THE PEOPLE'S REPUBLIC OF BANGLADESH
FLOOD PLAN COORDINATION ORGANIZATION

MASTER PLAN
FOR
GREATER DHAKA PROTECTION PROJECT
(STUDY IN DHAKA METROPOLITAN AREA)
OF
BANGLADESH FLOOD ACTION PLAN NO.8A

FAP 8A

DATA BOOK 1
HYDROLOGY

NOVEMBER 1991

JAPAN INTERNATIONAL COOPERATION AGENCY

THE PEOPLE'S REPUBLIC OF BANGLADESH
FLOOD PLAN COORDINATION ORGANIZATION

MASTER PLAN
FOR
GREATER DHAKA PROTECTION PROJECT
(STUDY IN DHAKA METROPOLITAN AREA)
OF
BANGLADESH FLOOD ACTION PLAN NO.8A

FAP 8A

DATA BOOK I
HYDROLOGY

NOVEMBER 1991

JAPAN INTERNATIONAL COOPERATION AGENCY

DATA BOOK I : Hydrology

(Supporting Report D)

TABLE OF CONTENTS

1. Monthly Rainfall in and around the study Area

MONTHLY AND ANNUAL RAINFALL

STATION : DHAKA (B.M.D.)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1953	10	2	90	90	274	333	392	326	352	52	13	0	1934
2	1954	14	0	0	86	211	810	320	433	167	218	0	10	2269
3	1955	0	0	0	54	201	254	502	247	149	71	99	0	1577
4	1956	12	5	189	135	69	433	690	489	286	121	53	13	2495
5	1957	68	69	16	117	114	487	385	125	144	29	0	0	1554
6	1958	0	95	5	64	200	161	184	267	91	191	0	0	1258
7	1959	15	4	78	78	254	368	230	413	445	568	0	0	2453
8	1960	0	0	16	19	358	304	655	189	231	38	24	0	1834
9	1961	1	12	20	205	219	856	296	288	221	52	0	0	2170
10	1962	0	15	6	166	205	191	355	273	395	180	0	0	1786
11	1963	0	0	51	98	219	621	404	186	200	182	7	3	1971
12	1964	9	42	18	284	236	354	629	155	269	283	41	0	2320
13	1965	0	28	22	55	305	442	304	480	300	60	131	0	2127
14	1966	0	0	0	34	127	270	291	306	496	261	14	15	1814
15	1967	23	12	168	185	216	241	363	504	266	74	1	0	2053
16	1968	0	5	121	27	194	590	480	290	128	69	74	0	1978
17	1969	0	1	65	86	95	249	198	540	201	103	2	0	1540
18	1970	16	8	23	45	192	276	496	280	200	427	32	0	1995
19	1971	3	28	0	0	344	339	550	540	259	118	95	0	2276
20	1972	0	11	12	248	340	353	249	380	110	105	0	0	1808
21	1973	0	21	32	131	621	414	444	238	348	128	64	86	2527
22	1974	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1975	1	29	13	98	317	235	559	307	329	232	25	0	2145
24	1976	0	7	117	34	459	627	346	361	165	114	8	0	2238
25	1977	0	66	71	255	381	252	306	92	131	273	10	24	1861
26	1978	0	20	18	194	454	529	320	426	192	98	0	0	2251
27	1979	3	13	6	17	114	258	267	525	382	146	55	51	1837
28	1980	3	32	54	147	414	323	380	269	296	300	0	0	2218
29	1981	10	42	108	292	411	325	356	187	320	82	9	35	2177
30	1982	0	15	81	104	154	514	140	343	258	146	51	0	1806
31	1983	0	63	138	318	348	298	181	408	322	253	0	0	2329
32	1984	13	1	7	124	708	635	891	311	478	58	0	0	3226
33	1985	8	1	195	176	300	399	262	317	306	79	0	10	2053
34	1986	6	0	23	231	119	308	450	171	687	237	172	3	2407
35	1987	4	0	33	230	109	316	526	462	363	104	7	33	2187
36	1988	0	44	74	282	513	580	255	169	196	213	153	3	2482
37	1989	0	32	0	85	228	319	347	59	305	240	0	12	1627
38	1990	0	36	151	154	202	230	-	-	-	-	-	-	-
	AVERAGE	6	21	55	134	276	392	389	315	277	164	32	8	2072

MONTHLY AND ANNUAL RAINFALL

STATION : NARAYANGANJ (B.M.D.)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1948	0	94	82	103	54	306	-	95	197	92	18	0	-
2	1949	0	0	146	414	346	196	274	356	184	182	0	0	2098
3	1950	5	34	0	0	12	425	266	711	108	79	174	0	1814
4	1951	0	0	40	270	202	484	413	318	255	309	1	0	2292
5	1952	0	0	16	199	209	438	341	207	352	154	51	0	1967
6	1953	6	0	99	109	300	384	552	-	-	-	-	-	-
7	1954	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1955	0	0	53	131	275	235	340	89	193	61	87	0	1464
9	1956	0	6	121	295	155	387	387	238	205	111	37	0	1942
10	1957	95	48	10	186	71	415	298	89	146	61	0	0	1419
11	1958	0	50	7	59	311	115	241	374	233	196	0	0	1586
12	1959	30	23	55	153	257	354	275	392	378	605	0	0	2522
13	1960	0	0	37	43	204	288	533	334	230	113	39	0	1821
14	1961	192	11	48	80	468	489	434	359	201	98	0	0	2380
15	1962	0	12	11	165	236	290	298	280	294	219	0	0	1805
16	1963	0	0	350	118	304	418	297	161	95	261	16	3	2023
17	1964	0	0	0	267	298	123	220	177	329	451	12	0	1877
18	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1966	9	0	19	55	62	357	262	227	479	183	20	17	1690
20	1967	79	0	188	143	193	161	325	498	525	43	0	0	2155
21	1968	0	0	45	24	196	502	329	251	66	36	89	0	1538
22	1969	0	2	100	138	223	374	234	428	205	314	0	0	2018
23	1970	0	0	0	132	223	285	270	278	216	284	48	0	1736
24	1971	4	15	15	15	15	312	388	644	330	79	112	0	1929
25	1972	0	23	1	185	123	338	200	356	356	63	0	0	1645
26	1973	0	0	17	172	521	429	499	213	512	146	82	131	2722
27	1974	0	0	105	101	259	239	634	378	-	104	0	0	-
28	1975	0	31	0	78	180	241	627	222	278	333	25	0	2015
29	1976	0	0	104	16	199	542	459	425	133	71	8	0	1957
30	1977	7	24	101	444	409	539	342	340	303	147	16	10	2682
31	1978	-	-	-	-	-	-	-	-	-	-	-	-	-
32	1979	0	15	40	42	93	258	-	-	-	-	-	-	-
	AVERAGE	15	13	62	143	221	342	361	301	243	171	30	6	1818

Notes : 1) AVERAGE is that of all available data.

MONTHLY AND ANNUAL RAINFALL

STATION NO. 9 DHAKA (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1957	-	-	-	118	61	297	349	109	138	23	0	2	-
2	1958	3	-	4	34	119	90	173	280	43	155	2	3	-
3	1959	61	21	91	18	119	270	239	337	412	544	0	0	2113
4	1960	0	0	14	70	283	245	489	196	208	42	8	0	1555
5	1961	12	47	52	71	426	495	258	388	132	120	0	0	2000
6	1962	11	16	7	137	232	175	357	282	430	182	0	0	1828
7	1963	1	0	29	71	233	678	330	194	162	201	6	2	1908
8	1964	13	51	21	340	254	334	673	170	224	285	70	0	2435
9	1965	0	14	28	61	334	442	331	436	301	30	124	1	2101
10	1966	12	0	7	34	143	354	327	277	607	223	17	17	2018
11	1967	-	-	-	104	181	208	335	476	248	55	0	1	-
12	1968	0	0	95	64	200	449	433	266	83	64	76	0	1731
13	1969	0	1	84	90	90	255	281	494	155	79	28	0	1556
14	1970	15	8	38	47	180	287	414	236	190	418	38	0	1869
15	1971	0	23	0	176	367	310	479	485	262	107	86	0	2294
16	1972	0	0	12	260	323	469	253	294	76	138	0	0	1825
17	1973	0	16	0	134	618	271	241	237	399	121	65	91	2192
18	1974	0	0	43	141	148	247	604	391	235	145	1	0	1953
19	1975	1	29	15	91	241	283	625	231	268	317	29	0	2130
20	1976	0	5	95	17	378	649	330	386	148	109	7	0	2123
21	1977	0	66	74	296	593	301	263	90	121	301	35	26	2165
22	1978	0	10	22	171	521	583	337	452	185	74	0	0	2356
23	1979	3	19	37	61	79	256	365	437	383	146	5	51	1841
24	1980	0	31	51	143	411	330	394	234	290	299	0	0	2183
25	1981	8	34	94	274	188	154	235	197	320	82	9	35	1630
26	1982	0	15	81	104	154	514	136	346	258	84	51	0	1743
27	1983	18	25	219	318	348	299	179	434	322	253	0	18	2433
28	1984	13	1	7	124	707	637	694	311	477	57	0	0	3028
29	1985	8	1	195	176	300	399	262	338	306	79	0	1	2065
30	1986	6	0	23	231	191	308	450	171	687	237	172	3	2479
31	1987	3	0	33	230	109	316	526	462	363	104	7	33	2186
32	1988	0	44	74	282	517	579	255	169	196	253	153	3	2525
33	1989	0	32	0	85	224	318	347	59	305	240	0	12	1622
34	1990	0	36	151	-	-	-	-	-	-	-	-	-	-
	AVERAGE	6	18	53	139	281	358	363	299	271	169	30	9	2063

MONTHLY AND ANNUAL RAINFALL

STATION NO. 17 JOYDEPRUR (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1961	-	-	-	93.0	439.1	463.9	220.8	257.8	169.8	119.5	0.0	0.0	-
2	1962	0.0	15.0	4.1	122.4	343.1	393.3	388.0	200.0	391.6	155.6	0.0	0.0	2013.1
3	1963	0.0	0.0	13.2	154.4	261.1	355.3	297.4	287.1	108.4	113.2	17.3	0.0	1607.4
4	1964	0.0	12.7	15.3	239.4	317.6	232.7	512.1	233.8	225.3	431.7	7.6	0.0	2228.2
5	1965	0.0	0.5	0.0	19.0	264.1	591.9	326.8	490.1	139.2	22.9	8.9	1.3	1864.7
6	1966	3.8	0.0	2.5	60.2	85.0	437.0	337.7	490.3	406.2	244.0	48.3	11.4	2126.4
7	1967	21.6	0.0	128.9	120.2	262.8	307.4	317.6	550.0	200.7	73.7	0.0	0.5	1983.4
8	1968	0.0	1.0	50.0	106.1	213.9	565.1	378.2	342.4	164.3	37.0	19.8	0.0	1877.8
9	1969	0.0	0.0	85.1	205.2	112.5	364.4	378.7	498.2	281.0	85.1	39.3	0.0	2049.5
10	1970	7.3	1.5	8.9	72.9	138.0	222.3	381.3	283.8	113.8	438.6	10.7	0.0	1679.1
11	1971	0.0	0.0	0.0	23.9	273.0	349.9	347.7	628.7	269.1	73.4	96.4	0.0	2062.1
12	1972	0.0	12.7	4.3	156.3	118.7	220.4	178.0	273.9	162.7	64.8	0.0	0.0	1191.8
13	1973	8.1	116.1	18.5	200.8	361.4	535.5	524.0	423.3	307.2	137.4	35.3	71.1	2738.7
14	1974	0.0	0.0	89.9	172.6	240.2	248.9	593.2	248.5	367.2	129.6	0.0	0.0	2090.1
15	1975	0.0	0.5	21.6	101.6	256.6	229.1	633.7	211.8	238.7	349.6	2.5	0.0	2045.7
16	1976	0.0	2.5	57.7	63.5	191.3	486.9	332.7	334.2	152.4	50.8	5.1	0.0	1677.1
17	1977	0.0	36.5	42.9	252.9	382.7	341.2	385.1	239.5	96.9	113.0	69.9	36.0	1996.6
18	1978	0.0	16.0	43.5	162.7	577.1	788.3	518.8	197.8	258.0	14.7	0.0	0.0	2576.9
19	1979	0.0	32.2	64.8	68.6	50.8	641.3	386.2	634.6	684.6	139.7	30.5	27.9	2761.2
20	1980	0.0	0.0	22.1	150.6	411.4	312.9	361.5	265.7	225.0	300.4	0.0	0.0	2049.6
21	1981	0.0	73.3	58.8	432.4	252.3	193.6	478.9	484.6	165.8	0.0	0.0	38.6	2178.3
22	1982	0.0	0.0	157.9	235.2	192.1	494.3	346.7	484.9	396.9	25.2	32.0	0.0	2365.2
23	1983	10.7	58.2	176.7	157.0	347.6	334.8	227.5	638.6	453.1	428.5	0.0	18.8	2851.5
24	1984	0.0	0.0	18.0	84.6	559.0	536.6	443.0	313.2	483.6	185.9	0.0	0.0	2623.9
25	1985	0.0	0.0	48.2	62.8	249.9	529.5	157.3	174.9	246.1	113.0	0.0	0.0	1581.7
26	1986	2.8	9.9	19.8	192.2	240.5	343.6	346.8	342.7	497.7	410.7	136.9	3.0	2546.6
27	1987	0.0	0.0	74.4	137.9	131.2	316.9	743.9	371.0	351.6	113.7	21.8	0.0	2262.4
28	1988	0.0	74.5	49.3	96.6	715.8	530.1	439.3	239.8	194.6	265.5	121.7	0.0	2727.2
29	1989	0.0	10.7	0.0	66.3	94.1	266.7	481.4	107.5	182.8	250.6	0.0	10.2	1470.3
30	1990	0.0	32.3	196.0	-	-	-	-	-	-	-	-	-	-
AVERAGE		1.9	17.5	50.8	138.3	278.7	401.2	395.3	353.4	273.6	168.5	24.3	7.5	2115.2

MONTHLY AND ANNUAL RAINFALL

STATION NO. 31 SAVAR (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1962	-	-	-	107.9	228.2	235.7	410.2	122.3	370.9	107.2	0.0	0.0	-
2	1963	0.0	0.0	10.2	86.7	-	-	423.2	300.0	161.4	157.9	9.4	0.0	-
3	1964	0.0	24.6	39.5	279.5	167.5	251.9	553.9	207.5	256.5	440.5	0.0	0.0	2221.4
4	1965	0.0	7.6	17.0	32.7	264.7	574.7	460.2	528.6	172.9	81.0	130.1	0.0	2269.5
5	1966	17.3	0.0	7.4	52.3	109.1	214.9	222.9	375.1	390.7	207.6	33.1	25.1	1655.5
6	1967	23.1	0.0	62.8	88.2	205.9	220.7	194.7	354.9	395.2	60.2	0.0	0.0	1605.7
7	1968	0.0	0.0	39.9	98.6	159.6	515.9	402.8	536.9	345.6	43.9	56.7	0.0	2199.9
8	1969	0.0	0.0	108.5	90.7	177.3	235.9	331.2	627.5	163.3	70.5	38.6	0.0	1843.5
9	1970	16.5	4.3	13.2	90.8	233.6	203.8	402.9	244.2	250.3	318.6	10.9	0.0	1789.1
10	1971	1.3	21.3	0.0	198.6	196.0	274.7	384.1	594.9	352.3	89.7	67.6	0.0	2180.5
11	1972	0.0	11.6	14.0	105.0	189.5	356.7	166.4	273.8	223.6	155.7	0.0	0.0	1496.3
12	1973	0.0	72.8	18.3	201.0	409.7	443.9	276.0	262.2	352.0	102.7	32.0	86.4	2257.0
13	1974	0.0	0.0	49.6	252.4	234.4	226.2	485.4	231.2	165.6	84.7	0.0	0.0	1729.5
14	1975	0.0	0.0	12.2	162.3	371.4	240.4	647.3	356.5	196.4	211.5	15.3	0.0	2213.3
15	1976	0.0	2.3	37.6	66.0	341.5	546.8	411.1	459.9	122.2	55.1	0.0	0.0	2042.5
16	1977	0.0	50.1	73.7	391.2	392.4	341.3	329.4	131.2	164.9	216.8	0.0	29.5	2120.5
17	1978	0.0	38.1	33.6	173.0	541.7	519.1	533.0	270.6	297.3	51.5	2.5	0.0	2460.4
18	1979	0.0	1.7	5.0	34.2	55.8	258.1	707.1	673.2	555.1	213.4	50.8	0.0	2554.4
19	1980	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-
20	1981	-	-	-	317.6	185.0	272.9	377.7	388.5	233.9	47.1	0.0	44.4	-
21	1982	5.6	27.0	125.5	156.0	142.4	488.6	176.2	280.3	146.7	0.0	43.4	0.0	1591.7
22	1983	9.6	33.3	87.9	356.7	234.3	165.6	210.5	400.6	259.1	236.6	0.0	15.5	2009.7
23	1984	1.5	0.0	9.2	111.6	428.7	590.5	572.2	291.1	234.6	79.9	0.0	0.0	2319.3
24	1985	0.0	0.0	219.8	95.8	208.3	184.3	328.9	352.4	191.5	116.8	0.0	0.0	1697.8
25	1986	1.3	0.0	15.2	228.4	161.3	277.5	282.1	297.8	477.1	310.0	127.7	0.0	2178.4
26	1987	0.0	0.0	33.1	278.0	71.1	532.3	369.7	423.3	477.3	50.8	0.0	0.0	2235.6
27	1988	0.0	36.3	45.7	-	-	-	-	-	-	-	-	-	82.0
28	1989	-	-	-	96.6	163.8	271.6	430.6	104.3	263.7	149.1	0.0	14.0	1493.7
29	1990	0.0	10.1	120.8	-	-	-	-	-	-	-	-	-	-
	AVERAGE	2.9	13.1	46.1	159.7	234.9	337.8	388.1	349.6	277.7	140.7	23.8	8.3	1927.0

MONTHLY AND ANNUAL RAINFALL

STATION NO. 76 NARSINDI (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1961	-	-	-	83.8	396.9	402.4	489.0	416.2	172.5	79.2	6.4	0.0	-
2	1962	21.8	45.2	31.0	141.4	307.7	347.5	476.8	272.3	209.5	278.2	0.0	0.0	2131.4
3	1963	2.0	0.0	54.1	97.0	296.4	573.1	437.9	189.0	136.8	198.7	15.7	0.0	2000.7
4	1964	0.0	12.2	25.7	332.7	323.5	519.1	912.0	223.2	551.9	283.2	53.0	0.0	3236.5
5	1965	0.0	17.5	39.4	25.0	153.9	642.2	587.3	705.4	580.6	66.0	59.4	5.8	2882.5
6	1966	11.7	0.0	6.1	260.2	172.0	594.4	304.8	580.9	493.9	348.1	62.2	25.1	2859.4
7	1967	27.1	0.0	80.2	201.4	194.2	532.0	485.1	391.0	563.1	116.2	0.0	0.0	2590.3
8	1968	5.3	6.8	56.4	209.0	264.5	588.2	408.0	394.2	266.0	27.0	32.8	0.0	2258.2
9	1969	3.0	0.0	202.1	415.2	61.7	753.7	618.1	554.0	452.3	131.7	53.0	0.0	3244.8
10	1970	14.8	4.1	36.5	134.9	266.8	279.8	600.7	575.6	318.9	471.2	18.3	0.0	2721.6
11	1971	12.2	9.7	0.0	103.4	430.8	756.1	513.2	910.6	152.4	74.9	68.5	0.0	3031.8
12	1972	0.0	29.0	23.4	315.6	401.4	589.4	337.4	487.1	253.4	56.7	0.0	0.0	2493.4
13	1973	14.7	92.7	57.1	160.8	874.9	667.0	529.9	446.6	377.3	160.2	72.7	165.9	3619.8
14	1974	3.0	0.0	108.7	311.4	346.1	299.5	1047.6	364.0	287.7	72.1	3.0	0.0	2843.1
15	1975	0.0	11.7	5.4	87.9	241.2	107.5	490.0	117.9	289.9	192.4	48.7	0.0	1592.6
16	1976	0.0	41.1	25.4	101.3	257.8	722.0	349.0	625.1	76.5	52.9	11.4	0.0	2262.5
17	1977	0.0	15.8	17.5	384.5	411.6	504.1	366.4	302.5	32.4	303.8	28.5	36.4	2403.5
18	1978	0.0	15.7	11.0	242.2	897.9	879.0	380.8	140.9	107.9	100.8	0.0	0.0	2776.2
19	1979	2.0	16.5	49.3	66.5	135.7	358.1	635.2	345.6	376.3	59.6	37.1	22.1	2104.0
20	1980	7.6	9.2	21.6	170.6	676.0	351.9	303.4	148.5	212.6	577.0	0.0	0.8	2479.2
21	1981	3.1	38.3	57.9	525.3	256.7	110.9	671.6	428.8	331.4	7.6	0.0	11.4	2443.0
22	1982	0.0	2.0	124.4	161.5	326.5	568.2	63.4	359.2	171.8	29.7	30.3	0.0	1837.0
23	1983	10.2	27.6	151.2	191.8	504.3	353.3	298.7	704.7	231.2	309.4	0.0	40.6	2823.0
24	1984	5.0	0.0	19.0	105.7	1064.9	752.6	774.0	617.7	742.3	133.6	0.0	0.0	4214.8
25	1985	12.7	0.0	76.2	106.0	356.1	504.2	454.4	502.5	273.9	153.0	0.0	3.3	2442.3
26	1986	22.8	0.0	2.0	378.6	361.2	256.7	497.0	397.1	564.0	589.5	195.6	0.0	3264.5
27	1987	2.0	18.3	58.9	225.9	135.7	574.4	463.8	635.7	229.1	72.7	27.2	22.4	2466.1
28	1988	0.0	46.3	124.2	100.4	648.8	692.4	620.5	299.1	194.9	164.1	114.4	8.9	3014.0
29	1989	0.0	57.1	11.9	54.4	278.4	332.6	220.8	64.9	224.4	168.5	0.0	13.2	1426.2
30	1990	0.0	41.3	155.7	-	-	-	-	-	-	-	-	-	-
	AVERAGE	6.2	19.2	56.3	196.4	380.8	503.9	494.4	420.7	306.0	182.0	32.4	12.3	2623.7

MONTHLY AND ANNUAL RAINFALL

STATION NO. 351 BANCHARAMPUR (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1961	-	-	-	99	296	537	371	284	131	114	25	0	-
2	1962	0	9	3	165	275	264	486	420	163	-	-	0	-
3	1963	0	0	37	206	215	711	389	177	163	288	-	0	-
4	1964	5	48	38	-	-	-	-	-	-	-	-	-	-
5	1965	-	-	-	91	124	408	431	484	363	71	85	6	-
6	1966	0	0	0	147	18	420	330	469	671	241	33	0	2328
7	1967	20	0	144	99	224	244	395	504	358	109	0	0	2097
8	1968	0	0	42	69	195	346	451	141	65	42	53	0	1404
9	1969	0	0	60	309	33	337	489	311	200	48	36	0	1823
10	1970	27	2	17	103	113	230	271	308	283	355	135	0	1843
11	1971	0	22	56	231	318	143	384	254	79	11	0	0	1499
12	1972	0	15	0	67	30	295	238	176	69	17	6	0	912
13	1973	0	28	34	28	524	301	494	393	166	69	22	118	2177
14	1974	0	0	46	52	156	547	604	602	252	65	107	0	2429
15	1975	0	0	8	43	159	344	608	83	251	180	37	0	1712
16	1976	0	0	111	30	133	602	325	467	43	23	0	0	1734
17	1977	0	56	0	267	289	269	203	114	98	91	40	11	1438
18	1978	0	8	14	202	716	457	180	143	132	61	0	0	1913
19	1979	0	5	21	79	0	299	250	41	277	76	62	13	1121
20	1980	0	23	17	66	362	102	193	188	129	152	0	0	1231
21	1981	10	31	46	446	100	67	194	167	147	49	0	12	1269
22	1982	0	27	46	65	70	125	126	288	132	11	28	0	919
23	1983	12	8	50	238	309	217	112	552	115	100	0	7	1720
24	1984	5	0	0	83	773	263	361	327	357	87	0	0	2256
25	1985	0	0	26	32	235	190	153	134	96	16	9	7	897
26	1986	7	0	18	107	84	81	402	133	558	103	85	0	1577
27	1987	0	7	4	167	223	290	520	307	209	70	25	11	1833
28	1988	0	25	49	146	1069	326	252	218	77	97	75	0	2333
29	1989	0	75	0	23	73	174	211	88	141	172	0	10	967
30	1990	0	30	387	-	-	-	-	-	-	-	-	-	-
	AVERAGE	3	15	45	131	254	307	337	278	204	101	33	7	1643

MONTHLY AND ANNUAL RAINFALL

STATION NO. 357 DAUDKANDI (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1983	-	-	-	845.8	746.8	370.7	422.9	665.8	363.3	304.8	0.0	25.3	-
2	1984	25.4	0.0	0.0	134.5	833.0	962.7	850.8	589.2	490.3	50.8	0.0	0.0	3936.7
3	1985	0.0	0.0	454.8	137.1	525.8	396.8	394.0	256.4	187.9	68.6	0.0	0.0	2421.4
4	1986	0.0	0.0	0.0	421.7	251.6	259.1	355.5	173.7	355.6	203.2	218.3	0.0	2238.7
5	1987	0.0	0.0	45.6	452.1	2.5	251.9	340.3	459.5	416.9	67.9	24.6	20.8	2082.1
6	1988	0.0	34.7	112.8	271.8	111.3	115.6	374.0	203.0	48.0	164.0	115.0	0.0	1550.2
7	1989	0.0	3.0	0.0	79.0	219.0	258.0	362.0	98.0	287.0	246.0	0.0	7.0	1559.0
8	1990	0.0	42.0	242.0	-	-	-	-	-	-	-	-	-	-
	AVERAGE	3.6	11.4	122.2	334.6	384.3	373.5	442.8	349.4	307.0	157.9	51.1	7.6	2298.0

MONTHLY AND ANNUAL RAINFALL

STATION NO. 365 MUNSHIGANJ (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1963	-	-	-	129.8	314.4	412.8	270.5	223.5	136.7	166.2	15.7	0.0	-
2	1964	1.0	100.6	38.9	-	-	-	-	-	-	-	-	-	-
3	1965	-	-	-	39.1	265.1	423.4	443.8	428.9	297.7	58.1	32.6	5.1	-
4	1966	7.4	0.0	5.8	40.1	95.3	413.5	292.7	334.0	293.3	268.3	12.7	30.2	1793.3
5	1967	33.0	0.0	81.9	118.3	187.8	172.9	338.6	430.9	302.6	52.0	0.0	0.0	1718.0
6	1968	0.0	0.0	57.6	84.0	207.8	549.9	564.7	254.3	81.4	70.1	111.8	0.0	1981.6
7	1969	0.0	0.0	76.1	147.2	58.6	405.0	291.0	458.9	269.7	138.7	26.4	0.0	1871.6
8	1970	16.0	7.4	118.8	191.0	79.9	353.0	396.1	293.2	306.9	413.5	74.2	0.0	2250.0
9	1971	28.4	19.3	0.0	153.6	341.7	614.5	565.2	929.6	120.8	63.5	38.1	0.0	2874.7
10	1972	0.0	1.0	0.0	375.9	193.0	472.4	491.8	807.7	205.6	45.7	0.0	0.0	2593.1
11	1973	0.0	172.7	96.5	274.8	952.5	680.8	693.5	536.0	853.4	172.8	137.2	76.2	4646.4
12	1974	0.0	0.0	0.0	121.9	833.1	1513.8	914.4	1292.9	370.8	0.0	0.0	0.0	5046.9
13	1975	0.0	20.3	0.0	233.7	188.0	370.8	876.2	182.9	290.7	405.3	34.3	0.0	2602.2
14	1976	10.2	0.0	0.0	50.8	114.6	525.7	736.4	575.6	0.0	0.0	0.0	0.0	2013.3
15	1977	0.0	35.6	33.0	420.5	374.8	525.6	267.7	26.7	47.7	73.9	2.3	1.8	1809.6
16	1978	0.0	19.0	10.2	51.4	500.4	438.6	104.6	101.3	154.4	8.1	0.9	0.0	1388.9
17	1979	0.5	0.8	2.8	21.8	1.6	403.8	436.1	632.3	334.3	0.0	2.1	1.3	1837.4
18	1980	0.0	2.6	0.0	1.0	7.5	7.9	7.5	5.4	4.0	7.2	0.0	0.0	43.1
19	1981	3.8	0.0	0.0	333.6	273.3	202.8	278.9	267.6	263.5	80.8	4.1	24.3	1732.7
20	1982	0.0	0.0	42.1	273.9	199.5	379.4	267.7	501.2	201.0	24.1	72.4	0.0	1961.3
21	1983	7.1	23.6	91.7	328.6	418.5	184.4	94.3	610.9	364.4	151.8	46.0	11.5	2332.8
22	1984	4.1	0.0	62.3	33.8	360.0	566.9	453.4	167.3	442.7	73.2	0.0	0.0	2163.7
23	1985	0.0	2.1	0.0	58.9	288.3	237.9	198.9	161.0	233.0	40.1	0.0	0.0	1220.2
24	1986	3.3	0.0	3.8	186.0	159.4	271.4	596.8	143.5	330.9	118.1	216.0	0.0	2029.2
25	1987	0.0	2.0	13.0	168.1	115.7	257.1	428.1	429.0	38.1	8.9	0.0	0.0	1460.0
26	1988	0.0	34.3	298.9	193.4	263.5	417.5	182.8	189.6	202.0	231.0	58.7	0.0	2071.7
27	1989	0.0	2.0	0.0	57.1	255.6	263.8	241.2	14.0	328.9	243.3	0.0	5.1	1411.0
28	1990	0.0	9.6	216.2	-	-	-	-	-	-	-	-	-	-
AVERAGE		4.4	17.4	48.1	157.2	271.2	425.6	401.3	384.5	249.0	112.1	34.1	6.0	2118.9

MONTHLY AND ANNUAL RAINFALL

STATION NO. 368 NARAYANGANJ (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1961	-	-	-	96.5	367.2	453.1	342.3	347.7	140.9	96.2	6.9	0.0	-
2	1962	14.5	12.2	11.4	-	-	-	-	-	-	-	-	-	-
3	1963	-	-	-	118.9	304.9	396.7	308.0	161.1	93.4	260.3	16.3	2.5	1662.1
4	1964	0.5	40.9	24.4	-	-	-	-	-	-	-	-	-	-
5	1965	-	-	-	280.2	252.0	0.0	306.4	387.0	328.3	44.2	46.4	4.3	1648.8
6	1966	9.1	0.0	18.5	54.6	62.0	364.6	261.5	224.1	501.3	129.5	15.0	25.4	1665.6
7	1967	20.3	0.0	72.4	142.7	141.0	163.9	347.3	509.4	327.7	55.1	0.0	0.0	1779.8
8	1968	0.0	0.3	45.2	82.0	214.9	500.7	493.1	250.8	63.9	35.8	76.5	0.0	1763.2
9	1969	0.0	0.0	73.6	201.5	190.4	363.5	255.5	434.1	159.3	135.7	34.0	0.0	1847.6
10	1970	31.8	4.8	48.3	125.1	151.0	269.0	246.5	303.6	214.7	0.0	0.0	0.0	1394.8
11	1971	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-
12	1972	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1973	-	-	-	174.9	0.0	412.4	496.9	265.2	361.7	146.8	82.5	130.6	2071.0
14	1974	0.0	0.0	106.4	153.4	259.8	235.9	622.8	379.7	217.9	129.4	6.1	0.0	2111.4
15	1975	0.0	31.3	0.0	71.8	188.2	244.3	654.8	224.1	281.2	327.0	44.0	0.0	2066.7
16	1976	0.0	0.0	0.0	99.1	215.7	646.7	344.2	401.5	69.0	114.7	0.0	0.0	1890.9
17	1977	0.0	14.0	7.6	-	-	-	-	-	-	-	-	-	-
	AVERAGE	6.4	8.6	34.0	133.4	195.6	337.6	389.9	324.0	229.9	122.9	27.3	13.6	1809.3

MONTHLY AND ANNUAL RAINFALL

STATION NO. 412 NAWABGONJ (BWDB)

(Unit: mm)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL
1	1965	-	-	-	232	166	388	279	416	182	52	8	0	-
2	1966	15	0	0	29	82	220	439	285	359	235	24	15	1703
3	1967	34	0	97	170	89	221	304	289	245	51	0	2	1501
4	1968	0	4	85	88	114	471	405	366	130	75	231	0	1967
5	1969	0	12	122	157	63	287	264	448	151	85	30	0	1618
6	1970	10	6	21	208	180	364	365	323	341	354	14	0	2185
7	1971	4	39	15	145	308	340	471	464	281	6	0	0	2073
8	1972	0	10	0	0	141	491	295	197	89	57	0	0	1280
9	1973	0	17	16	157	462	341	351	259	242	34	33	81	1992
10	1974	0	0	107	202	184	289	670	179	113	0	0	0	1743
11	1975	0	0	0	127	252	399	362	246	159	37	0	0	1581
12	1976	0	0	116	-	-	-	-	-	-	-	-	-	-
13	1977	-	-	-	378	211	253	422	70	85	108	29	23	1579
14	1978	0	8	13	83	285	206	201	99	234	19	0	0	1146
15	1979	0	10	10	18	43	170	196	158	122	61	18	0	805
16	1980	0	23	0	61	246	422	191	272	38	43	0	0	1296
17	1981	0	50	54	368	239	226	392	228	287	84	6	18	1952
18	1982	0	13	61	-	-	-	-	-	-	-	-	-	-
19	1983	-	-	-	247	239	85	83	344	125	168	0	3	-
20	1984	0	0	0	3	269	264	378	258	165	0	0	0	1337
21	1985	0	0	0	46	104	98	251	258	221	0	0	0	978
22	1986	0	0	6	-	-	-	-	-	-	-	-	-	-
23	1987	-	-	-	205	83	251	329	345	391	66	0	0	1670
24	1988	0	33	142	-	-	-	-	-	-	-	-	-	-
25	1989	-	-	-	79	193	267	302	107	259	119	0	0	1326
26	1990	0	6	66	-	-	-	-	-	-	-	-	-	-
	AVERAGE	3	11	44	143	188	288	331	267	201	79	19	7	1565

2. Probable Storm Rainfall of Dhaka (B.M.D.), Savar (BWDB Sta. 31), Joydebpur (BWDB Sta. 17) and Narayanganj (B.M.D.)

Dhaka (B.M.D.): 1 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Dhaka (B.M.D.) - Daily
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 36

K	R(K)
1	90.00
2	147.00
3	115.00
4	326.00
5	73.00
6	137.00
7	125.00
8	141.00
9	185.00
10	116.00
11	189.00
12	114.00
13	177.00
14	257.00
15	125.00
16	145.00
17	86.00
18	152.00
19	251.00
20	231.00
21	168.00
22	143.00
23	163.00
24	100.00
25	128.00
26	108.00
27	91.00
28	83.00
29	146.00
30	128.00
31	150.00
32	92.00
33	176.00
34	138.00
35	135.00
36	118.00

SORTING RESULTS

K	R(K)
1	326.00
2	257.00
3	251.00
4	231.00
5	189.00
6	185.00
7	177.00
8	176.00
9	168.00
10	163.00
11	152.00
12	150.00
13	147.00
14	146.00
15	145.00
16	143.00
17	141.00
18	138.00
19	137.00
20	135.00
21	128.00
22	128.00
23	125.00
24	125.00
25	118.00
26	116.00
27	115.00
28	114.00
29	108.00
30	100.00
31	92.00
32	91.00
33	90.00
34	86.00
35	83.00
36	73.00

XM = 145.8056
STANDARD DEVIATION
SG = 52.72088

T(YR)	KG	X
1.00	-3.9413	-61.98
2.00	-0.1643	137.14
3.00	0.2538	159.19
4.00	0.5214	173.29
5.00	0.7195	183.74
6.00	0.8770	192.04
7.00	1.0079	198.94
8.00	1.1198	204.84
9.00	1.2177	210.00
10.00	1.3046	214.58

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	214.58
20.00	1.8658	244.17
30.00	2.1887	261.20
40.00	2.4163	273.20
50.00	2.5923	282.47
60.00	2.7358	290.04
70.00	2.8569	296.42
80.00	2.9617	301.95
90.00	3.0541	306.82
100.00	3.1367	311.17

** X: RAINFALL(MM) **

Dhaka (B.M.D.) : 2 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Dhaka (B.M.D.)
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 10 (YR)
TE = 100 (YR)
SY = 10 (YR)

ORIGINAL DATA
N = 36

K	R(K)
1	127.00
2	255.00
3	120.00
4	346.00
5	98.00
6	140.00
7	179.00
8	223.00
9	185.00
10	141.00
11	257.00
12	206.00
13	181.00
14	270.00
15	147.00
16	240.00
17	104.00
18	262.00
19	328.00
20	251.00
21	177.00
22	212.00
23	263.00
24	133.00
25	191.00
26	166.00
27	125.00
28	148.00
29	167.00
30	194.00
31	200.00
32	132.00
33	321.00
34	172.00
35	175.00
36	151.00

SORTING RESULTS

K	R(K)
1	346.00
2	328.00
3	321.00
4	270.00
5	263.00
6	262.00
7	257.00
8	255.00
9	251.00
10	240.00
11	223.00
12	212.00
13	206.00
14	200.00
15	194.00
16	191.00
17	185.00
18	181.00
19	179.00
20	177.00
21	175.00
22	172.00
23	167.00
24	166.00
25	151.00
26	148.00
27	147.00
28	141.00
29	140.00
30	133.00
31	132.00
32	127.00
33	125.00
34	120.00
35	104.00
36	98.00

XM = 194.0833
STANDARD DEVIATION
SG = 62.66905

T(YR)	KG	X
1.00	-3.9413	-52.91
2.00	-0.1643	183.79
3.00	0.2538	209.99
4.00	0.5214	226.76
5.00	0.7195	239.17
6.00	0.8770	249.04
7.00	1.0079	257.24
8.00	1.1198	264.26
9.00	1.2177	270.39
10.00	1.3046	275.84

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	275.84
20.00	1.8658	311.01
30.00	2.1887	331.25
40.00	2.4163	345.51
50.00	2.5923	356.54
60.00	2.7358	365.53
70.00	2.8569	373.12
80.00	2.9617	379.69
90.00	3.0541	385.48
100.00	3.1367	390.66

** X: RAINFALL(MM) **

Dhaka (B.M.D.) : 5 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Dhaka (B.M.D.) - 5 Day
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 36

K	R(K)
1	150.00
2	323.00
3	181.00
4	430.00
5	184.00
6	170.00
7	309.00
8	331.00
9	317.00
10	164.00
11	327.00
12	241.00
13	219.00
14	238.00
15	250.00
16	379.00
17	139.00
18	303.00
19	355.00
20	314.00
21	205.00
22	401.00
23	436.00
24	175.00
25	216.00
26	234.00
27	259.00
28	168.00
29	133.00
30	250.00
31	296.00
32	169.00
33	401.00
34	234.00
35	301.00
36	152.00

SORTING RESULTS

K	R(K)
1	436.00
2	430.00
3	401.00
4	401.00
5	379.00
6	355.00
7	331.00
8	327.00
9	323.00
10	317.00
11	314.00
12	309.00
13	303.00
14	301.00
15	296.00
16	283.00
17	259.00
18	250.00
19	250.00
20	241.00
21	234.00
22	234.00
23	219.00
24	216.00
25	205.00
26	199.00
27	193.00
28	184.00
29	181.00
30	175.00
31	170.00
32	169.00
33	164.00
34	164.00
35	152.00
36	150.00

XM = 264.5556
STANDARD DEVIATION
SG = 82.2572

T(YR)	KG	X
1.00	-3.9413	-59.64
2.00	-0.1643	251.04
3.00	0.2538	285.43
4.00	0.5214	307.44
5.00	0.7195	323.74
6.00	0.8770	336.69
7.00	1.0079	347.46
8.00	1.1198	356.67
9.00	1.2177	364.72
10.00	1.3046	371.87

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	371.87
20.00	1.8658	418.03
30.00	2.1887	444.59
40.00	2.4163	463.32
50.00	2.5923	477.79
60.00	2.7358	489.59
70.00	2.8569	499.56
80.00	2.9617	508.18
90.00	3.0541	515.78
100.00	3.1367	522.57

** X: RAINFALL(MM) **

20

Dhaka (B.M.D.) : 1 month rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Dhaka (B.M.D.) - 1 Month
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 36

K	R(K)
1	392.00
2	910.00
3	502.00
4	690.00
5	437.00
6	267.00
7	568.00
8	655.00
9	856.00
10	395.00
11	621.00
12	629.00
13	480.00
14	496.00
15	504.00
16	590.00
17	540.00
18	496.00
19	550.00
20	380.00
21	621.00
22	559.00
23	627.00
24	381.00
25	529.00
26	525.00
27	414.00
28	411.00
29	514.00
30	408.00
31	891.00
32	399.00
33	687.00
34	526.00
35	580.00
36	347.00

SORTING RESULTS

K	R(K)
1	891.00
2	856.00
3	910.00
4	690.00
5	687.00
6	655.00
7	629.00
8	627.00
9	621.00
10	621.00
11	590.00
12	580.00
13	568.00
14	559.00
15	550.00
16	540.00
17	529.00
18	526.00
19	525.00
20	514.00
21	504.00
22	502.00
23	496.00
24	496.00
25	487.00
26	480.00
27	414.00
28	411.00
29	408.00
30	399.00
31	395.00
32	392.00
33	381.00
34	380.00
35	347.00
36	267.00

XM = 536.9611
STANDARD DEVIATION
SG = 137.087

T(YR)	KG	X
1.00	-3.9413	-3.44
2.00	-0.1643	514.34
3.00	0.2538	571.65
4.00	0.5214	608.34
5.00	0.7195	635.49
6.00	0.8770	657.09
7.00	1.0079	675.03
8.00	1.1198	690.37
9.00	1.2177	703.79
10.00	1.3046	715.70

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	715.70
20.00	1.8658	792.64
30.00	2.1887	836.90
40.00	2.4163	868.11
50.00	2.5923	892.23
60.00	2.7358	911.90
70.00	2.8569	928.51
80.00	2.9617	942.87
90.00	3.0541	955.54
100.00	3.1367	966.86

** X: RAINFALL(MM) **

Savar (BWDB Sta.31) : 1 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Savar (BWDB) - Daily
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 26

K	R(K)
1	246.00
2	87.00
3	165.00
4	179.00
5	122.00
6	142.00
7	163.00
8	93.00
9	82.00
10	98.00
11	114.00
12	133.00
13	136.00
14	235.00
15	162.00
16	126.00
17	165.00
18	187.00
19	114.00
20	165.00
21	146.00
22	184.00
23	107.00
24	107.00
25	99.00
26	102.00

SORTING RESULTS

K	R(K)
1	246.00
2	235.00
3	187.00
4	184.00
5	179.00
6	165.00
7	165.00
8	165.00
9	163.00
10	162.00
11	146.00
12	142.00
13	136.00
14	133.00
15	126.00
16	122.00
17	114.00
18	114.00
19	109.00
20	107.00
21	102.00
22	99.00
23	93.00
24	88.00
25	87.00
26	82.00

XM = 140.4231
STANDARD DEVIATION
SG = 42.53883

T(YR)	KG	X
1.00	-3.9413	-27.23
2.00	-0.1643	133.44
3.00	0.2538	151.22
4.00	0.5214	162.60
5.00	0.7195	171.03
6.00	0.8770	177.73
7.00	1.0079	183.30
8.00	1.1198	188.06
9.00	1.2177	192.22
10.00	1.3046	195.92

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	195.92
20.00	1.8658	219.79
30.00	2.1887	233.53
40.00	2.4163	243.21
50.00	2.5923	250.70
60.00	2.7358	256.80
70.00	2.8569	261.95
80.00	2.9617	266.41
90.00	3.0541	270.34
100.00	3.1367	273.85

** X: RAINFALL(MM) **

22

Savar (BWDB Sta. 31) : 2 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Savar (BWDB)
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 26

K	R(K)
1	297.00
2	110.00
3	196.00
4	184.00
5	167.00
6	161.00
7	197.00
8	117.00
9	118.00
10	139.00
11	145.00
12	133.00
13	136.00
14	371.00
15	250.00
16	150.00
17	199.00
18	268.00
19	160.00
20	208.00
21	249.00
22	261.00
23	159.00
24	164.00
25	168.00
26	155.00

SORTING RESULTS

K	R(K)
1	371.00
2	297.00
3	268.00
4	261.00
5	250.00
6	249.00
7	208.00
8	199.00
9	197.00
10	196.00
11	184.00
12	168.00
13	167.00
14	164.00
15	161.00
16	160.00
17	159.00
18	155.00
19	150.00
20	145.00
21	139.00
22	136.00
23	133.00
24	118.00
25	117.00
26	110.00

XM = 187
STANDARD DEVIATION
SG = 61.27743

T(YR)	KG	X
1.00	-3.9413	-54.51
2.00	-0.1643	176.93
3.00	0.2538	202.55
4.00	0.5214	218.95
5.00	0.7195	231.09
6.00	0.8770	240.74
7.00	1.0079	248.76
8.00	1.1198	255.62
9.00	1.2177	261.62
10.00	1.3046	266.94

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	266.94
20.00	1.8658	301.33
30.00	2.1887	321.12
40.00	2.4163	335.07
50.00	2.5923	345.85
60.00	2.7358	354.64
70.00	2.8569	362.06
80.00	2.9617	368.49
90.00	3.0541	374.15
100.00	3.1367	379.21

** X: RAINFALL(MM) **

Savar (BWDB Sta.31) : 5 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Savar (BWDB) - 5 Day
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 26

K	R(K)
1	297.00
2	188.00
3	238.00
4	277.00
5	190.00
6	170.00
7	289.00
8	173.00
9	157.00
10	273.00
11	202.00
12	154.00
13	174.00
14	507.00
15	358.00
16	192.00
17	283.00
18	446.00
19	185.00
20	254.00
21	286.00
22	377.00
23	262.00
24	255.00
25	203.00
26	208.00

SORTING RESULTS

K	R(K)
1	507.00
2	446.00
3	377.00
4	358.00
5	297.00
6	289.00
7	286.00
8	283.00
9	277.00
10	273.00
11	262.00
12	255.00
13	254.00
14	238.00
15	208.00
16	203.00
17	202.00
18	192.00
19	190.00
20	188.00
21	185.00
22	174.00
23	173.00
24	170.00
25	157.00
26	154.00

XM = 253.7692
STANDARD DEVIATION
SG = 87.01694

T(YR)	KG	X
1.00	-3.9413	-89.19
2.00	-0.1643	239.47
3.00	0.2538	275.85
4.00	0.5214	299.14
5.00	0.7195	316.37
6.00	0.8770	330.08
7.00	1.0079	341.47
8.00	1.1198	351.21
9.00	1.2177	359.73
10.00	1.3046	367.29

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	367.29
20.00	1.8658	416.13
30.00	2.1887	444.22
40.00	2.4163	464.03
50.00	2.5923	479.34
60.00	2.7358	491.83
70.00	2.8569	502.37
80.00	2.9617	511.49
90.00	3.0541	519.53
100.00	3.1367	526.71

** X: RAINFALL(MM) **

28

Savar (BWDB Sta. 31) : 1 month rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Savar (BWDB) -1 Month
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 22

K	R(K)
1	554.00
2	575.00
3	391.00
4	395.00
5	537.00
6	628.00
7	403.00
8	595.00
9	357.00
10	444.00
11	485.00
12	647.00
13	547.00
14	332.00
15	542.00
16	707.00
17	489.00
18	401.00
19	591.00
20	352.00
21	477.00
22	532.00

SORTING RESULTS

K	R(K)
1	707.00
2	647.00
3	628.00
4	595.00
5	591.00
6	575.00
7	554.00
8	547.00
9	542.00
10	537.00
11	532.00
12	489.00
13	485.00
14	477.00
15	444.00
16	403.00
17	401.00
18	395.00
19	392.00
20	391.00
21	357.00
22	352.00

XM = 501.8637
STANDARD DEVIATION
SG = 98.42454

T(YR)	KG	X
1.00	-3.9413	113.95
2.00	-0.1643	485.70
3.00	0.2538	526.84
4.00	0.5214	553.18
5.00	0.7195	572.68
6.00	0.8770	588.18
7.00	1.0079	601.06
8.00	1.1198	612.08
9.00	1.2177	621.71
10.00	1.3046	630.26

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	630.26
20.00	1.8658	685.51
30.00	2.1887	717.28
40.00	2.4163	739.69
50.00	2.5923	757.01
60.00	2.7358	771.13
70.00	2.8569	783.05
80.00	2.9617	793.37
90.00	3.0541	802.46
100.00	3.1367	810.59

** X: RAINFALL(MM) **

Joydebpur (BWDB Sta. 17): 1 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Joydebpur (BWDB) - Daily
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 29

K	R(K)
1	140.00
2	107.00
3	127.00
4	161.00
5	173.00
6	137.00
7	140.00
8	177.00
9	69.00
10	112.00
11	126.00
12	77.00
13	206.00
14	165.00
15	165.00
16	107.00
17	104.00
18	184.00
19	229.00
20	95.00
21	125.00
22	129.00
23	193.00
24	112.00
25	83.00
26	167.00
27	153.00
28	155.00
29	129.00

SORTING RESULTS

K	R(K)
1	229.00
2	206.00
3	193.00
4	184.00
5	177.00
6	173.00
7	167.00
8	165.00
9	165.00
10	161.00
11	155.00
12	153.00
13	140.00
14	140.00
15	137.00
16	129.00
17	129.00
18	127.00
19	126.00
20	125.00
21	112.00
22	112.00
23	107.00
24	107.00
25	104.00
26	95.00
27	83.00
28	77.00
29	69.00

XM = 139.5517
STANDARD DEVIATION
SG = 38.26188

T(YR)	KG	X
1.00	-3.9413	-11.25
2.00	-0.1643	133.27
3.00	0.2538	149.26
4.00	0.5214	159.50
5.00	0.7195	167.08
6.00	0.8770	173.11
7.00	1.0079	178.11
8.00	1.1198	182.40
9.00	1.2177	186.14
10.00	1.3046	189.47

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	189.47
20.00	1.8658	210.94
30.00	2.1987	223.30
40.00	2.4163	232.00
50.00	2.5923	238.74
60.00	2.7358	244.23
70.00	2.8569	248.86
80.00	2.9617	252.87
90.00	3.0541	256.41
100.00	3.1367	259.57

** X: RAINFALL(MM) **

24

Joydebpur (BWDB Sta. 17): 2 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Joydebpur (BWDB)
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 29

K	R(K)
1	152.00
2	156.00
3	131.00
4	254.00
5	221.00
6	229.00
7	231.00
8	210.00
9	107.00
10	147.00
11	162.00
12	117.00
13	221.00
14	182.00
15	264.00
16	199.00
17	115.00
18	267.00
19	330.00
20	132.00
21	201.00
22	181.00
23	290.00
24	160.00
25	142.00
26	271.00
27	230.00
28	283.00
29	160.00

SORTING RESULTS

K	R(K)
1	330.00
2	290.00
3	283.00
4	271.00
5	267.00
6	264.00
7	254.00
8	231.00
9	230.00
10	229.00
11	221.00
12	221.00
13	210.00
14	201.00
15	199.00
16	182.00
17	181.00
18	162.00
19	160.00
20	160.00
21	156.00
22	152.00
23	147.00
24	142.00
25	132.00
26	131.00
27	117.00
28	115.00
29	107.00

XM = 198.1035
STANDARD DEVIATION
SG = 58.69345

T(YR)	KG	Y
1.00	-3.9413	-33.22
2.00	-0.1643	188.46
3.00	0.2538	213.00
4.00	0.5214	228.71
5.00	0.7195	240.33
6.00	0.8770	249.58
7.00	1.0079	257.26
8.00	1.1198	263.83
9.00	1.2177	269.57
10.00	1.3046	274.67

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	274.67
20.00	1.8658	307.61
30.00	2.1887	326.57
40.00	2.4163	339.93
50.00	2.5923	350.25
60.00	2.7358	358.68
70.00	2.8569	365.78
80.00	2.9617	371.94
90.00	3.0541	377.36
100.00	3.1367	382.21

** X: RAINFALL(MM) **

Joydebpur (BWDB Sta. 17): 5 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Joydebpur (BWDB) - 5 Day
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 29

K	R(K)
1	283.00
2	223.00
3	144.00
4	295.00
5	307.00
6	279.00
7	326.00
8	263.00
9	192.00
10	254.00
11	300.00
12	163.00
13	269.00
14	209.00
15	475.00
16	368.00
17	189.00
18	288.00
19	500.00
20	215.00
21	309.00
22	209.00
23	363.00
24	315.00
25	302.00
26	331.00
27	406.00
28	413.00
29	178.00

SORTING RESULTS

K	R(K)
1	500.00
2	475.00
3	413.00
4	406.00
5	368.00
6	363.00
7	331.00
8	326.00
9	315.00
10	309.00
11	307.00
12	302.00
13	300.00
14	295.00
15	288.00
16	283.00
17	279.00
18	269.00
19	263.00
20	254.00
21	223.00
22	215.00
23	209.00
24	209.00
25	192.00
26	189.00
27	178.00
28	163.00
29	144.00

XM = 288.5517
STANDARD DEVIATION
SG = 86.7921

T(YR)	KG	X
1.00	-3.9413	-53.52
2.00	-0.1643	274.29
3.00	0.2538	310.58
4.00	0.5214	333.80
5.00	0.7195	351.00
6.00	0.8770	364.67
7.00	1.0079	376.03
8.00	1.1193	385.74
9.00	1.2177	394.24
10.00	1.3046	401.78

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	401.78
20.00	1.8658	450.49
30.00	2.1887	478.51
40.00	2.4163	498.27
50.00	2.5923	513.54
60.00	2.7358	525.99
70.00	2.8569	536.51
80.00	2.9617	545.61
90.00	3.0541	553.62
100.00	3.1367	560.79

** X: RAINFALL(MM) **

Joydebpur (BWDB Sta. 17): 1 month rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Joydebpur (BWDB) - 1 Month
N = NUMBER OF DATA

R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 28

K	R(K)
1	393.00
2	355.00
3	512.00
4	592.00
5	490.00
6	550.00
7	565.00
8	498.00
9	439.00
10	629.00
11	274.00
12	536.00
13	593.00
14	634.00
15	487.00
16	385.00
17	788.00
18	685.00
19	411.00
20	485.00
21	494.00
22	639.00
23	559.00
24	530.00
25	498.00
26	744.00
27	716.00
28	484.00

SORTING RESULTS

K	R(K)
1	788.00
2	744.00
3	716.00
4	685.00
5	639.00
6	634.00
7	629.00
8	593.00
9	592.00
10	565.00
11	559.00
12	550.00
13	536.00
14	530.00
15	512.00
16	498.00
17	498.00
18	494.00
19	490.00
20	487.00
21	485.00
22	484.00
23	439.00
24	411.00
25	393.00
26	385.00
27	355.00
28	274.00

XM = 534.4643
STANDARD DEVIATION
SG = 116.9388

T(YR)	KG	X
1.00	-3.9413	73.58
2.00	-0.1643	515.25
3.00	0.2538	564.14
4.00	0.5214	595.43
5.00	0.7195	618.60
6.00	0.8770	637.02
7.00	1.0079	652.32
8.00	1.1198	665.41
9.00	1.2177	676.86
10.00	1.3046	687.02

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
10.00	1.3046	687.02
20.00	1.8658	752.65
30.00	2.1887	790.41
40.00	2.4163	817.03
50.00	2.5923	837.60
60.00	2.7358	854.38
70.00	2.8569	868.55
80.00	2.9617	880.80
90.00	3.0541	891.61
100.00	3.1367	901.27

** X: RAINFALL(MM) **

Narayanganj (B.M.D.) : 1 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Narayanganj (B.M.D.)
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 25

K	R(K)
1	119.00
2	183.00
3	149.00
4	133.00
5	86.00
6	149.00
7	62.00
8	158.00
9	134.00
10	160.00
11	202.00
12	87.00
13	197.00
14	231.00
15	216.00
16	137.00
17	135.00
18	252.00
19	81.00
20	106.00
21	167.00
22	170.00
23	132.00
24	105.00
25	193.00

SORTING RESULTS

K	R(K)
1	252.00
2	231.00
3	216.00
4	202.00
5	197.00
6	193.00
7	183.00
8	170.00
9	167.00
10	160.00
11	158.00
12	149.00
13	149.00
14	137.00
15	135.00
16	134.00
17	133.00
18	132.00
19	119.00
20	106.00
21	105.00
22	87.00
23	86.00
24	81.00
25	62.00

XM = 149.76
STANDARD DEVIATION
SG = 47.65735

T(YR)	KG	X
1.00	-3.9413	-38.07
2.00	-0.1643	141.93
3.00	0.2538	161.86
4.00	0.5214	174.61
5.00	0.7195	184.05
6.00	0.8770	191.56
7.00	1.0079	197.79
8.00	1.1198	203.13
9.00	1.2177	207.79
10.00	1.3046	211.93

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	211.93
20.00	1.8658	238.68
30.00	2.1887	254.07
40.00	2.4163	264.92
50.00	2.5923	273.30
60.00	2.7358	280.14
70.00	2.8569	285.91
80.00	2.9617	290.91
90.00	3.0541	295.31
100.00	3.1367	299.25

** X: RAINFALL(MM) **

L40

Narayanganj (B.M.D.) : 2 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Narayanganj (B.M.D.)
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 25

K	R(K)
1	143.00
2	233.00
3	165.00
4	172.00
5	124.00
6	178.00
7	97.00
8	166.00
9	171.00
10	238.00
11	202.00
12	130.00
13	307.00
14	266.00
15	302.00
16	207.00
17	263.00
18	255.00
19	132.00
20	188.00
21	183.00
22	204.00
23	246.00
24	194.00
25	228.00

SORTING RESULTS

K	R(K)
1	307.00
2	302.00
3	266.00
4	263.00
5	255.00
6	246.00
7	238.00
8	233.00
9	228.00
10	207.00
11	204.00
12	202.00
13	194.00
14	188.00
15	183.00
16	178.00
17	172.00
18	171.00
19	166.00
20	165.00
21	143.00
22	132.00
23	130.00
24	124.00
25	97.00

XM = 199.76
STANDARD DEVIATION
SG = 53.97057

T(YR)	KG	X
1.00	-3.9413	-12.95
2.00	-0.1643	190.89
3.00	0.2538	213.46
4.00	0.5214	227.90
5.00	0.7195	238.59
6.00	0.8770	247.09
7.00	1.0079	254.15
8.00	1.1198	260.20
9.00	1.2177	265.48
10.00	1.3046	270.17

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	270.17
20.00	1.8658	300.46
30.00	2.1887	317.88
40.00	2.4163	330.17
50.00	2.5923	339.67
60.00	2.7358	347.41
70.00	2.8569	353.95
80.00	2.9617	359.61
90.00	3.0541	364.59
100.00	3.1367	369.05

** X: RAINFALL(MM) **

Narayanganj (B.M.D.) : 5 day rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Narayanganj (B.M.D.)
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 25

K	R(K)
1	224.00
2	295.00
3	198.00
4	183.00
5	182.00
6	259.00
7	191.00
8	166.00
9	298.00
10	257.00
11	264.00
12	160.00
13	350.00
14	299.00
15	343.00
16	292.00
17	343.00
18	297.00
19	163.00
20	331.00
21	215.00
22	252.00
23	429.00
24	318.00
25	308.00

SORTING RESULTS

K	R(K)
1	429.00
2	350.00
3	343.00
4	343.00
5	331.00
6	318.00
7	308.00
8	299.00
9	298.00
10	297.00
11	295.00
12	292.00
13	264.00
14	259.00
15	257.00
16	252.00
17	224.00
18	215.00
19	198.00
20	191.00
21	183.00
22	182.00
23	166.00
24	163.00
25	160.00

XM = 264.68
STANDARD DEVIATION
SG = 69.12523

T(YR)	KG	X
1.00	-3.9413	-7.76
2.00	-0.1643	253.32
3.00	0.2538	282.22
4.00	0.5214	300.72
5.00	0.7195	314.41
6.00	0.8770	325.30
7.00	1.0079	334.35
8.00	1.1198	342.09
9.00	1.2177	348.85
10.00	1.3046	354.86

** X: RAINFALL(MM) **

T(YR)	KG	X
10.00	1.3046	354.86
20.00	1.8658	393.65
30.00	2.1887	415.97
40.00	2.4163	431.71
50.00	2.5923	443.87
60.00	2.7358	453.79
70.00	2.8569	462.16
80.00	2.9617	469.41
90.00	3.0541	475.80
100.00	3.1367	481.50

** X: RAINFALL(MM) **

92

Narayanganj (B.M.D.) : 1 month rainfall

** GUMBEL-CHOW'S METHOD **

STATION NAME :Narayanganj (B.M.D.
N = NUMBER OF DATA
R=RAINFALL(MM)
TS = 1 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 27

K	R(K)
1	414.00
2	711.00
3	484.00
4	438.00
5	552.00
6	340.00
7	387.00
8	415.00
9	374.00
10	605.00
11	533.00
12	489.00
13	298.00
14	418.00
15	451.00
16	479.00
17	525.00
18	502.00
19	428.00
20	285.00
21	644.00
22	356.00
23	521.00
24	634.00
25	627.00
26	542.00
27	539.00

