

D-2 VARIOUS RAINFALL VALUES AT RAINFALL STATIONS IN SARAWAK

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LEGEND

	DIVISION	UNIT
	STATION NO.	
	STATION NAME	
	SEASONAL RAINFALL	
(1)	(1) DEC. — MAR.	100 mm
(2)	(2) APR. — MAY	10 mm
(3)	(3) JUN. — SEP.	10 mm
(4)	(4) OCT. — NOV.	10 mm
	HALF-ANNUAL RAINFALL	
	RAINY SEASON	
(5)	(1) OCT. — MAR.	100 mm
(6)	(%)	%
(7)	(2) NOV. — APR.	100 mm
(8)	(%)	%
(9)	(3) DEC. — MAY	100 mm
(10)	(%)	%
	DRY SEASON	
(11)	(1) APR. — SEP.	100 mm
(12)	(%)	%
(13)	(2) MAY — OCT.	100 mm
(14)	(%)	%
(15)	(3) JUN. — NOV.	100 mm
(16)	(%)	%
(17)	MEAN ANNUAL RAINFALL	100 mm
(18)	MEAN MONTHLY RAINFALL DETERMINED ON THE BASIS OF ANNUAL RAINFALL DATA	10 mm
(19)	STANDARD DEVIATION OF MEAN MONTHLY RAINFALL	10 mm
(20)	RATIO OF $\frac{\text{MAX. MMR}}{\text{MIN. MMR}}$	RATIO
(21)	AMOUNT OF RAINFALL DIFFERENCE BETWEEN TWO PERIODS (OCT. — NOV.) — (APR. — MAY)	10 mm

REMARKS: MMR MEAN MONTHLY RAINFALL

TABLE-1 VARIOUS RAINFALL VALUES AT STATIONS IN THE 1ST DIVISION

Division	1	1	1	1	1	1	1	1	1	1	1	1
Station No.	1	01	3	5	6	7	13	14	16	17	18	19
Station Name	Kuching	3rd Mile	Sg. China	Bau	Tarat	Lundu	Telok Anson	Bemongok	Bematan	D.I.D Kuching	Simunjan	Pedawan
Seasonal Rainfall												
(1) (1) Dec. - Mar.	2006	2262	2661	1751	1874	1960	2379	2101	2350	2185	1988	1804
(2) (2) Apr. - May	557	380	616	555	548	355	392	580	283	458	556	598
(3) (3) Jun. - Sep.	874	717	965	858	774	585	744	831	500	851	841	917
(4) (4) Oct. - Nov.	664	604	753	662	667	448	643	645	468	723	651	711
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2670	2866	3414	2413	2541	2408	3022	2746	2818	2908	2639	2515
(6) (%)	65	72	68	63	66	72	73	66	78	69	65	62
(7) (2) Nov. - Apr. (mm)	2626	2776	3405	2409	2535	2398	2928	2756	2795	2797	2628	2489
(8) (%)	64	70	68	63	66	72	70	66	78	66	65	62
(9) (3) Dec. - May (mm)	2563	2642	3277	2306	2422	2315	2771	2681	2633	2643	2544	2403
(10) (%)	62	67	65	61	63	69	67	65	73	63	63	60
Dry Season												
(11) (1) Apr. - Sep. (mm)	1431	1097	1581	1413	1322	940	1136	1411	783	1309	1397	1515
(12) (%)	35	28	32	37	34	28	27	34	22	31	35	38
(13) (2) May - Oct. (mm)	1475	1187	1590	1417	1328	950	1230	1401	806	1420	1408	1541
(14) (%)	36	30	32	37	34	28	30	34	22	34	35	38
(15) (3) Jun. - Nov. (mm)	1538	1321	1718	1520	1441	1033	1387	1476	968	1574	1492	1627
(16) (%)	38	33	35	39	37	31	33	35	27	37	37	40
(17) Mean Annual Rainfall	4101	3963	4995	3826	3863	3348	4158	4157	3601	4217	4036	4030
(18) Mean Monthly Rainfall*	342	330	416	319	322	279	347	346	300	351	336	336
(19) Standard Deviation of Mean Monthly Rainfall	143	201	219	117	125	172	202	156	242	181	146	102
(20) Ratio of Maximum MMR to Minimum MMR	3.42	7.90	4.32	3.04	2.88	5.31	4.48	3.67	9.29	3.95	3.66	2.84
(21) Rainfall differences between two factors (Oct.-Nov.)-(Apr.-May)	107	224	137	107	119	93	251	65	185	265	95	113

Division	1	1	1	1	1	1	1	1	1	1	1	1
Station No.	24	25	26	27	28	31	32	33	34	35	37	38
Station Name	Dragon School	Batu Lintang	Matang	Serian	Sg. Baku	Tebelu	Sg. Piliang	Sg. Mafang	Nonok	Simaja Nonok	Sg. Rab	Samarahan
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1789	2166	2159	1759	1474	1288	1632	1531	2140	1661	1491	1882
(2) (2) Apr. - May	542	481	534	616	517	478	671	545	403	576	500	595
(3) (3) Jun. - Sep.	824	829	855	831	817	741	1085	847	769	881	841	876
(4) (4) Oct. - Nov.	657	633	663	671	548	658	802	609	615	646	592	729
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2446	2799	2822	2430	2022	1946	2434	2140	2755	2307	2083	2611
(6) (%)	64	68	67	63	60	61	58	61	70	61	61	64
(7) (2) Nov. - Apr. (mm)	2443	2753	2787	2455	2045	1911	2442	2153	2715	2312	2071	2586
(8) (%)	64	67	66	63	61	60	58	61	69	61	60	63
(9) (3) Dec. - May (mm)	2331	2647	2693	2375	1891	1766	2303	2076	2543	2237	1991	2477
(10) (%)	61	65	64	61	59	56	55	58	64	59	59	61
Dry Season												
(11) (1) Oct. - Mar. (mm)	1366	1310	1389	1447	1334	1219	1756	1392	1172	1457	1341	1471
(12) (%)	36	32	33	37	40	39	42	39	30	39	39	36
(13) (2) May - Oct. (mm)	1369	1356	1424	1422	1311	1254	1748	1379	1212	1452	1353	1496
(14) (%)	36	33	34	37	39	40	42	39	31	39	40	37
(15) (3) Jun. - Nov. (mm)	1481	1462	1518	1502	1465	1399	1887	1456	1384	1527	1433	1605
(16) (%)	39	35	36	39	41	44	45	42	36	41	41	39
(17) Mean Annual Rainfall	3812	4109	4211	3877	3356	3165	4190	3532	3927	3764	3424	4082
(18) Mean Monthly Rainfall*	318	342	351	323	280	264	349	294	327	314	285	340
(19) Standard Deviation of Mean Monthly Rainfall	112	170	174	108	77	78	76	84	178	91	77	119
(20) Ratio of Maximum MMR to Minimum MMR	3.16	3.73	4.15	2.98	2.37	2.40	1.80	2.53	4.05	2.36	2.21	2.77
(21) Rainfall differences between two factors (Oct.-Nov.)-(Apr.-May)	105	152	129	65	31	180	131	64	212	70	92	134

TABLE-2 VARIOUS RAINFALL VALUES AT STATIONS IN THE 1ST AND 2ND DIVISIONS

No. 3												
Division	1	1	1	1	1	1	1	1	1	1	1	1
Station No.	39	40	47	49	50	51	55	58	74	75	76	78
Station Name	Kpg. Ruman	Balai Ringin	Batu Kiting	Paya Faloh	Tobakang	Kpg. Gtunokor	Mid-Sadong	Santubong	Krokong	Bogu Rumpik	Kpg. Enabun	Kpg. Oly
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1461	1286	1944	2108	1504	1791	1849	2525	2173	2293	1523	2501
(2) (2) Apr. - May	550	585	497	523	535	577	578	445	630	508	375	668
(3) (3) Jun. - Sep.	960	898	846	810	899	908	832	878	949	910	787	1087
(4) (4) Oct. - Nov.	611	635	674	641	661	654	657	659	762	657	698	800
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2072	1921	2618	2749	2165	2445	2506	3184	2935	2950	2221	3301
(6) (%)	58	56	66	67	60	62	64	71	65	68	66	65
(7) (2) Nov. - Apr. (mm)	2068	1975	2550	2719	2126	2461	2553	3149	2878	2942	2122	3300
(8) (%)	58	58	64	67	60	62	65	71	64	68	63	65
(9) (3) Dec. - May (mm)	2011	1871	2441	2631	2039	2368	2427	2970	2803	2801	1898	3169
(10) (%)	56	55	62	65	57	61	62	66	62	64	56	62
Dry Season												
(11) (1) Apr. - Sep. (mm)	1510	1483	1343	1333	1434	1485	1400	1323	1579	1418	1162	1755
(12) (%)	42	44	34	33	40	38	36	29	35	32	34	35
(13) (2) May - Oct. (mm)	1514	1429	1411	1363	1473	1469	1353	1358	1636	1426	1261	1756
(14) (%)	42	42	36	33	40	38	35	29	36	32	37	35
(15) (3) Jun. - Nov. (mm)	1571	1533	1520	1451	1560	1562	1479	1537	1711	1567	1485	1887
(16) (%)	44	45	38	35	43	39	38	34	38	36	44	37
(17) Mean Annual Rainfall	3582	3404	3961	4082	3599	3930	3906	4507	4514	4368	3383	5056
(18) Mean Monthly Rainfall*	299	284	330	340	300	328	326	376	368	364	282	421
(19) Standard Deviation of Mean Monthly Rainfall	63	64	140	167	80	124	133	211	180	173	119	175
(20) Ratio of Maximum to Minimum Rainfall	2.04	2.18	3.13	3.76	2.34	3.61	3.81	4.68	3.81	4.43	3.66	3.71
(21) Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	61	50	177	118	126	77	79	214	132	149	322	132

No. 4												
Division	1	1	1	2	2	2	2	2	2	2	2	2
Station No.	79	80	81	1	2	3	4	5	6	7	8	9
Station Name	Bukit Katub	Sg. Bukit	Nyok Sobese	Sri Aman	Inbok Antu	Lingga	Rotong	Saratok	Stumbin	Kabong	Pantu	Selayau
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1539	1646	2052	1431	1311	1354	1383	1365	1356	1558	1597	2099
(2) (2) Apr. - May	560	586	435	635	609	490	536	497	566	459	570	539
(3) (3) Jun. - Sep.	854	890	762	974	875	921	936	915	850	966	948	944
(4) (4) Oct. - Nov.	592	639	536	730	665	661	716	601	613	713	761	693
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2131	2285	2588	2161	1976	2015	2099	1966	1969	2271	2358	2792
(6) (%)	60	61	68	57	57	59	59	58	58	61	61	65
(7) (2) Nov. - Apr. (mm)	2166	2291	2562	2159	1983	1980	2012	1921	1971	2186	2369	2790
(8) (%)	60	61	68	57	57	58	56	57	58	59	61	65
(9) (3) Dec. - May (mm)	2099	2232	2487	2066	1920	1844	1919	1862	1922	2017	2167	2638
(10) (%)	59	59	65	55	56	54	54	55	57	54	55	52
Dry Season												
(11) (1) Apr. - Sep. (mm)	1414	1476	1197	1609	1484	1411	1470	1412	1416	1425	1518	1483
(12) (%)	40	39	32	43	43	41	41	42	42	39	39	35
(13) (2) May - Oct. (mm)	1379	1470	1223	1611	1477	1446	1557	1457	1414	1510	1507	1485
(14) (%)	40	39	32	43	43	42	44	43	42	41	39	35
(15) (3) Jun. - Nov. (mm)	1446	1529	1298	1704	1540	1582	1650	1516	1463	1679	1709	1637
(16) (%)	41	41	35	45	44	46	46	45	43	46	45	38
(17) Mean Annual Rainfall	3545	3761	3785	3770	3460	3426	3569	3378	3385	3696	3876	4215
(18) Mean Monthly Rainfall*	295	313	315	314	288	286	297	282	282	308	323	356
(19) Standard Deviation of Mean Monthly Rainfall	91	94	161	68	58	85	72	66	70	108	99	147
(20) Ratio of Maximum to Minimum Rainfall	2.47	2.67	4.70	1.99	1.99	2.63	2.34	2.12	2.37	3.16	2.87	3.72
(21) Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	32	53	101	95	56	171	180	104	47	254	191	154

TABLE-3 VARIOUS RAINFALL VALUES AT STATIONS IN THE 2ND AND 3RD DIVISIONS

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Division	3	2	2	2	2	2	2	2	2	2	2	2
Station No.	10	11	19	20	21	23	24	25	28	29	30	32
Station Name	Sesang	Riddan	Tecadok	Ng. Tobalau	Ng. Tiga	Danau	Ng. Tutong	Ng. Delok	Malugu	Skrang	Pusa	Bunting
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1468	1259	1313	1256	1520	1437	1395	1291	1481	1239	1445	1415
(2) (2) Apr. - May	509	587	575	457	628	590	597	633	619	545	503	606
(3) (3) Jun. - Sep.	966	914	947	913	1082	1042	1060	1021	1118	888	873	931
(4) (4) Oct. - Nov.	812	666	688	651	710	700	742	667	704	567	622	754
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2280	1925	2001	1907	2230	2137	2137	1958	2185	1806	2067	2169
(6) (%)	61	56	57	58	57	57	56	54	56	56	60	59
(7) (2) Nov. - Apr. (mm)	2168	1894	2023	1882	2179	2157	2132	2026	2244	1828	2050	2157
(8) (%)	58	55	57	57	55	57	56	56	57	56	60	58
(9) (3) Dec. - May (mm)	1977	1846	1888	1713	2148	2027	1992	1924	2100	1784	1948	2021
(10) (%)	53	54	53	52	54	54	53	53	54	55	57	54
Dry Season												
(11) (1) Apr. - Sep. (mm)	1475	1501	1522	1370	1710	1632	1657	1654	1737	1433	1376	1537
(12) (%)	39	44	43	42	43	43	44	46	44	44	40	41
(13) (2) May - Oct. (mm)	1587	1532	1500	1395	1761	1612	1662	1586	1678	1411	1393	1549
(14) (%)	42	45	43	43	45	43	44	44	43	44	40	42
(15) (3) Jun. - Nov. (mm)	1778	1580	1635	1564	1792	1742	1802	1688	1822	1455	1495	1685
(16) (%)	47	46	47	48	46	46	47	47	46	45	43	46
Mean Annual Rainfall	3755	3426	3523	3277	3940	3769	3794	3612	3922	3239	3443	3706
Mean Monthly Rainfall	313	286	294	273	328	314	316	301	327	270	287	309
Standard Deviation of Mean Monthly Rainfall	97	59	75	79	67	70	78	73	78	51	88	90
Ratio of Maximum to Minimum Monthly Rainfall	2.54	2.30	2.31	2.52	2.16	2.24	2.25	2.22	2.40	2.26	3.09	3.16
Ratio of Maximum to Minimum Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	303	79	113	194	82	110	145	34	85	22	119	148

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Division	3	3	3	3	3	3	3	3	3	3	3	3
Station No.	5	7	10	13	17	22	36	37	39	40	51	52
Station Name	Mukah	Sibu Airport	Balingian	Rantau Panjang	Sibu J.E.R.	Sg. Kut.	Kanoyit V/V	Mukah A.	Sg. Arau	Ng. Jago	Sg. Isoni	Tamin
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1860	1321	1902	1335	1328	1596	1227	1985	2262	1340	1373	1062
(2) (2) Apr. - May	355	470	419	455	476	371	503	334	647	493	438	439
(3) (3) Jun. - Sep.	775	840	938	813	834	789	946	822	980	868	963	776
(4) (4) Oct. - Nov.	588	568	655	592	533	596	596	541	847	721	661	465
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2448	1889	2557	1927	1861	2192	1823	2526	3109	2061	2034	1527
(6) (%)	68	59	65	60	59	65	56	69	66	60	59	56
(7) (2) Nov. - Apr. (mm)	2361	1854	2463	1894	1846	2075	1804	2467	2990	1903	1943	1541
(8) (%)	65	58	63	59	58	62	55	67	63	56	57	56
(9) (3) Dec. - May (mm)	2215	1791	2321	1790	1804	1967	1730	2319	2909	1833	1811	1501
(10) (%)	62	56	60	56	57	59	52	63	62	53	53	55
Dry Season												
(11) (1) Apr. - Sep. (mm)	1130	1310	1357	1268	1310	1160	1449	1156	1627	1361	1401	1215
(12) (%)	32	41	35	40	41	35	44	31	34	40	41	44
(13) (2) May - Oct. (mm)	1217	1345	1451	1301	1325	1277	1468	1215	1746	1519	1492	1201
(14) (%)	35	42	37	41	42	38	45	33	37	44	43	44
(15) (3) Jun. - Nov. (mm)	1363	1408	1593	1405	1367	1385	1542	1363	1827	1589	1624	1241
(16) (%)	38	44	40	44	43	41	48	37	38	47	47	45
(17) Mean Annual Rainfall	3578	3199	3914	3195	3171	3352	3272	3682	4736	3422	3435	2742
(18) Mean Monthly Rainfall	298	267	326	266	264	279	273	307	395	285	286	229
(19) Standard Deviation of Mean Monthly Rainfall	110	64	140	71	62	116	52	157	150	72	75	68
(20) Ratio of Maximum to Minimum Monthly Rainfall	3.61	2.04	2.84	2.30	2.17	3.04	2.16	3.87	2.62	2.55	2.45	2.17
(21) Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	233	98	236	137	57	225	93	207	200	228	223	26

TABLE-4 VARIOUS RAINFALL VALUES AT STATIONS IN THE 3RD AND 4TH DIVISIONS

Division		3	4	4	4	4	4	4	4	4	4	4
Station No.		59	1	2	3	4	5	6	7	9	11	15
Station Name		Sibintak	Lutong	Binulu	Long Alcar	Wandi J.K.R	Miri Airport	Bekenu	Bario	Long Lams	Long Matil	Long Moh
Seasonal Rainfall												
(1)	(1) Dec. - Mar.	1375	1118	1410	1878	1005	961	984	726	1494	1217	1698
(2)	(2) Apr. - May	583	369	522	949	436	353	379	490	787	540	814
(3)	(3) Jun. - Sep.	1009	979	1104	1709	779	955	973	709	1147	1123	1499
(4)	(4) Oct. - Nov.	610	705	800	1103	529	659	572	395	887	751	1004
Half-Annual Rainfall												
Rainy Season												
(5)	(1) Oct. - Mar. (mm)	1985	1823	2210	2981	1534	1620	1556	1121	2381	1968	2702
(6)	(%)	55	57	58	53	56	55	54	48	55	50	54
(7)	(2) Nov. - Apr. (mm)	2057	1651	2085	2897	1478	1458	1442	1154	2327	1853	2589
(8)	(%)	58	52	54	51	54	50	50	50	54	51	52
(9)	(3) Dec. - May (mm)	1958	1487	1932	2027	1441	1314	1363	1216	2281	1757	2512
(10)	(%)	55	47	51	50	53	45	47	52	53	48	50
Dry Season												
(11)	(1) Apr. - Sep. (mm)	1592	1348	1626	2658	1215	1308	1352	1199	1934	1663	2313
(12)	(%)	45	43	42	47	44	45	46	52	45	50	46
(13)	(2) May - Oct. (mm)	1520	1520	1751	2742	1271	1470	1466	1166	1988	1778	2426
(14)	(%)	42	48	46	49	46	50	50	46	46	49	48
(15)	(3) Jun. - Nov. (mm)	1619	1684	1904	3612	1308	1614	1545	1104	2034	1874	2503
(16)	(%)	45	53	49	50	47	55	53	48	47	52	50
(17)	Mean Annual Rainfall	3577	3171	3836	5639	2749	2928	2908	2320	4315	3631	5015
(18)	Mean Monthly Rainfall*	298	264	320	470	230	244	242	193	360	301	418
(19)	Standard Deviation of Mean Monthly Rainfall	61	94	71	56	44	69	59	32	76	49	70
(20)	Ratio of Maximum to Minimum Rainfall	1.81	2.97	1.91	1.46	1.72	2.25	2.16	1.76	1.84	1.52	1.70
(21)	Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	27	336	278	154	93	206	193	95	100	211	190

Division		4	4	4	4	4	4	4	4	4	4	4
Station No.		17	18	19	20	21	23	25	26	32	33	34
Station Name		Long Ponal	Long Pihah	Bkt. Peninjau	Long Seriban	Tubau	Sebauh	Tatau	Long Anap	Long Subing	Long Jagan	Long Teru
Seasonal Rainfall												
(1)	(1) Dec. - Mar.	1528	1795	879	1401	2004	1295	1632	1454	2129	1569	1086
(2)	(2) Apr. - May	696	769	344	670	698	470	555	754	876	830	518
(3)	(3) Jun. - Sep.	979	1350	726	1200	1350	901	1044	1410	213	1320	855
(4)	(4) Oct. - Nov.	859	853	518	829	973	655	694	929	948	783	695
Half-Annual Rainfall												
Rainy Season												
(5)	(1) Oct. - Mar. (mm)	2387	2648	1397	2230	2977	1950	2326	2383	3077	2352	1781
(6)	(%)	59	56	57	54	59	59	59	52	60	52	56
(7)	(2) Nov. - Apr. (mm)	2314	2619	1275	2158	2934	1913	2256	2284	3030	2412	1775
(8)	(%)	57	55	52	53	58	58	57	50	59	54	56
(9)	(3) Dec. - May (mm)	2224	2564	1223	2071	2702	1765	2187	2208	3005	2399	1604
(10)	(%)	55	54	50	50	54	53	56	49	58	53	50
Dry Season												
(11)	(1) Apr. - Sep. (mm)	1675	2119	1070	1870	2048	1371	1599	2164	2089	2150	1373
(12)	(%)	41	44	43	46	41	41	41	48	40	48	44
(13)	(2) May - Oct. (mm)	1748	2148	1192	1942	2091	1408	1669	2263	2136	2090	1379
(14)	(%)	43	45	48	47	42	42	43	50	41	46	44
(15)	(3) Jun. - Nov. (mm)	1838	2203	1244	2029	2323	1556	1738	2339	2161	2103	1550
(16)	(%)	45	46	50	50	46	47	44	51	42	47	50
(17)	Mean Annual Rainfall	4062	4767	2467	4100	5025	3321	3925	4547	5166	4502	3154
(18)	Mean Monthly Rainfall*	339	397	206	342	419	277	327	379	431	375	263
(19)	Standard Deviation of Mean Monthly Rainfall	96	63	64	53	103	78	90	66	113	71	63
(20)	Ratio of Maximum to Minimum Rainfall	2.54	1.84	2.65	1.55	2.03	2.19	2.50	1.67	2.59	1.87	2.13
(21)	Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	163	84	174	159	275	185	139	175	72	47	177

TABLE-5 VARIOUS RAINFALL VALUES AT STATIONS IN THE 4TH,
5TH AND 6TH DIVISIONS

11-9												
Division	4	4	4	4	4	4	4	5	5	5	5	5
Station No.	36	38	45	48	54	59	60	4	6	7	9	10
Station Name	Boluru	Rh. Luang	Sg. Niah	Lambir	Paya Selanau	Benawa	D.I.D. Barrack	Ukong	Long Semadoh	Kubong	Lauas	Limbang P. House
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1016	1217	922	928	905	883	1042	1304	831	1273	1495	1434
(2) (2) Apr. - May	423	463	406	378	318	400	346	651	478	666	699	559
(3) (3) Jun. - Sep.	789	828	715	880	879	802	825	1110	775	1188	1432	1050
(4) (4) Oct. - Nov.	545	687	453	800	546	684	676	779	485	807	916	679
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	1561	1904	1375	1728	1451	1567	1718	2083	1316	2080	2411	2113
(6) (%)	56	60	55	58	55	58	59	54	51	53	53	57
(7) (2) Nov. - Apr. (mm)	1508	1849	1368	1611	1351	1407	1526	2011	1308	1988	2262	2026
(8) (%)	54	58	55	54	51	51	53	52	51	51	50	54
(9) (3) Dec. - May (mm)	1439	1680	1328	1306	1223	1283	1388	1955	1309	1939	2194	1993
(10) (%)	52	52	53	44	46	46	48	51	51	49	48	54
Dry Season												
(11) (1) Apr. - Sep. (mm)	1212	1291	1121	1258	1197	1202	1171	1761	1253	1854	2131	1609
(12) (%)	44	40	45	42	45	42	41	46	49	47	47	43
(13) (2) May - Oct. (mm)	1265	1346	1128	1375	1297	1362	1363	1833	1261	1946	2280	1696
(14) (%)	46	42	45	46	49	49	47	48	49	49	50	46
(15) (3) Jun. - Nov. (mm)	1334	1515	1168	1680	1425	1486	1501	1889	1260	1995	2348	1729
(16) (%)	48	48	47	56	54	54	52	49	49	51	52	46
(17) Mean Annual Rainfall	2773	3195	2496	2986	2648	2769	2889	3844	2569	3934	4542	3722
(18) Mean Monthly Rainfall	231	266	208	249	221	231	241	320	214	328	379	310
(19) Standard Deviation of Mean Monthly Rainfall	59	75	50	95	74	64	73	55	29	57	68	74
(20) Ratio of Maximum MMR to Minimum MMR	2.08	2.11	2.10	2.57	3.78	2.45	2.69	1.58	1.43	1.57	1.65	1.95
(21) Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	122	224	47	422	228	284	330	128	7	141	217	120

11-10												
Division	5	5	5	5	5	5	5	6	6	6	6	6
Station No.	12	16	17	21	22	23	25	4	8	9	24	27
Station Name	Sg. Medant	Long Bilong	Long Napir	Merapok	Trusan	Pandaruan	Luhai Tengni	Daro	Sarikoi	Hatu	Juluau	Rajong
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1387	1539	941	1200	1639	1309	1474	1221	1271	1423	1421	1304
(2) (2) Apr. - May	746	709	459	557	1050	595	669	342	469	316	633	489
(3) (3) Jun. - Sep.	1239	1240	943	1137	1526	1071	1039	663	839	679	967	1045
(4) (4) Oct. - Nov.	793	825	492	799	1026	786	718	519	553	559	701	780
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	2180	2364	1433	1999	2665	2095	2192	1740	1824	1982	2122	2084
(6) (%)	52	55	51	54	51	56	56	63	58	67	57	57
(7) (2) Nov. - Apr. (mm)	2139	2296	1385	1917	2757	1984	2127	1677	1780	1880	2178	1919
(8) (%)	51	53	49	52	53	53	55	61	57	63	59	53
(9) (3) Dec. - May (mm)	2133	2248	1400	1757	2689	1904	2143	1563	1740	1739	2054	1793
(10) (%)	51	52	49	47	51	51	55	56	56	59	55	50
Dry Season												
(11) (1) Apr. - Sep. (mm)	1985	1949	1402	1694	2576	1666	1708	1005	1308	995	1600	1534
(12) (%)	48	45	49	46	49	44	44	37	42	33	43	43
(13) (2) Jun. - Nov. (mm)	2026	2017	1450	1776	2484	1777	1773	1068	1352	1097	1544	1699
(14) (%)	49	48	51	48	47	47	45	39	43	37	41	47
(15) (3) Jun. - Nov. (mm)	2032	2065	1435	1936	2552	1857	1757	1182	1392	1238	1668	1825
(16) (%)	49	48	51	53	49	49	45	44	44	41	45	50
(17) Mean Annual Rainfall	4165	4313	2835	3693	5241	3761	3900	2745	3132	2977	3722	3618
(18) Mean Monthly Rainfall	347	359	236	308	436	313	325	229	261	248	310	302
(19) Standard Deviation of Mean Monthly Rainfall	62	55	48	76	82	68	79	80	61	113	126	75
(20) Ratio of Maximum MMR to Minimum MMR	1.58	1.66	2.07	2.55	1.54	2.32	2.24	2.61	2.30	3.38	2.45	1.77
(21) Rainfall difference between two factors (Oct.-Nov.)-(Apr.-May)	47	116	33	242	24	191	49	177	84	243	68	291

TABLE-6 VARIOUS RAINFALL VALUES AT STATIONS IN THE 6TH AND 7TH DIVISIONS

Division	6	6	7	7	7	7	7	7	7	7	7	7
Station No.	30	58	1	3	12	33	35	42	43	44	47	50
Station Name	Binatang	Meradong	Kapit	Belaga	Song	Ng. Ga'at	Long Idanau	Ng. Entawan	Ng. Norit	Ng. Ebon	Batu Kelang	Baka L. Bilan
Seasonal Rainfall												
(1) (1) Dec. - Mar.	1209	1316	1398	1362	1066	1563	1358	1829	1385	1540	1379	1406
(2) (2) Apr. - May	486	465	611	620	338	620	890	743	635	502	657	731
(3) (3) Jun. - Sep.	835	834	1002	1054	809	1224	1256	1127	1084	1144	1007	1010
(4) (4) Oct. - Nov.	510	573	663	683	568	847	704	1047	890	814	667	864
Half-Annual Rainfall												
Rainy Season												
(5) (1) Oct. - Mar. (mm)	1719	1889	2061	2045	1634	2410	2062	2876	2275	2354	2046	2270
(6) (%)	57	59	56	55	59	57	49	61	57	59	55	57
(7) (2) Nov. - Apr. (mm)	1723	1841	2016	2057	1517	2296	2170	2810	2241	2197	2047	2290
(8) (%)	57	59	55	56	55	54	52	59	56	55	55	57
(9) (3) Dec. - May (mm)	1695	1781	2009	1982	1404	2183	2248	2572	2020	2042	2036	2137
(10) (%)	56	56	55	54	50	52	53	55	51	52	55	53
Dry Season												
(11) (1) Apr. - Sep. (mm)	1321	1299	1613	1674	1147	1844	2146	1870	1719	1646	1664	1741
(12) (%)	43	41	44	45	41	43	51	39	43	41	45	43
(13) (2) May - Oct. (mm)	1317	1347	1658	1662	1264	1958	2038	1936	1753	1803	1663	1721
(14) (%)	43	41	45	44	45	46	48	41	44	45	45	43
(15) (3) Jun. - Nov. (mm)	1345	1407	1665	1737	1377	2071	1960	2174	1974	1958	1674	1874
(16) (%)	44	44	45	46	50	48	47	45	49	48	45	47
(17) Mean Annual Rainfall	3040	3188	3674	3719	2781	4254	4208	4746	3994	4000	3710	4011
(18) Mean Monthly Rainfall	253	266	306	310	232	355	351	396	333	333	309	334
(19) Standard Deviation of Mean Monthly Rainfall	58	62	52	44	57	77	68	112	77	102	58	92
(20) Ratio of Maximum to Minimum Monthly Rainfall	2.24	2.36	1.86	1.40	2.18	2.01	1.77	2.31	2.31	3.14	1.91	2.51
(21) Rainfall difference between two seasons (Oct.-Nov.)-(Apr.-May)	24	108	52	63	230	227	186	304	255	312	10	133

