UNIVERSIDAD NACIONAL DE COLOMBIA SEDE MANIZALES

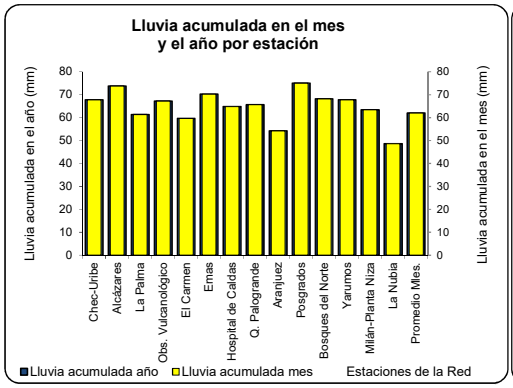
ESTACIONES HIDROMETEOROLÓGICAS PARA LA GESTIÓN DEL RIESGO POR DESLIZAMIENTOS EN MANIZALES

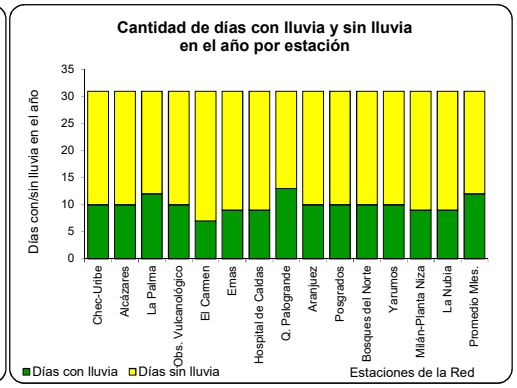
Sistema Integrado de Monitoreo Ambiental de Caldas - SIMAC

REGISTROS DE LLUVIA DIARIA Y PRECIPITACIÓN ACUMULADA EN LOS ÚLTIMOS 25 DÍAS (A25)

ENERO DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
Mi	1	5.0	117.8	2.4	127.0	3.4	181.8	1.6	131.4	8.2	111.6	4.0	124.4	3.0	130.0	4.2	125.0	3.4	93.8	6.0	138.0	4.6	164.0	4.8	125.0	5.2	130.4	16.0	82.8	6.9	123.6
J	2	0.0	117.8	0.0	127.0	0.2	182.0	0.0	131.4	0.0	111.6	0.2	124.6	0.0	130.0	0.4	125.4	0.2	94.0	0.2	137.6	0.2	164.2	0.2	124.2	0.0	128.0	0.0	82.6	0.1	123.1
V	3	0.0	117.8	0.0	127.0	1.0	183.0	0.0	131.4	0.0	111.6	0.0	124.6	0.0	130.0	0.0	125.4	0.0	94.0	0.0	137.6	0.0	164.2	0.0	124.2	0.0	128.0	0.0	82.6	0.1	123.2
S	4	0.0	103.8	0.0	113.6	0.0	182.0	0.0	114.2	0.0	101.8	0.0	124.2	0.0	127.0	0.0	120.6	0.0	90.8	0.0	133.0	0.0	163.0	0.0	116.2	0.0	126.0	0.0	82.6	0.0	119.2
D	5	0.0	102.6	0.0	113.2	0.0	180.8	0.0	113.4	0.0	101.0	0.0	107.8	0.0	118.4	0.0	110.2	0.0	86.6	0.0	124.4	0.0	146.4	0.0	101.6	0.0	110.4	0.0	73.4	0.0	110.1
L	6	0.0	98.6	0.0	108.2	0.0	180.2	0.0	112.8	0.0	91.4	0.0	107.4	0.0	93.6	0.0	102.8	0.0	81.6	0.0	108.8	0.0	142.6	0.0	86.6	0.0	95.4	0.0	71.4	0.0	103.1
Ma	7	0.0	94.4	0.0	105.0	0.0	168.4	0.0	111.2	0.0	86.4	0.0	103.2	0.0	87.6	0.0	95.0	0.0	70.0	0.0	101.2	0.0	124.8	0.0	78.4	0.0	86.8	0.0	64.4	0.0	95.4
Mi	8	0.0	68.8	0.0	77.2	0.0	112.0	0.0	78.0	0.0	62.2	0.0	74.2	0.0	64.2	0.0	77.0	0.0	58.4	0.0	87.6	0.0	117.0	0.0	71.2	0.0	80.8	0.0	57.0	0.0	76.6
J	9	0.0	55.4	0.0	56.4	0.0	80.8	0.0	56.4	0.0	51.4	0.0	60.6	0.0	57.4	0.0	66.6	0.0	55.6	0.0	80.6	0.0	83.6	0.0	58.2	0.0	71.0	0.0	49.0	0.0	62.6
V	10	0.0	54.4	0.0	54.4	0.0	80.6	0.0	55.0	0.0	50.6	0.0	56.0	0.0	51.6	0.0	59.2	0.0	55.4	0.0	70.0	0.0	69.8	0.0	45.4	0.0	58.8	0.0	46.4	0.0	56.9
S	11	0.0	52.0	0.0	52.0	0.0	80.0	0.0	52.8	0.0	47.8	0.0	55.2	0.0	50.0	0.0	56.2	0.0	53.2	0.0	68.0	0.0	68.6	0.0	41.6	0.0	53.8	0.0	43.6	0.0	54.3
D	12	0.0	51.8	0.0	51.8	0.0	80.0	0.0	52.8	0.0	47.8	0.0	55.2	0.0	49.6	0.0	55.6	0.0	49.4	0.0	66.0	0.0	68.2	0.0	41.2	0.0	53.2	0.0	41.4	0.0	53.5
L	13	0.0	51.8	0.0	51.8	0.0	78.6	0.0	52.4	0.0	47.8	0.0	54.0	0.0	49.6	0.0	55.6	0.0	49.4	0.0	66.0	0.0	66.8	0.0	40.6	0.0	53.2	0.0	41.4	0.0	53.1
Ma	14	0.0	51.8	0.0	51.8	0.0	78.6	0.0	52.4	0.0	47.8	0.0	54.0	0.0	49.6	0.0	55.6	0.0	49.4	0.0	66.0	0.0	66.8	0.0	40.6	0.0	53.2	0.0	41.4	0.0	53.1
Mi	15	0.8	52.6	0.8	52.6	0.4	79.0	0.6	53.0	0.0	47.8	0.0	54.0	0.0	49.6	0.4	56.0	0.0	49.4	0.0	66.0	0.0	66.4	0.0	40.6	0.0	53.2	0.0	41.4	0.1	53.2
J	16	0.0	50.0	0.0	48.8	0.0	76.4	0.0	47.8	0.0	44.8	0.0	48.8	0.0	49.6	0.2	56.2	0.0	49.4	0.0	66.0	0.0	66.4	0.0	40.6	0.0	53.2	0.0	41.4	0.0	51.9
V	17	0.0	50.0	0.0	48.8	0.0	76.4	0.0	47.8	0.0	44.8	0.0	46.8	0.0	49.6	0.0	56.2	0.0	49.4	0.0	66.0	0.0	62.0	0.0	39.8	0.0	52.8	0.0	39.4	0.0	51.0
S	18	0.0	50.0	0.0	48.8	0.0	76.4	0.0	47.8	0.0	44.8	0.0	46.8	0.0	49.6	0.0	56.2	0.0	49.4	0.0	66.0	0.0	62.0	0.0	39.8	0.0	52.8	0.0	39.4	0.0	51.0
D	19	0.0	49.8	0.0	48.4	0.0	75.6	0.0	47.2	0.0	44.4	0.0	45.6	0.0	49.6	0.0	56.2	0.0	49.4	0.0	66.0	0.0	62.0	0.0	39.8	0.0	52.8	0.0	38.8	0.0	50.6
L	20	0.8	50.6	0.6	49.0	4.0	79.6	1.6	48.6	0.4	44.6	1.2	46.8	1.0	50.6	1.0	57.2	2.0	51.4	0.8	66.8	0.4	62.4	2.8	42.6	0.8	53.6	1.0	39.6	1.4	51.9
Ma	21	20.0	70.6	23.4	72.4	8.2	87.8	24.2	72.8	12.8	57.4	22.8	69.6	10.8	61.4	8.6	65.8	8.8	60.2	13.6	80.4	15.8	78.2	10.6	53.2	9.4	63.0	4.0	43.6	11.6	63.5
Mi	22	16.6	87.2	17.6	90.0	19.6	107.4	18.4	91.2	14.0	71.4	12.8	82.4	15.6	77.0	16.0	81.6	15.2	75.4	15.4	95.8	16.8	95.0	9.6	62.8	18.4	81.4	10.0	53.6	14.9	78.4
J	23	0.0	87.2	0.0	90.0	0.0	107.4	0.0	91.2	0.0	71.4	0.2	82.6	0.0	77.0	0.0	81.6	0.0	75.4	0.0	95.8	0.0	95.0	0.0	62.8	0.0	81.4	0.0	53.6	0.0	78.4
V	24	1.2	77.6	2.8	77.4	1.2	63.2	1.0	83.0	0.0	64.8	0.0	77.0	1.4	71.2	4.0	79.0	3.0	75.8	5.4	94.0	0.0	80.6	7.8	62.4	7.8	85.2	0.4	51.4	2.7	70.9
S	25	1.6	46.0	4.4	52.0	4.2	42.2	0.6	48.0	0.0	35.4	0.0	41.2	0.2	32.0	0.4	35.2	0.8	33.4	1.6	43.0	0.8	38.6	4.0	39.8	4.6	46.2	3.2	34.6	2.5	40.4
D	26	14.8	55.8	14.0	63.6	13.4	52.2	13.8	60.2	16.8	44.0	17.8	55.0	18.2	47.2	11.6	42.6	5.2	35.2	12.0	49.0	14.2	48.2	15.4	50.4	4.8	45.8	3.8	22.4	10.5	44.0
L	27	4.4	60.2	5.2	68.8	4.2	56.2	3.6	63.8	4.0	48.0	8.8	63.6	4.4	51.6	6.2	48.4	9.2	44.2	9.6	58.4	9.6	57.6	4.4	54.6	8.6	54.4	8.8	31.2	7.0	51.0
Ma	28	2.6	62.8	2.6	71.4	1.6	56.8	1.8	65.6	3.4	51.4	2.4	66.0	10.2	61.8	12.4	60.8	6.4	50.6	10.4	68.8	5.6	63.2	8.2	62.8	3.8	58.2	0.0	31.2	3.7	54.6
Mi	29	0.0	62.8	0.0	71.4	0.0	56.8	0.0	65.6	0.0	51.4	0.0	66.0	0.0	61.8	0.2	61.0	0.0	50.6	0.0	68.8	0.2	63.4	0.0	62.8	0.0	58.2	1.4	32.6	0.3	54.9
J	30	0.0	62.8	0.0	71.4	0.0	56.8	0.0	65.6	0.0	51.4	0.0	66.0	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	54.9
V	31	0.0	62.8	0.0	71.4	0.0	56.8	0.0	65.6	0.0	51.4	0.0	66.0	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	54.9
Ll. mes		67.8		73.8		61.4		67.2		59.6		70.2		64.8		65.6		54.2		75.0		68.2		67.8		63.4		48.6		62.0	
Máx. mes		20.0	117.8	23.4	127.0	19.6	183.0	24.2	131.4	16.8	111.6	22.8	124.6	18.2	130.0	16.0	125.4	15.2	94.0	15.4	138.0	16.8	164.2	15.4	125.0	18.4	130.4	16.0	82.8	14.9	123.6
Ll. acum. en el año		67.8		73.8		61.4		67.2		59.6		70.2		64.8		65.6		54.2		75.0		68.2		67.8		63.4		48.6		62.0	
No. de días lluvia año		10	32%	10	32%	12	39%	10	32%	7	23%	9	29%	9	29%	13	42%	10	32%	10	32%	10	32%	10	32%	9	29%	9	29%	12	39%





