RECOMMENDATION ITU-R PN.837-1

CHARACTERISTICS OF PRECIPITATION FOR PROPAGATION MODELLING

(Question ITU-R 201/3)

(1992-1994)

The ITU Radiocommunication Assembly,

considering

a) that information on the statistics of precipitation intensity is needed for the prediction of attenuation and scattering caused by precipitation;

b) that the information is needed for all locations on the globe;

c) that a digitized version of the rainfall climate zone maps has been prepared that may be valuable in some computer applications,

recommends

1. that Figs. 1 to 3 be used to select the rain climate region for the prediction of precipitation effects;

2. that Table 1 be used to obtain the expected median cumulative distribution of rain rate for the rain climate region;

3. that when the rain climate zone is required in computer applications for any given set of geographic coordinates, the program RAINZONE be used. (The software for RAINZONE may be obtained from the ITU Radiocommunication Bureau.)

TABLE 1

Rain climatic zones

Rainfall intensity exceeded (mm/h) (Reference to Figs. 1 to 3)

Percentage of time (%)	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
1.0	<0.1	0.5	0.7	2.1	0.6	1.7	3	2	8	1.5	2	4	5	12	24
0.3	0.8	2	2.8	4.5	2.4	4.5	7	4	13	4.2	7	11	15	34	49
0.1	2	3	5	8	6	8	12	10	20	12	15	22	35	65	72
0.03	5	6	9	13	12	15	20	18	28	23	33	40	65	105	96
0.01	8	12	15	19	22	28	30	32	35	42	60	63	95	145	115
0.003	14	21	26	29	41	54	45	55	45	70	105	95	140	200	142
0.001	22	32	42	42	70	78	65	83	55	100	150	120	180	250	170

FIGURE 1
(See Table 1)