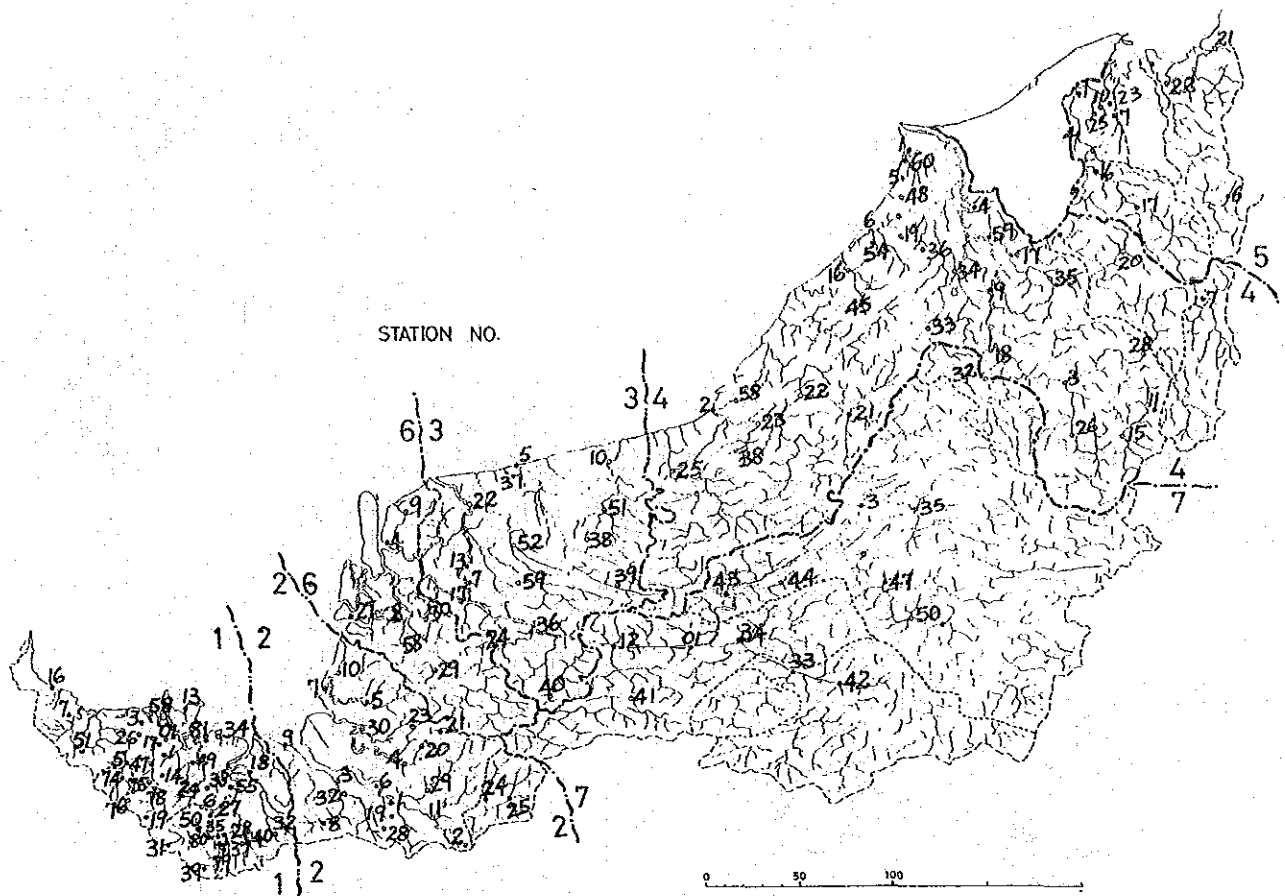


FIG.-1 LOCATION OF RAINFALL STATIONS

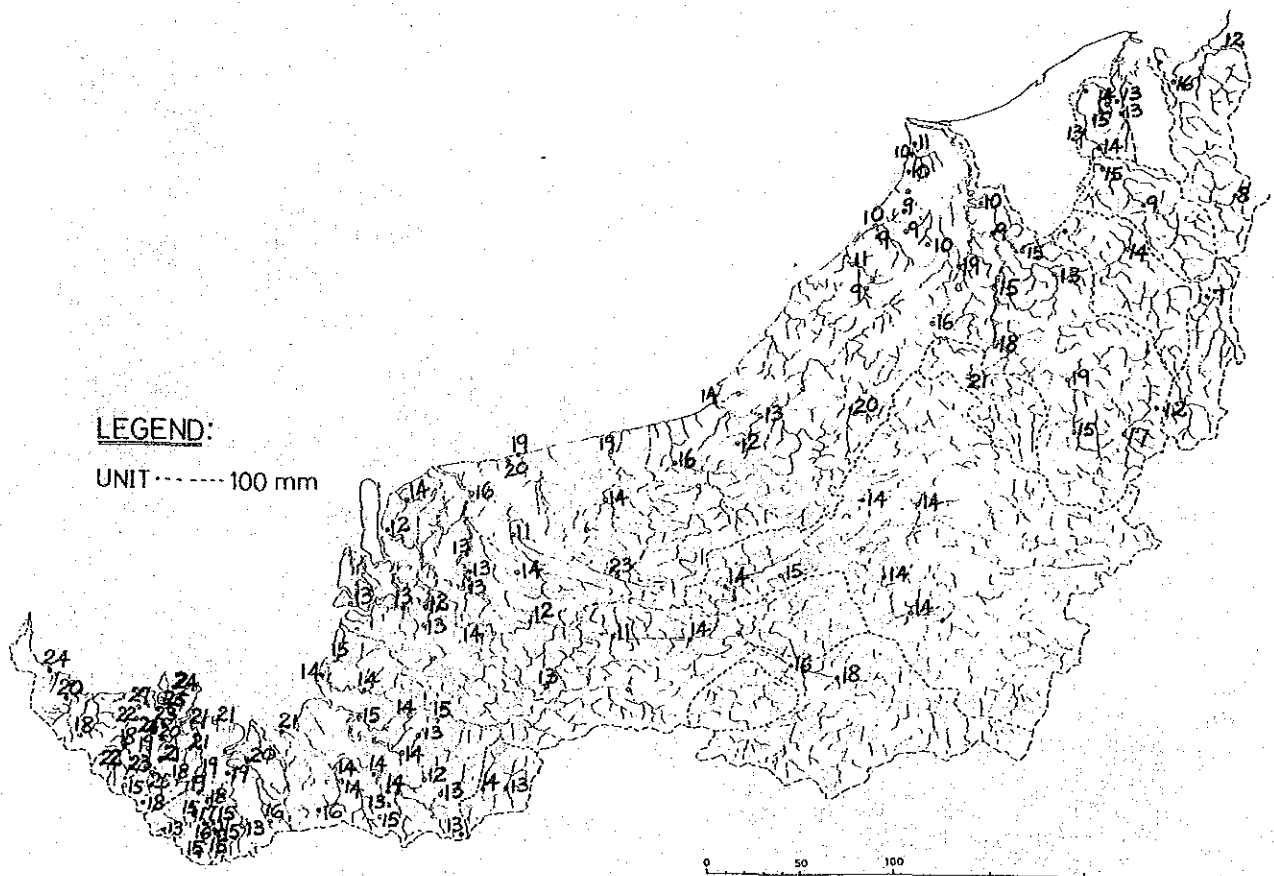


FIG.-2 (1) MEAN SEASONAL RAINFALL DEC. - MAR. UNIT: 100 mm

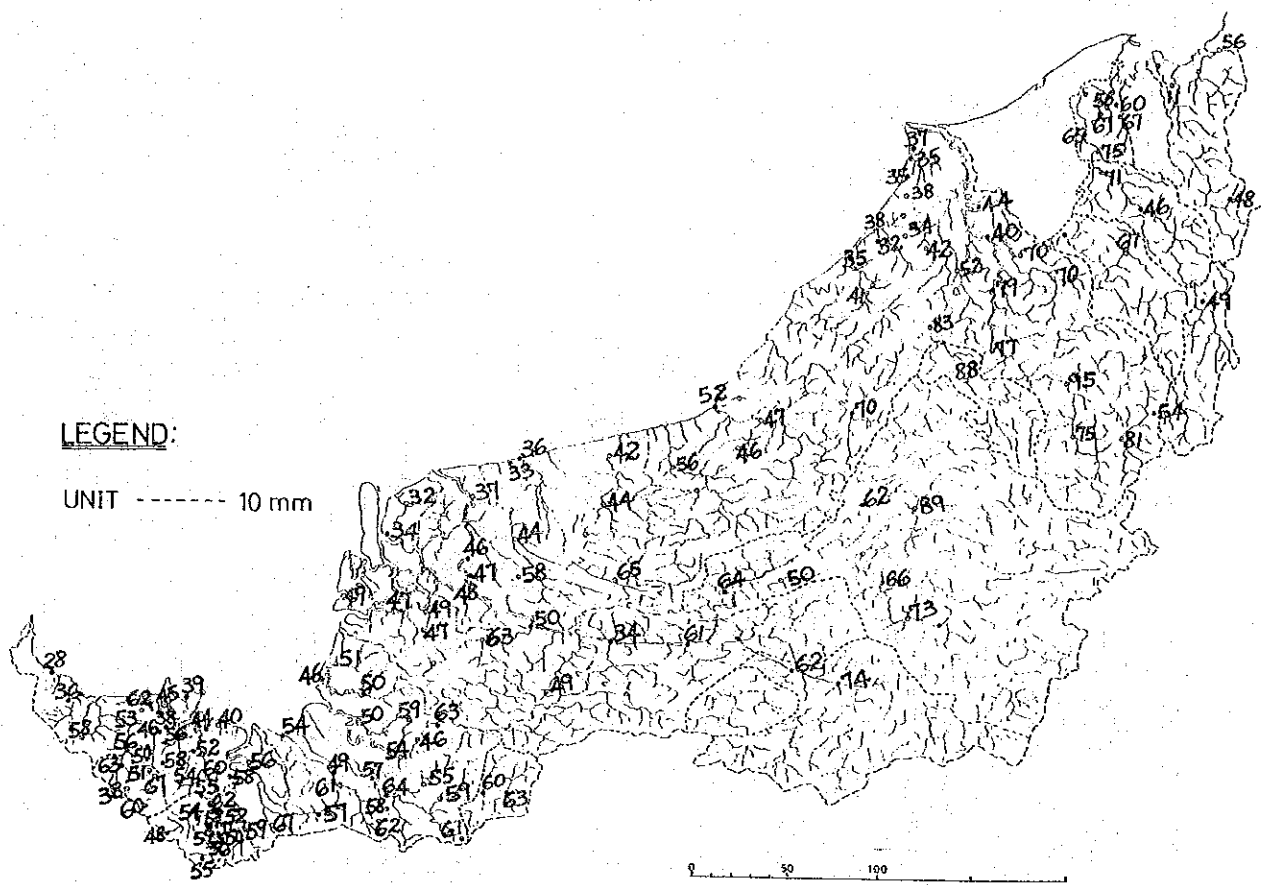


FIG.-3 (2) MEAN SEASONAL RAINFALL APR. - MAY UNIT: 10 mm

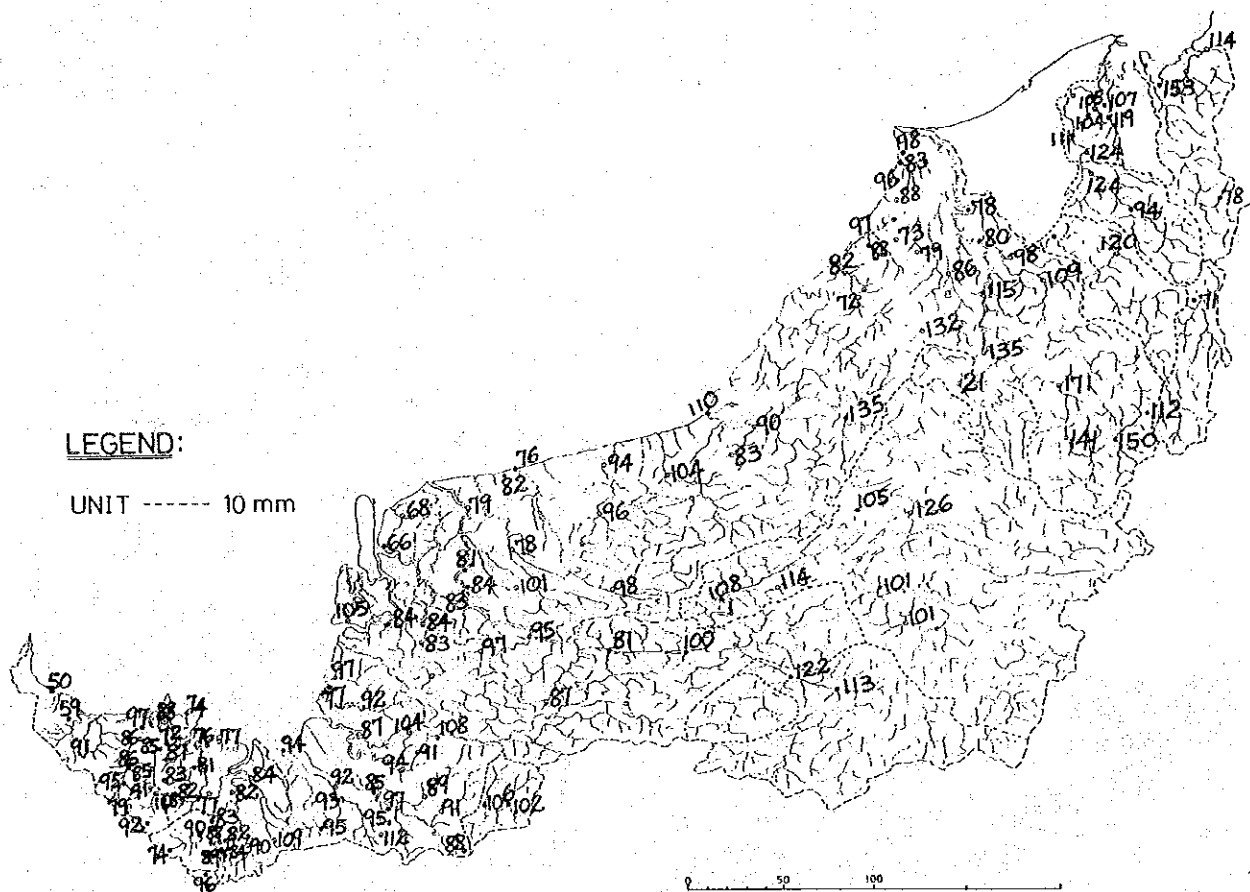


FIG.-4 (3) MEAN SEASONAL RAINFALL JUN. - SEP. UNIT: 10 mm

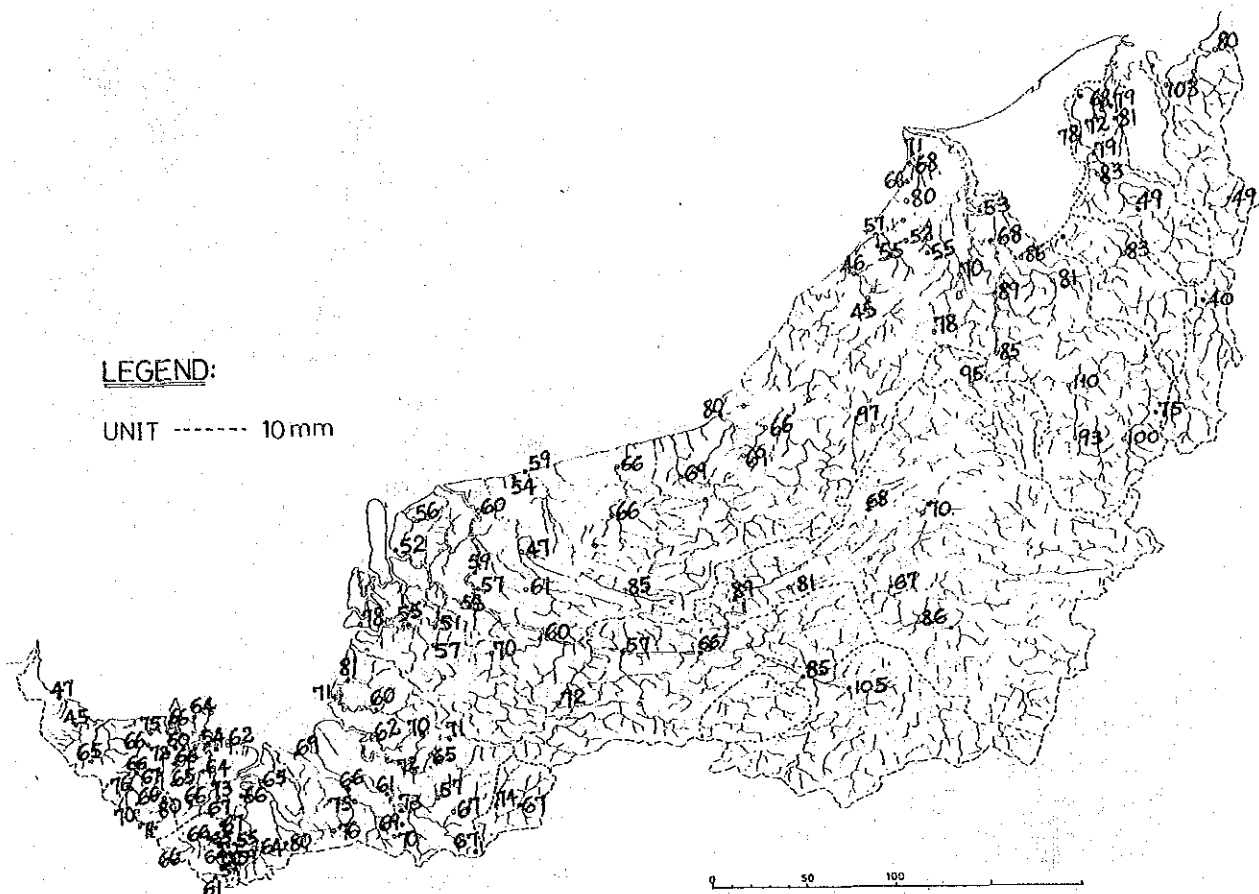


FIG.—5 (4) MEAN SEASONAL RAINFALL OCT. — NOV. UNIT: 10 mm

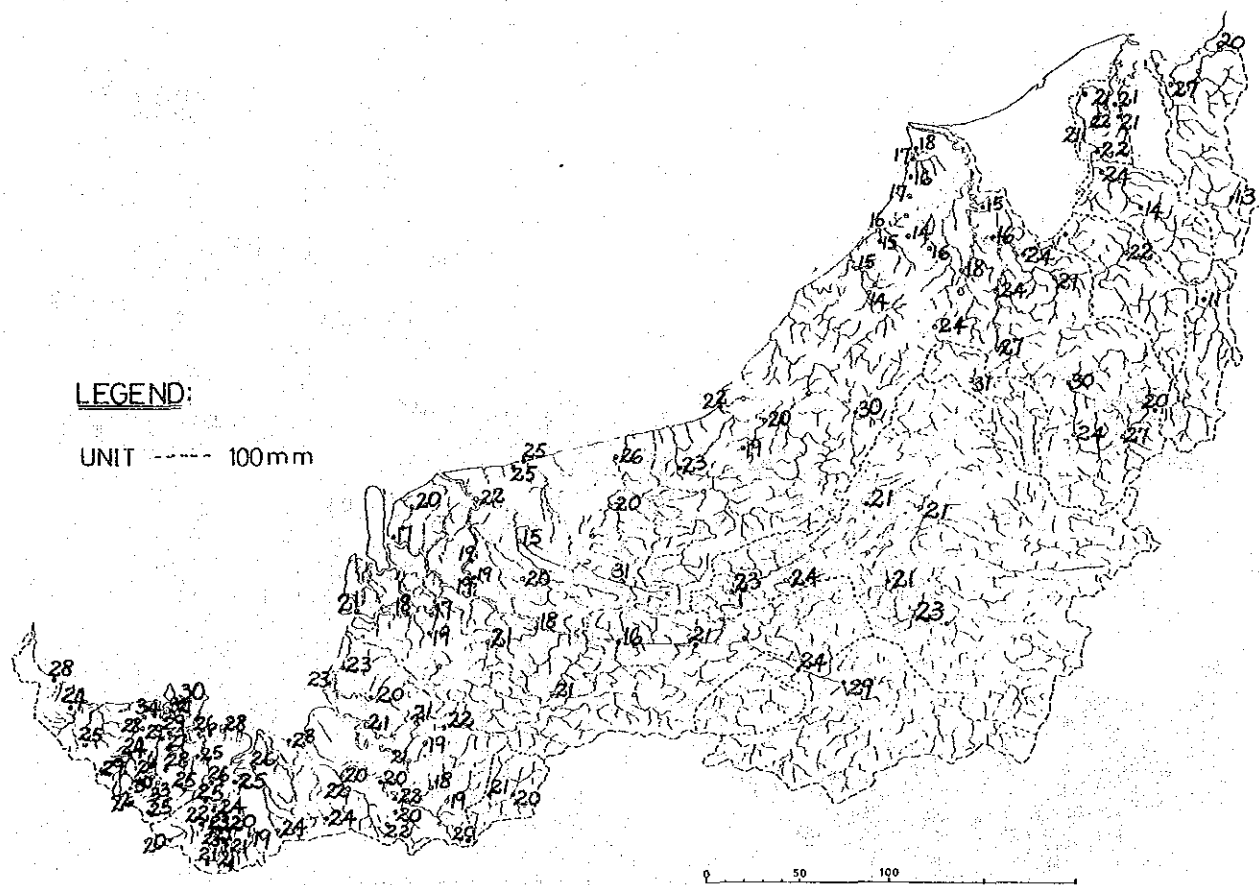
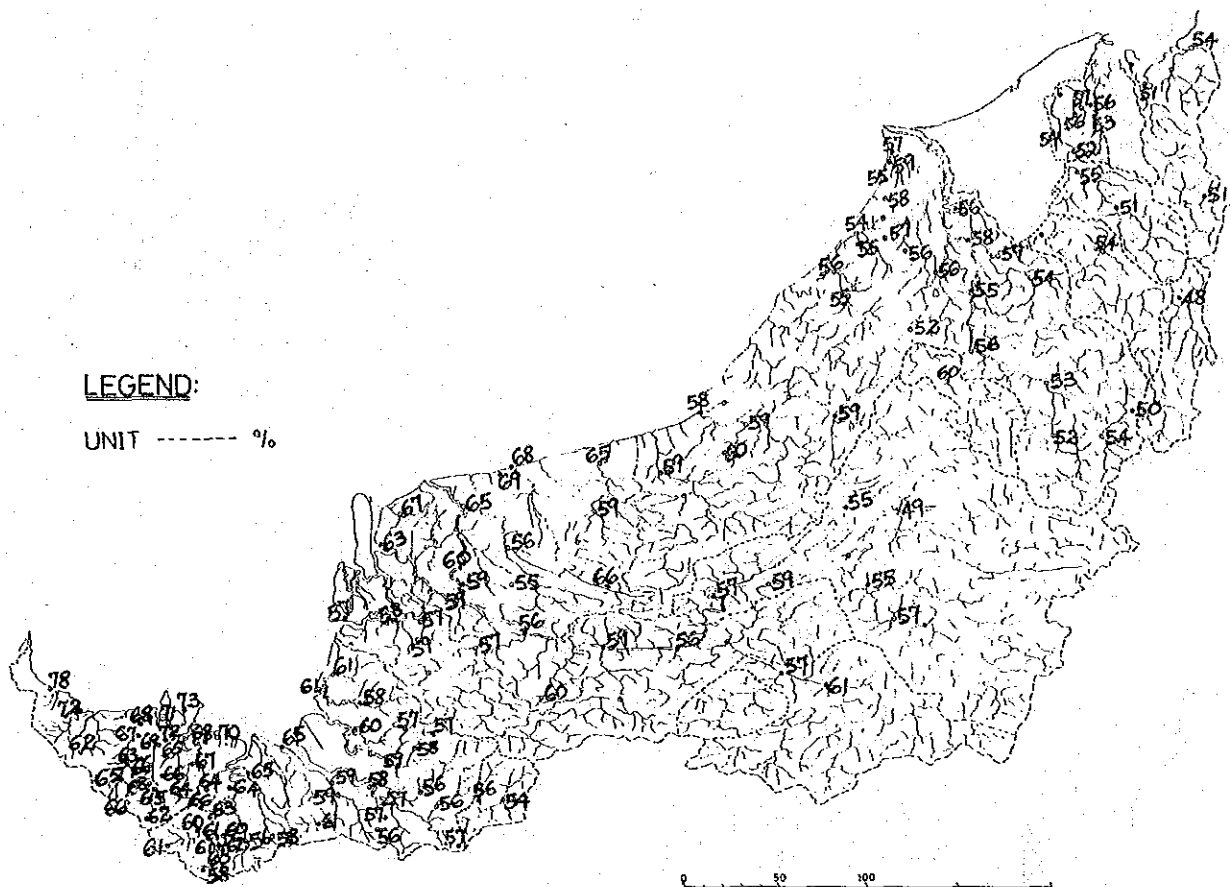
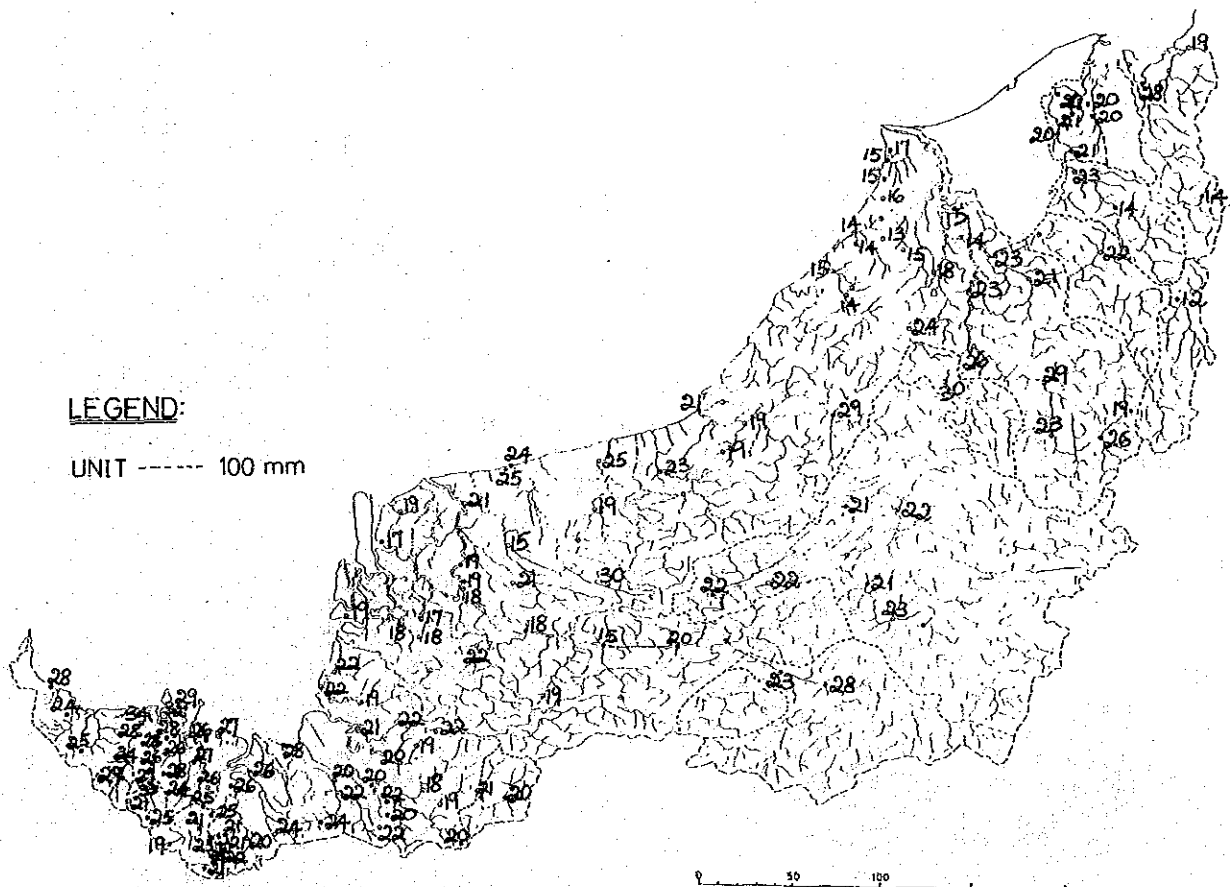


FIG.—6 (5) MEAN HALF-ANNUAL RAINFALL IN RAINY SEASON
OCT. — MAR. UNIT: 100 mm



**FIG.—7 (6) MEAN HALF-ANNUAL RAINFALL IN RAINY SEASON
OCT. — MAR. UNIT: %**



**FIG.—8 (7) MEAN HALF-ANNUAL RAINFALL IN RAINY SEASON
NOV. — APR. UNIT: 100 mm**

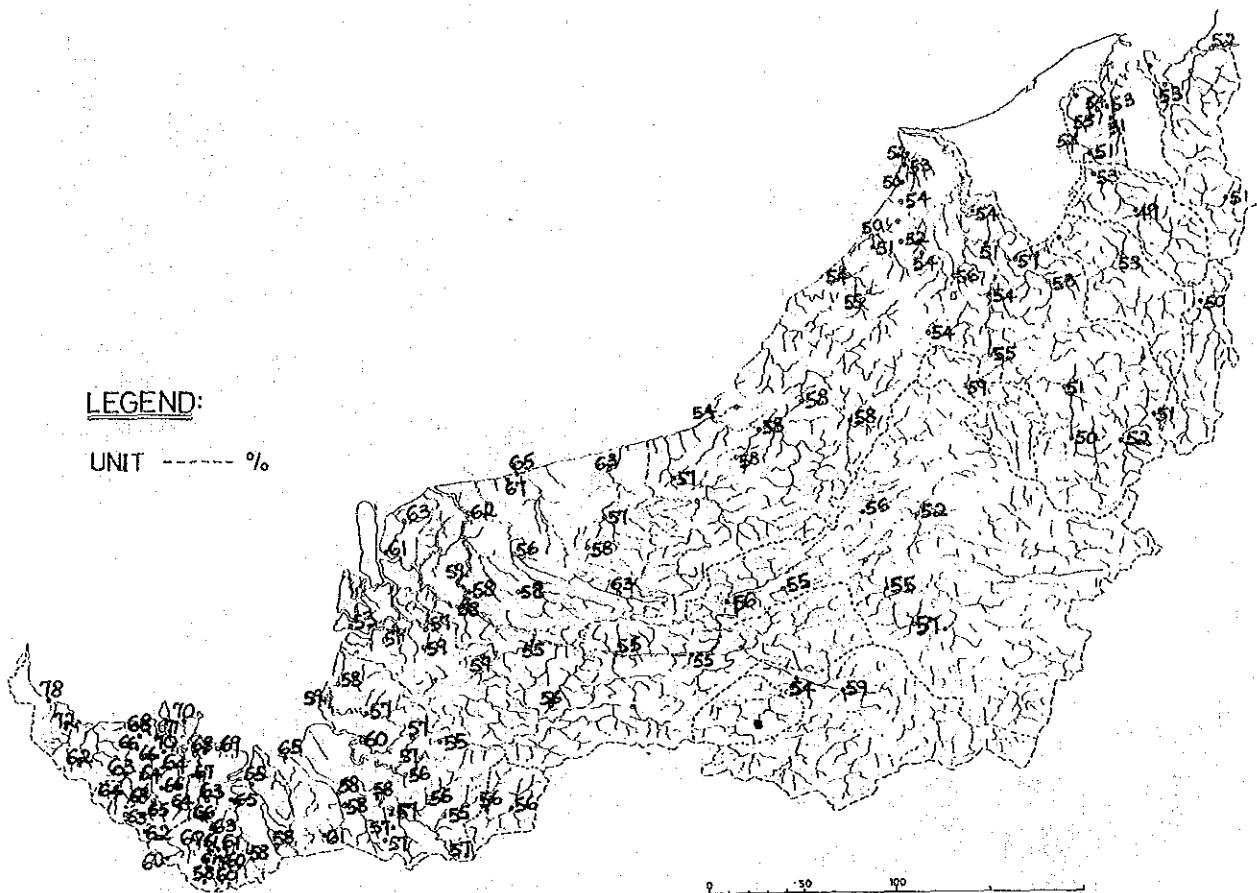


FIG.-9 (8) MEAN HALF-ANNUAL RAINFALL IN RAINY SEASON
NOV. - APR. UNIT: %

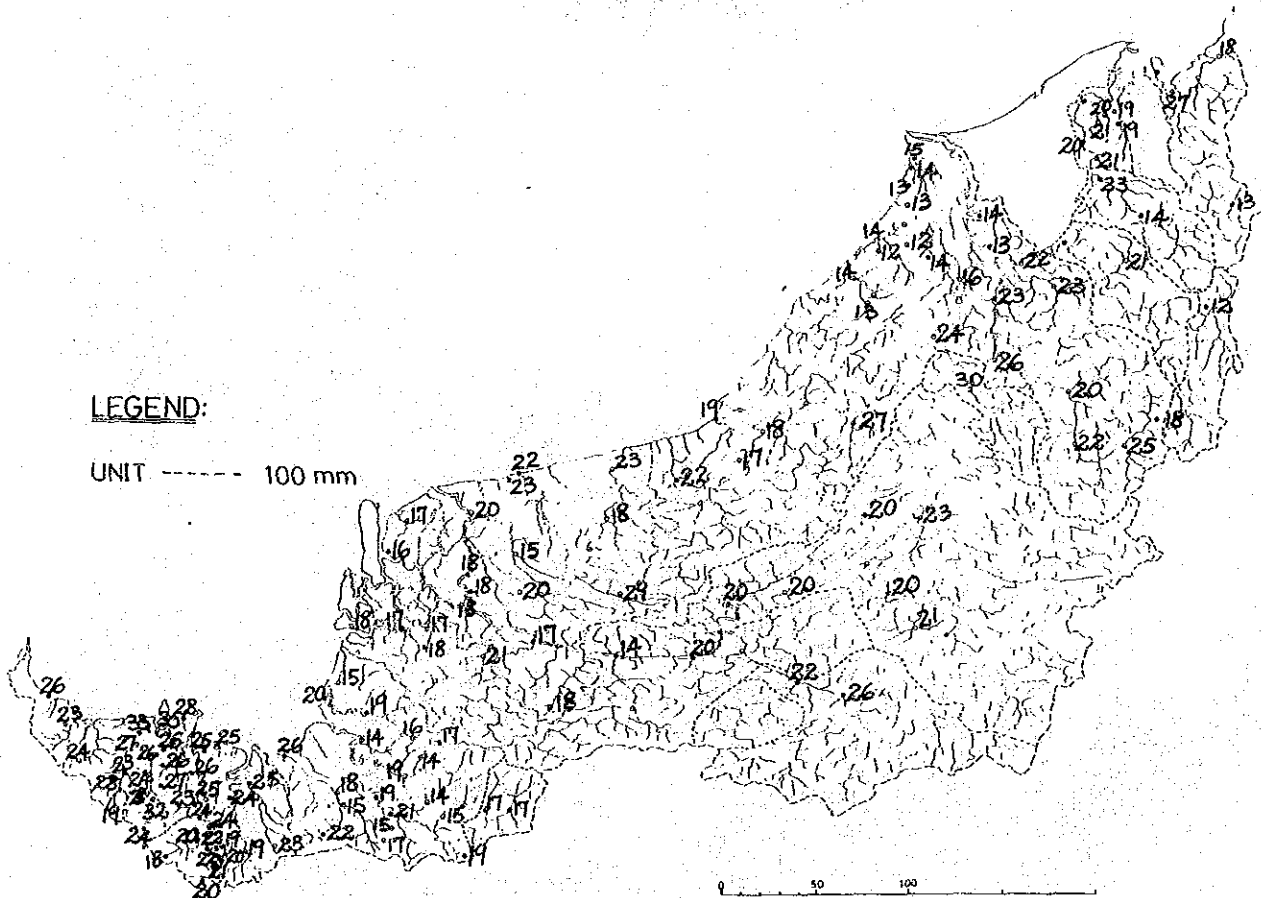
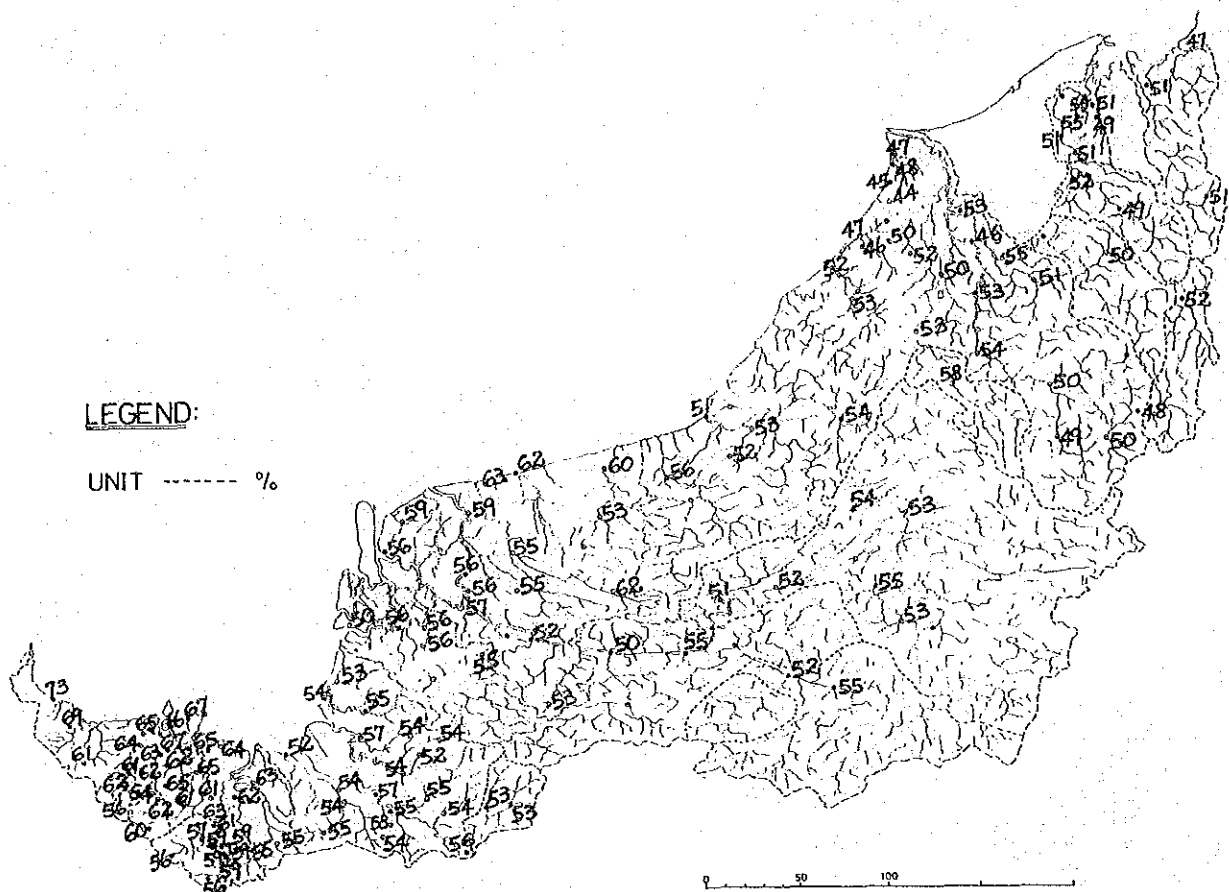
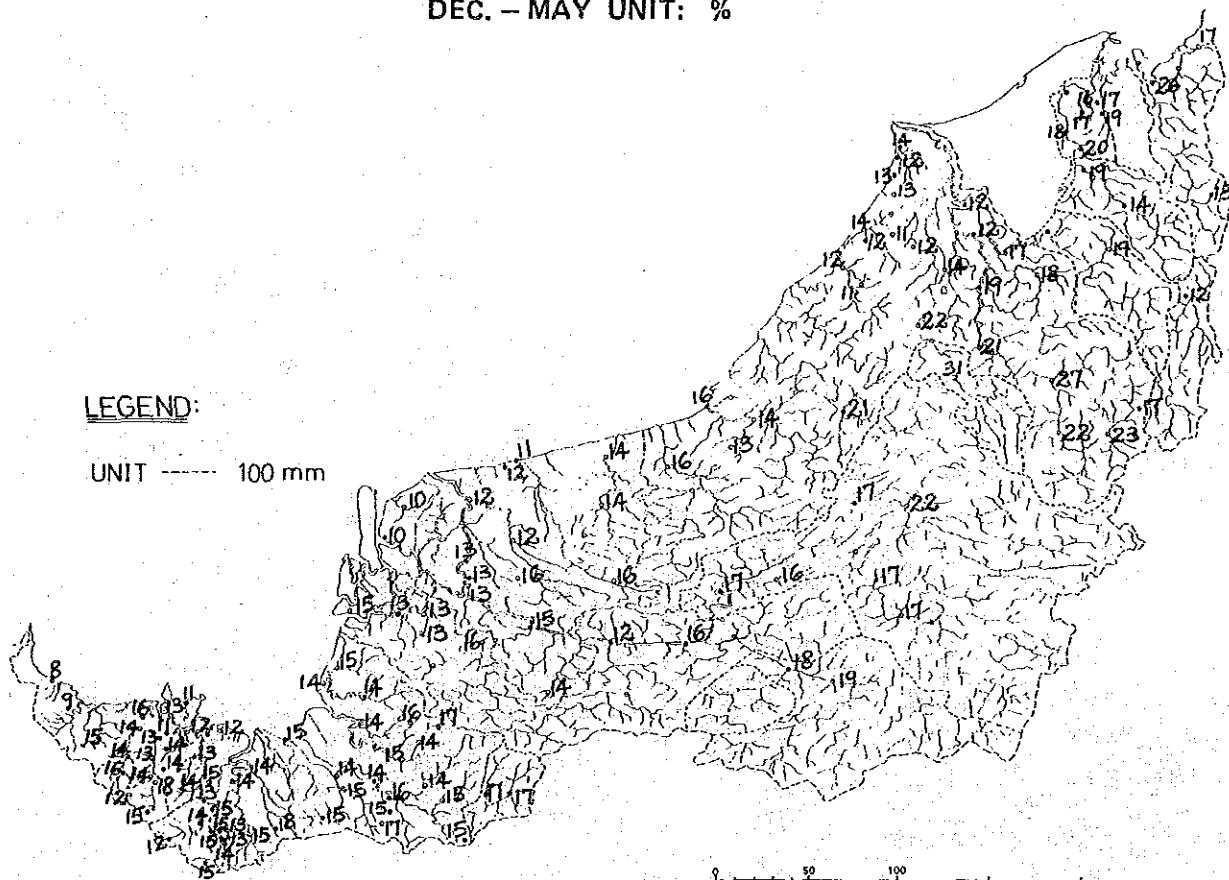


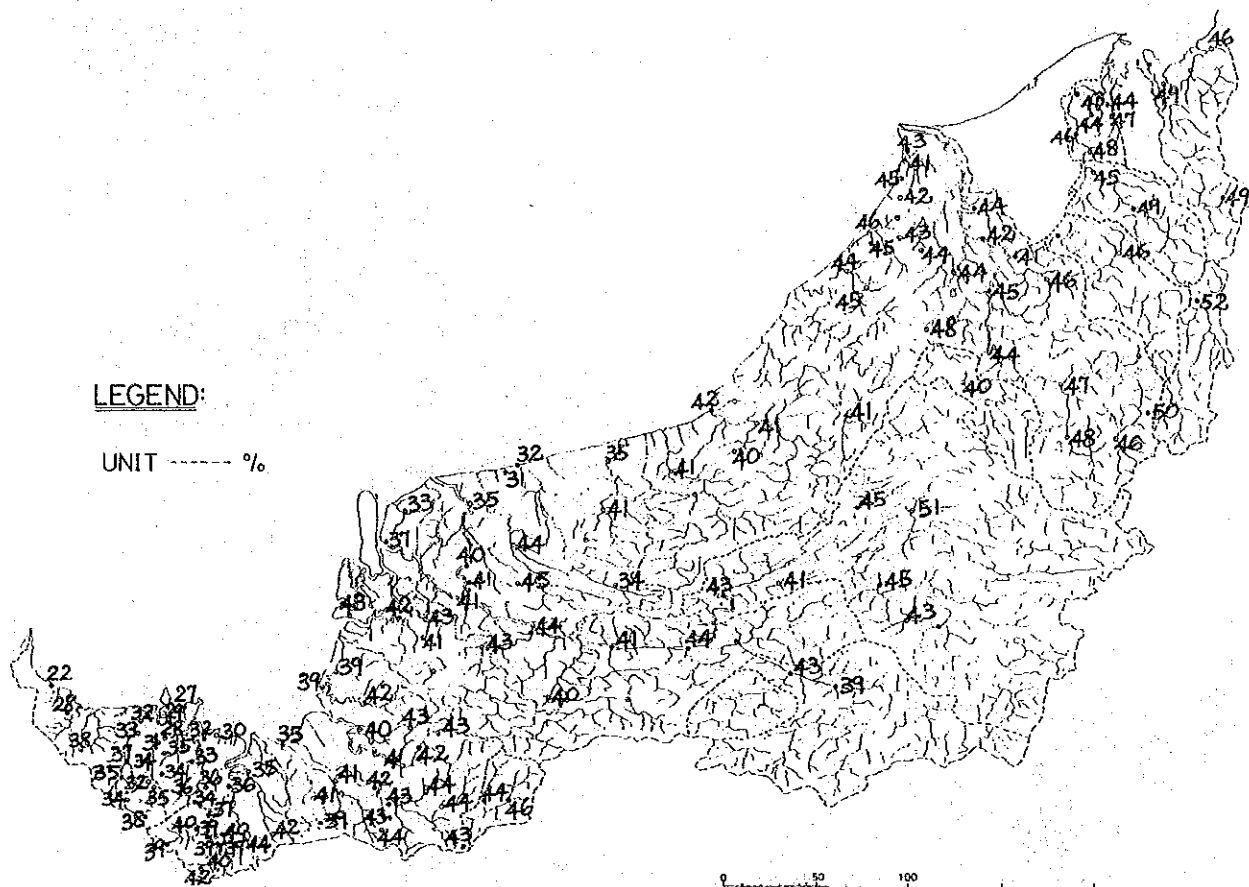
FIG.-10 (9) MEAN HALF-ANNUAL RAINFALL IN RAINY SEASON
DEC. - MAY UNIT: 100 mm



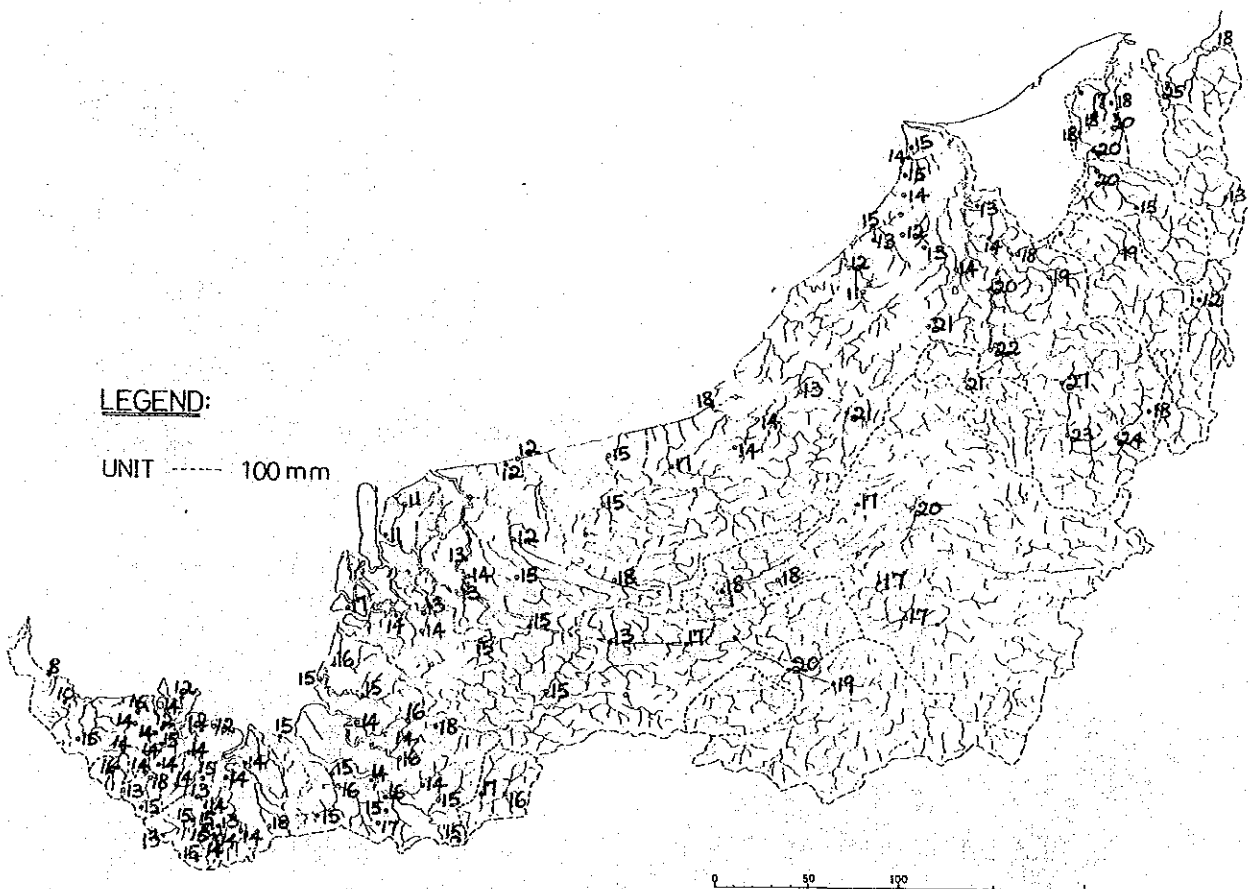
**FIG.-11 (10) MEAN HALF-ANNUAL RAINFALL IN RAINY SEASON
DEC. - MAY UNIT: %**



**FIG.-12 (11) MEAN HALF-ANNUAL RAINFALL IN DRY SEASON
APR. - SEP. UNIT: 100 mm**



**FIG.—13 (12) MEAN HALF-ANNUAL RAINFALL IN DRY SEASON
APR. — SEP. UNIT: %**



**FIG.—14 (13) MEAN HALF-ANNUAL RAINFALL IN DRY SEASON
MAY — OCT. UNIT: 100 mm**

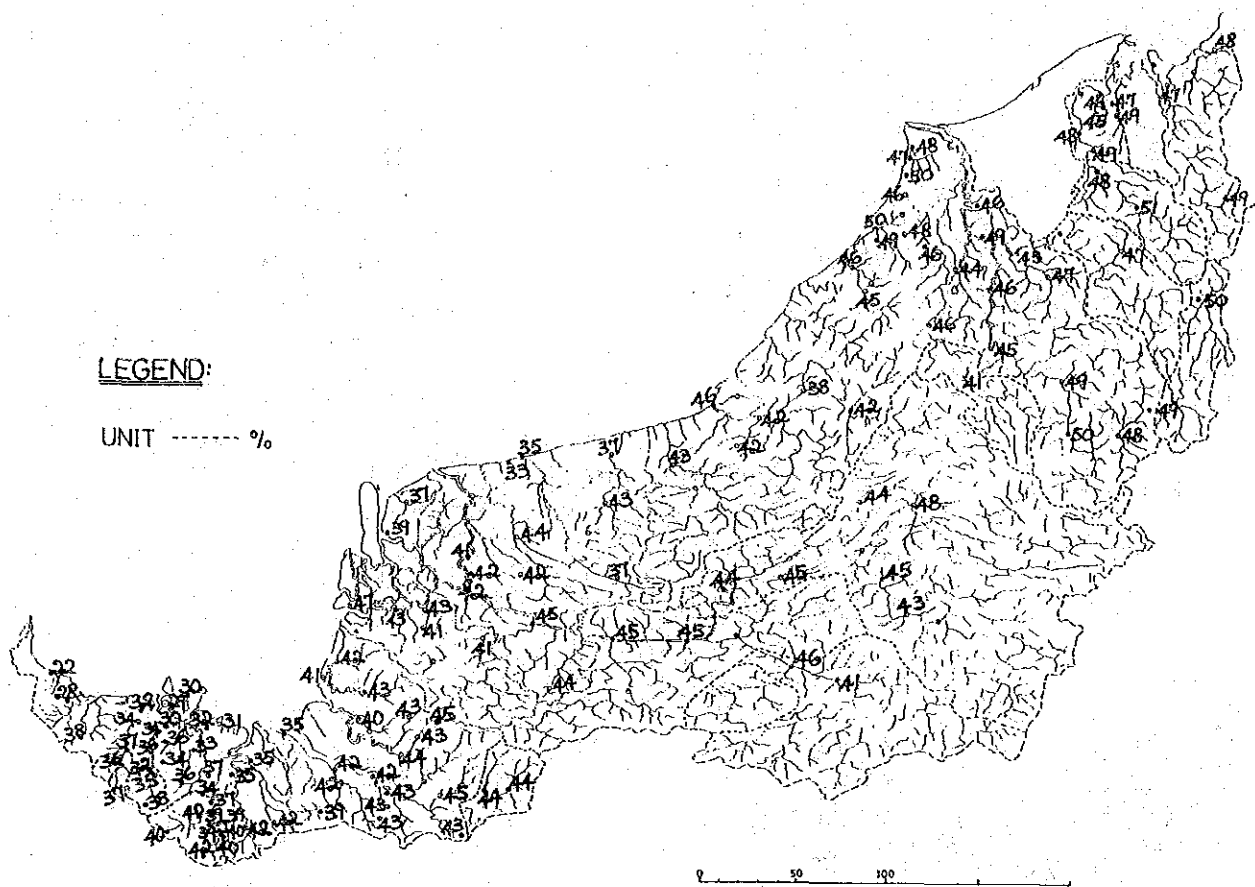


FIG.—15 (14) MEAN HALF-ANNUAL RAINFALL IN DRY SEASON
MAY – OCT. UNIT: %

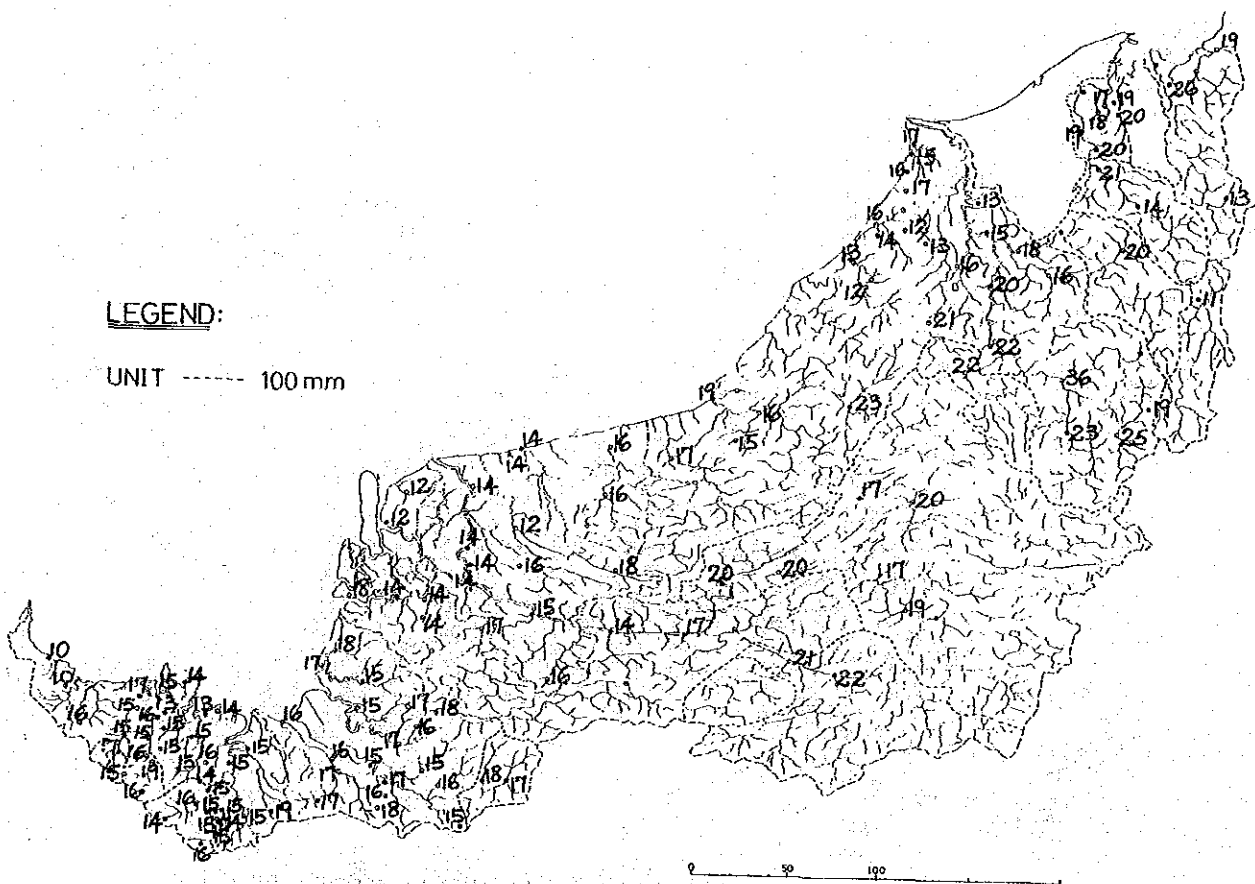


FIG.—16 (15) MEAN HALF-ANNUAL RAINFALL IN DRY SEASON
JUN. – NOV. UNIT: 100 mm

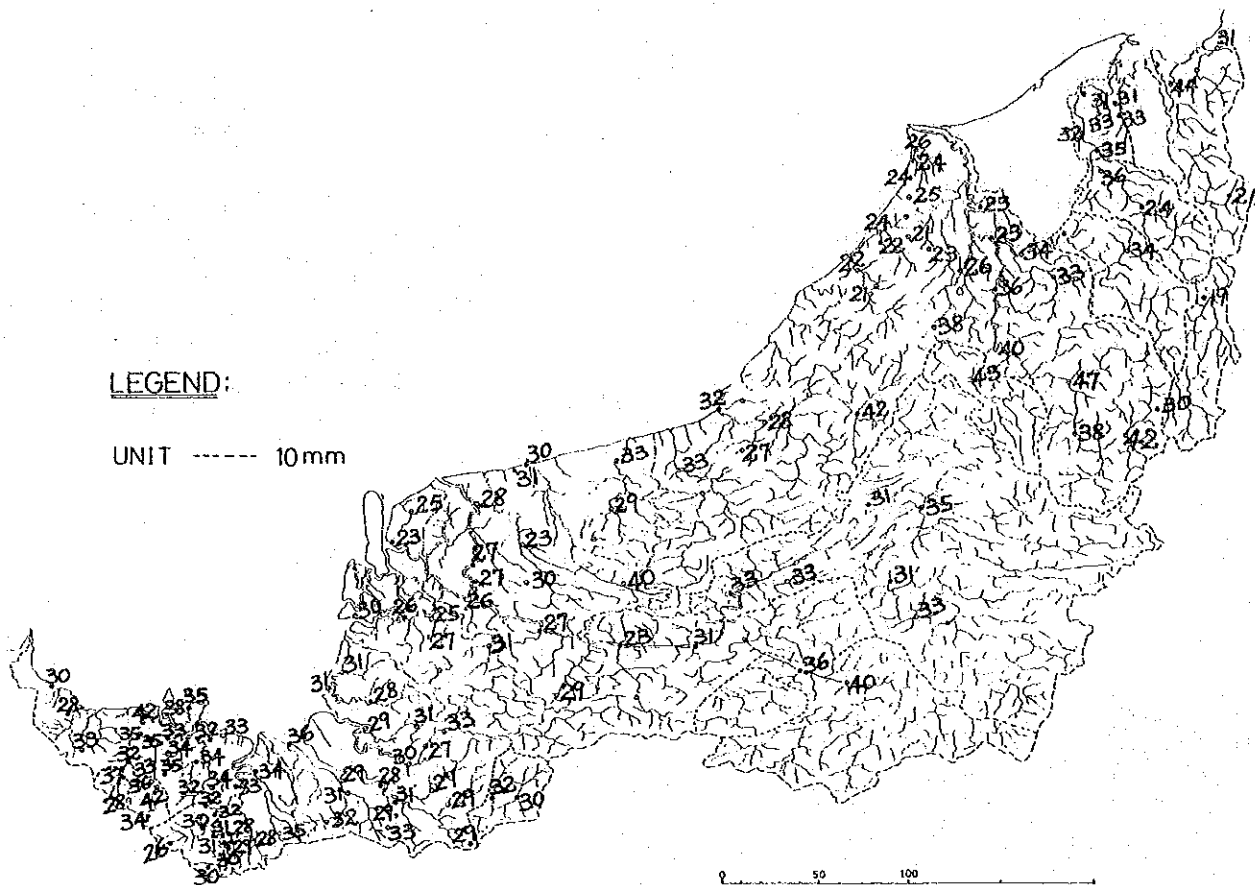


FIG.-19 (18) MEAN MONTHLY RAINFALL DETERMINED ON THE BASIS OF ANNUAL RAINFALL DATA UNIT: 10 mm

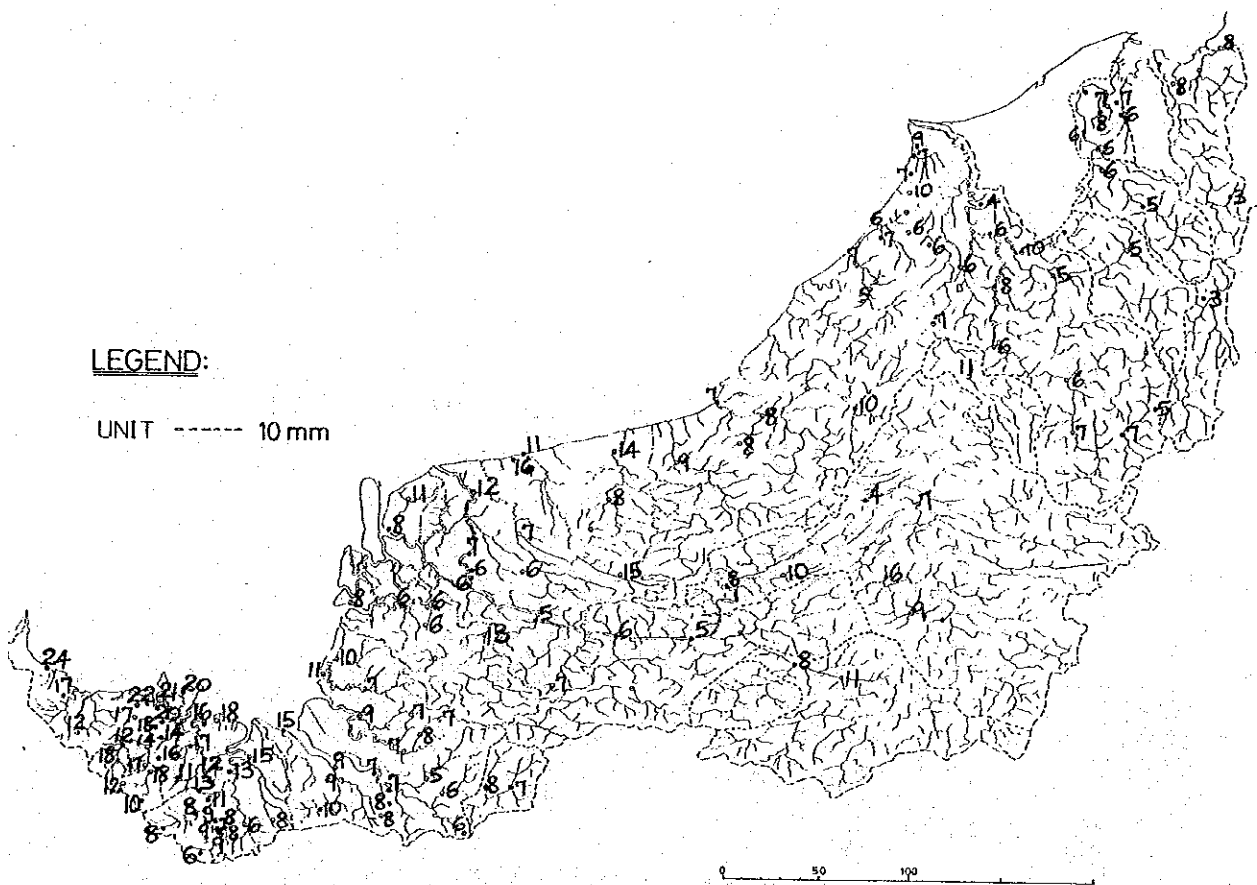


FIG.-20 (19) STANDARD DEVIATION OF MEAN MONTHLY RAINFALL UNIT: 10 mm

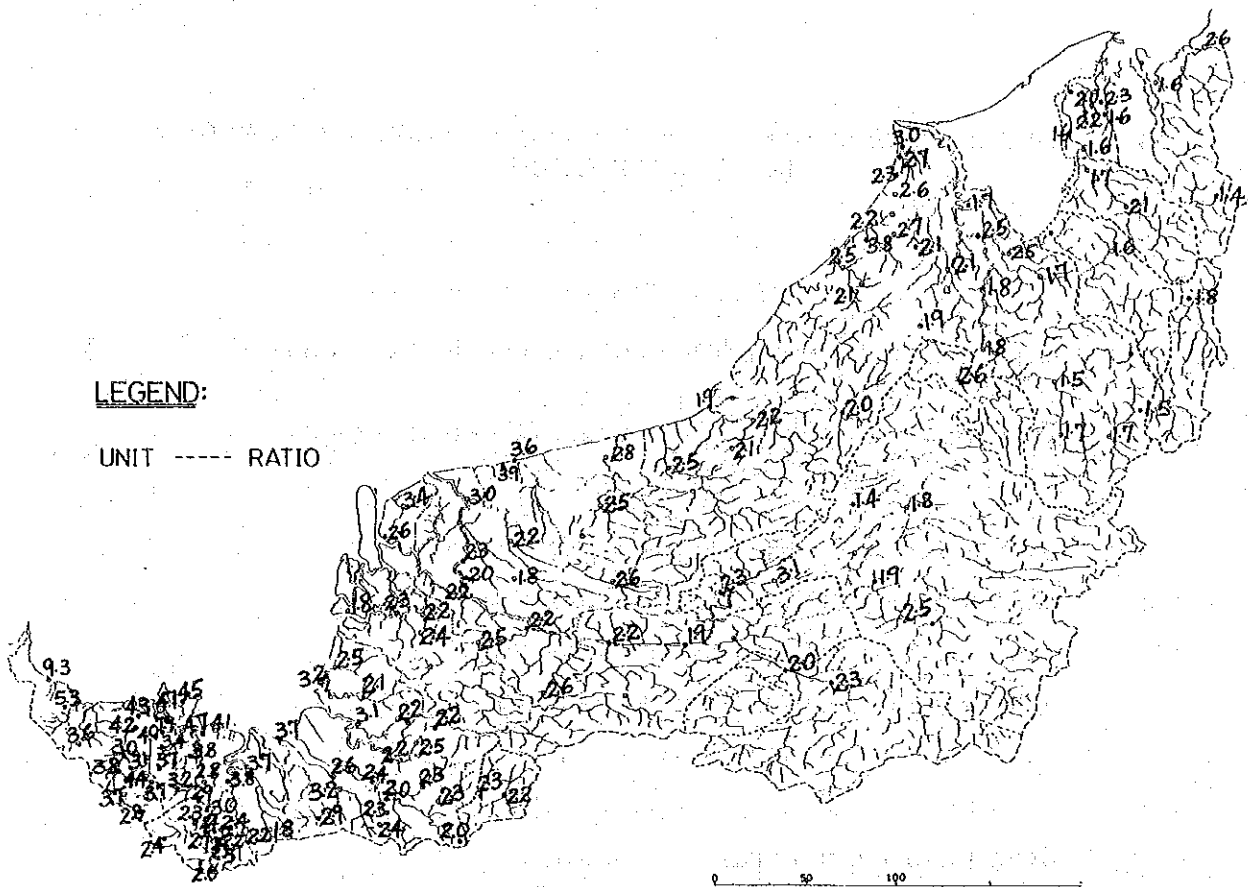


FIG.-21 (20) RATIO BETWEEN THE MAXIMUM MEAN MONTHLY RAINFALL AND THE MINIMUM MEAN MONTHLY RAINFALL

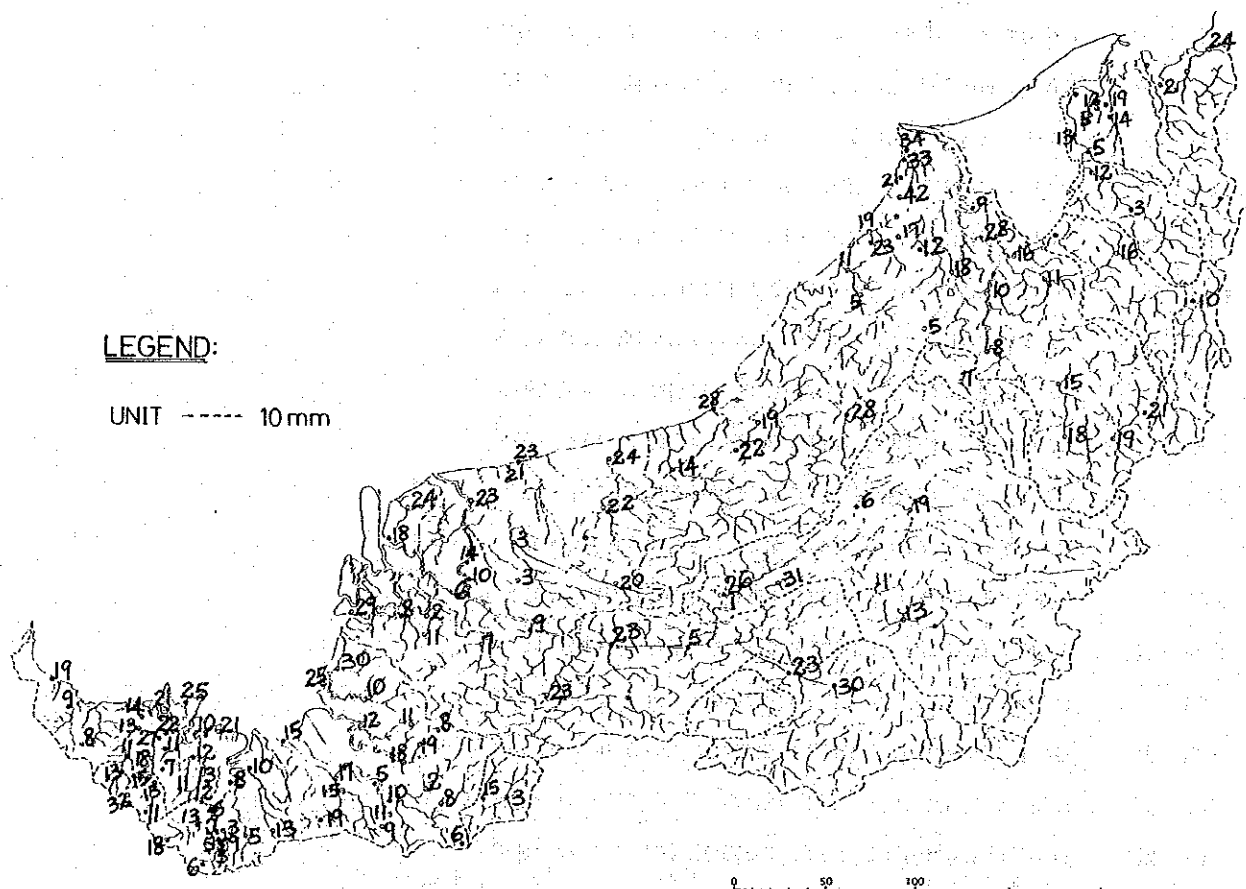


FIG.-22 (21) RAINFALL DIFFERENCE BETWEEN TWO FACTORS (OCT. - NOV.) - (APR. - MAY) UNIT: 10 mm

**D-3 AREAL DISTRIBUTION OF DAILY RAINFALL DURING HEAVY RAIN
IN THE 1ST DIVISION**

TABLES AND FIGURES

TABLE-1 AREAL DISTRIBUTION OF DAILY RAINFALL DURING HEAVY RAIN
IN THE 1ST DIVISION

TABLE-2 AREAL DISTRIBUTION OF DAILY RAINFALL DURING HEAVY RAIN
IN THE 1ST DIVISION (CONTINUED)