Días transcurridos en el año a la fecha			31
No. de días con algún Nivel de Alerta en el año			
Estación	A	N	R
Chec-Uribe	0	0	0
Alcázares	0	0	0
La Palma	0	0	0
Obs. Vulcanológico	0	0	0
El Carmen	0	0	0
Emas	0	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	0	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja:	A	200 mm <= A25 < 300 mm
Naranja o media:	N	300 mm <= A25 < 400 mm
Roja o alta:	R	A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes

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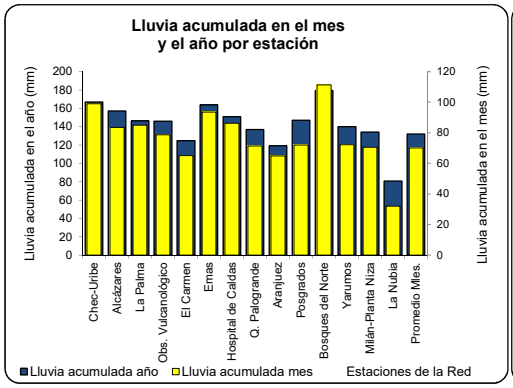
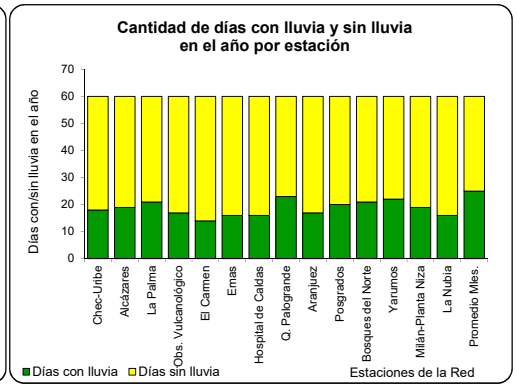
FEBRERO DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
S	1	0.0	62.8	0.0	71.4	0.0	56.8	0.0	65.6	0.0	51.4	0.0	66.0	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	54.9
D	2	0.6	63.4	1.0	72.4	0.6	57.4	1.4	67.0	0.0	51.4	0.8	66.8	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.3	55.2
L	3	0.0	63.4	0.0	72.4	0.0	57.4	0.0	67.0	0.0	51.4	0.0	66.8	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	55.2
Ma	4	0.0	63.4	0.0	72.4	0.0	57.4	0.0	67.0	0.0	51.4	0.0	66.8	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	55.2
Mi	5	0.0	63.4	0.0	72.4	0.0	57.4	0.0	67.0	0.0	51.4	0.0	66.8	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	55.2
J	6	0.0	63.4	0.0	72.4	0.0	57.4	0.0	67.0	0.0	51.4	0.0	66.8	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	55.2
V	7	0.0	63.4	0.0	72.4	0.0	57.4	0.0	67.0	0.0	51.4	0.0	66.8	0.0	61.8	0.0	61.0	0.0	50.6	0.0	68.8	0.0	63.4	0.0	62.8	0.0	58.2	0.0	32.6	0.0	55.2
S	8	0.2	63.6	0.0	72.4	0.8	58.2	0.0	67.0	0.0	51.4	0.0	66.8	0.0	61.8	0.2	61.2	0.0	50.6	0.4	69.2	1.0	64.4	1.6	64.4	1.8	60.0	2.0	34.6	1.0	56.2
D	9	0.0	62.8	0.0	71.6	0.2	58.0	0.0	66.4	0.0	51.4	0.0	66.8	0.0	61.8	0.0	60.8	0.0	50.6	0.2	69.4	0.6	65.0	2.6	67.0	4.4	64.4	0.2	34.8	1.0	57.0
L	10	0.0	62.8	0.0	71.6	0.0	58.0	0.0	66.4	0.0	51.4	0.0	66.8	0.0	61.8	0.0	60.6	0.0	50.6	0.0	69.4	0.0	65.0	0.0	67.0	0.0	64.4	0.0	34.8	0.0	57.0
Ma	11	0.0	62.8	0.0	71.6	0.0	58.0	0.0	66.4	0.0	51.4	0.0	66.8	0.0	61.8	0.0	60.6	0.0	50.6	0.0	69.4	0.0	65.0	0.0	67.0	0.0	64.4	0.0	34.8	0.0	57.0
Mi	12	0.0	62.8	0.0	71.6	0.0	58.0	0.0	66.4	0.0	51.4	0.0	66.8	0.0	61.8	0.0	60.6	0.0	50.6	0.0	69.4	0.0	65.0	0.0	67.0	0.0	64.4	0.0	34.8	0.0	57.0
J	13	0.0	62.8	0.0	71.6	0.0	58.0	0.0	66.4	0.0	51.4	0.0	66.8	0.0	61.8	0.0	60.6	0.0	50.6	0.0	69.4	0.0	65.0	0.0	67.0	0.0	64.4	0.0	34.8	0.0	57.0
V	14	0.0	62.0	0.0	71.0	0.0	54.0	0.0	64.8	0.0	51.0	0.0	65.6	0.0	60.8	0.0	59.6	0.0	48.6	0.0	68.6	0.0	64.6	2.6	66.8	4.2	67.8	0.0	33.8	0.9	56.5
S	15	0.0	42.0	0.6	48.2	0.0	45.8	1.8	42.4	1.6	39.8	4.6	47.4	3.2	53.2	0.6	51.6	0.0	39.8	0.0	55.0	1.4	50.2	2.2	58.4	0.0	58.4	0.0	29.8	0.9	45.8
D	16	4.4	29.8	0.6	31.2	0.0	26.2	0.0	24.0	2.2	28.0	0.0	34.6	3.8	41.4	4.8	40.4	10.2	34.8	7.6	47.2	0.0	33.4	8.4	57.2	10.6	50.6	6.8	26.6	5.0	35.9
L	17	0.0	29.8	0.0	31.2	0.0	26.2	0.0	24.0	0.0	28.0	0.0	34.4	0.0	41.4	0.0	40.4	0.0	34.8	0.0	47.2	0.0	33.4	0.0	57.2	0.0	50.6	0.0	26.6	0.0	35.9
Ma	18	0.0	28.6	0.0	28.4	0.0	25.0	0.0	23.0	0.0	28.0	0.0	34.4	0.0	40.0	0.0	36.4	0.0	31.8	0.0	41.8	0.0	33.4	0.0	49.4	0.0	42.8	0.0	26.2	0.0	33.2
Mi	19	0.0	27.0	0.0	24.0	0.0	20.8	0.0	22.4	0.0	28.0	0.0	34.4	0.0	39.8	0.0	36.0	0.0	31.0	0.0	40.2	0.0	32.6	0.0	45.4	0.0	38.2	0.0	23.0	0.0	30.6
J	20	16.0	28.2	14.8	24.8	16.2	23.6	15.0	23.6	15.0	26.2	14.8	31.4	8.6	30.2	1.6	26.0	0.8	26.6	1.2	29.4	10.6	29.0	0.4	30.4	0.6	34.0	0.0	19.2	6.7	26.8
V	21	0.0	23.8	0.0	19.6	0.0	19.4	0.0	20.0	0.0	22.2	0.0	22.6	0.0	25.8	0.0	19.8	0.6	18.0	0.0	19.8	0.0	19.4	0.0	26.0	0.0	25.4	0.0	10.4	0.0	19.7
S	22	53.8	75.0	32.4	49.4	39.6	57.4	32.8	51.0	24.0	42.8	37.4	57.6	42.2	57.8	42.4	49.8	38.4	50.0	43.2	52.6	64.6	78.4	43.2	61.0	43.0	64.6	18.8	29.2	36.6	52.6
D	23	0.0	75.0	0.0	49.4	0.0	57.4	0.0	51.0	0.0	42.8	0.0	57.6	0.0	57.8	0.2	49.8	0.0	50.0	0.2	52.8	0.6	78.8	0.2	61.2	0.2	64.8	0.2	28.0	0.1	52.4
L	24	5.8	80.8	4.4	53.8	3.2	60.6	4.2	55.2	2.6	45.4	2.4	60.0	1.8	59.6	1.8	51.6	1.0	51.0	0.8	53.6	5.2	84.0	0.8	62.0	0.6	65.4	0.0	28.0	1.9	54.3
Ma	25	2.0	82.8	2.4	56.2	8.8	69.4	2.4	57.6	1.6	47.0	4.2	64.2	4.0	63.6	1.6	53.2	0.6	51.6	1.4	55.0	7.8	91.8	1.8	63.8	1.0	66.4	2.6	30.6	3.1	57.4
Mi	26	16.2	99.0	27.0	83.2	15.4	84.8	21.0	78.6	18.0	65.0	29.4	93.6	22.6	86.2	18.0	71.2	13.2	64.8	16.4	71.4	16.0	107.8	6.6	70.4	4.2	70.6	1.4	32.0	12.4	69.8
J	27	0.0	98.4	0.2	82.4	0.2	84.4	0.0	77.2	0.0	65.0	0.0	92.8	0.0	86.2	0.2	71.4	0.0	64.8	0.0	71.4	0.2	108.0	0.0	70.4	0.0	70.6	0.0	32.0	0.0	69.6
V	28	0.0	98.4	0.0	82.4	0.0	84.4	0.0	77.2	0.0	65.0	0.0	92.8	0.0	86.2	0.0	71.4	0.0	64.8	0.0	71.4	0.0	108.0	0.0	70.4	0.0	70.6	0.0	32.0	0.0	69.6
S	29	0.0	98.4	0.0	82.4	0.0	84.4	0.0	77.2	0.0	65.0	0.0	92.8	0.0	86.2	0.0	71.4	0.0	64.8	0.6	72.0	3.4	111.4	1.8	72.2	0.0	70.6	0.0	32.0	0.3	69.9
D	1																														
L	2																														
Ll. mes		99.0		83.4		85.0		78.6		65.0		93.6		86.2		71.4		64.8		72.0		111.4		72.2		70.6		32.0		70.2	
Máx. mes		53.8	99.0	32.4	83.2	39.6	84.8	32.8	78.6	24.0	65.0	37.4	93.6	42.2	86.2	42.4	71.4	38.4	64.8	43.2	72.0	64.6	111.4	43.2	72.2	43.0	70.6	18.8	34.8	36.6	69.9
Ll. acum. en el año		166.8		157.2		146.4		145.8		124.6		163.8		151.0		137.0		119.0		147.0		179.6		140.0		134.0		80.6		132.2	
No. de días lluvia año		18	30%	19	32%	21	35%	17	28%	14	23%	16	27%	16	27%	23	38%	17	28%	20	33%	21	35%	22	37%	19	32%	16	27%	25	42%





