

Table  
TELEMETRING RAIN GAUGE ( SIRAGAN )

DATE	JAN. / '88							TOTAL																		
	7-8	8-9	9-10	10-11	11-12	12-13	13-14		14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-1	1-2	2-3	3-4	4-5	5-6	6-7	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
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22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
																										137
																										596

NOTE : \* means no data owing to the System being out of order

Table TELEMETERING RAIN GAUGE (SIHAGAR)

DATE	7-8	8-9	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0-1	1-2	2-3	3-4	4-5	5-6	6-7	TOTAL	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
12	*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	
22																										0	
23																										0	
24																										0	
25																										0	
26																										0	
27																										0	
28																										0	
29																										0	
30																										0	
31																										0	
																											242

NOTE : \* means no data owing to the system being out of order

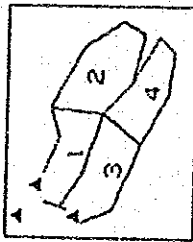
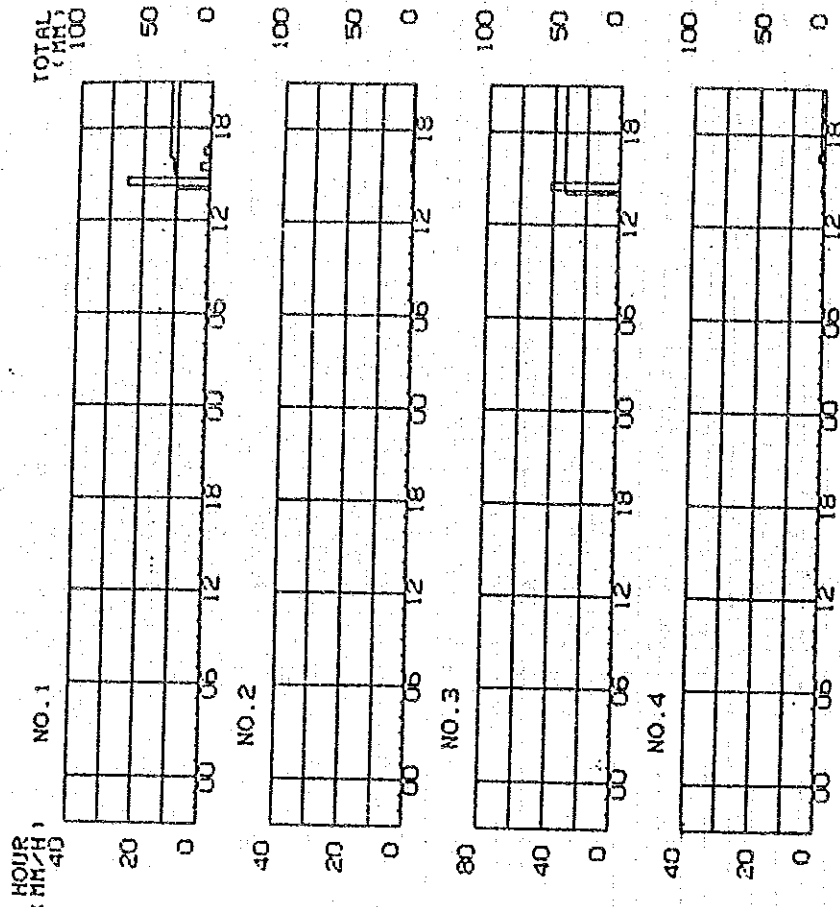
Table - RADAR DATA IN FLOPPY DISK

As of 20/FEB./88

NO.	DATE	TIME	BOX NO.	REMARKS	NO.	DATE	TIME	BOX NO.	REMARKS
1	6/MAY/84	12:00~	1		51	6/MAR/86	13:25~	5	
2	23/MAY/84	9:00~	1		52	9/MAR/86	13:05~	5	
3	28/MAY/84	9:00~	1		53	11/MAR/86	15:00~	5	
4	31/MAY/84	6:30~	1		54	21/MAR/86	13:30~	5	
5	15/AUG/84	18:30~	1		55	9/APR/86	10:00~	5	
6	17/AUG/84	21:30~	1		56	5/APR/86	20:35~	5	
7	25/AUG/84	10:00~	1		57	29/SEP/87	5:00~	6	
8	25/AUG/84	18:00~	1		58	29/SEP/87	8:45~	6	
9	27/AUG/84	14:30~	1		59	29/SEP/87	12:30~	6	
10	30/AUG/84	18:50~	1		60	29/SEP/87	16:15~	6	
11	1/SEP/84	16:40~	2		61	29/SEP/87	20:00~	6	
12	2/SEP/84	22:00~	2		62	30/SEP/87	1:00~	6	
13	3/SEP/84	16:50~	2		63	30/SEP/87	4:45~	6	
14	22/SEP/84	15:30~	2		64	30/SEP/87	19:20~	6	
15	26/SEP/84	17:20~	2		65	1/OCT/87	0:00~	6	
16	27/SEP/84	15:00~	2		66	1/OCT/87	3:00~	6	
17	29/SEP/84	16:00~	2		67	30/NOV/87	10:35~	7	
18	5/OCT/84	15:00~	2		68	7/DEC/87	10:10~	7	
19	12/OCT/84	11:30~	2		69	8/DEC/87	9:55~	7	
20	31/DEC/84	19:25~	2		70	9/DEC/87	11:10~	7	
21	19/JAN/85	12:40~	3		71	10/DEC/87	16:00~	7	
22	19/JAN/85	12:40~	3		72	13/DEC/87	10:40~	7	
23	19/JAN/85	12:40~	3		73	14/DEC/87	12:40~	7	
24	22/JAN/85	13:55~	3		74	15/DEC/87	15:30~	7	
25	20/OCT/85	17:00~	3		75	16/DEC/87	15:20~	7	
26	12/NOV/85	10:55~	3		76	17/DEC/87	11:20~	7	
27	12/NOV/85	19:55~	3		77	18/DEC/87	10:30~	8	
28	13/NOV/85	3:50~	3		78	19/DEC/87	11:20~	8	
29	13/NOV/85	12:30~	3		79	20/DEC/87	11:30~	8	
30	17/NOV/85	20:10~	3		80	21/DEC/87	13:00~	8	
31	18/NOV/85	4:00~	3		81	23/DEC/87	13:00~	8	
32	18/NOV/85	16:00~	3		82	25/DEC/87	13:00~	8	
33	19/NOV/85	1:00~	3		83	26/DEC/87	15:20~	8	
34	21/NOV/85	10:00~	3		84	27/DEC/87	12:25~	8	
35	21/NOV/85	17:55~	4		85	4/JAN/88	12:30~	8	
36	22/NOV/85	1:55~	4		86	4/JAN/88	20:25~	8	
37	24/NOV/85	15:00~	4		87	5/JAN/88	12:30~	9	
38	26/NOV/85	13:00~	4		88	6/JAN/88	13:20~	9	
39	26/NOV/85	20:55~	4		89	7/JAN/88	11:30~	9	
40	27/NOV/85	14:25~	4		90	8/JAN/88	12:00~	9	
41	27/NOV/85	22:20~	4		91	9/JAN/88	16:40~	9	
42	28/NOV/85	12:30~	4		92	10/JAN/88	12:50~	9	
43	28/NOV/85	20:25~	4		93	11/JAN/88	13:30~	9	
44	30/NOV/85	15:00~	4		94	12/JAN/88	12:20~	9	
45	30/NOV/85	22:00~	4		95	14/JAN/88	13:50~	9	
46	4/DEC/85	13:00~	5		96	15/JAN/88	14:20~	9	
47	18/DEC/85	15:50~	5		97	15/FEB/88	14:00~	10	
48	23/DEC/85	20:00~	5		98	17/FEB/88	16:00~	10	
49	2/MAR/86	16:00~	5		99	19/FEB/88	15:50~	10	
50	5/MAR/86	13:05~	5		100				

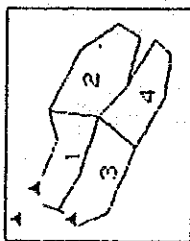
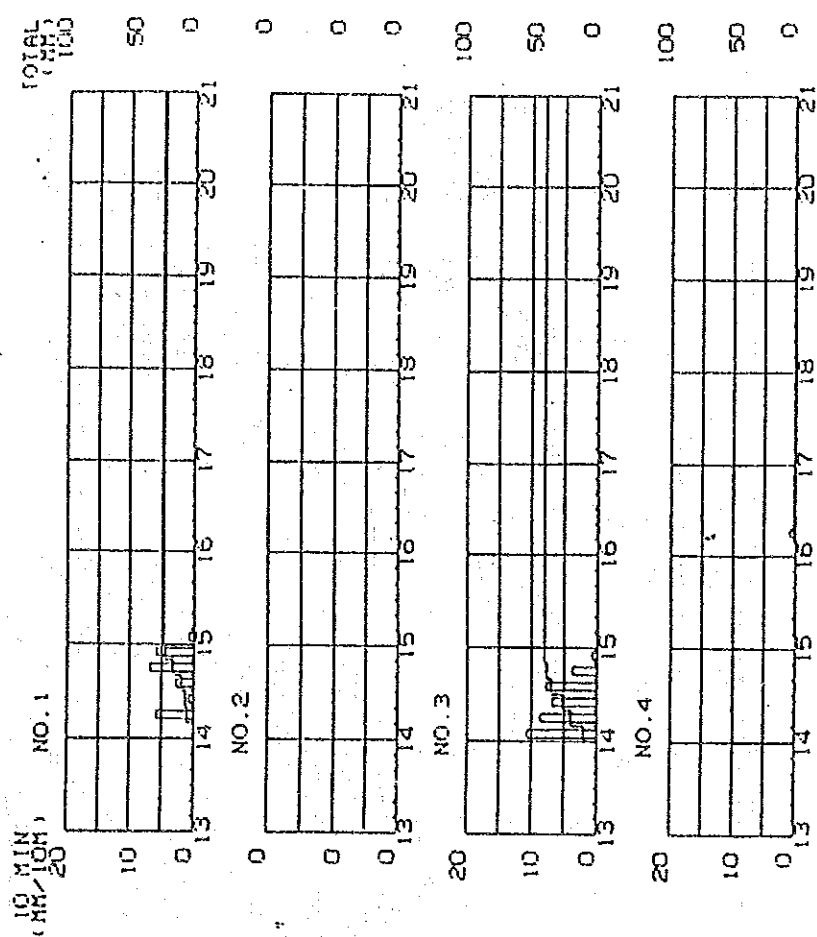
RAINFALL GRAPH PLAY BACK