FIG.-1 LOCATION OF RAINFALL STATIONS

FIG.-2 DAILY RAINFALL DISTRIBUTION ON 27 JAN. 1963

FIG.-3 DAILY RAINFALL DISTRIBUTION ON 28 JAN. 1963

FIG.-4 DAILY RAINFALL DISTRIBUTION ON 8 JAN. 1971

FIG.-5 DAILY RAINFALL DISTRIBUTION ON 9 JAN. 1971

FIG.-6 DAILY RAINFALL DISTRIBUTION ON 22 JAN. 1971

FIG.-7 DAILY RAINFALL DISTRIBUTION ON 22 JAN. 1972

FIG.-8 DAILY RAINFALL DISTRIBUTION ON 24 DEC. 1973

FIG.-9 DAILY RAINFALL DISTRIBUTION ON 27 DEC. 1973

FIG.-10 DAILY RAINFALL DISTRIBUTION ON 10 JAN. 1973

FIG.-11 DAILY RAINFALL DISTRIBUTION ON 10 FEB. 1974

FIG.-12 DAILY RAINFALL DISTRIBUTION ON 12 FEB. 1974

FIG.-13 DAILY RAINFALL DISTRIBUTION ON 28 FEB. 1974

FIG.-14 DAILY RAINFALL DISTRIBUTION ON 23 FEB. 1975

FIG.-15 DAILY RAINFALL DISTRIBUTION ON 23 DEC. 1975

FIG.-16 DAILY RAINFALL DISTRIBUTION ON 28 DEC. 1975

FIG.-17 DAILY RAINFALL DISTRIBUTION ON 11 JAN. 1976

FIG.-18 DAILY RAINFALL DISTRIBUTION ON 12 JAN. 1976

FIG.-19 DAILY RAINFALL DISTRIBUTION ON 13 JAN. 1976

FIG.-20 DAILY RAINFALL DISTRIBUTION ON 4 FEB. 1977

FIG.-21 DAILY RAINFALL DISTRIBUTION ON 6 FEB. 1977

FIG.-22 DAILY RAINFALL DISTRIBUTION ON 19 FEB. 1977

FIG.-23 DAILY RAINFALL DISTRIBUTION ON 22 FEB. 1977

FIG.-24 DAILY RAINFALL DISTRIBUTION ON 9 JAN. 1978

FIG.-25 DAILY RAINFALL DISTRIBUTION ON 10 JAN. 1978

FIG.-26 DAILY RAINFALL DISTRIBUTION ON 21 JAN. 1978

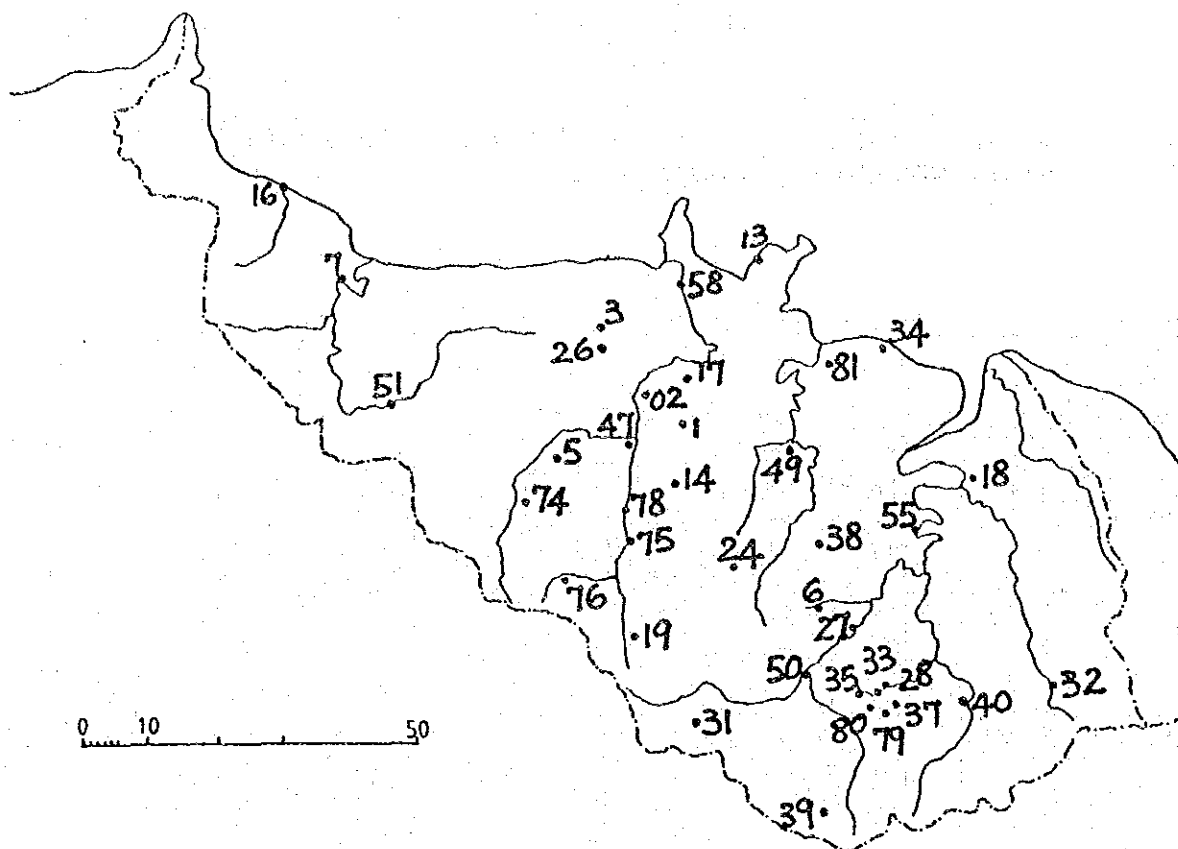
- FIG.—27 DAILY RAINFALL DISTRIBUTION ON 22 JAN. 1978
- FIG.—28 DAILY RAINFALL DISTRIBUTION ON 23 JAN. 1978
- FIG.—29 DAILY RAINFALL DISTRIBUTION ON 1 JAN. 1980
- FIG.—30 DAILY RAINFALL DISTRIBUTION ON 2 JAN. 1980
- FIG.—31 DAILY RAINFALL DISTRIBUTION ON 20 JAN. 1980
- FIG.—32 DAILY RAINFALL DISTRIBUTION ON 22 DEC. 1981
- FIG.—33 DAILY RAINFALL DISTRIBUTION ON 24 JAN. 1983
- FIG.—34 DAILY RAINFALL DISTRIBUTION ON 25 JAN. 1983
- FIG.—35 DAILY RAINFALL DISTRIBUTION ON 26 JAN. 1983

TABLE-1 AREAL DISTRIBUTION OF DAILY RAINFALL DURING HEAVY RAIN
IN THE 1ST DIVISION

No.	Station No.			31	34	81	55	38	6	27	50	28	35	33	37	80	79	39	18	32	40	25
	DAY	MONTH	YEAR																			
1	27	JAN.	1963	.	.	.	.	139.	127.	162.	.	54.	.	.	.	.	.	.	64.	.	.	.
2	28	"	"	.	.	.	.	46.	167.	122.	.	50.	.	.	.	.	.	.	182.	.	.	.
3	8	JAN.	1971	40.	282.	.	131.	.	103.	85.	76.	41.	48.	44.	38.	46.	.	28.	338.	93.	51.	405.
4	9	"	"	2.	127.	.	26.	.	15.	10.	5.	7.	10.	7.	6.	6.	.	3.	44.	6.	7.	258.
5	22	"	"	60.	12.	.	86.	.	130.	113.	92.	74.	56.	76.	100.	75.	.	11.	69.	9.	.	92.
6	22	JAN.	1972	57.	281.	.	158.	245.	124.	67.	55.	67.	.	63.	.	50.	.	13.	13.	.	.	183.
7	24	SEP.	1973	.	204.	.	29.	80.	62.	36.	74.	19.	43.	32.	21.	48.	29.	30.	44.	27.	38.	218.
8	27	"	"	.	120.	.	77.	82.	85.	80.	19.	60.	76.	62.	53.	77.	51.	30.	130.	30.	44.	131.
9	29	"	"	.	33.	.	84.	64.	118.	105.	26.	97.	105.	91.	116.	114.	90.	42.	41.	92.	81.	53.
10	10	FEB.	1974	.	66.	59.	165.	319.	164.	136.	116.	74.	77.	84.	38.	76.	95.	68.	.	63.	38.	.
11	12	"	"	.	61.	116.	124.	90.	84.	74.	25.	45.	47.	36.	38.	57.	44.	56.	102.	7.	8.	.
12	28	"	"	.	62.	79.	168.	119.	189.	182.	61.	120.	126.	131.	109.	170.	94.	93.	156.	21.	147.	.
13	23	FEB.	1975	10.	36.	74.	152.	62.	125.	112.	71.	135.	135.	129.	148.	132.	130.	107.	.	80.	.	69.
14	23	DEC.	1975	.	89.	138.	51.	312.	191.	142.	105.	102.	99.	103.	101.	.	101.	99.	8.	2.	7.	.
15	28	"	"	.	58.	.	121.	177.	121.	113.	43.	63.	93.	56.	69.	.	23.	19.	.	30.	4.	.
16	11	JAN.	1976	210.	189.	238.	331.	287.	226.	221.	114.	235.	197.	161.	182.	202.	225.	158.	.	112.	75.	.
17	12	"	"	78.	161.	87.	114.	119.	112.	123.	116.	96.	117.	108.	89.	83.	28.	79.	320.	38.	33.	.
18	13	"	"	59.	199.	181.	141.	211.	130.	114.	102.	77.	74.	57.	44.	105.	76.	47.	94.	26.	52.	.
19	4	FEB.	1977	32.	53.	64.	12.	53.	55.	57.	71.	35.	34.	36.	31.	54.	37.	89.	3.	87.	19.	.
20	6	"	"	53.	25.	36.	88.	150.	127.	164.	54.	125.	133.	95.	94.	96.	82.	73.	.	164.	27.	.
21	19	"	"	132.	53.	74.	131.	110.	158.	135.	186.	8.	105.	89.	95.	196.	117.	110.	.	33.	26.	.
22	22	"	"	46.	107.	39.	7.	121.	25.	7.	11.	3.	17.	17.	.	10.	4.	6.	36.	2.	.	.
23	9	JAN.	1978	29.	79.	18.	59.	71.	41.	8.	75.	17.	53.	44.	45.	33.	43.	38.	3.	41.	2.	.
24	10	"	"	24.	107.	27.	13.	86.	36.	23.	19.	6.	20.	13.	9.	11.	11.	2.	52.	8.	32.	.
25	21	"	"	41.	38.	11.	38.	44.	23.	34.	30.	18.	43.	45.	15.	19.	31.	29.	.	7.	.	.
26	22	"	"	3.	104.	1.	8.	19.	4.	3.	3.	4.	.	1.	2.	1.	2.	3.	.	17.	2.	.
27	23	"	"	96.	89.	7.	53.	47.	146.	161.	194.	77.	70.	75.	72.	68.	80.	88.	35.	137.	83.	.
28	1	JAN.	1980	33.	.	.	.	13.	88.	46.	10.	6.	10.	8.	14.	71.	12.	15.	.	22.	7.	.
29	2	"	"	89.	8.	61.	.	115.	53.	45.	44.	47.	64.	57.	64.	3.	53.	21.	46.	65.	50.	.
30	20	"	"	16.	5.	156.	.	85.	20.	54.	23.	16.	11.	18.	16.	30.	20.	7.	.	6.	23.	.
31	22	DEC.	1981	1.	5.	.	183.	204.	220.	183.	111.	101.	139.	130.	72.	180.	92.	38.	54.	132.	44.	.
32	24	JAN.	1983	8.	74.	88.	368.	183.	166.	350.	38.	156.	193.	149.	119.	176.	121.	42.	25.	65.	83.	.
33	25	"	"	157.	136.	92.	201.	244.	72.	168.	152.	63.	60.	51.	68.	71.	51.	93.	268.	67.	88.	.
34	26	"	"	139.	64.	135.	52.	116.	65.	33.	81.	33.	18.	22.	13.	24.	21.	20.	70.	.	53.	.

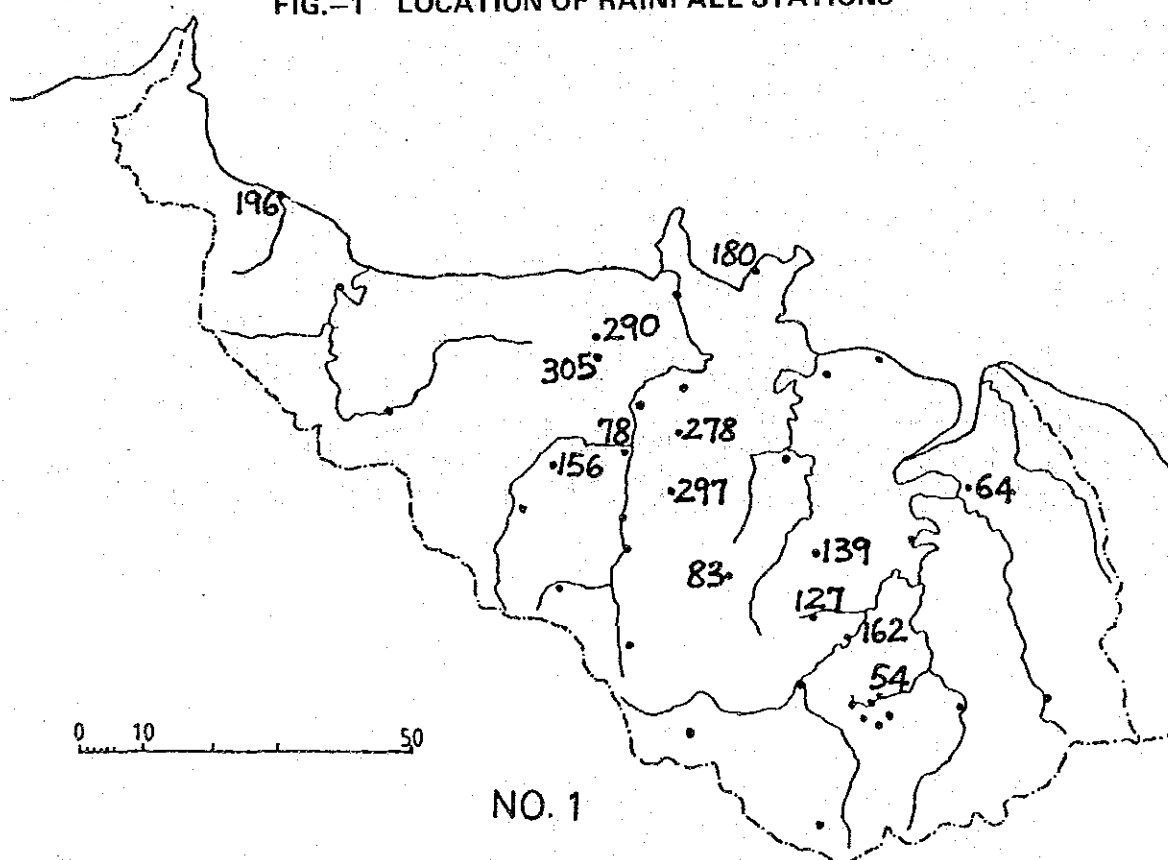
TABLE-2 AREAL DISTRIBUTION OF DAILY RAINFALL DURING HEAVY RAIN
IN THE 1ST DIVISION (CONTINUED)

No.	Station No.			16	7	51	3	26	47	5	74	78	76	75	19	13	58	1	17	02	49	14	24
	DAY	MONTH	YEAR																				
1	27	JAN	1963	196.			290	305	78.	156.						180.		278				297.	83.
2	28	"	"	117.			81.	388	48.	203						24.		93.				177.	199.
3	8	JAN.	1971	166.	203		27.	12.	312.	386	248	257	114.			124.	89.	354	406		315.	264	122.
4	9	"	"	44.	60		287.	297.	65.	68.	40.	75.	17.			26.	64.	220	233.		154.	95.	71.
5	22	"	"	111.	195.		88.	125.	221.	239	223	389.	158.			71.	43.	151.	51.		46.	230.	153.
6	22	JAN.	1972	11.	118.		98.	39.	186.	295.	191.	51.	37.			68.	81.	195.	216.		209.	156.	25.
7	24	DEC.	1973	73.	66.		234.	213.	231.	100.	184.		12.			211.	29.	201.	213.			158.	123.
8	27	"	"	47.	111.		137.	192.	192.	121.	167.		42.			36.	56.	151.	135.			206.	103.
9	29	"	"	56.	87.		58.	97.	94.	40.	152.		47.			25.	27.	104.	69.		55.	132.	91.
10	10	FEB.	1974	3.	43	46.	48.	60.	45.	45	31.	73.	50.	83.		30.	31.	40.			105.	61.	131.
11	12	"	"			1.	28.	28.	118.	57.	77.	21.	65.	121.		101.	90.	89.			25.	112.	131.
12	28	"	"	26.	59.	56.	20.	28.	91.	107.	99.	14.	17.	107.		34.	50.	94.			64.	110.	130.
13	23	FEB.	1975	54.	106.	25.	53.	19.	42.	84.	38.	86.		85.	66.	104.	43.	116.	66.		85.	88.	109.
14	23	DEC.	1975		136	135.	180.	201.	194.	338	352	216.	8.	195.	160.	114.	151.				134.	219.	204.
15	28	"	"		33.	30.	163.	224.	208.	96.	62.	151.	13.	119.	30.	36.	53.	283.			154.	253.	136.
16	11	JAN.	1976		38.	127	222	320	98.	220	221.	143.	35.	171.	140.	75.	116.	144.			219.	231.	305.
17	12	"	"		40.	79.	68.	80.	91.	142.	149.	189.	89.	204.	96.	30.	73.	97.			99.	94.	142.
18	13	"	"		85.	112.	102.	162	232	214.	166.	202.	53.	215.	88.	27.	55.	223.			173.	221.	165.
19	4	FEB.	1977	226.		38.	123.	118.	143.	126.	153.	188.	64.	147.	111.	29.	105.	159.			203.	177.	142.
20	6	"	"	145.	51.	196.	86.	119.	185.	226	247.	195.	132.	167.	76.	67.	68.	136.			196.	209.	114.
21	19	"	"		71.	14.	48.	61.	70.	24.	182.	57.	35.	102.	70.	49.	27.	21.	34.		36.	25.	52.
22	22	"	"	33.	23.	45.	155.	170.	142.	136.	147.	124.	116.	147.	90.	282.	194.	173.			206.	174.	128.
23	9	JAN.	1978	3.	78.	76.	43.	62.	116.	36.	49.	118.	43.	38.	50.	40.	72.	80.			58.	51.	51.
24	10	"	"		78.	127.	114.	158	71.	39.	48.	78.	35.	70.	48.	124.	124.	58.			128.	124.	46.
25	21	"	"	15.	30.	64.	61.	39.	130.	70.	75.	210.	60.	221.	126.	26.	23.	210.			195.	193.	76.
26	22	"	"	22.	43.	102.	101.	111.	76.	19.	64.	69.	68.	36.	42.	45.	129.	84.			38.	47.	7.
27	23	"	"	17.	112.	162.	133.	137.	129.	100.	142.	101.	76.	98.	115.	24.	114.	110.			78.	135.	88.
28	1	JAN.	1980	31.	49.	35.	53.		109.	109.	50.	137.		19.	11.	23.	23.	274	230.		84.	161.	69.
29	2	"	"	53.	17.	25.	21.		72.	48.	22.	78.		136.	21.	21.	30.	229	150.		217.	110.	67.
30	20	"	"	138.	143.	208	29.		175.	89.	72.	34.		89.	1.	61.	315.	144.	50.		101.	36.	23.
31	22	DEC.	1981	19.	130.	78.	57.	75.	86.	50.	59.	155.		116.	118.	26.	68.	136.	88.	63.	143.	135.	113.
32	24	JAN.	1983	122.		70.	280.	215.	139.	117.	168.	65.		159.	17.	254	185.	142.	68.	116.	33.	172.	
33	25	"	"	41.	78.	51.	190.	92.	125.	130.	208	95.		110.	50.	102	38.	109.	66.	84.	2.	210.	
34	26	"	"	195.		96.	90.	81.	47.	77.	42.	115.		123.	119.	36.	216.	98.	66.	83.	26.	121.	



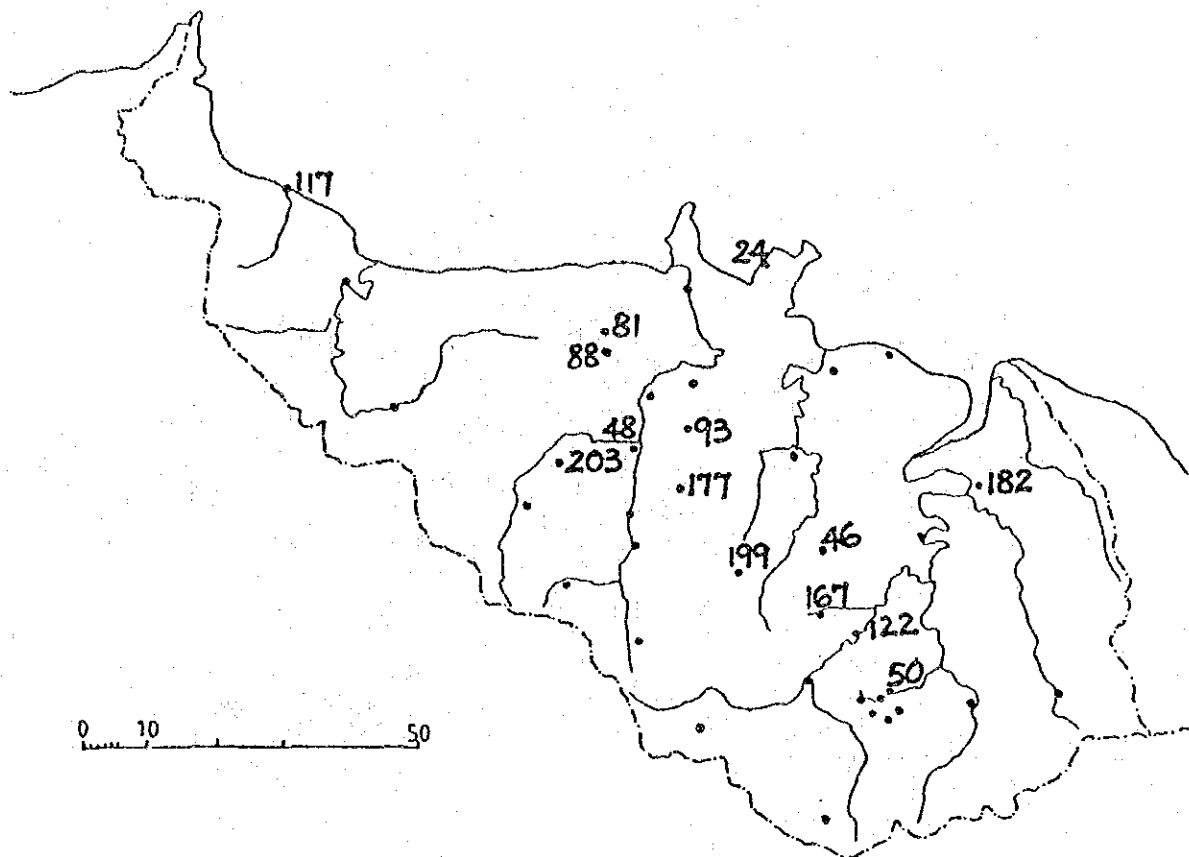
STATION NO.

FIG.-1 LOCATION OF RAINFALL STATIONS



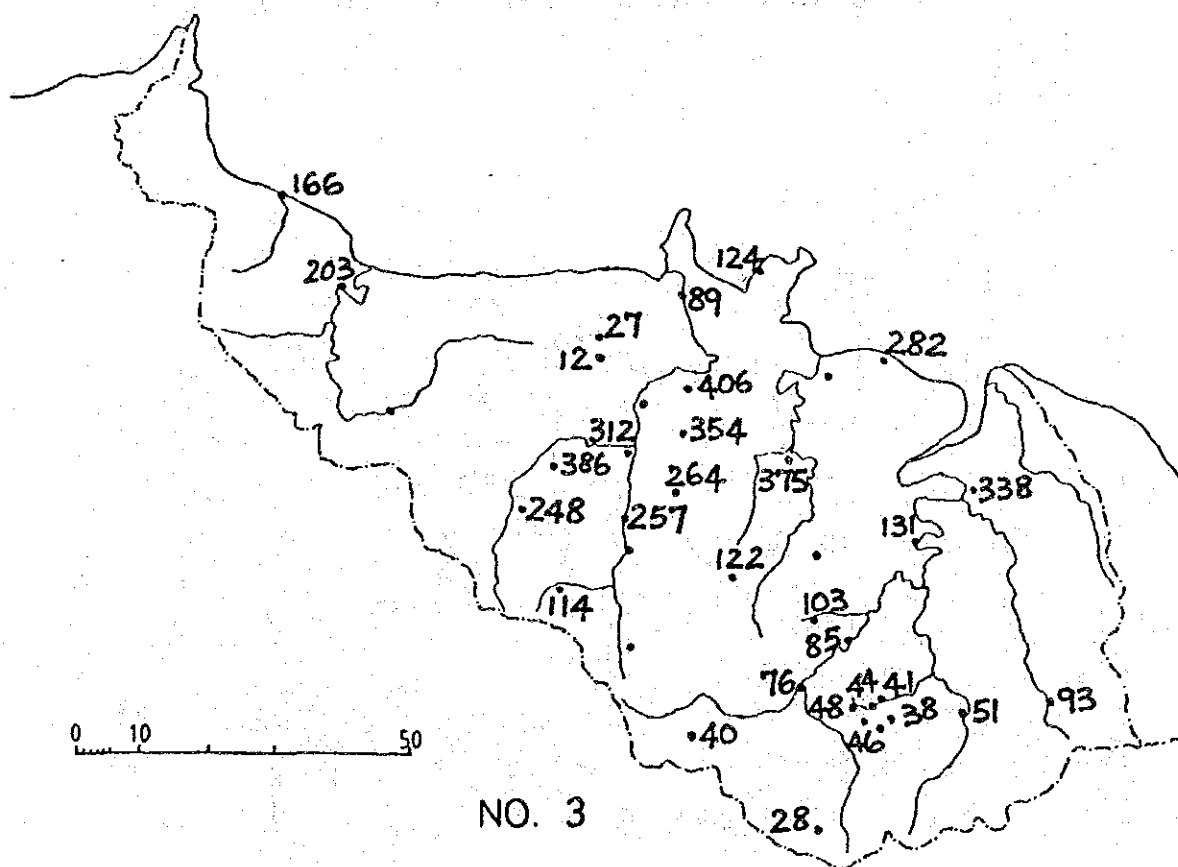
NO. 1

FIG.-2 DAILY RAINFALL DISTRIBUTION ON 27 JAN. 1963



NO. 2

FIG.-3 DAILY RAINFALL DISTRIBUTION ON 28 JAN. 1963



NO. 3

FIG.-4 DAILY RAINFALL DISTRIBUTION ON 8 JAN. 1971

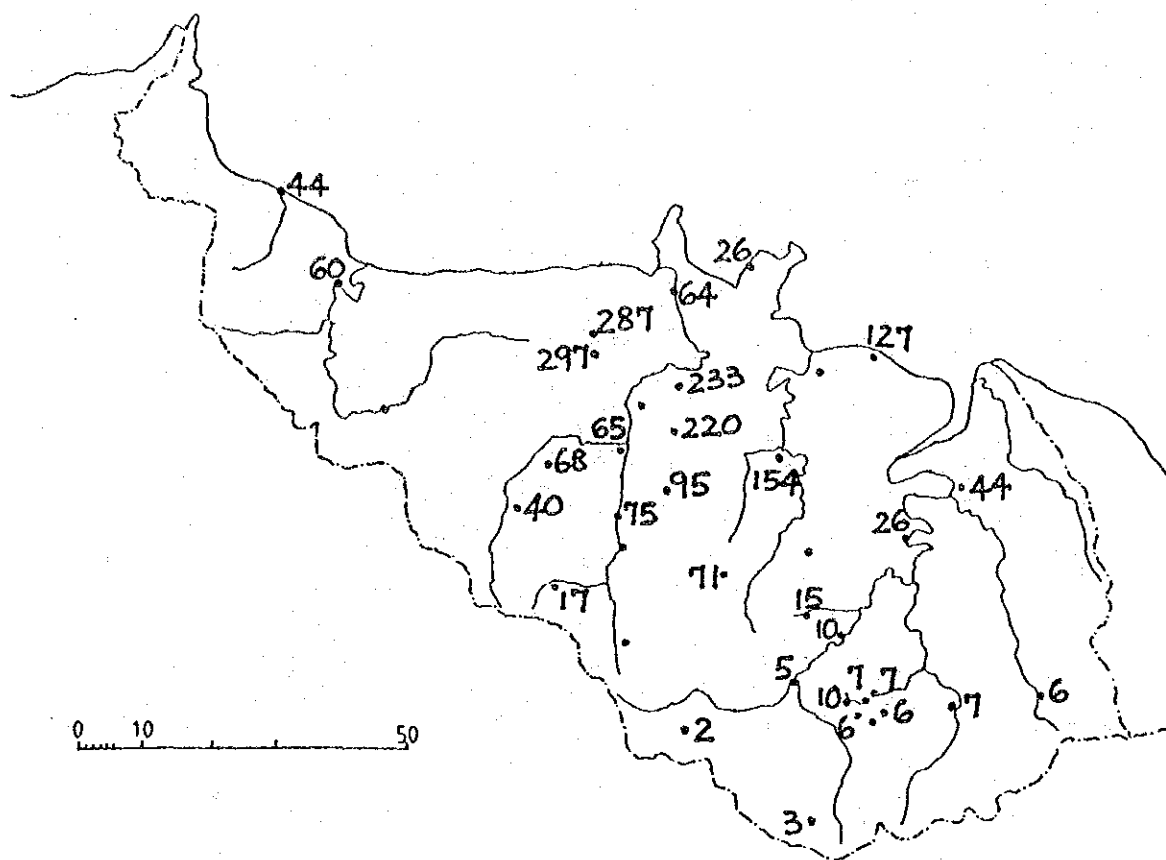


FIG.-5 DAILY RAINFALL DISTRIBUTION ON 9 JAN. 1971

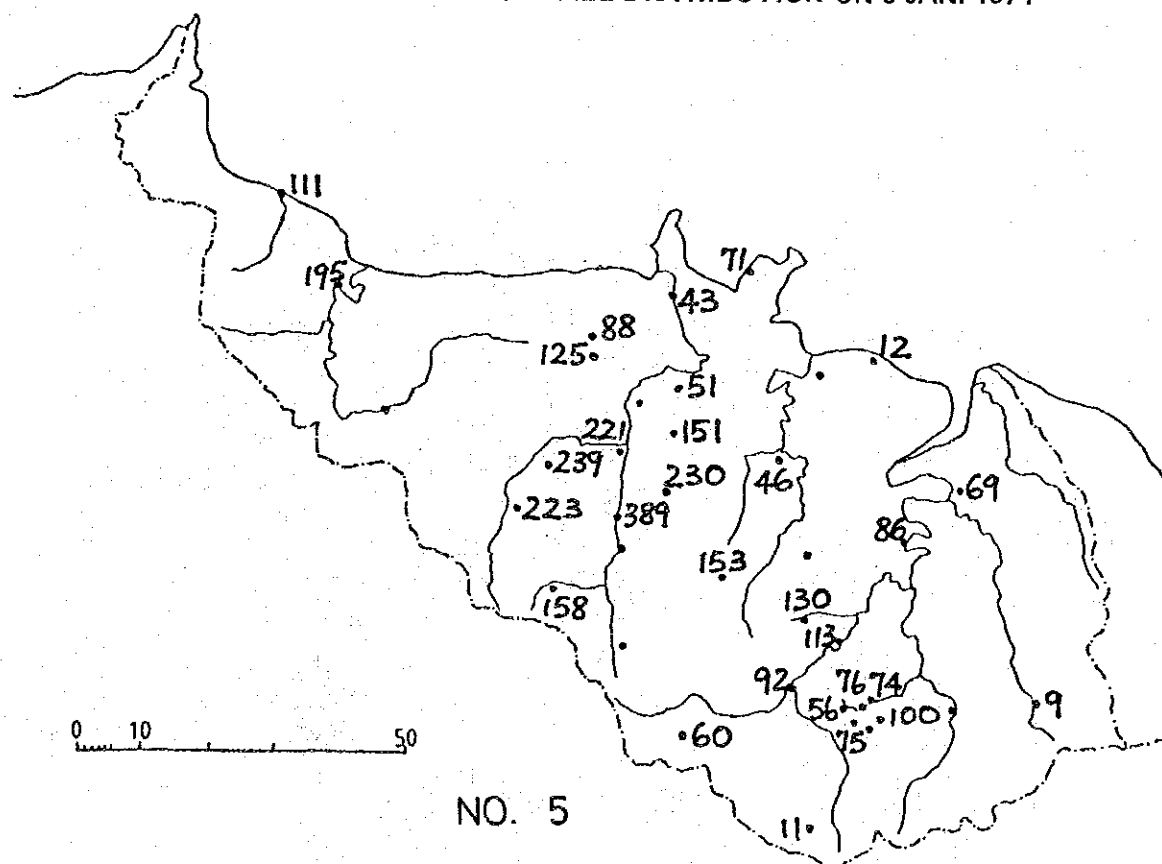
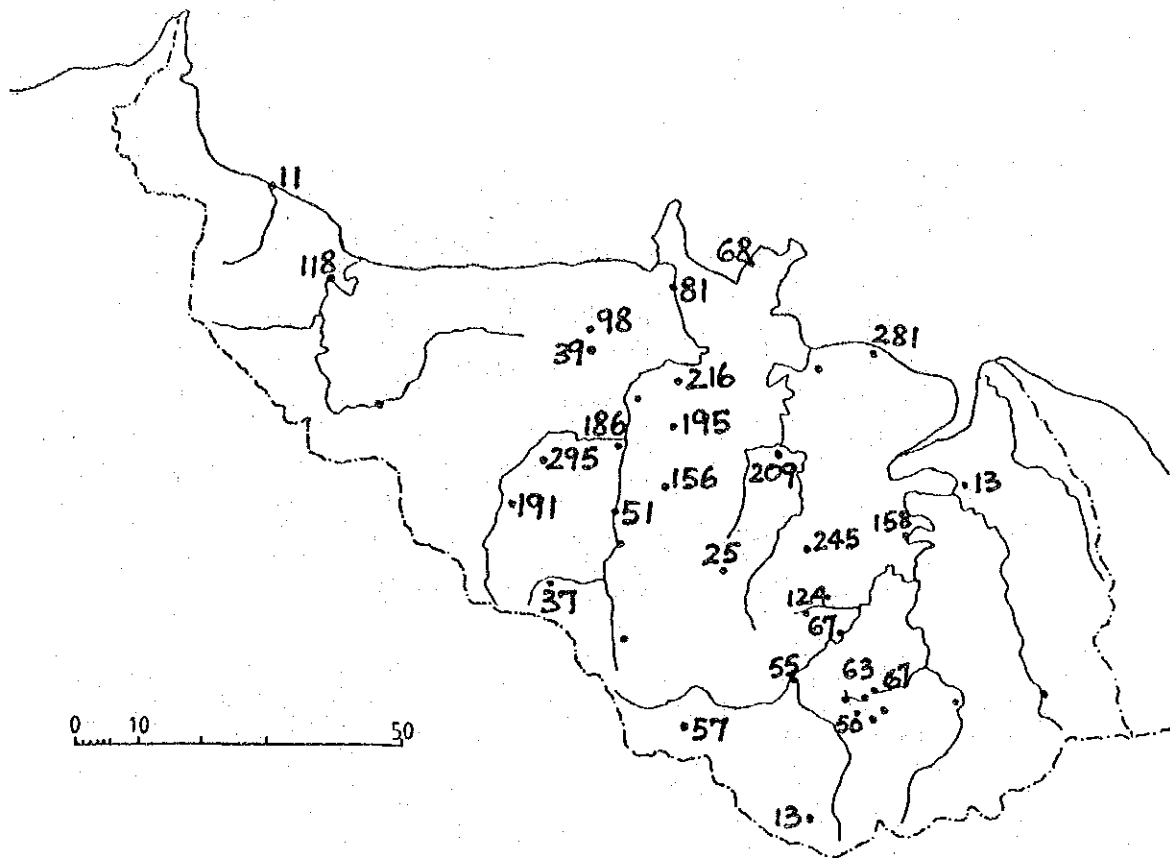
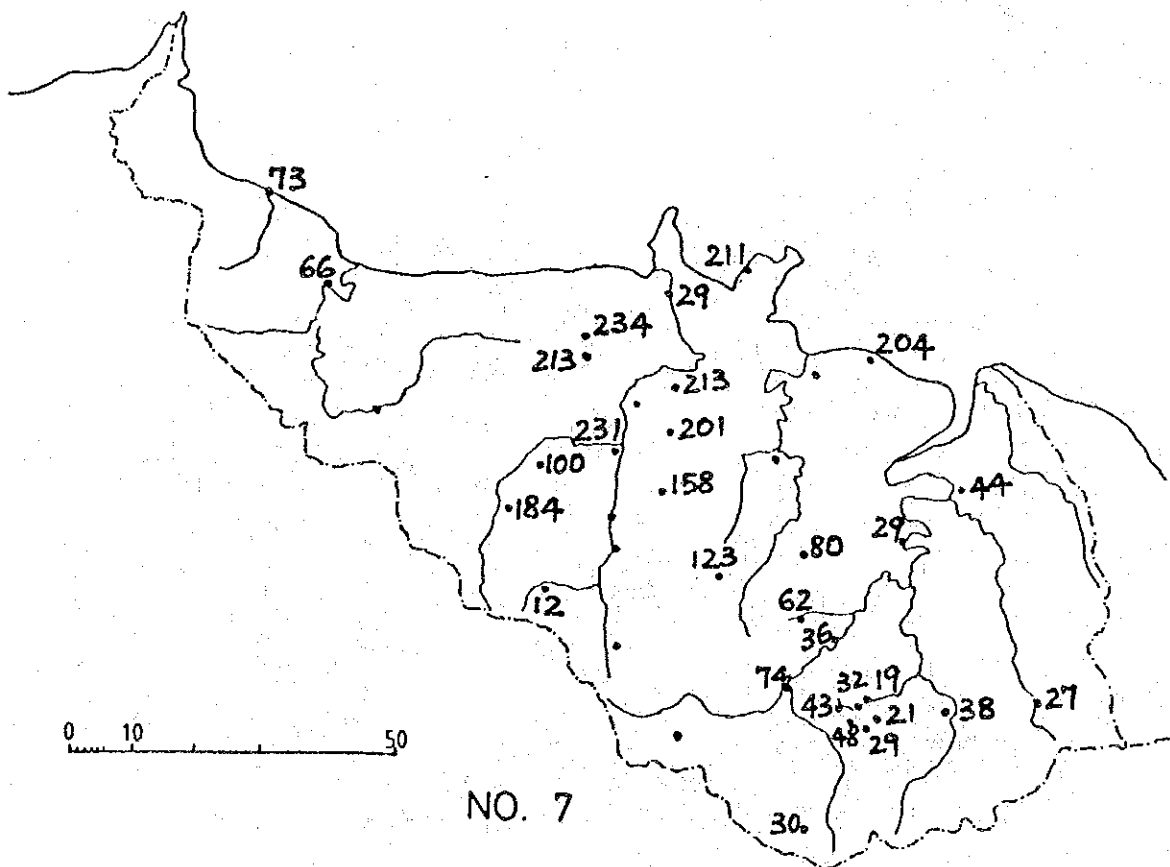


