Statistiek van de extreme neerslag voor de Belgische gemeenten

Mont-de-l'Enclus (NIS 57095)

1. Geschatte neerslaghoeveelheid voor een neerslagduur van 10 minuten tot 30 dagen (rijen) en een terugkeerperiode van 2 tot 200 jaar (kolommen). Eenheid: mm.

	Terugkeerperiode (jaren)											
Duur	**2**	**5**	**10**	**15**	**20**	**25**	**30**	**40**	**50**	**75**	**100**	**200**
10 min	7.5	10.8	13.3	14.8	15.9	16.8	17.5	18.7	19.7	21.5	22.8	26.3
20 min	10.8	15.5	19.0	21.2	22.7	24.0	25.0	26.7	28.1	30.6	32.6	37.4
30 min	12.8	18.6	22.9	25.6	27.5	29.0	30.3	32.4	34.1	37.2	39.6	45.6
1 u	15.9	22.2	26.9	29.7	31.8	33.4	34.8	37.1	38.9	42.3	44.8	51.2
2 u	19.0	26.1	31.4	34.5	36.9	38.8	40.3	42.8	44.8	48.6	51.4	58.5
3 u	21.0	28.9	34.8	38.3	40.9	43.0	44.7	47.5	49.7	53.9	57.0	64.8
6 u	25.4	33.6	39.7	43.4	46.1	48.2	50.0	52.9	55.2	59.5	62.7	70.8
12 u	30.8	40.7	48.0	52.4	55.7	58.2	60.3	63.8	66.5	71.6	75.4	85.0
1 d	37.8	49.2	57.4	62.3	65.8	68.6	70.9	74.6	77.5	82.9	86.9	96.9
2 d	47.7	61.2	70.7	76.3	80.3	83.4	86.0	90.1	93.3	99.3	103.6	114.3
3 d	50.6	64.9	74.8	80.6	84.7	87.9	90.5	94.7	97.9	104.0	108.3	118.9
4 d	54.9	70.1	80.6	86.6	90.9	94.2	96.9	101.2	104.6	110.8	115.2	126.1
5 d	62.2	78.7	89.8	96.2	100.8	104.3	107.2	111.7	115.3	121.8	126.4	137.7
7 d	71.5	89.3	101.3	108.1	112.9	116.6	119.6	124.4	128.1	134.9	139.7	151.4
10 d	85.0	104.8	118.0	125.4	130.7	134.7	138.0	143.1	147.1	154.3	159.5	171.8
15 d	102.9	126.0	141.2	149.7	155.6	160.2	163.9	169.7	174.1	182.2	187.9	201.4
20 d	119.8	146.8	164.3	174.0	180.7	185.9	190.1	196.7	201.7	210.8	217.1	232.2
25 d	127.5	156.2	174.6	184.8	191.9	197.3	201.7	208.5	213.8	223.2	229.7	245.3
30 d	149.3	180.2	200.0	210.9	218.4	224.2	228.8	236.0	241.6	251.4	258.4	274.7

2. Geschatte neerslaghoeveelheid en standaardafwijking van deze schatting voor een neerslagduur van 10 minuten tot 30 dagen (rijen) en een terugkeerperiode van 2 tot 200 jaar (kolommen). Eenheid: mm.