SORTING RESULTS

K	R(K)
1	711.00
2	644.00
3	634.00
4	627.00
5	605.00
6	552.00
7	542.00
8	539.00
9	533.00
10	525.00
11	521.00
12	502.00
13	489.00
14	484.00
15	479.00
16	451.00
17	438.00
18	428.00
19	418.00
20	415.00
21	414.00
22	387.00
23	374.00
24	356.00
25	340.00
26	298.00
27	285.00

XM = 481.1482
STANDARD DEVIATION
SG = 106.2006

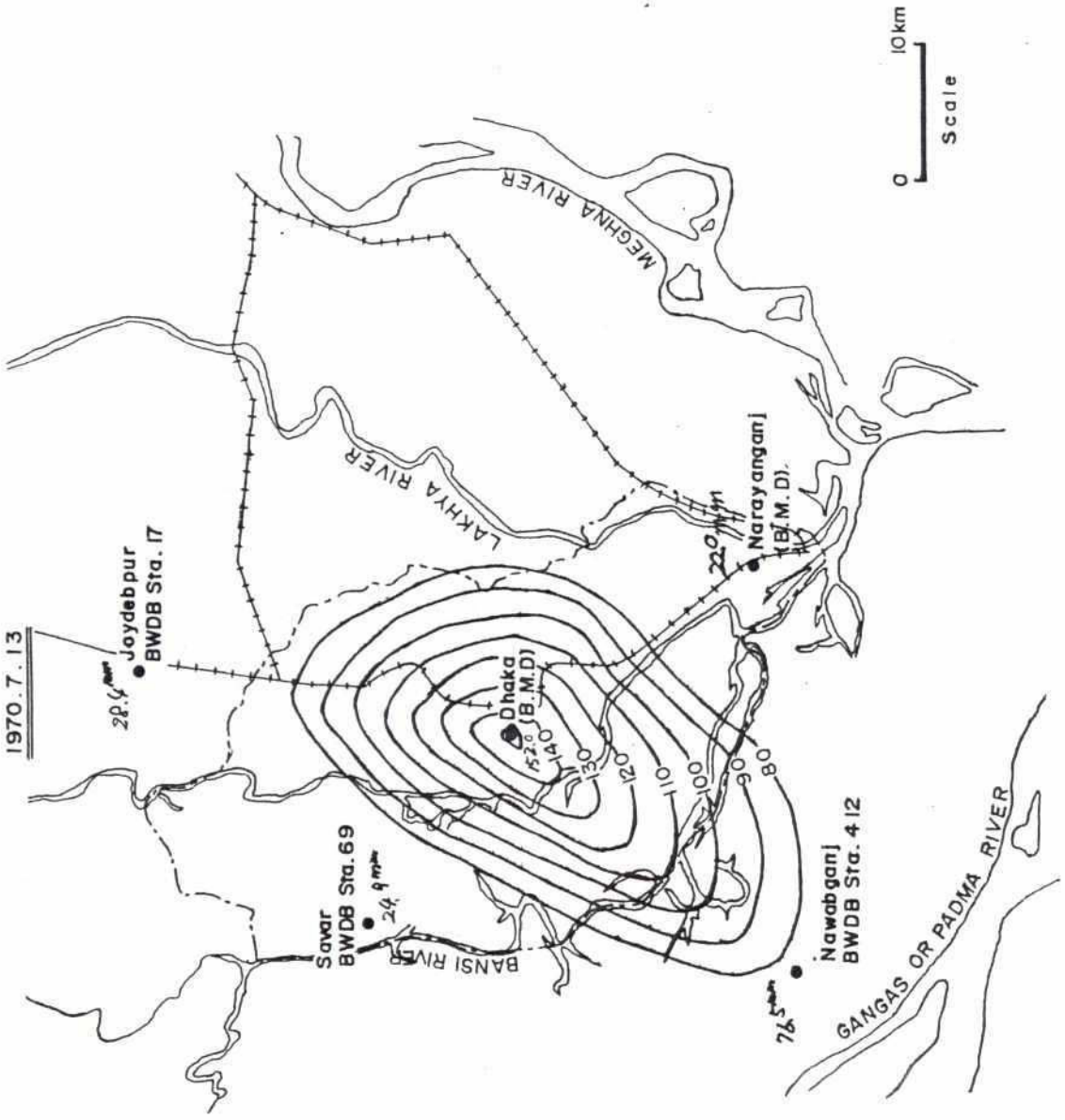
T(YR)	KG	X
1.00	-3.9413	62.58
2.00	-0.1643	463.70
3.00	0.2538	508.10
4.00	0.5214	536.52
5.00	0.7195	557.56
6.00	0.8770	574.23
7.00	1.0079	588.19
8.00	1.1198	600.07
9.00	1.2177	610.46
10.00	1.3046	619.69

** X: RAINFALL(MM) **

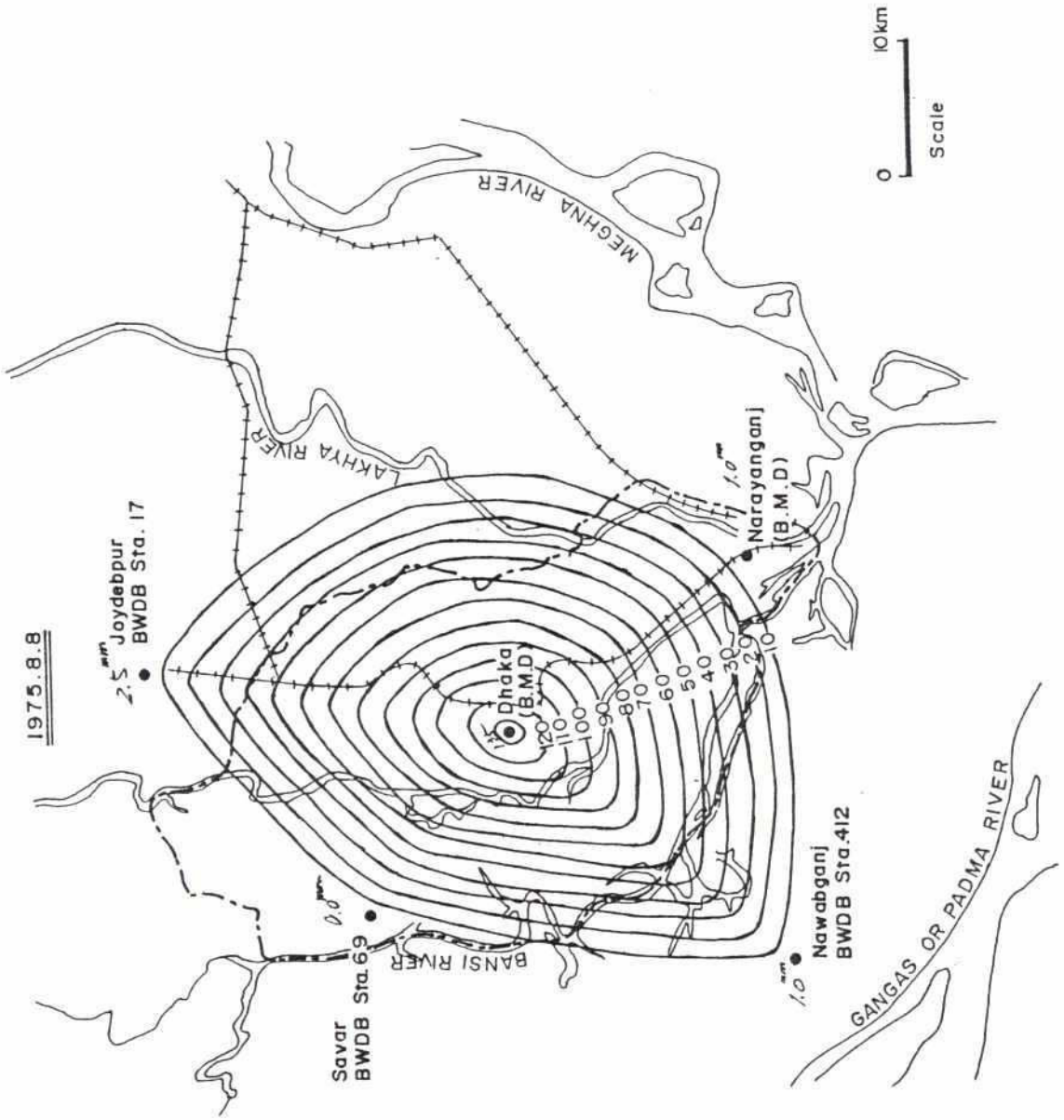
T(YR)	KG	X
10.00	1.3046	619.69
20.00	1.8658	679.30
30.00	2.1887	713.59
40.00	2.4163	737.76
50.00	2.5923	756.45
60.00	2.7358	771.69
70.00	2.8569	784.55
80.00	2.9617	795.68
90.00	3.0541	805.50
100.00	3.1367	814.27

** X: RAINFALL(MM) **

3. Isohyetal Maps of Areal Reduction of Dhaka (B.M.D.)


1970.7.13
Joydebpur
BWDB Sta. 17
28.6 mm
Dhaka
(B.M.D)
152.0
Narayanganj
(B.M.D).
220 mm
Savar
BWDB Sta. 69
24.9 mm
Nawabganj
BWDB Sta. 412
76.5 mm
MEGHNA RIVER
LAKHYA RIVER
BANSI RIVER
GANGAS OR PADMA RIVER
140
130
120
110
100
90
80
0
10km
Scale

1972.5.25
Joydebpur
BWDB Sta. 17
22.9mm
Dhaka
(B.M.D)
Narayaganj
(B.M.D)
40.6mm
MEGHNA RIVER
LAKHYA RIVER
BANSI RIVER
Savar
BWDB Sta. 69
12.7mm
Nawabganj
BWDB Sta. 412
20.3mm
GANGAS OR PADMA RIVER
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
0
10km
Scale


1975.8.8
Joydebpur
BWDB Sta. 17
2.5 mm
Dhaka
(B.M.D)
Narayanganj
(B.M.D)
1.0 mm
Savar
BWDB Sta.69
0.0 mm
Nawabganj
BWDB Sta.412
1.0 mm
MEGHNA RIVER
LAKHYA RIVER
BANSI RIVER
GANGAS OR PADMA RIVER
10
20
30
40
50
60
70
80
90
100
110
120
0
10km
Scale

4. Monthly Water Level in and around the Study Area

4.1 Monthly Maximum Water Level

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.7 PUBAIL (BWDB)

RIVER : BALU

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945							4.85	5.82	5.73	-	-	-	-
2	1946	-	-	-	-	-	-	-	-	-	-	-	-	-
3	1947	1.46	1.31	1.43	2.01	2.23	3.82	5.02	5.53	5.23	4.68	3.71	1.98	3.20
4	1948	1.46	1.28	1.31	1.95	3.29	4.54	5.52	5.82	5.35	4.94	3.52	2.07	3.42
5	1949	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1950	1.40	1.40	1.40	1.77	2.29	4.04	4.79	5.41	5.43	4.67	3.03	2.29	3.16
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	1.22	1.10	1.22	2.04	2.19	3.26	5.18	5.06	5.41	5.20	4.07	2.32	3.19
9	1953	1.37	1.34	-	-	-	-	-	-	-	-	-	-	-
10	1954	-	-	-	-	2.62	4.67	5.64	6.52	6.65	4.80	3.63	1.83	-
11	1955	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1956	2.64	2.39	2.61	3.00	-	5.95	6.31	5.90	6.19	5.64	3.98	2.42	-
13	1957	1.87	1.81	1.72	2.21	-	4.07	5.05	5.92	5.61	4.39	2.94	1.94	-
14	1958	1.72	1.66	1.63	1.97	3.09	3.66	4.39	6.31	6.54	5.58	4.28	2.58	3.62
15	1959	1.81	1.90	2.15	2.39	3.43	4.89	5.38	6.08	5.85	5.38	4.27	2.68	3.85
16	1960	1.97	1.84	1.78	2.00	2.85	3.92	5.66	5.75	6.17	6.17	3.84	2.27	3.69
17	1961	1.94	1.72	2.39	2.21	3.29	4.39	4.85	5.60	5.70	-	-	-	-
18	1962	-	-	-	2.23	3.29	4.39	5.76	6.67	6.92	5.98	3.70	2.32	-
19	1963	1.89	1.81	1.80	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	-	-	-	-	-	-	-	-	-	-
25	1969	-	-	-	2.30	2.80	4.45	5.81	6.16	6.19	5.59	3.41	2.29	-
26	1970	1.89	1.80	2.15	2.32	3.52	4.68	6.17	6.74	6.11	5.90	4.48	2.65	4.03
27	1971	2.03	1.97	1.84	2.55	2.76	4.79	5.91	6.42	6.42	5.46	4.24	2.71	3.93
28	1972	2.23	1.84	2.01	2.38	3.23	4.45	5.03	5.64	5.06	4.60	3.02	2.04	3.46
29	1973	1.72	1.74	1.86	2.39	3.78	5.67	5.68	6.25	5.90	5.72	4.08	2.76	3.96
30	1974	2.12	1.76	2.03	2.43	3.37	4.56	6.44	6.95	6.42	5.93	3.95	2.67	4.05
31	1975	1.89	1.89	1.89	2.61	3.06	3.84	5.41	5.73	5.43	5.18	3.92	2.56	3.62
32	1976	2.01	1.81	2.01	2.26	2.82	4.47	5.64	5.50	5.52	4.88	3.11	2.35	3.53
33	1977	1.84	1.74	1.86	2.61	3.58	5.17	5.64	5.93	6.03	5.00	3.72	2.47	3.80
34	1978	1.90	1.77	1.75	-	-	-	-	-	-	-	-	-	-
35	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	2.24	3.28	4.39	5.39	6.66	6.66	5.29	3.89	2.33	-
37	1981	1.83	1.65	1.77	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.56	3.16	4.15	5.05	5.79	6.05	5.97	4.29	2.59	-
40	1984	2.01	1.74	1.93	2.38	3.91	5.02	6.05	6.35	6.29	6.18	3.76	2.12	3.98
41	1985	1.69	1.73	2.16	2.38	2.88	4.47	5.46	5.83	5.39	5.03	3.96	2.43	3.62
42	1986	1.83	1.64	1.89	2.49	2.75	3.80	5.20	5.29	5.62	5.70	4.25	2.73	3.60
43	1987	1.84	1.68	1.75	2.43	2.64	3.97	5.83	6.90	6.58	6.04	3.96	2.53	3.85
44	1988	1.97	1.77	1.98	2.34	4.34	4.74	6.05	6.58	7.29	5.30	3.77	3.17	4.11
45	1989	1.78	1.83	1.83	2.23	3.24	4.37	5.47	5.42	5.17	5.13	4.07	2.37	3.58
46	1990	1.72	1.73	2.25	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.83	1.71	1.87	2.31	3.10	4.43	5.49	6.02	5.96	5.37	3.82	2.41	3.68

Notes: 1) AVER(1) is average of all data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.7.5 DEMRA (BWDB)

RIVER : BALU

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1962	-	-	-	2.44	3.32	4.33	5.30	6.22	6.28	5.33	3.29	2.26	-
2	1963	-	-	-	2.38	2.77	4.75	5.64	5.73	5.91	4.65	3.69	2.53	-
3	1964	2.16	1.89	2.13	2.47	3.14	4.48	5.81	6.39	5.64	5.29	3.81	2.32	3.79
4	1965	1.62	1.47	1.40	1.98	2.86	4.20	4.84	5.80	5.75	4.88	2.66	1.97	3.29
5	1966	2.07	1.43	1.46	1.88	2.55	4.61	5.30	5.97	6.23	5.07	2.86	2.08	3.46
6	1967	1.81	1.53	1.62	1.93	2.75	3.90	5.42	5.26	4.88	4.82	2.96	2.04	3.24
7	1968	1.62	1.47	1.65	2.53	2.96	4.68	6.02	6.07	5.33	5.01	3.22	2.10	3.56
8	1969	1.80	1.86	2.09	-	-	-	-	-	-	4.94	2.94	2.38	-
9	1970	2.07	1.92	2.21	2.39	3.49	4.69	5.90	6.23	5.53	5.49	3.95	-	-
10	1971	-	-	-	2.41	2.73	4.56	5.46	6.02	6.02	5.14	4.15	2.58	-
11	1972	2.26	1.95	2.16	2.53	3.20	4.60	4.91	5.93	4.69	4.13	2.56	2.76	3.49
12	1973	1.84	1.89	1.83	2.48	3.37	5.36	5.49	5.87	5.52	5.29	3.52	3.08	3.80
13	1974	2.24	1.84	2.13	2.51	3.41	4.57	6.13	6.57	5.90	5.49	3.66	2.77	3.94
14	1975	2.18	2.04	2.03	2.65	3.04	3.88	5.27	5.59	5.18	4.95	3.77	2.68	3.61
15	1976	2.10	1.88	2.19	2.50	2.85	4.30	5.46	5.35	5.35	4.48	2.67	2.33	3.46
16	1977	2.06	1.95	2.01	2.73	3.82	5.01	5.53	5.84	5.91	4.74	3.28	2.65	3.79
17	1978	2.06	2.01	1.97	-	-	-	-	-	-	-	-	-	-
18	1979	-	-	-	2.33	3.06	3.78	5.27	5.58	5.30	4.69	3.20	2.58	-
19	1980	1.98	2.10	2.27	-	-	-	-	-	-	-	-	-	-
20	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1982	-	-	-	2.58	2.77	4.57	4.98	5.49	5.99	4.80	2.72	2.19	-
22	1983	2.02	1.85	2.14	2.79	3.23	4.17	4.96	5.66	5.89	5.74	3.71	2.54	3.73
23	1984	2.30	1.81	2.07	2.90	3.85	5.09	5.95	6.26	6.32	6.06	3.43	2.39	4.04
24	1985	2.08	2.25	2.58	2.82	3.31	4.39	5.42	5.69	5.23	4.81	3.69	2.52	3.73
25	1986	2.02	1.90	2.17	2.89	2.99	3.98	4.97	5.24	5.19	5.06	3.81	2.66	3.57
26	1987	2.03	1.91	2.04	2.58	2.68	4.00	5.68	6.45	6.08	5.77	3.45	2.62	3.77
27	1988	2.13	2.17	2.31	2.84	4.23	4.66	5.95	6.68	7.09	4.97	3.50	2.84	4.11
28	1989	2.08	2.24	2.27	2.52	3.49	4.45	5.43	5.35	5.05	4.96	3.64	2.34	3.65
29	1990	2.00	2.07	2.28	-	-	-	-	-	-	-	-	-	-
	AVER(1)	2.02	1.89	2.04	2.50	3.16	4.46	5.46	5.88	5.69	5.06	3.37	2.47	3.67

Notes:

1) AVER(1) is average of all data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X + 0.007

where, X : raw data Y : revised data

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.14.5 NAYARHAT (BWDB)

RIVER : BANGSHI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1964				3.05	3.93	5.78	7.35	8.16	7.01	6.83	4.91	2.82	-
2	1965	2.09	1.92	1.83	2.53	3.66	5.52	6.26	7.62	7.44	6.51	3.73	2.49	4.30
3	1966	2.14	1.90	1.93	2.37	3.11	5.98	6.66	7.60	8.00	6.52	3.84	2.55	4.38
4	1967	2.03	1.83	2.03	2.29	3.37	5.42	7.07	6.97	6.44	6.42	4.13	2.59	4.22
5	1968	2.15	2.03	2.18	2.82	3.86	6.31	7.80	8.03	6.85	6.84	4.53	2.62	4.67
6	1969	2.00	1.87	2.16	2.59	4.18	6.04	7.39	7.51	7.55	6.49	3.60	2.55	4.49
7	1970	2.10	1.84	2.33	2.74	4.73	6.02	8.29	8.69	6.98	7.48	4.73	2.72	4.89
8	1971	2.25	2.08	-	-	-	-	-	-	-	-	-	-	-
9	1972	-	-	-	2.58	4.20	5.84	6.23	6.97	6.21	5.71	3.50	2.20	-
10	1973	1.88	1.74	1.79	2.78	4.21	6.80	6.94	7.70	7.06	6.74	4.44	2.97	4.59
11	1974	2.24	1.83	2.04	2.58	3.78	5.78	7.50	8.44	7.90	6.89	4.31	2.74	4.67
12	1975	2.12	1.95	1.87	2.59	3.46	-	-	-	-	5.98	4.21	2.74	-
13	1976	2.18	1.83	1.98	2.30	3.05	5.48	6.44	6.41	6.41	5.56	3.16	2.45	3.94
14	1977	1.97	1.78	1.87	2.85	4.17	5.97	6.60	7.07	7.15	5.91	3.86	2.50	4.31
15	1978	2.08	1.78	1.76	2.28	4.20	5.87	6.26	6.48	6.07	5.77	3.22	2.52	4.02
16	1979	2.03	1.84	1.99	2.10	3.23	3.94	6.11	6.46	6.25	5.88	3.92	2.53	3.86
17	1980	1.98	1.77	1.95	2.54	3.63	5.33	6.66	8.58	8.23	6.19	4.45	2.45	4.48
18	1981	2.08	1.75	1.94	2.98	3.47	4.23	6.45	6.74	6.66	5.82	3.05	-	-
19	1982	2.71	1.99	1.71	2.72	3.35	5.49	5.91	6.34	6.23	5.60	2.89	2.30	3.94
20	1983	1.99	1.84	2.27	2.88	3.82	5.07	5.90	6.56	7.23	7.15	4.81	2.65	4.35
21	1984	2.19	1.86	2.02	2.74	4.66	6.04	7.33	7.81	8.12	7.70	4.32	2.32	4.76
22	1985	1.92	1.84	2.55	2.56	3.32	5.31	6.74	7.04	6.43	6.03	4.35	2.59	4.22
23	1986	2.20	1.79	2.00	2.78	2.95	4.94	5.96	6.33	6.77	6.73	4.77	2.77	4.17
24	1987	2.09	1.92	1.85	2.67	2.68	4.82	6.74	8.74	7.75	7.27	4.32	2.57	4.45
25	1988	2.14	1.90	2.10	2.63	4.72	5.39	7.18	9.25	9.90	6.06	4.12	3.53	4.91
26	1989	2.05	2.01	1.94	2.37	3.89	5.14	6.21	6.10	6.09	6.04	4.42	2.49	4.06
27	1990	1.93	1.90	2.29	-	-	-	-	-	-	-	-	-	-
	AVER(1)	2.10	1.87	2.02	2.61	3.75	5.52	6.75	7.40	7.11	6.40	4.06	2.61	4.37

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.42 MILL BARAK (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945	-	-	-	2.44	2.90	-	5.10	6.04	5.88	5.22	-	2.29	-
2	1946	1.80	1.74	1.89	2.19	3.54	4.48	5.99	6.00	5.20	4.74	-	2.68	-
3	1947	1.98	1.86	2.04	2.74	2.71	4.18	5.49	5.64	5.13	4.72	-	2.53	-
4	1948	1.98	1.95	2.07	2.59	3.60	-	5.81	6.30	5.38	5.12	-	2.68	-
5	1949	1.92	1.71	2.10	3.17	3.41	-	5.63	6.00	6.00	5.18	3.49	1.91	-
6	1950	1.80	1.86	1.83	2.35	2.87	-	4.99	5.71	5.76	4.62	3.02	1.89	-
7	1951	1.52	1.43	1.89	1.98	2.24	4.01	5.94	-	-	-	-	1.98	-
8	1952	-	2.04	-	2.19	2.87	3.59	5.39	4.85	5.49	5.00	3.66	2.44	-
9	1953	2.04	2.04	2.44	2.50	3.02	3.75	5.49	5.70	5.70	5.39	3.05	2.04	3.60
10	1954	1.77	1.89	1.92	2.19	2.99	5.06	6.10	6.98	7.06	5.06	3.63	2.19	3.90
11	1955	1.92	1.98	2.32	2.35	3.11	4.54	-	7.09	6.14	4.92	3.23	2.47	-
12	1956	1.89	1.62	1.80	1.98	3.75	5.61	5.68	5.30	5.52	4.65	3.32	2.32	3.62
13	1957	1.52	1.40	1.43	1.83	2.74	3.66	4.56	5.36	4.72	3.60	2.23	1.74	2.90
14	1958	1.52	1.58	1.68	2.01	3.11	3.63	4.19	6.39	6.45	4.94	3.47	2.44	3.45
15	1959	-	-	-	2.53	3.20	4.94	5.00	5.78	5.27	4.91	3.72	2.50	-
16	1960	1.83	1.71	1.71	1.92	2.87	3.58	5.49	5.49	6.10	5.70	3.14	2.26	3.48
17	1961	1.98	1.66	2.47	2.19	3.20	3.93	4.54	5.49	5.52	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	2.45	2.91	4.74	6.25	6.34	5.43	5.14	3.09	2.09	-
25	1969	1.76	1.86	1.96	2.29	2.82	4.28	5.68	5.93	5.93	4.95	2.80	2.32	3.55
26	1970	1.98	1.86	2.12	2.32	3.32	4.57	6.17	6.51	5.51	5.52	3.78	2.47	3.84
27	1971	2.07	2.07	1.89	2.04	2.53	4.33	5.46	6.23	6.20	5.14	4.01	2.41	3.70
28	1972	2.12	1.83	2.07	2.47	3.11	4.47	4.77	5.30	4.79	4.02	2.50	2.06	3.29
29	1973	1.77	1.77	1.71	2.39	3.11	5.17	5.27	5.88	5.38	5.11	3.35	2.80	3.64
30	1974	2.18	1.80	2.13	2.45	3.35	4.39	5.96	6.61	5.94	5.32	3.47	2.62	3.85
31	1975	2.07	2.00	1.98	2.58	2.93	3.78	5.09	5.43	5.01	4.53	3.63	2.61	3.47
32	1976	2.04	1.94	2.16	2.47	2.77	3.98	5.15	5.17	5.15	4.27	2.48	2.24	3.32
33	1977	1.92	1.83	-	2.58	3.61	4.50	5.21	5.58	5.64	4.37	2.97	2.48	-
34	1978	1.95	1.89	1.89	2.16	3.41	4.47	4.83	5.26	4.77	4.54	2.85	2.41	3.37
35	1979	2.00	1.80	2.09	2.13	2.76	3.51	4.91	5.29	4.89	4.34	2.99	2.35	3.26
36	1980	1.86	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	2.53	2.81	3.40	5.11	5.46	5.29	4.45	2.82	2.85	-
38	1982	2.01	1.73	1.94	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.63	3.02	3.98	4.74	5.32	5.77	5.52	3.69	2.44	-
40	1984	2.26	2.01	2.19	2.69	3.77	4.62	5.69	5.91	6.04	5.62	2.96	2.10	3.82
41	1985	1.85	1.90	2.25	2.42	3.07	4.11	5.12	5.41	5.01	4.63	3.50	2.37	3.47
42	1986	1.92	1.69	1.95	2.54	2.74	3.72	4.68	5.00	4.98	4.77	3.67	2.42	3.34
43	1987	1.92	1.78	1.92	2.42	2.42	3.79	5.36	6.64	5.93	5.59	3.26	2.36	3.62
44	1988	1.98	1.99	2.16	2.66	3.94	4.23	5.73	7.03	7.58	4.63	3.35	2.59	3.99
45	1989	1.90	2.04	2.08	2.21	3.39	4.15	5.10	4.95	4.72	4.67	3.26	2.17	3.39
46	1990	1.87	1.93	2.26	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.91	1.83	2.01	2.37	3.08	4.22	5.32	5.82	5.59	4.88	3.24	2.35	3.54

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X - 0.037

where, X : Above raw data Y : revised data

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.43 HARIHARPARA (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945										4.57	3.61	1.95	-
2	1946	1.68	1.77	1.49	2.13	2.80	4.19	5.28	5.18	5.12	4.67	3.63	2.62	3.38
3	1947	1.80	1.43	1.80	2.62	2.13	-	4.89	-	4.83	-	-	-	-
4	1948	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1949	-	-	-	3.20	3.79	4.82	5.53	5.94	5.79	-	-	-	-
6	1950	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1953	-	-	-	2.29	2.90	3.41	5.00	5.24	5.12	4.71	2.74	1.43	-
10	1954	1.07	1.22	1.37	1.83	2.77	4.57	5.49	6.16	6.22	4.54	3.05	1.89	3.35
11	1955	1.52	1.46	1.92	2.07	2.74	4.11	5.41	6.40	5.61	4.59	3.05	2.01	3.41
12	1956	1.16	1.83	1.86	2.16	3.08	4.79	4.82	4.59	4.79	3.81	3.20	2.19	3.19
13	1957	1.65	1.40	1.37	1.89	2.65	3.66	4.36	5.06	4.51	3.51	2.29	1.55	2.82
14	1958	1.52	1.52	1.52	1.77	2.99	3.54	3.91	5.72	5.73	-	-	-	-
15	1959	-	-	-	2.23	2.87	4.69	4.68	5.33	4.85	4.47	3.47	2.32	-
16	1960	1.65	1.65	1.66	1.74	2.74	3.35	5.15	5.15	5.53	5.30	2.96	2.07	3.25
17	1961	1.74	1.52	2.32	2.07	2.87	3.72	4.24	5.11	5.12	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	2.27	2.65	4.39	5.82	5.85	5.06	4.75	2.83	1.82	-
25	1969	1.59	1.66	1.72	2.33	2.81	4.11	5.37	5.63	5.63	4.68	2.93	1.89	3.36
26	1970	1.78	1.68	1.81	2.13	3.14	4.37	5.72	6.04	5.24	5.21	3.52	2.23	3.57
27	1971	1.92	1.76	2.00	2.09	2.58	4.23	5.14	5.85	5.81	4.85	3.79	2.19	3.52
28	1972	1.69	1.69	1.89	2.26	2.88	4.24	4.57	5.01	4.56	3.75	2.37	1.93	3.07
29	1973	1.68	1.71	1.58	2.23	3.03	4.88	5.00	5.55	5.11	4.85	3.32	2.80	3.48
30	1974	2.01	1.68	1.89	2.16	2.93	4.19	5.64	6.34	5.55	4.98	3.23	2.48	3.59
31	1975	1.86	1.72	1.75	2.50	2.73	3.61	4.88	5.23	5.06	4.36	3.54	2.42	3.31
32	1976	1.80	1.65	1.89	2.16	2.53	3.72	4.92	4.98	4.91	3.87	2.42	2.07	3.08
33	1977	1.77	1.74	1.80	2.38	3.31	4.27	5.01	5.34	5.39	4.23	2.89	2.34	3.37
34	1978	1.79	1.62	1.80	2.11	3.60	4.19	4.59	5.05	4.59	4.24	2.81	2.33	3.23
35	1979	1.79	1.72	1.72	1.96	2.27	3.25	4.77	5.08	4.69	4.19	2.79	2.29	3.04
36	1980	1.72	1.48	1.62	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.58	2.88	3.75	4.45	4.93	5.43	5.19	3.36	2.52	-
40	1984	1.81	1.71	1.92	2.51	3.49	4.45	5.49	5.65	5.72	5.29	2.62	1.97	3.55
41	1985	1.67	1.88	2.02	2.19	2.61	3.95	4.89	5.12	4.74	4.39	3.25	2.31	3.25
42	1986	1.93	1.57	1.78	2.49	2.55	3.37	4.61	4.82	4.65	4.43	3.53	2.36	3.17
43	1987	1.73	1.55	1.56	2.15	2.29	3.56	5.11	6.23	5.57	5.30	3.12	2.20	3.36
44	1988	1.83	1.85	1.93	2.23	3.70	3.93	5.33	6.42	7.17	4.47	3.18	2.36	3.70
45	1989	1.58	1.64	1.70	2.02	2.96	3.96	4.78	4.63	4.40	4.32	3.03	1.82	3.07
46	1990	1.85	1.90	1.98	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.70	1.64	1.77	2.22	2.88	4.04	5.00	5.45	5.24	4.55	3.09	2.16	3.31

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.69 SAVAR (BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945				2.53	3.17	5.29	6.57	7.41	7.10	-	4.60	-	-
2	1946	2.07	1.92	2.04	2.50	4.18	5.55	6.88	6.84	6.22	5.73	4.66	2.68	4.27
3	1947	1.98	1.77	1.89	2.80	2.99	5.10	6.45	6.98	6.34	5.73	4.57	2.80	4.12
4	1948	1.98	1.92	2.07	2.87	4.53	-	7.13	7.20	6.54	6.16	-	-	-
5	1949	2.13	1.74	2.07	3.05	3.99	5.95	6.76	7.23	7.22	6.17	4.39	2.32	4.42
6	1950	1.86	1.83	1.83	2.41	3.29	5.79	-	6.99	7.04	5.59	3.93	2.77	-
7	1951	2.07	2.10	2.07	2.71	3.29	5.85	7.35	7.18	6.97	6.30	3.55	2.62	4.34
8	1952	-	-	-	2.16	3.47	4.74	7.10	6.57	7.10	6.81	4.88	2.68	-
9	1953	1.80	1.83	2.26	2.99	3.87	4.82	6.79	7.06	6.92	6.54	3.60	2.26	4.23
10	1954	1.74	1.80	1.86	2.53	4.02	6.37	7.48	8.12	8.17	6.18	4.34	2.65	4.61
11	1955	1.98	1.92	2.33	2.67	3.61	5.70	7.41	8.26	6.84	5.72	3.79	2.87	4.43
12	1956	2.04	1.77	2.06	2.38	5.04	6.83	6.83	6.58	6.77	5.81	4.01	2.53	4.39
13	1957	2.13	2.01	1.98	2.44	3.90	5.20	6.12	7.20	6.22	4.93	2.85	2.07	3.92
14	1958	1.89	1.94	1.74	2.23	3.84	4.75	5.28	7.85	7.93	-	-	-	-
15	1959	1.91	1.95	2.38	2.83	4.11	6.31	6.36	7.12	6.52	6.08	4.54	2.56	4.39
16	1960	2.07	2.10	2.10	2.38	3.19	4.89	7.06	7.03	7.57	7.10	3.81	2.62	4.33
17	1961	2.19	1.83	2.80	2.47	4.42	5.46	6.49	7.28	7.30	6.23	4.80	2.50	4.48
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	2.83	3.95	6.22	7.55	7.69	6.70	6.66	4.57	2.80	-
25	1969	2.32	2.19	2.15	2.62	4.05	5.81	6.98	7.06	7.08	6.17	3.54	2.51	4.37
26	1970	2.10	1.86	2.32	2.71	4.66	5.84	7.45	7.99	6.66	6.91	4.64	2.74	4.66
27	1971	2.29	2.06	2.13	2.41	3.02	5.76	6.71	7.36	7.35	6.17	5.00	2.72	4.42
28	1972	2.28	1.89	1.95	2.57	-	5.69	6.03	6.66	5.99	6.34	5.98	2.16	-
29	1973	1.91	1.65	1.74	2.76	4.14	6.57	6.64	7.21	6.88	6.42	4.18	2.73	4.40
30	1974	2.26	1.80	1.98	2.61	3.78	5.63	7.07	7.80	7.36	6.65	4.30	2.80	4.50
31	1975	2.09	1.95	1.63	2.77	3.45	-	-	-	-	-	-	2.69	-
32	1976	2.22	1.96	1.91	2.26	3.11	5.41	6.31	6.24	6.24	5.44	3.17	2.40	3.89
33	1977	1.83	1.58	1.80	-	4.04	5.78	6.39	6.83	6.88	5.75	3.82	2.50	-
34	1978	2.04	1.73	1.69	2.21	4.08	5.68	6.06	6.29	5.82	5.55	3.22	2.70	3.92
35	1979	2.48	2.00	1.89	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	3.04	4.05	5.27	6.04	6.66	6.96	6.85	4.77	2.55	-
40	1984	2.14	1.85	2.09	2.75	4.61	5.87	6.94	7.33	7.58	7.24	4.28	2.25	4.58
41	1985	1.84	1.78	2.43	2.75	3.40	5.24	6.44	6.70	6.18	5.79	4.28	2.49	4.11
42	1986	1.96	1.68	1.90	2.69	2.99	4.99	6.03	6.33	6.69	6.63	4.88	2.85	4.14
43	1987	2.03	1.82	1.79	2.84	2.76	4.96	6.68	8.30	7.34	6.99	4.26	2.51	4.36
44	1988	2.26	1.90	2.01	2.65	4.73	5.34	6.96	8.98	9.68	6.04	4.17	3.36	4.87
45	1989	2.31	2.05	2.30	2.68	3.80	5.45	6.34	6.22	6.17	6.13	4.58	2.48	4.21
46	1990	2.12	1.90	2.30	-	-	-	-	-	-	-	-	-	-
	AVER(1)	2.07	1.88	2.05	2.62	3.81	5.58	6.69	7.41	7.16	6.21	4.26	2.60	4.33

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO. 70 KALATIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				2.43	3.48	5.43	6.75	6.84	5.90	5.84	3.78	2.35	-
2	1969	1.76	1.73	1.91	2.34	3.50	5.13	6.27	6.43	6.46	5.48	3.07	2.26	3.86
3	1970	1.87	1.86	2.09	2.52	3.98	5.28	6.86	7.10	6.02	6.10	4.21	2.90	4.23
4	1971	1.93	1.87	1.74	2.11	2.82	5.16	6.11	6.81	6.76	5.65	4.46	3.69	4.09
5	1972	2.07	1.71	1.98	2.53	3.69	5.09	5.61	6.07	5.39	4.80	2.77	2.00	3.64
6	1973	1.65	1.65	1.62	2.51	3.72	5.94	6.00	6.55	6.10	5.75	3.95	2.77	4.02
7	1974	2.07	1.62	1.98	2.47	3.75	5.15	6.39	7.12	6.55	6.01	4.09	2.84	4.17
8	1975	2.84	2.89	1.49	-	-	-	-	-	-	5.25	3.76	2.64	-
9	1976	1.96	1.77	2.05	2.51	3.18	4.24	5.74	5.98	5.61	-	-	-	-
10	1977	-	-	-	2.69	3.70	5.14	5.89	6.25	6.34	5.15	3.49	2.32	-
11	1978	1.77	1.68	1.68	-	3.73	5.13	5.46	5.83	5.46	5.12	2.93	2.33	-
12	1979	1.85	1.63	1.91	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	2.36	3.31	4.82	6.05	7.21	6.83	5.32	3.83	2.04	-
14	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	2.70	3.53	4.58	5.37	5.75	6.38	6.25	4.23	2.28	-
17	1984	1.90	1.66	1.97	2.75	4.37	5.30	6.59	6.94	7.11	6.77	4.22	2.20	4.32
18	1985	1.85	1.74	2.20	2.66	3.25	4.79	5.95	6.18	5.84	5.45	4.08	2.35	3.86
19	1986	1.82	1.58	1.82	2.80	2.82	4.70	5.75	6.10	6.20	6.06	4.36	2.58	3.88
20	1987	1.80	1.75	1.85	2.68	2.90	4.76	6.15	7.53	6.69	6.39	3.99	2.47	4.08
21	1988	1.98	1.93	1.96	2.42	4.28	4.76	6.36	7.85	8.91	5.80	4.23	3.12	4.47
22	1989	1.92	2.05	2.08	2.47	3.50	4.93	5.92	5.78	5.72	5.63	4.15	2.40	3.88
23	1990	1.96	1.80	2.10	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.94	1.82	1.91	2.53	3.53	5.02	6.07	6.57	6.35	5.72	3.87	2.53	4.04

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.71 KALAGACHIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1977	-	-	-	-	3.56	4.32	5.02	5.31	5.34	4.13	2.91	2.42	-
2	1978	1.92	1.83	1.80	2.13	3.47	4.36	4.65	5.03	4.65	4.48	2.83	2.38	3.29
3	1979	2.03	1.98	2.13	2.73	3.09	4.13	5.01	-	-	-	-	-	-
4	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1983	-	-	-	2.70	2.95	4.12	4.54	5.03	5.44	5.04	3.85	2.98	-
8	1984	2.02	1.87	2.29	2.64	3.84	4.55	5.91	5.58	5.43	4.86	2.99	2.03	3.67
9	1985	1.85	1.93	2.19	2.35	2.72	4.13	4.93	5.06	4.85	4.53	3.49	2.24	3.36
10	1986	1.94	1.71	1.84	2.48	2.66	3.66	4.56	4.65	4.57	4.42	3.44	2.32	3.19
11	1987	1.85	1.65	1.73	2.52	2.55	3.49	5.15	5.92	5.53	5.11	3.12	2.21	3.40
12	1988	1.75	1.82	2.00	2.35	3.60	3.86	5.09	5.84	5.97	4.11	3.07	2.32	3.48
11	1989	1.70	1.85	1.93	2.35	3.32	4.13	5.04	4.87	4.59	4.56	3.25	2.12	3.31
12	1990	1.80	1.60	1.82	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.87	1.80	1.97	2.47	3.18	4.08	4.99	5.25	5.15	4.58	3.22	2.34	3.39

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.71A REKABI BAZAR(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				2.51	3.10	4.75	5.73	5.75	4.97	4.69	2.90	1.97	-
2	1969	1.66	1.72	1.81	2.24	2.83	4.18	5.26	5.47	5.46	4.54	2.77	2.09	3.34
3	1970	1.83	1.71	2.07	2.23	3.32	4.47	5.56	5.85	5.19	5.15	3.73	2.42	3.63
4	1971	2.07	1.93	2.23	2.23	2.69	4.34	5.11	5.71	5.72	-	-	-	-
5	1972	-	-	-	2.35	3.03	4.33	4.63	5.00	4.62	3.69	2.44	1.95	-
6	1973	1.75	1.71	1.74	2.35	3.08	4.92	5.06	5.46	5.06	4.83	3.38	2.83	3.51
7	1974	2.10	1.74	2.03	2.35	3.32	4.22	5.56	6.07	5.41	4.92	3.35	2.53	3.63
8	1975	1.98	1.98	1.77	2.59	2.88	3.69	4.85	5.18	4.83	4.33	3.58	2.56	3.35
9	1976	1.97	1.80	2.04	-	-	-	-	-	-	-	-	-	-
10	1977	-	-	-	2.68	3.45	4.33	5.01	5.33	5.39	4.21	2.93	2.50	-
11	1978	1.87	1.72	1.78	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	2.44	2.93	3.96	4.94	5.61	5.30	4.14	2.80	1.92	-
14	1981	1.68	1.46	1.68	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	2.68	3.08	3.91	4.62	5.17	5.49	5.16	3.56	2.39	-
17	1984	2.23	1.89	2.21	2.67	3.76	4.58	5.57	5.74	5.70	5.07	2.90	2.26	3.72
18	1985	1.92	1.98	2.14	2.42	3.08	4.19	5.04	5.28	4.89	4.53	3.52	2.47	3.46
19	1986	1.94	1.68	2.00	2.76	2.78	3.87	4.77	4.97	4.79	4.48	3.50	2.49	3.34
20	1987	1.94	1.76	2.00	2.56	2.50	3.95	5.25	6.02	5.58	5.21	3.15	2.31	3.52
21	1988	1.85	1.92	2.10	2.45	3.71	4.01	5.39	6.21	6.43	4.39	3.56	2.41	3.70
22	1989	1.85	1.96	1.99	2.37	3.37	4.17	5.10	4.96	4.67	4.62	3.39	2.21	3.39
23	1990	1.99	1.83	2.00	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.91	1.80	1.97	2.46	3.11	4.23	5.14	5.52	5.26	4.62	3.22	2.33	3.51

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.179 DEMRA (BWDB)

RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER
1	1952	-	-	-	2.29	3.02	3.75	5.58	5.18	5.58	5.27	4.08	2.74	-
2	1953	1.89	2.19	2.44	2.68	3.26	3.87	5.39	5.58	5.58	5.21	3.14	2.16	3.62
3	1954	1.77	1.83	1.86	2.29	3.60	4.94	5.85	6.46	6.52	5.09	3.54	2.16	3.83
4	1955	1.83	1.74	2.29	2.35	3.20	4.43	5.73	6.77	6.13	5.12	3.57	2.96	3.84
5	1956	2.13	1.86	1.83	2.41	3.99	5.67	5.73	5.46	5.64	4.80	2.54	2.38	3.70
6	1957	2.01	1.95	2.13	2.44	3.26	4.05	4.94	5.52	5.00	3.93	2.65	2.13	3.33
7	1958	1.92	1.92	1.86	2.19	3.41	3.87	4.33	5.94	5.97	5.03	3.57	2.68	3.56
8	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
10	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1964	-	-	-	-	-	-	-	-	-	-	3.82	2.26	-
14	1965	1.62	1.50	1.50	1.91	3.78	4.21	4.85	5.83	5.78	4.92	2.71	2.05	3.39
15	1966	1.97	1.46	1.48	1.89	2.57	4.63	5.34	6.01	6.30	5.09	2.88	2.07	3.47
16	1967	1.76	1.57	1.57	1.91	2.73	3.93	5.46	5.28	4.91	4.85	3.05	2.07	3.26
17	1968	1.65	1.43	1.66	2.53	2.99	4.72	6.09	6.09	5.36	5.03	3.19	2.15	3.57
18	1969	1.84	1.90	2.15	2.37	3.04	4.46	4.63	5.87	5.87	4.99	3.00	2.42	3.55
19	1970	2.07	2.01	2.26	-	-	-	-	-	-	-	-	-	-
20	1971	-	-	-	2.51	2.79	4.60	5.52	6.08	6.08	5.20	4.21	2.56	-
21	1972	2.29	1.93	2.17	2.70	3.35	4.68	5.00	5.44	4.95	4.15	2.65	2.16	3.46
22	1973	1.77	1.94	1.84	2.44	3.43	5.36	5.49	5.88	5.55	5.33	3.57	3.05	3.80
23	1974	2.26	1.87	2.15	2.56	3.46	4.63	6.16	6.60	5.96	5.64	3.70	2.91	3.99
24	1975	2.16	2.18	2.01	2.72	3.26	3.96	5.28	5.60	5.16	4.75	3.63	2.74	3.62
25	1976	2.10	1.96	2.22	2.50	2.96	4.36	5.53	5.39	5.39	4.50	2.80	2.36	3.51
26	1977	2.03	1.86	1.92	2.62	3.73	4.91	5.46	5.76	5.81	4.66	3.22	2.56	-
27	1978	1.98	1.92	1.98	2.26	3.69	4.80	5.12	5.43	4.97	4.69	3.05	2.45	3.53
28	1979	2.00	1.81	2.10	2.23	3.05	3.70	5.15	5.49	5.21	4.62	3.09	2.53	3.42
29	1980	2.01	2.09	2.26	-	-	-	-	-	-	-	-	-	-
30	1981	-	-	-	2.75	2.87	3.61	5.42	5.65	5.43	4.61	2.99	2.95	-
31	1982	1.96	1.78	1.80	2.70	2.85	4.44	4.89	5.35	5.07	4.68	2.73	2.15	3.37
32	1983	2.03	2.03	2.45	2.81	3.14	4.09	4.89	5.47	5.81	5.54	3.69	2.45	3.70
33	1984	2.23	1.97	2.25	2.68	3.98	4.84	5.87	6.04	6.00	5.71	3.23	2.15	3.91
34	1985	1.87	1.97	2.33	2.55	3.15	4.32	5.37	5.57	5.14	4.74	3.58	2.48	3.59
35	1986	1.98	1.78	2.07	2.77	2.84	3.69	4.87	5.14	5.10	5.00	3.72	2.57	3.46
36	1987	1.97	1.90	2.00	2.50	2.55	3.89	5.57	6.38	6.03	5.68	3.36	2.44	3.69
37	1988	1.99	2.01	2.06	-	-	-	-	-	-	-	-	-	-
38	1989	-	-	-	1.75	2.47	4.33	5.34	5.20	4.93	4.88	3.54	2.25	-
39	1990	1.84	1.95	2.21	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.96	1.87	2.03	2.42	3.19	4.37	5.34	5.74	5.56	4.96	3.28	2.43	3.59

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.275.5 MEGHNA FERRY GHAT (BWDB)

RIVER : SURMA-MEGHNA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				2.35	2.77	4.48	5.68	5.68	4.98	4.68	3.06	1.97	-
2	1969	1.65	1.55	1.92	2.27	3.17	4.33	5.40	5.63	5.60	4.79	2.94	2.43	3.47
3	1970	2.09	1.88	2.16	2.42	3.46	4.50	5.61	5.87	5.26	5.26	3.90	2.56	3.75
4	1971	2.21	2.06	2.41	2.39	2.74	4.45	5.18	5.75	-	-	-	-	-
5	1972	2.26	2.10	2.15	2.51	3.11	4.50	4.79	5.11	4.74	3.87	2.59	2.13	3.32
6	1973	1.87	1.69	1.83	2.51	3.29	5.03	5.15	5.44	5.21	4.95	3.49	3.60	3.67
7	1974	2.16	1.90	2.16	2.56	3.41	4.43	5.75	6.19	5.55	5.09	3.58	2.94	3.81
8	1975	2.26	2.21	2.26	2.65	2.99	3.79	4.99	5.29	5.01	4.53	3.72	2.65	3.53
9	1976	2.03	1.91	2.21	2.47	2.80	4.22	5.32	5.15	5.12	4.19	2.61	2.51	3.38
10	1977	1.95	1.63	1.95	2.71	3.80	4.63	5.24	5.59	5.53	4.36	3.19	2.70	3.61
11	1978	1.97	1.83	1.88	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1981	-	-	-	2.73	3.06	3.37	5.08	5.40	5.18	4.47	2.93	2.88	-
15	1982	1.95	1.69	1.78	2.73	3.00	4.14	4.81	5.19	4.99	4.64	2.69	2.10	3.31
16	1983	1.97	1.88	2.37	2.75	3.08	4.06	4.78	5.28	5.56	5.22	3.64	2.44	3.59
17	1984	2.19	2.07	2.20	2.49	3.84	4.58	5.57	5.73	5.67	5.20	3.18	2.19	3.74
18	1985	1.87	1.97	2.29	2.56	3.10	4.37	5.19	5.44	5.04	4.71	3.59	2.54	3.56
19	1986	2.02	1.77	2.07	2.87	2.86	3.71	4.72	5.03	4.88	4.61	3.77	2.65	3.41
20	1987	1.93	1.92	2.05	2.60	2.63	3.97	5.35	5.99	5.67	5.29	3.34	2.47	3.60
21	1988	2.03	2.03	2.14	2.77	4.15	4.48	5.73	6.41	6.55	4.70	3.34	2.69	3.92
22	1989	1.91	2.11	2.10	-	-	-	-	-	-	-	-	-	-
23	1990	-	-	-	-	-	-	-	-	-	-	-	-	-
	AVER(1)	2.02	1.90	2.11	2.57	3.18	4.28	5.24	5.57	5.33	4.74	3.27	2.56	3.58

Notes: 1) AVER(1) is average of all the data.

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.299 TONGI (BWDB)

RIVER : TONGI KHAL

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1960	-	-	-	1.83	2.70	3.78	5.70	5.73	6.28	6.05	3.38	2.03	-
2	1961	1.77	1.49	2.23	2.01	3.38	4.36	4.98	5.94	6.00	-	-	-	-
3	1962	1.95	2.04	1.95	2.01	3.12	4.33	5.82	7.10	7.15	5.72	3.37	2.13	3.89
4	1963	1.73	1.65	1.62	1.90	2.62	4.79	5.94	6.20	6.43	5.01	3.58	2.32	3.65
5	1964	1.92	1.46	1.77	2.61	3.17	4.51	6.19	6.88	6.01	5.66	4.01	2.41	3.88
6	1965	1.56	1.60	1.86	1.86	2.81	4.22	5.06	6.42	6.28	5.29	3.10	1.98	3.50
7	1966	1.72	1.50	1.62	1.91	2.32	4.70	5.45	6.34	6.60	5.32	3.14	2.07	3.56
8	1967	1.68	1.53	1.74	1.95	2.81	3.96	5.75	5.71	5.20	5.20	3.45	2.01	3.42
9	1968	1.56	1.59	1.67	2.19	2.87	4.85	6.41	6.58	5.64	5.27	3.76	2.03	3.70
10	1969	1.63	1.63	1.81	2.09	2.79	4.48	5.95	6.20	6.22	5.36	3.03	2.09	3.61
11	1970	1.83	1.71	1.97	2.16	3.49	4.77	6.52	6.99	5.93	5.93	4.08	2.36	3.98
12	1971	1.98	1.83	-	-	3.38	4.92	5.95	6.43	6.60	5.61	4.31	2.61	-
13	1972	2.03	1.74	1.83	2.28	3.23	4.63	5.03	5.69	5.03	4.45	2.71	1.79	3.37
14	1973	1.54	1.48	1.56	2.25	3.57	5.53	5.61	6.24	5.72	5.50	3.61	2.65	3.77
15	1974	1.92	1.57	1.85	2.33	3.28	4.59	6.30	6.98	6.34	-	3.63	2.47	-
16	1975	1.77	1.74	1.66	2.35	2.93	-	-	-	-	-	-	-	-
17	1976	-	-	-	2.09	2.71	-	-	-	-	-	-	-	-
18	1977	-	-	-	2.41	-	4.96	5.48	5.80	5.91	4.69	3.33	2.14	-
19	1978	1.66	1.43	1.53	2.04	3.78	4.74	5.08	5.44	5.02	4.73	2.82	2.11	3.37
20	1979	1.65	1.51	1.71	1.89	2.59	3.26	5.06	5.48	5.20	4.57	3.42	2.23	3.21
21	1980	1.59	1.56	1.72	2.20	3.17	4.31	5.46	6.87	6.60	4.95	3.49	1.97	3.66
22	1981	1.63	1.39	1.69	-	-	-	-	-	-	-	-	-	-
23	1982	-	-	-	2.27	2.63	4.45	4.78	5.58	4.99	4.78	2.54	1.81	-
24	1983	1.65	1.67	1.95	2.37	2.95	4.04	4.85	5.54	5.90	5.79	3.95	2.27	3.58
25	1984	1.80	1.58	1.71	2.25	3.75	4.85	5.89	6.26	6.28	6.05	3.39	1.90	3.81
26	1985	1.52	1.56	1.87	2.26	2.65	4.28	5.29	5.63	5.16	4.73	3.62	2.21	3.40
27	1986	1.67	1.45	1.67	2.35	2.53	3.78	4.94	5.16	5.38	5.34	3.86	2.38	3.38
28	1987	1.65	1.57	1.55	2.23	2.33	3.86	5.65	6.90	6.42	5.88	3.52	2.14	3.64
29	1988	1.72	1.55	1.85	-	-	-	-	7.13	7.84	-	-	-	-
30	1989	-	-	-	2.09	3.14	4.26	5.26	5.15	5.00	4.96	3.78	2.13	-
31	1990	1.52	1.60	2.03	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.72	1.59	1.78	2.15	2.99	4.43	5.55	6.16	5.97	5.29	3.48	2.17	3.60

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X + 0.122

where, X : raw data Y : revised data

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.302 MIRPUR (BWDB)

RIVER : TURAG

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1953	-	-	-	2.80	3.40	4.18	5.88	6.23	6.04	5.79	3.40	2.27	-
2	1954	2.00	2.00	2.10	2.48	3.35	5.32	6.63	7.53	7.60	5.43	3.93	2.35	4.23
3	1955	1.95	1.78	2.19	2.35	2.93	4.40	6.19	7.62	6.43	5.04	3.41	2.74	3.92
4	1956	2.09	-	2.12	2.29	3.98	5.90	5.99	5.67	5.93	5.11	3.60	-	-
5	1957	-	2.01	2.01	2.41	3.23	3.99	5.06	6.16	-	4.11	2.53	2.09	-
6	1958	1.90	2.01	1.86	2.18	3.19	3.73	4.33	7.04	7.13	5.30	3.76	2.50	3.74
7	1959	-	-	-	2.74	3.70	5.50	5.58	6.48	5.87	5.39	3.99	2.61	-
8	1960	2.60	1.89	1.89	2.06	2.88	3.79	5.90	5.91	6.58	6.17	3.26	2.27	3.77
9	1961	2.04	1.71	2.47	2.21	3.29	4.11	4.80	5.90	5.94	4.98	3.72	2.16	3.61
10	1962	2.01	2.12	1.98	2.35	3.14	4.37	5.87	7.53	7.51	5.67	3.23	2.32	4.01
11	1963	1.98	2.07	1.95	2.23	2.47	4.82	6.08	6.45	6.71	4.98	3.63	2.77	3.85
12	1964	2.44	2.10	2.44	2.71	3.00	4.42	6.34	7.13	6.04	5.74	3.87	2.23	4.04
13	1965	1.53	1.41	1.39	1.84	2.65	3.96	5.06	6.52	6.37	5.34	2.78	1.89	3.40
14	1966	1.98	1.47	1.53	1.95	2.56	4.76	5.60	6.59	6.94	5.38	3.05	2.08	3.66
15	1967	1.71	1.56	1.65	-	-	-	-	-	-	-	-	-	-
16	1968	-	-	-	2.56	2.93	4.88	6.55	6.72	5.62	5.38	3.34	2.07	-
17	1969	2.08	2.04	2.36	2.62	3.22	4.57	6.10	6.31	6.33	5.32	2.91	2.33	3.85
18	1970	2.11	2.02	2.11	2.37	3.58	4.77	6.69	7.13	5.83	5.96	3.70	2.60	4.07
19	1971	2.24	2.15	-	-	-	-	-	-	-	-	-	-	-
20	1972	-	-	-	2.44	3.16	4.59	5.03	5.70	5.01	4.34	2.55	2.17	-
21	1973	1.83	1.83	1.82	2.43	3.25	5.47	5.58	6.32	5.76	5.48	3.45	2.83	3.84
22	1974	2.31	1.94	2.12	2.45	3.35	4.80	6.24	7.05	6.34	5.63	3.56	2.65	4.04
23	1975	2.11	2.05	2.87	2.56	3.02	-	-	-	-	4.69	3.61	2.51	-
24	1976	2.04	1.92	2.16	2.41	2.83	-	-	-	-	4.49	2.62	2.31	-
25	1977	1.99	1.81	1.93	2.66	3.59	4.82	5.46	5.86	5.95	4.64	3.15	2.45	3.69
26	1978	1.91	1.94	1.95	2.26	3.60	4.67	5.02	5.47	5.00	4.70	2.90	2.40	3.48
27	1979	1.97	1.85	2.14	-	-	-	-	-	-	-	-	-	-
28	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
29	1981	-	-	-	2.70	2.95	3.47	5.40	5.75	5.60	4.75	2.85	2.74	3.02
30	1982	1.98	1.80	1.93	2.56	2.84	4.39	4.87	5.37	5.11	4.75	2.74	2.18	3.38
31	1983	2.02	1.94	2.34	2.80	3.12	4.08	4.87	5.54	5.99	5.84	3.75	2.41	3.72
32	1984	2.19	2.01	2.21	2.61	3.84	4.89	6.04	6.38	6.59	6.20	3.26	2.18	4.03
33	1985	1.92	1.98	2.35	2.50	3.00	4.32	5.43	5.75	5.22	4.78	3.65	2.44	3.61
34	1986	2.01	1.84	2.14	2.65	2.75	3.88	4.91	5.22	5.39	5.24	3.78	2.50	3.53
35	1987	1.98	1.95	2.00	2.47	2.48	3.93	5.68	7.26	6.45	6.01	3.44	2.48	3.84
36	1988	1.98	2.04	2.16	2.65	4.10	4.49	6.04	7.70	8.35	4.98	3.40	2.87	4.23
37	1989	2.00	2.09	2.04	2.29	3.24	4.41	5.38	5.22	5.01	4.95	3.93	2.30	3.57
38	1990	1.95	2.01	2.21	-	-	-	-	-	-	-	-	-	-
	AVER(1)	2.03	1.91	2.08	2.44	3.17	4.51	5.63	6.37	6.15	5.23	3.36	2.40	3.76

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X + 0.042

where, X : raw data Y : revised data

4.2 Monthly Average of Daily High Water Level

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.7 PUBAIL (BWDB)

RIVER : BALU

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945							4.22	5.44	5.51	-	-	-	-
2	1946	1.15	0.96	1.09	1.49	-	-	-	-	-	-	-	-	-
3	1947	-	-	-	1.49	1.94	3.17	4.33	5.29	4.98	4.37	2.82	1.49	-
4	1948	1.07	1.01	0.99	1.41	2.52	3.91	4.96	5.67	4.99	4.62	2.75	1.50	2.95
5	1949	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1950	1.15	1.09	1.11	1.47	1.85	3.14	4.61	5.15	5.22	3.73	2.59	1.43	2.71
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	0.84	0.72	0.83	1.13	1.87	2.85	4.33	4.61	5.12	4.78	3.21	1.68	2.66
9	1953	1.05	1.04	-	-	-	-	-	-	-	-	-	-	-
10	1954	-	-	-	-	2.05	3.63	5.17	6.32	5.94	4.39	2.67	1.52	-
11	1955	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1956	2.24	2.04	2.30	2.64	-	4.87	5.95	5.67	5.56	4.60	3.20	2.01	-
13	1957	1.60	1.54	1.48	1.80	-	3.42	4.72	5.60	4.86	3.73	2.35	1.65	-
14	1958	1.43	1.37	1.38	1.71	2.63	3.31	4.17	5.30	6.17	4.97	3.36	2.07	3.16
15	1959	1.62	1.51	1.68	2.03	2.77	4.07	5.22	5.60	5.29	4.89	3.40	2.08	3.35
16	1960	1.60	1.53	1.49	1.73	2.22	3.49	4.84	5.63	5.76	5.16	2.97	1.95	3.20
17	1961	1.65	1.49	2.04	2.06	2.71	4.09	4.54	5.18	5.49	-	-	-	-
18	1962	-	-	-	2.07	2.51	3.92	5.37	5.80	6.60	4.82	2.93	2.02	-
19	1963	1.68	1.58	1.58	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	-	-	-	-	-	-	-	-	-	-
25	1969	-	-	-	2.01	2.31	3.73	5.18	5.96	6.00	4.58	2.83	2.04	-
26	1970	1.65	1.55	1.69	2.15	2.98	3.92	5.29	6.55	5.60	5.44	3.51	2.27	3.55
27	1971	1.86	1.63	1.52	2.08	2.57	3.79	5.28	6.06	6.08	4.86	3.54	2.30	3.46
28	1972	1.91	1.54	1.68	2.14	2.75	3.63	4.73	5.41	4.91	3.88	2.45	1.88	3.08
29	1973	1.52	1.48	1.60	2.16	3.27	4.21	5.41	5.88	5.54	5.01	3.36	2.47	3.49
30	1974	1.88	1.56	1.75	2.16	3.02	3.82	5.68	6.71	6.15	5.01	3.25	2.51	3.63
31	1975	1.69	1.61	1.60	2.03	2.57	3.29	4.68	5.49	5.32	4.73	3.21	2.16	3.20
32	1976	1.68	1.54	1.67	1.96	2.55	3.88	5.26	5.23	5.14	3.93	2.55	2.08	3.12
33	1977	1.58	1.44	1.66	2.43	3.28	4.46	5.16	5.68	5.63	4.55	3.06	2.17	3.43
34	1978	1.61	1.50	1.47	-	-	-	-	-	-	-	-	-	-
35	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	1.80	2.93	3.87	4.70	5.80	5.93	4.65	3.11	2.07	-
37	1981	1.61	1.48	1.55	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.10	2.95	3.52	4.73	5.48	5.76	5.32	3.41	2.12	-
40	1984	1.74	1.46	1.61	2.05	3.25	4.60	5.44	5.86	5.72	4.89	2.84	1.94	3.45
41	1985	1.52	1.44	1.81	2.15	2.67	3.99	5.03	5.45	5.25	4.63	3.12	2.10	3.26
42	1986	1.58	1.37	1.51	2.05	2.55	2.77	4.54	5.05	5.08	5.20	3.59	2.12	3.12
43	1987	1.52	1.44	1.48	2.03	2.53	3.31	4.98	6.43	6.13	5.13	3.18	2.26	3.37
44	1988	1.72	1.57	1.70	2.07	3.03	4.47	5.56	5.81	6.69	4.59	2.91	2.46	3.55
45	1989	1.55	1.53	1.52	1.90	2.61	3.96	4.98	5.08	5.00	4.78	3.17	1.92	3.17
46	1990	1.51	1.43	1.67	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.56	1.43	1.55	1.94	2.63	3.76	4.97	5.64	5.59	4.69	3.05	2.01	3.24

Notes: 1) AVER(1). is average of all the data.

