.0	41.7	89.4	8.5	7.7	8.0	8.6	45.0	14.0	100.0	100.0	1979
1980	51.5	87.9	100.0	74.2	59.6	46.2	24.0	22.9	45.0	100.0	100.0	70.9	1980

1981	100.0	53.7	74.7	83.3	42.6	34.6	24.0	14.3	8.3	10.0	100.0	50.0	100.0	1981
1982	100.0	43.9	100.0	100.0	100.0	100.0	100.0	68.6	100.0	10.0	65.6	50.0	100.0	1982
1983	100.0	88.6	63.7	50.0	70.2	38.5	52.0	17.1	10.0	34.0	36.0	34.0	77.0	1983
1984	100.0	63.9	100.0	36.4	44.7	50.0	24.0	8.6	31.7	33.0	31.2	33.0	100.0	1984
1985	92.1	75.0	100.0	62.1	27.7	0	48.0	11.4	100.0	31.0	48.0	31.0	100.0	1985
1986	66.7	89.4	28.7	71.2	27.7	30.8	88.0	17.1	56.7	18.0	100.0	18.0	100.0	1986
1987	91.5	89.4	28.7	71.2	27.7	30.8	88.0	17.1	56.7	18.0	100.0	18.0	100.0	1987
1988	100.0	10.6	68.5	71.2	17.0	0	12.0	0	100.0	9.0	12.0	9.0	100.0	1988
1989	75.2	100.0	31.5	18.2	0	3.8	8.0	8.6	13.3	100.0	48.0	100.0	100.0	1989
1990	100.0	9.8	62.0	100.0	66.0	61.5	28.0	22.9	23.3	26.0	16.0	100.0	100.0	1990
1991	99.4	99.2	80.6	66.7	100.0	46.2	32.0	25.7	20.0	69.0	16.0	100.0	91.5	1991
1991	64.8	48.5	100.0	86.4	66.0	65.4								

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 34

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTIADO.  
EXCESOS MENSUALES EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1934
1935	0	84.0	46.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1935
1936	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1936
1937	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1937
1938	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1938
1939	-0	-0	46.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1939
1940	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1940
1941	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1941
1942	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1942
1943	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1943
1944	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1944
1945	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1945
1946	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1946
1947	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1947
1948	-0	42.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1948
1949	-0	-0	-0	-0	-0	-0	-0	-0	-0	20.0	-0	-0	1949
1950	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1950
1951	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1951
1952	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1952
1953	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1953
1954	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1954
1955	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1955
1956	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1956
1957	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1957
1958	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1958
1959	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1959
1960	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1960
1961	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1961
1962	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1962
1963	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1963
1964	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1964
1965	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1965
1966	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1966
1967	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1967
1968	3.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1968
1969	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1969
1970	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1970
1971	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1971
1972	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972
1973	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1973
1974	42.0	391.0	64.0	11.0	-0	-0	-0	-0	-0	-0	-0	-0	1974
1975	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1975
1976	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976
1977	-0	80.0	-0	101.0	-0	-0	-0	-0	-0	-0	-0	-0	1977
1978	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1978
1979	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1979
1980	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	53.0	-0	1980



CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 35

PRESTE ATENCION A LA NOTA DE LA PAGINA 1-

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 66.18 W. ALT. 199 M. TABLA 100 MM

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	*****	67.0	.0	25.0	33.0	17.0	18.0	12.0	34.0	77.0	.0	.0	1934
1935	107.0	.0	.0	14.0	27.0	.0	14.0	22.0	47.0	86.0	97.0	57.0	1935
1936	.0	39.0	17.0	55.0	42.0	.0	25.0	35.0	.0	96.0	52.0	.0	1936
1937	112.0	.0	87.0	19.0	34.0	23.0	25.0	32.0	.0	92.0	106.0	.0	1937
1938	.0	31.0	.0	28.0	.0	12.0	16.0	21.0	50.0	89.0	81.0	10.0	1938
1939	63.0	17.0	.0	8.0	22.0	14.0	18.0	28.0	15.0	26.0	83.0	60.0	1939
1940	104.0	.0	34.0	19.0	.0	4.0	11.0	24.0	47.0	66.0	47.0	43.0	1940
1941	.0	.0	3.0	33.0	13.0	18.0	17.0	30.0	56.0	71.0	.0	129.0	1941
1942	.0	.0	43.0	.0	22.0	9.0	18.0	29.0	44.0	88.0	81.0	122.0	1942
1943	.0	91.0	.0	11.0	6.0	5.0	11.0	24.0	38.0	34.0	.0	96.0	1943
1944	103.0	36.0	.0	49.0	40.0	19.0	24.0	27.0	53.0	39.0	.0	116.0	1944
1945	.0	.0	43.0	41.0	27.0	24.0	23.0	33.0	56.0	93.0	.0	142.0	1945
1946	.0	66.0	.0	30.0	13.0	12.0	11.0	23.0	54.0	73.0	20.0	.0	1946
1947	94.0	71.0	.0	41.0	27.0	4.0	24.0	32.0	35.0	39.0	.0	119.0	1947
1948	.0	.0	5.0	26.0	30.0	20.0	20.0	31.0	49.0	77.0	14.0	103.0	1948
1949	.0	85.0	.0	49.0	42.0	10.0	23.0	35.0	37.0	.0	12.0	69.0	1949
1950	96.0	112.0	67.0	38.0	10.0	21.0	25.0	35.0	.0	62.0	96.0	.0	1950
1951	112.0	70.0	.0	31.0	43.0	18.0	25.0	34.0	.0	96.0	81.0	23.0	1951
1952	.0	69.0	11.0	64.0	30.0	25.0	25.0	28.0	.0	71.0	58.0	.0	1952
1953	29.0	100.0	.0	41.0	39.0	7.0	23.0	34.0	.0	73.0	43.0	.0	1953
1954	53.0	68.0	.0	37.0	41.0	24.0	23.0	33.0	.0	79.0	108.0	.0	1954
1955	.0	5.0	9.0	57.0	40.0	26.0	25.0	35.0	.0	56.0	71.0	.0	1955
1956	.0	14.0	57.0	34.0	31.0	10.0	24.0	30.0	58.0	.0	22.0	106.0	1956
1957	43.0	76.0	.0	38.0	43.0	20.0	25.0	34.0	42.0	.0	51.0	27.0	1957
1958	26.0	61.0	.0	.0	37.0	4.0	7.0	32.0	47.0	88.0	46.0	14.0	1958
1959	.0	6.0	27.0	42.0	24.0	14.0	8.0	33.0	57.0	78.0	.0	66.0	1959
1960	.0	63.0	52.0	8.0	43.0	19.0	19.0	35.0	.0	72.0	77.0	47.0	1960
1961	.0	75.0	24.0	15.0	19.0	25.0	25.0	34.0	.0	.0	90.0	60.0	1961
1962	.0	102.0	.0	55.0	33.0	26.0	15.0	35.0	.0	92.0	89.0	.0	1962
1963	60.0	.0	.0	22.0	28.0	5.0	14.0	28.0	53.0	87.0	8.0	63.0	1963
1964	98.0	26.0	.0	52.0	24.0	22.0	22.0	34.0	27.0	32.0	83.0	119.0	1964
1965	.0	39.0	38.0	55.0	44.0	16.0	22.0	32.0	.0	74.0	.0	.0	1965
1966	55.0	55.0	.0	14.0	38.0	26.0	25.0	34.0	.0	82.0	16.0	.0	1966
1967	63.0	.0	38.0	63.0	37.0	23.0	23.0	32.0	26.0	.0	81.0	.0	1967
1968	.0	31.0	14.0	41.0	28.0	9.0	18.0	.0	45.0	49.0	51.0	63.0	1968
1969	108.0	5.0	.0	19.0	.0	20.0	23.0	33.0	55.0	93.0	33.0	14.0	1969
1970	.0	64.0	.0	47.0	.0	14.0	19.0	27.0	15.0	81.0	65.0	87.0	1970
1971	.0	.0	36.0	24.0	37.0	23.0	17.0	33.0	48.0	25.0	51.0	.0	1971
1972	102.0	.0	61.0	6.0	36.0	24.0	22.0	35.0	33.0	.0	87.0	.0	1972
1973	.0	69.0	.0	.0	9.0	.0	4.0	15.0	37.0	67.0	.0	40.0	1973
1974	.0	.0	.0	3.0	.0	7.0	5.0	16.0	39.0	62.0	104.0	132.0	1974
1975	.0	45.0	49.0	12.0	42.0	23.0	25.0	27.0	26.0	.0	57.0	100.0	1975
1976	.0	.0	.0	24.0	26.0	19.0	19.0	27.0	52.0	70.0	41.0	121.0	1976
1977	.0	.0	2.0	.0	4.0	9.0	11.0	4.0	16.0	73.0	97.0	7.0	1977
1978	19.0	95.0	46.0	.0	40.0	21.0	25.0	34.0	33.0	46.0	.0	41.0	1978
1979	4.0	.0	63.0	7.0	43.0	24.0	23.0	32.0	33.0	86.0	.0	.0	1979
1980	80.0	16.0	.0	17.0	19.0	14.0	19.0	27.0	33.0	.0	.0	48.0	1980

1981	-0	12.0	23.0	11.0	27.0	17.0	19.0	30.0	55.0	90.0	-0	114.0	1981
1982	-0	78.0	-0	-0	-0	-0	-0	11.0	-0	50.0	43.0	-0	1982
1983	-0	15.0	37.0	33.0	14.0	16.0	12.0	29.0	54.0	66.0	50.0	38.0	1983
1984	13.0	41.0	-0	42.0	26.0	13.0	19.0	32.0	41.0	67.0	86.0	-0	1984
1985	55.0	33.0	-0	25.0	34.0	26.0	13.0	31.0	-0	69.0	65.0	-0	1985
1986	14.0	14.0	77.0	19.0	34.0	18.0	3.0	29.0	26.0	82.0	-0	130.0	1986
1987	-0	118.0	34.0	19.0	39.0	26.0	25.0	35.0	-0	72.0	22.0	44.0	1987
1988	41.0	-0	74.0	54.0	47.0	25.0	22.0	35.0	-0	91.0	110.0	-0	1988
1989	-0	119.0	61.0	-0	16.0	10.0	23.0	32.0	49.0	-0	65.0	-0	1989
1990	1.0	1.0	21.0	22.0	-0	14.0	18.0	27.0	46.0	72.0	105.0	-0	1990
1991	58.0	68.0	-0	9.0	16.0	9.0	17.0	26.0	48.0	31.0	105.0	14.0	1991
TOTALES	1713.0	2268.0	1133.0	1548.0	1519.0	903.0	1076.0	1657.0	1714.0	3426.0	2910.0	2584.0	TOTALES
NUM CASOS	27	42	30	51	51	54	57	57	41	49	44	36	NUM CASOS
D. MEDIOS	29.5	39.1	19.5	26.7	26.2	15.6	18.6	28.6	29.6	59.1	50.2	44.6	D. MEDIOS
D. REALES	63.4	54.0	37.8	30.4	29.8	16.7	18.9	29.1	41.8	69.9	66.1	71.8	D. REALES
FREC. X	47.4	72.4	51.7	87.9	87.9	93.1	98.3	96.3	70.7	84.5	75.9	62.1	FREC. X

SUMATORIA DEF\*FREC = 387.60 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -208.78 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EPM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	9.5	13.4	15.0	9.0	6.1	72.7	71.6	67.4	-3	.9	1.4	2.3	E.P.E.

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\* CONSEJO FEDERAL DE INVERSIONES-  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 36  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 O MENOR	7	8	4	17	28	32	44	52	28	38	22	13	293
ENTRE 40.1 Y 54.9	4	14	5	8	12	8	4	1	6	4	6	2	74
ENTRE 55.0 Y 69.9	7	3	10	8	4	7	5	3	4	5	8	7	71
ENTRE 70.0 Y 84.9	4	7	5	12	5	7	3	0	3	2	4	8	60
ENTRE 85.0 Y 100.0	35	26	34	13	9	4	2	2	17	9	18	23	197
70 O MENOR	18	25	19	33	44	47	53	56	38	47	36	22	439

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 O MENOR	12.3	13.8	6.9	29.3	48.3	55.2	75.9	89.7	49.3	65.5	37.9	22.4	
ENTRE 40.1 Y 54.9	7.0	24.1	8.6	13.8	20.7	13.8	6.9	1.7	10.3	6.9	10.3	3.4	
ENTRE 55.0 Y 69.9	12.3	5.2	17.2	13.8	6.9	12.1	8.6	5.2	6.9	8.6	13.8	12.1	
ENTRE 70.0 Y 84.9	7.0	12.1	8.6	20.7	8.6	12.1	5.2	0	5.2	3.4	6.9	13.8	
ENTRE 85.0 Y 100.0	61.4	44.8	58.6	22.4	15.5	6.9	3.4	3.4	29.3	15.5	31.0	48.3	
70 O MENOR	31.6	43.1	32.8	56.9	75.9	81.0	91.4	96.6	65.5	81.0	62.1	37.9	



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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 37  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	18	24	19	32	44	47	53	56	38	47	35	22
SOLO UN MES	8	13	6	5	2	0	0	1	0	0	5	10
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	5	6	6	8	26	38	46	51	37	29	27	9
SOLO DOS MESES	2	5	1	1	4	1	1	2	0	0	15	2
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	2	1	1	1	6	22	37	44	33	23	11	6
SOLO TRES MESES	1	0	0	0	0	0	0	2	0	2	0	1
	NDEF	DEFM	EFMA	FHAM	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	1	1	0	6	22	36	28	24	11	5	1
SOLO CUATRO MESES	0	0	0	0	0	1	6	0	3	1	0	0
	NDEFM	DEFMA	EFMAH	FHAMJ	MAMJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	0	1	0	0	6	21	22	19	9	4	1	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	39	33	38	25	14	11	5	2	20	11	22	35
SOLO UN MES	9	4	11	10	7	5	1	1	17	6	11	9
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	22	21	20	14	7	5	4	0	1	2	3	9
SOLO DOS MESES	8	4	4	0	0	1	1	0	0	0	2	4
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	5	13	12	7	6	5	3	0	0	0	0	1
SOLO TRES MESES	1	3	3	3	0	1	0	0	0	0	0	0
	NDEF	DEFM	EFMA	FHAM	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	4	8	3	3	4	3	0	0	0	0	0	1
SOLO CUATRO MESES	2	6	0	1	1	0	0	0	0	0	0	0
	NDEFM	DEFMA	EFMAH	FHAMJ	MAMJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	2	2	2	1	3	0	0	0	0	0	0	1

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	3	0	1	1	0	1	0	0	0	0	0
SOLO UN MES	0	3	0	1	1	0	1	0	0	0	0	0
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDEF	DEFM	EFMA	FHAM	MAMJ	AMJJ	MJJAS	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
SGO. DEL ESTERO (1934-91).LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	89.1	93.0	91.4	28.0	15.4	10.6	3.6	2.5	6.7	35.9	62.2	79.9	518.3
1963	51.1	68.5	51.6	21.3	15.7	10.0	5.2	4.5	10.2	45.3	39.6	46.9	
1935	88.9	93.4	89.0	27.4	15.9	10.5	3.6	1.8	7.1	37.5	58.0	75.4	510.7
1964	51.1	67.6	51.5	21.5	15.6	10.0	5.2	2.9	10.9	45.6	37.8	43.5	
1936	94.0	88.0	86.1	27.4	16.0	9.4	3.7	1.9	7.1	38.2	58.5	74.5	504.7
1965	53.1	54.3	50.2	21.4	15.6	7.9	5.1	2.9	10.9	45.2	37.4	43.1	
1937	95.2	87.4	84.0	28.8	16.1	8.5	3.7	1.9	7.1	38.6	59.8	73.2	504.4
1966	53.0	56.4	51.2	21.6	15.5	7.4	5.1	2.9	10.8	44.9	38.5	43.7	
1938	96.9	91.0	85.6	27.2	15.9	8.5	3.8	1.8	8.2	38.5	60.6	71.9	509.9
1967	52.3	54.2	49.9	21.9	15.6	7.4	5.1	2.9	11.9	45.0	37.8	43.2	
1939	99.4	89.3	83.7	27.1	14.5	8.8	3.9	3.4	8.2	39.9	61.5	70.0	509.6
1968	58.4	55.0	48.6	22.0	13.4	7.5	5.1	9.8	11.8	44.5	37.7	42.8	
1940	97.9	89.7	77.2	27.9	16.2	8.8	3.9	3.4	6.9	37.8	63.4	71.6	504.6
1969	58.9	55.2	36.8	22.3	15.0	7.5	5.1	9.8	10.0	44.6	37.7	46.9	
1941	99.5	89.6	79.0	26.7	16.3	8.4	3.5	3.2	8.0	37.1	62.8	70.1	504.2
1970	58.5	55.3	37.9	22.2	15.5	7.2	4.8	9.7	12.0	44.8	37.7	43.9	
1942	103.4	90.4	77.0	26.9	15.3	8.2	3.4	3.1	8.3	38.7	64.4	69.3	508.3
1971	60.2	56.3	38.0	22.3	15.4	7.3	4.8	9.7	11.9	45.3	37.0	44.9	
1943	103.8	85.6	76.8	25.9	15.2	7.8	3.5	3.1	8.9	38.9	64.2	69.0	502.6
1972	59.8	56.3	38.1	20.0	15.4	7.3	4.8	9.7	12.4	45.1	37.1	45.1	
1944	109.2	85.9	76.6	28.3	14.0	8.7	3.4	3.0	8.5	37.5	64.6	71.0	510.7
1973	59.6	56.1	37.6	25.4	15.2	10.1	4.8	9.7	12.4	45.0	38.2	45.0	
1945	116.7	100.2	78.1	29.4	15.6	8.6	3.8	3.0	8.6	36.3	63.2	70.4	533.9
1974	66.3	97.6	40.4	25.1	16.5	10.2	5.0	9.7	12.4	44.9	39.3	45.4	
1946	116.6	97.3	78.5	30.6	15.3	8.7	3.8	3.2	9.7	36.6	61.1	72.0	533.4
1975	66.3	96.6	40.1	25.4	16.6	10.1	5.0	9.7	13.1	44.7	37.2	44.3	
1947	115.7	102.6	77.9	29.9	14.5	8.3	3.5	3.0	9.8	36.7	60.4	72.8	535.1
1976	65.2	97.7	39.4	26.0	16.4	10.2	4.7	9.7	13.1	44.7	36.6	43.6	
1948	120.3	109.5	80.0	35.4	14.4	7.6	3.5	3.9	10.1	34.9	60.8	76.6	556.9
1977	66.7	101.9	38.1	38.8	16.4	10.0	4.7	10.8	13.5	44.8	36.1	45.9	
1949	122.2	101.7	79.6	35.1	14.5	7.7	3.5	3.9	10.7	36.0	59.5	78.6	553.2
1978	66.5	98.1	38.2	39.0	16.4	9.9	4.7	10.8	13.9	44.8	36.9	46.5	

1950	125.7	105.3	77.0	36.5	14.3	7.2	3.5	4.0	10.8	29.2	59.7	83.9	557.2
1979	65.7	97.9	38.7	39.0	16.5	9.9	4.6	10.8	14.0	28.7	35.0	52.8	
1951	125.3	108.5	81.4	36.2	15.6	7.3	3.5	4.1	11.5	31.7	67.3	81.7	572.0
1980	66.1	96.5	41.7	39.1	15.9	9.9	4.6	10.7	14.0	32.3	49.6	52.9	
1952	130.8	109.7	81.7	36.8	13.9	7.2	3.5	4.1	11.5	31.8	70.0	78.6	579.6
1981	66.5	96.1	41.5	39.2	15.8	9.9	4.7	10.7	14.0	32.2	50.5	52.0	
1953	130.7	109.4	85.0	39.6	19.5	7.7	3.6	3.9	13.7	31.3	70.2	84.5	598.2
1982	66.6	96.2	46.2	39.6	35.2	10.0	4.7	10.7	17.8	32.4	50.5	56.4	
1954	133.0	110.7	82.8	39.6	20.3	7.3	4.0	4.0	13.7	31.5	68.9	87.1	602.8
1983	68.0	95.4	46.5	39.6	35.1	9.7	4.9	10.7	17.7	32.4	50.6	56.5	
1955	134.4	111.6	85.9	38.8	20.6	7.6	4.0	3.9	14.2	31.9	69.7	88.1	610.7
1984	68.0	95.1	47.8	40.1	35.0	9.7	4.9	10.7	17.6	32.3	50.0	55.5	
1956	137.2	110.6	83.7	39.9	20.8	7.6	4.4	4.0	14.4	31.4	69.9	94.8	618.6
1985	64.9	95.1	48.6	39.6	35.0	9.7	5.0	10.7	17.5	32.3	49.9	59.7	
1957	135.8	110.4	82.5	40.4	20.6	7.3	5.1	4.0	15.5	27.9	68.1	94.3	611.8
1986	64.5	95.0	50.1	39.6	35.0	9.6	5.9	10.7	17.6	27.6	49.9	60.2	
1958	137.6	108.8	81.3	41.0	20.7	7.1	5.1	4.0	14.9	28.5	70.1	93.7	612.8
1987	64.7	96.4	49.9	39.5	35.0	9.7	5.9	10.7	17.8	27.3	50.0	59.8	
1959	137.1	109.1	81.1	38.6	20.7	6.4	4.7	4.0	14.6	28.4	68.0	88.9	601.4
1988	64.8	96.3	50.2	39.1	35.0	9.4	5.5	10.7	16.0	27.4	51.0	60.9	
1960	131.5	105.3	80.9	38.5	21.0	6.6	4.2	4.1	14.9	28.9	69.1	96.1	601.1
1989	66.6	97.9	50.2	39.2	35.0	9.5	5.1	10.7	17.8	27.5	50.4	73.7	
1961	135.3	107.3	80.8	37.5	22.8	6.5	4.0	4.1	15.0	28.8	68.1	94.6	604.7
1990	64.2	97.7	50.3	39.0	35.5	9.5	5.1	10.7	17.7	27.5	51.2	73.7	
1962	135.6	107.6	84.0	37.2	22.4	6.9	4.0	4.1	15.1	27.6	67.5	96.1	606.1
1991	64.0	97.6	53.4	39.0	35.5	9.5	5.1	10.7	17.6	25.1	51.7	74.4	

PRESYE ATENCION A LA NOTA DE LA PAGINA 1.

ESTERO (19Y4-9Y). LAT. 27.46 S. LONG. 64.18 W. ALT. 199 M. TABLA 100 MM

ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN JÓVENES DE LA ZONA DE LA SIERRA DE LOS RIOS. FRECUENCIAS DE EXCESOS Y DEFICIENCIAS MENSUALES EN MILIMETROS, PARA 58 AÑOS DE DATOS, EXCEPTO EN ENERO EN QUE HAY UNO MENOS.

[illegible]



RESULTADOS DEL BALANCE EN LAS RESTANTES LOCALIDADES  
CONSIDERADAS EN EL ESTUDIO

A B R A   G R A N D E

ESTADÍSTICOS DE INTERÉS EN ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MN

\*\*\* SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	166.00	132.00	110.00	72.00	45.00	23.00	25.00	38.00	60.00	100.00	131.00	161.00
LLUVIAS	92.40	93.51	83.82	23.54	15.20	5.96	2.13	1.76	7.60	30.60	57.00	84.60
ETP REAL	117.93	100.36	87.20	36.31	18.13	6.82	4.76	5.31	30.27	36.42	31.36	114.40
EXCEDENTES	-43	1.96	2.80	-53	-16	-22	-60	-60	-60	-60	-60	3.30
DEFICIT	48.07	31.64	22.80	35.69	26.87	16.18	20.24	32.69	29.73	63.58	49.64	46.60
ETP REAL / ETP POT.	71.04	76.03	79.27	50.43	40.30	29.66	19.02	13.98	50.44	36.42	62.10	71.06
ESCURRIMIENTOS	1.19	1.56	2.18	1.36	.76	.49	.24	.12	.06	.03	.02	1.91

\*\*\* SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	63.86	64.81	53.65	27.99	18.50	10.95	5.55	5.33	11.18	32.38	32.70	75.94
ETP REAL	46.76	36.72	27.25	23.97	16.40	7.36	6.82	7.67	23.71	31.40	41.89	49.95
EXCEDENTES	2.86	9.58	10.90	2.64	1.04	1.49	.00	.00	.00	.00	.00	24.89
DEFICIT	46.76	38.72	27.25	23.97	16.40	7.36	6.82	7.67	23.71	31.40	41.89	49.95
ETP REAL / ETP POT.	28.17	29.34	27.25	33.29	36.44	32.02	27.27	20.20	39.52	31.40	31.98	31.03
ESCURRIMIENTOS	6.42	5.65	7.52	4.33	2.20	1.61	.91	.40	.20	.10	.05	12.44

... SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

[illegible]



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTIADO.  
LLUVIAS MEDIAS MENSUALES EN ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 106 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	30.0	(100.0)	30.0	25.0	25.0	-0	-0	17.0	15.0	27.0	55.0	69.0	393.0
1935	17.0	(134.0)	134.0	4.0	-0	33.0	-0	-0	-0	-0	-0	45.0	367.0
1936	(95.0)	43.0	23.0	22.0	9.0	19.0	-0	-0	-0	9.0	15.0	30.0	265.0
1937	13.0	21.0	(65.0)	60.0	-0	-0	-0	-0	1.0	-0	-0	22.0	182.0
1938	85.0	83.0	(123.0)	-0	26.0	-0	-0	-0	-0	-0	33.0	49.0	399.0
1939	77.0	67.0	76.0	10.0	1.0	1.0	-0	-0	36.0	24.0	37.0	(175.0)	506.0
1940	93.0	(137.0)	31.0	29.0	50.0	12.0	6.0	-0	-0	15.0	81.0	55.0	509.0
1941	64.0	(71.0)	55.0	13.0	57.0	-0	10.0	-0	-0	36.0	39.0	51.0	393.0
1942	36.0	(179.0)	150.0	78.0	58.0	11.0	-0	-0	14.0	69.0	82.0	38.0	715.0
1943	36.0	62.0	(216.0)	80.0	34.0	9.0	10.0	-0	20.0	58.0	97.0	109.0	731.0
1944	131.0	(161.0)	50.0	-0	-0	-0	-0	-0	5.0	62.0	108.0	41.0	558.0
1945	54.0	47.0	(95.0)	31.0	-0	-0	-0	-0	-0	56.0	20.0	73.0	378.0
1946	(130.0)	69.0	127.0	-0	60.0	3.0	-0	-0	-0	9.0	82.0	35.0	495.0
1947	14.0	(91.0)	16.0	37.0	66.0	41.0	3.0	1.0	15.0	12.0	60.0	61.0	417.0
1948	55.0	(205.0)	145.0	8.0	9.0	-0	-0	-0	20.0	12.0	33.0	74.0	561.0
1949	80.0	26.0	(122.0)	-0	-0	2.0	-0	-0	18.0	96.0	89.0	-0	433.0
1950	54.0	29.0	62.0	-0	26.0	-0	-0	-0	-0	34.0	15.0	(107.0)	327.0
1951	75.0	64.0	38.0	24.0	-0	-0	-0	6.0	-0	6.0	60.0	(228.0)	501.0
1952	58.0	103.0	98.0	-0	23.0	-0	-0	-0	-0	7.0	(130.0)	35.0	454.0
1953	(282.0)	44.0	114.0	24.0	-0	-0	-0	-0	-0	-0	99.0	111.0	674.0
1954	(86.0)	23.0	34.0	7.0	4.0	2.0	-0	-0	-0	29.0	61.0	75.0	321.0
1955	58.0	(137.0)	60.0	23.0	-0	-0	-0	-0	-0	41.0	41.0	-0	360.0
1956	46.0	(107.0)	9.0	-0	9.0	5.0	-0	-0	-0	102.0	31.0	70.0	379.0
1957	25.0	-0	82.0	-0	-0	6.0	-0	-0	6.0	3.0	113.0	(426.0)	661.0
1958	24.0	19.0	(111.0)	76.0	-0	-0	8.0	-0	-0	33.0	45.0	93.0	416.0
1959	104.0	(193.0)	30.0	28.0	18.0	7.0	32.0	-0	-0	41.0	24.0	91.0	565.0
1960	111.0	55.0	89.0	28.0	6.0	6.0	-0	-0	-0	(146.0)	72.0	74.0	587.0
1961	(151.0)	141.0	44.0	26.0	61.0	-0	-0	-0	-0	71.0	51.0	91.0	416.0
1962	84.0	79.0	27.0	23.0	-0	-0	-0	-0	-0	54.0	(107.0)	88.0	466.0
1963	67.0	25.0	102.0	12.0	-0	-0	-0	-0	-0	32.0	35.0	(114.0)	389.0
1964	27.0	82.0	75.0	30.0	6.0	-0	-0	-0	-0	42.0	40.0	55.0	523.0
1965	(211.0)	21.0	123.0	17.0	2.0	12.0	10.0	-0	-0	11.0	86.0	87.0	684.0
1966	137.0	(261.0)	83.0	12.0	7.0	-0	-0	-0	-0	-0	55.0	22.0	262.0
1967	(82.0)	53.0	-0	-0	4.0	2.0	4.0	-0	31.0	-0	124.0	27.0	570.0
1968	(233.0)	90.0	13.0	6.0	2.0	13.0	3.0	22.0	23.0	12.0	92.0	(190.0)	701.0
1969	105.0	107.0	107.0	36.0	37.0	5.0	-0	-0	-0	18.0	63.0	84.0	540.0
1970	40.0	103.0	(137.0)	31.0	38.0	6.0	-0	4.0	30.0	4.0	38.0	43.0	440.0
1971	91.0	(109.0)	32.0	35.0	-0	-0	-0	-0	7.0	85.0	30.0	52.0	411.0
1972	78.0	37.0	(118.0)	57.0	14.0	-0	-0	-0	23.0	-0	30.0	72.0	689.0
1973	124.0	39.0	(239.0)	88.0	26.0	51.0	-0	-0	-0	20.0	15.0	22.0	688.0
1974	112.0	(288.0)	175.0	43.0	9.0	-0	10.0	-0	-0	14.0	57.0	8.0	474.0
1975	74.0	(158.0)	62.0	68.0	12.0	3.0	-0	6.0	15.0	11.0	12.0	89.0	687.0
1976	(252.0)	135.0	127.0	-0	19.0	-0	-0	-0	-0	-0	53.0	-0	905.0
1977	217.0	161.0	43.0	114.0	6.0	-0	-0	23.0	29.0	10.0	40.0	(262.0)	553.0
1978	136.0	49.0	71.0	-0	-0	15.0	-0	-0	26.0	50.0	50.0	(156.0)	553.0

PROM.	92.4	93.5	83.8	26.6	15.2	6.0	2.1	1.2	7.6	30.6	57.0	84.6	501.1
MAX.	282.0	288.0	239.0	114.0	66.0	51.0	32.0	23.0	38.0	146.0	130.0	426.0	905.0
MIN.	13.0	.0	9.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	162.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
 MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	86.4	45.5	43.1	60.0	8.7	4.0	47.4	28.3	23.0	100.0	44.1	1934
1935	100.0	100.0	100.0	26.4	11.1	100.0	20.0	13.2	6.7	4.0	100.0	29.8	1935
1936	57.8	100.0	22.7	31.9	20.0	82.6	-0	-0	100.0	11.0	12.2	100.0	1936
1937	9.0	100.0	60.0	83.3	2.2	-0	-0	-0	100.0	3.0	100.0	14.9	1937
1938	100.0	64.4	100.0	11.1	60.0	4.3	6.0	2.6	1.7	1.0	100.0	31.7	1938
1939	100.0	52.3	70.0	100.0	6.7	4.3	-0	2.6	63.3	100.0	29.8	100.0	1939
1940	60.3	100.0	34.5	43.1	100.0	56.5	28.0	5.3	3.3	17.0	100.0	36.0	1940
1941	39.2	100.0	51.8	19.4	100.0	13.0	44.0	7.9	5.0	39.0	30.5	100.0	1941
1942	22.9	100.0	100.0	100.0	100.0	100.0	80.0	57.9	51.7	77.0	68.7	29.2	1942
1943	23.5	100.0	100.0	100.0	100.0	91.3	84.0	55.3	58.3	68.0	78.6	71.4	1943
1944	80.1	100.0	60.0	13.9	6.7	4.3	4.0	2.6	10.0	63.0	32.4	100.0	1944
1945	33.7	100.0	87.3	44.4	2.2	-0	-0	-0	100.0	59.0	16.8	100.0	1945
1946	78.9	53.0	100.0	13.9	88.9	21.7	4.0	5.3	3.3	10.0	100.0	24.2	1946
1947	100.0	69.7	100.0	52.8	100.0	100.0	44.0	31.6	40.0	20.0	48.1	39.1	1947
1948	100.0	100.0	100.0	77.8	55.6	30.4	28.0	18.4	41.7	18.0	26.7	46.6	1948
1949	100.0	22.0	100.0	9.7	4.4	13.0	4.0	2.6	30.0	96.0	67.9	100.0	1949
1950	33.1	100.0	57.3	1.4	57.8	-0	-0	15.3	100.0	8.0	46.6	100.0	1950
1951	47.0	49.2	100.0	36.1	2.2	-0	-0	2.6	1.7	8.0	99.2	100.0	1951
1952	62.0	82.6	90.9	11.1	53.3	4.3	4.0	2.6	5.0	3.0	75.6	100.0	1952
1953	100.0	78.8	100.0	56.9	22.2	17.4	12.0	7.9	1.7	8.0	99.2	100.0	1953
1954	53.6	18.2	100.0	12.5	11.1	8.7	-0	-0	100.0	31.0	47.3	100.0	1954
1955	36.7	100.0	56.4	34.7	20.0	21.7	-0	-0	100.0	43.0	32.1	100.0	1955
1956	23.3	81.1	2.8	2.8	20.0	21.7	-0	-0	100.0	100.0	26.7	44.1	1956
1957	100.0	1.5	76.5	100.0	4.4	26.1	-0	2.6	100.0	6.0	86.3	100.0	1957
1958	60.2	26.5	100.0	100.0	8.9	34.8	36.0	5.3	3.3	34.0	100.0	59.0	1958
1959	63.3	100.0	59.1	52.8	48.9	26.1	100.0	15.8	10.0	44.0	19.8	100.0	1959
1960	68.1	42.4	80.9	38.9	13.3	26.1	-0	-0	100.0	100.0	72.5	55.9	1960
1961	92.2	100.0	48.2	40.3	91.1	4.3	4.0	2.6	1.7	72.0	100.0	57.8	1961
1962	53.6	100.0	27.3	33.3	-0	-0	-0	-0	100.0	56.0	81.7	55.3	1962
1963	100.0	20.5	92.7	4.4	4.4	-0	-0	2.6	100.0	3.0	100.0	68.3	1963
1964	100.0	63.6	69.1	41.7	13.3	-0	-0	-0	100.0	34.0	27.5	70.8	1964
1965	100.0	38.4	100.0	29.2	15.6	56.5	44.0	5.3	3.3	43.0	31.3	100.0	1965
1966	93.1	100.0	97.3	65.3	44.4	26.1	20.0	15.8	8.3	15.0	66.4	100.0	1966
1967	50.6	40.9	100.0	2.8	8.9	8.7	16.0	-0	51.7	100.0	43.5	100.0	1967
1968	100.0	86.4	38.2	19.4	11.1	60.9	16.0	60.5	43.3	13.0	94.7	100.0	1968
1969	63.9	81.1	97.3	51.4	82.2	21.7	-0	-0	100.0	20.0	71.0	100.0	1969
1970	37.3	100.0	58.3	58.3	88.9	39.1	16.0	21.1	53.3	8.0	48.9	52.8	1970
1971	100.0	30.9	48.6	-0	-0	-0	-0	-0	100.0	86.0	30.5	27.3	1971
1972	100.0	29.5	83.3	35.6	35.6	4.3	4.0	5.3	40.0	1.0	100.0	33.3	1972
1973	74.7	100.0	100.0	100.0	97.8	100.0	92.0	65.6	40.0	36.0	29.0	46.0	1973
1974	68.1	100.0	100.0	95.8	71.1	47.6	64.0	28.9	18.3	21.0	13.7	100.0	1974
1975	45.8	100.0	66.4	37.8	21.7	8.0	21.1	28.3	13.0	100.0	100.0	6.8	1975
1976	100.0	100.0	72.2	66.7	30.4	28.0	28.0	13.4	11.7	17.0	42.0	55.9	1976
1977	97.6	68.9	73.6	100.0	73.3	52.2	40.0	73.7	61.7	23.0	34.4	100.0	1977
1978	97.6	68.9	73.6	16.7	8.9	65.2	4.0	5.3	45.0	51.0	100.0	96.9	1978

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1934
1935	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1935
1936	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1936
1937	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1937
1938	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1938
1939	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1939
1940	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1940
1941	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1941
1942	-0	-0	-0	-0	7.0	-0	-0	-0	-0	-0	-0	-0	1942
1943	-0	-0	10.0	8.0	-0	-0	-0	-0	-0	-0	-0	-0	1943
1944	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1944
1945	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1945
1946	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1946
1947	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1947
1948	-0	-0	11.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1948
1949	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1949
1950	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1950
1951	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1951
1952	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1952
1953	19.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1953
1954	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1954
1955	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1955
1956	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1956
1957	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	167.0	1957
1958	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1958
1959	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1959
1960	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1960
1961	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1961
1962	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1962
1963	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1963
1964	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1964
1965	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1965
1966	-0	31.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1966
1967	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1967
1968	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1968
1969	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1969
1970	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1970
1971	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1971
1972	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972
1973	-0	-0	33.0	16.0	-0	10.0	-0	-0	-0	-0	-0	-0	1973
1974	-0	57.0	65.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1974
1975	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1975
1976	-0	-0	7.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976
1977	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	4.0	1977
1978	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1978
TOTALES	19.0	88.0	126.0	24.0	7.0	10.0	-0	-0	-0	-0	-0	171.0	TOTALES



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN AGRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MM

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	*****	18.0	60.0	41.0	18.0	21.0	24.0	20.0	43.0	72.0	-0	90.0	1934
1935	-0	-0	53.0	53.0	40.0	-0	20.0	33.0	56.0	96.0	-0	113.0	1935
1936	70.0	-0	85.0	49.0	36.0	4.0	25.0	38.0	-0	89.0	115.0	-0	1936
1937	151.0	-0	44.0	12.0	18.0	23.0	25.0	38.0	-0	97.0	-0	137.0	1937
1938	-0	47.0	-0	64.0	48.0	22.0	24.0	24.0	59.0	99.0	-0	110.0	1938
1939	-0	63.0	33.0	-0	42.0	22.0	25.0	-0	22.0	-0	92.0	-0	1939
1940	65.0	-0	72.0	41.0	-0	10.0	18.0	36.0	58.0	83.0	-0	103.0	1940
1941	101.0	-0	53.0	58.0	-0	20.0	14.0	33.0	57.0	61.0	91.0	-0	1941
1942	128.0	-0	-0	-0	-0	-0	5.0	16.0	29.0	23.0	41.0	114.0	1942
1943	127.0	-0	-0	-0	-0	2.0	4.0	17.0	25.0	32.0	23.0	46.0	1943
1944	33.0	-0	44.0	62.0	42.0	22.0	24.0	37.0	54.0	37.0	109.0	-0	1944
1945	110.0	-0	14.0	40.0	44.0	23.0	25.0	38.0	-0	41.0	-0	-0	1945
1946	35.0	62.0	-0	62.0	5.0	18.0	24.0	36.0	58.0	90.0	-0	122.0	1946
1947	-0	40.0	-0	34.0	-0	-0	14.0	26.0	36.0	80.0	68.0	98.0	1947
1948	-0	-0	-0	16.0	20.0	16.0	18.0	31.0	35.0	82.0	96.0	86.0	1948
1949	-0	103.0	-0	65.0	43.0	20.0	24.0	37.0	42.0	4.0	42.0	-0	1949
1950	111.0	-0	47.0	71.0	19.0	23.0	25.0	38.0	-0	64.0	115.0	-0	1950
1951	88.0	67.0	-0	46.0	44.0	23.0	25.0	32.0	-0	92.0	70.0	-0	1951
1952	63.0	23.0	10.0	64.0	21.0	22.0	24.0	37.0	59.0	92.0	1.0	-0	1952
1953	-0	28.0	-0	31.0	35.0	19.0	22.0	35.0	57.0	97.0	32.0	-0	1953
1954	77.0	108.0	-0	63.0	40.0	21.0	25.0	38.0	-0	69.0	69.0	-0	1954
1955	105.0	-0	48.0	47.0	44.0	23.0	25.0	38.0	-0	57.0	69.0	-0	1955
1956	119.0	25.0	-0	70.0	36.0	18.0	25.0	33.0	-0	-0	96.0	90.0	1956
1957	-0	130.0	28.0	-0	43.0	17.0	25.0	37.0	-0	94.0	18.0	-0	1957
1958	65.0	97.0	-0	-0	41.0	15.0	16.0	36.0	58.0	66.0	-0	66.0	1958
1959	61.0	-0	45.0	34.0	33.0	17.0	-0	32.0	54.0	56.0	105.0	-0	1959
1960	53.0	76.0	21.0	44.0	39.0	17.0	25.0	38.0	-0	-0	36.0	71.0	1960
1961	13.0	-0	57.0	43.0	4.0	22.0	24.0	37.0	59.0	28.0	-0	68.0	1961
1962	77.0	-0	80.0	48.0	43.0	23.0	25.0	38.0	-0	44.0	24.0	72.0	1962
1963	-0	105.0	-0	-0	43.0	23.0	25.0	37.0	-0	97.0	-0	51.0	1963
1964	-0	48.0	34.0	42.0	39.0	23.0	25.0	38.0	-0	66.0	95.0	47.0	1964
1965	-0	80.0	-0	51.0	38.0	10.0	14.0	36.0	58.0	57.0	90.0	-0	1965
1966	28.0	-0	3.0	25.0	25.0	17.0	20.0	32.0	55.0	85.0	44.0	-0	1966
1967	82.0	78.0	-0	70.0	41.0	21.0	21.0	38.0	29.0	-0	74.0	-0	1967
1968	-0	18.0	68.0	58.0	40.0	9.0	21.0	15.0	34.0	87.0	7.0	-0	1968
1969	60.0	25.0	3.0	35.0	8.0	18.0	25.0	38.0	-0	80.0	38.0	-0	1969
1970	104.0	27.0	-0	30.0	5.0	14.0	21.0	30.0	28.0	92.0	67.0	76.0	1970
1971	-0	22.0	76.0	37.0	45.0	23.0	25.0	38.0	-0	14.0	91.0	117.0	1971
1972	-0	93.0	-0	14.0	29.0	22.0	24.0	36.0	36.0	99.0	-0	107.0	1972
1973	42.0	-0	-0	-0	1.0	-0	2.0	27.0	36.0	64.0	93.0	87.0	1973
1974	53.0	-0	-0	3.0	13.0	12.0	9.0	27.0	49.0	79.0	113.0	-0	1974
1975	90.0	-0	37.0	3.0	28.0	18.0	23.0	30.0	43.0	87.0	-0	150.0	1975
1976	-0	-0	-0	20.0	15.0	16.0	18.0	31.0	53.0	83.0	76.0	71.0	1976
1977	-0	-0	27.0	-0	12.0	11.0	15.0	30.0	23.0	77.0	86.0	-0	1977
1978	4.0	41.0	29.0	60.0	41.0	8.0	24.0	36.0	33.0	49.0	-0	5.0	1978
TOTALES	2115.0	1624.0	1026.0	1606.0	1209.0	728.0	911.0	1471.0	1336.0	2861.0	2234.0	2097.0	TOTALES

	26	24	25	37	40	41	44	45	50	41	33	24	NUM CASOS
D. MEDIOS	47.0	31.6	22.8	35.7	26.9	16.2	20.2	32.7	29.7	63.6	49.6	46.6	D. MEDIOS
D. REALES	75.5	59.3	41.0	43.4	30.2	17.8	20.7	32.7	44.6	69.8	67.7	87.4	D. REALES
FREC. X	63.6	53.3	55.6	82.2	88.9	91.1	97.8	100.0	66.7	91.1	73.3	53.3	FREC. X

SUMATORIA DEF\*FREC = 423.74 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -413.84 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EPM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	4.7	4.8	5.5	3.9	1.1	.0	.3	.0	.0	.0	2.3	2.8	E.P.E.

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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 30  
\*\*\*\*\*

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN ABRA GRANDE (1934-72). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	1	9	7	5	19	33	37	39	21	29	15	10	249
ENTRE 40.1 Y 54.9	5	5	3	9	3	2	3	1	6	4	6	5	52
ENTRE 55.0 Y 69.9	8	4	7	3	5	4	1	4	3	4	3	6	52
ENTRE 70.0 Y 84.9	4	6	5	4	3	1	2	1	0	2	6	2	36
ENTRE 85.0 Y 100.0	18	23	25	10	9	5	2	0	15	6	15	22	150
70 0 MENOR	22	16	16	31	33	39	41	44	30	37	24	21	354

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	20.5	15.6	11.1	42.2	55.6	73.3	82.2	86.7	46.7	64.4	33.3	22.2	
ENTRE 40.1 Y 54.9	11.4	11.1	6.7	20.0	6.7	4.4	6.7	2.2	13.3	8.9	13.3	11.1	
ENTRE 55.0 Y 69.9	18.2	8.9	15.6	6.7	11.1	8.9	2.2	8.9	6.7	8.9	6.7	13.3	
ENTRE 70.0 Y 84.9	9.1	13.3	11.1	8.9	6.7	2.2	4.4	2.2	.0	4.4	13.3	4.4	
ENTRE 85.0 Y 100.0	40.9	51.1	55.6	22.2	20.0	11.1	4.4	.0	33.3	13.3	33.3	48.9	
70 0 MENOR	50.0	35.6	35.6	68.9	73.3	86.7	91.1	97.8	66.7	82.2	53.3	46.7	



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARTICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	22	16	15	30	33	39	41	44	30	37	24	21
SOLO UN MES	11	9	2	4	0	0	0	0	0	5	3	9
	0-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	6	5	2	12	24	31	38	40	29	25	18	8
SOLO DOS MESES	4	5	1	3	1	0	1	1	1	0	7	2
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	2	0	0	1	10	22	30	37	25	24	11	5
SOLO TRES MESES	1	0	0	0	1	0	0	1	0	1	1	0
	NDEF	DEFM	EFMA	FMAJ	MAJJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	0	0	1	9	21	30	23	21	10	3	1
SOLO CUATRO MESES	0	0	0	0	1	0	3	1	1	1	0	0
	NDEFM	DEFMA	EFMAJ	FMAJJ	MAJJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	0	0	0	1	8	21	17	19	8	5	1	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	22	28	29	34	12	6	4	1	15	8	20	23
SOLO UN MES	8	9	10	3	0	2	1	1	12	4	11	11
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	7	11	15	11	5	4	3	0	0	3	2	7
SOLO DOS MESES	3	2	5	4	0	1	0	0	0	2	1	5
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	2	4	7	7	5	3	3	0	0	0	1	0
SOLO TRES MESES	0	1	1	0	0	0	0	0	0	0	1	0
	NDEF	DEFM	EFMA	FMAJ	MAJJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	2	2	4	5	3	3	0	0	0	0	0	0
SOLO CUATRO MESES	1	1	2	1	0	0	0	0	0	0	0	0
	NDEFM	DEFMA	EFMAJ	FMAJJ	MAJJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	1	0	2	3	5	0	0	0	0	0	0	0

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	1
SOLO UN MES	0	0	0	0	0	0	0	0	0	0	0	1
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDEF	DEFM	EFMA	FMAJ	MAJJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 103 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	74.6	83.8	78.6	22.3	16.7	5.4	2.3	-8	5.1	35.2	59.5	84.1	467.4
1963	53.2	55.7	49.1	23.7	20.9	9.8	6.4	3.3	9.3	35.7	35.1	79.7	
1935	74.5	83.2	80.1	22.4	16.1	5.4	2.3	-2	4.6	35.4	57.8	85.6	467.7
1964	53.3	55.6	48.2	23.7	20.9	9.8	6.4	1.1	9.1	35.7	35.4	79.8	
1936	81.0	79.5	79.7	22.5	16.2	4.7	2.6	-2	4.6	36.8	59.2	86.0	472.9
1965	57.6	55.9	47.8	23.6	20.8	8.4	6.5	1.1	9.1	35.1	33.8	79.7	
1937	82.4	86.7	81.7	22.2	16.1	4.0	2.6	-2	4.6	36.8	61.5	87.9	486.9
1966	58.5	64.5	46.6	23.7	20.9	8.0	6.5	1.1	9.1	35.0	33.1	79.0	
1938	84.7	87.8	79.9	20.2	16.2	4.1	2.8	-2	5.6	36.5	63.4	87.9	489.5
1967	57.0	63.6	48.4	22.9	20.3	8.0	6.5	1.1	10.3	35.0	31.1	79.0	
1939	89.6	88.0	76.2	20.4	15.4	4.5	2.9	1.0	6.4	37.2	66.4	87.1	495.2
1968	63.1	63.6	49.2	22.8	20.9	8.1	6.5	4.1	10.8	34.7	32.4	79.5	
1940	90.6	89.4	77.2	21.3	16.6	4.7	2.9	1.0	5.3	37.0	69.2	87.6	501.7
1969	63.1	63.6	49.5	22.9	21.0	8.1	6.5	4.1	9.1	34.8	32.2	80.1	
1941	88.8	88.2	80.8	21.3	16.2	4.5	2.7	1.1	6.3	36.7	67.6	88.6	502.8
1970	63.8	63.0	49.9	22.9	20.5	8.0	6.5	4.2	10.1	35.1	32.2	79.8	
1942	99.7	89.5	80.0	22.1	14.3	4.5	2.3	1.1	6.5	38.2	67.6	88.3	504.2
1971	63.6	63.0	50.4	23.0	19.2	8.0	6.3	4.2	10.0	36.2	32.2	80.0	
1943	91.1	84.8	78.9	21.4	12.9	4.1	2.3	1.1	6.8	35.2	65.9	88.8	494.0
1972	62.9	61.4	49.2	21.5	17.3	7.9	5.3	4.2	10.3	36.3	32.7	79.7	
1944	94.0	84.0	79.7	21.6	12.6	5.5	2.0	1.1	6.1	34.7	63.7	87.6	492.6
1973	62.3	61.8	51.6	22.3	17.0	11.6	6.2	4.2	10.1	36.2	32.8	79.7	
1945	93.4	88.2	83.9	23.1	12.9	5.5	2.3	1.1	6.0	33.1	60.6	86.9	497.0
1974	62.0	70.9	54.1	22.2	16.9	11.6	6.3	4.2	10.2	36.0	32.9	80.1	
1946	94.1	91.9	82.8	24.3	13.3	5.6	2.3	1.3	6.5	31.5	61.8	84.8	500.2
1975	61.6	71.6	54.2	23.6	16.7	11.6	6.3	4.2	10.2	35.9	32.0	81.4	
1947	98.1	94.1	82.8	24.3	12.6	5.5	2.3	1.3	6.5	31.6	60.9	86.6	506.6
1976	67.8	71.9	54.2	23.6	16.0	11.6	6.3	4.2	10.2	35.8	31.8	80.9	
1948	104.9	96.5	83.7	26.9	10.6	4.1	2.2	2.0	6.9	31.5	60.2	93.3	522.8
1977	69.2	72.9	53.2	28.7	12.4	9.6	6.3	5.8	10.9	35.9	32.0	86.8	
1949	107.6	91.3	81.2	26.6	10.3	4.6	2.2	2.0	7.1	32.8	60.8	96.0	522.6
1978	66.8	70.4	52.0	28.9	12.6	9.7	6.3	5.8	11.2	35.8	31.7	87.4	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN ABRA GRANDE (1934-78). LAT. 27.17 S. LONG. 64.23 W. ALT. 271 M. TABLA 100 MH

FRECUENCIAS DE EXCESOS Y DEFICIENCIAS MENSUALES EN MILIMETROS, PARA 45 AÑOS DE DATOS, EXCEPTO EN ENERO EN QUE HAY UNO MENOS.

