

Table 1. Combination of characteristics used in the regionalization technique to delimit hydrological homogeneous regions

No.	Characteristics
1	Longitude, latitude, altitude of measurement site, k
2	Longitude, latitude, altitude of measurement site, m
3	Longitude, latitude, altitude of measurement site, n
4	Longitude, latitude, altitude of measurement site, k, m, n
5	Longitude, latitude, altitude of measurement site, rainfall intensity for d30T2
6	Longitude, latitude, altitude of measurement site, rainfall intensity for d30T10
7	Longitude, latitude, altitude of measurement site, rainfall intensity for d60T2
8	Longitude, latitude, altitude of measurement site, rainfall intensity for d60T10
9	Longitude, latitude, altitude of measurement site, rainfall intensity for d24hT2
10	Longitude, latitude, altitude of measurement site, rainfall intensity for d24hT10
11	Longitude, latitude, altitude of measurement site, all the above intensities
12	all the above intensities d30T2, d30T10, d60T2, d60T10, d24hT2, d24hT10

k, m, n are the coefficients of the Sherman equation (equation 1).

d30T2, denotes the rainfall intensity in (mm/h) expected for a 30-minute storm duration and 2-year return period.

Table 2. Coefficients of the equations to characterize the Huff Curves in each hydrological homogeneous region

Region	ID	Huff Curve 1			Huff Curve 2			Huff Curve 3		
		a	b	c	a	b	c	a	b	c
REGION A Eq. (4)	A-GO	1.0	99900	-5.92	0.6879	147.43	-1.94			
	A-GOS	0.957	147.43	-2.50	-0.532	299.84	-1.659			
	A-PA	-16.90	22.52	-0.072	1.0	32664.24	-5.1605			
REGION B Eq. (5)	B-NO	1.0	6736.21	0.98	1.0	283.1	0.433			
	B-PAS	1.0	22.80	0.65	1.0	21.49	0.29	1.0	7988.26	0.546
	B-PE	1.0	13.99	0.45	1.0	11.69	0.27	5.68	164.17	0.149
REGION C Eq. (4)	C-PAS	1.0	2134.98	-5.60	0.765	1.65	-0.6139	-50.59	58.00	-0.0369
	C-CE	1.0	8701.74	-4.18	-2.588	55.82	-0.863			
	C-NO	1.0	8644.19x10 ³	-6.47	-0.0409	17479	-3.06			
	C-PA	1.0	17538.90	-4.89	-0.287	51.597	-1.16			

Table 3. Hyetogram for rainfall generated by Hurricane Marty at Huajicori station

Time	Lag time (h)	Rainfall height (mm)	Total rainfall (mm)	Rainfall intensity (mm/h)	Rainfall intensity I30 (mm/h)
06:30	0.167	5.50	5.50	32.939	
06:40	0.167	5.62	11.12	33.634	
06:50	0.167	5.69	16.81	34.069	33.6
07:00	0.167	5.72	22.53	34.242	34.0*
07:10	0.167	5.70	28.23	34.161	34.2
07:20	0.167	5.65	33.88	33.840	34.1
07:30	0.167	5.56	39.44	33.299	33.8
07:40	0.167	5.44	44.88	32.562	33.3