FIG.—6 DAILY RAINFALL DISTRIBUTION ON 22 JAN. 1971



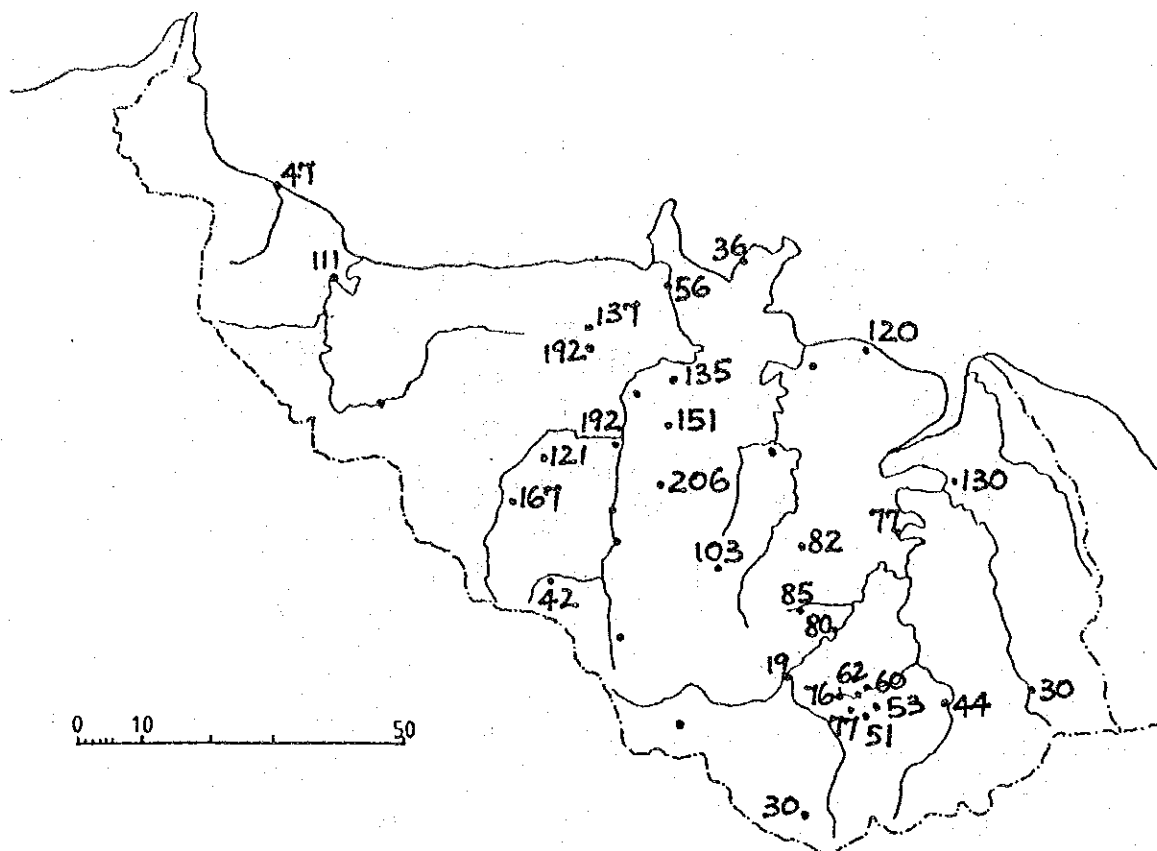
NO. 6

FIG.-7 DAILY RAINFALL DISTRIBUTION ON 22 JAN. 1972



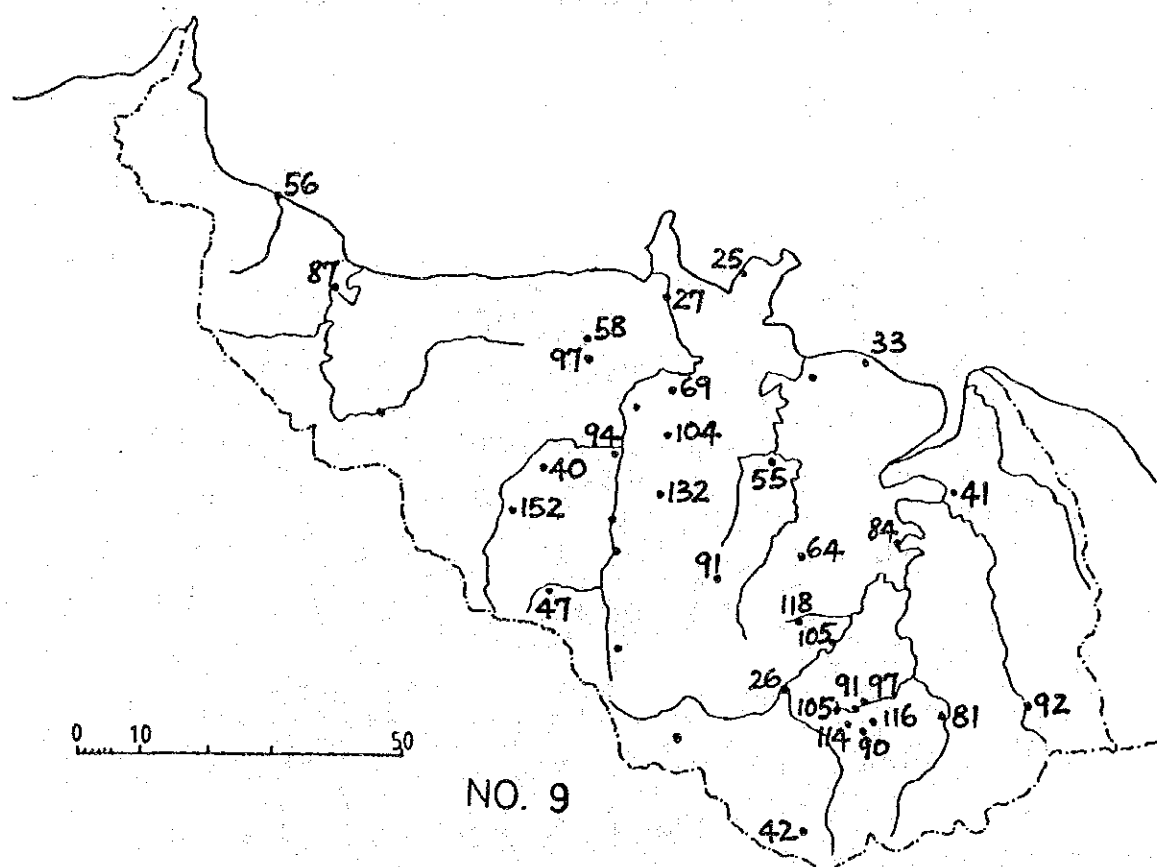
NO. 7

FIG.-8 DAILY RAINFALL DISTRIBUTION ON 24 DEC. 1973



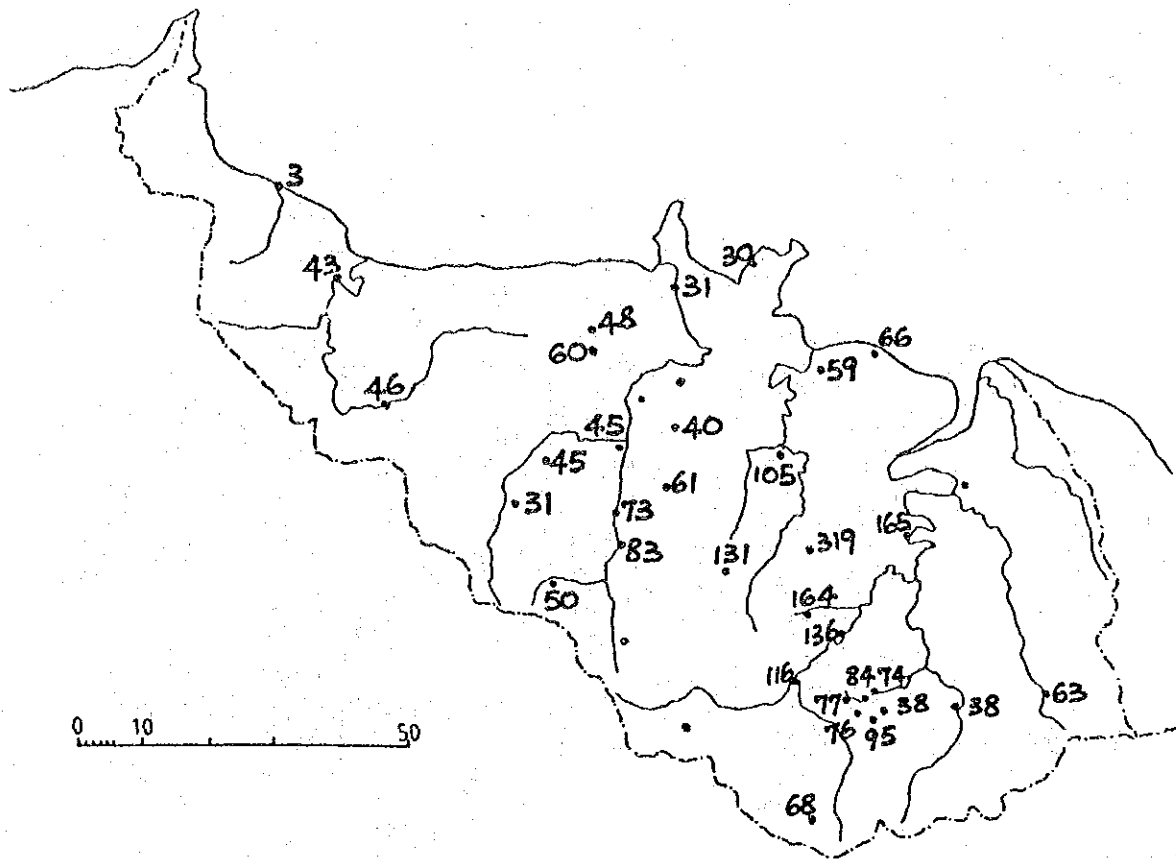
NO. 8

FIG.-9 DAILY RAINFALL DISTRIBUTION ON 27 DEC. 1973



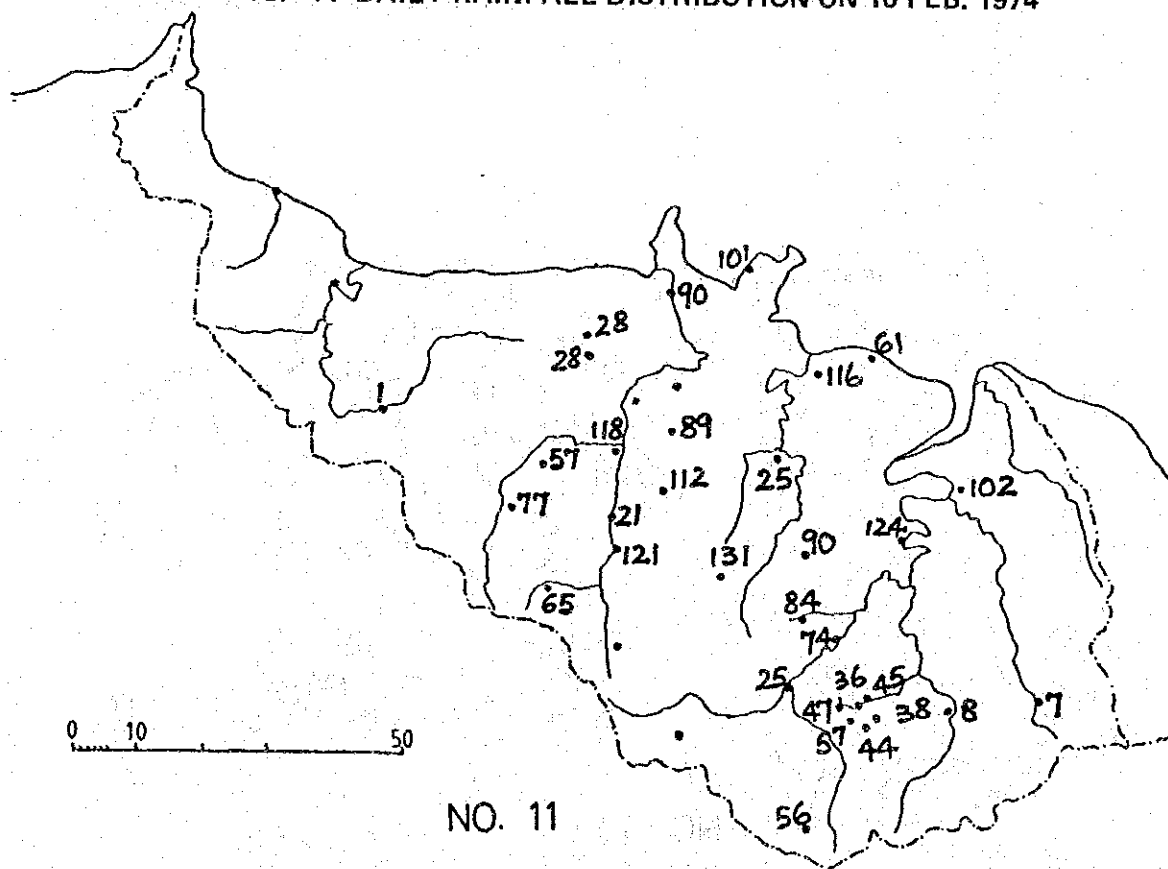
NO. 9

FIG.-10 DAILY RAINFALL DISTRIBUTION ON 10 JAN. 1973



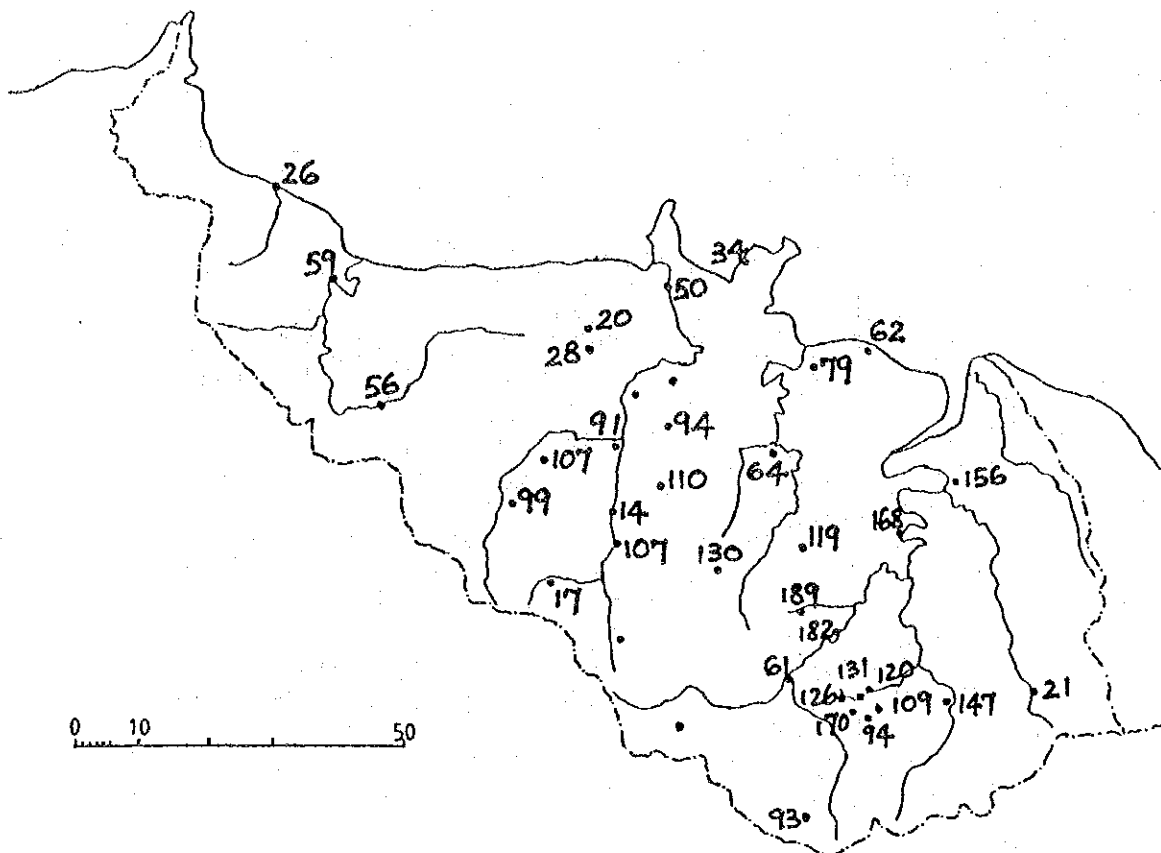
NO. 10

FIG.-11 DAILY RAINFALL DISTRIBUTION ON 10 FEB. 1974



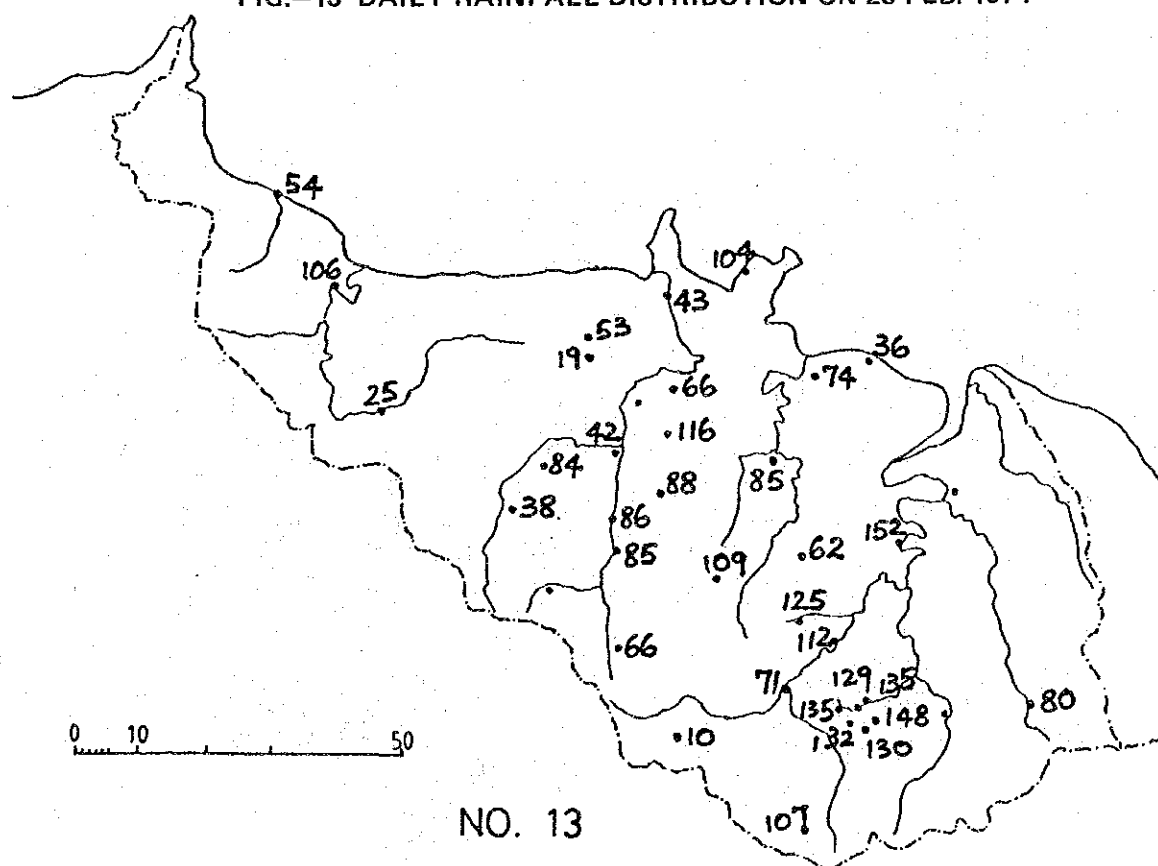
NO. 11

FIG.-12 DAILY RAINFALL DISTRIBUTION ON 12 FEB. 1974



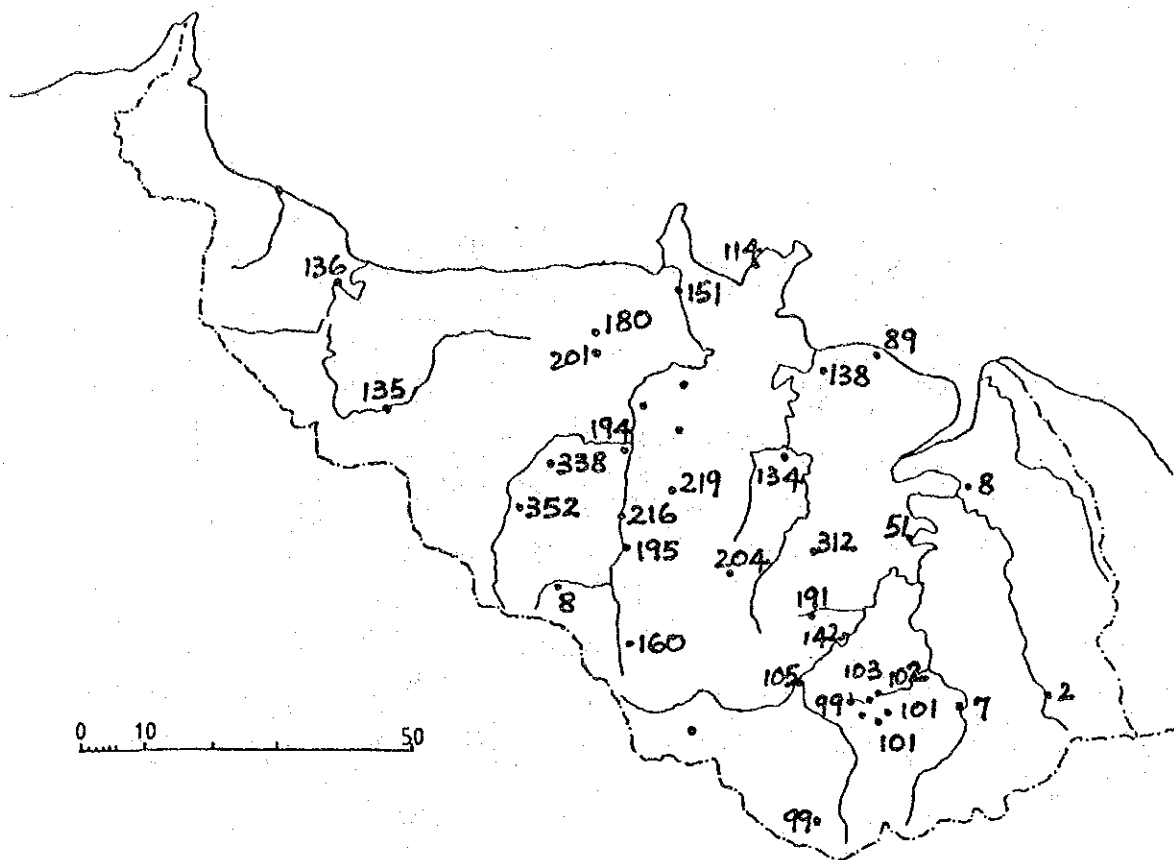
NO. 12

FIG.—13 DAILY RAINFALL DISTRIBUTION ON 28 FEB. 1974



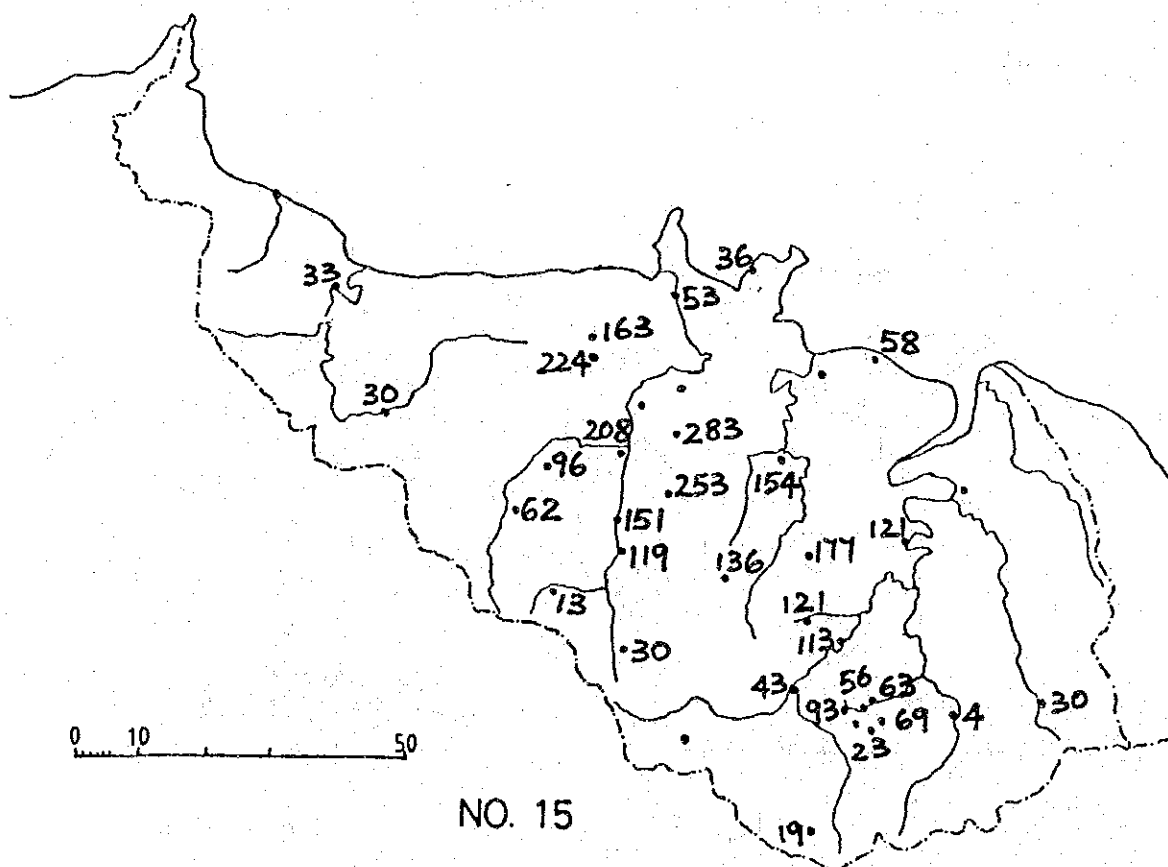
NO. 13

FIG.—14 DAILY RAINFALL DISTRIBUTION ON 23 FEB. 1975



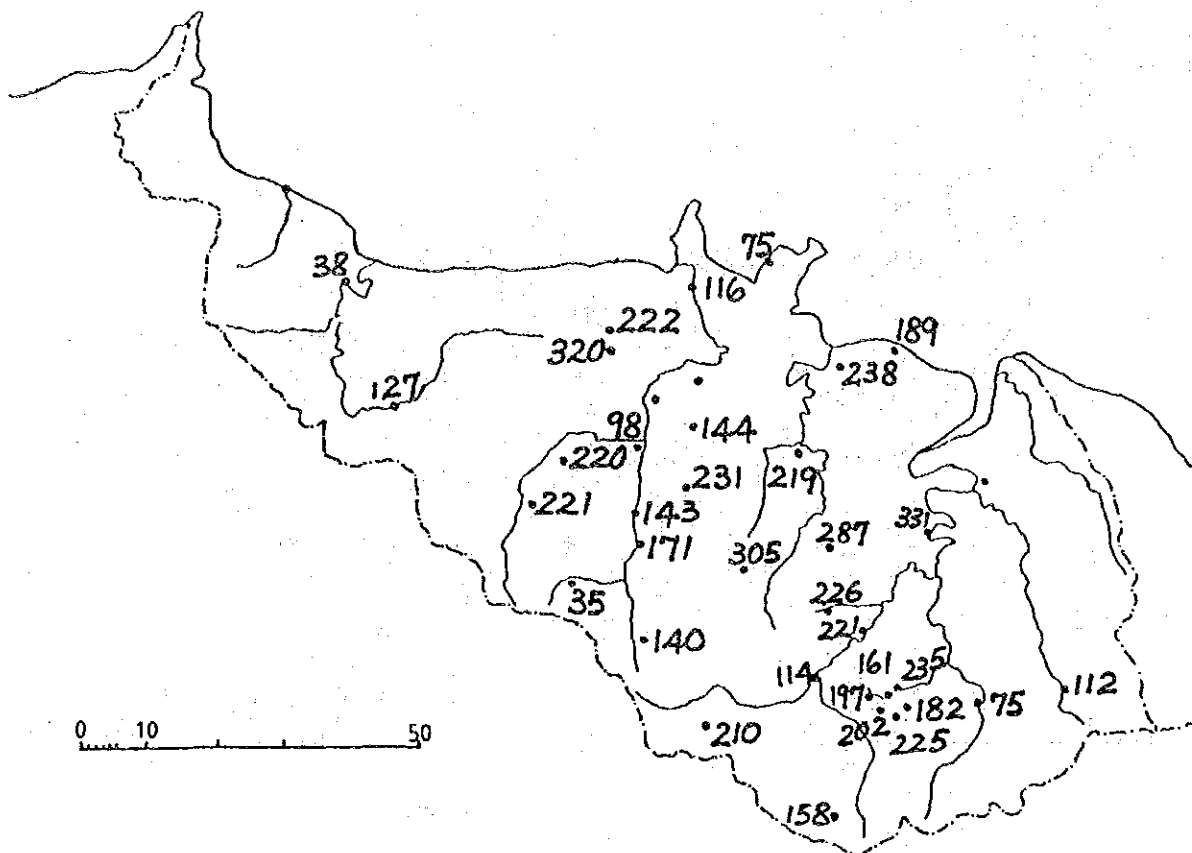
NO. 14

FIG.-15 DAILY RAINFALL DISTRIBUTION ON 23 DEC. 1975



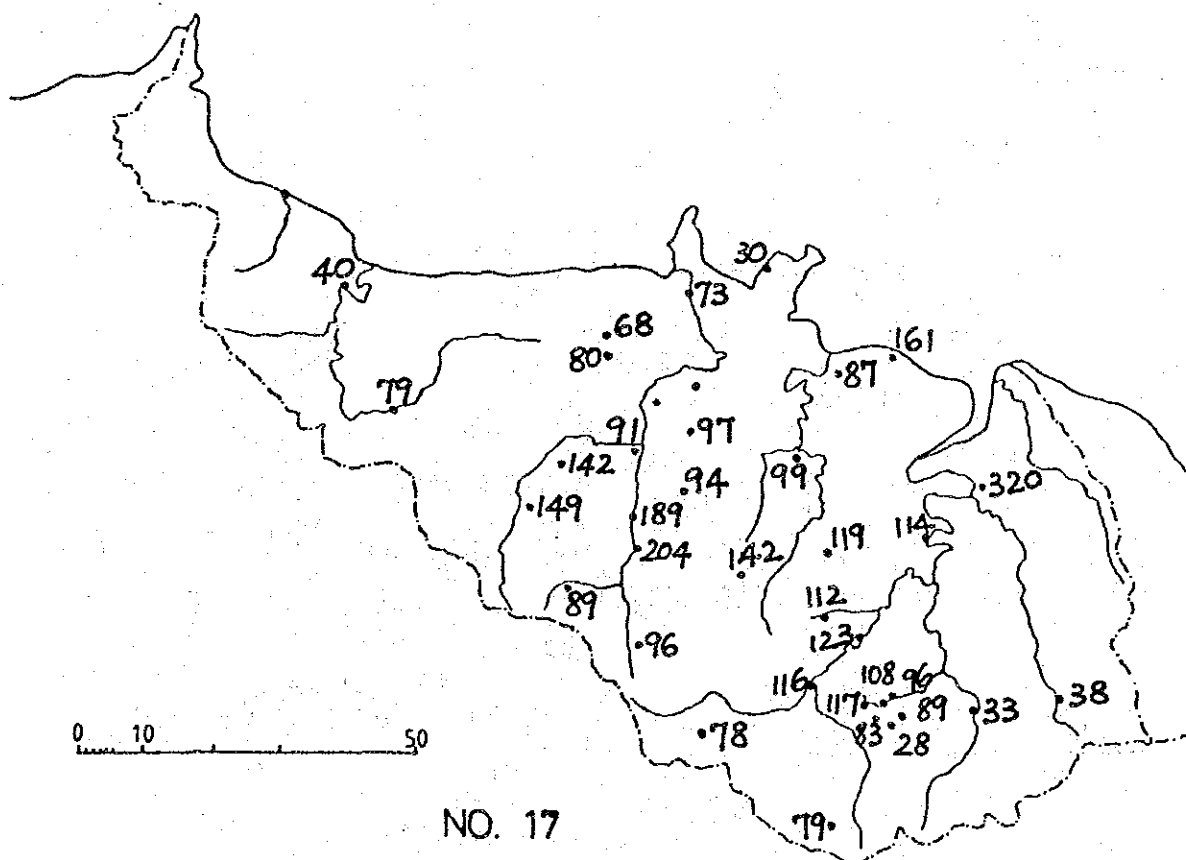
NO. 15

FIG.-16 DAILY RAINFALL DISTRIBUTION ON 28 DEC. 1975



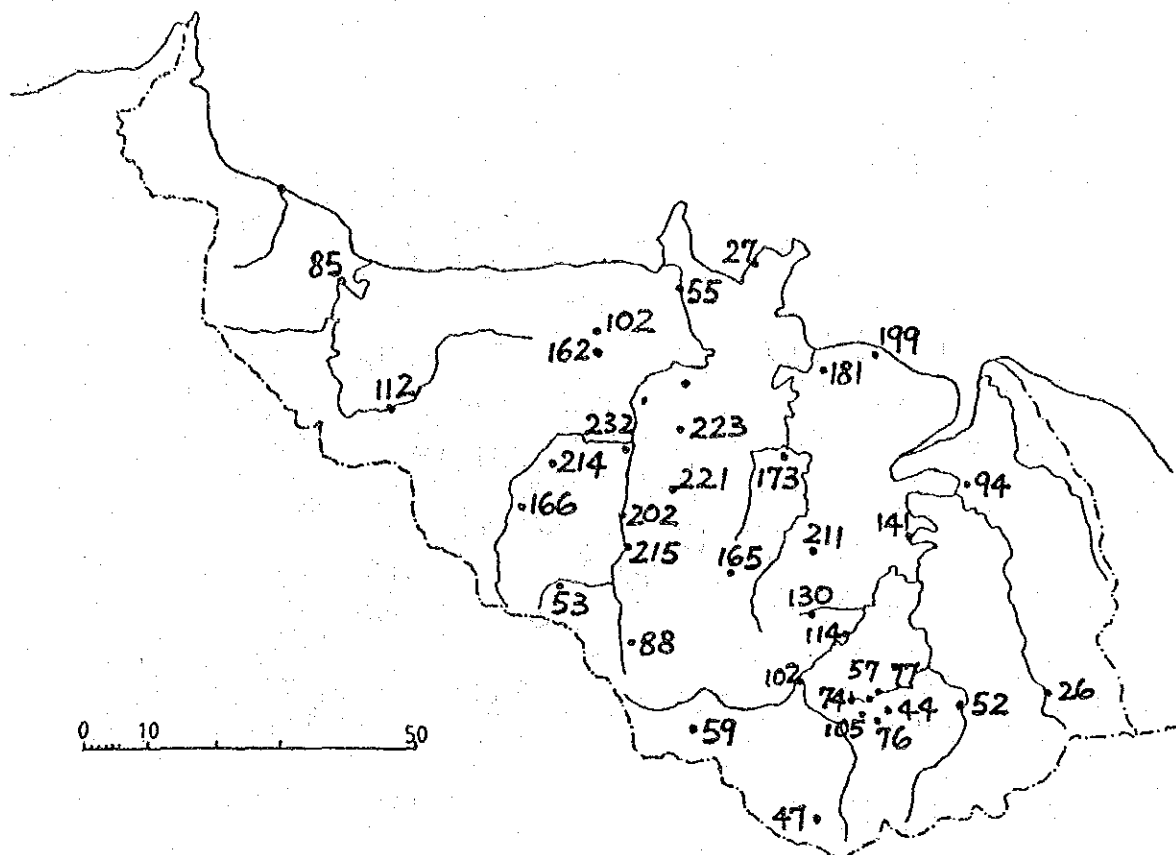
NO. 16

FIG.-17 DAILY RAINFALL DISTRIBUTION ON 11 JAN. 1976



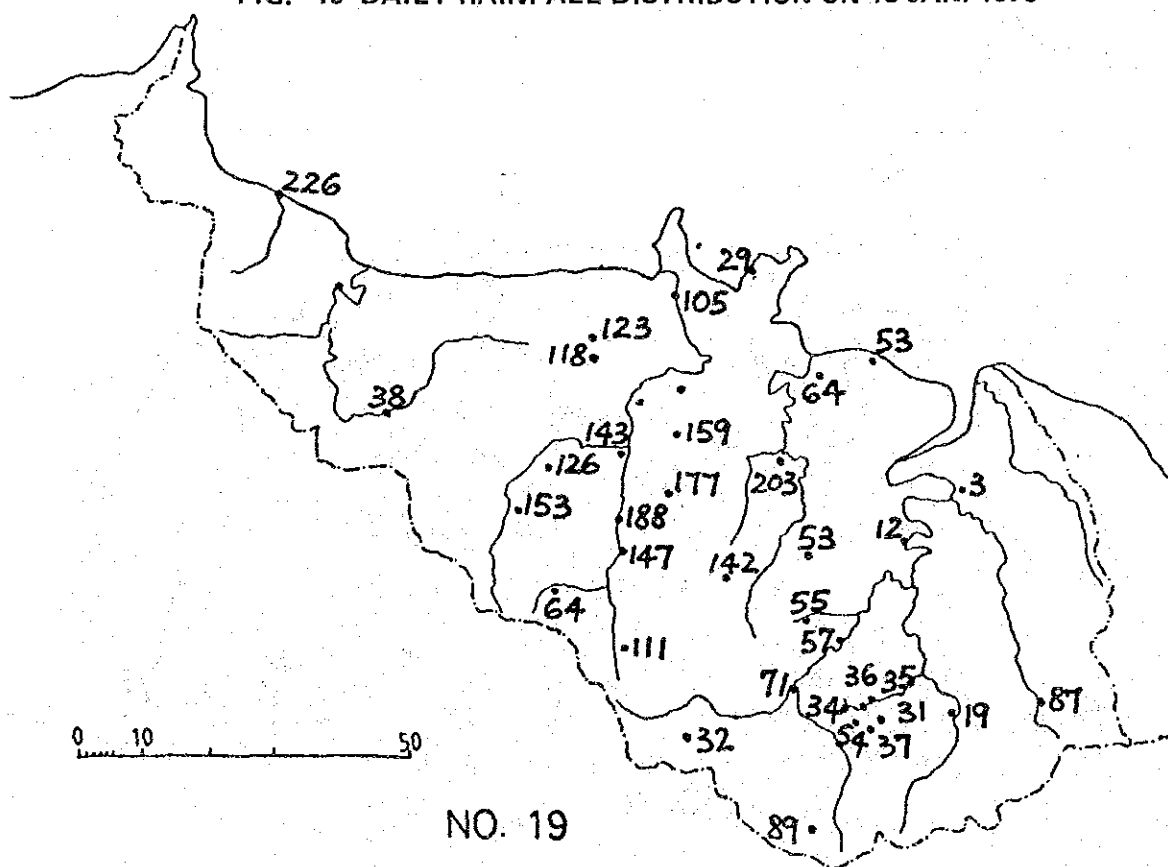
NO. 17

FIG.-18 DAILY RAINFALL DISTRIBUTION ON 12 JAN. 1976



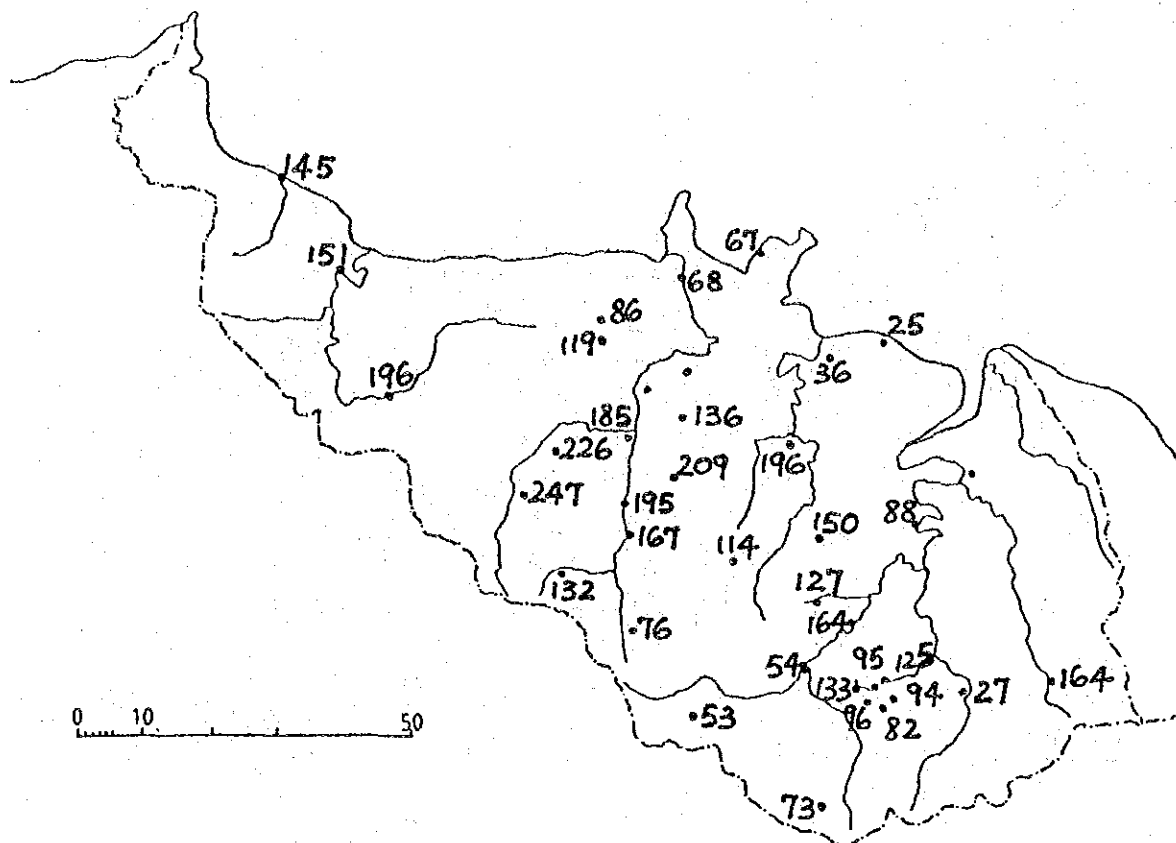
NO. 18

FIG.—19 DAILY RAINFALL DISTRIBUTION ON 13 JAN. 1976



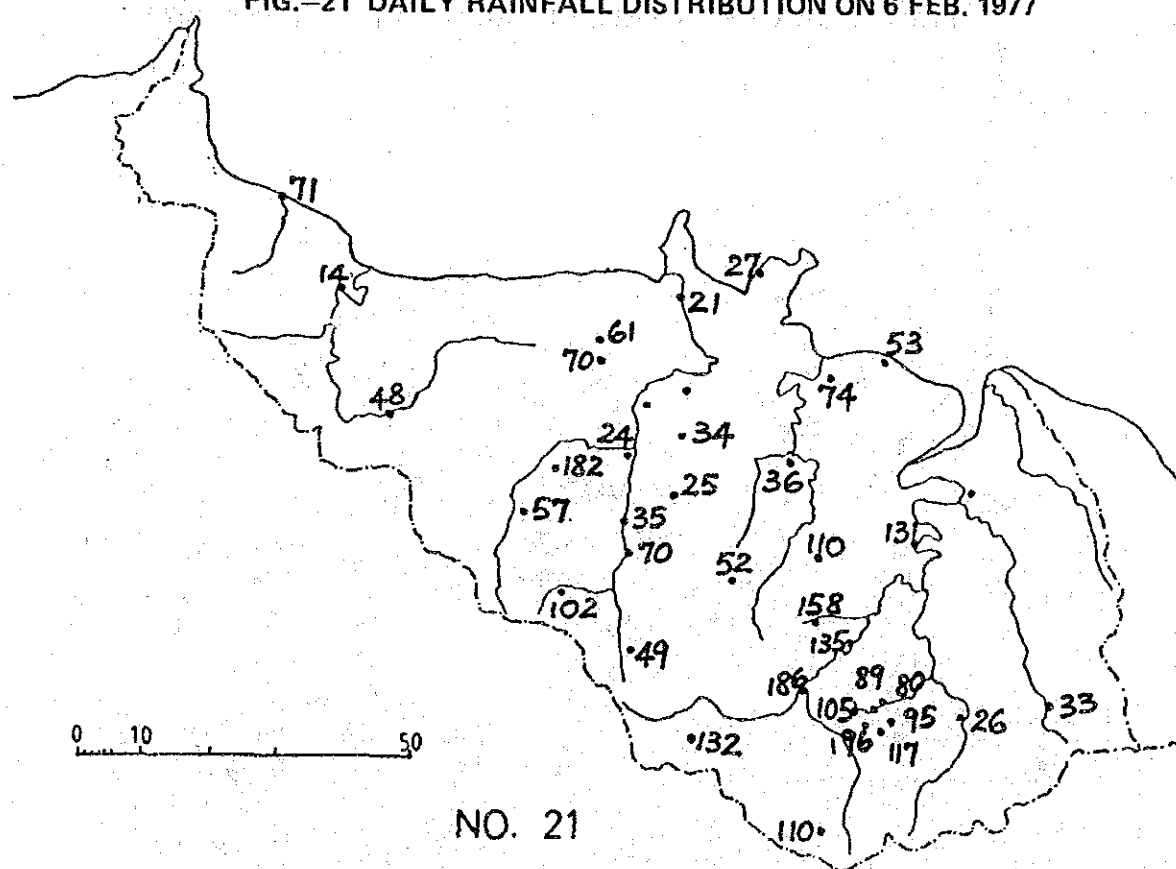
NO. 19

FIG.—20 DAILY RAINFALL DISTRIBUTION ON 4 FEB. 1977



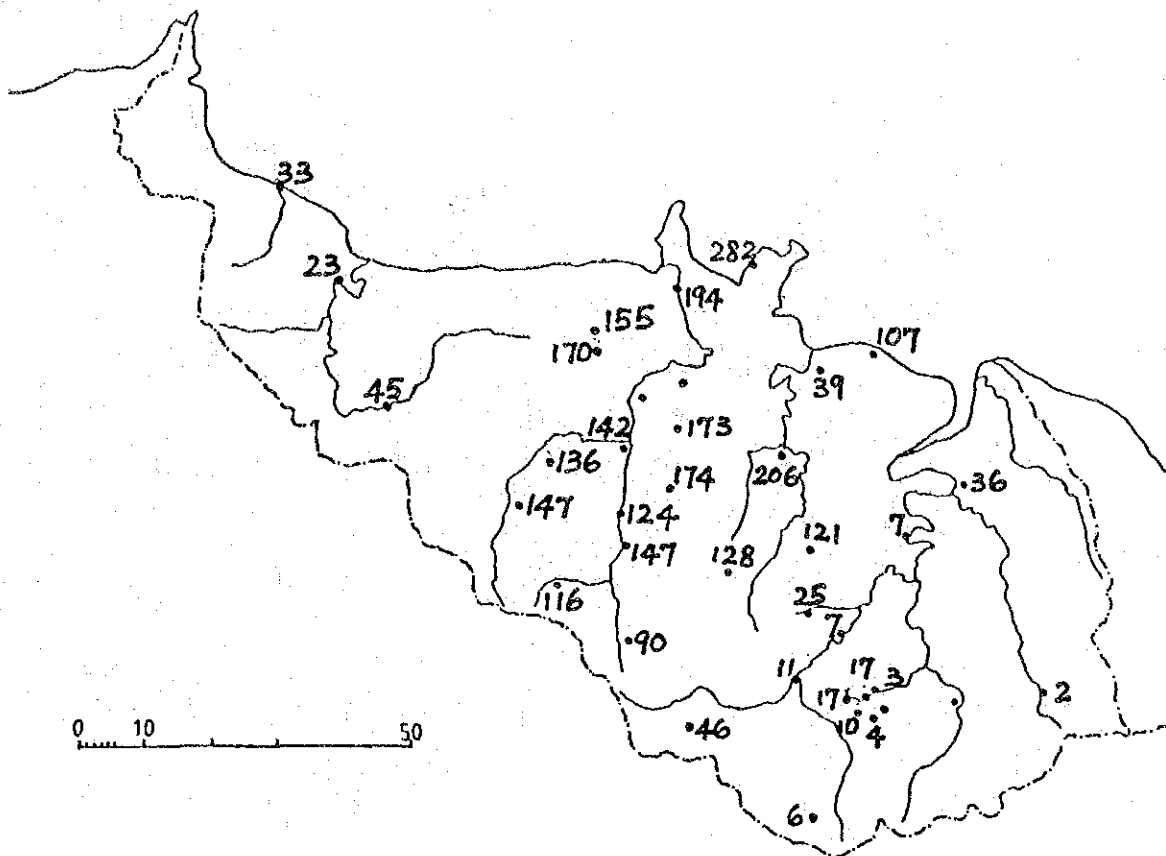
NO. 20

FIG.—21 DAILY RAINFALL DISTRIBUTION ON 6 FEB. 1977



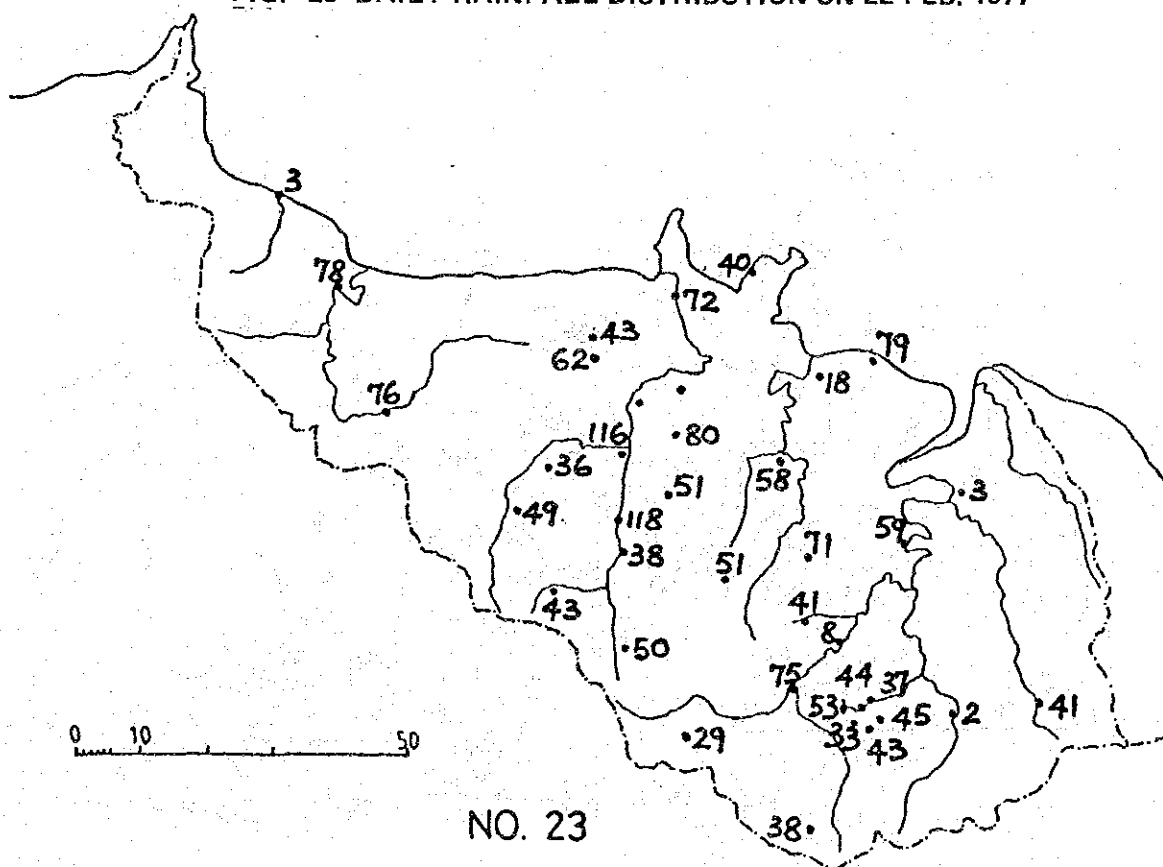
NO. 21

FIG.—22 DAILY RAINFALL DISTRIBUTION ON 19 FEB. 1977



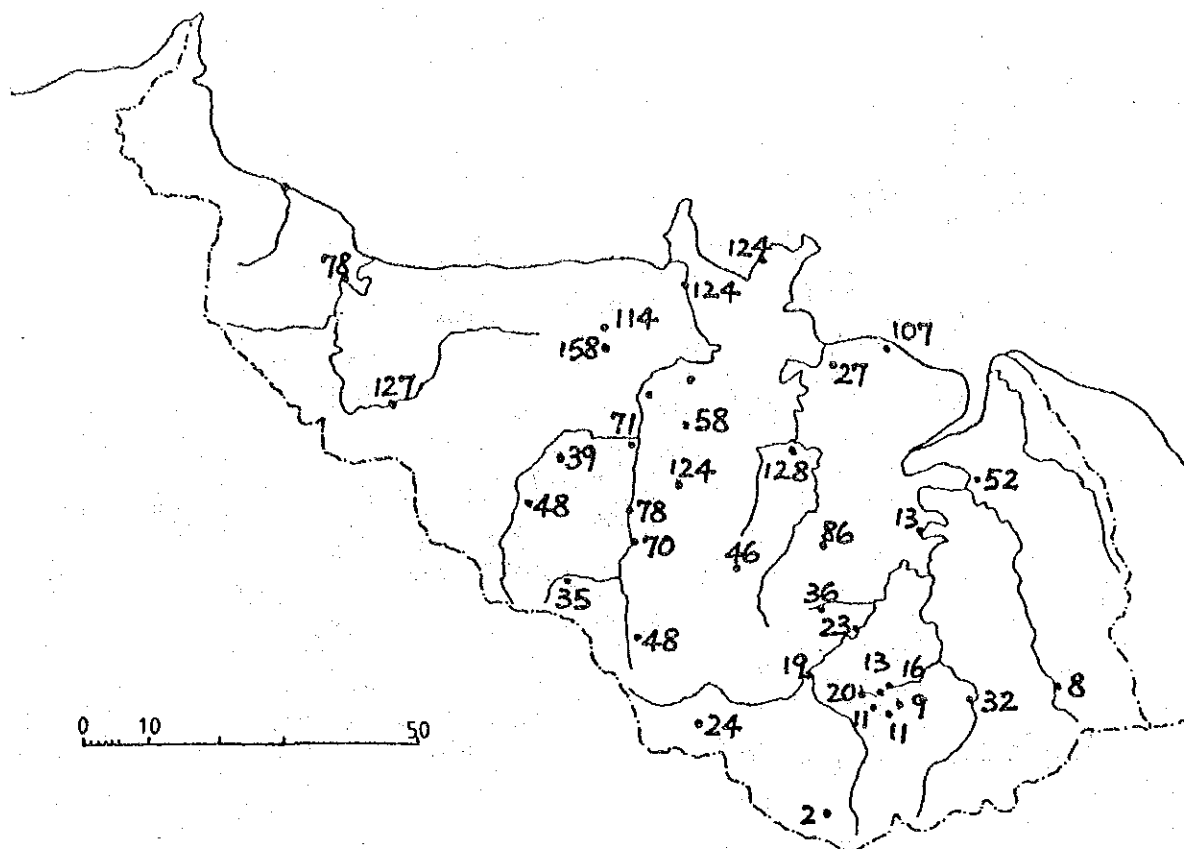
NO. 22

FIG.-23 DAILY RAINFALL DISTRIBUTION ON 22 FEB. 1977



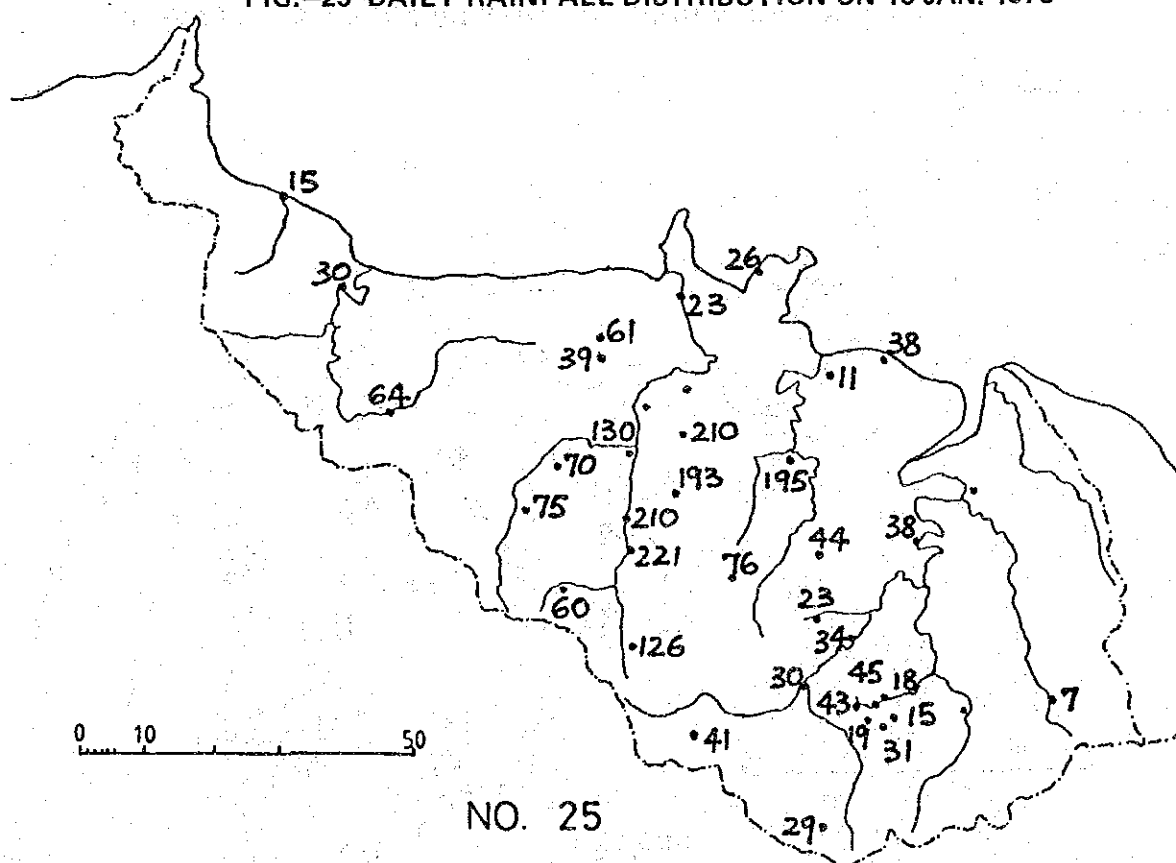
NO. 23

FIG.-24 DAILY RAINFALL DISTRIBUTION ON 9 JAN. 1978



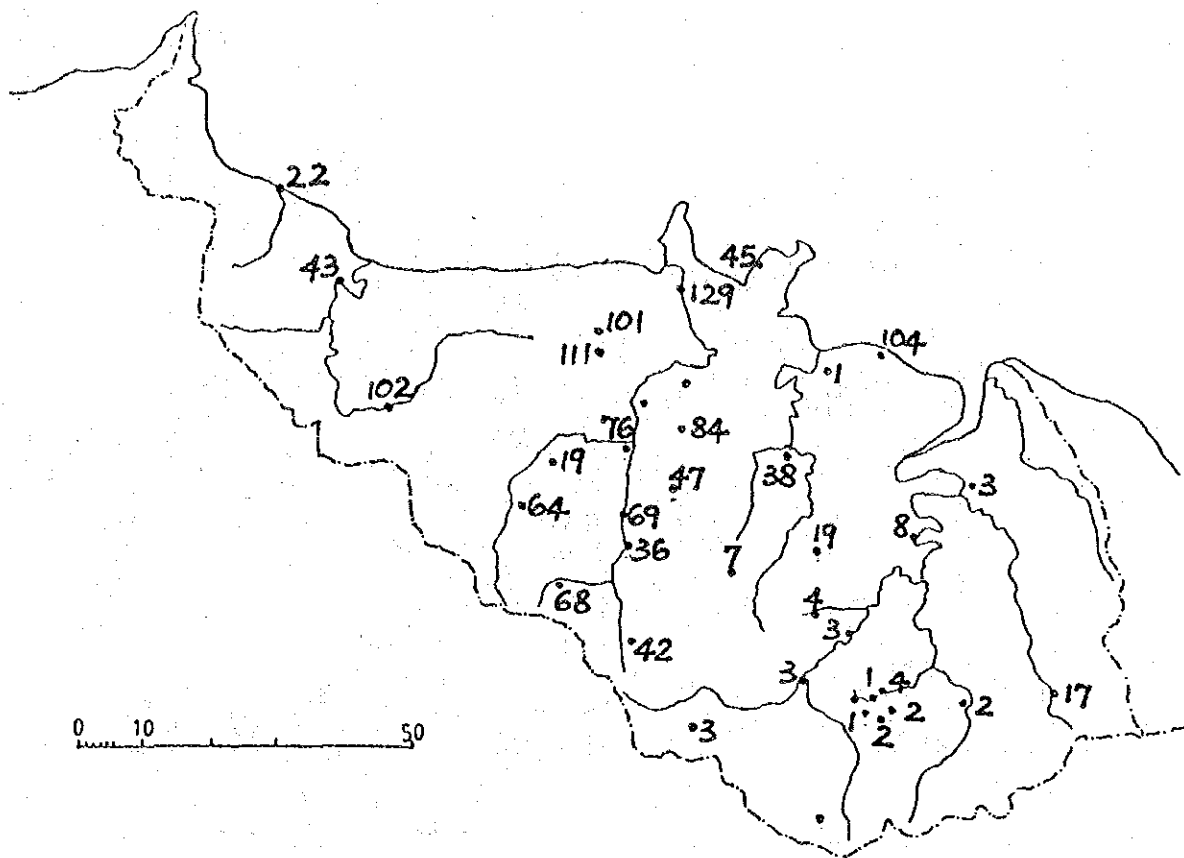
NO. 24

FIG.-25 DAILY RAINFALL DISTRIBUTION ON 10 JAN. 1978



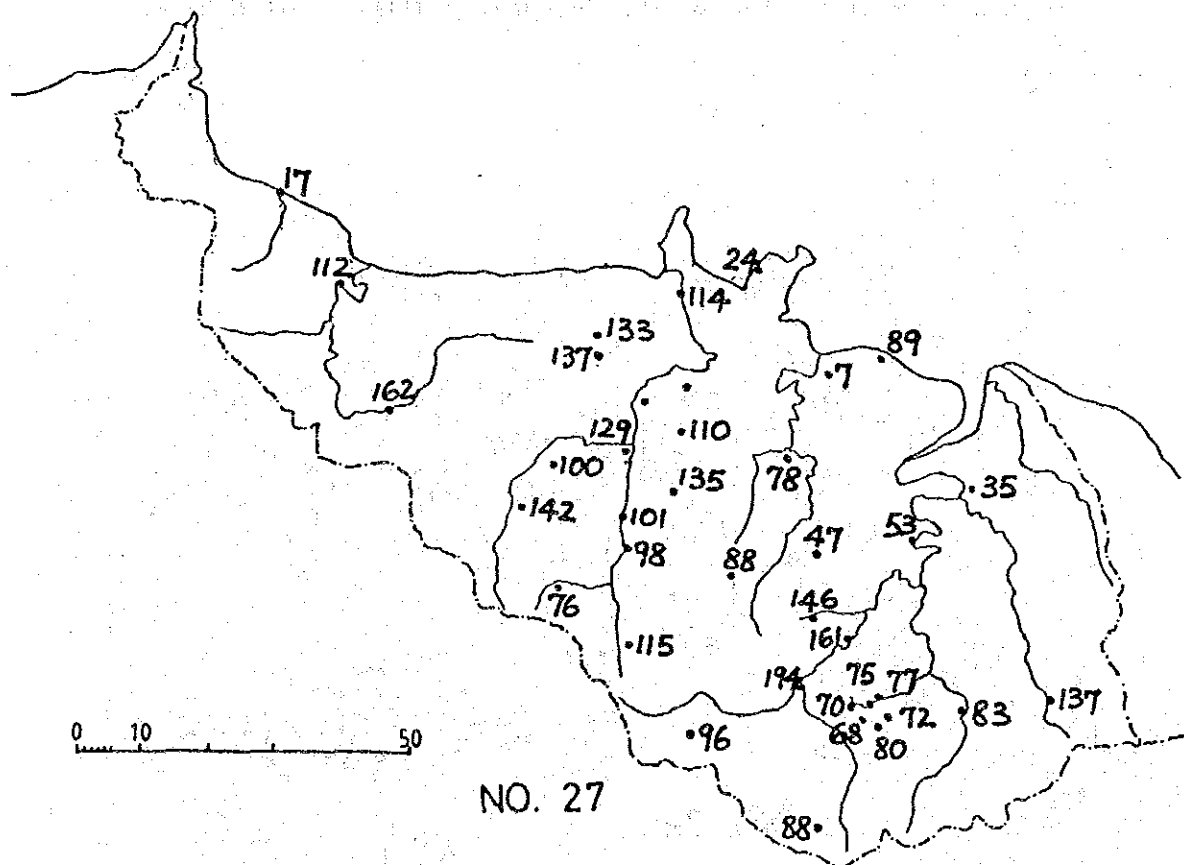
NO. 25

FIG.-26 DAILY RAINFALL DISTRIBUTION ON 21 JAN. 1978



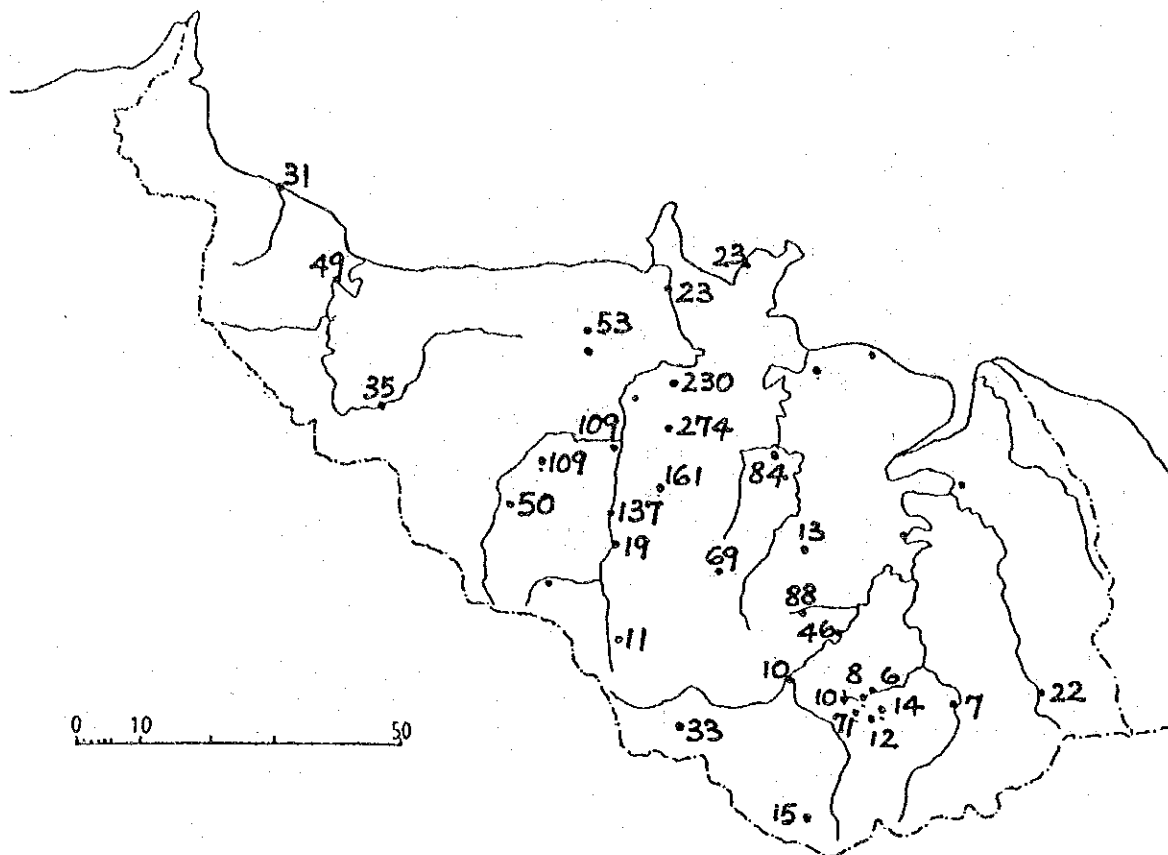
NO. 26

FIG.-27 DAILY RAINFALL DISTRIBUTION ON 22 JAN. 1978



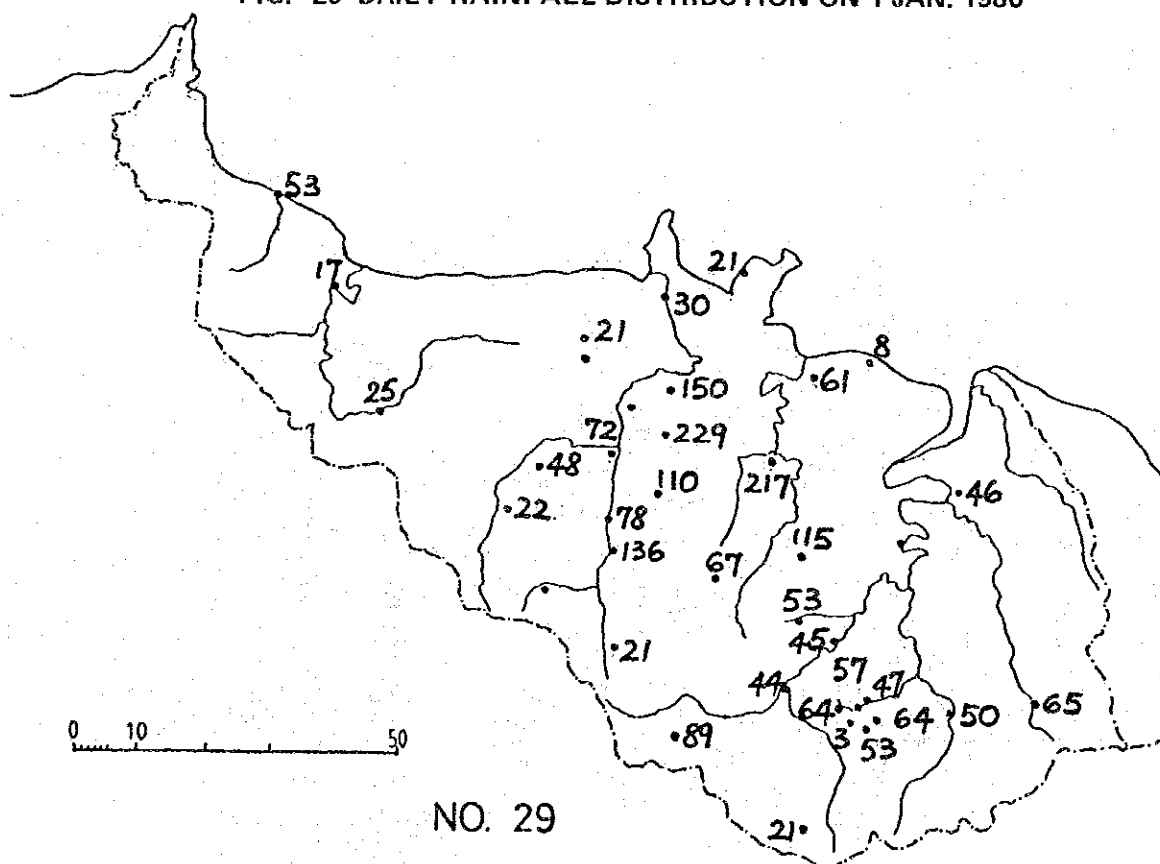
NO. 27

FIG.-28 DAILY RAINFALL DISTRIBUTION ON 23 JAN. 1978



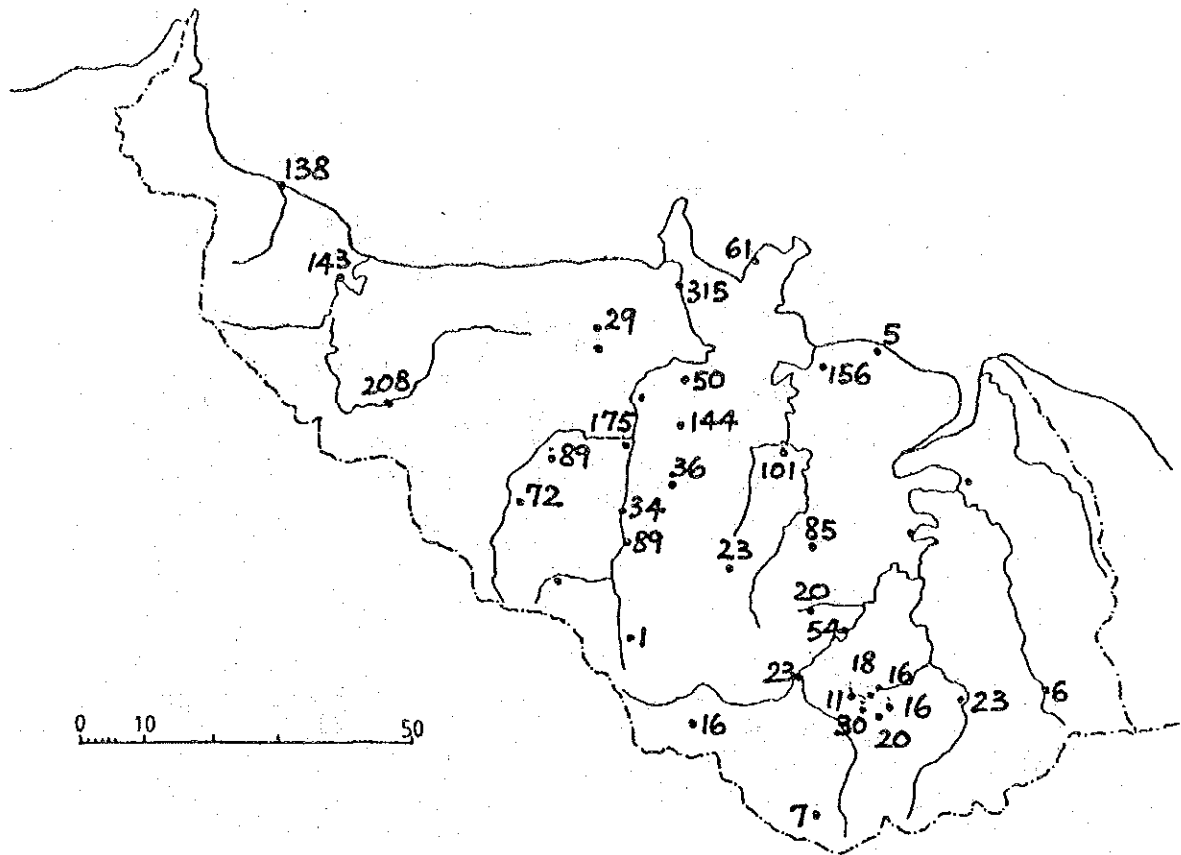
NO. 28

FIG.-29 DAILY RAINFALL DISTRIBUTION ON 1 JAN. 1980



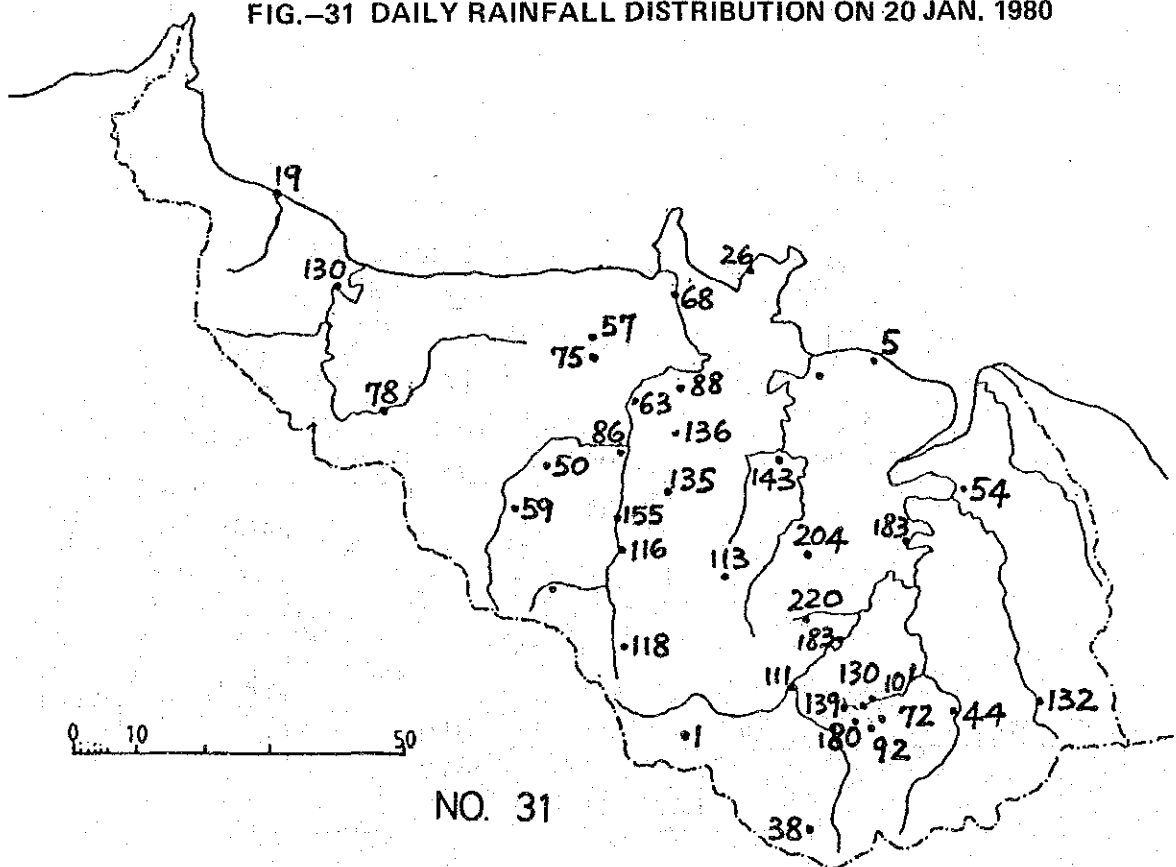
NO. 29

FIG.-30 DAILY RAINFALL DISTRIBUTION ON 2 JAN. 1980



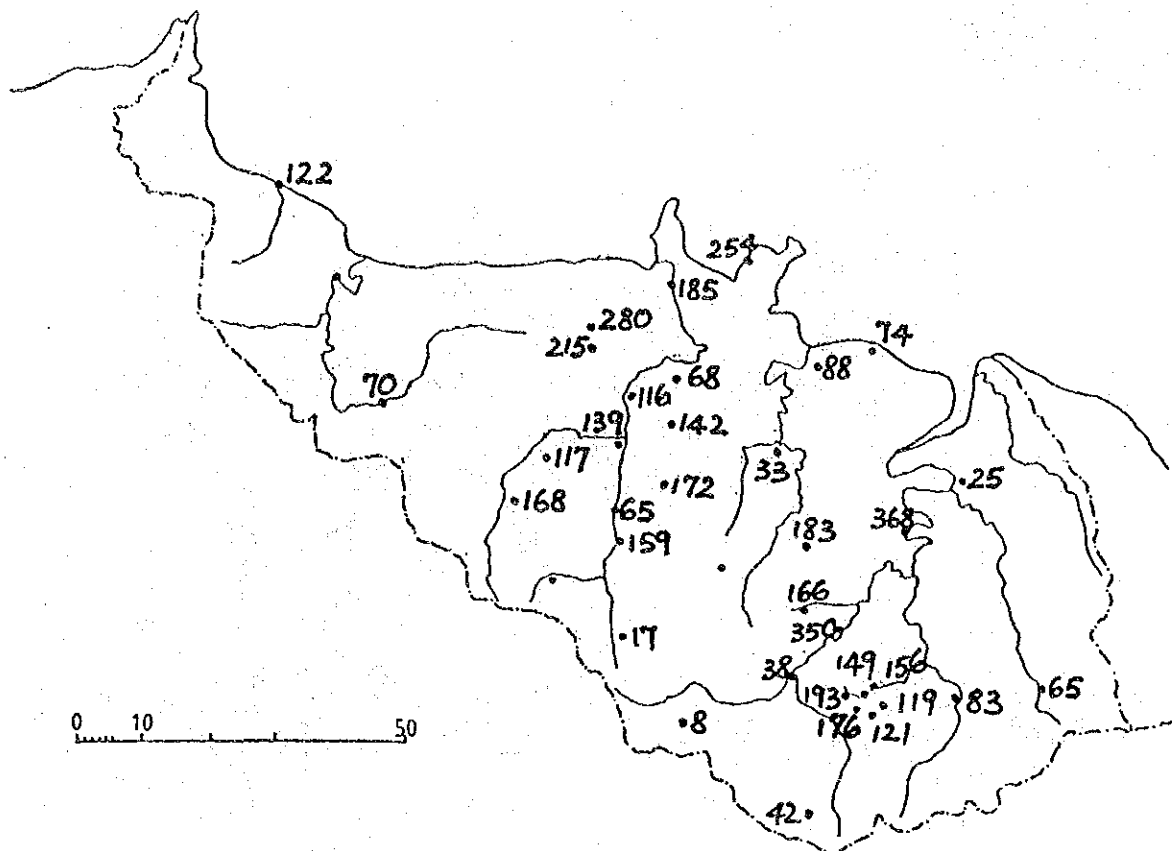
NO. 30

FIG.-31 DAILY RAINFALL DISTRIBUTION ON 20 JAN. 1980



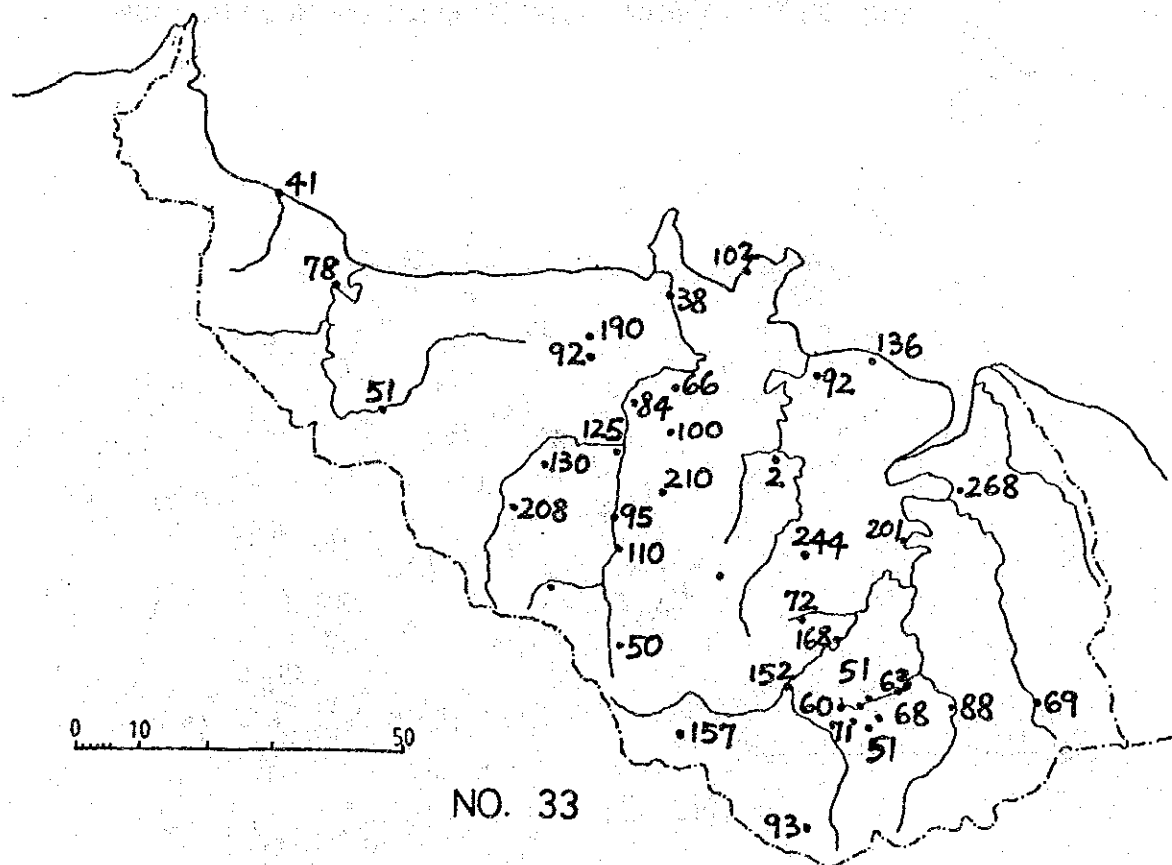
NO. 31

FIG.-32 DAILY RAINFALL DISTRIBUTION ON 22 DEC. 1981



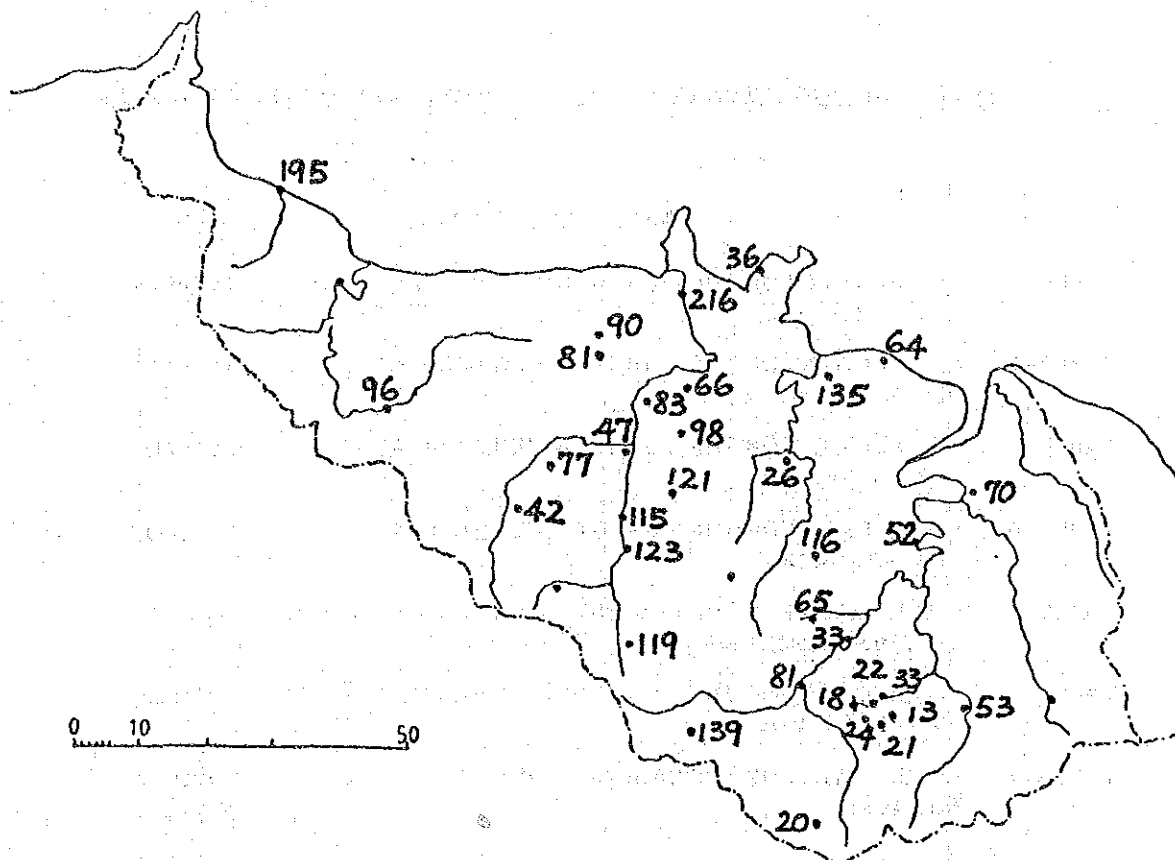
NO. 32

FIG.-33 DAILY RAINFALL DISTRIBUTION ON 24 JAN. 1983



NO. 33

FIG.-34 DAILY RAINFALL DISTRIBUTION ON 25 JAN. 1983



NO. 34

FIG.—35 DAILY RAINFALL DISTRIBUTION ON 26 JAN, 1983

D-4 FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN

TABLES AND FIGURES

TABLE-1	FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF JAN. - FEB. 1963
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TABLE-3	FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF FEB. - MAR. 1974
TABLE-4	FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF FEB. - MAR. 1975
TABLE-5	FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF DEC. 1975 - JAN. 1976
TABLE-6	FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF FEB. - MAR. 1977