[illegible]

PROCENTUALES MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 45 A=05.

[illegible]

A N A T U Y A

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 31

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 103 M TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	111.00	63.00	47.00	26.00	25.00	38.00	60.00	93.00	125.00	166.00
LLUVIAS	108.74	105.42	98.75	50.02	22.28	11.40	9.14	9.93	25.63	54.12	75.82	82.61
ETP REAL	132.75	103.07	88.51	48.09	25.07	13.12	11.56	14.42	32.74	57.40	78.28	105.00
EXCEDENTES	1.27	6.79	3.72	1.70	2.89	.40	.02	.00	.05	.89	1.11	.00
DEFICIT	38.25	34.93	22.49	14.91	21.93	12.88	13.44	23.58	27.26	35.60	46.72	61.00
ETP REAL / ETP POT.	77.63	74.69	79.74	76.33	53.34	50.47	46.25	37.95	54.56	61.72	62.62	63.25
ESCURRIMIENTOS	.85	4.81	4.26	2.98	2.94	1.67	.84	.42	.24	.57	.84	.42

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	63.68	85.93	55.75	35.72	26.10	16.35	12.63	16.55	31.19	39.37	50.74	49.41
ETP REAL	41.67	36.70	26.69	17.74	16.87	8.19	8.73	11.22	20.00	27.37	36.90	45.76
EXCEDENTES	9.49	35.52	11.88	6.46	11.64	3.05	.15	.00	.40	6.76	8.34	.00
DEFICIT	41.67	36.70	26.69	17.74	16.87	8.19	8.73	11.22	20.00	27.37	36.90	45.76
ETP REAL / ETP POT.	24.37	26.59	24.04	28.17	35.90	31.50	34.92	29.53	33.33	29.43	29.52	27.57
ESCURRIMIENTOS	4.85	17.94	10.77	7.28	7.30	4.18	2.10	1.05	.55	3.37	4.46	2.23

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.5856	.8151	.5645	.7141	1.1716	1.4336	1.3821	1.6669	1.2170	.7367	.6691	.5980
ETP REAL	.3139	.3561	.3015	.3690	.6731	.6241	.7551	.7780	.6109	.4768	.4714	.4358
EXCEDENTES	7.4833	4.0412	3.1954	3.7936	4.0221	7.5498	7.5498	***	7.5498	7.5498	7.5498	***
DEFICIT	1.0895	1.0507	1.1866	1.1899	.7695	.6360	.6496	.5759	.7336	.7689	.7898	.7502
ETP REAL / ETP POT.	.3139	.3561	.3015	.3690	.6731	.6241	.7551	.7780	.6109	.4768	.4714	.4358
ESCURRIMIENTOS	5.7300	3.7292	2.5250	2.4399	2.4846	2.5003	2.4924	2.4924	2.3262	5.9583	5.3426	5.3427

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 108 M TABLA 100 MM

EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	91.0	37.0	73.0	20.0	12.0	5.0	17.0	44.0	31.0	16.0	(274.0)	70.0	74.0.0
1935	47.0	(286.0)	131.0	5.0	-	11.0	-	7.0	-	63.0	87.0	118.0	755.0
1936	68.0	84.0	38.0	46.0	26.0	8.0	8.0	-	-	3.0	46.0	(133.0)	458.0
1937	25.0	(125.0)	29.0	61.0	4.0	-	-	-	20.0	14.0	10.0	3.0	297.0
1938	125.0	(178.0)	171.0	78.0	20.0	6.0	-	9.0	5.0	13.0	79.0	41.0	725.0
1939	117.0	71.0	(131.0)	42.0	38.0	6.0	-	13.0	43.0	102.0	26.0	102.0	693.0
1940	101.0	83.0	(117.0)	73.0	13.0	16.0	32.0	6.0	8.0	69.0	58.0	96.0	672.0
1941	(135.0)	88.0	111.0	75.0	53.0	4.0	23.0	12.0	2.0	58.0	86.0	60.0	707.0
1942	79.0	(208.0)	81.0	45.0	33.0	21.0	-	3.0	-	62.0	126.0	33.0	691.0
1943	37.0	52.0	75.0	(138.0)	21.0	3.0	4.0	3.0	8.0	64.0	93.0	115.0	613.0
1944	(134.0)	41.0	121.0	17.0	26.0	2.0	-	15.0	-	113.0	41.0	32.0	542.0
1945	60.0	109.0	(176.0)	2.0	24.0	-	7.0	5.0	8.0	96.0	20.0	49.0	555.0
1946	(150.0)	10.0	124.0	114.0	69.0	12.0	19.0	5.0	9.0	72.0	133.0	32.0	749.0
1947	(124.0)	64.0	64.0	7.0	1.0	9.0	3.0	4.0	62.0	82.0	54.0	7.0	463.0
1948	(160.0)	91.0	51.0	19.0	-	4.0	3.0	-	9.0	28.0	51.0	78.0	494.0
1949	48.0	68.0	(120.0)	10.0	5.0	4.0	30.0	-	93.0	91.0	(131.0)	88.0	628.0
1950	26.0	80.0	38.0	45.0	6.0	38.0	-	-	2.0	4.0	66.0	72.0	442.0
1951	(136.0)	58.0	79.0	83.0	4.0	5.0	-	2.0	1.0	43.0	53.0	122.0	599.0
1952	101.0	(113.0)	46.0	84.0	15.0	5.0	-	40.0	25.0	71.0	53.0	43.0	596.0
1953	(170.0)	89.0	32.0	27.0	42.0	60.0	2.0	-	-	83.0	22.0	56.0	586.0
1954	29.0	53.0	(129.0)	42.0	2.0	14.0	1.0	-	13.0	51.0	29.0	64.0	427.0
1955	58.0	(148.0)	49.0	29.0	11.0	2.0	-	6.0	-	51.0	23.0	13.0	390.0
1956	90.0	67.0	68.0	63.0	-	16.0	-	22.0	16.0	(158.0)	157.0	103.0	760.0
1957	184.0	69.0	89.0	27.0	15.0	19.0	-	5.0	14.0	58.0	58.0	(217.0)	755.0
1958	55.0	75.0	88.0	82.0	11.0	1.0	-	2.0	3.0	22.0	(156.0)	125.0	620.0
1959	108.0	68.0	(252.0)	17.0	107.0	22.0	17.0	-	-	67.0	149.0	30.0	835.0
1960	88.0	118.0	48.0	72.0	-	9.0	43.0	85.0	14.0	92.0	39.0	(222.0)	830.0
1961	52.0	99.0	(107.0)	34.0	62.0	-	-	-	7.0	87.0	-	102.0	550.0
1962	88.0	30.0	66.0	16.0	3.0	-	18.0	-	1.0	80.0	(100.0)	34.0	436.0
1963	(151.0)	123.0	93.0	89.0	13.0	-	10.0	-	40.0	29.0	104.0	90.0	434.0
1964	46.0	40.0	(142.0)	9.0	1.0	-	-	4.0	37.0	47.0	38.0	90.0	539.0
1965	24.0	109.0	44.0	7.0	1.0	54.0	15.0	1.0	2.0	80.0	(112.0)	104.0	559.0
1966	(137.0)	45.0	77.0	40.0	11.0	5.0	3.0	-	60.0	42.0	35.0	104.0	320.0
1967	34.0	(99.0)	31.0	8.0	18.0	8.0	6.0	16.0	35.0	11.0	22.0	32.0	493.0
1968	(97.0)	74.0	55.0	23.0	5.0	43.0	20.0	75.0	10.0	14.0	46.0	31.0	449.0
1969	19.0	70.0	47.0	35.0	37.0	5.0	8.0	-	10.0	11.0	99.0	(108.0)	594.0
1970	130.0	10.0	(185.0)	15.0	42.0	21.0	10.0	14.0	16.0	22.0	46.0	83.0	510.0
1971	(137.0)	86.0	52.0	80.0	-	-	-	26.0	(111.0)	41.0	63.0	23.0	446.0
1972	29.0	27.0	69.0	62.0	5.0	13.0	8.0	1.0	2.0	40.0	16.0	65.0	825.0
1973	153.0	65.0	(248.0)	91.0	-	87.0	8.0	-	2.0	41.0	20.0	110.0	871.0
1974	100.0	(435.0)	55.0	58.0	68.0	7.0	3.0	1.0	32.0	22.0	37.0	53.0	600.0
1975	11.0	24.0	(195.0)	70.0	8.0	12.0	-	26.0	49.0	2.0	112.0	91.0	583.0
1976	154.0	53.0	(184.0)	20.0	31.0	-	-	21.0	30.0	15.0	56.0	167.0	1139.0
1977	224.0	(352.0)	99.0	106.0	27.0	-	-	15.0	62.0	58.0	72.0	137.0	664.0
1978	(156.0)	57.0	67.0	20.0	3.0	5.0	-	-	89.0	58.0	-	-	-

1979	42.0	(300.0)	10.0	6.0	3.0	.0	2.0	6.0	42.0	26.0	32.0	192.0	661.0
1980	(211.0)	67.0	187.0	86.0	113.0	4.0	9.0	9.0	20.0	22.0	176.0	44.0	948.0
1981	104.0	(215.0)	130.0	56.0	76.0	1.0	12.0	16.0	11.0	12.0	132.0	30.0	799.0
1982	168.0	(194.0)	76.0	86.0	6.0	6.0	4.0	1.0	144.0	2.0	121.0	168.0	976.0
1983	(190.0)	86.0	114.0	54.0	28.0	5.0	26.0	8.0	42.0	46.0	91.0	52.0	742.0
1984	173.0	(218.0)	161.0	48.0	6.0	6.0	.0	2.0	72.0	102.0	106.0	74.0	968.0
1985	(235.0)	108.0	81.0	76.0	32.0	16.0	65.0	11.0	33.0	195.0	124.0	93.0	1069.0
1986	72.0	(153.0)	61.0	96.0	11.0	29.0	22.0	5.0	52.0	44.0	120.0	113.0	778.0
1987	(334.0)	8.0	153.0	36.0	60.0	.0	8.0	10.0	.0	56.0	46.0	62.0	775.0
1988	(127.0)	50.0	105.0	6.0	22.0	.0	30.0	3.0	7.0	26.0	28.0	98.0	480.0
1989	121.0	37.0	50.0	(159.0)	22.0	8.0	14.0	7.0	38.0	55.0	101.0	140.0	752.0
1990	136.0	(242.0)	170.0	36.0	16.0	7.0	11.0	.0	25.0	144.0	72.0	94.0	953.0

PROM.	108.7	105.4	98.8	50.0	22.3	11.4	9.1	9.9	25.6	54.1	75.8	82.6	653.9
MAX.	334.0	435.0	252.0	159.0	113.0	67.0	65.0	85.0	144.0	195.0	274.0	222.0	1139.0
MIN.	11.0	8.0	10.0	2.0	.0	.0	.0	.0	.0	2.0	.0	3.0	297.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE EIP REAL EN ANTIATUYA (1934-1990) LAT. 28-27 S. LONG. 62-50 W. ALT. 108 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	43.3	50.0	71.2	38.1	29.8	23.1	65.0	100.0	100.0	36.6	100.0	80.1	1934
1935	40.9	100.0	100.0	79.4	44.7	61.5	28.0	34.2	11.7	69.9	71.2	72.3	1935
1936	40.9	100.0	36.9	73.0	55.3	30.8	32.0	2.6	100.0	5.4	36.0	80.1	1936
1937	100.0	90.6	27.0	96.8	8.5	23.1	0	0	33.3	100.0	10.4	100.0	1937
1938	73.7	100.0	100.0	100.0	93.6	76.9	56.0	55.3	33.3	26.9	65.6	27.1	1938
1939	69.0	100.0	100.0	74.6	85.1	34.6	12.0	42.1	71.3	100.0	30.4	63.3	1939
1940	59.6	100.0	100.0	100.0	38.3	65.4	100.0	28.9	21.7	76.3	48.8	58.4	1940
1941	79.5	100.0	100.0	100.0	100.0	34.6	92.0	42.1	13.3	64.5	70.4	38.0	1941
1942	100.0	100.0	91.0	85.7	83.0	88.5	32.0	31.6	15.0	69.9	100.0	24.1	1942
1943	100.0	39.1	68.5	100.0	83.0	57.7	52.0	36.8	31.7	73.1	76.8	71.1	1943
1944	79.5	31.2	100.0	33.3	57.4	11.5	4.0	42.1	1.7	100.0	43.2	23.5	1944
1945	35.7	79.0	100.0	52.4	66.0	23.1	44.0	26.3	21.7	100.0	21.6	30.7	1945
1946	87.7	100.0	100.0	100.0	100.0	92.3	92.0	68.4	59.0	93.9	100.0	34.3	1946
1947	74.3	100.0	42.3	100.0	6.4	34.6	12.0	13.2	100.0	88.2	44.8	100.0	1947
1948	93.6	66.7	100.0	33.3	2.1	15.4	12.0	12.0	100.0	32.3	42.4	100.0	1948
1949	29.8	100.0	100.0	23.8	17.0	19.2	100.0	7.9	103.0	98.9	69.6	60.2	1949
1950	19.9	58.7	100.0	73.0	14.9	100.0	12.0	10.5	8.3	6.5	100.0	46.4	1950
1951	80.1	42.8	71.2	100.0	23.4	30.8	12.0	10.5	6.7	47.3	53.6	73.5	1951
1952	100.0	82.6	42.3	100.0	44.7	30.8	36.0	100.0	43.3	78.5	45.6	27.1	1952
1953	99.4	100.0	31.5	44.4	89.4	100.0	36.0	23.7	15.0	94.6	22.4	34.3	1953
1954	100.0	39.9	100.0	73.0	14.9	57.7	12.0	5.3	25.0	55.9	24.0	100.0	1954
1955	35.1	100.0	48.6	49.2	25.5	11.5	0	18.4	100.0	55.9	20.0	100.0	1955
1956	53.2	100.0	62.2	100.0	2.1	61.5	0	57.9	29.3	100.0	100.0	90.4	1956
1957	100.0	73.2	85.6	55.6	42.6	76.9	12.0	21.1	26.7	63.4	47.2	100.0	1957
1958	53.8	60.1	81.1	100.0	40.4	19.2	12.0	13.2	10.0	25.8	100.0	61.9	1958
1959	68.4	53.6	100.0	87.3	100.0	96.2	100.0	73.7	45.0	80.6	100.0	43.4	1959
1960	55.6	86.2	45.0	100.0	8.5	38.5	100.0	100.0	68.3	98.9	52.0	100.0	1960
1961	60.8	76.8	97.3	60.3	100.0	23.1	16.0	13.2	18.3	93.5	3.2	62.0	1961
1962	100.0	23.9	59.5	25.4	6.4	0	72.0	0	100.0	86.0	80.6	21.7	1962
1963	88.3	89.1	83.8	100.0	44.7	19.2	48.0	10.5	70.0	34.4	84.0	39.2	1963
1964	100.0	30.4	100.0	36.5	17.0	11.5	8.0	15.8	63.3	51.6	31.2	100.0	1964
1965	15.8	78.0	100.0	14.3	6.3	100.0	72.0	23.7	16.7	37.1	90.4	56.6	1965
1966	80.7	34.1	69.4	63.5	23.4	19.2	12.0	0	100.0	100.0	30.4	63.3	1966
1967	100.0	72.5	28.8	100.0	40.4	34.6	28.0	42.1	58.3	12.9	100.0	20.5	1967
1968	100.0	55.1	50.5	36.5	10.6	100.0	3.0	100.0	51.7	34.4	43.2	21.7	1968
1969	100.0	52.2	43.2	55.6	78.7	19.2	32.0	0	100.0	15.1	79.2	65.7	1969
1970	76.0	100.0	100.0	71.4	93.6	88.5	64.0	57.9	45.0	33.3	40.8	51.2	1970
1971	80.7	100.0	48.6	100.0	17.0	11.5	8.0	71.1	8.3	45.2	51.2	100.0	1971
1972	100.0	21.7	62.2	98.4	10.6	50.0	32.0	2.6	100.0	66.7	28.8	42.8	1972
1973	90.1	48.6	100.0	100.0	80.9	100.0	96.0	71.1	46.7	58.1	25.6	68.1	1973
1974	59.6	100.0	89.2	96.8	100.0	76.9	60.0	42.1	66.7	38.7	33.7	100.0	1974
1975	100.0	18.6	100.0	100.0	100.0	46.2	4.0	68.4	81.7	3.2	89.6	100.0	1975
1976	90.1	39.9	100.0	73.0	80.9	34.6	28.0	65.8	25.0	22.6	47.2	100.0	1976
1977	100.0	100.0	100.0	100.0	97.9	73.1	56.0	65.8	66.7	75.3	53.6	100.0	1977
1978	92.4	44.9	62.2	33.3	6.4	19.2	0	0	100.0	72.0	64.8	84.3	1978
1979	28.7	100.0	67.6	33.3	21.3	11.5	16.0	21.1	71.7	31.2	26.4	100.0	1979
1980	100.0	73.9	100.0	100.0	100.0	92.3	84.0	68.4	61.7	43.0	100.0	55.4	1980

1981	66.1	100.0	100.0	98.4	100.0	92.3	84.0	76.7	53.3	33.3	100.0	27.7	1981
1982	98.2	100.0	84.7	100.0	61.7	53.8	44.0	26.3	100.0	67.7	97.6	100.0	1982
1983	100.0	79.7	100.0	90.5	72.3	42.3	100.0	36.8	75.0	55.9	75.2	33.7	1983
1984	100.0	100.0	100.0	98.4	76.6	61.5	40.0	34.2	100.0	100.0	91.2	58.4	1984
1985	100.0	93.5	86.5	100.0	85.1	76.9	100.0	81.6	80.0	100.0	99.2	85.0	1985
1986	59.6	100.0	66.7	100.0	57.4	100.0	92.0	42.1	90.0	58.1	96.8	71.7	1986
1987	100.0	59.4	100.0	84.1	100.0	57.7	64.0	55.3	25.0	65.6	42.4	39.2	1987
1988	74.9	100.0	94.6	12.7	2.1	.0	100.0	13.2	15.0	29.0	100.0	59.6	1988
1989	71.3	100.0	65.9	100.0	95.7	80.8	80.0	57.9	76.7	71.0	84.8	86.7	1989
1990	81.9	100.0	100.0	95.2	78.7	65.4	68.0	31.6	55.0	100.0	80.8	69.3	1990

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 108 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	-0	-0	-0	-0	-0	-0	-0	-0	-0	63.0	-0	1934
1935	-0	58.0	20.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1935
1936	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1936
1937	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1937
1938	-0	-0	1.0	15.0	-0	-0	-0	-0	-0	-0	-0	-0	1938
1939	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1939
1940	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1940
1941	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1941
1942	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1942
1943	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1943
1944	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1944
1945	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1945
1946	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1946
1947	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1947
1948	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1948
1949	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1949
1950	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1950
1951	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1951
1952	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1952
1953	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1953
1954	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1954
1955	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1955
1956	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1956
1957	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1957
1958	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1958
1959	-0	-0	46.0	-0	22.0	-0	1.0	-0	-0	-0	-0	-0	1959
1960	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1960
1961	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1961
1962	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1962
1963	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1963
1964	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1964
1965	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1965
1966	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1966
1967	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1967
1968	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1968
1969	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1969
1970	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1970
1971	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1971
1972	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972
1973	-0	-0	38.0	28.0	-0	23.0	-0	-0	-0	-0	-0	-0	1973
1974	-0	198.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1974
1975	-0	-0	-0	-0	50.0	-0	-0	-0	-0	-0	-0	-0	1975
1976	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976
1977	-0	168.0	-0	31.0	-0	-0	-0	-0	-0	-0	-0	-0	1977
1978	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1978
1979	-0	64.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1979
1980	-0	-0	8.0	23.0	66.0	-0	-0	-0	-0	-0	-0	-0	1980



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERVADO.  
DEFICIENCIAS MENSUALES EN ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 109 M TABLA 10. HM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	69.0	32.0	39.0	33.0	20.0	8.0	.0	.0	59.0	.0	33.0	1934
1935	97.0	.0	.0	13.0	26.0	10.0	18.0	25.0	53.0	28.0	36.0	46.0	1935
1936	101.0	.0	70.0	17.0	21.0	18.0	17.0	37.0	.0	88.0	80.0	33.0	1936
1937	.0	13.0	81.0	2.0	43.0	20.0	25.0	38.0	40.0	.0	112.0	.0	1937
1938	45.0	.0	.0	.0	3.0	6.0	11.0	17.0	40.0	68.0	43.0	121.0	1938
1939	53.0	.0	.0	16.0	3.0	17.0	22.0	22.0	16.0	22.0	87.0	61.0	1939
1940	69.0	.0	.0	.0	29.0	9.0	.0	27.0	47.0	22.0	64.0	65.0	1940
1941	35.0	.0	.0	.0	.0	17.0	2.0	22.0	52.0	33.0	37.0	103.0	1941
1942	.0	.0	10.0	9.0	8.0	3.0	17.0	26.0	51.0	28.0	.0	126.0	1942
1943	.0	84.0	35.0	.0	8.0	11.0	12.0	24.0	41.0	25.0	29.0	48.0	1943
1944	35.0	95.0	.0	42.0	20.0	23.0	24.0	22.0	59.0	.0	71.0	127.0	1944
1945	110.0	29.0	.0	30.0	16.0	20.0	14.0	28.0	47.0	.0	93.0	115.0	1945
1946	21.0	.0	.0	.0	.0	2.0	2.0	12.0	30.0	15.0	.0	109.0	1946
1947	44.0	.0	64.0	.0	44.0	17.0	22.0	33.0	.0	11.0	69.0	.0	1947
1948	11.0	46.0	.0	42.0	46.0	22.0	22.0	38.0	.0	1.0	72.0	.0	1948
1949	120.0	.0	.0	17.0	39.0	21.0	.0	35.0	55.0	27.0	38.0	60.0	1949
1950	137.0	.0	.0	17.0	40.0	.0	22.0	34.0	56.0	49.0	.0	59.0	1950
1951	34.0	79.0	32.0	.0	36.0	18.0	22.0	34.0	56.0	20.0	58.0	44.0	1951
1952	.0	26.0	64.0	.0	26.0	18.0	22.0	.0	31.0	5.0	68.0	121.0	1952
1953	1.0	.0	76.0	35.0	5.0	.0	16.0	29.0	51.0	41.0	97.0	109.0	1953
1954	.0	83.0	.0	17.0	40.0	11.0	22.0	36.0	45.0	41.0	95.0	.0	1954
1955	111.0	.0	57.0	32.0	35.0	23.0	25.0	31.0	.0	41.0	100.0	.0	1955
1956	80.0	.0	42.0	.0	46.0	10.0	23.0	16.0	43.0	.0	.0	16.0	1956
1957	.0	37.0	16.0	28.0	27.0	6.0	23.0	30.0	44.0	34.0	66.0	.0	1957
1958	79.0	55.0	21.0	.0	28.0	21.0	22.0	33.0	54.0	69.0	.0	30.0	1958
1959	54.0	64.0	.0	.0	28.0	21.0	22.0	10.0	33.0	19.0	.0	99.0	1959
1960	76.0	19.0	.0	8.0	.0	1.0	.0	.0	19.0	1.0	60.0	.0	1960
1961	67.0	32.0	3.0	25.0	43.0	16.0	.0	33.0	49.0	6.0	121.0	63.0	1961
1962	.0	105.0	45.0	47.0	44.0	26.0	21.0	38.0	.0	13.0	24.0	130.0	1962
1963	20.0	15.0	18.0	.0	26.0	21.0	7.0	34.0	18.0	61.0	20.0	101.0	1963
1964	.0	96.0	.0	40.0	39.0	23.0	23.0	32.0	22.0	45.0	86.0	.0	1964
1965	144.0	.0	.0	54.0	45.0	.0	7.0	29.0	50.0	12.0	12.0	72.0	1965
1966	33.0	91.0	34.0	23.0	36.0	21.0	22.0	36.0	.0	.0	87.0	61.0	1966
1967	.0	38.0	79.0	.0	28.0	17.0	18.0	22.0	25.0	81.0	.0	132.0	1967
1968	.0	62.0	55.0	40.0	42.0	.0	4.0	.0	29.0	61.0	71.0	130.0	1968
1969	.0	60.0	63.0	28.0	10.0	21.0	17.0	38.0	.0	74.0	26.0	57.0	1969
1970	41.0	.0	.0	18.0	3.0	3.0	9.0	16.0	33.0	62.0	74.0	81.0	1970
1971	33.0	.0	.0	.0	39.0	23.0	23.0	11.0	55.0	51.0	39.0	.0	1971
1972	17.0	108.0	42.0	1.0	42.0	13.0	17.0	37.0	.0	31.0	39.0	95.0	1972
1973	69.0	71.0	.0	.0	9.0	.0	1.0	11.0	32.0	39.0	93.0	53.0	1973
1974	.0	.0	12.0	2.0	.0	6.0	10.0	22.0	20.0	57.0	81.0	110.0	1974
1975	17.0	111.0	.0	.0	.0	14.0	18.0	13.0	11.0	90.0	66.0	.0	1975
1976	83.0	.0	.0	17.0	9.0	17.0	24.0	12.0	45.0	72.0	66.0	120.0	1976
1977	.0	.0	.0	.0	1.0	7.0	11.0	13.0	20.0	23.0	53.0	.0	1977
1978	13.0	76.0	42.0	42.0	44.0	21.0	25.0	28.0	.0	26.0	44.0	26.0	1978
1979	122.0	.0	36.0	42.0	37.0	23.0	21.0	30.0	17.0	64.0	92.0	.0	1979
1980	.0	36.0	.0	.0	.0	2.0	4.0	12.0	23.0	53.0	.0	74.0	1980

1981	58.0	.0	.0	1.0	.0	2.0	4.0	6.0	23.0	62.0	.0	120.0	1981
1982	3.0	.0	17.0	.0	18.0	12.0	14.0	28.0	.0	30.0	3.0	.0	1982
1983	.0	28.0	.0	6.0	13.0	15.0	.0	24.0	15.0	41.0	31.0	110.0	1983
1984	.0	.0	.0	1.0	11.0	10.0	15.0	25.0	.0	.0	11.0	69.0	1984
1985	.0	9.0	15.0	.0	7.0	6.0	.0	7.0	12.0	.0	1.0	20.0	1985
1986	69.0	.0	37.0	.0	20.0	.0	2.0	22.0	6.0	39.0	4.0	47.0	1986
1987	.0	56.0	.0	10.0	.0	11.0	9.0	17.0	45.0	32.0	72.0	101.0	1987
1988	43.0	.0	6.0	55.0	46.0	26.0	.0	33.0	51.0	66.0	.0	67.0	1988
1989	49.0	.0	60.0	.0	2.0	5.0	5.0	16.0	14.0	27.0	19.0	22.0	1989
1990	31.0	.0	.0	3.0	10.0	9.0	8.0	26.0	27.0	.0	24.0	51.0	1990
TOTALES	2142.0	1991.0	1282.0	850.0	1250.0	734.0	766.0	1344.0	1554.0	2029.0	2663.0	3477.0	TOTALES
NUM CASOS	37	34	31	35	48	51	50	53	44	48	46	44	NUM CASOS
D. MEDIOS	37.6	34.9	22.5	14.9	21.9	12.9	13.4	23.6	27.3	35.0	46.7	61.0	D. MEDIOS
D. REALES	57.9	56.6	41.4	24.3	26.0	14.4	15.3	25.4	35.3	42.3	57.9	79.0	D. REALES
FREC. X	66.1	59.6	54.4	61.4	84.2	89.5	87.7	93.0	77.2	84.2	80.7	77.2	FREC. X

SUMATORIA DEF=FREC = 352.99 MM

SUMATORIA (EXC=FREC - DEF=FREC) = -332.14 MM

# EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAN	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	7.0	12.6	16.4	12.3	9.1	6.4	.8	.1	1.1	1.8	1.4	1.6	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN ANIATUYA (1934-1990) LAT. 28-27 S. LONG. 62-50 W. ALT. 108 M TABLA 105 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 O MENOR	6	9	4	11	22	27	29	32	22	17	14	17	210
ENTRE 40.1 Y 54.9	4	7	8	3	6	4	4	6	7	4	14	4	71
ENTRE 55.0 Y 69.9	8	6	8	4	5	8	7	10	7	12	3	12	90
ENTRE 70.0 Y 84.9	11	8	5	8	8	6	6	5	7	8	9	8	69
ENTRE 85.0 Y 100.0	27	27	32	31	16	12	11	4	14	16	17	16	223
70 O MENOR	18	22	20	18	33	39	40	48	37	33	31	33	372

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 O MENOR	10.7	15.8	7.0	19.3	38.6	47.4	50.9	56.1	38.6	29.8	24.6	29.8	
ENTRE 40.1 Y 54.9	7.1	12.3	14.0	5.3	10.5	7.0	7.0	10.5	12.3	7.0	24.6	7.0	
ENTRE 55.0 Y 69.9	14.3	10.5	14.0	7.0	8.8	14.0	12.3	17.5	12.3	21.1	5.3	21.1	
ENTRE 70.0 Y 84.9	19.6	14.0	8.8	14.0	14.0	10.5	10.5	8.8	12.3	14.0	15.8	14.0	
ENTRE 85.0 Y 100.0	48.2	47.4	56.1	54.4	28.1	21.1	19.3	7.0	24.6	28.1	29.8	28.1	
70 O MENOR	32.1	38.6	35.1	31.6	57.9	68.4	70.2	84.2	64.9	57.9	54.4	57.9	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 108 M TABLA 103 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	18	21	20	17	33	39	40	48	37	33	31	32
SOLO UN MES	9	9	9	1	2	2	0	5	3	6	5	13
DOS O MAS MESES	7	4	8	8	15	28	32	37	30	22	17	17
SOLO DOS MESES	2	2	3	1	2	2	0	0	3	1	4	6
TRES O MAS MESES	5	2	0	0	6	12	23	29	24	18	12	8
SOLO TRES MESES	1	0	0	1	0	2	2	4	2	3	1	1
CUATRO O MAS MESES	2	0	0	0	5	9	20	16	15	9	7	2
SOLO CUATRO MESES	2	0	0	1	0	1	4	3	2	0	1	0
CINCO O MAS MESES	0	0	0	3	4	6	11	9	9	5	2	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	38	35	36	39	24	16	17	9	20	24	25	24
SOLO UN MES	11	6	3	30	2	2	6	2	10	9	10	7
DOS O MAS MESES	13	21	23	27	21	13	10	6	2	5	9	10
SOLO DOS MESES	3	4	4	5	1	1	2	1	1	1	3	3
TRES O MAS MESES	6	7	15	17	19	12	7	5	1	1	4	4
SOLO TRES MESES	2	2	1	1	3	0	0	1	0	0	2	0
CUATRO O MAS MESES	3	5	13	14	11	7	6	1	1	1	2	3
SOLO CUATRO MESES	0	0	0	1	0	1	0	0	0	0	0	1
CINCO O MAS MESES	3	4	11	9	6	4	1	1	1	1	1	2

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	1	2	0	0	0	0	0	0	0	0	0	0
SOLO UN MES	1	2	0	0	0	0	0	0	0	0	0	0
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 108 M TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	94.5	92.8	92.6	48.7	21.2	10.3	7.9	9.6	16.1	61.6	78.1	77.4	610.8
1963	45.6	55.6	50.0	34.3	24.7	12.6	11.7	17.9	24.2	35.6	58.0	53.4	
1935	93.0	92.9	94.9	48.4	20.8	10.1	7.3	8.3	14.7	62.6	70.2	78.0	601.3
1964	46.4	55.5	50.6	34.7	24.9	12.7	11.6	16.7	21.3	34.7	45.1	53.4	
1936	92.2	87.0	92.0	48.4	20.9	11.5	7.8	8.1	14.7	63.2	71.0	77.1	594.1
1965	47.4	42.1	51.0	34.6	24.9	15.0	11.6	16.8	21.2	34.8	45.6	52.9	
1937	94.5	85.7	93.3	48.2	20.4	11.4	7.7	8.1	16.7	64.5	70.7	76.1	597.4
1966	47.8	42.8	50.1	34.7	25.0	15.1	11.6	16.8	22.6	33.2	45.8	52.1	
1938	94.8	84.9	93.4	46.5	20.8	11.5	7.9	8.6	17.2	64.4	71.1	77.1	598.2
1967	47.4	42.2	50.0	35.3	24.8	15.1	11.6	16.8	22.8	33.3	45.3	51.0	
1939	93.9	81.4	89.5	44.6	20.3	12.7	8.5	10.8	17.4	64.4	70.0	76.8	590.5
1968	47.1	38.4	48.2	35.1	24.9	16.1	11.7	20.7	22.8	33.3	45.5	51.3	
1940	90.6	81.4	86.7	44.4	20.3	12.7	8.8	10.4	16.3	61.4	72.4	77.0	582.3
1969	48.8	38.4	48.2	35.1	24.9	16.1	11.6	20.8	22.3	33.9	45.1	51.4	
1941	91.6	78.9	89.0	42.5	21.3	12.9	8.1	10.6	16.6	59.8	72.0	76.5	579.7
1970	49.3	40.5	51.1	35.1	25.2	16.1	10.7	20.8	22.2	34.6	45.3	51.3	
1942	91.7	78.9	87.0	42.6	19.5	12.7	7.3	11.1	16.6	59.2	71.2	75.3	573.2
1971	49.3	40.5	51.4	35.3	24.7	16.2	10.4	21.0	22.2	34.8	45.3	52.1	
1943	90.0	72.8	86.6	43.2	18.6	12.5	7.6	11.0	20.3	58.5	67.6	76.4	565.0
1972	50.6	33.5	51.5	35.4	24.7	16.2	10.3	21.0	27.9	34.9	45.1	51.6	
1944	93.9	73.3	92.4	41.6	17.9	15.3	7.7	10.9	20.1	57.7	65.1	76.2	572.1
1973	50.9	33.3	59.3	32.0	25.0	21.0	10.3	21.1	28.0	35.1	45.7	51.4	
1945	92.7	86.4	90.2	43.0	19.3	15.4	7.8	10.5	21.1	54.7	65.0	76.9	583.0
1974	50.3	73.5	59.4	31.8	26.6	20.9	10.2	21.1	27.8	34.0	45.7	50.9	
1946	91.1	83.6	90.8	45.3	18.7	15.8	7.6	11.2	22.5	51.6	68.1	78.3	584.5
1975	52.2	74.3	60.4	31.1	26.6	20.7	10.3	21.3	28.2	34.4	45.7	50.7	
1947	91.2	85.0	92.8	42.1	17.5	15.4	6.9	11.7	22.4	49.7	65.5	78.7	579.0
1976	52.3	73.2	62.5	28.6	25.0	20.9	10.2	21.3	28.2	34.8	44.1	50.4	
1948	94.5	84.6	94.6	45.4	18.3	15.1	6.8	12.1	21.3	49.0	65.6	84.1	601.5
1977	57.4	87.8	61.9	30.1	24.9	21.1	10.2	21.3	27.2	34.4	44.0	51.0	
1949	94.4	93.5	5.1	45.5	18.4	15.2	6.7	12.1	24.0	50.0	66.3	86.0	607.2
1978	57.2	88.1	61.6	30.1	24.8	21.1	10.3	21.3	29.8	34.2	44.0	51.9	

1950	94.2	101.2	91.5	45.3	18.4	15.0	5.8.	12.3	22.3	47.8	65.0	89.5	608.3
1979	57.6	95.6	63.3	30.2	24.8	21.2	9.3	21.2	27.0	33.5	44.4	55.4	
1951	100.4	100.8	96.4	46.7	21.9	13.9	6.1	12.6	22.9	48.4	66.5	88.6	625.2
1980	59.7	95.7	64.8	31.1	30.1	20.8	9.3	21.1	26.8	32.9	47.4	55.9	
1952	99.3	106.0	98.1	45.9	24.4	13.8	6.5	13.0	23.2	47.4	68.7	85.5	631.8
1981	59.3	97.6	65.0	30.5	31.6	20.9	9.3	21.0	26.6	33.5	48.9	56.5	
1953	101.5	108.7	99.1	45.9	24.2	13.8	6.6	11.7	27.2	45.1	71.0	89.7	644.5
1982	60.7	98.9	64.4	30.5	31.7	20.8	9.2	20.5	34.5	34.2	49.7	57.9	
1954	102.2	108.6	101.9	46.8	23.7	12.0	7.4	12.0	28.6	43.7	73.3	89.6	649.7
1983	61.5	98.9	63.1	30.3	31.5	19.0	9.8	20.3	34.2	33.3	48.9	57.9	
1955	107.0	114.1	102.9	47.0	23.8	11.7	7.4	12.1	30.6	45.4	75.8	89.9	667.7
1984	61.3	100.3	63.9	30.3	31.4	19.0	9.8	20.3	35.0	34.7	48.5	57.8	
1956	112.9	112.8	104.0	48.5	24.5	12.2	9.6	12.2	31.7	50.2	79.2	92.6	690.4
1985	64.8	100.1	63.2	30.5	31.4	18.9	14.3	20.3	34.5	44.3	48.2	55.9	
1957	112.3	115.6	103.8	49.6	24.9	12.6	10.3	11.7	32.9	46.4	78.0	92.9	691.0
1986	65.1	100.0	63.4	31.6	31.1	19.2	14.4	20.2	34.6	39.4	46.6	56.0	
1958	117.3	113.6	106.0	49.9	26.4	12.0	10.6	11.8	32.4	46.3	77.6	87.8	691.6
1987	75.7	101.6	64.0	31.5	31.7	19.3	14.2	20.2	34.9	39.4	46.9	51.1	
1959	119.7	112.8	106.5	47.4	26.0	11.9	11.6	11.9	32.5	46.5	73.3	86.9	687.0
1988	74.8	102.0	63.9	31.8	32.0	19.3	14.5	20.2	34.8	39.3	45.3	50.7	
1960	120.2	111.7	99.8	52.1	23.2	11.5	11.5	12.1	33.8	46.1	71.7	90.5	684.2
1989	74.7	102.6	58.4	37.3	28.1	19.2	14.5	20.1	34.3	39.1	43.3	50.4	
1961	121.8	115.9	103.9	50.9	23.7	11.4	10.4	9.3	34.2	47.8	72.8	86.3	688.3
1990	74.5	105.3	59.0	37.2	27.8	19.2	13.2	14.7	34.1	42.3	42.9	43.9	

ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN ANIATUYA (1934-1990) LAT. 28.27 S. LONG. 62.50 W. ALT. 108 M TABLA 100 MM

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 57 AÑOS.

[illegible]

K L C O L O R A D O

\*\*\* SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).-

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 13

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTADO.  
LLUVIAS MEDIAS MENSUALES EN EL COLORADO (1972-90). LAT. 27.56 S. LONG. 62.10 W. ALT. S/D.TABLA 300 MM

EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1972	118.0	12.0	154.0	80.0	-0	50.0	-0	-0	43.0	131.0	87.0	(216.0)	891.0
1973	250.0	44.0	(461.0)	161.0	-0	115.0	2.0	-0	-0	30.0	46.0	183.0	1292.0
1974	91.0	(294.0)	103.0	55.0	63.0	-0	-0	10.0	27.0	37.0	32.0	48.0	760.0
1975	20.0	117.0	(206.0)	111.0	22.0	-0	-0	54.0	33.0	32.0	101.0	79.0	775.0
1976	174.0	92.0	(582.0)	12.0	-0	-0	-0	-0	14.0	-0	53.0	14.0	746.0
1977	107.0	(220.0)	105.0	109.0	13.0	-0	9.0	22.0	56.0	87.0	51.0	94.0	673.0
1978	82.0	24.0	30.0	31.0	9.0	43.0	-0	8.0	66.0	61.0	(230.0)	68.0	652.0
1979	42.0	(215.0)	3.0	48.0	-0	28.0	-0	-0	82.0	43.0	90.0	134.0	737.0
1980	130.0	61.0	(373.0)	235.0	41.0	-0	-0	12.0	27.0	6.0	99.0	140.0	1119.0
1981	240.0	204.0	(241.0)	137.0	77.0	10.0	-0	15.0	-0	18.0	133.0	(253.0)	803.0
1982	146.0	62.0	61.0	55.0	10.0	7.0	15.0	6.0	50.0	112.0	95.0	126.0	826.0
1983	(204.0)	54.0	32.0	33.0	155.0	-0	-0	-0	-0	79.0	-0	84.0	638.0
1984	(136.0)	113.0	117.0	-0	-0	19.0	3.0	-0	87.0	100.0	71.0	45.0	859.0
1985	(187.0)	137.0	71.0	85.0	15.0	-0	51.0	10.0	87.0	120.0	40.0	77.0	960.0
1986	83.0	73.0	186.0	(217.0)	34.0	41.0	39.0	8.0	62.0	43.0	92.0	139.0	836.0
1987	(421.0)	-0	75.0	17.0	15.0	-0	13.0	7.0	14.0	-0	68.0	114.0	612.0
1988	(242.0)	21.0	115.0	5.0	-0	-0	-0	10.0	9.0	28.0	104.0	137.0	834.0
1989	83.0	45.0	(192.0)	170.0	6.0	-0	7.0	-0	30.0	58.0	175.0	99.0	1009.0
1990	(227.0)	130.0	155.0	80.0	9.0	-0	12.0	-0	16.0	106.0	-0	-0	-0
PROM.	157.1	100.9	161.2	86.4	24.8	16.5	7.9	8.5	37.0	59.8	89.2	114.1	863.3
MAX.	421.0	294.0	461.0	235.0	155.0	115.0	51.0	54.0	87.0	131.0	230.0	253.0	1292.0
MIN.	20.0	-0	3.0	-0	-0	-0	-0	-0	-0	-0	-0	14.0	612.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 14  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN EL COLORADO (1972-90). LAT. 27.56 S. LONG. 62.10 W. ALT. 5/D.TABLA 300 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1972	*****	46.4	100.0	100.0	44.8	100.0	48.1	42.1	81.0	100.0	84.5	100.0	1972
1973	100.0	86.2	100.0	100.0	93.6	100.0	96.3	86.8	74.6	75.3	67.4	100.0	1973
1974	73.7	100.0	98.2	97.1	100.0	83.7	77.8	78.9	77.8	76.6	56.1	51.9	1974
1975	29.8	87.0	100.0	100.0	76.6	50.0	48.1	100.0	76.2	66.2	86.8	64.8	1975
1976	100.0	75.4	100.0	94.1	76.6	67.9	63.0	55.3	58.7	39.0	62.0	28.4	1976
1977	67.8	100.0	95.6	100.0	63.8	46.4	59.3	73.7	93.7	100.0	61.2	69.8	1977
1978	59.1	30.4	34.2	50.0	25.5	100.0	11.1	28.9	100.0	81.8	100.0	66.2	1978
1979	44.4	100.0	41.2	79.4	27.7	100.0	25.9	21.1	100.0	68.8	76.7	100.0	1979
1980	81.5	56.5	100.0	100.0	100.0	92.9	85.2	84.2	82.5	83.1	97.7	71.0	1980
1981	100.0	100.0	100.0	100.0	100.0	100.0	88.9	89.5	73.0	61.0	87.6	92.6	1981
1982	91.8	64.5	66.7	85.3	40.4	39.3	18.5	31.6	82.5	35.1	100.0	100.0	1982
1983	100.0	68.6	54.4	64.7	100.0	60.7	77.8	52.6	46.0	100.0	86.9	87.0	1983
1984	87.7	88.4	100.0	30.9	25.5	75.0	29.6	21.1	100.0	100.0	22.5	59.3	1984
1985	100.0	99.3	69.3	100.0	46.8	21.4	100.0	44.7	100.0	100.0	71.3	66.9	1985
1986	58.5	59.4	100.0	100.0	95.7	100.0	100.0	89.5	98.4	100.0	89.9	80.2	1986
1987	100.0	30.4	86.0	63.2	61.7	39.3	66.7	47.4	46.0	67.5	78.3	88.9	1987
1988	100.0	46.4	100.0	32.4	23.4	21.4	18.5	39.5	27.0	44.2	57.4	72.8	1988
1989	52.0	35.5	100.0	100.0	66.0	53.6	63.0	44.7	68.3	84.4	87.6	89.5	1989
1990	100.0	97.1	100.0	100.0	68.1	53.6	70.4	47.4	55.6	100.0	100.0	83.3	1990



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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA..  
\* PAGINA 15  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO-  
EXCESOS MENSUALES EN EL COLORADO (1972-90). LAT. 27.56 S. LONG. 62.10 W. ALT. S/D.TABLA 300 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1972	*****	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972
1973	-0	-0	250.0	93.0	-0	43.0	-0	-0	-0	-0	-0	-0	1973
1974	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1974
1975	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1975
1976	-0	-0	41.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976
1977	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1977
1978	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1978
1979	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1979
1980	-0	-0	18.0	167.0	-0	-0	-0	-0	-0	-0	-0	-0	1980
1981	-0	-0	89.0	69.0	30.0	-0	-0	-0	-0	-0	-0	-0	1981
1982	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1982
1983	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1983
1984	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1984
1985	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1985
1986	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1986
1987	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1987
1988	112.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1988
1989	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1989
1990	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1990
TOTALES	112.0	-0	398.0	329.0	30.0	43.0	-0	-0	-0	-0	-0	-0	TOTALES
NUM CASOS	1	0	4	3	1	1	0	0	0	0	0	0	NUM CASOS
E. MEDIOS	5.9	-0	20.9	17.3	1.6	2.3	-0	-0	-0	-0	-0	-0	E. MEDIOS
E. REALES	112.0	-0	99.5	109.7	30.0	43.0	-0	-0	-0	-0	-0	-0	E. REALES
FREC. X	5.6	-0	21.1	15.8	5.3	5.3	-0	-0	-0	-0	-0	-0	FREC. X

SUMATORIA EXC\*FREC = 48.33 MM

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\* CONSEJO FEDERAL DE INVERSIONES-  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 16  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN EL COLORADO (1972-90). LAT. 27.56 S. LONG. 62.10 W. ALT. 5700 M. TABLA 300 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1972	*****	74.0	0.0	0.0	25.0	0.0	14.0	22.0	12.0	0.0	20.0	0.0	1972
1973	0.0	19.0	0.0	0.0	3.0	0.0	1.0	5.0	16.0	19.0	42.0	0.0	1973
1974	45.0	0.0	2.0	2.0	0.0	4.0	6.0	8.0	14.0	18.0	54.0	78.0	1974
1975	120.0	18.0	0.0	0.0	11.0	14.0	14.0	0.0	15.0	25.0	17.0	57.0	1975
1976	0.0	34.0	0.0	4.0	11.0	9.0	10.0	17.0	26.0	47.0	49.0	116.0	1976
1977	55.0	0.0	5.0	0.0	17.0	15.0	11.0	10.0	4.0	0.0	50.0	49.0	1977
1978	70.0	96.0	75.0	34.0	35.0	0.0	24.0	27.0	0.0	14.0	30.0	58.0	1978
1979	95.0	0.0	67.0	14.0	34.0	0.0	20.0	30.0	0.0	24.0	0.0	0.0	1979
1980	30.0	60.0	0.0	0.0	0.0	2.0	4.0	6.0	11.0	13.0	3.0	47.0	1980
1981	0.0	0.0	0.0	0.0	0.0	0.0	3.0	4.0	17.0	30.0	16.0	12.0	1981
1982	14.0	49.0	38.0	10.0	28.0	17.0	22.0	26.0	11.0	50.0	0.0	0.0	1982
1983	0.0	43.0	52.0	24.0	0.0	11.0	6.0	18.0	34.0	0.0	17.0	21.0	1983
1984	21.0	16.0	0.0	47.0	35.0	7.0	19.0	30.0	0.0	0.0	100.0	66.0	1984
1985	0.0	1.0	35.0	0.0	25.0	22.0	0.0	21.0	0.0	0.0	37.0	86.0	1985
1986	71.0	56.0	0.0	0.0	2.0	0.0	0.0	4.0	1.0	0.0	13.0	32.0	1986
1987	0.0	27.0	16.0	25.0	30.0	17.0	9.0	20.0	34.0	25.0	28.0	18.0	1987
1988	0.0	74.0	46.0	0.0	36.0	22.0	22.0	23.0	46.0	43.0	55.0	44.0	1988
1989	82.0	89.0	0.0	0.0	16.0	13.0	10.0	21.0	20.0	12.0	16.0	17.0	1989
1990	0.0	4.0	0.0	0.0	15.0	13.0	8.0	20.0	23.0	0.0	0.0	27.0	1990
TOTALES	603.0	660.0	290.0	206.0	311.0	166.0	203.0	312.0	289.0	321.0	547.0	728.0	TOTALES
NUM CASOS	10	15	3	9	15	13	17	18	15	12	16	15	NUM CASOS
D. MEDIOS	31.7	34.7	15.3	10.8	16.4	8.7	10.7	16.4	15.2	16.9	28.8	38.3	D. MEDIOS
D. REALES	40.3	44.0	36.2	22.9	20.7	12.6	11.9	17.3	19.3	25.7	34.2	48.5	D. REALES
FREC. X	55.6	78.9	42.1	47.4	78.9	63.4	89.5	94.7	78.9	63.2	84.2	78.9	FREC. X

SUMATORIA DEF\*FREC = 243.76 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -197.44 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	5.5	24.6	38.6	48.6	37.1	9.7	5.9	0.0	0.0	0.0	0.0	5.8	E.P.E.

PRESTIE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN EL COLORADO (1972-90). LAT. 27.56 S. LONG. 62.10 W. ALT. S/D.TABLA 300 NM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	1	2	1	2	4	4	5	5	1	2	1	1	29
ENTRE 40.1 Y 54.9	2	2	2	1	3	4	2	6	2	1	0	2	27
ENTRE 55.0 Y 69.9	3	4	2	2	4	2	4	1	3	4	5	4	38
ENTRE 70.0 Y 84.9	2	2	0	1	2	1	3	3	7	5	4	4	34
ENTRE 85.0 Y 100.0	10	9	14	13	6	8	5	4	6	7	9	8	99
70 0 MENOR	6	8	5	5	11	10	11	12	6	7	6	7	94

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	5.6	10.5	5.3	10.5	21.1	21.1	26.3	26.3	5.3	10.5	5.3	5.3	
ENTRE 40.1 Y 54.9	11.1	10.5	10.5	5.3	15.8	21.1	10.5	31.6	10.5	5.3	0	10.5	
ENTRE 55.0 Y 69.9	16.7	21.1	10.5	10.5	21.1	10.5	21.1	5.3	15.8	21.1	26.3	21.1	
ENTRE 70.0 Y 84.9	11.1	10.5	0	5.3	10.5	5.3	15.8	15.3	36.8	26.3	21.1	21.1	
ENTRE 85.0 Y 100.0	55.6	47.4	73.7	68.4	31.6	42.1	26.3	21.1	31.6	36.8	47.4	42.1	
70 0 MENOR	33.3	42.1	26.3	26.3	57.9	52.6	57.9	63.2	31.6	36.8	31.6	36.8	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

EL COLORADO (1972-90). LAT. 27.56 S. LONG. 62.10 W. ALT. S/D. TABLA 300 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(=)	FEB(=)	MAR(=)	ABR(=)	MAY	JUN	JUL	AGO	SET	OCT	NOV(=)	DIC(=)
UNO O MAS MESES	6	7	5	5	11	13	11	12	6	7	6	7
SOLO UN MES	0	0	2	0	2	1	0	1	0	4	1	1
DOS O MAS MESES	5	3	3	2	4	7	7	9	6	5	2	4
SOLO DOS MESES	1	1	1	0	1	2	1	4	2	0	0	1
TRES O MAS MESES	3	2	1	1	1	2	5	5	4	3	2	1
SOLO TRES MESES	1	1	0	1	0	0	1	0	0	0	0	0
CUATRO O MAS MESES	1	1	1	1	0	2	4	4	3	2	1	1
SOLO CUATRO MESES	0	0	0	0	0	2	1	0	0	0	0	0
CINCO O MAS MESES	1	1	1	0	0	2	3	3	2	1	1	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	12	11	13	13	8	7	8	7	13	12	12	11
SOLO UN MES	0	0	1	3	1	4	3	0	2	0	1	1
DOS O MAS MESES	10	8	9	10	7	1	5	5	5	9	7	9
SOLO DOS MESES	0	1	0	1	0	0	0	0	1	1	0	0
TRES O MAS MESES	9	6	7	7	7	1	5	5	5	5	5	5
SOLO TRES MESES	4	0	0	1	0	0	0	0	0	1	2	0
CUATRO O MAS MESES	5	6	5	5	5	5	5	5	4	2	3	5
SOLO CUATRO MESES	0	0	0	1	0	0	0	0	0	0	0	0
CINCO O MAS MESES	5	4	4	3	5	5	5	4	2	2	3	5

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	1	0	2	2	0	0	0	0	0	0	0	0
SOLO UN MES	1	0	1	1	0	0	0	0	0	0	0	0
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(=) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA NUESTRA TIENE UN INDIVIDUO MENOS.