	Terugkeerperiode (jaren)											
Duur	**2**	**5**	**10**	**15**	**20**	**25**	**30**	**40**	**50**	**75**	**100**	**200**
10 min	7.5	10.8	13.3	14.8	15.9	16.8	17.5	18.7	19.7	21.5	22.8	26.3
	0.2	0.3	0.5	0.7	0.8	0.9	1.0	1.2	1.4	1.7	1.9	2.7
20 min	10.8	15.5	19.0	21.2	22.7	24.0	25.0	26.7	28.1	30.6	32.6	37.4
	0.3	0.5	0.8	1.0	1.1	1.3	1.4	1.6	1.8	2.2	2.6	3.5
30 min	12.8	18.6	22.9	25.6	27.5	29.0	30.3	32.4	34.1	37.2	39.6	45.6
	0.4	0.6	0.9	1.1	1.2	1.4	1.5	1.7	1.9	2.2	2.5	3.3
1 u	15.9	22.2	26.9	29.7	31.8	33.4	34.8	37.1	38.9	42.3	44.8	51.2
	0.5	0.8	1.1	1.4	1.6	1.8	1.9	2.2	2.5	3.0	3.4	4.6
2 u	19.0	26.1	31.4	34.5	36.9	38.8	40.3	42.8	44.8	48.6	51.4	58.5
	0.6	0.9	1.3	1.6	1.8	2.0	2.2	2.5	2.8	3.4	3.9	5.2
3 u	21.0	28.9	34.8	38.3	40.9	43.0	44.7	47.5	49.7	53.9	57.0	64.8
	0.7	1.0	1.3	1.6	1.8	2.0	2.2	2.5	2.8	3.3	3.7	4.9
6 u	25.4	33.6	39.7	43.4	46.1	48.2	50.0	52.9	55.2	59.5	62.7	70.8
	0.8	1.1	1.4	1.8	2.1	2.3	2.6	3.0	3.3	4.1	4.7	6.4
12 u	30.8	40.7	48.0	52.4	55.7	58.2	60.3	63.8	66.5	71.6	75.4	85.0
	1.1	1.5	1.9	2.4	2.7	3.1	3.4	3.9	4.4	5.3	6.1	8.3
1 d	37.8	49.2	57.4	62.3	65.8	68.6	70.9	74.6	77.5	82.9	86.9	96.9
	1.2	1.5	1.8	2.0	2.3	2.4	2.6	2.9	3.1	3.6	4.0	5.1
2 d	47.7	61.2	70.7	76.3	80.3	83.4	86.0	90.1	93.3	99.3	103.6	114.3
	1.8	2.4	3.0	3.5	3.9	4.3	4.6	5.1	5.5	6.4	7.1	8.9
3 d	50.6	64.9	74.8	80.6	84.7	87.9	90.5	94.7	97.9	104.0	108.3	118.9
	2.2	2.9	3.6	4.1	4.5	4.9	5.2	5.7	6.1	6.9	7.6	9.3
4 d	54.9	70.1	80.6	86.6	90.9	94.2	96.9	101.2	104.6	110.8	115.2	126.1
	2.6	3.2	3.8	4.2	4.5	4.8	5.0	5.4	5.8	6.5	7.0	8.4
5 d	62.2	78.7	89.8	96.2	100.8	104.3	107.2	111.7	115.3	121.8	126.4	137.7
	2.9	3.6	4.2	4.6	4.9	5.2	5.4	5.8	6.1	6.7	7.2	8.5
7 d	71.5	89.3	101.3	108.1	112.9	116.6	119.6	124.4	128.1	134.9	139.7	151.4
	3.5	4.2	4.8	5.1	5.4	5.6	5.8	6.2	6.5	7.0	7.4	8.6
10 d	85.0	104.8	118.0	125.4	130.7	134.7	138.0	143.1	147.1	154.3	159.5	171.8
	4.4	5.4	6.2	6.6	7.0	7.2	7.5	7.9	8.2	8.8	9.3	10.6
15 d	102.9	126.0	141.2	149.7	155.6	160.2	163.9	169.7	174.1	182.2	187.9	201.4
	5.4	6.5	7.3	7.7	8.0	8.3	8.5	8.8	9.0	9.5	9.8	10.7
20 d	119.8	146.8	164.3	174.0	180.7	185.9	190.1	196.7	201.7	210.8	217.1	232.2
	6.3	7.8	8.7	9.3	9.7	10.0	10.2	10.6	10.9	11.5	12.0	13.1
25 d	127.5	156.2	174.6	184.8	191.9	197.3	201.7	208.5	213.8	223.2	229.7	245.3
	7.1	8.7	9.9	10.6	11.2	11.6	12.0	12.6	13.0	14.0	14.7	16.5
30 d	149.3	180.2	200.0	210.9	218.4	224.2	228.8	236.0	241.6	251.4	258.4	274.7
	7.8	9.6	11.0	11.8	12.5	13.1	13.5	14.3	14.9	16.2	17.1	19.5

3. 95%-betrouwbaarheidsinterval van de geschatte neerslaghoeveelheid voor een neerslagduur van 10 minuten tot 30 dagen (rijen) en een terugkeerperiode van 2 tot 200 jaar (kolommen). Eenheid: mm.