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.7.5 DEMRA (BWDB)

RIVER : BALU

(Unit : PWD in m)

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1962				2.06	2.50	3.75	5.06	5.43	5.94	4.14	2.57	1.97	-
1963	-	-	-	1.92	2.32	3.84	5.17	5.65	5.46	4.09	2.82	2.02	-
1964	1.70	1.55	1.73	2.07	2.73	3.56	5.14	5.99	5.54	4.64	2.95	1.85	3.29
1965	1.38	1.25	1.24	1.61	2.40	3.50	4.61	5.34	5.26	3.64	2.30	1.65	2.85
1966	1.41	1.17	1.30	1.67	2.06	2.80	4.93	5.34	5.86	3.95	2.27	1.73	2.87
1967	1.43	1.33	1.38	1.61	2.29	3.21	4.73	5.01	4.73	4.10	2.17	1.61	2.80
1968	1.32	1.25	1.31	2.03	2.50	3.74	5.39	5.64	4.90	4.46	2.64	1.85	3.09
1969	1.63	1.55	1.66	-	-	-	-	-	-	3.90	2.53	1.98	-
1970	1.69	1.59	1.72	2.12	2.97	3.82	5.08	6.05	5.18	4.90	3.09	-	-
1971	-	-	-	2.06	2.42	3.78	5.03	5.88	5.60	4.68	3.12	2.16	-
1972	1.86	1.57	2.37	2.14	2.77	3.55	4.58	5.06	4.55	3.39	2.29	1.89	3.00
1973	1.55	1.53	1.59	2.17	3.02	3.98	5.00	5.55	5.09	4.54	3.04	2.32	3.28
1974	1.85	1.60	1.79	2.15	3.04	3.74	5.43	6.27	5.72	4.53	2.94	2.09	3.43
1975	1.72	1.65	1.68	2.12	2.61	3.29	4.51	5.24	5.04	4.29	2.92	2.11	3.10
1976	1.70	1.57	1.72	1.99	2.53	3.75	5.12	5.01	4.89	3.55	2.47	2.08	3.03
1977	1.70	1.59	1.75	2.50	3.28	4.43	5.07	5.56	5.34	4.24	2.79	2.18	3.37
1978	1.68	1.63	1.66	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	1.97	2.54	2.88	4.47	5.21	5.08	4.34	2.66	2.17	-
1980	1.70	1.63	1.80	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	2.10	2.46	3.39	4.80	5.17	5.00	3.50	2.25	1.82	-
1983	1.58	1.43	1.79	2.19	2.88	3.46	4.64	5.27	5.57	4.97	3.05	2.20	3.25
1984	1.91	1.53	1.78	2.45	3.26	4.17	5.40	5.70	5.75	4.73	2.84	2.19	3.48
1985	1.81	1.84	2.17	2.45	2.81	4.00	4.92	5.22	5.03	4.39	2.92	2.20	3.31
1986	1.80	1.63	1.74	2.28	2.63	2.98	4.53	4.86	4.91	4.67	3.09	2.03	3.10
1987	1.69	1.65	1.68	2.20	2.46	3.36	4.94	6.20	5.88	4.69	2.96	2.26	3.33
1988	1.82	1.77	1.87	2.23	3.09	4.30	5.46	5.73	6.43	4.35	2.84	2.32	3.52
1989	1.75	1.80	1.82	2.25	2.79	3.93	4.92	4.97	4.91	4.49	2.85	2.00	3.21
1990	1.70	1.68	1.84	-	-	-	-	-	-	-	-	-	-
AVER(1)	1.67	1.56	1.71	2.10	2.68	3.63	4.96	5.47	5.32	4.29	2.73	2.03	3.18

Notes:
1) AVER(1) is average of all the data.
2) Above data are necessary to be revised by using following equation to get the correct elevation.
Y=X + 0.007
where, X : above raw data Y : revised data

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.14.5 NAYARHAT (BWDB)

RIVER : BANGSHI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1964				2.42	3.36	4.45	6.52	7.56	6.97	5.92	3.73	2.42	-
2	1965	1.90	1.75	1.66	2.07	3.23	4.55	5.99	6.86	6.84	4.99	3.19	2.25	3.77
3	1966	1.91	1.72	1.74	2.09	2.68	4.97	6.26	6.86	7.56	5.29	2.97	2.24	3.86
4	1967	1.83	1.71	1.77	1.96	2.85	4.37	6.28	6.54	6.16	5.62	3.24	1.87	3.68
5	1968	1.96	1.86	1.87	2.45	3.21	5.03	6.98	7.34	6.43	6.12	3.43	2.32	4.08
6	1969	1.89	1.76	1.81	2.23	3.00	4.99	6.60	7.21	7.23	5.09	3.02	2.32	3.93
7	1970	1.92	1.72	1.77	2.45	3.85	4.91	6.50	8.09	6.45	6.34	3.56	2.40	4.16
8	1971	2.01	1.75	-	-	-	-	-	-	-	-	-	-	-
9	1972	-	-	-	2.19	3.38	4.65	5.72	6.52	5.95	4.65	2.76	2.06	-
10	1973	1.72	1.52	1.61	2.26	3.54	5.06	6.28	7.16	6.43	5.73	3.32	2.48	3.93
11	1974	2.04	1.65	1.75	2.29	3.43	4.45	6.58	7.86	7.34	5.67	3.35	2.23	4.05
12	1975	1.83	1.65	1.59	2.02	2.70	-	-	-	-	5.36	3.29	2.36	-
13	1976	1.90	1.62	1.70	1.96	2.70	4.48	6.04	5.99	5.92	4.34	2.68	2.18	3.46
14	1977	1.73	1.53	1.69	2.56	3.77	5.31	6.02	6.73	6.61	5.27	3.06	2.26	3.88
15	1978	1.79	1.56	1.54	1.91	3.00	4.79	5.99	6.30	5.81	4.57	2.71	2.10	3.51
16	1979	1.74	1.46	1.55	1.86	2.50	2.96	5.16	6.15	6.04	5.29	2.87	2.22	3.32
17	1980	1.75	1.50	1.62	1.94	3.35	4.50	5.72	7.36	7.00	5.38	3.24	2.30	3.81
18	1981	1.86	1.62	1.64	2.42	2.73	3.76	5.87	6.56	6.41	4.41	2.71	-	-
19	1982	2.18	1.71	1.47	2.20	2.85	3.98	5.69	6.02	5.86	4.40	2.57	2.03	3.41
20	1983	1.72	1.45	1.87	2.20	3.18	4.19	5.58	6.23	6.68	6.22	3.56	2.27	3.76
21	1984	1.95	1.62	1.67	2.16	3.45	5.43	6.52	7.05	7.05	5.73	3.10	2.17	3.99
22	1985	1.75	1.54	1.94	2.27	2.89	4.83	6.05	6.44	6.27	5.45	3.30	2.28	3.75
23	1986	1.79	1.47	1.57	2.14	2.68	3.18	5.46	5.95	6.12	6.11	3.71	2.29	3.54
24	1987	1.82	1.61	1.58	2.16	2.49	3.79	5.89	7.87	7.38	5.94	3.30	2.34	3.85
25	1988	1.88	1.67	1.74	2.17	3.20	4.99	6.47	7.06	8.24	5.23	3.13	2.64	4.04
26	1989	1.82	1.70	1.65	2.00	2.78	4.53	5.79	5.81	5.82	5.52	3.35	2.15	3.58
27	1990	1.79	1.60	1.76	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.86	1.63	1.69	2.18	3.07	4.51	6.08	6.81	6.61	5.39	3.17	2.26	3.78

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.42 MILL BARAK (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945				1.96	2.38	-	4.55	5.68	5.66	4.46	-	1.99	-
2	1946	1.56	1.49	1.53	1.90	2.62	3.77	5.06	5.45	4.89	4.34	-	2.13	-
3	1947	1.63	1.48	1.60	2.06	2.43	3.64	4.72	5.45	4.99	4.31	-	1.93	-
4	1948	1.59	1.49	1.57	1.98	2.94	-	5.20	6.01	5.14	4.46	-	1.92	-
5	1949	1.56	1.43	1.59	2.09	2.90	-	5.33	5.63	5.65	4.45	2.65	1.54	-
6	1950	1.51	1.46	1.51	1.89	2.28	3.39	4.86	5.18	5.40	3.77	2.32	1.66	2.94
7	1951	1.34	1.26	1.68	1.86	2.10	2.86	5.00	-	-	-	-	1.59	-
8	1952	-	1.57	-	1.76	2.22	3.21	4.56	4.59	5.22	4.45	2.90	1.96	-
9	1953	1.51	1.57	1.84	2.01	2.41	3.41	4.60	5.39	5.11	4.47	2.45	1.77	3.05
10	1954	1.43	1.55	1.53	1.98	2.55	3.87	5.59	6.73	6.09	4.57	2.77	1.80	3.37
11	1955	1.54	1.48	1.68	2.05	2.53	3.60	-	6.72	5.42	3.93	2.70	1.85	-
12	1956	1.44	1.33	1.45	1.61	2.95	4.33	5.29	5.07	5.27	3.74	2.73	1.64	3.07
13	1957	1.18	1.15	1.13	1.40	2.23	2.86	4.13	5.03	4.11	3.01	1.90	1.41	2.46
14	1958	1.21	1.16	1.37	1.69	2.64	3.17	3.99	5.27	5.70	4.31	2.78	1.92	2.93
15	1959	-	-	-	1.95	2.69	3.71	4.85	5.31	4.72	4.30	2.81	1.84	-
16	1960	1.41	1.35	1.28	1.57	2.07	3.15	4.44	5.27	5.59	4.46	2.45	1.87	2.91
17	1961	1.55	1.38	1.92	1.93	2.52	3.59	4.15	4.90	5.14	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	1.99	2.47	4.63	5.42	5.79	4.95	4.51	2.53	1.92	2.85
25	1969	1.57	1.53	1.65	1.88	2.18	3.48	4.91	5.54	5.56	3.83	2.43	1.90	3.04
26	1970	1.59	1.46	1.63	2.04	2.83	3.66	4.98	6.24	5.13	4.82	2.96	2.08	3.29
27	1971	1.81	1.63	1.45	1.84	2.20	3.42	4.91	5.82	5.71	4.58	3.00	2.07	3.20
28	1972	1.77	1.47	1.63	2.08	2.70	3.43	4.39	4.95	4.42	3.27	2.20	1.78	2.84
29	1973	1.48	1.40	1.47	2.10	2.83	3.78	4.78	5.50	4.97	4.39	2.91	2.16	3.15
30	1974	1.78	1.57	1.78	2.10	2.87	3.57	5.21	6.23	5.65	4.32	2.81	2.01	3.33
31	1975	1.71	1.62	1.62	2.04	2.50	3.13	4.31	5.06	4.88	4.05	2.83	2.08	2.99
32	1976	1.67	1.55	1.74	2.00	2.47	3.47	4.81	4.76	4.68	3.32	2.31	1.96	2.90
33	1977	1.59	1.54	1.72	2.33	2.99	4.03	4.68	5.28	5.04	3.85	2.58	2.03	3.14
34	1978	1.61	1.55	1.59	1.86	2.60	3.71	4.59	5.00	4.53	3.59	2.40	1.83	2.91
35	1979	1.57	1.37	1.54	1.82	2.31	2.63	4.05	4.81	4.64	3.94	2.43	1.96	2.76
36	1980	1.54	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	2.07	2.39	3.13	4.57	5.23	4.96	3.45	2.37	1.90	-
38	1982	1.55	1.50	1.58	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.06	2.73	3.34	4.43	5.00	5.42	4.70	3.03	2.08	-
40	1984	1.82	1.62	1.73	2.07	2.88	4.15	5.02	5.30	5.38	4.23	2.46	1.90	3.21
41	1985	1.59	1.56	1.89	2.18	2.52	3.72	4.63	4.94	4.78	4.18	2.72	2.02	3.06
42	1986	1.57	1.44	1.53	1.94	2.36	2.75	4.20	4.62	4.66	4.36	2.90	1.89	2.85
43	1987	1.52	1.46	1.54	2.04	2.20	3.10	4.68	6.10	5.75	4.41	2.73	2.02	3.13
44	1988	1.68	1.62	1.72	2.07	2.83	4.00	5.16	5.56	6.38	4.00	2.61	2.08	3.31
45	1989	1.55	1.64	1.66	1.91	2.47	3.62	4.55	4.65	4.58	4.12	2.54	1.85	2.93
46	1990	1.54	1.50	1.74	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.56	1.48	1.60	1.95	2.53	3.51	4.74	5.39	5.17	4.14	2.62	1.90	3.02

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X - 0.037

where, X : above raw data Y : revised data

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.43 HARIHARPARA (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945										4.14	2.52	1.67	-
2	1946	1.26	1.17	1.21	1.74	2.48	3.48	4.67	4.90	4.83	4.12	-	1.98	-
3	1947	1.49	1.21	1.41	1.83	1.84	-	4.29	-	4.62	-	-	-	-
4	1948	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1949	-	-	-	2.46	3.24	4.19	5.19	5.62	5.58	-	-	-	-
6	1950	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1953	-	-	-	1.81	2.21	3.12	4.13	4.98	4.44	3.95	2.28	1.15	-
10	1954	0.95	1.08	1.13	1.76	2.25	3.50	5.03	5.98	5.44	4.14	-	1.59	-
11	1955	1.12	1.16	1.32	1.65	2.20	3.21	4.57	6.08	5.04	3.72	2.49	1.48	2.84
12	1956	1.05	1.45	1.75	1.94	2.64	3.57	4.42	4.30	4.49	3.01	2.41	1.67	2.73
13	1957	1.31	1.24	1.17	1.57	2.31	2.90	4.02	4.79	3.96	2.95	1.95	1.34	2.46
14	1958	1.19	1.28	1.32	1.46	2.50	2.91	3.74	4.87	5.15	-	-	-	-
15	1959	-	-	-	1.69	2.48	3.49	4.53	4.92	4.35	3.96	2.59	1.65	-
16	1960	1.17	1.25	1.13	1.36	1.83	3.00	4.16	4.93	5.14	4.17	2.27	1.65	2.67
17	1961	1.34	1.17	1.75	1.73	2.29	3.32	3.88	4.58	4.75	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	1.80	2.16	3.40	5.06	5.38	4.59	4.17	2.32	1.50	-
25	1969	1.35	1.41	1.35	1.75	2.04	3.34	4.66	5.23	5.22	3.62	2.26	1.67	2.83
26	1970	1.50	1.31	1.45	1.86	2.66	3.47	4.71	5.81	4.89	4.57	2.81	1.94	3.08
27	1971	1.62	1.37	1.35	1.80	2.24	3.41	4.72	5.48	5.37	4.33	2.77	1.47	2.99
28	1972	1.42	1.31	1.41	1.90	2.50	3.15	4.17	4.67	4.18	3.06	1.98	1.68	2.62
29	1973	1.32	1.30	1.39	1.88	2.67	3.59	4.52	5.18	4.70	4.17	2.85	2.06	2.97
30	1974	1.53	1.34	1.53	1.81	2.67	3.33	4.92	5.90	5.27	4.04	2.56	1.77	3.06
31	1975	1.51	1.38	1.39	1.81	2.46	3.07	4.16	4.88	4.68	3.88	2.66	1.90	2.82
32	1976	1.43	1.31	1.50	1.72	2.18	3.24	4.48	4.53	4.41	3.16	2.11	1.84	2.66
33	1977	1.38	1.34	1.49	2.06	2.79	3.83	4.49	5.03	4.81	3.66	2.43	1.97	2.94
34	1978	1.54	1.32	1.48	1.67	2.60	3.61	4.38	4.77	4.34	3.43	2.29	1.66	2.76
35	1979	1.35	1.13	1.13	1.57	1.95	2.55	3.96	4.60	4.45	3.81	2.23	1.78	2.54
36	1980	1.37	1.14	1.23	1.06	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	1.83	2.59	3.05	4.18	4.65	5.13	4.30	2.92	1.78	-
40	1984	1.54	1.33	1.45	1.84	2.72	3.95	4.83	5.04	5.13	3.93	2.24	1.74	2.98
41	1985	1.29	1.41	1.77	1.99	2.29	3.56	4.42	4.65	4.52	3.98	2.47	1.92	2.86
42	1986	1.35	1.31	1.39	1.83	2.23	2.50	4.02	4.42	4.40	4.07	2.77	1.79	2.67
43	1987	1.31	1.36	1.30	1.83	2.03	2.86	4.46	5.78	5.45	4.17	2.52	1.90	2.91
44	1988	1.51	1.43	1.53	1.92	2.57	3.72	4.73	5.14	6.05	3.84	2.47	1.86	3.06
45	1989	1.21	1.28	1.25	1.70	2.44	3.35	4.25	4.35	4.27	3.81	2.29	1.44	2.64
46	1990	1.34	1.41	1.44	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.35	1.29	1.39	1.77	2.39	3.32	4.44	5.05	4.83	3.86	2.44	1.71	2.81

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.71 KALAGACHIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1977	-	-	-	-	2.93	3.93	4.50	5.02	4.67	3.64	2.48	1.91	-
2	1978	1.47	1.40	1.44	1.77	2.54	3.61	4.39	4.77	4.33	3.49	2.35	1.87	2.79
3	1979	1.59	1.41	1.59	-	-	-	-	-	-	-	-	-	-
4	1980	-	-	-	2.03	2.86	3.57	4.36	-	-	-	-	-	-
5	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1983	-	-	-	2.04	2.73	3.26	4.28	4.76	5.12	4.37	3.26	2.03	2.65
8	1984	1.68	1.45	1.69	2.11	2.88	4.12	4.83	4.92	5.01	3.95	2.44	1.85	3.08
9	1985	1.46	1.49	1.81	2.03	2.38	3.55	4.49	4.68	4.59	4.07	2.63	1.88	2.92
10	1986	1.59	1.36	1.47	2.05	2.32	2.74	4.11	4.40	4.42	4.02	2.81	1.77	2.76
11	1987	1.44	1.39	1.45	2.11	2.26	2.88	4.48	5.63	5.35	4.08	2.59	1.89	2.96
12	1988	1.46	1.40	1.49	1.85	2.68	3.63	4.56	4.86	5.28	3.52	2.30	1.76	2.90
13	1989	1.19	1.51	1.56	1.94	2.63	3.57	4.43	4.55	4.46	3.97	2.51	1.69	2.83
14	1990	1.45	1.23	1.32	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.48	1.40	1.54	1.99	2.62	3.49	4.44	4.84	4.80	3.90	2.60	1.85	2.86

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.71A REKABI BAZAR(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				1.99	2.58	3.84	5.07	5.26	4.55	4.14	2.39	1.68	-
2	1969	1.46	1.38	1.49	1.80	2.14	3.46	4.67	5.11	5.10	3.64	2.35	1.77	2.86
3	1970	1.48	1.42	1.56	1.93	2.78	3.58	4.73	5.64	4.86	4.52	2.90	1.99	3.12
4	1971	1.73	1.52	1.55	1.93	2.32	3.55	4.74	5.39	5.29	-	-	-	-
5	1972	-	-	-	1.99	2.59	3.32	4.26	4.65	4.20	3.15	2.14	1.62	-
6	1973	1.43	1.36	1.54	2.06	2.83	3.75	4.59	5.14	4.70	4.18	2.86	2.14	3.05
7	1974	1.68	1.45	1.63	1.99	2.81	3.46	4.89	5.72	5.16	4.06	2.67	1.91	3.12
8	1975	1.62	1.53	1.49	1.95	2.47	3.11	4.16	4.83	4.64	3.88	2.75	1.95	2.87
9	1976	1.53	1.41	1.61	-	-	-	-	-	-	-	-	-	-
10	1977	-	-	-	2.23	2.93	3.90	4.52	5.06	4.76	3.71	2.49	1.97	-
11	1978	1.44	1.40	1.43	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	1.88	2.64	3.40	4.23	5.13	4.76	3.56	2.32	1.63	-
14	1981	1.34	1.16	1.28	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	2.02	2.69	3.27	4.34	4.82	5.20	4.40	2.97	1.96	-
17	1984	1.74	1.42	1.67	2.09	2.91	4.14	4.92	5.06	5.18	4.06	2.40	1.84	3.12
18	1985	1.65	1.54	1.84	2.08	2.40	3.72	4.59	4.80	4.64	4.12	2.72	2.01	3.01
19	1986	1.56	1.41	1.55	2.02	2.41	2.84	4.33	4.62	4.54	4.14	2.87	1.87	2.85
20	1987	1.54	1.51	1.55	2.09	2.28	2.96	4.57	5.73	5.40	4.21	2.68	2.00	3.04
21	1988	1.56	1.50	1.62	1.96	2.76	3.76	4.83	5.14	5.65	3.82	2.51	1.92	3.09
22	1989	1.52	1.63	1.58	2.03	2.76	3.67	4.53	4.63	4.56	4.10	2.66	1.87	2.96
23	1990	1.60	1.37	1.54	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.55	1.44	1.56	2.00	2.61	3.51	4.59	5.10	4.89	3.98	2.60	1.88	3.01

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.179 DEMRA (BWDB)

RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1952				1.88	2.36	3.40	4.88	4.94	5.40	4.82	3.10	2.10	-
2	1953	1.57	1.70	2.00	2.19	2.63	3.64	4.67	5.38	5.10	4.48	2.57	1.86	3.15
3	1954	1.55	1.54	1.64	2.05	2.76	4.32	5.40	6.26	5.89	4.58	2.82	1.85	3.39
4	1955	1.48	1.48	1.65	2.10	2.55	3.67	5.03	6.43	5.54	4.14	2.97	2.25	3.27
5	1956	1.78	1.50	1.50	1.90	3.28	4.54	5.40	5.23	5.40	3.99	2.86	1.95	3.28
6	1957	1.66	1.54	1.75	1.90	2.74	3.20	4.55	5.28	4.41	3.39	2.24	1.76	2.87
7	1958	1.59	1.55	1.56	1.89	2.83	3.34	4.18	5.21	5.56	4.44	2.96	2.16	3.11
8	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
10	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1964	-	-	-	-	-	-	-	-	-	-	2.94	1.86	-
14	1965	1.39	1.26	1.31	1.55	2.43	3.51	4.63	5.36	5.28	3.65	2.31	1.69	2.86
15	1966	1.42	1.22	1.33	1.68	2.07	3.83	4.96	5.37	5.90	3.97	2.31	1.73	2.98
16	1967	1.45	1.33	1.36	1.59	2.26	3.21	4.74	5.01	4.75	4.07	2.20	1.63	2.80
17	1968	1.35	1.27	1.32	2.05	2.53	3.76	5.40	5.67	4.92	4.46	2.62	1.88	3.10
18	1969	1.68	1.60	1.70	2.00	2.32	3.69	5.01	5.52	5.54	3.94	2.59	2.03	3.14
19	1970	1.70	1.63	1.77	-	-	-	-	-	-	-	-	-	-
20	1971	-	-	-	2.18	2.48	3.84	5.11	5.74	5.66	4.73	3.20	2.22	-
21	1972	1.93	1.58	1.76	2.23	2.87	3.61	4.64	5.11	4.60	3.46	2.33	1.86	3.00
22	1973	1.59	1.54	1.61	2.19	3.06	4.00	5.03	5.57	5.12	4.58	3.06	2.29	3.30
23	1974	1.86	1.61	1.79	2.18	3.08	3.81	5.50	6.30	5.76	4.57	2.99	2.14	3.47
24	1975	1.77	1.67	1.69	2.09	2.62	3.33	4.52	5.24	5.06	4.29	2.92	2.12	3.11
25	1976	1.70	1.62	1.73	2.03	2.60	3.80	5.19	5.06	4.93	3.61	2.50	2.10	3.07
26	1977	1.65	1.52	1.68	2.41	3.19	4.35	4.99	5.48	5.26	4.16	2.73	2.10	-
27	1978	1.59	1.54	1.60	1.92	2.73	4.07	4.95	5.23	4.75	3.83	2.51	1.91	3.05
28	1979	1.61	1.40	1.56	1.87	2.50	2.83	4.36	5.10	4.98	4.22	2.57	2.19	2.93
29	1980	1.68	1.63	1.77	-	-	-	-	-	-	-	-	-	-
30	1981	-	-	-	2.20	2.55	3.33	4.82	5.42	5.16	3.64	2.57	1.99	-
31	1982	1.57	1.51	1.48	2.14	2.51	3.44	4.70	5.05	4.88	3.40	2.22	1.87	2.90
32	1983	1.66	1.50	1.90	2.15	2.85	3.44	4.58	5.16	5.51	4.76	3.04	2.05	3.22
33	1984	1.75	1.49	1.68	2.16	3.03	4.37	5.20	5.46	5.48	4.43	2.54	1.95	3.30
34	1985	1.56	1.57	1.92	2.23	2.61	3.95	4.88	5.13	4.95	4.32	2.78	2.04	3.16
35	1986	1.65	1.50	1.61	2.06	2.49	2.70	4.40	4.76	4.83	4.57	3.02	1.94	2.96
36	1987	1.53	1.58	1.62	2.12	2.36	3.27	4.84	6.09	5.79	4.60	3.04	2.03	3.24
37	1988	1.66	1.62	1.70	-	-	-	-	-	-	-	-	-	-
38	1989	-	-	-	2.02	2.69	3.82	4.81	4.87	4.80	4.38	2.70	1.87	-
39	1990	1.49	1.51	1.71	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.62	1.52	1.64	2.03	2.65	3.66	4.87	5.39	5.21	4.19	2.71	1.98	3.11

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.275.5 MEGHNA FERRY GHAT (BWDB)

RIVER : SURMA-MEGHNA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				1.90	2.37	3.61	5.00	5.31	4.55	4.11	2.47	1.75	-
2	1969	1.53	1.38	1.52	1.91	2.09	3.55	4.81	5.22	5.21	3.82	2.54	2.02	2.97
3	1970	1.70	1.58	1.70	2.15	2.94	3.75	4.85	5.68	4.96	4.64	3.08	2.16	3.27
4	1971	1.90	1.63	1.69	2.12	2.43	3.48	4.76	5.35	-	-	-	-	-
5	1972	2.01	1.56	1.70	2.15	2.74	3.49	4.47	4.77	4.30	3.32	2.34	1.90	2.90
6	1973	1.58	1.44	1.53	2.19	2.98	3.91	4.80	5.22	4.85	4.38	3.07	2.44	3.20
7	1974	1.87	1.63	1.81	2.18	3.01	3.69	5.09	5.85	5.30	4.30	2.89	2.15	3.31
8	1975	1.82	1.86	1.87	2.05	2.63	3.22	4.27	4.95	4.79	4.06	2.92	2.04	3.04
9	1976	1.60	1.53	1.66	1.94	2.53	3.61	4.92	4.82	4.62	3.38	2.43	2.12	2.93
10	1977	1.63	1.41	1.65	2.38	3.10	4.08	4.78	5.23	5.01	3.87	2.76	2.03	3.16
11	1978	1.58	1.49	1.58	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1981	-	-	-	2.08	2.50	3.24	4.61	5.15	4.85	3.56	2.54	1.97	-
15	1982	1.52	1.36	1.39	2.14	2.51	3.21	4.56	4.90	4.84	3.38	2.17	1.73	2.81
16	1983	1.56	1.39	1.75	2.02	2.79	3.44	4.53	4.98	5.31	4.52	3.02	2.02	3.11
17	1984	1.76	1.55	1.66	1.94	2.93	4.15	4.93	5.04	5.22	4.20	2.58	1.96	3.16
18	1985	1.59	1.57	1.92	2.20	2.65	3.93	4.76	4.96	4.76	4.22	2.87	2.16	3.13
19	1986	1.66	1.52	1.63	2.16	2.49	2.86	4.29	4.67	4.66	4.30	3.07	2.01	2.94
20	1987	1.60	1.57	1.63	2.20	2.41	3.30	4.77	5.77	5.47	4.38	2.81	2.12	3.17
21	1988	1.67	1.63	1.70	2.11	3.01	4.22	5.22	5.44	5.87	4.15	2.71	2.15	3.32
22	1989	1.57	1.66	1.63	2.06	2.80	3.83	4.72	4.87	4.74	4.32	2.88	1.93	3.08
23	1990	1.55	1.52	1.72	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.67	1.54	1.67	2.10	2.68	3.61	4.74	5.17	4.96	4.05	2.73	2.04	3.09

Notes: 1) AVER(1) is average of all the data.

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	MONTHLY AVERAGE OF DAILY HWL													
2														
3	STATION : NO.299 TONGI(BWDB)													
4	RIVER : TONGI KHAL													
5													(Unit : PWD in m)	
6	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	AVER
7	1960				1.58	2.11	3.33	4.72	5.54	5.78	4.81	2.59	1.75	-
8	1961	1.40	1.27	1.83	1.82	2.63	4.06	4.63	5.37	5.65	-	-	-	-
9	1962	1.63	1.72	1.62	1.79	2.32	3.78	5.41	5.91	6.59	4.45	2.64	1.84	3.31
10	1963	1.52	1.42	1.36	1.61	2.05	3.77	5.30	6.01	5.93	4.26	2.87	1.91	3.17
11	1964	1.57	1.29	1.50	2.08	2.88	3.51	5.32	6.46	5.88	4.95	3.21	1.96	3.38
12	1965	1.37	1.25	1.25	1.60	2.44	3.51	4.81	5.69	5.69	4.10	2.60	1.71	3.00
13	1966	1.32	1.14	1.30	1.63	2.00	3.77	5.06	5.58	6.27	4.26	2.48	1.78	3.05
14	1967	1.42	1.30	1.41	1.56	2.31	3.26	4.92	5.42	5.03	4.50	2.59	1.63	2.95
15	1968	1.31	1.24	1.32	1.87	2.38	3.83	5.63	6.05	5.20	4.81	2.87	1.74	3.19
16	1969	1.47	1.40	1.46	1.80	2.13	3.68	5.19	5.92	5.91	4.20	2.53	1.86	3.13
17	1970	1.53	1.42	1.51	2.00	2.87	3.84	5.30	6.68	5.44	5.26	3.17	2.05	3.42
18	1971	1.75	1.52	-	-	2.90	4.06	5.39	6.12	6.15	5.05	3.48	2.12	-
19	1972	1.78	1.43	1.46	2.02	2.65	3.58	4.70	5.35	4.79	3.64	2.20	1.59	2.93
20	1973	1.30	1.21	1.31	1.98	3.05	4.06	5.20	5.82	5.27	4.71	3.03	2.20	3.26
21	1974	1.65	1.31	1.47	2.09	2.91	3.70	5.54	6.59	6.00	-	2.94	1.85	-
22	1975	1.46	1.31	1.31	1.88	2.40	-	-	-	-	-	-	-	-
23	1976	-	-	-	1.79	2.39	-	-	-	-	-	-	-	-
24	1977	-	-	-	2.26	-	4.28	5.00	5.52	5.36	4.20	2.70	1.87	-
25	1978	1.36	1.19	1.17	1.70	2.76	4.10	4.89	5.23	4.74	3.80	2.37	1.64	2.91
26	1979	1.29	1.05	1.25	1.71	2.19	2.58	4.24	5.12	4.99	4.27	2.61	1.89	2.77
27	1980	1.32	1.16	1.37	1.81	2.81	3.77	4.65	5.91	5.66	4.25	2.68	1.79	3.10
28	1981	1.27	1.20	1.30	-	-	-	-	-	-	-	-	-	-
29	1982	-	-	-	1.84	2.34	3.20	4.63	5.24	4.87	3.60	2.11	1.53	-
30	1983	1.31	1.15	1.53	1.87	2.69	3.30	4.58	5.20	5.53	5.02	3.09	1.90	3.10
31	1984	1.55	1.28	1.36	1.86	2.99	4.40	5.26	5.65	5.59	4.59	2.53	1.72	3.23
32	1985	1.34	1.26	1.60	1.95	2.43	3.81	4.84	5.19	5.00	4.37	2.83	1.90	3.04
33	1986	1.38	1.18	1.32	1.84	2.33	2.58	4.39	4.85	4.90	4.86	3.18	1.85	2.89
34	1987	1.36	1.23	1.27	1.81	2.23	3.12	4.85	6.35	5.99	4.78	2.77	1.95	3.14
35	1988	1.46	1.31	1.50	-	-	-	-	5.84	6.70	-	-	-	-
36	1989	-	-	-	1.74	2.38	3.83	4.83	4.87	4.81	4.55	2.89	1.77	-
37	1990	1.36	1.28	1.57	-	-	-	-	-	-	-	-	-	-
38														
39	AVER(1)	1.44	1.29	1.41	1.83	2.50	3.64	4.97	5.68	5.55	4.47	2.76	1.83	3.10
40														
41	N0tes:	1) AVER(1) is average of all the data												
42		2) Above data are necessary to be revised by using following equation to ge the correct elevation.												
43		Y=X + 0.122												
44		where, X : above raw data Y : revised data												

MONTHLY AVERAGE OF DAILY HWL

STATION : NO.302 MIRPUR (BWDB)

RIVER : TURAG

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1953				2.28	2.72	3.81	5.00	5.95	5.50	4.86	2.78	2.06	-
2	1954	1.67	1.77	1.78	2.29	2.80	4.23	5.96	7.32	6.52	4.91	2.99	1.95	
3	1955	1.55	1.46	1.67	2.00	2.48	3.46	5.09	7.22	5.64	4.08	2.95	2.13	3.31
4	1956	1.72	-	1.76	1.99	3.15	4.55	5.60	5.36	5.68	4.11	2.80	-	3.06
5	1957	-	1.81	1.74	2.00	2.75	3.25	4.63	5.69	-	3.44	2.26	1.76	-
6	1958	1.61	1.55	1.55	1.87	2.77	3.25	4.13	5.62	6.23	4.63	2.93	2.03	3.18
7	1959	-	-	-	2.11	2.94	4.27	5.44	5.93	5.20	4.71	3.09	2.02	-
8	1960	1.62	1.51	1.44	1.72	2.17	3.34	4.74	5.69	5.97	4.78	2.53	1.93	3.12
9	1961	1.61	1.44	2.00	1.98	2.59	3.79	4.38	5.22	5.51	4.62	2.76	1.77	3.14
10	1962	1.64	1.72	1.65	2.00	2.42	3.73	5.43	6.05	6.73	4.32	2.52	1.97	3.35
11	1963	1.70	1.62	1.62	1.85	2.08	3.65	5.37	6.17	6.10	4.27	2.87	2.25	3.30
12	1964	1.92	1.87	2.02	2.15	2.59	3.39	5.31	6.61	5.98	4.91	3.00	1.79	3.46
13	1965	1.30	1.18	1.18	1.53	2.24	3.42	4.68	5.76	5.72	3.92	2.33	1.69	2.91
14	1966	1.38	1.18	1.29	1.69	2.08	3.87	5.15	5.74	6.42	4.20	2.31	1.74	3.09
15	1967	1.40	1.32	1.35	-	-	-	-	-	-	-	-	-	-
16	1968	-	-	-	2.10	2.46	3.72	5.66	6.08	5.15	4.76	2.60	1.88	-
17	1969	1.91	1.78	1.94	2.24	2.55	3.85	5.24	5.92	5.95	4.08	2.54	2.03	3.34
18	1970	1.76	1.68	1.72	2.17	2.99	3.79	5.28	6.74	5.39	5.13	2.96	2.18	3.48
19	1971	1.94	1.76	-	-	-	-	-	-	-	-	-	-	-
20	1972	-	-	-	2.12	2.74	3.46	4.64	5.30	4.70	3.47	2.31	1.86	-
21	1973	1.58	1.53	1.60	2.12	2.92	3.90	5.08	5.85	5.26	4.65	3.01	2.27	3.31
22	1974	1.94	1.67	1.77	2.11	2.89	3.60	5.40	6.57	5.95	4.54	2.87	2.09	3.45
23	1975	1.75	1.68	1.72	2.10	2.53	-	-	-	-	4.17	2.84	2.04	-
24	1976	1.66	1.58	1.76	2.03	2.53	-	-	-	-	3.52	2.43	2.07	-
25	1977	1.57	1.49	1.66	2.38	3.10	4.24	4.93	5.54	5.34	4.08	2.64	2.02	3.25
26	1978	1.64	1.58	1.62	1.94	2.71	3.88	4.83	5.21	4.72	3.75	2.43	1.91	3.02
27	1979	1.66	1.46	1.64	2.22	2.52	3.29	4.83	5.54	5.29	3.69	2.48	2.00	-
28	1980	1.61	1.53	-	1.98	2.94	3.73	4.72	6.08	5.79	4.28	2.79	2.07	-
29	1981	1.69	1.59	1.69	2.22	2.52	3.29	4.83	5.54	5.29	3.69	2.48	2.00	-
30	1982	1.65	1.55	1.54	2.16	2.52	3.35	4.67	5.09	4.92	3.52	2.26	1.89	2.93
31	1983	1.66	1.54	1.88	2.14	2.84	3.43	4.58	5.20	5.60	4.96	3.08	2.09	3.25
32	1984	1.80	1.61	1.77	2.15	3.00	4.40	5.33	5.72	5.76	4.54	2.59	1.99	3.39
33	1985	1.66	1.61	1.95	2.19	2.57	3.93	4.89	5.25	5.05	4.39	2.85	2.11	3.20
34	1986	1.71	1.55	1.63	2.12	2.46	2.86	4.43	4.87	4.93	4.76	3.09	2.01	3.04
35	1987	1.66	1.61	1.64	2.10	2.31	3.24	4.92	6.55	6.13	4.78	2.86	2.15	3.33
36	1988	1.68	1.73	1.79	2.13	2.92	4.23	5.43	5.88	6.93	4.29	2.73	2.25	3.50
37	1989	1.67	1.70	1.67	1.00	2.66	3.85	4.86	4.93	4.87	4.48	2.79	1.96	3.04
38	1990	1.66	1.63	1.75	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.67	1.58	1.68	2.03	2.64	3.70	5.01	5.82	5.63	4.32	2.71	2.00	3.23

Notes:
1) AVER(1) is average of all the data.
2) Above data are necessary to be revised by using following equation to get the correct elevation.
Y=X + 0.042
where, X : above raw data Y : revised data

4.3 Monthly Average of Daily Low Water Level

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.7 PUBAIL (BWDB)

RIVER : BALU

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945							4.22	5.44	5.51	-	-	-	-
2	1946	1.11	0.91	1.03	-	-	-	-	-	-	-	-	-	-
3	1947	-	-	-	1.43	1.91	3.17	4.33	5.29	4.98	4.37	2.82	1.42	-
4	1948	1.01	0.96	0.94	1.36	2.48	3.91	4.96	5.67	4.99	4.62	2.75	1.45	2.93
5	1949	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1950	1.05	0.98	1.01	1.33	1.78	3.14	4.61	5.15	5.22	3.73	2.59	1.28	2.66
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	0.74	0.64	0.71	1.04	1.85	2.85	4.33	4.61	5.12	4.78	3.21	1.63	2.63
9	1953	0.97	0.89	-	-	-	-	-	-	-	-	-	-	-
10	1954	-	-	-	-	1.99	3.63	5.17	6.32	5.94	4.39	2.67	1.43	-
11	1955	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1956	2.06	1.90	2.17	2.53	-	4.87	5.95	5.67	5.96	4.60	3.20	1.88	-
13	1957	1.46	1.39	1.29	1.59	-	3.42	4.72	5.60	4.86	3.73	2.29	1.49	-
14	1958	1.28	1.22	1.22	1.52	2.57	3.31	4.17	5.30	6.17	4.97	3.36	1.96	3.09
15	1959	1.47	1.35	1.53	1.91	2.72	4.07	5.22	5.60	5.29	4.89	3.40	2.08	3.29
16	1960	1.45	1.37	1.30	1.57	2.12	3.49	4.84	5.63	5.76	5.16	2.97	1.95	3.13
17	1961	1.48	1.32	1.90	1.90	2.71	4.09	4.54	5.18	5.49	-	-	-	-
18	1962	-	-	-	1.88	2.44	3.92	5.37	5.80	6.60	4.82	2.89	1.88	-
19	1963	1.49	1.40	1.37	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	-	-	-	-	-	-	-	-	-	-
25	1969	-	-	-	1.85	2.20	3.70	5.16	5.97	5.99	4.55	2.80	1.93	-
26	1970	1.52	1.39	1.49	2.00	2.93	3.89	5.26	6.53	5.59	5.41	3.49	2.18	3.47
27	1971	1.73	1.51	1.37	1.96	2.54	3.76	5.27	6.05	6.05	4.85	3.52	2.23	3.40
28	1972	1.75	1.36	1.46	2.01	2.70	3.61	4.71	5.39	4.90	3.86	2.40	1.73	2.99
29	1973	1.33	1.28	1.42	2.01	3.24	4.17	5.39	5.86	5.51	4.99	3.34	2.42	3.41
30	1974	1.73	1.38	1.55	2.05	3.00	3.80	5.65	6.69	6.14	4.98	3.23	2.05	3.52
31	1975	1.53	1.40	1.39	1.86	2.45	3.28	4.65	5.48	5.31	4.71	3.20	2.06	3.11
32	1976	1.50	1.32	1.45	1.78	2.49	3.86	5.24	5.22	5.13	3.91	2.51	1.96	3.03
33	1977	1.43	1.27	1.49	2.37	3.26	4.43	5.15	5.67	5.62	4.53	3.03	2.06	3.36
34	1978	1.47	1.33	1.30	-	-	-	-	-	-	-	-	-	-
35	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	1.66	2.90	3.85	4.68	5.77	5.90	4.63	3.08	2.04	-
37	1981	1.56	1.42	1.41	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	1.98	2.91	3.50	4.72	5.46	5.75	5.29	3.38	2.06	-
40	1984	1.62	1.30	1.43	1.93	3.19	4.58	5.42	5.83	5.70	4.85	2.81	1.84	3.37
41	1985	1.38	1.28	1.66	2.04	2.63	3.96	5.02	5.43	5.24	4.61	3.10	2.03	3.20
42	1986	1.45	1.22	1.34	1.92	2.52	2.73	4.52	5.04	5.07	5.17	3.56	2.07	3.05
43	1987	1.40	1.30	1.35	1.92	2.51	3.28	4.94	6.40	6.11	5.10	3.15	2.22	3.31
44	1988	1.62	1.42	1.58	1.98	2.98	4.45	5.53	5.79	6.63	4.54	2.88	2.43	3.49
45	1989	1.44	1.40	1.36	1.76	2.56	3.94	4.96	5.08	4.99	4.76	3.15	1.85	3.10
46	1990	1.40	1.31	1.53	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.43	1.28	1.39	1.83	2.58	3.75	4.96	5.63	5.58	4.67	3.03	1.91	3.18

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.7.5 DEMRA (BWDB)
RIVER : BALU

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1962				1.63	2.15	3.64	5.01	5.39	5.91	4.04	2.27	1.55	-
2	1963	-	-	-	1.46	2.00	3.72	5.13	5.62	5.42	4.01	2.58	1.59	-
3	1964	1.21	1.11	1.24	2.07	2.73	3.56	5.14	5.99	5.54	4.64	2.95	1.85	3.17
4	1965	1.38	1.25	1.24	1.61	2.40	3.50	4.61	5.34	5.26	3.64	2.30	1.65	2.85
5	1966	1.41	1.17	1.30	1.67	2.06	2.80	4.93	5.34	5.86	3.95	2.27	1.73	2.87
6	1967	1.43	1.33	1.38	1.61	2.29	3.21	4.73	5.01	4.73	4.10	2.17	1.61	2.80
7	1968	1.32	1.25	1.31	1.63	2.21	3.63	5.36	5.61	4.86	3.39	2.31	1.41	2.86
8	1969	1.13	1.02	1.14	-	-	-	-	-	-	3.76	2.21	1.56	-
9	1970	1.21	1.10	1.24	1.69	2.75	3.72	5.03	6.03	5.14	4.83	2.85	-	-
10	1971	-	-	-	1.62	2.14	3.65	4.98	5.66	5.58	4.62	2.93	1.79	-
11	1972	1.41	1.11	1.26	1.72	2.51	3.42	4.52	5.02	4.50	3.23	1.93	1.40	2.67
12	1973	1.08	1.03	1.11	1.75	2.75	3.87	4.94	5.55	5.04	4.48	2.80	1.97	3.03
13	1974	1.40	1.16	1.34	1.75	2.83	3.62	5.40	6.24	5.70	4.47	2.69	1.65	3.19
14	1975	1.26	1.18	1.21	1.64	2.25	3.06	4.46	5.20	5.00	4.17	2.66	1.69	2.82
15	1976	1.25	1.09	1.24	1.56	2.19	3.59	5.08	4.97	4.84	3.36	2.08	1.63	2.74
16	1977	1.21	1.10	1.29	2.12	3.07	4.35	5.02	5.53	5.29	4.13	2.51	1.72	3.11
17	1978	1.22	1.12	1.14	-	-	-	-	-	-	-	-	-	-
18	1979	-	-	-	1.49	2.14	2.59	4.38	5.16	5.02	4.24	2.31	1.69	-
19	1980	1.21	1.11	1.28	-	-	-	-	-	-	-	-	-	-
20	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1982	-	-	-	1.63	2.12	3.16	4.74	5.11	4.91	3.33	1.96	1.44	-
22	1983	1.16	1.01	1.65	1.86	2.62	3.26	4.53	5.17	5.49	4.68	2.90	2.07	3.05
23	1984	1.77	1.32	1.49	2.24	2.94	3.99	5.26	5.64	5.70	4.62	2.50	1.74	3.27
24	1985	1.28	1.25	1.66	2.00	2.39	3.82	4.86	5.14	4.97	4.28	2.59	1.74	3.00
25	1986	1.26	1.07	1.24	1.82	2.24	2.61	4.41	4.75	4.84	4.58	2.82	1.63	2.77
26	1987	1.21	1.14	1.14	1.76	2.10	3.13	4.85	6.16	5.85	4.59	2.64	1.83	3.03
27	1988	1.33	1.24	1.38	1.78	2.79	4.16	5.39	5.68	6.38	4.20	2.47	1.87	3.22
28	1989	1.25	1.25	1.27	1.73	2.39	3.76	4.83	4.90	4.83	4.36	2.55	1.55	2.89
29	1990	1.19	1.13	1.30	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.29	1.15	1.30	1.74	2.42	3.49	4.90	5.43	5.28	4.16	2.49	1.68	2.96

Notes:
1) AVER(1) is average of all the data.
2) Above data are necessary to be revised by using following equation to get the correct elevation.
Y=X + 0.007
where, X : above raw data Y : revised data

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.14.5 NAYARHAT (BWDB)

RIVER : BANGSHI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1964				2.42	3.36	4.45	6.52	7.56	6.97	5.92	3.73	2.42	-
2	1965	1.90	1.75	1.66	2.07	3.23	4.55	5.99	6.86	6.84	4.99	3.19	2.25	3.77
3	1966	1.91	1.72	1.74	2.09	2.68	4.97	6.26	6.86	7.56	5.29	2.97	2.24	3.86
4	1967	1.83	1.71	1.77	1.96	2.85	4.37	6.28	6.54	6.16	5.62	3.24	1.87	3.68
5	1968	1.96	1.86	1.87	2.40	3.18	4.99	6.95	7.32	6.41	6.07	3.40	2.28	3.45
6	1969	1.87	1.73	1.76	2.15	2.95	4.99	6.60	7.21	7.23	5.05	2.98	2.30	3.90
7	1970	1.87	1.68	1.74	2.39	3.79	4.91	6.50	8.09	6.45	6.34	3.52	2.38	4.14
8	1971	1.99	1.72	-	-	-	-	-	-	-	-	-	-	-
9	1972	-	-	-	2.12	3.34	4.65	5.72	6.54	5.95	4.62	2.72	2.04	-
10	1973	1.69	1.48	1.55	2.18	3.47	5.06	6.28	7.16	6.43	5.69	3.27	2.44	3.89
11	1974	2.00	1.62	1.69	2.25	3.39	4.45	6.58	7.86	7.34	5.63	3.31	2.20	4.03
12	1975	1.78	1.61	1.55	1.97	2.64	-	-	-	-	5.33	3.25	2.31	-
13	1976	1.89	1.59	1.65	1.92	2.66	4.48	6.04	5.99	5.92	4.30	2.63	2.14	3.43
14	1977	1.70	1.49	1.65	2.52	3.72	5.28	6.00	6.72	6.59	5.25	3.01	2.23	3.85
15	1978	1.75	1.51	1.48	1.86	2.96	4.75	5.98	6.29	5.79	4.53	2.65	2.06	3.47
16	1979	1.69	1.41	1.50	1.79	2.43	2.91	5.12	6.12	6.03	5.25	2.83	2.16	3.27
17	1980	1.70	1.45	1.55	1.88	3.30	4.47	5.70	7.32	6.96	5.35	3.19	2.25	3.76
18	1981	1.80	1.56	1.57	2.3[illegible]	2.68	3.73	5.83	6.55	6.39	4.37	2.66	-	-
19	1982	2.15	1.68	1.44	2.12	2.79	3.92	5.68	6.00	5.84	4.35	2.54	1.98	3.37
20	1983	1.66	1.38	1.78	2.12	3.14	4.15	5.55	6.20	6.66	6.19	3.51	2.21	3.71
21	1984	1.87	1.54	1.58	2.07	3.38	5.39	6.49	7.02	7.01	5.68	3.05	2.11	3.93
22	1985	1.67	1.47	1.85	2.19	2.84	4.78	6.02	6.41	6.26	5.42	3.25	2.22	3.70
23	1986	1.71	1.39	1.48	2.04	2.61	3.11	5.45	5.93	6.10	6.07	3.67	2.25	3.48
24	1987	1.75	1.53	1.49	2.07	2.41	3.74	5.85	7.82	7.35	5.90	3.28	2.28	3.79
25	1988	1.80	1.58	1.64	2.09	3.14	4.96	6.43	7.01	8.17	5.19	3.09	2.60	3.98
26	1989	1.76	1.61	1.57	1.92	2.71	4.51	5.76	5.80	5.81	5.47	3.31	2.10	3.53
27	1990	1.72	1.53	1.69	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.82	1.58	1.64	2.12	3.03	4.48	6.07	6.78	6.59	5.35	3.13	2.22	3.71

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.42 MILL BARAK (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945				1.49	1.97	-	4.55	5.68	5.66	4.46	-	1.56	-
2	1946	1.14	1.00	1.05	1.47	2.34	3.65	5.06	5.45	4.89	4.34	-	1.65	-
3	1947	1.13	0.92	1.06	1.55	2.07	3.49	4.72	5.45	4.99	4.31	-	1.38	-
4	1948	1.03	0.98	1.00	1.41	2.65	-	5.20	6.01	5.14	4.46	-	1.44	-
5	1949	1.02	0.91	1.02	1.58	2.66	-	5.33	5.63	5.65	4.45	2.65	1.54	-
6	1950	1.01	0.92	0.99	1.34	1.79	3.22	4.86	5.18	5.40	3.77	2.32	1.66	2.71
7	1951	1.17	0.94	1.20	1.36	1.38	1.85	3.78	-	-	-		1.59	-
8	1952	-	1.02	-	1.15	1.71	3.05	4.48	4.55	5.18	4.41	2.71	1.48	-
9	1953	0.98	1.02	1.30	1.57	2.09	3.29	4.55	5.38	5.07	4.44	2.27	1.37	2.78
10	1954	0.98	1.05	1.00	1.50	2.21	3.71	5.53	6.71	6.05	4.54	2.55	1.41	3.10
11	1955	1.10	1.01	1.19	1.70	2.15	3.45	-	6.68	5.39	3.90	2.58	1.43	-
12	1956	0.94	0.81	0.97	1.23	2.76	4.26	5.26	5.04	5.24	3.68	2.47	1.20	2.82
13	1957	0.75	0.69	0.59	0.85	1.88	2.69	4.07	5.00	4.06	2.89	1.54	0.92	2.16
14	1958	0.70	0.66	0.88	1.21	2.36	2.99	3.92	5.22	5.67	4.26	2.57	1.49	2.66
15	1959	-	-	-	1.49	2.41	4.61	4.82	5.27	4.68	4.24	2.64	1.39	-
16	1960	0.91	0.83	0.78	1.05	1.61	2.98	4.37	5.25	5.57	4.42	2.12	1.34	2.60
17	1961	0.98	0.79	1.38	1.43	2.14	3.52	4.10	4.87	5.11	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	1.47	2.10	3.52	5.39	5.76	4.92	4.45	2.29	1.39	-
25	1969	1.03	0.95	1.04	1.30	1.73	3.34	4.88	5.52	5.54	3.76	2.13	1.40	2.72
26	1970	1.07	0.90	1.06	1.60	2.62	3.57	4.94	6.20	5.10	4.76	2.76	1.65	3.02
27	1971	1.23	1.10	0.83	1.15	1.79	3.26	4.89	5.80	5.69	4.56	2.79	1.58	2.89
28	1972	1.20	0.88	1.01	1.53	2.37	3.29	4.36	4.92	4.39	3.14	1.76	1.19	2.50
29	1973	0.85	0.76	0.81	1.55	2.50	3.66	4.74	5.47	4.94	4.35	2.67	1.76	2.84
30	1974	1.22	0.95	1.17	1.60	2.62	3.42	5.16	6.20	5.63	4.28	2.53	1.50	3.02
31	1975	1.11	0.98	0.98	1.48	2.09	2.90	4.26	5.03	4.86	4.00	2.52	1.58	2.65
32	1976	1.07	0.91	1.12	1.42	2.05	3.29	4.78	4.74	4.64	3.13	1.88	1.44	2.54
33	1977	0.94	0.85	1.05	1.84	2.68	3.92	4.63	5.25	5.00	3.75	2.24	1.53	2.81
34	1978	1.02	0.86	0.85	1.18	2.10	3.53	4.53	4.96	4.48	3.41	1.95	1.29	2.51
35	1979	0.97	0.71	0.83	1.15	1.80	2.23	3.93	4.75	4.59	3.82	1.96	1.37	2.34
36	1980	0.93	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	1.49	1.91	2.84	4.50	5.18	4.92	3.27	1.91	1.39	-
38	1982	0.93	0.74	0.84	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	1.43	2.37	3.11	4.35	4.94	5.38	4.64	2.68	1.50	-
40	1984	1.18	0.91	1.00	1.44	2.49	4.02	4.97	5.27	5.34	4.09	2.05	1.30	2.84
41	1985	0.92	0.81	1.08	1.36	1.99	3.49	4.56	4.89	4.73	4.07	2.30	1.40	2.63
42	1986	0.91	0.73	0.84	1.31	1.88	2.29	4.08	4.54	4.59	4.28	2.55	1.35	2.45
43	1987	0.95	0.84	0.85	1.46	1.76	2.81	4.59	6.06	5.72	4.32	2.36	1.48	2.77
44	1988	1.09	1.00	1.13	1.49	2.43	3.85	5.09	5.50	6.32	3.86	2.15	1.52	2.95
45	1989	0.92	0.92	0.98	1.25	2.00	3.40	4.47	4.58	4.51	4.00	2.16	1.29	2.54
46	1990	0.95	0.88	1.09	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.01	0.89	1.00	1.40	2.15	3.31	4.66	5.36	5.14	4.07	2.32	1.44	2.70

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X - 0.037

where, X : above raw data Y : revised data

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.43 HARIHARPARA (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945										4.14	2.52	1.39	-
2	1946	0.85	0.88	0.91	1.31	2.11	3.48	4.67	4.90	4.83	4.12	-	1.53	-
3	1947	0.93	0.65	0.80	1.31	1.34	-	4.29	-	4.62	-	-	-	-
4	1948	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1949	-	-	-	2.09	2.93	4.05	5.01	5.45	5.44	-	-	-	-
6	1950	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1953	-	-	-	1.01	1.57	2.84	4.13	4.98	4.44	3.95	2.09	0.99	-
10	1954	0.68	0.71	0.64	1.05	1.83	3.41	5.03	5.98	5.44	4.14	-	1.11	-
11	1955	0.63	0.54	0.71	1.14	1.78	3.02	4.57	6.08	5.04	3.72	2.32	1.22	2.56
12	1956	0.71	0.93	1.41	1.52	2.34	3.57	4.42	4.30	4.49	3.01	2.27	1.39	2.53
13	1957	0.99	0.85	0.78	0.97	1.99	2.72	3.95	4.73	3.89	2.84	1.57	0.96	2.19
14	1958	0.78	0.71	0.68	1.00	2.12	2.70	3.61	4.76	5.12	-	-	-	-
15	1959	-	-	-	1.24	2.13	3.38	4.48	4.88	4.31	3.89	2.39	1.30	-
16	1960	0.81	0.75	0.61	0.95	1.42	2.79	4.08	4.90	5.15	4.11	1.93	1.21	2.39
17	1961	0.85	0.70	1.31	1.24	1.89	3.21	3.78	4.53	4.72	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	1.27	1.79	3.17	5.05	5.36	4.51	4.12	2.10	1.15	-
25	1969	0.96	0.81	0.87	1.18	1.62	3.19	4.62	5.20	5.20	3.53	1.93	1.27	2.53
26	1970	0.95	0.80	1.02	1.42	2.42	3.29	4.66	5.78	4.86	4.52	2.55	1.52	2.82
27	1971	1.14	0.92	0.81	1.19	1.73	3.23	4.68	4.45	5.33	4.29	2.64	1.22	2.64
28	1972	0.92	0.84	0.90	1.30	2.04	2.93	4.12	4.64	4.14	2.95	1.61	1.20	2.30
29	1973	0.74	0.72	0.80	1.37	2.38	3.48	4.48	5.14	4.67	4.12	2.65	1.82	2.70
30	1974	1.13	0.93	1.06	1.38	2.37	3.20	4.88	5.85	5.24	4.00	2.37	1.35	2.81
31	1975	1.01	0.85	0.83	1.15	1.93	2.79	4.06	4.84	4.64	3.81	2.36	1.34	2.47
32	1976	0.88	0.71	0.88	1.12	1.74	3.01	4.55	4.47	4.38	3.04	1.73	1.25	2.31
33	1977	0.84	0.73	0.81	1.66	2.42	3.70	4.38	4.98	4.76	3.58	2.22	1.47	2.63
34	1978	0.90	0.68	0.70	0.67	1.98	3.35	4.31	4.70	4.29	3.25	1.93	1.21	2.33
35	1979	0.70	0.57	0.54	0.90	1.22	2.01	3.57	4.55	4.39	3.68	1.92	1.29	2.11
36	1980	0.81	0.44	0.60	0.70	2.22	3.13	4.27	5.27	5.01	3.68	2.19	1.29	-
37	1981	1.02	o,73	0.95	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	1.21	2.21	2.86	4.10	4.61	5.09	4.27	2.76	1.39	-
40	1984	1.03	0.86	0.84	1.18	2.27	3.75	4.74	5.01	5.09	3.85	1.86	1.23	2.64
41	1985	0.83	0.80	1.03	0.60	1.85	3.29	4.35	4.60	4.47	3.86	2.16	1.39	2.44
42	1986	0.89	0.78	0.73	1.22	1.75	2.04	3.93	4.35	4.34	4.01	2.47	1.38	2.32
43	1987	0.88	0.71	0.73	1.38	1.52	2.49	4.30	5.74	5.42	4.07	2.26	1.45	2.58
44	1988	0.99	0.83	0.89	1.31	2.10	3.46	4.66	5.10	5.93	3.71	2.10	1.47	2.71
45	1989	0.67	0.66	0.61	1.18	1.98	3.13	4.15	4.28	4.20	3.71	1.98	1.05	2.30
46	1990	0.89	0.91	0.81	-	-	-	-	-	-	-	-	-	-
	AVER(1)	0.88	0.76	0.84	1.19	1.97	3.12	4.37	4.98	4.80	3.79	2.18	1.30	2.49