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROCENTAJES MENORES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 19 A=05.

[illegible]

H U Y A M A M P A

ESTACIONES DE TUSCOES EN HUAYAMAMPA (1934-1977). LAT. 27.23 S. LONG. 04.18 W. ALT. 198 M TABLA 300 MM

... SÉRIE DE LOS PROMEDIOS.

	JUN	JUL	AUG	SET	OCT	NOV	DIC
ETP POTENCIAL	23.00	25.00	38.00	60.00	100.00	131.00	161.00
LUVIAS	6.73	2.86	1.50	8.55	29.66	57.14	78.98
ETP REAL	7.39	5.36	6.09	14.14	35.20	61.64	74.20
EXCEDENTES	.00	.00	.00	.00	.00	.00	.64
DEFICIT	15.61	19.64	31.91	45.86	64.80	69.36	86.80
ETP REAL / ETP POT.	32.11	21.45	16.03	23.56	35.20	47.05	46.09
EXCURSIONES	.05	.03	.01	.01	.00	.00	.32
RECORRIDOS	.10	.03	.01	.01	.00	.00	.32

\*\*\*  
SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	69.41	67.22	59.67	30.25	20.00	13.15	7.23	5.12	13.57	27.56	39.41	76.73
ETP REAL	50.83	40.00	31.01	23.30	15.75	7.78	6.76	7.54	14.29	23.88	35.77	45.30
EXCEDENTES	14.64	.00	1.21	.00	.00	.00	.00	.00	.00	.00	.00	4.22
DEFICIT	50.83	40.00	31.01	23.30	15.75	7.78	6.76	7.54	14.29	23.88	35.77	45.30
ETP REAL / ETP POT.	30.62	30.31	28.19	32.37	35.00	33.82	27.02	19.84	23.81	23.88	27.30	28.14
DESCUENTOS	8.39	4.15	2.15	1.07	.54	.27	.13	.07	.03	.02	.01	2.11

... SECTE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

[illegible]



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN HUAYAMPA (1934-1977).LAT. 27.23 S. LONG. 64.18 W. ALT. 198 M TABLA 300 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	30.0	100.0	30.0	25.0	25.0	2.0	.0	14.0	9.0	26.0	57.0	(122.0)	442.0
1935	44.0	149.0	(173.0)	2.0	.0	57.0	.0	1.0	8.0	.0	.0	76.0	510.0
1936	(179.0)	48.0	58.0	17.0	1.0	22.0	.0	.0	.0	16.0	26.0	31.0	396.0
1937	19.0	37.0	(102.0)	58.0	6.0	.0	.0	.0	.0	.0	.0	72.0	294.0
1938	(119.0)	62.0	106.0	1.0	49.0	.0	1.0	3.0	.0	12.0	22.0	27.0	402.0
1939	(118.0)	94.0	61.0	16.0	.0	3.0	.0	.0	38.0	42.0	61.0	109.0	542.0
1940	( 90.0)	53.0	30.0	30.0	73.0	16.0	7.0	4.0	.0	22.0	60.0	70.0	490.0
1941	57.0	(156.0)	54.0	30.0	24.0	.0	16.0	.0	5.0	50.0	103.0	45.0	540.0
1942	27.0	(221.0)	133.0	62.0	22.0	10.0	.0	.0	17.0	22.0	72.0	30.0	616.0
1943	17.0	70.0	126.0	45.0	27.0	5.0	15.0	.0	27.0	45.0	(137.0)	69.0	586.0
1944	(120.0)	110.0	36.0	.0	.0	5.0	.0	.0	.0	62.0	82.0	.0	415.0
1945	61.0	64.0	( 99.0)	12.0	.0	.0	.0	.0	.0	51.0	22.0	59.0	368.0
1946	(134.0)	34.0	78.0	5.0	35.0	.0	.0	.0	.0	7.0	95.0	31.0	419.0
1947	25.0	( 95.0)	40.0	30.0	34.0	.0	.0	.0	13.0	29.0	23.0	50.0	373.0
1948	44.0	(130.0)	44.0	.0	8.0	.0	.0	.0	16.0	14.0	37.0	30.0	325.0
1949	57.0	53.0	(289.0)	17.0	4.0	5.0	.0	.0	25.0	74.0	102.0	13.0	644.0
1950	58.0	20.0	26.0	8.0	32.0	.0	.0	.0	.0	40.0	15.0	(137.0)	336.0
1951	63.0	49.0	28.0	19.0	.0	.0	.0	.0	.0	50.0	( 70.0)	.0	279.0
1952	.0	.0	53.0	.0	10.0	.0	.0	5.0	3.0	18.0	(115.0)	37.0	241.0
1953	(221.0)	53.0	137.0	11.0	.0	19.0	.0	.0	.0	26.0	79.0	86.0	632.0
1954	87.0	42.0	(148.0)	27.0	.0	.0	.0	.0	.0	16.0	16.0	65.0	401.0
1955	36.0	(124.0)	60.0	12.0	.0	.0	.0	.0	.0	62.0	36.0	.0	330.0
1956	68.0	150.0	68.0	73.0	22.0	.0	.0	.0	.0	133.0	(154.0)	77.0	770.0
1957	90.0	27.0	264.0	12.0	.0	5.0	.0	.0	10.0	.0	24.0	(460.0)	832.0
1958	(262.0)	105.0	45.0	135.0	.0	.0	25.0	.0	.0	22.0	45.0	223.0	862.0
1959	75.0	(186.0)	45.0	5.0	15.0	5.0	32.0	.0	.0	60.0	25.0	85.0	553.0
1960	45.0	80.0	17.0	55.0	46.0	3.0	.0	.0	5.0	39.0	54.0	(117.0)	461.0
1961	106.0	70.0	(135.0)	.0	.0	.0	.0	.0	.0	66.0	61.6	59.0	497.0
1962	62.0	(167.0)	15.0	23.0	.0	.0	.0	.0	.0	13.0	26.0	91.0	397.0
1963	123.0	(146.0)	40.0	45.0	.0	.0	15.0	.0	.0	5.0	74.0	95.0	549.0
1964	10.0	( 66.0)	63.0	.0	30.0	.0	.0	.0	.0	55.0	50.0	47.0	321.0
1965	(213.0)	37.0	99.0	3.0	.0	.0	.0	.0	.0	35.0	35.0	101.0	543.0
1966	129.0	(189.0)	65.0	12.0	.0	10.0	.0	.0	.0	10.0	103.0	44.0	552.0
1967	( 65.0)	15.0	28.0	.0	2.0	.0	.0	.0	30.0	.0	24.0	7.0	171.0
1968	(217.0)	136.0	23.0	8.0	.0	4.0	1.0	30.0	17.0	10.0	126.0	58.0	650.0
1969	102.0	72.0	72.0	20.0	74.0	4.0	.0	.0	15.0	3.0	130.0	(164.0)	656.0
1970	31.0	66.0	(172.0)	16.0	38.0	8.0	.0	.0	61.0	.0	53.0	110.0	555.0
1971	133.0	(143.0)	22.0	37.0	.0	.0	.0	.0	.0	64.0	7.0	11.0	419.0
1972	(254.0)	75.0	125.0	42.0	5.0	.0	.0	.0	30.0	2.0	95.0	142.0	770.0
1973	(180.0)	25.0	145.0	109.0	5.0	55.0	1.0	.0	.0	20.0	24.0	75.0	659.0
1974	97.0	(370.0)	151.0	43.0	.0	.0	.0	.0	.0	15.0	15.0	41.0	732.0
1975	72.0	(136.0)	46.0	75.0	9.0	3.0	.0	9.0	14.0	9.0	61.0	60.0	494.0
1976	(225.0)	111.0	165.0	.0	46.0	.0	.0	.0	.0	26.0	46.0	55.0	674.0
1977	159.0	115.0	93.0	71.0	4.0	.0	.0	.0	33.0	12.0	46.0	(189.0)	722.0

PROM.	96.4	96.7	86.4	27.5	14.7	6.7	2.9	1.5	8.5	29.7	57.1	79.0	509.1
MAX.	262.0	370.0	289.0	135.0	74.0	57.0	32.0	30.0	61.0	133.0	158.0	460.0	882.0
MIN.	.0	.0	15.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	171.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ET/P REAL EN HUAYAMAPA (1934-1977).LAT. 27-23 S. LONG. 64.18 W. ALT. 198 M TABLA 300 MM

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	*****	87.1	56.4	55.6	68.9	30.4	24.0	50.0	31.7	40.0	51.1	78.3	1934
1935	32.5	100.0	100.0	31.9	24.4	100.0	32.0	31.6	35.0	20.0	13.7	52.2	1935
1936	100.0	43.2	56.4	29.2	8.9	95.7	4.0	5.3	5.0	19.0	21.4	19.9	1936
1937	11.4	28.0	92.7	80.6	13.3	0	0	0	0	0	0	44.7	1937
1938	71.7	47.0	96.4	1.4	100.0	4.3	8.0	10.5	1.7	12.0	16.8	16.8	1938
1939	71.1	71.2	55.5	22.2	0	13.0	0	0	63.3	42.0	46.6	67.7	1939
1940	54.2	41.7	57.3	41.7	100.0	73.9	36.0	18.4	8.3	27.0	48.9	45.3	1940
1941	36.1	100.0	53.6	45.8	55.6	8.7	68.0	5.3	13.3	53.0	79.4	30.4	1941
1942	16.9	100.0	100.0	91.7	60.7	60.9	32.0	28.9	46.7	38.0	62.6	28.6	1942
1943	15.9	55.3	100.0	66.7	64.4	30.4	76.0	7.9	4.3	48.0	100.0	46.0	1943
1944	73.5	84.1	35.5	2.8	2.2	21.7	4.0	2.6	0	62.0	62.0	0	1944
1945	36.7	48.5	90.0	16.7	0	0	0	0	0	51.0	16.8	36.6	1945
1946	80.7	25.8	70.9	6.9	77.8	0	0	0	0	7.0	72.5	19.3	1946
1947	15.1	72.0	36.4	41.7	75.6	100.0	4.0	5.3	23.0	31.0	19.8	31.7	1947
1948	26.5	98.5	40.0	0	17.8	0	0	0	26.7	14.0	29.8	18.6	1948
1949	34.3	40.2	100.0	46.7	53.3	52.2	40.0	36.8	40.0	82.0	84.0	29.2	1949
1950	43.4	22.7	28.2	15.3	73.3	4.3	4.0	2.6	3.3	41.0	13.0	85.1	1950
1951	38.0	37.1	25.5	26.4	0	0	0	0	0	50.0	53.4	0	1951
1952	0	0	48.2	0	22.2	0	0	13.2	5.0	18.0	67.8	23.0	1952
1953	100.0	50.8	100.0	33.3	20.0	87.0	16.0	13.2	13.3	33.0	63.4	56.5	1953
1954	54.8	34.1	100.0	47.2	13.3	13.0	8.0	10.5	8.3	21.0	16.0	42.2	1954
1955	23.5	93.9	54.5	16.7	0	0	0	0	0	62.0	27.5	0	1955
1956	41.0	100.0	64.5	100.0	51.1	91.3	8.0	5.3	5.0	100.0	100.0	59.0	1956
1957	62.0	29.5	100.0	48.6	31.1	43.5	24.0	23.7	33.3	16.0	27.5	100.0	1957
1958	100.0	99.2	90.0	100.0	86.7	78.3	100.0	71.1	60.0	59.0	58.8	100.0	1958
1959	69.9	100.0	70.9	44.4	57.8	47.8	100.0	31.6	26.7	85.0	34.4	59.0	1959
1960	34.3	63.6	20.0	77.8	100.0	17.4	4.0	2.6	11.7	41.0	42.7	73.3	1960
1961	63.9	53.0	100.0	8.3	6.7	4.3	8.0	5.3	5.0	67.0	48.1	38.5	1961
1962	38.6	100.0	23.6	37.5	6.7	8.7	8.0	5.3	5.0	16.0	22.1	57.1	1962
1963	78.3	100.0	40.0	63.9	4.4	4.3	60.0	2.6	3.3	7.0	57.3	59.0	1963
1964	6.0	50.0	57.3	0	66.7	0	0	0	0	55.0	38.2	29.2	1964
1965	100.0	38.6	90.9	15.3	8.9	47.6	44.0	7.9	6.7	39.0	29.0	64.0	1965
1966	78.3	100.0	67.3	30.6	13.3	13.0	12.0	10.5	8.3	16.0	80.2	30.4	1966
1967	41.0	13.6	25.5	0	4.4	0	0	0	50.0	0	18.3	4.3	1967
1968	100.0	100.0	35.5	22.2	11.1	26.1	12.0	31.6	35.0	16.0	96.2	39.1	1968
1969	62.7	56.1	66.4	29.2	100.0	26.1	8.0	10.5	31.7	9.0	99.2	100.0	1969
1970	22.9	51.5	100.0	38.9	86.7	47.8	20.0	15.8	100.0	13.0	45.8	70.8	1970
1971	81.3	100.0	27.3	55.6	6.7	4.3	4.0	5.3	5.0	65.0	8.1	8.1	1971
1972	100.0	68.9	100.0	70.8	35.6	21.7	20.0	21.1	56.3	16.0	75.6	89.4	1972
1973	100.0	28.8	100.0	100.0	44.4	100.0	48.0	39.5	33.0	42.0	34.4	54.0	1973
1974	63.3	100.0	100.0	98.6	84.4	78.3	68.0	63.2	53.3	50.0	38.2	40.4	1974
1975	51.2	100.0	49.1	100.0	28.9	21.7	8.0	28.9	30.0	39.0	48.9	39.8	1975
1976	100.0	87.9	100.0	34.7	100.0	30.4	28.0	26.3	21.7	39.0	43.5	40.4	1976
1977	96.4	87.9	85.5	98.6	15.6	4.3	4.0	5.3	56.7	15.0	36.6	100.0	1977





PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN HUAYAMPA (1934-1977).LAT. 27-23 S. LONG. 64-16 W. ALT. 193 M TABLA 300 MM

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	*****	17.0	48.0	32.0	14.0	16.0	19.0	19.0	41.0	60.0	64.0	35.0	1934
1935	112.0	.0	.0	49.0	34.0	.0	17.0	26.0	39.0	30.0	113.0	77.0	1935
1936	.0	75.0	48.0	51.0	41.0	1.0	24.0	36.0	57.0	103.0	103.0	129.0	1936
1937	147.0	95.0	8.0	14.0	39.0	23.0	25.0	38.0	60.0	101.0	131.0	89.0	1937
1938	47.0	70.0	4.0	71.0	.0	22.0	23.0	34.0	59.0	88.0	109.0	134.0	1938
1939	48.0	38.0	49.0	56.0	45.0	20.0	25.0	35.0	22.0	53.0	70.0	52.0	1939
1940	74.0	77.0	47.0	42.0	.0	6.0	16.0	31.0	55.0	73.0	67.0	88.0	1940
1941	106.0	.0	51.0	39.0	20.0	21.0	8.0	36.0	52.0	48.0	27.0	112.0	1941
1942	137.0	.0	.0	6.0	15.0	17.0	17.0	27.0	32.0	62.0	49.0	115.0	1942
1943	138.0	59.0	.0	24.0	16.0	16.0	6.0	33.0	31.0	52.0	.0	87.0	1943
1944	44.0	21.0	71.0	70.0	44.0	18.0	24.0	37.0	60.0	38.0	49.0	161.0	1944
1945	105.0	68.0	11.0	60.0	45.0	23.0	25.0	38.0	60.0	49.0	109.0	102.0	1945
1946	32.0	98.0	32.0	67.0	10.0	23.0	25.0	36.0	60.0	93.0	36.0	130.0	1946
1947	141.0	37.0	70.0	42.0	11.0	.0	24.0	36.0	45.0	69.0	105.0	110.0	1947
1948	122.0	2.0	66.0	72.0	37.0	23.0	25.0	38.0	44.0	86.0	92.0	131.0	1948
1949	109.0	79.0	.0	24.0	21.0	11.0	15.0	24.0	24.0	18.0	21.0	114.0	1949
1950	94.0	102.0	79.0	61.0	12.0	22.0	24.0	37.0	53.0	59.0	114.0	24.0	1950
1951	103.0	83.0	82.0	53.0	45.0	23.0	25.0	36.0	60.0	50.0	61.0	161.0	1951
1952	166.0	132.0	57.0	72.0	35.0	23.0	25.0	33.0	57.0	82.0	16.0	124.0	1952
1953	.0	65.0	.0	48.0	36.0	3.0	21.0	33.0	52.0	67.0	48.0	70.0	1953
1954	75.0	87.0	.0	38.0	39.0	20.0	23.0	34.0	55.0	79.0	110.0	93.0	1954
1955	127.0	8.0	50.0	60.0	45.0	23.0	25.0	38.0	60.0	38.0	95.0	161.0	1955
1956	98.0	.0	39.0	.0	22.0	2.0	23.0	36.0	57.0	.0	.0	66.0	1956
1957	63.0	93.0	.0	37.0	31.0	13.0	19.0	29.0	40.0	84.0	95.0	.0	1957
1958	.0	1.0	11.0	.0	6.0	5.0	.0	11.0	24.0	41.0	54.0	.0	1958
1959	50.0	.0	32.0	40.0	19.0	12.0	.0	26.0	44.0	15.0	86.0	66.0	1959
1960	109.0	48.0	88.0	16.0	.0	19.0	24.0	37.0	53.0	59.0	75.0	43.0	1960
1961	60.0	62.0	.0	66.0	42.0	22.0	23.0	36.0	57.0	33.0	68.0	99.0	1961
1962	102.0	.0	84.0	45.0	42.0	21.0	23.0	36.0	57.0	84.0	102.0	69.0	1962
1963	36.0	.0	66.0	26.0	43.0	22.0	10.0	37.0	53.0	93.0	56.0	66.0	1963
1964	154.0	66.0	47.0	72.0	15.0	23.0	25.0	38.0	60.0	45.0	81.0	114.0	1964
1965	.0	81.0	10.0	61.0	41.0	12.0	14.0	35.0	56.0	62.0	93.0	58.0	1965
1966	36.0	.0	36.0	50.0	39.0	20.0	22.0	34.0	55.0	34.0	26.0	112.0	1966
1967	98.0	114.0	82.0	72.0	43.0	23.0	23.0	38.0	30.0	100.0	107.0	154.0	1967
1968	.0	.0	71.0	56.0	40.0	17.0	22.0	7.0	39.0	34.0	5.0	98.0	1968
1969	62.0	58.0	37.0	51.0	.0	17.0	23.0	34.0	41.0	91.0	1.0	.0	1969
1970	128.0	64.0	.0	44.0	6.0	12.0	20.0	32.0	.0	97.0	71.0	47.0	1970
1971	31.0	.0	80.0	32.0	42.0	22.0	24.0	36.0	57.0	35.0	120.0	148.0	1971
1972	.0	41.0	.0	21.0	29.0	18.0	20.0	30.0	25.0	84.0	32.0	17.0	1972
1973	.0	94.0	.0	.0	25.0	.0	13.0	23.0	39.0	53.0	86.0	74.0	1973
1974	61.0	.0	.0	1.0	7.0	5.0	8.0	14.0	28.0	50.0	61.0	96.0	1974
1975	81.0	.0	56.0	.0	32.0	18.0	23.0	27.0	42.0	86.0	67.0	97.0	1975
1976	.0	16.0	.0	47.0	.0	16.0	18.0	28.0	47.0	61.0	74.0	96.0	1976
1977	6.0	16.0	16.0	1.0	38.0	22.0	24.0	36.0	26.0	85.0	83.0	.0	1977
TOTALES	3106.0	1967.0	1528.0	1789.0	1166.0	687.0	866.0	1404.0	2018.0	2851.0	3052.0	3819.0	TOTALES
NUM CASOS	35	32	31	40	39	41	42	44	43	43	42	40	NUM CASOS

D. MEDIOS	70.6	44.7	34.7	40.7	26.5	15.6	19.6	31.9	45.9	64.6	69.4	86.8	D. MEDIOS
D. REALES	88.7	61.5	49.3	44.7	29.9	16.8	20.0	31.9	46.9	66.3	72.7	95.5	D. REALES
FREC. X	81.4	72.7	70.5	90.9	88.6	93.2	95.5	100.0	97.7	97.7	95.5	90.9	FREC. X

SUMATORIA DEF\*FREC = 552.80 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -549.75 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	1.4	1.6	.2	.2	.0	.0	.0	.0	.0	.0	.3	1.2	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN HUAYAMPA (1934-1977).LAT. 27.23 S. LONG. 64.18 W. ALT. 198 M TABLA 300 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	16	10	11	23	24	29	36	40	34	26	20	20	289
ENTRE 40.1 Y 54.9	6	9	4	6	3	5	2	1	4	9	9	5	66
ENTRE 55.0 Y 69.9	5	4	6	5	6	1	3	1	5	6	5	7	56
ENTRE 70.0 Y 84.9	7	3	2	3	4	3	1	2	0	1	5	3	34
ENTRE 85.0 Y 100.0	9	18	19	7	7	6	2	0	1	2	5	6	82
70 0 MENOR	27	23	23	34	33	35	41	42	43	41	34	33	411

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	37.2	22.7	25.0	52.3	54.5	65.9	81.8	90.9	77.3	59.1	45.5	45.5	
ENTRE 40.1 Y 54.9	14.0	20.5	9.1	13.6	6.8	11.4	4.5	2.3	9.1	20.5	20.5	18.2	
ENTRE 55.0 Y 69.9	11.6	9.1	18.2	11.4	13.6	2.3	6.8	2.3	11.4	13.6	11.4	15.9	
ENTRE 70.0 Y 84.9	16.3	6.8	4.5	6.8	9.1	6.8	2.3	4.5	0	2.3	11.4	6.8	
ENTRE 85.0 Y 100.0	20.9	40.9	43.2	15.9	15.9	13.6	4.5	0	2.3	4.5	11.4	13.6	
70 0 MENOR	62.8	52.3	52.3	77.3	75.0	79.5	93.2	95.5	97.7	93.2	77.3	79.5	



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

MUYAHAMPA (1934-1977).LAT. 27-23 S. LONG. 64-18 W. ALT. 198 M TABLA 300 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	27	23	22	33	33	35	41	42	43	41	33	35
SOLO UN MES	2	6	2	4	2	0	0	0	0	0	0	2
	0-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	22	16	9	19	26	28	33	40	41	40	32	27
SOLO DOS MESES	2	2	0	1	2	0	0	0	1	1	1	0
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	16	13	8	6	16	23	26	32	39	38	31	26
SOLO TRES MESES	0	1	0	0	0	2	0	1	1	1	1	0
	NDEF	DEFM	EFMA	FMAH	MAHJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	9	7	5	15	15	21	25	31	37	31	26	15
SOLO CUATRO MESES	0	0	0	1	0	0	0	0	0	0	0	0
	NDEFM	DEFMA	EFMAH	FMAHJ	MAHJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	4	6	4	4	15	20	25	30	31	26	15	8

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	16	20	21	10	11	9	3	2	1	3	10	8
SOLO UN MES	6	7	11	2	6	5	2	1	1	1	6	4
	0-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	3	9	7	3	3	4	1	1	0	0	2	2
SOLO DOS MESES	0	5	2	3	1	2	0	0	0	0	2	1
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	1	2	3	4	2	0	1	1	0	0	0	0
SOLO TRES MESES	1	1	1	1	0	0	0	0	0	0	0	0
	NDEF	DEFM	EFMA	FMAH	MAHJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	1	2	2	2	1	1	0	0	0	0	0
SOLO CUATRO MESES	0	0	1	0	0	0	0	0	0	0	0	0
	NDEFM	DEFMA	EFMAH	FMAHJ	MAHJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	0	1	1	2	1	1	0	0	0	0	0	0

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	1	0	0	0	0	0	0	0	0	0	0	0
SOLO UN MES	1	0	0	0	0	0	0	0	0	0	0	0
	0-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDEF	DEFM	EFMA	FMAH	MAHJ	AMJJ	MJJAS	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS NOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
HUYAHAMPA (1934-1977)-LAT. 27.23 S. LONG. 64.18 W. ALT. 198 M TABLA 300 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	81.4	89.9	83.8	25.8	14.4	7.1	3.8	.9	5.9	34.8	56.6	79.0	483.5
1963	60.0	56.3	62.4	28.9	18.9	12.7	8.5	2.8	9.8	29.3	39.8	89.8	
1935	80.8	88.8	84.9	25.0	14.6	7.0	3.8	.4	5.6	35.7	56.4	76.5	479.4
1964	60.7	56.4	61.7	29.3	19.0	12.8	8.5	1.3	9.8	29.5	39.8	85.6	
1936	86.4	85.0	82.4	25.0	14.6	5.4	4.1	.4	5.3	36.9	57.6	77.4	480.5
1965	64.9	54.0	59.5	29.3	19.0	8.6	8.5	1.2	9.9	28.8	38.6	85.7	
1937	84.7	89.7	82.6	24.9	14.6	4.7	4.1	.4	5.3	36.7	60.1	77.8	485.7
1966	63.0	56.7	59.4	29.3	19.0	8.1	8.5	1.2	9.9	28.9	39.0	85.5	
1938	84.3	89.0	80.2	22.9	14.4	4.7	4.1	.4	6.3	36.7	60.9	75.6	481.6
1967	61.9	57.5	60.1	29.0	19.1	8.1	8.5	1.2	10.8	28.9	37.9	86.5	
1939	89.5	91.5	77.4	23.2	12.8	4.8	4.1	1.3	6.9	36.6	64.4	76.7	439.2
1968	66.1	57.9	60.8	28.8	18.1	8.0	3.5	5.5	10.9	29.0	39.0	86.1	
1940	89.0	90.7	77.8	23.3	15.3	4.9	4.1	1.3	6.1	35.3	66.7	78.5	493.0
1969	66.0	58.0	60.7	28.8	21.1	8.0	8.5	5.5	9.3	29.6	40.6	87.3	
1941	87.0	91.1	81.4	22.8	14.1	4.6	3.9	1.2	8.1	34.6	66.5	79.8	495.1
1970	66.8	57.8	63.0	28.8	18.6	7.8	8.5	5.5	13.6	30.2	40.8	87.5	
1942	89.6	90.7	80.3	23.1	13.3	4.6	3.4	1.2	8.0	35.0	63.3	78.7	491.1
1971	67.1	57.4	63.8	28.9	18.7	7.8	8.2	5.5	13.7	30.6	41.6	88.2	
1943	97.1	85.9	80.1	22.4	12.7	4.3	3.4	1.2	9.4	34.4	64.0	82.4	496.2
1972	72.4	51.9	63.6	28.2	18.7	7.8	8.2	5.5	14.2	31.1	42.0	88.4	
1944	102.6	84.4	81.4	24.5	12.0	5.9	2.8	1.2	7.5	33.5	60.3	82.6	498.7
1973	72.3	53.1	64.9	32.1	18.5	12.1	7.7	5.5	13.8	31.1	40.3	88.4	
1945	101.8	93.0	85.2	26.0	12.0	5.8	2.8	1.2	7.5	32.0	58.0	84.0	509.2
1974	72.2	74.4	65.5	31.9	18.5	12.1	7.7	5.5	13.8	30.8	40.9	87.4	
1946	102.2	95.4	83.4	28.1	12.3	5.9	2.8	1.5	8.0	30.6	59.3	84.0	513.4
1975	72.0	74.5	65.9	33.0	18.4	12.1	7.7	5.7	13.8	30.9	40.3	87.4	
1947	105.2	98.0	86.3	27.9	12.7	5.9	2.8	1.5	8.0	31.2	57.7	84.8	521.9
1976	75.2	73.7	67.5	33.2	19.0	12.1	7.7	5.7	13.8	30.6	39.8	87.0	
1948	109.7	98.7	88.1	29.3	11.7	4.7	2.8	1.5	8.6	30.6	58.5	89.5	533.6
1977	74.3	73.7	66.9	34.1	18.6	10.9	7.7	5.7	14.5	30.8	39.3	88.8	



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I S C A   Y A C U

\* PAGINA 24

ESTADÍSTICOS DE INTERÉS EN ISCA YACU (1934-1977). LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 107 MM

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	166.00	132.00	110.00	72.00	45.00	26.00	25.00	38.00	63.00	100.00	128.00	157.00
LLUVIAS	119.25	92.73	98.07	29.23	12.37	6.64	2.23	2.50	4.48	33.43	58.32	81.89
ETP REAL	127.47	102.75	89.68	42.61	16.33	7.84	4.73	5.52	32.00	42.23	75.89	120.09
EXCEDENTES	-53	-91	6.23	2.68	.00	.36	.00	.00	.00	.00	.00	1.11
DEFICIT	38.53	29.25	20.32	29.39	28.57	18.16	20.27	32.48	31.00	56.77	52.11	36.91
ETP REAL / ETP POT.	76.79	77.84	81.53	59.19	36.52	30.16	18.91	14.53	50.79	43.23	59.29	75.49
EXCEDENTES	-56	-73	3.48	3.08	1.54	.95	.43	.24	.12	.06	.03	.57

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	65.68	47.40	63.58	33.23	14.90	13.23	6.58	6.95	7.58	31.66	37.26	61.14
ETP REAL	46.17	28.90	27.57	21.45	14.75	9.11	6.97	7.41	25.83	30.79	39.10	45.97
EXCEDENTES	2.51	6.03	23.27	17.18	.00	2.41	.00	.00	.00	.00	.00	6.39
DEFICIT	46.17	28.90	27.57	21.45	14.75	9.11	6.97	7.41	25.83	30.79	39.10	45.97
ETP REAL / ETP POT.	28.61	21.90	25.06	29.79	32.77	35.04	27.86	19.51	40.99	30.79	30.55	29.28
DESCUENTOS	2.01	3.14	12.15	11.35	5.68	3.53	1.77	.88	.44	.22	.11	3.20

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1-

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN ISCA YACU (1934-1977).LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 100 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	30.0	(100.0)	30.0	25.0	25.0	.0	.0	8.0	13.0	32.0	59.0	84.0	406.0
1935	59.0	(164.0)	49.0	28.0	.0	29.0	.0	.0	.0	.0	.0	88.0	417.0
1936	(106.0)	24.0	19.0	6.0	5.0	7.0	.0	.0	.0	21.0	45.0	31.0	264.0
1937	9.0	60.0	(61.0)	35.0	17.0	.0	.0	.0	3.0	13.0	2.0	27.0	227.0
1938	103.0	83.0	(191.0)	.0	10.0	28.0	.0	.0	.0	.0	34.0	34.0	483.0
1939	82.0	78.0	(86.0)	29.0	.0	.0	.0	.0	20.0	15.0	34.0	66.0	410.0
1940	(159.0)	73.0	112.0	49.0	28.0	36.0	.0	3.0	.0	41.0	133.0	114.0	748.0
1941	(95.0)	60.0	52.0	19.0	14.0	.0	25.0	.0	.0	22.0	25.0	55.0	367.0
1942	71.0	(193.0)	82.0	85.0	33.0	.0	.0	.0	9.0	32.0	111.0	57.0	673.0
1943	33.0	80.0	(183.0)	41.0	45.0	20.0	12.0	.0	.0	16.0	52.0	106.0	588.0
1944	(212.0)	117.0	63.0	4.0	.0	3.0	.0	.0	4.0	85.0	65.0	15.0	508.0
1945	59.0	108.0	118.0	33.0	.0	.0	.0	.0	.0	37.0	44.0	(188.0)	633.0
1946	(154.0)	139.0	120.0	.0	2.0	.0	.0	.0	.0	59.0	100.0	55.0	607.0
1947	(64.0)	48.0	24.0	51.0	43.0	27.0	5.0	6.0	22.0	43.0	20.0	46.0	415.0
1948	50.0	(83.0)	48.0	11.0	7.0	.0	.0	.0	1.0	49.0	31.0	76.0	350.0
1949	(158.0)	73.0	109.0	31.0	.0	.0	.0	.0	7.0	.0	74.0	55.0	556.0
1950	113.0	55.0	116.0	.0	18.0	3.0	.0	.0	.0	32.0	46.0	(139.0)	522.0
1951	131.0	132.0	62.0	31.0	.0	10.0	.0	14.0	.0	28.0	40.0	(146.0)	594.0
1952	(164.0)	103.0	99.0	8.0	12.0	.0	.0	.0	.0	69.0	80.0	62.0	597.0
1953	(201.0)	81.0	130.0	15.0	.0	.0	.0	.0	.0	12.0	112.0	53.0	604.0
1954	(165.0)	114.0	111.0	67.0	10.0	.0	.0	.0	.0	.0	69.0	47.0	603.0
1955	65.0	(102.0)	67.0	8.0	3.0	.0	.0	.0	.0	43.0	77.0	.0	345.0
1956	(155.0)	85.0	25.0	23.0	.0	12.0	.0	.0	.0	144.0	68.0	61.0	573.0
1957	97.0	49.0	149.0	9.0	.0	3.0	.0	10.0	.0	23.0	141.0	(285.0)	766.0
1958	90.0	25.0	35.0	71.0	.0	.0	.0	.0	.0	32.0	8.0	(263.0)	524.0
1959	65.0	(103.0)	61.0	8.0	.0	9.0	33.0	.0	.0	5.0	23.0	52.0	359.0
1960	161.0	60.0	(164.0)	.0	60.0	.0	.0	.0	.0	120.0	77.0	125.0	767.0
1961	63.0	82.0	(158.0)	52.0	15.0	.0	.0	.0	.0	40.0	30.0	10.0	450.0
1962	(181.0)	114.0	38.0	19.0	10.0	.0	.0	.0	.0	31.0	99.0	91.0	583.0
1963	(120.0)	64.0	.0	.0	15.0	.0	.0	.0	.0	.0	50.0	120.0	389.0
1964	40.0	(120.0)	110.0	50.0	.0	.0	7.0	.0	.0	27.0	46.0	56.0	456.0
1965	80.0	.0	69.0	.0	.0	.0	5.0	.0	.0	44.0	74.0	(84.0)	356.0
1966	116.0	103.0	(172.0)	.0	.0	.0	.0	.0	.0	15.0	77.0	104.0	587.0
1967	88.0	43.0	(90.0)	.0	.0	.0	.0	.0	16.0	.0	75.0	21.0	333.0
1968	(276.0)	89.0	12.0	23.0	34.0	26.0	.0	12.0	.0	18.0	136.0	34.0	660.0
1969	97.0	(160.0)	160.0	22.0	30.0	4.0	.0	.0	7.0	4.0	52.0	145.0	681.0
1970	65.0	45.0	(125.0)	17.0	19.0	10.0	.0	3.0	22.0	8.0	41.0	112.0	467.0
1971	(184.0)	149.0	51.0	54.0	.0	.0	.0	.0	6.0	64.0	14.0	24.0	546.0
1972	(113.0)	69.0	19.0	41.0	22.0	.0	.0	.0	28.0	.0	3.0	104.0	399.0
1973	270.0	43.0	(299.0)	76.0	20.0	65.0	.0	.0	.0	11.0	62.0	69.0	915.0
1974	177.0	(259.0)	147.0	29.0	13.0	.0	11.0	.0	.0	70.0	38.0	42.0	786.0
1975	59.0	93.0	111.0	30.0	5.0	.0	.0	14.0	17.0	10.0	(119.0)	47.0	505.0
1976	225.0	114.0	(238.0)	.0	3.0	.0	.0	.0	12.0	56.0	52.0	32.0	732.0
1977	(242.0)	141.0	150.0	186.0	35.0	.0	.0	40.0	10.0	17.0	8.0	178.0	1007.0

PROM.	119.2	92.7	98.1	29.2	12.6	6.6	2.2	2.5	4.5	33.4	58.3	81.9	541.3
MAX.	276.0	259.0	299.0	186.0	60.0	65.0	33.0	40.0	28.0	144.0	141.0	285.0	1007.0
MIN.	9.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	227.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
 MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.



\*\*\*\*\*  
 \* CONSEJO FEDERAL DE INVERSIONES.  
 \* AREA DE INFRAESTRUCTURA HIDRICA.  
 \* PAGINA 26  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
 PORCENTAJES MENSUALES DE ETP REAL EN ISCA YACU (1934-1977). LAT. 27.01 S. LONG. 64.37 W. ALT. 266 M TABLA 10C MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	86.4	45.5	43.1	60.0	7.7	4.0	23.7	23.8	33.0	100.0	54.8	1934
1935	36.1	100.0	58.2	48.6	8.9	100.0	8.0	5.3	4.8	33.0	100.0	56.7	1935
1936	64.5	100.0	19.1	100.0	13.3	30.8	.0	2.6	100.0	15.0	35.9	100.0	1936
1937	6.6	100.0	57.3	50.0	37.8	.0	.0	.0	100.0	15.0	100.0	19.7	1937
1938	100.0	64.4	100.0	59.7	48.9	100.0	28.0	18.4	12.7	35.0	28.1	100.0	1938
1939	50.6	100.0	79.1	61.7	2.2	.0	.0	2.6	31.7	100.0	100.0	42.7	1939
1940	95.8	100.0	100.0	69.4	64.4	100.0	12.0	15.8	4.3	43.0	100.0	74.5	1940
1941	58.4	46.2	100.0	29.2	33.3	.0	100.0	.0	100.0	24.0	20.3	100.0	1941
1942	44.0	100.0	38.2	100.0	88.9	46.2	36.0	26.3	30.2	38.0	87.5	38.2	1942
1943	100.0	62.1	100.0	86.1	100.0	11.1	4.0	5.3	7.9	35.0	51.6	100.0	1943
1944	100.0	93.9	70.9	23.6	100.0	19.2	4.0	2.6	100.0	84.0	35.9	100.0	1944
1945	36.7	81.8	100.0	50.0	4.4	3.8	4.0	5.3	4.3	38.0	78.1	35.7	1945
1946	95.2	100.0	100.0	31.9	22.2	11.5	12.0	5.3	36.5	59.0	100.0	30.6	1946
1947	100.0	37.9	100.0	72.2	95.6	100.0	24.0	18.4	100.0	45.0	28.0	100.0	1947
1948	100.0	63.6	44.5	100.0	17.8	3.8	.0	2.6	100.0	51.0	58.6	100.0	1948
1949	95.2	56.8	99.1	44.4	.0	.0	.0	.0	100.0	34.0	32.0	88.5	1949
1950	68.7	42.4	100.0	5.6	42.2	11.5	.0	2.6	100.0	30.0	32.0	93.0	1950
1951	78.9	100.0	56.4	43.1	.0	38.5	.0	36.8	100.0	70.0	63.3	40.1	1951
1952	98.8	72.0	100.0	90.0	28.9	3.8	.0	2.6	100.0	14.0	87.5	100.0	1952
1953	100.0	72.0	100.0	45.8	20.0	11.5	12.0	7.9	4.8	3.0	69.5	100.0	1953
1954	99.4	87.1	100.0	93.1	24.4	.0	.0	2.6	100.0	45.0	60.9	100.0	1954
1955	40.4	77.3	60.9	100.0	8.9	3.8	.0	2.6	100.0	100.0	70.3	49.0	1955
1956	93.4	65.2	100.0	34.7	2.2	46.2	12.0	.0	100.0	25.0	100.0	100.0	1956
1957	61.4	39.4	100.0	38.9	17.8	23.1	12.0	31.6	4.8	34.0	100.0	100.0	1957
1958	86.7	42.4	39.1	98.6	6.7	3.8	4.0	2.6	100.0	7.0	18.7	100.0	1958
1959	78.3	84.8	64.5	22.2	6.7	38.5	100.0	10.5	6.3	2.0	69.5	82.8	1959
1960	97.0	47.0	100.0	40.3	100.0	34.6	28.0	21.1	12.7	100.0	25.0	100.0	1960
1961	42.8	63.6	100.0	84.7	57.8	26.9	20.0	15.8	9.5	43.0	78.1	100.0	1961
1962	100.0	88.6	40.9	30.6	24.4	3.8	.0	2.6	100.0	33.0	100.0	77.1	1962
1963	73.5	49.2	100.0	2.8	33.3	.0	.0	.0	100.0	3.0	100.0	100.0	1963
1964	25.3	90.9	100.0	69.4	.0	.0	28.0	.0	100.0	29.0	58.6	100.0	1964
1965	49.4	100.0	63.6	1.4	.0	.0	20.0	.0	100.0	46.0	60.9	100.0	1965
1966	71.1	78.8	100.0	45.8	24.4	.0	12.0	10.5	4.3	17.0	60.9	100.0	1966
1967	54.8	33.3	81.8	100.0	4.4	19.2	20.0	2.6	25.4	100.0	59.4	100.0	1967
1968	100.0	94.7	47.3	45.8	80.0	100.0	12.0	36.8	4.8	20.0	100.0	92.4	1968
1969	59.0	100.0	100.0	75.0	82.2	46.2	28.0	21.1	23.8	10.0	42.2	72.6	1969
1970	39.8	100.0	100.0	34.7	48.9	42.3	4.0	13.2	36.5	10.0	100.0	16.6	1970
1971	100.0	100.0	61.8	79.2	13.3	11.5	8.0	5.3	12.7	45.0	100.0	100.0	1971
1972	100.0	53.8	19.1	56.9	48.9	.0	92.0	.0	44.4	100.0	3.9	100.0	1972
1973	100.0	78.0	100.0	100.0	95.6	100.0	92.0	65.8	37.7	27.0	52.3	46.5	1973
1974	100.0	100.0	100.0	90.3	68.9	42.3	64.0	26.3	15.9	73.0	32.3	28.0	1974
1975	100.0	71.2	100.0	43.1	13.3	.0	20.0	36.8	27.0	50.0	93.0	31.8	1975
1976	100.0	93.9	100.0	72.2	44.4	26.9	64.0	15.8	27.0	39.0	43.0	100.0	1976
1977	100.0	100.0	100.0	100.0	100.0	80.8	64.0	100.0	52.4	35.0	14.1	100.0	1977

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO-  
EXCESOS MENSUALES EN ISCA YACU (1934-1977).LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0	TOTALES NUM CASOS
1934	*****	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1934	
1935	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1935	
1936	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1936	
1937	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1937	
1938	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1938	
1939	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1939	
1940	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1940	
1941	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1941	
1942	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1942	
1943	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1943	
1944	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1944	
1945	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1945	
1946	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1946	
1947	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1947	
1948	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1948	
1949	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1949	
1950	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1950	
1951	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1951	
1952	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1952	
1953	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1953	
1954	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1954	
1955	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1955	
1956	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1956	
1957	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1957	
1958	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1958	
1959	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1959	
1960	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1960	
1961	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1961	
1962	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1962	
1963	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1963	
1964	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1964	
1965	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1965	
1966	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1966	
1967	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1967	
1968	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1968	
1969	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1969	
1970	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1970	
1971	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1971	
1972	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972	
1973	9.0	-0	129.0	4.0	-0	16.0	-0	-0	-0	-0	-0	-0	1973	
1974	-0	40.0	37.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1974	
1975	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1975	
1976	-0	-0	78.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976	
1977	-0	-0	30.0	114.0	-0	-0	-0	-0	-0	-0	-0	-0	1977	
TOTALES	23.0	40.0	274.0	118.0	-0	16.0	-0	-0	-0	-0	-0	49.0	TOTALES	
NUM CASOS	2	1	4	2	0	1	0	0	0	0	0	2	NUM CASOS	



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN ISCA YACU (1934-1977).LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 103 NM

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	*****	18.0	60.0	41.0	18.0	24.0	24.0	29.0	48.0	67.0	-0	71.0	1934
1935	106.0	-0	46.0	37.0	41.0	-0	23.0	36.0	60.0	98.0	-0	68.0	1935
1936	59.0	-0	89.0	-0	39.0	18.0	25.0	37.0	-0	77.0	82.0	-0	1936
1937	155.0	-0	47.0	36.0	28.0	26.0	25.0	34.0	-0	85.0	-0	128.0	1937
1938	-0	47.0	-0	29.0	23.0	-0	18.0	31.0	55.0	95.0	92.0	-0	1938
1939	82.0	-0	23.0	42.0	44.0	26.0	25.0	37.0	43.0	-0	92.0	90.0	1939
1940	7.0	-0	-0	22.0	16.0	-0	22.0	32.0	59.0	57.0	-0	40.0	1940
1941	69.0	71.0	-0	51.0	30.0	26.0	-0	38.0	-0	76.0	102.0	-0	1941
1942	93.0	-0	13.0	-0	3.0	14.0	16.0	28.0	44.0	62.0	16.0	97.0	1942
1943	-0	50.0	-0	10.0	-0	3.0	7.0	24.0	48.0	75.0	72.0	50.0	1943
1944	-0	8.0	32.0	55.0	40.0	21.0	24.0	36.0	58.0	15.0	62.0	-0	1944
1945	105.0	24.0	-0	36.0	43.0	25.0	24.0	37.0	-0	16.0	82.0	-0	1945
1946	8.0	-0	-0	49.0	35.0	23.0	22.0	36.0	60.0	62.0	28.0	101.0	1946
1947	-0	82.0	-0	20.0	2.0	-0	19.0	31.0	40.0	41.0	-0	109.0	1947
1948	-0	68.0	61.0	-0	37.0	25.0	25.0	37.0	-0	55.0	96.0	-0	1948
1949	8.0	77.0	1.0	40.0	45.0	26.0	25.0	38.0	-0	49.0	53.0	-0	1949
1950	52.0	76.0	-0	68.0	26.0	23.0	25.0	37.0	-0	65.0	81.0	18.0	1950
1951	35.0	-0	48.0	41.0	45.0	16.0	25.0	24.0	-0	70.0	47.0	11.0	1951
1952	-0	29.0	11.0	-0	32.0	25.0	25.0	37.0	-0	30.0	16.0	-0	1952
1953	-0	37.0	-0	39.0	36.0	23.0	22.0	35.0	60.0	86.0	-0	-0	1953
1954	1.0	17.0	-0	5.0	34.0	26.0	25.0	37.0	-0	97.0	39.0	-0	1954
1955	99.0	30.0	43.0	-0	41.0	25.0	25.0	37.0	-0	55.0	50.0	-0	1955
1956	11.0	46.0	-0	47.0	44.0	14.0	23.0	38.0	-0	75.0	38.0	80.0	1956
1957	64.0	80.0	-0	44.0	37.0	20.0	22.0	26.0	60.0	66.0	-0	-0	1957
1958	22.0	76.0	67.0	1.0	42.0	25.0	24.0	37.0	-0	93.0	119.0	-0	1958
1959	36.0	20.0	39.0	56.0	42.0	16.0	-0	34.0	59.0	93.0	104.0	-0	1959
1960	5.0	70.0	-0	43.0	-0	17.0	18.0	30.0	55.0	-0	39.0	27.0	1960
1961	95.0	48.0	-0	11.0	19.0	19.0	20.0	32.0	57.0	57.0	96.0	-0	1961
1962	-0	15.0	65.0	50.0	34.0	25.0	25.0	37.0	-0	67.0	28.0	-0	1962
1963	44.0	67.0	-0	70.0	30.0	26.0	25.0	38.0	-0	97.0	-0	36.0	1963
1964	124.0	12.0	-0	22.0	45.0	26.0	18.0	38.0	-0	71.0	91.0	-0	1964
1965	84.0	-0	40.0	71.0	45.0	26.0	20.0	38.0	-0	54.0	53.0	-0	1965
1966	48.0	28.0	-0	39.0	34.0	21.0	22.0	34.0	60.0	83.0	50.0	-0	1966
1967	75.0	88.0	20.0	-0	43.0	26.0	23.0	37.0	47.0	-0	52.0	-0	1967
1968	-0	7.0	58.0	39.0	9.0	-0	22.0	24.0	60.0	80.0	-0	116.0	1968
1969	48.0	-0	-0	18.0	8.0	14.0	18.0	30.0	48.0	90.0	74.0	12.0	1969
1970	100.0	-0	-0	47.0	23.0	15.0	24.0	33.0	40.0	90.0	-0	43.0	1970
1971	-0	-0	42.0	15.0	39.0	23.0	23.0	36.0	55.0	35.0	-0	131.0	1971
1972	-0	61.0	89.0	31.0	23.0	26.0	25.0	38.0	35.0	-0	123.0	-0	1972
1973	-0	29.0	-0	-0	2.0	-0	2.0	13.0	38.0	73.0	61.0	86.0	1973
1974	-0	-0	-0	7.0	14.0	15.0	9.0	28.0	53.0	27.0	86.0	113.0	1974
1975	-0	38.0	-0	41.0	39.0	26.0	25.0	24.0	46.0	-0	9.0	107.0	1975
1976	-0	8.0	-0	20.0	25.0	18.0	20.0	32.0	46.0	41.0	73.0	-0	1976
1977	-0	-0	-0	-0	-0	5.0	9.0	-0	30.0	65.0	110.0	-0	1977
TOTALES	1657.0	1287.0	894.0	1293.0	1257.0	799.0	892.0	1429.0	1364.0	2498.0	2293.0	1624.0	TOTALES
NUM CASOS	28	30	20	36	41	38	42	43	27	38	34	22	NUM CASOS

D. MEDIOS	37.7	29.2	20.3	29.4	28.6	18.2	20.3	32.5	31.0	56.8	52.1	36.9	D. MEDIOS
D. REALES	59.2	42.9	44.7	35.9	30.7	21.0	21.2	33.2	50.5	65.7	67.4	73.8	D. REALES
FREC. %	65.1	68.2	45.5	81.8	93.2	86.4	93.5	97.7	61.4	86.4	77.3	50.0	FREC. %

SUMATORIA DEF\*FREC = 393.76 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -381.93 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIN.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIN.
E.P.E.	2.4	8.0	11.1	10.2	3.8	-5	-5	-0	-0	-0	-3	1.3	E.P.E.