1987 12-07 21:00 1987 12-15 16:10



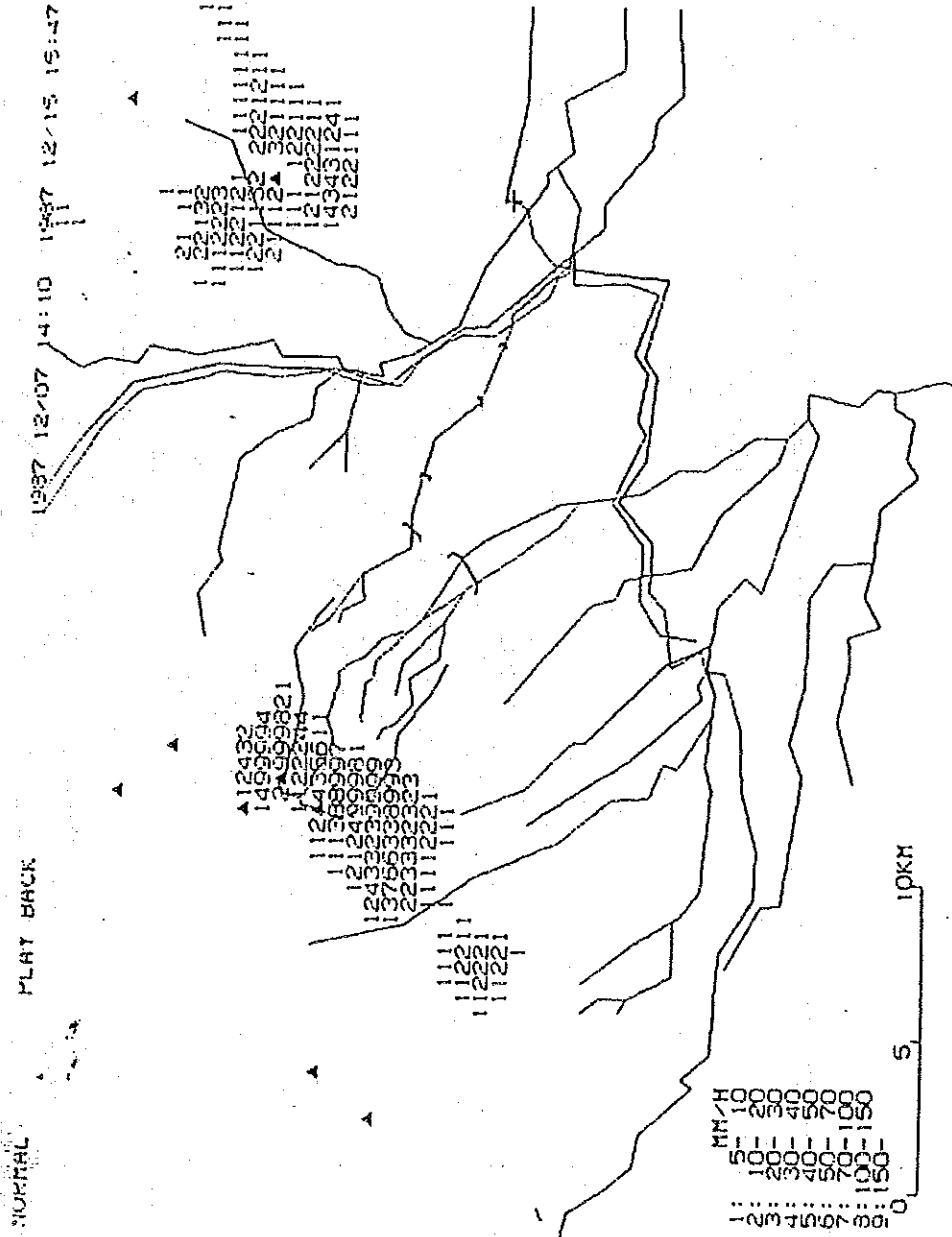
- | NO. | AREA     |
|-----|----------|
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| 2   | CI LOSEH |
| 3   | BANJARAN |
| 4   | CI KUNIR |

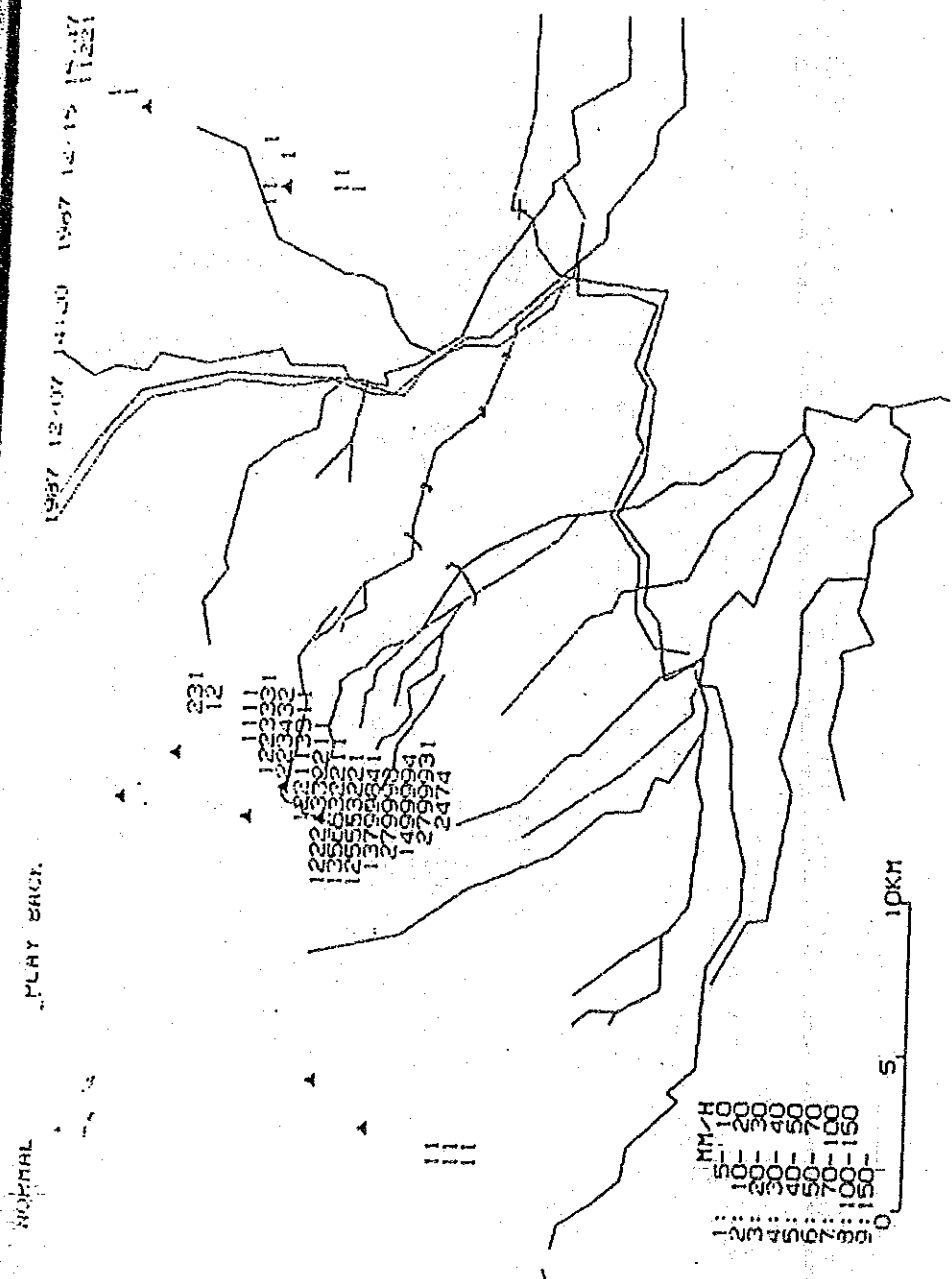
THIRPALL GRAPH PLAY BACK 1987 12-07 21:00 1987 12 15 14:05