Días transcurridos en el año a la fecha			60
No. de días con algún Nivel de Alerta en el año			
Estación	**A**	**N**	**R**
Chec-Uribe	0	0	0
Alcázares	0	0	0
La Palma	0	0	0
Obs. Vulcanológico	0	0	0
El Carmen	0	0	0
Emas	0	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	0	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja: A 200 mm <= A25 < 300 mm
Naranja o media: N 300 mm <= A25 < 400 mm
Roja o alta: R A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes

UNIVERSIDAD NACIONAL DE COLOMBIA SEDE MANIZALES

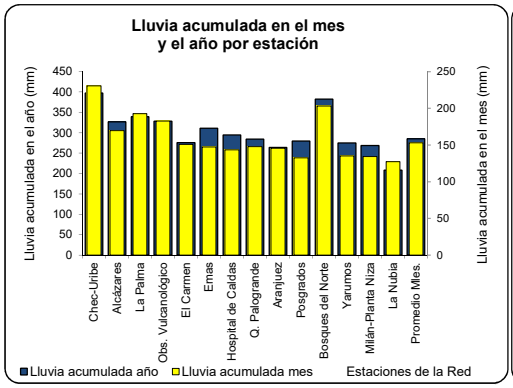
ESTACIONES HIDROMETEOROLÓGICAS PARA LA GESTIÓN DEL RIESGO POR DESLIZAMIENTOS EN MANIZALES

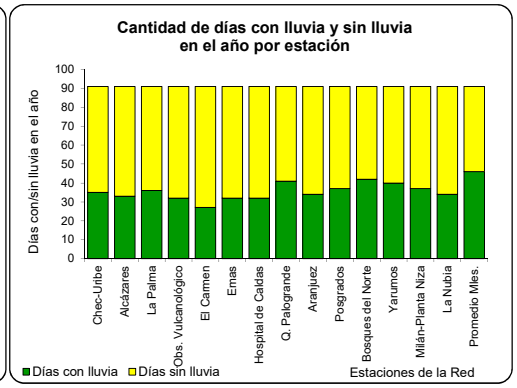
Sistema Integrado de Monitoreo Ambiental de Caldas - SIMAC

REGISTROS DE LLUVIA DIARIA Y PRECIPITACIÓN ACUMULADA EN LOS ÚLTIMOS 25 DÍAS (A25)

MARZO DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
D	1	0.0	98.4	0.0	82.4	0.0	84.4	0.0	77.2	0.0	65.0	0.0	92.8	0.0	86.2	0.2	71.6	2.6	67.4	0.0	72.0	0.2	111.6	0.0	72.2	1.0	71.6	5.2	37.2	1.4	71.3
L	2	3.0	101.4	0.0	82.4	0.6	85.0	0.0	77.2	0.0	65.0	0.0	92.8	0.0	86.2	0.0	71.6	0.2	67.6	0.0	72.0	1.0	112.6	0.6	72.8	2.0	73.6	10.2	47.4	2.8	74.1
Ma	3	0.4	101.8	0.0	82.4	0.0	85.0	0.0	77.2	0.0	65.0	0.4	93.2	0.4	86.6	0.6	72.2	0.0	67.6	0.4	72.4	0.6	113.2	0.4	73.2	0.8	74.4	0.6	48.0	0.4	74.5
Mi	4	0.0	101.6	2.4	84.8	1.8	86.0	1.2	78.4	0.0	65.0	0.4	93.6	0.0	86.6	0.0	72.0	0.0	67.6	0.0	72.0	0.2	112.4	0.0	71.6	0.0	72.6	0.0	46.0	0.4	73.9
J	5	0.0	101.6	0.0	84.8	0.0	85.8	0.0	78.4	0.0	65.0	0.0	93.6	0.0	86.6	0.0	72.0	0.0	67.6	0.0	71.8	0.0	111.8	0.0	69.0	0.0	68.2	0.0	45.8	0.0	72.9
V	6	4.6	106.2	4.6	89.4	0.0	85.8	7.6	86.0	6.6	71.6	3.6	97.2	9.6	96.2	7.2	79.2	11.4	79.0	10.2	82.0	1.6	113.4	3.0	72.0	2.0	70.2	0.0	45.8	3.3	76.3
S	7	0.4	106.6	0.0	89.4	0.0	85.8	0.0	86.0	0.0	71.6	0.4	97.6	3.0	99.2	4.2	83.4	7.6	86.6	12.0	94.0	20.6	134.0	20.6	92.6	28.4	98.6	3.0	48.8	8.7	85.0
D	8	7.2	113.8	6.4	95.8	6.8	92.6	8.8	94.8	9.0	80.6	7.0	104.6	7.6	106.8	5.4	88.8	0.0	86.6	5.6	99.6	14.4	148.4	1.8	94.4	14.0	112.6	5.0	53.8	7.6	92.5
L	9	19.6	133.4	23.0	118.8	5.0	97.6	20.0	114.8	15.8	96.4	11.2	115.8	12.2	119.0	12.6	101.4	9.8	96.4	5.6	105.2	8.4	156.8	2.4	96.8	3.2	115.8	4.2	58.0	8.3	100.9
Ma	10	9.6	143.0	3.4	122.2	3.0	100.6	5.6	120.4	5.4	101.8	4.2	120.0	9.8	128.8	11.8	113.2	14.4	110.8	13.4	118.6	6.2	163.0	13.4	107.6	12.0	123.6	13.8	71.8	9.6	109.6
Mi	11	1.0	144.0	2.4	124.0	15.4	116.0	4.8	123.4	4.8	105.0	10.6	126.0	2.4	128.0	1.0	113.6	1.0	111.8	2.6	121.2	7.2	168.8	3.6	109.0	1.2	124.8	0.4	72.2	4.2	112.9
J	12	12.4	152.0	17.4	140.8	29.8	145.8	20.0	143.4	7.8	110.6	22.8	148.8	8.0	132.2	2.0	110.8	0.2	101.8	0.8	114.4	11.4	180.2	1.0	101.6	0.2	114.4	2.4	67.8	9.0	116.8
V	13	59.6	211.6	49.0	189.8	78.8	224.6	69.8	213.2	46.6	157.2	62.8	211.6	55.2	187.4	61.8	172.6	52.0	153.8	45.8	160.2	71.4	251.6	52.0	153.6	30.0	144.4	42.0	109.8	51.8	168.6
S	14	15.6	227.2	9.8	199.6	2.6	227.2	6.2	219.4	18.6	175.8	2.4	214.0	3.4	190.8	3.0	175.6	15.8	169.6	3.6	163.8	4.6	256.2	3.6	157.2	5.6	150.0	3.6	113.4	5.7	174.3
D	15	1.0	228.2	0.2	199.8	0.6	227.8	0.4	219.8	0.2	176.0	0.0	214.0	0.2	191.0	0.2	175.8	1.8	171.4	0.2	164.0	0.2	256.4	0.2	157.4	0.6	150.6	1.4	114.8	0.6	175.0
L	16	0.0	212.2	0.0	185.0	0.0	211.6	0.0	204.8	0.0	161.0	0.8	200.0	1.0	183.4	2.6	176.8	1.4	172.0	3.6	166.4	0.6	246.4	5.4	162.4	7.6	157.6	8.4	123.2	3.8	172.1
Ma	17	0.0	212.2	0.0	185.0	0.0	211.6	0.0	204.8	0.0	161.0	0.0	200.0	0.0	183.4	0.0	176.8	0.0	171.4	0.0	166.4	0.2	246.6	0.0	162.4	0.0	157.6	0.0	123.2	0.0	172.1
Mi	18	0.0	158.4	0.0	152.6	0.4	172.4	0.0	172.0	0.0	137.0	0.0	162.6	0.0	141.2	0.0	134.4	0.0	133.0	0.0	123.2	0.0	182.0	0.0	119.2	0.0	114.6	0.0	104.4	0.0	135.6
J	19	0.0	158.4	0.0	152.6	0.0	172.4	0.0	172.0	0.0	137.0	0.0	162.6	0.0	141.2	0.0	134.2	0.0	133.0	0.0	123.0	0.0	181.4	0.0	119.0	0.0	114.4	0.0	104.2	0.0	135.5
V	20	2.2	154.8	0.8	149.0	0.0	169.2	0.6	168.4	0.6	135.0	0.0	160.2	0.0	139.4	0.8	133.2	0.0	132.0	0.6	122.8	0.0	176.2	0.0	118.2	0.0	113.8	0.4	104.6	0.3	133.9
S	21	0.0	152.8	0.0	146.6	0.0	160.4	0.0	166.0	0.0	133.4	0.0	156.0	0.0	135.4	0.0	131.6	0.0	131.4	0.0	121.4	0.0	168.4	0.0	116.4	0.0	112.8	0.0	102.0	0.0	130.8
D	22	0.0	136.6	0.0	119.6	0.0	145.0	0.0	145.0	0.0	115.4	0.0	126.6	0.0	112.8	0.0	113.6	0.0	118.2	0.0	105.0	0.0	152.4	0.0	109.8	0.0	108.6	0.0	100.6	0.0	118.4
L	23	0.0	136.6	0.0	119.4	0.0	144.8	0.0	145.0	0.0	115.4	0.0	126.6	0.0	112.8	0.0	113.4	0.0	118.2	0.0	105.0	0.0	152.2	0.0	109.8	0.0	108.6	0.0	100.6	0.0	118.4
Ma	24	0.0	136.6	0.0	119.4	0.0	144.8	0.0	145.0	0.0	115.4	0.0	126.6	0.0	112.8	0.0	113.4	0.0	118.2	0.0	105.0	0.0	152.2	0.0	109.8	0.0	108.6	0.0	100.6	0.0	118.4
Mi	25	0.0	136.6	0.0	119.4	0.0	144.8	0.0	145.0	0.0	115.4	0.4	127.0	5.2	118.0	4.0	117.4	2.0	120.2	8.2	112.6	3.6	152.4	8.2	116.2	4.8	113.4	1.2	101.8	2.5	120.6
J	26	1.0	137.6	0.0	119.4	0.6	145.4	0.4	145.4	0.0	115.4	0.0	127.0	0.0	118.0	0.0	117.2	0.4	118.0	0.0	112.6	0.2	152.4	0.2	116.4	0.0	112.4	0.0	96.6	0.2	119.4
V	27	0.0	134.6	0.0	119.4	0.0	144.8	0.0	145.4	0.0	115.4	0.0	127.0	0.0	118.0	0.0	117.2	0.0	117.8	0.0	112.6	0.0	151.4	0.0	115.8	0.0	110.4	0.0	86.4	0.0	116.5
S	28	0.0	134.2	0.0	119.4	0.0	144.8	0.0	145.4	0.0	115.4	0.0	126.6	0.0	117.6	0.0	116.6	0.0	117.8	0.0	112.2	0.0	150.8	0.0	115.4	0.0	109.6	0.0	85.8	0.0	116.1
D	29	5.6	139.8	3.4	120.4	25.2	168.2	3.4	147.6	4.4	119.8	7.6	133.8	11.4	129.0	8.4	125.0	3.2	121.0	6.6	118.8	39.0	189.6	11.4	126.8	10.2	119.8	11.0	96.8	11.7	127.5
L	30	9.6	149.4	0.6	121.0	3.4	171.6	2.0	149.6	1.8	121.6	0.4	134.2	1.0	130.0	1.4	126.4	2.4	123.4	1.8	120.6	0.6	190.2	1.8	128.6	2.0	121.8	3.4	100.2	2.4	129.9
Ma	31	78.0	222.8	46.2	162.6	18.8	190.4	32.0	174.0	29.4	144.4	12.4	143.0	13.2	133.6	20.6	139.8	19.2	131.2	11.6	122.0	11.0	199.6	5.4	131.0	8.8	128.6	11.2	111.4	18.1	144.7
Ll. mes		230.8		169.6		192.8		182.8		151.0		147.4		143.6		147.8		145.4		132.6		203.2		135.0		134.4		127.4		153.0	
Máx. mes		78.0	228.2	49.0	199.8	78.8	227.8	69.8	219.8	46.6	176.0	62.8	214.0	55.2	191.0	61.8	176.8	52.0	172.0	45.8	166.4	71.4	256.4	52.0	162.4	30.0	157.6	42.0	123.2	51.8	175.0
Ll. acum. en el año		397.6		326.8		339.2		328.6		275.6		311.2		294.6		284.8		264.4		279.6		382.8		275.0		268.4		208.0		285.2	
No. de días lluvia año		35	38%	33	36%	36	40%	32	35%	27	30%	32	35%	32	35%	41	45%	34	37%	37	41%	42	46%	40	44%	37	41%	34	37%	46	51%