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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 29  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN ISCA YACU (1934-1977).LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	5	3	3	11	27	31	38	42	23	25	15	6	233
ENTRE 40.1 Y 54.9	6	6	4	12	5	5	0	0	2	6	5	5	56
ENTRE 55.0 Y 69.9	5	6	7	4	4	0	2	1	0	3	3	2	42
ENTRE 70.0 Y 84.9	4	8	3	5	2	1	1	0	0	3	3	4	34
ENTRE 85.0 Y 100.0	23	21	27	12	6	7	3	1	17	7	13	25	162
70 0 MENOR	16	15	14	27	36	36	40	43	27	35	28	15	332

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	11.6	6.8	6.8	25.0	61.4	70.5	86.4	95.5	56.8	56.9	34.1	18.2	
ENTRE 40.1 Y 54.9	14.0	13.6	9.1	27.3	11.4	11.4	-0	-0	4.5	13.6	11.4	11.4	
ENTRE 55.0 Y 69.9	11.6	13.6	15.9	9.1	9.1	-0	4.5	2.3	-0	6.8	18.2	4.5	
ENTRE 70.0 Y 84.9	9.3	18.2	6.8	11.4	4.5	2.3	2.3	-0	-0	6.8	6.8	9.1	
ENTRE 85.0 Y 100.0	53.5	47.7	61.4	27.3	13.6	15.9	6.8	2.3	38.6	15.9	29.5	56.9	
70 0 MENOR	37.2	34.1	31.8	61.4	81.8	81.8	90.9	97.7	61.4	79.5	63.6	34.1	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

ISCA YACU (1934-1977).LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	16	15	13	26	36	36	40	43	27	35	27	15
SOLO UN MES	9	7	3	1	0	0	1	1	0	3	5	0
DOS O MAS MESES	4	5	8	8	25	33	34	39	26	20	20	5
SOLO DOS MESES	3	4	2	1	2	0	0	0	0	0	11	2
TRES O MAS MESES	0	1	0	0	8	22	31	34	23	19	8	3
SOLO TRES MESES	0	1	0	0	1	1	0	0	0	0	0	1
CUATRO O MAS MESES	0	0	0	0	7	20	31	18	16	8	2	0
SOLO CUATRO MESES	0	0	0	0	1	0	6	1	4	1	0	0
CINCO O MAS MESES	0	0	0	1	0	20	15	11	5	2	0	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	27	28	30	17	8	8	4	1	17	9	16	28
SOLO UN MES	5	5	8	5	1	3	2	1	15	6	8	10
DOS O MAS MESES	16	17	18	12	6	5	0	0	0	2	2	6
SOLO DOS MESES	3	0	4	2	0	1	0	0	0	0	1	2
TRES O MAS MESES	4	11	12	8	6	4	2	0	0	0	1	0
SOLO TRES MESES	2	4	4	0	0	0	0	0	0	0	1	0
CUATRO O MAS MESES	2	6	6	4	4	2	0	0	0	0	0	0
SOLO CUATRO MESES	1	2	2	2	1	0	0	0	0	0	0	0
CINCO O MAS MESES	1	4	2	2	2	0	0	0	0	0	0	0

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	0	2	1	0	0	0	0	0	0	0	0
SOLO UN MES	0	0	2	1	0	0	0	0	0	0	0	0
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS

ISCA YACU (1934-1977).LAT. 27.01 S. LONG. 64.37 W. ALT. 286 M TABLA 103 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	107.2	88.4	85.4	25.3	12.4	6.2	2.5	1.4	2.6	37.6	59.0	85.0	512.9
1963	53.9	37.5	51.5	23.0	15.7	10.6	7.6	3.5	5.9	34.2	37.4	66.9	
1935	107.5	89.1	88.1	26.1	11.6	6.2	2.7	1.1	2.2	37.4	58.5	84.1	514.6
1964	53.4	37.8	50.6	23.5	15.7	10.6	7.7	3.2	5.6	34.3	37.5	67.1	
1936	108.2	83.6	88.7	25.2	11.6	5.3	2.9	1.1	2.2	38.9	61.0	84.0	512.6
1965	52.9	38.5	50.2	24.0	15.7	9.8	7.7	3.2	5.6	33.6	35.9	67.1	
1937	108.5	86.2	93.8	25.0	11.4	5.0	2.9	1.1	2.2	38.7	62.1	86.4	523.3
1966	52.9	36.9	50.6	24.1	15.8	9.8	7.7	3.2	5.6	33.7	35.9	66.4	
1938	111.2	85.7	94.8	23.8	10.8	5.0	2.9	1.1	2.6	38.2	64.5	86.2	526.9
1967	46.6	37.5	50.2	24.5	15.9	9.8	7.7	3.2	6.1	34.1	34.1	66.6	
1939	116.9	85.9	88.8	24.6	11.6	5.0	2.9	1.5	2.6	38.8	67.9	86.2	532.8
1968	58.0	37.5	49.0	24.1	16.4	9.7	7.7	3.8	6.1	33.6	36.0	66.6	
1940	117.4	88.6	91.3	24.3	12.6	5.1	2.9	1.5	2.2	38.5	68.5	88.8	541.8
1969	57.7	39.8	50.7	24.1	16.6	9.6	7.7	3.8	5.2	33.9	35.6	67.4	
1941	114.3	87.7	91.7	23.3	12.3	4.2	2.9	1.5	2.9	37.4	65.4	88.8	532.4
1970	56.0	40.5	51.0	23.6	16.4	7.7	7.7	3.8	6.3	34.4	33.7	67.3	
1942	117.3	90.6	91.7	24.4	11.9	4.2	2.1	1.5	3.1	38.8	65.1	87.7	538.4
1971	59.2	41.7	51.0	24.3	16.5	7.7	6.4	3.8	6.3	34.6	34.2	68.1	
1943	118.7	86.5	89.6	23.0	11.5	4.2	2.1	1.5	3.8	37.7	61.5	89.3	529.3
1972	58.6	37.0	52.7	21.7	16.2	7.7	6.4	3.8	7.7	35.3	34.9	67.9	
1944	126.6	85.3	93.5	24.1	10.7	5.7	1.7	1.5	3.8	37.5	61.8	88.1	540.2
1973	62.5	37.9	63.0	23.5	15.0	13.3	6.2	3.6	7.7	35.4	34.9	67.9	
1945	125.4	90.0	96.3	25.0	11.1	5.6	2.0	1.5	3.6	37.0	60.9	89.0	547.4
1974	61.1	49.2	63.5	23.2	14.9	13.3	6.4	3.8	7.8	34.8	35.1	67.1	
1946	125.4	89.5	96.0	24.9	11.3	5.6	2.0	2.0	4.2	34.6	63.4	84.3	543.2
1975	61.1	49.1	63.4	23.2	14.8	13.3	6.4	4.4	8.1	34.0	36.5	64.8	
1947	127.8	88.7	100.0	24.9	11.3	5.6	2.0	2.0	4.6	35.2	61.8	83.5	547.3
1976	63.6	48.4	68.4	23.2	14.7	13.3	6.4	4.4	8.2	34.2	35.9	65.3	
1948	133.7	91.8	104.2	29.4	11.0	4.7	1.9	3.1	4.2	33.8	61.4	87.9	567.1
1977	65.7	48.7	67.4	37.3	14.2	12.7	6.4	8.2	7.6	34.1	36.4	67.1	



**PRESTE ATENCION A LA NOTA DE LA PAGINA 1.**

ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN ISCA YACU (1934-1977).-LAT. 27.01 S. LONG. 64.37 W. ALT. 266 M. TABLA 100 MM

FRECUENCIAS DE EXCESOS Y DEFICIENCIAS MENSUALES EN MILIMETROS, PARA 44 AÑOS DE DATOS, EXCEPTO EN ENERO EN QUE HAY UNO MENOS.

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

CONCENTRACIONES MENCIONADAS DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 44 A=05.

[illegible]

L A B A N D A

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 29

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN LA BANDA (1938-1990). LAT- 27-45 S. LONG. 64-15 W. ALT. 187 M. TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	161.00	125.00	108.00	68.00	47.00	26.00	25.00	38.00	60.00	93.00	129.00	153.00
LLUVIAS	112.85	94.92	84.81	33.50	14.62	7.77	4.57	2.30	12.91	35.55	67.87	83.57
ETP REAL	123.87	97.34	84.28	40.57	19.79	9.60	6.79	5.60	34.00	43.38	69.21	116.85
EXCEDENTES	.06	7.62	1.13	176.60	.00	.00	.00	.00	.00	.91	.08	.75
DEFICIT	37.13	27.66	23.72	27.43	27.21	16.40	18.21	32.40	26.00	49.62	59.79	34.15
ETP REAL / ETP POT.	76.94	77.87	78.04	59.66	42.11	36.94	27.17	14.75	56.67	46.84	53.65	77.38
ESCURRIMIENTOS	.47	4.04	2.59	89.60	44.80	22.40	11.20	5.60	2.80	1.85	.96	.86

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	63.99	72.51	46.39	32.54	13.79	9.28	6.35	4.67	19.27	39.57	44.37	62.78
ETP REAL	46.37	33.62	26.79	19.63	14.02	7.37	6.59	6.18	22.44	30.23	36.10	41.02
EXCEDENTES	.42	39.10	5.77	1278.15	.00	.00	.00	.00	.00	6.59	.55	3.89
DEFICIT	46.37	33.62	26.79	19.63	14.02	7.37	6.59	6.18	22.44	30.23	36.10	41.02
ETP REAL / ETP POT.	28.80	26.89	24.30	28.87	29.83	28.33	26.35	16.27	37.41	32.50	27.98	27.16
ESCURRIMIENTOS	1.62	19.59	12.35	640.58	320.29	160.15	80.07	40.04	20.02	10.48	5.24	3.21

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	5671	7639	5469	9684	9431	1.1846	1.3901	2.0280	1.4931	1.1131	6537	7513
ETP REAL	3744	3454	3178	4840	7083	.7669	.9699	1.1030	.6601	.6966	5216	3510
EXCEDENTES	7.2111	5.1299	5.1010	7.2374	*****	*****	*****	*****	*****	7.2801	7.2801	5.1573
DEFICIT	1.2487	1.2154	1.1294	7157	5152	4492	3618	1.1908	.8632	.6091	6037	1.2011
ETP REAL / ETP POT.	3744	3454	3178	4840	7083	.7669	.9699	1.1030	.6601	.6966	5216	3510
ESCURRIMIENTOS	3.4766	4.8493	4.7737	7.1498	7.1498	7.1498	7.1498	7.1498	7.1498	5.6546	5.4337	3.7303

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN LA BANDA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 100 MM  
EL RES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1938	(215.0)	64.0	101.0	10.0	33.0	1.0	-0	2.0	-0	1.0	54.0	114.0	595.0
1939	78.0	(169.0)	168.0	15.0	-0	2.0	-0	1.0	26.0	36.0	45.0	80.0	620.0
1940	34.0	67.0	80.0	42.0	35.0	13.0	5.0	5.0	9.0	30.0	56.0	(119.0)	495.0
1941	58.0	(114.0)	69.0	21.0	28.0	-0	10.0	-0	8.0	34.0	20.0	27.0	359.0
1942	21.0	(166.0)	59.0	68.0	11.0	15.0	-0	-0	10.0	4.0	47.0	42.0	443.0
1943	14.0	70.0	134.0	40.0	25.0	11.0	11.0	-0	10.0	17.0	(230.0)	49.0	611.0
1944	69.0	104.0	(130.0)	3.0	1.0	-0	-0	1.0	-0	52.0	51.0	51.0	622.0
1945	45.0	41.0	(105.0)	20.0	-0	-0	-0	-0	1.0	74.0	13.0	65.0	364.0
1946	(112.0)	55.0	105.0	16.0	17.0	4.0	8.0	3.0	-0	10.0	73.0	21.0	406.0
1947	26.0	(55.0)	14.0	20.0	9.0	14.0	3.0	-0	20.0	41.0	24.0	34.0	263.0
1948	97.0	(222.0)	56.0	6.0	2.0	-0	-0	-0	14.0	18.0	73.0	53.0	541.0
1949	77.0	27.0	118.0	11.0	1.0	9.0	1.0	-0	31.0	(133.0)	89.0	73.0	570.0
1950	(81.0)	13.0	36.0	13.0	26.0	5.0	5.0	-0	-0	55.0	46.0	69.0	344.0
1951	57.0	36.0	44.0	36.0	3.0	3.0	-0	-0	-0	7.0	23.0	(108.0)	317.0
1952	70.0	75.0	(100.0)	-0	19.0	2.0	-0	6.0	14.0	21.0	69.0	26.0	402.0
1953	(151.0)	25.0	125.0	25.0	4.0	18.0	-0	-0	-0	28.0	97.0	44.0	518.0
1954	54.0	(63.0)	56.0	24.0	8.0	1.0	-0	-0	1.0	11.0	54.0	11.0	267.0
1955	20.0	(116.0)	105.0	9.0	5.0	-0	1.0	-0	-0	57.0	92.0	28.0	439.0
1956	133.0	159.0	35.0	61.0	16.0	23.0	-0	2.0	2.0	90.0	(171.0)	60.0	752.0
1957	119.0	41.0	100.0	27.0	5.0	8.0	-0	-0	18.0	6.0	43.0	(141.0)	506.0
1958	133.0	78.0	34.0	38.0	1.0	4.0	18.0	-0	3.0	10.0	73.0	(176.0)	565.0
1959	(190.0)	122.0	81.0	23.0	27.0	13.0	14.0	-0	-0	23.0	24.0	117.0	634.0
1960	69.0	39.0	61.0	49.0	9.0	15.0	7.0	-0	-0	30.0	56.0	(165.0)	502.0
1961	106.0	52.0	47.0	37.0	34.0	-0	-0	-0	-0	100.0	40.0	(121.0)	537.0
1962	(157.0)	18.0	17.0	10.0	12.0	-0	10.0	-0	-0	12.0	49.0	94.0	379.0
1963	107.0	(154.0)	135.0	8.0	11.0	21.0	9.0	-0	9.0	16.0	95.0	79.0	636.0
1964	49.0	(114.0)	65.0	19.0	16.0	10.0	3.0	-0	-0	74.0	8.0	33.0	391.0
1965	(153.0)	28.0	83.0	8.0	1.0	11.0	8.0	3.0	1.0	50.0	35.0	95.0	476.0
1966	(134.0)	125.0	43.0	35.0	7.0	-0	1.0	-0	2.0	13.0	16.0	60.0	516.0
1967	63.0	(116.0)	54.0	2.0	7.0	4.0	6.0	4.0	32.0	7.0	27.0	10.0	332.0
1968	(167.0)	74.0	53.0	13.0	49.0	27.0	4.0	29.0	11.0	39.0	86.0	96.0	646.0
1969	41.0	92.0	25.0	45.0	38.0	8.0	-0	1.0	3.0	6.0	55.0	(133.0)	447.0
1970	113.0	49.0	(140.0)	19.0	38.0	8.0	1.0	2.0	52.0	10.0	42.0	51.0	525.0
1971	(221.0)	206.0	23.0	29.0	-0	-0	12.0	7.0	10.0	28.0	63.0	6.0	659.0
1972	53.0	36.0	48.0	(82.0)	17.0	7.0	5.0	-0	34.0	15.0	47.0	78.0	422.0
1973	(228.0)	36.0	150.0	134.0	-0	50.0	4.0	-0	1.0	19.0	105.0	96.0	823.0
1974	230.0	(420.0)	147.0	37.0	34.0	4.0	14.0	-0	2.0	19.0	15.0	41.0	963.0
1975	81.0	(121.0)	63.0	56.0	4.0	7.0	-0	12.0	40.0	16.0	72.0	79.0	551.0
1976	192.0	115.0	106.0	-0	10.0	-0	1.0	4.0	2.0	(239.0)	96.0	63.0	828.0
1977	173.0	(276.0)	99.0	183.0	20.0	-0	4.0	6.0	43.0	5.0	51.0	212.0	1072.0
1978	(182.0)	34.0	103.0	2.0	5.0	7.0	-0	-0	24.0	47.0	61.0	107.0	572.0
1979	73.0	159.0	47.0	38.0	-0	-0	3.0	3.0	22.0	26.0	63.0	(273.0)	705.0
1980	44.0	119.0	144.0	42.0	17.0	5.0	-0	3.0	32.0	66.0	(197.0)	37.0	696.0
1981	(229.0)	84.0	137.0	62.0	22.0	1.0	2.0	1.0	-0	7.0	145.0	38.0	730.0
1982	105.0	91.0	(221.0)	85.0	-0	24.0	5.0	-0	110.0	14.0	96.0	213.0	964.0

1983	(152.0)	122.0	49.0	30.0	30.0	4.0	16.0	5.0	5.0	57.0	113.0	104.0	665.0
1984	142.0	87.0	(184.0)	15.0	19.0	12.0	4.0	1.0	15.0	20.0	64.0	37.0	600.0
1985	(169.0)	66.0	41.0	48.0	14.0	1.0	18.0	8.0	4.0	39.0	102.0	155.0	665.0
1986	106.0	(120.0)	14.0	50.0	6.0	11.0	31.0	10.0	41.0	16.0	41.0	25.0	471.0
1987	(261.0)	3.0	79.0	47.0	7.0	1.0	.0	.0	.0	28.0	86.0	143.0	655.0
1988	(143.0)	88.0	78.0	25.0	.0	6.0	3.0	.0	1.0	17.0	8.0	7.0	376.0
1989	43.0	20.0	86.0	13.0	16.0	17.0	.0	3.0	14.0	41.0	81.0	(265.0)	599.0
1990	(137.0)	100.0	98.0	30.0	56.0	5.0	.0	.0	7.0	26.0	17.0	45.0	521.0
PROM.	112.8	94.9	84.8	33.6	14.6	7.8	4.6	2.3	12.9	35.5	67.9	83.6	555.3
MAX.	261.0	420.0	221.0	183.0	56.0	50.0	31.0	29.0	110.0	239.0	230.0	273.0	1072.0
MIN.	14.0	3.0	14.0	.0	.0	.0	.0	.0	.0	1.0	8.0	6.0	260.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.

PORCENTAJES MENSUALES DE ETP REAL EN LA BANDA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1938	*****	69.6	95.4	30.9	74.5	15.4	8.0	10.5	3.3	3.2	100.0	76.2	1938
1939	49.7	100.0	100.0	83.8	46.8	38.5	24.0	21.1	50.0	44.1	38.0	53.6	1939
1940	100.0	54.4	74.1	61.8	74.5	50.0	20.0	15.8	100.0	34.4	45.0	78.8	1940
1941	100.0	91.2	64.8	32.4	59.6	.0	40.0	.0	100.0	38.7	17.1	100.0	1941
1942	14.3	100.0	69.4	100.0	40.4	65.4	16.0	10.5	21.7	7.5	37.2	100.0	1942
1943	9.9	100.0	100.0	70.6	63.8	53.8	52.0	10.5	21.7	21.5	100.0	75.5	1943
1944	55.9	85.6	100.0	27.9	14.9	11.5	8.0	7.9	3.3	57.0	100.0	35.8	1944
1945	100.0	34.4	97.2	29.4	.0	.0	.0	.0	100.0	30.6	11.6	100.0	1945
1946	70.2	30.4	97.2	100.0	38.3	19.2	36.0	10.5	100.0	12.9	57.4	100.0	1946
1947	17.4	100.0	14.8	30.9	19.1	53.8	12.0	.0	33.3	100.0	20.9	23.2	1947
1948	100.0	100.0	89.8	50.0	27.7	19.2	12.0	10.5	28.3	22.6	57.4	100.0	1948
1949	49.1	100.0	100.0	25.0	8.5	38.5	8.0	2.6	51.7	100.0	79.8	58.3	1949
1950	54.7	12.8	34.3	100.0	57.4	23.1	4.0	2.6	100.0	60.2	37.2	100.0	1950
1951	37.3	100.0	42.6	54.4	6.4	11.5	.0	.0	100.0	9.7	18.6	71.5	1951
1952	100.0	61.6	92.6	1.5	40.4	7.7	.0	15.8	23.3	100.0	58.0	100.0	1952
1953	94.4	24.0	100.0	47.1	17.0	73.1	4.0	5.3	3.3	29.0	75.2	100.0	1953
1954	37.3	100.0	53.7	36.8	17.0	3.8	.0	.0	100.0	14.0	42.6	100.0	1954
1955	13.7	92.8	97.2	100.0	12.8	3.8	4.0	2.6	100.0	62.4	78.7	19.2	1955
1956	92.6	100.0	49.1	91.2	42.6	88.5	12.0	13.2	.3	96.8	100.0	57.6	1956
1957	77.6	38.4	92.6	42.6	12.8	30.8	.0	2.6	30.0	100.0	34.9	93.4	1957
1958	82.6	63.2	100.0	57.4	4.3	15.4	72.0	2.6	100.0	12.9	57.4	100.0	1958
1959	100.0	99.2	87.0	55.9	68.1	57.7	64.0	13.2	3.3	28.0	40.2	77.5	1959
1960	100.0	32.8	57.4	72.1	19.1	57.7	28.0	.0	100.0	34.4	45.7	100.0	1960
1961	69.6	45.6	45.4	55.9	72.3	.0	.0	.0	100.0	100.0	36.4	80.8	1961
1962	97.5	16.0	100.0	17.6	27.7	.0	40.0	.0	100.0	15.1	38.8	100.0	1962
1963	67.7	100.0	100.0	51.5	42.6	84.6	48.0	15.6	23.3	15.1	74.4	53.0	1963
1964	100.0	91.2	61.1	29.4	34.0	38.5	12.0	.0	100.0	30.6	7.8	100.0	1964
1965	95.0	24.0	76.9	100.0	6.4	42.3	32.0	10.5	100.0	54.8	28.7	100.0	1965
1966	83.9	100.0	40.7	52.9	14.9	.0	4.0	.0	100.0	16.1	89.9	27.2	1966
1967	100.0	92.8	50.9	4.4	14.9	15.4	24.0	10.5	53.3	100.0	23.3	100.0	1967
1968	100.0	62.4	50.9	20.6	100.0	100.0	20.0	76.3	21.7	43.0	66.7	100.0	1968
1969	27.3	74.4	100.0	67.6	80.9	34.6	.0	5.3	100.0	5.6	43.4	88.1	1969
1970	70.2	100.0	100.0	43.5	83.1	42.3	20.0	15.8	88.3	15.1	34.1	34.4	1970
1971	100.0	100.0	75.0	63.2	23.4	15.4	56.0	26.3	21.7	89.2	50.4	100.0	1971
1972	34.8	100.0	46.3	100.0	44.7	34.6	28.0	5.3	55.3	19.4	37.2	100.0	1972
1973	100.0	62.4	100.0	100.0	80.9	100.0	84.0	57.9	38.7	33.5	83.7	66.2	1973
1974	100.0	100.0	100.0	94.1	91.5	65.4	76.0	39.5	26.7	30.1	16.3	27.8	1974
1975	100.0	96.8	60.2	82.4	10.6	26.9	.0	31.6	66.7	100.0	57.4	53.0	1975
1976	100.0	94.4	99.1	20.6	29.8	7.7	12.0	15.8	6.7	100.0	96.9	69.5	1976
1977	100.0	100.0	100.0	100.0	93.6	69.2	60.0	50.0	80.0	100.0	44.2	100.0	1977
1978	100.0	69.6	97.2	26.5	23.4	34.6	8.0	5.3	41.7	52.7	48.1	70.9	1978
1979	100.0	100.0	60.2	63.2	12.8	7.7	16.0	13.2	33.3	28.9	49.6	100.0	1979
1980	70.8	96.8	100.0	83.8	61.8	46.2	28.0	26.3	60.0	74.2	100.0	54.3	1980
1981	100.0	91.2	100.0	98.5	80.9	57.7	48.0	36.8	23.3	17.2	100.0	35.1	1981
1982	67.1	73.6	100.0	100.0	80.9	96.2	64.0	42.1	100.0	65.6	82.2	100.0	1982
1983	99.4	99.2	78.7	84.7	74.5	34.6	72.0	26.3	13.3	4.0	88.4	69.5	1983
1984	88.2	70.4	100.0	69.1	63.8	61.5	40.0	23.7	35.0	26.9	51.2	25.8	1984

1985	100.0	56.0	40.7	70.6	31.9	3.8	72.0	21.1	100.0	44.1	77.1	100.0	1985
1986	67.7	96.0	14.8	73.5	12.8	42.3	100.0	31.6	70.0	19.4	32.6	100.0	1986
1987	100.0	59.2	79.6	75.0	27.7	15.4	8.0	5.3	3.3	31.2	67.4	94.7	1987
1988	68.8	70.4	72.2	36.8	.0	23.1	12.0	.0	100.0	20.4	7.0	100.0	1988
1989	27.3	100.0	80.4	20.6	34.0	65.4	.0	7.9	23.3	130.0	64.3	100.0	1989
1990	98.8	94.4	96.3	69.1	100.0	53.8	32.0	23.7	25.0	34.4	16.3	30.5	1990



DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN LA BANDA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 103 MA

[illegible]



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN LA BANDA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 103 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1938	*****	38.0	5.0	47.0	12.0	22.0	23.0	34.0	58.0	90.0	0	36.0	1938
1939	81.0	0	0	11.0	25.0	16.0	19.0	30.0	30.0	52.0	50.0	70.0	1939
1940	0	57.0	28.0	26.0	12.0	13.0	20.0	32.0	0	61.0	71.0	32.0	1940
1941	0	11.0	38.0	46.0	19.0	26.0	15.0	38.0	0	57.0	107.0	0	1941
1942	138.0	0	33.0	0	28.0	9.0	21.0	34.0	47.0	86.0	81.0	0	1942
1943	145.0	0	0	20.0	17.0	12.0	12.0	34.0	47.0	73.0	0	37.0	1943
1944	71.0	18.0	0	49.0	40.0	23.0	23.0	40.0	53.0	40.0	0	97.0	1944
1945	0	82.0	3.0	48.0	47.0	26.0	25.0	38.0	0	18.0	114.0	0	1945
1946	48.0	87.0	3.0	0	29.0	21.0	16.0	34.0	0	81.0	55.0	0	1946
1947	133.0	0	92.0	47.0	38.0	12.0	22.0	38.0	40.0	0	102.0	116.0	1947
1948	0	0	11.0	34.0	34.0	21.0	22.0	34.0	43.0	72.0	55.0	0	1948
1949	82.0	0	0	51.0	43.0	16.0	23.0	37.0	29.0	0	26.0	63.0	1949
1950	73.0	109.0	71.0	0	20.0	20.0	24.0	37.0	0	37.0	81.0	0	1950
1951	101.0	0	62.0	31.0	44.0	23.0	25.0	38.0	0	84.0	105.0	43.0	1951
1952	0	48.0	8.0	67.0	28.0	24.0	25.0	32.0	46.0	0	58.0	0	1952
1953	9.0	95.0	0	36.0	39.0	7.0	24.0	36.0	53.0	66.0	32.0	0	1953
1954	101.0	0	50.0	43.0	39.0	25.0	24.0	38.0	0	80.0	74.0	0	1954
1955	139.0	9.0	3.0	0	41.0	25.0	24.0	37.0	0	35.0	30.0	122.0	1955
1956	28.0	0	55.0	6.0	27.0	3.0	22.0	33.0	55.0	3.0	0	64.0	1956
1957	36.0	77.0	8.0	39.0	41.0	18.0	25.0	37.0	42.0	0	84.0	10.0	1957
1958	28.0	46.0	0	29.0	45.0	22.0	7.0	37.0	0	81.0	55.0	0	1958
1959	0	1.0	14.0	30.0	15.0	11.0	9.0	33.0	53.0	67.0	103.0	34.0	1959
1960	0	84.0	46.0	19.0	38.0	11.0	18.0	38.0	0	61.0	70.0	0	1960
1961	49.0	68.0	59.0	30.0	13.0	26.0	25.0	38.0	0	0	42.0	29.0	1961
1962	4.0	105.0	0	56.0	34.0	26.0	15.0	38.0	0	79.0	79.0	0	1962
1963	52.0	0	0	33.0	27.0	4.0	13.0	32.0	46.0	79.0	33.0	71.0	1963
1964	0	11.0	42.0	48.0	31.0	16.0	22.0	38.0	0	18.0	119.0	0	1964
1965	8.0	95.0	25.0	0	44.0	15.0	17.0	34.0	0	42.0	92.0	0	1965
1966	26.0	0	64.0	32.0	40.0	26.0	24.0	38.0	0	78.0	13.0	110.0	1966
1967	0	9.0	53.0	65.0	40.0	22.0	19.0	34.0	28.0	0	99.0	0	1967
1968	0	47.0	53.0	54.0	0	0	20.0	9.0	47.0	53.0	43.0	0	1968
1969	117.0	32.0	0	22.0	9.0	17.0	25.0	36.0	0	35.0	73.0	18.0	1969
1970	48.0	0	0	35.0	7.0	15.0	20.0	32.0	7.0	79.0	85.0	99.0	1970
1971	0	0	27.0	25.0	36.0	22.0	11.0	28.0	47.0	10.0	64.0	0	1971
1972	105.0	0	58.0	0	26.0	17.0	18.0	36.0	25.0	75.0	81.0	0	1972
1973	0	47.0	0	0	9.0	0	4.0	16.0	33.0	60.0	21.0	51.0	1973
1974	0	0	0	4.0	4.0	9.0	6.0	23.0	44.0	65.0	108.0	109.0	1974
1975	0	4.0	43.0	12.0	42.0	19.0	25.0	28.0	20.0	0	55.0	71.0	1975
1976	0	7.0	1.0	54.0	33.0	24.0	22.0	32.0	58.0	0	4.0	46.0	1976
1977	0	0	0	0	3.0	8.0	10.0	19.0	12.0	71.0	72.0	0	1977
1978	0	38.0	3.0	50.0	36.0	17.0	23.0	36.0	35.0	44.0	67.0	44.0	1978
1979	0	0	43.0	25.0	41.0	24.0	21.0	33.0	37.0	68.0	65.0	0	1979
1980	47.0	4.0	0	11.0	17.0	14.0	18.0	28.0	24.0	24.0	0	69.0	1980
1981	0	11.0	0	1.0	6.0	11.0	13.0	24.0	46.0	77.0	0	98.0	1981
1982	53.0	33.0	0	0	9.0	1.0	9.0	28.0	0	32.0	23.0	0	1982
1983	1.0	1.0	23.0	24.0	12.0	17.0	7.0	28.0	52.0	32.0	15.0	46.0	1983
1984	19.0	37.0	0	21.0	17.0	10.0	15.0	29.0	39.0	68.0	63.0	112.0	1984

1980	53.0	64.0	20.0	32.0	23.0	7.0	30.0	32.0	26.0	26.0	18.0	1981
1986	52.0	51.0	92.0	41.0	15.0	-0	26.0	27.0	27.0	75.0	18.0	1986
1987	-0	51.0	22.0	34.0	22.0	23.0	36.0	42.0	42.0	64.0	58.0	1987
1988	13.0	37.0	30.0	47.0	20.0	22.0	36.0	120.0	120.0	74.0	-0	1988
1989	117.0	-0	21.0	31.0	9.0	25.0	35.0	46.0	46.0	40.0	40.0	1989
1990	2.0	7.0	4.0	21.0	12.0	17.0	29.0	103.0	103.0	61.0	105.0	1990
TOTALES	1931.0	1466.0	1257.0	1454.0	869.0	965.0	1717.0	1378.0	2630.0	3169.0	1810.0	TOTALES
NUM CASOS	31	35	36	44	51	52	53	34	44	47	28	NUM CASOS
D- MEDIOS	36.4	27.7	23.7	27.4	16.4	18.2	32.4	26.0	49.6	59.8	34.2	D- MEDIOS
D- REALES	62.3	41.9	34.9	33.0	17.0	18.6	32.4	40.5	59.8	67.4	64.0	D- REALES
FREC. %	59.6	60.0	67.9	83.0	96.2	98.1	100.0	64.2	83.0	88.7	52.8	FREC. %

SUMATORIA DEF\*FREC = 379.72 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -192.57 MM

# EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAH	MAJ	MJJ	JJA	JAS	AGO	SON	OND	NDE	TRIM.
E.P.E.	7.9	9.1	70.2	69.4	71.3	-0	-0	-0	.8	.7	1.2	.7	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN LA BANDA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	9	8	3	16	26	31	40	49	24	29	20	9	260
ENTRE 40.1 Y 54.9	3	2	9	7	6	8	3	2	4	0	9	4	63
ENTRE 55.0 Y 69.9	5	8	6	10	6	8	4	1	3	4	8	5	68
ENTRE 70.0 Y 84.9	7	4	7	8	7	2	5	1	2	3	7	7	60
ENTRE 85.0 Y 100.0	28	31	28	12	6	4	1	0	20	11	9	22	173
70 0 MENOR	17	18	18	33	40	47	47	52	32	39	37	18	396

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	17.3	15.1	5.7	30.2	52.8	58.5	75.5	92.5	45.1	54.7	37.7	17.0	
ENTRE 40.1 Y 54.9	5.8	3.8	17.0	13.2	11.3	15.1	5.7	3.8	7.5	11.3	17.0	7.5	
ENTRE 55.0 Y 69.9	9.6	15.1	11.3	18.9	11.3	15.1	7.5	1.9	5.7	7.5	15.1	9.4	
ENTRE 70.0 Y 84.9	13.5	7.5	13.2	15.1	13.2	3.8	9.4	1.9	3.8	5.7	15.2	13.2	
ENTRE 85.0 Y 100.0	53.8	58.5	52.8	22.6	11.3	7.5	1.9	0	37.7	20.8	17.0	52.8	
70 0 MENOR	32.7	34.0	34.0	62.3	75.5	88.7	88.7	98.1	60.4	73.6	69.5	34.0	

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 35

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

LA BARRA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	17	17	18	32	40	47	47	52	32	39	30	17
SOLO UN MES	14	12	5	5	1	2	1	2	0	4	0	9
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	2	2	5	10	25	37	42	49	31	21	20	6
	1	0	2	0	2	0	0	1	0	0	13	2
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAJ	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	1	2	2	8	23	34	42	27	20	12	4
	0	0	0	1	0	1	0	5	1	2	1	1
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAJ	MAJJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
SOLO CUATRO MESES	0	1	1	0	8	22	34	24	16	12	3	0
	0	1	1	0	0	0	5	0	2	1	0	0
CINCO O MAS MESES	NDEFM	DEFMA	EFMAJ	FMAJJ	MAJJA	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
	0	0	0	0	8	22	21	14	10	4	0	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	35	35	34	20	13	6	6	1	21	14	16	35
SOLO UN MES	4	6	8	8	7	3	5	1	13	7	7	11
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	20	20	22	12	5	3	1	0	0	3	4	5
	11	4	5	3	0	1	0	0	0	3	4	4
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAJ	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	9	13	8	5	2	1	0	0	0	0	0
	0	3	4	3	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAJ	MAJJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
SOLO CUATRO MESES	1	6	4	4	2	1	0	0	0	0	0	0
	0	4	0	0	0	0	0	0	0	0	0	0
CINCO O MAS MESES	NDEFM	DEFMA	EFMAJ	FMAJJ	MAJJA	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
	1	1	3	1	1	0	0	0	0	0	0	0

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	2	0	1	0	0	0	0	0	0	0	0
SOLO UN MES	0	2	0	1	0	0	0	0	0	0	0	0
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAJ	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAJ	MAJJ	AMJJ	MJJAS	JJAS	JASO	ASON	SOND	ONDE
	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROHEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
LA BANDA (1938-1990). LAT. 27.45 S. LONG. 64.15 W. ALT. 187 M. TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1938	89.9	83.8	73.7	23.2	12.4	6.9	3.8	.9	7.0	35.1	63.4	70.8	475.9
1967	51.6	53.6	38.9	17.2	11.1	7.0	5.1	1.7	9.7	32.4	46.7	45.2	
1939	86.3	94.1	77.1	23.3	13.0	7.8	4.0	1.8	7.4	36.3	64.4	70.2	477.6
1968	48.2	53.5	38.9	17.1	12.5	7.8	5.0	5.4	9.7	31.7	46.8	44.7	
1940	87.0	81.5	72.3	24.3	14.2	8.0	4.0	1.8	6.6	35.3	64.8	72.0	471.9
1969	49.0	51.1	36.1	17.5	13.0	7.7	5.0	5.4	9.0	32.2	46.7	46.1	
1941	89.7	80.9	74.3	23.5	14.3	7.8	3.6	1.7	8.1	34.7	64.3	69.7	472.9
1970	43.1	51.4	38.1	17.2	13.2	7.7	5.0	5.4	12.2	32.5	46.9	45.4	
1942	95.1	84.0	72.8	23.8	13.4	7.8	3.9	1.9	8.1	36.3	65.7	69.0	451.9
1971	53.4	56.0	39.2	17.2	13.2	7.7	5.1	5.4	12.2	33.7	46.1	46.2	
1943	96.2	79.7	72.4	24.3	13.6	7.5	4.1	1.9	8.9	36.6	65.7	70.2	481.2
1972	52.1	54.4	39.4	18.6	13.2	7.6	5.1	5.4	13.1	33.4	46.1	46.0	
1944	103.3	78.5	72.9	27.4	12.8	8.8	3.6	1.9	8.6	36.7	61.6	71.8	486.2
1973	55.1	55.0	40.4	27.2	13.2	10.8	4.9	5.4	13.2	33.3	35.1	46.0	
1945	108.7	89.1	73.5	28.5	13.9	9.0	4.3	1.9	8.7	35.6	60.4	71.5	504.9
1974	59.3	53.1	41.3	26.9	13.6	10.7	5.2	5.4	13.2	33.3	36.1	46.2	
1946	109.9	91.7	72.1	29.7	14.0	9.2	4.3	2.3	10.0	33.7	62.3	72.6	511.6
1975	58.3	82.8	40.9	27.3	13.5	10.6	5.2	5.7	14.3	32.7	35.0	45.9	
1947	112.5	94.3	72.1	29.2	13.8	9.1	4.1	2.3	10.1	41.3	63.1	74.0	525.9
1976	60.2	82.2	40.9	27.7	13.5	10.7	5.2	5.7	14.2	49.4	35.5	44.9	
1948	117.4	101.7	75.0	34.6	14.1	8.6	4.1	2.5	10.8	40.1	64.0	79.9	553.0
1977	58.9	88.3	39.7	30.4	13.5	10.8	5.2	5.8	15.3	49.9	34.6	50.8	
1949	120.3	95.4	76.5	34.5	14.2	8.8	4.1	2.5	11.2	41.1	63.0	81.7	554.0
1978	59.9	86.1	39.9	30.5	13.4	10.7	5.2	5.8	15.5	49.7	34.8	50.6	
1950	120.1	99.8	74.2	35.4	14.2	8.5	4.2	2.6	10.9	37.4	62.7	88.4	558.5
1979	60.0	85.8	39.4	30.3	13.4	10.8	5.1	5.7	15.2	46.7	34.5	61.6	
1951	118.9	103.4	77.8	36.4	13.9	8.5	4.2	2.7	11.9	37.8	67.4	87.3	570.2
1980	61.2	84.5	40.7	30.0	13.3	10.8	5.1	5.7	15.5	46.6	41.1	62.2	
1952	124.6	105.0	80.9	37.2	14.5	8.5	4.2	2.8	12.0	37.8	71.5	85.0	584.0
1981	63.2	83.4	41.6	30.3	13.2	10.8	5.1	5.7	15.5	46.8	42.5	62.7	
1953	125.8	105.5	84.9	40.1	13.9	9.2	4.4	2.6	15.2	37.6	72.4	91.2	602.7
1982	62.5	83.5	48.8	30.6	13.4	11.1	5.0	5.7	23.7	47.0	42.6	65.9	

1954	125.8	108.6	82.4	40.2	14.3	8.7	4.9	2.7	15.3	37.9	72.9	43.2	607.6
1983	62.5	82.0	48.6	39.5	13.6	11.0	5.4	3.7	23.6	46.9	43.2	65.3	
1955	128.6	109.4	86.6	39.9	15.1	9.1	5.1	2.8	15.6	39.2	73.3	94.1	618.1
1984	61.3	81.7	51.7	39.7	13.6	11.0	5.3	5.7	23.5	46.8	43.1	64.3	
1956	133.6	107.8	84.5	41.2	15.4	9.1	5.6	3.0	15.9	37.6	73.4	98.3	625.6
1985	58.1	82.0	52.2	39.3	13.4	10.9	5.7	5.7	23.4	46.6	43.2	64.0	
1957	132.7	106.5	83.8	40.9	15.1	8.7	6.7	3.3	17.2	35.2	69.1	97.2	616.2
1986	58.3	81.5	53.1	39.2	13.5	10.6	7.3	5.9	23.7	45.7	39.4	65.1	
1958	137.4	105.2	83.1	41.5	15.2	8.5	6.7	3.3	16.6	35.9	70.5	97.2	621.1
1987	62.8	82.8	53.0	39.1	13.5	10.7	7.3	5.9	23.9	45.4	39.2	65.1	
1959	137.8	105.5	84.6	41.1	15.1	8.6	6.2	3.3	16.5	36.1	68.3	91.6	614.7
1988	62.8	82.8	52.2	39.2	13.5	10.7	7.0	5.9	23.9	45.3	40.2	65.4	
1960	138.9	102.1	84.7	40.8	14.8	8.7	5.7	3.4	17.0	35.7	70.2	96.5	613.5
1989	64.3	84.1	52.2	39.4	13.3	10.8	6.9	5.1	23.7	45.2	40.0	72.5	
1961	135.1	104.2	86.0	40.1	16.3	8.6	5.5	3.4	17.2	36.6	68.9	92.5	614.2
1990	63.1	83.3	52.0	39.4	15.3	10.7	7.0	5.8	23.6	45.2	41.1	71.9	



ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN LA BANDA (1938-1990). LAT. 27.45 S. LONG. 66.15 W. ALT. 187 M. TABLA 100 MM

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

INTERVALOS EN UN TOTAL DE 33 AÑOS.

[illegible]

L O S   J U R I E S

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 23

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN LOS JURIES (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	111.00	63.00	47.00	26.00	25.00	38.00	60.00	93.00	125.00	166.00
LLUVIAS	125.88	120.07	116.44	73.63	23.59	16.88	10.88	19.12	31.76	62.95	101.15	91.90
ETP REAL	130.75	108.37	95.76	49.71	29.37	15.95	15.20	21.83	37.63	64.85	92.71	110.54
EXCEDENTES	2.87	6.80	21.88	240.17	2.37	1.76	.83	.00	.00	1.66	5.90	.00
DEFICIT	40.25	29.63	15.24	13.29	17.63	10.15	9.80	16.17	22.37	28.15	32.29	55.46
ETP REAL / ETP POT.	76.46	78.53	86.27	78.90	64.48	60.98	60.78	57.45	62.72	69.74	74.17	66.59
ESCURRIMIENTOS	2.57	4.66	13.27	126.72	64.54	33.15	16.99	8.49	4.25	2.95	4.43	2.21

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	69.07	79.27	97.08	60.91	29.89	26.60	12.03	25.29	31.76	42.38	59.02	45.61
ETP REAL	42.85	36.41	26.10	17.76	15.96	8.48	7.52	12.42	16.37	26.64	31.78	41.29
EXCEDENTES	10.96	22.82	69.99	144.75	11.56	7.71	4.71	.00	.00	10.62	25.34	.00
DEFICIT	42.85	36.41	26.10	17.76	15.96	5.68	7.52	12.42	16.37	26.64	31.78	41.29
ETP REAL / ETP POT.	25.06	26.38	23.51	28.19	33.96	33.37	30.10	32.69	30.61	28.64	25.43	24.88
ESCURRIMIENTOS	6.68	12.99	35.75	723.74	361.78	180.90	90.45	45.23	22.61	16.61	14.02	7.01

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.5487	.6602	.8337	.8272	1.2675	1.5760	1.1059	1.3223	1.0002	.6731	.5835	.4941
ETP REAL	.3278	.3360	.2726	.3572	.5435	.5473	.4952	.5691	.4880	.4108	.3428	.3756
EXCEDENTES	3.8137	3.3538	3.1993	6.0072	4.8872	4.3921	5.6811	.0000	.0000	6.4031	3.9550	.0000
DEFICIT	1.0647	1.2287	1.7121	1.3359	.9050	.8551	.7674	.7683	.8212	.9464	.9843	.7445
ETP REAL / ETP POT.	.3278	.3360	.2726	.3572	.5435	.5473	.4952	.5691	.4880	.4108	.3428	.3756
ESCURRIMIENTOS	2.5987	2.7895	2.6948	5.7114	5.6053	5.4572	5.3240	5.3240	5.3240	5.6237	3.1661	3.1661

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN LOS JURIS (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1950	52.0	(222.0)	29.0	42.0	16.0	24.0	5.0	13.0	27.0	83.0	134.0	61.0	763.0
1951	(206.0)	140.0	88.0	59.0	3.0	23.0	19.0	19.0	0	54.0	82.0	90.0	764.0
1952	107.0	85.0	(109.0)	56.0	34.0	5.0	5.0	95.0	28.0	24.0	90.0	75.0	713.0
1953	(193.0)	97.0	70.0	63.0	77.0	98.0	0	0	0	83.0	32.0	44.0	757.0
1954	70.0	34.0	(128.0)	29.0	0	12.0	13.0	1.0	18.0	102.0	3.0	57.0	467.0
1955	36.0	(135.0)	134.0	37.0	3.0	3.0	0	6.0	3.0	2.0	56.0	10.0	553.0
1956	122.0	84.0	35.0	28.0	0	12.0	0	50.0	15.0	156.0	(201.0)	33.0	736.0
1957	(141.0)	61.0	17.0	50.0	25.0	24.0	12.0	6.0	25.0	111.0	62.0	118.0	640.0
1958	44.0	34.0	52.0	55.0	16.0	27.0	27.0	0	22.0	9.0	163.0	(197.0)	625.0
1959	115.0	156.0	(204.0)	163.0	117.0	27.0	29.0	0	4.0	32.0	98.0	51.0	998.0
1960	71.0	50.0	45.0	117.0	0	28.0	28.0	100.0	17.0	120.0	24.0	(142.0)	714.0
1961	39.0	(189.0)	157.0	15.0	112.0	0	0	0	6.0	56.0	60.0	116.0	780.0
1962	(96.0)	45.0	40.0	12.0	0	0	10.0	0	5.0	64.0	93.0	40.0	405.0
1963	(240.0)	116.0	74.0	81.0	4.0	0	3.0	0	31.0	25.0	122.0	70.0	766.0
1964	44.0	60.0	115.0	16.0	0	8.0	4.0	0	56.0	37.0	55.0	(163.0)	558.0
1965	144.0	129.0	90.0	8.0	0	0	14.0	0	5.0	31.0	(171.0)	134.0	779.0
1966	(164.0)	60.0	65.0	82.0	81.0	7.0	5.0	0	45.0	10.0	87.0	134.0	740.0
1967	76.0	(105.0)	43.0	42.0	24.0	4.0	5.0	49.0	39.0	65.0	95.0	66.0	613.0
1968	138.0	(205.0)	85.0	15.0	0	64.0	2.0	65.0	42.0	68.0	118.0	70.0	872.0
1969	26.0	54.0	23.0	44.0	57.0	5.0	0	0	0	36.0	61.0	(74.0)	382.0
1970	60.0	(139.0)	132.0	3.0	61.0	19.0	13.0	16.0	43.0	41.0	32.0	110.0	675.0
1971	119.0	(148.0)	110.0	93.0	0	0	25.0	28.0	24.0	26.0	112.0	22.0	707.0
1972	82.0	104.0	(146.0)	0	0	61.0	18.0	10.0	52.0	59.0	123.0	148.0	836.0
1973	256.0	55.0	(456.0)	213.0	0	111.0	0	0	0	81.0	37.0	150.0	1409.0
1974	114.0	(284.0)	24.0	96.0	12.0	1.0	9.0	49.0	85.0	16.0	20.0	27.0	603.0
1975	54.0	28.0	157.0	51.0	13.0	19.0	0	0	0	92.0	(222.0)	62.0	832.0
1976	168.0	179.0	(464.0)	22.0	17.0	0	0	27.0	4.0	50.0	43.0	103.0	1079.0
1977	143.0	(260.0)	249.0	118.0	24.0	0	14.0	30.0	11.0	76.0	167.0	91.0	1183.0
1978	88.0	41.0	97.0	31.0	18.0	29.0	16.0	27.0	72.0	74.0	(105.0)	79.0	663.0
1979	93.0	(221.0)	39.0	80.0	10.0	0	0	22.0	71.0	47.0	65.0	202.0	866.0
1980	72.0	33.0	163.0	(227.0)	15.0	3.0	8.0	57.0	20.0	34.0	129.0	73.0	826.0
1981	180.0	(257.0)	159.0	44.0	66.0	0	0	24.0	21.0	10.0	82.0	155.0	1006.0
1982	100.0	(214.0)	37.0	130.0	5.0	5.0	12.0	0	122.0	20.0	187.0	105.0	937.0
1983	(143.0)	21.0	10.0	135.0	29.0	5.0	13.0	9.0	52.0	58.0	101.0	64.0	640.0
1984	179.0	202.0	175.0	56.0	10.0	0	0	3.0	104.0	97.0	(283.0)	82.0	1196.0
1985	240.0	(267.0)	102.0	122.0	21.0	13.0	25.0	0	32.0	193.0	97.0	69.0	1231.0
1986	128.0	127.0	135.0	(222.0)	13.0	66.0	55.0	20.0	72.0	59.0	132.0	116.0	1140.0
1987	(291.0)	10.0	125.0	22.0	18.0	0	14.0	8.0	0	21.0	56.0	75.0	640.0
1988	(291.0)	25.0	84.0	5.0	0	0	32.0	25.0	11.0	32.0	93.0	77.0	675.0
1989	101.0	59.0	(199.0)	83.0	15.0	34.0	5.0	20.0	23.0	136.0	94.0	81.0	850.0
1990	134.0	(188.0)	106.0	158.0	17.0	5.0	25.0	5.0	12.0	104.0	55.0	132.0	941.0
PROM.	125.9	120.1	116.4	73.6	23.6	16.9	10.9	19.1	31.5	63.0	101.1	91.9	794.2
MAX.	291.0	284.0	464.0	227.0	117.0	111.0	55.0	100.0	122.0	193.0	283.0	202.0	1409.0