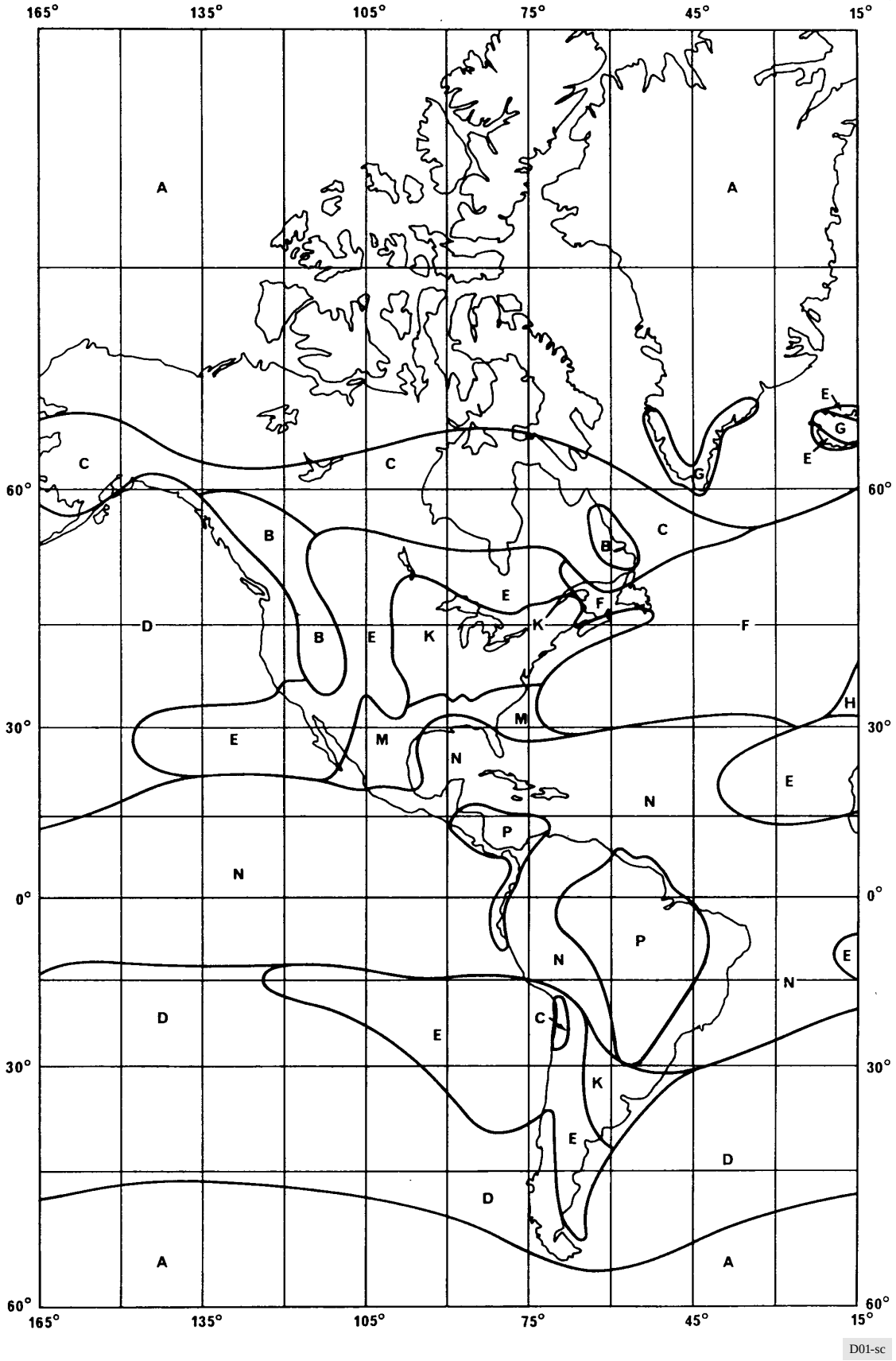

FIGURE 2
(See Table 1)