Días transcurridos en el año a la fecha			91
No. de días con algún Nivel de Alerta en el año			
Estación	**A**	**N**	**R**
Chec-Uribe	6	0	0
Alcázares	0	0	0
La Palma	5	0	0
Obs. Vulcanológico	5	0	0
El Carmen	0	0	0
Emas	5	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	5	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja: A 200 mm <= A25 < 300 mm
Naranja o media: N 300 mm <= A25 < 400 mm
Roja o alta: R A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes

UNIVERSIDAD NACIONAL DE COLOMBIA SEDE MANIZALES

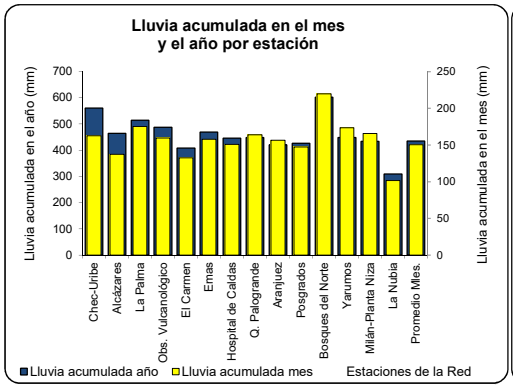
ESTACIONES HIDROMETEOROLÓGICAS PARA LA GESTIÓN DEL RIESGO POR DESLIZAMIENTOS EN MANIZALES

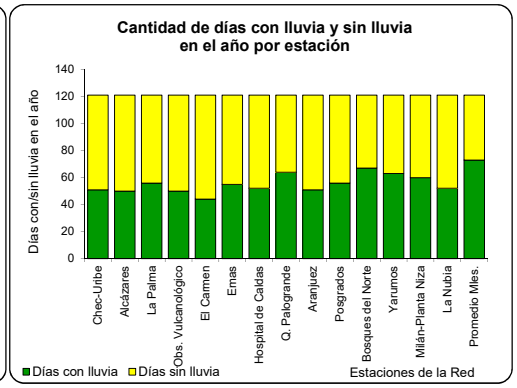
Sistema Integrado de Monitoreo Ambiental de Caldas - SIMAC

REGISTROS DE LLUVIA DIARIA Y PRECIPITACIÓN ACUMULADA EN LOS ÚLTIMOS 25 DÍAS (A25)

ABRIL DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
Mi	1	37.0	259.4	22.8	185.4	39.0	229.4	26.2	200.2	20.0	164.4	26.8	169.4	21.0	151.6	21.4	157.0	32.0	155.6	21.0	131.0	34.8	213.8	23.0	133.4	31.6	131.8	15.6	124.0	26.0	162.0
J	2	0.0	252.2	0.0	179.0	1.4	224.0	0.0	191.4	0.0	155.4	1.2	163.6	0.0	144.0	0.0	151.6	0.0	155.6	0.0	125.4	0.0	199.4	0.0	131.6	0.0	117.8	0.0	119.0	0.2	154.7
V	3	0.0	232.6	0.0	156.0	0.2	219.2	0.0	171.4	0.0	139.6	0.2	152.6	0.0	131.8	0.0	139.0	0.0	145.8	0.0	119.8	0.0	191.0	0.0	129.2	0.0	114.6	0.0	114.8	0.0	146.4
S	4	0.0	223.0	0.0	152.6	0.0	216.2	0.0	165.8	0.0	134.2	0.0	148.4	0.0	122.0	0.0	127.2	0.0	131.4	0.0	106.4	0.0	184.8	0.0	115.8	0.0	102.6	0.0	101.0	0.0	136.8
D	5	0.0	222.0	0.0	150.2	0.0	200.8	0.0	161.0	0.0	129.4	0.0	137.8	0.0	119.6	0.0	126.2	0.0	130.4	0.0	103.8	0.0	177.6	0.0	112.2	2.2	103.6	0.0	100.6	0.4	133.0
L	6	0.0	209.6	0.0	132.8	0.0	171.0	0.0	141.0	0.0	121.6	0.0	115.0	0.0	111.6	0.0	124.2	0.0	130.2	0.0	103.0	0.0	166.2	0.0	111.2	0.0	103.4	0.0	98.2	0.0	124.0
Ma	7	8.2	158.2	7.4	91.2	4.8	97.0	6.4	77.6	8.4	83.4	4.0	56.2	4.8	61.2	5.4	67.8	5.0	83.2	5.0	62.2	5.2	100.0	4.8	64.0	4.8	78.2	3.2	59.4	4.9	77.2
Mi	8	0.0	142.6	0.0	81.4	1.4	95.8	0.0	71.4	0.0	64.8	0.6	54.4	0.0	57.8	0.0	64.8	0.0	67.4	0.0	58.6	0.8	96.2	0.0	60.4	0.4	73.0	0.0	55.8	0.3	71.7
J	9	0.0	141.6	0.0	81.2	0.0	95.2	0.0	71.0	0.0	64.6	0.8	55.2	1.6	59.2	1.4	66.0	0.0	65.6	1.6	60.0	2.0	98.0	4.4	64.6	4.2	76.6	0.0	54.4	1.3	72.4
V	10	5.0	146.6	3.6	84.8	0.0	95.2	2.4	73.4	0.6	65.2	1.2	55.6	1.2	59.4	1.8	65.2	1.0	65.2	1.6	58.0	6.4	103.8	4.6	63.8	2.4	71.4	1.6	47.6	2.2	70.7
S	11	8.8	155.4	12.2	97.0	20.8	116.0	13.6	87.0	11.6	76.8	9.6	65.2	21.0	80.4	26.2	91.4	24.0	89.2	17.4	75.4	7.0	110.6	22.6	86.4	13.0	84.4	13.6	61.2	15.0	85.7
D	12	7.2	162.6	7.4	104.4	3.6	119.2	4.8	91.8	13.6	90.4	10.8	76.0	12.4	92.8	8.2	99.6	4.2	93.4	7.6	83.0	28.6	139.2	7.6	94.0	3.4	87.8	2.2	63.4	6.9	92.5
L	13	19.2	181.8	17.2	121.6	8.0	127.2	16.6	108.4	17.8	108.2	5.6	81.6	4.4	97.2	4.8	104.4	4.6	98.0	8.2	91.2	7.8	147.0	13.0	107.0	9.8	97.6	5.0	68.4	9.1	101.7
Ma	14	6.6	186.2	6.6	127.4	5.0	132.2	8.0	115.8	3.8	111.4	11.8	93.4	8.6	105.8	10.4	114.0	13.4	111.4	12.0	102.6	36.8	183.8	6.6	113.6	7.4	105.0	0.6	68.6	7.8	109.1
Mi	15	0.2	186.4	1.0	128.4	0.0	132.2	0.6	116.4	0.8	112.2	0.4	93.8	0.8	106.6	0.2	114.2	1.2	112.6	0.4	103.0	4.0	187.8	0.2	113.8	1.8	106.8	0.0	68.6	0.7	109.9
J	16	0.0	186.4	0.0	128.4	13.6	145.8	0.0	116.4	0.0	112.2	0.0	93.8	3.2	109.8	3.0	117.2	0.0	112.6	1.8	104.8	3.0	190.8	12.2	126.0	4.0	110.8	1.0	69.6	3.5	113.3
V	17	0.0	186.4	0.0	128.4	0.2	146.0	0.0	116.4	0.0	112.2	0.0	93.8	0.0	109.8	0.2	117.4	0.0	112.6	0.0	104.8	3.2	194.0	0.2	126.2	0.0	110.8	2.6	72.2	0.8	114.1
S	18	50.8	237.2	28.8	157.2	28.2	174.2	33.6	150.0	30.2	142.4	28.6	122.4	36.2	146.0	43.6	161.0	44.4	157.0	30.8	135.6	23.6	217.6	23.0	149.2	37.8	148.6	37.4	109.6	34.1	148.2
D	19	0.2	237.4	0.2	157.4	0.4	174.6	0.4	150.4	0.0	142.4	0.2	122.2	0.6	141.4	1.2	158.2	0.0	155.0	1.0	128.4	0.6	214.6	1.4	142.4	1.6	145.4	1.0	109.4	0.8	146.4
L	20	0.0	236.4	0.0	157.4	0.0	174.0	0.2	150.2	0.0	142.4	0.4	122.6	0.4	141.8	0.8	159.0	0.0	154.6	0.6	129.0	0.8	215.2	0.8	143.0	0.2	145.6	0.4	109.8	0.3	146.6
Ma	21	10.8	247.2	17.0	174.4	26.8	200.8	29.2	179.4	11.4	153.8	26.8	149.4	16.0	157.8	20.4	179.4	13.0	167.6	21.4	150.4	9.2	224.4	16.4	159.4	12.0	157.6	2.2	112.0	14.5	161.1
Mi	22	2.0	249.2	2.6	177.0	7.8	208.6	3.4	182.8	2.8	156.6	12.0	161.4	5.6	163.4	4.2	183.6	1.8	169.4	4.4	154.8	20.2	244.6	6.0	165.4	6.6	164.2	1.4	113.4	5.6	166.7
J	23	4.8	248.4	6.2	179.8	9.8	193.2	8.4	187.8	5.8	158.0	8.8	162.6	5.0	157.0	3.4	178.6	4.8	171.0	4.0	152.2	9.6	215.2	3.6	157.6	4.2	158.2	5.0	107.4	5.9	160.9
V	24	0.6	239.4	2.0	181.2	3.2	193.0	2.6	188.4	2.6	158.8	5.2	167.4	3.4	159.4	2.6	179.8	0.8	169.4	2.0	152.4	9.4	224.0	5.0	160.8	1.0	157.2	0.0	104.0	2.4	160.9
S	25	0.0	161.4	0.0	135.0	0.2	174.4	0.0	156.4	0.0	129.4	0.0	155.0	0.0	146.2	0.2	159.4	0.0	150.2	0.0	140.8	0.4	213.4	0.6	156.0	0.4	148.8	0.0	92.8	0.2	142.9
D	26	0.0	124.4	0.0	112.2	0.0	135.4	0.0	130.2	0.4	109.8	0.0	128.2	0.0	125.2	0.6	138.6	3.6	121.8	0.0	119.8	0.8	179.4	0.0	133.0	0.2	117.4	0.0	77.2	0.2	117.1
L	27	0.0	124.4	0.2	112.4	0.0	134.0	0.4	130.6	0.2	110.0	0.4	127.4	0.4	125.6	0.6	139.2	0.4	122.2	0.4	120.2	0.8	180.2	0.4	133.4	0.6	118.0	0.6	77.8	0.4	117.3
Ma	28	0.0	124.4	0.0	112.4	0.0	133.8	0.0	130.6	0.0	110.0	0.4	127.6	0.4	126.0	0.0	139.2	0.0	122.2	0.0	120.2	1.0	181.2	2.0	135.4	0.0	118.0	0.0	77.8	0.2	117.5
Mi	29	1.2	125.6	1.6	114.0	0.6	134.4	2.4	133.0	1.4	111.4	0.8	128.4	4.0	130.0	3.0	142.2	2.2	124.4	6.0	126.2	2.2	183.4	13.0	148.4	16.2	134.2	7.4	85.2	6.2	123.7
J	30	0.2	125.8	0.6	114.6	0.2	134.6	0.4	133.4	1.2	112.6	1.0	129.4	0.0	130.0	0.2	142.4	0.2	124.6	0.0	126.2	1.4	184.8	2.0	150.4	0.0	132.0	0.6	85.8	0.5	123.9
V	1																														
Ll. mes		162.8		137.4		175.2		159.6		132.6		157.6		151.0		163.8		156.6		147.2		219.6		173.4		165.8		101.4		150.5	
Máx. mes		50.8	259.4	28.8	185.4	39.0	229.4	33.6	200.2	30.2	164.4	28.6	169.4	36.2	163.4	43.6	183.6	44.4	171.0	30.8	154.8	36.8	244.6	23.0	165.4	37.8	164.2	37.4	124.0	34.1	166.7
Ll. acum. en el año		560.4		464.2		514.4		488.2		408.2		468.8		445.6		448.6		421.0		426.8		602.4		448.4		434.2		309.4		435.7	
No. de días lluvia año		51	42%	50	41%	56	46%	50	41%	44	36%	55	45%	52	43%	64	53%	51	42%	56	46%	67	55%	63	52%	60	50%	52	43%	73	60%