MIN. 26.0 10.0 10.0 .0 .0 .0 .0 .0 .0 10.0 382.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN LOS JURIES (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1950	*****	100.0	77.5	79.4	53.2	92.3	40.0	47.4	53.3	95.7	100.0	63.9	1950
1951	100.0	100.0	91.0	96.8	40.4	92.3	28.0	60.5	13.3	61.3	68.0	55.4	1951
1952	63.2	100.0	98.2	88.9	74.5	23.1	24.0	100.0	73.3	49.5	76.8	50.6	1952
1953	100.0	77.5	68.5	100.0	100.0	100.0	92.0	65.8	40.0	92.5	37.6	30.7	1953
1954	42.1	100.0	100.0	55.6	10.6	50.0	56.0	7.9	33.3	100.0	8.8	36.1	1954
1955	100.0	97.8	100.0	100.0	100.0	80.8	60.0	52.6	31.7	16.1	48.0	7.8	1955
1956	100.0	62.5	33.3	44.4	0	46.2	0	100.0	33.3	100.0	100.0	64.5	1956
1957	86.5	51.4	19.8	79.4	55.3	92.3	48.0	2.6	43.3	100.0	56.8	73.5	1957
1958	28.1	25.4	100.0	87.3	36.2	3.8	100.0	18.4	38.3	10.8	100.0	100.0	1958
1959	84.8	100.0	100.0	100.0	100.0	100.0	100.0	84.2	56.7	53.8	92.4	36.7	1959
1960	43.3	37.0	100.0	100.0	46.8	30.8	100.0	100.0	85.0	100.0	64.0	89.2	1960
1961	33.3	100.0	100.0	85.7	100.0	88.5	68.0	50.0	38.3	94.6	56.8	72.3	1961
1962	58.5	34.1	100.0	22.2	2.1	0	40.0	0	100.0	69.9	75.2	25.3	1962
1963	100.0	94.2	82.9	100.0	51.1	30.8	36.0	18.4	58.3	32.3	97.6	44.6	1963
1964	100.0	45.7	100.0	28.6	4.3	30.8	16.0	2.6	91.3	100.0	45.6	98.2	1964
1965	84.2	93.5	81.1	14.3	0	0	56.0	0	100.0	88.2	100.0	89.2	1965
1966	97.1	57.2	64.0	100.0	100.0	69.2	56.0	34.2	81.7	25.3	72.8	81.9	1966
1967	46.2	76.8	100.0	68.3	53.2	15.4	20.0	100.0	68.3	73.1	77.6	42.2	1967
1968	81.3	100.0	91.0	55.6	25.5	100.0	56.3	100.0	91.7	87.1	66.8	59.0	1968
1969	22.2	40.6	23.4	69.8	100.0	26.9	8.0	5.3	3.3	39.8	49.6	100.0	1969
1970	40.4	100.0	100.0	22.2	100.0	80.8	64.0	52.6	76.7	50.5	29.6	66.9	1970
1971	70.2	100.0	99.1	100.0	31.9	23.1	100.0	78.9	50.0	34.4	96.4	15.7	1971
1972	100.0	76.1	100.0	28.6	17.0	100.0	84.0	55.3	100.0	80.6	100.0	92.8	1972
1973	100.0	81.2	100.0	100.0	80.9	50.0	60.0	28.9	13.3	23.7	76.0	92.2	1973
1974	70.2	100.0	74.8	100.0	72.3	50.0	28.0	100.0	100.0	98.9	100.0	100.0	1974
1975	33.3	100.0	100.0	88.9	53.3	80.8	32.0	78.9	26.7	59.1	39.2	64.5	1975
1976	98.8	100.0	100.0	100.0	72.3	42.3	80.0	89.5	51.7	87.1	100.0	76.5	1976
1977	83.6	100.0	100.0	100.0	40.4	100.0	4.0	71.1	100.0	83.9	86.4	51.8	1977
1978	62.0	35.5	88.3	50.8	59.6	34.6	76.0	63.4	100.0	64.5	66.0	100.0	1978
1979	55.6	100.0	75.7	100.0	59.6	69.2	52.0	100.0	68.3	57.0	100.0	54.2	1979
1980	59.6	31.9	100.0	100.0	91.5	88.5	80.0	96.8	65.0	34.4	70.4	94.0	1980
1981	100.0	100.0	100.0	98.4	100.0	88.5	72.0	39.5	100.0	74.2	100.0	91.6	1981
1982	61.4	100.0	72.1	100.0	85.1	69.2	76.0	52.6	91.7	72.0	84.8	45.2	1982
1983	91.2	35.5	16.2	100.0	89.4	65.4	48.0	39.5	100.0	100.0	100.0	84.3	1983
1984	100.0	100.0	100.0	98.4	85.1	65.4	100.0	57.9	100.0	100.0	97.6	69.9	1984
1985	100.0	100.0	100.0	100.0	93.6	84.6	100.0	97.4	100.0	94.6	100.0	87.3	1985
1986	78.4	93.5	100.0	100.0	91.5	100.0	100.0	97.4	100.0	94.6	100.0	87.3	1986
1987	100.0	60.1	100.0	57.1	53.2	19.2	60.0	31.6	6.7	25.8	45.6	45.8	1987
1988	100.0	82.0	100.0	25.4	10.6	7.7	100.0	71.1	25.0	37.6	75.2	47.6	1988
1989	100.0	44.2	100.0	100.0	91.5	100.0	80.0	81.6	66.7	100.0	92.8	69.3	1989
1990	83.0	100.0	98.2	100.0	91.5	73.1	100.0	57.9	68.3	100.0	59.2	82.5	1990

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN LOS JURIS (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1950	*****	34.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1950
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1951
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1952
1953	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	1953
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1954
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1955
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	1956
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1957
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1958
1959	0.0	0.0	51.0	100.0	70.0	1.0	4.0	0.0	0.0	0.0	0.0	0.0	1959
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1960
1961	0.0	0.0	3.0	0.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1961
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1962
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1963
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1964
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1965
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1966
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1967
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1968
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1969
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1970
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1971
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1972
1973	19.0	0.0	288.0	150.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	1973
1974	0.0	54.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0	1974
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1975
1976	0.0	0.0	327.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1976
1977	0.0	24.0	138.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1977
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1978
1979	0.0	0.0	0.0	122.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1979
1980	0.0	38.0	48.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1980
1981	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1981
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1982
1983	0.0	0.0	42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	134.0	0.0	1983
1984	0.0	129.0	0.0	9250.0	0.0	0.0	0.0	0.0	0.0	68.0	0.0	0.0	1984
1985	11.0	0.0	0.0	0.0	0.0	10.0	30.0	0.0	0.0	0.0	0.0	0.0	1985
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1986
1987	64.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1987
1988	21.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1988
1989	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1989
1990	0.0	0.0	0.0	58.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1990
TOTALES	115.0	279.0	897.0	9847.0	97.0	72.0	34.0	0.0	0.0	68.0	242.0	0.0	TOTALES
NUM CASOS	4	5	7	9	3	4	2	0	0	1	4	0	NUM CASOS
E. MEDIOS	2.8	6.8	21.9	240.2	2.4	1.8	0.8	0.0	0.0	1.7	5.9	0.0	E. MEDIOS
E. REALES	28.7	55.8	128.1	1094.1	32.3	18.0	17.0	0.0	0.0	68.0	60.5	0.0	E. REALES





PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERTIADO.  
DEFICIENCIAS MENSUALES EN LOS JURIS (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1950	*****	-0	25.0	13.0	22.0	2.0	15.0	20.0	23.0	4.0	-0	60.0	1950
1951	-0	-0	10.0	2.0	28.0	2.0	16.0	15.0	52.0	36.0	40.0	74.0	1951
1952	63.0	-0	2.0	7.0	12.0	20.0	19.0	19.0	16.0	47.0	29.0	82.0	1952
1953	-0	31.0	35.0	-0	-0	-0	2.0	13.0	36.0	7.0	78.0	115.0	1953
1954	99.0	-0	-0	28.0	42.0	13.0	11.0	35.0	40.0	-0	114.0	106.0	1954
1955	-0	3.0	-0	-0	-0	5.0	10.0	18.0	41.0	78.0	65.0	153.0	1955
1956	-0	52.0	74.0	35.0	47.0	14.0	23.0	-0	40.0	-0	-0	59.0	1956
1957	23.0	67.0	89.0	13.0	21.0	2.0	13.0	37.0	34.0	-0	54.0	44.0	1957
1958	133.0	103.0	-0	8.0	30.0	25.0	-0	31.0	37.0	83.0	-0	-0	1958
1959	26.0	-0	-0	-0	-0	-0	-0	6.0	26.0	43.0	22.0	105.0	1959
1960	97.0	87.0	-0	-0	25.0	18.0	-0	-0	9.0	-0	43.0	18.0	1960
1961	114.0	-0	-0	9.0	-0	3.0	8.0	19.0	37.0	5.0	54.0	46.0	1961
1962	71.0	91.0	-0	49.0	46.0	26.0	15.0	38.0	-0	23.0	31.0	124.0	1962
1963	-0	8.0	19.0	-0	23.0	18.0	16.0	31.0	25.0	63.0	3.0	92.0	1963
1964	-0	75.0	-0	45.0	45.0	18.0	21.0	37.0	4.0	-0	65.0	3.0	1964
1965	27.0	9.0	21.0	54.0	47.0	26.0	11.0	38.0	-0	11.0	-0	18.0	1965
1966	5.0	59.0	40.0	-0	-0	8.0	11.0	25.0	11.0	69.0	34.0	30.0	1966
1967	92.0	32.0	-0	20.0	22.0	22.0	20.0	-0	19.0	25.0	28.0	96.0	1967
1968	32.0	-0	10.0	28.0	35.0	-0	11.0	-0	5.0	12.0	4.0	66.0	1968
1969	133.0	82.0	85.0	19.0	-0	19.0	23.0	36.0	58.0	56.0	63.0	-0	1969
1970	102.0	-0	-0	49.0	-0	5.0	9.0	18.0	14.0	46.0	88.0	55.0	1970
1971	51.0	-0	1.0	-0	32.0	20.0	-0	8.0	30.0	61.0	12.0	140.0	1971
1972	-0	33.0	-0	45.0	39.0	-0	4.0	17.0	-0	18.0	-0	12.0	1972
1973	-0	26.0	-0	-0	9.0	-0	2.0	13.0	36.0	9.0	35.0	13.0	1973
1974	51.0	-0	28.0	-0	13.0	-0	10.0	27.0	49.0	71.0	101.0	-0	1974
1975	114.0	-0	-0	7.0	21.0	5.0	18.0	-0	-0	1.0	-0	38.0	1975
1976	2.0	-0	-0	7.0	13.0	15.0	17.0	8.0	44.0	38.0	76.0	59.0	1976
1977	28.0	-0	-0	-0	2.0	7.0	5.0	4.0	29.0	12.0	-0	39.0	1977
1978	65.0	89.0	13.0	31.0	28.0	-0	24.0	11.0	-0	15.0	17.0	80.0	1978
1979	76.0	-0	27.0	-0	19.0	17.0	6.0	12.0	-0	33.0	50.0	-0	1979
1980	69.0	94.0	-0	-0	4.0	8.0	12.0	-0	19.0	40.0	-0	76.0	1980
1981	-0	-0	-0	1.0	-0	3.0	5.0	5.0	21.0	31.0	37.0	10.0	1981
1982	66.0	-0	31.0	-0	7.0	8.0	7.0	23.0	-0	24.0	-0	14.0	1982
1983	15.0	89.0	93.0	-0	5.0	9.0	6.0	14.0	5.0	25.0	19.0	91.0	1983
1984	-0	-0	-0	1.0	7.0	9.0	13.0	23.0	-0	-0	-0	26.0	1984
1985	-0	-0	-0	-0	3.0	4.0	-0	16.0	-0	-0	3.0	50.0	1985
1986	37.0	9.0	-0	-0	4.0	-0	-0	1.0	-0	5.0	-0	21.0	1986
1987	-0	55.0	-0	27.0	22.0	21.0	10.0	26.0	56.0	69.0	68.0	90.0	1987
1988	-0	44.0	20.0	47.0	42.0	24.0	-0	11.0	45.0	58.0	31.0	87.0	1988
1989	-0	77.0	-0	-0	4.0	-0	5.0	7.0	20.0	-0	9.0	51.0	1989
1990	29.0	-0	2.0	-0	4.0	7.0	-0	16.0	31.0	-0	51.0	29.0	1990
TOTALES	1610.0	1215.0	625.0	545.0	723.0	416.0	402.0	663.0	917.0	1154.0	1324.0	2274.0	TOTALES
NUM CASOS	26	22	19	23	33	33	33	34	31	32	30	37	NUM CASOS
D. MEDIOS	39.3	29.6	15.2	13.3	17.6	10.1	9.8	16.2	22.4	28.1	32.3	55.5	D. MEDIOS
D. REALES	61.9	55.2	32.9	23.7	21.9	12.6	12.2	19.5	29.6	36.1	44.1	61.5	D. REALES

FREQUENCY	50.0	56.1	60.5	80.5	86.7	90.0	95.0	100.0
RELATIVE FREQUENCY	0.05	0.08	0.10	0.12	0.15	0.18	0.20	0.22

SUMATORIA DEF#FREC = 290.45 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -6.20 MM

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EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIN.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIN.
7.2	27.0	82.2	85.1	85.6	11.6	6.7	1.7	2.4	3.4	6.1	6.4	E.P.E.	

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PRESTE ATENCIÓN A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN LOS JURIES (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	4	6	4	6	10	13	12	13	13	10	5	6	102
ENTRE 40.1 Y 54.9	4	4	0	2	7	4	3	5	5	3	4	8	49
ENTRE 55.0 Y 69.9	6	4	2	5	3	5	9	7	6	5	6	8	66
ENTRE 70.0 Y 84.9	8	4	7	2	4	6	7	6	3	5	9	7	66
ENTRE 85.0 Y 100.0	18	23	28	26	17	13	10	10	14	18	17	12	206
70 0 MENOR	14	14	6	13	20	22	24	25	24	18	15	22	217

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	10.0	14.6	9.8	14.6	24.4	31.7	29.3	31.7	31.7	24.4	12.2	14.6	
ENTRE 40.1 Y 54.9	10.0	9.8	.0	4.9	17.1	9.8	7.3	12.2	12.2	7.3	7.8	19.5	
ENTRE 55.0 Y 69.9	15.0	9.8	4.9	12.2	7.3	12.2	22.0	17.1	14.6	12.2	14.6	19.5	
ENTRE 70.0 Y 84.9	20.0	9.8	17.1	4.9	9.8	14.6	17.1	14.6	7.3	12.2	22.0	17.1	
ENTRE 85.0 Y 100.0	45.0	56.1	68.3	63.4	41.5	31.7	24.4	24.4	34.1	43.9	41.5	29.3	
70 0 MENOR	35.0	34.1	14.6	31.7	48.8	53.7	58.5	61.0	58.5	43.9	36.6	53.7	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

LOS JURIES (1950-1990). LAT. 28-28 S. LONG. 62-07 W. ALT. 92 M TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	14	14	6	13	20	22	24	25	24	16	14	22
SOLO UN MES	5	4	1	1	4	2	3	5	4	3	4	12
DOS O MAS MESES	5	6	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	1	4	3	0	3	4	3	1	3	5	1	1
TRES O MAS MESES	2	2	1	2	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	1	1	0	0	0	1	0	2	3	1	0	1
CUATRO O MAS MESES	0	1	1	1	MANJ	AMJJ	MJJA	5	6	5	7	1
SOLO CUATRO MESES	0	0	0	0	0	1	0	0	0	0	0	0
CINCO O MAS MESES	0	1	0	1	MANJJ	AMJJA	MJJAS	4	5	3	1	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	26	26	34	27	21	19	17	16	17	23	26	18
SOLO UN MES	5	0	5	1	1	6	4	4	4	5	7	0
DOS O MAS MESES	9	18	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	0	1	3	2	19	12	10	8	2	12	16	11
TRES O MAS MESES	8	6	17	19	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	0	2	2	10	11	0	0	0	0	2	1
CUATRO O MAS MESES	5	14	EFMA	FMAM	MANJ	AMJJ	MJJA	5	4	4	6	7
SOLO CUATRO MESES	0	1	3	2	0	1	0	0	1	2	0	0
CINCO O MAS MESES	5	5	11	9	8	5	1	1	1	2	0	4

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	1	3	5	0	0	0	0	0	0	1	0
SOLO UN MES	0	1	2	4	0	0	0	0	0	0	1	0
DOS O MAS MESES	0	0	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	0	0	0	1	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	0	0	0	0	MANJ	AMJJ	MJJJA	JJAS	JASO	ASON	SOND	ONDE

(\*) TODA VEZ QUE EN EL CORTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
LOS JURIES (1950-1990). LAT. 28.28 S. LONG. 62.07 W. ALT. 92 M TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1950	110.2	117.3	116.0	60.5	25.3	19.5	8.6	20.4	26.1	60.6	94.6	91.3	749.4
1979	60.3	71.5	108.8	50.0	33.4	28.7	9.4	27.9	25.8	36.3	56.1	50.4	
1951	110.9	111.0	120.4	66.7	25.2	17.8	8.4	21.9	25.9	58.8	92.8	91.7	751.5
1980	59.8	70.3	107.9	58.4	33.4	28.8	9.5	28.7	25.8	36.3	53.9	50.2	
1952	110.0	114.9	122.8	66.2	27.3	17.1	8.7	22.1	26.6	57.3	92.8	93.9	759.6
1981	58.5	75.0	107.9	58.5	34.0	29.0	9.3	28.7	25.4	37.4	53.9	51.5	
1953	109.8	119.2	120.4	68.6	26.4	17.1	8.9	18.9	29.7	57.2	96.0	94.9	767.0
1982	58.6	76.9	109.0	59.6	34.2	29.0	9.3	25.4	30.8	37.5	56.6	51.4	
1954	108.1	116.7	118.4	71.0	24.8	14.0	9.3	19.2	31.4	56.3	98.3	95.5	763.1
1983	56.8	78.9	110.5	60.8	32.8	24.7	9.2	25.2	30.5	37.2	55.3	50.9	
1955	111.8	122.3	120.0	71.9	25.1	13.7	8.9	19.3	34.3	56.2	107.6	96.4	787.4
1984	57.8	78.8	111.0	60.4	32.6	24.7	9.3	25.2	33.1	37.0	61.9	50.4	
1956	118.6	126.7	118.9	71.6	24.6	14.1	9.7	19.1	36.9	62.5	109.0	98.3	810.0
1985	60.5	83.1	111.0	60.1	32.5	24.7	9.6	25.3	33.7	43.2	61.1	48.1	
1957	118.6	128.1	122.2	78.1	25.0	15.9	11.6	18.1	38.8	59.3	106.7	101.1	823.5
1986	60.5	82.7	109.9	65.4	32.3	26.4	12.5	24.6	34.0	39.5	58.8	46.5	
1958	123.0	126.4	125.8	77.2	24.8	15.1	11.6	18.3	38.0	56.3	106.5	99.7	923.3
1987	68.1	84.7	108.1	66.1	32.3	26.5	12.5	24.5	34.7	38.8	59.0	46.6	
1959	131.8	126.1	126.9	75.5	24.2	15.1	11.8	19.0	37.6	57.1	104.2	95.7	825.0
1988	72.9	85.0	107.5	67.3	32.6	26.5	12.8	24.4	34.9	38.1	58.1	43.0	
1960	131.4	122.9	126.7	72.8	20.8	15.3	11.0	19.6	38.3	60.5	104.0	96.7	820.1
1989	73.1	85.7	107.4	65.2	27.5	26.7	12.4	24.1	34.5	40.4	58.1	42.3	
1961	133.5	127.5	128.8	74.2	21.4	15.5	10.9	16.5	38.1	60.0	105.1	96.3	827.7
1990	72.2	85.3	106.3	66.6	27.2	26.6	12.3	18.8	34.6	39.7	56.9	42.0	



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROCENTUALES MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 41 A=05.-

[illegible]



L O S   L I N A R E S

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 12

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN LOS LINARES (1968-1986).LAT. 28.23 S. LONG. 62.33 W. ALT. 108 M TABLA 105 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	111.00	63.00	47.00	26.00	25.00	36.00	60.00	93.00	125.00	166.00
LLUVIAS	145.53	137.00	157.63	72.53	23.05	15.11	8.39	13.79	44.84	58.11	105.05	102.00
ETP REAL	149.78	104.16	94.21	54.79	32.16	15.63	13.84	20.42	46.47	60.95	90.42	119.58
EXCEDENTES	7.39	35.11	48.32	13.42	3.05	1.42	.00	.00	.00	2.21	4.84	1.63
DEFICIT	21.22	33.84	16.79	8.21	14.84	10.37	11.16	17.58	13.53	32.05	34.58	46.42
ETP REAL / ETP POT.	87.59	75.48	84.87	86.97	68.42	60.12	55.37	53.74	77.46	65.53	72.34	72.04
ESCURRIMIENTOS	4.97	19.91	34.11	23.77	13.41	7.42	3.71	1.85	.93	1.57	3.21	2.42

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	69.30	133.73	114.20	50.82	26.66	24.58	11.53	18.70	35.62	45.60	71.51	59.56
ETP REAL	32.88	36.28	25.92	12.84	13.38	9.76	8.98	13.64	15.05	25.14	30.62	47.30
EXCEDENTES	21.25	89.57	76.62	30.60	7.44	6.19	.00	.00	.00	9.64	12.32	7.11
DEFICIT	32.88	36.28	25.92	12.84	13.38	9.76	8.98	13.64	15.05	25.14	30.62	47.30
ETP REAL / ETP POT.	19.23	26.29	23.35	20.38	28.47	37.54	35.91	35.85	25.08	27.03	24.50	28.49
ESCURRIMIENTOS	13.96	45.75	42.83	30.61	18.00	10.47	5.24	2.62	1.31	4.75	6.33	6.40

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.4762	.9762	.7245	.7008	1.1565	1.6271	1.2960	1.3558	.7943	.7848	.6808	.5639
ETP REAL	.2195	.3484	.2751	.2343	.4161	.6243	.6485	.6077	.3237	.4125	.3387	.3956
EXCEDENTES	3.6878	2.5514	1.5857	2.4280	2.4380	4.3589	.8045	.7757	.1123	.7844	2.5446	4.3589
DEFICIT	1.5491	1.0722	1.5436	1.5637	.9015	.9413	.8045	.7757	1.1123	.7844	.8856	1.0189
ETP REAL / ETP POT.	.2195	.3484	.2751	.2343	.4161	.6243	.6485	.6077	.3237	.4125	.3387	.3956
ESCURRIMIENTOS	2.8100	2.2982	1.2557	1.2879	1.3423	1.4124	1.4124	1.4124	1.4124	3.0284	1.9747	2.6475

CONSEJO FEDERAL DE INVERSIONES-  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 13

PRESTE ATENCIÓN A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN LOS LINARES (1968-1986).LAT. 28.23 S. LONG. 62.33 W. ALT. 108 M TABLA 109 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1968	(117.0)	83.0	96.0	22.0	7.0	34.0	4.0	52.0	15.0	20.0	69.0	27.0	540.0
1969	20.0	59.0	70.0	34.0	28.0	4.0	3.0	.0	.0	49.0	61.0	( 79.0)	407.0
1970	(149.0)	35.0	117.0	20.0	61.0	5.0	5.0	.0	54.0	17.0	23.0	94.0	585.0
1971	(113.0)	72.0	81.0	76.0	.0	.0	.0	47.0	40.0	57.0	104.0	18.0	606.0
1972	34.0	25.0	120.0	83.0	16.0	40.0	10.0	2.0	119.0	28.0	83.0	(132.0)	692.0
1973	226.0	80.0	(365.0)	121.0	.0	91.0	23.0	.0	.0	133.0	23.0	143.0	1205.0
1974	178.0	(533.0)	110.0	72.0	65.0	3.0	.0	.0	33.0	73.0	37.0	34.0	1138.0
1975	47.0	45.0	(310.0)	74.0	16.0	41.0	.0	26.0	53.0	49.0	209.0	25.0	895.0
1976	202.0	100.0	(357.0)	.0	25.0	.0	.0	23.0	.0	40.0	62.0	66.0	821.0
1977	164.0	(267.0)	250.0	82.0	.0	.0	21.0	13.0	44.0	77.0	62.0	122.0	1102.0
1978	116.0	75.0	54.0	50.0	60.0	.0	.0	.0	37.0	53.0	(251.0)	197.0	946.0
1979	131.0	(375.0)	89.0	30.0	.0	40.0	.0	52.0	52.0	68.0	40.0	244.0	1171.0
1980	(293.0)	39.0	278.0	188.0	72.0	.0	.0	20.0	21.0	19.0	213.0	85.0	1228.0
1981	193.0	248.0	(302.0)	70.0	62.0	.0	21.0	22.0	.0	.0	77.0	106.0	1101.0
1982	127.0	122.0	20.0	76.0	15.0	.0	.0	.0	94.0	.0	(190.0)	153.0	797.0
1983	(208.0)	45.0	82.0	117.0	.0	.0	25.0	.0	25.0	82.0	67.0	107.0	758.0
1984	154.0	70.0	185.0	17.0	.0	.0	.0	.0	73.0	110.0	(203.0)	55.0	867.0
1985	157.0	(195.0)	62.0	68.0	.0	.0	35.0	.0	90.0	140.0	97.0	138.0	1022.0
1986	80.0	135.0	47.0	(178.0)	11.0	29.0	22.0	5.0	52.0	44.0	120.0	113.0	836.0
PROM.	145.5	137.0	157.6	72.5	23.1	15.1	8.9	13.8	44.8	56.1	105.1	102.0	863.5
MAX.	293.0	533.0	365.0	188.0	72.0	91.0	35.0	52.0	119.0	180.0	251.0	244.0	1228.0
MIN.	20.0	25.0	20.0	.0	.0	.0	.0	.0	.0	.0	23.0	18.0	407.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN LOS LINARES (1968-1986).LAT. 28.23 S. LOIG. 62.33 U. ALT. 108 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1968	*****	75.4	90.1	42.2	25.5	100.0	32.0	100.0	43.3	32.3	53.4	18.1	1968
1969	100.0	43.5	63.1	54.0	59.6	15.4	12.0	10.0	100.0	54.6	49.6	100.0	1969
1970	87.7	26.8	100.0	36.5	100.0	34.6	32.0	10.5	90.0	28.6	24.0	100.0	1970
1971	67.3	52.9	73.0	100.0	10.6	7.7	4.0	100.0	71.7	65.6	84.8	13.9	1971
1972	100.0	19.6	100.0	100.0	51.1	100.0	60.0	28.9	100.0	72.0	78.4	84.3	1972
1973	100.0	81.9	100.0	100.0	80.9	100.0	96.0	86.8	50.0	100.0	57.6	89.2	1973
1974	100.0	100.0	99.1	100.0	100.0	92.3	72.0	52.6	71.7	84.9	41.6	24.7	1974
1975	28.7	100.0	100.0	100.0	91.5	100.0	80.0	89.5	95.0	74.2	100.0	60.8	1975
1976	100.0	87.0	100.0	76.2	74.5	38.5	28.0	68.4	16.7	48.4	52.0	41.6	1976
1977	95.9	100.0	100.0	100.0	80.9	53.8	92.0	60.5	81.7	88.2	59.2	76.5	1977
1978	70.2	55.8	49.5	79.4	100.0	11.5	12.0	7.9	100.0	73.1	100.0	100.0	1978
1979	100.0	100.0	98.2	84.1	46.8	100.0	44.0	100.0	93.3	84.9	48.8	100.0	1979
1980	100.0	74.6	100.0	100.0	100.0	88.5	68.0	79.9	61.7	39.3	100.0	84.9	1980
1981	100.0	100.0	100.0	100.0	100.0	88.5	96.0	66.8	48.3	22.2	65.6	66.3	1981
1982	75.4	88.4	18.9	100.0	40.4	7.7	8.0	5.3	100.0	24.7	100.0	98.2	1982
1983	100.0	77.5	82.9	100.0	66.0	46.2	100.0	31.6	55.0	90.3	60.0	66.9	1983
1984	90.6	52.2	100.0	73.0	38.3	26.9	20.0	15.6	100.0	100.0	100.0	74.1	1984
1985	94.2	100.0	86.5	100.0	44.7	30.8	100.0	31.6	100.0	100.0	97.6	94.6	1985
1986	66.7	98.6	51.4	100.0	89.4	100.0	96.0	65.2	93.3	66.7	96.3	74.7	1986

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN LOS LINARES (1968-1986).LAT. 28.23 S. LONG. -2.33 W. ALT. 108 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1968	*****	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1968
1969	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1969
1970	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1970
1971	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1971
1972	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1972
1973	-0.0	-0.0	195.0	58.0	-0.0	27.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1973
1974	-0.0	324.0	-0.0	9.0	18.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1974
1975	-0.0	-0.0	103.0	11.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	20.0	-0.0	1975
1976	-0.0	-0.0	187.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1976
1977	-0.0	30.0	139.0	19.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1977
1978	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	49.0	31.0	1978
1979	10.0	237.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1979
1980	116.0	-0.0	103.0	125.0	25.0	-0.0	-0.0	-0.0	-0.0	-0.0	4.0	-0.0	1980
1981	-0.0	76.0	191.0	7.0	15.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1981
1982	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1982
1983	7.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1983
1984	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	19.0	-0.0	1984
1985	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	42.0	-0.0	-0.0	1985
1986	-0.0	-0.0	-0.0	26.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	1986
TOTALES	133.0	667.0	918.0	255.0	58.0	27.0	-0.0	-0.0	-0.0	42.0	92.0	31.0	TOTALES
NUM CASOS	3	4	6	7	3	1	0	0	0	1	4	1	NUM CASOS
E. MEDIOS	7.0	35.1	48.3	13.4	3.1	1.4	-0.0	-0.0	-0.0	2.2	4.8	1.6	E. MEDIOS
E. REALES	46.3	160.7	153.0	36.4	19.3	27.0	-0.0	-0.0	-0.0	42.0	23.0	31.0	E. REALES
FREC. %	16.7	21.1	31.6	36.8	15.8	5.3	-0.0	-0.0	-0.0	5.3	21.1	5.3	FREC. %

SUNATORIA EXC.FREC = 117.39 MM

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 10

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN LOS LINARES (1968-1986).LAT. 28.23 S. LONG. 62.33 W. ALT. 108 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1968	*****	34.0	11.0	32.0	35.0	-0	17.0	-0	34.0	63.0	52.0	136.0	1968
1969	-0	78.0	41.0	29.0	19.0	22.0	22.0	38.0	-0	42.0	63.0	-0	1969
1970	21.0	101.0	-0	40.0	-0	17.0	17.0	34.0	6.0	72.0	95.0	-0	1970
1971	56.0	65.0	30.0	-0	42.0	24.0	24.0	-0	17.0	32.0	19.0	143.0	1971
1972	-0	111.0	-0	-0	23.0	-0	10.0	27.0	-0	26.0	27.0	-26.0	1972
1973	-0	25.0	-0	-0	9.0	-0	1.0	5.0	-0	-0	53.0	13.0	1973
1974	-0	-0	-0	-0	-0	-0	7.0	18.0	17.0	14.0	73.0	125.0	1974
1975	122.0	-0	-0	-0	4.0	-0	5.0	4.0	3.0	24.0	-0	65.0	1975
1976	-0	18.0	-0	15.0	12.0	16.0	18.0	12.0	50.0	48.0	60.0	97.0	1976
1977	7.0	-0	-0	-0	9.0	12.0	2.0	15.0	11.0	11.0	51.0	39.0	1977
1978	51.0	61.0	56.0	13.0	-0	23.0	22.0	35.0	-0	25.0	-0	-0	1978
1979	-0	-0	2.0	10.0	25.0	-0	14.0	-0	4.0	14.0	64.0	-0	1979
1980	-0	35.0	-0	-0	-0	3.0	8.0	8.0	23.0	56.0	-0	25.0	1980
1981	-0	-0	-0	-0	-0	3.0	1.0	5.0	31.0	72.0	43.0	56.0	1981
1982	42.0	16.0	90.0	-0	28.0	24.0	23.0	36.0	-0	70.0	-0	3.0	1982
1983	-0	31.0	19.0	-0	16.0	14.0	-0	26.0	27.0	9.0	50.0	55.0	1983
1984	16.0	66.0	-0	17.0	29.0	19.0	20.0	32.0	-0	-0	-0	43.0	1984
1985	10.0	-0	15.0	-0	26.0	18.0	-0	26.0	-0	-0	3.0	9.0	1985
1986	57.0	2.0	54.0	-0	5.0	-0	1.0	13.0	4.0	31.0	4.0	42.0	1986
TOTALES	382.0	643.0	319.0	156.0	282.0	197.0	212.0	334.0	257.0	609.0	657.0	882.0	TOTALES
NUM CASOS	9	13	10	7	14	13	17	16	13	16	14	15	NUM CASOS
D. MEDIOS	20.1	33.8	16.8	8.2	14.8	10.4	11.2	17.6	13.5	32.1	34.6	46.4	D. MEDIOS
D. REALES	42.4	49.5	31.9	22.3	20.1	15.2	12.5	20.9	19.8	38.1	46.9	58.8	D. REALES
FREC. %	50.0	68.4	52.6	36.8	73.7	68.4	89.5	84.2	68.4	84.2	73.7	78.9	FREC. %

SUMATORIA DEF\*FREC = 260.59 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -143.20 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.-E.	30.3	55.8	62.2	61.9	34.9	11.0	3.5	-0	3.4	8.1	7.1	11.9	E.P.-E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN LOS LINARES (1968-1986).LAT. 28.23 S.- LONG. 62.33 W. ALT. 108 M TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	1	2	1	1	3	3	8	8	1	5	1	3	42
ENTRE 40.1 Y 54.9	0	3	2	2	4	2	1	1	3	2	4	1	25
ENTRE 55.0 Y 69.9	2	1	1	0	2	0	2	3	2	2	5	3	23
ENTRE 70.0 Y 84.9	2	4	2	4	3	0	2	1	3	5	2	5	33
ENTRE 85.0 Y 100.0	13	9	13	12	7	9	6	6	10	5	7	7	104
70 0 MENOR	3	6	4	3	9	10	11	12	6	9	10	7	90

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	5.6	10.5	5.3	5.3	15.8	42.1	42.1	42.1	5.3	26.3	5.3	13.2
ENTRE 40.1 Y 54.9	.0	15.8	10.5	10.5	21.1	10.5	5.3	5.3	15.8	10.5	21.1	5.3
ENTRE 55.0 Y 69.9	11.1	5.3	5.3	.0	10.5	.0	10.5	15.3	10.5	10.5	26.3	15.6
ENTRE 70.0 Y 84.9	11.1	21.1	10.5	21.1	15.8	.0	10.5	5.3	15.8	26.3	10.5	26.3
ENTRE 85.0 Y 100.0	72.2	47.4	68.4	63.2	36.8	47.4	31.6	31.6	52.6	26.3	36.8	36.8
70 0 MENOR	16.7	31.6	21.1	15.8	47.4	52.6	57.9	63.2	31.6	47.4	52.6	36.8

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

LOS LINARES (1963-1986).LAT. 28.23 S. LONG. 62.33 W. ALT. 103 M TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	3	6	4	2	2	10	11	12	9	9	10	7
SOLO UN MES	1	3	2	1	2	1	3	4	1	3	3	2
DOS O MAS MESES	0-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	1	1	2	1	2	6	7	7	2	4	5	5
TRES O MAS MESES	0	1	1	0	1	2	0	1	1	1	2	1
SOLO TRES MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
CUATRO O MAS MESES	1	0	0	1	1	1	4	6	1	1	3	3
SOLO CUATRO MESES	NDEF	DEFM	EFMA	FMAJ	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SONO	ONDE
CINCO O MAS MESES	0	0	0	0	0	0	1	2	0	0	0	0
	NDEFM	DEFMA	EFMAJ	FMAJJ	MAMJJ	AMJJA	MJJAS	JJASO	JASON	ASONO	SONDE	ONDEF
	0	0	0	1	1	1	0	1	1	1	0	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	15	12	14	16	10	9	8	7	13	10	8	11
SOLO UN MES	3	1	1	1	1	3	3	2	4	2	1	1
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	9	10	10	13	9	6	5	3	3	8	5	6
TRES O MAS MESES	2	1	0	3	1	0	0	0	1	2	0	0
SOLO TRES MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
CUATRO O MAS MESES	5	7	9	10	7	2	5	3	1	2	5	4
SOLO CUATRO MESES	NDEF	DEFM	EFMA	FMAJ	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SONO	ONDE
CINCO O MAS MESES	5	7	6	5	4	3	1	1	1	0	3	3
	NDEFM	DEFMA	EFMAJ	FMAJJ	MAMJJ	AMJJA	MJJAS	JJASO	JASON	ASONO	SONDE	ONDEF

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	1	3	6	1	0	0	0	0	0	0	0	0
SOLO UN MES	1	2	4	0	0	0	0	0	0	0	0	0
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	0	0	1	1	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	1	1	0	0	0	0	0	0	0	0
SOLO TRES MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO CUATRO MESES	NDEF	DEFM	EFMA	FMAJ	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SONO	ONDE
	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.



**PRESTE ATENCION A LA NOTA DE LA PAGINA 1.**

ESTUDIO DE SUCCESOS Y FRECUENCIAS MENSUALES EN LOS PINARES (1968-1986) -LAT. 23-23 S. LONG. 62-33 W. ALT. 108 M TABLA 100 ME

FRECUENCIAS DE EXCESOS Y DEFICIENCIAS MENSUALES EN MILIMETROS, PARA 19 AÑOS DE DATOS, EXCEPTO EN ENERO EN QUE HAY UNO MENOS.

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

[illegible]

P O Z O   H O N D O

ESTADÍSTICOS DE INTERÉS EN POZO HONDO (1934-1990). LAT. 27.10 S. LONG. 64.29 W. ALT. 266 M. TABLA 10J MM

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	166.00	132.00	110.00	72.00	45.00	23.00	25.00	38.00	60.00	100.00	131.00	161.00
LLUVIAS	108.84	102.33	87.14	30.74	12.58	7.23	2.53	.91	8.14	26.18	59.30	81.36
ETP REAL	124.11	101.07	82.11	42.70	16.95	7.68	5.16	4.42	32.65	34.61	70.93	130.26
EXCEDENTES	-80	2.96	4.30	.00	.00	.00	.00	.00	.00	.00	.00	2.70
DEFICIT	41.89	30.93	27.89	29.30	28.05	15.32	19.84	33.58	27.35	65.39	60.07	30.74
ETP REAL / ETP POT.	74.76	76.57	74.64	59.31	37.66	33.44	20.63	11.63	54.42	34.61	54.14	80.91
RESCURRIMIENTOS	1.09	2.02	3.16	1.58	.79	.59	.20	.10	.05	.02	.01	1.36

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LUVIAS	55.42	60.12	55.29	25.87	16.55	11.80	6.34	2.95	13.81	26.08	36.76	66.71
ETP REAL	43.43	32.46	38.84	20.69	12.67	7.85	6.18	5.30	23.91	30.00	37.14	47.42
EXCEDENTES	6.01	18.17	18.07	.00	.00	.00	.00	.00	.00	.00	.00	20.40
DEFICIT	43.43	32.46	30.84	20.69	12.67	7.85	6.18	5.30	23.91	30.00	37.14	47.42
ETP REAL / ETP POT.	26.16	24.59	28.04	28.73	28.15	34.14	24.71	13.96	39.85	30.00	28.35	29.45
CONSUMOS	8.15	9.86	12.31	6.16	3.08	1.54	.77	.38	.19	.10	.05	10.20
CONSUMOS / ETP POT.	30.80	40.20	43.80	21.40	10.90	4.50	3.10	1.40	6.25	3.33	1.76	34.60

[illegible]

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
 LLUVIAS MEDIAS MENSUALES EN POZO MONDO (1934-1990). LAT. 27.10 S. LONG. 64.26 W. ALT. 266 M. TABLA 10C MM  
 EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	30.0	(100.0)	30.0	25.0	25.0	-0	-0	16.0	18.0	30.0	57.0	87.0	418.0
1935	88.0	(157.0)	94.0	26.0	-0	50.0	-0	1.0	-0	-0	-0	157.0	573.0
1936	(172.0)	53.0	58.0	23.0	10.0	30.0	-0	-0	-0	2.0	31.0	29.0	408.0
1937	40.0	(115.0)	50.0	58.0	13.0	-0	-0	-0	1.0	24.0	8.0	31.0	335.0
1938	(107.0)	92.0	106.0	3.0	11.0	17.0	-0	-0	-0	-0	8.0	31.0	375.0
1939	91.0	73.0	59.0	18.0	-0	6.0	-0	-0	21.0	41.0	80.0	(113.0)	502.0
1940	(107.0)	67.0	46.0	31.0	46.0	15.0	3.0	-0	-0	34.0	97.0	69.0	515.0
1941	( 98.0)	71.0	43.0	19.0	19.0	-0	26.0	-0	-0	21.0	29.0	79.0	605.0
1942	57.0	(174.0)	83.0	59.0	17.0	9.0	-0	-0	6.0	2.0	70.0	65.0	545.0
1943	29.0	80.0	(188.0)	50.0	22.0	-0	11.0	-0	-0	18.0	64.0	111.0	573.0
1944	148.0	(171.0)	51.0	-0	-0	-0	-0	-0	8.0	63.0	103.0	53.0	597.0
1945	46.0	25.0	(107.0)	25.0	-0	-0	-0	-0	-0	27.0	14.0	79.0	323.0
1946	( 91.0)	64.0	86.0	17.0	20.0	-0	-0	-0	-0	9.0	74.0	47.0	408.0
1947	60.0	48.0	40.0	41.0	55.0	34.0	3.0	-0	23.0	37.0	16.0	( 93.0)	450.0
1948	46.0	(205.0)	75.0	9.0	-0	-0	-0	-0	21.0	2.0	24.0	79.0	467.0
1949	119.0	51.0	(175.0)	4.0	-0	8.0	-0	-0	53.0	47.0	74.0	25.0	556.0
1950	( 80.0)	40.0	25.0	-0	26.0	-0	-0	-0	-0	19.0	57.0	45.0	312.0
1951	(123.0)	105.0	30.0	31.0	2.0	-0	-0	5.0	-0	16.0	73.0	108.0	493.0
1952	80.0	88.0	76.0	-0	16.0	-0	-0	-0	-0	21.0	(119.0)	50.0	450.0
1953	(211.0)	57.0	96.0	21.0	-0	-0	-0	-0	-0	12.0	129.0	19.0	545.0
1954	(100.0)	100.0	49.0	20.0	-0	2.0	-0	-0	-0	10.0	53.0	46.0	390.0
1955	103.0	(114.0)	60.0	30.0	12.0	-0	-0	-0	-0	37.0	56.0	7.0	419.0
1956	84.0	(177.0)	49.0	11.0	10.0	21.0	-0	-0	-0	103.0	149.0	117.0	721.0
1957	60.0	75.0	188.0	34.0	-0	11.0	-0	6.0	14.0	-0	78.0	(413.0)	879.0
1958	(211.0)	75.0	58.0	53.0	-0	5.0	-0	-0	-0	76.0	33.0	183.0	694.0
1959	78.0	( 79.0)	32.0	32.0	11.0	7.0	35.0	-0	-0	25.0	39.0	22.0	360.0
1960	141.0	(144.0)	136.0	64.0	15.0	16.0	-0	-0	-0	112.0	64.0	45.0	737.0
1961	68.0	(116.0)	105.0	72.0	28.0	-0	-0	-0	-0	15.0	25.0	35.0	526.0
1962	79.0	(152.0)	31.0	36.0	10.0	-0	-0	-0	-0	7.0	44.0	122.0	530.0
1963	87.0	(126.0)	95.0	20.0	13.0	2.0	14.0	-0	-0	33.0	35.0	47.0	428.0
1964	25.0	(110.0)	109.0	43.0	20.0	-0	6.0	-0	-0	61.0	63.0	107.0	476.0
1965	(135.0)	43.0	50.0	-0	-0	7.0	10.0	-0	-0	20.0	30.0	49.0	479.0
1966	108.0	94.0	(167.0)	11.0	-0	-0	-0	-0	-0	-0	55.0	25.0	395.0
1967	(132.0)	107.0	44.0	-0	1.0	6.0	-0	-0	25.0	-0	126.0	30.0	700.0
1968	(209.0)	189.0	46.0	17.0	16.0	12.0	3.0	12.0	21.0	19.0	107.0	(212.0)	777.0
1969	96.0	126.0	126.0	33.0	56.0	5.0	-0	-0	5.0	11.0	42.0	127.0	493.0
1970	42.0	24.0	(152.0)	44.0	26.0	15.0	-0	-0	18.0	3.0	100.0	81.0	600.0
1971	(142.0)	90.0	48.0	46.0	-0	-0	-0	-0	8.0	85.0	40.0	71.0	387.0
1972	89.0	36.0	( 91.0)	34.0	11.0	-0	-0	-0	-0	15.0	50.0	76.0	664.0
1973	169.0	20.0	(194.0)	76.0	17.0	50.0	-0	-0	1.0	12.0	56.0	33.0	876.0
1974	186.0	(344.0)	173.0	44.0	-0	-0	5.0	-0	-0	44.0	46.0	18.0	528.0
1975	64.0	(197.0)	49.0	66.0	5.0	-0	-0	7.0	21.0	22.0	79.0	74.0	769.0
1976	(222.0)	204.0	197.0	-0	8.0	-0	-0	-0	-0	12.0	52.0	185.0	946.0
1977	(226.0)	159.0	108.0	154.0	24.0	24.0	3.0	-0	10.0	15.0	38.0	185.0	946.0
1978	(142.0)	41.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	153.0

1979	142.0	167.0	128.0	26.0	.0	.0	4.0	.0	57.0	65.0	64.0	(188.0)	839.0
1980	31.0	102.0	56.0	28.0	16.0	3.0	.0	.0	19.0	21.0	(169.0)	121.0	566.0
1981	(197.0)	109.0	43.0	42.0	8.0	.0	.0	.0	.0	13.0	69.0	49.0	535.0
1982	119.0	49.0	(191.0)	47.0	7.0	17.0	.0	.0	32.0	8.0	45.0	173.0	681.0
1983	(150.0)	63.0	42.0	20.0	.0	.0	12.0	.0	.0	.0	89.0	66.0	429.0
1984	142.0	69.0	(216.0)	23.0	.0	6.0	.0	.0	.0	.0	20.0	120.0	596.0
1985	66.0	(175.0)	65.0	46.0	7.0	.0	.0	.0	.0	4.0	42.0	99.0	504.0
1986	35.0	(109.0)	25.0	16.0	8.0	8.0	5.0	.0	66.0	8.0	46.0	77.0	403.0
1987	(189.0)	43.0	87.0	49.0	.0	.0	.0	.0	30.0	30.0	69.0	81.0	556.0
1988	(177.0)	93.0	.0	15.0	.0	.0	4.0	.0	8.0	15.0	8.0	35.0	347.0
1989	48.0	36.0	(135.0)	4.0	18.0	26.0	.0	.0	18.0	14.0	83.0	12.0	394.0
1990	87.0	40.0	(104.0)	36.0	88.0	.0	.0	.0	10.0	22.0	89.0	86.0	564.0

PROM.	108.8	102.3	87.1	30.7	12.6	7.2	2.5	.9	8.1	26.2	59.3	81.9	527.8
MAX.	226.0	344.0	216.0	154.0	88.0	50.0	35.0	16.0	66.0	112.0	169.0	413.0	946.0
MIN.	25.0	20.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	183.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
 MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.