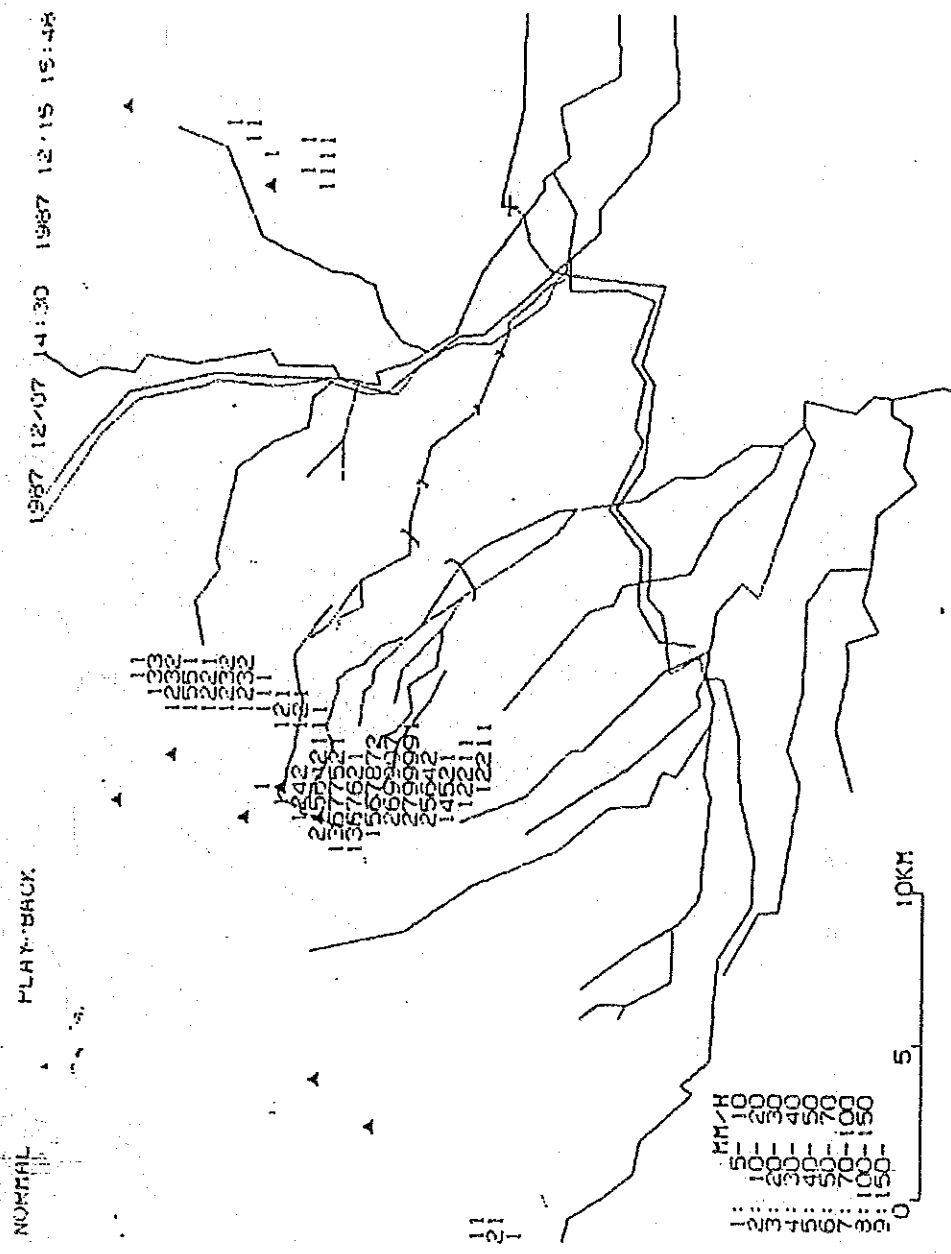
- NO. AREA
- 1 CI LOSEH
- 2 CI LOSEH
- 3 CI SANJARAN
- 4 CI KUNIR







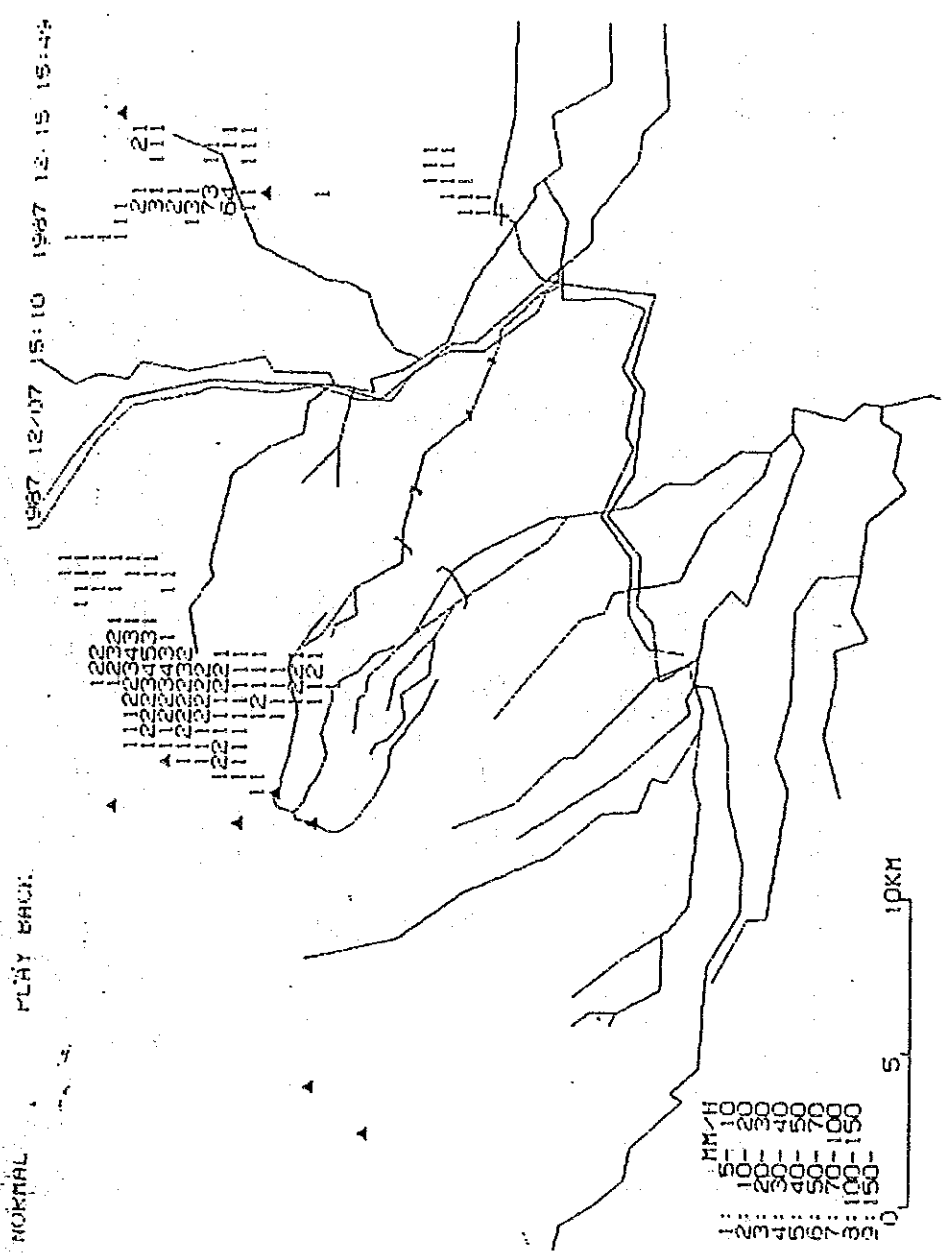


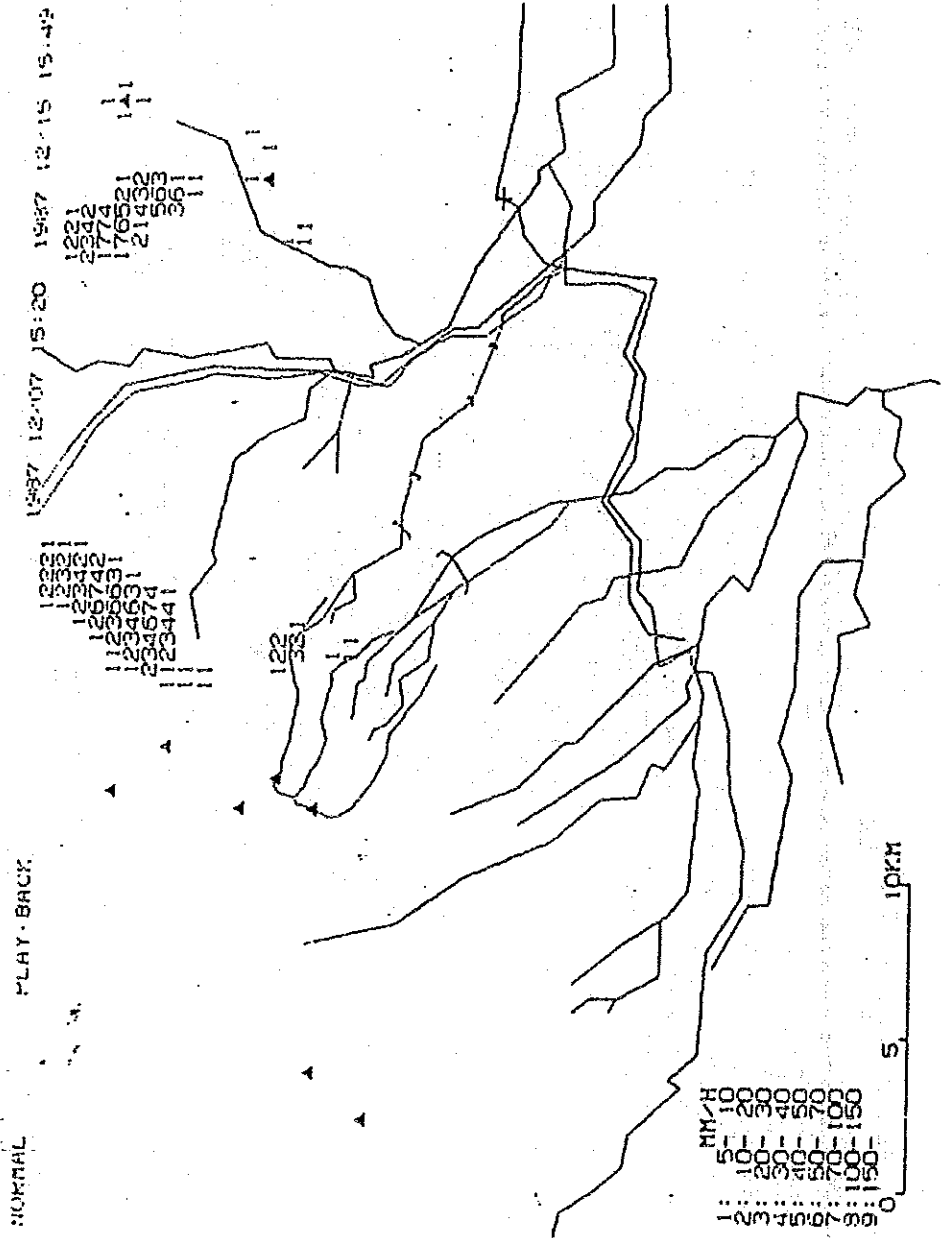