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.69 SAVAR (BWDB)
RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945				1.94	2.35	4.22	5.84	7.03	6.88	-	3.32	-	-
2	1946	1.56	1.41	1.43	1.96	2.58	4.68	6.28	6.49	5.88	5.21	3.39	2.01	3.57
3	1947	1.46	1.28	1.37	1.92	2.59	4.33	5.81	6.68	6.15	5.38	3.30	1.92	3.52
4	1948	1.44	1.32	1.41	1.96	3.47	-	6.55	7.02	6.20	5.59	-	-	-
5	1949	1.44	1.26	1.45	2.15	3.23	4.71	6.49	6.73	6.78	5.39	3.10	1.78	3.71
6	1950	1.30	1.16	1.21	1.64	2.35	4.53	-	6.33	6.58	4.46	2.96	1.97	-
7	1951	1.46	1.42	1.46	1.86	2.56	4.46	6.73	6.55	6.54	4.93	2.53	2.09	3.55
8	1952	-	-	-	1.49	2.15	4.10	6.29	6.07	6.90	6.05	3.30	1.89	-
9	1953	1.33	1.31	1.61	2.18	2.72	4.37	5.93	6.68	6.34	5.51	2.73	1.72	3.54
10	1954	1.25	1.35	1.37	1.96	3.10	5.06	6.93	7.96	7.10	5.72	3.17	2.11	3.92
11	1955	1.55	1.39	1.61	2.10	2.73	4.35	6.38	7.87	6.25	4.60	2.69	1.99	3.63
12	1956	1.56	1.40	1.55	1.96	3.92	5.29	6.28	6.07	6.50	4.74	3.00	2.06	3.69
13	1957	1.76	1.63	1.57	1.90	3.19	4.06	5.60	6.73	5.47	4.14	2.34	1.62	3.33
14	1958	1.42	1.40	1.38	1.71	3.10	3.86	5.10	6.64	7.10	-	-	-	-
15	1959	1.50	1.39	1.57	1.98	3.39	4.72	6.06	6.64	5.85	5.35	3.33	2.10	3.66
16	1960	1.65	1.50	1.50	1.77	2.45	4.32	5.94	6.78	7.07	5.72	2.88	1.98	3.63
17	1961	1.63	1.47	1.96	2.12	3.33	5.08	5.83	6.69	6.80	5.80	3.50	2.11	3.86
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	2.39	3.21	5.02	6.80	7.11	6.31	6.02	3.54	2.54	-
25	1969	2.19	1.86	1.74	2.14	2.86	4.83	6.30	6.79	6.79	4.91	2.94	2.26	3.80
26	1970	1.87	1.67	1.70	2.44	3.74	4.83	6.23	7.53	5.90	6.07	3.55	2.25	3.98
27	1971	1.94	1.67	1.59	2.09	2.58	4.50	6.23	6.99	6.79	5.82	3.75	2.38	3.86
28	1972	1.98	1.59	1.60	2.06	3.29	4.57	5.59	6.25	5.76	4.78	3.61	1.95	3.59
29	1973	1.61	1.41	1.50	2.13	3.44	4.95	6.05	6.83	6.17	5.58	3.30	2.40	3.78
30	1974	1.98	1.62	1.67	2.25	3.49	4.44	6.35	7.36	6.96	5.53	3.34	2.21	3.93
31	1975	1.78	1.57	1.35	1.85	2.72	-	-	-	-	-	-	2.34	-
32	1976	1.92	1.61	1.60	1.88	2.66	4.48	5.95	5.86	5.79	4.32	2.64	2.14	3.40
33	1977	1.58	1.36	1.58	2.57	3.68	5.17	5.85	6.52	6.38	5.17	2.98	2.20	3.75
34	1978	1.71	1.46	1.42	1.78	2.84	4.65	5.79	6.12	5.63	4.50	2.75	2.38	3.42
35	1979	2.08	1.67	1.36	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.32	3.34	4.35	5.75	6.34	6.54	5.97	3.44	2.13	-
40	1984	1.84	1.58	1.68	2.15	3.37	5.29	6.26	6.67	6.66	5.51	3.09	2.08	3.85
41	1985	1.66	1.46	1.83	2.30	2.82	4.72	5.86	6.14	5.96	5.29	3.20	2.18	3.62
42	1986	1.68	1.38	1.44	1.99	2.61	3.19	5.53	5.99	6.11	6.04	3.96	2.20	3.51
43	1987	1.72	1.47	1.43	2.20	2.47	3.89	5.91	7.55	7.05	5.72	3.22	2.22	3.74
44	1988	1.82	1.57	1.66	2.09	3.09	4.97	6.28	6.83	7.78	5.25	3.53	2.59	3.96
45	1989	2.02	1.71	1.83	2.17	3.01	4.69	5.92	5.93	5.94	5.61	3.28	2.10	3.68
46	1990	1.82	1.52	1.69	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.68	1.48	1.55	2.04	2.98	4.57	6.08	6.70	6.44	5.33	3.18	2.12	3.68

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO. 70 KALATIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				1.98	2.71	4.26	5.99	6.23	5.48	5.12	2.90	1.91	-
2	1969	1.50	1.36	1.46	1.78	2.41	4.13	5.60	6.07	6.06	4.31	2.63	1.90	3.27
3	1970	1.54	1.31	1.44	1.96	3.12	4.21	5.60	6.76	5.67	5.34	3.35	2.03	3.53
4	1971	1.59	1.51	1.35	1.73	2.44	3.98	5.61	6.42	6.21	5.20	4.21	2.64	3.57
5	1972	1.60	1.36	1.45	1.91	2.82	4.02	4.97	5.57	5.09	3.89	2.29	1.64	3.05
6	1973	1.31	1.26	1.29	1.90	2.97	4.38	5.41	6.19	5.68	4.99	3.13	2.14	3.39
7	1974	1.64	1.36	1.60	1.88	3.08	4.02	5.74	6.66	6.20	4.93	2.93	2.16	3.52
8	1975	2.48	1.29	1.12	1.84	2.35	3.48	4.98	5.63	5.49	4.71	2.94	1.98	3.19
9	1976	1.57	1.42	1.44	-	-	-	-	-	-	-	-	-	-
10	1977	-	-	-	2.25	3.35	4.63	5.26	5.99	5.75	4.59	2.76	1.90	-
11	1978	1.46	1.33	1.34	1.62	2.45	4.15	5.22	5.61	5.19	4.12	2.33	1.71	3.04
12	1979	1.43	1.26	1.32	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	1.68	3.00	4.02	5.16	6.39	5.95	4.56	2.64	1.69	-
14	1981	1.32	1.17	1.23	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	1.87	2.86	3.83	5.06	5.36	5.95	5.37	3.09	1.86	-
17	1984	1.57	1.39	1.44	1.93	3.16	4.81	5.81	6.32	6.38	5.25	2.96	1.96	3.58
18	1985	1.50	1.37	1.67	2.11	2.69	4.24	5.37	5.67	5.64	4.99	3.01	1.94	3.35
19	1986	1.42	1.24	1.32	1.83	2.41	2.82	5.22	5.77	5.87	5.35	3.36	1.98	3.22
20	1987	1.50	1.42	1.41	2.02	2.40	3.69	5.61	6.88	6.52	5.26	3.12	2.08	3.49
21	1988	1.57	1.47	1.50	1.81	2.80	4.42	5.73	6.26	7.51	5.13	3.23	2.05	3.62
22	1989	1.49	1.61	1.57	1.93	2.68	4.25	5.46	5.52	5.53	5.16	3.06	1.89	3.35
23	1990	1.66	1.36	1.52	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.56	1.36	1.42	1.89	2.76	4.07	5.43	6.07	5.90	4.90	3.00	1.97	3.37

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.71 KALAGACHIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1977	-	-	-	-	2.59	3.76	4.35	4.92	4.58	3.39	2.15	1.38	-
2	1978	0.90	0.77	0.79	1.13	2.04	3.40	4.26	4.66	4.23	3.23	1.93	1.25	2.38
3	1979	0.90	0.69	0.77	-	-	-	-	-	-	-	-	-	-
4	1980	-	-	-	1.27	2.30	3.19	4.13	-	-	-	-	-	-
5	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1983	-	-	-	1.41	2.16	2.86	3.99	4.54	4.79	4.18	2.88	1.49	2.36
8	1984	1.08	0.85	0.65	1.22	2.35	3.75	4.60	4.73	4.76	3.67	2.02	1.27	2.58
9	1985	0.92	0.82	1.05	1.32	1.82	3.07	4.14	4.47	4.23	3.79	2.24	1.44	2.44
10	1986	0.96	0.72	0.81	1.16	1.74	2.12	3.65	4.18	4.24	3.79	2.37	1.48	2.27
11	1987	1.03	0.93	0.95	1.50	1.89	2.55	4.30	5.56	5.29	3.92	2.24	1.44	2.63
12	1988	0.96	0.90	0.99	1.42	2.29	3.43	4.40	4.76	5.17	3.29	1.84	1.29	2.56
13	1989	0.63	0.95	0.88	1.29	2.11	3.25	4.23	4.35	4.28	3.75	2.18	1.22	2.43
14	1990	0.92	0.62	0.66	-	-	-	-	-	-	-	-	-	-
	AVER(1)	0.92	0.81	0.84	1.30	2.13	3.14	4.21	4.69	4.62	3.67	2.21	1.36	2.46

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.71A REKABI BAZAR(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				1.56	2.27	3.69	4.99	5.21	4.48	4.01	2.07	1.25	-
2	1969	1.00	0.92	1.02	1.33	1.75	3.26	4.59	5.04	5.04	3.49	2.02	1.37	2.57
3	1970	1.04	0.93	1.09	1.54	2.51	3.43	4.65	5.59	4.80	4.41	2.60	1.56	2.85
4	1971	1.25	1.06	1.07	1.55	1.99	3.35	4.67	5.35	5.24	-	-	-	-
5	1972	-	-	-	1.47	2.26	3.13	4.15	4.56	4.10	2.94	1.74	1.26	-
6	1973	0.92	0.83	0.97	1.56	2.44	3.54	4.50	5.07	4.61	4.08	2.55	1.72	2.73
7	1974	1.23	0.96	1.11	1.52	2.50	3.29	4.82	5.69	5.12	3.94	2.35	1.48	2.83
8	1975	1.13	1.01	0.97	1.49	2.06	2.79	4.03	4.74	4.55	3.72	2.42	1.52	2.54
9	1976	1.06	0.89	1.11	-	-	-	-	-	-	-	-	-	-
10	1977	-	-	-	1.81	2.63	3.72	4.41	4.98	4.66	3.53	2.16	1.48	-
11	1978	0.97	0.86	0.89	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	1.36	2.25	3.17	4.10	5.04	4.66	3.37	1.95	1.16	-
14	1981	0.81	0.64	0.76	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	1.52	2.34	3.03	4.20	4.73	5.13	4.26	2.63	1.46	-
17	1984	1.21	0.99	1.06	1.57	2.53	3.96	4.81	4.95	5.07	3.85	2.02	1.37	2.78
18	1985	1.17	0.98	1.33	1.67	1.92	3.49	4.46	4.68	4.54	3.95	2.36	1.48	2.67
19	1986	1.03	0.85	0.97	1.48	1.95	2.40	4.15	4.49	4.41	3.98	2.58	1.51	2.48
20	1987	1.08	0.98	1.00	1.61	1.88	2.63	4.40	5.66	5.34	4.03	2.32	1.55	2.71
21	1988	1.06	1.00	1.12	1.51	2.39	3.55	4.72	5.05	5.56	3.60	2.08	1.47	2.76
22	1989	1.07	1.15	1.05	1.50	2.32	3.42	4.39	4.50	4.42	3.92	2.32	1.43	2.62
23	1990	1.07	0.96	1.09	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.07	0.94	1.04	1.53	2.23	3.29	4.47	5.02	4.81	3.82	2.26	1.44	2.69

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.179 DEMRA (BWDB)

RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1952				1.38	1.92	3.19	4.81	4.88	5.35	4.75	2.85	1.62	-
2	1953	1.05	1.14	1.43	1.71	2.21	3.45	4.59	5.33	5.04	4.42	2.30	1.39	2.84
3	1954	1.00	0.95	1.00	1.51	2.44	4.19	5.35	6.25	5.83	4.53	2.55	1.50	3.09
4	1955	0.94	0.93	1.10	1.54	2.09	3.47	5.00	6.41	5.50	4.05	2.77	1.79	2.97
5	1956	1.20	0.96	1.03	1.51	3.10	4.48	5.37	5.20	5.37	3.90	2.56	1.51	3.02
6	1957	1.12	1.05	1.07	1.36	2.39	3.01	4.50	5.25	4.36	3.26	1.92	1.35	2.55
7	1958	1.10	1.05	1.06	1.41	2.54	3.15	4.11	5.17	5.53	4.38	2.71	1.71	2.83
8	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
10	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1964	-	-	-	-	-	-	-	-	-	-	2.94	1.86	-
14	1965	1.39	1.26	1.31	1.55	2.43	3.51	4.63	5.36	5.28	3.65	2.31	1.69	2.86
15	1966	1.42	1.22	1.33	1.68	2.07	3.83	4.96	5.37	5.90	3.97	2.31	1.73	2.98
16	1967	1.45	1.33	1.36	1.59	2.26	3.21	4.74	5.01	4.75	4.07	2.20	1.63	2.80
17	1968	1.35	1.27	1.32	1.65	2.24	3.63	5.38	5.63	4.88	4.40	2.36	1.48	2.97
18	1969	1.25	1.14	1.24	1.59	1.97	3.56	4.98	5.49	5.50	3.79	2.27	1.63	2.87
19	1970	1.28	1.18	1.29	-	-	-	-	-	-	-	-	-	-
20	1971	-	-	-	1.76	2.22	3.71	5.08	5.71	5.64	4.69	2.98	1.84	-
21	1972	1.52	1.17	1.29	1.74	2.57	3.49	4.57	5.06	4.54	3.31	2.01	1.46	2.73
22	1973	1.12	1.06	1.14	1.79	2.81	3.87	4.98	5.54	5.08	4.52	2.82	1.99	3.06
23	1974	1.51	1.18	1.33	1.78	2.85	3.64	5.45	6.27	5.74	4.52	2.71	1.72	3.23
24	1975	1.33	1.17	1.18	1.61	2.26	3.07	4.44	5.21	5.03	4.23	2.68	1.72	2.83
25	1976	1.26	1.12	1.24	1.57	2.21	3.65	5.14	5.03	4.91	3.41	2.15	1.68	2.78
26	1977	1.19	0.94	1.21	2.05	2.97	4.25	4.94	5.45	5.23	4.08	2.47	1.69	-
27	1978	1.14	1.03	1.06	1.39	2.35	3.93	4.90	5.20	4.71	3.70	2.17	1.54	2.76
28	1979	1.16	0.94	1.05	1.36	2.04	2.48	4.27	5.06	4.95	4.18	2.25	1.71	2.62
29	1980	1.23	1.10	1.23	-	-	-	-	-	-	-	-	-	-
30	1981	-	-	-	1.75	2.12	3.08	4.74	5.40	5.13	3.50	2.21	1.62	-
31	1982	1.14	1.06	0.99	1.70	2.20	3.17	4.66	5.00	4.83	3.25	1.86	1.41	2.61
32	1983	1.16	0.95	1.36	1.69	2.56	3.25	4.51	5.10	5.48	4.69	2.76	1.62	2.93
33	1984	1.30	1.01	1.13	1.67	2.66	4.25	5.16	5.42	5.46	4.32	2.23	1.51	3.01
34	1985	1.12	1.06	1.41	1.75	2.20	3.78	4.82	5.08	4.90	4.19	2.47	1.66	2.87
35	1986	1.13	0.95	1.05	1.55	2.10	2.63	4.30	4.67	4.75	4.49	2.76	1.56	2.66
36	1987	1.13	1.14	1.06	1.68	1.98	3.00	4.74	6.06	5.77	4.51	2.78	1.71	2.96
37	1988	1.25	1.13	1.21	-	-	-	-	-	-	-	-	-	-
38	1989	-	-	-	1.49	2.25	3.66	4.76	4.83	4.73	4.30	2.50	1.52	-
39	1990	1.12	1.02	1.16	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.22	1.09	1.19	1.61	2.35	3.50	4.82	5.36	5.18	4.11	2.46	1.63	2.87

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.275.5 MEGHNA FERRY GHAT (BWDB)

RIVER : SURMA-MEGHNA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				1.47	2.03	3.43	4.91	5.25	4.47	4.03	2.15	1.39	-
2	1969	1.26	1.04	1.11	1.39	1.61	3.33	4.70	5.15	5.14	3.62	2.21	1.61	2.68
3	1970	1.27	1.12	1.24	1.70	2.61	3.55	4.80	5.61	4.86	4.50	2.84	1.75	2.99
4	1971	1.43	1.20	1.18	1.64	1.96	3.10	4.60	5.21	-	-	-	-	-
5	1972	1.68	1.21	1.20	1.70	2.37	3.27	4.31	4.69	4.10	3.12	1.97	1.43	2.59
6	1973	1.11	1.01	1.03	1.68	2.62	3.73	4.66	5.14	4.73	4.26	2.81	2.04	2.90
7	1974	1.46	1.18	1.31	1.70	2.66	3.45	5.00	5.80	5.22	4.18	2.64	1.85	3.04
8	1975	1.41	1.32	1.31	1.53	2.17	2.92	4.09	4.84	4.68	3.93	2.60	1.66	2.71
9	1976	1.15	1.02	1.17	1.43	2.12	3.33	4.78	4.66	4.53	3.12	2.04	1.70	2.59
10	1977	1.18	0.95	1.14	1.97	2.75	3.88	4.64	5.12	4.91	3.70	2.42	1.68	2.86
11	1978	1.16	1.04	1.06	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1981	-	-	-	1.62	2.07	2.89	4.49	5.03	4.75	3.34	2.12	1.54	-
15	1982	1.10	0.90	0.89	1.60	2.07	2.89	4.39	4.76	4.70	3.18	1.82	1.33	2.47
16	1983	1.11	0.91	1.18	1.56	2.46	3.18	4.39	4.87	5.21	4.40	2.70	1.59	2.80
17	1984	1.28	1.02	1.09	1.41	2.56	3.95	4.81	4.94	5.12	4.00	2.20	1.50	2.82
18	1985	1.12	1.06	1.40	1.78	2.19	3.66	4.61	4.81	4.63	4.01	2.48	1.68	2.79
19	1986	1.19	1.03	1.14	1.68	2.12	2.41	4.09	4.53	4.54	4.16	2.75	1.59	2.60
20	1987	1.14	1.09	1.13	1.71	2.02	2.98	4.61	5.68	5.38	4.23	2.47	1.71	2.85
21	1988	1.21	1.13	1.23	1.62	2.63	3.99	5.09	5.35	5.77	3.96	2.33	1.74	3.00
22	1989	1.13	1.16	1.13	1.56	2.38	3.57	4.58	4.76	4.62	4.15	2.57	1.54	2.76
23	1990	1.12	1.08	1.22	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.24	1.08	1.17	1.62	2.28	3.34	4.61	5.06	4.85	3.88	2.40	1.63	2.78

Notes: 1) AVER(1) is average of all the data.

	C	D	E	F	G	H	I	J	K	L	M	N	O
1	AVERAGE OF DAILY LWL												
2													
3	NO.299 TONGI(BWDB)												
4	NGI KHAL												
5												(Unit : PWD in m)	
6	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	AVER
7				1.38	1.94	3.30	4.69	5.52	5.75	4.76	2.55	1.56	-
8	1.19	1.06	1.65	1.62	2.58	4.03	4.61	5.35	5.63	-	-	-	-
9	1.43	1.51	1.41	1.62	2.25	3.75	5.37	5.88	6.56	4.41	2.60	1.69	3.21
10	1.29	1.20	1.16	1.42	1.94	3.73	5.28	6.00	5.91	4.23	2.84	1.81	3.07
11	1.39	1.10	1.27	2.08	2.88	3.51	5.32	6.46	5.88	4.95	3.21	1.96	3.33
12	1.37	1.25	1.25	1.60	2.44	3.51	4.81	5.69	5.69	4.10	2.60	1.71	3.00
13	1.32	1.14	1.30	1.63	2.00	3.77	5.06	5.58	6.27	4.26	2.48	1.78	3.05
14	1.42	1.30	1.41	1.56	2.31	3.26	4.92	5.42	5.03	4.50	2.59	1.63	2.95
15	1.31	1.24	1.32	1.67	2.29	3.83	5.63	6.05	5.18	4.78	2.83	1.57	3.14
16	1.24	1.17	1.22	1.60	2.02	3.68	5.19	5.90	5.90	4.15	2.48	1.66	3.02
17	1.29	1.17	1.28	1.81	2.82	3.84	5.30	6.68	5.41	5.21	3.13	1.92	3.32
18	1.49	1.29	-	-	2.84	4.06	5.39	6.12	6.13	5.03	3.46	1.95	-
19	1.55	1.18	1.20	1.85	2.59	3.58	4.70	5.35	4.79	3.64	2.20	1.59	2.85
20	1.30	1.21	1.31	1.80	3.00	4.06	5.20	5.82	5.27	4.71	3.03	2.20	3.24
21	1.65	1.31	1.47	1.95	2.88	3.70	5.54	6.59	6.00	-	2.94	1.85	-
22	1.46	1.31	1.31	1.68	2.32	-	-	-	-	-	-	-	-
23	-	-	-	1.57	2.32	-	-	-	-	-	-	-	-
24	-	-	-	2.18	-	4.28	5.00	5.52	5.36	4.20	2.70	1.87	-
25	1.36	1.19	1.17	1.47	2.67	4.10	4.89	5.23	4.74	3.80	2.37	1.64	2.89
26	1.29	1.05	1.25	1.47	2.08	2.58	4.24	5.12	4.96	4.27	2.61	1.89	2.73
27	1.32	1.16	1.37	1.61	2.77	3.75	4.63	5.89	5.64	4.23	2.64	1.68	3.06
28	1.18	1.00	1.07	-	-	-	-	-	-	-	-	-	-
29	-	-	-	1.70	2.29	3.16	4.62	5.20	4.86	3.56	2.06	1.40	-
30	1.13	0.98	1.34	1.71	2.67	3.28	4.56	5.17	5.52	4.99	3.05	1.81	3.02
31	1.41	1.08	1.18	1.68	2.92	4.38	5.24	5.63	5.56	4.54	2.49	1.61	3.14
32	1.21	1.06	1.40	1.80	2.39	3.78	4.82	5.16	4.98	4.34	2.78	1.81	2.96
33	1.23	1.03	1.15	1.70	2.29	2.54	4.37	4.82	4.88	4.83	3.14	1.81	2.82
34	1.24	1.08	1.11	1.65	2.20	3.09	4.81	6.32	5.97	4.74	2.75	1.86	3.07
35	1.32	1.15	1.31	-	-	-	-	5.84	6.70	-	-	-	-
36	-	-	-	1.57	2.30	3.80	4.80	4.85	4.80	4.52	2.87	1.71	-
37	1.24	1.15	1.41	-	-	-	-	-	-	-	-	-	-
38													
39	1.33	1.17	1.29	1.68	2.44	3.63	4.96	5.67	5.53	4.45	2.74	1.76	3.05
40													
41	1)AVER(1) is average of all the data												
42	2) Above data are necessary to be revised by using following equation to get the correct elevation.												
43	Y=X + 0.122												
44	where, X : above raw data Y : revised data												

MONTHLY AVERAGE OF DAILY LWL

STATION : NO.302 MIRPUR (BWDB)

RIVER : TURAG

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1953				1.84	1.42	3.76	4.97	5.93	5.47	4.83	2.57	1.58	-
2	1954	1.16	1.26	1.26	1.76	2.55	4.18	5.94	7.29	6.49	4.88	2.84	1.47	3.42
3	1955	1.07	0.96	1.16	1.53	2.13	3.38	5.07	7.19	5.62	4.05	2.84	1.93	3.08
4	1956	1.18	-	1.21	1.51	3.04	4.51	5.58	5.34	5.64	4.06	2.64	-	-
5	1957	-	1.18	1.09	1.41	2.44	3.13	4.60	5.66	-	3.36	1.86	1.20	-
6	1958	1.03	0.94	0.96	1.30	2.50	3.14	4.09	5.57	6.20	4.60	2.76	1.56	2.89
7	1959	-	-	-	1.60	2.68	4.21	5.43	5.89	5.18	4.68	2.95	1.58	-
8	1960	0.99	0.90	0.82	1.08	1.68	3.23	4.69	5.67	5.95	4.74	2.31	1.43	2.79
9	1961	1.06	0.94	1.47	1.52	2.30	3.75	4.35	5.20	5.49	4.60	2.64	1.43	2.90
10	1962	1.17	1.18	1.14	1.57	2.15	3.68	5.39	6.02	6.69	4.28	2.34	1.52	3.09
11	1963	1.21	1.12	1.06	1.36	1.72	3.53	5.36	6.15	6.08	4.26	2.77	1.83	3.04
12	1964	1.40	1.28	1.52	2.15	2.59	3.39	5.31	6.61	5.98	4.91	3.00	1.79	3.33
13	1965	1.30	1.18	1.18	1.53	2.24	3.42	4.68	5.76	5.72	3.92	2.33	1.69	2.91
14	1966	1.38	1.18	1.29	1.69	2.08	3.87	5.15	5.74	6.42	4.20	2.31	1.74	3.09
15	1967	1.40	1.32	1.35	-	-	-	-	-	-	-	-	-	-
16	1968	-	-	-	1.60	2.14	3.72	5.66	6.08	5.15	4.72	2.38	1.33	-
17	1969	1.29	1.23	1.30	1.68	2.11	3.85	5.24	5.92	5.95	4.02	2.25	1.49	3.03
18	1970	1.16	1.03	1.09	1.69	2.76	3.79	5.28	6.74	5.39	5.08	2.75	1.69	3.20
19	1971	1.33	1.13	-	-	-	-	-	-	-	-	-	-	-
20	1972	-	-	-	1.58	2.46	3.46	4.64	5.30	4.70	3.37	1.85	1.27	-
21	1973	0.92	0.86	0.95	1.64	2.70	3.90	5.08	5.85	5.26	4.61	2.82	1.89	3.04
22	1974	1.36	1.01	1.15	1.65	2.70	3.60	5.40	6.57	5.95	4.50	2.66	1.60	3.18
23	1975	1.16	1.03	1.03	1.55	2.17	-	-	-	-	4.13	2.56	1.53	-
24	1976	1.08	0.91	1.10	1.44	2.11	-	-	-	-	3.37	2.04	1.51	-
25	1977	1.10	0.81	0.99	1.95	2.87	4.17	4.90	5.52	5.32	4.01	2.53	1.54	2.98
26	1978	1.02	0.89	0.93	1.28	2.32	3.88	4.83	5.21	4.72	3.65	2.12	1.37	2.69
27	1979	1.02	0.80	0.95	1.74	2.15	3.10	4.78	5.52	5.27	3.55	2.13	1.53	-
28	1980	1.01	0.90	0.86	1.63	2.20	3.11	4.63	5.09	4.90	3.38	1.84	1.26	-
29	1981	0.96	0.82	1.23	1.60	2.51	3.25	4.55	5.17	5.58	4.91	2.84	1.56	-
30	1982	1.21	0.97	1.09	1.61	2.74	4.34	5.30	5.69	5.73	4.47	2.27	1.99	3.12
31	1983	1.31	1.18	1.55	1.87	2.67	3.34	4.56	5.18	5.59	4.94	2.96	1.82	3.08
32	1984	1.50	1.29	1.43	1.88	2.87	4.37	5.32	5.70	5.74	4.51	2.43	1.70	3.23
33	1985	1.00	0.90	1.27	1.68	2.20	3.77	4.86	5.22	5.03	4.34	2.56	1.60	2.87
34	1986	1.01	0.81	0.96	1.52	2.08	2.46	4.36	4.83	4.90	4.72	2.90	1.52	2.67
35	1987	1.02	0.95	0.94	1.61	1.96	3.05	4.87	6.51	6.10	4.73	2.62	1.72	3.01
36	1988	1.18	1.09	1.19	1.61	2.66	4.15	5.40	5.83	6.85	4.20	2.44	1.81	3.20
37	1989	1.11	1.08	1.11	0.75	2.32	3.76	4.82	4.91	4.85	4.42	2.53	1.39	2.75
38	1990	1.04	0.98	1.10	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.16	1.03	1.14	1.58	2.35	3.64	5.00	5.78	5.62	4.31	2.50	1.58	3.02

Notes:
1) AVER(1) is average of all the data.
2) Above data are necessary to be revised by using following equation to get the correct elevation.
Y=X + 0.042
where, X : above raw data Y : revised data

99

4.4 Monthly Average Water Level

MONTHLY AVERAGE WATER LEVEL

STATION : NO.7 PUBAIL (BWDB)

RIVER : BALU

(Unit : PWD in m)

NO	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945							4.22	5.44	5.51	-	-	-	-
2	1946	1.13	0.94	1.06	-	-	-	-	-	-	-	-	-	-
3	1947	-	-	-	1.46	1.93	3.17	4.33	5.29	4.98	4.37	2.82	1.46	-
4	1948	1.04	0.99	0.97	1.39	2.50	3.91	4.96	5.67	4.99	4.62	2.75	1.48	2.94
5	1949	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1950	1.10	1.04	1.06	1.40	1.82	3.14	4.61	5.15	5.22	3.73	2.59	1.36	2.69
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	0.79	0.68	0.77	1.09	1.86	2.85	4.33	4.61	5.12	4.78	3.21	1.66	2.65
9	1953	1.01	0.97	-	-	-	-	-	-	-	-	-	-	-
10	1954	-	-	-	-	2.02	3.63	5.17	6.32	5.94	4.39	2.67	1.48	-
11	1955	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1956	2.15	1.97	2.24	2.59	-	4.87	5.95	5.67	5.96	4.60	3.20	1.95	-
13	1957	1.53	1.47	1.39	1.70	-	3.42	4.72	5.60	4.86	3.73	2.32	1.57	-
14	1958	1.36	1.30	1.30	1.62	2.60	3.31	4.17	5.30	6.17	4.97	3.36	2.02	3.12
15	1959	1.55	1.43	1.61	1.97	2.75	4.07	5.22	5.60	5.29	4.89	3.40	2.08	3.32
16	1960	1.53	1.45	1.40	1.65	2.17	3.49	4.84	5.63	5.76	5.16	2.97	1.95	3.17
17	1961	1.57	1.41	1.97	1.98	2.71	4.09	4.54	5.18	5.49	-	-	-	-
18	1962	-	-	-	1.98	2.48	3.92	5.37	5.80	6.60	4.82	2.91	1.95	-
19	1963	1.59	1.49	1.48	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	-	-	-	-	-	-	-	-	-	-
25	1969	-	-	-	1.93	2.26	3.72	5.17	5.98	6.00	4.57	2.82	1.99	-
26	1970	1.59	1.47	1.59	2.08	2.96	3.91	5.28	6.54	5.60	5.93	3.50	2.23	3.56
27	1971	1.80	1.57	1.45	2.02	2.56	3.78	5.26	6.06	6.07	4.86	3.53	2.27	3.44
28	1972	1.83	1.45	1.57	2.08	2.73	3.62	4.72	5.40	4.91	3.87	2.43	1.81	3.04
29	1973	1.43	1.38	1.51	2.09	3.26	4.19	5.40	5.87	5.53	5.00	3.35	2.45	3.46
30	1974	1.81	1.47	1.65	2.11	3.01	3.81	5.67	6.70	6.15	5.00	3.24	2.28	3.58
31	1975	1.61	1.51	1.50	1.95	2.51	3.29	4.67	5.49	5.32	4.72	3.21	2.11	3.16
32	1976	1.59	1.43	1.56	1.87	2.52	3.87	5.25	5.23	5.14	3.92	2.53	2.02	3.08
33	1977	1.51	1.36	1.58	2.40	3.27	4.45	5.16	5.68	5.63	4.54	3.05	2.12	3.41
34	1978	1.54	1.42	1.39	-	-	-	-	-	-	-	-	-	-
35	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	1.73	2.92	3.86	4.69	5.79	5.92	4.64	3.10	2.06	-
37	1981	1.59	1.45	1.48	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.04	2.93	3.51	4.72	5.47	5.75	5.31	3.39	2.09	-
40	1984	1.68	1.38	1.52	1.99	3.22	4.59	5.43	5.84	5.71	4.87	2.82	1.89	3.41
41	1985	1.45	1.36	1.74	2.09	2.65	3.97	5.02	5.44	5.25	4.62	3.11	2.07	3.23
42	1986	1.52	1.29	1.43	1.98	2.54	2.75	4.53	5.05	5.08	5.18	3.58	2.10	3.09
43	1987	1.46	1.37	1.41	1.98	2.52	3.30	4.96	6.41	6.12	5.11	3.17	2.24	3.34
44	1988	1.67	1.50	1.64	2.02	3.01	4.46	5.55	5.80	6.66	4.56	2.90	2.44	3.52
45	1989	1.49	1.47	1.44	1.83	2.58	3.95	4.97	5.08	5.00	4.77	3.16	1.88	3.14
46	1990	1.45	1.37	1.60	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.50	1.36	1.48	1.89	2.60	3.76	4.96	5.64	5.59	4.70	3.04	1.96	3.21

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.7.5 DEMRA (BWDB)

RIVER : BALU

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1962				1.85	2.33	3.70	5.04	5.41	5.93	4.09	2.42	1.76	-
2	1963	-	-	-	1.69	2.16	3.78	5.15	5.64	5.44	4.05	2.70	1.81	-
3	1964	1.46	1.33	1.49	2.07	2.73	3.56	5.14	5.99	5.54	4.64	2.95	1.85	3.23
4	1965	1.38	1.25	1.24	1.61	2.40	3.50	4.61	5.34	5.26	3.64	2.30	1.65	2.85
5	1966	1.41	1.17	1.30	1.67	2.06	2.80	4.93	5.34	5.86	3.95	2.27	1.73	2.87
6	1967	1.43	1.33	1.38	1.61	2.29	3.21	4.73	5.01	4.73	4.10	2.17	1.61	2.80
7	1968	1.32	1.25	1.31	1.83	2.36	3.69	5.38	5.63	4.88	3.93	2.48	1.63	2.97
8	1969	1.38	1.29	1.40	-	-	-	-	-	-	3.83	2.37	1.77	-
9	1970	1.45	1.35	1.48	1.91	2.86	3.77	5.06	6.04	5.16	4.87	2.97	-	-
10	1971	-	-	-	1.84	2.28	3.72	5.01	5.67	5.59	4.15	3.03	1.98	-
11	1972	1.64	1.34	1.82	1.93	2.64	3.49	4.55	5.04	4.53	3.31	2.11	1.65	2.84
12	1973	1.32	1.28	1.35	1.96	2.89	3.93	4.97	5.55	5.07	4.51	2.92	2.15	3.16
13	1974	1.63	1.38	1.57	1.95	2.94	3.68	5.42	6.26	5.71	4.50	2.82	1.87	3.31
14	1975	1.49	1.42	1.45	1.88	2.43	3.18	4.49	5.22	5.02	4.23	2.79	1.90	2.96
15	1976	1.48	1.33	1.48	1.78	2.36	3.67	5.10	4.99	4.86	3.46	2.28	1.86	2.89
16	1977	1.45	1.35	1.52	2.31	3.17	4.39	5.04	5.54	5.32	4.19	2.65	1.95	3.24
17	1978	1.45	1.37	1.40	-	-	-	-	-	-	-	-	-	-
18	1979	-	-	-	1.73	2.34	2.74	4.42	5.18	5.05	4.29	2.48	1.93	-
19	1980	1.45	1.37	1.54	-	-	-	-	-	-	-	-	-	-
20	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1982	-	-	-	1.86	2.29	3.28	4.77	5.14	4.96	3.42	2.10	1.[illegible]	-
22	1983	1.37	1.22	1.72	2.03	2.75	3.36	4.58	5.22	5.53	4.92	2.98	2.13	3.15
23	1984	1.84	1.43	1.64	2.34	3.10	4.08	5.33	5.67	5.73	4.68	2.67	1.96	3.37
24	1985	1.55	1.54	1.92	2.22	2.60	3.91	4.89	5.18	5.00	4.33	2.76	1.97	3.16
25	1986	1.53	1.35	1.49	2.05	2.43	2.80	4.47	4.81	4.87	4.63	2.96	1.83	2.93
26	1987	1.45	1.39	1.41	1.98	2.28	3.25	4.89	6.18	5.86	4.64	2.80	2.05	3.18
27	1988	1.58	1.50	1.62	2.00	2.94	4.23	5.42	5.71	6.41	4.27	2.65	2.09	3.37
28	1989	1.50	1.53	1.54	1.99	2.59	3.85	4.88	4.94	4.87	4.42	2.70	1.78	3.05
29	1990	1.45	1.41	1.57	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.48	1.36	1.51	1.92	2.55	3.57	4.93	5.45	5.30	4.20	2.61	1.86	3.07

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X + 0.007

where, X ; above raw data Y ; revised data

MONTHLY AVERAGE WATER LEVEL

STATION : NO.14.5 NAYARHAT (BWDB)

RIVER : BANGSHI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1964				2.42	3.36	4.45	6.52	7.56	6.97	5.92	3.73	2.42	-
2	1965	1.90	1.75	1.66	2.07	3.23	4.55	5.99	6.86	6.84	4.99	3.19	2.25	3.77
3	1966	1.91	1.72	1.74	2.09	2.68	4.97	6.26	6.86	7.56	5.29	2.97	2.24	3.86
4	1967	1.83	1.71	1.77	1.96	2.85	4.37	6.28	6.54	6.16	5.62	3.24	1.87	3.68
5	1968	1.96	1.86	1.87	2.43	3.20	5.01	6.97	7.33	6.42	6.10	3.42	2.30	4.07
6	1969	1.88	1.75	1.79	2.19	2.98	4.99	6.60	7.21	7.23	5.07	3.00	2.31	3.92
7	1970	1.90	1.70	1.76	2.42	3.82	4.91	6.50	8.09	6.45	6.34	3.54	2.39	4.15
8	1971	2.00	1.74	-	-	-	-	-	-	-	-	-	-	-
9	1972	-	-	-	2.16	3.36	4.65	5.72	6.52	5.95	4.64	2.74	2.05	-
10	1973	1.71	1.50	1.58	2.22	3.51	5.06	6.28	7.16	6.43	5.71	3.30	2.46	3.91
11	1974	2.02	1.64	1.72	2.27	3.41	4.45	6.58	7.86	7.34	5.65	3.33	2.22	4.04
12	1975	1.81	1.63	1.57	2.00	2.67	-	-	-	-	5.35	3.27	2.33	-
13	1976	1.90	1.61	1.68	1.94	2.68	4.48	6.04	5.99	5.92	4.32	2.66	2.16	3.45
14	1977	1.72	1.52	1.67	2.54	3.75	5.29	6.01	6.73	6.60	5.29	3.04	2.25	3.87
15	1978	1.77	1.54	1.51	1.88	2.98	4.77	5.98	6.29	5.80	4.55	2.67	2.08	3.48
16	1979	1.72	1.44	1.53	1.82	2.47	2.93	5.14	6.13	6.04	5.27	2.85	2.19	3.29
17	1980	1.72	1.48	1.59	1.91	3.33	4.48	5.71	7.34	6.98	5.37	3.21	2.27	3.78
18	1981	1.83	1.59	1.61	2.39	2.71	3.74	5.85	6.56	6.40	4.39	2.68	-	-
19	1982	2.18	1.71	1.47	2.16	2.82	3.95	5.68	6.01	5.85	4.37	2.54	2.00	3.40
20	1983	1.69	1.41	1.82	2.16	3.16	4.17	5.56	6.21	6.67	6.20	3.53	2.24	3.74
21	1984	1.91	1.58	1.63	2.11	3.41	5.41	6.50	7.03	7.03	5.71	3.07	2.14	3.96
22	1985	1.71	1.50	1.89	2.23	2.86	4.81	6.03	6.42	6.27	5.44	3.27	2.25	3.72
23	1986	1.75	1.43	1.52	2.09	2.65	3.15	5.46	5.94	6.11	6.09	3.69	2.27	3.51
24	1987	1.79	1.57	1.54	2.12	2.45	3.77	5.87	7.85	7.36	5.92	3.29	2.31	3.82
25	1988	1.84	1.62	1.69	2.13	3.17	4.98	6.45	7.04	8.21	5.21	3.11	2.62	4.01
26	1989	1.79	1.66	1.61	1.96	2.74	4.52	5.78	5.80	5.82	5.49	3.33	2.12	3.55
27	1990	1.75	1.56	1.72	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.84	1.61	1.66	2.15	3.05	4.49	6.07	6.81	6.60	5.37	3.15	2.24	3.76

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.42 MILL BARAK (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945				1.73	2.18	-	4.55	5.68	5.66	4.46	-	1.78	-
2	1946	1.35	1.25	1.29	1.69	2.48	3.71	5.06	5.45	4.89	4.34	-	1.89	-
3	1947	1.38	1.20	1.33	1.81	2.25	3.57	4.72	5.45	4.99	4.31	-	1.66	-
4	1948	1.31	1.24	1.29	1.70	2.80	-	5.20	6.01	5.14	4.46	-	1.68	-
5	1949	1.29	1.17	1.31	1.84	2.78	-	5.33	5.63	5.65	4.45	2.65	1.54	-
6	1950	1.26	1.19	1.25	1.62	2.04	3.31	4.86	5.18	5.40	3.77	2.32	1.66	2.82
7	1951	1.26	1.10	1.44	1.61	1.74	2.36	4.39	-	-	-	-	1.59	-
8	1952	-	1.30	-	1.46	1.97	3.13	4.52	4.57	5.20	4.43	2.81	1.72	-
9	1953	1.25	1.30	1.57	1.79	2.25	3.35	4.58	5.39	5.09	4.46	2.36	1.57	2.91
10	1954	1.21	1.30	1.27	1.74	2.38	3.79	5.56	6.72	6.07	4.56	2.66	1.61	3.24
11	1955	1.32	1.25	1.44	1.88	2.34	3.53	-	6.70	5.41	3.92	2.64	1.64	-
12	1956	1.19	1.07	1.21	1.42	2.86	4.30	5.28	5.06	5.26	3.71	2.60	1.42	2.95
13	1957	0.97	0.92	0.86	1.13	2.06	2.78	4.10	5.02	4.09	2.95	1.72	1.17	2.31
14	1958	0.96	0.91	1.13	1.45	2.50	3.08	3.96	5.25	5.69	4.29	2.68	1.71	2.80
15	1959	-	-	-	1.72	2.55	4.16	4.84	5.29	4.70	4.27	2.73	1.62	-
16	1960	1.16	1.09	1.03	1.31	1.84	3.07	4.41	5.26	5.58	4.44	2.29	1.61	2.76
17	1961	1.27	1.09	1.65	1.68	2.33	3.56	4.13	4.89	5.13	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	1.73	2.29	4.08	5.41	5.78	4.94	4.48	2.41	1.66	-
25	1969	1.30	1.24	1.35	1.59	1.96	3.41	4.90	5.53	5.55	3.80	2.28	1.65	2.88
26	1970	1.33	1.18	1.35	1.82	2.73	3.62	4.96	6.22	5.12	4.79	2.86	1.87	3.15
27	1971	1.52	1.37	1.14	1.50	2.00	3.34	4.90	5.81	5.70	4.57	2.90	1.83	3.05
28	1972	1.49	1.18	1.32	1.81	2.54	3.36	4.38	4.94	4.41	3.21	1.98	2.00	2.72
29	1973	1.17	1.08	1.14	1.83	2.67	3.72	4.76	5.49	4.96	4.37	2.79	1.96	3.00
30	1974	1.50	1.26	1.48	1.85	2.75	3.50	5.19	6.22	5.64	4.30	2.67	1.76	3.18
31	1975	1.41	1.30	1.30	1.76	2.30	3.02	4.29	5.05	4.87	4.03	2.68	1.83	2.82
32	1976	1.37	1.23	1.43	1.71	2.26	3.38	4.80	4.75	4.66	3.23	2.10	1.70	2.72
33	1977	1.27	1.20	1.39	2.08	2.83	3.98	4.65	5.26	5.02	3.80	2.41	1.78	2.97
34	1978	1.32	1.20	1.22	1.52	2.35	3.62	4.56	4.98	4.51	3.50	2.18	1.56	2.71
35	1979	1.27	1.04	1.18	1.48	2.05	2.43	3.99	4.78	4.62	3.88	2.19	1.66	2.55
36	1980	1.23	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	1.78	2.15	2.99	4.53	5.20	4.94	3.36	2.14	1.64	-
38	1982	1.24	1.12	1.21	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	1.75	2.55	3.23	4.39	4.97	5.40	4.67	2.86	1.79	-
40	1984	1.50	1.27	1.37	1.76	2.69	4.09	5.00	5.29	5.36	4.16	2.26	1.60	3.03
41	1985	1.26	1.19	1.49	1.77	2.26	3.61	4.60	4.92	4.76	4.13	2.51	1.71	2.85
42	1986	1.24	1.09	1.18	1.63	2.12	2.52	4.14	4.58	4.63	4.32	2.73	1.62	2.65
43	1987	1.24	1.15	1.20	1.75	1.98	2.96	4.64	6.08	5.74	4.37	2.55	1.75	2.95
44	1988	1.39	1.31	1.43	1.78	2.63	3.93	5.13	5.53	6.35	3.95	2.38	1.80	3.13
45	1989	1.24	1.28	1.32	1.58	2.24	3.51	4.51	4.63	4.55	4.06	2.35	1.57	2.74
46	1990	1.25	1.19	1.42	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.29	1.18	1.30	1.68	2.34	3.41	4.70	5.38	5.16	4.11	2.47	1.68	2.87

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X - 0.037

where, X : above raw data Y : revised data

MONTHLY AVERAGE WATER LEVEL

STATION : NO.43 HARIHARPARA (BWDB)

RIVER : BURIGANGA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945										4.14	2.32	1.53	-
2	1946	1.06	1.03	1.06	1.53	2.30	3.48	4.67	4.90	4.83	4.12	-	1.76	-
3	1947	1.21	0.93	1.11	1.57	1.59	-	4.29	-	4.62	-	-	-	-
4	1948	-	-	-	-	-	-	-	-	-	-	-	-	-
5	1949	-	-	-	2.28	3.09	4.12	5.10	5.54	5.51	-	-	-	-
6	1950	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1951	-	-	-	-	-	-	-	-	-	-	-	-	-
8	1952	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1953	-	-	-	1.41	1.89	2.98	4.13	4.98	4.44	3.95	2.19	1.07	-
10	1954	0.82	0.90	0.89	1.41	2.04	3.50	5.03	5.98	5.44	4.14	-	1.35	-
11	1955	0.88	0.85	1.02	1.40	1.99	3.12	4.57	6.08	5.04	3.72	2.41	1.35	2.70
12	1956	0.88	1.19	1.58	1.51	2.99	3.57	4.42	4.30	4.49	3.01	2.34	1.53	2.65
13	1957	1.15	1.05	0.98	1.27	2.15	2.81	3.99	4.76	3.93	2.90	1.76	1.15	2.33
14	1958	0.99	1.00	1.00	1.23	2.31	2.81	3.68	4.82	5.14	-	-	-	-
15	1959	-	-	-	1.47	2.31	3.44	4.51	4.90	4.33	3.93	2.49	1.30	-
16	1960	0.99	1.00	0.87	1.16	1.63	2.90	4.12	4.92	5.17	4.14	2.10	1.43	2.54
17	1961	1.10	0.94	1.53	1.49	2.09	3.27	3.83	4.56	-	-	-	-	-
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	1.54	1.98	3.29	5.06	5.37	4.58	4.15	2.21	1.33	-
25	1969	1.16	1.11	1.11	1.47	1.83	3.27	4.64	5.22	5.21	3.58	2.10	1.47	2.68
26	1970	1.23	1.06	1.24	1.64	2.54	3.38	4.69	5.80	4.88	4.55	2.68	1.73	2.95
27	1971	1.38	1.15	1.08	1.50	1.99	3.32	4.70	4.97	5.35	4.31	2.71	1.47	2.83
28	1972	1.17	1.08	1.16	1.60	2.27	3.04	4.15	4.66	4.16	3.01	1.80	1.44	2.46
29	1973	1.03	1.01	1.10	1.63	2.53	3.54	4.50	5.16	4.69	4.15	2.75	1.94	2.84
30	1974	1.33	1.14	1.30	1.60	2.52	3.27	4.90	5.88	5.26	4.02	2.47	1.56	2.94
31	1975	1.26	1.12	1.11	1.48	2.20	2.93	4.11	4.86	4.66	3.85	2.51	1.62	2.64
32	1976	1.16	1.01	1.19	1.42	1.96	3.13	4.57	4.50	4.40	3.09	1.92	1.55	2.49
33	1977	1.11	1.34	1.15	1.86	2.61	3.77	4.43	5.01	4.79	3.62	2.33	1.72	2.81
34	1978	1.22	1.00	1.09	1.27	2.29	3.48	4.35	4.74	4.32	3.34	2.11	1.44	2.55
35	1979	1.03	0.85	0.84	1.24	1.59	2.28	3.77	4.58	4.42	3.75	2.08	1.54	2.33
36	1980	1.09	0.79	0.92	1.06	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	1.52	2.40	2.96	4.14	4.63	5.12	4.29	2.84	1.59	-
40	1984	1.29	1.10	1.15	1.51	2.50	3.85	4.79	5.03	5.11	3.89	2.05	1.49	2.81
41	1985	1.06	1.11	1.40	1.70	2.07	3.43	4.39	4.63	4.50	3.92	2.32	1.66	2.68
42	1986	1.12	1.05	1.06	1.53	1.99	2.27	3.98	4.39	4.37	4.04	2.62	1.59	2.50
43	1987	1.10	1.04	1.02	1.61	1.78	2.68	4.38	5.76	5.44	4.12	2.39	1.68	2.75
44	1988	1.25	1.13	1.21	1.62	2.34	3.59	4.70	5.12	5.99	3.78	2.29	1.67	2.89
45	1989	0.94	0.97	0.93	1.44	2.21	3.24	4.20	4.32	4.24	3.76	2.14	1.25	2.47
46	1990	1.12	1.16	1.13	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.11	1.04	1.12	1.50	2.19	3.22	4.41	5.01	4.81	3.83	2.31	1.51	2.66

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.69 SAVAR (BWDB)
RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1945				2.04	2.47	4.22	5.84	7.03	6.88	-	3.36	-	-
2	1946	1.69	1.54	1.58	2.07	2.67	4.68	6.28	6.49	5.88	5.21	3.43	2.10	3.64
3	1947	1.54	1.38	1.47	2.02	2.64	4.33	5.81	6.68	6.15	5.38	3.33	2.01	3.56
4	1948	1.57	1.45	1.49	2.07	3.51	-	6.55	7.02	6.20	5.59	-	-	-
5	1949	1.59	1.40	1.58	2.24	3.28	4.71	6.49	6.73	6.78	5.39	3.15	1.90	3.77
6	1950	1.46	1.34	1.39	1.83	2.46	4.57	-	6.33	6.58	4.46	3.03	2.11	-
7	1951	1.58	1.56	1.62	2.04	2.69	4.50	6.73	6.55	6.54	4.93	2.59	2.20	3.63
8	1952	-	-	-	1.60	2.26	4.10	6.29	6.07	6.90	6.05	3.36	1.98	-
9	1953	1.42	1.42	1.73	2.35	2.83	4.40	5.93	6.68	6.34	5.51	2.78	1.81	3.60
10	1954	1.33	1.44	1.47	2.03	3.15	5.06	6.93	7.96	7.10	5.72	3.21	2.17	3.96
11	1955	1.62	1.47	1.70	2.18	2.79	4.39	6.38	7.87	6.25	4.60	2.72	2.10	3.67
12	1956	1.63	1.48	1.62	2.03	3.96	5.32	6.28	6.07	6.50	4.74	3.05	2.14	3.74
13	1957	1.83	1.70	1.64	1.97	3.25	4.09	5.60	6.73	5.47	4.14	2.41	1.70	3.38
14	1958	1.51	1.46	1.45	1.81	3.17	3.89	5.10	6.64	7.10	-	-	-	-
15	1959	1.58	1.47	1.66	2.09	3.44	4.75	6.07	6.66	5.85	5.38	3.36	2.14	3.70
16	1960	1.72	1.58	1.59	1.84	2.53	4.35	5.96	6.79	7.09	5.74	2.92	2.07	3.68
17	1961	1.70	1.54	2.06	2.20	3.38	5.10	5.85	6.70	6.82	5.81	3.53	2.14	3.90
18	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
23	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
24	1968	-	-	-	2.42	3.24	5.02	6.80	7.11	6.31	6.02	3.54	2.55	-
25	1969	2.20	1.88	1.77	2.18	2.90	4.83	6.30	6.79	6.79	4.91	2.96	2.28	3.82
26	1970	1.89	1.70	1.73	2.47	3.74	4.83	6.23	7.53	5.90	6.07	3.55	2.34	4.00
27	1971	1.96	1.69	1.61	2.12	2.60	4.50	6.23	6.99	6.79	5.82	3.75	2.40	3.87
28	1972	2.00	1.61	1.63	2.09	3.32	4.57	5.59	6.25	5.76	4.78	3.61	1.97	3.60
29	1973	1.63	1.43	1.53	2.17	3.47	4.95	6.05	6.83	6.17	5.58	3.30	2.42	3.79
30	1974	2.00	1.64	1.70	2.27	3.50	4.44	6.35	7.36	6.96	5.53	3.34	2.23	3.94
31	1975	1.80	1.59	1.37	1.88	2.74	-	-	-	-	-	-	2.35	-
32	1976	1.94	1.62	1.62	1.90	2.68	4.48	5.95	5.86	5.79	4.32	2.64	2.16	3.41
33	1977	1.59	1.37	1.60	2.57	3.71	5.17	5.85	6.52	6.38	5.17	2.98	2.23	3.76
34	1978	1.73	1.49	1.46	1.81	2.87	4.65	5.79	6.12	5.63	4.50	2.75	2.43	3.44
35	1979	2.12	1.70	1.40	-	-	-	-	-	-	-	-	-	-
36	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
37	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
38	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1983	-	-	-	2.36	3.37	4.38	5.76	6.35	6.55	5.99	3.46	2.16	-
40	1984	1.87	1.61	1.71	2.19	3.44	5.31	6.28	6.69	6.68	5.53	3.11	2.10	3.88
41	1985	1.67	1.48	1.85	2.33	2.84	4.75	5.87	6.16	5.98	5.30	3.21	2.20	3.64
42	1986	1.70	1.40	1.46	2.02	2.63	3.21	5.55	6.00	6.12	6.06	3.98	2.22	3.53
43	1987	1.74	1.50	1.47	2.31	2.51	3.92	5.93	7.58	7.07	5.74	3.24	2.24	3.77
44	1988	1.85	1.61	1.70	2.15	3.15	4.99	6.30	6.85	7.82	5.28	3.56	2.63	3.99
45	1989	2.05	1.79	1.92	2.29	3.08	4.71	5.94	5.94	5.95	5.63	3.30	2.13	3.73
46	1990	1.86	1.56	1.73	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.74	1.54	1.62	2.11	3.04	4.58	6.09	6.70	6.44	5.34	3.20	2.18	3.72

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO. 70 KALATIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				2.05	2.75	4.29	6.00	6.25	5.49	5.14	2.93	1.96	-
2	1969	1.55	1.44	1.55	1.88	2.47	4.16	5.61	6.08	6.07	4.33	2.68	1.97	3.32
3	1970	1.65	1.48	1.60	2.13	3.23	4.25	5.63	6.77	5.68	5.37	3.38	2.10	3.61
4	1971	1.65	1.55	1.39	1.77	2.48	4.01	5.62	6.43	6.22	5.22	4.23	2.68	3.60
5	1972	1.66	1.41	1.51	2.02	2.91	4.06	5.00	5.59	5.11	3.91	2.34	1.71	3.10
6	1973	1.36	1.31	1.34	1.34	3.06	4.41	5.43	6.21	5.71	5.01	3.19	2.23	3.38
7	1974	1.71	1.42	1.68	1.96	3.15	4.05	5.42	6.70	6.21	4.95	2.98	2.24	3.54
8	1975	2.52	1.45	1.22	1.90	2.44	3.52	5.02	5.65	5.50	4.73	2.98	2.06	3.25
9	1976	1.62	1.46	1.53	-	-	-	-	-	-	-	-	-	-
10	1977	-	-	-	2.33	3.39	4.65	5.28	6.00	5.76	4.61	2.79	1.96	-
11	1978	1.49	1.36	1.38	1.93	2.52	4.18	5.24	5.62	5.21	4.14	2.39	1.76	3.10
12	1979	1.47	1.29	1.37	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	1.74	3.04	4.04	5.17	6.41	5.97	4.58	2.70	1.76	-
14	1981	1.37	1.22	1.29	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	1.94	2.91	3.86	5.07	5.38	5.96	5.39	3.13	1.90	-
17	1984	1.61	1.42	1.49	2.01	3.22	4.83	5.83	6.34	6.40	5.28	3.00	2.00	3.62
18	1985	1.55	1.42	1.71	2.18	2.73	4.27	5.39	5.69	5.65	5.01	3.04	1.99	3.39
19	1986	1.47	1.29	1.37	1.90	2.46	2.87	5.23	5.79	5.88	5.37	3.38	2.02	3.25
20	1987	1.54	1.48	1.49	2.13	2.48	3.73	5.64	6.90	6.53	5.28	3.15	2.14	3.54
21	1988	1.64	1.54	1.58	1.89	2.87	4.44	5.75	6.29	7.55	5.15	3.30	2.12	3.68
22	1989	1.56	1.68	1.64	2.01	2.81	4.28	5.47	5.53	5.54	5.18	3.10	1.95	3.40
23	1990	1.70	1.41	1.58	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.62	1.42	1.48	1.95	2.83	4.11	5.43	6.09	5.91	4.93	3.04	2.03	3.41

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.71 KALAGACHIA(BWDB)

RIVER : DHALESWARI

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1977	-	-	-	-	2.76	3.85	4.43	4.97	4.63	3.52	2.32	1.65	-
2	1978	1.19	1.09	1.12	1.45	2.29	3.51	4.33	4.72	4.28	3.36	2.14	1.56	2.59
3	1979	1.25	1.05	1.18	-	-	-	-	-	-	-	-	-	-
4	1980	-	-	-	1.65	2.58	3.38	4.25	-	-	-	-	-	-
5	1981	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
7	1983	-	-	-	1.73	2.45	3.06	4.14	4.65	4.95	4.28	3.07	1.76	2.51
8	1984	1.38	1.15	1.17	1.66	2.61	3.93	4.71	4.82	4.88	3.81	2.23	1.56	2.83
9	1985	1.19	1.16	1.43	1.67	2.10	3.31	4.31	4.58	4.41	3.93	2.44	1.66	2.68
10	1986	1.28	1.04	1.14	1.60	2.03	2.43	3.88	4.29	4.33	3.91	2.59	1.63	2.51
11	1987	1.23	1.16	1.20	1.81	2.08	2.71	4.39	5.59	5.32	4.00	2.42	1.66	2.80
12	1988	1.21	1.15	1.24	1.64	2.48	3.53	4.48	4.81	5.23	3.41	2.07	1.52	2.73
13	1989	0.91	1.23	1.22	1.61	2.37	3.41	4.33	4.45	4.37	3.86	2.34	1.46	2.63
14	1990	1.18	0.92	0.99	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.20	1.11	1.19	1.65	2.38	3.31	4.33	4.76	4.71	3.79	2.40	1.61	2.66

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.71A REKABI BAZAR(BWDB)

RIVER : DHALESWARI

(Unit : P.W.D in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1968				1.78	2.43	3.77	5.03	5.24	4.52	4.08	2.23	1.47	-
2	1969	1.23	1.15	1.26	1.57	1.95	3.36	4.63	5.08	5.07	3.57	2.69	1.57	2.76
3	1970	1.26	1.18	1.33	1.74	2.65	3.51	4.69	5.62	4.83	4.47	2.75	1.78	2.98
4	1971	1.49	1.29	1.31	1.74	2.16	3.45	4.71	5.37	5.27	-	-	-	-
5	1972	-	-	-	1.73	2.43	3.23	4.21	4.61	4.15	3.05	1.94	1.44	-
6	1973	1.18	1.10	1.26	1.81	2.64	3.65	4.55	5.11	4.66	4.13	2.71	1.93	2.89
7	1974	1.46	1.21	1.37	1.76	2.66	3.38	4.86	5.71	5.14	4.00	2.51	1.70	2.98
8	1975	1.38	1.27	1.23	1.72	2.27	2.95	4.09	4.78	4.60	2.80	2.58	1.74	2.62
9	1976	1.30	1.15	1.36	-	-	-	-	-	-	-	-	-	-
10	1977	-	-	-	2.02	2.78	3.81	4.47	5.02	4.71	3.62	2.23	1.73	-
11	1978	1.21	1.13	1.16	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	1.62	2.45	3.29	4.17	5.09	4.71	3.47	2.14	1.40	-
14	1981	1.08	0.90	1.02	-	-	-	-	-	-	-	-	-	-
15	1982	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1983	-	-	-	1.77	2.52	3.15	4.27	4.78	5.17	4.33	2.80	1.71	-
17	1984	1.48	1.21	1.37	1.83	2.72	4.05	4.87	5.01	5.13	3.96	2.21	1.61	2.95
18	1985	1.42	1.26	1.59	1.88	2.16	3.61	4.53	4.74	4.59	4.04	2.54	1.75	2.84
19	1986	1.30	1.13	1.26	1.75	2.18	2.62	4.24	4.56	4.48	4.06	2.73	1.69	2.67
20	1987	1.31	1.25	1.28	1.85	2.08	2.80	4.49	5.70	5.37	4.12	2.50	1.78	2.88
21	1988	1.31	1.25	1.37	1.74	2.58	3.66	4.78	5.10	5.61	3.71	2.30	1.70	2.93
22	1989	1.30	1.39	1.32	1.77	2.54	3.55	4.46	4.57	4.48	4.01	2.49	1.65	2.79
23	1990	1.34	1.17	1.32	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.32	1.19	1.30	1.77	2.42	3.40	4.53	5.06	4.85	3.84	2.46	1.67	2.85

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.179 DEMRA (BWDB)

RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1952				1.63	2.14	3.30	4.85	4.91	5.38	4.79	2.98	1.86	-
2	1953	1.31	1.42	1.72	1.95	2.42	3.55	4.63	5.36	5.07	4.45	2.44	1.63	3.00
3	1954	1.28	1.25	1.32	1.78	2.60	4.26	5.38	6.26	5.86	4.56	2.69	1.66	3.24
4	1955	1.21	1.21	1.38	1.82	2.32	3.57	5.02	6.42	5.52	4.10	2.87	2.02	3.12
5	1956	1.49	1.23	1.26	1.71	3.19	4.51	5.39	5.22	5.39	3.95	2.71	1.73	3.15
6	1957	1.39	1.30	1.41	1.63	2.57	3.11	4.53	5.27	4.39	3.33	2.08	1.56	2.71
7	1958	1.35	1.30	1.31	1.65	2.69	3.25	4.15	5.19	5.55	4.41	2.84	1.94	2.97
8	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
10	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1962	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1964	-	-	-	-	-	-	-	-	-	-	2.94	1.86	-
14	1965	1.39	1.26	1.31	1.55	2.43	3.51	4.63	5.36	5.28	3.65	2.31	1.69	2.86
15	1966	1.42	1.22	1.33	1.68	2.07	3.83	4.96	5.37	5.90	3.97	2.31	1.73	2.98
16	1967	1.45	1.33	1.36	1.59	2.26	3.21	4.74	5.01	4.75	4.07	2.20	1.63	2.80
17	1968	1.35	1.27	1.32	1.85	2.39	3.70	5.39	5.65	4.90	4.43	2.49	1.68	3.04
18	1969	1.47	1.37	1.47	1.80	2.15	3.63	5.00	5.51	5.52	3.87	2.43	1.83	3.00
19	1970	1.49	1.41	1.53	-	-	-	-	-	-	-	-	-	-
20	1971	-	-	-	1.97	2.35	3.78	5.10	5.73	5.65	4.71	3.09	2.03	-
21	1972	1.73	1.38	1.53	1.99	2.72	3.55	4.61	5.09	4.57	3.39	2.17	1.66	2.87
22	1973	1.36	1.30	1.38	1.99	2.94	3.94	5.01	5.56	5.10	4.55	2.94	2.14	3.18
23	1974	1.69	1.40	1.56	1.98	2.97	3.73	5.48	6.29	5.75	4.55	2.85	1.93	3.35
24	1975	1.55	1.42	1.44	1.85	2.44	3.20	4.48	5.23	5.05	4.26	2.80	1.92	2.97
25	1976	1.48	1.37	1.49	1.80	2.41	3.73	5.17	5.05	4.92	3.51	2.33	1.89	2.93
26	1977	-	-	-	2.23	3.08	4.30	4.96	5.46	5.24	4.12	2.60	1.89	-
27	1978	1.37	1.28	1.33	1.66	2.54	4.00	4.93	5.21	4.73	3.77	2.34	1.72	2.91
28	1979	1.38	1.17	1.30	1.62	2.27	2.65	4.32	5.08	4.96	4.20	2.41	1.95	2.78
29	1980	1.46	1.37	1.50	-	-	-	-	-	-	-	-	-	-
30	1981	-	-	-	1.97	2.33	3.20	4.78	5.41	5.15	3.57	2.39	1.81	-
31	1982	1.36	1.29	1.23	1.92	2.35	3.30	4.68	5.02	4.86	3.32	2.04	1.64	2.75
32	1983	1.41	1.22	1.63	1.92	2.71	3.35	4.54	5.13	5.49	4.72	2.90	1.83	3.07
33	1984	1.52	1.25	1.40	1.92	2.85	4.31	5.18	5.44	5.47	4.38	2.39	1.73	3.15
34	1985	1.34	1.31	1.67	1.99	2.41	3.87	4.85	5.10	4.93	4.26	2.62	1.85	3.02
35	1986	1.39	1.22	1.33	1.81	2.29	2.67	4.35	4.71	4.79	4.53	2.89	1.75	2.81
36	1987	1.33	1.36	1.34	1.90	2.17	3.13	4.79	6.07	5.78	4.56	2.91	1.87	3.10
37	1988	1.45	1.37	1.45	-	-	-	-	-	-	-	-	-	-
38	1989	-	-	-	1.75	2.47	3.74	4.79	4.85	4.77	4.34	2.60	1.69	-
39	1990	1.31	1.26	1.43	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.42	1.30	1.42	1.82	2.50	3.58	4.85	5.38	5.20	4.15	2.59	1.80	2.99

Notes: 1) AVER(1) is average of all the data.