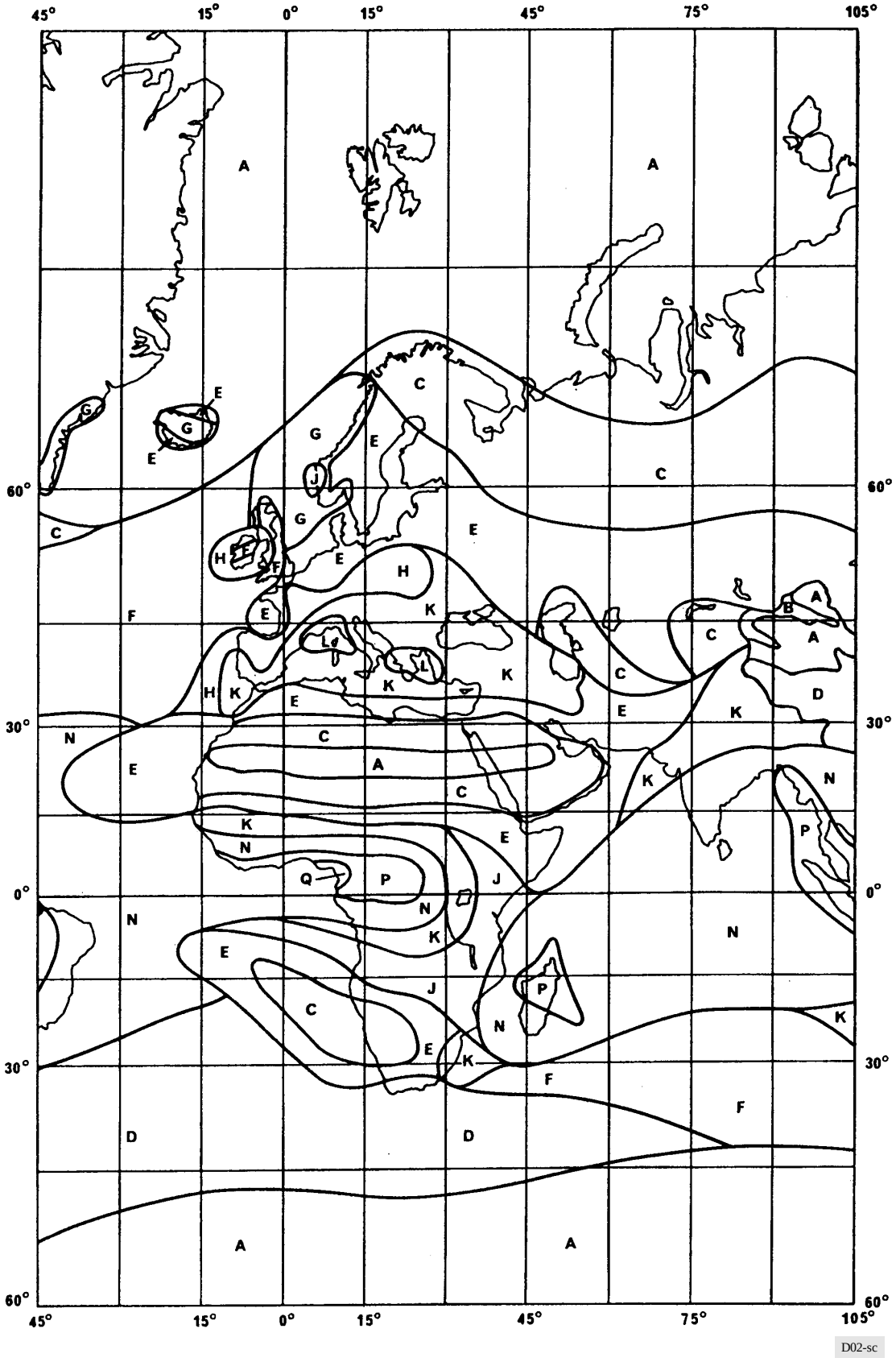
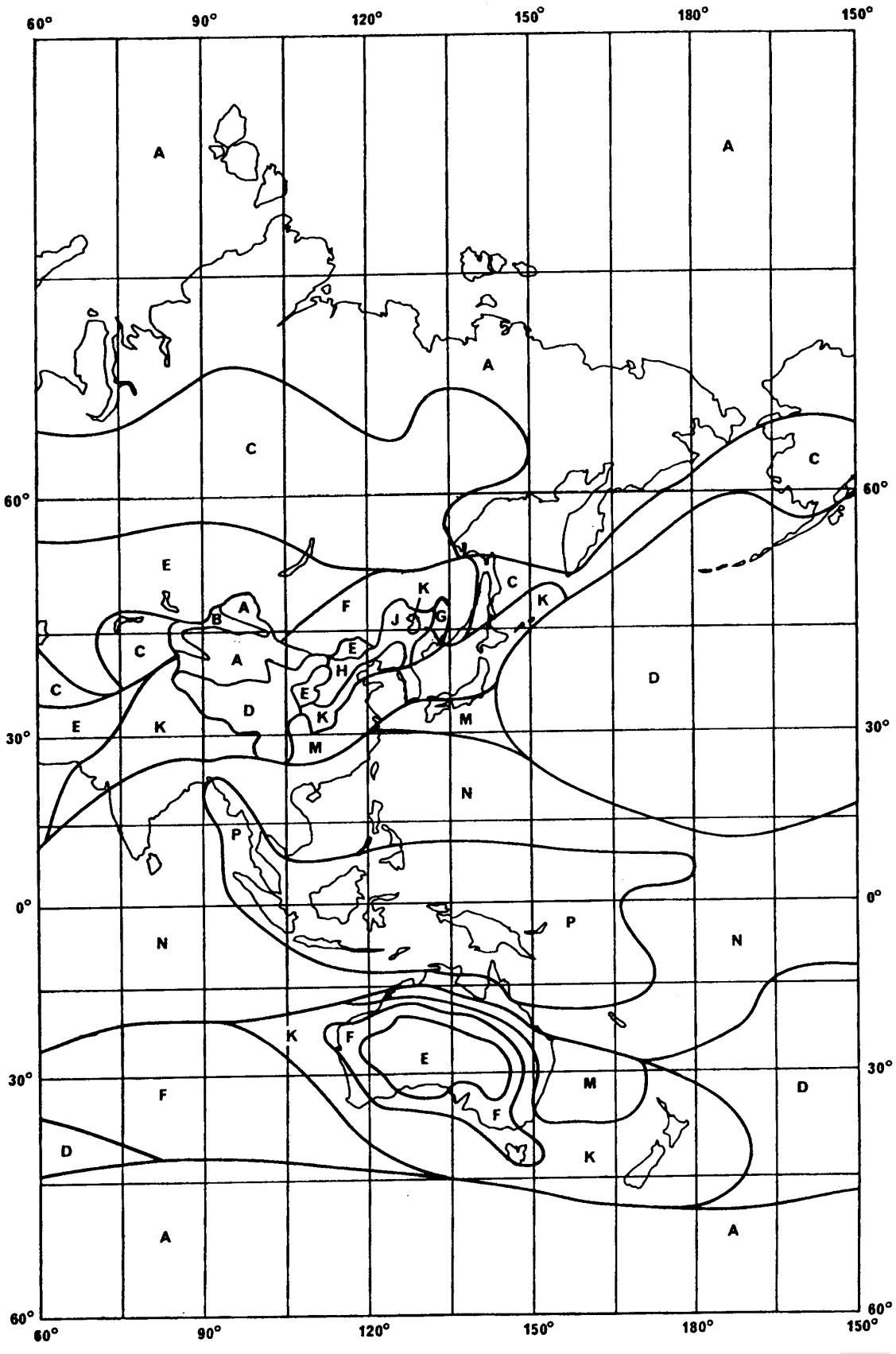
FIGURE 3
(See Table 1)