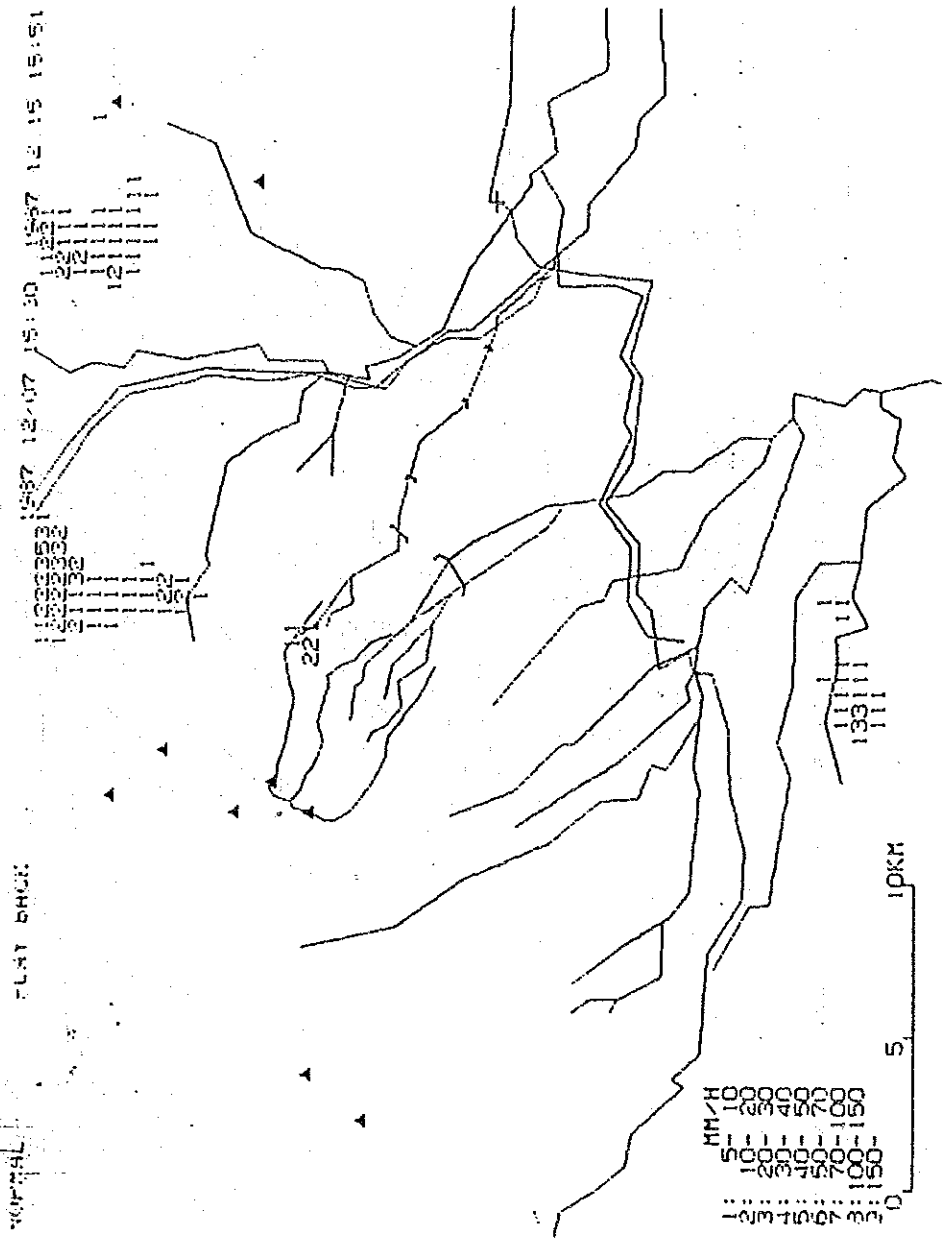


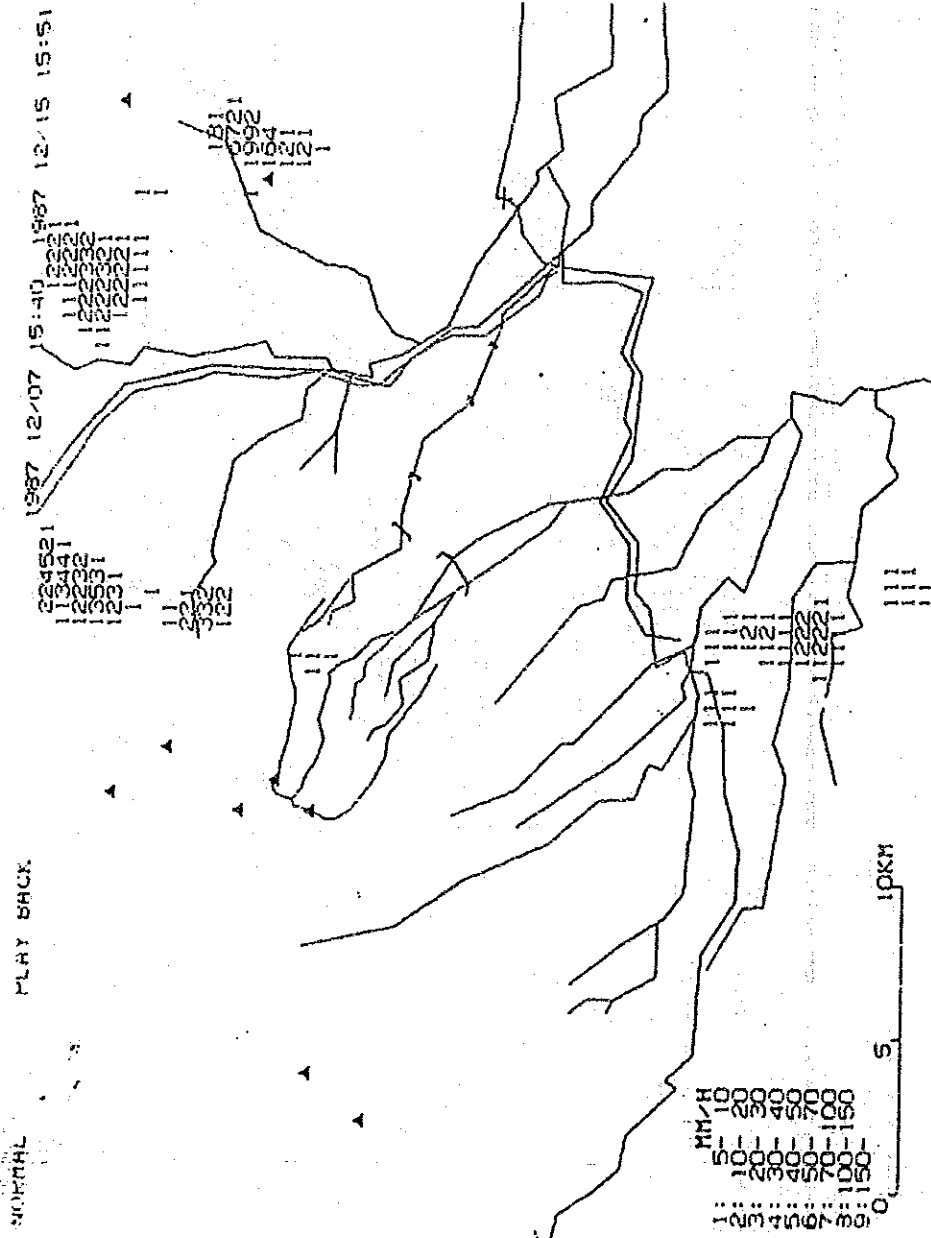




PLAY - BACK

NORMAL





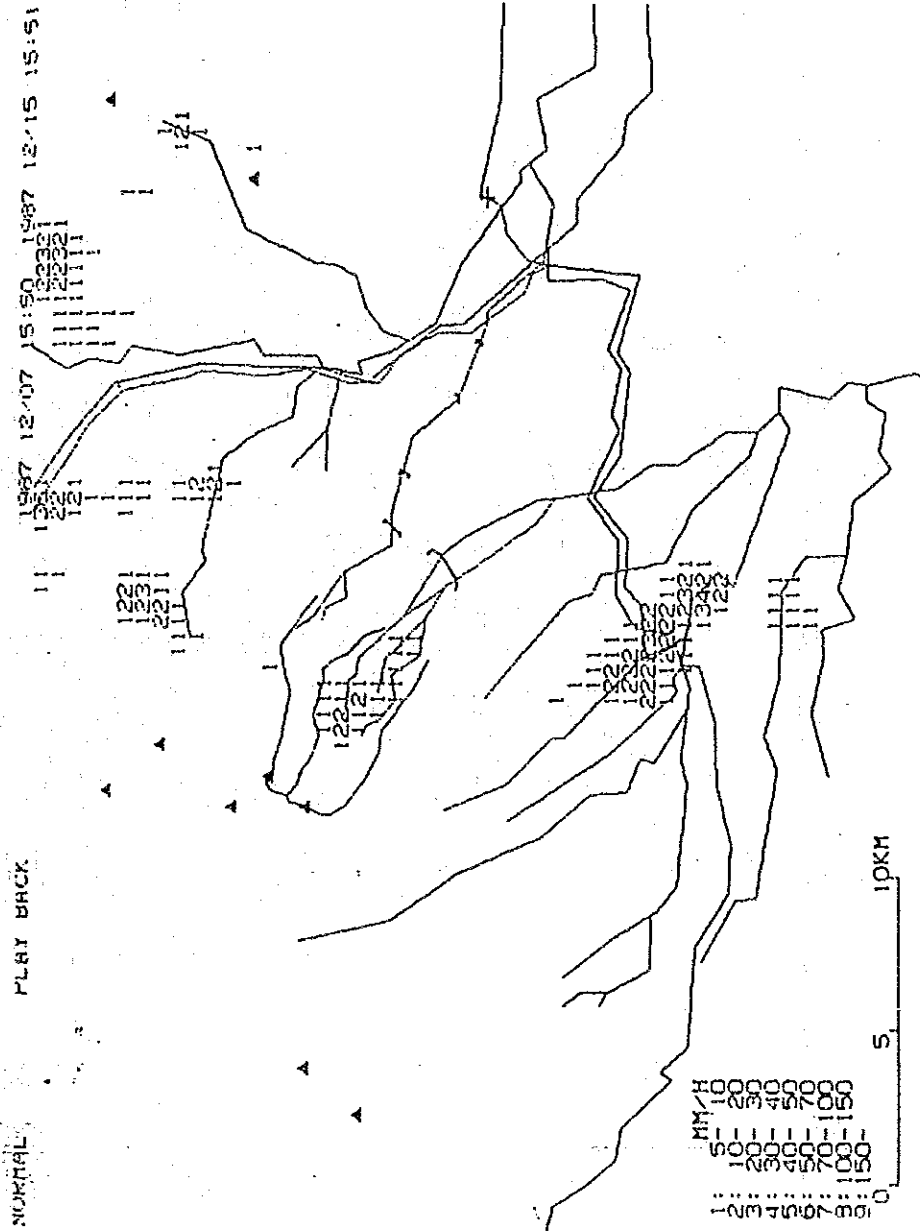
PLAY BACK

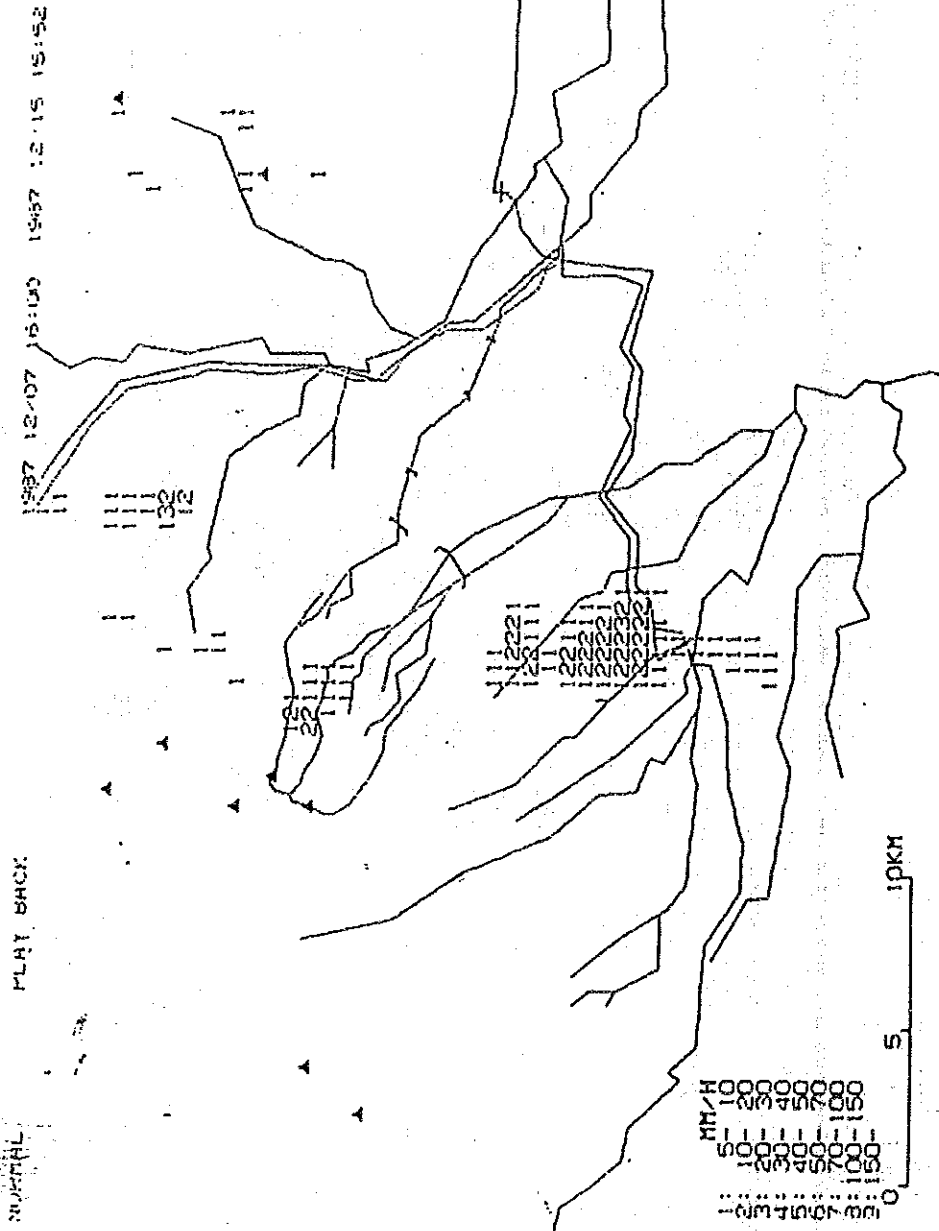