MONTHLY AVERAGE WATER LEVEL

STATION : NO.275.5 MEGHNA FERRY GHAT (BWDB)

RIVER : SURMA-MEGHNA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP	OCT.	NOV.	DEC.	AVER.
1	1968				1.69	2.20	3.52	4.95	5.28	4.51	4.07	2.31	1.57	-
2	1969	1.40	1.21	1.32	1.65	1.85	3.44	4.76	5.19	5.18	3.72	2.38	1.82	2.83
3	1970	1.49	1.35	1.47	1.93	2.78	3.65	4.80	5.65	4.91	4.57	2.96	1.96	3.13
4	1971	1.67	1.42	1.44	1.88	2.20	3.29	4.68	5.28	-	-	-	-	-
5	1972	1.85	1.39	1.45	1.93	2.56	3.38	4.93	7.05	4.25	1.66	2.16	1.67	2.86
6	1973	1.35	1.23	1.28	1.94	2.80	3.82	4.73	5.18	4.79	4.32	2.94	2.24	3.05
7	1974	1.67	1.41	1.56	1.94	2.84	3.57	5.05	5.83	5.26	4.24	2.77	2.00	3.18
8	1975	1.62	1.59	1.59	1.79	2.40	3.07	4.18	4.88	4.74	4.00	2.76	1.85	2.87
9	1976	1.38	1.28	1.42	1.66	2.33	3.47	4.85	4.74	4.58	3.25	2.24	1.91	2.76
10	1977	1.41	1.18	1.40	2.17	2.92	3.98	4.71	5.18	4.96	3.79	2.59	1.86	3.01
11	1978	1.37	1.27	1.32	-	-	-	-	-	-	-	-	-	-
12	1979	-	-	-	-	-	-	-	-	-	-	-	-	-
13	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1981	-	-	-	1.85	2.28	3.06	4.55	5.09	4.80	3.45	2.33	1.76	-
15	1982	1.31	1.13	1.14	1.87	2.29	3.05	4.48	4.83	4.77	3.28	2.00	1.53	2.64
16	1983	1.33	1.15	1.47	1.79	2.63	3.31	4.46	4.93	5.26	4.46	2.86	1.81	2.96
17	1984	1.52	1.29	1.38	1.68	2.74	4.05	4.87	4.99	5.17	4.10	2.39	1.73	2.99
18	1985	1.36	1.32	1.66	1.99	2.42	3.80	4.68	4.88	4.70	4.11	2.67	1.92	2.96
19	1986	1.43	1.27	1.38	1.92	2.31	2.64	4.19	4.60	4.60	4.23	2.91	1.80	2.77
20	1987	1.37	1.33	1.38	1.95	2.22	3.14	4.69	5.72	5.43	4.30	2.64	1.91	3.01
21	1988	1.44	1.38	1.47	1.86	2.82	4.11	5.16	5.39	5.82	4.05	2.52	1.94	3.16
22	1989	1.35	1.41	1.38	1.81	2.59	3.70	4.65	4.81	4.68	4.23	2.72	1.73	2.92
23	1990	1.33	1.30	1.47	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.46	1.31	1.42	1.86	2.48	3.48	4.70	5.24	4.91	3.88	2.56	1.83	2.94

Notes: 1) AVER(1) is average of all the data.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		MONTHLY AVERAGE WATERLEVEL													
2															
3		STATION : NO.299 TONGI(BWDB)													
4		RIVER : TONGI KHAL												(Unit : PWD in m)	
5															
6	NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	AVER
7	1	1960				1.48	2.03	3.32	4.71	5.53	5.77	4.79	2.57	1.66	-
8	2	1961	1.30	1.17	1.74	1.72	2.61	4.05	4.62	5.36	5.64	-	-	-	-
9	3	1962	1.53	1.62	1.52	1.71	2.29	3.77	5.39	5.90	6.58	4.43	2.62	1.77	3.26
10	4	1963	1.41	1.31	1.26	1.52	2.00	3.75	5.29	6.01	5.93	4.25	2.86	1.86	3.12
11	5	1964	1.48	1.20	1.39	2.08	2.88	3.51	5.32	6.46	5.88	4.95	3.21	1.96	3.36
12	6	1965	1.37	1.25	1.25	1.60	2.44	3.51	4.81	5.69	5.69	4.10	2.60	1.71	3.00
13	7	1966	1.32	1.14	1.30	1.63	2.00	3.77	5.06	5.58	6.27	4.26	2.48	1.78	3.05
14	8	1967	1.42	1.30	1.41	1.56	2.31	3.26	4.92	5.42	5.03	4.50	2.59	1.63	2.95
15	9	1968	1.31	1.24	1.32	1.77	2.34	3.83	5.63	6.05	5.19	4.80	2.85	1.66	3.17
16	10	1969	1.36	1.29	1.34	1.70	2.08	3.68	5.19	5.91	5.91	4.18	2.51	1.76	3.08
17	11	1970	1.41	1.30	1.40	1.91	2.85	3.84	5.30	6.68	5.43	5.24	3.15	1.99	3.38
18	12	1971	1.62	1.41	-	-	2.87	4.06	5.39	6.12	6.14	5.04	3.47	2.04	-
19	13	1972	1.67	1.31	1.33	1.94	2.62	3.58	4.70	5.35	4.79	3.64	2.20	1.59	2.89
20	14	1973	1.30	1.21	1.31	1.89	3.03	4.06	5.20	5.82	5.27	4.71	3.03	2.20	3.25
21	15	1974	1.65	1.31	1.47	2.02	2.90	3.70	5.54	6.59	6.00	-	2.94	1.85	-
22	16	1975	1.46	1.31	1.31	1.78	2.36	-	-	-	-	-	-	-	-
23	17	1976	-	-	-	1.68	2.36	-	-	-	-	-	-	-	-
24	18	1977	-	-	-	2.22	-	4.28	5.00	5.52	5.36	4.20	2.70	1.87	-
25	19	1978	1.36	1.19	1.17	1.59	2.72	4.10	4.89	5.23	4.74	3.80	2.37	1.64	2.90
26	20	1979	1.29	1.05	1.25	1.60	2.13	2.58	4.24	5.12	4.99	4.27	2.61	1.89	2.75
27	21	1980	1.32	1.16	1.37	1.71	2.80	3.77	4.65	5.91	5.66	4.25	2.66	1.74	3.08
28	22	1981	1.27	1.10	1.19	-	-	-	-	-	-	-	-	-	-
29	23	1982	-	-	-	1.77	2.32	3.16	4.63	5.22	4.87	3.58	2.09	1.46	-
30	24	1983	1.22	1.07	1.44	1.79	2.68	3.29	4.57	5.19	5.53	5.00	3.07	1.86	3.06
31	25	1984	1.48	1.18	1.27	1.77	2.96	4.39	5.25	5.64	5.58	4.56	2.51	1.67	3.19
32	26	1985	1.28	1.16	1.50	1.88	2.41	3.80	4.83	5.18	4.99	4.36	2.81	1.86	3.01
33	27	1986	1.31	1.11	1.24	1.77	2.31	2.56	4.38	4.84	4.89	4.85	3.16	1.83	2.85
34	28	1987	1.30	1.16	1.19	1.73	2.22	3.11	4.83	6.34	5.98	4.76	2.76	1.91	3.11
35	29	1988	1.39	1.23	1.41	-	-	-	-	5.84	6.70	-	-	-	-
36	30	1989	-	-	-	1.66	2.34	3.82	4.81	4.86	4.81	4.54	2.89	1.74	-
37	31	1990	1.30	1.22	1.49	-	-	-	-	-	-	-	-	-	-
38															
39		AVER(1)	1.39	1.23	1.35	1.76	2.48	3.64	4.97	5.68	5.54	4.46	2.75	1.8	3.08
40															
41		N0tes: 1) AVER(1) is average of all the data													
42		2) Above data are necessary to be revised by using following equation to get the correct elevation.													
43		Y=X + 0.122													
44		where, X : above raw data Y : revised data													

MONTHLY AVERAGE WATER LEVEL

STATION : NO.302 MIRPUR (BWDB)

RIVER : TURAG

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1953				2.06	2.07	3.79	4.99	5.94	5.49	4.85	2.68	1.82	-
2	1954	1.42	1.52	1.52	2.03	2.68	4.21	5.95	7.31	6.51	4.90	2.92	1.71	3.56
3	1955	1.31	1.21	1.42	1.77	2.31	3.42	5.08	7.21	5.63	4.07	2.90	1.93	3.19
4	1956	1.45	-	1.49	1.75	3.10	4.53	5.59	5.35	5.66	4.09	2.72	-	-
5	1957	-	1.50	1.42	1.71	2.60	3.19	4.62	5.68	-	3.40	2.06	1.48	-
6	1958	1.32	1.25	1.26	1.59	2.64	3.20	4.11	5.60	6.22	4.62	2.85	1.80	3.04
7	1959	-	-	-	1.86	2.81	4.24	5.44	5.91	5.19	4.70	3.02	1.80	-
8	1960	1.31	1.21	1.13	1.40	1.93	3.29	4.72	5.68	5.96	4.76	2.42	1.68	2.96
9	1961	1.34	1.19	1.74	1.75	2.45	3.77	4.37	5.21	5.50	4.61	2.70	1.60	3.02
10	1962	1.41	1.45	1.40	1.79	2.29	3.71	5.41	6.04	6.71	4.30	2.43	1.75	3.22
11	1963	1.46	1.37	1.34	1.61	1.90	3.59	5.37	6.16	6.09	4.27	2.82	2.05	3.17
12	1964	1.66	1.58	1.77	2.15	2.59	3.39	5.31	6.61	5.98	4.91	3.00	1.79	3.40
13	1965	1.30	1.18	1.18	1.53	2.24	3.42	4.68	5.76	5.72	3.92	2.33	1.69	2.91
14	1966	1.38	1.18	1.29	1.69	2.08	3.87	5.15	5.74	6.42	4.20	2.31	1.74	3.09
15	1967	1.40	1.32	1.35	-	-	-	-	-	-	-	-	-	-
16	1968	-	-	-	1.85	2.30	3.72	5.66	6.08	5.15	4.74	2.49	1.61	-
17	1969	1.60	1.51	1.62	1.96	2.33	3.85	5.24	5.92	5.95	4.05	2.40	1.76	3.18
18	1970	1.46	1.36	1.41	1.93	2.88	3.79	5.28	6.74	5.39	5.11	2.86	1.94	3.35
19	1971	1.64	1.45	-	-	-	-	-	-	-	-	-	-	-
20	1972	-	-	-	1.85	2.60	3.46	4.64	5.30	4.70	3.42	2.08	1.57	-
21	1973	1.25	1.20	1.28	1.88	2.81	3.90	5.08	5.85	5.26	4.63	2.92	2.08	3.18
22	1974	1.65	1.34	1.46	1.88	2.80	3.60	5.40	6.57	5.95	4.52	2.77	1.85	3.32
23	1975	1.46	1.36	1.38	1.83	2.35	-	-	-	-	4.15	2.70	1.79	-
24	1976	1.37	1.25	1.43	1.74	2.32	-	-	-	-	3.45	2.24	1.79	-
25	1977	1.34	1.15	1.33	2.17	2.99	4.21	4.91	5.54	5.33	4.04	2.59	1.78	3.12
26	1978	1.33	1.24	1.28	1.61	2.52	3.88	4.83	5.21	4.72	3.70	2.27	1.64	2.85
27	1979	1.34	1.13	1.30	-	-	-	-	-	-	-	-	-	-
28	1980	-	-	-	-	-	-	-	-	-	-	-	-	-
29	1981	-	-	-	1.98	2.33	3.19	4.80	5.53	5.28	3.62	2.30	1.77	-
30	1982	1.33	1.22	1.20	1.89	2.36	3.23	4.65	5.08	4.91	3.45	2.05	1.57	2.75
31	1983	1.31	1.18	1.55	1.87	2.67	3.34	4.56	5.18	5.59	4.94	2.96	1.82	3.08
32	1984	1.50	1.29	1.43	1.88	2.87	4.37	5.32	5.70	5.74	4.51	2.43	1.70	3.23
33	1985	1.33	1.25	1.61	1.94	2.39	3.85	4.88	5.24	5.04	4.37	2.70	1.85	3.04
34	1986	1.36	1.18	1.29	1.82	2.27	2.66	4.40	4.85	4.91	4.74	3.00	1.77	2.85
35	1987	1.34	1.28	1.29	1.86	2.13	3.15	4.89	6.53	6.11	4.75	2.74	1.94	3.17
36	1988	1.43	1.41	1.49	1.87	2.79	4.19	5.42	5.86	6.89	4.24	2.59	2.03	3.35
37	1989	1.39	1.39	1.39	0.88	2.49	3.80	4.84	4.92	4.86	4.45	2.66	1.67	2.90
38	1990	1.35	1.30	1.43	-	-	-	-	-	-	-	-	-	-
	AVER(1)	1.40	1.30	1.40	1.80	2.48	3.67	5.02	5.82	5.63	4.32	2.60	1.77	3.12

Notes:

1) AVER(1) is average of all the data.

2) Above data are necessary to be revised by using following equation to get the correct elevation.

Y=X + 0.042

where, X : above raw data Y : revised data

5. Probable Maximum Water Level of Mill Barak (BWDB Sta. 42), Demra (BWDB Sta. 7.5) and Savar (BWDB Sta. 69)

Mill Barak (BWDB Sta. 42)

** GUMBEL-CHOW'S METHOD **

STATION NAME :MILL BARAK(BWDB STA.42)
N = NUMBER OF DATA
H=WATER LEVEL(M,PWD)

TS = 2 (YR)
TR = 10 (YR)
ST = 1 (YR)

ORIGINAL DATA
N = 37

K	R(K)
1	6.00
2	5.96
3	5.60
4	6.26
5	5.96
6	5.72
7	5.45
8	5.66
9	7.02
10	7.05
11	5.64
12	5.32
13	6.41
14	5.74
15	6.06
16	5.48
17	6.30
18	5.89
19	6.47
20	6.19
21	5.26
22	5.84
23	6.57
24	5.39
25	5.13
26	5.60
27	5.22
28	5.25
29	6.39
30	5.42
31	5.73
32	6.00
33	5.37
34	4.96
35	6.60
36	7.54
37	5.06

SORTING RESULTS

K	R(K)
1	7.54
2	7.05
3	7.02
4	6.60
5	6.57
6	6.47
7	6.41
8	6.39
9	6.30
10	6.26
11	6.19
12	6.06
13	6.00
14	6.00
15	5.96
16	5.96
17	5.89
18	5.84
19	5.74
20	5.73
21	5.72
22	5.66
23	5.64
24	5.60
25	5.60
26	5.48
27	5.45
28	5.42
29	5.39
30	5.37
31	5.32
32	5.26
33	5.25
34	5.22
35	5.13
36	5.06
37	4.96

XM = 5.878649
STANDARD DEVIATION
SG = .5881541

T(YR)	KG	X
2.00	-0.1643	5.78
3.00	0.2538	6.03
4.00	0.5214	6.19
5.00	0.7195	6.30
6.00	0.8770	6.39
7.00	1.0079	6.47
8.00	1.1198	6.54
9.00	1.2177	6.59
10.00	1.3046	6.65

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
10.00	1.3046	6.65
20.00	1.8658	6.98
30.00	2.1887	7.17
40.00	2.4163	7.30
50.00	2.5923	7.40
60.00	2.7358	7.49
70.00	2.8569	7.56
80.00	2.9617	7.62
90.00	3.0541	7.67
100.00	3.1367	7.72

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
50.00	2.5923	7.40
100.00	3.1367	7.72
150.00	3.4541	7.91
200.00	3.6791	8.04
250.00	3.8535	8.15
300.00	3.9959	8.23
350.00	4.1163	8.30
400.00	4.2205	8.36
450.00	4.3125	8.42
500.00	4.3947	8.46

** X: WATER LEVEL(M,PWD) **

Demra (BWDB Sta. 7.5)

** GUMBEL-CHOW'S METHOD **

STATION NAME :DEMRA(BWDB STA.7.5
N = NUMBER OF DATA
R=WATER LEVEL(M,PWD)

TS = 2 (YR)
TR = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 35

K	R(K)
1	5.63
2	5.63
3	6.63
4	6.89
5	5.79
6	5.57
7	6.05
8	6.29
9	5.92
10	6.40
11	5.81
12	6.24
13	5.43
14	6.08
15	5.85
16	6.24
17	6.03
18	5.40
19	5.88
20	6.58
21	5.60
22	5.47
23	5.92
24	5.47
25	5.59
26	6.23
27	5.74
28	6.00
29	5.90
30	6.33
31	5.70
32	5.25
33	6.46
34	7.10
35	5.44

SORTING RESULTS

K	R(K)
1	7.10
2	6.89
3	6.63
4	6.58
5	6.46
6	6.40
7	6.33
8	6.29
9	6.24
10	6.24
11	6.23
12	6.08
13	6.05
14	6.03
15	6.00
16	5.92
17	5.92
18	5.90
19	5.88
20	5.85
21	5.81
22	5.79
23	5.74
24	5.70
25	5.63
26	5.63
27	5.60
28	5.59
29	5.57
30	5.47
31	5.47
32	5.44
33	5.43
34	5.40
35	5.25

XM = 5.958286
STANDARD DEVIATION
SG = .4350402

T(YR)	KG	X
2.00	-0.1643	5.89
3.00	0.2538	6.07
4.00	0.5214	6.19
5.00	0.7195	6.27
6.00	0.8770	6.34
7.00	1.0079	6.40
8.00	1.1198	6.45
9.00	1.2177	6.49
10.00	1.3046	6.53

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
10.00	1.3046	6.53
20.00	1.8658	6.77
30.00	2.1887	6.91
40.00	2.4163	7.01
50.00	2.5923	7.09
60.00	2.7358	7.15
70.00	2.8569	7.20
80.00	2.9617	7.25
90.00	3.0541	7.29
100.00	3.1367	7.32

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
50.00	2.5923	7.09
100.00	3.1367	7.32
150.00	3.4541	7.46
200.00	3.6791	7.56
250.00	3.8535	7.63
300.00	3.9959	7.70
350.00	4.1163	7.75
400.00	4.2205	7.79
450.00	4.3125	7.83
500.00	4.3947	7.87

** X: WATER LEVEL(M,PWD) **

6. Major Cyclones in Bangladesh

Savar (BWDB Sta. 69)

** GUMBEL-CHOW'S METHOD **

STATION NAME :SAVAR(BWDB STA.69)
N = NUMBER OF DATA
R=WATER LEVEL(M,PWD)

TS = 2 (YR)
TE = 10 (YR)
SY = 1 (YR)

ORIGINAL DATA
N = 33

K	R(K)
1	7.41
2	6.84
3	6.98
4	7.20
5	7.23
6	7.04
7	7.35
8	7.10
9	7.06
10	8.17
11	8.26
12	6.83
13	7.20
14	7.12
15	7.57
16	7.30
17	7.69
18	7.08
19	7.99
20	7.36
21	6.66
22	7.21
23	7.80
24	6.31
25	6.88
26	6.29
27	6.96
28	7.58
29	6.70
30	6.69
31	8.30
32	9.68
33	6.34

SORTING RESULTS

K	R(K)
1	9.68
2	8.30
3	8.26
4	8.17
5	7.99
6	7.80
7	7.69
8	7.58
9	7.57
10	7.41
11	7.36
12	7.35
13	7.30
14	7.23
15	7.21
16	7.20
17	7.20
18	7.12
19	7.10
20	7.08
21	7.06
22	7.04
23	6.98
24	6.96
25	6.88
26	6.84
27	6.83
28	6.70
29	6.69
30	6.66
31	6.34
32	6.31
33	6.29

XM = 7.278182
STANDARD DEVIATION
S = .6638736

T(YR)	KG	X
2.00	-0.1643	7.17
3.00	0.2538	7.45
4.00	0.5214	7.62
5.00	0.7195	7.76
6.00	0.8770	7.86
7.00	1.0079	7.95
8.00	1.1198	8.02
9.00	1.2177	8.09
10.00	1.3046	8.14

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
10.00	1.3046	8.14
20.00	1.8658	8.52
30.00	2.1887	8.73
40.00	2.4163	8.88
50.00	2.5923	9.00
60.00	2.7358	9.09
70.00	2.8569	9.17
80.00	2.9617	9.24
90.00	3.0541	9.31
100.00	3.1367	9.36

** X: WATER LEVEL(M,PWD) **

T(YR)	KG	X
50.00	2.5923	9.00
100.00	3.1367	9.36
150.00	3.4541	9.57
200.00	3.6791	9.72
250.00	3.8535	9.84
300.00	3.9959	9.93
350.00	4.1163	10.01
400.00	4.2205	10.08
450.00	4.3125	10.14
500.00	4.3947	10.20

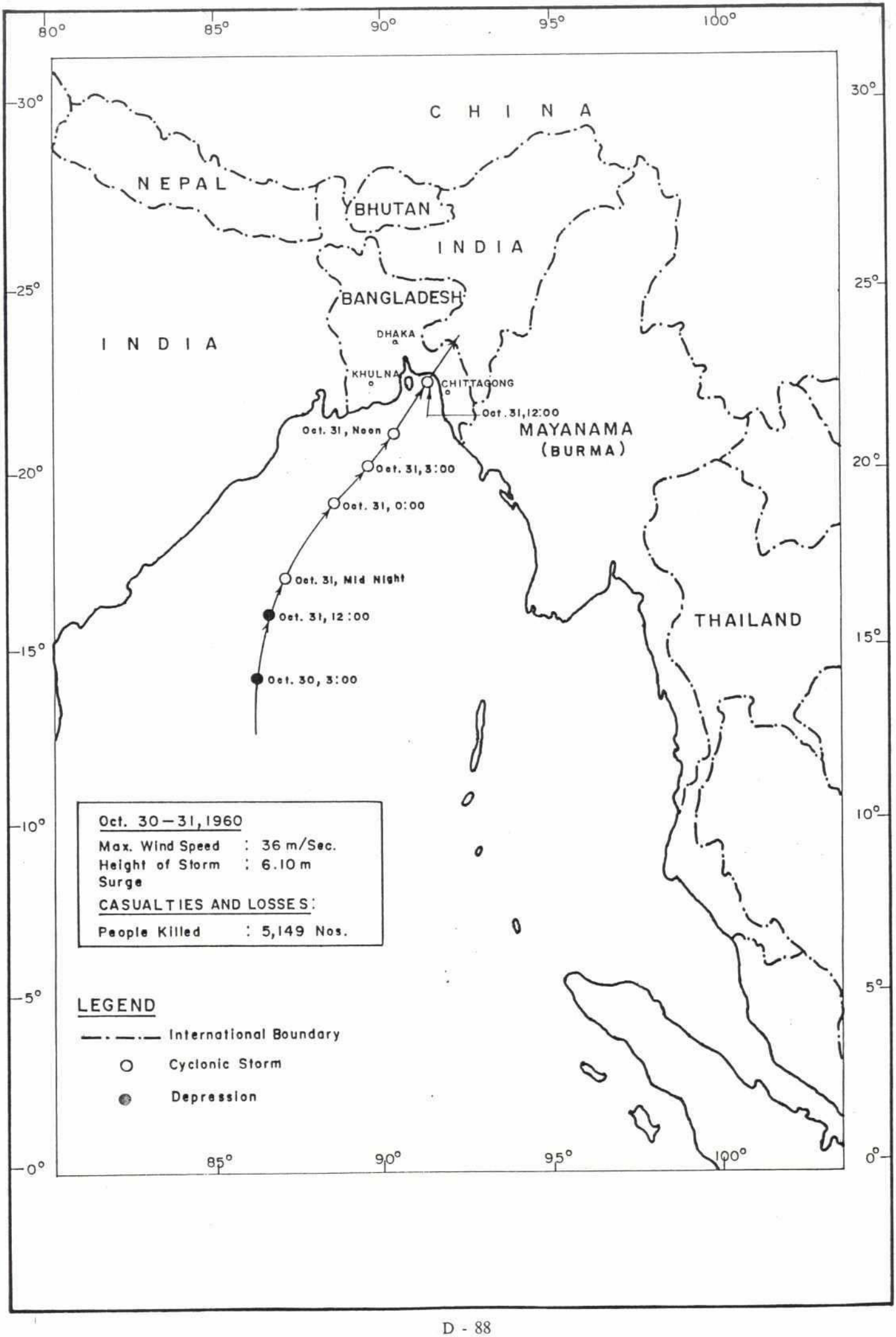
** X: WATER LEVEL(M,PWD) **

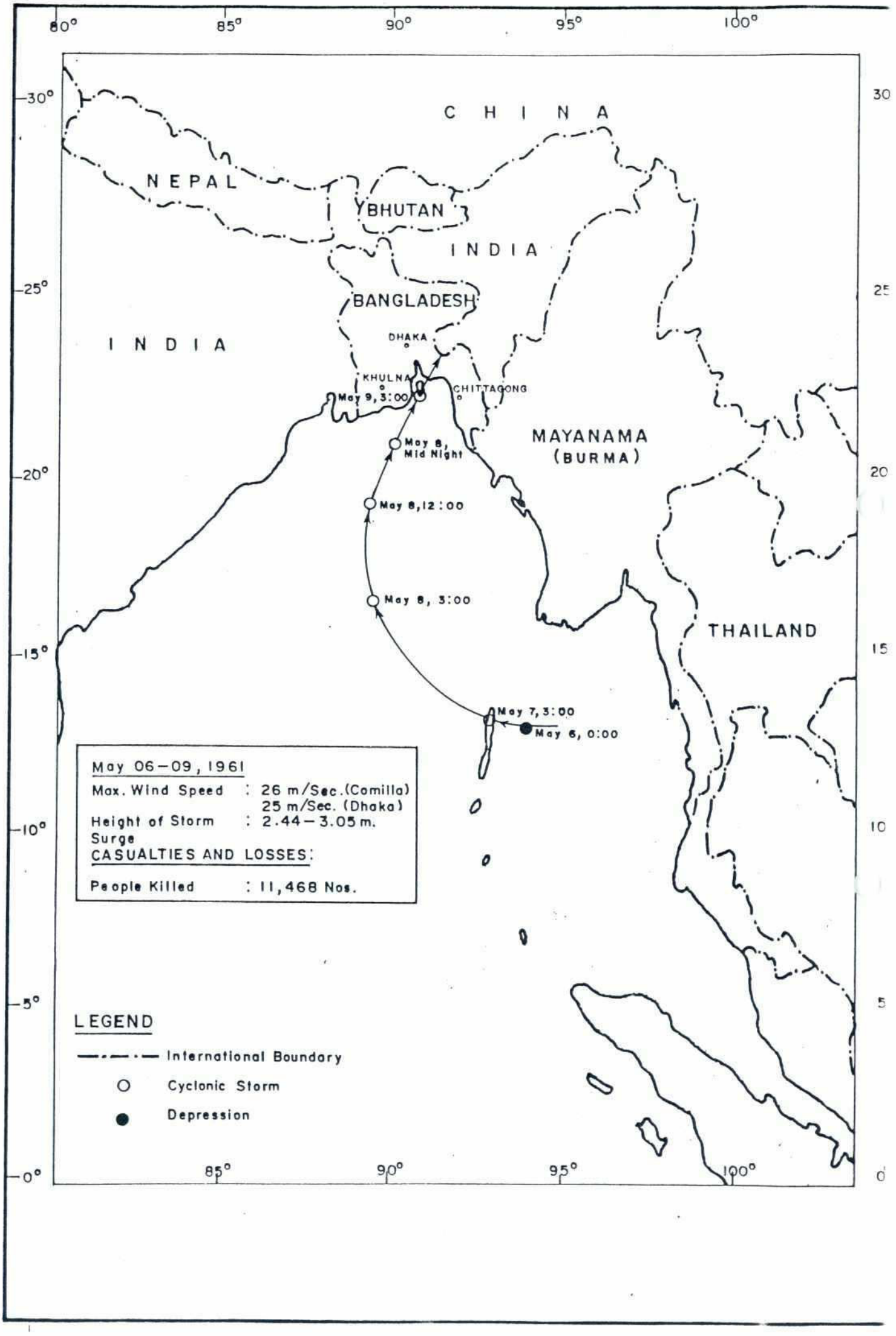
GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
BANGLADESH METEOROLOGICAL DEPARTMENT
(CLIMATE DIVISION)
METEOROLOGICAL COMPLEX, AGARGAON,
DHAKA -1207.

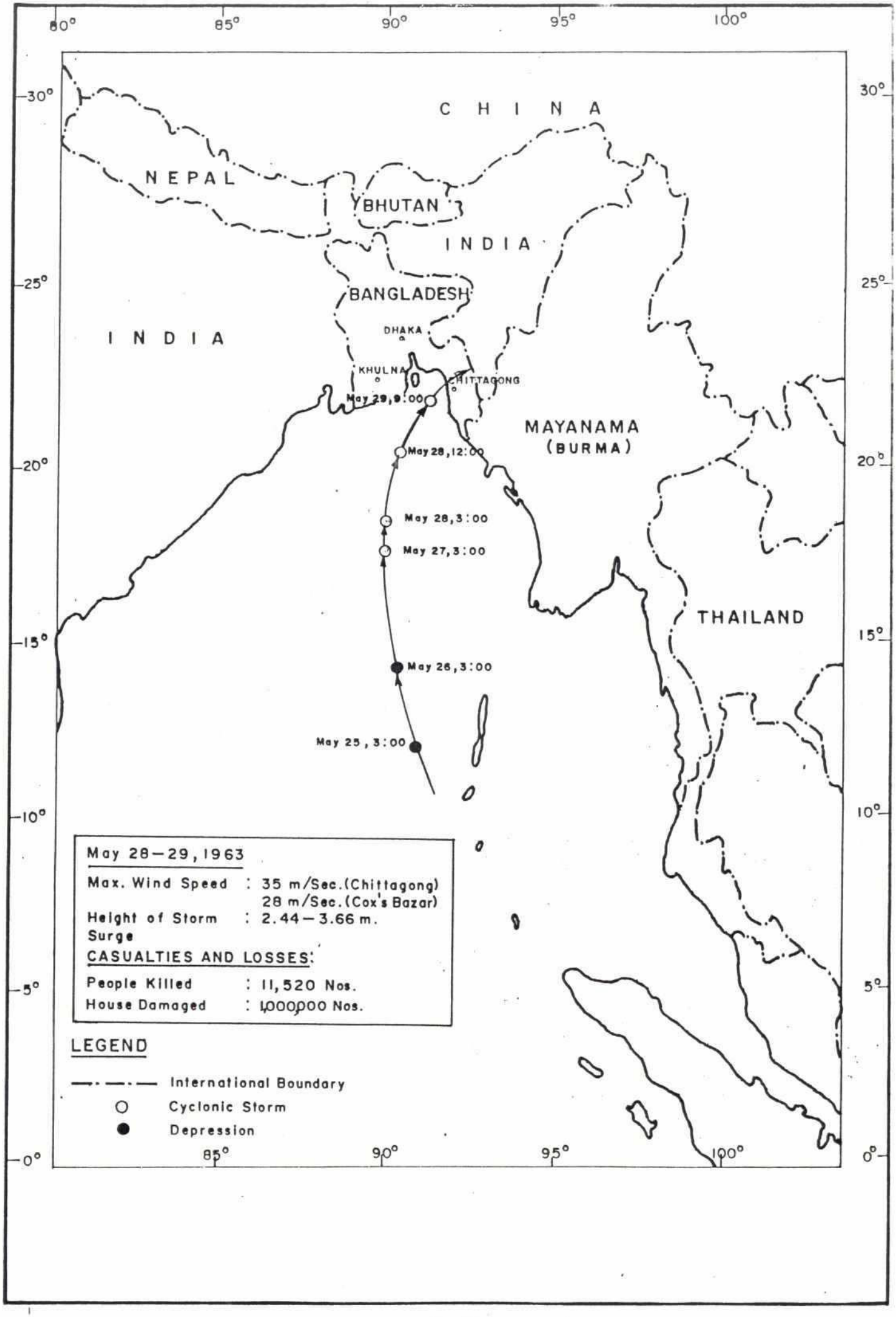
Major cyclonic Storms with Max. Wind Speed and tidal Surges in Bangladesh.

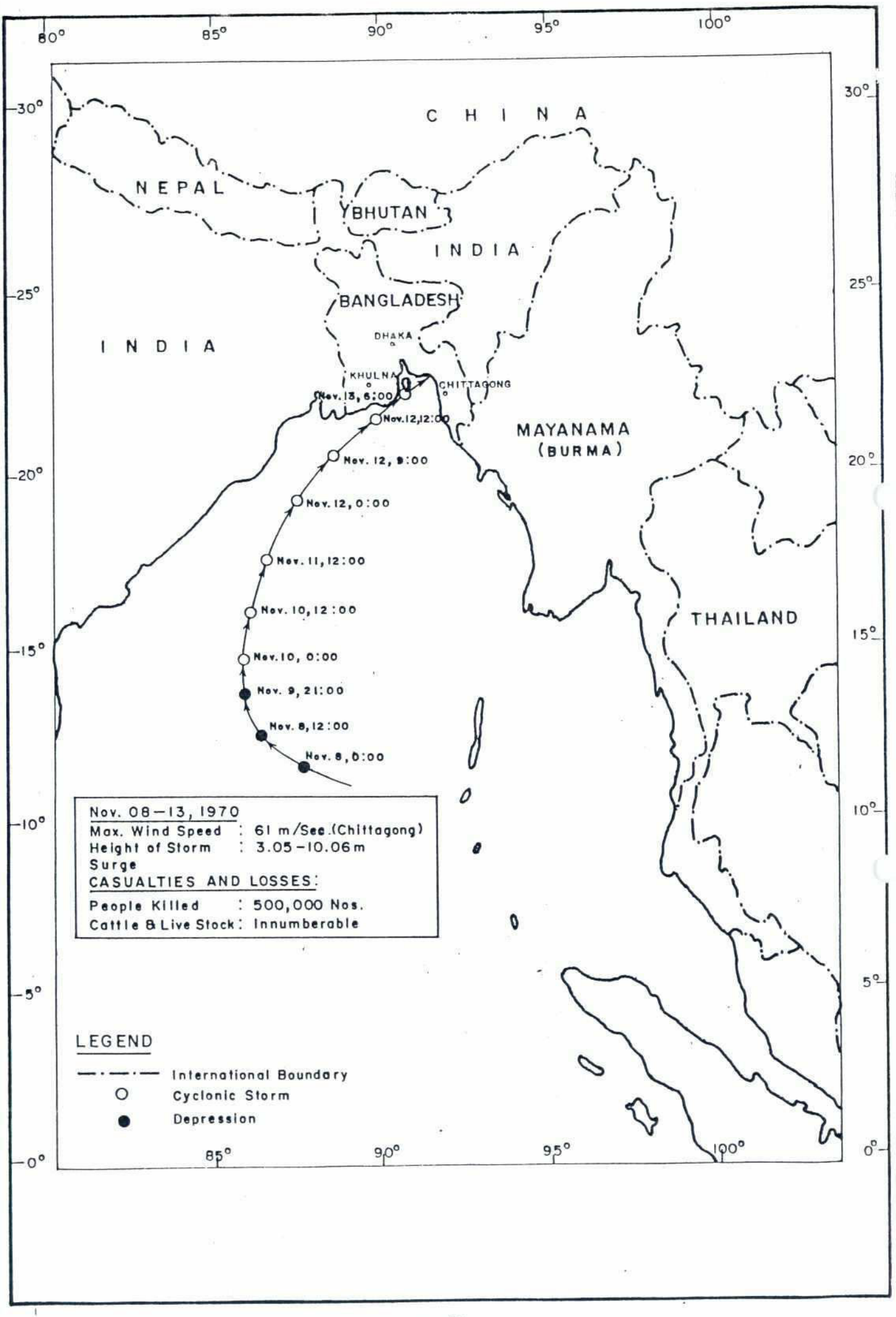
Date	Nature of Phenomena	Landfall area	Estimated Central Pressure (mbs.)
1.11.1876	Severe cyclonic Stom with a core of hurricane wind with Storm surge of 10-45ft.	Noakhali	-
11.10.1960	Serwre cyclonic storm with storm Surge of 15ft. and maximum wind speed 87 kts (160 Kph.)	Chittagong	-
31.10.1960	Severe cyclonic Storm with Storm surge of 20 ft. and maximum wind speed 104 kts. (193 kph).	Chittagong	-
09.05.1961	Severe cyclonic Storm with Storm Surge of 8-10ft. and maximum wind Speed 87 kts. (160 kph).	Chittagong	-
30.05.1961	Severe cyclonic Storm with storm Surge of 6-15ft. and maximum wind Speed 87 kts. (160 kph)	Chittagong (Near Feni)	-
28.05.1963	Severe cyclonic storm with Storm Surge of 8-12 ft. and maximum wind Speed 113 kts (209 kph).	Chittagong - Cox's Bazar	-
11.05.1965	Severe cyclonic Storm with Storm Surge of 12ft. and maximum wind Speed 87 kts. (160 kph).	Chittagong Barisal coast.	-
05.11.1965	Severe cyclonic Storm with Surge height 8-12 ft. and maximum wind speed 87 kts. (160 kph).	Chittagong	-
15.12.1965	Sever cyclonic storma with Surge of 8-10 ft. and maximum wind Speed 114 kts. (210 kph)	Cox's Bazar	-
01.11.1966	Severe cyclonic storm with surge height 20-22ft. and maximum wind speed 65 kts. (120 kph)	Chittagong	-
23.10.1970	Severe cyclonic Storm of hurricane intens ity with moderate storm Surge and maximum wind speed 88kts. (163 kph)	Khulna - Barisal	-
12.11.1970	Severe cyclonice Storm with a core of hurricane wind with Surge height of 10-33 ft. and maximum wind speed 121 kts (224 khph).	Chittagong	-

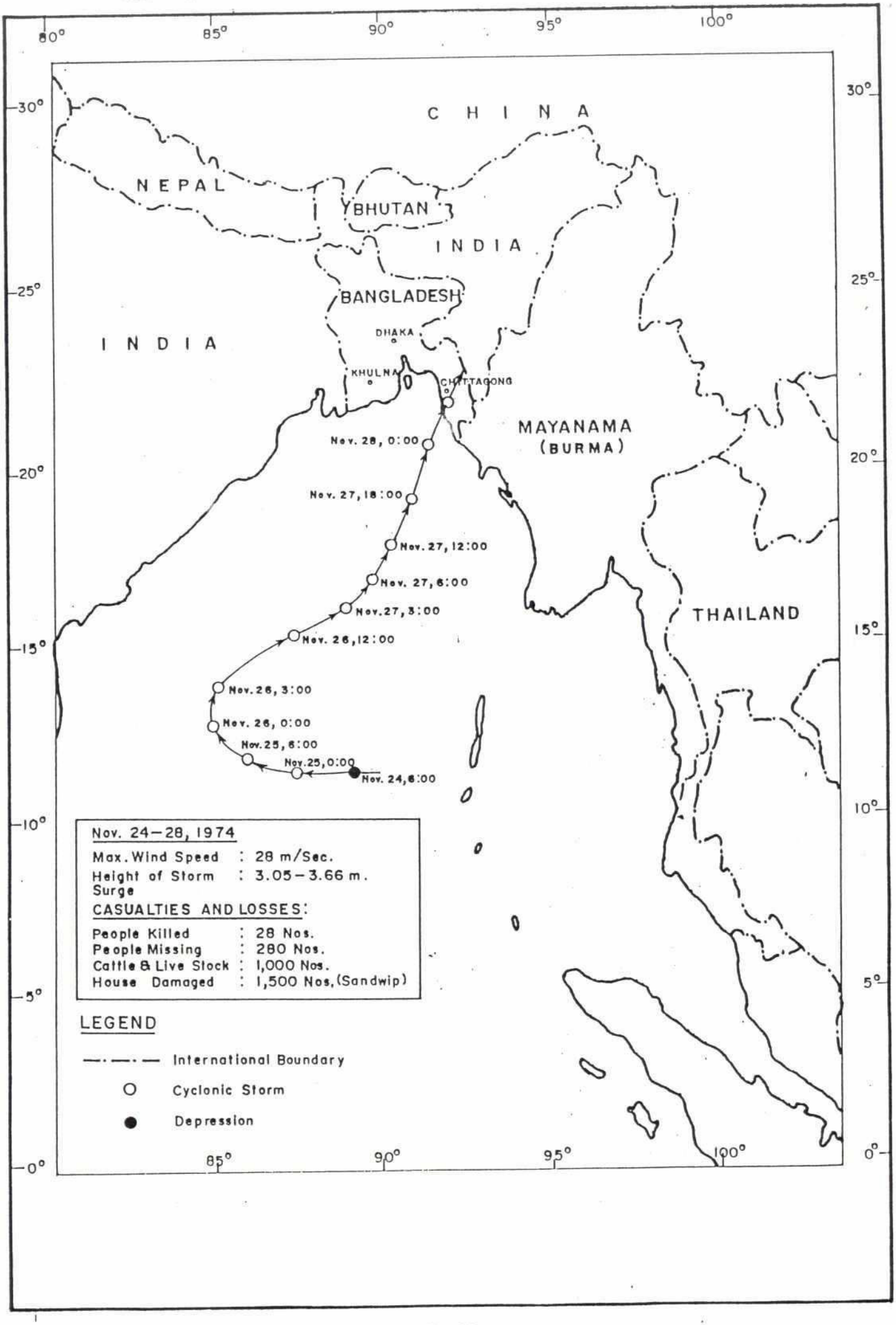
	Nature of phenomena	Landfall area	Estimated Central pressure (mbs)
+ 28.11.1974	Severe cyclonic Storm with Surge height 9-17ft. and maximum wind speed 88 kts. (163 kph).	Cox's Bazar Chittagong	-
10.12.1981	Cyclonic Storm with Surge of 7 -15 ft. and wind Speed 65 kts. (120 kph).	Khulna	989 mbs
15.10.1983	Cyclonic Storm with wind Speed 50 kts.(93 kph).	Chittagong	995 mbs
09.11.1983	Severe cyclonic Storm with Surge of 5ft. and maximum wind Speed 73 kts. (136 kph)	Cox's Bazar	986 mbs
24.05.1985	Severe cyclonic Storm with Surge height of 15ft. and maximum wind Speed 83 kts (154 kph).	Chittagong	982 mbs
29.11.1988	Severe cyclonic Storm with a core of hurricane wind with Storm Surge of 2 - 14.5 ft. and maximum wind Speed of 87 kts. (160 kph.)	Khulna	983 mbs

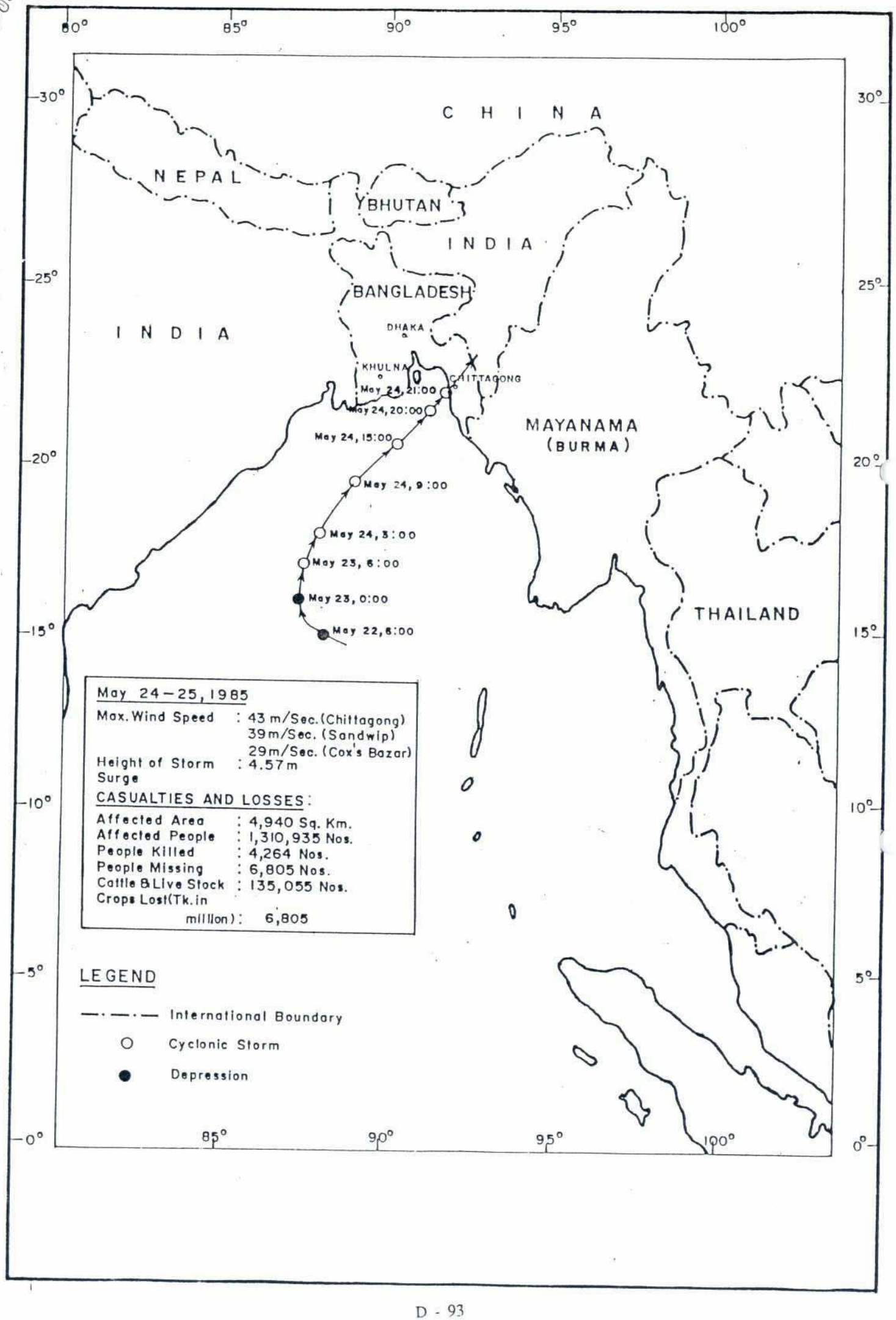

80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
CHITTAGONG
Oct. 31, 12:00
Oct. 31, Noon
Oct. 31, 3:00
Oct. 31, 0:00
Oct. 31, Mid Night
Oct. 31, 12:00
Oct. 30, 3:00
MAYANAMA
(BURMA)
THAILAND
Oct. 30–31, 1960
Max. Wind Speed : 36 m/Sec.
Height of Storm Surge : 6.10 m
CASUALTIES AND LOSSES:
People Killed : 5,149 Nos.
LEGEND
International Boundary
Cyclonic Storm
Depression

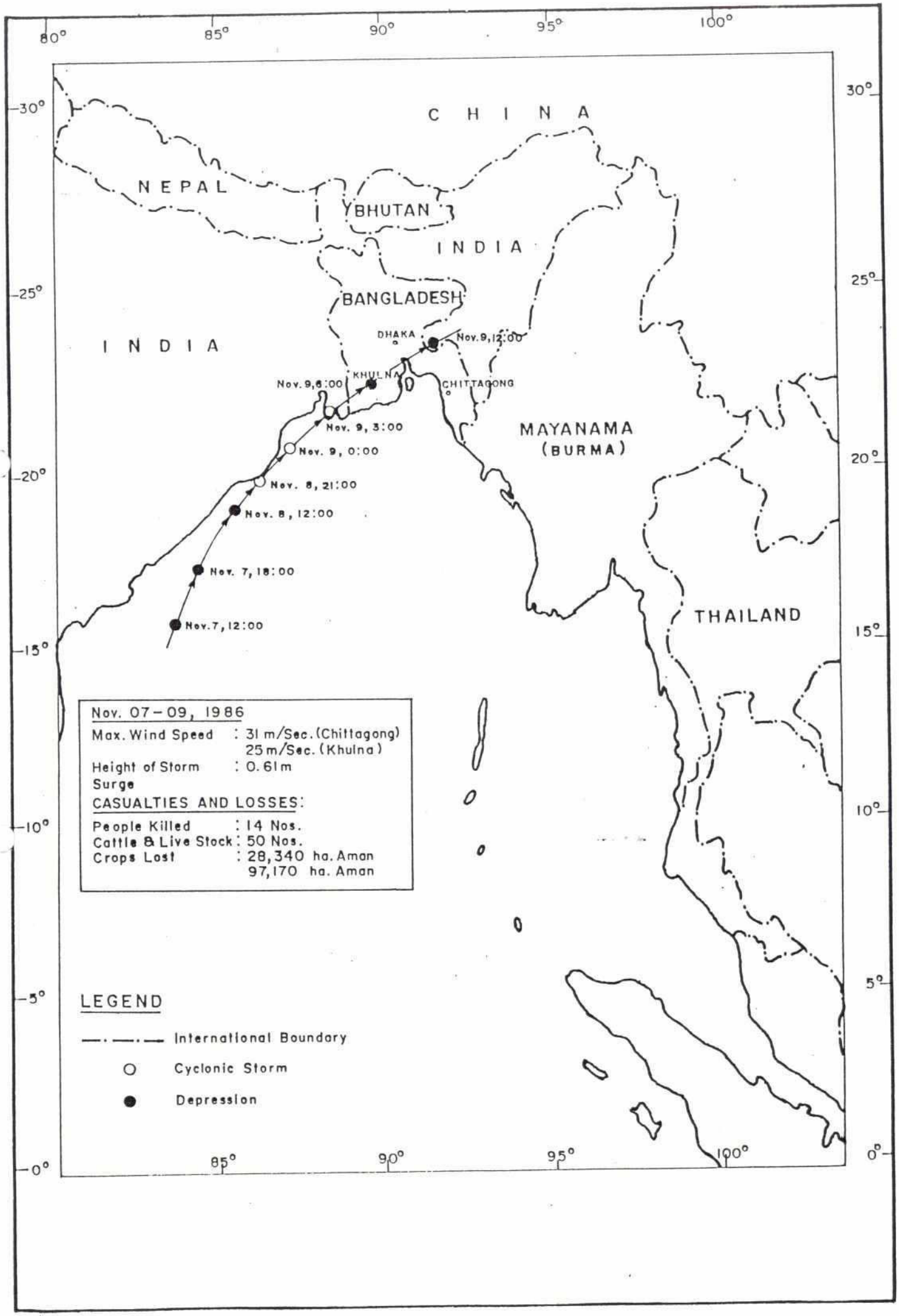

80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
May 9, 3:00
CHITTAGONG
MAYANAMA
(BURMA)
May 8,
Mid Night
May 8, 12:00
May 8, 3:00
THAILAND
May 7, 3:00
May 6, 0:00
May 06–09, 1961
Max. Wind Speed : 26 m/Sec.(Comilla)
25 m/Sec. (Dhaka)
Height of Storm Surge : 2.44–3.05 m.
CASUALTIES AND LOSSES:
People Killed : 11,468 Nos.
LEGEND
International Boundary
Cyclonic Storm
Depression

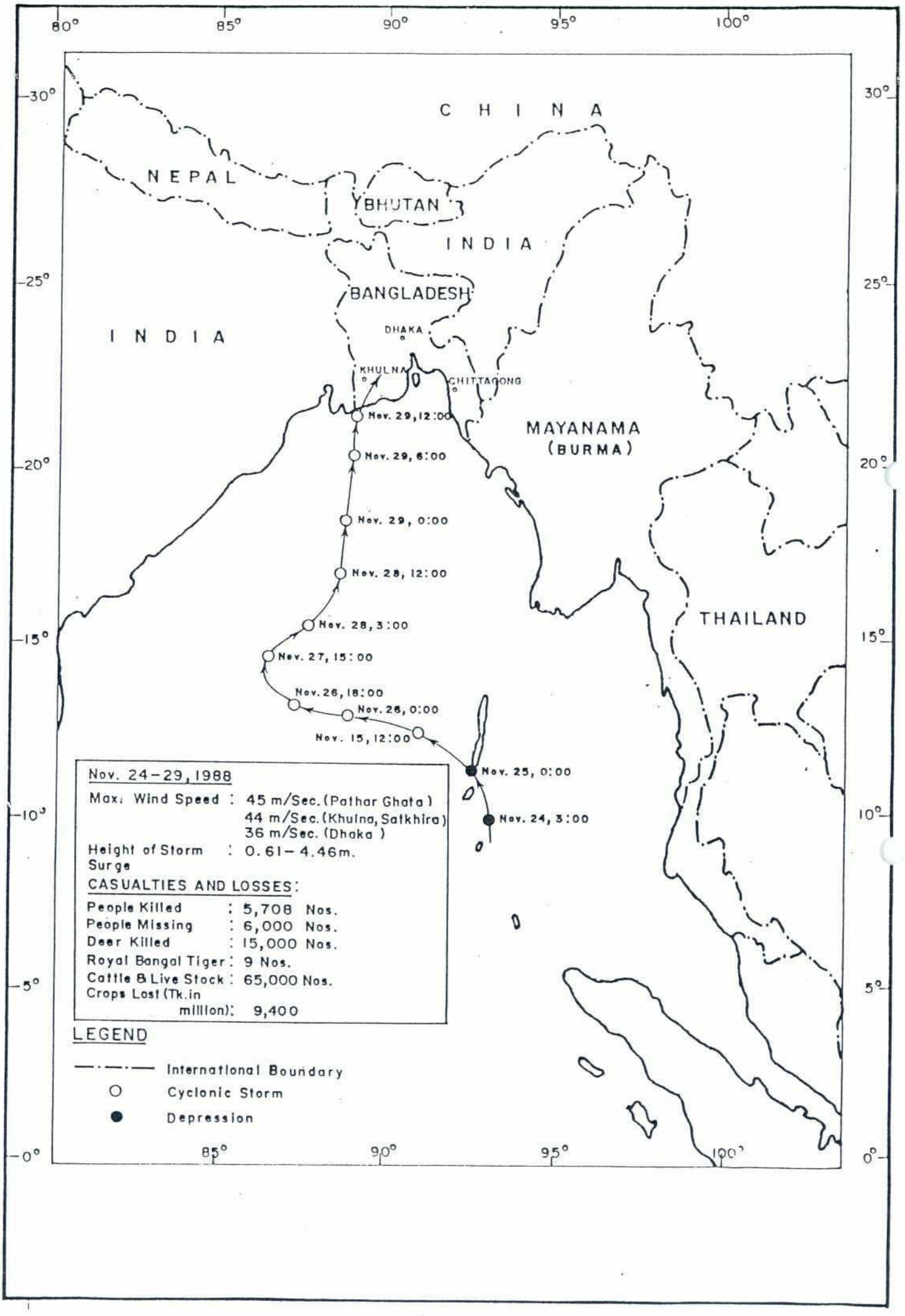

80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
CHITTAGONG
May 29, 9:00
May 28, 12:00
May 28, 3:00
May 27, 3:00
May 26, 3:00
May 25, 3:00
MAYANAMA
(BURMA)
THAILAND
May 28–29, 1963
Max. Wind Speed : 35 m/Sec.(Chittagong)
28 m/Sec.(Cox's Bazar)
Height of Storm Surge : 2.44–3.66 m.
CASUALTIES AND LOSSES:
People Killed : 11,520 Nos.
House Damaged : 1,000,00 Nos.
LEGEND
International Boundary
Cyclonic Storm
Depression


80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
CHITTAGONG
Nov. 13, 6:00
Nov. 12, 12:00
Nov. 12, 6:00
Nov. 12, 0:00
Nov. 11, 12:00
Nov. 10, 12:00
Nov. 10, 0:00
Nov. 9, 21:00
Nov. 8, 12:00
Nov. 8, 0:00
MAYANAMA
(BURMA)
THAILAND
Nov. 08—13, 1970
Max. Wind Speed : 61 m/Sec.(Chittagong)
Height of Storm Surge : 3.05—10.06 m
CASUALTIES AND LOSSES:
People Killed : 500,000 Nos.
Cattle & Live Stock : Innumberable
LEGEND
International Boundary
Cyclonic Storm
Depression


80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
CHITTAGONG
MAYANAMA
(BURMA)
THAILAND
Nov. 28, 0:00
Nov. 27, 18:00
Nov. 27, 12:00
Nov. 27, 6:00
Nov. 27, 3:00
Nov. 26, 12:00
Nov. 26, 3:00
Nov. 26, 0:00
Nov. 25, 6:00
Nov. 25, 0:00
Nov. 24, 6:00
Nov. 24–28, 1974
Max. Wind Speed : 28 m/Sec.
Height of Storm Surge : 3.05–3.66 m.
CASUALTIES AND LOSSES:
People Killed : 28 Nos.
People Missing : 280 Nos.
Cattle & Live Stock : 1,000 Nos.
House Damaged : 1,500 Nos. (Sandwip)
LEGEND
International Boundary
Cyclonic Storm
Depression


80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
CHITTAGONG
May 24, 21:00
May 24, 20:00
May 24, 15:00
May 24, 9:00
May 24, 3:00
May 23, 6:00
May 23, 0:00
May 22, 6:00
MAYANAMA
(BURMA)
THAILAND
May 24–25, 1985
Max. Wind Speed : 43 m/Sec. (Chittagong)
39 m/Sec. (Sandwip)
29 m/Sec. (Cox's Bazar)
Height of Storm Surge : 4.57 m
CASUALTIES AND LOSSES:
Affected Area : 4,940 Sq. Km.
Affected People : 1,310,935 Nos.
People Killed : 4,264 Nos.
People Missing : 6,805 Nos.
Cattle & Live Stock : 135,055 Nos.
Crops Lost (Tk. in million) : 6,805
LEGEND
International Boundary
Cyclonic Storm
Depression


80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
Nov. 9, 12:00
KHULNA
Nov. 9, 6:00
CHITTAGONG
Nov. 9, 3:00
Nov. 9, 0:00
Nov. 8, 21:00
Nov. 8, 12:00
Nov. 7, 18:00
Nov. 7, 12:00
MAYANAMA
(BURMA)
THAILAND
Nov. 07 – 09, 1986
Max. Wind Speed : 31 m/Sec. (Chittagong)
25 m/Sec. (Khulna)
Height of Storm Surge : 0.61m
CASUALTIES AND LOSSES:
People Killed : 14 Nos.
Cattle & Live Stock : 50 Nos.
Crops Lost : 28,340 ha. Aman
97,170 ha. Aman
LEGEND
International Boundary
Cyclonic Storm
Depression


80°
85°
90°
95°
100°
30°
25°
20°
15°
10°
5°
0°
C H I N A
NEPAL
BHUTAN
INDIA
BANGLADESH
I N D I A
DHAKA
KHULNA
CHITTAGONG
MAYANAMA
(BURMA)
THAILAND
Nov. 29, 12:00
Nov. 29, 6:00
Nov. 29, 0:00
Nov. 28, 12:00
Nov. 28, 3:00
Nov. 27, 15:00
Nov. 26, 18:00
Nov. 26, 0:00
Nov. 15, 12:00
Nov. 25, 0:00
Nov. 24, 3:00
Nov. 24-29, 1988
Max. Wind Speed : 45 m/Sec. (Pathar Ghata)
44 m/Sec. (Khulna, Satkhira)
36 m/Sec. (Dhaka)
Height of Storm Surge : 0.61 - 4.46m.
CASUALTIES AND LOSSES:
People Killed : 5,708 Nos.
People Missing : 6,000 Nos.
Deer Killed : 15,000 Nos.
Royal Bangal Tiger : 9 Nos.
Cattle & Live Stock : 65,000 Nos.
Crops Lost (Tk. in million): 9,400
LEGEND
International Boundary
Cyclonic Storm
Depression

7. Maximum Wind Speed in Dhaka and its Frequency Analysis

FREQUENCY ANALYSIS OF WIND SPEED OF DHAKA(B.M.D.)