PORCENTAJES MENSUALES DE ETP REAL EN POZO MONDO (1934-1990). LAT. 2° 10 S. LONG. 64.29 W. ALT. 266 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	86.4	45.5	43.1	60.0	6.7	4.0	44.7	31.7	31.0	44.3	100.0	1934
1935	54.2	100.0	89.1	48.6	11.1	100.0	32.0	26.3	15.0	6.0	2.3	97.5	1935
1936	100.0	43.2	53.6	33.3	22.2	100.0	8.0	5.3	3.3	3.0	100.0	19.3	1936
1937	100.0	87.9	46.4	80.6	23.9	0	0	0	100.0	26.0	100.0	21.7	1937
1938	100.0	70.5	96.4	5.6	26.7	73.9	0	0	100.0	3.0	100.0	20.5	1938
1939	100.0	56.8	54.5	100.0	4.4	30.4	0	2.6	35.0	100.0	62.6	70.8	1939
1940	100.0	52.3	42.7	43.1	100.0	65.2	12.0	2.6	100.0	36.0	74.8	100.0	1940
1941	60.2	54.5	100.0	29.2	42.2	0	100.0	2.6	1.7	100.0	24.4	100.0	1941
1942	36.1	100.0	84.5	87.5	53.3	52.2	13.2	13.2	16.7	6.0	54.2	100.0	1942
1943	19.3	100.0	100.0	93.1	80.0	47.8	64.0	31.6	14.3	25.0	51.1	69.6	1943
1944	89.2	100.0	62.7	16.7	8.9	4.3	4.0	5.3	15.0	64.0	78.6	100.0	1944
1945	28.9	100.0	97.3	36.1	2.2	0	0	0	100.0	29.0	11.5	100.0	1945
1946	56.0	49.2	78.2	100.0	46.7	4.3	4.0	2.6	100.0	11.0	57.3	100.0	1946
1947	37.3	100.0	38.2	58.3	100.0	100.0	28.0	15.8	45.0	41.0	14.5	100.0	1947
1948	29.5	100.0	88.2	47.2	22.2	17.4	12.0	7.9	38.3	31.0	19.1	100.0	1948
1949	72.9	39.4	100.0	51.4	26.7	47.8	16.0	10.5	90.0	51.0	58.0	16.3	1949
1950	100.0	31.8	23.6	100.0	60.0	4.3	0	2.6	100.0	41.0	44.3	100.0	1950
1951	74.7	79.5	28.2	43.1	4.4	0	0	13.2	100.0	18.0	56.5	100.0	1951
1952	50.0	67.4	69.1	100.0	37.8	4.3	0	2.6	100.0	23.0	90.8	31.7	1952
1953	100.0	61.4	90.0	40.3	8.9	4.3	4.0	5.3	1.7	13.0	98.5	100.0	1953
1954	60.8	76.5	100.0	30.6	2.2	0	0	13.2	100.0	12.0	45.0	100.0	1954
1955	62.7	86.4	55.5	41.7	26.7	8.7	0	0	100.0	39.0	43.5	100.0	1955
1956	51.2	100.0	61.6	31.9	31.1	91.3	8.0	5.3	3.3	100.0	100.0	78.3	1956
1957	42.2	58.3	100.0	83.3	44.4	65.2	28.0	34.2	33.3	7.0	61.1	100.0	1957
1958	100.0	90.2	73.6	81.9	22.2	34.8	12.0	10.5	5.0	77.0	26.7	100.0	1958
1959	55.4	62.9	31.8	45.8	24.4	30.4	100.0	10.5	5.0	27.0	30.5	100.0	1959
1960	35.5	100.0	100.0	93.1	55.6	78.3	24.0	15.8	10.0	100.0	55.7	32.3	1960
1961	42.2	87.9	95.5	100.0	62.2	0	0	0	100.0	30.0	20.6	100.0	1961
1962	48.8	100.0	39.1	54.2	26.7	4.3	4.0	2.6	100.0	17.0	29.8	100.0	1962
1963	53.6	95.5	86.4	29.2	28.9	8.7	56.0	0	100.0	9.0	34.4	75.8	1963
1964	100.0	84.1	99.1	61.1	44.4	0	24.0	0	100.0	35.0	27.5	100.0	1964
1965	81.9	33.3	100.0	2.8	2.2	30.4	40.0	0	100.0	62.0	48.9	67.1	1965
1966	100.0	72.0	100.0	54.2	26.7	17.4	16.0	10.5	6.7	22.0	23.7	100.0	1966
1967	80.1	81.1	40.9	100.0	6.7	26.1	0	2.6	41.7	100.0	43.5	100.0	1967
1968	100.0	100.0	85.5	54.2	53.3	60.9	28.0	42.1	41.7	23.0	96.2	20.5	1968
1969	100.0	95.5	100.0	55.6	100.0	39.1	20.0	13.2	15.0	15.0	81.7	100.0	1969
1970	48.2	25.8	100.0	77.8	71.1	73.9	24.0	18.4	33.3	9.0	33.6	78.9	1970
1971	85.5	68.2	100.0	65.3	2.2	0	0	2.6	100.0	86.0	77.1	51.6	1971
1972	100.0	28.8	82.7	48.6	24.4	0	0	0	100.0	17.0	31.3	100.0	1972
1973	100.0	18.9	100.0	100.0	86.7	100.0	88.0	63.2	36.7	28.0	42.7	49.1	1973
1974	100.0	100.0	100.0	95.8	62.2	43.5	48.0	26.3	16.7	49.0	38.2	100.0	1974
1975	40.4	100.0	72.7	94.4	35.6	21.7	16.0	28.9	40.0	26.0	61.1	100.0	1975
1976	100.0	100.0	100.0	72.2	51.1	30.4	24.0	15.8	10.0	17.0	41.2	100.0	1976
1977	100.0	100.0	100.0	100.0	88.9	100.0	68.0	44.7	41.7	28.0	32.8	100.0	1977
1978	89.2	40.9	5.5	2.6	0	0	0	0	100.0	3.0	100.0	1.2	1978
1979	85.5	100.0	100.0	63.9	26.7	21.7	28.0	10.5	65.0	67.0	64.1	100.0	1979
1980	32.5	78.8	52.7	41.7	37.8	13.0	0	0	31.7	100.0	100.0	83.9	1980

1981	100.0	91.7	60.0	66.7	31.1	8.7	6.0	5.3	5.0	20.0	100.0	32.5	1981
1982	71.7	100.0	100.0	91.7	53.3	82.5	36.0	26.3	61.7	18.0	37.4	100.0	1982
1983	91.6	52.3	40.9	29.2	17.8	.0	48.0	.0	100.0	3.0	67.9	100.0	1983
1984	36.1	53.0	100.0	87.5	48.9	52.2	28.0	21.1	13.3	6.0	16.8	74.5	1984
1985	100.0	100.0	74.5	73.6	31.1	13.0	12.0	7.9	5.0	6.0	100.0	62.7	1985
1986	100.0	83.3	24.5	23.6	17.8	34.8	20.0	.0	100.0	12.0	38.6	100.0	1986
1987	100.0	44.7	80.9	70.8	6.7	4.3	4.0	2.6	100.0	33.0	53.4	100.0	1987
1988	100.0	74.2	6.4	22.2	2.2	.0	16.0	.0	100.0	17.0	6.9	100.0	1988
1989	30.1	100.0	100.0	25.0	46.7	100.0	12.0	10.5	33.3	17.0	64.1	100.0	1989
1990	53.0	100.0	94.5	51.4	100.0	43.5	32.0	23.7	30.0	28.0	69.5	55.9	1990



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN POZO HONDO (1934-1990). LAT. 27.10 S. LONG. 66.29 W. ALT. 266 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	18.0	60.0	41.0	18.0	21.0	24.0	21.0	41.0	69.0	73.0	0	1934
1935	76.0	-0	12.0	37.0	40.0	-0	17.0	28.0	51.0	94.0	128.0	4.0	1935
1936	-0	75.0	51.0	48.0	35.0	-0	23.0	36.0	58.0	97.0	-0	130.0	1936
1937	-0	16.0	59.0	14.0	32.0	23.0	25.0	38.0	-0	74.0	-0	126.0	1937
1938	-0	39.0	4.0	68.0	33.0	6.0	25.0	38.0	-0	97.0	-0	128.0	1938
1939	-0	57.0	50.0	-0	43.0	16.0	25.0	37.0	39.0	-0	49.0	47.0	1939
1940	-0	63.0	63.0	41.0	-0	8.0	22.0	37.0	-0	64.0	33.0	-0	1940
1941	66.0	60.0	-0	51.0	26.0	23.0	-0	37.0	59.0	-0	99.0	-0	1941
1942	106.0	-0	17.0	9.0	21.0	11.0	21.0	33.0	50.0	94.0	60.0	-0	1942
1943	134.0	-0	-0	5.0	9.0	12.0	9.0	26.0	49.0	75.0	64.0	49.0	1943
1944	18.0	-0	41.0	60.0	41.0	22.0	24.0	36.0	51.0	36.0	28.0	-0	1944
1945	118.0	-0	3.0	46.0	44.0	23.0	25.0	38.0	-0	71.0	116.0	-0	1945
1946	73.0	67.0	24.0	-0	24.0	22.0	24.0	37.0	-0	89.0	56.0	-0	1946
1947	104.0	-0	68.0	30.0	-0	-0	18.0	32.0	33.0	59.0	112.0	-0	1947
1948	117.0	-0	13.0	38.0	35.0	19.0	22.0	35.0	37.0	69.0	106.0	-0	1948
1949	45.0	80.0	-0	35.0	33.0	12.0	21.0	34.0	6.0	49.0	55.0	134.0	1949
1950	-0	90.0	84.0	-0	18.0	22.0	25.0	37.0	-0	59.0	73.0	-0	1950
1951	42.0	27.0	79.0	41.0	43.0	23.0	25.0	33.0	-0	82.0	57.0	-0	1951
1952	83.0	43.0	34.0	-0	28.0	22.0	25.0	37.0	-0	77.0	12.0	110.0	1952
1953	-0	51.0	11.0	43.0	41.0	22.0	24.0	36.0	59.0	87.0	2.0	-0	1953
1954	65.0	31.0	-0	50.0	44.0	21.0	25.0	33.0	-0	88.0	72.0	-0	1954
1955	62.0	18.0	49.0	42.0	33.0	23.0	25.0	36.0	-0	61.0	74.0	-0	1955
1956	81.0	-0	40.0	49.0	31.0	2.0	23.0	36.0	58.0	-0	-0	35.0	1956
1957	96.0	-0	55.0	12.0	25.0	8.0	18.0	25.0	40.0	93.0	51.0	-0	1957
1958	-0	13.0	29.0	13.0	35.0	15.0	22.0	34.0	57.0	23.0	96.0	-0	1958
1959	-0	49.0	75.0	39.0	39.0	16.0	-0	34.0	57.0	73.0	91.0	-0	1959
1960	24.0	-0	-0	5.0	20.0	5.0	19.0	32.0	54.0	-0	58.0	109.0	1960
1961	96.0	16.0	5.0	-0	17.0	23.0	25.0	38.0	-0	20.0	104.0	-0	1961
1962	85.0	-0	67.0	33.0	33.0	22.0	24.0	37.0	-0	33.0	92.0	-0	1962
1963	77.0	-0	15.0	51.0	32.0	21.0	21.0	38.0	-0	91.0	86.0	39.0	1963
1964	-0	21.0	1.0	28.0	25.0	23.0	19.0	38.0	-0	65.0	95.0	-0	1964
1965	30.0	-0	88.0	70.0	44.0	16.0	15.0	38.0	-0	38.0	67.0	53.0	1965
1966	-0	37.0	-0	33.0	33.0	19.0	21.0	34.0	56.0	78.0	100.0	-0	1966
1967	33.0	25.0	65.0	-0	42.0	17.0	25.0	37.0	35.0	-0	74.0	-0	1967
1968	-0	-0	16.0	33.0	21.0	9.0	18.0	22.0	35.0	77.0	5.0	128.0	1968
1969	-0	6.0	-0	32.0	-0	14.0	20.0	33.0	51.0	85.0	24.0	-0	1969
1970	86.0	98.0	-0	16.0	13.0	6.0	19.0	31.0	37.0	91.0	67.0	34.0	1970
1971	24.0	42.0	-0	25.0	44.0	23.0	25.0	37.0	-0	14.0	30.0	78.0	1971
1972	-0	94.0	19.0	37.0	37.0	23.0	25.0	38.0	-0	83.0	90.0	-0	1972
1973	-0	107.0	-0	-0	6.0	-0	3.0	14.0	38.0	72.0	75.0	82.0	1973
1974	-0	-0	-0	3.0	17.0	13.0	13.0	28.0	50.0	51.0	81.0	-0	1974
1975	99.0	-0	30.0	4.0	29.0	18.0	19.0	27.0	36.0	74.0	51.0	-0	1975
1976	-0	-0	-0	20.0	22.0	16.0	8.0	32.0	54.0	83.0	77.0	-0	1976
1977	-0	-0	-0	-0	5.0	-0	23.0	21.0	35.0	72.0	88.0	-0	1977
1978	18.0	78.0	104.0	70.0	45.0	23.0	25.0	36.0	-0	97.0	-0	159.0	1978
1979	24.0	-0	-0	26.0	33.0	18.0	18.0	34.0	21.0	33.0	47.0	-0	1979
1980	112.0	28.0	52.0	42.0	28.0	20.0	25.0	38.0	41.0	-0	-0	26.0	1980

1981	-0	11.0	44.0	24.0	31.0	21.0	23.0	30.0	36.0	36.0	80.0	109.0	1981
1982	47.0	-0	-0	6.0	21.0	4.0	16.0	28.0	23.0	92.0	92.0	52.0	1982
1983	14.0	63.0	65.0	51.0	37.0	23.0	13.0	38.0	-0	97.0	97.0	42.0	1983
1984	23.0	62.0	-0	9.0	23.0	11.0	18.0	30.0	52.0	94.0	94.0	109.0	1984
1985	-0	-0	28.0	19.0	31.0	20.0	22.0	35.0	57.0	94.0	94.0	60.0	1985
1986	-0	22.0	83.0	55.0	37.0	15.0	20.0	38.0	-0	88.0	88.0	33.0	1986
1987	-0	73.0	21.0	21.0	42.0	22.0	24.0	37.0	-0	67.0	67.0	61.0	1987
1988	-0	34.0	103.0	56.0	21.0	23.0	21.0	33.0	-0	83.0	83.0	122.0	1988
1989	116.0	-0	-0	54.0	24.0	-0	22.0	34.0	40.0	83.0	83.0	47.0	1989
1990	78.0	-0	6.0	35.0	-0	13.0	17.0	29.0	42.0	72.0	72.0	40.0	1990
TOTALES	2346.0	1763.0	1590.0	1670.0	1599.0	873.0	1131.0	1914.0	1559.0	3727.0	3424.0	1752.0	TOTALES
NUM CASOS	34	37	38	49	53	51	55	57	35	51	49	22	NUM CASOS
D. MEDIOS	41.2	30.9	27.9	29.3	28.1	15.3	19.8	33.6	27.4	65.4	60.1	30.7	D. MEDIOS
D. REALES	69.0	47.6	41.8	34.1	30.2	17.1	20.4	32.6	44.5	73.1	69.9	79.6	D. REALES
FREC. %	60.7	64.9	66.7	86.0	93.0	89.5	96.5	100.0	61.4	89.5	86.0	38.5	FREC. %

SUMATORIA DEF\*FREC = 410.35 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -399.58 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EPM	FMA	MAH	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	5.9	7.4	7.6	4.8	-0	-0	-0	-0	-0	-0	1.7	2.6	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN POZO HONDO (1934-1990). LAT. 27.10 S. LONG. 64.29 W. ALT. 266 M. TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	7	6	8	14	34	37	49	53	23	41	20	9	306
ENTRE 40.1 Y 54.9	10	8	8	15	10	6	2	3	4	4	11	2	83
ENTRE 55.0 Y 69.9	5	6	5	6	5	3	3	1	2	3	11	4	54
ENTRE 70.0 Y 84.9	5	9	7	7	2	4	0	0	0	2	4	6	40
ENTRE 85.0 Y 100.0	29	28	29	15	6	7	3	0	23	7	11	36	194
70 0 MEJOR	22	20	21	35	49	46	54	57	34	48	42	15	443

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	12.5	10.5	14.0	24.6	59.6	64.9	86.0	93.0	49.1	71.9	35.1	15.8	
ENTRE 40.1 Y 54.9	17.9	14.0	14.0	26.3	17.5	10.5	3.5	5.3	7.0	7.0	19.3	3.5	
ENTRE 55.0 Y 69.9	8.9	10.5	8.8	10.5	8.8	5.3	5.3	1.3	3.5	5.3	19.3	7.0	
ENTRE 70.0 Y 84.9	8.9	15.8	12.3	12.3	3.5	7.0	.0	.0	.0	3.5	7.0	10.5	
ENTRE 85.0 Y 100.0	51.8	49.1	50.9	26.3	10.5	12.3	5.3	.0	40.4	12.3	19.3	63.2	
70 0 MEJOR	39.3	35.1	36.8	61.4	36.0	60.7	94.7	100.0	59.6	84.2	73.7	26.3	

CONSEJO FEDERAL DE INVERSIONES.

AREA DE INFRAESTRUCTURA HIDRICA.

PAGINA 37

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION: REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

POZO MONDO (1934-1990). LAT. 27.10 S. LONG. 64.29 W. ALT. 266 M. TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(++)	MAR(++)	ABR(++)	MAY	JUN	JUL	AGO	SET	OCT	NOV(++)	DIC(++)
UNO O MAS MESES	22	20	20	34	49	46	54	57	34	48	41	14
SOLO UN MES	15	8	2	2	2	0	0	0	0	5	5	9
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	1	6	8	15	31	42	44	54	34	27	35	5
SOLO DOS MESES	0	4	2	1	3	0	0	1	1	0	14	0
	NDE	DEF	EFM	FMA	MAJ	MJJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	1	0	2	5	14	26	40	44	31	27	19	4
SOLO TRES MESES	1	0	1	1	1	1	0	1	2	0	0	2
	NDEF	DEFM	EFMA	FMAJ	MAJJ	MJJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	0	1	4	12	24	40	22	25	20	2	0
SOLO CUATRO MESES	0	0	0	1	0	0	6	0	1	1	0	0
	NDEFM	DEFMA	EFMAJ	FMAJJ	MAJJJ	MAJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	0	0	1	3	11	24	19	18	13	3	0	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	34	36	36	22	3	11	3	0	23	9	15	42
SOLO UN MES	4	5	6	5	5	7	2	0	21	5	8	16
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	21	20	24	17	4	4	1	0	0	2	3	6
SOLO DOS MESES	10	3	7	4	0	1	0	0	0	1	0	4
	NDE	DEF	EFM	FMA	MAJ	MAJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	1	11	13	11	4	3	1	0	3	0	1	2
SOLO TRES MESES	0	3	4	3	0	0	0	0	0	0	1	1
	NDEF	DEFM	EFMA	FMAJ	MAJJ	MAJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	1	7	7	2	3	1	0	0	0	0	0	0
SOLO CUATRO MESES	0	2	2	1	1	0	0	0	0	0	0	0
	NDEFM	DEFMA	EFMAJ	FMAJJ	MAJJJ	MAJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
CINCO O MAS MESES	0	5	1	1	1	0	0	0	0	0	0	1

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	1	2	0	0	0	0	0	0	0	0	1
SOLO UN MES	0	1	2	0	0	0	0	0	0	0	0	1
	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
DOS O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDE	DEF	EFM	FMA	MAJ	MAJ	MJJ	JJA	JAS	ASO	SON	OND
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
	NDEF	DEFM	EFMA	FMAJ	MAJJ	MAJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
POZO HONDO (1934-1990). LAT. 27-10 S. LONG. 64.29 W. ALT. 266 M. TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	94.5	99.8	77.4	27.7	12.7	7.8	3.1	1.1	5.5	31.2	56.9	61.4	496.9
1963	46.2	46.0	45.6	19.7	13.7	12.2	8.2	3.3	11.6	29.4	37.3	75.4	
1935	94.3	100.1	80.0	28.3	12.5	7.8	3.3	.6	4.9	31.3	56.1	80.1	499.3
1964	46.4	46.0	45.1	19.9	13.6	12.2	8.2	1.6	11.4	29.4	37.5	75.7	
1936	95.9	96.3	78.5	27.5	12.5	6.3	3.6	.5	4.9	33.3	58.2	78.4	496.0
1965	47.0	45.9	45.3	20.5	13.6	9.3	8.3	1.6	11.4	29.2	36.0	74.5	
1937	93.7	97.7	82.2	27.1	12.2	5.3	3.6	.5	4.9	33.9	56.2	79.1	496.4
1966	44.8	45.2	47.9	20.7	13.7	6.2	8.3	1.6	11.4	29.7	36.0	74.1	
1938	96.8	97.4	82.0	25.1	11.6	5.5	3.6	.5	5.7	33.1	59.9	78.9	500.4
1967	44.1	45.1	48.1	20.5	13.9	8.1	8.3	1.6	12.3	29.4	34.5	74.2	
1939	100.2	100.7	80.0	25.6	12.0	5.4	3.7	.9	6.4	33.7	63.9	78.8	511.2
1968	48.7	48.1	48.3	20.1	13.9	7.9	8.2	2.7	12.3	28.3	35.1	74.3	
1940	100.4	102.4	82.2	26.1	13.3	5.3	3.7	.9	5.9	32.7	64.8	82.1	520.4
1969	48.6	48.0	48.8	20.1	15.9	7.9	8.2	2.7	11.9	29.1	35.9	77.9	
1941	98.2	101.0	85.7	26.5	13.2	5.3	3.6	.9	6.5	31.7	62.9	84.1	519.7
1970	49.8	49.7	49.9	20.3	14.9	7.9	8.3	2.7	12.1	29.6	35.6	78.3	
1942	99.7	101.6	85.9	27.4	12.5	5.3	2.7	.9	6.7	33.4	65.3	84.1	526.2
1971	50.4	49.4	49.8	20.6	15.0	7.9	7.1	2.7	12.0	31.0	35.6	78.3	
1943	100.7	97.0	86.2	26.6	12.3	5.0	2.7	.9	6.5	34.3	64.3	84.2	520.9
1972	49.8	48.9	49.8	19.7	15.0	8.0	7.1	2.7	12.1	30.7	35.9	78.3	
1944	105.4	95.0	86.4	27.5	12.2	6.7	2.4	.9	6.5	34.1	63.6	83.1	523.9
1973	49.4	50.8	50.2	21.3	14.9	11.4	7.0	2.7	12.1	30.8	36.0	78.2	
1945	106.7	100.8	90.4	28.9	12.2	6.7	2.5	.9	6.3	33.4	61.9	82.4	533.2
1974	51.0	66.9	52.2	20.9	14.9	11.4	7.0	2.7	12.1	30.4	35.3	78.5	
1946	107.3	106.5	88.5	30.3	12.3	6.7	2.5	1.2	7.0	33.3	64.1	80.4	540.1
1975	50.4	67.6	52.6	21.9	14.8	11.4	7.0	2.9	12.4	30.4	34.3	79.4	
1947	111.6	111.2	92.2	29.7	11.9	6.7	2.5	1.2	7.0	33.4	63.4	81.3	552.1
1976	54.4	69.4	56.2	22.5	14.7	11.4	7.0	2.9	12.4	30.4	34.3	79.1	
1948	117.2	114.9	94.5	33.5	10.9	6.4	2.5	1.2	6.6	32.6	64.1	84.3	568.6
1977	57.3	68.8	55.4	31.9	12.5	10.7	7.0	2.9	12.0	30.5	33.5	81.4	
1949	120.4	109.4	92.0	33.2	10.9	6.4	2.5	1.2	5.9	31.7	63.3	81.7	558.5
1978	55.9	67.9	57.9	32.2	12.5	10.7	7.0	2.9	11.7	31.1	36.7	82.8	

1950	121.1	113.3	90.4	33.9	10.9	6.1	2.7	1.2	5.3	32.3	63.6	87.1	567.9
1979	56.0	67.8	56.2	31.8	12.5	10.7	7.0	2.9	9.7	31.6	34.8	84.3	
1951	119.5	115.4	91.4	34.9	10.6	6.2	2.7	1.2	6.0	31.7	67.3	89.7	576.4
1980	58.0	66.4	55.3	31.1	12.3	10.7	7.0	2.9	10.0	31.6	39.3	84.1	
1952	122.0	115.5	91.9	35.2	10.8	6.2	2.7	1.0	6.0	31.8	67.2	87.7	577.8
1981	59.7	66.4	54.8	31.2	12.2	10.7	7.0	2.8	10.0	31.6	39.7	84.4	
1953	123.3	114.2	95.7	36.8	10.2	6.8	2.7	1.0	7.0	31.3	64.7	91.8	585.5
1982	59.1	67.3	57.6	30.5	12.3	10.8	7.0	2.8	11.0	31.8	38.7	85.5	
1954	121.2	114.4	93.9	36.8	10.5	6.8	3.1	1.0	7.0	30.9	63.4	92.7	581.6
1983	57.0	67.2	58.4	30.5	12.1	10.8	7.1	2.8	11.0	32.1	37.1	84.8	
1955	122.6	113.4	99.5	36.9	10.5	6.9	3.1	.8	7.0	30.6	62.1	95.2	586.5
1984	57.0	67.6	61.9	30.5	12.1	10.8	7.1	2.7	11.0	32.4	37.9	84.5	
1956	121.4	115.4	99.6	37.4	10.3	6.9	3.1	.8	7.0	29.5	61.6	98.2	591.3
1985	57.8	68.6	61.8	30.5	12.1	10.8	7.1	2.7	11.0	32.8	38.1	82.8	
1957	119.8	113.1	98.8	37.6	10.2	6.5	3.2	.8	9.2	26.3	58.2	96.9	580.7
1986	59.6	67.6	62.6	30.3	12.2	10.4	7.1	2.7	15.3	29.9	34.4	82.8	
1958	124.1	112.1	95.5	38.1	10.2	6.1	3.2	.6	9.0	27.3	57.9	85.8	570.0
1987	59.8	68.4	60.3	30.4	12.2	10.5	7.1	2.5	15.3	29.5	34.2	57.4	
1959	122.9	112.7	93.5	36.8	10.2	5.9	3.4	.6	9.0	25.3	57.1	80.9	558.4
1988	58.4	68.2	62.4	30.6	12.2	10.5	7.1	2.5	15.3	28.1	35.2	55.1	
1960	121.9	111.2	97.0	35.9	10.5	6.6	2.2	.6	9.6	24.9	58.5	80.6	559.5
1989	59.4	69.4	61.8	31.1	12.2	11.1	3.9	2.5	15.2	28.1	35.3	55.5	
1961	120.1	107.8	95.9	34.9	12.9	6.0	2.2	.6	10.0	21.9	59.4	62.0	553.8
1990	59.7	70.3	61.4	30.7	16.7	11.0	3.9	2.5	15.1	22.8	35.7	55.1	



PRESTÉ ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN POZO HONDO (1934-1999). LAT. 27.10 S. LONG. 64.29 W. ALT. 266 M. TABLA 100 KH

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 57 A=05.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ENTRE 151 Y 999 MM. DE EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	-0	-0	1-3
ENTRE 101 Y 150 MM. DE EXCESO	.0	1.8	-0	.0	.0	.0	-0	-0	-0	-0	-0	-0
ENTRE 91 Y 100 MM. DE EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	-0
ENTRE 81 Y 90 MM. DE EXCESO	.0	.0	3.5	.0	.0	.0	.0	-0	.0	.0	-0	-0
ENTRE 71 Y 80 MM. DE EXCESO	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	-0
ENTRE 61 Y 70 MM. DE EXCESO	.0	.0	1.8	.0	.0	.0	-0	-0	.0	.0	.0	-0
ENTRE 51 Y 60 MM. DE EXCESO	-0	-0	-0	-0	-0	.0	.0	-0	.0	.0	-0	-0
ENTRE 41 Y 50 MM. DE EXCESO	1.8	.0	-0	-0	.0	.0	.0	.0	.0	-0	-0	-0
ENTRE 31 Y 40 MM. DE EXCESO	.0	1.8	-0	-0	.0	.0	-0	-0	-0	-0	-0	-0
ENTRE 21 Y 30 MM. DE EXCESO	-0	-0	.0	.0	.0	.0	.0	.0	.0	.0	.0	-0
ENTRE 11 Y 20 MM. DE EXCESO	-0	.0	.0	.0	.0	.0	-0	-0	-0	-0	-0	-0
ENTRE 1 Y 10 MM. DE EXCESO	-0	1.8	1.8	-0	.0	-0	-0	.0	-0	-0	-0	-0
CERO EXCESO	98.2	94.7	93.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2
CERO DEFICIT	39.3	35.1	33.3	14.0	7.0	10.5	3.5	-0	38.6	10.5	14.0	61.4
ENTRE 1 Y 10 MM. DE DEFICIT	-0	3.5	8.8	12.3	5.3	14.0	5.3	-0	1.8	-0	3.5	1.2
ENTRE 11 Y 20 MM. DE DEFICIT	5.4	10.5	12.3	10.5	10.5	35.1	31.6	1.8	-0	3.5	1.8	.0
ENTRE 21 Y 30 MM. DE DEFICIT	8.9	8.8	8.8	10.5	22.8	40.4	59.6	19.3	3.5	1.8	5.3	1.8
ENTRE 31 Y 40 MM. DE DEFICIT	1.8	7.0	3.5	17.5	33.3	.0	.0	78.9	19.3	5.3	3.5	5.3
ENTRE 41 Y 50 MM. DE DEFICIT	5.4	5.3	7.0	17.5	21.1	.0	-0	.0	10.5	1.8	7.0	5.3
ENTRE 51 Y 60 MM. DE DEFICIT	.0	7.0	7.0	12.3	.0	.0	.0	.0	26.3	5.3	12.3	3.5
ENTRE 61 Y 70 MM. DE DEFICIT	5.4	7.0	8.8	5.3	.0	.0	.0	-0	.0	10.5	5.3	-0
ENTRE 71 Y 80 MM. DE DEFICIT	8.9	7.0	3.5	.0	.0	.0	.0	-0	-0	21.1	12.3	3.5
ENTRE 81 Y 90 MM. DE DEFICIT	7.1	3.5	3.5	.0	.0	.0	.0	.0	.0	21.1	12.3	1.8
ENTRE 91 Y 100 MM. DE DEFICIT	5.4	3.5	.0	.0	.0	.0	.0	.0	.0	19.3	10.5	-0
ENTRE 101 Y 150 MM. DE DEFICIT	12.5	1.8	3.5	-0	.0	-0	-0	-0	-0	-0	12.3	14.0
ENTRE 151 Y 999 MM. DE DEFICIT	-0	-0	.0	.0	.0	.0	.0	.0	.0	-0	.0	1-3

P U N A

PAGINA 25

ESTADÍSTICOS DE INTERÉS EN PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 100 MM

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	114.00	68.00	47.00	28.00	27.00	38.00	63.00	77.00	129.00	162.00
LLUVIAS	99.53	83.93	101.76	53.18	13.44	13.09	8.00	8.22	18.29	46.09	83.44	86.22
ETP REAL	116.59	100.71	87.18	51.80	21.18	13.38	10.96	12.91	31.82	43.96	79.33	110.40
EXCEDENTES	.61	3.38	9.38	1.40	.96	.42	.00	.00	.00	.00	2.76	2.22
DEFICIT	56.41	37.29	26.84	16.20	25.82	14.62	16.04	25.09	31.18	33.04	49.67	51.60
ETP REAL / ETP POT.	68.18	72.98	76.45	76.18	45.06	47.18	40.58	33.98	50.51	57.09	61.50	68.15
ACCURRIMIENTOS	1.20	2.28	5.83	3.61	2.28	1.35	1.68	.34	.17	.08	1.42	1.82

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	63.45	66.77	69.61	37.39	26.35	20.68	14.71	15.25	22.98	40.55	63.08	71.37
ETP REAL	47.53	36.53	32.03	18.19	16.95	10.11	9.33	11.00	20.56	26.08	31.58	32.09
EXCEDENTES	4.07	1.88	27.36	7.30	6.41	2.53	.00	.00	.00	.00	10.56	9.76
DEFICIT	47.53	36.53	32.03	18.19	16.95	10.11	9.33	11.00	20.56	26.08	31.58	32.09
ETP REAL / ETP POT.	27.80	26.47	28.10	26.75	36.06	36.11	34.57	28.96	32.63	33.88	28.94	32.16
ENCUENTROS	3.93	8.56	16.21	9.81	7.19	4.37	2.19	1.09	.55	.27	5.28	5.90

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 100 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	53.0	3.0	70.0	48.0	6.0	15.0	10.0	30.0	43.0	11.0	84.0	( 96.0)	473.0
1935	12.0	77.0	83.0	70.0	-0	12.0	-0	-0	-0	2.0	87.0	(113.0)	462.0
1936	70.0	110.0	36.0	43.0	-0	-0	-0	-0	-0	-0	22.0	(210.0)	491.0
1937	12.0	30.0	12.0	( 78.0)	-0	3.0	-0	-0	5.0	3.0	24.0	2.0	169.0
1938	(237.0)	166.0	174.0	52.0	22.0	14.0	-0	10.0	5.0	13.0	109.0	14.0	836.0
1939	111.0	(127.0)	73.0	21.0	7.0	10.0	7.0	-0	67.0	21.0	88.0	127.0	639.0
1940	90.0	79.0	79.0	33.0	19.0	10.0	72.0	7.0	17.0	86.0	63.0	(266.0)	821.0
1941	(198.0)	72.0	81.0	44.0	55.0	3.0	30.0	7.0	-0	49.0	47.0	72.0	653.0
1942	1942	(264.0)	78.0	31.0	56.0	24.0	-0	-0	-0	6.0	103.0	62.0	694.0
1943	30.0	40.0	84.0	28.0	28.0	-0	-0	-0	-0	37.0	(131.0)	78.0	456.0
1944	80.0	38.0	(145.0)	21.0	17.0	1.0	-0	-0	14.0	111.0	61.0	40.0	528.0
1945	86.0	50.0	(291.0)	8.0	-0	-0	5.0	-0	45.0	11.0	39.3	25.0	560.0
1946	144.0	30.0	108.0	182.0	23.0	6.0	-0	-0	8.0	10.0	(237.0)	2.0	770.0
1947	71.0	59.0	18.0	( 84.0)	8.0	16.0	7.0	7.0	75.0	52.0	7.0	20.0	424.0
1948	(131.0)	103.0	51.0	-0	-0	-0	-0	-0	15.0	17.0	99.0	76.0	492.0
1949	(132.0)	22.0	130.0	5.0	-0	2.0	33.0	-0	17.0	121.0	28.0	57.0	547.0
1950	28.0	(174.0)	42.0	29.0	8.0	26.0	-0	5.0	4.0	87.0	123.0	45.0	571.0
1951	164.0	24.0	95.0	63.0	-0	42.0	-0	23.0	10.0	53.0	(241.0)	224.0	939.0
1952	40.0	70.0	30.0	35.0	38.0	-0	-0	80.0	5.0	(135.0)	79.0	69.0	541.0
1953	(157.0)	19.0	117.0	37.0	78.0	90.0	-0	-0	-0	85.0	107.0	50.0	770.0
1954	33.0	92.0	(128.0)	100.0	-0	-0	21.0	4.0	-0	106.0	44.0	70.0	595.0
1955	58.0	131.0	(147.0)	3.0	-0	35.0	-0	-0	-0	10.0	37.0	66.0	487.0
1956	189.0	70.0	89.0	62.0	10.0	22.0	15.0	33.0	-0	164.0	(195.0)	74.0	943.0
1957	80.0	81.0	131.0	54.0	12.0	40.0	-0	12.0	25.0	61.0	45.0	(271.0)	812.0
1958	82.0	80.0	128.0	110.0	20.0	-0	2.0	7.0	23.0	8.0	(184.0)	125.0	769.0
1959	(163.0)	67.0	138.0	84.0	38.0	3.0	21.0	-0	9.0	48.0	50.0	123.0	744.0
1960	56.0	53.0	44.0	100.0	-0	16.0	47.0	7.0	2.0	121.0	115.0	(217.0)	778.0
1961	24.0	97.0	(117.0)	105.0	65.0	-0	-0	-0	-0	17.0	56.0	59.0	540.0
1962	(126.0)	34.0	30.0	16.0	10.0	-0	24.0	-0	-0	55.0	30.0	22.0	347.0
1963	(200.0)	80.0	48.0	38.0	-0	-0	-0	4.0	10.0	2.0	62.0	10.0	454.0
1964	-0	87.0	( 93.0)	63.0	-0	-0	-0	-0	50.0	28.0	5.0	57.0	343.0
1965	83.0	17.0	11.0	4.0	6.0	-0	-0	-0	-0	48.0	92.0	(145.0)	406.0
1966	143.0	100.0	45.0	60.0	18.0	-0	15.0	-0	37.0	15.0	(188.0)	36.0	657.0
1967	35.0	(165.0)	50.0	38.0	77.0	2.0	-0	17.0	19.0	26.0	24.0	20.0	473.0
1968	(111.0)	103.0	70.0	43.0	-0	34.0	-0	47.0	5.0	25.0	53.0	96.0	587.0
1969	78.0	(163.0)	125.0	58.0	-0	10.0	20.0	-0	12.0	35.0	102.0	140.0	743.0
1970	(126.0)	34.0	65.0	27.0	92.0	5.0	-0	-0	42.0	8.0	43.0	80.0	522.0
1971	(143.0)	103.0	84.0	74.0	-0	-0	16.0	22.0	87.0	32.0	72.0	12.0	645.0
1972	80.0	-0	(195.0)	45.0	-0	43.0	-0	-0	54.0	37.0	35.0	130.0	619.0
1973	245.0	25.0	(270.0)	115.0	-0	85.0	15.0	-0	-0	20.0	20.0	192.0	987.0
1974	70.0	(335.0)	215.0	67.0	90.0	-0	-0	-0	-0	16.0	35.0	3.0	831.0
1975	56.0	45.0	(177.0)	105.0	8.0	-0	-0	18.0	23.0	55.0	105.0	40.0	632.0
1976	207.0	77.0	(295.0)	-0	-0	-0	-0	20.0	-0	10.0	80.0	4.0	693.0
1977	40.0	(120.0)	37.0	65.0	9.0	-0	-0	10.0	50.0	69.0	35.0	115.0	440.0
1978	120.0	61.0	50.0	25.0	10.0	20.0	-0	-0	45.0	52.0	(240.0)	115.0	738.0

PROM.	99.5	83.9	101.8	53.2	13.4	13.1	8.0	8.2	13.3	44.1	83.4	84.2	610.2
MAX.	257.0	335.0	295.0	182.0	92.0	90.0	72.0	30.0	37.0	164.0	257.0	271.0	987.0
MIN.	.0	.0	11.0	.0	.0	.0	.0	.0	.0	.0	5.0	2.0	169.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	29.7	64.9	73.5	17.0	53.6	40.7	78.9	69.8	15.6	68.2	100.0	1934
1935	8.8	100.0	73.7	100.0	4.3	46.4	.0	2.6	100.0	13.0	68.2	100.0	1935
1936	42.7	79.7	32.5	63.2	.0	.0	.0	.0	100.0	2.6	17.8	100.0	1936
1937	29.8	26.8	12.3	100.0	8.5	14.3	7.4	2.6	9.5	5.2	100.0	2.5	1937
1938	100.0	100.0	100.0	98.5	87.2	78.6	51.9	55.3	31.7	28.6	86.0	11.7	1938
1939	65.5	92.0	64.0	30.9	16.9	35.7	25.9	.0	100.0	29.9	69.0	79.0	1939
1940	100.0	58.7	70.2	48.5	40.4	35.7	100.0	50.0	47.6	100.0	60.5	100.0	1940
1941	100.0	97.7	84.2	76.5	100.0	39.3	100.0	39.5	17.5	67.5	40.3	45.7	1941
1942	38.6	100.0	95.6	77.9	100.0	92.9	48.1	34.2	20.6	18.2	84.5	40.7	1942
1943	100.0	30.4	74.6	41.2	56.6	.0	.0	.0	100.0	49.4	100.0	50.0	1943
1944	47.4	100.0	100.0	50.0	48.9	17.9	11.1	5.3	25.4	100.0	62.0	32.7	1944
1945	52.4	37.0	100.0	79.4	42.6	28.6	37.0	18.4	74.6	28.1	33.3	100.0	1945
1946	84.8	23.2	94.7	100.0	93.7	78.6	55.6	39.5	34.9	26.7	100.0	51.2	1946
1947	68.5	45.7	17.5	100.0	29.8	60.7	33.3	23.7	100.0	72.7	13.2	14.2	1947
1948	76.6	74.6	100.0	2.9	2.1	.0	.0	.0	23.6	100.0	77.5	48.1	1948
1949	77.2	100.0	100.0	20.6	8.5	10.7	100.0	10.5	31.7	100.0	45.7	42.0	1949
1950	19.3	100.0	53.5	51.5	25.5	92.9	7.4	18.4	9.5	100.0	76.1	32.7	1950
1951	95.9	18.8	83.3	92.6	.0	100.0	14.3	65.8	22.2	70.1	100.0	100.0	1951
1952	66.7	60.1	32.5	54.4	80.9	3.6	3.7	100.0	39.7	100.0	86.3	61.1	1952
1953	93.6	21.7	100.0	57.4	100.0	100.0	92.6	63.2	38.1	100.0	88.4	58.9	1953
1954	24.6	67.4	100.0	100.0	38.3	25.0	81.5	28.9	11.1	100.0	50.4	49.4	1954
1955	36.3	94.9	100.0	29.4	14.9	100.0	16.8	10.5	7.9	100.0	29.5	100.0	1955
1956	100.0	58.7	79.8	100.0	36.2	82.1	63.0	89.5	7.9	100.0	100.0	62.7	1956
1957	60.6	63.8	100.0	83.8	40.4	100.0	25.9	44.7	47.6	81.3	38.8	100.0	1957
1958	83.0	71.0	100.0	100.0	83.0	53.6	44.4	42.1	49.2	22.1	100.0	89.5	1958
1959	97.1	63.8	100.0	100.0	91.5	53.6	85.2	34.2	31.7	67.5	44.2	77.2	1959
1960	33.9	100.0	40.4	100.0	27.7	64.3	100.0	44.7	25.4	100.0	95.3	100.0	1960
1961	59.6	76.1	100.0	100.0	100.0	64.3	48.1	34.2	20.6	31.2	46.5	38.3	1961
1962	73.7	100.0	28.1	100.0	25.5	3.6	88.9	2.6	100.0	72.7	24.8	100.0	1962
1963	100.0	68.1	50.0	58.8	6.4	3.6	3.7	13.2	100.0	6.5	48.6	100.0	1963
1964	100.0	81.6	81.6	92.6	2.1	.0	.0	.0	79.4	100.0	7.0	100.0	1964
1965	49.7	100.0	11.4	100.0	14.9	3.6	.0	2.6	100.0	63.6	72.1	89.5	1965
1966	83.6	73.2	100.0	88.2	40.4	3.6	55.6	2.6	58.7	100.0	100.0	50.6	1966
1967	28.1	100.0	57.0	61.8	100.0	42.9	29.6	57.9	41.3	48.3	22.5	100.0	1967
1968	66.1	75.4	61.4	63.2	.0	100.0	7.4	100.0	17.5	36.4	43.4	59.9	1968
1969	100.0	100.0	100.0	91.2	29.8	50.0	77.8	15.8	27.0	48.1	79.8	87.0	1969
1970	74.3	100.0	57.9	41.2	100.0	53.6	33.3	23.7	73.0	19.5	36.4	50.6	1970
1971	83.6	74.6	73.7	100.0	6.4	3.6	59.3	60.5	100.0	54.5	61.2	11.7	1971
1972	47.4	100.0	100.0	92.6	53.2	100.0	48.1	36.8	90.5	59.7	35.7	81.5	1972
1973	100.0	57.2	100.0	100.0	80.9	100.0	100.0	73.7	44.4	44.2	24.8	100.0	1973
1974	54.4	100.0	100.0	98.5	100.0	89.3	66.7	50.0	28.6	32.5	32.6	3.7	1974
1975	100.0	34.1	100.0	100.0	87.2	60.7	44.4	65.8	52.4	76.6	84.5	30.2	1975
1976	100.0	68.8	73.5	95.6	21.3	28.6	18.5	60.5	11.1	19.2	63.6	100.0	1976
1977	25.1	87.0	100.0	95.6	21.3	3.6	.0	26.3	79.4	89.6	27.9	100.0	1977
1978	70.8	100.0	45.6	38.2	21.3	71.4	.0	.0	71.4	67.5	100.0	94.4	1978

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1934
1935	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1935
1936	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1936
1937	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1937
1938	-0	15.0	60.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1938
1939	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1939
1940	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	19.0	1940
1941	27.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1941
1942	-0	27.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1942
1943	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1943
1944	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1944
1945	-0	-0	78.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1945
1946	-0	-0	-0	15.0	-0	-0	-0	-0	-0	-0	37.0	-0	1946
1947	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1947
1948	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1948
1949	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1949
1950	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1950
1951	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	16.0	62.0	1951
1952	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1952
1953	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1953
1954	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1954
1955	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1955
1956	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	59.0	-0	1956
1957	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	13.0	1957
1958	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1958
1959	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1959
1960	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	6.0	1960
1961	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1961
1962	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1962
1963	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1963
1964	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1964
1965	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1965
1966	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1966
1967	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1967
1968	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1968
1969	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1969
1970	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1970
1971	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1971
1972	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972
1973	-0	110.0	80.0	47.0	-0	19.0	-0	-0	-0	-0	-0	-0	1973
1974	-0	-0	101.0	-0	43.0	-0	-0	-0	-0	-0	-0	-0	1974
1975	-0	-0	-0	1.0	-0	-0	-0	-0	-0	-0	-0	-0	1975
1976	-0	-0	103.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976
1977	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1977
1978	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	12.0	-0	1978
TOTALES	27.0	152.0	422.0	63.0	43.0	19.0	-0	-0	-0	-0	124.0	100.0	TOTALES



NUM CASOS	1	3	5	3	1	1	0	0	0	4	4	NUM CASOS
E. MEDIOS	6	3.4	9.4	1.4	1.0	1.0	0	0	0	2.8	2.2	E. MEDIOS
E. REALES	27.0	50.7	84.4	21.0	43.0	19.0	0	0	0	31.0	25.0	E. REALES
FREC. X	2.3	6.7	11.1	6.7	2.2	2.2	0	0	0	8.9	8.9	FREC. X

SUMATORIA EXC\*FREC = 21.12 MM

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 102 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	97.0	40.0	18.0	39.0	13.0	16.0	8.0	19.0	65.0	41.0	41.0	0	1934
1935	156.0	30.0	0	45.0	15.0	27.0	37.0	0	67.0	41.0	0	0	1935
1936	98.0	77.0	25.0	47.0	28.0	27.0	38.0	0	75.0	106.0	0	0	1936
1937	120.0	100.0	0	43.0	24.0	25.0	32.0	57.0	73.0	0	158.0	0	1937
1938	0	0	1.0	6.0	6.0	13.0	17.0	43.0	53.0	16.0	143.0	0	1938
1939	59.0	41.0	47.0	40.0	18.0	20.0	36.0	0	54.0	40.0	34.0	0	1939
1940	57.0	34.0	35.0	28.0	18.0	0	19.0	33.0	0	51.0	0	0	1940
1941	0	17.0	16.0	0	17.0	0	23.0	52.0	25.0	77.0	84.0	0	1941
1942	105.0	0	5.0	19.0	2.0	14.0	25.0	50.0	63.0	20.0	96.0	0	1942
1943	0	29.0	40.0	19.0	28.0	27.0	38.0	0	39.0	0	81.0	0	1943
1944	90.0	0	34.0	24.0	23.0	24.0	36.0	47.0	0	49.0	109.0	0	1944
1945	81.0	0	14.0	27.0	20.0	17.0	31.0	16.0	60.0	86.0	0	0	1945
1946	26.0	106.0	6.0	2.0	6.0	12.0	23.0	41.0	58.0	0	79.0	0	1946
1947	88.0	75.0	94.0	33.0	11.0	18.0	29.0	0	21.0	112.0	139.0	0	1947
1948	40.0	35.0	0	46.0	28.0	27.0	38.0	48.0	0	29.0	84.0	0	1948
1949	39.0	0	54.0	43.0	25.0	0	34.0	43.0	0	70.0	94.0	0	1949
1950	138.0	0	53.0	35.0	2.0	25.0	31.0	57.0	23.0	5.0	109.0	0	1950
1951	2.0	112.0	19.0	47.0	27.0	23.0	13.0	49.0	0	17.0	0	0	1951
1952	57.0	55.0	77.0	9.0	0	26.0	0	38.0	0	0	63.0	0	1952
1953	11.0	108.0	0	0	0	2.0	14.0	39.0	0	15.0	67.0	0	1953
1954	129.0	45.0	0	29.0	21.0	5.0	27.0	56.0	0	64.0	82.0	0	1954
1955	109.0	7.0	0	40.0	0	23.0	34.0	58.0	0	91.0	0	0	1955
1956	0	57.0	23.0	30.0	5.0	10.0	4.0	58.0	0	0	28.0	0	1956
1957	67.0	50.0	0	28.0	0	20.0	21.0	33.0	14.0	79.0	0	0	1957
1958	29.0	40.0	0	8.3	13.0	15.0	22.0	32.0	60.0	0	17.0	0	1958
1959	5.0	50.0	0	4.0	13.0	4.0	25.0	43.0	25.0	72.0	37.0	0	1959
1960	113.0	0	68.0	34.0	10.0	0	21.0	47.0	0	6.0	0	0	1960
1961	69.0	33.0	0	0	10.0	14.0	25.0	50.0	53.0	69.0	100.0	0	1961
1962	45.0	0	82.0	35.0	27.0	3.0	37.0	0	21.0	97.0	0	0	1962
1963	0	44.0	57.0	44.0	27.0	26.0	33.0	0	72.0	66.0	0	0	1963
1964	0	50.0	21.0	5.0	46.0	28.0	38.0	13.0	0	120.0	0	0	1964
1965	86.0	0	101.0	0	40.0	27.0	37.0	0	28.0	36.0	17.0	0	1965
1966	28.0	37.0	0	8.0	28.0	12.0	37.0	26.0	0	0	80.0	0	1966
1967	123.0	0	49.0	26.0	0	16.0	16.0	37.0	46.0	100.0	0	0	1967
1968	58.0	34.0	44.0	25.0	47.0	25.0	0	52.0	49.0	73.0	65.0	0	1968
1969	0	0	6.0	33.0	0	6.0	32.0	46.0	40.0	26.0	21.0	0	1969
1970	44.0	0	48.0	0	0	18.0	29.0	17.0	62.0	82.0	80.0	0	1970
1971	28.0	35.0	30.0	44.0	27.0	11.0	15.0	0	35.0	50.0	143.0	0	1971
1972	90.0	0	0	22.0	0	14.0	24.0	6.0	31.0	83.0	30.0	0	1972
1973	0	59.0	0	9.0	0	0	10.0	35.0	43.0	97.0	0	0	1973
1974	78.0	0	0	0	3.0	9.0	19.0	45.0	52.0	87.0	156.0	0	1974
1975	0	91.0	0	6.0	11.0	15.0	13.0	30.0	18.0	20.0	113.0	0	1975
1976	0	43.0	18.0	28.0	22.0	22.0	15.0	56.0	63.0	47.0	0	0	1976
1977	128.0	18.0	0	3.0	37.0	27.0	28.0	13.0	8.0	93.0	0	0	1977
1978	50.0	0	62.0	42.0	37.0	8.0	27.0	18.0	25.0	0	9.0	0	1978
TOTALES	2394.0	1676.0	1208.0	729.0	1162.0	658.0	722.0	1129.0	1403.0	1487.0	2235.0	2322.0	TOTALES

NUM CASOS	35	30	25	30	38	40	43	36	33	37	29	NUM CASOS
D. MEDIOS	53.2	37.3	26.8	16.2	25.8	16.0	25.1	31.2	33.0	49.7	51.6	D. MEDIOS
D. REALES	72.5	55.9	48.3	24.5	30.6	18.1	26.3	39.0	45.1	60.4	80.1	D. REALES
FREC. X	75.0	66.7	55.6	66.7	84.4	98.9	95.6	80.0	73.3	82.2	64.4	FREC. X

SUMATORIA DEF+REC = 381.81 MM

SUMATORIA (EXC+REC - DEF+REC) = -300.68 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	NAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	4.2	10.1	15.0	14.6	4.7	2.4	4.8	.0	.0	2.4	3.6	3.5	E.P.E.

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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 30  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN PUÑA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	9	8	6	5	23	20	23	28	22	17	13	9	183
ENTRE 40.1 Y 54.9	7	1	4	6	7	7	7	5	6	5	7	9	71
ENTRE 55.0 Y 69.9	5	10	5	5	1	4	5	7	2	5	7	3	59
ENTRE 70.0 Y 84.9	9	7	8	6	3	4	2	2	5	5	5	4	60
ENTRE 85.0 Y 100.0	14	19	22	23	11	10	8	3	10	13	13	20	166
70 0 MENOR	21	19	15	16	31	31	35	40	30	27	27	21	313

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	20.5	17.8	13.3	11.1	51.1	44.4	51.1	62.2	48.9	37.8	23.9	20.0	
ENTRE 40.1 Y 54.9	15.9	2.2	8.9	13.3	15.6	15.6	15.6	11.1	13.3	11.1	15.6	20.0	
ENTRE 55.0 Y 69.9	11.4	22.2	11.1	11.1	2.2	8.9	11.1	15.6	4.4	11.1	15.6	6.7	
ENTRE 70.0 Y 84.9	20.5	15.6	17.8	13.3	6.7	8.9	4.4	4.4	11.1	11.1	11.1	8.9	
ENTRE 85.0 Y 100.0	31.8	42.2	48.9	51.1	24.4	22.2	17.8	6.7	22.2	28.9	28.9	44.4	
70 0 MENOR	47.7	42.2	33.3	35.6	68.9	68.9	77.8	88.9	66.7	60.0	60.0	46.7	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INICIAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(★)	FEB(★)	MAR(★)	ABR(★)	MAY	JUN	JUL	AGO	SET	OCT	NOV(★)	DIC(★)
UNO O MAS MESES	21	18	14	16	31	31	35	40	30	27	27	21
SOLO UN MES	8	11	3	1	4	2	2	1	2	3	5	6
DOS O MAS MESES	10	6	4	9	12	23	23	31	25	16	18	10
SOLO DOS MESES	3	1	0	2	1	4	1	2	5	0	6	1
TRES O MAS MESES	5	3	3	2	6	8	17	21	17	13	10	6
SOLO TRES MESES	2	1	1	0	3	2	1	1	3	1	2	1
CUATRO O MAS MESES	1	1	1	1	3	6	16	9	10	7	4	2
SOLO CUATRO MESES	1	1	1	0	0	0	7	1	3	1	1	1
CINCO O MAS MESES	0	0	0	1	3	6	5	5	5	3	1	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	23	26	30	28	14	14	10	5	15	18	17	23
SOLO UN MES	5	7	3	5	3	8	8	4	11	5	5	8
DOS O MAS MESES	12	11	16	23	10	6	2	1	0	4	0	6
SOLO DOS MESES	6	1	2	7	0	0	0	0	0	0	0	0
TRES O MAS MESES	3	5	8	12	10	5	2	1	0	0	0	3
SOLO TRES MESES	1	1	2	3	2	0	1	0	0	0	0	0
CUATRO O MAS MESES	2	3	6	6	5	1	1	0	0	0	0	0
SOLO CUATRO MESES	1	1	2	1	1	0	0	0	0	0	0	0
CINCO O MAS MESES	1	3	3	3	1	1	0	0	0	0	0	0

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	1	4	0	0	0	0	0	0	0	0	0
SOLO UN MES	0	0	3	0	0	0	0	0	0	0	0	0
DOS O MAS MESES	0	0	1	0	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	1	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(★) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
PUNA (1934-1978). LAT. 27.48 S. LONG. 62.32 W. ALT. 127 M. TABLA 105 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	98.1	78.1	93.2	53.5	17.3	13.0	9.8	7.9	13.3	50.3	87.5	90.5	612.4
1963	63.7	54.4	56.9	40.2	21.8	19.2	17.0	16.2	19.7	47.2	62.9	76.0	
1935	96.3	80.9	94.0	54.0	17.1	12.5	9.5	6.9	13.5	50.8	84.4	89.2	609.4
1964	65.7	52.5	56.7	40.3	21.9	19.3	17.1	15.7	20.1	46.8	64.7	76.3	
1936	98.7	78.9	91.6	51.8	17.3	12.1	9.5	6.9	13.5	52.2	84.9	90.3	607.6
1965	63.6	53.8	58.7	41.1	21.8	19.5	17.1	15.7	20.1	46.1	64.7	76.8	
1937	101.1	78.5	91.9	52.3	17.9	12.1	10.0	6.9	14.8	52.7	90.5	84.5	613.1
1966	64.1	53.6	58.4	41.1	21.5	19.5	17.1	15.7	20.4	45.6	66.2	74.0	
1938	101.9	83.0	93.2	51.0	20.5	12.1	10.0	7.4	15.2	53.4	90.5	85.1	623.2
1967	63.1	55.1	57.0	40.9	23.8	19.5	17.1	15.8	20.3	44.9	66.2	73.4	
1939	97.0	80.9	89.7	50.7	19.8	12.7	10.0	8.7	15.2	53.3	88.6	87.8	614.9
1968	56.0	53.0	55.1	40.9	24.1	19.9	17.1	17.3	20.3	44.6	66.5	72.2	
1940	95.9	82.1	91.4	51.9	19.5	12.7	10.4	8.7	13.4	54.3	89.1	88.2	617.7
1969	56.0	54.4	55.4	40.6	24.2	19.9	17.1	17.3	17.3	44.3	66.5	72.4	
1941	97.1	40.6	91.0	51.7	22.0	12.6	3.0	8.4	14.2	51.7	88.4	82.0	607.8
1970	56.3	55.1	55.5	40.7	27.6	20.0	12.7	17.4	18.6	44.6	66.9	64.2	
1942	95.3	81.7	91.1	52.7	20.1	12.5	7.5	8.9	17.1	51.1	89.2	80.0	607.3
1971	53.7	55.2	55.5	40.9	27.2	20.0	12.1	17.6	22.6	44.6	66.5	65.4	
1943	95.8	72.9	95.0	53.2	15.3	13.1	7.5	8.9	18.9	52.2	86.4	82.3	604.6
1972	53.5	45.3	58.6	40.7	26.5	20.7	12.1	17.6	23.3	44.1	67.1	66.0	
1944	102.9	72.4	101.2	54.1	17.3	15.9	8.0	8.9	18.9	51.6	83.1	86.1	622.5
1973	58.5	45.8	66.7	41.9	26.7	24.3	12.1	17.6	23.3	44.4	67.7	68.9	
1945	102.6	82.3	103.5	57.6	19.8	15.9	8.0	6.9	18.5	48.4	82.2	84.9	632.6
1974	58.7	65.8	69.4	41.4	29.8	24.3	12.1	17.6	23.6	43.4	68.1	70.1	
1946	101.6	82.1	99.7	60.9	20.0	15.9	7.9	9.5	17.7	49.9	84.4	85.4	635.0
1975	59.3	65.9	61.5	41.2	29.6	24.3	12.2	17.6	23.1	42.8	67.7	69.7	
1947	103.7	83.7	105.9	54.8	19.3	15.7	7.9	10.2	17.5	49.9	76.5	85.4	632.5
1976	61.9	65.2	71.1	35.8	29.9	24.5	12.2	17.6	23.2	42.8	59.4	69.6	
1948	102.7	85.7	106.6	54.2	19.3	15.2	7.6	10.3	16.6	50.5	79.5	84.9	633.0
1977	62.7	65.4	70.3	35.4	29.8	24.6	12.2	17.6	21.5	42.9	58.4	70.2	
1949	102.3	84.3	106.5	55.0	19.6	15.8	7.6	10.3	17.6	51.6	84.2	86.2	641.2
1978	62.5	65.4	70.4	34.4	29.7	24.5	12.2	17.6	22.1	42.5	65.3	70.4	

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FRECUENCIAS DE EXCESOS Y DEFICIENCIAS MENSUALES EN MILIMETROS, PARA 45 AÑOS DE DATOS, EXCEPTO EN ENERO EN QUE HAY UNO MENOS.