NORMAL

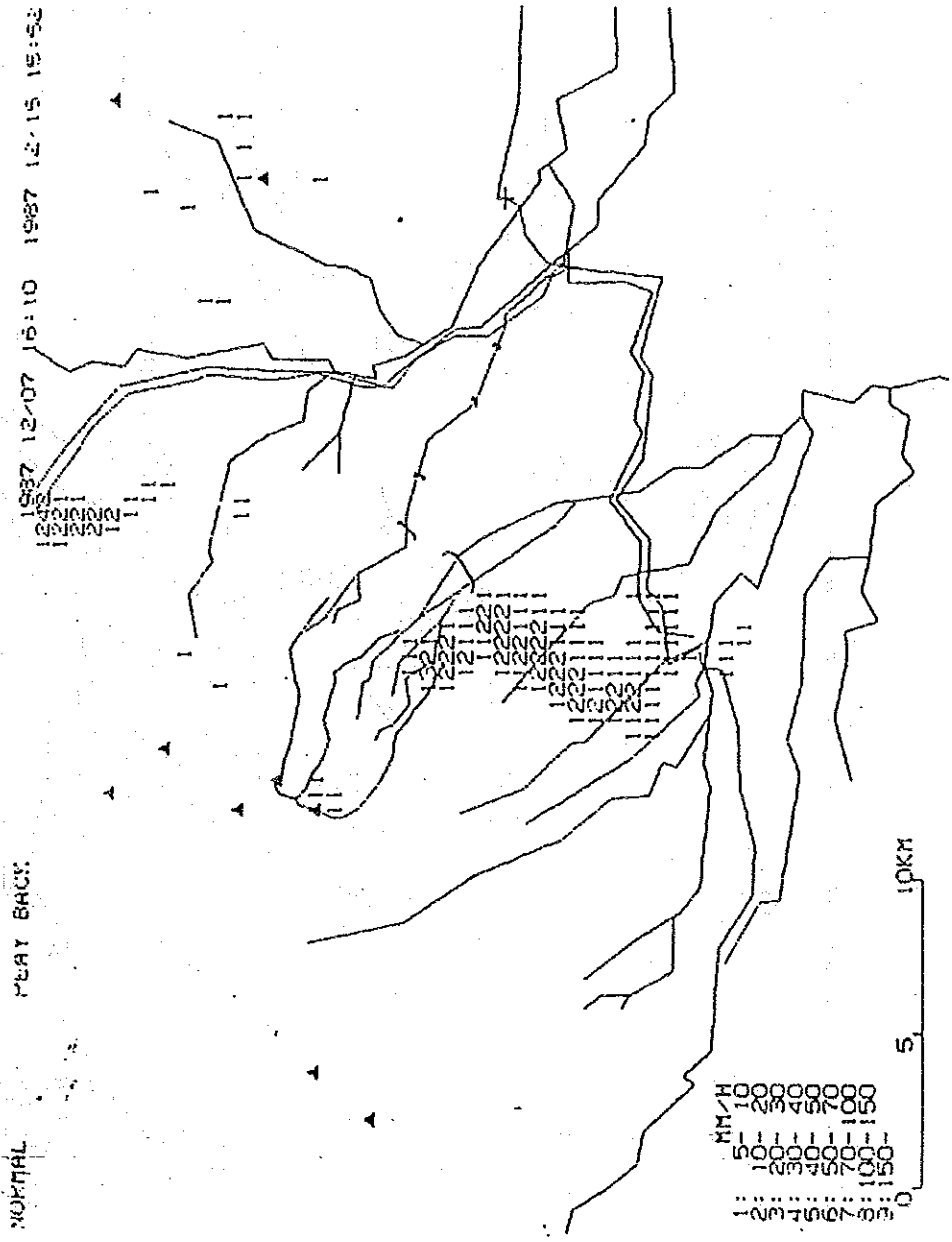
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8300  
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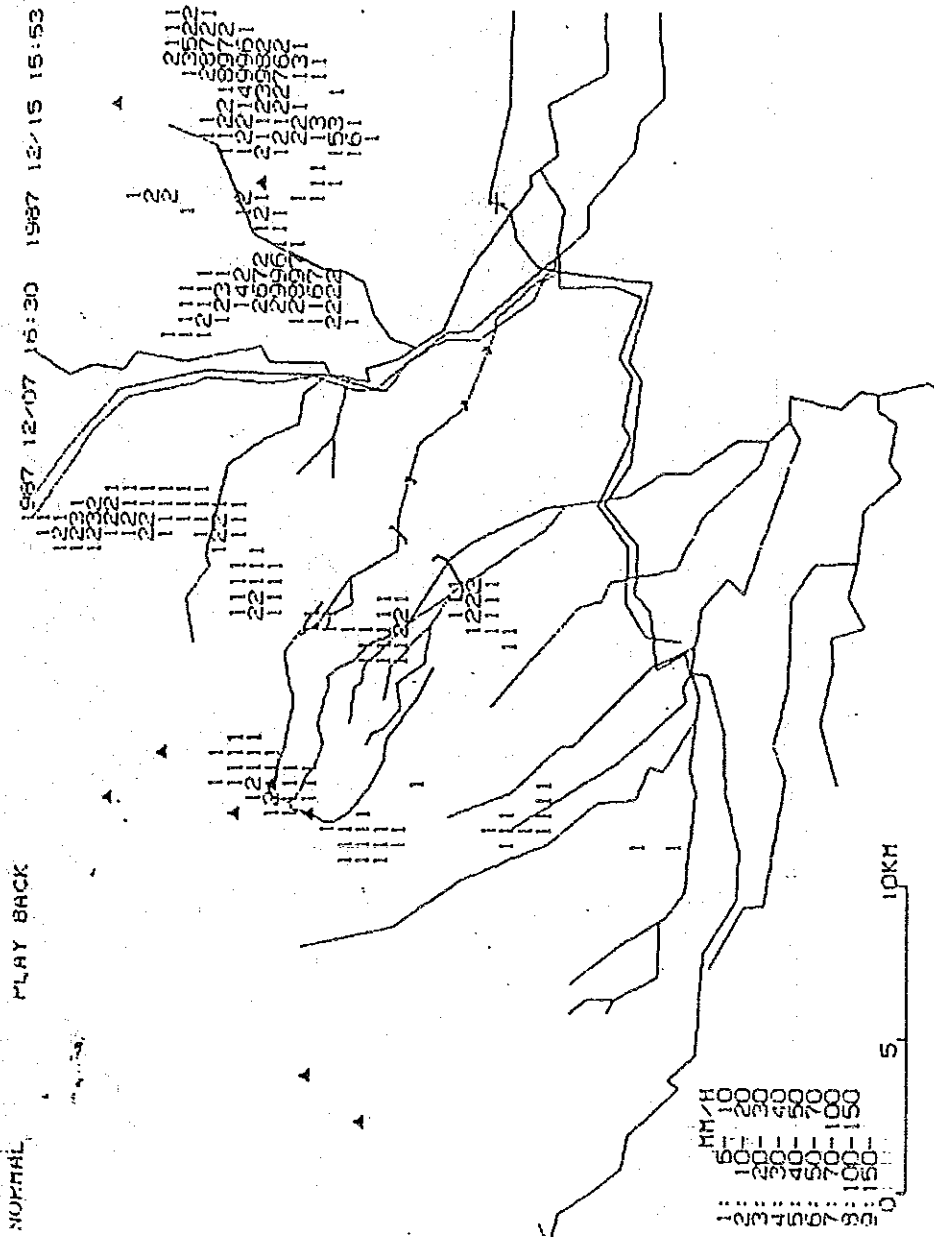