TABLE-7	FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF JAN. 1978
FIG.-1	FLOOD OF JAN. - FEB. 1963
FIG.-2	FLOOD OF DEC. 1969 - JAN. 1970
FIG.-3	FLOOD OF FEB. - MAR. 1974
FIG.-4	FLOOD OF FEB. - MAR. 1975
FIG.-5	FLOOD OF DEC. 1975 - JAN. 1976
FIG.-6	FLOOD OF FEB. - MAR. 1977
FIG.-7	FLOOD OF JAN. 1978

YEARLY MAXIMUM WATER LEVEL AT GAUGING STATION L/1-1 AND L/1-3

GAUGING STATION	L/1-1				L/1-3			
	MAXIMUM		NEXT TO MAXIMUM		MAXIMUM		NEXT TO MAXIMUM	
	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
1962	20 FEB.	9.36			2 DEC.	0.61		
63	30 JAN.	9.37			4 FEB.	1.98		
64	3 MAR.	8.36			11 FEB.	2.71		
65	18 MAR.	8.15			16 AUG.	2.62		
66	29 JAN.	8.09			10 MAR.	2.26		
67	2 MAR.	8.09			11 JAN.	2.12		
68	17 JAN.	8.84			22 DEC.	2.77		
69	23 DEC.	9.06			22 JAN.	2.00		
70	23 JAN.	8.26						
71	8 FEB.	8.38			8 FEB.	1.87		
72	29 JAN.	8.15			29 JAN.	1.39		
73	31 DEC.	8.85			13 SEP.	1.62		
74	14 FEB.	9.41	2 MAR.	9.15	1 MAR.	2.90	12 FEB.	2.68
75	27 FEB.	9.40	27 DEC.	9.07	24 FEB.	2.67		
76	14 JAN.	9.76			14 JAN.	(MISSING)		
77	21 FEB.	9.29	7 DEC.	8.35	20 FEB.	2.80	5 APR.	2.14
78	25 JAN.	8.70			12 JAN.	1.89	23 JAN.	2.21
79	7 DEC.	7.61			6 NOV.	1.79	17 DEC.	1.80
80	23 FEB.	8.53			3 DEC.	1.53		
1981	24 DEC.	9.04			23 DEC.	2.60		

CAGIN STATION: SERIAN (L/1-1)

JAN. - FEB. 1963

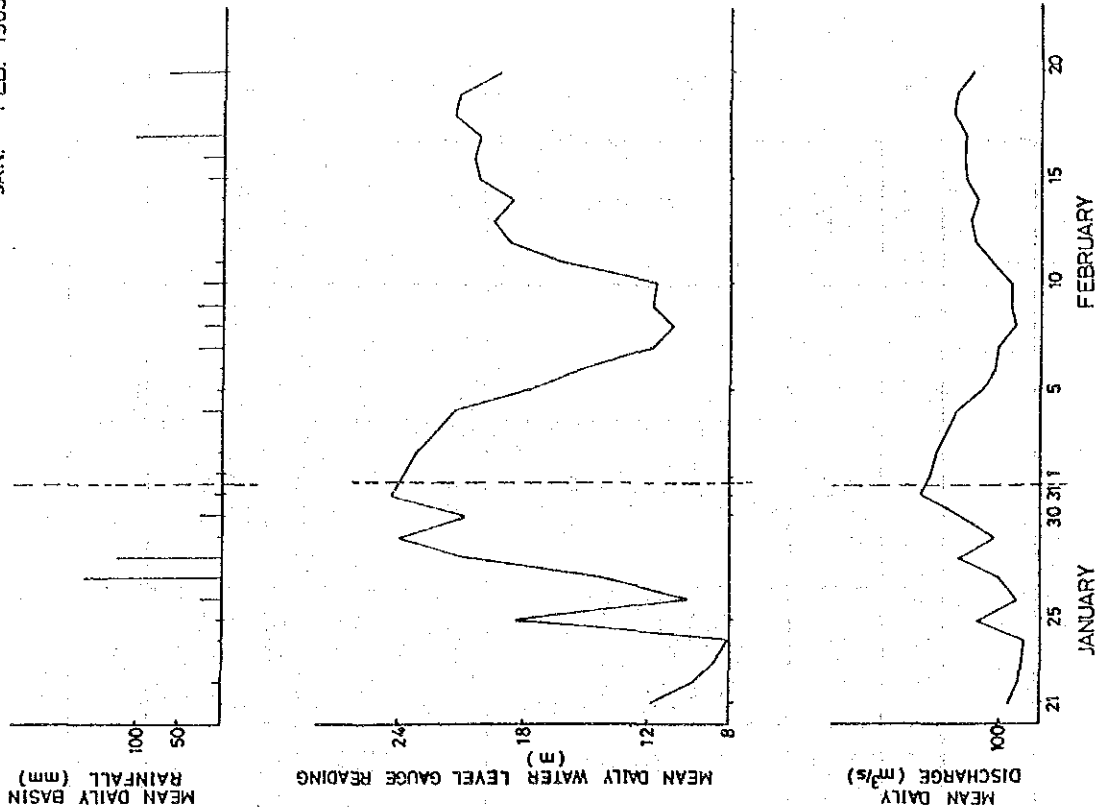


FIG.-1 FLOOD OF JAN. - FEB. 1963

JAN. - FEB. 1963

NO	RAINFALL STATION 1-31	1-50	1-39	(OUTSIDE BASIN) 1-27	MEAN DAILY BASIN RAINFALL (mm)	MEAN DAILY WATER LEVEL GAUGE READING (m)	MEAN DAILY DISCHARGE (m³/s)	DAILY RAINFALL (mm)
JAN 21	1.				1.	11.23	75	6.9
22	12.					9.68	55	5.0
23	3.				5.	8.70	45	4.1
24	6.				5.25	8.13	42	3.9
25	7.				6.	18.46	153	14.0
26	24.				3.13	10.08	58	5.3
27	16.2				5.4	14.23	100	9.2
28	12.2				50.167	20.97	204	18.7
29	4.				5.35	24.00	112	10.3
30	25.				14.17	20.80	196	18.0
31	11.				5.31	24.30	293	26.9
FEB 1	11.				4.15	23.70	268	24.6
2					1.	23.30	255	23.4
3	3.				10.	22.25	230	21.1
4	24.				1.32	21.20	205	18.8
5	6.				23.5	17.90	143	13.1
6	6.				1.13	15.43	112	10.3
7	29.				3.5	11.90	103	9.5
8	23.				16.39	10.78	64	5.9
9	31.				2.47	11.88	74	6.8
10	24.				36.9	11.70	72	6.6
11	12.				2.3	16.35	118	10.8
12					6.	18.20	159	14.6
13	3.				4.12	19.53	171	15.7
14	3.				1.4	18.60	156	14.3
15	18.				8.19	20.19	183	16.8
16	27.				29.35	20.27	187	17.2
17	106.				9.89	20.23	184	16.9
18	3.				28.38	21.36	209	19.2
19					3.	21.25	206	18.9
20	67.				4.13	19.30	167	15.3
Feb TTB							422.1	

TABLE-1 FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF JAN. - FEB. 1963

DEC. 1969 - JAN. 1970

NO	DATE	RAINFALL (mm)	MEAN DAILY BASIN DISCHARGE (m ³ /s)	MEAN DAILY WATER LEVEL (m)	MEAN DAILY DISCHARGE (m ³ /s)
1	1	4	11	4	9.83
2	2	23	6	3	8
3	3	11	3	3	7.99
4	4				11.19
5	5				9.15
6	6				7.19
7	7	41	3	3	7.07
8	8				9.84
9	9	3	74	36	7.94
10	10	36	5	14	6.76
11	11	2	12	22	9.94
12	12	52	2	22	12.59
13	13	37	15	33	15.21
14	14	41	48	23	13.44
15	15	3	2	33	15.52
16	16	40	8	7	12.46
17	17	16	5	19	15.89
18	18	10	5	18	11.02
19	19	12	14	76	16.00
20	20	4	91	83	17.22
21	21	44	86	18	21.23
22	22	2	17	1	23.51
23	23	1			24.90
24	24	2	8	3	24.94
25	25	6			26.00
26	26	9	152	8	23.98
27	27	47	3	6	21.19
28	28	33	14	42	19.66
29	29	12	20	1	17.53
30	30	12	20	1	14.74
31	31	21	41	35	16.91
1	1	30	2	11	17.13
2	2	17			19.64
3	3	33	22	18	19.84
4	4	8	18	9	18.79
5	5				19.14
6	6				17.33
7	7	2	52	46	14.35
8	8	8	12	79	11.48
9	9	16	10		13.81
10	10	152			83.9

TABLE-2 FLOOD DATA FOR THE SADONG RIVER BASIN AT
SERIAN FLOOD OF DEC. 1969 - JAN. 1970

GAGIN STATION: SERIAN (L/1-1)