1. ORIGINAL DATA OF WIND SPEED OF DHAKA(B.M.D.)

YEAR	MONTH	WIND SPEED		DIRECTION	
		KNOTS	km/min	DEGREE	
1970	Sep	13	0.401	13	NNE
1971	Aug	13	0.401	13	NNE
1972	Aug	20	0.617	18	NNE
1973	Aug	9	0.278	13	NNE
1974	-	-	-	-	-
1975	Aug	13	0.401	13	NNE
1976	Aug	19	0.586	18	NNE
1977	Aug	19	0.586	13	NNE
1978	Sep	19	0.586	13	NNE
1979	Aug	25	0.772	13	NNE
1980	Aug	13	0.401	13	NNE
1981	Aug	13	0.401	13	NNE
1982	Aug	19	0.586	21	NNE
1983	Sep	19	0.586	13	NNE
1984	Aug	13	0.401	13	NNE
1985	Aug	18	0.555	13	NNE
1986	Sep	18	0.555	13	NNE
1987	Sep	13	0.401	18	NNE
1988	Aug	13	0.401	18	NNE
1989	Aug	13	0.401	13	NNE
1990	Aug	9	0.278	23	NNE

2. PROBABLE WIND SPEED

RETURN PERIOD (YEAR)	WIND SPEED	
	(km/min)	(m/sec)
10	0.64	10.6
20	0.71	11.8
30	0.75	12.5
40	0.78	13.0
50	0.80	13.3
60	0.82	13.7
70	0.83	13.8
80	0.85	14.2
90	0.86	14.3
100	0.87	14.5
200	0.94	15.7
300	0.98	16.3
400	1.00	16.6
500	1.03	17.2

8. Hydraulic simulation of 1988 Floods for Without Flood Mitigation Plan

206

D. River Model of Without Project

```
+-----------------------------------------------------------------------------------+
!  RIVER MODEL                    MAIN MENU                        Version 2.10   !
+-----------------------------------------------------------------------------------+
!                                                                  File Name      !
!   X     A.   River / Catchment                              :      RIVER1       !
!   X     B.   Boundaries / Time Series                       :      BOUND1       !
!         C.   Transport dispersion and cohesive sediment     :                   !
!         D.   Water quality                                  :                   !
!         E.   Non cohesive sediment                          :                   !
!                                                                                 !
!   X     G.   Supplementary data                             :      MAN1         !
!                                                                                 !
!   X     H.   Calculation                                                        !
!                                                                                 !
!   X     J.   Presentation of results                        :      RES-B7       !
!                                                                                 !
..,A-J)                                                   !
+-----------------------------------------------------------------------------------+
!   X : Installed Modules              Data area ............... :       468 Kb !
                                       Free disk space ..........:     19058 Kb !
!   Current directory : C:¥PROJECTS¥WOUT1                                         !
+-----------------------------------------------------------------------------------+
<Esc> Return to Opening Menu                                       <F1> Help Menu
```

2). River System of Without Project

```
+----------   -----------------------------------------------------+
! MENU A.5          RIVER SYSTEM        GENERAL VIEW         MIKE 11 !
+------------------------------------------------------------------+
!                                                          number  !
!       1  RIVER BRANCHES .............................      8     !
!                                                                  !
!       2  RIVER CROSS-SECTIONS                                    !
!       3  BROADCRESTED WEIRS ...........................    0     !
!       4  SPECIAL WEIRS ................................    0     !
!       5  CULVERTS .....................................    0     !
!       6  Q = Q(t) .....................................    0     !
!       7  Q = f(Q,h upstream) ..........................    0     !
!       8  Q-h BOUNDARIES................................    0     !
!       9  ..............................................    0     !
!       0  CATCHMENTS ...................................    0     !
!       T  TEXT .........................................    0     !
!                                                                  !
!       D  DATA BASE NAME (cross-sections) .............. CROSS-B1 !
!       A  ADD ON MODULES                                          !
!                                                                  !
!   Select : <Enter> or (0-9,O,T,D,A)                              !
+------------------------------------------------------------------+
 <Esc> return to Menu A                                <F1> Help Menu
```

```
+------------------------------------------------------------------+
! A.5.1               R I V E R     S Y S T E M                    !
+-+----------------------------------------------------------------+-+
! !  Topo - ID   !  River name  ! Km. upstr. ! Km. dwnstr.!dx-max(m)! !
! +----+---------+--------------+------------+------------+---------+ !
!      !  Upstream connection       !  Downstream connection    !     !
8 !    +----------------------------+---------------------------+     !
----! +--------------+--------------+------------+------------+---------+ !
1 ! ! 1988-B1      ! DHALESWARI   !     0.000 !     60.200 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             ! DHALESWARI   !      60.200!     !
!      +--------------+-------------+--------------+------------+     !
! +--------------+--------------+------------+------------+---------+ !
2 ! ! 1988-B1      ! BANSI        !     0.000 !      9.000 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             ! DHALESWARI   !       0.000!     !
!      +--------------+-------------+--------------+------------+     !
! +--------------+--------------+------------+------------+---------+ !
3 ! ! 1988-B1      ! BURIGANGA    !     0.000 !     17.500 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             ! DHALESWARI   !      45.700!     !
!      +--------------+-------------+--------------+------------+     !
Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=retur
```

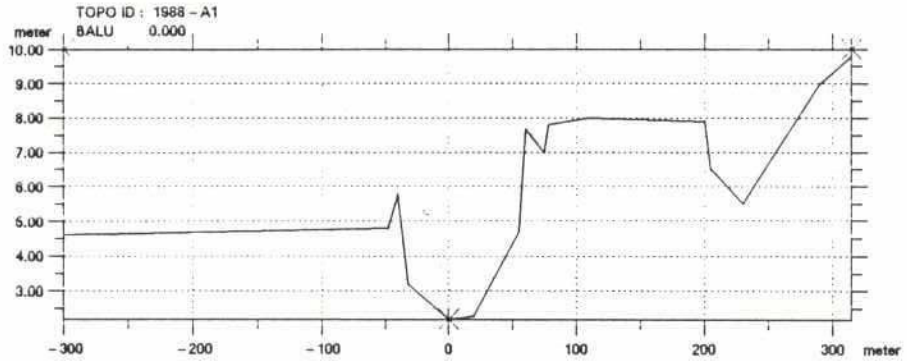
```
+------------------------------------------------------------------+
! A.5.1               R I V E R     S Y S T E M                    !
+-+----------------------------------------------------------------+-+
! !  Topo - ID   !  River name  ! Km. upstr. ! Km. dwnstr.!dx-max(m)! !
! +----+---------+--------------+------------+------------+---------+ !
!      !  Upstream connection       !  Downstream connection    !     !
8 !    +----------------------------+---------------------------+     !
----! +--------------+--------------+------------+------------+---------+ !
4 ! ! 1988-B1      ! TURAG        !     0.000 !     37.500 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             ! BURIGANGA    !       0.000!     !
!      +--------------+-------------+--------------+------------+     !
! +--------------+--------------+------------+------------+---------+ !
5 ! ! 1988-B1      ! LAKHYA       !     0.000 !     23.900 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             ! DHALESWARI   !      57.700!     !
!      +--------------+-------------+--------------+------------+     !
! +--------------+--------------+------------+------------+---------+ !
6 ! ! 1988-B1      ! BALU         !     0.000 !     28.700 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             ! LAKHYA       !       3.600!     !
!      +--------------+-------------+--------------+------------+     !
Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=retur
```

```
+------------------------------------------------------------------+
! A.5.1               R I V E R     S Y S T E M                    !
+-+----------------------------------------------------------------+-+
! !  Topo - ID   !  River name  ! Km. upstr. ! Km. dwnstr.!dx-max(m)! !
! +----+---------+--------------+------------+------------+---------+ !
!      !  Upstream connection       !  Downstream connection    !     !
8 !    +----------------------------+---------------------------+     !
----! +--------------+--------------+------------+------------+---------+ !
7 ! ! 1988-B1      ! TONGI        !     0.000 !     16.000 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      ! TURAG        !      15.000! BALU         !       7.200!     !
!      +--------------+-------------+--------------+------------+     !
! +--------------+--------------+------------+------------+---------+ !
8 ! ! 1988-B1      ! KARNATALI    !     0.000 !     11.900 !   2000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      ! DHALESWARI   !       0.800! TURAG        !      27.000!     !
!      +--------------+-------------+--------------+------------+     !
! +--------------+--------------+------------+------------+---------+ !
9 ! !              !              !     0.000 !      0.000 !  10000  ! !
! +----+---------+--------------+------------+------------+---------+ !
!      !              !             !              !            !     !
!      +--------------+-------------+--------------+------------+     !
Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=retur
```

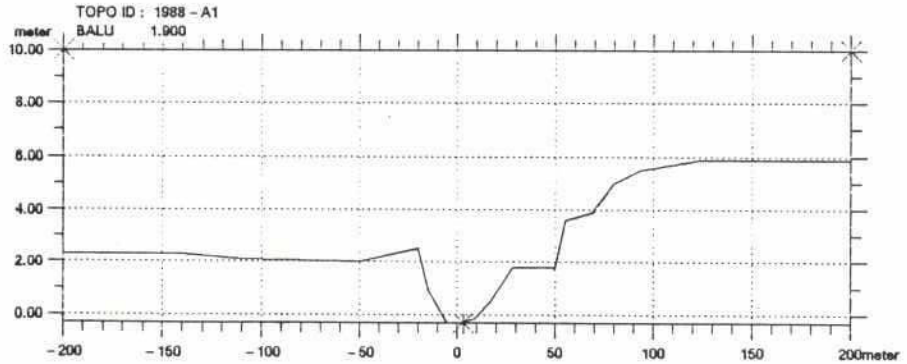
3) River Cross Section of Without Project

CROSS-B1

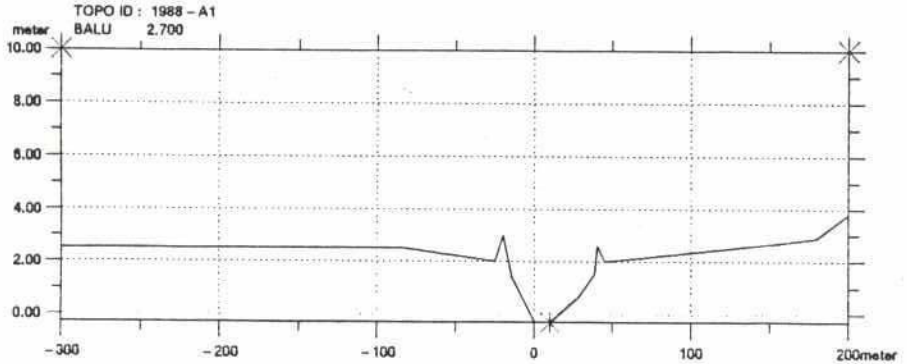
B-7A (Acc. dis. = 28.7)



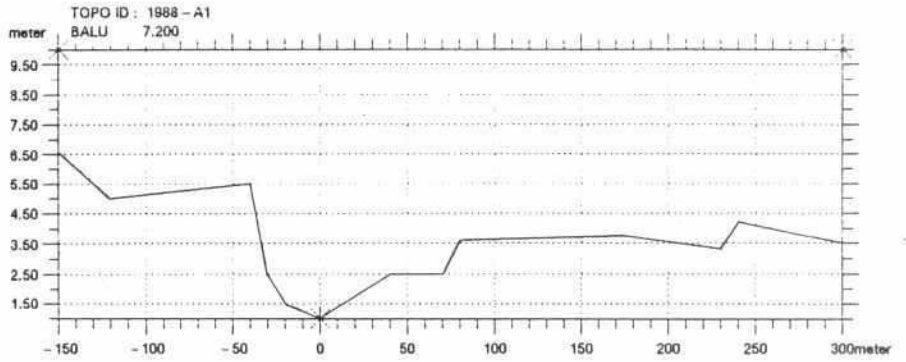
B-7 (Acc. dis. = 26.8)



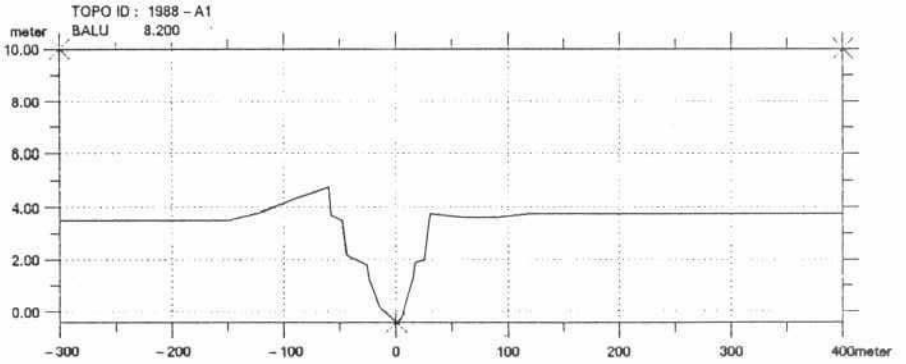
B-6B (Acc. dis. = 26.0)



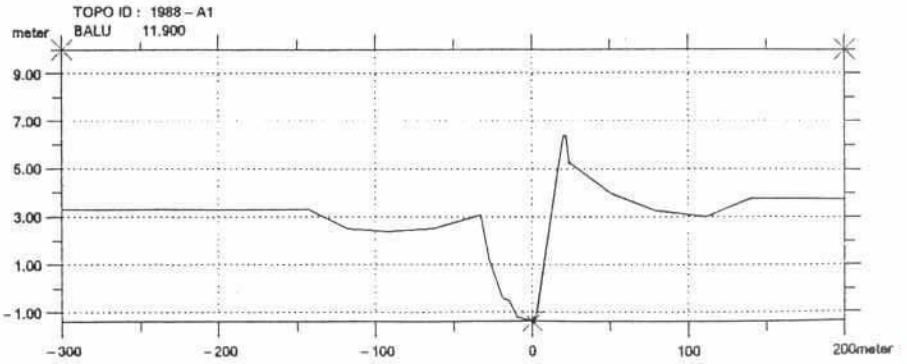
B-6A (Acc. dis. = 21.5)



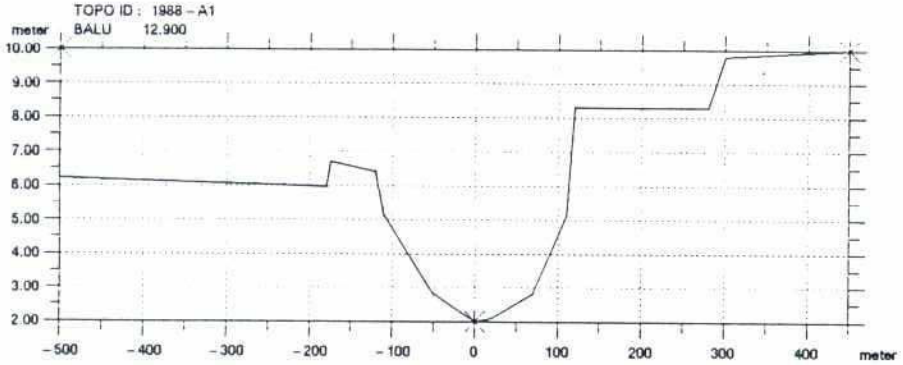
B-6 (Acc. dis. = 20.5)



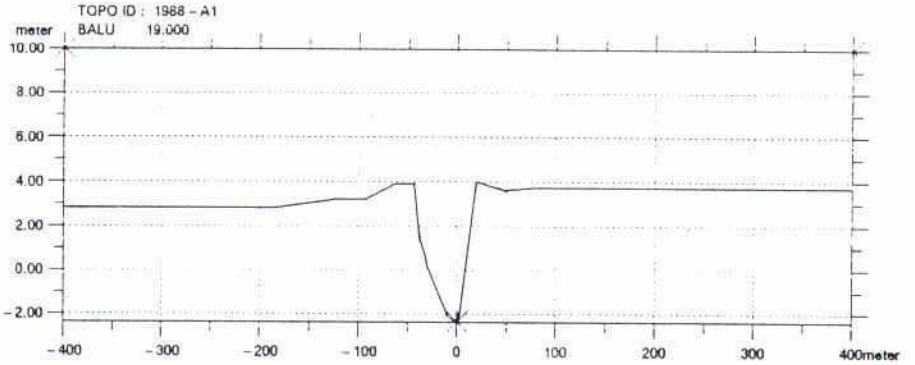
B-5 (Acc. dis. = 16.8)



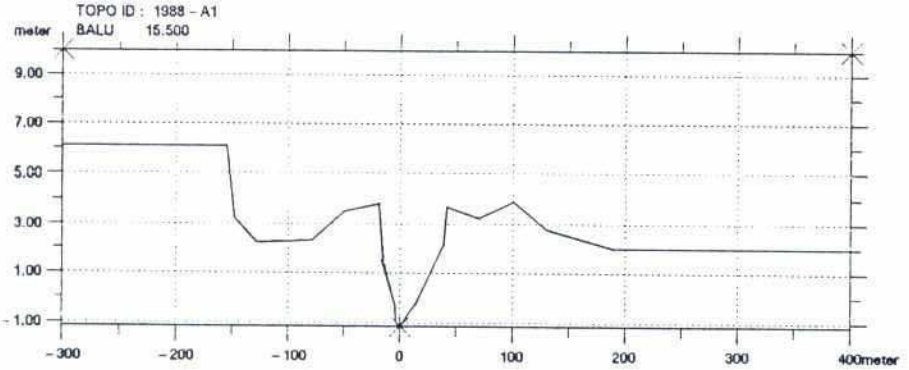
B-4A (Acc dis. = 15.8)



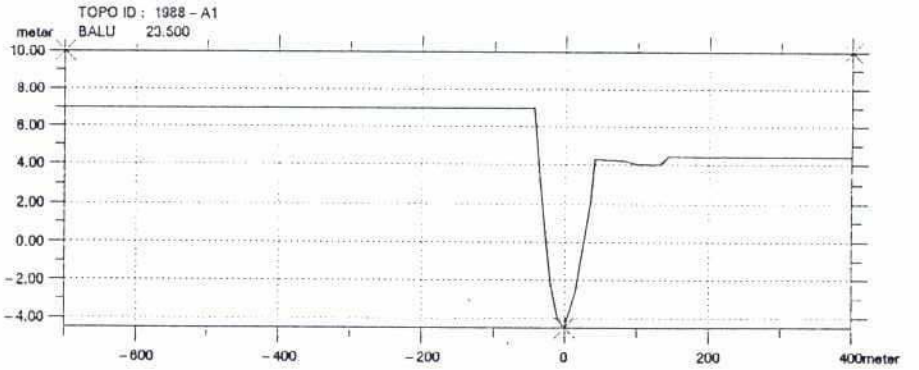
B-3 (Acc dis. = 9.7)



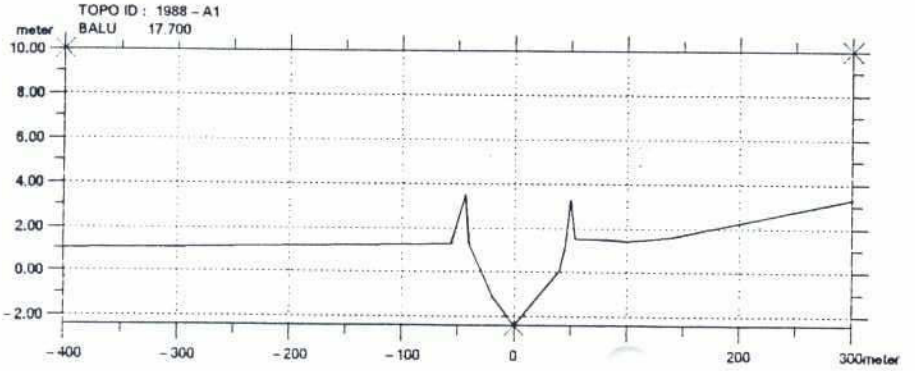
B-4 (Acc dis. = 13.2)



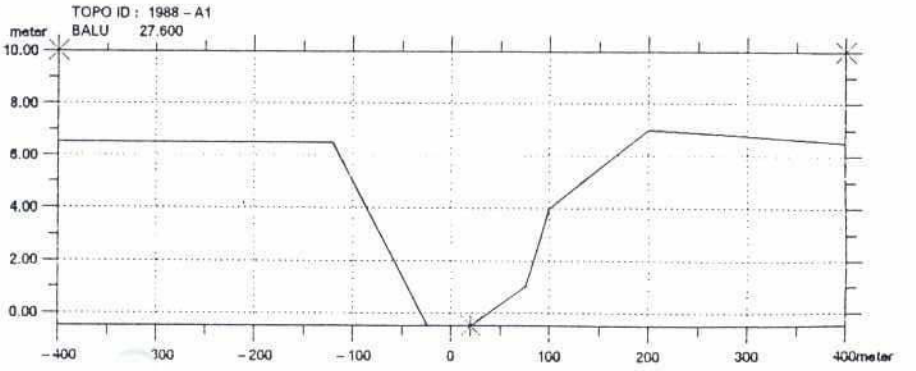
B-2 (Acc. dis. = 5.2)



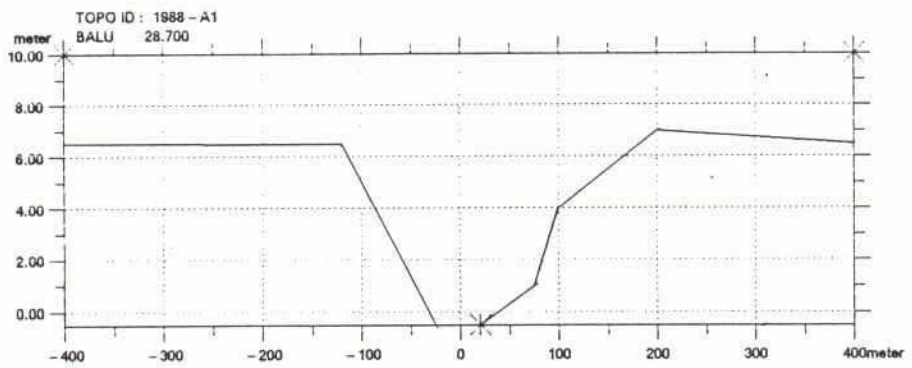
B-3A (Acc. dis. = 11.0)



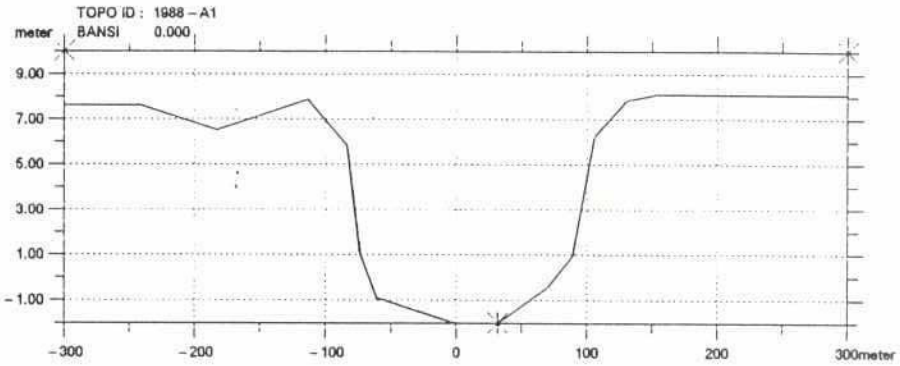
B-2A (Acc. dis. = 1.1) : Demra 7.5



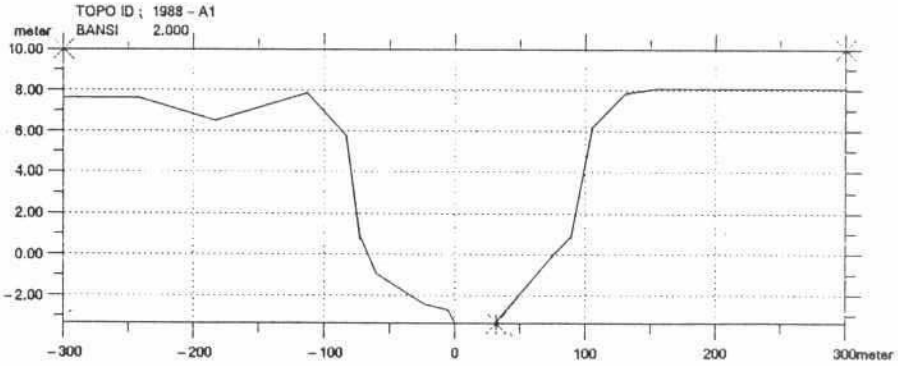
B-1A (Acc. dis. = 0)



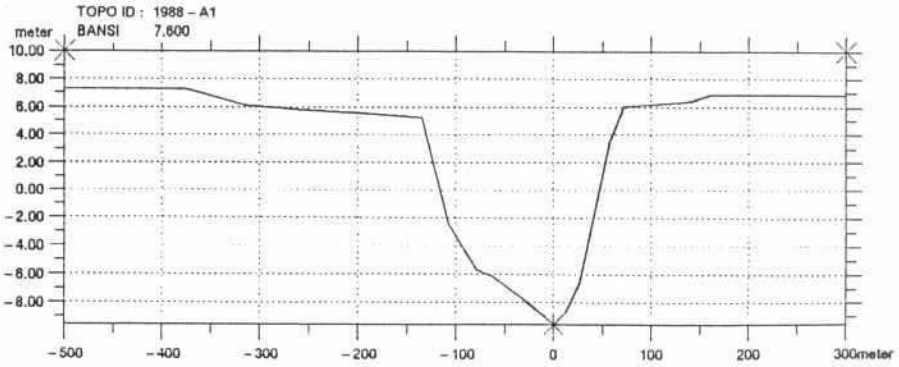
BHI-25A (Acc. dis. = 9.0) : Nayarkat



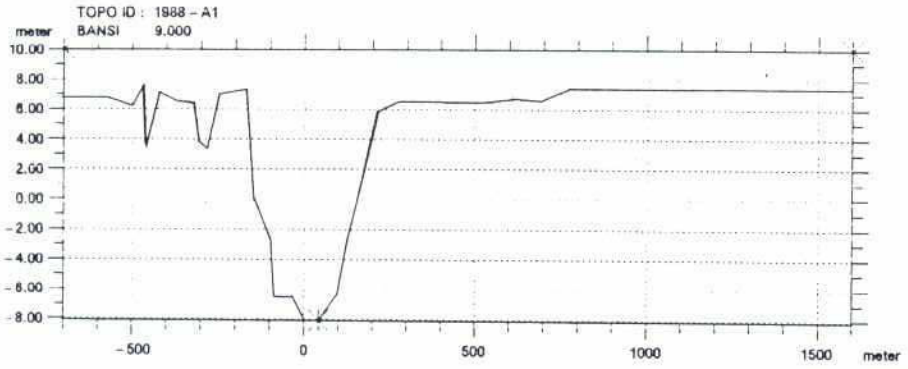
BHI-25 (Acc. dis. = 11.0)



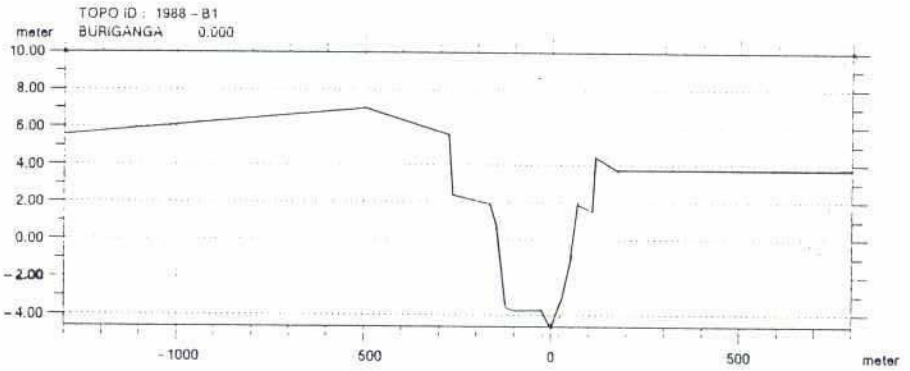
BHI-26 (Acc. dis. = 14) : Savar



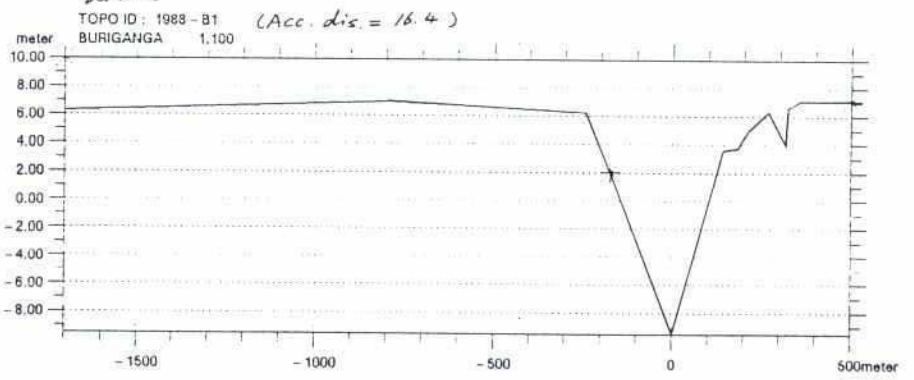
D-14A (Acc. dis. = 0)



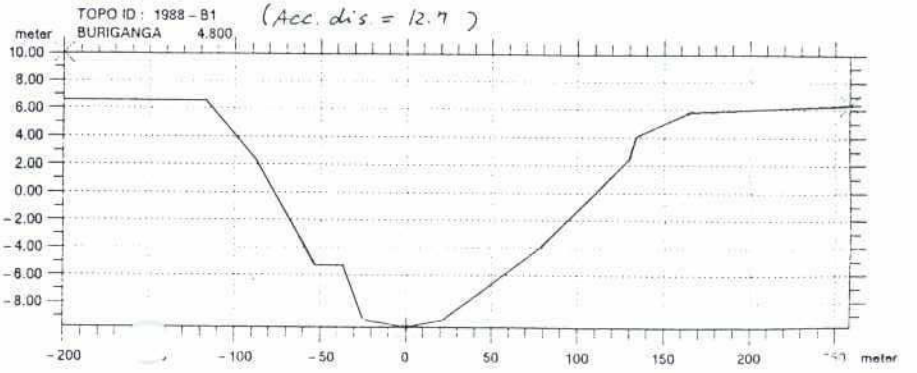
TU-1 (Acc. dis. = 17.5 km)



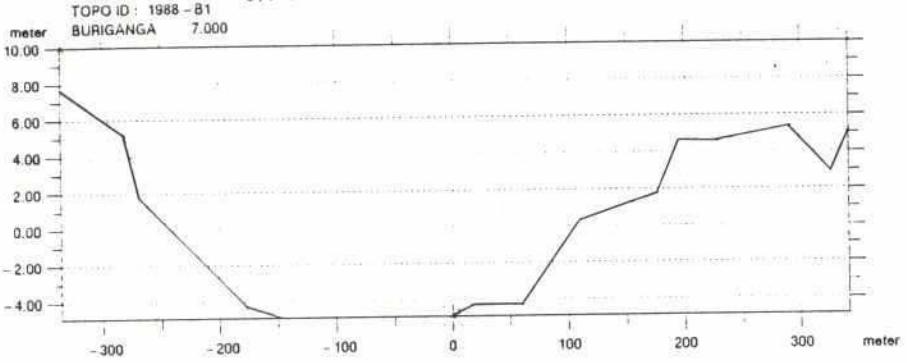
BGA-6



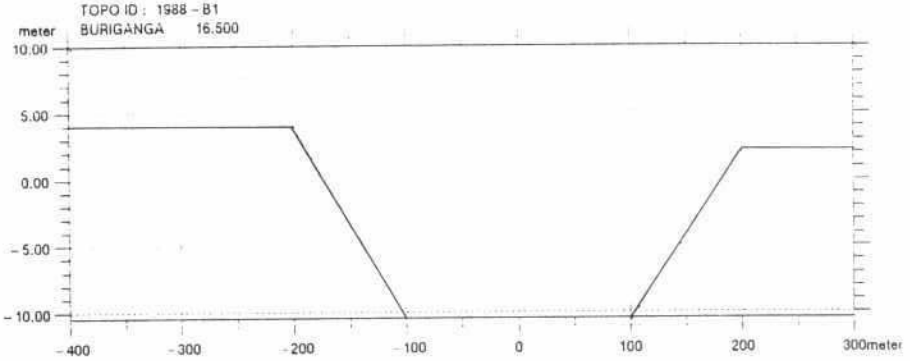
BGA-5



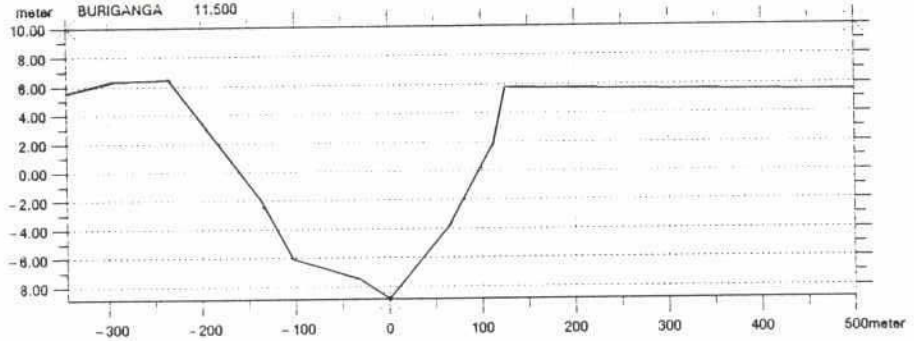
BGA-4 (Acc. dis. = 10.5) : Mill Borak



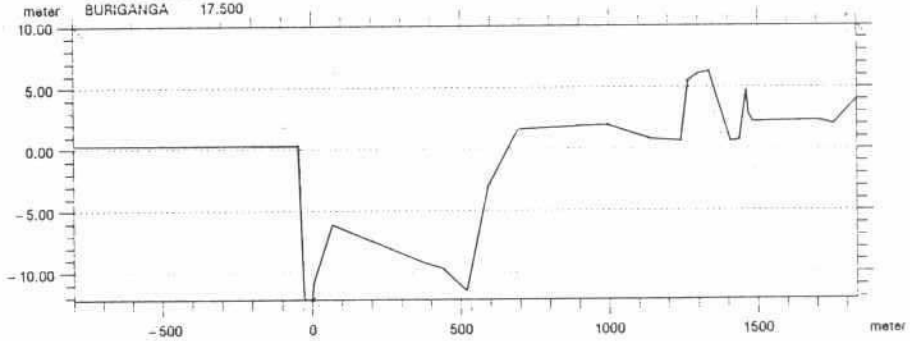
BGA-2A (Acc. dis. = 1.0) : Hanikanpara



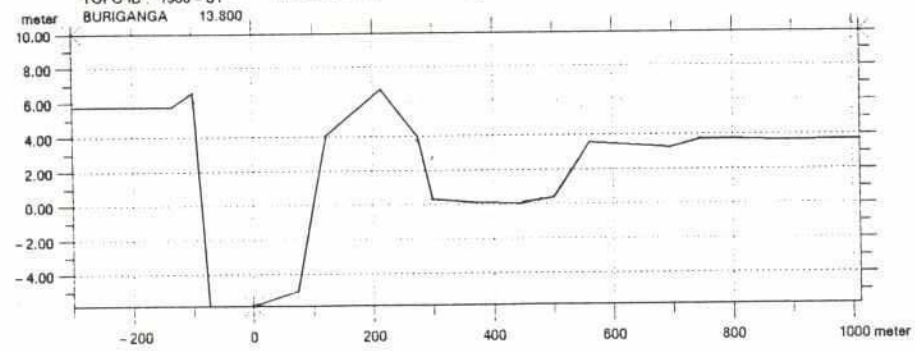
BGA-3 (Acc. dis. = 6.0)



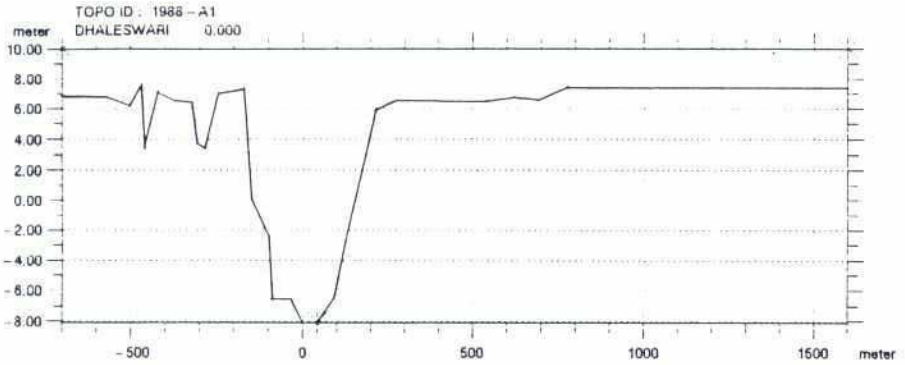
BGA-1 (Acc dis. = 0.0)



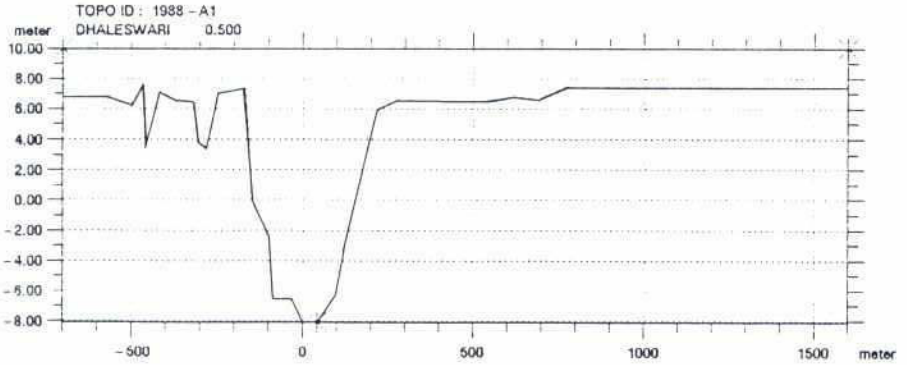
BGA-2 (Acc. dis = 3.7)



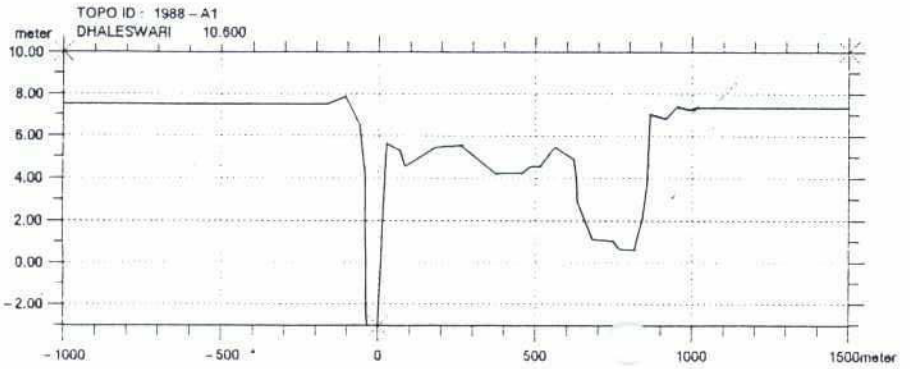
D-14A (Acc dis = 60.2)



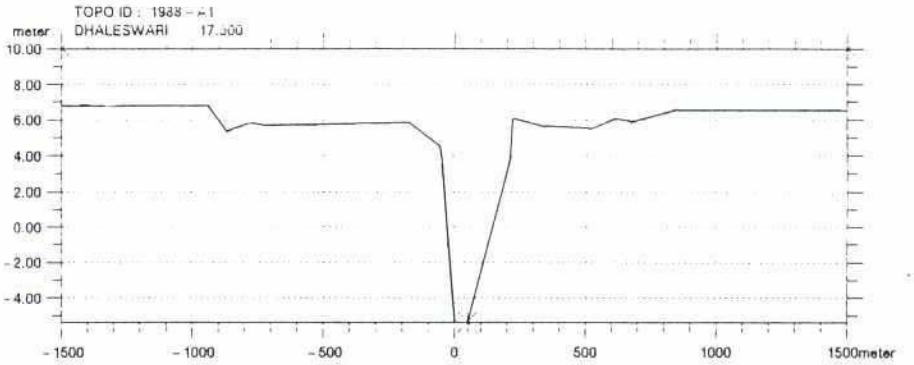
D-14 (Acc dis = 59.7)



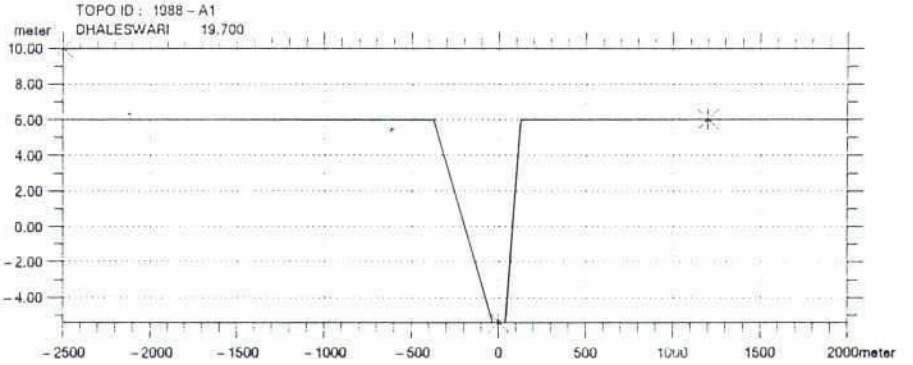
D-15 (Acc dis = 49.6)



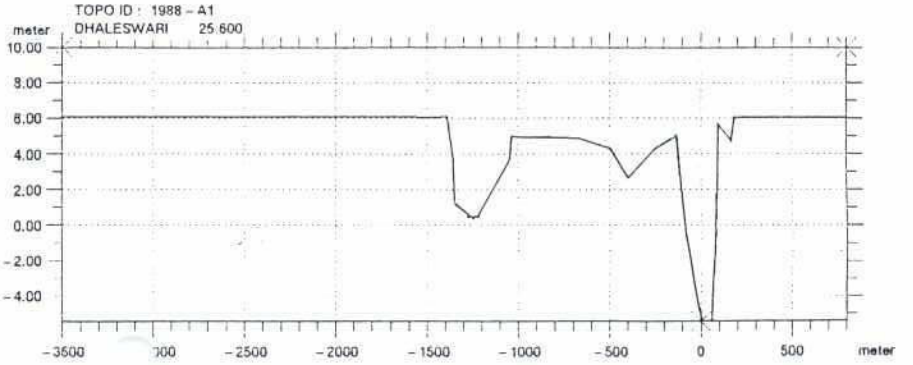
D-16 (Acc dis = 42.9)



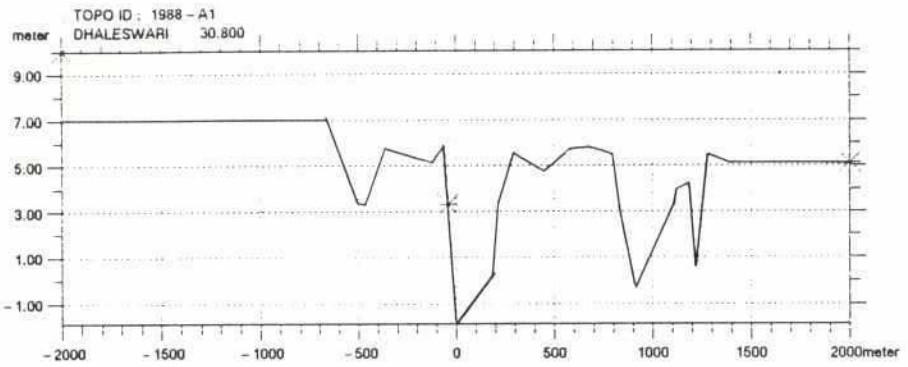
D-16A (Acc dis = 40.5) Kalatia



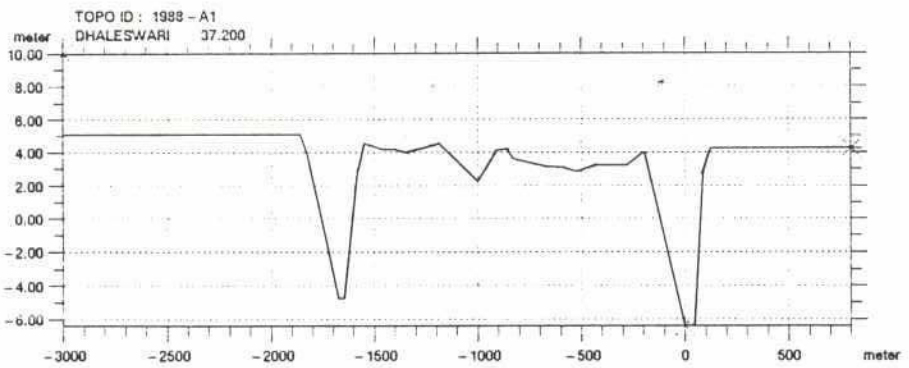
D-17 (Acc dis = 34.6)



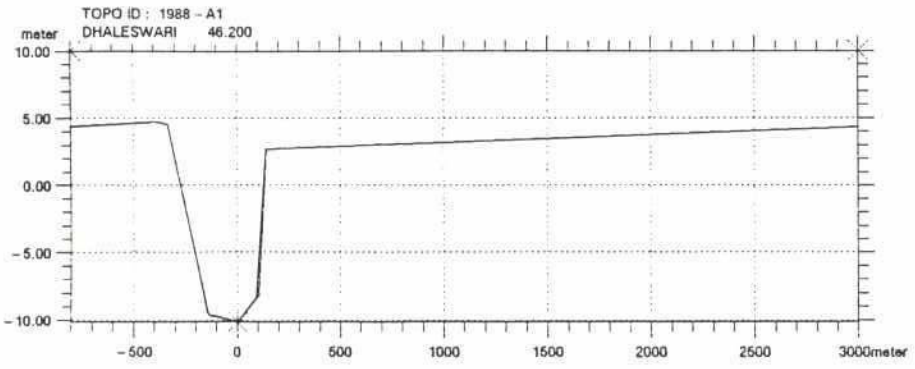
D-18 (Acc. dis = 29.4)



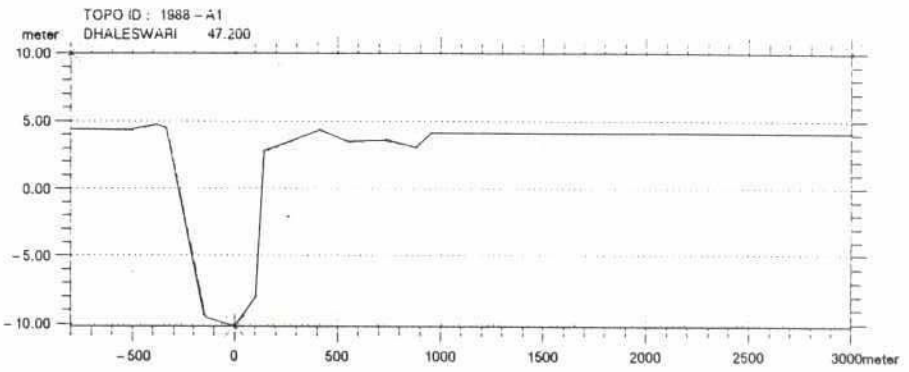
D-19 (Acc dis. = 23.0)



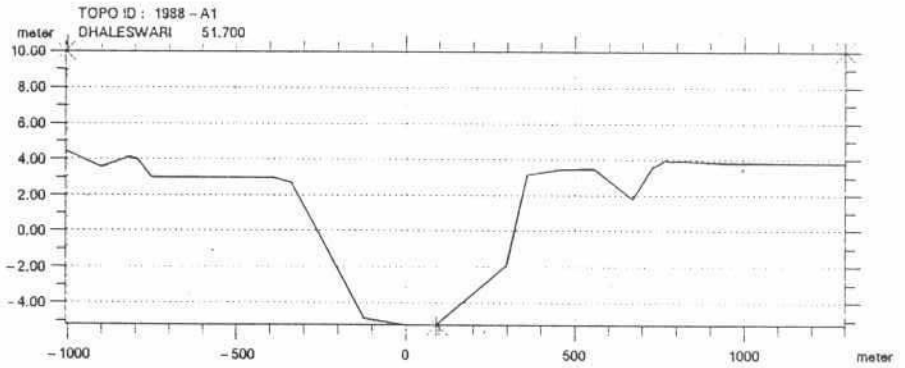
D-19A (Acc. dis = 14.0)



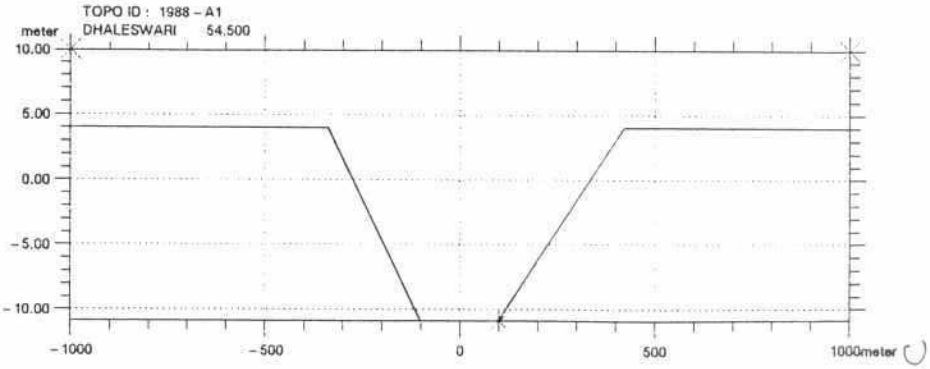
D-20 (Acc. dis. = 13.2)



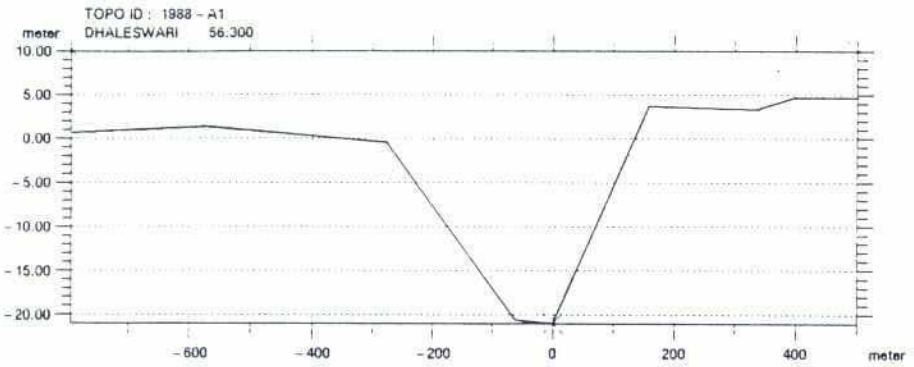
D-21 (Acc. dis. = 8.5)



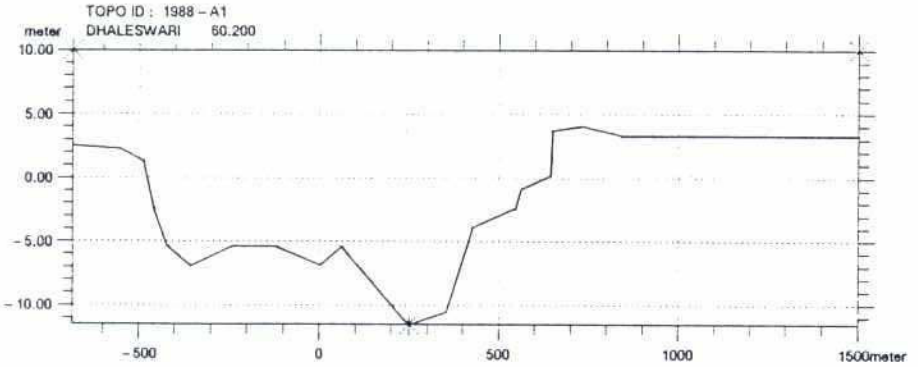
D-21A (Acc. dis. = 5.7) : Rekabi Bazar



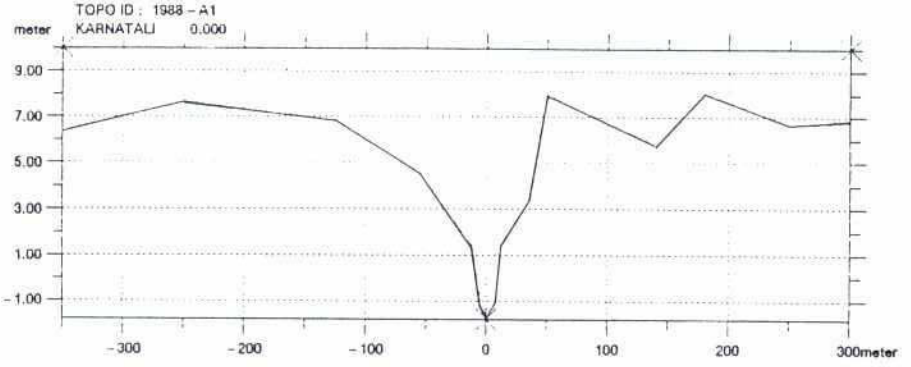
D-22 (Acc. dis. = 3.9)



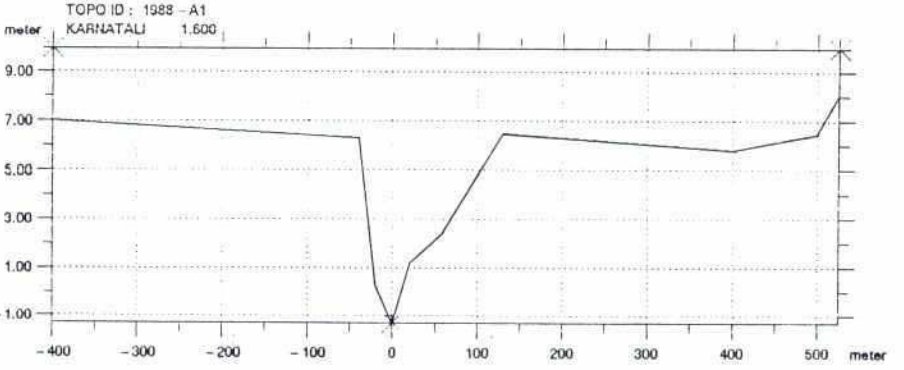
D-23 (Acc. dis. = 0)



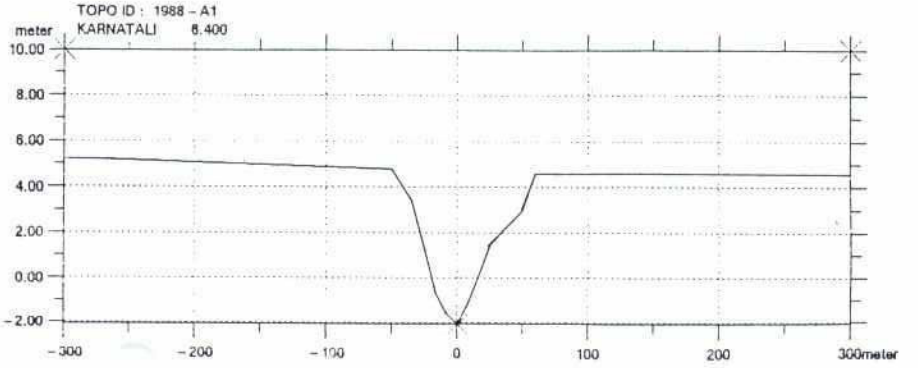
K-4 (Acc. dis = 11.9)



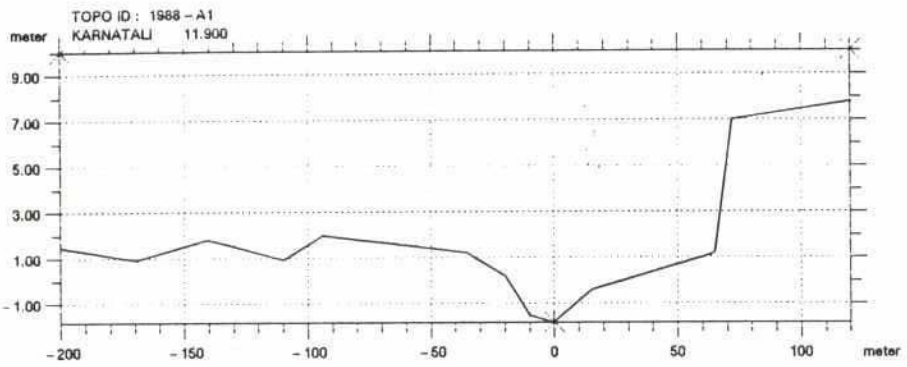
K-3 (Acc. dis. = 10.3)