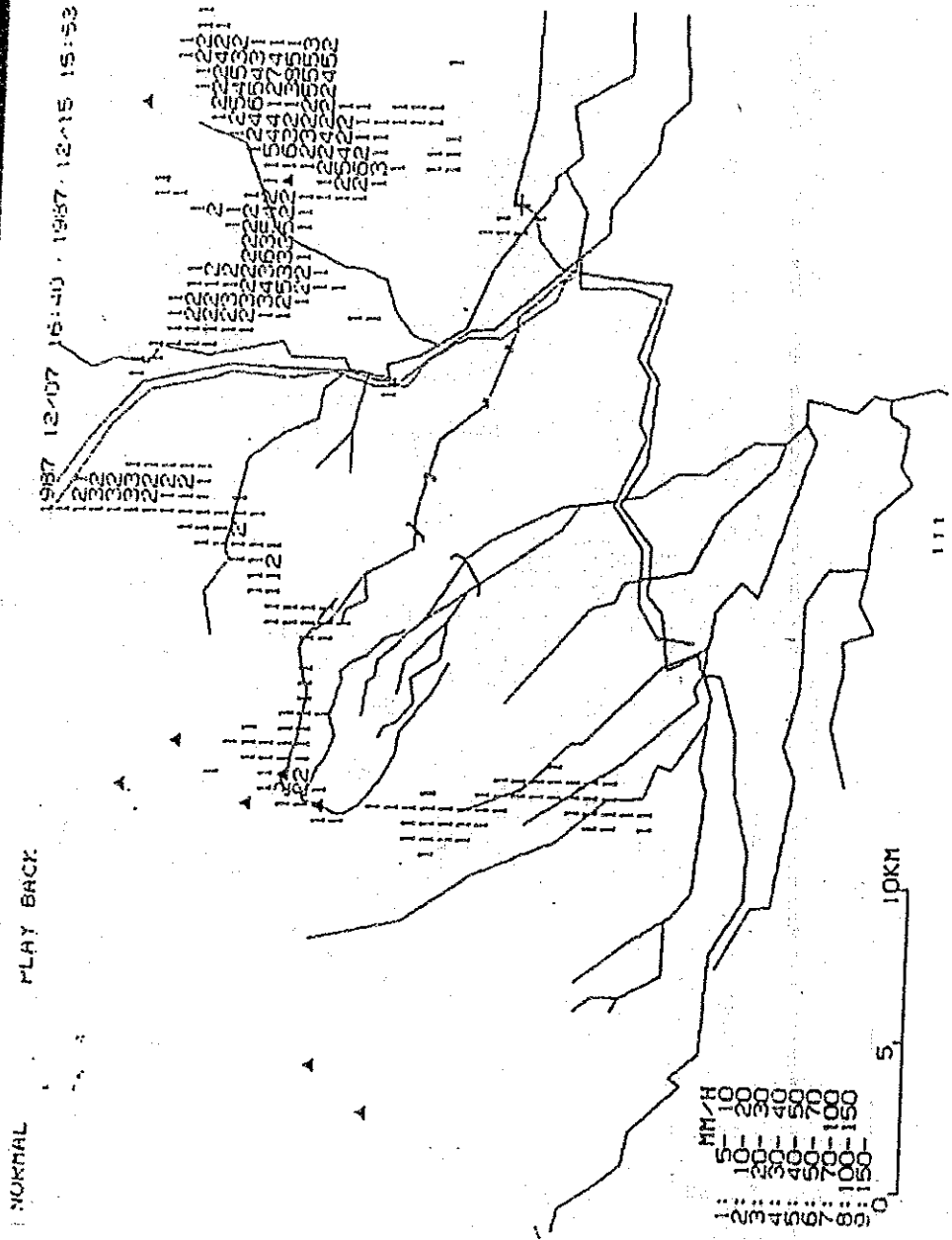




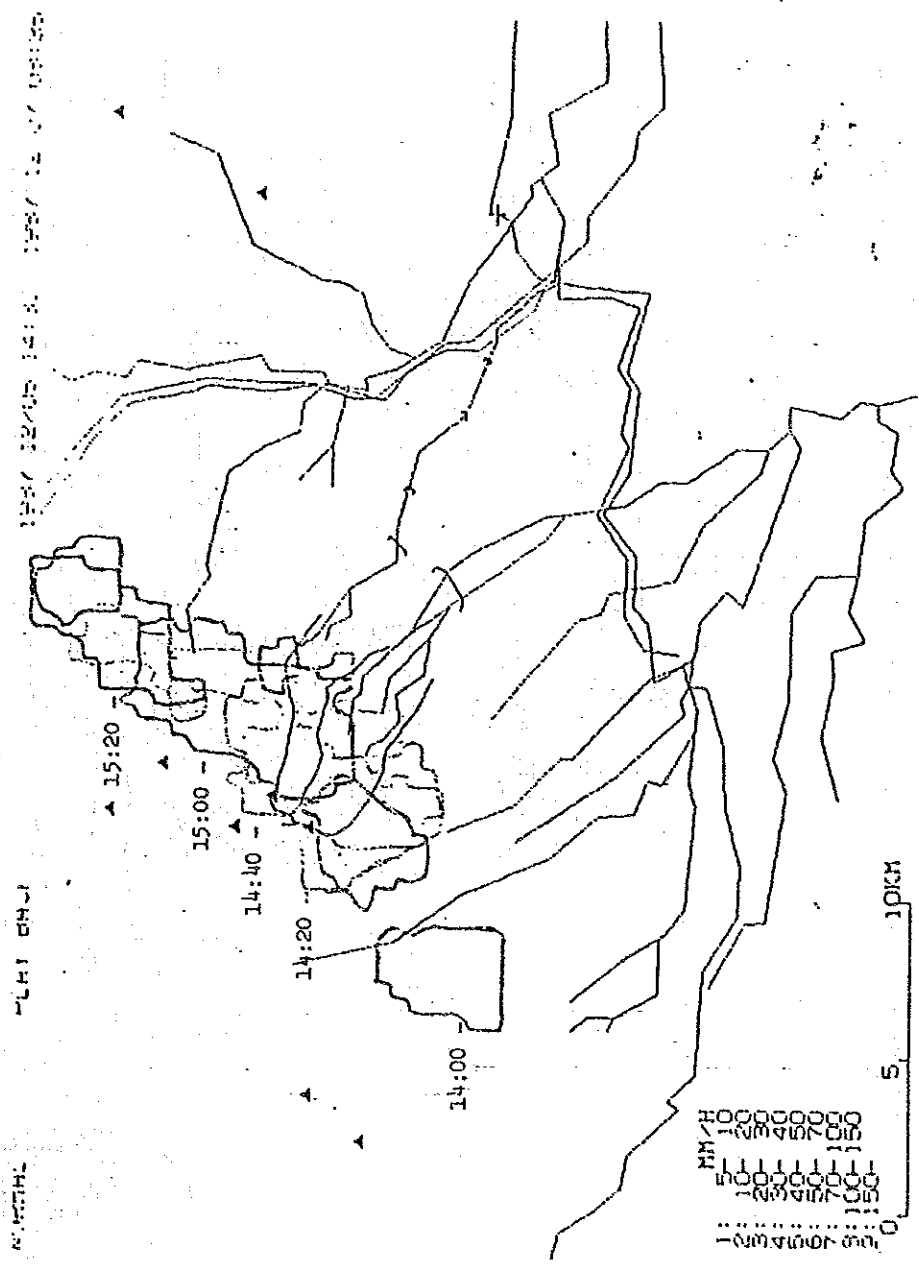








7/DEC/87  
( 14:00 - 15:20 )



— 14:00	27.8 km <sup>2</sup>
--- 14:20	33.1 km <sup>2</sup>
--- 14:40	41.0 km <sup>2</sup>
--- 15:00	45.0 km <sup>2</sup>
--- 15:20	22.7 km <sup>2</sup>

Fig. - 5.3 RAIN ZONE MOVEMENT (7/Dec./87)

( 16:00 - 16:40 )

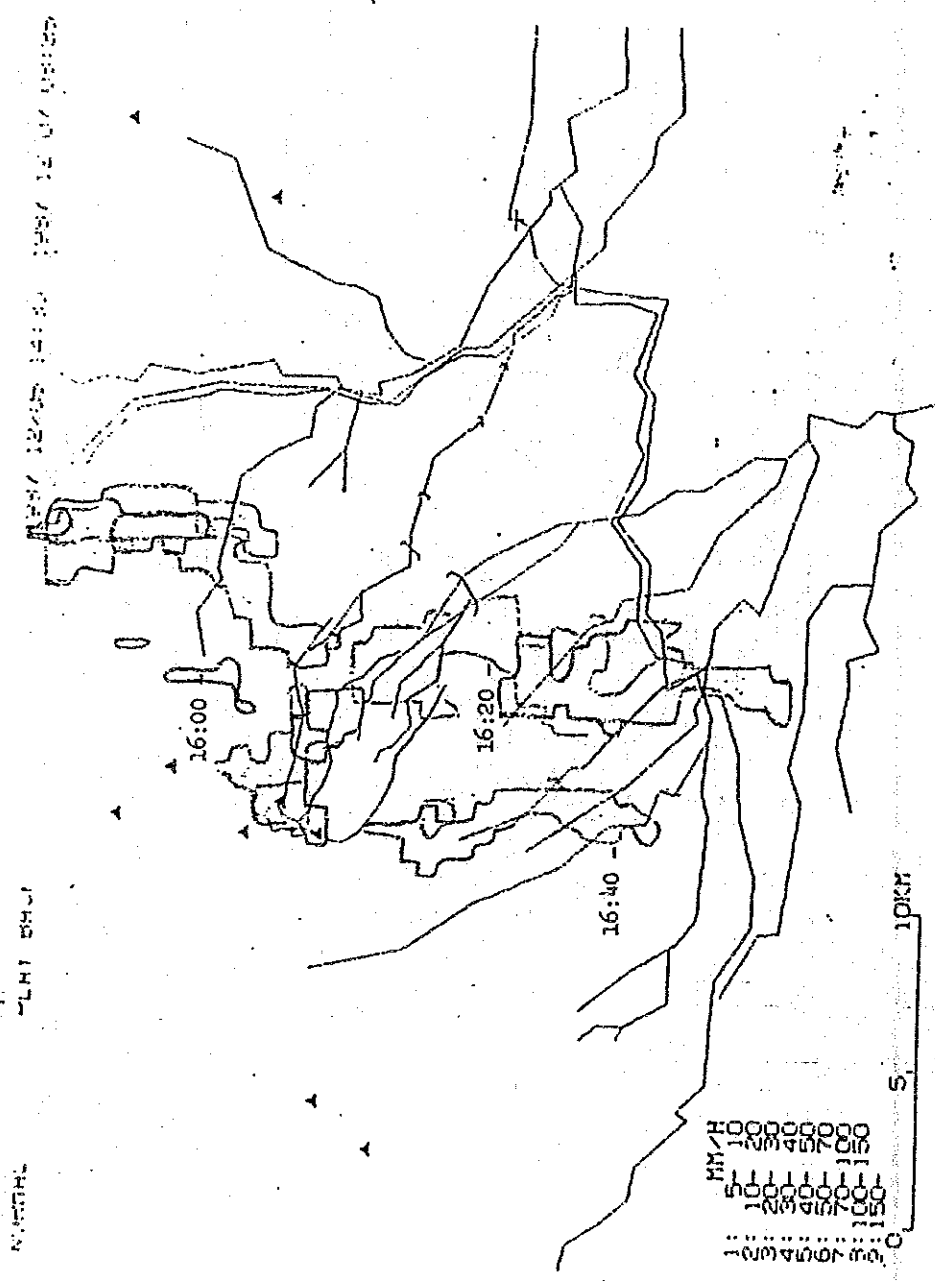


Fig. - 5.4 RAIN ZONE MOVEMENT (7/dec./87)



13/DEC/87  
 ( 11:20 - 13:00 )

11:20 11:40 12:00 12:20 12:40 13:00

11:20 11:40 12:00 12:20 12:40 13:00

11:20 11:40 12:00 12:20 12:40 13:00

11:20	8.3 km2
11:40	57.7 km2
12:00	103.3 km2
12:20	97.2 km2
12:40	110.9 km2
13:00	19.1 km2

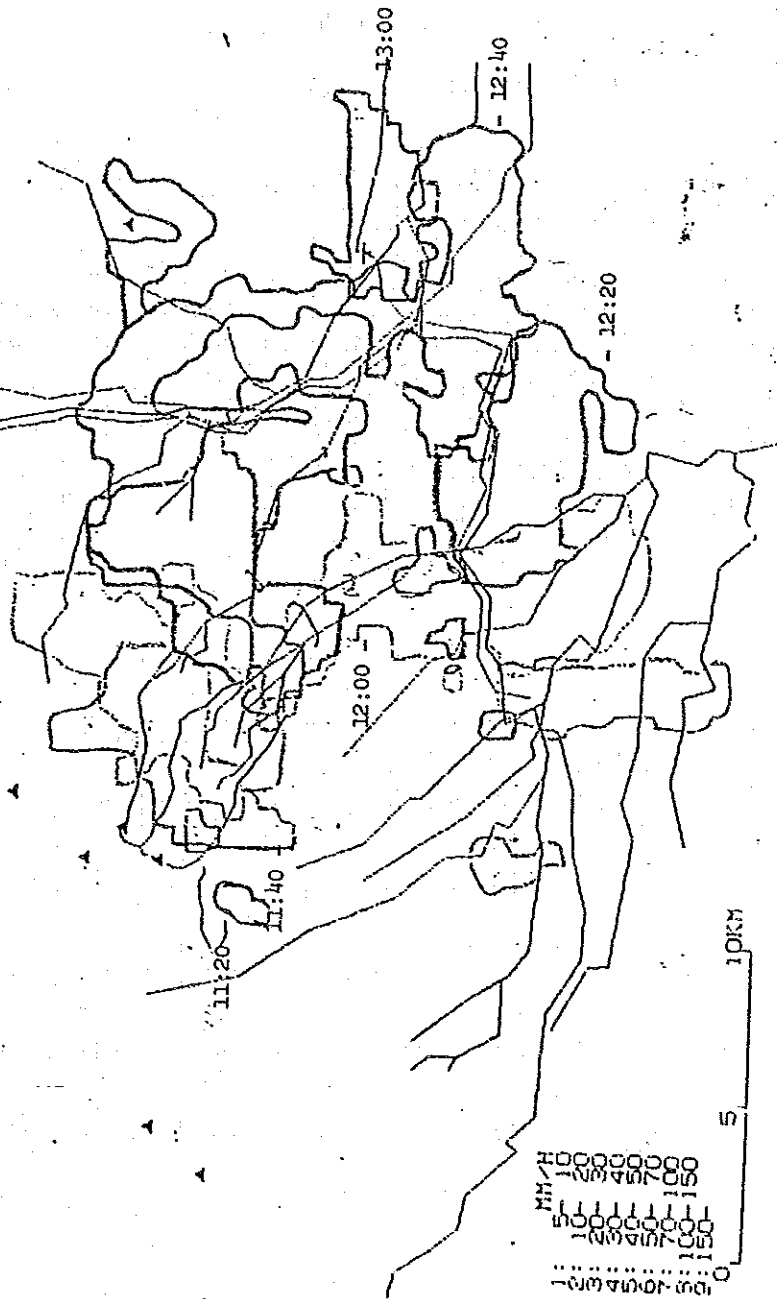


Fig. - 5.5 RAIN ZONE MOVEMENT  
 (13/Dec./87)

### 3.2 Water Level Data

Most of the water level observation stations have been operated by the Mt. Galunggung Project Office since 1984 except two stations (SUKAMAHI and JEMB. DANGUR operated by the Puslitbang Air).