DEC. 1969 - JAN. 1970

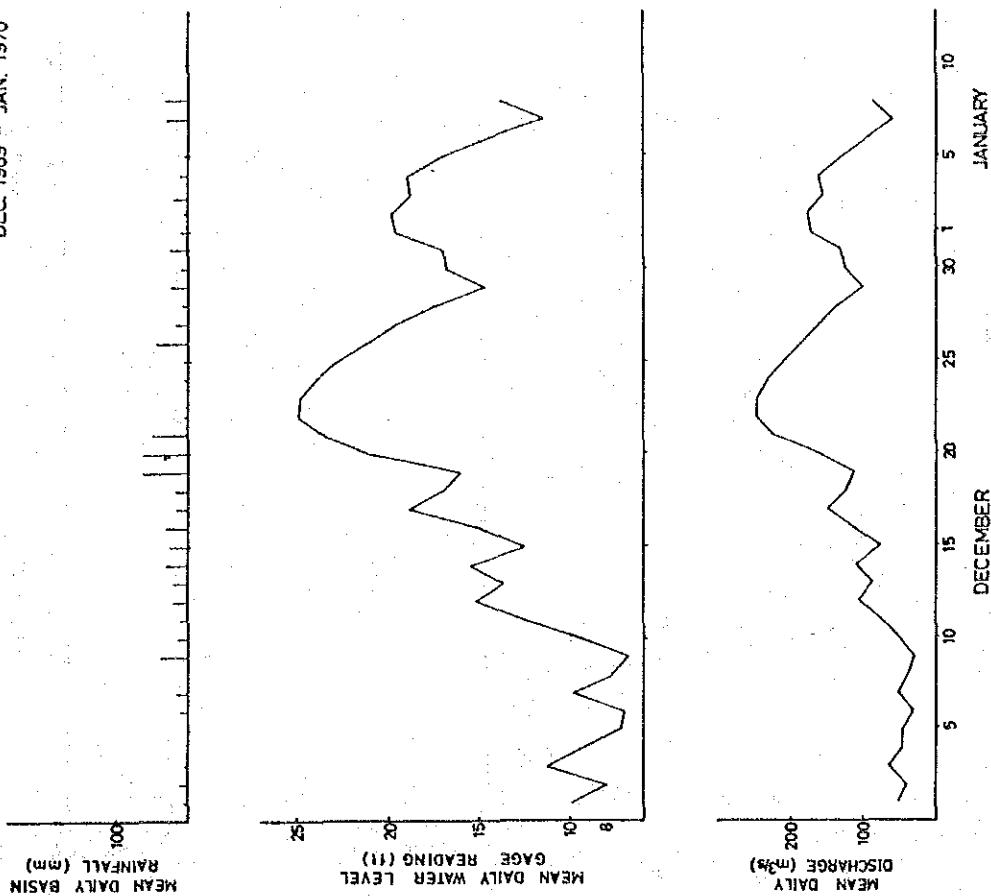


FIG.-2 FLOOD OF DEC. 1969 - JAN. 1970

FEB - MAR 1974

DATE	RAINFALL STATION 1-31	1-30	6-30	1-27 BASIN 1-27	MEAN DAILY BASIN RAINFALL (mm)	MEAN DAILY WATER LEVEL GAGE READING (ft)	MEAN DAILY DISCHARGE (m ³ /s)	MEAN DAILY WATER LEVEL GAGE READING (ft)	MEAN DAILY DISCHARGE (m ³ /s)
FEB 1	8	15	51	25	14.28	110	10.1		
2	7	2	4		15.05	124	11.4		
3	3	1	1		15.00	122	11.2		
4	6	2			11.80	74.5	6.8		
5					9.01	42.7	3.9		
6	19	19	13		8.10	34.4	3.2		
7	14	1	5		8.98	42.7	3.9		
8					9.70	44.7	4.1		
9	91	24	164	95	9.03	42.7	3.9		
10	68	116	136	107	18.51	186	17.1		
11	82	121	136	115	23.33	297	27.3		
12	56	76	74	69	25.31	351	32.2		
13	30	25	42	32	25.81	365	33.5		
14	8	27	19	18	26.02	272	24.1		
15	20	6	9		25.38	354	32.5		
16		34	11		24.37	327	30.0		
17	15	10	35	20	23.59	305	28.0		
18		6	1	2	22.43	280	25.7		
19		1	1	1	21.23	246	22.6		
20	42	1	14		18.75	197	18.1		
21	36	3	13		15.00	137	12.6		
22	20	10	10		13.75	103	9.5		
23		1			12.85	89.4	8.2		
24	1	4	2		11.26	75.8	7.0		
25	4	1	24	10	10.71	61.0	6.0		
26	30	1	41	24	9.45	49.9	4.6		
27	41	33	70	48	9.43	48.8	4.5		
28	93	61	122	112	17.95	159	14.6		
29									
30									
MAR 1					24.11	318	29.2		
2	1				25.14	346	31.8		
3					24.18	321	29.5		
4					23.55	300	27.5		
5					22.04	265	24.3		
6	13	1		3	19.33	203	18.6		
7	2	1	17	5	16.76	148	13.6		
8	2			1	12.46	83.9	7.7		
9					10.09	54.2	5.0		
10					8.59	38.9	3.6		
11									
12									

TABLE-3 FLOOD DATA FOR THE SADONG RIVER BASIN AT
SERIAN FLOOD OF FEB. - MAR. 1974

GAGIN STATION: SERIAN (L/1-1)
FEB. - MAR. 1974

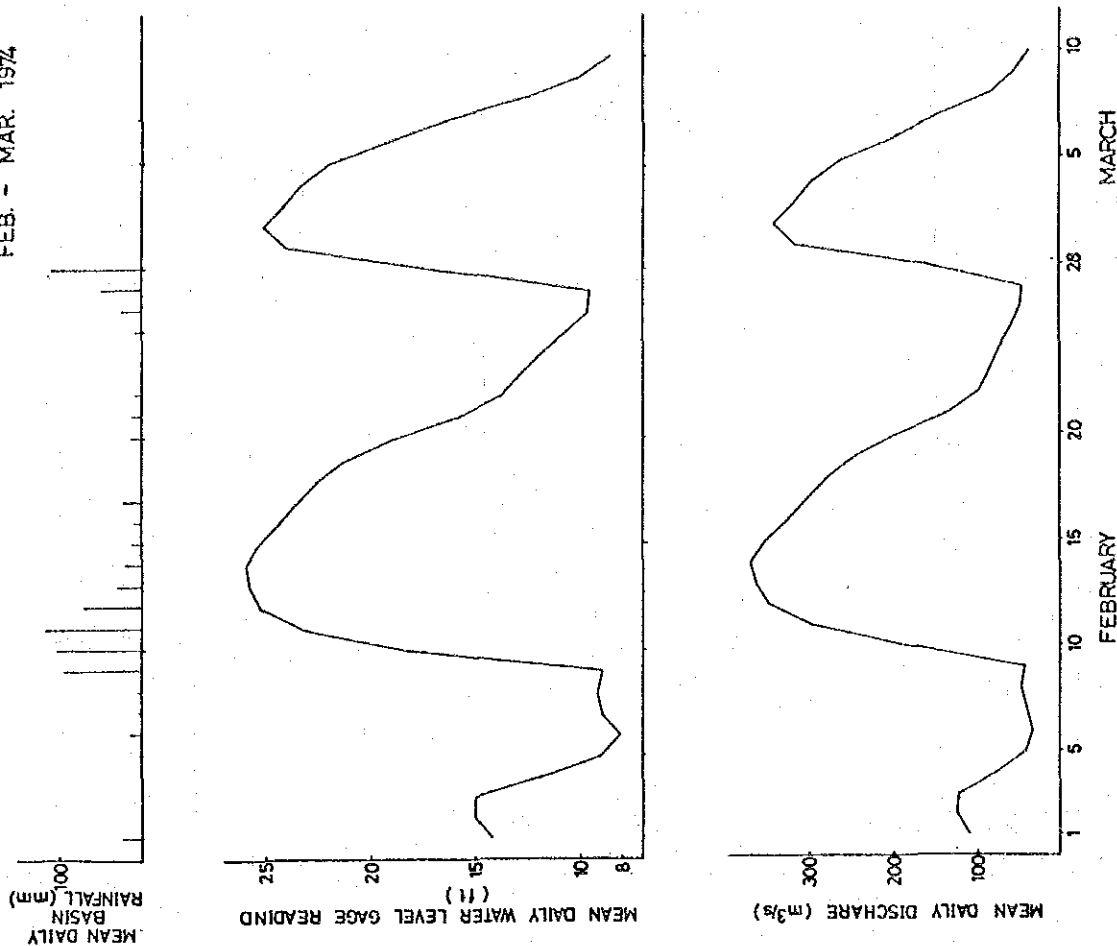


FIG.-3 FLOOD OF FEB. - MAR. 1974

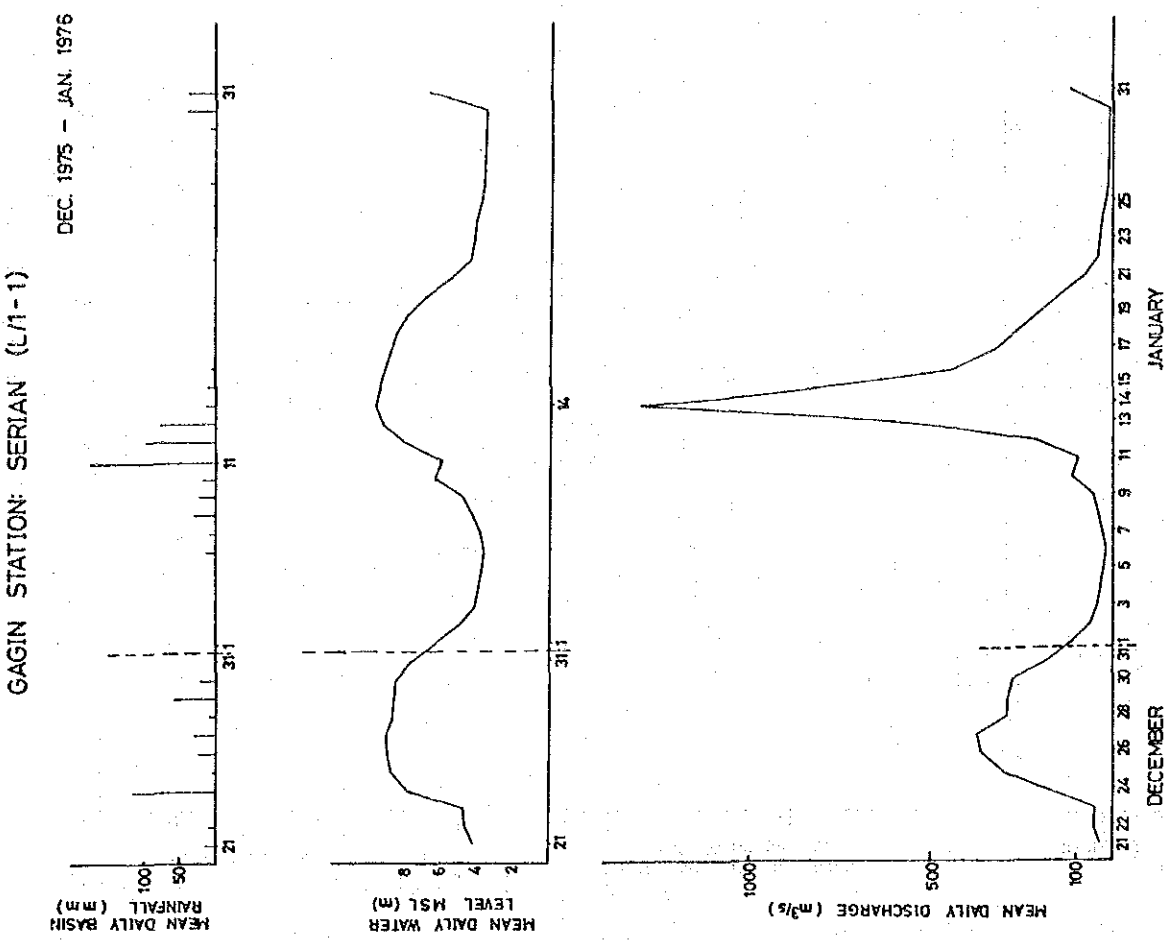


FIG.-5 FLOOD OF DEC. 1975 - JAN. 1976

DEC. 1975 - JAN. 1976									
NO	1-31	1-30	1-29	1-28	1-27	1-26	1-25	1-24	1-23
1	21	24	15	7	15				
2	22	8	9	6	8				
3	23	9	10	5	15				
4	24	13	2	5	6				
5	25	24	27		26				
6	26	33	24	27	27				
7	27	13	4	14	9				
8	28	19	43	113	58				
9	29	3	24	38	22				
10	30	1	12	4					
11	31		2	2	1				
12	1								
13	2								
14	3								
15	4								
16	5								
17	6								
18	7								
19	8								
20	9								
21	10								
22	11								
23	12								
24	13								
25	14								
26	15								
27	16								
28	17								
29	18								
30	19								
31	20								
32	21								
33	22								
34	23								
35	24								
36	25								
37	26								
38	27								
39	28								
40	29								
41	30								
42	31								

TABLE-5 FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF DEC. 1975 - JAN. 1976

GAGIN STATION: SERIAN (L/1-1)

FEB - MAR. 1977

NO	RAINFALL STATION 1-31	1-50	1-39	(OUTSIDE BASIN) 1-27	MEAN DAILY BASIN RAINFALL (mm)		MEAN DAILY WATER LEVEL GAGE READING (m)		HEAT DAILY DISCHARGE (m ³ /s)	DAILY RUNOFF (mm)
FEB	1	1	8	10	5		3.29		59	5.4
	2	1	7	19	11	10	2.75		44	4.0
	3	7		2	1	3	2.75		44	4.0
	4	32	89	71	57	62	2.65		41	3.8
	5	43	44	68	87	61	5.48		151	13.9
	6	53	73	54	164	86	6.62		228	20.9
	7	6	3	34	37	20	7.15		277	25.4
	8	57	39	31	32	40	7.31		293	26.9
	9	31	1	11	8	13	7.32		294	27.0
	10		28		11	10	7.25		297	27.3
	11	59	42	96	71	67	7.15		277	25.4
	12	13	15	14	13	14	7.08		269	24.7
	13	11				3	7.24		285	26.2
	14		1	3	2	2	7.08		289	24.7
	15	17	21	39	44	30	6.73		237	21.8
	16	6	4	6	7	6	6.45		214	19.6
	17			6	19	6	6.12		190	17.4
	18	21	34	34	42	33	5.54		154	14.1
	19	32	110	185	135	141	5.56		155	14.2
	20	63	109	28	44	61	6.65		230	21.1
	21	20	25	52	52	37	7.63		337	30.9
	22	46	6	11	7	18	7.80		375	34.4
	23		2	3	1	2	7.61		333	30.6
	24	7	11	17	14	12	7.50		317	29.1
	25	3	6	3	4	4	7.19		280	25.7
	26	3	11	8	7	7	6.75		237	21.9
	27	2		15	42	15	6.33		205	18.8
	28		11			3	6.25		199	18.3
MAR	1						5.51		152	14.0
	2						4.03		85	7.8
	3			1			2.94		49	4.5

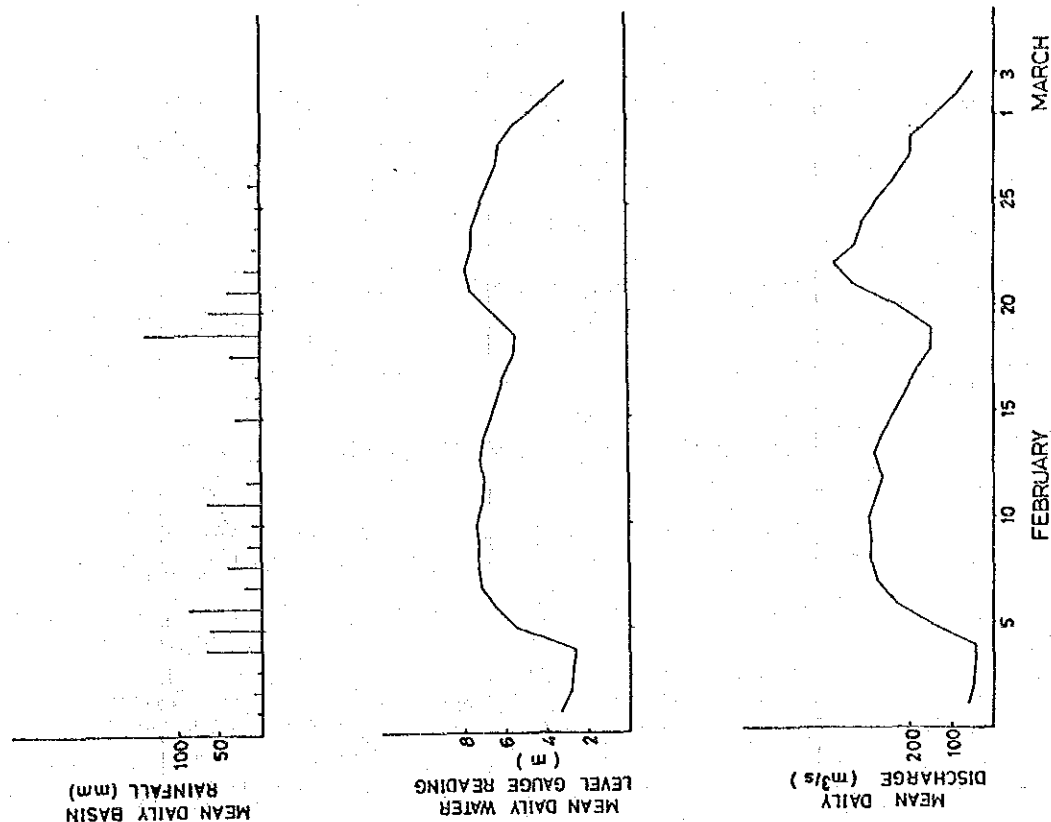


FIG.-6 FLOOD OF FEB. - MAR. 1977

TABLE-6 FLOOD DATA FOR THE SADONG RIVER BASIN AT
SERIAN FLOOD OF FEB. - MAR. 1977

GAGIN STATION: SERIAN (L/1-1)

JAN. 1978

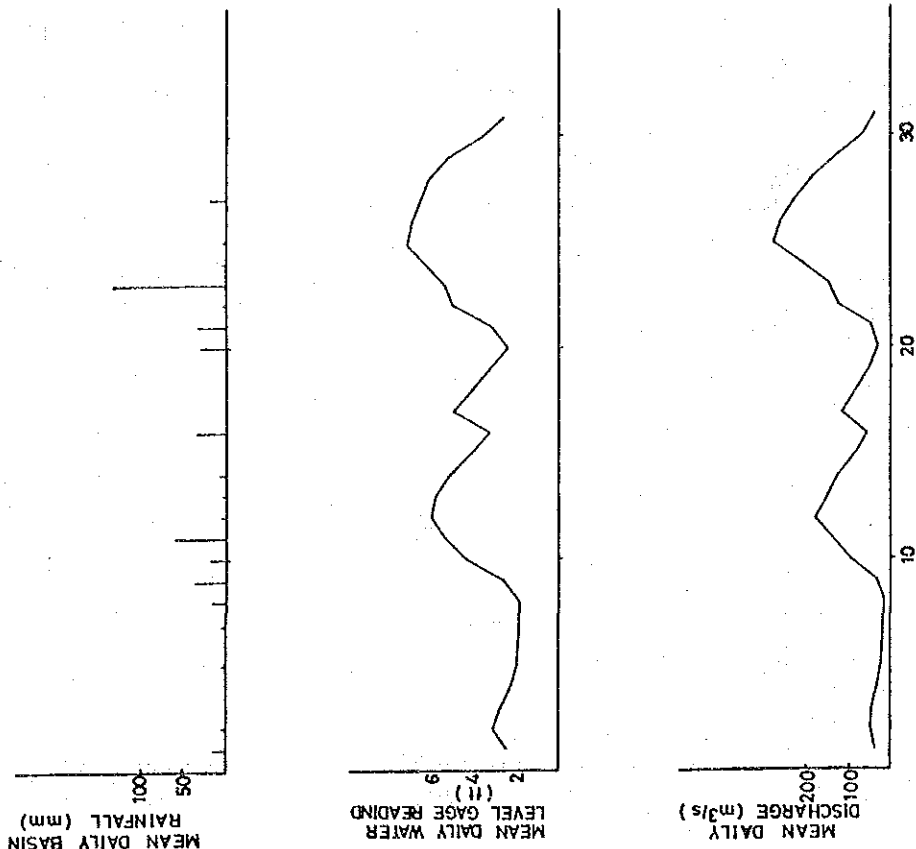


FIG.-7 FLOOD OF JAN. 1978

JAN. 1978

NO.	1-31	1-30	1-29	1-28	1-27	MEAN DAILY BASIN RAINFALL (mm)	MEAN DAILY WATER LEVEL (ft)	MEAN DAILY DISCHARGE (m³/s)	DAILY RUNOFF (mm)
1	10	17	20	1	16	2.59	4.03	39.0	3.6
2	14			28	5	3.11	4.55	53.3	4.9
3						2.76	4.30	44.0	4.0
4						2.23	3.76	32.2	3.0
5	24				6	2.07	3.51	26.0	2.4
6	4	1			1	1.95	3.39	23.2	2.1
7	4	7	2		4	1.87	3.31	21.5	2.0
8	6	11	32	9	15	1.87	3.31	21.5	2.0
9	24	38	75	8	38	2.55	3.99	38.5	3.5
10	24	2	19	23	17	4.40	5.84	99.0	9.1
11	47	69	49	67	58	5.42	6.86	141	13.5
12	17	1	2	1	5	6.08	7.52	181	17.2
13		5		2	3	5.99	7.37	175	16.1
14	2	7	13	11	8	5.11	6.55	131	12.0
15	1		1			4.11	5.55	81.8	8.1
16	28	51	35	28	36	3.33	4.77	60.2	5.5
17						4.25	6.29	119	10.9
18						4.04	5.48	85.0	7.8
19				3	1	3.19	4.63	56.0	5.1
20	30	51	19	27	32	2.46	3.90	36.0	3.3
21	41	29	30	34	34	3.10	4.54	53.1	4.9
22	3	3	3	3	3	5.04	6.49	128	11.8
23	96	88	194	161	135	5.43	6.87	148	13.6
24	4	3	3	1	3	6.45	7.89	214	19.6
25	1	1	2	6	3	7.21	8.65	282	25.9
26			3	3	2	7.07	8.51	268	24.6
27	19	15	27	21	21	6.64	8.09	230	21.1
28						6.19	7.63	195	17.9
29						5.29	6.70	139	12.8
30						3.63	6.10	71.0	6.5
31						2.57	4.01	38.8	3.7
Total									

TABLE-7 FLOOD DATA FOR THE SADONG RIVER BASIN AT SERIAN FLOOD OF JAN. 1978

D-5 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP

TABLES AND FIGURES

TABLE-1	FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF FEB. 1965
TABLE-2	FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF DEC. 1969
TABLE-3	FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF FEB. - MAR. 1974
TABLE-4	FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF FEB. - MAR. 1975
TABLE-5	FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF JAN. - FEB. 1976
TABLE-6	FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF FEB. 1977
FIG.-1	FLOOD OF FEB. 1965
FIG.-2	FLOOD OF DEC. 1969
FIG.-3	FLOOD OF FEB. - MAR. 1974
FIG.-4	FLOOD OF FEB. - MAR. 1975
FIG.-5	FLOOD OF JAN. - FEB. 1976
FIG.-6	FLOOD OF FEB. 1977

FEB. 1965

NO.	RAINFALL STATION 1-35	1-80	1-33	1-79	1-28	1-37	MEAN DAILY BASIN RAINFALL (mm.)	MEAN DAILY WATER LEVEL (ft.)	MEAN DAILY WATER LEVEL (m.)	MEAN DAILY DISCHARGE (m ³ /s)	DAILY RUNOFF (mm/d)
1	8	9					6	0.31	0.09	0.26	0.5
2	4	4			14		7	0.36	0.11	0.20	0.6
3	28	10			28		22	0.34	0.10	0.29	0.6
4	19	9			6		11	0.39	0.12	0.33	0.6
5	55	65			64		61	0.88	0.26	1.07	2.0
6								2.69	0.82	5.51	10.5
7	46	28			17		30	2.01	0.61	3.39	6.4
8	21	19			18		19	2.20	0.67	3.90	7.4
9	21	20			18		20	2.36	0.72	4.40	8.4
10	96	174			153		141	2.36	0.72	4.27	8.1
11								7.83	2.39	41.4	78.7
12	1	1			1		1	5.42	1.65	20.7	39.3
13								2.54	0.77	5.40	10.3
14	60	47			38		48	1.12	0.34	1.31	2.5
15	15	12			14		14	2.70	0.82	5.65	10.7
16	3	9			10		7	2.77	0.84	5.84	11.1
17	15	8			12		12	2.02	0.62	3.40	6.5
18								1.45	0.44	1.95	3.7
19	47	22			13		27	1.03	0.31	1.15	2.2
20	9	2			2		4	1.14	0.35	1.34	2.5
21								0.92	0.28	0.98	1.9
22								0.67	0.20	0.62	1.2
23								0.55	0.17	0.49	0.9
24								0.52	0.15	0.45	0.9
25								0.48	0.15	0.41	0.8
26	4	13			5		7	0.44	0.13	0.37	0.7
27	19	6			1		9	0.45	0.14	0.38	0.7
28	16						5	0.50	0.15	0.43	0.8
29											
30											
31											
Total	481	458	414	451							220

TABLE-1 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT
SG. BEDUP FLOOD OF FEB. 1965

GAGIN STATION: SG. BEDUP (L/1-3)

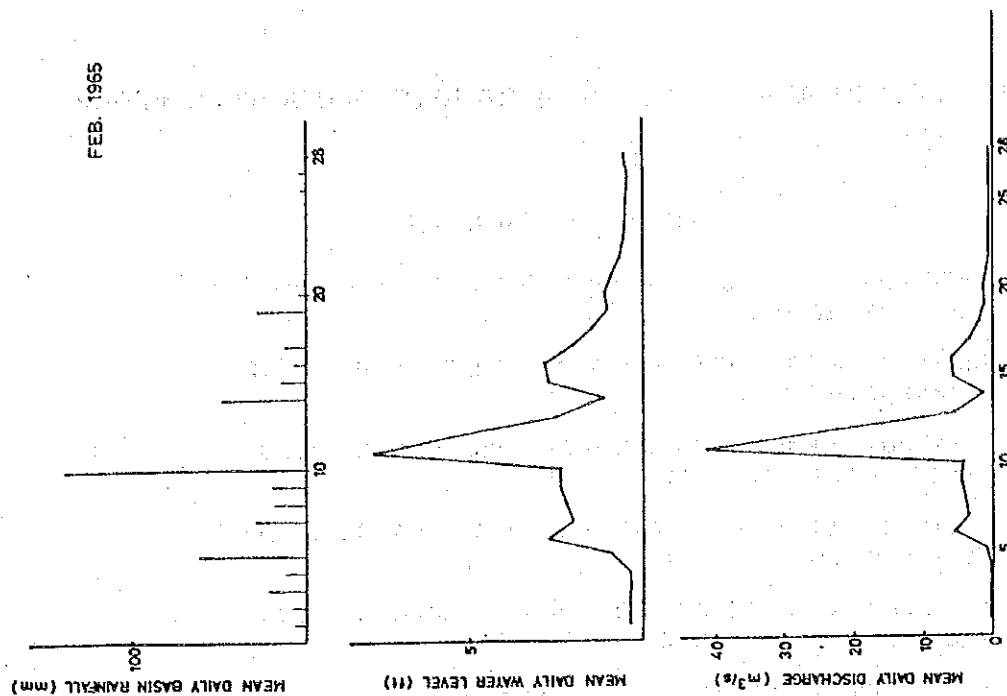


FIG.-1 FLOOD OF FEB. 1965

GAGIN STATION: SG. BEDUP (L/1-3)

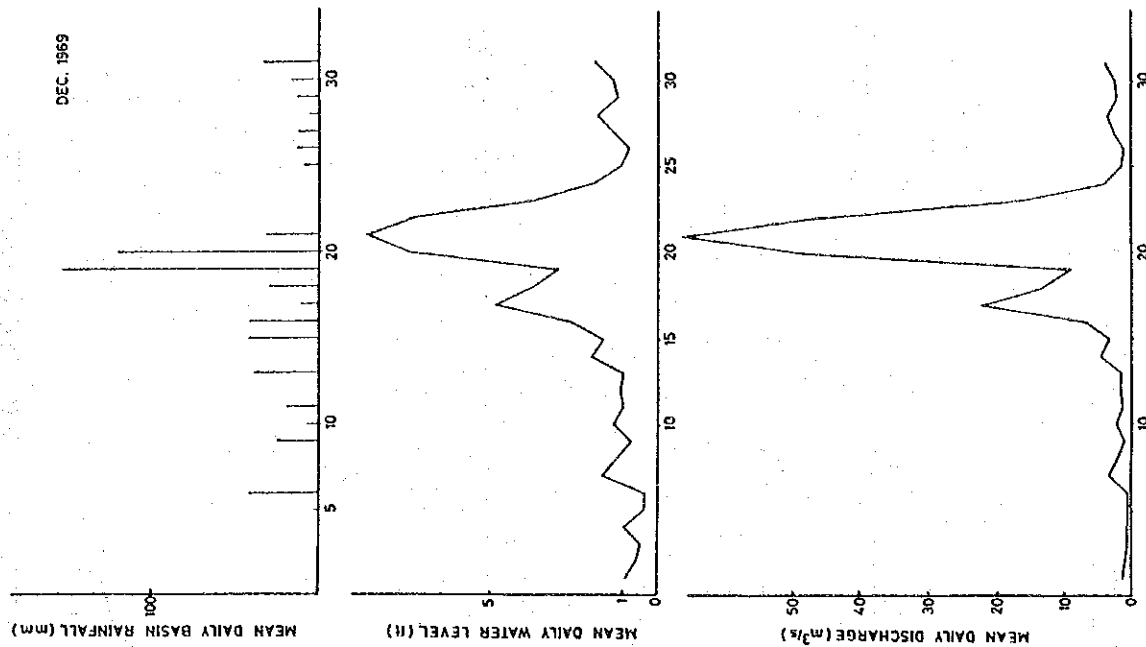


FIG.-2 FLOOD OF DEC. 1969

DEC. 1969

NO.	RAINFALL STATION	1-35	1-80	1-33	1-79	1-28	1-37	MEAN DAILY BASIN RAINFALL (mm.)	MEAN DAILY WATER LEVEL (ft.)	MEAN DAILY WATER LEVEL (m.)	MEAN DAILY DISCHARGE (m³/s)	DAILY RUNOFF (mm/d)
1				5				1	0.90		13	2.5
2	3					3	4	3	0.63		0.8	1.5
3									0.51		0.6	1.1
4									0.93		0.5	1.0
5	5			3		6	3	4	0.38		0.4	0.8
6	74			56		23	7	40	0.36		0.4	0.8
7							1		1.66		3.4	6.5
8	1					3	1	1	1.19		2.0	3.8
9	24			27		36	10	24	0.79		1.1	2.1
10	6			2		5	5	5	1.29		2.2	4.2
11	18			17		22	15	18	1.00		1.5	2.9
12				1					1.09		1.7	3.2
13	56			40		33	23	38	0.99		1.5	2.9
14	1			1			1	1	1.95		4.4	8.4
15	19			31		71	47	42	1.63		3.3	6.3
16	27			48		72	23	43	2.54		6.9	13.1
17	12			9		19	9	12	4.81		22.1	42.0
18	22			15		36	42	29	3.68		13.5	25.7
19	66			137		156	147	150	2.96		9.1	17.3
20	95			106		86	100	97	7.29		48.5	92.2
21	48			15		43	23	32	8.58		66.3	126.0
22				3		1	3	2	7.18		47.2	89.7
23				3			4	2	3.74		13.9	26.4
24	3								1.88		4.1	7.8
25	6			11		8	7	8	1.09		1.7	3.2
26	10			5		14	19	12	0.85		1.2	2.3
27	4			24		6	15	12	1.38		2.5	4.8
28	6			4		2	5	4	1.77		3.7	7.0
29	10			14		13	18	14	1.23		2.1	4.0
30	21			19		13	6	16	1.34		2.4	4.6
31	41			32		35	21	32	1.87		4.1	7.8
100	678			628		706	559	642				521.9

TABLE-2 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF DEC. 1969

GAGIN STATION SG. BEDUP (L/1-3)

FEB - MAR. 1974

NO.	RAINFALL STATION 1-35	1-80	1-33	1-79	1-28	1-37	MEAN DAILY BASIN RAINFALL (mm.)	MEAN DAILY WATER LEVEL (ft.)	MEAN DAILY DISCHARGE (m ³ /s)	DAILY RAINFALL (mm.)
FEB 1	14	11	25	42	20	34	24	1.01	8.81	16.7
2	3	6	6	6	4	4	5	0.73	5.69	10.8
3			1	1	1	1	1	0.52	3.74	7.1
4	2	3	1	10	3	3	3	0.39	2.80	5.3
5	1	1					1	0.26	2.01	3.8
6	19	18	17	15	17	15	17	0.22	1.64	3.1
7							1	0.25	1.81	3.4
8	8	5	3	6	2	15	7	0.25	1.81	3.4
9	31	37	19	99	126	122	122	0.23	1.64	3.1
10	77	76	95	38	84	74	74	1.34	13.51	25.7
11	104	107	105	117	93	105	105	2.33	33.4	63.5
12	47	57	44	38	36	45	45	2.54	38.4	73.0
13	30	41	19	29	24	34	30	2.38	34.5	65.6
14	19	12	18	14	15	15	16	1.95	24.7	46.9
15				2				1.54	17.0	32.3
16	29	19	19	5	17	18	18	1.03	9.18	17.4
17	26	18	5	9	19	15	15	0.66	5.10	9.7
18		1		1	1	3	1	0.55	3.99	7.6
19						1		0.55	3.99	7.6
20				1				0.55	3.99	7.6
21	11	10	12	29	22	25	18	0.51	3.74	7.1
22			1					0.49	3.48	6.6
23								0.32	2.38	4.5
24	4	3	4	3	3	3	3	0.25	1.81	3.4
25	7	7	4	6	3	6	6	0.22	1.64	3.1
26	27	28	22	34	22	27	27	0.25	1.81	3.4
27	98	108	118	71	94	83	95	0.47	3.48	6.6
28	126	170	94	109	131	120	125	1.41	14.5	27.6
MAR 1	23	21	23	29	20	22	23	2.83	46.8	88.9
2	5	6	5	3	4	4	5	2.12	28.7	54.5
3								1.28	12.6	23.9
4		1						0.79	6.32	12.0
5								0.44	3.26	6.2
6	25	24	29	30	27	15	25	0.34	2.38	4.5
7	10	9	7	6	5	9	8	0.53	3.99	7.6
8			1							

TABLE-3 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT
SG. BEDUP FLOOD OF FEB. - MAR. 1974

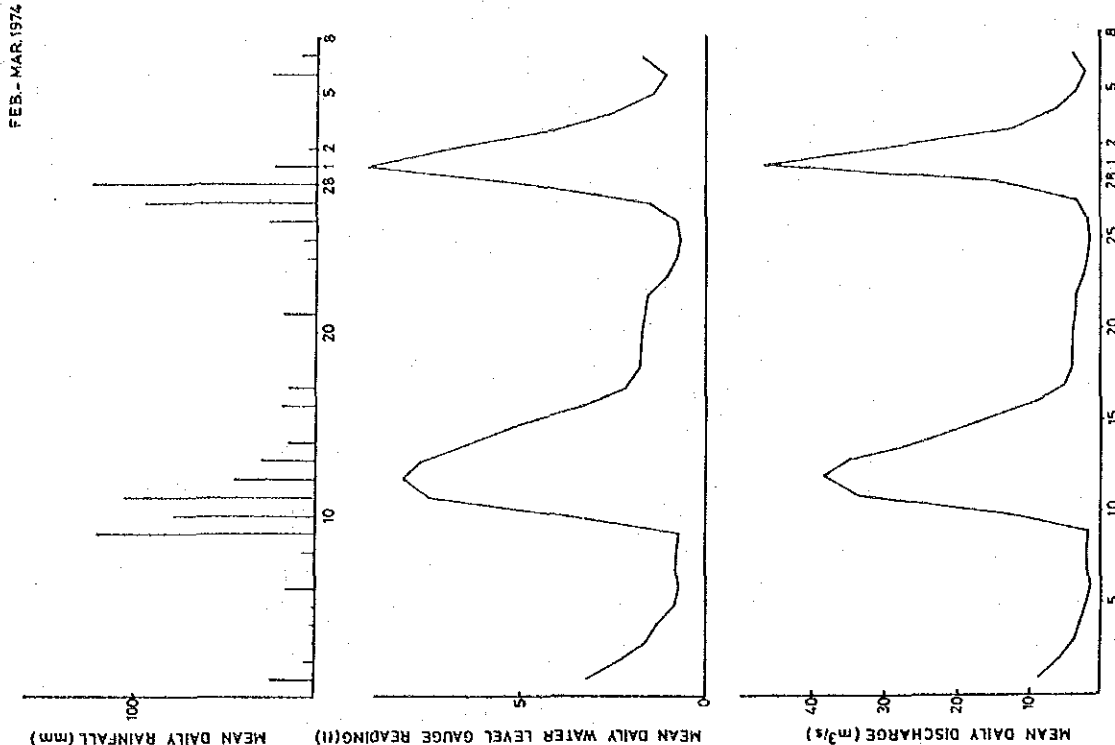


FIG.-3 FLOOD OF FEB. - MAR. 1974

FEB. - MAR. 1975

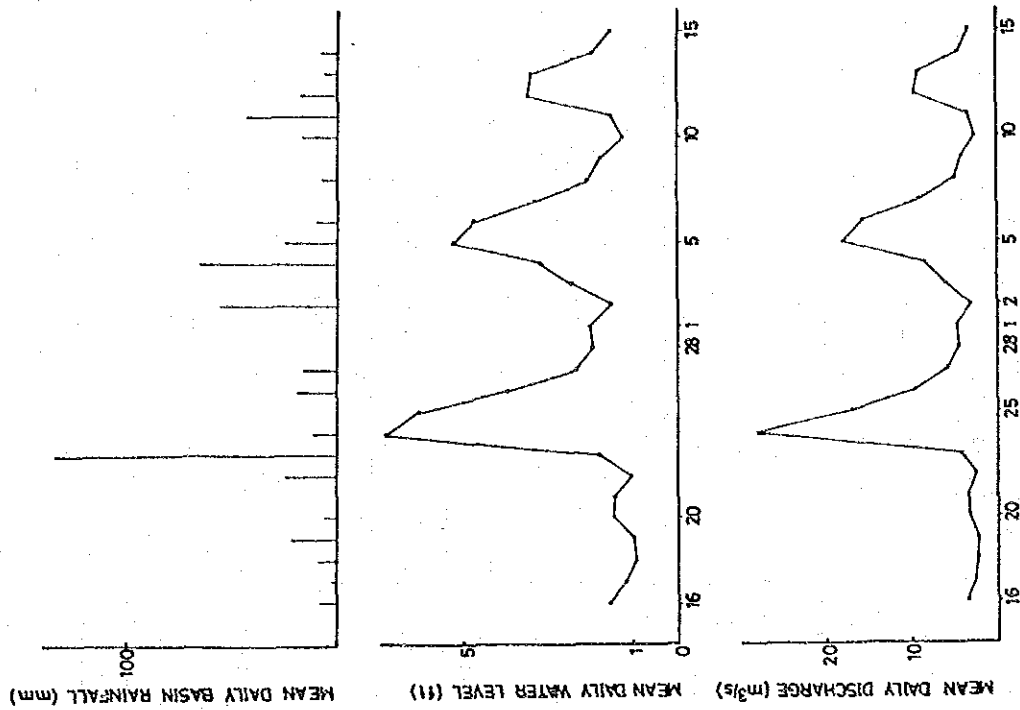


FIG.-4 FLOOD OF FEB. - MAR. 1975

TABLE-4 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT
SG. BEDUP FLOOD OF FEB. - MAR. 1975

[illegible]

GAGIN STATION: SG. BEDUP (L/1-3)

JAN - FEB. 1976

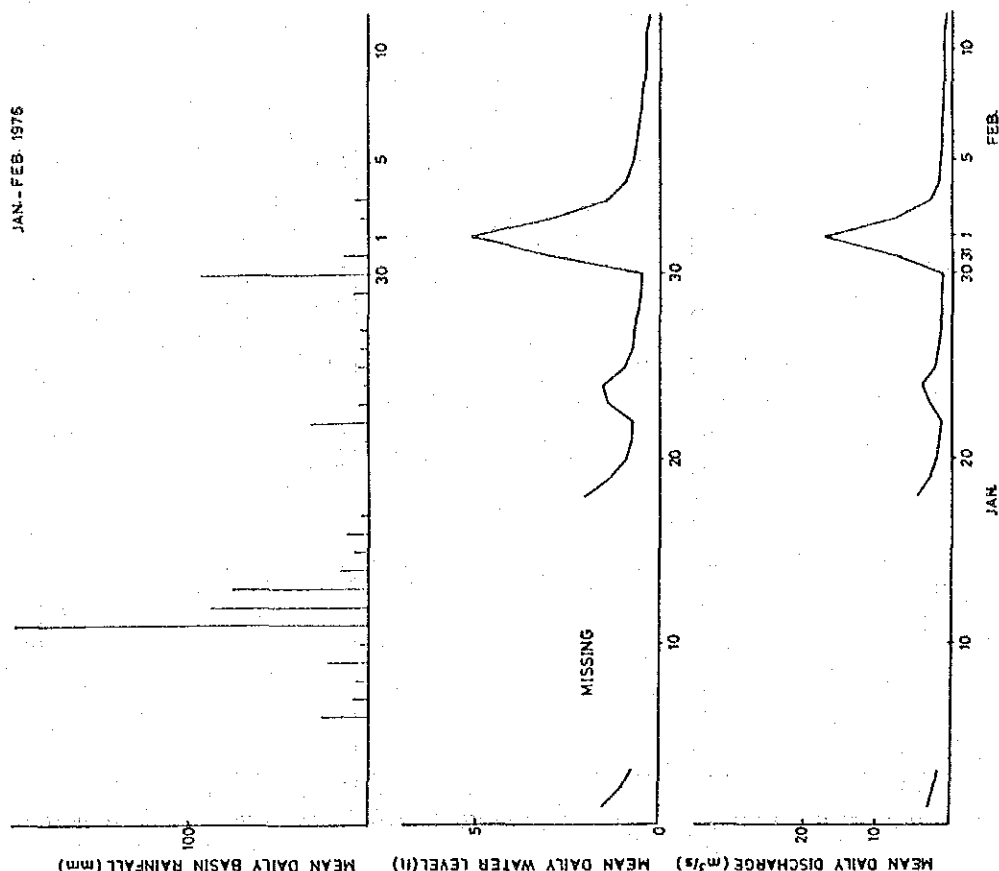


FIG.-5 FLOOD OF JAN. - FEB. 1976

JAN - FEB. 1976

NO	1-35	1-30	1-29	1-28	1-27	MEAN DAILY BASIN RAINFALL (mm)	MEAN DAILY WATER LEVEL (ft)	MEAN DAILY DISCHARGE (m³/s)	MEAN DAILY DAILY RAINFALL (mm)
1	3	2	3	3	1	1.54	0.47	3.26	6.2
2						0.93	0.30	2.18	4.1
3						0.75	0.23	1.81	3.4
4									
5	4								
6	22	25	36	25	24	19	25		
7	13	17	9	12	4	4	10		
8	6	7	7	14	5	5	7		
9	22	18	25	13	29	30	23		
10	7	8	5	1	3	3	5		
11	197	202	161	225	235	182	200		
12	117	183	108	23	96	89	87		
13	74	105	57	76	71	74	71		
14	53	8	7	6	6	7	15		
15	7	7	5	8	7	8	7		
16	25	17	12	9	12	13			
17	3	5	2	11	1	4			
18	1	1	1	1	1				
19						2.06	0.63	4.81	9.1
20						1.38	0.42	3.03	5.8
21						0.77	0.23	1.81	3.4
22	34	25	10	31	53	42	33	0.69	0.21
23	1	3	19	2	2	5		1.40	0.43
24	2	4	2	2	3	2	3	1.59	0.48
25	7	4	3	4	5	4	5	0.95	0.29
26	7	4	3	4	4	3	4	0.75	0.23
27	5	4	4	3	3	4		0.75	0.22
28								0.62	0.19
29	9	18	4	3	8	4	8	0.55	0.17
30	131	125	99	78	64	67	94	0.52	0.15
31	36	7	10	7	10	7	13	2.98	0.91
FEB 1	3	2	3	2	3	10	4	5.20	1.59
2	6	6	6	7	1	3	5	3.03	0.92
3								1.45	0.44
4								0.96	0.29
5								0.77	0.23
6								0.65	0.20
7								0.57	0.17
8								0.52	0.15
9								0.47	0.14
10								0.41	0.12
11								0.39	0.12
12								0.33	0.10

TABLE-5 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF JAN. - FEB. 1976

FEB. 1977

GACIN STATION: SG BEDUP (L/N-3)

NO	RAINFALL STATION 1-35	1-80	1-33	1-79	1-28	1-37	MEAN DAILY BASIN RAINFALL (mm.)	MEAN DAILY WATER LEVEL (ft.)	MEAN DAILY WATER LEVEL (m.)	MEAN DAILY DISCHARGE (m ³ /s)	DAILY RUNOFF (mm/d)
1	1	7					1		0.18	1.23	2.3
2	1	4	1	2	8	8	4		0.17	1.18	2.2
3		1							0.17	1.18	2.2
4	34	54	36	37	35	31	38		0.14	1.02	1.9
5	67	62	45	59	88	68	65		0.47	3.39	6.4
6	133	96	95	82	125	94	104		0.96	9.48	18.0
7	29	20	42	28	31	35	31		2.09	35.2	66.8
8	35	36	38		49	47	41		1.94	30.8	58.6
9	8	9	6		7	7	7		1.45	18.6	35.4
10	8	15	5		2	1	6		1.18	13.2	25.1
11	81	83	71		96	90	84		0.78	6.89	13.1
12	21	9	17		9	7	13		1.18	13.2	25.1
13			1						1.61	22.3	42.3
14	12	14	14	154	4	3	9		0.92	8.9	16.9
15	28	38	42	39	40	39	38		0.50	3.68	7.0
16	8	7	5	9	10	10	8		0.63	5.05	9.6
17	17	6	5	7	9	7	9		0.83	7.57	14.4
18	39	49	37	32	24	34	36		0.69	5.75	10.9
19	105	96	89	117	80	95	114		0.69	5.75	10.9
20	86	47	74	52	44	55	60		1.76	26.0	49.4
21	27	47	55	52	41	54	46		2.57	51.0	96.9
22	17	10	17	4	3		10		1.98	32.0	60.7
23	4	2	1	5	1		3		1.27	13.8	26.1
24	62	15	42		88		52		0.74	6.37	12.1
25	13	12	11	37	10		12		0.80	7.16	13.6
26	51	23	14	3	5		19		0.91	8.72	16.6
27	12	12	6	7	5	62	8		0.88	8.28	15.7
28											
Total	898	874	769	726	814	747	(831)				660.2

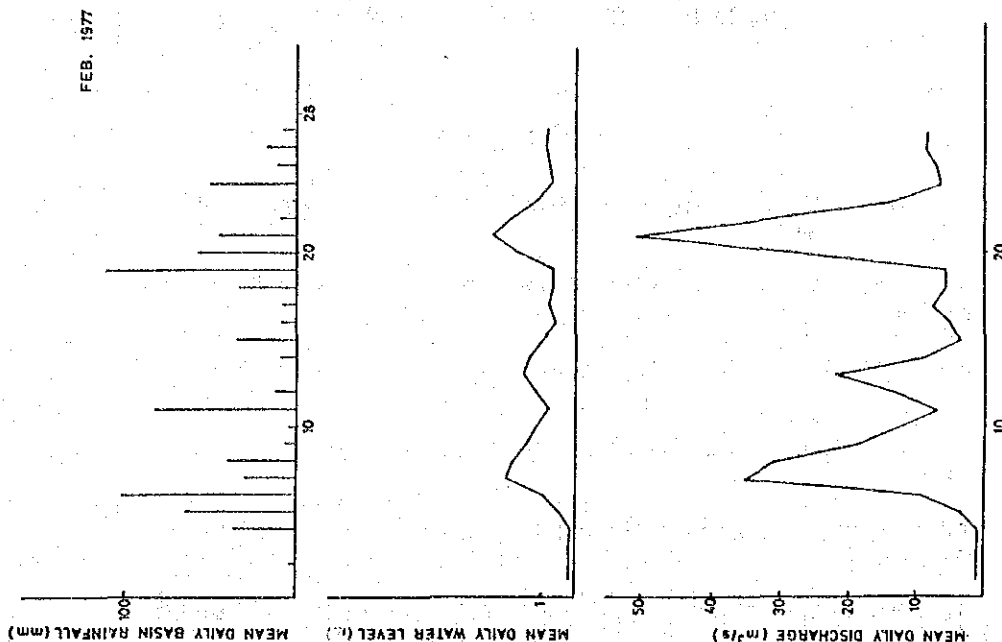


FIG.-6 FLOOD OF FEB. 1977

TABLE-6 FLOOD DATA FOR THE SG. BEDUP RIVER BASIN AT SG. BEDUP FLOOD OF FEB. 1977

D-6 DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN

TABLES AND FIGURES

TABLE-1	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN JAN. - FEB. 1963
TABLE-2	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN DEC. 1969 - JAN. 1970
TABLE-3	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN FEB. 1974
TABLE-4	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN FEB. 1975
TABLE-5	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN JAN. 1976
TABLE-6	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN FEB. - MAR. 1977
TABLE-7	DAILY RAINFALL DURING HEAVY RAIN IN THE SADONG RIVER BASIN JAN. 1978
FIG.-1	(i) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1963)
FIG.-2	(ii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1963, 1969)
FIG.-3	(iii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1969, 1974)
FIG.-4	(iv) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1974)
FIG.-5	(v) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1974)
FIG.-6	(vi) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1975, 1976)
FIG.-7	(vii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1976, 1977)
FIG.-8	(viii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1977, 1978)

JAN. - FEB. 1963

NO.	UPSTREAM FROM: SERIAN					EXPERIMENTAL BASIN													
	31	39	50	27		35	80	33	79	28	37	6	40	32	55	18			
JAN 21				1.								1.				20.			
22				12.															
23				3.							5.	5.							
24				6.							5.	25.				8.			
25				7.							6.	6.				87.			
26				24.							3.	13.				5.			
27				162.							54.	127.				64.			
28				122.							50.	167.				182.			
29				4.							5.	35.				154.			
30				25.							14.	17.				103.			
31				11.							5.	31.				20.			
FEB 1				11.							4.	15.							
2											1.								
3				3.								10.							
4				24.								1.	32.			13.			
5				6.								23.	5.			24.			
6				6.								1.	13.						
7				29.								3.	5.						
8				23.								16.	39.						
9				31.								2.	47.						
10				24.								36.	9.						
11				12.								2.	3.						
12												6.				5.			
13				3.								4.	12.			9.			
14				3.								1.	4.			14.			
15				18.								8.	19.			5.			
16				27.								29.	35.			13.			
17				106.								9.	89.			44.			
18				8.								28.	38.			27.			
19													3.			29.			
20				67.								44.	13.			17.			