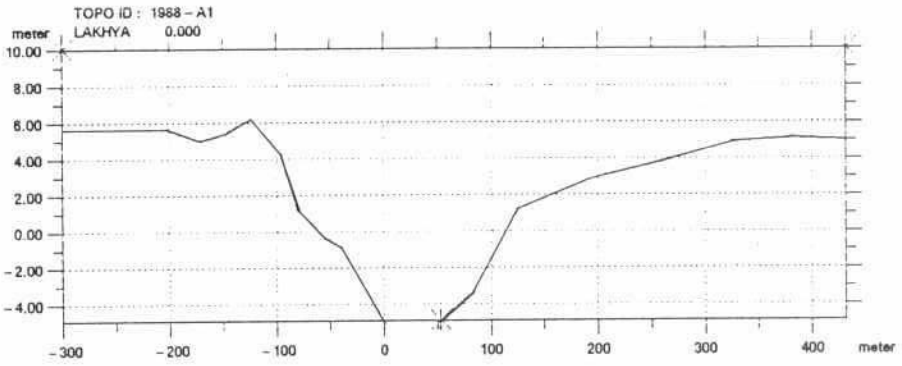
K-2 (Acc. dis. = 5.5)



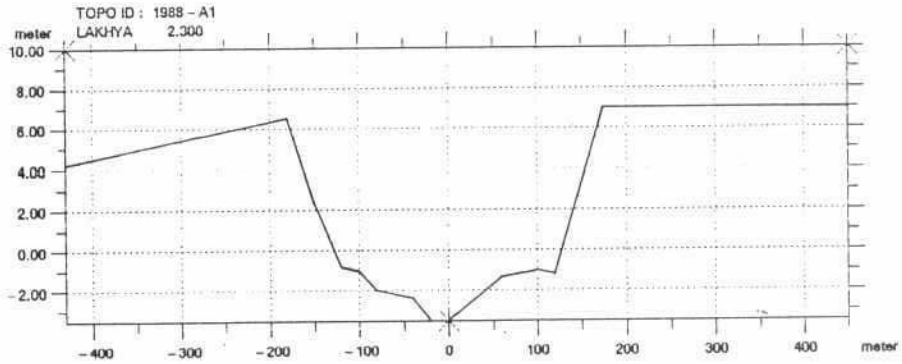
K-1 (Acc. dis. = 0 km)



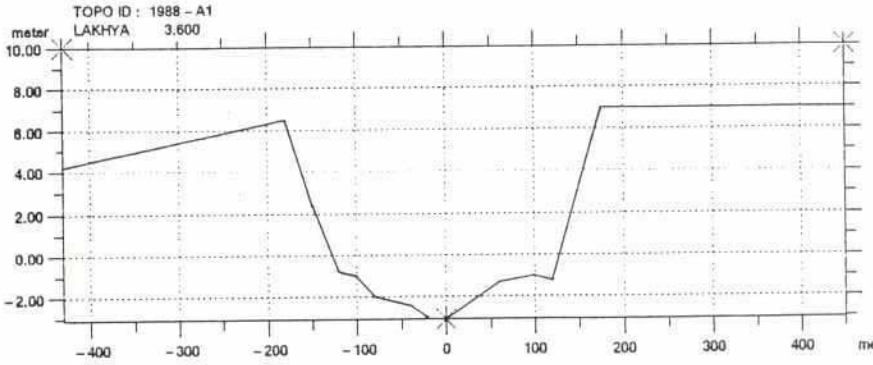
L-16 (Acc. dis. = 23.9)



L-16A (Acc. dis. = 21.6) : Demra 179

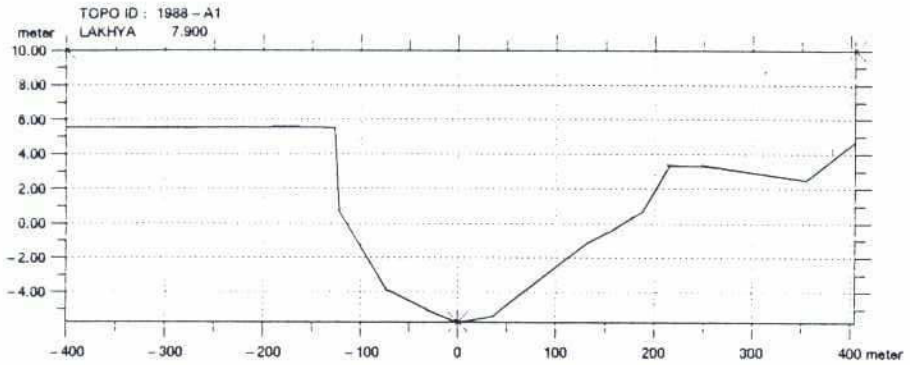


L-16/1 (Acc. dis. = 20.3)

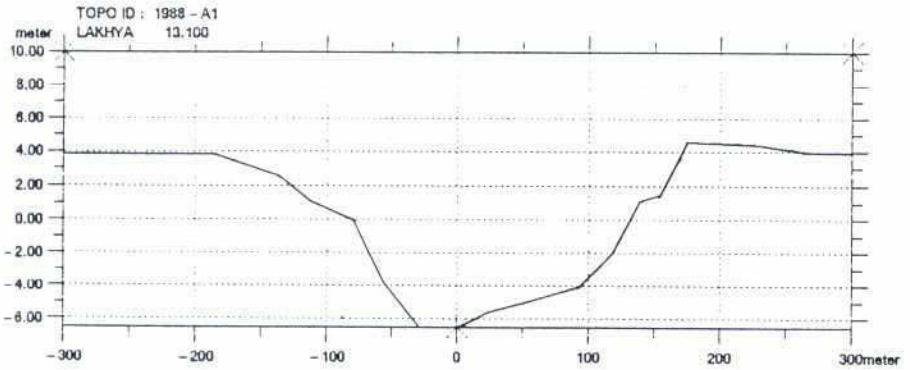


Acc

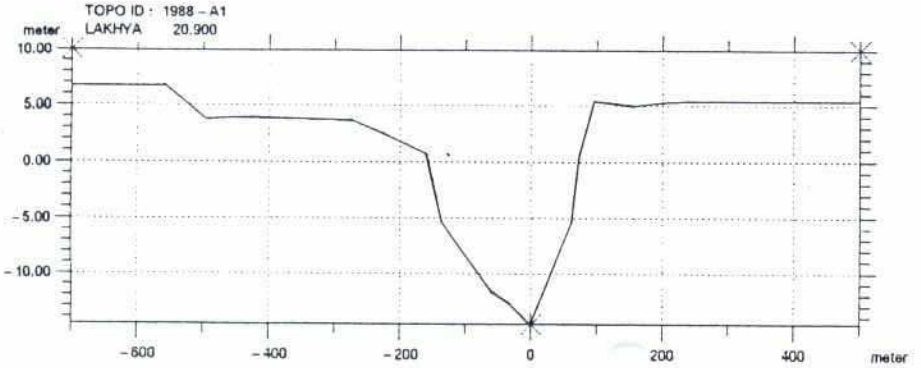
L-17 (Acc. dis. = 16.0)



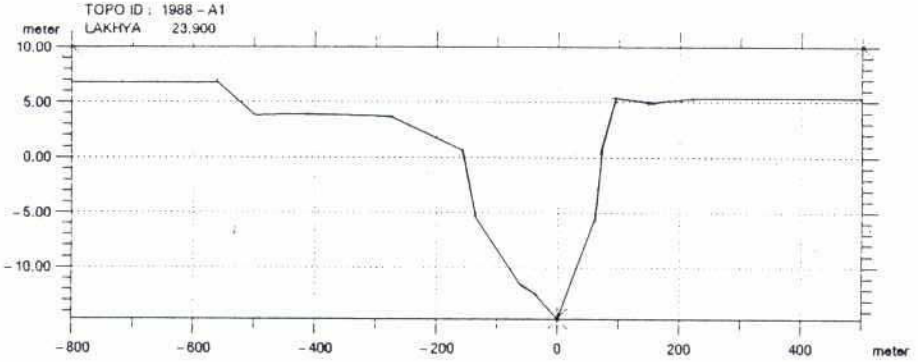
L-18 (Acc. dis. = 10.8)



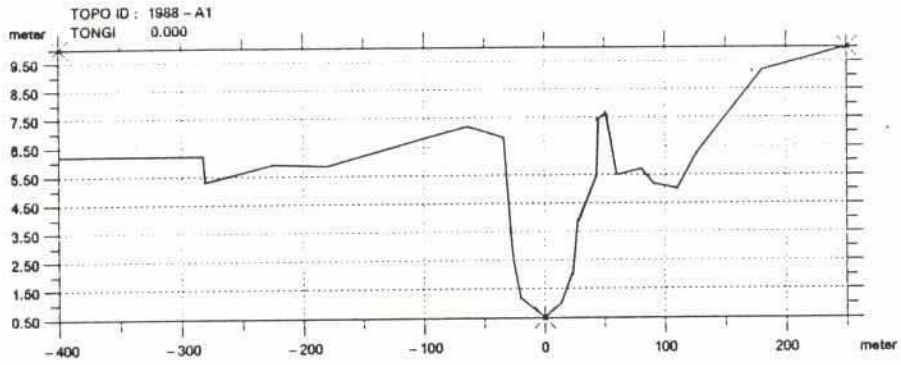
L-19 (Acc. dis. = 3.0)



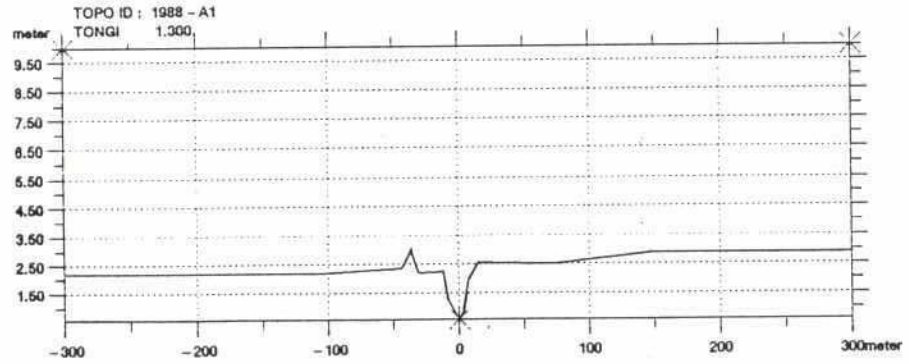
L-19A (Acc. dis. = 0)



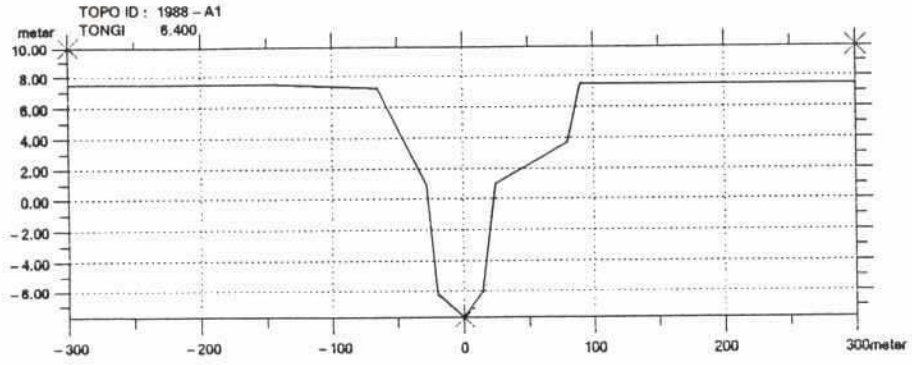
TON-1A (Acc. dis. = 16.0)



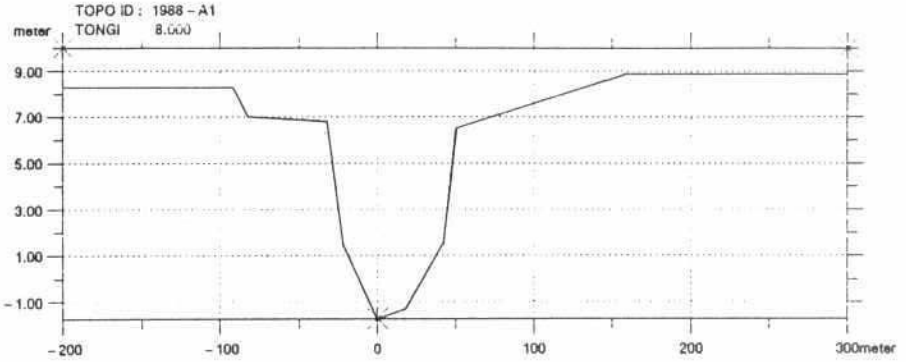
TON-1 (Acc. dis. = 14.7)



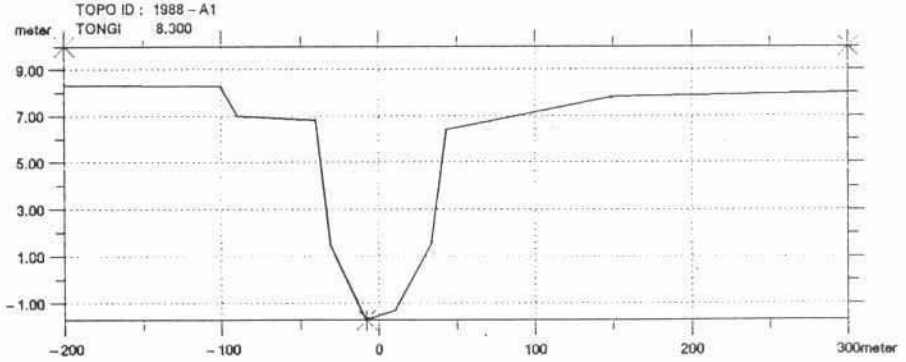
TON-2 (Acc. dis. = 9.6)



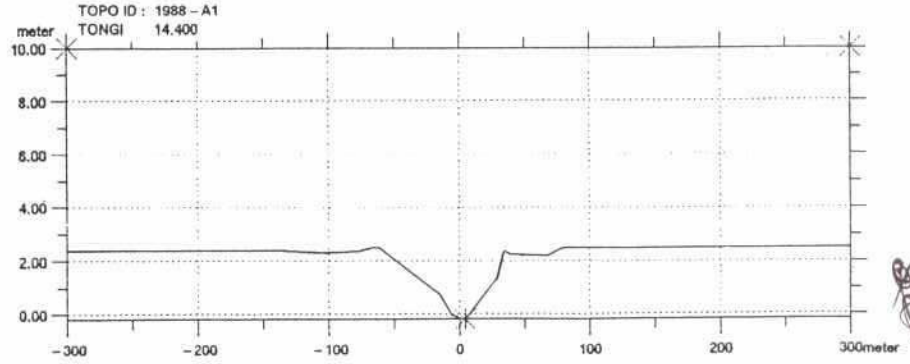
TON-2B (Acc. dis = 8.0) : TONGI



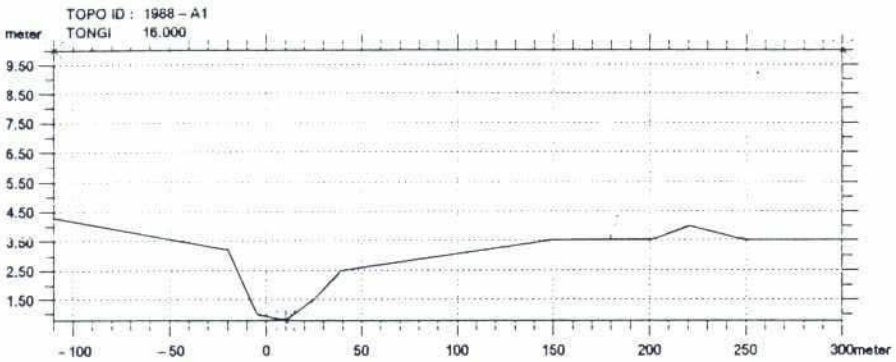
TON-2A (Acc. dis. = 7.7)



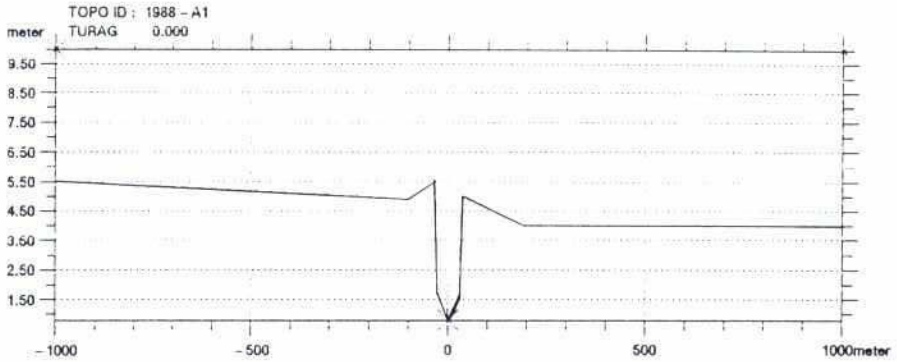
TON-3 (Acc. dis. = 1.6)



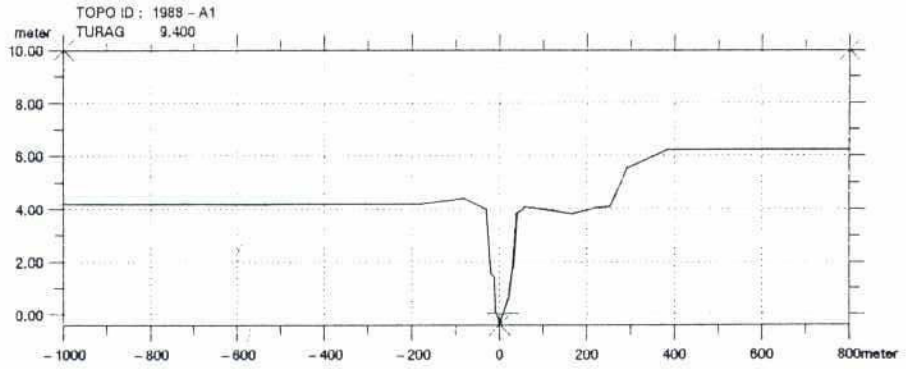
TON-3A (Acc dis. = 0)



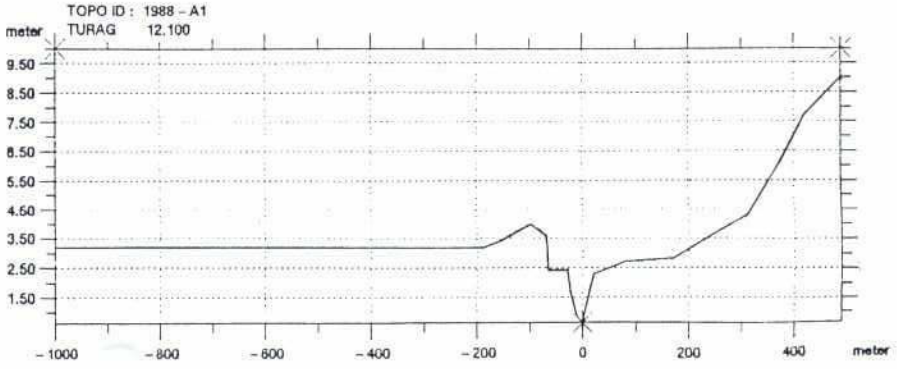
TU-12A (Acc. dis = 37.5)



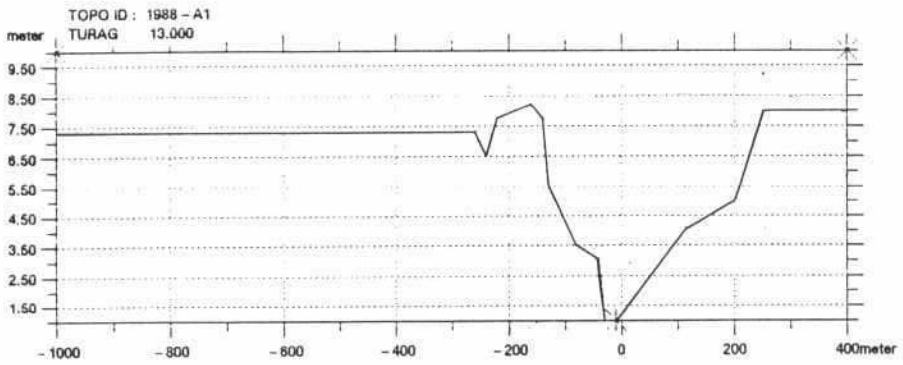
TU-12 (Acc. dis = 28.0)



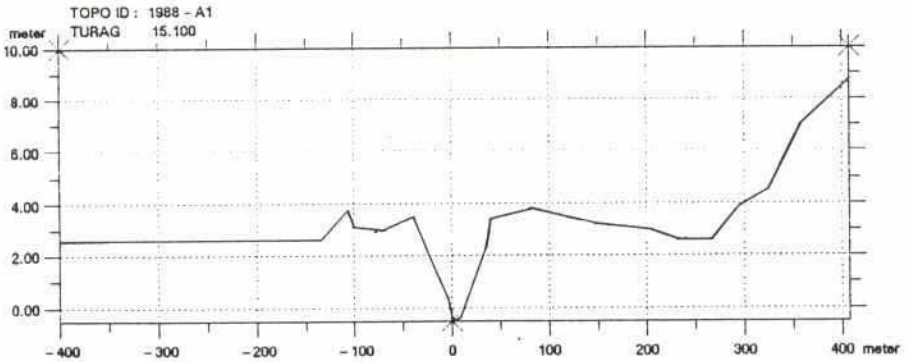
TU-11 (Acc. dis. = 25.4)



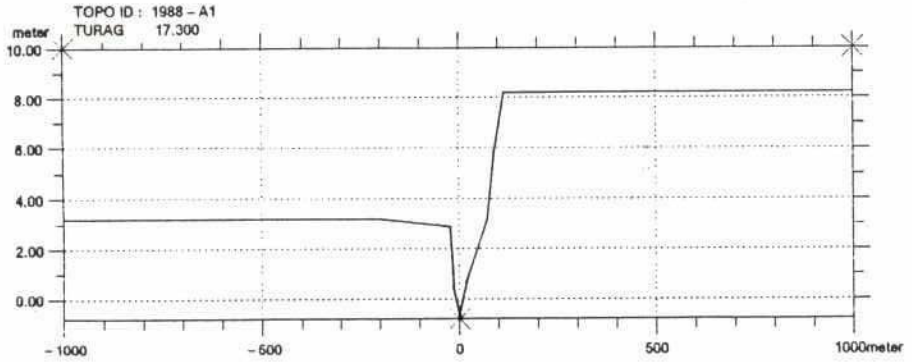
TU-10A (Acc. dis. = 24.5)



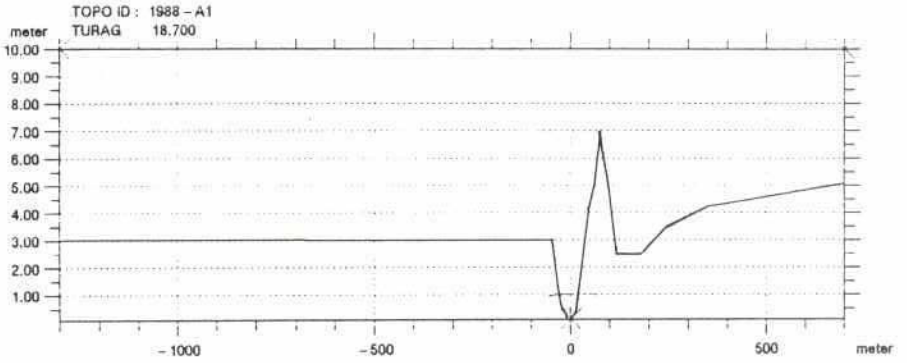
TU-10 (Acc. dis. = 22.4)



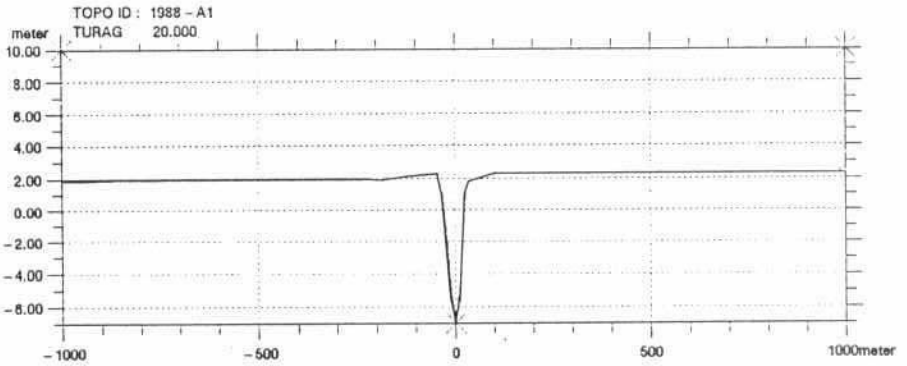
TU-9 (Acc. dis. = 20.2)



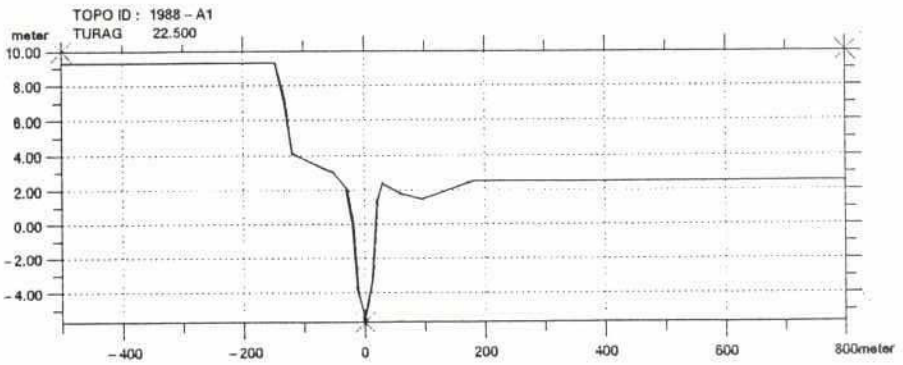
TU-8A (Acc. dis. = 18.8)



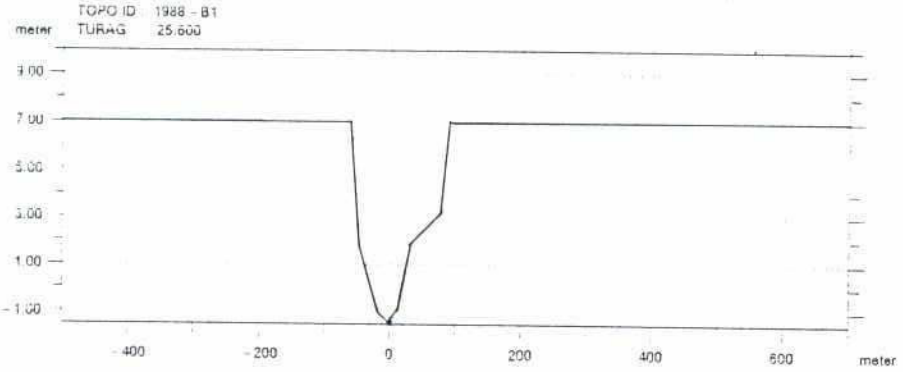
TU-8 (Acc. dis. = 17.5)



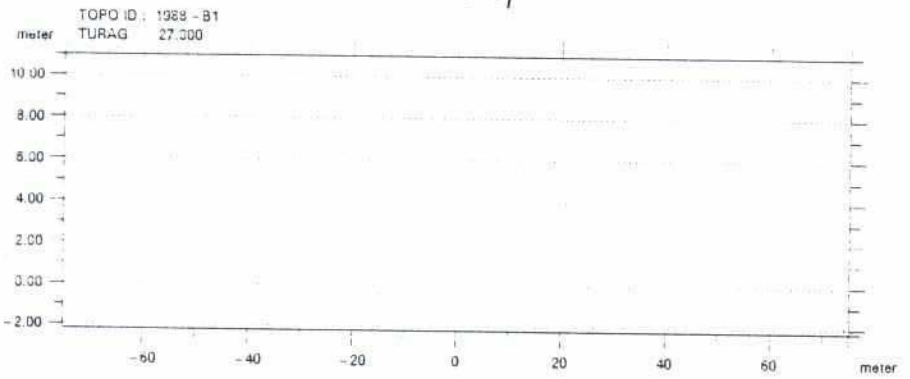
TU-7 (Acc. dis. = 15.0)



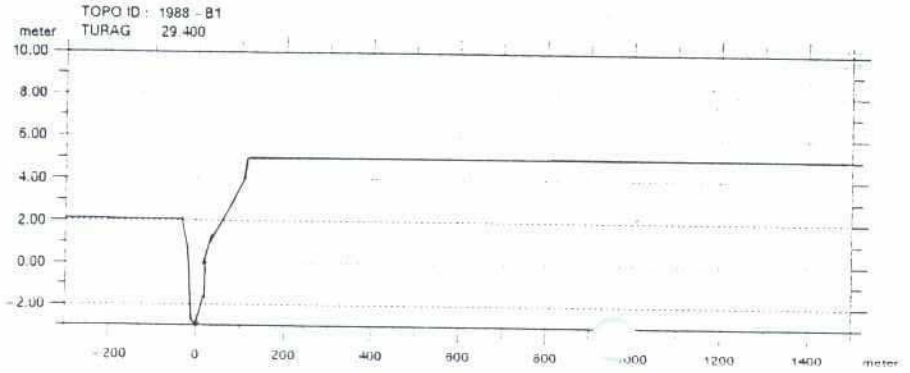
TU-6 (Acc. dis. = 11.9)



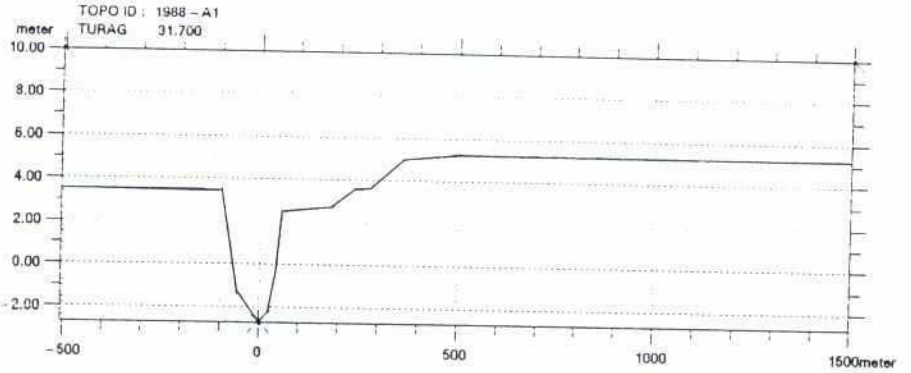
TU-6A (Acc. dis. = 10.2) : Mirpur



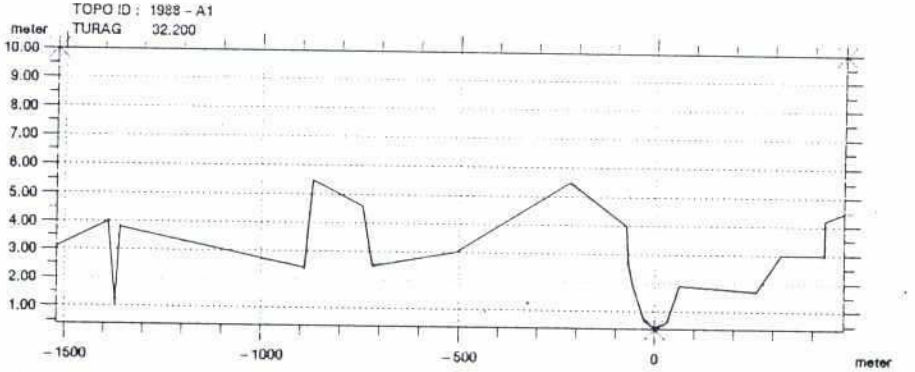
TU-5 (Acc. dis. = 8.1)



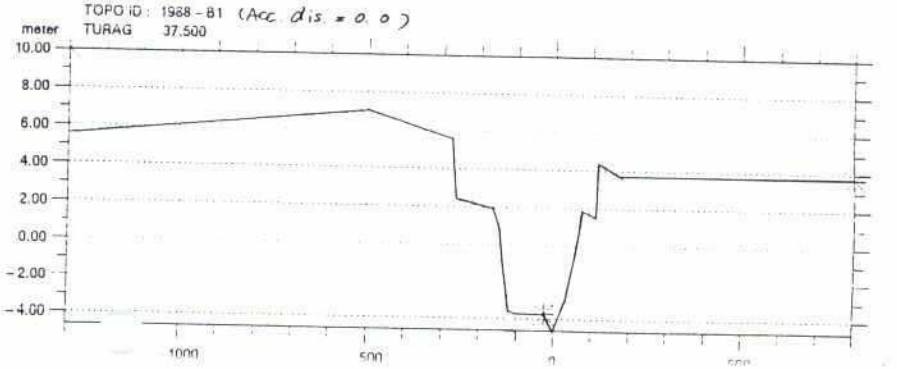
TU-4 (Acc. dis. = 5.8)



TU-4A (Acc. dis = 5.3)



TU-1



1988-B1
BALU
0.000
COORDINATES
1 90.193 23.932
FLOW DIRECTION
0
DATUM
0.00

B-7A (Acc. dis. = 28.7 km)

(90.193 └ Longitude; 23.932 └ Latitude)

PROFILE	18		
-300.00	10.00	1.00	<1>
-300.00	1.60	3.33	
-18.00	1.80	3.33	
-10.00	5.80	3.33	
-32.00	3.20	1.00	
0.00	2.20	1.00	<2>
20.00	2.30	1.00	
55.00	1.70	1.00	
60.00	7.70	1.00 ⇔ $n_1 = 0.030$	
75.00	7.00	1.00	
78.00	7.80	1.00	
110.00	8.00	3.33 ⇔ $n_2 = 0.030 \times 3.33 = 0.100$	
200.00	7.90	3.33	
205.00	6.50	3.33	
230.00	5.50	3.33	
290.00	9.00	3.33	
315.00	9.80	3.33	
315.00	10.00	3.33	<3>
X(m)	Z(m)	relative resistance	

****

1988-B1
BALU
1.900
COORDINATES
1 90.192 23.917
FLOW DIRECTION
0
DATUM
0.00

B-7 (Acc. dis. = 26.8 km)

PROFILE	22		
-200.00	10.00	1.00	<1>
-200.00	2.30	3.33	
-110.00	2.30	3.30	
-110.00	2.10	3.33	
-50.00	2.00	3.33	
-20.00	2.50	3.33	
-15.00	0.90	1.00	
-7.00	-0.10	1.00	
-5.00	-0.30	1.00	
3.00	-0.30	1.00	<2>
6.00	-0.20	1.00	
9.00	-0.15	1.00	
18.00	0.60	1.00	
28.00	1.80	1.00	
50.00	1.80	1.00	
55.00	3.60	1.00	
69.00	3.90	3.33	
80.00	5.00	3.33	
93.00	5.50	3.33	
123.00	5.90	3.33	
200.00	5.90	3.33	
200.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

Note: n_1 : Manning's roughness coefficient of river channel
n_2 : Manning's roughness coefficient of flood plain

1988-B1
BALU
2.700
COORDINATES
1 90.488 23.911
FLOW DIRECTION
0
DATUM
0.00

B-6B (Acc. dis. = 26.0 km)

PROFILE	16		
-300.00	10.00	1.00	<1>
-300.00	2.50	3.33	
-85.00	2.50	3.33	
-25.00	2.00	3.33	
-20.00	3.00	3.33	
-15.00	1.50	1.00	
0.00	-0.30	1.00	
10.00	-0.30	1.00	<2>
30.00	0.80	1.00	
38.00	1.50	1.00	
40.00	2.60	1.00	
45.00	2.00	3.33	
155.00	2.70	3.33	
180.00	2.90	3.33	
200.00	3.80	3.33	
200.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BALU
7.200
COORDINATES
1 90.167 23.883
FLOW DIRECTION
0
DATUM
0.00

B-6A (Acc. dis. = 21.5 km)

PROFILE	15		
-150.00	10.00	1.00	<1>
-150.00	6.60	3.33	
-120.00	5.00	3.33	
-40.00	5.50	3.33	
-30.00	2.50	1.00	
-20.00	1.50	1.00	
0.00	1.00	1.00	<2>
10.00	2.50	1.00	
70.00	2.50	1.00	
80.00	3.60	1.00	
175.00	3.75	3.33	
230.00	3.30	3.33	
210.00	1.20	3.33	
300.00	3.50	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BALU
8.200 (B-6 Acc. dis. = 20.5 km)
COORDINATES
1 90.167 23.871
FLOW DIRECTION
0
DATUM
0.00

PROFILE	23		
-300.00	10.00	1.00	<1>
-300.00	3.50	3.33	
-150.00	3.50	3.33	
-120.00	3.80	3.33	
-90.00	4.35	3.33	
-60.00	4.75	3.33	
-58.00	3.70	1.00	
-18.00	3.50	1.00	
-14.00	2.20	1.00	
-26.00	1.80	1.00	
-21.00	1.25	1.00	
-15.00	0.20	1.00	
0.00	-0.10	1.00	<2>
1.00	-0.30	1.00	
15.00	1.25	1.00	
17.00	1.90	1.00	
25.00	2.00	1.00	
30.00	3.75	1.00	
60.00	3.60	3.33	
90.00	3.60	3.33	
120.00	3.75	3.33	
400.00	3.75	3.33	
100.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BALU
11.900 (B-5 Acc. dis. = 16.8 km)
COORDINATES
1 90.175 23.811
FLOW DIRECTION
0
DATUM
0.00

PROFILE	23		
-300.00	10.00	1.00	1
-300.00	3.30	3.33	
-113.00	3.30	3.33	
-118.00	2.50	3.33	
-93.00	2.10	3.33	
-63.00	2.50	3.33	
-33.00	3.10	3.33	
-28.00	1.30	1.00	
-19.00	-0.10	1.00	
-15.00	-0.50	1.00	
-10.00	-1.20	1.00	
0.00	-1.40	1.00	<2>
3.00	-1.00	1.00	
16.00	1.70	1.00	
20.00	6.10	1.00	
22.00	6.10	3.33	
21.00	5.25	3.33	
50.00	4.00	3.33	
80.00	3.25	3.33	
111.00	3.00	3.33	
110.00	3.75	3.33	
200.00	3.75	3.33	
200.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BALU
12.900 (B-4A Acc. dis. = 15.8 km)
COORDINATES
1 90.479 23.837
FLOW DIRECTION
0
DATUM
0.00

PROFILE	15		
-500.00	10.00	1.00	<1>
-500.00	6.20	3.33	
-180.00	6.00	3.33	
-175.00	6.70	3.33	
-120.00	6.40	3.33	
-110.00	5.10	1.00	
-50.00	2.80	1.00	
0.00	2.00	1.00	<2>
20.00	2.10	1.00	
70.00	2.80	1.00	
110.00	5.10	1.00	
120.00	8.30	1.00	
280.00	8.30	3.33	
300.00	9.80	3.33	
150.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BALU
15.500 (B-4 Acc. dis. = 13.2 km)
COORDINATES
1 90.188 23.821
FLOW DIRECTION
0
DATUM
0.00

PROFILE	21		
-300.00	10.00	1.00	<1>
-300.00	6.10	3.33	
-155.00	6.10	3.33	
-118.00	3.25	3.33	
-128.00	2.25	3.33	
-80.00	2.30	3.33	
-50.00	3.50	3.33	
-19.00	3.80	3.33	
-15.00	1.50	1.00	
-5.00	-0.30	1.00	
-4.00	-1.00	1.00	
0.00	-1.15	1.00	<2>
15.00	-0.20	1.00	
38.00	2.10	1.00	
11.00	3.70	1.00	
70.00	3.25	3.33	
101.00	3.90	3.33	
130.00	2.80	3.33	
190.00	2.00	3.33	
100.00	2.00	3.33	
100.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BALU
17.700

B-3A
(Acc. dis. = 11.0 km)

COORDINATES

1	90.186	23.802

FLOW DIRECTION

0

DATUM

0.00

PROFILE 16

-400.00	10.00	1.00	<1>
-100.00	1.00	3.33	
-56.00	1.30	3.33	
-44.00	3.50	3.33	
-40.00	1.20	1.00	
-20.00	-1.10	1.00	
0.00	-2.10	1.00	<2>
40.00	0.00	1.00	
45.00	1.00	1.00	
50.00	3.30	1.00	
51.00	1.50	3.33	
80.00	1.50	3.33	
100.00	1.10	3.33	
140.00	1.60	3.33	
300.00	3.31	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
BALU
19.000

B-3
(Acc. dis. = 9.7 km)

COORDINATES

1	90.180	23.790

FLOW DIRECTION

0

DATUM

0.00

PROFILE 20

-400.00	10.00	1.00	<1>
-400.00	2.80	3.33	
-184.00	2.80	3.33	
-121.00	3.20	3.33	
-91.00	3.20	3.33	
-61.00	3.90	3.33	
-41.00	3.90	3.33	
-41.00	2.50	1.00	
-37.00	1.20	1.00	
-34.00	0.85	1.00	
-31.00	0.20	1.00	
-10.00	-2.10	1.00	
0.00	-2.35	1.00	<2>
3.00	-1.70	1.00	
16.00	3.00	1.00	
19.00	4.00	1.00	
48.00	3.65	3.33	
79.00	3.75	3.33	
400.00	3.75	3.33	
400.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
BALU
23.500

B-2
(Acc. dis. = 5.2 km)

COORDINATES

1	90.486	23.758

FLOW DIRECTION

0

DATUM

0.00

PROFILE 17

-700.00	10.00	1.00	<1>
-700.00	7.00	3.33	
-54.00	7.00	3.33	
-44.00	7.00	3.33	
-34.00	2.90	1.00	
-19.00	-2.30	1.00	
-9.00	-4.10	1.00	
0.00	-4.50	1.00	<2>
16.00	-2.50	1.00	
36.00	2.20	1.00	
41.00	4.30	1.00	
81.00	4.20	3.33	
101.00	4.00	3.33	
131.00	4.00	3.33	
141.00	4.40	3.33	
400.00	4.40	3.33	
400.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
BALU
27.600

B-2A
(Acc. dis. = 1.1 km)

COORDINATES

1	90.500	23.731

FLOW DIRECTION

0

DATUM

0.00

PROFILE 10

-400.00	10.00	1.00	<1>
-400.00	6.51	3.33	
-120.00	6.50	3.33	
-25.00	-0.50	1.00	
20.00	-0.50	1.00	<2>
75.00	1.00	1.00	
100.00	4.00	1.00	
200.00	7.00	1.00	
400.00	6.50	3.33	
400.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

B-1A

```
1988-B1
BALU
        28.700
COORDINATES
    1          90.504          23.730
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          10
   -100.00       10.00        1.00      <1>
   -100.00        6.51        3.33
   -120.00        6.50        3.33
    -25.00       -0.50        1.00
     20.00       -0.50        1.00      <2>
     75.00        1.00        1.00
    100.00        1.00        1.00
    200.00        7.00        1.00
    100.00        6.50        3.33
    100.00       10.00        3.33      <3>
**********************************
```

(Acc. dis = 0.0 km)

$n_1 = 0.030$

$n_2 = 0.100$

BHI-25A

```
1988-B1
BANSI
        0.000
COORDINATES
    1          90.232          23.909
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          17
   -300.00       10.00        1.00       1>
   -300.00        7.60        3.33
   -242.07        7.60        3.33
   -182.92        6.50        3.33
   -113.72        7.85        3.33
    -83.53        5.80        1.00
    -72.86        0.92        1.00
    -60.67       -0.91        1.00
      0.00       -2.00        1.00
     31.40       -2.00        1.00      <2>
     68.90       -0.15        1.00
     89.33        0.92        1.00
    105.19        6.19        1.00
    130.49        7.82        1.00
    153.66        8.08        3.33
    300.00        8.08        3.33
    300.00       10.00        3.33      <3>
**********************************
```

(Acc. dis. = 9.0 km)

$n_1 = 0.030$

$n_2 = 0.100$

BHI-25

```
1988-B1
BANSI
        2.000
COORDINATES
    1          90.233          23.892
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          19
   -300.00       10.00        1.00      <1>
   -300.00        7.60        3.33
   -242.07        7.60        3.33
   -182.92        6.50        3.33
   -113.72        7.85        3.33
    -83.53        5.80        1.00
    -72.86        0.92        1.00
    -60.67       -0.91        1.00
    -24.39       -2.13        1.00
     -6.09       -2.73        1.00
      0.00       -3.31        1.00
     31.40       -3.31        1.00      <2>
     68.90       -0.45        1.00
     89.33        0.92        1.00
    105.19        6.19        1.00
    130.49        7.82        1.00
    153.66        8.08        3.33
    300.00        8.08        3.33
    300.00       10.00        3.33      <3>
**********************************
```

(Acc. dis. = 7.0 km)

$n_1 = 0.030$

$n_2 = 0.100$

BHI-26

```
1988-B1
BANSI
        7.600
COORDINATES
    1          90.211          23.815
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          20
   -500.00       10.00        1.00      <1>
   -500.00        7.29        3.33
   -375.56        7.29        3.33
   -316.11        6.13        3.33
   -256.96        5.76        3.33
   -195.38        5.55        3.33
   -135.01        5.21        3.33
   -106.96       -2.56        1.00
    -80.11       -5.61        1.00
    -60.93       -6.22        1.00
    -21.65       -8.05        1.00
      0.00       -9.58        1.00      <2>
     12.85       -8.66        1.00
     27.18       -6.53        1.00
     57.67        3.38        1.00
     72.09        6.05        1.00
    136.33        6.36        3.33
    160.12        6.88        3.33
    300.00        6.88        3.33
    300.00       10.00        3.33      <3>
**********************************
```

(Acc. dis. = 1.4 km)

$n_1 = 0.030$

$n_2 = 0.100$

D-14A
(Acc. dis. = 0.0 km)

```
1988-B1
BANSI
          9.000
COORDINATES
    1          90.250          23.833
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          29
   -700.00       10.00        1.00      <1>
   -700.00        6.79        3.33
   -570.10        6.79        3.33
   -500.00        6.18        3.33
   -166.50        7.66        3.33
   -160.40        3.39        3.33
   -420.70        7.13        3.33
   -368.90        6.53        3.33
   -320.10        6.45        3.33
   -307.90        3.81        3.33
   -283.50        3.32        3.33
   -247.00        7.03        3.33
   -170.70        7.37        3.33
   -119.10        0.00        1.00
   -100.60       -2.16        1.00
    -88.10       -6.55        1.00
    -33.54       -6.55        1.00
      0.00       -8.07        1.00
     12.76       -8.07        1.00      <2>
     94.51       -6.31        1.00
    125.00       -2.71        1.00
    216.46        5.89        1.00
    277.44        6.54        1.00

    527.44        6.50        3.33
    618.90        6.75        3.33
    692.07        6.60        3.33
    777.14        7.10        3.33
   1600.00        7.40        3.33
   1600.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

TV-1
(Acc. dis. = 17.5 km)

```
1988-B1
BURIGANGA
          0.000
COORDINATES
    1          90.318          23.712
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          19
  -1300.00       10.00        1.00      <1>
  -1300.00        5.60        3.30
   -500.00        7.00        3.30
   -275.00        5.60        3.30
   -265.00        2.10        3.30
   -165.00        1.90        3.30
   -119.00        0.90        1.00
   -123.00       -3.60        1.00
   -105.00       -3.75        1.00
    -25.00       -3.75        1.00
      0.00       -1.60        1.00      <2>
     30.00       -3.00        1.00
     50.00       -1.00        1.00
     70.00        1.90        1.00
    109.00        1.50        3.30
    115.00        1.50        3.30
    175.00        3.75        3.30
    800.00        3.75        3.30
    800.00       10.00        3.30      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

BGA-6
(Acc. dis. = 16.4 km)

```
1988-B1
BURIGANGA
          1.100
COORDINATES
    1          90.368          23.706
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          16
  -1700.00       10.00        1.00      <1>
  -1700.00        6.25        3.30
   -800.00        7.00        3.30
   -243.90        6.25        3.30
   -173.78        2.05        1.00      <2>
      0.00       -9.52        1.00
    125.00        2.05        1.00
    140.24        3.55        1.00
    182.92        3.75        3.30
    213.41        4.99        3.30
    268.29        6.29        3.30
    317.07        3.95        3.30
    323.17        6.63        3.30
    359.75        7.08        3.30
    500.00        7.08        3.30      <3>
    500.00       10.00        3.30
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

BGA-5
(Acc. dis. = 12.7 km)

```
1988-B1
BURIGANGA
          4.800
COORDINATES

    1          90.402          23.708
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          15
   -200.00       10.00        1.00      <1>
   -200.00        6.56        3.33
   -117.07        6.56        3.33
    -87.80        2.33        1.00
    -53.66       -5.28        1.00
    -36.59       -5.28        1.00
    -21.95       -9.27        1.00
      0.00       -9.85        1.00      <2>
     21.95       -9.27        1.00
     80.49       -3.76        1.00
    129.27        2.33        1.00
    131.15        4.09        1.00
    165.86        5.83        1.00
    197.56        5.97        3.33
    258.51        6.10        3.33      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BURIGANGA
7.000 (BGA-4 Acc.dis.=10.5 km)
COORDINATES
1 90.118 23.698
FLOW DIRECTION
0
DATUM
0.00
PROFILE 17

-335.36	10.00	1.00	<1>
-335.36	7.69	3.33	
-280.56	5.18	1.00	
-268.29	1.82	1.00	
-176.83	-4.26	1.00	
-146.34	-4.87	1.00	
0.00	-4.87	1.00	<2>
18.29	-4.26	1.00	
60.98	-4.26	1.00	
109.76	0.30	1.00	
176.83	1.82	1.00	
195.12	4.61	1.00	
228.66	4.57	3.33	
289.64	5.31	3.33	
326.22	2.91	3.33	
341.46	5.18	3.33	
341.46	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BURIGANGA
11.500 (BGA-3 Acc.dis.=6.0 km)
COORDINATES
1 90.151 23.669
FLOW DIRECTION
0
DATUM
0.00
PROFILE 11

-311.51	10.00	1.00	<1>
-311.51	5.54	3.33	
-292.69	6.34	3.33	
-231.76	6.13	3.33	
-138.72	-1.82	1.00	
-102.41	-6.10	1.00	
-29.88	-7.56	1.00	
0.00	-8.81	1.00	<2>
66.77	-3.66	1.00	
112.80	1.82	1.00	
125.00	5.75	1.00	
154.27	5.52	3.33	
500.00	5.52	3.33	
500.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BURIGANGA
13.800 (BGA-2 Acc.dis.=3.7 km)
COORDINATES
1 90.465 23.652
FLOW DIRECTION
0
DATUM
0.00
PROFILE 22

-300.00	10.00	1.00	<1>
-300.00	5.74	3.33	
-131.00	5.74	3.33	
-98.17	6.61	3.33	
-73.17	-5.85	1.00	
0.00	-5.85	1.00	<2>
18.78	-5.25	1.00	
73.17	-1.96	1.00	
121.95	1.05	1.00	
213.42	6.73	1.00	
274.39	1.05	3.33	
298.78	0.31	3.33	
371.95	0.10	3.33	
445.12	0.03	3.33	
500.00	0.41	3.33	
560.98	3.60	3.33	
695.12	3.30	3.33	
743.90	3.75	3.33	
801.83	3.78	3.33	
868.90	3.68	3.33	
1012.20	3.72	3.33	
1012.20	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BURIGANGA
16.500 (BGA-2A Acc.dis.=1.0 km)
COORDINATES
1 90.168 23.633
FLOW DIRECTION
0
DATUM
0.00
PROFILE 9

-100.00	10.00	1.00	<1>
-100.00	4.00	1.00	
-200.00	1.00	3.33	
-100.50	-10.40	3.33	
0.00	-10.10	1.00	
100.00	-10.40	1.00	<2>
200.00	2.20	1.00	
300.00	2.20	1.00	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
BURIGANGA
17.500
BGA-1 (Acc. dis. = 0.0 km)

COORDINATES

1	90.458	23.629

FLOW DIRECTION
0
DATUM
0.00

PROFILE 29

-800.00	10.00	1.00	<1>
-800.00	0.33	3.33	
-42.68	0.33	3.33	
-27.68	-12.10	1.00	
0.00	-12.16	1.00	<2>
6.10	-10.64	1.00	
67.07	-6.06	1.00	
365.86	-9.12	1.00	
445.12	-9.73	1.00	
518.29	-11.55	1.00	
591.76	-3.01	1.00	
692.26	1.55	1.00	
908.53	1.85	3.33	
993.90	1.92	3.33	
1146.34	0.80	3.33	
1243.90	0.64	3.33	
1268.29	5.57	3.33	
1310.97	6.22	3.33	
1335.36	6.25	3.33	
1408.53	0.57	3.33	
1438.93	0.70	3.33	
1463.41	4.93	3.33	
1469.51	2.77	3.33	
1481.71	2.16	3.33	
1560.97	2.23	3.33	
1695.12	2.31	3.33	
1756.10	1.93	3.33	
1835.36	4.03	3.33	
1835.36	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
DHALESWARI
0.000
D-14A (Acc. dis. = 60.2 km)

COORDINATES

1	90.250	23.833

FLOW DIRECTION
0
DATUM
0.00

PROFILE 29

-700.00	10.00	1.00	<1>
-700.00	6.79	3.33	
-570.10	6.79	3.33	
-500.00	6.18	3.33	
-466.50	7.66	3.33	
-460.40	3.39	3.33	
-420.70	7.13	3.33	
-368.90	6.53	3.33	
-320.10	6.45	3.33	
-307.90	3.81	3.33	
-283.50	3.32	3.33	
-247.00	7.03	3.33	
-170.70	7.37	3.33	
-149.40	0.00	1.00	
-100.60	-2.46	1.00	
-88.40	-6.55	1.00	
-33.54	-6.55	1.00	
0.00	-8.07	1.00	
42.76	-8.07	1.00	<2>
94.51	-6.34	1.00	
125.00	-2.74	1.00	
216.46	5.89	1.00	
277.44	6.54	1.00	
527.44	6.50	3.33	
618.90	6.75	3.33	
692.07	6.60	3.33	
777.44	7.10	3.33	
1600.00	7.10	3.33	
1600.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
DHALESWARI
0.500
D-14 (Acc. dis. = 59.7 km)

COORDINATES

1	90.251	23.827

FLOW DIRECTION
0
DATUM
0.00

PROFILE 29

-700.00	10.00	1.00	<1>
-700.00	6.79	3.33	
-570.10	6.79	3.33	
-500.00	6.18	3.33	
-466.50	7.66	3.33	
-460.40	3.39	3.33	
-420.70	7.13	3.33	
-368.90	6.53	3.33	
-320.10	6.45	3.33	
-307.90	3.81	3.33	
-283.50	3.32	3.33	
-247.00	7.03	3.33	
-170.70	7.37	3.33	
-149.40	0.00	1.00	
-100.60	-2.46	1.00	
-88.40	-6.55	1.00	
-33.54	-6.55	1.00	
0.00	-8.07	1.00	
42.76	-8.07	1.00	<2>
94.51	-6.34	1.00	
125.00	-2.74	1.00	
216.46	5.89	1.00	
277.44	6.54	1.00	
527.44	6.50	3.33	
618.90	6.75	3.33	
692.07	6.60	3.33	
777.44	7.10	3.33	
1600.00	7.10	3.33	
1600.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
DHALESWARI
10.600
D-15 (Acc. dis. = 49.6 km)

COORDINATES

1	90.265	23.756

FLOW DIRECTION
0
DATUM
0.00

PROFILE 36

-1000.00	10.00	1.00	<1>
-1000.00	7.49	3.33	
-164.63	7.49	3.33	
-106.70	7.83	3.33	
-60.97	6.43	3.33	
-42.68	1.05	1.00	
-39.63	-2.53	1.00	
-36.58	-3.04	1.00	
0.00	-3.04	1.00	<2>
21.39	5.61	1.00	
67.08	5.28	3.33	
85.37	4.55	3.33	
179.88	5.17	3.33	
262.20	5.51	3.33	
371.96	1.25	3.33	
454.27	4.25	3.33	
481.71	1.51	3.33	
515.25	4.54	3.33	
560.98	5.45	3.33	
621.96	4.86	1.00	
631.10	3.96	1.00	
631.15	2.89	1.00	
679.88	1.12	1.00	
743.91	1.06	1.00	
762.25	0.70	1.00	
780.49	0.64	1.00	
817.08	0.64	1.00	
841.47	2.19	1.00	
856.71	1.02	1.00	
865.86	7.05	1.00	
914.64	6.83	3.33	
951.22	7.36	3.33	
987.81	7.20	3.33	
1024.39	7.37	3.33	
1500.00	7.37	3.33	
1500.00	10.00	3.33	<3>

$n_1 = 0.030$
$n_2 = 0.100$

202

```
1988-B1                                    D-16
DHALESWARI
        17.300          (Acc.dis. = 42.9 km)
COORDINATES
    1          90.250          23.733
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          23
  -1500.00       10.00        1.00        <1>
  -1500.00        6.79        3.33
   -945.12        6.79        3.33
   -917.69        6.28        3.33
   -871.95        5.33        3.33
   -783.54        5.79        3.33
   -756.10        5.79        3.33
   -725.61        5.66        3.33
   -179.88        5.82        3.33
    -60.98        4.57        1.00
    -48.78        3.80        1.00
      0.00       -5.34        1.00
     48.78       -5.34        1.00        <2>
    210.36        3.80        1.00
    219.51        6.06        1.00
    335.36        5.67        3.33
    169.51        5.55        3.33
    518.29        5.47        3.33
    609.75        6.06        3.33
    682.92        5.91        3.33
    811.16        6.50        3.33
   1500.00        6.50        3.33
   1500.00       10.00        3.33        <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1                                    D-16A
DHALESWARI                      (Acc.dis.=40.5 km)
        19.700
COORDINATES
    1          90.265          23.721
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          11
  -2500.00       10.00        1.00        <1>
  -2500.00        6.00        1.00
   -900.00        6.00        1.00
   -375.00        6.00        1.00
    -35.00       -5.40        1.00
      0.00       -5.40        1.00        <2>
     35.00       -5.40        1.00
    125.00        6.60        1.00
   1200.00        6.60        1.00        3
   2000.00        6.00        1.00
   2000.00       10.00        1.00
**********************************
```

$n_1 = 0.025$

$n_2 = 0.100$

```
1988-B1                                    D-17
DHALESWARI                      ( Acc.dis.= 34.6 km)
        25.600
COORDINATES
    1          90.281          23.681
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          28
  -3500.00       10.00        1.00        <1>
  -3500.00        6.06        4.00
  -1631.11        6.06        1.00
  -1478.66        6.03        4.00
  -1387.19        6.09        1.00
  -1356.70        3.66        1.00
  -1350.61        1.34        1.00
  -1256.09        0.48        1.00
  -1219.51        0.51        1.00
  -1048.78        3.66        1.00
  -1036.58        5.01        1.00
   -975.61        1.93        1.00
   -853.66        1.95        1.00
   -670.73        1.87        1.00
   -187.80        4.29        1.00
   -396.34        2.68        1.00
   -213.90        1.29        1.00
   -128.05        5.10        1.00
    -85.36       -0.36        1.00
      0.00       -5.44        1.00        <2>
     60.98       -5.38        1.00
     91.47        3.01        1.00
     91.96        5.66        1.00
    170.73        4.75        4.00
    182.93        6.03        1.00
    189.73        6.03        1.00
    800.00        6.03        1.00
    800.00       10.00        1.00        <3>
**********************************
```

$n_1 = 0.025$

$n_2 = 0.100$

```
1988-B1                                    D-18
DHALESWARI                      ( Acc.dis. = 29.4 km )
        30.800
COORDINATES
    1          90.327          23.656
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          30
  -2000.00       10.00        1.00        <1>
  -2000.00        7.01        4.00
  -1500.00        7.01        1.00
   -661.61        7.01        1.00
   -501.10        3.35        1.00
   -163.42        3.32        1.00
   -365.86        5.79        1.00
   -121.95        5.15        1.00
    -60.98        5.90        1.00
    -12.69        3.32        1.00        <2>
      0.00       -1.86        1.00
    182.92        0.27        1.00
    213.11        3.32        1.00
    289.63        5.58        1.00
    112.07        1.76        1.00
    573.17        5.70        1.00
    670.73        5.82        1.00
    731.70        5.67        1.00
    792.68        5.19        1.00
    829.26        3.31        1.00
    911.63       -0.35        1.00
   1103.65        3.31        1.00
   1115.85        3.97        1.00
   1182.92        1.27        1.00
   1219.51        0.57        1.00
   1280.48        5.51        1.00
   1390.21        5.15        1.00
   1500.00        5.15        1.00
   2000.00        5.15        1.00        1
   2000.00       10.00        1.00
**********************************
```