Días transcurridos en el año a la fecha			121
No. de días con algún Nivel de Alerta en el año			
Estación	**A**	**N**	**R**
Chec-Uribe	19	0	0
Alcázares	0	0	0
La Palma	12	0	0
Obs. Vulcanológico	6	0	0
El Carmen	0	0	0
Emas	5	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	14	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja: A 200 mm <= A25 < 300 mm
Naranja o media: N 300 mm <= A25 < 400 mm
Roja o alta: R A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes

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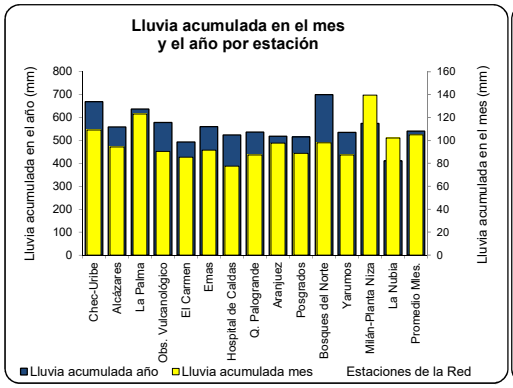
ESTACIONES HIDROMETEOROLÓGICAS PARA LA GESTIÓN DEL RIESGO POR DESLIZAMIENTOS EN MANIZALES

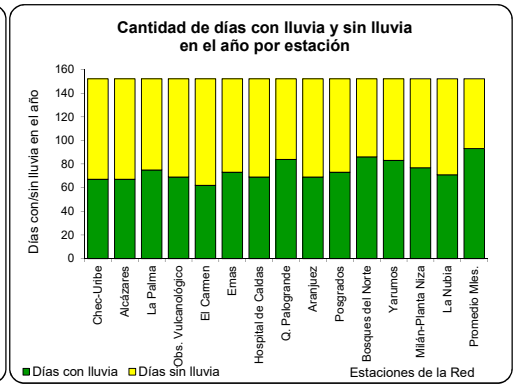
Sistema Integrado de Monitoreo Ambiental de Caldas - SIMAC

REGISTROS DE LLUVIA DIARIA Y PRECIPITACIÓN ACUMULADA EN LOS ÚLTIMOS 25 DÍAS (A25)