	Terugkeerperiode (jaren)											
Duur	**2**	**5**	**10**	**15**	**20**	**25**	**30**	**40**	**50**	**75**	**100**	**200**
10 min	7.1	10.2	12.3	13.5	14.3	15.0	15.5	16.4	17.0	18.2	19.1	21.1
	7.9	11.5	14.3	16.1	17.5	18.6	19.5	21.1	22.3	24.8	26.6	31.5
20 min	10.2	14.5	17.5	19.3	20.5	21.5	22.3	23.5	24.5	26.3	27.5	30.6
	11.5	16.5	20.5	23.0	24.9	26.5	27.8	29.9	31.7	35.0	37.6	44.3
30 min	12.0	17.4	21.2	23.5	25.1	26.4	27.4	29.1	30.4	32.9	34.6	39.0
	13.6	19.8	24.6	27.6	29.9	31.7	33.2	35.7	37.8	41.6	44.5	52.1
1 u	15.0	20.7	24.7	27.0	28.7	30.0	31.0	32.7	34.0	36.4	38.1	42.2
	16.8	23.7	29.0	32.4	34.9	36.9	38.6	41.4	43.7	48.1	51.4	60.2
2 u	17.9	24.3	28.9	31.5	33.4	34.8	36.0	37.9	39.3	42.0	43.9	48.4
	20.1	27.8	33.8	37.6	40.4	42.7	44.6	47.8	50.3	55.2	58.9	68.7
3 u	19.7	27.0	32.2	35.2	37.3	39.0	40.4	42.6	44.3	47.4	49.7	55.2
	22.4	30.9	37.4	41.5	44.5	46.9	49.0	52.4	55.1	60.3	64.2	74.4
6 u	23.8	31.5	36.9	39.9	42.1	43.7	45.0	47.1	48.7	51.5	53.6	58.3
	27.0	35.7	42.6	46.9	50.1	52.8	55.0	58.7	61.7	67.4	71.8	83.2
12 u	28.7	37.9	44.2	47.8	50.3	52.2	53.7	56.1	58.0	61.2	63.5	68.8
	33.0	43.6	51.9	57.1	61.0	64.2	66.9	71.4	75.0	82.0	87.3	101.2
1 d	35.5	46.4	53.9	58.3	61.4	63.8	65.8	68.9	71.4	75.8	79.0	86.8
	40.2	52.1	60.9	66.3	70.2	73.4	76.0	80.2	83.6	90.1	94.8	107.0
2 d	44.2	56.5	64.8	69.4	72.5	75.0	77.0	80.1	82.4	86.7	89.7	96.7
	51.3	65.9	76.7	83.2	88.0	91.8	95.0	100.1	104.2	111.8	117.5	131.8
3 d	46.2	59.2	67.7	72.5	75.8	78.3	80.4	83.5	86.0	90.3	93.4	100.6
	54.9	70.6	81.9	88.7	93.6	97.4	100.6	105.8	109.9	117.6	123.2	137.2
4 d	49.9	63.9	73.2	78.4	82.0	84.8	87.0	90.6	93.3	98.1	101.5	109.6
	59.9	76.3	87.9	94.8	99.7	103.6	106.8	111.9	115.9	123.5	128.9	142.6
5 d	56.5	71.6	81.6	87.2	91.1	94.2	96.6	100.4	103.3	108.6	112.3	121.0
	68.0	85.8	98.1	105.2	110.4	114.4	117.7	123.0	127.2	134.9	140.5	154.4
7 d	64.7	81.1	91.9	98.0	102.3	105.6	108.2	112.3	115.5	121.2	125.1	134.6
	78.4	97.6	110.6	118.2	123.5	127.7	131.1	136.5	140.8	148.6	154.3	168.2
10 d	76.4	94.2	105.9	112.5	117.0	120.5	123.3	127.7	131.0	137.0	141.2	151.1
	93.5	115.4	130.1	138.4	144.3	148.9	152.6	158.6	163.2	171.6	177.7	192.5
15 d	92.3	113.2	126.9	134.6	139.9	144.0	147.3	152.5	156.5	163.6	168.6	180.5
	113.4	138.8	155.5	164.8	171.4	176.4	180.5	186.9	191.8	200.7	207.1	222.3
20 d	107.4	131.5	147.1	155.8	161.8	166.4	170.1	175.9	180.3	188.2	193.7	206.5
	132.2	162.0	181.4	192.2	199.7	205.4	210.1	217.5	223.1	233.3	240.6	257.9
25 d	113.6	139.1	155.2	164.0	170.1	174.6	178.3	183.9	188.2	195.8	201.0	213.0
	141.3	173.3	194.0	205.7	213.8	220.1	225.1	233.1	239.3	250.5	258.5	277.6
30 d	133.9	161.5	178.5	187.7	193.9	198.6	202.3	208.0	212.3	219.8	224.9	236.5
	164.7	199.0	221.5	234.1	242.9	249.8	255.3	264.1	270.8	283.1	291.8	312.9

4. Schatting van de coefficienten van Montana.
Formule van Montana : intensiteit[mm/h] = a . duur[min]$^{-b}$ voor verschillende tijdsduren
a_1, b_1 : duur $<$ 25 min
a_2, b_2 : duur tussen 25 min en 6000 min (= 100 h)
a_3, b_3 : duur $>$ 6000 min (= 100 h)

Terugkeerperiode (jaren)	a_1	b_1	a_2	b_2	a_3	b_3
2	134.4	0.4730	299.0	0.7215	53.0	0.5227
5	193.3	0.4742	461.3	0.7443	80.9	0.5442
10	236.1	0.4721	591.2	0.7573	105.9	0.5596
15	261.6	0.4703	673.7	0.7641	122.9	0.5686
20	280.1	0.4688	735.8	0.7688	136.3	0.5750
25	294.7	0.4675	786.1	0.7723	147.4	0.5799
30	306.9	0.4664	828.8	0.7751	157.1	0.5840
40	326.4	0.4646	899.2	0.7795	173.6	0.5904
50	341.8	0.4631	956.4	0.7828	187.3	0.5954
75	370.7	0.4603	1066.9	0.7887	214.8	0.6045
100	391.8	0.4581	1150.7	0.7928	236.4	0.6109
200	445.0	0.4526	1372.8	0.8026	297.0	0.6267

Referenties

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