

Table S1. Rainfall intensity-duration-frequency (IDF) Brazil with $c > 1$.

No	Station	K	n	b	c	t*(hours)
1	Parintins	5775.7	0.2	30.0	1.0	25.0
2	Teodoro Sampaio	5850.0	0.2	51.8	1.0	41.1
3	Ponte Serafim	4073.9	0.2	27.9	1.1	6.4
4	Medeiros Neto	6899.2	0.2	40.9	1.1	6.4
5	Juazeiro	5592.6	0.2	40.0	1.1	7.2
6	Itamaraju	4032.9	0.2	28.6	1.1	7.9
7	Fazenda Refrigério	3950.0	0.2	33.9	1.0	20.2
8	Brotas de Macaúbas	4210.0	0.2	32.5	1.0	12.9
9	Argoim	8999.0	0.2	56.1	1.1	7.9
10	São João da Cachoeira Grande	5829.1	0.2	33.4	1.1	6.3
11	Ecoporanga	5666.2	0.2	43.6	1.1	13.2
12	Córrego de Boa Esperança	4350.8	0.2	40.3	1.0	223.6
13	Acesita (Coronel Fabriciano)	6010.4	0.2	44.8	1.0	24.9
14	Aimorés	5695.9	0.2	36.7	1.0	18.5
15	Aiuruoca	8394.5	0.2	40.7	1.2	4.1
16	Araguari	10,246.2	0.2	53.0	1.1	6.1
17	Barbacena	3000.0	0.2	23.1	1.0	128.2
18	Barra do Cuité	5400.4	0.2	47.6	1.0	19.3
19	Barra do Jequitai	11,285.1	0.2	45.9	1.2	3.4
20	Bom Jardim de Minas	3195.3	0.2	30.1	1.0	45.6
21	Brás Pires	4645.3	0.2	35.0	1.0	12.9
22	Cachoeira da Manteiga	3794.3	0.2	34.6	1.0	44.3
23	Cachoeira do Paredão	3352.3	0.2	27.4	1.0	50.7
24	Capitânea	6040.2	0.2	37.6	1.1	6.3
25	Capitão Enéas	8561.4	0.2	48.4	1.1	6.5
26	Caratinga	5069.8	0.2	35.9	1.0	12.5
27	Colônia do Jaíba	6527.5	0.2	32.1	1.1	3.8
28	Conceição do Mato de Dentro (ANEEL)	9459.8	0.2	34.5	1.2	2.6
29	Congonhas	3359.6	0.2	25.1	1.0	16.1

30	Entre Rios de Minas	3655.2	0.2	27.6	1.0	115.2
31	Fazenda Buritis	10,030.6	0.1	45.2	1.2	4.9
32	Fazenda Correntes	3716.1	0.2	28.6	1.0	14.0
33	Fazenda Curralinho	4784.3	0.2	34.2	1.1	8.6
34	Fazenda das Pedras (Três Marias)	4782.2	0.2	33.8	1.0	15.2
35	Fazenda Juca Casemiro	6058.8	0.2	32.9	1.1	6.1
36	Grão Mongol	5619.0	0.2	37.9	1.1	8.5
37	Itinga	6483.0	0.2	35.2	1.2	3.8
38	Itumirim	4159.3	0.2	33.8	1.0	112.7
39	Janaúba	4323.8	0.2	45.9	1.0	25.5
40	Juatuba	6985.6	0.2	46.5	1.1	8.4
41	Lavras	10,224.8	0.2	56.3	1.1	6.3
42	Machado	3811.3	0.2	20.3	1.1	4.5
43	Monte Alegre de Minas	5492.3	0.2	40.1	1.1	11.0
44	Muzambinho	3543.4	0.2	18.2	1.0	6.9
45	Paracatu	9099.0	0.2	49.2	1.1	6.6
46	Pedra Azul	4452.0	0.2	37.3	1.0	47.9
47	Pompéu	4988.6	0.2	32.2	1.0	13.7
48	Ponte Nova	9920.0	0.2	46.7	1.1	5.3
49	Ponte Raul Soares	3316.8	0.2	32.1	1.0	89.0
50	Porto dos Poções	5240.5	0.2	30.5	1.1	7.8
51	Porto Extrema	5212.5	0.2	33.7	1.1	9.2
52	Presidente Juscelino	3574.3	0.2	21.7	1.0	11.0
53	Salinas	4600.0	0.2	35.0	1.0	17.7
54	Santana do Jacaré	3628.1	0.2	29.5	1.0	44.7
55	São Francisco	3666.0	0.2	32.8	1.0	14.4
56	São Gotardo	5154.3	0.2	28.9	1.1	6.7
57	São João dos Buritis	2960.9	0.2	18.1	1.0	100.8
58	Serra Azul	8376.9	0.2	52.2	1.1	7.3
59	Serra do Salitre	5786.5	0.2	35.3	1.1	7.6
60	Sete Lagoas (ANEEL)	5309.2	0.2	48.3	1.1	14.4
61	Sete Lagoas (INMET)	3938.8	0.2	32.8	1.0	136.8