MAYO DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
V	1	5.2	131.0	4.2	118.8	4.6	139.2	4.0	137.4	3.4	116.0	3.8	133.2	4.2	134.2	4.0	146.4	5.6	130.2	5.2	131.4	4.6	189.4	3.4	153.8	6.0	138.0	5.8	91.6	4.9	128.8
S	2	0.0	122.8	0.0	111.4	0.2	134.6	0.0	131.0	0.0	107.6	0.0	129.2	0.0	129.4	0.0	141.0	0.0	125.2	0.0	126.4	0.0	184.2	0.2	149.2	0.0	133.2	0.0	88.4	0.0	123.8
D	3	0.0	122.8	0.0	111.4	4.6	137.8	0.0	131.0	0.0	107.6	0.0	128.6	0.0	129.4	0.0	141.0	0.0	125.2	0.0	126.4	0.0	183.4	0.0	149.2	0.0	132.8	0.0	88.4	0.5	124.0
L	4	0.0	122.8	0.0	111.4	0.0	137.8	0.4	131.4	0.0	107.6	0.0	127.8	0.0	127.8	0.2	139.8	0.0	125.2	0.0	124.8	0.0	181.4	0.0	144.8	0.0	128.6	0.0	88.4	0.0	122.7
Ma	5	0.0	117.8	0.0	107.8	0.0	137.8	0.0	129.0	0.4	107.4	0.0	126.6	0.0	126.6	0.2	138.2	0.0	124.2	0.0	123.2	0.0	175.0	0.0	140.2	0.0	126.2	0.0	86.8	0.0	120.6
Mi	6	6.8	115.8	9.0	104.6	2.4	119.4	8.8	124.2	11.0	106.8	4.2	121.2	5.6	111.2	9.0	121.0	21.6	121.8	9.6	115.4	0.6	168.6	2.6	120.2	7.4	120.6	12.4	85.6	7.9	113.5
J	7	0.0	108.6	0.0	97.2	0.2	116.0	0.0	119.4	0.0	93.2	0.0	110.4	0.0	98.8	0.0	112.8	0.0	117.6	0.0	107.8	0.2	140.2	0.0	112.6	0.0	117.2	0.2	83.6	0.1	106.6
V	8	0.0	89.4	0.0	80.0	0.0	108.0	0.0	102.8	0.0	75.4	0.0	104.8	0.0	94.4	0.0	108.0	0.0	113.0	0.0	99.6	0.0	132.4	0.0	99.6	0.0	107.4	0.0	78.6	0.0	97.5
S	9	0.0	82.8	0.0	73.4	0.0	103.0	0.0	94.8	0.0	71.6	0.0	93.0	0.0	85.8	0.0	97.6	0.0	99.6	0.0	87.6	0.0	95.6	0.0	93.0	0.0	100.0	0.0	78.0	0.0	89.7
D	10	0.0	82.6	0.0	72.4	0.0	103.0	0.0	94.2	0.0	70.8	0.0	92.6	0.0	85.0	0.0	97.4	0.0	98.4	0.0	87.2	0.0	91.6	0.0	92.8	0.0	98.2	0.0	78.0	0.0	89.0
L	11	13.4	96.0	13.0	85.4	11.6	101.0	10.0	104.2	15.4	86.2	9.2	101.8	6.0	87.8	7.0	101.4	5.4	103.8	5.4	90.8	2.6	91.2	2.8	83.4	5.4	99.6	0.0	77.0	6.3	91.8
Ma	12	34.2	130.2	31.0	116.4	55.2	156.0	34.0	138.2	25.2	111.4	21.6	123.4	17.6	105.4	31.4	132.6	18.8	122.6	26.4	117.2	27.0	115.0	25.6	108.8	40.2	139.8	16.8	91.2	29.5	120.5
Mi	13	0.0	79.4	0.2	87.8	0.6	128.4	0.2	104.8	0.2	81.4	0.8	95.6	0.8	70.0	1.6	90.6	1.8	80.0	2.2	88.6	2.6	94.0	1.8	87.6	6.4	108.4	3.2	57.0	2.4	88.8
J	14	0.0	79.2	1.4	89.0	1.0	129.0	2.2	106.6	2.4	83.8	16.0	111.4	3.6	73.0	3.8	93.2	10.0	90.0	5.6	93.2	2.4	95.8	8.2	94.4	23.8	130.6	17.6	73.6	10.9	98.9
V	15	3.0	82.2	1.8	90.8	2.0	131.0	1.4	107.8	0.8	84.6	1.0	112.0	3.8	76.4	1.2	93.6	2.6	92.6	1.2	93.8	2.6	97.6	2.6	96.2	3.4	133.8	9.4	82.6	3.8	102.4
S	16	0.0	71.4	0.0	73.8	0.2	104.4	0.2	78.8	0.0	73.2	0.2	85.4	0.0	60.4	0.2	73.4	0.0	79.6	0.0	72.4	0.6	89.0	0.8	80.6	0.4	122.2	0.2	80.6	0.2	88.1
D	17	0.8	70.2	0.0	71.2	0.0	96.6	0.0	75.4	0.0	70.4	0.0	73.4	0.0	54.8	0.0	69.2	0.0	77.8	0.0	68.0	0.0	68.8	0.0	74.6	0.0	115.6	0.0	79.2	0.0	82.5
L	18	4.8	70.2	1.6	66.6	0.0	86.8	0.0	67.0	0.4	65.0	0.4	65.0	0.0	49.8	0.0	65.8	0.8	73.8	0.0	64.0	0.0	59.2	0.0	71.0	0.0	111.4	1.4	75.6	0.7	77.2
Ma	19	4.8	74.4	2.8	67.4	6.0	89.6	1.8	66.2	1.6	64.0	6.2	66.0	2.8	49.2	2.0	65.2	1.4	74.4	2.2	64.2	12.6	62.4	4.8	70.8	1.6	112.0	1.0	76.6	3.3	78.2
Mi	20	0.0	74.4	0.0	67.4	0.0	89.4	0.0	66.2	0.0	64.0	0.0	66.0	0.2	49.4	0.0	65.0	0.0	74.4	0.0	64.2	0.0	62.0	0.0	70.2	0.0	111.6	0.0	76.6	0.0	78.0
J	21	0.0	74.4	0.0	67.4	0.0	89.4	0.0	66.2	0.0	63.6	0.0	66.0	0.0	49.4	0.0	64.4	0.0	70.8	0.0	64.2	0.0	61.2	0.0	70.2	0.0	111.4	0.0	76.6	0.0	77.8
V	22	2.4	76.8	1.8	69.0	2.2	91.6	1.6	67.4	1.8	65.2	3.2	68.8	2.6	51.6	2.4	66.2	5.6	76.0	2.2	66.0	8.6	69.0	4.8	74.6	3.0	113.8	2.4	78.4	3.0	80.4
S	23	1.4	78.2	1.2	70.2	0.0	91.6	1.2	68.6	1.0	66.2	2.4	70.8	3.0	54.2	1.0	67.2	4.4	80.4	1.0	67.0	1.8	69.8	3.6	76.2	0.0	113.8	3.8	82.2	1.9	82.1
D	24	9.6	86.6	3.8	72.4	0.0	91.0	0.4	66.6	1.4	66.2	0.0	70.0	2.0	52.2	4.6	68.8	4.4	82.6	6.6	67.6	0.4	68.0	1.8	65.0	10.4	108.0	4.0	78.8	4.0	79.9
L	25	0.0	86.4	0.0	71.8	0.0	90.8	0.2	66.4	0.0	65.0	0.0	69.0	0.0	52.2	0.2	68.8	0.0	82.4	0.0	67.6	0.0	66.6	0.2	63.2	0.2	108.2	0.0	78.2	0.1	79.4
Ma	26	7.4	88.6	7.0	74.6	10.6	96.8	7.6	70.0	5.8	67.4	6.6	71.8	4.6	52.6	2.8	67.6	2.8	79.6	3.8	66.2	7.4	69.4	7.4	67.2	7.2	109.4	2.8	75.2	6.0	80.5
Mi	27	0.4	89.0	1.0	75.6	2.4	99.0	1.4	71.4	1.0	68.4	0.2	72.0	0.6	53.2	1.6	69.2	1.4	81.0	0.8	67.0	3.6	73.0	1.6	68.6	1.2	110.6	2.0	77.2	1.5	81.9
J	28	6.8	95.8	5.6	81.2	11.6	106.0	5.2	76.6	5.0	73.4	6.8	78.8	8.4	61.6	5.6	74.8	6.2	87.2	5.4	72.4	8.2	81.2	8.6	77.2	9.0	119.6	9.6	86.8	8.2	89.7
V	29	4.2	100.0	2.6	83.8	2.2	108.2	1.6	77.8	2.0	75.4	6.8	85.6	2.6	64.2	2.8	77.4	2.2	89.4	3.6	76.0	8.2	89.4	3.6	80.8	5.8	125.4	5.4	92.2	4.4	94.0
S	30	3.8	103.8	6.2	90.0	5.2	113.4	8.2	86.0	6.6	81.6	2.0	87.6	9.2	73.4	5.8	83.0	2.4	91.8	7.4	83.4	3.2	92.6	2.6	83.4	8.0	133.4	3.0	95.2	5.0	99.0
D	31	0.0	97.0	0.0	81.0	0.2	111.2	0.0	77.2	0.0	70.6	0.2	83.6	0.0	67.8	0.0	74.0	0.2	70.4	0.2	74.0	0.6	92.6	0.2	81.0	0.0	126.0	1.0	83.8	0.3	91.5
Ll. mes		109.0		94.2		123.0		90.4		85.4		91.6		77.6		87.4		97.6		88.8		97.8		87.2		139.4		102.0		104.8	
Máx. mes		34.2	131.0	31.0	118.8	55.2	156.0	34.0	138.2	25.2	116.0	21.6	133.2	17.6	134.2	31.4	146.4	21.6	130.2	26.4	131.4	27.0	189.4	25.6	153.8	40.2	139.8	17.6	95.2	29.5	128.8
Ll. acum. en el año		669.4		558.4		637.4		578.6		493.6		560.4		523.2		536.0		518.6		515.6		700.2		535.6		573.6		411.4		540.5	
No. de días lluvia año		67	44%	67	44%	75	49%	69	45%	62	41%	73	48%	69	45%	84	55%	69	45%	73	48%	86	57%	83	55%	77	51%	71	47%	93	61%





Días transcurridos en el año a la fecha			152
No. de días con algún Nivel de Alerta en el año			
Estación	**A**	**N**	**R**
Chec-Uribe	19	0	0
Alcázares	0	0	0
La Palma	12	0	0
Obs. Vulcanológico	6	0	0
El Carmen	0	0	0
Emas	5	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	14	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja: A 200 mm <= A25 < 300 mm
Naranja o media: N 300 mm <= A25 < 400 mm
Roja o alta: R A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes

UNIVERSIDAD NACIONAL DE COLOMBIA SEDE MANIZALES

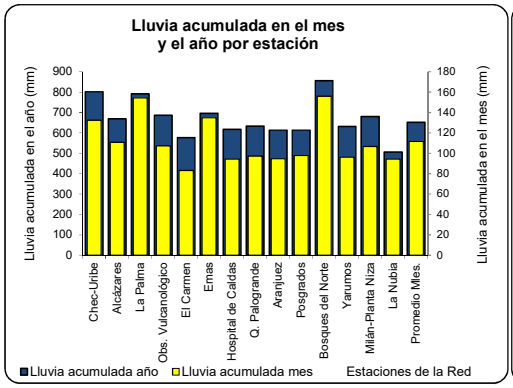
ESTACIONES HIDROMETEOROLÓGICAS PARA LA GESTIÓN DEL RIESGO POR DESLIZAMIENTOS EN MANIZALES

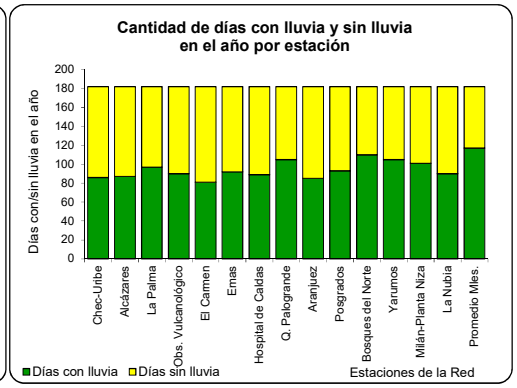
Sistema Integrado de Monitoreo Ambiental de Caldas - SIMAC

REGISTROS DE LLUVIA DIARIA Y PRECIPITACIÓN ACUMULADA EN LOS ÚLTIMOS 25 DÍAS (A25)