[illegible]

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 45 A±OS.

[illegible]



Q U I M I L I

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 30

PRESTE ATENCION A LA NOTA DE LA PAGINA 1-

ESTADISTICOS DE INTERES EN QUIMILI (1934-1989).LAT. 27.39 S. LONG. 62.25 W. ALT. 134 M TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	114.00	68.00	47.00	28.00	27.00	38.00	63.00	77.00	129.00	162.00
LLUVIAS	115.52	85.21	105.30	63.57	19.30	14.87	10.14	8.59	21.52	52.00	86.11	95.24
ETP REAL	131.60	96.14	94.62	50.34	25.09	14.43	12.86	14.70	35.14	51.25	83.70	111.29
EXCEDENTES	5.38	1.98	7.50	8.86	1.00	1.37	.05	.00	.00	.91	3.91	3.57
DEFICIT	39.40	41.86	19.37	17.66	21.91	13.55	14.13	23.30	30.86	25.75	45.30	50.71
ETP REAL / ETP POT.	76.96	69.67	83.00	74.03	53.38	51.59	47.69	38.67	51.02	66.56	64.88	68.69
ESCURRIMIENTOS	4.18	3.04	5.27	7.06	4.03	2.70	1.38	.69	.34	.63	2.27	2.92

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	78.54	58.30	69.31	51.50	22.75	23.73	16.20	13.56	25.37	44.89	64.13	73.83
ETP REAL	42.03	36.07	29.48	19.51	15.47	10.33	9.14	11.99	19.41	25.18	38.60	50.64
EXCEDENTES	24.06	12.95	25.34	24.58	5.33	8.91	.40	.00	.00	.00	17.50	13.20
DEFICIT	42.03	36.07	29.48	19.51	15.47	10.33	9.14	11.99	19.41	25.18	38.60	50.64
ETP REAL / ETP POT.	24.58	26.14	25.86	28.69	32.92	36.90	33.85	31.55	30.81	32.70	29.92	31.26
ESCURRIMIENTOS	12.59	8.77	14.09	17.77	9.49	6.54	3.35	1.68	.84	2.46	6.92	9.07

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.6799	.6842	.6582	.8101	1.1784	1.5952	1.5970	1.5792	1.1325	.8633	.7447	.7704
ETP REAL	.3193	.3752	.3115	.3875	.6166	.7151	.7099	.6159	.6038	.4914	.4612	.4550
EXCEDENTES	4.4701	6.5324	3.3781	2.7750	5.3292	6.4835	7.4833	*****	*****	4.2073	4.2753	3.6969
DEFICIT	1.0666	.8618	1.5213	1.1045	.7061	.7622	.6470	.5145	.6290	.9780	.8520	.9985
ETP REAL / ETP POT.	.3193	.3752	.3115	.3875	.6166	.7151	.7099	.6159	.6038	.4914	.4612	.4550
ESCURRIMIENTOS	3.0160	2.8840	2.6729	2.5150	2.3536	2.4184	2.4318	2.4318	2.4318	3.9147	3.9305	3.1063

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LUBIAS MEDIAS MENSUALES EN QUINILI (1934-1989).LAT. 27.39 S. LONG. 62.25 W. ALT. 134 M TABLA 100 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	(123.0)	18.0	114.0	75.0	13.0	23.0	15.0	33.0	47.0	28.0	60.0	78.0	626.0
1935	0	123.0	18.0	80.0	7.0	62.0	0	3.0	0	23.0	112.0	(140.0)	579.0
1936	123.0	81.0	45.0	64.0	5.0	2.0	0	0	2.0	0	46.0	(137.0)	510.0
1937	13.0	43.0	40.0	(133.0)	10.0	3.0	0	0	18.0	1.0	45.0	17.0	323.0
1938	(370.0)	119.0	253.0	167.0	21.0	16.0	0	7.0	5.0	17.0	85.0	42.0	1102.0
1939	132.0	104.0	136.0	19.0	17.0	0	8.0	2.0	45.0	19.0	74.0	(189.0)	743.0
1940	163.0	96.0	101.0	46.0	24.0	21.0	89.0	9.0	20.0	103.0	74.0	(296.0)	1042.0
1941	(124.0)	58.0	108.0	29.0	33.0	9.0	33.0	4.0	4.0	81.0	56.0	68.0	607.0
1942	45.0	(248.0)	125.0	16.0	21.0	13.0	0	0	0	6.0	124.0	22.0	620.0
1943	38.0	38.0	(99.0)	38.0	15.0	0	1.0	0	8.0	21.0	49.0	42.0	349.0
1944	81.0	31.0	162.0	12.0	35.0	2.0	0	0	8.0	(164.0)	86.0	40.0	621.0
1945	153.0	72.0	(192.0)	24.0	0	0	0	0	24.0	20.0	72.0	20.0	577.0
1946	(195.0)	18.0	164.0	137.0	20.0	26.0	0	0	18.0	7.0	147.0	29.0	761.0
1947	(83.0)	82.0	15.0	22.0	12.0	22.0	10.0	7.0	47.0	28.0	20.0	48.0	396.0
1948	(117.0)	104.0	17.0	16.0	0	2.0	0	0	41.0	9.0	86.0	55.0	447.0
1949	128.0	68.0	70.0	13.0	10.0	2.0	28.0	0	37.0	(196.0)	144.0	95.0	792.0
1950	43.0	(193.0)	48.0	26.0	13.0	27.0	0	0	0	68.0	50.0	98.0	568.0
1951	138.0	68.0	152.0	23.0	0	27.0	0	16.0	3.0	61.0	24.0	(250.0)	762.0
1952	6.0	20.0	36.0	53.0	39.0	1.0	0	35.0	10.0	53.0	( 90.0)	86.0	487.0
1953	150.0	35.0	123.0	67.0	98.0	133.0	0	0	0	(177.0)	64.0	44.0	911.0
1954	21.0	56.0	( 95.0)	81.0	3.0	0	29.0	0	0	56.0	35.0	55.0	431.0
1955	83.0	110.0	(155.0)	1.0	0	12.0	0	6.0	0	6.0	57.0	50.0	460.0
1956	172.0	95.0	75.0	63.0	5.0	39.0	21.0	50.0	7.0	122.0	(188.0)	110.0	947.0
1957	114.0	93.0	110.0	110.0	22.0	43.0	0	18.0	51.0	35.0	34.0	(286.0)	976.0
1958	73.0	60.0	147.0	100.0	17.0	0	5.0	26.0	0	5.0	174.0	(213.0)	820.0
1959	22.0	82.0	48.0	66.0	32.0	10.0	50.0	0	14.0	52.0	18.0	(236.0)	833.0
1960	81.0	97.0	64.0	136.0	0	9.0	29.0	0	0	82.0	107.0	(163.0)	768.0
1961	52.0	92.0	(113.0)	80.0	95.0	0	0	0	21.0	90.0	0	104.0	647.0
1962	( 76.0)	14.0	38.0	27.0	3.0	0	25.0	0	0	68.0	19.0	38.0	308.0
1963	(149.0)	90.0	69.0	10.0	24.0	5.0	10.0	1.0	15.0	5.0	74.0	57.0	509.0
1964	0	68.0	(127.0)	98.0	0	0	0	0	47.0	45.0	12.0	93.0	490.0
1965	152.0	54.0	23.0	3.0	0	0	0	0	0	46.0	118.0	(215.0)	611.0
1966	212.0	71.0	74.0	52.0	7.0	0	0	0	43.0	20.0	(247.0)	18.0	744.0
1967	44.0	( 79.0)	52.0	12.0	39.0	7.0	0	30.0	26.0	30.0	29.0	43.0	391.0
1968	(149.0)	99.0	46.0	19.0	31.0	36.0	22.0	53.0	6.0	119.0	64.0	32.0	676.0
1969	100.0	121.0	62.0	49.0	0	13.0	13.0	0	0	46.0	49.0	( 33.0)	594.0
1970	51.0	26.0	43.0	27.0	30.0	5.0	10.0	4.0	36.0	6.0	26.0	10.0	488.0
1971	90.0	(102.0)	52.0	48.0	0	0	7.0	20.0	24.0	25.0	101.0	7.0	616.0
1972	(145.0)	12.0	129.0	36.0	15.0	58.0	16.0	0	24.0	31.0	7.0	143.0	616.0
1973	235.0	25.0	(276.0)	154.0	0	77.0	30.0	0	1.0	12.0	34.0	164.0	1008.0
1974	43.0	(332.0)	117.0	71.0	70.0	0	0	4.0	10.0	37.0	16.0	22.0	727.0
1975	62.0	125.0	(175.0)	48.0	3.0	5.0	0	24.0	15.0	28.0	78.0	37.0	600.0
1976	207.0	55.0	(310.0)	0	10.0	0	0	42.0	0	0	154.0	35.0	813.0
1977	62.0	83.0	(101.0)	70.0	49.0	0	0	25.0	15.0	75.0	58.0	38.0	576.0
1978	102.0	52.0	17.0	45.0	11.0	30.0	0	0	66.0	80.0	(246.0)	68.0	719.0

1979	21.0	(137.0)	48.0	27.0	7.0	.0	14.0	.0	61.0	60.0	50.0	13.0	494.0
1980	185.0	104.0	258.0	160.0	27.0	.0	.0	10.0	30.0	20.0	(341.0)	195.0	1330.0
1981	114.0	(165.0)	129.0	95.0	80.0	7.0	.0	17.0	7.0	27.0	106.0	115.0	862.0
1982	81.0	138.0	62.0	(154.0)	4.0	11.0	.0	.0	34.0	39.0	76.0	76.0	675.0
1983	(127.0)	92.0	15.0	110.0	39.0	.0	31.0	.0	7.0	74.0	96.0	26.0	417.0
1984	(137.0)	85.0	120.0	21.0	3.0	11.0	3.0	2.0	50.0	69.0	133.0	128.0	762.0
1985	178.0	168.0	124.0	145.0	10.0	9.0	15.0	19.0	37.0	116.0	143.0	(215.0)	1229.0
1986	10.0	37.0	128.0	(200.0)	13.0	41.0	33.0	1.0	56.0	93.0	84.0	111.0	797.0
1987	(385.0)	.9.0	87.0	23.0	3.0	.0	7.0	7.0	110.0	51.0	110.0	39.0	831.0
1988	(188.0)	25.0	145.0	7.0	.0	.0	12.0	5.0	2.0	23.0	61.0	70.0	538.0
1989	48.0	80.0	(245.0)	152.0	33.0	13.0	2.0	1.0	1.0	80.0	107.0	124.0	886.0

PROM.	115.5	85.2	105.3	63.6	19.3	14.9	10.1	8.6	21.5	52.0	86.1	95.2	675.0
MAX.	385.0	332.0	310.0	200.0	98.0	133.0	89.0	53.0	110.0	196.0	341.0	296.0	1330.0
MIN.	.0	9.0	15.0	.0	.0	.0	.0	.0	.0	.0	.0	10.0	308.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
 MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN QUIMILI (1934-1989).-LAT. 27.39 S.- LONG. 62.25 W. ALT. 134 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	100.0	38.4	100.0	100.0	42.6	65.7	63.0	89.5	77.8	40.3	48.8	49.4	1934
1935	100.0	89.1	16.7	100.0	23.4	100.0	37.0	34.2	17.5	42.9	92.2	87.0	1935
1936	74.3	59.4	40.4	94.1	17.0	7.1	0.0	0.0	100.0	2.6	36.4	84.6	1936
1937	100.0	31.9	100.0	100.0	68.1	50.0	33.3	23.7	39.7	9.1	37.2	100.0	1937
1938	100.0	99.3	100.0	100.0	93.6	89.3	59.3	55.3	34.9	35.1	69.0	29.0	1938
1939	100.0	77.8	100.0	41.2	64.7	7.1	33.3	10.5	73.0	27.3	53.1	100.0	1939
1940	96.5	76.1	90.4	72.1	55.3	78.6	100.0	71.1	61.9	100.0	77.5	100.0	1940
1941	94.7	67.4	95.6	54.4	74.5	42.9	100.0	26.3	15.9	100.0	48.1	43.8	1941
1942	100.0	100.0	100.0	83.8	74.5	67.9	33.3	26.3	15.9	100.0	96.1	16.0	1942
1943	100.0	29.0	86.8	55.9	31.9	0.0	3.7	0.0	100.0	29.9	39.5	100.0	1943
1944	48.5	100.0	100.0	50.0	80.9	28.6	18.5	13.2	19.0	100.0	93.0	50.6	1944
1945	91.2	57.2	100.0	80.9	42.6	28.6	22.2	15.8	48.0	31.2	57.4	13.6	1945
1946	100.0	28.1	100.0	100.0	93.6	100.0	66.7	47.4	50.8	24.7	100.0	31.5	1946
1947	51.5	60.1	14.0	32.4	25.5	78.6	37.0	18.4	74.6	100.0	17.8	30.2	1947
1948	100.0	76.1	16.7	25.0	0.0	7.1	0.0	0.0	65.1	100.0	67.4	35.2	1948
1949	74.9	100.0	63.2	20.6	21.3	10.7	100.0	2.6	59.7	100.0	100.0	69.5	1949
1950	47.4	100.0	71.9	55.9	42.6	96.4	14.8	10.5	6.3	88.3	40.3	61.1	1950
1951	80.7	100.0	100.0	55.9	21.3	96.4	14.8	50.0	11.1	80.5	20.9	100.0	1951
1952	72.5	29.7	36.0	79.4	83.0	7.1	0.0	92.1	17.5	68.8	69.8	100.0	1952
1953	88.3	26.8	100.0	98.5	100.0	100.0	88.9	65.8	35.1	100.0	93.8	54.3	1953
1954	21.1	42.0	83.3	100.0	17.0	7.1	100.0	7.9	4.8	74.0	28.7	100.0	1954
1955	49.7	79.7	100.0	32.4	17.0	50.0	11.1	21.1	4.8	10.4	100.0	32.7	1955
1956	100.0	69.6	65.8	92.6	10.6	100.0	81.5	100.0	27.0	100.0	100.0	93.2	1956
1957	81.9	76.1	97.4	100.0	74.6	100.0	55.6	71.1	98.4	100.0	48.1	100.0	1957
1958	30.1	58.0	100.0	100.0	80.9	53.6	51.9	78.9	23.8	15.2	100.0	100.0	1958
1959	100.0	91.3	65.8	99.5	76.6	50.0	100.0	36.8	39.7	72.7	21.7	100.0	1959
1960	74.9	78.3	63.2	100.0	66.0	64.3	100.0	34.2	23.2	100.0	86.0	100.0	1960
1961	37.4	68.1	99.1	100.0	100.0	57.1	40.7	31.6	46.0	100.0	16.3	66.7	1961
1962	45.6	10.9	100.0	41.2	8.5	0.0	92.6	2.6	100.0	83.3	17.1	100.0	1962
1963	87.7	65.9	60.5	100.0	53.2	21.4	37.0	5.3	23.8	100.0	58.9	35.8	1963
1964	100.0	50.0	100.0	100.0	36.2	25.0	18.5	13.2	77.8	61.0	12.4	58.0	1964
1965	88.9	100.0	21.9	5.9	0.0	0.0	0.0	0.0	100.0	61.0	91.5	100.0	1965
1966	100.0	87.0	78.9	83.8	34.0	14.3	11.1	10.5	69.8	39.0	100.0	53.6	1966
1967	35.7	59.4	46.5	19.1	83.0	25.0	0.0	78.9	41.3	39.0	100.0	27.8	1967
1968	87.1	71.7	100.0	30.9	66.0	100.0	81.5	100.0	27.0	100.0	70.5	32.7	1968
1969	60.8	88.4	55.3	72.1	2.1	46.4	48.1	0.0	100.0	61.0	39.5	87.0	1969
1970	100.0	20.3	100.0	41.2	66.0	17.9	37.0	13.2	57.1	100.0	22.5	100.0	1970
1971	59.1	74.6	100.0	72.1	2.1	0.0	25.9	52.6	39.7	100.0	79.1	8.0	1971
1972	84.8	100.0	100.0	60.3	40.4	100.0	74.1	28.9	50.8	48.1	10.9	88.9	1972
1973	100.0	50.7	100.0	100.0	80.9	100.0	100.0	84.2	52.4	37.7	55.7	100.0	1973
1974	29.2	100.0	100.0	100.0	100.0	89.3	66.7	55.3	42.9	58.4	20.2	19.1	1974
1975	100.0	90.6	100.0	88.2	46.8	42.9	22.2	71.1	34.9	41.6	62.0	24.7	1975
1976	100.0	55.1	100.0	73.5	55.3	28.6	22.2	100.0	19.0	7.8	100.0	35.8	1976
1977	39.2	60.9	88.6	100.0	100.0	7.1	3.7	65.8	25.4	97.4	45.7	100.0	1977
1978	60.2	38.4	100.0	67.6	25.5	100.0	51.9	2.6	100.0	100.0	100.0	60.2	1978
1979	29.8	100.0	53.5	47.1	21.3	7.1	2.6	96.8	96.8	79.2	67.4	100.0	1979
1980	100.0	79.0	100.0	100.0	97.9	71.4	55.6	55.3	63.5	40.3	100.0	100.0	1980

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989
1981	34.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1982	50.3	100.0	55.3	74.5	71.4	70.4	70.4	70.4	70.4
1983	74.9	67.4	100.0	89.4	55.7	44.4	44.4	44.4	44.4
1984	80.7	100.0	100.0	12.8	43.9	14.3	14.3	14.3	14.3
1985	100.0	100.0	100.0	36.8	73.0	77.8	77.8	77.8	77.8
1986	53.2	35.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1987	100.0	59.4	81.6	45.6	7.1	29.6	29.6	29.6	29.6
1988	100.0	31.2	100.0	36.8	10.7	48.1	48.1	48.1	48.1
1989	29.8	100.0	100.0	100.0	92.9	66.7	66.7	66.7	66.7

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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN QUIMILI (1934-1989).LAT. 27.39 S. LONG. 62.25 W. ALT. 134 M TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1934
1935	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1935
1936	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1936
1937	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1937
1938	103.0	-0	121.0	99.0	-0	-0	-0	-0	-0	-0	-0	-0	1938
1939	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1939
1940	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	68.0	1940
1941	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1941
1942	-0	15.0	11.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1942
1943	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1943
1944	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1944
1945	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1945
1946	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1946
1947	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1947
1948	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1948
1949	-0	-0	-0	-0	-0	-0	-0	-0	-0	20.0	15.0	-0	1949
1950	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1950
1951	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1951
1952	-0	-0	-0	-0	-0	-0	-0	-0	-0	27.0	-0	-0	1952
1953	-0	-0	-0	-0	-0	66.0	-0	-0	-0	-0	-0	-0	1953
1954	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1954
1955	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1955
1956	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1956
1957	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	17.0	-0	1957
1958	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	42.0	1958
1959	54.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	4.0	1959
1960	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1960
1961	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1961
1962	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1962
1963	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1963
1964	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1964
1965	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1965
1966	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1966
1967	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	21.0	-0	1967
1968	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1968
1969	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1969
1970	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1970
1971	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1971
1972	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1972
1973	-0	-0	83.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1973
1974	-0	96.0	3.0	86.0	23.0	11.0	3.0	-0	-0	-0	-0	-0	1974
1975	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1975
1976	-0	-0	112.0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1976
1977	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1977
1978	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1978
1979	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	26.0	-0	1979
1980	-0	-0	55.0	92.0	-0	-0	-0	-0	-0	-0	126.0	33.0	1980





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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN QUIMILI (1934-1989).LAT. 27.39 S. LONG. 62.25 W. ALT. 134 M TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	7	11	5	9	21	23	27	33	25	15	15	16	207
ENTRE 40.1 Y 54.9	7	3	3	7	7	8	6	4	8	6	6	5	70
ENTRE 55.0 Y 69.9	3	13	7	5	6	3	7	5	7	6	9	4	75
ENTRE 70.0 Y 84.9	11	9	4	8	10	5	5	9	5	5	5	6	82
ENTRE 85.0 Y 100.0	27	20	37	27	12	17	11	5	11	24	21	25	237
70 0 MENOR	17	27	15	21	34	34	40	42	40	27	30	25	352

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	12.7	19.6	8.9	16.1	37.5	41.1	48.2	58.9	44.6	26.8	26.8	28.6	
ENTRE 40.1 Y 54.9	12.7	5.4	5.4	12.5	12.5	14.3	10.7	7.1	14.3	10.7	10.7	8.9	
ENTRE 55.0 Y 69.9	5.5	23.2	12.5	8.9	10.7	5.4	12.5	8.9	12.5	10.7	16.1	7.1	
ENTRE 70.0 Y 84.9	20.0	16.1	7.1	14.3	17.9	8.9	8.9	16.1	8.9	8.9	8.9	10.7	
ENTRE 85.0 Y 100.0	49.1	35.7	66.1	48.2	21.4	30.4	19.6	8.9	19.6	42.9	37.5	44.6	
70 0 MENOR	30.9	48.2	26.8	37.5	60.7	60.7	71.4	75.0	71.4	48.2	53.6	44.6	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

QUIMILI (1934-1989).LAT. 27.39 S. LONG. 62.25 W. ALT. 134 M TABLA 100 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	17	26	15	21	34	34	40	42	40	27	30	25
SOLO UN MES	3	14	5	2	4	3	2	1	3	1	8	7
DOS O MAS MESES	6	8	6	6	18	24	27	33	30	20	16	13
SOLO DOS MESES	1	3	4	0	5	2	3	2	7	4	4	5
TRES O MAS MESES	1	5	2	2	5	12	20	22	22	13	10	7
SOLO TRES MESES	0	2	0	0	0	1	2	0	3	0	2	2
CUATRO O MAS MESES	1	2	2	1	4	10	18	13	12	7	5	0
SOLO CUATRO MESES	1	0	0	0	1	0	3	3	3	1	1	0
CINCO O MAS MESES	0	2	1	0	3	10	9	6	6	4	0	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	38	29	40	34	22	22	16	14	16	29	25	30
SOLO UN MES	6	3	7	6	3	6	7	5	6	10	6	6
DOS O MAS MESES	19	20	20	25	19	12	9	7	4	9	14	13
SOLO DOS MESES	7	4	3	5	2	0	1	0	1	3	5	1
TRES O MAS MESES	8	9	14	12	16	12	5	7	2	3	3	8
SOLO TRES MESES	1	1	5	1	4	1	0	3	0	1	1	2
CUATRO O MAS MESES	5	7	9	0	11	5	4	2	2	2	4	4
SOLO CUATRO MESES	1	0	1	0	1	0	0	0	0	0	1	1
CINCO O MAS MESES	4	7	6	7	5	4	2	2	2	2	2	2

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	2	1	3	4	0	0	0	0	0	0	1	0
SOLO UN MES	2	1	1	2	0	0	0	0	0	0	1	0
DOS O MAS MESES	0	0	0	2	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	2	0	0	0	0	0	0	0	0
TRES O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS  
QUIMILI (1934-1939)-LAT. 27.39 S. LONG. 62.25 W. ALT. 134 M TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	111.1	80.3	97.7	57.8	19.9	17.0	11.8	7.2	15.2	55.3	74.7	103.6	651.5
1963	73.4	50.0	57.3	44.8	23.6	26.7	19.8	12.8	17.7	54.1	46.7	82.2	
1935	107.0	81.9	98.2	58.6	19.5	16.2	11.3	6.1	15.2	55.8	73.1	104.1	646.9
1964	76.1	48.7	57.5	45.3	23.9	26.9	19.9	11.9	17.7	53.9	48.0	82.1	
1936	112.1	79.6	98.3	56.0	19.2	14.2	11.3	6.0	15.2	56.4	73.1	106.6	646.0
1965	73.7	48.3	57.2	46.2	24.0	25.6	19.9	11.9	17.7	53.7	48.0	84.3	
1937	115.0	79.3	99.3	55.6	19.2	14.1	11.3	6.0	16.5	57.1	79.8	102.6	655.8
1966	75.9	48.4	56.5	46.2	24.0	25.6	19.9	11.9	18.3	53.1	57.3	85.6	
1938	116.0	80.5	99.7	51.6	20.2	14.2	11.3	7.0	16.8	58.1	79.2	103.5	658.1
1967	74.7	47.9	56.2	46.4	24.2	25.6	19.9	12.6	18.3	52.3	57.7	84.9	
1939	108.6	79.8	92.8	46.6	20.5	14.9	12.0	8.6	16.8	61.5	78.5	103.2	643.9
1968	57.7	47.5	48.9	39.0	24.3	25.9	19.9	15.2	18.3	52.8	57.7	85.1	
1940	107.6	80.4	90.3	47.6	19.9	15.3	12.2	8.5	15.3	62.4	77.7	101.6	638.8
1969	57.6	47.9	48.5	38.7	24.6	25.7	19.9	15.2	17.8	52.3	56.0	83.9	
1941	103.8	78.1	88.4	47.0	20.1	14.8	9.5	8.3	15.9	59.2	76.1	94.5	615.7
1970	57.5	48.8	49.2	38.9	24.7	25.8	13.6	15.2	18.2	52.6	58.7	75.5	
1942	103.0	79.5	86.5	47.6	19.0	14.5	8.7	8.9	16.5	57.3	77.6	92.5	611.8
1971	57.4	48.8	49.5	38.7	24.8	25.9	12.9	15.4	18.1	52.8	58.8	76.9	
1943	106.3	71.7	86.7	48.3	18.8	14.0	9.2	8.9	17.3	58.2	73.7	96.6	611.6
1972	56.8	38.7	49.6	38.3	24.8	27.1	12.8	15.4	17.8	52.2	59.5	76.2	
1944	112.9	71.2	92.6	52.2	18.3	18.6	10.2	8.9	17.1	57.9	73.2	100.6	633.6
1973	59.9	39.1	60.5	42.8	25.0	29.1	13.3	15.4	18.0	52.4	59.8	76.5	
1945	111.6	81.3	91.1	54.1	19.5	18.5	10.2	9.0	17.2	53.6	70.9	100.2	637.1
1974	61.0	61.0	59.3	42.3	26.6	29.1	13.3	15.3	18.0	48.5	60.4	76.9	
1946	108.6	83.0	90.5	54.9	19.6	18.7	10.2	9.8	16.9	53.9	71.1	100.8	637.9
1975	61.2	61.5	58.3	41.9	26.5	29.0	13.3	15.4	17.9	48.4	60.6	76.3	
1947	109.0	84.3	95.4	50.4	19.3	17.8	10.2	11.2	16.3	53.7	71.3	101.0	639.6
1976	61.8	60.5	69.7	40.1	26.6	29.2	13.3	16.4	18.2	48.6	60.9	76.1	
1948	108.3	84.3	98.2	52.0	20.5	17.1	9.8	11.8	15.2	55.2	72.6	100.6	645.6
1977	62.2	60.5	68.0	39.9	27.1	29.4	13.4	16.6	17.2	48.5	60.2	76.4	
1949	107.8	82.6	98.2	52.9	20.9	18.0	9.8	11.8	16.1	57.6	77.9	101.1	654.7
1978	62.2	60.6	68.0	39.3	26.9	29.3	13.4	16.6	19.2	47.9	68.0	76.2	

1950	104.2	85.5	97.5	53.4	20.8	17.9	9.4	11.8	16.9	53.1	76.0	96.3	644.8
1979	64.0	62.0	68.4	38.9	26.9	29.4	13.0	16.6	20.6	40.2	66.9	77.9	
1951	108.9	82.6	104.5	57.9	21.2	17.0	9.4	12.1	17.9	51.5	85.7	101.6	670.2
1980	64.7	58.8	73.7	43.1	26.9	29.5	13.0	16.4	20.5	40.5	82.3	79.8	
1952	108.1	85.8	103.7	60.3	23.9	16.3	9.4	12.2	18.0	50.3	88.4	97.1	673.5
1981	64.4	60.6	73.3	43.1	28.6	29.5	13.0	16.4	20.4	40.7	81.6	74.8	
1953	108.7	89.7	104.6	63.6	22.7	16.7	9.4	11.0	18.8	49.9	87.9	96.7	679.8
1982	64.1	60.0	72.7	46.4	28.7	29.4	13.0	16.0	20.5	40.7	81.6	74.9	
1954	107.9	91.6	101.0	65.1	20.8	12.2	10.4	11.0	19.1	46.4	88.3	96.1	670.0
1983	63.7	59.1	74.4	47.1	25.2	19.6	13.4	16.0	20.3	33.3	81.6	75.4	
1955	111.8	92.6	101.8	63.1	20.8	12.6	9.5	11.1	20.7	46.9	91.9	96.6	681.0
1984	61.8	58.7	74.4	47.7	25.2	19.5	13.0	15.9	20.8	33.5	81.4	75.2	
1956	114.9	94.5	100.8	67.9	21.1	12.5	10.0	11.5	23.6	50.5	94.5	104.1	706.0
1985	62.7	60.3	73.9	48.5	25.0	19.5	12.9	16.0	23.6	34.9	81.6	77.5	
1957	109.5	92.6	102.6	72.4	21.4	12.6	10.4	9.9	24.9	49.6	91.0	104.1	701.0
1986	64.5	61.2	73.9	54.1	24.8	19.6	13.5	14.3	23.8	33.2	79.7	77.5	
1958	118.6	89.8	101.8	69.5	20.7	11.1	10.7	9.5	26.6	48.4	93.5	95.9	696.1
1987	81.8	63.0	73.9	54.4	25.1	18.8	13.3	14.2	27.7	32.5	79.0	70.3	
1959	122.4	88.6	101.7	66.4	20.2	11.1	10.9	8.8	26.6	49.0	89.8	91.1	666.7
1988	92.3	63.9	73.9	55.2	25.3	19.8	13.3	13.9	27.6	31.9	77.7	66.9	
1960	116.5	88.6	108.3	69.3	20.2	11.2	9.3	8.8	26.2	50.0	92.7	87.4	683.5
1989	81.0	63.9	77.6	57.4	25.4	18.8	11.2	13.9	27.9	32.4	76.6	61.4	

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R O V E R S I



CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 30

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN ROVERSI (1934-89) LAT. 27.35 S. LONG. 61.57 W. ALT. 153 M.TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	114.00	68.00	47.00	28.00	27.00	38.00	63.00	100.00	119.00	162.00
LLUVIAS	1116.50	101.29	106.16	62.68	23.00	14.37	10.23	6.14	30.29	60.11	79.27	105.30
ETP REAL	127.76	103.57	87.07	52.27	28.11	15.46	13.91	13.86	37.61	59.91	80.64	115.48
EXCEDENTES	5.80	6.50	9.57	174.23	34	165.21	00	00	00	1.23	3.73	5.02
DEFICIT	43.24	34.43	26.93	15.73	18.89	12.54	13.09	24.14	25.39	40.09	38.36	46.52
ETP REAL / ETP POT.	74.72	75.05	76.38	76.86	59.80	55.23	51.52	36.47	59.69	59.91	67.77	71.29
ESCURRIMIENTOS	5.57	5.98	7.78	91.01	45.67	105.44	52.72	26.36	13.18	7.21	5.47	5.24

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	77.68	75.40	72.39	56.00	27.64	20.59	15.17	8.81	33.29	51.39	60.46	77.82
ETP REAL	44.94	39.11	33.05	19.43	16.07	9.74	8.90	9.99	21.74	32.43	35.66	48.03
EXCEDENTES	22.16	22.62	25.90	129.70	2.54	1227.94	00	00	00	9.22	16.29	30.75
DEFICIT	44.94	39.11	33.05	19.43	16.07	9.74	8.90	9.99	21.74	32.43	35.66	48.03
ETP REAL / ETP POT.	26.28	28.34	28.99	28.58	34.19	34.79	34.95	26.28	34.50	32.43	29.97	29.65
ESCURRIMIENTOS	16.26	14.39	16.90	616.44	309.49	633.13	316.57	158.28	79.14	39.76	26.80	20.06

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	6668	7444	6819	8935	1-2016	1-4327	1-4823	1-4349	1-0992	8550	7628	7390
ETP REAL	3517	3776	3796	3718	5717	6299	6395	7208	5780	5413	4222	4159
EXCEDENTES	3-8211	3-4802	2-7056	7-0578	7-4833	7-4324	6-6796	6-4137	8561	7-4834	4-3648	6-1286
DEFICIT	1-0394	1-1359	1-2275	1-2352	8506	7770	6796	7208	5780	5413	4222	4159
ETP REAL / ETP POT.	3517	3776	3796	3718	5717	6299	6395	7208	5780	5413	4222	4159
ESCURRIMIENTOS	2-9193	2-4044	2-1724	6-7736	6-7762	6-0045	6-0045	6-0045	6-0045	5-5180	4-9003	3-8249

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN ROVERSI (1934-89) LAT. 27-35 S. LONG. 61-57 W. ALT. 153 M.TABLA 10J MM

EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1934	81.0	22.0	66.0	-0	7.0	18.0	30.0	26.0	(140.0)	22.0	69.0	95.0	576.0
1935	125.0	-0	5.0	30.0	7.0	-0	-0	12.0	-0	63.0	(131.0)	120.0	493.0
1936	104.0	91.0	47.0	20.0	11.0	2.0	-0	-0	6.0	5.0	14.0	(177.0)	477.0
1937	12.0	70.0	27.0	(166.0)	4.0	1.0	-0	-0	7.0	14.0	57.0	14.0	372.0
1938	(380.0)	127.0	222.0	117.0	24.0	15.0	-0	11.0	17.0	19.0	131.0	27.0	1070.0
1939	125.0	157.0	140.0	76.0	8.0	3.0	-0	4.0	68.0	53.0	92.0	(226.0)	938.0
1940	97.0	162.0	186.0	37.0	14.0	19.0	35.0	19.0	71.0	73.0	60.0	(458.0)	1250.0
1941	(224.0)	65.0	99.0	23.0	42.0	24.0	36.0	4.0	11.0	52.0	39.0	71.0	695.0
1942	127.0	(182.0)	155.0	42.0	44.0	22.0	-0	-0	-0	17.0	103.0	47.0	744.0
1943	25.0	60.0	( 89.0)	73.0	33.0	-0	13.0	-0	28.0	11.0	35.0	16.0	317.0
1944	121.0	41.0	(160.0)	19.0	55.0	-0	8.0	-0	41.0	56.0	47.0	45.0	633.0
1945	116.0	120.0	(135.0)	35.0	-0	-0	-0	-0	-0	35.0	87.0	44.0	635.0
1946	63.0	34.0	(254.0)	78.0	40.0	36.0	7.0	15.0	59.0	63.0	24.0	( 71.0)	449.0
1947	39.0	58.0	18.0	37.0	24.0	18.0	21.0	-0	19.0	20.0	56.0	48.0	528.0
1948	(192.0)	128.0	51.0	8.0	-0	15.0	-0	-0	62.0	116.0	150.0	130.0	914.0
1949	107.0	(156.0)	81.0	54.0	14.0	-0	44.0	-0	-0	122.0	10.0	103.0	736.0
1950	63.0	(270.0)	22.0	32.0	4.0	41.0	-0	-0	69.0	193.0	27.0	(195.0)	843.0
1951	126.0	103.0	150.0	27.0	2.0	13.0	-0	9.0	-0	14.0	(160.0)	103.0	752.0
1952	86.0	40.0	34.0	17.0	104.0	8.0	-0	45.0	7.0	14.0	85.0	68.0	903.0
1953	98.0	21.0	95.0	71.0	115.0	110.0	-0	-0	-0	(242.0)	23.0	69.0	524.0
1954	56.0	74.0	(108.0)	60.0	3.0	8.0	11.0	8.0	3.0	96.0	29.0	91.0	604.0
1955	22.0	163.0	(235.0)	2.0	18.0	10.0	-0	-0	-0	111.0	(197.0)	68.0	898.0
1956	159.0	138.0	73.0	53.0	22.0	22.0	27.0	23.0	5.0	82.0	29.0	(222.0)	733.0
1957	58.0	25.0	68.0	73.0	29.0	16.0	-0	19.0	112.0	62.0	156.0	190.0	914.0
1958	75.0	125.0	(226.0)	114.0	3.0	-0	-0	-0	23.0	-0	15.0	143.0	866.0
1959	(240.0)	90.0	76.0	47.0	76.0	7.0	52.0	11.0	25.0	83.0	76.0	(259.0)	1094.0
1960	66.0	180.0	83.0	178.0	-0	22.0	53.0	3.0	15.0	159.0	34.0	(157.0)	523.0
1961	-0	136.0	53.0	83.0	65.0	-0	-0	-0	-0	34.0	35.0	60.0	423.0
1962	(139.0)	23.0	63.0	6.0	5.0	-0	41.0	-0	70.0	12.0	24.0	59.0	390.0
1963	54.0	(110.0)	-0	35.0	9.0	4.0	13.0	-0	66.0	13.0	43.0	163.0	681.0
1964	6.0	45.0	111.0	(229.0)	-0	-0	-0	-0	13.0	83.0	59.0	(212.0)	639.0
1965	129.0	81.0	43.0	7.0	-0	-0	10.0	-0	-0	17.0	82.0	44.0	540.0
1966	(158.0)	82.0	10.0	40.0	47.0	-0	6.0	-0	54.0	35.0	44.0	45.0	598.0
1967	61.0	(181.0)	66.0	22.0	69.0	13.0	-0	20.0	42.0	58.0	57.0	52.0	501.0
1968	(157.0)	59.0	20.0	13.0	25.0	31.0	8.0	21.0	-0	35.0	45.0	(113.0)	466.0
1969	80.0	68.0	10.0	61.0	18.0	5.0	15.0	-0	16.0	28.0	15.0	95.0	508.0
1970	88.0	18.0	(110.0)	8.0	60.0	15.0	17.0	5.0	44.0	43.0	36.0	40.0	486.0
1971	80.0	69.0	( 94.0)	76.0	-0	-0	-0	-0	28.0	12.0	37.0	195.0	699.0
1972	135.0	-0	(195.0)	18.0	-0	79.0	-0	-0	-0	20.0	38.0	42.0	1038.0
1973	(341.0)	87.0	290.0	157.0	-0	53.0	10.0	5.0	-0	35.0	-0	95.0	807.0
1974	86.0	(349.0)	130.0	32.0	75.0	-0	-0	-0	-0	10.0	50.0	65.0	429.0
1975	33.0	(122.0)	79.0	79.0	5.0	-0	-0	-0	20.0	-0	96.0	40.0	469.0
1976	113.0	35.0	(140.0)	-0	35.0	-0	-0	-0	-0	45.0	75.0	15.0	593.0
1977	61.0	135.0	(182.0)	70.0	5.0	-0	-0	10.0	105.0	80.0	(240.0)	68.0	777.0
1978	120.0	39.0	30.0	60.0	-0	35.0	-0	-0	-0	-0	-0	-0	-0

1979	45.0	(268.0)	31.0	.0	.0	43.0	.0	11.0	67.0	77.0	(261.0)	216.0	611.0
1980	171.0	112.0	220.0	221.0	38.0	13.0	.0	8.0	28.0	127.0	(261.0)	80.0	1279.0
1981	(228.0)	204.0	105.0	87.0	66.0	.0	2.0	9.0	.0	21.0	199.0	94.0	1015.0
1982	(215.0)	115.0	65.0	132.0	.0	8.0	.0	16.0	56.0	19.0	89.0	139.0	856.0
1983	(205.0)	91.0	35.0	69.0	19.0	.0	24.0	1.0	2.0	72.0	73.0	101.0	692.0
1984	199.0	(305.0)	180.0	105.0	7.0	5.0	27.0	5.0	.0	121.0	59.0	94.0	1137.0
1985	154.0	34.0	(212.0)	37.0	16.0	10.0	.0	5.0	42.0	19.0	58.0	96.0	731.0
1986	24.0	54.0	117.0	(204.0)	14.0	36.0	44.0	4.0	58.0	104.0	91.0	124.0	876.0
1987	(242.0)	5.0	86.0	18.0	11.0	.0	9.0	7.0	86.0	61.0	126.0	54.0	705.0
1988	(117.0)	117.0	97.0	62.0	22.0	13.0	9.0	6.0	24.0	57.0	85.0	94.0	703.0
1989	99.0	40.0	(203.0)	85.0	9.0	10.0	1.0	3.0	4.0	92.0	124.0	131.0	801.0
PROM.	116.5	101.3	106.2	62.7	23.0	14.4	10.2	6.1	30.3	60.1	79.3	105.3	715.3
MAX.	380.0	349.0	290.0	229.0	115.0	110.0	53.0	45.0	140.0	242.0	261.0	488.0	1279.0
MIN.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	372.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
 MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN ROVERSI (1934-89) LAT. 27.35 S. LONG. 61.57 W. ALT. 153 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	41.3	63.2	7.4	17.0	64.3	100.0	71.1	100.0	67.0	70.6	65.4	1934
1935	75.4	3.6	5.3	44.1	14.9	0	0	31.6	100.0	64.0	100.0	77.2	1935
1936	63.7	67.4	42.1	30.9	23.4	7.1	46.4	0	100.0	7.0	50.4	100.0	1936
1937	14.6	51.4	24.6	100.0	85.1	57.1	63.0	31.6	27.0	22.0	94.1	9.9	1937
1938	100.0	100.0	100.0	100.0	93.7	89.3	63.0	60.5	50.8	33.0	64.0	21.6	1938
1939	73.7	100.0	100.0	100.0	55.3	39.3	25.9	26.3	100.0	61.0	37.0	100.0	1939
1940	79.5	100.0	100.0	94.1	74.5	82.1	100.0	73.7	100.0	84.0	37.0	100.0	1940
1941	100.0	85.5	93.0	60.3	91.5	89.3	100.0	36.8	33.3	57.0	31.5	45.1	1941
1942	74.9	100.0	100.0	91.2	97.9	92.9	51.9	39.5	23.8	28.0	91.6	31.5	1942
1943	100.0	44.9	78.1	100.0	72.3	7.1	48.1	2.6	46.0	12.0	100.0	11.7	1943
1944	100.0	31.9	100.0	55.9	100.0	32.1	7.4	18.4	25.4	100.0	53.5	35.2	1944
1945	69.6	87.7	100.0	61.8	14.8	100.0	96.3	68.4	61.9	52.0	100.0	53.7	1945
1946	38.0	100.0	100.0	100.0	97.9	64.3	77.8	39.5	93.7	65.0	100.0	45.1	1946
1947	31.6	44.2	17.5	54.4	51.1	53.6	3.7	2.6	27.0	100.0	48.7	30.2	1947
1948	100.0	90.6	52.6	17.6	4.3	7.1	100.0	21.1	98.4	100.0	100.0	91.4	1948
1949	100.0	100.0	76.3	82.4	38.3	7.1	25.9	21.1	100.0	100.0	33.6	67.3	1949
1950	55.0	100.0	72.8	64.7	27.7	100.0	11.1	31.6	6.3	100.0	73.1	100.0	1950
1951	75.4	74.6	100.0	58.8	25.5	53.6	4.4	100.0	41.3	100.0	100.0	92.0	1951
1952	73.7	42.8	35.1	27.9	100.0	67.9	88.9	65.8	38.1	100.0	96.6	69.5	1952
1953	73.7	28.3	84.2	100.0	100.0	100.0	40.7	23.7	100.0	96.0	25.2	43.2	1953
1954	43.9	56.5	94.7	88.2	10.6	28.6	29.6	21.1	12.7	5.0	52.1	58.0	1954
1955	100.0	100.0	100.0	75.0	66.0	57.1	100.0	60.5	100.0	100.0	100.0	77.8	1955
1956	93.0	100.0	64.0	77.9	46.8	78.6	3.7	52.6	103.0	90.0	46.2	100.0	1956
1957	48.0	23.2	61.4	100.0	63.8	60.7	44.4	31.6	49.2	10.0	100.0	100.0	1957
1958	72.5	93.5	100.0	100.0	83.0	57.1	100.0	76.3	69.8	89.0	31.1	89.5	1958
1959	100.0	93.5	84.2	80.9	100.0	89.3	100.0	76.3	60.3	100.0	93.3	100.0	1959
1960	42.1	100.0	83.3	100.0	80.9	35.7	29.6	21.1	12.7	38.0	2.5	96.9	1960
1961	48.5	98.6	53.5	100.0	100.0	55.7	100.0	13.2	7.9	51.0	31.1	100.0	1961
1962	81.3	100.0	56.1	10.3	10.6	0	100.0	0	100.0	17.0	21.8	100.0	1962
1963	32.7	79.7	100.0	52.9	21.3	14.3	48.1	31.6	100.0	28.0	45.4	100.0	1963
1964	4.7	100.0	97.4	100.0	80.9	53.6	40.7	2.6	100.0	86.0	51.3	100.0	1964
1965	76.6	60.1	38.6	100.0	4.3	0	37.0	2.6	100.0	65.7	63.9	100.0	1965
1966	95.9	73.9	23.7	61.8	100.0	7.1	25.9	63.2	73.0	44.0	41.2	29.6	1966
1967	36.8	100.0	72.8	47.1	100.0	64.3	29.6	57.9	1.4	58.0	100.0	34.0	1967
1968	91.8	100.0	19.3	20.6	53.2	100.0	33.3	0	28.6	100.0	39.5	70.4	1968
1969	50.7	73.9	9.6	89.7	38.3	17.9	55.6	0	84.1	100.0	15.1	100.0	1969
1970	100.0	15.2	96.5	100.0	100.0	60.7	74.1	10.5	69.8	44.0	100.0	26.5	1970
1971	48.0	50.0	82.5	100.0	6.4	7.1	3.7	15.8	63.5	30.0	37.0	100.0	1971
1972	78.9	100.0	100.0	76.5	40.4	100.0	88.9	52.6	53.5	35.0	6.7	59.3	1972
1973	100.0	92.8	100.0	100.0	80.9	100.0	66.7	52.6	28.6	45.0	100.0	27.8	1973
1974	50.9	100.0	100.0	92.6	100.0	89.3	11.1	5.3	4.8	12.0	100.0	41.4	1974
1975	100.0	48.6	100.0	100.0	25.5	10.7	11.1	7.9	34.9	3.0	80.7	100.0	1975
1976	66.7	100.0	100.0	36.8	27.7	14.3	29.6	42.1	14.3	49.0	64.7	11.1	1976
1977	36.8	97.8	100.0	100.0	57.4	39.3	7.4	5.3	100.0	88.0	100.0	80.2	1977
1978	100.0	30.4	27.2	88.2	0	100.0	25.9	44.7	100.0	82.0	66.4	100.0	1978
1979	40.9	100.0	77.2	30.9	17.0	100.0	77.8	65.8	66.7	100.0	100.0	84.6	1979
1980	100.0	92.0	100.0	100.0	100.0	100.0	0	0	0	0	0	0	1980

[illegible]

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\* CONSEJO FEDERAL DE INVERSIONES.  
\* AREA DE INFRAESTRUCTURA HIDRICA.  
\* PAGINA 33  
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PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN ROVERSI (1934-89) LAT. 27.35 S. LONG. 61.57 W. ALT. 153 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	0	0	0	0	0	0	0	0	0	0	0	1934
1935	0	0	0	0	0	0	0	0	0	0	0	0	1935
1936	0	0	0	0	0	0	0	0	0	0	0	0	1936
1937	0	0	0	0	0	0	0	0	0	0	0	0	1937
1938	110.0	0	97.0	69.0	0	0	0	0	0	0	0	0	1938
1939	0	0	0	0	0	0	0	0	0	0	0	0	1939
1940	0	0	31.0	0	0	0	0	0	0	0	0	224.0	1940
1941	53.0	0	0	0	0	0	0	0	0	0	0	0	1941
1942	0	0	0	0	0	0	0	0	0	0	0	0	1942
1943	0	0	0	0	0	0	0	0	0	0	0	0	1943
1944	0	0	0	0	0	0	0	0	0	0	0	0	1944
1945	0	0	0	0	0	0	0	0	0	0	0	0	1945
1946	0	0	43.0	10.0	0	2.0	0	0	0	0	33.0	0	1946
1947	0	0	0	0	0	0	0	0	0	0	0	0	1947
1948	0	0	0	0	0	0	0	0	0	0	0	0	1948
1949	0	0	0	0	0	0	0	0	0	0	0	0	1949
1950	0	47.0	0	0	0	0	0	0	0	0	0	0	1950
1951	0	0	0	0	0	0	0	0	0	0	0	0	1951
1952	0	0	0	0	0	60.0	0	0	0	69.0	14.0	0	1952
1953	0	0	0	0	0	0	0	0	0	0	0	0	1953
1954	0	0	0	0	0	0	0	0	0	0	0	0	1954
1955	0	0	48.0	0	0	0	0	0	0	0	0	0	1955
1956	0	0	0	0	0	0	0	0	0	0	0	0	1956
1957	0	0	0	0	0	0	0	0	0	0	0	0	1957
1958	0	0	37.0	46.0	0	0	0	0	0	0	0	0	1958
1959	42.0	0	0	0	0	0	0	0	0	0	0	0	1959
1960	0	0	0	43.0	0	0	0	0	0	0	0	57.0	1960
1961	0	0	0	0	0	0	0	0	0	0	0	0	1961
1962	0	0	0	0	0	0	0	0	0	0	0	0	1962
1963	0	0	0	0	0	0	0	0	0	0	0	0	1963
1964	0	0	0	65.0	0	0	0	0	0	0	0	0	1964
1965	0	0	0	0	0	0	0	0	0	0	0	0	1965
1966	0	0	0	0	0	0	0	0	0	0	0	0	1966
1967	0	0	0	0	0	0	0	0	0	0	0	0	1967
1968	0	0	0	0	0	0	0	0	0	0	0	0	1968
1969	0	0	0	0	0	0	0	0	0	0	0	0	1969
1970	0	0	0	0	0	0	0	0	0	0	0	0	1970
1971	0	0	0	0	0	0	0	0	0	0	0	0	1971
1972	0	0	0	0	0	0	0	0	0	0	0	0	1972
1973	108.0	0	135.0	89.0	0	0	0	0	0	0	0	0	1973
1974	0	112.0	16.0	0	0	0	0	0	0	0	0	0	1974
1975	0	0	0	0	0	0	0	0	0	0	0	0	1975
1976	0	0	0	0	0	0	0	0	0	0	0	0	1976
1977	0	0	0	0	0	0	0	0	0	0	0	0	1977
1978	0	0	0	0	0	0	0	0	0	0	0	0	1978
1979	0	40.0	0	0	0	0	0	0	0	0	59.0	0	1979
1980	0	0	0	153.0	0	9190.0	0	0	0	0	103.0	0	1980



PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.