The type of the water level gauges are as follows;

- ; Two (2) Automatic water level gauges
- ; Nine (9) Staff gauges

The data condition of all stations are shown in Table-3.3.

Table-3.4 shows the water level data of JB. KP. ASTA, JB. CIMERAH, SMA II, JB. MANGUNREJA and JB. CIKUNIR.

Fig.-3.1 shows main water level data of SUKAMAHI in 1985 and 1986 in CILOSEH RIVER.

Table-3.3(1) Water Level Data

STATIONS Mon.	1984												1985											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
CIGEDE	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
CINEHEL	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
LEUWIMIGA	X	X	X	X	O	O	O	X	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O
JB. KP. ASTA	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O	O	O	O	O	O	O	O	O
JB. CINTARAJA	X	X	X	O	O	O	O	O	O	O	O	O	O	O	X	X	X	X	X	X	X	X	X	X
JB. CIPASUNG	X	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
JB. CIMERAH	X	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
JB. DANGUR	X	X	X	X	O	O	O	O	O	O	X	X	O	O	O	O	O	O	O	O	O	O	O	O
JB. MANGUNREJA	X	X	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

Notes: O means complete data  
X means no data

Table-3.3(2) Water Level Data

STATIONS Mon.	1986												1987											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
CIGEDE	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	X						
CINEHEL	O	O	O	O	O	O	O	O	O	O	O	O	O	O	X	O	X	X						
LEUWIMIGA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O						
JB. KP. ASTA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O					
JB. CINTARAJA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
JB. CIPASUNG	O	O	O	O	O	O	O	X	O	O	X	O	O	O	O	O	X	X						
JB. CIMERAH	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O					
JB. DANGUR	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O						
JB. MANGUNREJA	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O					

Notes: O means complete data  
X means no data



# DAILY WATER LEVEL

MONTH DAY	station KIPANTA year 1984											
	1	2	3	4	5	6	7	8	9	10	11	12
1	36	53	80	31	50	112	80	69	25	36	88	82
2	46	30	56	31	49	104	47	36	20	30	89	48
3	78	31	52	92	41	145	51	36	32	34	68	28
4	57	29	45	63	39	128	48	46	30	50	128	32
5	92	43	75	65	46	92	40	38	43	22	96	44
6	70	57	90	69	64	109	42	36	24	27	73	43
7	85	39	43	57	73	92	54	32	26	24	110	55
8	69	70	92	111	69	86	86	37	26	20	79	53
9	69	40	106	58	42	81	97	138	27	30	72	51
10	51	48	110	50	84	95	96	95	23	86	116	38
11	35	60	101	83	54	87	69	54	18	84	86	37
12	43	56	82	123	33	106	53	34	34	81	71	33
13	42	71	53	125	40	68	50	47	50	77	58	36
14	41	50	81	85	30	52	45	102	72	52	47	40
15	42	46	88	74	30	96	35	152	79	34	38	61
16	31	41	52	83	30	89	36	112	98	35	40	60
17	30	40	30	91	36	53	65	52	156	27	52	74
18	30	37	36	87	29	46	127	30	57	34	114	56
19	28	30	30	58	30	40	84	21	40	30	118	38
20	25	30	30	50	32	99	76	71	69	28	41	18
21	30	30	78	47	61	51	86	13	92	38	37	32
22	32	18	68	60	61	40	80	12	212	40	30	32
23	30	52	53	58	64	52	81	19	138	62	15	23
24	30	70	57	50	70	68	68	195	111	61	128	23
25	45	38	55	45	82	62	84	34	73	67	60	30
26	32	72	52	52	76	86	87	48	80	82	87	32
27	25	76	51	87	128	54	228	25	56	65	68	25
28	37	72	56	55	88	79	127	16	114	72	88	26
29	34	59	44	104	65	91	92	12	58	80	58	32
30	76	70	70	54	70	112	74	16	50	95	61	25
31	113	46	88	69	89	80	80	33	87	87	33	33
MAX	113	76	110	125	155	145	228	22	812	95	118	82
TOTAL	2179	759	1931	2633	1843	2060	2356	1507	12146	1792	2220	1230
											TOTAL	2196

# DAILY WATER LEVEL

Jemb  
station K.P. ASTA year 1987

NORTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	42	47	106	18	34	15						
2	57	52	81	10	39	12						
3	72	76	62	18	25	16						
4	61	40	68	11	17	14						
5	58	39	61	40	24	32						
6	41	31	71	52	16	50						
7	52	46	56	16	25	45						
8	84	56	60	20	25	38						
9	57	34	70	13	37	23						
10	41	43	58	22	54	16						
11	47	43	54	38	28	11						
12	38	34	22	43	21	11						
13	23	20	13	44	40	12						
14	70	60	11	34	37	0						
15	37	52	66	33	37	16						
16	36	62	129	27	30	10						
17	30	61	76	24	24	11						
18	33	64	14	20	20	11						
19	24	62	38	20	21	11						
20	33	53	79	16	15	9						
21	21	34	104	54	15	10						
22	26	28	92	36	15	13						
23	31	21	31	26	13	12						
24	42	53	10	24	14	10						
25	36	64	19	16	12	12						
26	85	38	46	21	14	22						
27	61	20	54	20	16	19						
28	33	38	41	16	13	11						
29	43		25	16	15	10						
30	45		37	15	24	12						
31	41		40	13	13	10						
MAX	72	64	189	80	50	98						
TOTAL	1564	1230	1112	505	505	505						
TOTAL												6673

# DAIL. WATER LEVEL

Station Camb. Can year 1924

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1				82	70	78	68	65	73	80	83	55
2				87	70	78	68	65	78	77	87	57
3				85	52	77	61	65	72	80	80	53
4				79	78	78	67	64	72	83	86	58
5				72	78	78	67	60	83	83	80	58
6				68	80	78	67	88	88	85	81	55
7				68	80	77	67	88	78	87	83	50
8				67	75	75	67	55	75	63	67	48
9				80	75	75	65	55	80	85	80	53
10				83	75	73	65	53	82	85	80	46
11				80	80	70	65	52	87	85	83	40
12				83	79	70	65	52	81	85	83	41
13				85	78	69	65	51	77	85	81	40
14				85	78	69	65	51	79	85	80	48
15				78	80	69	65	51	78	85	80	48
16				72	79	68	65	51	79	85	83	40
17				72	78	68	65	53	88	90	81	40
18				70	78	68	65	54	80	90	81	40
19				70	78	68	65	52	78	90	83	40
20				70	78	68	65	51	78	90	70	138
21				78	78	68	65	51	79	87	70	138
22				78	78	68	65	41	78	87	76	37
23				85	85	68	65	69	80	88	70	38
24				83	83	69	65	66	79	88	77	50
25				80	80	69	65	69	80	88	62	33
26				79	79	69	65	70	89	75	76	20
27				78	78	68	65	66	80	73	58	20
28				78	78	68	69	64	80	83	60	20
29				78	78	68	66	68	80	87	57	20
30				75	75	68	65	65	80	80	55	20
31				77	77	65	65	67	82	82	87	19
MAX				107	85	78	69	70	89	90	87	126
TOTAL				1586	2389	2129	2039	1812	2388	2563	2270	1471
											TOTAL	18.607

# DAILY WATER LEVEL

Station Cimera  
year 1985

MONTH DAY	Station Cimera											
	1	2	3	4	5	6	7	8	9	10	11	12
1	11	13	10	13	8	15	10	8	-69	-39	-85	72
2	8	11	10	10	10	15	12	-69	-69	-85	68	
3	7	10	9	10	8	15	10	-70	-73	-86	70	
4	5	9	6	10	7	15	10	-70	-79	-88	81	
5	5	8	8	10	6	10	8	-69	-77	-89	68	
6	4	8	9	7	22	10	8	81	-78	-85	-69	
7	10	7	10	7	18	11	10	-69	-75	-85	77	
8	5	7	13	7	15	11	6	-70	-75	-104	82	
9	6	7	9	9	10	10	10	-70	-81	-103	87	
10	10	10	9	10	10	10	10	-69	-70	-58	78	
11	5	9	8	10	14	5	10	-69	-73	-77	84	
12	5	8	8	8	14	14	10	-70	-74	-72	89	
13	5	11	6	10	10	11	10	-70	-68	-84	90	
14	5	10	5	8	11	10	15	-70	-76	-84	90	
15	9	8	12	5	12	10	18	-70	-57	-86	91	
16	5	8	23	8	16	10	10	-70	-85	-86	91	
17	5	7	16	7	10	10	6	-70	-49	-87	82	
18	5	6	10	6	14	13	14	-70	-69	-84	60	
19	15	7	7	7	11	10	8	-70	-73	-85	90	
20	14	8	8	7	10	12	9	-70	-71	-88	72	
21	9	8	7	5	10	15	10	-70	-40	-87	73	
22	8	8	7	7	10	15	10	-69	-70	-87	74	
23	10	9	6	6	10	10	8	-69	-77	-88	81	
24	8	9	5	6	10	10	10	-81	-80	-88	72	
25	7	10	6	16	16	10	6	-85	-72	-85	81	
26	6	10	16	18	8	10	8	-66	-62	-76	87	
27	5	13	4	20	8	10	5	-47	-81	-77	91	
28	5	13	4	18	8	16	7	-33	-81	-77	90	
29	14	1	4	10	9	10	5	-61	-83	-81	91	
30	14	1	13	10	9	10	6	-41	-82	-74	89	
31	14	1	14	10	8	10	5	-84	-84	-74	22	
MAX	15	13	23	20	22	15	14	18	33	58	91	
TOTAL	240	244	288	285	343	338	268	294	2037	2200	2481	2303
											TOTAL	-2105



# DAILY WATER LEVEL

station Semb. Cemerah year 1986

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	-58	-82	-79	-84	-90	-78	-73	-89	-93	-83	-63	66
2	-50	-87	-89	-74	-92	-63	-93	-91	-94	-85	-64	82
3	-60	-92	-92	-81	-95	-52	-94	-92	-76	-82	-66	86
4	-55	-95	-93	-79	-99	-76	-93	-91	-91	-80	-90	75
5	-61	-91	-92	-84	-88	-67	-97	-87	-92	-88	-58	81
6	-64	-92	-77	-82	-84	-73	-99	-85	-91	-91	-71	85
7	-33	-92	-87	-67	-89	-86	-94	-88	-72	-90	-63	56
8	-43	-86	-38	-75	-94	-88	-91	-87	-99	-90	-78	83
9	-70	-73	-64	-83	-79	-82	-95	-55	-90	-87	-61	87
10	-74	-89	-67	-85	-86	-68	-79	-81	-85	-91	-53	88
11	-99	-83	-73	-79	-89	-65	-88	-85	-88	-71	-74	90
12	-81	-65	-73	-68	-82	-77	-84	-85	-77	-81	-78	92
13	-81	-84	-77	-65	-90	-76	-60	-82	-73	-61	-69	92
14	-80	-82	-59	-79	-93	-88	-69	-64	-89	-76	-81	94
15	-87	-87	-67	-85	-95	-66	-82	-70	-69	-83	-87	87
16	-81	-77	-41	-79	-98	-77	-89	-79	-22	-79	-90	87
17	-86	-89	-81	-74	-50	-88	-79	-88	-24	-84	-74	76
18	-90	-94	-89	-81	-50	-93	-78	-91	-74	-88	-25	89
19	-91	-97	-88	-90	-25	-93	-90	-94	-77	-75	-	94
20	-93	-98	-91	-94	-25	-75	-87	-95	-58	-87	-52	95
21	-92	-76	-74	-92	-27	-94	-88	-96	-69	-89	-79	93
22	-88	-98	-85	-84	-73	-96	-86	-97	+1	-89	-84	92
23	-86	-69	-78	-83	-72	-95	-86	-97	-54	-71	-85	98
24	-86	-90	-88	-85	-81	-95	-74	-97	-40	-84	-33	86
25	-77	-91	-87	-97	-69	-80	-81	-77	-42	-70	-75	85
26	-84	-78	-77	-84	-49	-78	-80	-82	-56	-65	-56	88
27	-90	-89	-85	-82	-72	-94	-90	-87	-33	-76	-78	90
28	-86	-61	-81	-68	-80	-96	-60	-94	-51	-72	-65	92
29	-84		-89	-82	-84	-80	-71	-92	-71	-55	-81	95
30	-84		-71	-88	-87	-61	-76	-76	-79	-58	-85	95
31	-60		-80		-89		-85	-88		-68		86
MAX	-37	-61	-38	-65	-25	-92	-30	-55	1	-15	-25	98
TOTAL	-2348	-2383	-2446	-2423	-2369	-2396	-2531	-2662	-2007	-2301	-1967	2685
											TOTAL	-23.118