JUNIO DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
L	1	9.4	106.4	12.0	93.0	13.0	124.0	13.2	90.4	13.2	83.8	16.2	99.8	17.8	85.6	13.4	87.4	7.6	78.0	15.2	89.2	22.0	114.4	21.8	102.8	15.0	141.0	7.0	90.6	13.3	104.7
Ma	2	6.2	112.6	2.8	95.8	0.0	124.0	0.8	91.2	1.6	85.4	0.0	99.8	0.2	85.8	0.6	88.0	0.0	78.0	1.0	90.2	1.0	115.4	1.0	103.8	1.0	142.0	1.8	92.4	1.2	105.9
Mi	3	29.4	142.0	22.8	118.6	23.6	147.6	23.0	114.2	16.2	101.6	18.0	117.8	15.0	100.8	17.8	105.8	18.6	96.6	17.8	108.0	16.2	131.6	11.0	114.8	12.6	154.6	6.0	98.4	15.3	121.2
J	4	0.0	142.0	0.0	118.6	0.0	147.6	0.0	114.2	0.2	101.8	0.0	117.8	0.2	101.0	0.0	105.8	0.0	96.6	0.0	108.0	0.0	131.6	0.2	115.0	0.0	154.6	0.0	98.4	0.0	121.2
V	5	0.0	128.6	0.0	105.6	0.0	136.0	0.0	104.2	0.0	86.4	0.0	108.6	0.0	95.0	0.0	98.8	0.0	91.2	0.0	102.6	0.0	129.0	0.0	112.2	0.6	149.8	0.6	99.0	0.2	115.2
S	6	6.2	100.6	5.2	79.8	5.0	85.8	4.6	74.8	5.0	66.2	4.6	91.6	4.2	81.6	5.0	72.4	5.4	77.8	5.0	81.2	4.8	106.8	4.2	90.8	5.4	115.0	4.2	86.4	4.8	90.5
D	7	0.0	100.6	0.2	79.8	3.8	89.0	0.6	75.2	0.0	66.0	3.0	93.8	0.4	81.2	0.2	71.0	0.0	76.0	0.4	79.4	4.2	108.4	0.6	89.6	1.0	109.6	0.4	83.6	1.2	89.3
L	8	0.0	100.6	0.0	78.4	0.0	88.0	0.0	73.0	0.0	63.6	0.0	77.8	0.0	77.6	0.0	67.2	0.0	66.0	0.0	73.8	0.0	106.0	0.0	81.4	0.0	85.8	0.0	66.0	0.0	78.5
Ma	9	4.8	102.4	4.2	80.8	9.8	95.8	4.6	76.2	3.2	66.0	7.8	84.6	7.4	81.2	5.8	71.8	4.0	67.4	6.6	79.2	11.4	114.8	4.8	83.6	7.4	89.8	16.0	72.6	8.8	83.5
Mi	10	1.0	103.4	2.4	83.2	3.8	99.4	1.2	77.2	1.0	67.0	2.6	87.0	1.4	82.6	1.6	73.2	0.6	68.0	3.0	82.2	8.4	122.6	7.6	90.4	7.0	96.4	1.0	73.4	3.4	86.6
J	11	0.0	102.6	0.0	83.2	0.0	99.4	0.4	77.6	0.2	67.2	0.2	87.2	0.4	83.0	0.6	73.8	2.2	70.2	1.0	83.2	0.8	123.4	0.8	91.2	2.2	98.6	1.4	74.8	0.9	87.5
V	12	2.8	100.6	3.4	85.0	4.8	104.2	3.6	81.2	3.0	69.8	4.0	90.8	3.8	86.8	3.4	77.2	3.4	72.8	3.8	87.0	5.8	129.2	3.4	94.6	4.8	103.4	2.4	75.8	3.7	90.6
S	13	0.6	96.4	0.2	82.4	0.4	98.6	0.0	79.4	0.0	68.2	0.0	84.6	0.0	84.0	0.4	75.6	0.8	72.2	0.4	85.2	0.8	117.4	0.0	89.8	0.6	102.4	2.0	76.8	0.7	87.9
D	14	10.8	107.2	6.8	89.2	0.8	99.4	0.4	79.8	3.2	71.4	0.0	84.6	0.0	83.8	0.8	76.4	10.0	82.2	0.4	85.6	0.8	118.2	0.0	89.8	0.4	102.8	0.8	77.6	1.6	89.6
L	15	0.6	107.8	0.0	89.2	0.4	99.8	0.0	79.8	0.0	71.4	0.0	84.6	0.0	83.8	0.0	76.4	0.2	82.4	0.0	85.6	1.6	119.8	0.2	90.0	0.4	103.2	1.4	79.0	0.5	90.1
Ma	16	2.0	107.4	0.8	88.2	0.4	98.0	0.8	79.0	1.2	70.8	0.4	81.8	0.6	81.8	2.0	76.0	2.4	79.2	1.4	84.8	0.8	112.0	0.8	86.0	1.8	102.0	2.0	78.6	1.3	88.4
Mi	17	4.0	110.0	3.6	90.6	5.6	103.6	3.6	81.4	3.0	72.8	3.6	83.0	3.0	81.8	3.2	78.2	3.6	78.4	3.2	87.0	3.6	113.8	3.0	85.4	3.6	105.6	3.4	78.2	3.7	90.2
J	18	1.0	101.4	1.8	88.6	0.4	104.0	1.4	82.4	2.0	73.4	1.2	84.2	3.6	83.4	1.4	75.0	1.4	75.4	1.2	81.6	1.4	114.8	1.4	85.0	1.4	96.6	1.6	75.8	1.4	87.6
V	19	0.0	101.4	3.4	92.0	0.8	104.8	4.4	86.6	3.6	77.0	2.8	87.0	5.6	89.0	6.2	81.0	0.0	75.4	5.8	87.4	0.6	115.4	4.0	88.8	2.0	98.4	0.0	75.8	2.1	89.7
S	20	4.2	98.2	2.6	87.6	3.8	98.0	2.4	81.4	1.6	72.8	2.2	82.6	1.8	86.2	1.8	80.0	0.0	72.6	2.8	86.4	1.0	109.0	0.8	82.2	2.6	93.8	0.0	73.0	1.8	85.5
D	21	0.0	97.8	0.0	86.6	0.2	95.8	0.0	80.0	0.0	71.8	0.0	82.4	0.0	85.6	0.2	78.6	0.0	71.2	0.0	85.6	0.2	105.6	0.2	80.8	0.2	92.8	0.0	71.0	0.1	84.1
L	22	0.4	91.4	0.4	81.4	0.4	84.6	1.0	75.8	0.0	66.8	1.2	76.8	0.4	77.6	0.0	73.0	0.0	65.0	0.4	80.6	1.2	98.6	1.2	73.4	1.2	85.0	0.0	61.4	0.6	76.5
Ma	23	22.4	109.6	8.8	87.6	1.2	83.6	3.6	77.8	0.6	65.4	5.6	75.6	0.6	75.6	0.2	70.4	0.0	62.8	0.0	77.0	1.2	91.6	0.2	70.0	0.2	79.4	0.0	56.0	2.3	74.3
Mi	24	0.0	105.8	0.0	81.4	0.0	78.4	0.2	69.8	0.0	58.8	0.0	73.6	0.0	66.4	0.0	64.6	0.0	60.4	0.0	69.6	0.0	88.4	0.0	67.4	0.0	71.4	0.0	53.0	0.0	69.3
J	25	0.0	105.8	0.0	81.4	0.0	78.2	0.0	69.8	0.0	58.8	0.0	73.4	0.0	66.4	0.0	64.6	0.0	60.2	0.0	69.4	0.0	87.8	0.0	67.2	0.0	71.4	0.0	52.0	0.0	69.0
V	26	1.6	98.0	1.0	70.4	1.4	66.6	0.6	57.2	1.0	46.6	1.2	58.4	0.8	49.4	1.0	52.2	3.8	56.4	1.0	55.2	2.4	68.2	1.0	46.4	1.8	58.2	6.2	51.2	2.5	58.2
S	27	0.0	91.8	0.0	67.6	0.0	66.6	0.0	56.4	0.0	45.0	0.0	58.4	0.0	49.2	0.0	51.6	0.0	56.4	0.0	54.2	0.0	67.2	0.0	45.4	0.0	57.2	0.0	49.4	0.0	57.0
D	28	20.8	83.2	25.0	69.8	70.6	113.6	32.8	66.2	21.8	50.6	49.4	89.8	19.6	53.8	24.4	58.2	27.2	65.0	18.6	55.0	38.0	89.0	15.4	49.8	24.6	69.2	30.0	73.4	32.2	74.0
L	29	4.2	87.4	3.4	73.2	3.4	117.0	4.2	70.4	1.6	52.0	9.4	99.2	7.4	61.0	7.4	65.6	3.4	68.4	8.6	63.6	26.0	115.0	12.6	62.2	8.8	78.0	6.0	79.4	7.5	81.5
Ma	30	0.0	87.4	0.0	73.2	0.8	117.8	0.0	70.4	0.0	52.0	1.4	100.6	0.0	61.0	0.0	65.6	0.0	68.4	0.0	63.6	1.8	116.8	0.0	62.2	0.0	77.4	0.0	78.8	0.3	81.5
Mi	1																														
Ll. mes		132.4		110.8		154.4		107.4		83.2		134.8		94.2		97.4		94.6		97.6		156.0		96.2		106.6		94.2		111.6	
Máx. mes		29.4	142.0	25.0	118.6	70.6	147.6	32.8	114.2	21.8	101.8	49.4	117.8	19.6	101.0	24.4	105.8	27.2	96.6	18.6	108.0	38.0	131.6	21.8	115.0	24.6	154.6	30.0	99.0	32.2	121.2
Ll. acum. en el año		801.8		669.2		791.8		686.0		576.8		695.2		617.4		633.4		613.2		613.2		856.2		631.8		680.2		505.6		652.1	
No. de días lluvia año		86	47%	87	48%	97	53%	90	49%	81	45%	92	51%	89	49%	105	58%	85	47%	93	51%	110	60%	105	58%	101	55%	90	49%	117	64%





Días transcurridos en el año a la fecha			182
No. de días con algún Nivel de Alerta en el año			
Estación	**A**	**N**	**R**
Chec-Uribe	19	0	0
Alcázares	0	0	0
La Palma	12	0	0
Obs. Vulcanológico	6	0	0
El Carmen	0	0	0
Emas	5	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	14	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja: A 200 mm <= A25 < 300 mm
Naranja o media: N 300 mm <= A25 < 400 mm
Roja o alta: R A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes

UNIVERSIDAD NACIONAL DE COLOMBIA SEDE MANIZALES

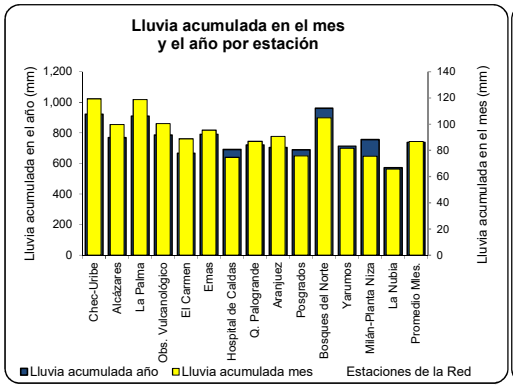
ESTACIONES HIDROMETEOROLÓGICAS PARA LA GESTIÓN DEL RIESGO POR DESLIZAMIENTOS EN MANIZALES

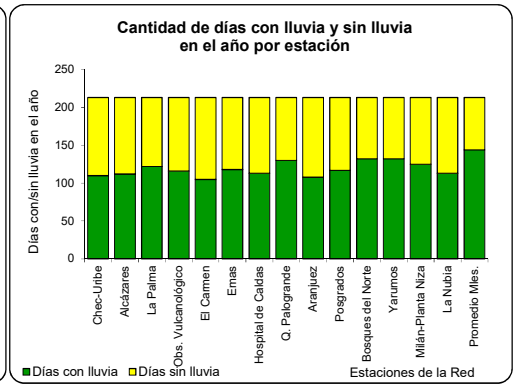
Sistema Integrado de Monitoreo Ambiental de Caldas - SIMAC

REGISTROS DE LLUVIA DIARIA Y PRECIPITACIÓN ACUMULADA EN LOS ÚLTIMOS 25 DÍAS (A25)