DEFICIENCIAS MENSUALES EN ROVERSI (1934-89) LAT. 27.35 S. LONG. 61.57 W. ALT. 153 M-TABLA 103 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1934	*****	81.0	42.0	63.0	39.0	10.0	27.0	11.0	0	33.0	35.0	56.0	1934
1935	42.0	133.0	108.0	38.0	40.0	28.0	27.0	26.0	0	36.0	0	37.0	1935
1936	62.0	45.0	66.0	47.0	36.0	26.0	27.0	38.0	0	93.0	104.0	0	1936
1937	146.0	67.0	86.0	0	7.0	12.0	15.0	26.0	46.0	78.0	59.0	146.0	1937
1938	0	0	0	0	2.0	3.0	10.0	15.0	31.0	67.0	7.0	127.0	1938
1939	45.0	0	0	0	21.0	17.0	20.0	28.0	0	19.0	19.0	0	1939
1940	35.0	0	0	4.0	12.0	5.0	0	10.0	0	14.0	26.0	0	1940
1941	0	20.0	8.0	27.0	4.0	3.0	0	24.0	42.0	43.0	75.0	89.0	1941
1942	43.0	0	0	6.0	1.0	2.0	13.0	33.0	48.0	74.0	10.0	111.0	1942
1943	0	76.0	25.0	0	13.0	26.0	14.0	37.0	34.0	88.0	0	143.0	1943
1944	0	94.0	0	30.0	0	19.0	14.0	31.0	47.0	0	53.0	105.0	1944
1945	52.0	17.0	0	26.0	41.0	26.0	25.0	36.0	21.0	43.0	31.0	0	1945
1946	106.0	0	0	0	1.0	0	1.0	12.0	24.0	48.0	0	75.0	1946
1947	117.0	77.0	94.0	31.0	23.0	10.0	6.0	23.0	4.0	35.0	0	89.0	1947
1948	0	13.0	54.0	56.0	45.0	13.0	26.0	37.0	46.0	0	61.0	113.0	1948
1949	0	0	27.0	12.0	29.0	26.0	0	30.0	1.0	0	0	14.0	1949
1950	77.0	0	31.0	24.0	34.0	13.0	20.0	30.0	59.0	0	79.0	53.0	1950
1951	42.0	35.0	0	28.0	35.0	9.0	15.0	26.0	37.0	0	32.0	0	1951
1952	45.0	79.0	74.0	49.0	0	0	3.0	0	39.0	0	0	13.0	1952
1953	43.0	99.0	18.0	0	0	0	16.0	29.0	0	4.0	4.0	51.0	1953
1954	96.0	60.0	6.0	8.0	42.0	20.0	19.0	30.0	55.0	95.0	39.0	92.0	1954
1955	0	0	0	17.0	16.0	12.0	0	15.0	0	0	0	68.0	1955
1956	12.0	0	41.0	15.0	25.0	6.0	26.0	18.0	0	0	0	36.0	1956
1957	89.0	106.0	44.0	0	17.0	12.0	15.0	26.0	32.0	10.0	64.0	0	1957
1958	47.0	9.0	0	13.0	8.0	9.0	0	26.0	19.0	90.0	82.0	0	1958
1959	0	0	18.0	0	9.0	3.0	0	9.0	25.0	11.0	8.0	0	1959
1960	99.0	0	19.0	0	0	18.0	19.0	30.0	55.0	62.0	116.0	5.0	1960
1961	88.0	2.0	53.0	0	42.0	28.0	0	33.0	58.0	49.0	82.0	0	1961
1962	32.0	0	50.0	61.0	37.0	24.0	14.0	38.0	0	83.0	93.0	0	1962
1963	115.0	28.0	0	32.0	37.0	13.0	16.0	26.0	0	71.0	58.0	0	1963
1964	163.0	0	3.0	0	45.0	28.0	17.0	37.0	0	14.0	58.0	0	1964
1965	40.0	55.0	70.0	0	0	0	20.0	37.0	9.0	81.0	37.0	0	1965
1966	7.0	36.0	87.0	26.0	0	26.0	19.0	14.0	17.0	56.0	70.0	0	1966
1967	108.0	0	31.0	36.0	0	10.0	18.0	16.0	62.0	42.0	0	114.0	1967
1968	14.0	0	103.0	54.0	22.0	23.0	12.0	38.0	45.0	0	72.0	48.0	1968
1969	0	68.0	7.0	7.0	29.0	0	0	16.0	0	0	101.0	0	1969
1970	0	117.0	4.0	0	0	11.0	9.0	34.0	10.0	67.0	101.0	0	1970
1971	89.0	69.0	20.0	0	44.0	26.0	26.0	32.0	19.0	56.0	75.0	0	1971
1972	36.0	0	0	16.0	28.0	0	7.0	18.0	23.0	70.0	75.0	0	1972
1973	0	10.0	0	0	9.0	0	3.0	14.0	40.0	65.0	75.0	0	1973
1974	84.0	0	0	0	0	3.0	9.0	18.0	45.0	55.0	111.0	66.0	1974
1975	0	71.0	0	0	0	25.0	24.0	36.0	60.0	88.0	0	95.0	1975
1976	57.0	0	0	43.0	34.0	26.0	19.0	22.0	54.0	51.0	42.0	144.0	1976
1977	108.0	3.0	0	0	20.0	17.0	0	0	0	12.0	0	32.0	1977
1978	0	96.0	83.0	8.0	47.0	0	25.0	36.0	0	18.0	40.0	0	1978
1979	101.0	0	26.0	47.0	35.0	0	20.0	21.0	0	0	0	25.0	1979
1980	0	11.0	0	0	0	0	6.0	13.0	21.0	0	0	0	1980



1981	-0	-0	-0	-0	-0	3.0	8.0	14.0	43.0	66.0	-0	23.0	1981
1982	-0	4.0	22.0	-0	9.0	9.0	15.0	14.0	4.0	64.0	27.0	21.0	1982
1983	-0	31.0	65.0	-0	25.0	26.0	3.0	35.0	58.0	27.0	45.0	53.0	1983
1984	-0	-0	-0	-0	6.0	9.0	-0	18.0	46.0	-0	19.0	53.0	1984
1985	15.0	49.0	-0	4.0	12.0	10.0	16.0	24.0	16.0	70.0	57.0	64.0	1985
1986	-0	82.0	-0	-0	4.0	-0	-0	4.0	2.0	-0	11.0	21.0	1986
1987	-0	59.0	22.0	42.0	32.0	26.0	17.0	30.0	-0	30.0	-0	91.0	1987
1988	51.0	20.0	16.0	6.0	24.0	15.0	18.0	31.0	39.0	43.0	34.0	-0	1988
1989	70.0	97.0	-0	-0	6.0	7.0	13.0	22.0	45.0	7.0	-0	25.0	1989
TOTALES	2378.0	1928.0	1508.0	883.0	1038.0	702.0	733.0	1352.0	1422.0	2245.0	2148.0	2405.0	TOTALES
NUM CASOS	35	36	33	32	45	46	46	55	41	43	40	37	NUM CASOS
D. MEDIOS	42.5	34.4	26.9	15.7	18.9	12.5	13.1	24.1	25.4	40.1	38.4	46.5	D. MEDIOS
D. REALES	67.9	53.6	45.7	27.5	23.5	15.3	15.9	24.6	34.7	52.2	53.7	70.4	D. REALES
FREC. X	63.6	64.3	58.9	57.1	80.4	82.1	82.1	98.2	73.2	76.8	71.4	66.1	FREC. X

SUMATORIA DEF\*FREC = 339.34 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = 32.30 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAH	AMJ	HJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	12.2	17.3	71.2	74.9	87.8	78.8	76.9	.0	1.4	4.6	7.4	10.2	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN ROVERSI (1934-89) LAT. 27.35 S. LONG. 61.57 W. ALT. 153 M.TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 O MENOR	7	7	9	9	19	20	22	33	22	19	13	11	191
ENTRE 40.1 Y 54.9	8	9	4	4	6	4	12	7	4	6	8	6	78
ENTRE 55.0 Y 69.9	4	5	4	6	4	13	4	10	7	8	5	7	77
ENTRE 70.0 Y 84.9	12	4	11	5	8	3	4	4	3	3	9	6	72
ENTRE 85.0 Y 100.0	24	31	28	32	19	16	14	2	20	20	21	26	253
70 O MENOR	19	21	17	19	29	37	38	50	33	34	26	24	347

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 O MENOR	12.7	12.5	16.1	16.1	33.9	35.7	39.3	58.9	39.3	33.9	23.2	19.6	
ENTRE 40.1 Y 54.9	14.5	16.1	7.1	7.1	10.7	7.1	21.4	12.5	7.1	10.7	14.3	10.7	
ENTRE 55.0 Y 69.9	7.3	8.9	7.1	10.7	7.1	23.2	7.1	17.9	12.5	14.3	8.9	12.5	
ENTRE 70.0 Y 84.9	21.8	7.1	19.6	8.9	14.3	5.4	7.1	7.1	5.4	5.4	16.1	10.7	
ENTRE 85.0 Y 100.0	43.6	55.4	50.0	57.1	33.9	25.6	25.0	3.6	35.7	35.7	37.5	46.4	
70 O MENOR	34.5	37.5	30.4	33.9	51.8	66.1	67.9	59.3	58.9	60.7	46.4	42.9	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

ROVERSI (1934-89) LAT. 27-35 S. LONG. 61.57 W. ALT. 153 M. TABLA 100 MM

PROCESO DE LOS CICIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	19	20	16	18	29	37	38	50	33	34	25	24
SOLO UN MES	9	8	3	3	3	2	0	3	3	6	6	9
DOS O MAS MESES	5	7	9	8	14	23	30	37	30	21	16	12
SOLO DOS MESES	1	2	3	1	2	2	1	3	4	0	5	3
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	2	2	4	4	7	11	18	29	20	21	9	8
CUATRO O MAS MESES	1	1	2	1	1	0	0	6	1	2	0	2
SOLO CUATRO MESES	NDEF	DEFM	EFMA	FMAJ	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
	0	1	2	3	6	8	18	15	15	9	6	1
	0	0	0	0	1	0	4	1	3	2	0	0
SOLO CINCO O MAS MESES	NDEFM	DEFMA	EFMAM	FMAJJ	MAMJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
	0	1	2	3	5	8	10	11	5	6	1	0

PROCESO DE LOS CICIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	36	35	39	37	27	19	18	6	23	22	29	31
SOLO UN MES	8	1	2	6	4	4	5	1	12	5	10	6
DOS O MAS MESES	17	23	28	29	22	13	11	5	3	10	11	17
SOLO DOS MESES	2	3	6	3	2	0	2	1	0	5	2	4
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	9	12	17	20	20	12	9	5	3	1	5	9
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAJ	MAMJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
SOLO CUATRO MESES	6	9	15	14	12	8	3	2	2	2	5	5
CINCO O MAS MESES	1	0	5	1	1	0	0	0	0	0	3	2
	NDEFM	DEFMA	EFMAM	FMAJJ	MAMJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
	5	8	10	9	8	3	2	2	2	2	2	2

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	2	1	2	3	0	1	0	0	0	0	1	1
SOLO UN MES	2	2	1	2	0	1	0	0	0	0	1	1
DOS O MAS MESES	0	0	0	1	0	0	0	0	0	0	0	0
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAJ	MAMJ	AMJJ	MJJAS	JJAS	JASO	ASON	SOND	ONDE
	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PROMEDIOS Y DESVIOS MOVILES MENSUALES DE LLUVIA, DURANTE CICLOS TREINTENARIOS

ROVERSI (1934-89) LAT. 27.35 S. LONG. 61.57 W. ALT. 153 M. TABLA 100 MM

PERIODO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	TOTAL
1934	106.0	98.8	100.7	53.9	26.1	14.5	13.0	6.9	29.4	69.3	75.0	113.0	706.7
1963	77.3	62.3	71.1	44.0	30.3	21.2	17.8	10.6	36.2	60.9	59.0	94.0	
1935	103.5	99.6	102.2	61.6	25.8	13.9	12.0	6.1	27.0	69.0	74.3	115.3	710.2
1964	79.3	61.5	70.8	53.2	30.5	21.3	17.7	10.1	30.4	61.2	59.2	94.4	
1936	103.6	102.3	103.5	60.8	25.6	13.9	12.4	5.7	27.4	69.8	71.9	118.3	715.1
1965	79.4	58.7	69.4	53.9	30.7	21.3	17.5	10.0	30.1	61.2	53.3	96.0	
1937	105.4	102.0	102.2	61.5	26.8	13.8	12.6	5.7	29.0	70.2	74.2	113.9	717.2
1966	80.0	58.7	70.7	53.5	30.8	21.4	17.4	10.0	30.2	60.5	57.3	96.3	
1938	107.1	105.7	103.5	56.7	29.0	14.2	12.6	6.3	30.2	70.9	73.7	114.9	724.7
1967	78.5	60.1	69.6	50.1	31.4	21.2	17.4	10.3	30.0	60.3	57.5	95.3	
1939	99.6	103.4	96.8	53.2	29.0	14.7	12.8	6.7	29.6	72.2	71.9	115.8	705.3
1968	60.2	60.6	67.5	49.4	31.4	21.5	17.3	10.6	30.4	59.6	57.1	94.6	
1940	98.1	100.5	92.5	52.7	29.3	14.8	13.3	6.5	27.9	71.6	70.2	112.0	689.4
1969	60.1	60.1	68.8	49.2	31.3	21.4	17.1	10.7	29.6	59.8	57.1	92.3	
1941	97.8	95.7	89.9	51.7	30.9	14.7	12.7	5.9	27.3	70.1	68.0	99.9	664.6
1970	60.1	60.7	66.6	49.8	31.6	21.4	16.6	10.5	28.9	60.4	57.9	85.2	
1942	93.0	95.8	89.8	53.3	29.5	13.9	11.5	6.0	28.4	69.8	67.9	98.9	657.7
1971	55.2	60.7	66.6	49.8	32.0	21.5	16.2	10.5	28.8	60.5	58.0	85.9	
1943	93.3	89.7	91.1	52.5	28.0	15.8	11.5	6.0	29.3	69.6	65.5	103.8	656.2
1972	55.4	60.8	68.3	50.2	32.3	24.5	16.2	10.5	28.3	60.6	57.7	87.4	
1944	103.8	90.6	97.8	55.3	26.9	17.5	11.4	6.0	28.4	69.9	65.5	104.7	677.9
1973	70.1	60.6	77.4	53.6	32.7	25.3	16.2	10.5	28.8	60.4	57.7	86.4	
1945	102.7	100.9	96.8	55.8	27.6	17.5	11.2	6.1	28.1	66.8	63.9	106.3	683.7
1974	70.1	76.0	76.7	53.3	33.5	25.3	16.3	10.5	29.1	59.7	58.9	85.5	
1946	99.9	99.0	96.4	57.2	27.7	17.5	11.2	6.1	26.7	65.3	62.7	106.9	676.7
1975	71.2	76.2	76.5	53.4	33.4	25.3	16.3	10.5	29.4	60.5	58.8	85.0	
1947	101.6	99.1	93.2	54.6	26.6	16.3	10.9	6.1	26.8	64.1	58.1	108.0	665.4
1976	70.9	76.2	71.6	54.2	33.5	25.2	16.4	10.5	29.4	61.5	49.6	83.6	
1948	102.3	101.6	98.7	55.7	25.8	15.7	10.2	6.0	24.8	63.4	59.8	106.1	670.2
1977	70.3	76.0	72.0	54.2	33.9	25.4	16.4	10.4	29.2	61.6	49.3	85.5	
1949	99.9	98.9	98.0	57.5	25.8	16.4	10.2	6.0	27.8	65.4	65.9	106.8	678.5
1978	68.3	76.8	72.5	53.4	33.9	25.6	16.4	10.4	32.6	61.1	59.2	85.0	

1950	97.7	102.6	96.3	55.7	25.3	17.9	8.8	6.3	28.0	64.1	63.3	109.6	675.7
1979	69.1	82.2	73.5	54.4	34.2	26.0	15.2	10.3	32.8	60.4	57.1	67.9	
1981	101.3	97.3	102.9	62.0	26.4	17.0	8.8	6.6	26.6	64.3	71.7	108.9	693.8
1980	70.1	75.9	75.5	62.0	34.0	25.6	15.2	10.3	31.9	60.5	66.6	68.1	
1952	104.7	100.8	101.4	64.0	28.6	16.5	8.8	6.6	26.6	58.6	77.4	105.5	699.6
1981	73.7	78.4	74.9	61.8	34.4	25.8	15.2	10.3	31.9	55.9	69.9	66.2	
1953	109.0	103.3	102.5	67.8	25.1	16.5	8.8	5.6	28.3	54.3	75.1	106.7	703.0
1982	76.3	77.6	74.2	62.4	31.7	25.8	15.2	7.5	32.2	53.7	68.2	66.4	
1954	112.6	105.6	100.5	67.7	21.9	13.9	9.6	5.7	23.4	48.6	74.7	107.8	695.9
1983	78.2	76.0	75.2	62.4	26.7	18.9	15.3	7.5	32.1	40.6	68.2	66.1	
1955	117.4	113.3	102.9	69.2	22.0	12.8	10.2	5.6	28.3	49.4	76.7	108.6	716.4
1984	79.0	84.0	76.6	62.7	26.7	19.0	15.7	7.5	32.2	41.9	67.7	65.7	
1956	121.6	110.7	102.1	70.4	21.9	12.8	10.2	5.7	29.7	50.1	76.6	108.7	720.6
1985	77.2	83.6	75.3	61.7	26.7	19.0	15.7	7.4	31.9	41.2	67.7	65.7	
1957	117.3	107.9	103.6	75.4	21.7	13.2	10.7	5.1	31.5	49.8	73.1	110.6	719.9
1986	78.8	84.1	75.2	66.3	26.7	19.4	16.6	6.7	31.9	40.8	63.8	65.3	
1953	123.4	107.2	104.2	73.6	21.1	12.7	11.0	4.7	30.6	49.1	76.3	105.0	718.9
1987	81.2	84.9	74.9	67.1	26.7	19.5	16.5	6.1	29.9	40.5	64.0	62.5	
1959	124.8	106.9	99.9	71.9	21.7	13.1	11.3	4.9	30.6	51.0	73.9	101.8	711.9
1988	80.7	84.8	71.3	66.7	26.5	19.4	16.3	6.1	29.9	39.4	62.1	60.5	
1960	120.1	105.3	104.1	73.1	19.5	13.2	9.6	4.6	29.9	51.3	77.5	101.4	709.7
1989	77.8	95.6	73.6	66.5	24.5	19.3	14.5	6.0	30.3	39.7	61.8	60.2	



PRESTE ATENCION A LA NOTA DE LA PAGINA 1-

PROCELTAS MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 56 A=05.

[illegible]

V I L L A S



CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 8

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN VILELAS (1979-1980). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	171.00	138.00	114.00	68.00	47.00	28.00	27.00	38.00	63.00	77.00	129.00	162.00
LLUVIAS	145.42	108.75	92.50	103.42	13.08	5.17	10.83	9.00	36.08	59.33	91.50	93.58
ETP REAL	136.64	109.00	83.33	62.00	28.83	13.75	14.08	18.50	39.17	57.17	96.92	110.17
EXCEDENTES	.36	8.17	3.67	23.25	2.50	.00	.00	.00	.00	.75	.00	.00
DEFICIT	34.36	29.00	30.67	6.00	13.17	14.25	12.92	19.50	23.83	19.83	32.08	51.83
ETP REAL / ETP POT.	79.90	78.99	73.10	91.18	61.35	49.11	52.16	43.68	62.17	74.24	75.13	68.00
ESCURRIMIENTOS	.26	4.20	3.94	13.59	8.05	4.02	2.01	1.01	.50	.63	.31	.16

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	39.03	81.06	70.53	74.47	24.97	13.78	14.65	11.31	29.61	46.92	48.99	34.81
ETP REAL	46.92	31.05	38.34	11.14	17.06	8.93	8.88	10.36	22.30	21.35	24.79	36.06
EXCEDENTES	1.21	21.26	8.56	49.46	8.66	.00	.00	.00	.00	2.30	.00	.00
DEFICIT	46.92	31.05	38.34	11.14	17.06	8.93	8.88	10.36	22.30	21.35	24.79	36.06
ETP REAL / ETP POT.	27.44	22.50	33.53	16.58	36.30	31.88	32.88	27.27	35.40	27.73	19.22	22.26
ESCURRIMIENTOS	.60	10.58	8.57	25.79	12.31	6.45	3.23	1.61	.81	1.24	.62	.31

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.6123	.7454	.7625	.7201	1.9083	2.6677	1.3520	1.2571	.8262	.7908	.5355	.3720
ETP REAL	.3834	.2849	.4601	.1796	.5917	.6491	.6304	.5601	.5693	.3735	.2558	.3273
EXCEDENTES	3.3166	2.6027	2.3355	2.1273	3.4641	*****	*****	*****	*****	3.0662	*****	*****
DEFICIT	1.3653	1.0708	1.2503	1.8559	.9391	.6263	.6873	.5314	.9356	1.0766	.7727	.6957
ETP REAL / ETP POT.	.3834	.2849	.4601	.1796	.5917	.6491	.6304	.5601	.5693	.3735	.2558	.3273
ESCURRIMIENTOS	2.2560	2.5164	2.1771	1.8976	1.6040	1.6040	1.6040	1.6040	1.6040	1.9751	1.9751	1.9751

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN VILELAS (1979-1990). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 100 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=O	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=O
1979	10.0	(215.0)	8.0	92.0	19.0	-0	8.0	-0	59.0	64.0	98.0	134.0	707.0
1980	105.0	39.0	234.0	(236.0)	-0	-0	-0	35.0	56.0	18.0	201.0	107.0	1031.0
1981	144.0	(187.0)	94.0	87.0	86.0	-0	12.0	-0	10.0	-0	92.0	71.0	783.0
1982	(154.0)	110.0	45.0	53.0	5.0	9.0	-0	-0	16.0	-0	84.0	139.0	615.0
1983	(214.0)	57.0	17.0	144.0	30.0	-0	4.0	10.0	10.0	150.0	63.0	84.0	808.0
1984	115.0	105.0	(140.0)	27.0	-0	-0	7.0	5.0	66.0	41.0	96.0	76.0	630.0
1985	(214.0)	142.0	85.0	140.0	15.0	5.0	51.0	5.0	71.0	112.0	75.0	139.0	1054.0
1986	14.0	87.0	76.0	(208.0)	-0	48.0	25.0	-0	79.0	114.0	31.0	60.0	742.0
1987	(237.0)	38.0	102.0	32.0	-0	-0	15.0	11.0	-0	52.0	58.0	113.0	673.0
1988	(270.0)	10.0	173.0	139.0	-0	-0	13.0	20.0	-0	33.0	40.0	108.0	806.0
1989	51.0	43.0	-0	-0	-0	-0	-0	22.0	49.0	51.0	(169.0)	35.0	420.0
1990	197.0	(272.0)	136.0	63.0	-0	-0	-0	-0	17.0	77.0	86.0	57.0	905.0
PROM.	145.4	108.7	92.5	103.4	13.1	5.2	10.8	9.0	36.1	59.3	91.5	93.6	768.7
MAX.	270.0	272.0	234.0	236.0	86.0	48.0	51.0	35.0	79.0	150.0	201.0	139.0	1054.0
MIN.	10.0	10.0	-0	-0	-0	-0	-0	-0	-0	-0	31.0	35.0	420.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

CONSEJO FEDERAL DE INVERSIONES-  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 10

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN VIELAS (1979-1990). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1979	*****	100.0	64.9	100.0	70.2	39.3	51.9	23.7	95.2	85.7	79.1	84.6	1979
1980	63.7	29.7	100.0	100.0	80.9	53.6	40.7	94.7	92.1	42.9	100.0	90.1	1980
1981	91.2	100.0	96.5	100.0	100.0	89.3	85.2	52.5	44.4	18.2	74.4	46.9	1981
1982	90.6	79.7	40.4	77.9	10.6	32.1	.0	.0	25.4	100.0	66.7	85.8	1982
1983	100.0	59.4	26.3	100.0	97.9	75.0	63.0	57.9	41.3	100.0	87.6	68.5	1983
1984	73.1	79.0	100.0	57.4	23.4	10.7	33.3	21.1	100.0	57.1	76.0	49.1	1984
1985	100.0	100.0	86.0	100.0	91.5	71.4	100.0	73.7	100.0	100.0	90.7	93.2	1985
1986	29.8	65.9	68.4	100.0	80.9	100.0	96.3	68.4	100.0	100.0	73.6	51.2	1986
1987	100.0	73.9	93.0	60.3	17.0	10.7	44.4	34.2	4.8	68.8	46.5	100.0	1987
1988	100.0	60.1	100.0	100.0	80.9	53.6	70.4	71.1	25.4	51.9	36.4	67.9	1988
1989	30.4	100.0	1.8	100.0	4.3	.0	.0	57.9	77.8	66.2	100.0	40.7	1989
1990	100.0	100.0	100.0	93.5	78.7	53.6	40.7	28.9	39.7	100.0	70.5	38.9	1990

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 11

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN VILELAS (1979-1990). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	GCT	NOV	DIC	A=0
1979	*****	27.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1979
1980	0.0	0.0	0.0	168.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1980
1981	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1981
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1982
1983	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1983
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1984
1985	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1985
1986	0.0	0.0	0.0	43.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	1986
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1987
1988	4.0	0.0	0.0	57.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1988
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1989
1990	0.0	71.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1990
TOTALES	4.0	98.0	44.0	279.0	30.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	TOTALES
NUM CASOS	1	2	2	5	1	0	0	0	0	2	0	0	NUM CASOS
E. MEDIOS	3	8.2	3.7	23.2	2.5	0.0	0.0	0.0	0.0	2	0.0	0.0	E. MEDIOS
E. REALES	4.0	49.0	22.0	55.8	30.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	E. REALES
FREC. X	9.1	16.7	16.7	41.7	8.3	0.0	0.0	0.0	0.0	16.7	0.0	0.0	FREC. X

SUMATORIA EXC\*FREC = 38.70 MM

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN VIELAS (1979-1990). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 103 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1979	*****	.0	40.0	.0	14.0	17.0	13.0	29.0	3.0	11.0	27.0	25.0	1979
1980	62.0	97.0	.0	.0	9.0	13.0	16.0	2.0	5.0	44.0	.0	16.0	1980
1981	15.0	.0	4.0	.0	.0	3.0	4.0	18.0	35.0	63.0	33.0	86.0	1981
1982	16.0	28.0	68.0	15.0	42.0	19.0	27.0	38.0	47.0	.0	43.0	23.0	1982
1983	.0	56.0	84.0	.0	1.0	7.0	10.0	16.0	37.0	.0	16.0	51.0	1983
1984	46.0	29.0	.0	29.0	36.0	25.0	18.0	30.0	.0	33.0	31.0	84.0	1984
1985	.0	.0	16.0	.0	4.0	8.0	.0	10.0	.0	.0	12.0	11.0	1985
1986	120.0	47.0	36.0	.0	9.0	.0	1.0	12.0	.0	.0	34.0	79.0	1986
1987	.0	36.0	8.0	27.0	39.0	25.0	15.0	25.0	60.0	24.0	69.0	.0	1987
1988	.0	55.0	.0	.0	9.0	13.0	8.0	11.0	47.0	37.0	32.0	52.0	1988
1989	119.0	.0	112.0	.0	45.0	28.0	27.0	16.0	14.0	26.0	.0	96.0	1989
1990	.0	.0	.0	1.0	10.0	13.0	16.0	27.0	38.0	.0	35.0	99.0	1990
TOTALES	378.0	348.0	368.0	72.0	218.0	171.0	155.0	234.0	286.0	238.0	385.0	622.0	TOTALES
NUM CASOS	6	7	8	4	11	11	11	12	9	7	10	11	NUM CASOS
D. MEDIOS	31.5	29.0	30.7	6.0	18.2	14.2	12.9	19.5	23.8	19.6	32.1	51.8	D. MEDIOS
D. REALES	63.0	49.7	46.0	18.0	19.8	15.5	14.1	19.5	31.8	34.0	36.5	56.5	D. REALES
FREC. %	54.5	58.3	66.7	33.3	91.7	91.7	91.7	100.0	75.0	58.3	83.3	91.7	FREC. %

SUNATORIA DEF=FREC = 292.45 MM

SUNATORIA (EXC=FREC - DEF=FREC) = -253.75 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NOE	TRIM.
E.P.E.	6.9	11.5	34.8	34.9	40.1	5.2	.0	.0	1.2	1.0	.7	.3	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN VILELAS (1979-1990). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 0 MENOR	2	1	2	0	4	5	3	5	4	1	1	1	29
ENTRE 40.1 Y 54.9	0	0	1	0	0	3	4	1	2	2	1	4	18
ENTRE 55.0 Y 69.9	1	3	2	2	0	0	1	3	0	3	1	2	19
ENTRE 70.0 Y 84.9	1	3	0	1	5	2	1	2	1	0	5	1	22
ENTRE 85.0 Y 100.0	7	5	7	9	3	2	3	1	5	6	4	4	56
70 0 MENOR	3	4	5	2	4	8	8	9	5	6	3	7	65

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 0 MENOR	18.2	8.3	16.7	.0	33.3	41.7	25.0	41.7	33.3	8.3	8.3	8.3	
ENTRE 40.1 Y 54.9	.0	.0	8.3	.0	.0	25.0	33.3	8.3	16.7	16.7	8.3	33.3	
ENTRE 55.0 Y 69.9	9.1	25.0	16.7	16.7	.0	.0	8.3	25.0	.0	25.0	8.3	16.7	
ENTRE 70.0 Y 84.9	9.1	25.0	.0	8.3	41.7	16.7	8.3	16.7	8.3	.0	41.7	8.3	
ENTRE 85.0 Y 100.0	65.6	41.7	58.3	75.0	25.0	16.7	25.0	8.3	41.7	50.0	33.3	33.3	
70 0 MENOR	27.3	33.3	41.7	16.7	33.3	66.7	66.7	75.0	50.0	50.0	25.0	58.3	

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE INDICAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

VILELAS (1979-1990). LAT. 27.57 S. LONG. 62.37 W. ALT. 125 M. TABLA 106 MM

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

	ENE(*)	FEB(*)	MAR(*)	ABR(*)	MAY	JUN	JUL	AGO	SET	OCT	NOV(*)	DIC(*)
UNO O MAS MESES	3	4	4	2	4	8	8	9	6	6	3	6
SOLO UN MES	0	1	2	0	0	1	0	1	0	3	1	5
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	1	2	2	0	2	4	7	7	5	3	2	1
	0	1	1	0	0	0	1	0	0	0	0	0
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	1	0	1	0	0	2	4	6	4	2	2	1
	0	0	1	0	0	0	0	1	1	0	0	0
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAH	MAHJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
SOLO CUATRO MESES	0	0	0	0	0	2	4	3	1	1	1	1
	0	0	0	0	0	0	1	1	0	0	0	0
CINCO O MAS MESES	NDEFM	DEFMA	EFMAH	FMAHJ	MAHJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
	0	0	0	0	0	2	2	1	1	0	1	0

PROCESO DE LOS COCIENTES MAYORES DEL 70 POR CIENTO.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	8	7	7	9	8	4	4	3	6	6	8	5
SOLO UN MES	0	1	0	2	0	0	0	0	2	1	3	0
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	3	6	5	5	8	4	3	2	2	3	4	3
	2	1	0	0	1	0	0	1	1	0	1	0
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	1	1	5	3	5	4	3	1	1	1	3	2
	0	0	2	0	2	1	0	0	0	0	1	0
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAH	MAHJ	AMJJ	MJJA	JJAS	JASO	ASON	SOND	ONDE
SOLO CUATRO MESES	1	1	3	3	2	3	1	1	1	1	2	0
	0	0	0	0	0	1	0	0	0	0	1	0
CINCO O MAS MESES	NDEFM	DEFMA	EFMAH	FMAHJ	MAHJJ	AMJJA	MJJAS	JJASO	JASON	ASOND	SONDE	ONDEF
	1	1	3	2	2	1	1	1	1	1	0	0

PROCESO DE LOS EXCESOS IGUALES O MAYORES DE 71 MM.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
UNO O MAS MESES	0	1	0	1	0	0	0	0	0	0	0	0
SOLO UN MES	0	1	0	1	0	0	0	0	0	0	0	0
DOS O MAS MESES	D-E	E-F	F-M	M-A	A-M	M-J	J-J	J-A	A-S	S-O	O-N	N-D
SOLO DOS MESES	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
TRES O MAS MESES	NDE	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND
SOLO TRES MESES	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
CUATRO O MAS MESES	NDEF	DEFM	EFMA	FMAH	MAHJ	AMJJ	MJJAS	JJAS	JASO	ASON	SOND	ONDE
	0	0	0	0	0	0	0	0	0	0	0	0

(\*) TODA VEZ QUE EN EL CONTEO INTERVIENGAN ESTOS MESES LA MUESTRA TIENE UN INDIVIDUO MENOS.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

LONG. 27.57 S. ALT. 125 M. TABLA 100 MM

FRECUENCIAS DE EXCESOS Y DEFICIENCIAS MENSUALES EN MILIMETROS, PARA 12 AÑOS DE DATOS, EXCEPTO EN ENERO EN QUE HAY UNO MENOS.

[illegible]



**PRESTE ATENCION A LA NOTA DE LA PAGINA 1.**

DE 12 A=0\$.

ENTRE 151 Y 999 MM. DE EXCESO

3

1

V I L L A   O J O   D E   A G U A

CONSEJO FEDERAL DE INVERSIONES-  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 12

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

ESTADISTICOS DE INTERES EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 63.42 W. ALT. 480.TABLA 100 MM

SERIE DE LOS PROMEDIOS.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
ETP POTENCIAL	128.00	117.00	95.00	57.00	39.00	26.00	24.00	35.00	54.00	77.00	106.00	138.00
LLUVIAS	146.95	113.32	122.84	61.21	13.26	3.95	6.84	3.74	36.58	24.11	64.98	105.21
ETP REAL	117.06	92.79	81.63	48.79	24.79	13.58	11.95	11.74	31.21	37.79	65.16	94.84
EXCEDENTES	16.17	18.26	28.16	9.63	.11	2.42	.00	.00	.53	.00	.00	6.58
DEFICIT	30.94	24.21	13.37	8.21	14.21	12.42	12.05	23.26	22.79	39.21	40.84	43.16
ETP REAL / ETP POT.	79.09	79.31	85.93	85.60	63.56	52.23	49.78	33.53	57.80	49.08	61.47	68.73
ESCURRIMIENTOS	9.88	13.81	20.98	15.31	7.71	5.06	2.53	1.27	.90	.45	.22	3.40

SERIE DE LAS DESVIACIONES STANDARD.

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	91.62	83.43	91.04	56.76	18.18	9.94	14.21	12.51	40.96	21.43	43.48	83.11
ETP REAL	41.86	30.38	22.52	11.09	12.67	8.02	7.24	9.06	18.99	18.22	30.70	37.38
EXCEDENTES	34.43	54.14	59.63	33.15	.46	10.55	.00	.00	2.29	.00	.00	21.60
DEFICIT	41.86	30.38	22.52	11.09	12.67	8.02	7.24	8.06	18.99	18.22	30.70	37.38
ETP REAL / ETP POT.	28.28	25.96	23.70	19.45	32.49	30.86	30.16	23.03	35.17	23.96	28.96	27.08
ESCURRIMIENTOS	17.93	27.97	34.00	21.68	10.87	8.12	4.06	2.03	1.55	.77	.39	10.32

SERIE DE LOS COEFICIENTES DE VARIABILIDAD (EN TANTO POR UNO).

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC
LLUVIAS	.6235	.7362	.7411	.9273	1.3710	2.5185	2.0762	3.3482	1.1198	.8839	.6722	.7899
ETP REAL	.3576	.3274	.2758	.2273	.5111	.5908	.6058	.6868	.6055	.4821	.4712	.3941
EXCEDENTES	2.1294	2.9644	2.1178	3.4420	4.3589	4.3589	.0000	.0000	4.3589	.0000	.0000	3.2825
DEFICIT	1.3527	1.3547	1.3544	1.3505	.8915	.6459	.6005	.3465	.8334	.4646	.7517	.8660
ETP REAL / ETP POT.	.3576	.3274	.2758	.2273	.5111	.5908	.6058	.6868	.6055	.4821	.4712	.3941
ESCURRIMIENTOS	1.8151	2.0256	1.6201	1.4164	1.4104	1.6041	1.6041	1.6041	1.7283	1.7283	1.7283	3.1820

CONSEJO FEDERAL DE INVERSIONES.  
AREA DE INFRAESTRUCTURA HIDRICA.  
PAGINA 13

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
LLUVIAS MEDIAS MENSUALES EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 63.42 W. ALT. 480. TABLA 100 MM  
EL MES QUE FIGURA ENTRE PARENTESIS CORRESPONDE AL DE MAYOR DESCARGA ANUAL.

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1970	71.0	(200.0)	157.0	5.0	14.0	1.0	-0	-0	23.0	33.0	11.0	55.0	570.0
1971	(275.0)	115.0	63.0	78.0	14.0	-0	-0	-0	-0	-0	54.0	38.0	637.0
1972	70.0	72.0	183.0	(212.0)	-0	14.0	16.0	-0	92.0	4.0	32.0	77.0	772.0
1973	71.0	16.0	98.0	(180.0)	-0	42.0	10.0	-0	6.0	32.0	25.0	116.0	593.0
1974	56.0	(163.0)	106.0	32.0	63.0	-0	4.0	-0	13.0	12.0	89.0	116.0	656.0
1975	105.0	69.0	(270.0)	65.0	21.0	8.0	-0	55.0	90.0	10.0	88.0	86.0	867.0
1976	(231.0)	66.0	141.0	20.0	18.0	-0	-0	2.0	10.0	83.0	70.0	85.0	726.0
1977	148.0	67.0	30.0	79.0	10.0	-0	-0	-0	-0	43.0	28.0	(208.0)	613.0
1978	267.0	134.0	(332.0)	-0	-0	-0	-0	-0	51.0	25.0	57.0	321.0	1187.0
1979	148.0	183.0	10.0	26.0	-0	-0	28.0	-0	31.0	27.0	29.0	(206.0)	683.0
1980	34.0	149.0	(228.0)	49.0	48.0	5.0	-0	3.0	40.0	46.0	95.0	83.0	830.0
1981	210.0	(371.0)	71.0	70.0	40.0	-0	-0	2.0	-0	56.0	172.0	23.0	1015.0
1982	83.0	150.0	20.0	34.0	3.0	5.0	-0	-0	137.0	10.0	54.0	(248.0)	744.0
1983	(195.0)	75.0	58.0	113.0	9.0	-0	9.0	4.0	8.0	7.0	83.0	43.0	602.0
1984	(149.0)	49.0	68.0	83.0	-0	-0	-0	5.0	-0	22.0	96.0	20.0	492.0
1985	(186.0)	68.0	152.0	25.0	7.0	-0	-0	-0	66.0	-0	70.0	123.0	697.0
1986	-0	(148.0)	11.0	26.0	-0	-0	57.0	-0	93.0	12.0	25.0	56.0	428.0
1987	(358.0)	15.0	212.0	61.0	5.0	-0	-0	-0	-0	27.0	142.0	47.0	567.0
1988	93.0	43.0	(124.0)	5.0	-0	-0	6.0	-0	35.0	9.0	9.0	50.0	364.0

PROM.	146.9	113.3	122.8	61.2	13.3	3.9	6.8	3.7	36.0	24.1	64.7	105.2	702.7
MAX.	358.0	371.0	332.0	212.0	63.0	42.0	57.0	55.0	137.0	83.0	172.0	321.0	1187.0
MIN.	-0	15.0	10.0	-0	-0	-0	-0	-0	-0	-0	9.0	20.0	364.0

NOTA: EL PROMEDIO TOTAL ES SUMA DE LOS DOCE VALORES MENSUALES.  
MAXIMO Y MINIMO ANUAL SON LOS EXTREMOS DEL REGISTRO INVESTIGADO, CON ESE PASO DE TIEMPO.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
PORCENTAJES MENSUALES DE ETP REAL EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 63.42 W. ALT. 480-TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1970	*****	100.0	100.0	80.7	69.2	42.3	33.3	22.9	53.7	49.4	15.1	41.3	1970
1971	100.0	99.1	94.8	100.0	74.4	69.2	54.2	37.1	25.9	13.0	53.8	29.7	1971
1972	48.0	61.5	100.0	100.0	84.6	84.6	87.5	45.7	100.0	57.1	48.1	61.6	1972
1973	51.4	16.2	100.0	100.0	84.6	100.0	87.5	62.9	66.3	55.8	34.0	85.5	1973
1974	41.9	100.0	100.0	78.9	100.0	65.4	58.3	37.1	44.4	28.6	85.6	85.5	1974
1975	72.3	60.7	100.0	100.0	97.4	84.6	62.5	100.0	100.0	77.9	90.6	74.5	1975
1976	100.0	91.5	100.0	91.2	79.5	50.0	37.5	31.4	35.2	100.0	72.6	65.9	1976
1977	100.0	59.8	33.7	100.0	41.0	19.2	12.5	8.6	5.6	57.1	28.3	100.0	1977
1978	100.0	100.0	100.0	77.2	46.2	34.6	25.0	20.0	94.4	41.6	56.6	100.0	1978
1979	100.0	100.0	71.6	64.9	25.6	19.2	100.0	17.1	63.0	40.3	31.1	100.0	1979
1980	79.7	100.0	100.0	98.2	100.0	92.3	70.8	60.0	35.2	74.0	92.5	68.1	1980
1981	100.0	100.0	97.9	100.0	100.0	100.0	16.7	20.0	9.3	74.0	100.0	52.2	1981
1982	63.5	100.0	46.3	66.7	20.5	26.9	8.3	5.7	100.0	70.1	67.9	100.0	1982
1983	100.0	94.0	83.2	100.0	89.7	65.4	70.8	48.6	38.9	24.7	80.2	34.1	1983
1984	100.0	43.6	71.6	100.0	23.1	19.2	12.5	22.9	5.6	31.2	90.6	15.9	1984
1985	100.0	70.9	100.0	82.5	59.0	33.5	29.2	22.9	100.0	20.8	69.8	89.9	1985
1986	4.7	100.0	31.6	52.6	7.7	7.7	100.0	31.4	100.0	57.1	41.5	47.1	1986
1987	100.0	68.4	100.0	100.0	89.7	61.5	45.8	37.1	24.1	44.2	100.0	54.3	1987
1988	62.2	41.0	100.0	53.3	15.4	11.5	33.3	5.7	66.7	15.6	9.4	100.0	1988

PRESTIE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
EXCESOS MENSUALES EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 63.42 W. ALT. 480. TABLA 100 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	A=0
1970	*****	33.0	62.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1970
1971	29.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1971
1972	.0	.0	.0	144.0	.0	.0	.0	.0	.0	.0	.0	.0	1972
1973	.0	.0	.0	27.0	.0	.0	.0	.0	.0	.0	.0	.0	1973
1974	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1974
1975	.0	.0	.0	.0	.0	.0	.0	.0	10.0	.0	.0	.0	1975
1976	8.0	.0	77.0	8.0	.0	.0	.0	.0	.0	.0	.0	.0	1976
1977	.0	.0	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1977
1978	91.0	17.0	237.0	.0	.0	.0	.0	.0	.0	.0	.0	89.0	1978
1979	.0	66.0	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0	1979
1980	.0	.0	102.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1980
1981	.0	231.0	.0	.0	.0	46.0	.0	.0	.0	.0	.0	36.0	1981
1982	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1982
1983	47.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1983
1984	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1984
1985	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1985
1986	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1986
1987	116.0	.0	52.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	1987
1988	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1988
TOTALES	291.0	347.0	535.0	183.0	2.0	46.0	.0	.0	13.0	.0	.0	125.0	TOTALES
NUM CASOS	5	4	6	4	1	1	0	0	1	0	0	2	NUM CASOS
E. MEDIOS	15.3	18.3	28.2	9.6	.1	2.4	.0	.0	.5	.0	.0	6.6	E. MEDIOS
E. REALES	58.2	86.7	89.2	45.7	2.0	46.0	.0	.0	10.0	.0	.0	62.5	E. REALES
FREC. %	27.8	21.1	31.6	21.1	5.3	5.3	.0	.0	5.3	.0	.0	10.5	FREC. %

SUMATORIA EXC\*FREC = 81.85 MM

CONSEJO FEDERAL DE INVERSIONES.

AREA DE INFRAESTRUCTURA HIDRICA.

PAGINA 16

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

DATOS RESUMEN DEL BALANCE HIDROLOGICO SERIADO.  
DEFICIENCIAS MENSUALES EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 63.42 W. ALT. 480. TABLA 103 MM

A=0	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEY	OCT	NOV	DIC	A=0
1970	*****	0	0	11.0	12.0	15.0	16.0	27.0	25.0	39.0	90.0	81.0	1970
1971	0	1.0	3.0	0	10.0	3.0	11.0	22.0	40.0	67.0	49.0	97.0	1971
1972	77.0	45.0	0	0	6.0	4.0	3.0	19.0	0	33.0	55.0	53.0	1972
1973	72.0	98.0	0	0	6.0	0	3.0	13.0	29.0	36.0	70.0	20.0	1973
1974	86.0	0	0	12.0	0	9.0	10.0	22.0	30.0	55.0	15.0	20.0	1974
1975	41.0	46.0	0	0	1.0	4.0	9.0	0	0	17.0	10.0	35.0	1975
1976	0	10.0	0	5.0	8.0	13.0	15.0	24.0	35.0	0	29.0	47.0	1976
1977	0	47.0	63.0	0	23.0	21.0	21.0	32.0	51.0	33.0	76.0	0	1977
1978	0	0	0	13.0	21.0	17.0	18.0	28.0	3.0	45.0	46.0	0	1978
1979	0	0	27.0	20.0	29.0	21.0	7.0	29.0	20.0	46.0	73.0	0	1979
1980	30.0	0	0	1.0	0	2.0	0	14.0	8.0	20.0	8.0	44.0	1980
1981	0	0	2.0	0	0	0	20.0	28.0	49.0	20.0	0	66.0	1981
1982	54.0	0	51.0	19.0	31.0	19.0	22.0	33.0	0	23.0	36.0	0	1982
1983	0	7.0	16.0	0	4.0	9.0	7.0	13.0	33.0	58.0	21.0	91.0	1983
1984	0	66.0	27.0	0	30.0	21.0	21.0	27.0	51.0	53.0	10.0	116.0	1984
1985	0	34.0	0	10.0	16.0	16.0	17.0	27.0	0	61.0	32.0	14.0	1985
1986	141.0	0	65.0	27.0	36.0	24.0	0	24.0	0	33.0	62.0	73.0	1986
1987	0	37.0	0	0	4.0	10.0	13.0	22.0	41.0	43.0	0	63.0	1987
1988	56.0	69.0	0	38.0	33.0	23.0	16.0	33.0	18.0	65.0	96.0	0	1988
TOTALES	557.0	460.0	254.0	156.0	270.0	236.0	229.0	42.0	433.0	745.0	776.0	820.0	TOTALES
NUM CASOS	8	11	8	10	16	17	17	18	14	18	17	14	NUM CASOS
D. MEDIOS	29.3	24.2	13.4	8.2	14.2	12.4	12.1	23.3	22.8	39.2	40.8	43.2	D. MEDIOS
D. REALES	69.6	41.8	31.7	15.6	16.9	13.9	13.5	24.6	30.9	41.4	45.6	58.6	D. REALES
FREC. %	44.4	57.9	42.1	52.6	84.2	89.5	89.5	94.7	73.7	94.7	89.5	73.7	FREC. %

SUMATORIA DEF\*FREC = 284.68 MM

SUMATORIA (EXC\*FREC - DEF\*FREC) = -202.33 MM

EFICIENCIAS PORCENTUALES DEL EXCESO.

TRIM.	DEF	EFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDE	TRIM.
E.P.E.	29.4	47.7	55.0	51.4	25.9	6.1	4.8	.9	.6	.5	5.1	16.5	E.P.E.

PRESTE ATENCION A LA NOTA DE LA PAGINA 1.

PORCENTAJES MENSUALES DE ETP REAL SEGUN INTERVALOS EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 63.42 W. ALT. 480-TABLA 100 MM

FRECUENCIAS DE APARICION

	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SET	OCT	NOV	DIC	SUMATORIA
40.0 O MENOR	1	1	2	1	5	8	9	14	7	6	5	3	62
ENTRE 40.1 Y 54.9	3	2	1	1	2	2	2	2	3	4	3	4	29
ENTRE 55.0 Y 69.9	2	4	0	2	2	4	2	2	2	4	3	3	30
ENTRE 70.0 Y 84.9	2	1	3	4	4	2	2	0	0	4	2	1	25
ENTRE 85.0 Y 100.0	10	11	13	11	6	3	4	1	7	1	6	4	61
70 O MENOR	6	7	3	4	9	14	13	18	12	14	11	10	121

FRECUENCIAS EXPRESADAS EN PORCENTAJE

40.0 O MENOR	5.6	5.3	10.5	5.3	26.3	42.1	47.4	73.7	36.8	31.0	26.3	15.6	
ENTRE 40.1 Y 54.9	16.7	10.5	5.3	5.3	10.5	10.5	10.5	10.5	15.8	21.1	15.8	21.1	
ENTRE 55.0 Y 69.9	11.1	21.1	0	10.5	10.5	21.1	10.5	10.5	10.5	21.1	15.6	15.6	
ENTRE 70.0 Y 84.9	11.1	5.3	15.6	21.1	21.1	10.5	10.5	0	0	21.1	10.5	5.3	
ENTRE 85.0 Y 100.0	53.6	57.9	68.4	57.9	31.6	15.8	21.1	5.3	36.8	5.3	31.6	42.1	
70 O MENOR	33.3	36.8	15.8	21.1	47.4	73.7	68.4	94.7	63.2	73.7	57.9	52.6	



ESTUDIO DE LA APARICION DEL PORCENTAJE DE EVAPOTRANSPIRACION REAL IGUAL, MAYOR O MENOR AL 70 POR CIENTO EN LOS MESES QUE SE EMPIEZAN EN CADA CASO. EL CONTEO INICIA AL QUINTO MES DEL PRIMER CICLO Y TERMINA DOS MESES ANTES DEL ULTIMO.

PROCESO DE LOS COCIENTES IGUALES O MENORES DEL 70 POR CIENTO.

2000

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2000

2000

ESTUDIO DE EXCESOS Y DEFICIENCIAS MENSUALES EN VA. OJO DE AGUA (1970-1988) LAT. 29.31 S. LONG. 83.42 W. ALT. 480. TABLA 100 MN.

[illegible]

OCURRENCIAS MENSUALES DE OCURRENCIA DE EXCESOS Y DEFICIENCIAS PARA DIVERSOS INTERVALOS EN UN TOTAL DE 15 A=05.

[illegible]