TABLE-1 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN JAN. - FEB. 1963

DEC. 1969 - JAN. 1970

NO	UPSTREAM FROM SERIAN					EXPERIMENTAL BASIN										
	31	39	50	27		35	80	33	79	28	37	6	40	32	55	18
1	4	11								5		3		21		36
2	23	6				3			4		3	47		22	71	
3			11											30	1	102
4														3	19	3
5	2					5			3	3	6	1	4			20
6		3				74			7	56	23	32	4	46	3	
7			47						1					3		
8	3					1			1		3	2	3	16	25	
9	74	3				24			10	27	36	31	5	8	33	21
10	36					6			5	2	5		38	27	3	20
11	12	2				18			15	17	22	26	14	31	15	
12	34	2	52							1	4	27		3	1	
13	37	15				56			23	40	33	37	8	30	30	1
14	41	23	48			1			1	1			6	5	3	
15	3	33	2			19			47	31	71	61	23	21	27	1
16	8	40				27			23	48	72	10	37	11	4	5
17	16	5	16			12			9	9	19	1	2	19	39	25
18	10	18	5			22			42	15	36	31	81	28	36	17
19	12	76	14			160			147	137	156	104	143	21	167	64
20	4	83	91			95			100	106	86	102	137	35		178
21	44	18	86			48			23	15	43	30	10	27	425	114
22	2		17						3	3	1	5		25	14	89
23			1						4	3		6	3	60		10
24	2	8				3							1	5		2
25	6					6			7	11	8	3	3	15	6	2
26	9	8	52			10			19	5	14	8		24	8	10
27	3	47				4			15	24	6	3	30		5	7
28	21	17				6			5	4	2	5	3		10	30
29	33	42	14			10			18	14	13	20		10	23	13
30	12	1	20			27			6	19	13	11			9	10
31	41	21	41			41			21	32	35	28	30		13	20
JAN 1			30							2				4	2	
2			7											10		8
3	33									22		8			1	
4			8							18		5		22	5	
5										13				8	30	
6														35	47	60
7	52	2								46				31	34	18
8	12	8								79				13	10	5
9	10	61								46				20	29	1
10		52												36		5

TABLE-2 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN DEC. 1969 - JAN. 1970

FEB. 1974

NO	UPSTREAM FROM					EXPERIMENTAL BASIN									
	31	39	50	27	35	80	33	79	28	37	6	40	32	55	18
1		8	15	51	14	11	25	42	20	34	38	69	99		
2		7	2	2	3	6	6	6	4	4	1	8	14		23
3		3	1				1	1	1	1				8	
4			6		2	3	1	1	10	3	7			10	19
5					1	1		1		1					
6	19		19	19	18	17	15	17	15	23	27	34	39		
7		14	1							1	1			35	
8			11	8	5	3	6	2	15	3			12	1	
9	97	24	164	131	137	119	99	126	22	92	58		151	10	
10	68	116	136	77	76	95	38	84	74	164	38	63	165		
11	88	121	136	104	107	105	117	93	105	120	103	104	111	292	
12	56	76	74	47	57	44	38	36	45	84	8	7	124	102	
13	30	25	42	30	41	19	29	24	34	39	37	17	51	93	
14	8	27	19	19	12	18	14	15	15	36	10	26	34	33	
15	20	6					2		30		29	2	37		
16			34	29	19	19	5	17	18	143			61		
17	15	10	35	26	18	5	9	19	15	21	21	45	31	49	
18		6	1		1		1	1	1	3	3	6	12	1	
19			1							1					
20	42		1					1			5	6	1		
21	36		3	11	10	12	29	22	25	6	19	1	39	4	
22	20	10				1							1	12	
23			1							6					
24	1		4	4	3	4	3	3	3	8	2		1		
25	4		1	24	7	4	6	3	6	23	3	3	24	25	
26	30	1	41	27	28	22	34	22	27	25	30	13	33	4	
27	41	33	70	98	108	118	71	94	83	47	15	28	82	77	
28	93	61	182	126	170	94	109	131	120	189	147	21	168	156	
29	9	161	37	23	21	23	29	20	22	57	28	18	41	180	
30		34	9	5	6	5	3	4	4	12	5	13	13	77	
31				5											
Total						1									

TABLE-3 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN FEB. 1974

FEB. 1975

NO	UPSTREAM FROM					EXPERIMENTAL BASIN									
	31	39	50	27	35	80	33	79	28	37	6	40	32	55	18
1	16	4		1	1	3					11		12		37
2		4		24	46	57	27	30	30	42	19	19	25	18	21
3		2	31	7	1	3	9	9	4	1	4		50	6	1
4	9	4	1	14	11	4	6	9	8	3	5	12	25	22	15
5	21	2	2	4	10	9	10	8	6	8	7	7	8	6	10
6	23	57	23	28	34	46	51	52	48	46	18	37	15	3	3
7	18	24	5	2	1			1			1	28		5	
8	24	7		14	1	9	4	3	3	4	6	4	18	9	
9	21	2	3	38	36	11	15	14	9	17	41	13	24	6	24
10	5	10	14		1	1	1	1	1	1	1	32	2	6	1
11	50	23	31	34	33	29	30	36	45	32		25	72	107	
12	5	25			1	1				1	8	33			
13		2			1					1					
14	56	15	1	41	54	9	7	23	40	5		35			
15		1			4	14	3	3	6	1	5	10	7	3	3
16	2		9	19	14	4	4	10	9	4	32	11	1	1	21
17	3		13		1		1	1	14					7	
18	2		21	27	9	6	7	2	10	28	11			1	5
19	3	15	16	15	24	15	20	27	19	28	34		26	40	19
20		4	19	4	4	4	7	7	9	8	8		4	6	14
21	10		6	4	1	2	1			4	21	5	6	7	
22	8	72	2	44	27	21	25	28	23	25	39	32	81	4	21
23	10	107	71	112	135	132	130	148	129	135	125		80	152	104
24	16	77	77	77	19	11	18	14	9	9	16		22	73	17
25	1		10		1	1	1	1	1	1	10				
26		11	1	19	36	20	16	18	18	11	17	7	33	28	69
27		19	45	11	10	15	22	24	12	12	9	30	6	6	7
28		1	12	74		1	1	1							45
29															
30															
31															
Total															

TABLE-4 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN FEB. 1975

JAN. 1976

NO	UPSTREAM FROM SERIAN					EXPERIMENTAL BASIN																			
	31	39	50	27		35	80	33	79	28	37	6	40	32	55	18									
1										2	3		1												
2											1									7					
3																									
4																									
5						4			1	1		2				2	13								
6	5	12	23	14	22	25	25	19	36	24	23	35	10	43											
7		5	15	28	13	17	12	4	9	4	36		17		52										
8	49	14	42	9	6	7	14	5	7	5	46	32	14	5	6										
9	5	32	38	20	22	18	13	30	25	29	26	24	83	62	13										
10	7	1	60	4	7	8	1	3	5	3	6	12	62	79	69										
11	210	158	114	221	197	202	225	182	161	235	226	75	112	331											
12	78	79	116	123	117	83	28	89	108	96	112	33	38	114	320										
13	59	47	102	114	74	105	76	74	57	77	130	52	26	141	94										
14	19	3	10	18	53	8	6	7	7	6	20	64	34	38	108										
15	5	6	32	10	7	7	8	8	5	7	26	2	11	26	17										
16		1	10	6	25	17		12	12	9	8	3	58	5											
17			3		3	5	11	1	2		13	41	4	5	23										
18			1		1	1	1		1		2		3												
19		2						1				1			29										
20							1	1					1												
21		6	5				1	2	3	2		6	25												
22		11	9	8	34	25	31	42	10	53	8		37	49	6										
23						1	3	2		19	2				24										
24			3	12	2	4	2	2	2	3	15				7										
25			8	16	7	4	4	4	3	5	20		26	46											
26	13	2	5	7	7	4	4	3	3	4	11		2	29	95										
27	3		2	7	5	4	3	3	4	3	14		15	75											
28											13			1	11										
29		1	18	12	9	18	3	4	4	8	20		14	28											
30		29	19	106	131	125	78	67	99	64	65		6	152	74										
31	19	33	72	26	36	7	7	7	10	10	10	2	12	63											
Total																									

TABLE-5 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN JAN. 1976

FEB - MAR. 1977

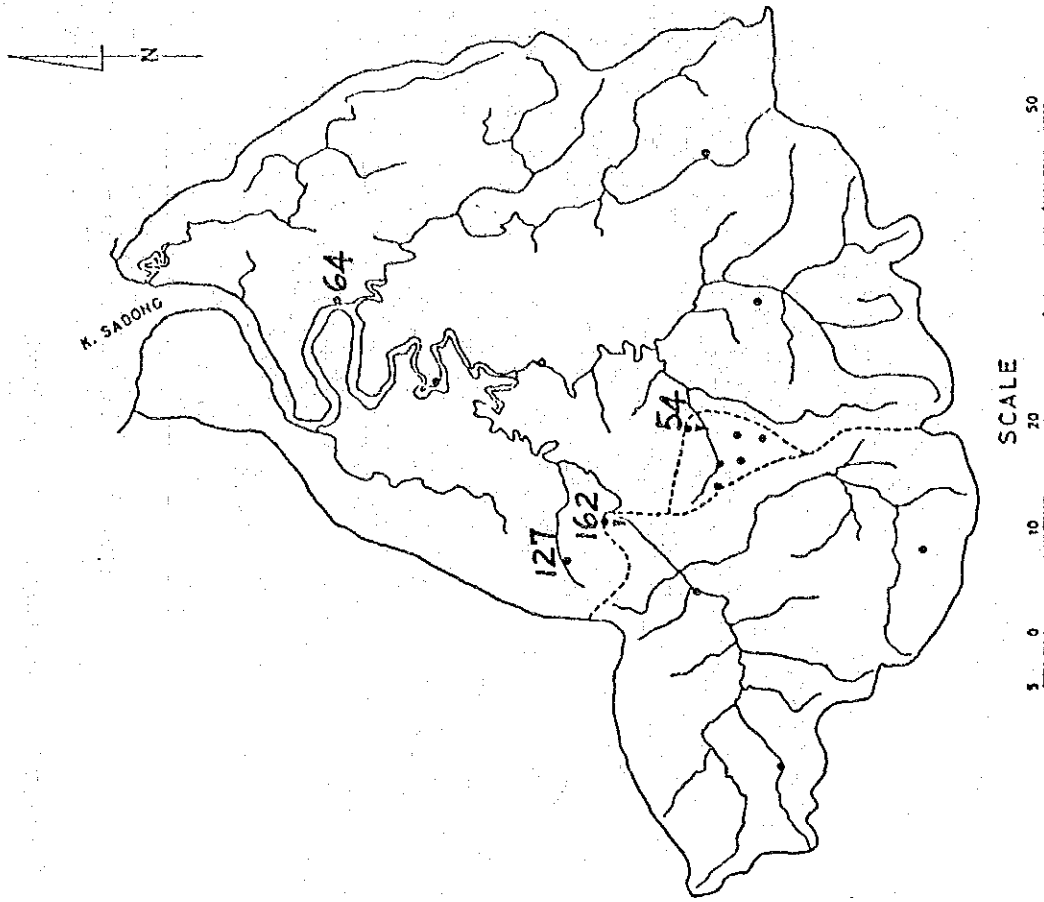
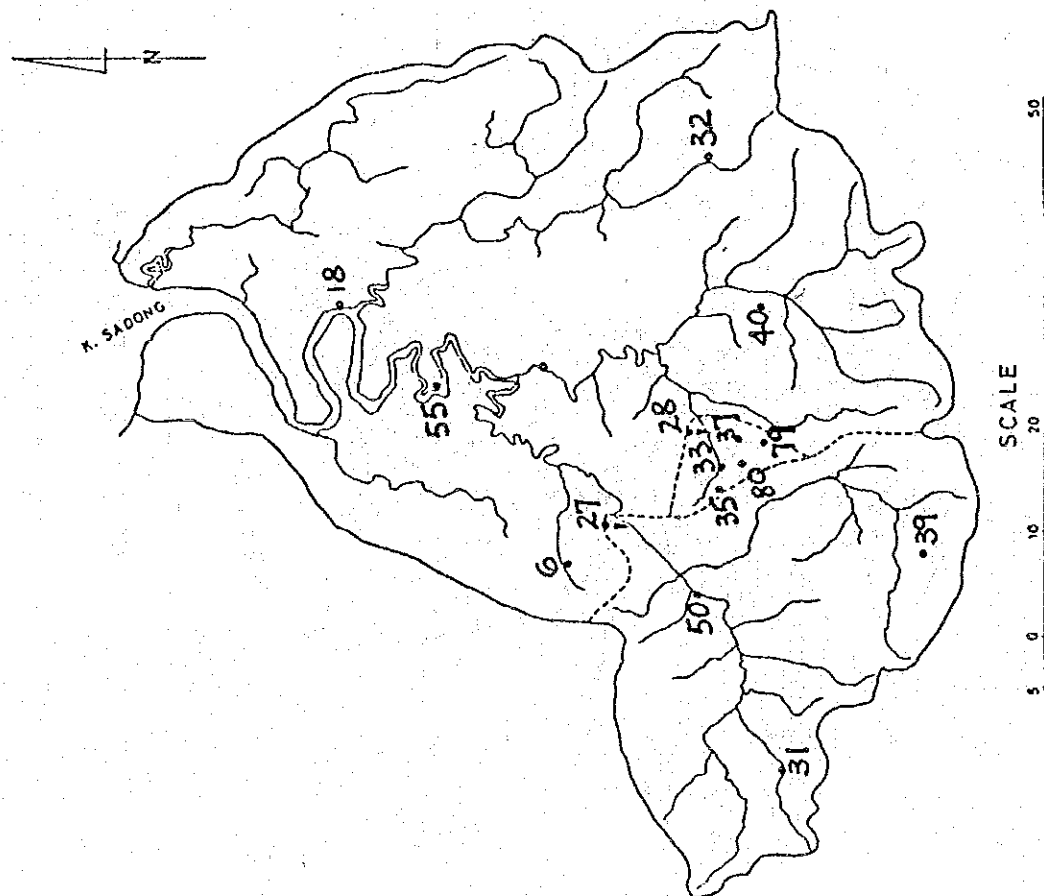
NO	UPSTREAM FROM SERIAN					EXPERIMENTAL BASIN																			
	31	39	50	27	SERIAN	35	80	33	79	28	37	6	40	32	55	18									
1	1	8	10			1	7						53												
2	1	7	19	11		1	4	2	8	1	8	36	30												
3	7		2	1								3			16	1									
4	32	89	71	57	34	54	37	31	31	36	35	55	19	87	12	3									
5	43	44	58	87	67	62	59	68	45	88	79	107	106	75	13										
6	53	73	54	164	133	96	82	94	95	125	127	27	164	88											
7	6	3	34	37	29	20	28	35	42	31	61	20	60	30	78										
8	57	39	31	32	35	36		47	38	49	25	33	101	58	14										
9	31	1	11	8	8	9		7	6	7	21	24	8	90	7										
10		28		11	8	15			1	5	2	1	9	14	1	8									
11	59	42	96	71	81	83		90	71	96	112	28	47	71	76										
12	13	15	14	13	21	9		7	17	9	22	53	2	18											
13	11									1		1	5	7											
14		1	3	2	12	14	154	3	14	4	3	42	2	3	46										
15	17	21	39	44	28	38	39	39	42	40	36	5	79	27	13										
16	6	4	6	7	8	7	9	10	5	10	4	37	45	5	8										
17			6	19	17	6	7	7	5	9	10	6	34	24	33										
18	21	34	34	42	39	49	32	34	37	24	49	46	27	47											
19	32	110	185	135	105	196	117	95	89	80	158	26	33	131											
20	63	109	28	44	86	47	52	55	74	44	36	53	10	72											
21	20	25	52	52	27	47	52	54	55	41	38		40	52	224										
22	46	6	11	7	17	10	4		17	3	25		2	7	36										
23		2	3	1	4	2	5		1	1	1	13	7	14											
24	7	11	17	14	62	15			42	88	9	47		19											
25	3	6	3	4	13	12	37		11	10	6		10	4	38										
26	3	11	8	7	51	23	3		14	5	3		11	24	17										
27	2		15	42	12	12	7	62	6	5	47		18	61											
28		11										1		70											
MAR 1									1				28												
2																									
3			1										2	1	1										
Total																									

TABLE-6 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN FEB. - MAR. 1977

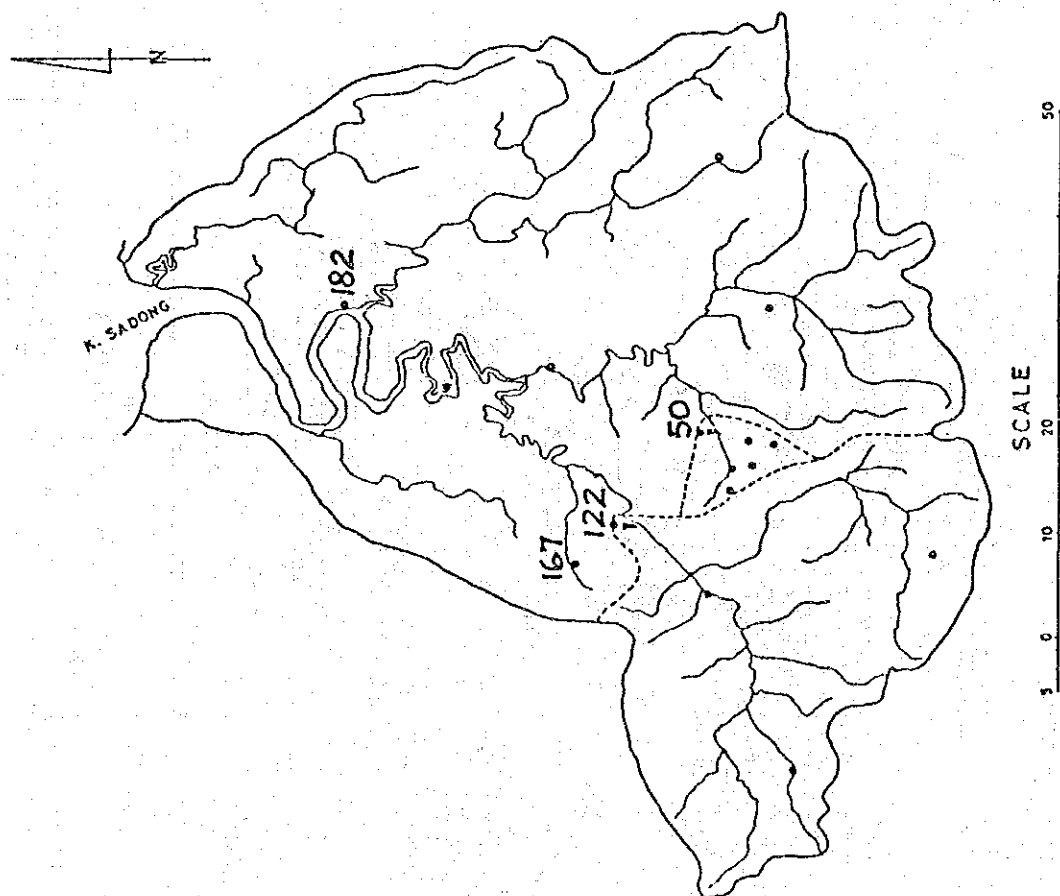
JAN. 1978

NO	UPSTREAM FROM					EXPERIMENTAL BASIN														
	31	39	50	27		35	80	33	79	28	37	6	40	32	55	18				
1	10.	17.	20.			15.	26.	51.	48.	33.	64.	16.	1.	27.	70.					
2	14.		1.	28.	48.	2.	1.				1.	2.		23.						
3					1.											10.				
4					2.															
5		24.																		
6	4.	1.					2.						1.	3.	19.					
7	4.	7.	2.				1.	4.	1.	1.	2.			1.						
8	6.	11.	32.	9.	61.	27.	16.	16.	55.	47.	12.	61.	31.	54.						
9	29.	38.	75.	8.	53.	33.	43.	45.	44.	37.	41.	2.	41.	59.	3.					
10	24.	2.	19.	23.	20.	11.	9.	13.	16.	36.	32.	8.	13.	52.						
11	47.	69.	49.	67.	67.	61.	94.	55.	108.	110.	86.		39.	29.						
12	17.	1.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.			62.					
13		5.		2.	12.	5.	3.	1.	7.	3.	9.	1.								
14	2.	7.	13.	11.	20.	9.	7.	6.	10.	18.	9.		6.	25.						
15	1.		1.		1.	4.	1.	1.	1.				36.	25.						
16	28.	51.	35.	28.	16.	14.	12.	14.	9.	12.	34.		54.	21.	74.					
17							1.	1.							35.					
18												29.								
19				3.	3.							6.								
20	30.	51.	19.	27.	32.	32.	61.	72.	52.	64.	8.	19.		1.						
21	41.	29.	30.	34.	43.	19.	31.	15.	45.	18.	23.		7.	38.						
22	3.	3.	3.	3.		1.	2.	2.	1.	4.	4.	2.	17.	8.						
23	96.	88.	194.	161.	70.	68.	80.	72.	75.	77.	146.	83.	137.	53.	35.					
24	4.	3.	3.	1.	1.	5.	7.	1.	5.	3.	6.	27.		4.	56.					
25	1.	1.	2.	6.	2.	2.	1.	1.	1.	1.	2.	1.	1.	8.	4.					
26			3.	3.	11.	3.	2.	3.	2.	2.	2.		5.	15.	7.					
27	19.	15.	27.	21.	32.	21.	20.	30.	29.	22.	25.				53.					
28												6.								
29									1.			1.								
30									1.											
31			1.	6.								4.	12.	6.						
Total																				

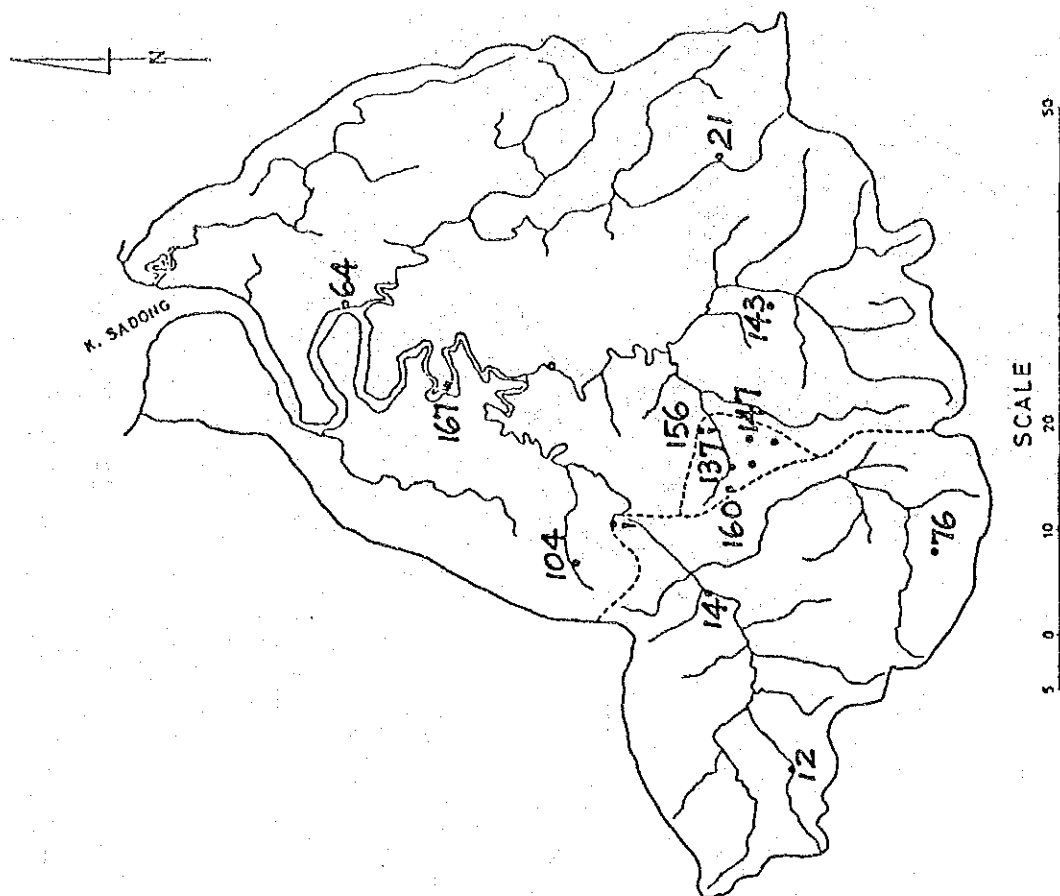
TABLE-7 DAILY RAINFALL DURING HEAVY RAIN
IN THE SADONG RIVER BASIN JAN. 1978



STATION NUMBER NO. 1 27 JAN. 1963
 FIG.-1 (i) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1963)

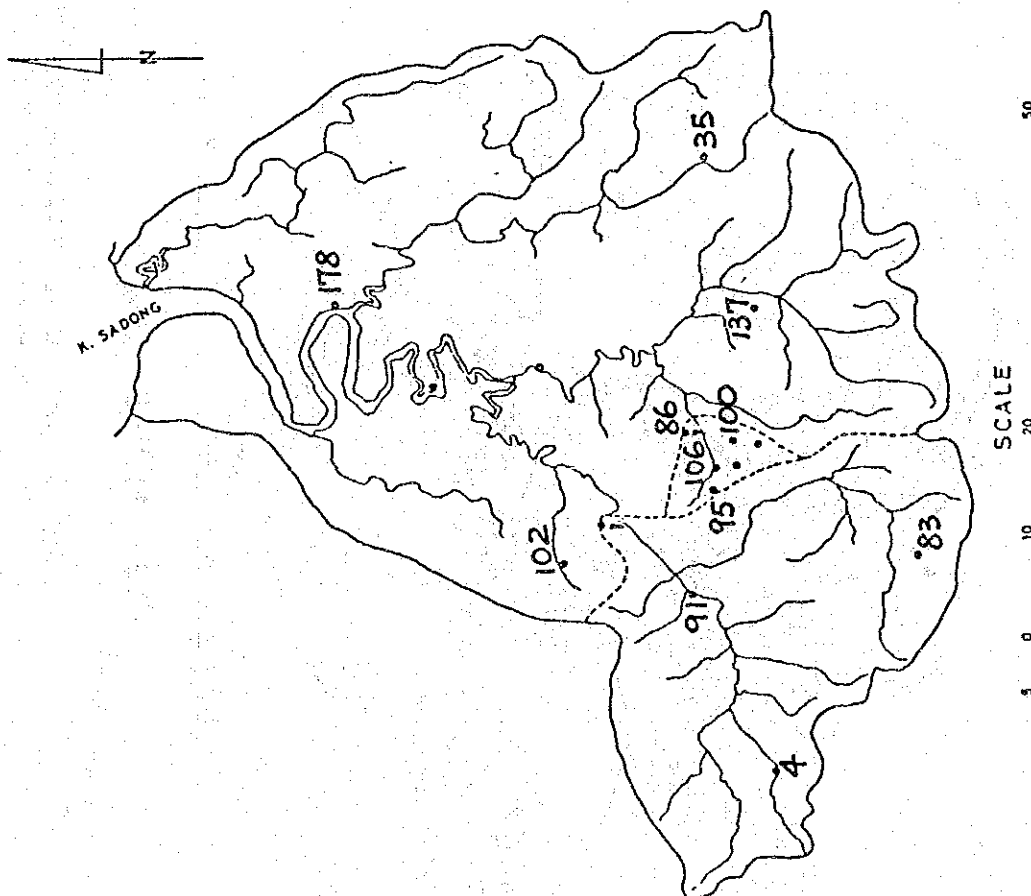


NO.2 28 JAN 1963

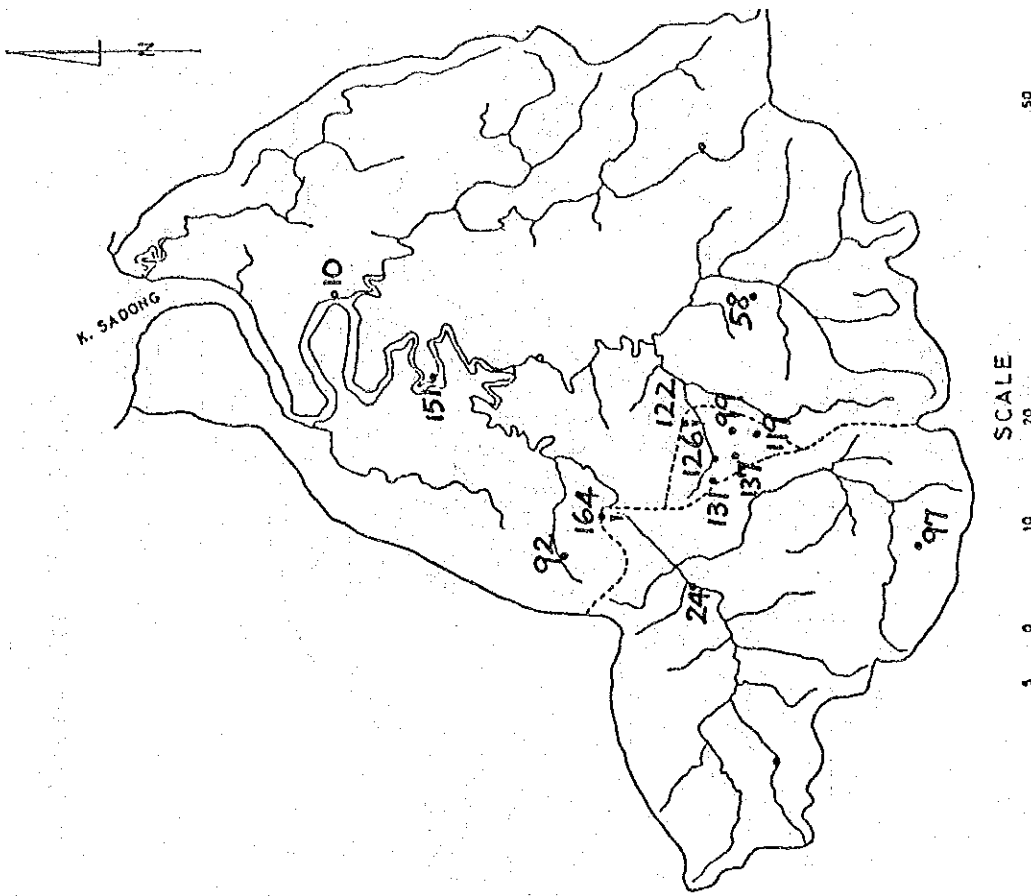


NO. 3 19 DEC: 1969

FIG.-2 (ii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1963, 1969)

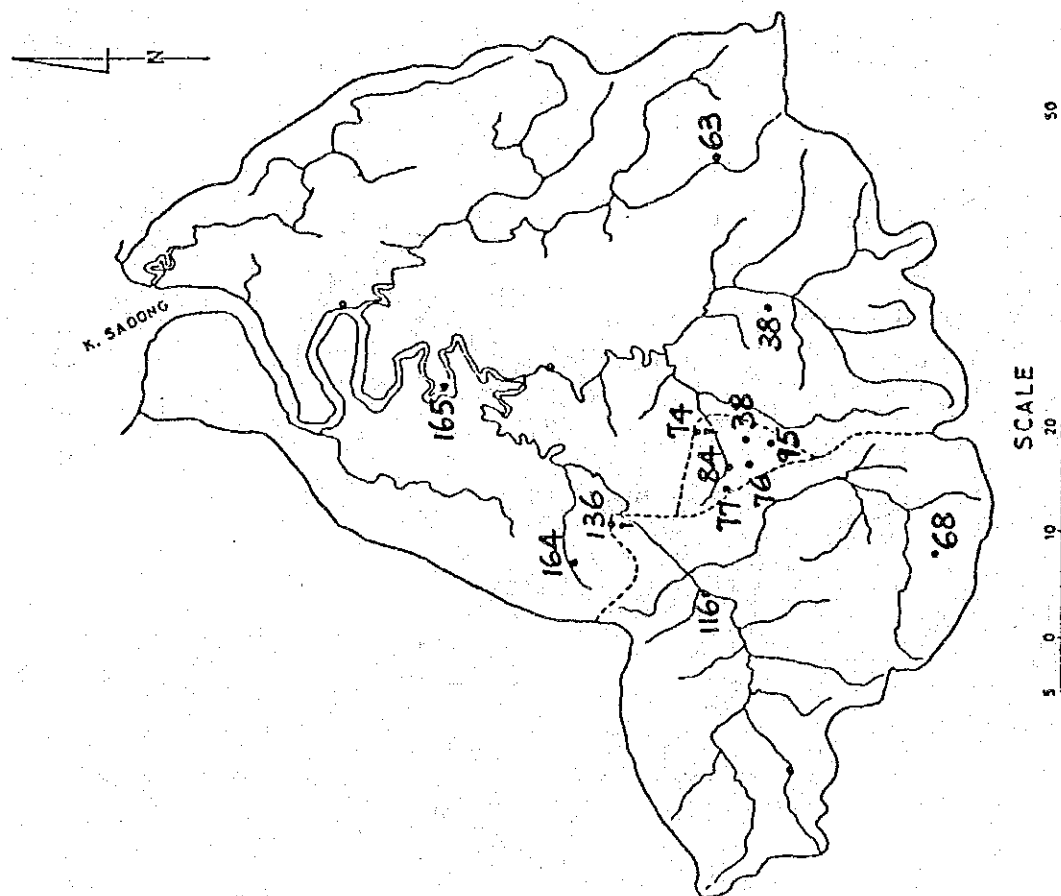


NO. 4 20 DEC. 1969

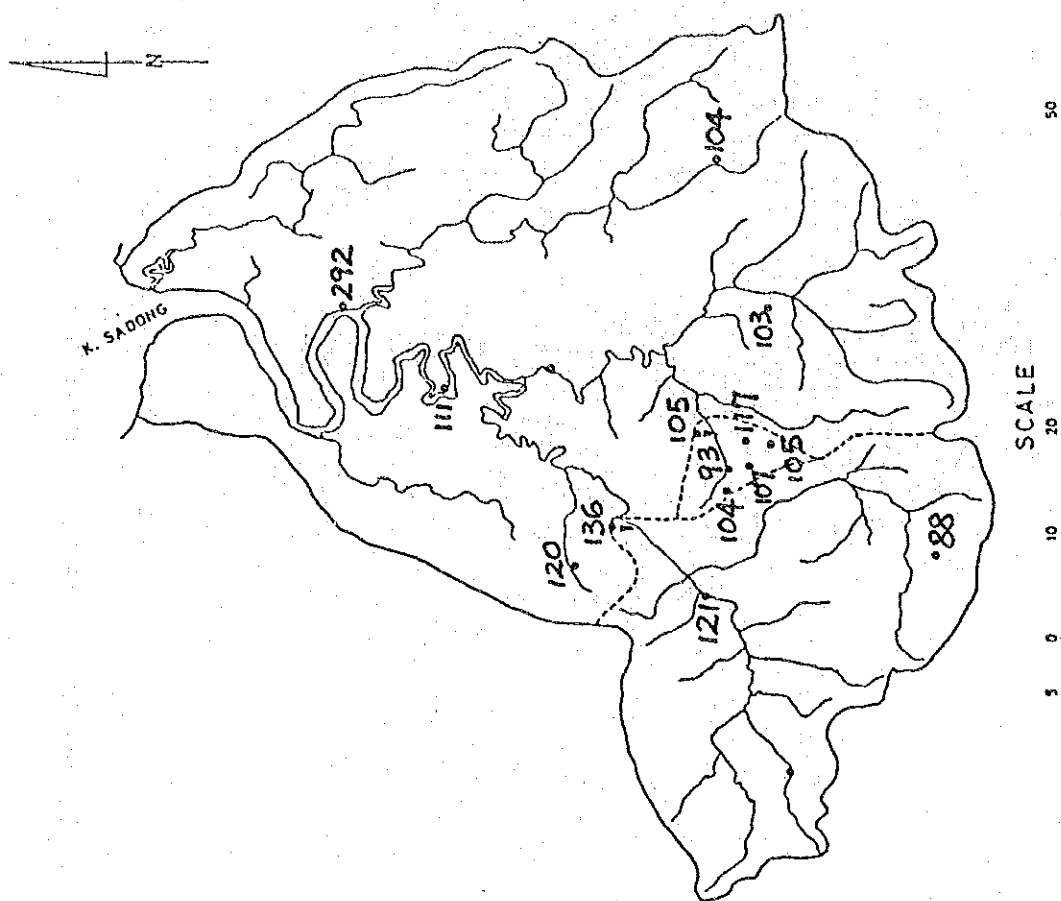


NO. 5 9 FEB. 1974

FIG.-3 (iii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1969, 1974)

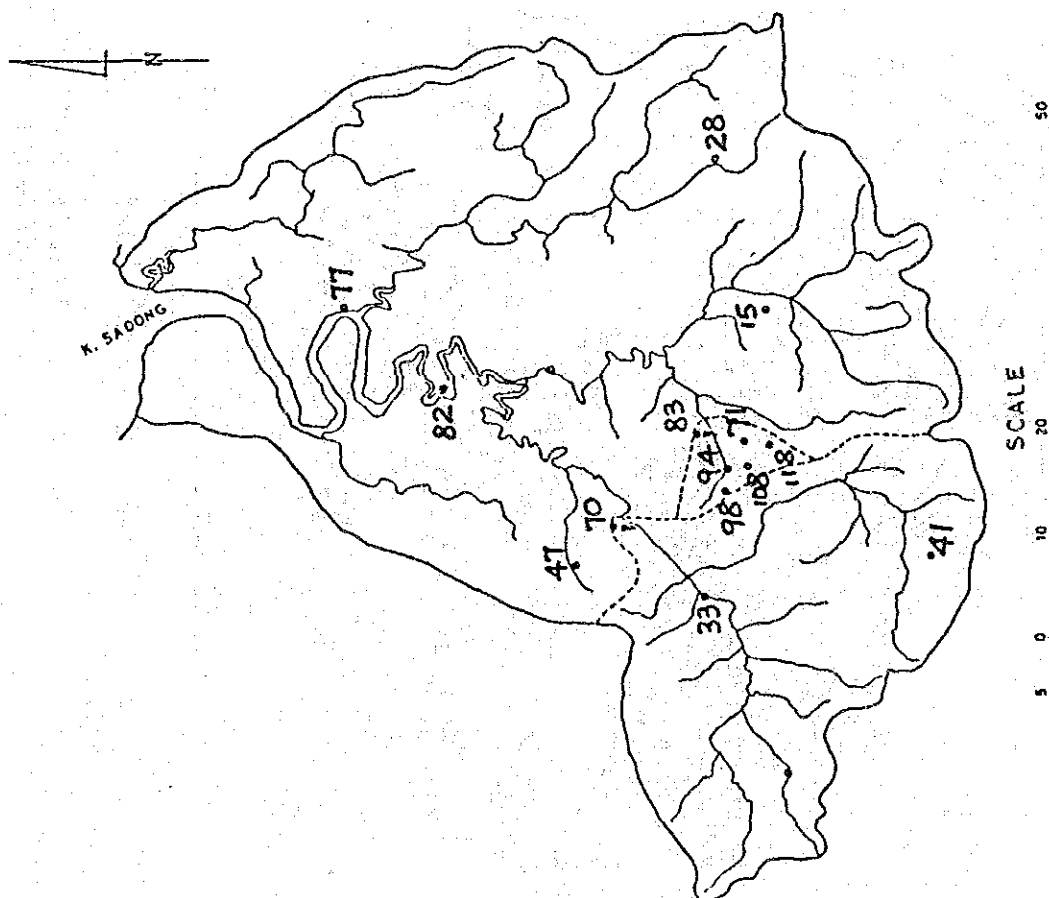


NO.6 10 FEB. 1974

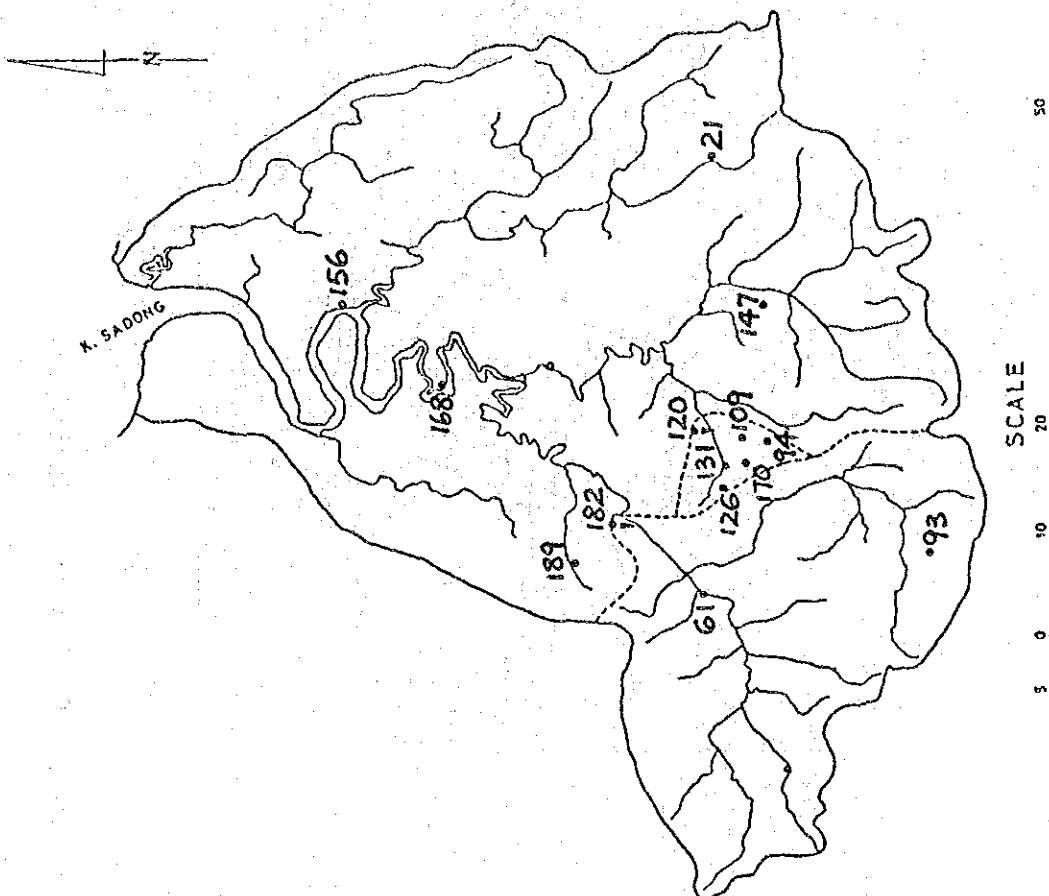


NO.7 11 FEB. 1974

FIG.-4 (iv) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1974)

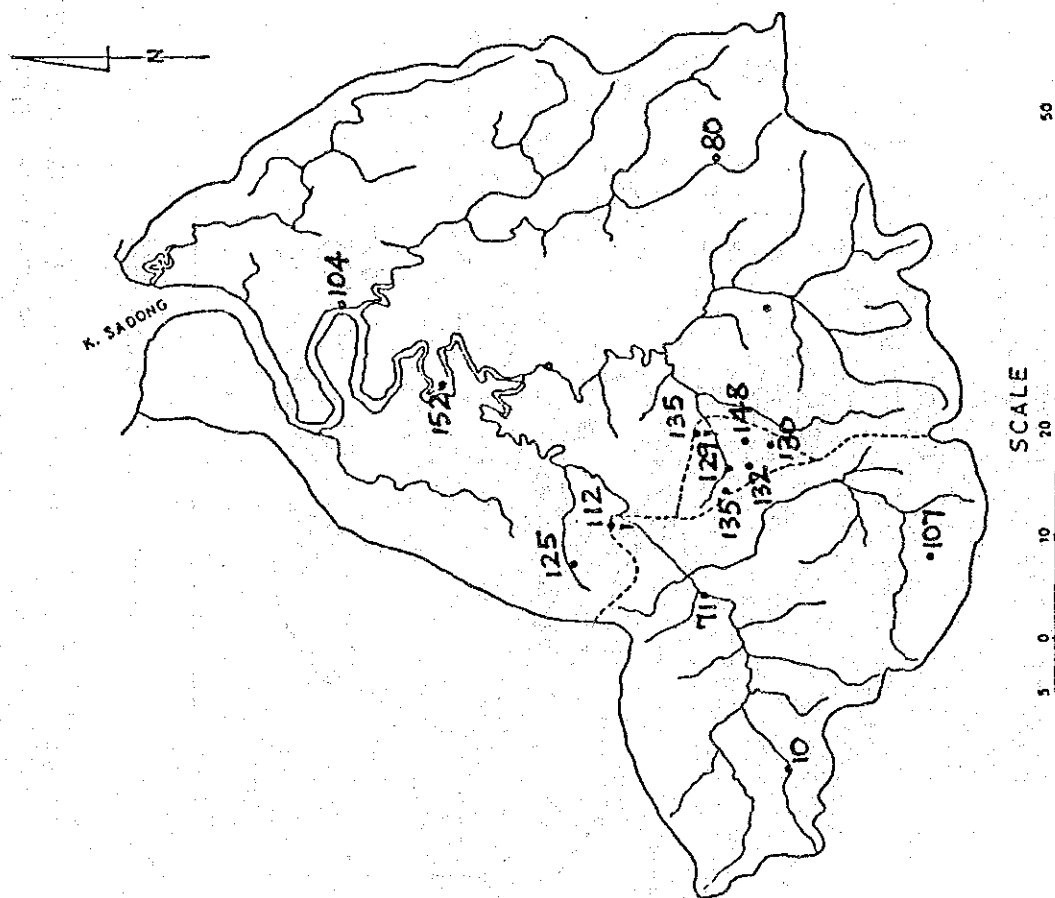


NO. 8 27 FEB. 1974

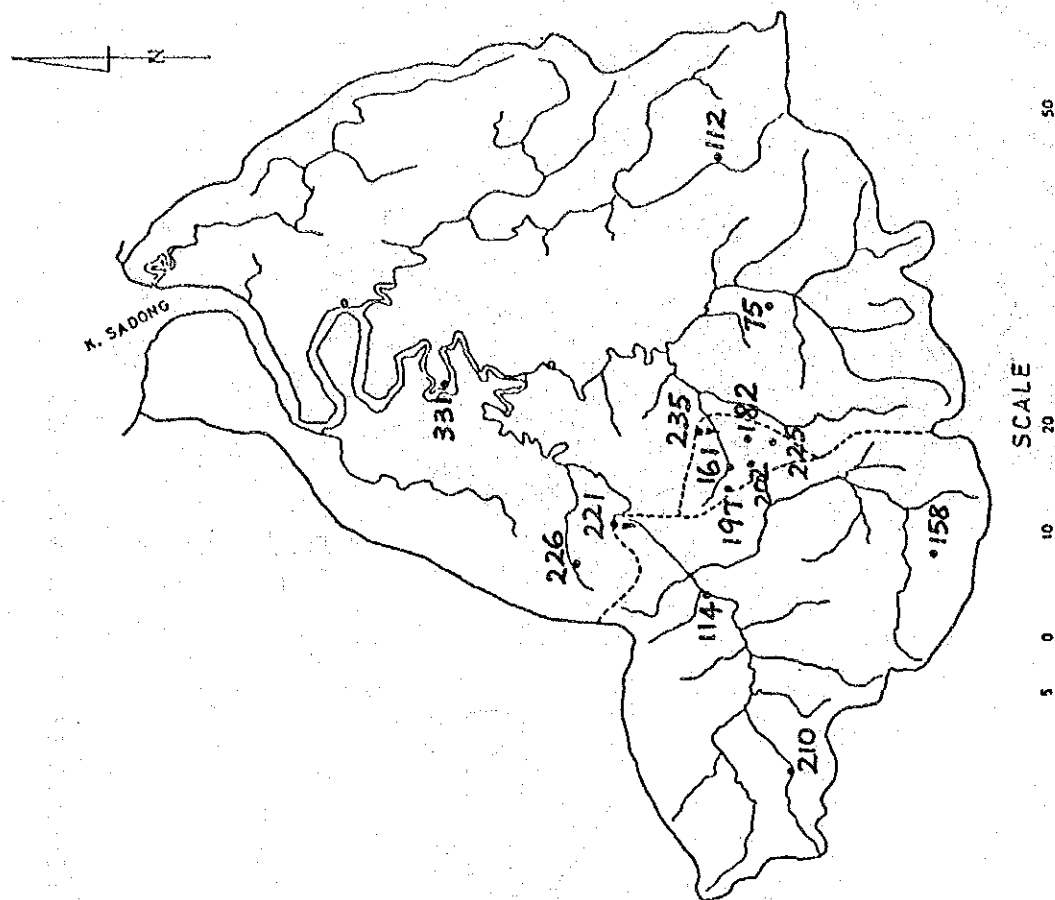


NO. 9 28 FEB. 1974

FIG.-5 (v) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1974)