JULIO DE 2020

Estaciones		Chec-Uribe		Alcázares		La Palma		Observatorio Vulcanológico		El Carmen		Emas		Hospital de Caldas		Quebrada Palogrande-Ruta 30		Aranjuez		Posgrados		Bosques del Norte		Yarumos		Milán-Planta Niza		La Nubia		Promedio Manizales	
Propietarios		CHEC S.A. E.S.P		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		EMAS S.A. E.S.P		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR		UN-Manizales		Alcaldía/UGR		Alcaldía/UGR		Alcaldía/UGR			
Día		Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25	Ll. d.	A25
Mi	1	5.8	87.0	7.6	75.6	6.4	119.2	10.0	75.8	7.0	54.0	13.8	109.8	8.0	64.8	9.8	70.4	7.8	70.8	10.0	68.6	19.4	131.4	9.2	67.2	12.4	84.4	5.8	80.4	9.3	86.0
J	2	11.6	98.6	10.0	85.4	14.4	129.8	11.0	86.2	7.0	61.0	7.8	114.6	9.0	73.4	8.2	78.4	9.0	79.8	8.2	76.4	11.2	138.4	8.2	74.8	10.4	93.8	6.8	86.8	9.3	94.1
V	3	0.0	98.6	0.2	85.6	0.0	129.8	0.6	86.8	0.0	61.0	1.4	116.0	0.4	73.8	0.6	79.0	0.0	79.8	0.0	76.4	0.6	139.0	2.8	77.6	0.0	93.8	1.6	88.4	0.7	94.9
S	4	5.4	99.2	4.2	85.6	9.4	129.4	5.0	87.2	2.4	60.2	4.6	112.8	3.2	69.6	4.2	77.4	4.2	80.0	3.0	72.8	3.0	130.6	3.2	76.0	4.6	91.0	2.2	74.6	4.2	90.2
D	5	0.0	98.2	1.0	84.2	2.0	127.6	2.2	88.2	0.8	60.0	2.8	113.0	2.0	70.2	0.4	76.2	0.0	79.4	1.0	70.8	3.8	126.0	3.6	72.0	0.8	84.8	0.0	73.6	1.3	88.2
L	6	4.8	103.0	6.0	90.2	4.8	132.4	6.8	94.6	6.4	66.2	4.6	117.4	3.8	73.6	3.6	79.2	3.4	80.6	4.0	73.8	3.2	128.4	3.4	74.6	4.6	87.2	3.4	75.6	4.3	91.6
Ma	7	0.6	100.8	0.4	87.2	6.4	134.0	0.8	91.8	0.2	63.4	2.0	115.4	0.2	70.0	0.6	76.4	0.4	77.6	0.2	70.2	1.4	124.0	1.0	72.2	1.0	83.4	1.6	74.8	1.6	89.4
Mi	8	5.4	105.6	4.0	91.0	8.0	141.6	3.6	95.4	2.8	66.2	2.2	117.6	2.6	72.6	2.0	78.0	6.8	83.6	1.6	71.4	10.4	133.6	1.4	73.6	1.2	84.0	2.2	75.0	3.4	92.2
J	9	1.4	96.2	2.8	87.0	0.6	141.4	3.2	98.2	4.2	67.2	0.6	118.2	0.8	73.4	1.8	79.0	8.2	81.8	1.4	72.4	0.6	133.4	1.2	74.8	2.4	86.0	2.0	76.2	2.0	92.5
V	10	2.2	97.8	6.0	93.0	6.4	147.4	8.4	106.6	5.4	72.6	6.4	124.6	7.4	80.8	6.0	85.0	3.8	85.4	9.2	81.6	10.2	142.0	8.0	82.6	4.8	90.4	4.8	79.6	6.0	97.9
S	11	29.2	125.0	17.2	109.4	12.0	159.0	11.2	117.0	11.2	82.6	5.8	130.0	4.0	84.2	7.2	90.2	5.8	88.8	2.0	82.2	5.4	146.6	1.8	83.6	1.8	90.4	4.6	82.2	7.0	103.6
D	12	3.4	124.4	3.8	109.6	3.2	156.6	3.0	116.4	4.0	83.6	4.2	130.6	3.4	84.6	3.8	90.8	3.0	88.2	3.8	82.8	3.0	146.0	5.6	86.2	3.0	89.8	3.0	81.8	3.5	103.4
L	13	0.0	123.4	0.0	107.8	1.0	157.2	0.2	115.2	0.0	81.6	0.4	129.8	0.6	81.6	0.6	90.0	0.6	87.4	0.8	82.4	0.0	144.6	1.0	85.8	1.6	90.0	0.2	80.4	0.6	102.6
Ma	14	2.0	125.4	1.0	105.4	0.6	157.0	0.6	111.4	0.8	78.8	0.4	127.4	0.6	76.6	0.8	84.6	1.6	89.0	0.4	77.0	0.0	144.0	0.2	82.0	0.4	88.4	2.0	82.4	0.9	101.4
Mi	15	2.0	123.2	1.8	104.6	0.8	154.0	1.4	110.4	2.2	79.4	1.6	126.8	1.8	76.6	2.2	85.0	2.4	91.4	2.6	76.8	1.8	144.8	2.8	84.0	3.4	89.2	2.4	84.8	2.2	101.8
J	16	0.2	123.4	0.2	104.8	4.2	158.0	0.4	110.8	0.2	79.6	3.0	129.8	1.0	77.6	0.4	85.2	0.4	91.8	0.4	77.2	4.2	148.8	2.4	86.2	0.8	89.8	0.8	85.6	1.5	103.2
V	17	0.0	123.0	0.0	104.4	0.0	157.6	0.0	109.8	0.0	79.6	0.0	128.6	0.0	77.2	0.0	85.2	0.0	91.8	0.0	76.8	0.0	147.6	0.0	85.0	0.0	88.6	0.0	85.6	0.0	102.6
S	18	0.0	100.6	0.0	95.6	0.0	156.4	0.0	106.2	0.0	79.0	0.0	123.0	0.0	76.6	0.0	85.0	0.0	91.8	0.0	76.8	0.0	146.4	0.0	84.8	0.0	88.4	0.0	85.6	0.0	100.4
D	19	0.0	100.6	0.0	95.6	0.0	156.4	0.0	106.0	0.0	79.0	0.0	123.0	0.0	76.6	0.0	85.0	0.0	91.8	0.0	76.8	0.0	146.4	0.0	84.8	0.0	88.4	0.0	85.6	0.0	100.4
L	20	2.6	103.2	5.2	100.8	13.2	169.6	7.4	113.4	3.4	82.4	13.0	136.0	3.2	79.8	3.0	88.0	2.8	94.6	2.6	79.4	0.6	147.0	4.4	89.2	1.8	90.2	2.6	88.2	4.8	105.2
Ma	21	2.0	103.6	2.0	101.8	6.0	174.2	1.8	114.6	1.8	83.2	3.8	138.6	2.2	81.2	1.6	88.6	1.6	92.4	1.4	79.8	3.0	147.6	2.4	90.6	2.0	90.4	0.6	82.6	2.3	105.0
Mi	22	5.2	108.8	4.6	106.4	2.8	177.0	2.4	117.0	7.0	90.2	1.8	140.4	2.8	84.0	4.0	92.6	2.8	95.2	2.2	82.0	4.8	152.4	2.8	93.4	1.6	92.0	3.4	86.0	3.1	108.1
J	23	9.0	97.0	5.4	86.8	1.8	108.2	3.2	87.4	3.6	72.0	0.8	91.8	3.4	67.8	6.0	74.2	9.4	77.4	6.0	69.4	0.6	115.0	1.8	79.8	4.8	72.2	4.2	60.2	3.9	79.8
V	24	7.0	99.8	6.6	90.0	6.6	111.4	6.0	89.2	7.2	77.6	6.2	88.6	5.4	65.8	5.4	72.2	5.6	79.6	5.2	66.0	6.6	95.6	5.2	72.4	6.6	70.0	5.6	59.8	6.1	78.3
S	25	2.8	102.6	2.2	92.2	2.6	113.2	2.4	91.6	1.0	78.6	2.2	89.4	1.0	66.8	2.2	74.4	4.2	83.8	1.4	67.4	8.4	102.2	3.4	75.8	1.6	71.6	3.6	63.4	2.8	80.8
D	26	0.2	97.0	0.0	84.6	0.6	107.4	0.0	81.6	0.0	71.6	1.0	76.6	0.0	58.8	0.0	64.6	0.0	76.0	0.0	57.4	0.8	83.6	0.4	67.0	0.0	59.2	0.0	57.6	0.2	71.8
L	27	2.8	88.2	2.4	77.0	3.0	96.0	3.6	74.2	3.0	67.6	3.8	72.6	2.4	52.2	2.6	59.0	1.8	68.8	2.6	51.8	1.8	74.2	2.6	61.4	1.4	50.2	0.8	51.6	2.1	64.6
Ma	28	0.6	88.8	0.8	77.6	0.6	96.6	1.0	74.6	0.2	67.8	0.6	71.8	0.0	51.8	0.0	58.4	0.0	68.8	0.0	51.8	0.0	73.6	0.2	58.8	0.0	50.2	0.0	50.0	0.2	64.1
Mi	29	0.0	83.4	0.0	73.4	0.0	87.2	0.0	69.6	0.0	65.4	0.0	67.2	0.0	48.6	0.0	54.2	0.0	64.6	0.0	48.8	0.0	70.6	0.0	55.6	0.0	45.6	0.0	47.8	0.0	59.9
J	30	1.2	84.6	0.4	72.8	0.0	85.2	0.4	67.8	0.4	65.0	0.0	64.4	0.0	46.6	0.4	54.2	0.8	65.4	0.4	48.2	0.0	66.8	0.6	52.6	1.0	45.8	1.6	49.4	0.7	59.3
V	31	12.0	91.8	4.0	70.8	1.4	81.8	3.8	64.8	6.6	65.2	0.6	60.4	5.4	48.2	9.4	60.0	4.2	66.2	5.4	49.6	0.0	63.6	2.0	51.2	1.6	42.8	0.0	46.0	2.7	57.6
Ll. mes		119.4		99.8		118.8		100.4		88.8		95.4		74.6		86.8		90.6		75.8		104.8		81.6		75.6		65.8		86.8	
Máx. mes		29.2	125.4	17.2	109.6	14.4	177.0	11.2	117.0	11.2	90.2	13.8	140.4	9.0	84.6	9.8	92.6	9.4	95.2	10.0	82.8	19.4	152.4	9.2	93.4	12.4	93.8	6.8	88.4	9.3	108.1
Ll. acum. en el año		921.2		769.0		910.6		786.4		665.6		790.6		692.0		720.2		703.8		689.0		961.0		713.4		755.8		571.4		738.8	
No. de días lluvia año		110	52%	112	53%	122	57%	116	54%	105	49%	118	55%	113	53%	130	61%	108	51%	117	55%	132	62%	132	62%	125	59%	113	53%	144	68%





Días transcurridos en el año a la fecha			213
No. de días con algún Nivel de Alerta en el año			
Estación	A	N	R
Chec-Uribe	19	0	0
Alcázares	0	0	0
La Palma	12	0	0
Obs. Vulcanológico	6	0	0
El Carmen	0	0	0
Emas	5	0	0
Hospital	0	0	0
Q. Palogrande-Ruta 30	0	0	0
Aranjuez	0	0	0
Posgrados	0	0	0
Bosques	14	0	0
Yarumos	0	0	0
Milán-Planta Niza	0	0	0
La Nubia	0	0	0
Promedio Manizales	0	0	0

CONVENCIONES

Ll. d. : Lluvia diaria en mm
A25 : Indicador lluvia antecedente de 25 días en mm
Ll. mes: Lluvia parcial o total en el mes en mm
Máx. mes: Valores máximos de lluvia diaria y A25 en el mes en mm
Ll. acum. en el año: Lluvia acumulada en el año en mm
No. días lluvia año: Número de días con lluvia en lo corrido del año
Resalta la lluvia diaria máxima del mes
valor lluvia diaria calculada con estaciones cercanas
* Indicadores con base a los días de funcinamiento de cada estación

NIVELES DE ALERTA (N.A.)

Amarilla o baja: A 200 mm <= A25 < 300 mm
Naranja o media: N 300 mm <= A25 < 400 mm
Roja o alta: R A25 >= 400 mm

OBSERVACIONES:

1. La lluvia promedio y acumulada en lo corrido del año para Manizales se calcularon con el Método de los Polígonos de Thiessen
2. Datos resaltados en rojo están incompletos

Entidades participantes