

Fecha: 2021-11-23



Ecuación cálculo curvas IDF

$$INTENSIDAD = C_1 (DURACIÓN + X_0)^{C_2}$$

Tabla coeficientes ecuación IDF

Id	Punto (E,N) EPSG:3116	Tiempo de retorno 3 años			Tiempo de retorno 5 años			Tiempo de retorno 10 años			Tiempo de retorno 25 años			Tiempo de retorno 50 años			Tiempo de retorno 100 años		
		C1	Xo	C2	C1	Xo	C2	C1	Xo	C2	C1	Xo	C2	C1	Xo	C2	C1	Xo	C2
0	996578,998360	1991.53	20.7	-0.98708	2065.54	18.7	-0.97224	2295.89	17.6	-0.96622	2578.14	16.6	-0.95855	2757.70	16.1	-0.95250	3067.83	15.9	-0.95569
1	1002334,1002894	2653.86	24.4	-0.97702	2808.31	23.2	-0.96435	2688.72	20.5	-0.93216	2689.30	18.2	-0.90658	2892.75	17.3	-0.90258	2836.81	16.0	-0.88291
2	1001786,995108	2300.97	29.3	-0.95767	2512.88	29.0	-0.94733	2707.19	28.5	-0.93134	3010.89	28.2	-0.91930	3355.99	28.5	-0.91910	3502.74	27.9	-0.90908
3	994789,999247	2362.36	22.8	-1.02394	2445.93	20.8	-1.00743	2762.02	19.6	-1.00543	3149.39	18.6	-1.00098	3373.33	18.1	-0.99426	3778.62	17.9	-0.99936
4	999787,999386	2260.31	22.7	-0.98007	2260.65	21.0	-0.95957	2540.31	20.8	-0.95609	2833.71	20.1	-0.94883	3324.24	22.1	-0.95858	3604.43	21.5	-0.95773
5	989785,1003363	2002.19	20.5	-1.01233	2345.15	19.8	-1.01672	3081.69	20.0	-1.03941	3773.45	19.6	-1.04690	4207.28	19.5	-1.04620	4745.89	19.4	-1.05110
6	1000857,1001298	2089.57	20.7	-0.95733	2127.03	18.9	-0.94110	2329.43	18.0	-0.93437	2593.83	17.4	-0.92647	2574.11	15.7	-0.90918	2982.39	16.5	-0.91986
7	999383,999851	2267.95	22.3	-0.98601	2168.23	19.8	-0.95804	2539.53	19.9	-0.96274	2894.91	19.6	-0.95804	3451.30	21.7	-0.97145	3746.08	21.1	-0.97063
8	1003422,1004420	2364.63	20.7	-0.95654	2202.46	17.7	-0.92058	2251.18	15.9	-0.90014	2350.82	14.3	-0.88206	2281.83	11.6	-0.86058	2381.74	11.3	-0.85173
9	1001492,1005114	2747.91	22.0	-0.99328	2865.94	20.6	-0.97970	3109.46	19.5	-0.97004	3420.53	18.7	-0.96074	3475.06	17.2	-0.94674	3814.41	17.5	-0.94698
10	989982,1002265	1966.16	20.9	-1.00881	2502.31	20.9	-1.02944	2874.29	19.7	-1.02750	3451.49	19.0	-1.03174	3999.33	19.2	-1.03907	4533.64	19.2	-1.04467
11	991593,1002215	2334.45	22.4	-1.03411	2718.42	21.6	-1.03784	3238.57	20.9	-1.04276	3875.84	20.4	-1.04704	4419.39	20.6	-1.05050	4946.57	20.2	-1.05447
12	1001548,1005407	2820.29	22.0	-0.99790	2970.53	20.8	-0.98567	3278.64	20.0	-0.97888	3603.26	19.2	-0.96924	3686.28	17.8	-0.95647	3997.13	17.9	-0.95484
13	989165,1003505	1987.66	20.6	-1.01431	2267.28	19.4	-1.01342	2885.57	19.4	-1.03072	3462.68	18.7	-1.03449	3975.39	18.8	-1.04016	4507.71	18.8	-1.04559
14	989753,1003777	2014.15	20.3	-1.01351	2401.68	19.6	-1.02093	3136.17	19.9	-1.04258	3997.63	20.1	-1.05649	4457.23	20.0	-1.05607	4990.06	19.8	-1.05971
15	989238,1003326	1987.66	20.6	-1.01431	2267.28	19.4	-1.01342	2885.57	19.4	-1.03072	3462.68	18.7	-1.03449	3975.39	18.8	-1.04016	4507.71	18.8	-1.04559

NOTAS:

- 1) Unidades en la aplicación de la ecuación IDF: Intensidad [mm/h], Duración [min]
- 2) Sistema de Referencia de Coordenadas: MAGNA-SIRGAS / Zona Bogotá Colombia, EPSG 3116.

Responsable EAB: _____