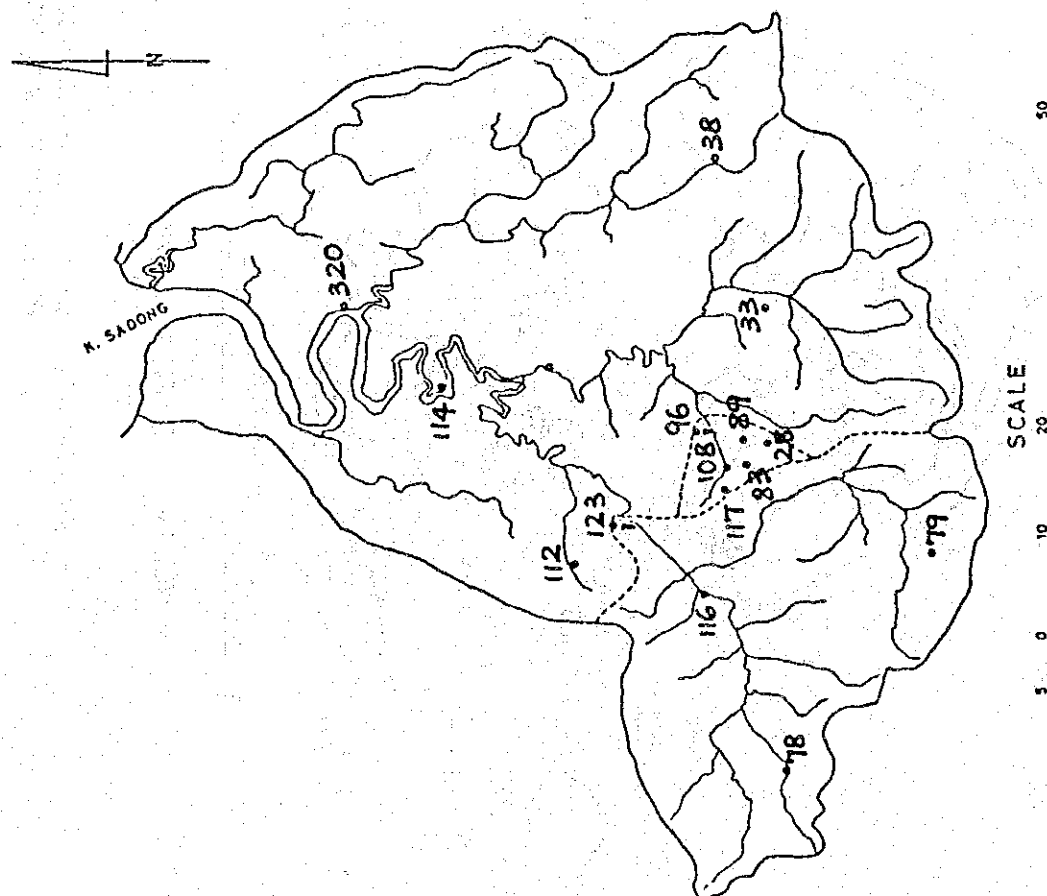


NO. 10 23 FEB. 1975



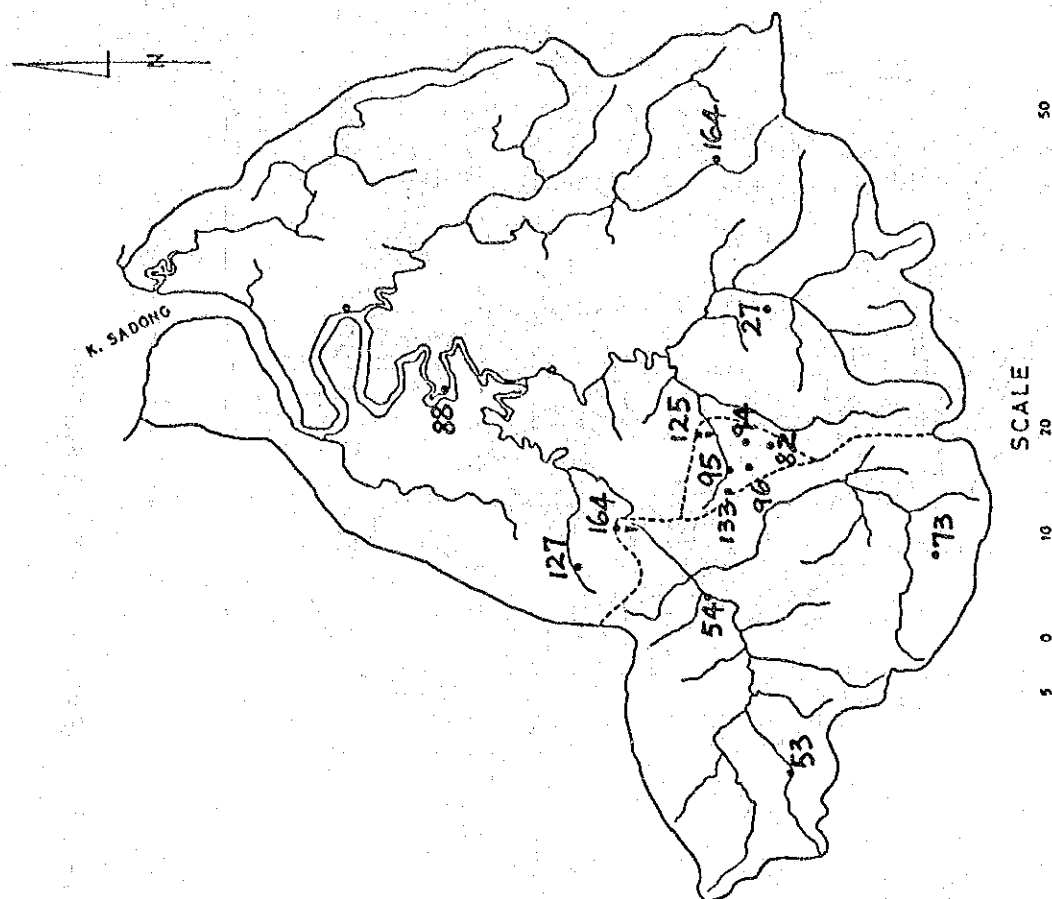
NO. 11 11 JAN. 1976

FIG.-6 (vi) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1975, 1976)

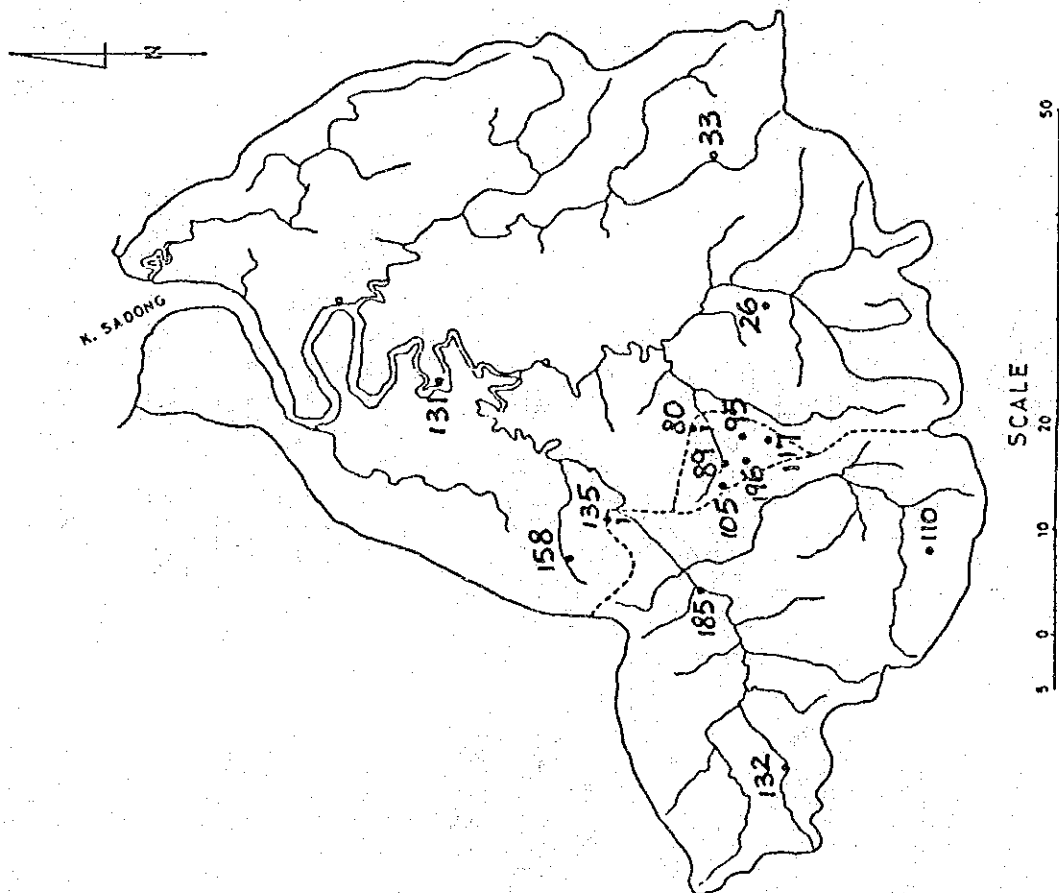


NO. 12 12 JAN. 1976

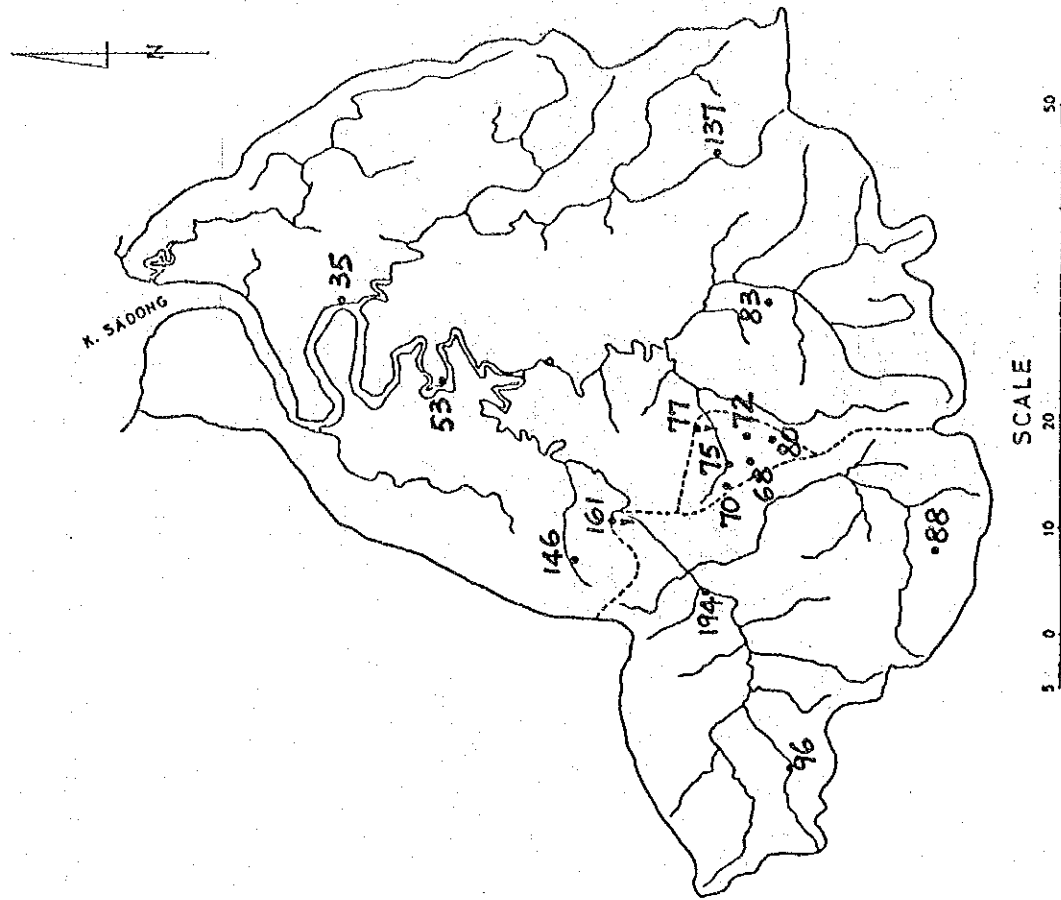
FIG.-7 (vii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1976, 1977)



NO. 13 6 FEB. 1977



NO. 14 19 FEB. 1977



NO. 15 23 JAN. 1978

FIG.-8 (viii) DAILY RAINFALL DISTRIBUTION DURING HEAVY RAIN IN THE SADONG RIVER BASIN (1977, 1978)

**D-7 HOURLY RAINFALL DISTRIBUTION FOR TWO STORMS
IN THE SG. BEDUP EXPERIMENTAL BESIN**

TABLES AND FIGURES

- FIG.—1 HOURLY RAINFALL DISTRIBUTION ON 12—13 JANUARY 1976
- FIG.—2 HOURLY RAINFALL DISTRIBUTION ON 12—13 JANUARY 1976
(ADJUSTED)
- FIG.—3 HOURLY RAINFALL DISTRIBUTION ON 24 JANUARY 1983

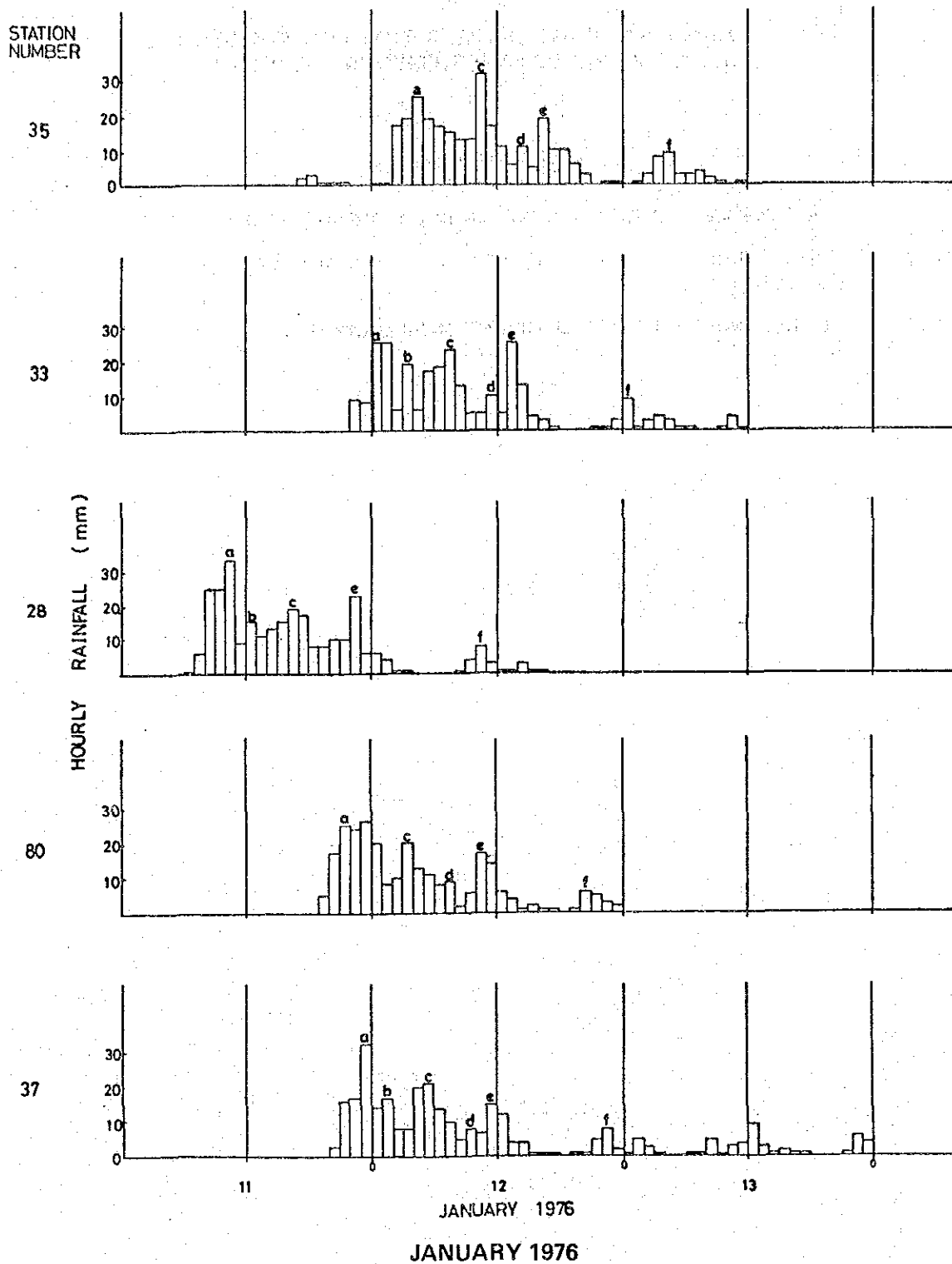
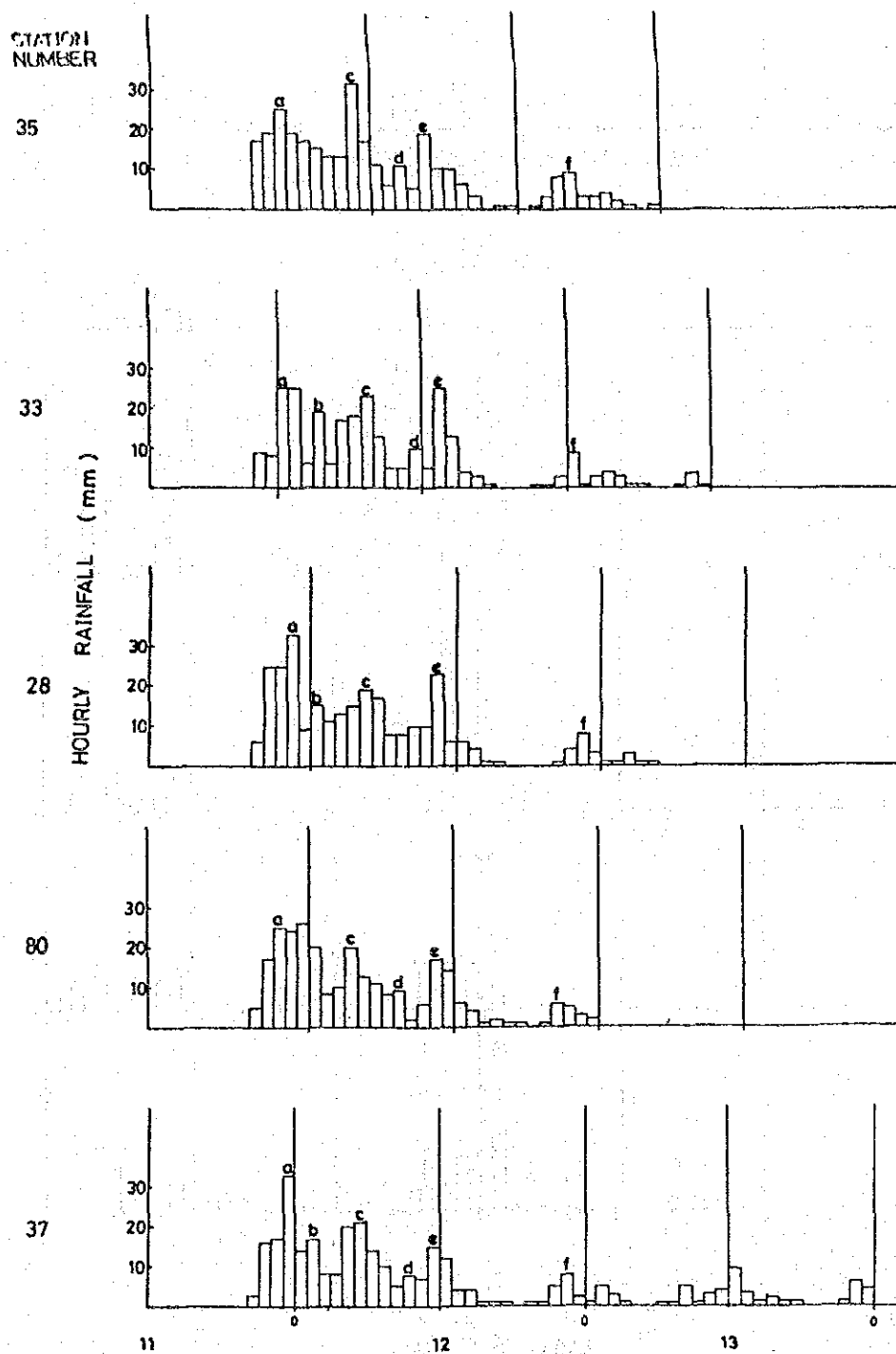
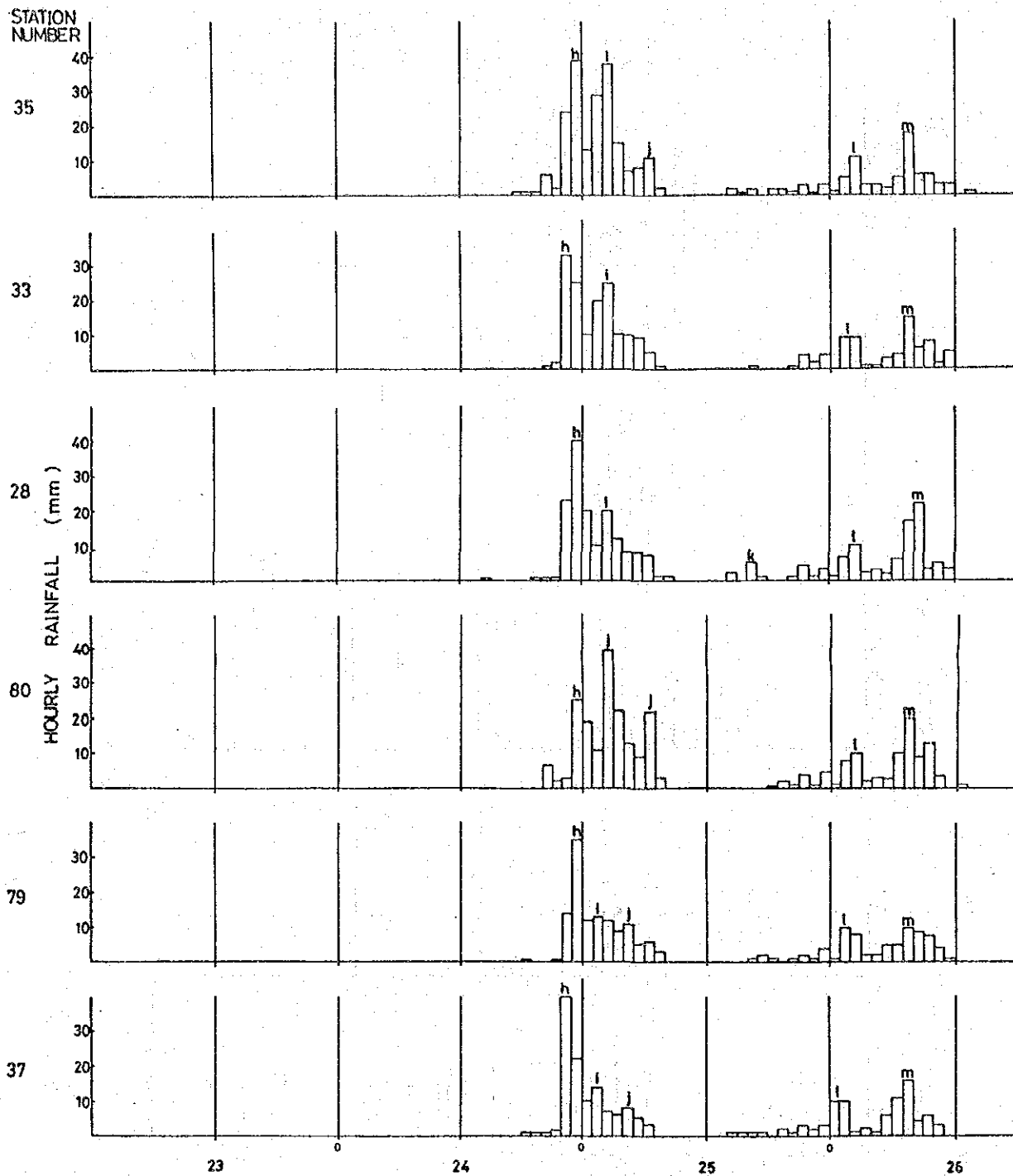


FIG.-1 HOURLY RAINFALL DISTRIBUTION ON 12-13 JANUARY 1976



JANUARY 1976

FIG.-2 HOURLY RAINFALL DISTRIBUTION ON 12-13 JANUARY 1976
(ADJUSTED)



JANUARY 1983

FIG.—3 HOURLY RAINFALL DISTRIBUTION ON 24 JANUARY 1983

**D-8 CORRELATION COEFFICIENTS OBTAINED AMONG THE MONTHLY
RAINFALLS AT THE STATIONS IN THE SG. BEDUP RIVER BASIN**

TABLES AND FIGURES

**TABLE-1 CORRELATION COEFFICIENTS OBTAINED AMONG THE MONTHLY RAINFALLS
AT THE STATIONS IN THE 1ST DIVISION**

FIG.-1 LOCATION OF RAINFALL STATIONS

FIG.-2 CORRELATION MAP (1969, 1971)

FIG.-3 CORRELATION MAP (1972, 1973)

FIG.-4 CORRELATION MAP (1974, 1975)

FIG.-5 CORRELATION MAP (1976, 1977)

FIG.-6 CORRELATION MAP (1978)

TABLE-1 CORRELATION COEFFICIENTS OBTAINED AMONG THE MONTHLY RAINFALLS AT THE STATIONS IN THE 1ST DIVISION

1969	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1975	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1970	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1976	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1971	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1977	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

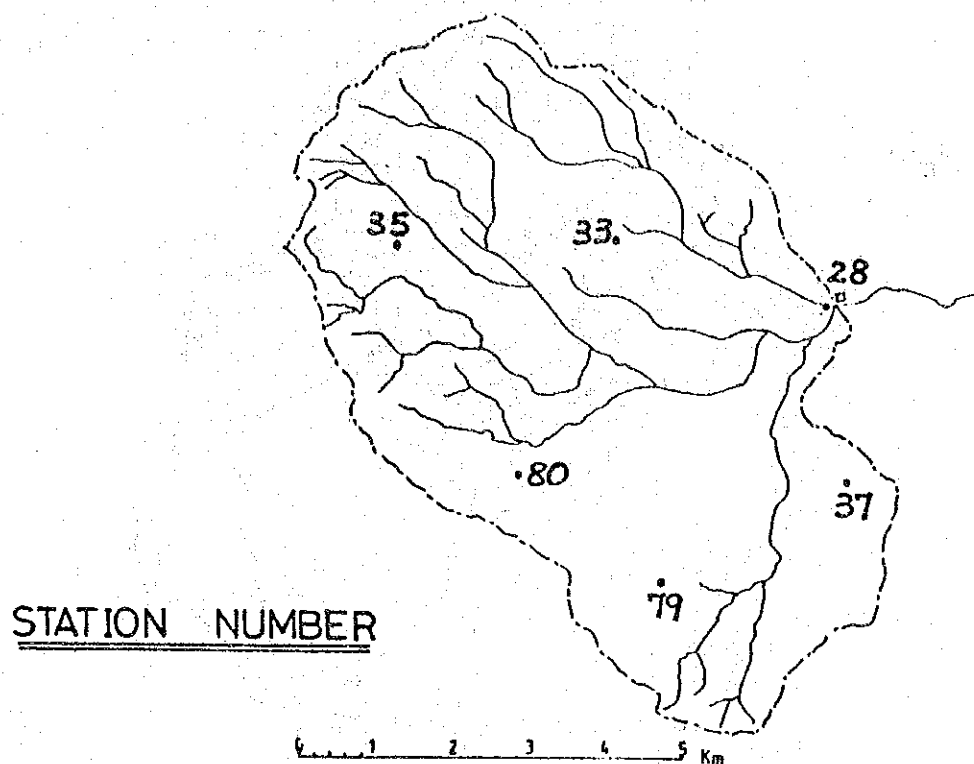
1972	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1978	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1973	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

1974	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						

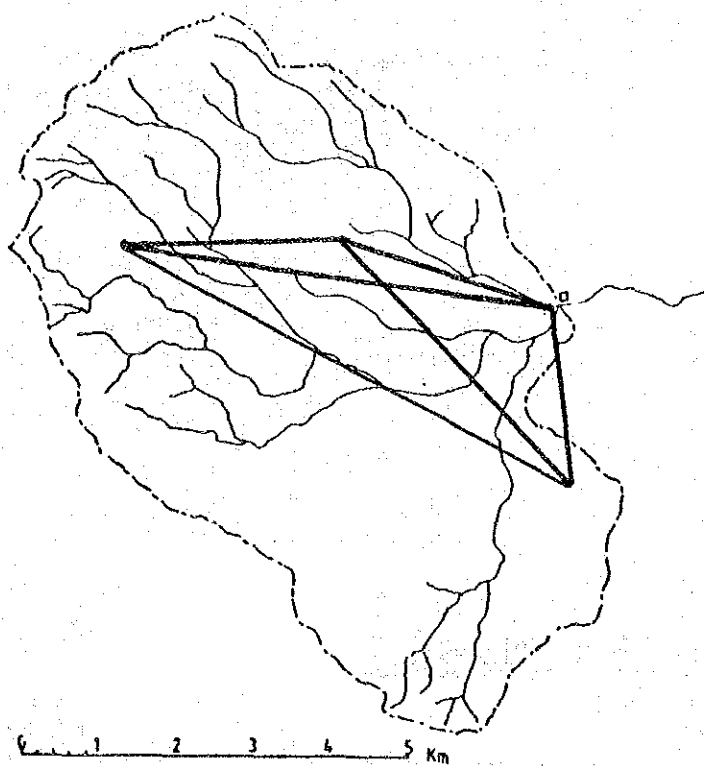
MEAN	28	33	35	37	79	80
28						
33						
35						
37						
79						
80						



<u>LEGEND</u>	
CORRELATION	COEFFICIENT
$r > 0.95$	—————
$0.95 > r > 0.90$	—————
$0.90 > r > 0.80$	- - - - -
$0.80 > r$

FIG.-1 LOCATION OF RAINFALL STATIONS

1969



1971

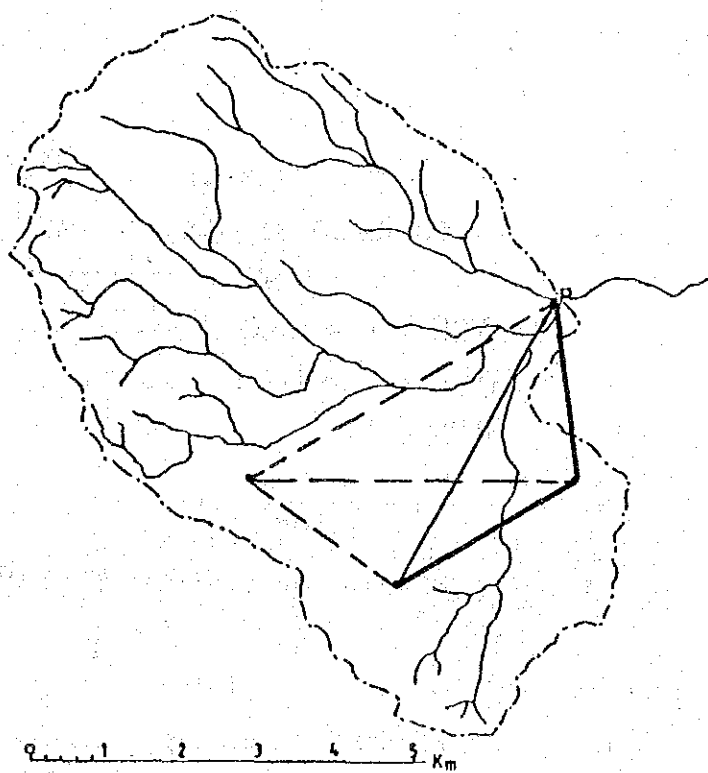
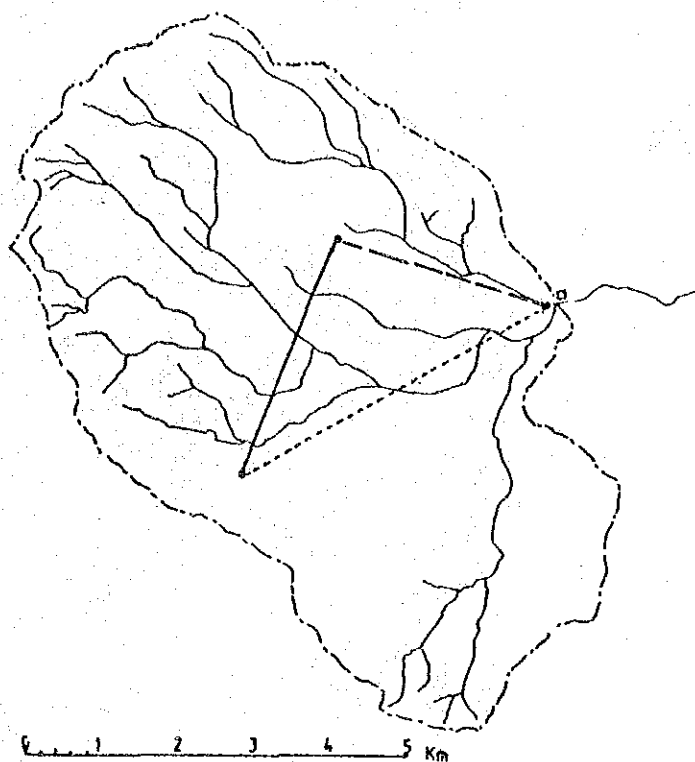


FIG.-2 CORRELATION MAP (1969, 1971)

1972



1973

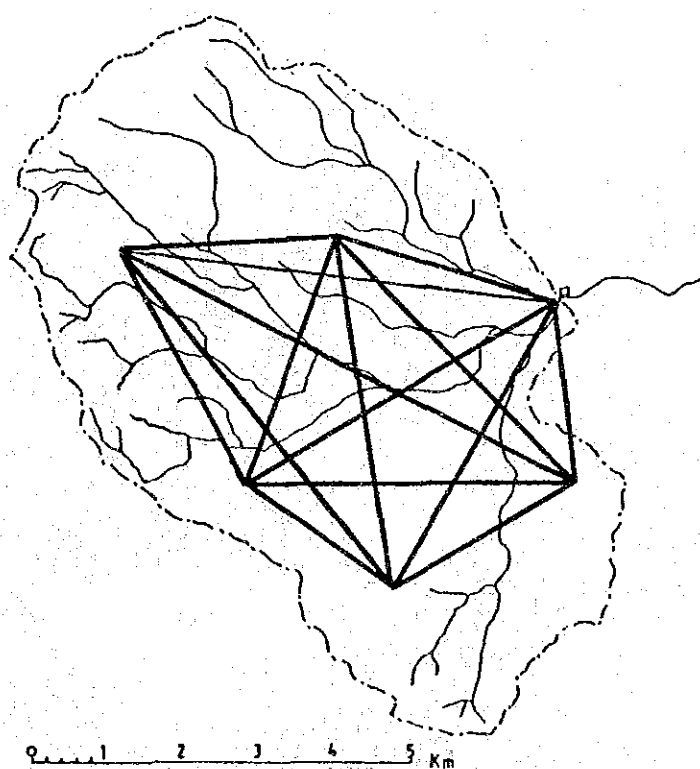
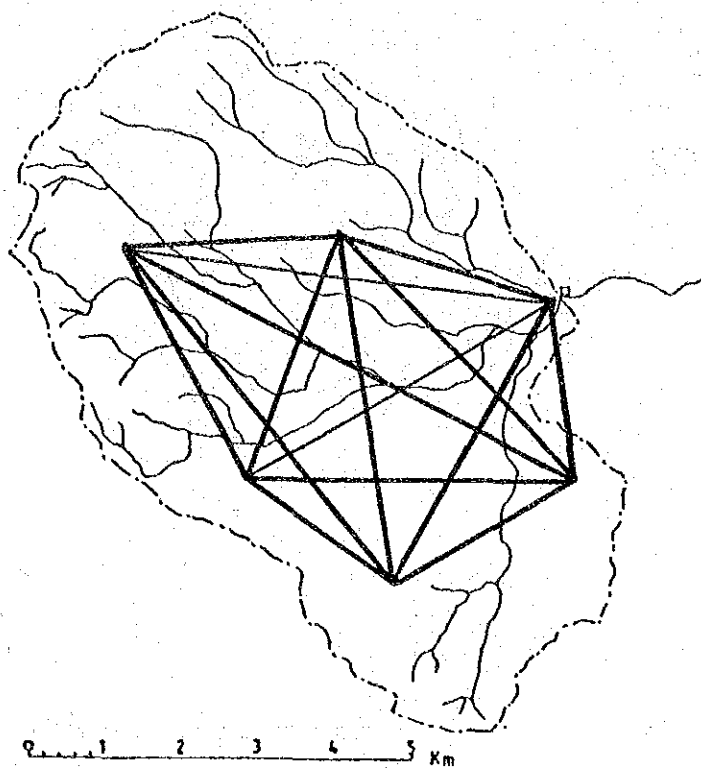


FIG.—3 CORRELATION MAP (1972, 1973)

1974



1975

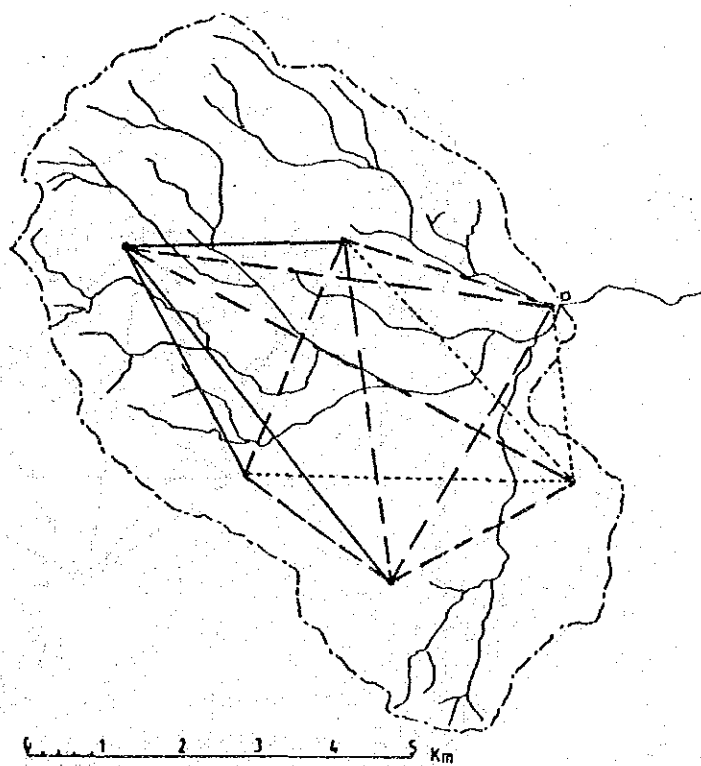
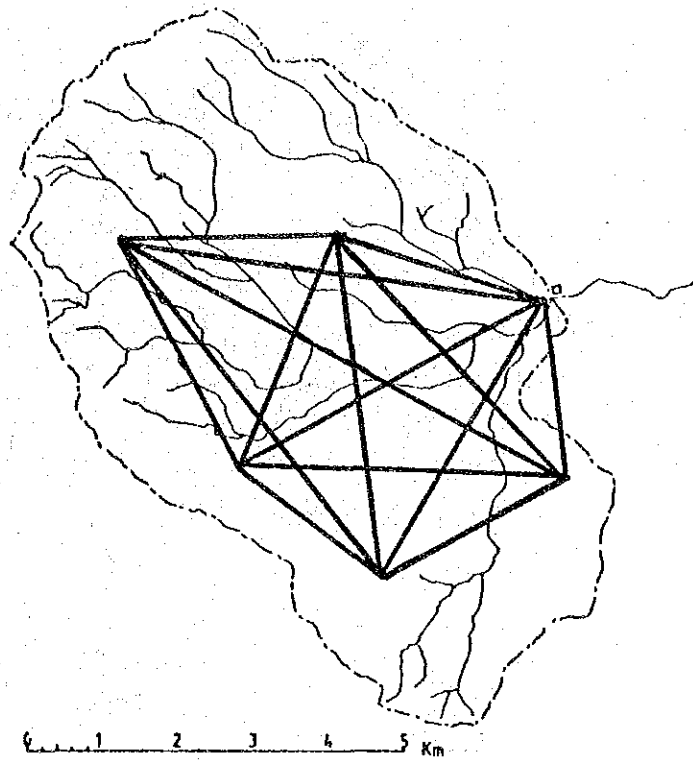


FIG.-4 CORRELATION MAP (1974, 1975)

1976



1977

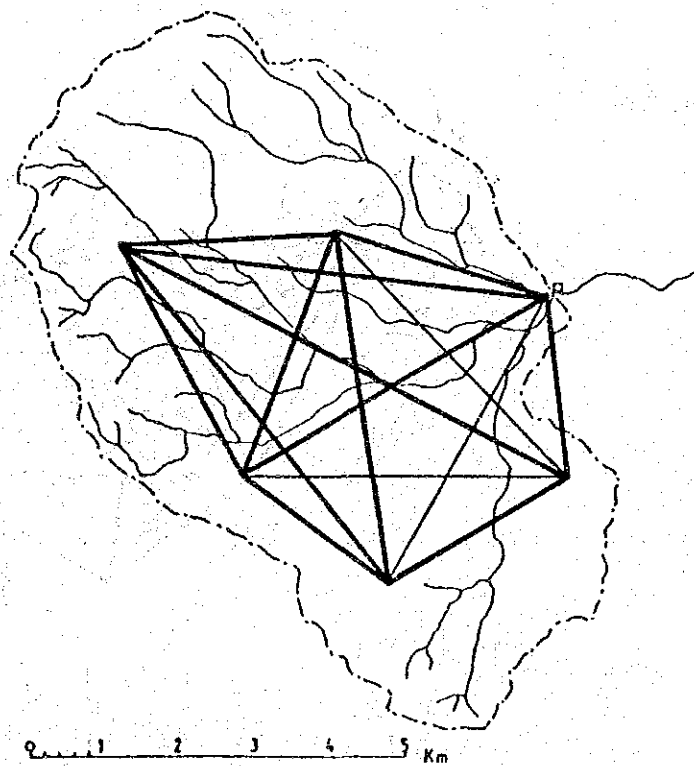
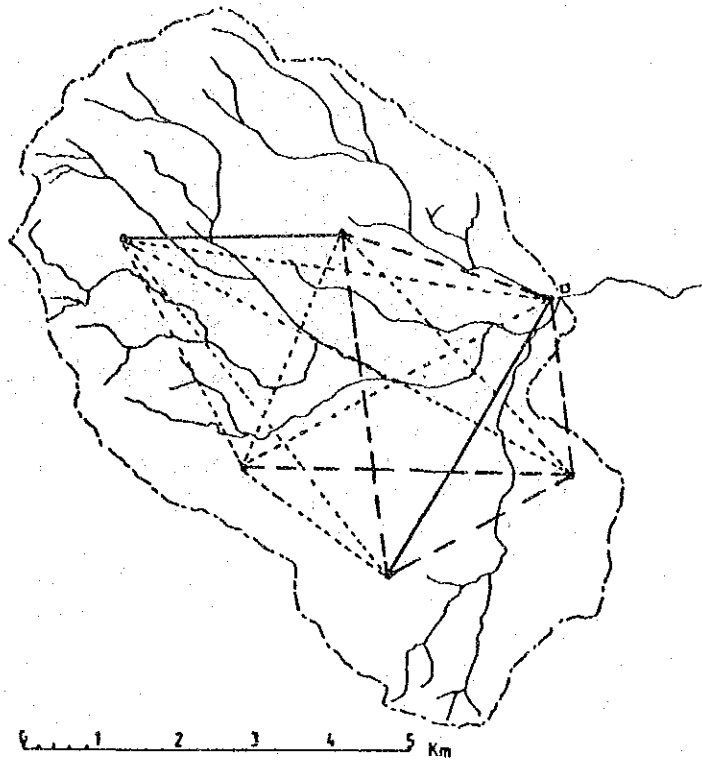


FIG.-5 CORRELATION MAP (1976, 1977)

1978



MEAN

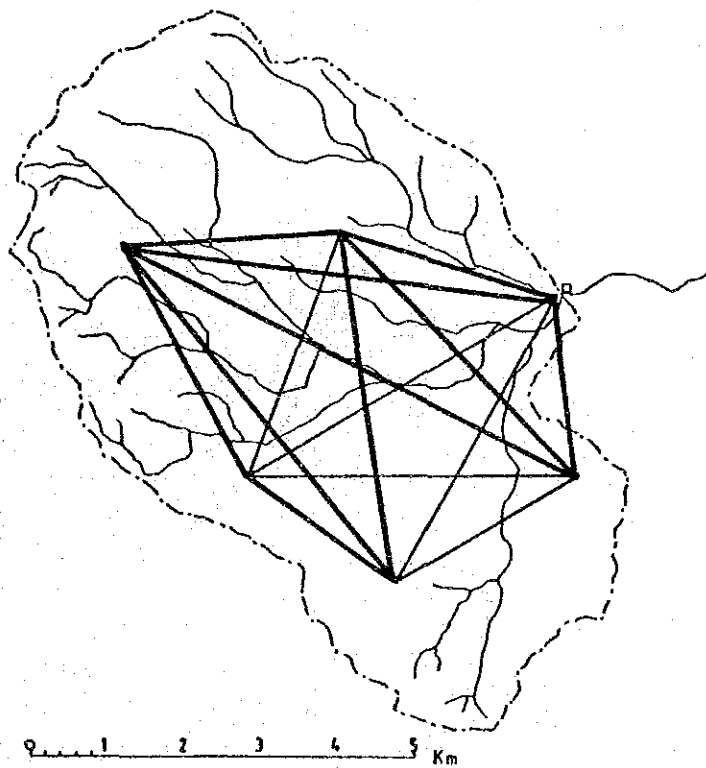


FIG.-6 CORRELATION MAP (1978)