62	Três Marias	6168.2	0.2	37.1	1.1	6.9
63	Coritiba	5950.0	0.2	26.0	1.2	2.9
64	Coritiba Prado Velho	3221.1	0.3	26.0	1.0	43.3
65	Manoel Duarte (Rio das Flores)	9900.0	0.2	54.1	1.1	6.9
66	Rio da Cidade (Petrópolis)	9756.8	0.2	41.6	1.1	5.0
67	Vargem Alta (Bom Jardim)	8520.4	0.8	33.2	1.1	4.2
68	Blumenau	6649.2	0.2	43.0	1.1	7.2
69	CRHEA (Itiapina)	5369.2	0.2	31.9	1.1	7.3
70	Guarapiranga	8682.7	0.2	59.2	1.1	12.5
71	Itirapina	7818.2	0.2	55.2	1.1	11.2
72	Ribeirão Bonito	3257.8	0.2	30.9	1.0	64.4
73	Ribeirão do Feijão	9985.0	0.2	56.8	1.1	7.0
74	Alvorada	9990.6	0.2	56.6	1.1	10.9
75	Dianópolis	4642.2	0.2	35.9	1.1	11.7
76	Formoso do Araguaia	8740.4	0.2	54.7	1.1	11.7
77	Guaraí	8650.4	0.2	41.4	1.1	7.0
78	Miracema do Tocantins	5958.1	0.2	35.3	1.0	13.7
79	Projeto Rio Formoso	9862.0	0.2	69.6	1.1	16.1
80	Tocantinópolis	8950.3	0.2	71.1	1.0	43.9

Source: Pruski (2006) [1].

Table S2. Rainfall intensity-duration-frequency (IDF) Mexico with $c > 1$.

No	Station	K	n	b	c	t*(hours)
1	Álamos	1.92	10.00	0.69	1.23	3.07
2	Altamira	2.07	10.00	1.04	1.05	22.13
3	Angamacutiro	2.22	10.00	0.66	1.43	1.53
4	Atlacomulco	2.27	10.00	0.79	1.40	1.99
5	Cabo San Lucas	2.27	10.00	1.04	1.12	8.76
6	Calakmul	3.84	10.00	1.62	1.43	3.77
7	Cd. Alemán	2.28	10.00	1.35	1.03	49.93
8	Celestún	2.95	10.00	1.26	1.36	3.55
9	Chapala	2.32	10.00	0.73	1.39	1.86

10	Chinatú	1.99	10.00	0.66	1.25	2.68
11	Chinipas	5.28	10.00	1.64	1.70	2.34
12	ENCB	19.36	10.00	2.53	2.35	1.87
13	Huamantla	4.23	10.00	1.21	1.76	1.59
14	Huejutla	3.02	10.00	1.83	1.09	19.62
15	Huimilpan	24.12	10.00	2.96	2.32	2.24
16	IMTA	2.57	10.00	1.05	1.27	3.86
17	Izúcar	7.68	10.00	2.37	1.69	3.44
18	Los Colomos	7.89	10.00	1.55	2.14	1.36
19	Matamoros	5.26	10.00	1.86	1.57	3.24
20	Pachuca	1.30	10.00	0.23	1.01	20.64
21	Psa. El Cuchillo	5.83	10.00	2.56	1.39	6.54
22	Pto. Ángel	2.33	10.00	1.14	1.11	10.41
23	SMN	10.94	10.00	2.28	2.00	2.28
24	Tuxpan	31.19	10.00	3.88	2.19	3.27
25	Urique	1.67	10.00	0.60	1.07	8.51
26	UTT	3.27	10.00	0.92	1.71	1.30
27	Zacatecas	28.60	10.00	2.51	2.63	1.54

Source: Manzano-Agugliaro et al. (2014) [2].

Table S3. Rainfall intensity-duration-frequency (IDF) India with $c > 1$.

No	Station	K	n	b	c	t*(hours)
1	Amitsar	14.41	0.1304	1.4	1.2963	4.72
2	Jodhpur	4.098	0.1677	0.5	1.028	17.86
3	Srinagar	1.503	0.273	0.25	1.0636	3.93
4	Nagpur	11.45	0.156	1.25	1.0324	38.58
5	Aurangabad	6.081	0.1459	0.5	1.0923	5.42
6	Bangalore	6.275	0.1262	0.5	1.128	3.91
7	Hyderabad	5.25	0.1354	0.5	1.0295	16.95

Source: Subramanya (2013) [3].

References

1. Pruski, F.F.; Teixeira, A.F.; Silva, D.D.; Cecílio, R.A.; Silva, J.M.A. Plúvio 2.1: Chuvas intensas para o Brasil. In *HIDROS Dimens. Sist. Hidroagrícolas*; Pruski, F.F., Silva, D.D., Teixeira, A.F., Cecílio, R.A., Silva, J.M.A., Griebeler, N.P., Eds.; Editora UFV: Viçosa, Brazil, 2006; pp. 15–25.
2. Manzano-Agugliaro, F.; Zapata-Sierra, A.; Rubí-Maldonado, J.F.; Hernández-Escobedo, Q. Assessment of obtaining IDF curve methods for Mexico. *Technol. Cienc. Del. Agua*. **2014**, *5*, 151–161.
3. Subramanya, K. *Engineering Hydrology*, 4th ed.; Tata McGraw Hill Publishing Company Limited: New Delhi, India, 2013.