# DAILY WATER LEVEL

Jamba  
station Camera N year 1987

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	-93	-97	-72	-100	-15	-100	-16					
2	-87	-96	-85	-100	-81	-100	-10					
3	-77	-96	-84	-100	-95	-100	-13					
4	-86	-96	-88	-100	-10	-94	-119					
5	-69	-90	-81	-88	-10	-100	-121					
6	-95	-96	-69	-88	-100	-83	-120					
7	-93	-75	-79	-91	-95	-98	-121					
8	-90	-87	-89	-98	-66	-100	-14					
9	-94	-97	-67	-100	-88	-118	-119					
10	-90	-85	-88	-100	-66	-121	-117					
11	-90	-86	-93	-90	-96	-120	-118					
12	-95	-92	-95	-86	-98	-121	-116					
13	-186	-88	-100	-92	-98	-121	-110					
14	-89	-98	-100	-97	-100	-120	-115					
15	-89	-60	-88	-84	-100	-120	-115					
16	-95	-87	-96	-85	-100	-113	-113					
17	-96	-84	-99	-96	-100	-88	-99					
18	-97	-89	-100	-100	-100	-120	-81					
19	-99	-86	-100	-100	-100	-118	-115					
20	-100	-88	-53	-100	-100	-108	-122					
21	-10	-92	-63	-100	-100	-114	-125					
22	-109	-97	-87	-100	-100	-119	-121					
23	-10	-96	-93	-100	-100	-118	-121					
24	-99	-80	-99	-100	-100	-118	-120					
25	-10	-76	-100	-100	-100	-109	-120					
26	-65	-92	-79	-100	-100	-76	-120					
27	-89	-90	-84	-100	-100	-108	-120					
28	-98	-80	-99	-100	-89	-123	-113					
29	-99		-100	-100	-85	-123	-115					
30	-97		-100	-100	-99	-120	-115					
31	-96		-100	-100	-100	-112	-112					
MAX	-10	-48	-53	-84	-10	-120	-81					
TOTAL	2697	2422	2730	2896	2685	3215	3583					
												TOTAL

# DAILY WATER LEVEL

station SM 11 year 1984

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MAX												
TOTAL												TOTAL

# DAILY WATER LEVEL

Somb. Station Maiguarejo year 1984

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1					40	23	17	2	32	35	62	123
2					37	20	20	0	41	75	74	89
3					33	42	20	0	25	40	60	66
4					40	28	20	0	82	57	63	56
5					53	38	22	0	74	84	60	112
6					38	38	13	5	105	39	61	123
7					33	22	10	5	82	87	69	124
8					30	25	7	0	87	80	90	93
9					30	27	5	0	110	30	75	120
10					27	25	5	0	80	27	62	101
11					28	20	5	7	85	29	57	92
12					28	21	5	9	95	60	62	78
13					48	25	5	10	86	72	80	91
14					28	21	5	10	77	92	61	70
15					30	20	5	10	112	65	69	89
16					47	20	5	10	115	81	87	67
17					40	20	5	20	157	30	54	68
18					33	15	5	32	125	35	73	62
19					28	15	5	37	87	24	85	54
20					30	22	3	24	97	32	66	61
21					28	25	0	22	120	20	47	60
22					25	20	0	26	65	21	40	57
23					22	20	0	27	50	50	112	51
24					45	20	0	15	47	37	99	83
25					23	22	0	40	40	35	61	130
26					25	22	0	32	99	26	93	95
27					25	20	2	26	62	26	114	86
28					23	20	5	16	81	36	106	76
29					25	15	5	22	66	41	128	77
30					25	15	5	16	45	90	85	64
31					25	27	5	27	52	25	61	61
MAX					48	42	22	37	157	92	121	130
TOTAL					990	606	217	542	5371	1578	10928	10928

# DAILY WATER LEVEL

station <sup>Pomb</sup> Mangrove year 1985

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	60	119	65	70	60	47	60	46	51	56	59	108
2	60	68	60	82	50	65	57	77	77	52	61	77
3	51	60	67	70	40	77	60	72	75	37	57	78
4	50	56	70	72	40	62	100	55	69	32	53	86
5	44	54	80	60	57	60	92	51	66	31	58	70
6	92	63	92	60	80	50	172	51	64	38	57	136
7	89	62	87	80	82	50	125	74	63	64	47	58
8	72	60	70	80	70	60	97	77	82	60	54	52
9	76	98	70	70	60	65	90	57	60	46	43	48
10	68	90	60	65	70	62	100	53	57	50	49	115
11	71	80	60	60	87	50	64	49	55	50	81	95
12	73	80	60	60	105	55	64	54	47	44	87	43
13	50	53	60	67	82	65	68	51	43	106	70	38
14	50	64	46	62	82	55	54	56	42	66	61	74
15	50	62	64	60	90	52	62	81	39	71	55	74
16	65	70	101	60	85	60	60	89	34	59	48	34
17	64	70	70	72	75	57	53	78	30	81	48	43
18	72	70	60	70	72	50	43	66	30	69	63	66
19	96	70	50	62	70	92	43	63	30	62	56	70
20	95	70	62	60	60	130	84	52	30	70	50	57
21	89	70	50	60	60	170	93	51	31	88	46	69
22	60	67	50	57	50	75	82	49	35	69	45	66
23	70	61	50	50	40	62	53	46	31	65	36	72
24	65	60	50	50	40	50	40	45	30	66	36	63
25	52	72	50	110	40	62	37	41	37	63	114	48
26	50	72	82	108	40	60	35	39	57	73	91	45
27	55	102	80	80	40	50	31	38	73	55	81	41
28	60	85	70	80	40	65	37	37	92	59	75	37
29	167	85	70	70	40	57	34	39	70	80	74	36
30	95	134	134	60	42	57	31	38	100	82	84	36
31	67	95	95	42	42	47	47	33	33	66	96	96
MAX	107	179	101	106	105	170	125	89	100	106	114	108
TOTAL	5114	3126	2140	2510	2571	2022	2008	1723	2020	2010	2089	2133
											TOTAL	25126

# DAILY WATER LEVEL

Station Mangrove, Semab  
YEAR 1986

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	63	37	88	72	63	62	77	69	44	75	176	58
2	79	31	52	122	57	72	59	73	33	71	142	64
3	57	32	57	93	54	90	47	79	36	86	199	60
4	59	23	59	95	57	75	44	78	35	87	180	54
5	63	30	80	71	57	74	42	62	35	66	145	55
6	79	57	83	72	69	79	40	56	35	64	135	58
7	115	48	87	132	53	64	35	64	32	52	150	47
8	108	37	63	79	40	53	70	59	44	50	117	50
9	83	63	94	65	53	57	71	72	37	56	107	49
10	69	47	126	62	39	74	76	77	31	144	122	41
11	58	45	135	59	35	61	74	74	35	177	104	34
12	54	52	93	94	43	57	61	68	50	168	107	42
13	54	38	90	121	35	56	63	76	73	142	82	48
14	62	58	85	72	31	60	63	49	64	119	76	36
15	46	55	93	72	32	81	45	53	56	94	74	49
16	41	77	69	81	24	61	39	44	39	80	72	55
17	39	40	66	71	26	24	59	76	197	76	85	53
18	35	29	70	70	25	47	85	74	82	68	117	51
19	34	28	69	64	20	43	59	72	98	64	135	44
20	31	35	73	63	17	38	41	55	113	64	95	35
21	31	22	71	60	36	34	41	53	66	63	73	21
22	38	33	78	81	65	30	86	45	171	57	59	51
23	36	53	95	67	48	30	73	46	131	83	64	47
24	34	41	75	66	44	38	73	44	131	76	120	70
25	50	77	67	58	52	44	107	71	139	74	70	57
26	38	60	85	59	82	66	107	77	111	102	72	49
27	44	71	83	63	64	50	193	68	154	90	69	62
28	75	93	88	12	54	56	110	59	211	93	168	49
29	47	80	61	72	57	53	94	47	123	154	76	33
30	42	61	56	58	45	79	85	45	91	124	64	29
31	62	75	75	75	44	47	77	47	107	107	49	49
MAX	115	98	103	132	82	90	111	79	211	177	150	172
TOTAL	177.23	147.25	205.73	222.17	173.6	175.7	212.4	177.33	212.6	212.24	212.6	212.6
TOTAL												212.6

# DAIL. WATER LEVEL

Semb.  
station Mangreja year 1987

MONTH DAY	1	2	3	4	5	6	7	8	9	10	11	12
1	41	33	110	35	40	34	-11					
2	52	35	68	30	80	34	-8					
3	62	35	63	39	66	35	41					
4	66	40	66	36	49	35	-22					
5	61	34	58	44	39	33	-22					
6	63	30	57	38	35	39	-11					
7	56	49	59	32	47	49	-13					
8	61	47	130	48	59	36	-14					
9	58	29	76	36	101	30	-13					
10	58	50	78	28	74	32	-18					
11	51	59	61	23	61	10	-19					
12	46	47	53	40	45	8	-19					
13	33	50	49	37	46	6	-5					
14	43	59	45	43	55	2	-7					
15	37	76	46	61	41	13	-13					
16	42	89	49	70	51	-4	9					
17	29	100	40	45	33	-4	22					
18	22	65	39	29	45	-9	67					
19	22	59	44	49	42	-6	53					
20	23	73	78	33	18	18	12					
21	35	57	89	58	15	-8	7					
22	40	48	74	48	18	-1	16					
23	24	62	62	33	17	12	3					
24	33	77	52	29	14	14	-1					
25	21	87	40	24	13	13	-10					
26	54	59	55	18	14	32	-21					
27	48	61	52	14	18	31	-20					
28	34	87	43	11	31	12	-13					
29	51		34	93	30	-9	-16					
30	48		31	63	62	-13	-12					
31	38		27	43	43	7						
MAX	66	100	131	93	101	49	169					
TOTAL	1507	1477	1025	1170	1320	464	149				TOTAL	7571