$n_1 = 0.025$

$n_2 = 0.100$

D-19
(Acc.dis.=23.0 km)

```
1988-B1
DHALESWARI
        37.200
COORDINATES
    1          90.381          23.638
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          31
  -3000.00       10.00        1.00        1>
  -3000.00        5.08        1.00
  -1865.86        5.08        1.00
  -1829.27        4.05        1.00
  -1807.93        2.85        1.00
  -1676.84       -4.77        1.00
  -1616.35       -4.77        1.00
  -1585.37        2.85        1.00
  -1518.78        1.50        1.00
  -1163.42        4.18        1.00
  -1102.41        4.18        1.00
  -1311.47        4.00        1.00   n1=0.025
  -1182.93        1.50        1.00
  -1000.00        2.32        1.00   n2=0.100
   -914.64        4.12        1.00
   -853.66        4.21        1.00
   -823.18        3.61        1.00
   -670.74        3.15        1.00
   -585.37        3.12        1.00
   -524.39        2.85        1.00
   -426.83        3.21        1.00
   -280.49        3.24        1.00
   -195.13        4.05        1.00
   -170.74        2.76        1.00
      0.00       -6.39        1.00        <2>
     48.78       -6.31        1.00
     89.02        2.76        1.00
    121.95        4.24        1.00
    450.00        4.24        1.00
    800.00        4.21        1.00        <3>
    800.00       10.00        4.00
**********************************
```

D-19A
(Acc.dis.=14.0 km)

```
1988-B1
DHALESWARI
        16.200
COORDINATES
    1          90.151          23.606
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          10
   -800.00       10.00        1.00        <1>
   -800.00        4.12        1.00
   -384.14        1.71        1.00
   -335.36        1.18        1.00
   -110.21       -9.51        1.00
      0.00      -10.15        1.00        <2>
    103.66       -8.02        1.00
    110.25        2.70        1.00
   3000.00        1.31        1.00
   3000.00       10.00        1.00        <3>
**********************************
```

n1=0.025
n2=0.100

D-20
(Acc.dis.=13.2 km)

```
1988-B1
DHALESWARI
        47.200
COORDINATES
    1          90.456          23.619
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          18
   -800.00       10.00        1.00        <1>
   -800.00        4.12        1.00
   -506.09        1.12        1.00
   -384.14        4.71        4.00
   -335.36        4.18        1.00
   -110.21       -9.51        1.00
      0.00      -10.15        1.00        <2>
    103.66       -8.02        1.00
    110.25        2.70        1.00
    408.04        4.34        4.00
    551.88        3.17        1.00
    652.44        3.58        4.00
    725.61        3.58        1.00
    804.88        3.29        4.00
    881.11        3.07        4.00
    957.32        4.11        4.00
   3000.00        4.11        4.00
   3000.00       10.00        4.00        <3>
**********************************
```

n1=0.025
n2=0.100

D-21
(Acc.dis.=8.5 km)

```
1988-B1
DHALESWARI
        51.700
COORDINATES
    1          90.188          23.590
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          22
  -1006.09       10.00        1.00        <1>
  -1006.09        4.41        4.00
   -898.34        3.56        1.00
   -823.17        4.11        4.00
   -792.68        3.96        4.00
   -750.00        3.00        4.00
   -390.24        3.00        1.00
   -338.41        2.73        4.00
   -121.95       -4.89        1.00
      0.00       -5.19        1.00
     91.47       -5.19        1.00        <2>
    298.78       -1.84        1.00
    359.76        3.17        1.00
    457.32        3.50        4.00
    554.88        3.55        4.00
    670.73        1.82        4.00
    731.71        3.62        4.00
    768.30        3.93        4.00
    823.17        3.91        4.00
    915.12        3.81        1.00
   1300.00        3.81        1.00
   1300.00       10.00        1.00        <3>
**********************************
```

n1=0.025
n2=0.100

206

1988-B1
DHALESWARI
54.500
D-21A
(Acc.dis. = 5.7 km)
COORDINATES

1	90.500	23.579

FLOW DIRECTION
0
DATUM
0.00

PROFILE	9		
-1000.00	10.00	1.00	<1>
-1000.00	4.00	1.00	
-310.00	4.00	1.00	
-100.00	-10.90	1.00	
0.00	-10.90	1.00	
100.00	-10.90	1.00	<2>
120.00	4.00	1.00	
1000.00	4.00	4.00	
1000.00	10.00	4.00	<3>

****

$n_1 = 0.025$

$n_2 = 0.100$

1988-B1
DHALESWARI
56.300
D-22
(Acc.dis. = 3.9 km)
COORDINATES

1	90.521	23.568

FLOW DIRECTION
0
DATUM
0.00

PROFILE	11		
-792.69	10.00	1.00	<1>
-792.69	0.68	1.00	
-573.17	1.29	1.00	
-271.39	-0.53	1.00	
-60.98	-20.65	1.00	
0.00	-20.95	1.00	<2>
158.53	3.65	1.00	
335.36	3.35	1.00	
396.52	1.62	1.00	
500.00	1.62	1.00	
500.00	10.00	1.00	<3>

****

$n_1 = 0.025$

$n_2 = 0.100$

1988-B1
DHALESWARI
60.200
D-23
(Acc.dis. = 0.0 km)
COORDINATES

1	90.561	23.571

FLOW DIRECTION
0
DATUM
0.00

PROFILE	22		
-682.93	10.00	1.00	<1>
-682.93	2.53	1.00	
-518.78	2.21	1.00	
-487.80	1.29	1.00	
-457.32	-2.53	1.00	
-420.73	-5.39	1.00	
-353.66	-6.92	1.00	
-213.90	-5.39	1.00	
-121.95	-5.39	1.00	
0.00	-6.92	1.00	
60.98	-5.39	1.00	
250.00	-11.19	1.00	<2>
353.66	-10.57	1.00	
426.83	-3.87	1.00	
518.78	-2.31	1.00	
560.98	-0.82	1.00	
646.34	0.21	1.00	
649.39	3.73	1.00	
731.71	1.09	1.00	
841.47	3.31	4.00	
1500.00	3.31	1.00	
1500.00	10.00	1.00	<3>

****

$n_1 = 0.025$

$n_2 = 0.100$

1988-B1
KARNATALI
0.000
K-4
(Acc.dis. = 11.9 km)
COORDINATES

1	90.251	23.824

FLOW DIRECTION
0
DATUM
0.00

PROFILE	17		
-350.00	10.00	1.00	<1>
-350.00	6.38	3.33	
-250.00	7.61	3.33	
-125.00	6.82	3.33	
-55.00	1.50	1.00	
-12.00	1.11	1.00	
-1.00	-1.35	1.00	
0.00	-1.79	1.00	<2>
8.00	-1.00	1.00	
12.00	1.11	1.00	
35.00	3.30	1.00	
50.00	7.95	1.00	
110.00	5.71	3.33	
180.00	8.01	3.33	
250.00	6.65	3.33	
300.00	6.82	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

2^68

1988-B1
KARNATALI
1.600
COORDINATES
1 90.261 23.818
FLOW DIRECTION
0
DATUM
0.00
PROFILE 12

K-3
(Acc. dis. = 10.3 km)

-100.00	10.00	1.00	<1>
-100.00	7.00	3.33	
-40.00	6.30	3.33	
-20.00	0.30	1.00	
0.00	-1.30	1.00	<2>
20.00	1.20	1.00	
60.00	2.50	1.00	
130.00	6.50	1.00	
400.00	5.80	3.33	
500.00	6.50	3.33	
525.00	8.00	3.33	
525.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
KARNATALI
6.100
COORDINATES
1 90.302 23.806
FLOW DIRECTION
0
DATUM
0.00
PROFILE 14

K-2
(Acc. dis. = 5.5 km)

-300.00	10.00	1.00	<1>
-300.00	5.22	3.33	
-270.00	5.21	3.33	
-50.00	4.77	3.33	
-35.00	3.44	1.00	
-17.00	-0.61	1.00	
-9.00	-1.54	1.00	
0.00	-2.09	1.00	<2>
8.00	-1.21	1.00	
25.00	1.44	1.00	
50.00	2.96	1.00	
60.00	1.60	1.00	
300.00	1.60	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
KARNATALI
11.900
COORDINATES
1 90.336 23.788
FLOW DIRECTION
0
DATUM
0.00
PROFILE 15

K-1
(Acc. dis. = 0.0 km)

-200.00	10.00	1.00	<1>
-200.00	1.50	3.33	
-170.00	0.90	3.33	
-140.00	1.80	3.33	
-110.00	0.90	3.33	
-94.00	2.00	3.33	
-35.00	1.20	3.33	
-20.00	0.20	1.00	
-10.00	-1.50	1.00	
0.00	-1.80	1.00	<2>
15.00	-0.40	1.00	
65.00	1.20	1.00	
72.00	7.00	1.00	
120.00	7.80	3.33	
120.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
LAKHYA
0.000
COORDINATES
1 90.515 23.753
FLOW DIRECTION
0
DATUM
0.00
PROFILE 20

L-16
(Acc. dis. = 23.9 km)

-300.00	10.00	1.00	<1>
-300.00	5.63	3.33	
-203.35	5.63	3.33	
-171.95	4.99	3.33	
-154.87	5.24	3.33	
-123.47	6.20	3.33	
-96.65	1.30	1.00	
-79.88	1.21	1.00	
-55.18	-0.31	1.00	
-38.72	-0.92	1.00	
0.00	-4.88	1.00	
53.05	-4.88	1.00	<2>
82.32	-3.36	1.00	
125.92	1.21	1.00	
196.04	2.91	1.00	
256.10	3.73	1.00	
326.53	1.89	1.00	
379.87	5.10	3.33	
432.00	4.97	3.33	
432.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

2.6.9

1988-B1
LAKHYA
2.300 *L-16A (Acc. dis. = 21.6 km)*
COORDINATES
1 90.513 23.731
FLOW DIRECTION
0
DATUM
0.00
PROFILE 16

-430.00	10.00	1.00	<1>
-430.00	1.20	3.33	
-180.00	6.50	3.33	
-150.00	2.40	1.00	
-120.00	-0.80	1.00	
-100.00	-1.00	1.00	
-80.00	-2.00	1.00	
-40.00	-2.40	1.00	
-20.00	-3.50	1.00	
0.00	-3.50	1.00	<2>
60.00	-1.30	1.00	
100.00	-1.00	1.00	
120.00	-1.20	1.00	
175.00	7.00	1.00	
450.00	7.00	3.33	
450.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
LAKHYA
3.600 *L-16/1 (Acc. dis. = 20.3 km)*
COORDINATES
1 90.501 23.730
FLOW DIRECTION
0
DATUM
0.00
PROFILE 16

-430.00	10.00	1.00	<1>
-430.00	1.20	3.33	
-180.00	6.50	3.33	
-150.00	2.40	1.00	
-120.00	-0.80	1.00	
-100.00	-1.00	1.00	
-80.00	-2.00	1.00	
-40.00	-2.40	1.00	
-20.00	-3.10	1.00	
0.00	-3.10	1.00	<2>
60.00	-1.30	1.00	
100.00	-1.00	1.00	
120.00	-1.20	1.00	
175.00	7.00	1.00	
450.00	7.00	3.33	
450.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
LAKHYA
7.900 *L-17 (Acc. dis. = 16.0 km)*
COORDINATES
1 90.527 23.695
FLOW DIRECTION
0
DATUM
0.00
PROFILE 20

-400.00	10.00	1.00	<1>
-400.00	5.55	3.33	
-209.45	5.55	3.33	
-174.39	5.58	3.33	
-127.13	5.52	3.33	
-122.25	0.71	1.00	
-71.08	-3.86	1.00	
-29.27	-5.08	1.00	
0.00	-5.69	1.00	<2>
36.28	-5.38	1.00	
103.97	-2.31	1.00	
131.71	-1.12	1.00	
153.35	-0.51	1.00	
187.50	0.71	1.00	
211.03	3.30	1.00	
247.87	3.30	3.33	
308.23	2.81	3.33	
355.49	2.16	3.33	
401.71	4.73	3.33	
404.71	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-B1
LAKHYA
13.100 *L-18 (Acc. dis. = 10.8 km)*
COORDINATES
1 90.523 23.654
FLOW DIRECTION
0
DATUM
0.00
PROFILE 20

-300.00	10.00	1.00	<1>
-300.00	3.81	3.33	
-186.28	3.81	3.33	
-135.37	2.47	1.00	
-113.62	1.13	1.00	
-79.88	-0.09	1.00	
-56.71	-3.75	1.00	
-28.96	-6.19	1.00	
0.00	-6.19	1.00	<2>
21.39	-5.58	1.00	
54.27	-1.97	1.00	
93.29	-1.05	1.00	
118.60	-1.92	1.00	
138.11	1.13	1.00	
151.88	1.51	1.00	
171.39	4.57	1.00	
225.00	4.15	3.33	
269.81	3.96	3.33	
300.00	3.96	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

```
1988-B1                          L-19
LAKHYA
        20.900          (Acc. dis.= 3.0 km)
COORDINATES
    1          90.515              23.585
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          22
   -700.00       10.00        1.00      <1>
   -700.00        6.74        3.33
   -558.81        6.71        3.33
   -497.25        3.71        3.33
   -454.88        3.89        3.33
   -307.32        3.75        3.33
   -274.39        3.59        3.33
   -228.66        2.52        3.33
   -159.15        0.62        1.00
   -136.58       -5.18        1.00
    -61.59      -11.58        1.00
    -35.06      -12.59        1.00
      0.00      -14.63        1.00      <2>
     11.16       -8.53        1.00
     60.67       -5.18        1.00
     72.56        0.62        1.00
     94.51        5.37        1.00
    157.32        5.02        3.33
    208.67        5.30        3.33
    242.07        5.37        3.33
    500.00        5.37        3.33
    500.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

```
1988-B1                          L-19A
LAKHYA
        23.900          (Acc. dis.= 0.0 km)
COORDINATES
    1          90.537              23.568
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          22
   -800.00       10.00        1.00      <1>
   -800.00        6.71        3.33
   -558.81        6.71        3.33
   -497.25        3.71        3.33
   -454.88        3.89        3.33
   -307.32        3.75        3.33
   -274.39        3.59        3.33
   -228.66        2.52        3.33
   -159.15        0.62        1.00
   -136.58       -5.18        1.00
    -61.59      -11.58        1.00
    -35.06      -12.59        1.00
      0.00      -11.63        1.00      <2>
     11.16       -8.53        1.00
     60.67       -5.18        1.00
     72.56        0.62        1.00
     94.51        5.37        1.00
    157.32        5.02        3.33
    208.67        5.30        3.33
    212.07        5.37        3.33
    500.00        5.37        3.33
    500.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

```
1988-B1                          TON-1A
TONGI
          0.000          (Acc. dis. = 16.0 km)
COORDINATES
    1          90.358              23.879
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          24
   -400.00       10.00        1.00      <1>
   -400.00        6.20        3.33
   -282.00        6.20        3.33
   -280.00        5.30        3.33
   -225.00        5.90        3.33
   -180.00        5.85        3.33
    -65.00        7.20        3.33
    -34.00        6.80        3.33
    -26.00        2.50        1.00
    -20.00        1.20        1.00
      0.00        0.50        1.00      <2>
     14.00        1.00        1.00
     23.00        2.00        1.00
     28.00        4.00        1.00
     43.00        5.50        1.00
     45.00        7.10        1.00
     52.00        7.70        3.33
     60.00        5.50        3.33
     80.00        5.70        3.33
     90.00        5.20        3.33
    110.00        5.00        3.33
    125.00        6.20        3.33
    180.00        9.20        3.33
    250.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

```
1988-B1                          TON-1
TONGI
          1.300          (Acc. dis.=14.7 km)
COORDINATES
    1          90.361              23.883
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          18
   -300.00       10.00        1.00      <1>
   -300.00        2.20        3.33
   -101.00        2.20        3.33
    -44.00        2.35        3.33
    -37.00        3.00        3.33
    -31.00        2.20        3.33
    -12.00        2.25        3.33
     -8.00        1.20        1.00
      0.00        0.60        1.00      <2>
      1.00        1.00        1.00
      7.00        1.90        1.00
     11.00        2.55        1.00
     58.00        2.50        3.33
     71.00        2.50        3.33
    118.00        2.90        3.33
    206.00        2.90        3.33
    300.00        2.90        3.33
    300.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$
$n_2 = 0.100$

209

```
1988-B1
TONGI
          6.400
COORDINATES
    1          90.391          23.887
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          15
   -300.00       10.00        1.00      <1>
   -300.00        7.50        3.33
   -150.00        7.50        3.33
    -65.00        7.20        3.33
    -28.00        1.00        1.00
    -20.00       -6.30        1.00
      0.00       -7.80        1.00      <2>
     11.00       -6.00        1.00
     20.00       -2.00        1.00
     21.00        1.00        1.00
     80.00        3.70        1.00
     90.00        7.50        3.33
    105.00        7.50        3.33
    300.00        7.50        3.33
    300.00       10.00        3.33      <3>
**********************************
```

TON-2
(Acc. dis. = 9.6 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TONGI
          8.000
COORDINATES
    1          90.405          23.881
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          11
   -200.00       10.00        1.00      <1>
   -200.00        8.30        3.33
   -192.00        8.30        3.33
    -92.00        8.30        3.33
    -82.00        7.00        3.33
    -32.00        6.80        3.33
    -22.00        1.50        1.00
      0.00       -1.70        1.00      <2>
     18.00       -1.30        1.00
     12.00        1.50        1.00
     50.00        6.50        1.00
    158.00        8.90        3.33
    300.00        8.90        3.33
    300.00       10.00        3.33      <3>
**********************************
```

TON-2B
(Acc. dis. = 8.0 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TONGI
          8.300
COORDINATES
    1          90.406          23.879
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          13
   -200.00       10.00        1.00      <1>
   -200.00        8.31        3.33
   -100.00        8.30        3.33
    -90.00        7.00        3.33
    -40.00        6.80        3.33
    -31.00        1.50        1.00
     -8.00       -1.70        1.00      <2>
     10.00       -1.30        1.00
     33.00        1.50        1.00
     43.00        6.10        1.00
    150.00        7.80        3.33
    300.00        8.00        3.33
    300.00       10.00        3.33      <3>
**********************************
```

TON-2A
(Acc. dis. = 7.7 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TONGI
         11.400
COORDINATES
    1          90.158          23.892
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          20
   -300.00       10.00        1.00      <1>
   -300.00        2.10        3.33
   -138.00        2.10        3.33
   -108.00        2.30        3.33
    -78.00        2.35        3.33
    -68.00        2.50        3.33
    -62.00        2.50        3.33
    -38.00        1.60        1.00
    -16.00        0.75        1.00
     -6.00       -0.05        1.00
     -2.00       -0.10        1.00
      0.00       -0.20        1.00
      1.00       -0.20        1.00      <2>
     29.00        1.10        1.00
     31.00        2.10        1.00
     38.00        2.25        3.33
     68.00        2.20        3.33
     79.00        2.50        3.33
    300.00        2.50        3.33
    300.00       10.00        3.33      <3>
**********************************
```

TON-3
(Acc. dis. = 1.6 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1                    TON-3A
TONGI
        16.000     (Acc.dis.= 0.0 km)
COORDINATES
    1          90.461          23.886
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          13
   -110.00       10.00        1.00        1>
   -110.00        4.30        3.33
    -20.00        3.20        3.33
     -5.00        1.00        1.00
     10.00        0.80        1.00        2>
     25.00        1.50        1.00
     10.00        2.50        1.00
    150.00        3.50        1.00
    200.00        3.50        3.33
    220.00        4.00        3.33
    250.00        3.50        3.33
    300.00        3.50        3.33
    300.00       10.00        3.33        3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1                    TU-12A
TURAG
        0.000      (Acc.dis. =31.5 km )
COORDINATES
    1          90.373          23.976
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          11
  -1000.00       10.00        1.00        <1>
  -1000.00        5.51        3.33
   -100.00        1.90        3.33
    -35.00        5.50        3.33
    -28.00        1.80        1.00
      0.00        0.80        1.00        <2>
     28.00        1.70        1.00
     35.00        5.00        1.00
    190.00        1.00        3.33
   1000.00        1.00        3.33
   1000.00       10.00        3.33        <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1                    TU-12
TURAG
        9.100      (Acc.dis.= 28.0 km)
COORDINATES
    1          90.338          23.915
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          21
  -1000.00       10.00        1.00        <1>
  -1000.00        4.20        3.33
   -182.00        1.20        3.33
    -82.00        4.10        3.33
    -30.00        1.00        3.33
    -20.00        1.55        1.00
    -12.00        1.10        1.00
    -10.00        0.25        1.00
      0.00       -0.10        1.00        <2>
     18.00        0.60        1.00
     28.00        1.60        1.00
     38.00        3.80        1.00
     58.00        4.10        1.00
    104.00        4.00        3.33
    163.00        3.80        3.33
    222.00        4.05        3.33
    252.00        4.10        3.33
    292.00        5.50        3.33
    384.00        6.20        3.33
    800.00        6.20        3.33
    800.00       10.00        3.33        <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1                    TU-11
TURAG
       12.100      (Acc.dis. = 25.4 km)
COORDINATES
    1          90.338          23.891
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          21
  -1000.00       10.00        1.00        <1>
  -1000.00        3.20        3.33
   -190.00        3.20        3.33
   -160.00        3.40        3.33
   -130.00        3.70        3.33
   -100.00        1.00        3.33
    -70.00        3.60        3.33
    -66.00        2.40        3.33
    -30.00        2.40        3.33
    -22.00        1.60        1.00
    -10.00        0.80        1.00
      0.00        0.60        1.00        <2>
     20.00        2.30        1.00
     80.00        2.70        1.00
    170.00        2.80        3.33
    260.00        3.80        3.33
    310.00        4.25        3.33
    370.00        6.00        3.33
    420.00        7.75        3.33
    490.00        9.00        3.33
    490.00       10.00        3.33        <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
TURAG
13.000 (Acc. dis. = 24.5 km) TU-10A
COORDINATES
1 90.312 23.892
FLOW DIRECTION
0
DATUM
0.00
PROFILE 17

-1000.00	10.00	1.00	<1>
-1000.00	7.31	3.33	
-260.00	7.30	3.33	
-210.00	6.50	3.33	
-220.00	7.80	3.33	
-160.00	8.20	3.33	
-140.00	7.80	3.33	
-130.00	5.50	1.00	
-80.00	3.50	1.00	
-40.00	3.00	1.00	
-30.00	1.00	1.00	
-10.00	1.00	1.00	<2>
110.00	4.00	1.00	
200.00	5.00	1.00	
250.00	8.00	1.00	
400.00	8.00	3.33	
400.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
TURAG
13.100 (Acc. dis. = 22.4 km) TU-10
COORDINATES
1 90.353 23.875
FLOW DIRECTION
0
DATUM
0.00
PROFILE 21

-100.00	10.00	1.00	<1>
-100.00	2.60	3.33	
-134.00	2.60	3.33	
-106.00	3.75	3.33	
-100.00	3.10	3.33	
-70.00	3.00	3.33	
-38.00	3.50	3.33	
-24.00	2.10	1.00	
-4.00	0.35	1.00	
0.00	-0.50	1.00	<2>
8.00	-0.10	1.00	
22.00	1.00	1.00	
31.00	2.20	1.00	
40.00	3.10	1.00	
84.00	3.80	3.33	
144.00	3.25	3.33	
204.00	3.00	3.33	
234.00	2.60	3.33	
266.00	2.60	3.33	
291.00	3.90	3.33	
321.00	1.50	3.33	
357.00	7.00	3.33	
408.00	8.75	3.33	
409.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
TURAG
17.300 (Acc. dis. = 20.2 km) TU-9
COORDINATES
1 90.318 23.857
FLOW DIRECTION
0
DATUM
0.00
PROFILE 14

-1000.00	10.00	1.00	<1>
-1000.00	3.20	3.33	
-326.00	3.20	3.33	
-204.00	3.20	3.33	
-21.00	2.90	3.33	
-16.00	0.65	1.00	
0.00	-0.80	1.00	<2>
22.00	0.80	1.00	
72.00	3.15	1.00	
90.00	5.80	3.33	
116.00	8.20	3.33	
226.00	8.20	3.33	
1000.00	8.20	3.33	
1000.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-B1
TURAG
18.700 (Acc. dis. = 18.8 km) TU-8A
COORDINATES
1 90.310 23.816
FLOW DIRECTION
0
DATUM
0.00
PROFILE 18

-1300.00	10.00	1.00	<1>
-1300.00	3.01	3.33	
-45.00	3.00	3.33	
-35.00	1.50	1.00	
-25.00	0.70	1.00	
-15.00	0.10	1.00	
0.00	0.10	1.00	<2>
15.00	0.50	1.00	
45.00	4.00	1.00	
63.00	5.10	3.33	
75.00	7.00	3.33	
98.00	5.00	3.33	
115.00	2.50	3.33	
180.00	2.50	3.33	
212.00	3.50	3.33	
315.00	4.20	3.33	
700.00	5.10	3.33	
700.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TURAG
        20.000
COORDINATES
    1          90.342          23.837
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          17
  -1000.00       10.00        1.00      <1>
  -1000.00        2.00        3.33
   -250.00        2.00        3.33
   -190.00        1.90        3.33
   -126.00        2.10        3.33
    -45.00        2.30        3.33
    -33.00        0.80        1.00
    -20.00       -2.90        1.00
    -12.00       -5.10        1.00
      0.00       -7.00        1.00      <2>
     10.00       -5.20        1.00
     25.00        1.00        1.00
     35.00        1.80        1.00
    103.00        2.30        3.33
    150.00        2.30        3.33
   1000.00        2.30        3.33
   1000.00       10.00        3.33      <3>
**********
```

TV-8 (Acc. dis. = 17.5 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TURAG
        22.500
COORDINATES
    1          90.310          23.821
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          22
   -500.00       10.00        1.00      <1>
   -500.00        9.30        3.33
   -145.00        9.30        3.33
   -130.00        7.20        3.33
   -119.00        1.20        3.33
   -110.00        1.00        3.33
    -65.00        3.20        3.33
    -50.00        3.00        3.33
    -28.00        2.00        3.33
    -18.00        0.20        1.00
     -9.00       -3.90        1.00
      0.00       -5.70        1.00      <2>
     10.00       -1.00        1.00
     11.00       -3.00        1.00
     22.00        1.10        1.00
     30.00        2.10        1.00
     61.00        1.80        3.33
     95.00        1.50        3.33
    180.00        2.50        3.33
    205.00        2.50        3.33
    800.00        2.50        3.33
    800.00       10.00        3.33      <3>
**********
```

TV-7 (Acc. dis. = 15.0 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TURAG
        25.600
COORDINATES
    1          90.313          23.797
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          15
   -500.00       10.00        1.00      <1>
   -500.00        7.01        3.33
   -312.00        7.01        3.33
    -82.00        7.00        3.33
    -62.00        7.00        3.33
    -47.00        1.80        1.00
    -12.00       -1.50        1.00
      0.00       -1.50        1.00      <2>
     15.00       -0.70        1.00
     32.00        1.80        1.00
     76.00        3.10        1.00
     88.00        7.00        1.00
     93.00        7.00        3.33
    700.00        7.00        3.33
    700.00       10.00        3.33      <3>
**********
```

TV-6 (Acc. dis. = 11.9 km)

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-B1
TURAG
        27.300
COORDINATES
    1          90.310          23.783
FLOW DIRECTION
0
DATUM
      0.00
PROFILE           5
   -75.00        11.00        1.00      <1>
   -75.00        -2.20        1.00
     0.00        -2.20        1.00
    75.00        -2.20        1.00      <2>
    75.00        11.00        1.00      <3>
**********
```

TV-6A (Acc. dis. = 10.2 km)

$n_1 = 0.030$

282

TU-5 (Acc. dis. = 8.1 km)

```
1988-B1
TURAG
      29.100
COORDINATES
    1            90.316              23.770
FLOW DIRECTION
0
DATUM
      0.00
PROFILE           15
    -300.00      10.00       1.00      <1>
    -300.00       2.11       3.33
    -100.00       2.10       3.33
     -31.00       2.10       3.33
     -23.00       0.90       1.00
     -10.00      -2.70       1.00
       0.00      -3.00       1.00      <2>
      17.00      -1.50       1.00
      20.00       0.20       1.00
      33.00       1.20       1.00
      81.00       3.00       1.00
     108.00       4.00       3.33
     115.00       5.00       3.33
    1500.00       5.01       3.33
    1500.00      10.00       3.33      <3>
********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

TU-4 (Acc. dis. = 5.8 km)

```
1988-B1
TURAG
      31.700
COORDINATES
    1            90.333              23.753
FLOW DIRECTION
0
DATUM
      0.00
PROFILE           17
    -505.00      10.00       1.00      <1>
    -505.00       3.51       3.33
    -185.00       3.50       1.00
     -95.00       3.18       1.00
     -55.00      -1.20       1.00
      -5.00      -2.55       1.00
       0.00      -2.70       1.00      <2>
      21.00      -2.30       1.00
      11.00      -0.10       1.00
      57.00       2.50       1.00
     180.00       2.70       3.33
     210.00       3.55       3.33
     280.00       3.60       3.33
     361.00       5.00       3.33
     505.00       5.25       3.33
    1500.00       5.25       3.33
    1500.00      10.00       3.33      <3>
********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

TU-4A (Acc. dis. = 5.3 km)

```
1988-B1
TURAG
      32.200
COORDINATES
    1            90.333              23.719
FLOW DIRECTION
0
DATUM
      0.00
PROFILE           21
   -1520.00      10.00       1.00      <1>
   -1520.00       3.10       3.33
   -1390.00       1.00       3.33
   -1370.00       1.00       3.33
   -1360.00       3.80       3.33
    -890.00       2.40       3.33
    -870.00       5.50       3.33
    -745.00       4.60       3.33
    -720.00       2.50       3.33
    -510.00       3.00       3.33
    -220.00       5.50       3.33
     -75.00       4.00       3.33
     -70.00       2.80       1.00
     -60.00       2.00       1.00
     -30.00       0.70       1.00
       0.00       0.40       1.00      <2>
      30.00       0.60       1.00
      60.00       1.90       1.00
     255.00       1.70       1.00
     320.00       3.00       1.00
     430.00       3.00       1.00
     430.00       4.20       1.00
     480.00       4.50       3.33
     480.00      10.00       3.33      <3>
********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

TU-1 (Acc. dis. = 0.0 km)

```
1988-B1
TURAG
      37.500
COORDINATES
    1            90.348              23.712
FLOW DIRECTION
0
DATUM
      0.00
PROFILE           19
   -1300.00      10.00       1.00      <1>
   -1300.00       5.60       3.30
    -500.00       7.00       3.30
    -275.00       5.60       3.30
    -265.00       2.10       3.30
    -165.00       1.90       3.30
    -119.00       0.90       1.00
    -123.00      -3.60       1.00
    -105.00      -3.75       1.00
     -25.00      -3.75       1.00      <2>
       0.00      -1.60       1.00
      30.00      -3.00       1.00
      50.00      -1.00       1.00
      70.00       1.90       1.00
     109.00       1.50       3.30
     115.00       4.10       3.30
     175.00       3.75       3.30
     800.00       3.75       3.30      <3>
     800.00      10.00       3.30
********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

4) Boundary Condition of Without Project

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No.  1   at:              Boundary     1: WATER LEVEL  !
    ! River name    : BANSI                type...: 2   2: DISCHARGE    !
    ! Chainage(km) :       0.000                       3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !                                                   5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                            !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+-------------+--------------------+-------------------+
    ! ! WL       ! Q-NAYARHAT  ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+-------------+--------------------+-------------------+
    !            Right (y/n) :                                          !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
 Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No.  3   at:              Boundary     1: WATER LEVEL  !
    ! River name    : BALU                 type...: 2   2: DISCHARGE    !
    ! Chainage(km) :       0.000                       3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !                                                   5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                            !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+-------------+--------------------+-------------------+
    ! ! WL       ! Q-B7A0.8    ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+-------------+--------------------+-------------------+
    !            Right (y/n) :                                          !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
 Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No.  2   at:              Boundary     1: WATER LEVEL  !
    ! River name    : TURAG                type...: 2   2: DISCHARGE    !
    ! Chainage(km) :       0.000                       3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !                                                   5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                            !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+-------------+--------------------+-------------------+
    ! ! WL       ! Q-TU12A0.5  ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+-------------+--------------------+-------------------+
    !            Right (y/n) :                                          !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
 Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No.  4   at:              Boundary     1: WATER LEVEL  !
    ! River name    : LAKHYA               type...: 2   2: DISCHARGE    !
    ! Chainage(km) :       0.000                       3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !                                                   5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                            !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+-------------+--------------------+-------------------+
    ! ! WL       ! Q-DEMRA179  ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+-------------+--------------------+-------------------+
    !            Right (y/n) :                                          !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
 Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

386

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No.  5   at:                Boundary    1: WATER LEVEL
    ! River name    : DHALESWARI            type...: 1  2: DISCHARGE
    ! Chainage(km) :       60.200                       3: WIND FIELD
    !                                                   4: RESISTANCE FACTOR !
    !                                                   5: GATE LEVEL
    !
    !  Name of      Name of
    !  Data base !  Event         !      Start time     !     Finish time
    +------------+----------------+---------------------+--------------------+
    ! WL         ! KALAGACHIA     ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +------------+----------------+---------------------+--------------------+
                  Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No.  6   at:                Boundary    1: WATER LEVEL
    ! River name    : BANSI                 type...: 2  2: DISCHARGE
    ! Chainage(km) :        2.000                       3: WIND FIELD
    !                                                   4: RESISTANCE FACTOR !
    !      (Sub-catchment No.1)                         5: GATE LEVEL
    !
    !  Name of      Name of
    !  Data base !  Event         !      Start time     !     Finish time
    +------------+----------------+---------------------+--------------------+
    ! RAIN       ! D-1            ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +------------+----------------+---------------------+--------------------+
                  Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No.  7   at:                Boundary    1: WATER LEVEL
    ! River name    : DHALESWARI            type...: 2  2: DISCHARGE
    ! Chainage(km) :       10.600                       3: WIND FIELD
    !                                                   4: RESISTANCE FACTOR !
    !      (Sub-catchment No.2)                         5: GATE LEVEL
    !
    !  Name of      Name of
    !  Data base !  Event         !      Start time     !     Finish time
    +------------+----------------+---------------------+--------------------+
    ! RAIN       ! D-2            ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +------------+----------------+---------------------+--------------------+
                  Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No.  8   at:                Boundary    1: WATER LEVEL
    ! River name    : DHALESWARI            type...: 2  2: DISCHARGE
    ! Chainage(km) :       12.200                       3: WIND FIELD
    !                                                   4: RESISTANCE FACTOR !
    !      (Sub-catchment No.3)                         5: GATE LEVEL
    !
    !  Name of      Name of
    !  Data base !  Event         !      Start time     !     Finish time
    +------------+----------------+---------------------+--------------------+
    ! RAIN       ! D-3            ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +------------+----------------+---------------------+--------------------+
                  Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No.  9    at:              Boundary     1: WATER LEVEL  !
    ! River name    : TURAG                 type...: 2   2: DISCHARGE    !
    ! Chainage(km) :       5.000                        3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !         (Sub-catchment No.4)                      5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                             !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+--------------+--------------------+-------------------+
    ! ! RAIN      ! BU-1         ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+--------------+--------------------+-------------------+
    !           Right (y/n) :                                           !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No. 11    at:              Boundary     1: WATER LEVEL  !
    ! River name    : TURAG                 type...: 2   2: DISCHARGE    !
    ! Chainage(km) :      22.300                        3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !         (Sub-catchment No.6)                      5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                             !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+--------------+--------------------+-------------------+
    ! ! RAIN      ! BU-3         ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+--------------+--------------------+-------------------+
    !           Right (y/n) :                                           !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No. 10    at:              Boundary     1: WATER LEVEL  !
    ! River name    : TURAG                 type...: 2   2: DISCHARGE    !
    ! Chainage(km) :      15.100                        3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !         (Sub-catchment No.5)                      5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                             !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+--------------+--------------------+-------------------+
    ! ! RAIN      ! BU-2         ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+--------------+--------------------+-------------------+
    !           Right (y/n) :                                           !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE                    !
--- +-----------------------------------------------------------------+
    !  BOUNDARY  No. 12    at:              Boundary     1: WATER LEVEL  !
    ! River name    : TURAG                 type...: 2   2: DISCHARGE    !
    ! Chainage(km) :      25.600                        3: WIND FIELD   !
    !                                                   4: RESISTANCE FACTOR !
    !         (Sub-catchment No.7)                      5: GATE LEVEL   !
    !                                                                   !
    !  Name of      Name of                                             !
    !  Data base !  Event        !     Start time     !    Finish time  !
    ! +----------+--------------+--------------------+-------------------+
    ! ! RAIN      ! BU-4         ! 1988  8  1  12  0 ! 1988  9 30  12  0 ! !
    ! +----------+--------------+--------------------+-------------------+
    !           Right (y/n) :                                           !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    !                                                                   !
    +-----------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No. 13   at:              Boundary    1: WATER LEVEL
    ! River name   : TURAG                 type...: 2  2: DISCHARGE
    ! Chainage(km) :       29.400                      3: WIND FIELD
    !                                                  4: RESISTANCE FACTOR
    !        (Sub-catchment No.8)                      5: GATE LEVEL
    !
    ! Name of      Name of
    ! Data base !  Event        !     Start time    !     Finish time
    ! +----------+--------------+-------------------+-------------------+
    ! ! RAIN     ! BU-5         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    ! +----------+--------------+-------------------+-------------------+
    !          Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No. 11   at:              Boundary    1: WATER LEVEL
    ! River name   : BURIGANGA             type...: 2  2: DISCHARGE
    ! Chainage(km) :        1.300                      3: WIND FIELD
    !                                                  4: RESISTANCE FACTOR
    !        (Sub-catchment No.9)                      5: GATE LEVEL
    !
    ! Name of      Name of
    ! Data base !  Event        !     Start time    !     Finish time
    ! +----------+--------------+-------------------+-------------------+
    ! ! RAIN     ! BU-6         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    ! +----------+--------------+-------------------+-------------------+
    !          Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No. 13   at:              Boundary    1: WATER LEVEL
    ! River name   : BURIGANGA             type...: 2  2: DISCHARGE
    ! Chainage(km) :        4.800                      3: WIND FIELD
    !                                                  4: RESISTANCE FACTOR
    !        (Sub-catchment No.10)                     5: GATE LEVEL
    !
    ! Name of      Name of
    ! Data base !  Event        !     Start time    !     Finish time
    ! +----------+--------------+-------------------+-------------------+
    ! ! RAIN     ! BU-7         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    ! +----------+--------------+-------------------+-------------------+
    !          Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY  No. 16   at:              Boundary    1: WATER LEVEL
    ! River name   : BURIGANGA             type...: 2  2: DISCHARGE
    ! Chainage(km) :        7.000                      3: WIND FIELD
    !                                                  4: RESISTANCE FACTOR
    !        (Sub-catchment No.11)                     5: GATE LEVEL
    !
    ! Name of      Name of
    ! Data base !  Event        !     Start time    !     Finish time
    ! +----------+--------------+-------------------+-------------------+
    ! ! RAIN     ! BU-8         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    ! +----------+--------------+-------------------+-------------------+
    !          Right (y/n) :
    !
    +-------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY No. 17   at:            Boundary     1: WATER LEVEL      !
    ! River name    : TONGI           type...: 2   2: DISCHARGE        !
    ! Chainage(km) :      8.300                    3: WIND FIELD       !
    !                                              4: RESISTANCE FACTOR!
    !      (Sub-catchment No. 12)                  5: GATE LEVEL       !
    !                                                                  !
    ! Name of     Name of                                              !
    ! Data base ! Event       !     Start time     !    Finish time    !
    +-----------+-------------+--------------------+-------------------+
    ! RAIN      ! T-1         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +-----------+-------------+--------------------+-------------------+
              Right (y/n) :
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    +------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY No. 19   at:            Boundary     1: WATER LEVEL      !
    ! River name    : TONGI           type...: 2   2: DISCHARGE        !
    ! Chainage(km) :     11.400                    3: WIND FIELD       !
    !                                              4: RESISTANCE FACTOR!
    !      (Sub-catchment No. 14)                  5: GATE LEVEL       !
    !                                                                  !
    ! Name of     Name of                                              !
    ! Data base ! Event       !     Start time     !    Finish time    !
    +-----------+-------------+--------------------+-------------------+
    ! RAIN      ! T-3         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +-----------+-------------+--------------------+-------------------+
              Right (y/n) :
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    +------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY No. 18   at:            Boundary     1: WATER LEVEL      !
    ! River name    : TONGI           type...: 2   2: DISCHARGE        !
    ! Chainage(km) :     12.200                    3: WIND FIELD       !
    !                                              4: RESISTANCE FACTOR!
    !      (Sub-catchment No. 13)                  5: GATE LEVEL       !
    !                                                                  !
    ! Name of     Name of                                              !
    ! Data base ! Event       !     Start time     !    Finish time    !
    +-----------+-------------+--------------------+-------------------+
    ! RAIN      ! T-2         ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +-----------+-------------+--------------------+-------------------+
              Right (y/n) :
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    +------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28  ! B.5              EXTRACTION FROM THE DATA BASE
--- +-------------------------------------------------------------------+
    ! BOUNDARY No. 20   at:            Boundary     1: WATER LEVEL      !
    ! River name    : BALU            type...: 2   2: DISCHARGE        !
    ! Chainage(km) :      7.100                    3: WIND FIELD       !
    !                                              4: RESISTANCE FACTOR!
    !      (Sub-catchment No. 15)                  5: GATE LEVEL       !
    !                                                                  !
    ! Name of     Name of                                              !
    ! Data base ! Event       !     Start time     !    Finish time    !
    +-----------+-------------+--------------------+-------------------+
    ! RAIN      ! BA-1        ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
    +-----------+-------------+--------------------+-------------------+
              Right (y/n) :
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    !                                                                  !
    +------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28 ! B.5                EXTRACTION FROM THE DATA BASE
---
  BOUNDARY  No. 21   at:              Boundary     1: WATER LEVEL
  River name    : BALU                type...: 2   2: DISCHARGE
  Chainage(km) :      11.900                       3: WIND FIELD
                                                   4: RESISTANCE FACTOR
        (Sub-catchment No. 16)                     5: GATE LEVEL

  Name of      Name of
  Data base !  Event        !     Start time     !    Finish time
 +-----------+--------------+--------------------+-------------------+
 ! RAIN      ! BA-2         ! 1988  8  1  12  0  ! 1988  9 30  12  0 !
 +-----------+--------------+--------------------+-------------------+
             Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28 ! B.5                EXTRACTION FROM THE DATA BASE
---
  BOUNDARY  No. 22   at:              Boundary     1: WATER LEVEL
  River name    : BALU                type...: 2   2: DISCHARGE
  Chainage(km) :      15.500                       3: WIND FIELD
                                                   4: RESISTANCE FACTOR
        (Sub-catchment No. 17)                     5: GATE LEVEL

  Name of      Name of
  Data base !  Event        !     Start time     !    Finish time
 +-----------+--------------+--------------------+-------------------+
 ! RAIN      ! BA-3         ! 1988  8  1  12  0  ! 1988  9 30  12  0 !
 +-----------+--------------+--------------------+-------------------+
             Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28 ! B.5                EXTRACTION FROM THE DATA BASE
---
  BOUNDARY  No. 23   at:              Boundary     1: WATER LEVEL
  River name    : BALU                type...: 2   2: DISCHARGE
  Chainage(km) :      17.700                       3: WIND FIELD
                                                   4: RESISTANCE FACTOR
        (Sub-catchment No. 18)                     5: GATE LEVEL

  Name of      Name of
  Data base !  Event        !     Start time     !    Finish time
 +-----------+--------------+--------------------+-------------------+
 ! RAIN      ! BA-4         ! 1988  8  1  12  0  ! 1988  9 30  12  0 !
 +-----------+--------------+--------------------+-------------------+
             Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28 ! B.5                EXTRACTION FROM THE DATA BASE
---
  BOUNDARY  No. 24   at:              Boundary     1: WATER LEVEL
  River name    : BALU                type...: 2   2: DISCHARGE
  Chainage(km) :      23.300                       3: WIND FIELD
                                                   4: RESISTANCE FACTOR
        (Sub-catchment No. 19)                     5: GATE LEVEL

  Name of      Name of
  Data base !  Event        !     Start time     !    Finish time
 +-----------+--------------+--------------------+-------------------+
 ! RAIN      ! BA-5         ! 1988  8  1  12  0  ! 1988  9 30  12  0 !
 +-----------+--------------+--------------------+-------------------+
             Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

```
28 : B.5                EXTRACTION FROM THE DATA BASE
---
 BOUNDARY  No. 25    at:                Boundary     1: WATER LEVEL
 River name    : LAKHYA                 type...: 2   2: DISCHARGE
 Chainage(km)  :        7.900                        3: WIND FIELD
                                                     4: RESISTANCE FACTOR
                                                     5: GATE LEVEL
 Name of      Name of
 Data base !  Event          !      Start time     !    Finish time
+-----------+----------------+---------------------+-------------------+
! RAIN      ! L-1            ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
+-----------+----------------+---------------------+-------------------+
            Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

(Sub-catchment No. 20)

```
28 : B.5                EXTRACTION FROM THE DATA BASE
---
 BOUNDARY  No. 26    at:                Boundary     1: WATER LEVEL
 River name    : LAKHYA                 type...: 2   2: DISCHARGE
 Chainage(km)  :       13.100                        3: WIND FIELD
                                                     4: RESISTANCE FACTOR
                                                     5: GATE LEVEL
 Name of      Name of
 Data base !  Event          !      Start time     !    Finish time
+-----------+----------------+---------------------+-------------------+
! RAIN      ! L-2            ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
+-----------+----------------+---------------------+-------------------+
            Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

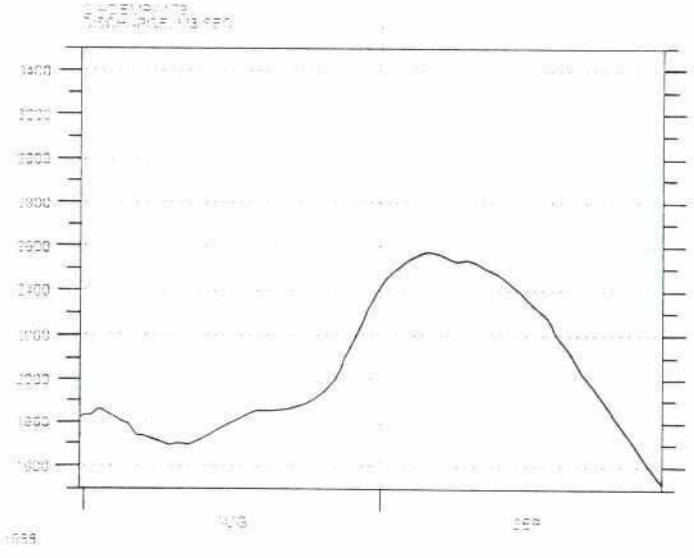
(Sub-catchment No. 21)

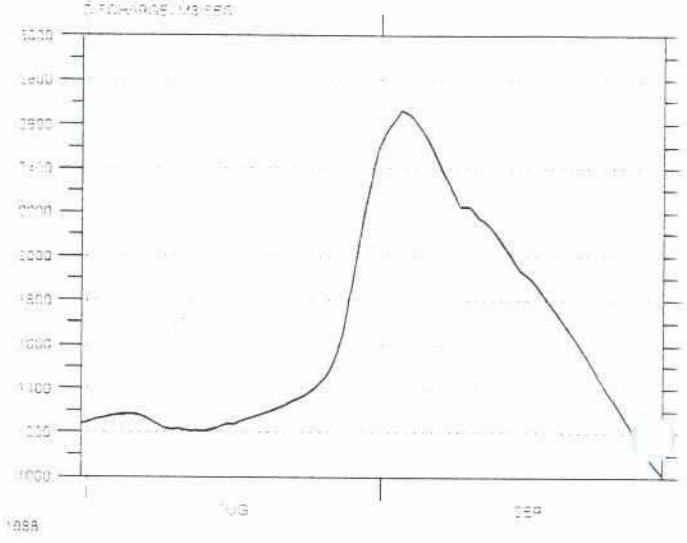
```
28 : B.5                EXTRACTION FROM THE DATA BASE
---
 BOUNDARY  No. 27    at:                Boundary     1: WATER LEVEL
 River name    : LAKHYA                 type...: 2   2: DISCHARGE
 Chainage(km)  :       13.200                        3: WIND FIELD
                                                     4: RESISTANCE FACTOR
                                                     5: GATE LEVEL
 Name of      Name of
 Data base !  Event          !      Start time     !    Finish time
+-----------+----------------+---------------------+-------------------+
! RAIN      ! L-3            ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
+-----------+----------------+---------------------+-------------------+
            Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

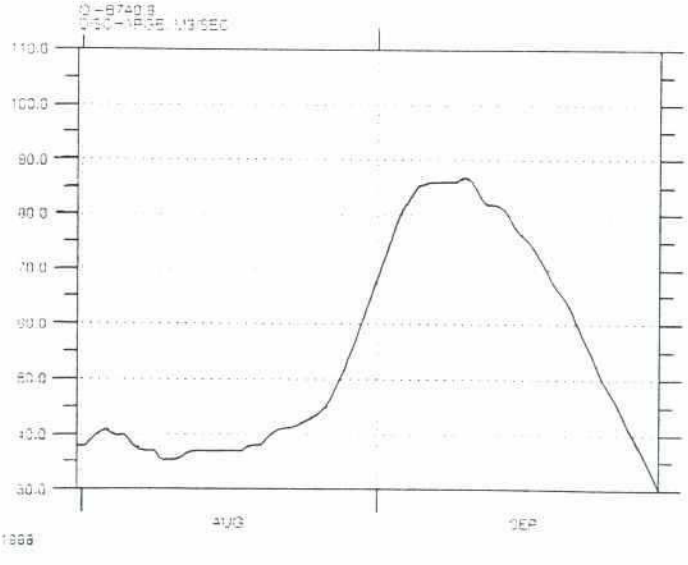
(Sub-catchment No. 22)

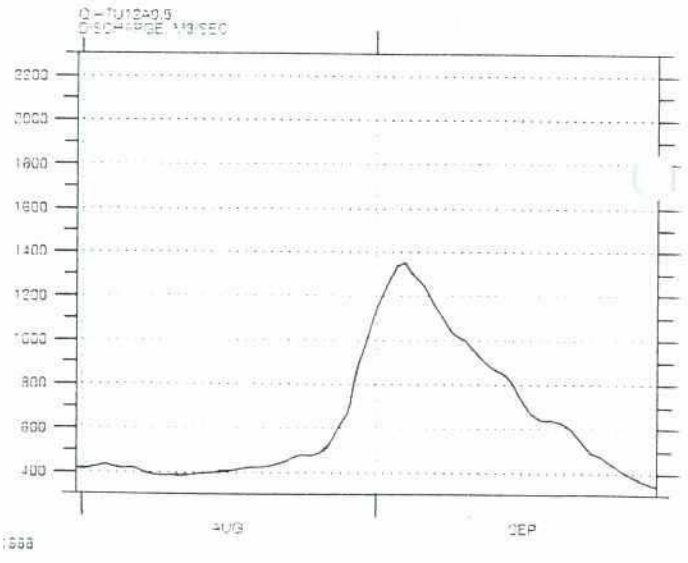
```
28 : B.5                EXTRACTION FROM THE DATA BASE
---
 BOUNDARY  No. 28    at:                Boundary     1: WATER LEVEL
 River name    : DHALESWARI             type...: 2   2: DISCHARGE
 Chainage(km)  :       18.200                        3: WIND FIELD
                                                     4: RESISTANCE FACTOR
                                                     5: GATE LEVEL
 Name of      Name of
 Data base !  Event          !      Start time     !    Finish time
+-----------+----------------+---------------------+-------------------+
! WL        ! Q-KALIGAN2.1   ! 1988  8  1  12  0 ! 1988  9 30  12  0 !
+-----------+----------------+---------------------+-------------------+
            Right (y/n) :

Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

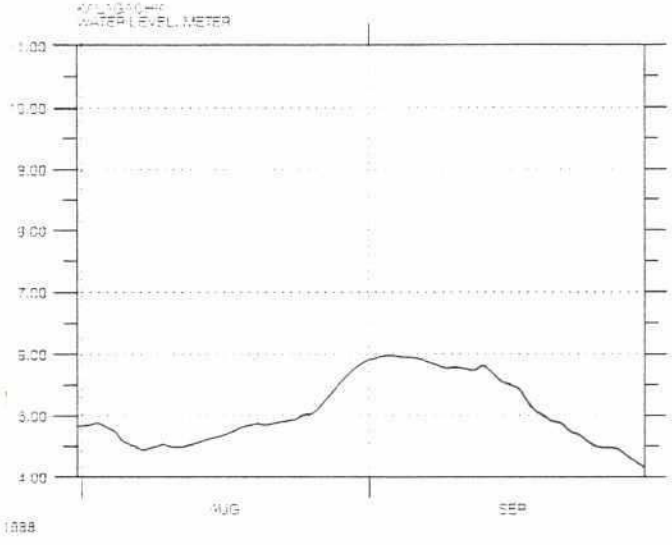

138



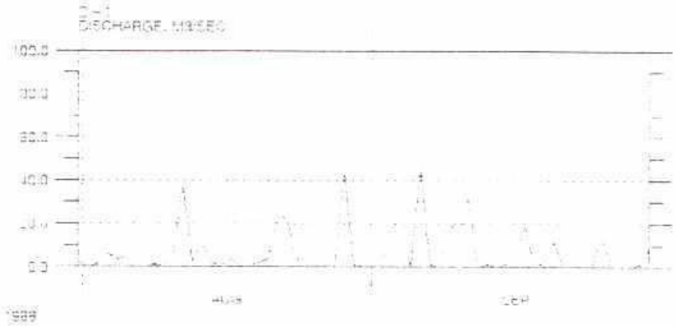


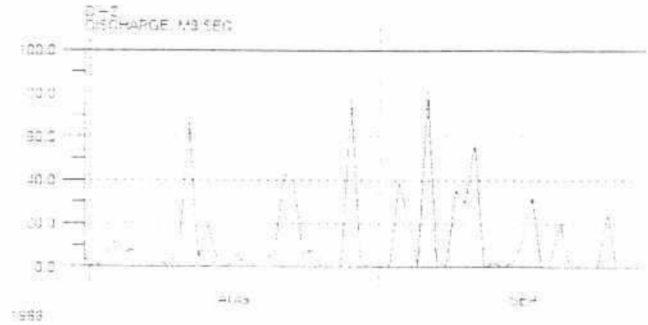


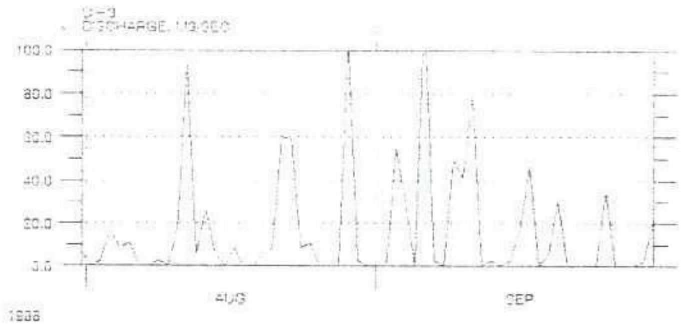


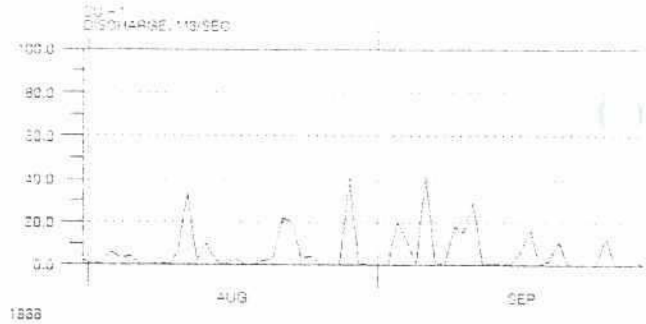


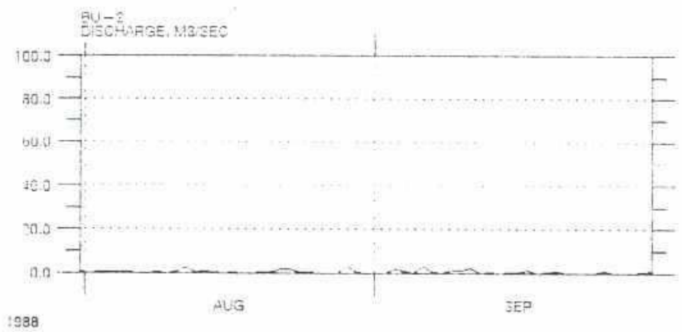
MIKE 11

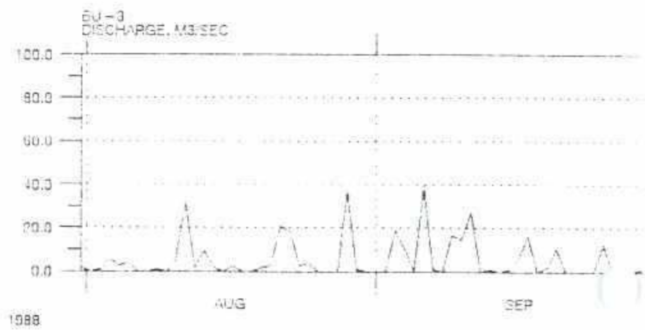

DISCHARGE, M3/SEC
100.0
40.0
0.0
SEP
1988

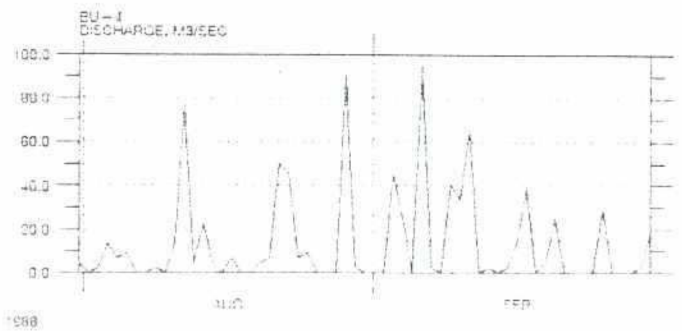

DISCHARGE, M3/SEC
100.0
40.0
0.0
1988

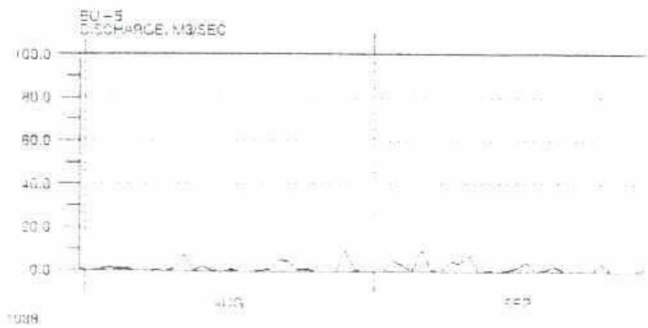

DISCHARGE, M3/SEC
100.0
80.0
40.0
20.0
0.0
AUG
SEP
1988


DISCHARGE, M3/SEC
100.0
80.0
40.0
20.0
0.0
AUG
SEP
1988

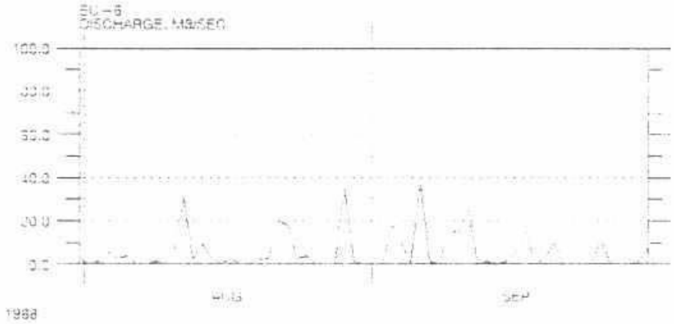

BU-2
DISCHARGE, M3/SEC
100.0
80.0
60.0
40.0
20.0
0.0
AUG
SEP
1988

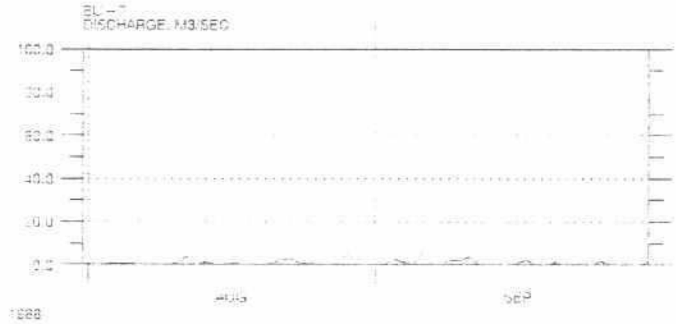

BU-3
DISCHARGE, M3/SEC
100.0
80.0
60.0
40.0
20.0
0.0
AUG
SEP
1988

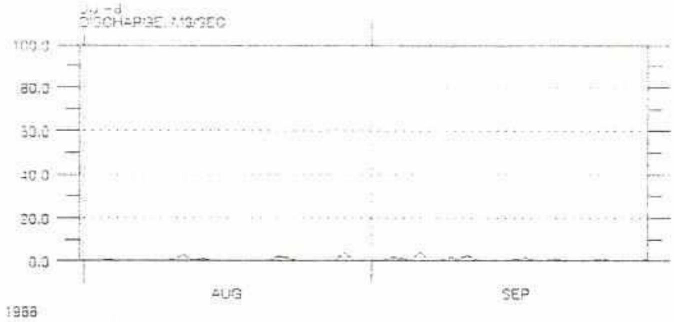

DISCHARGE, M3/SEC
100.0
80.0
60.0
40.0
20.0
0.0
1988

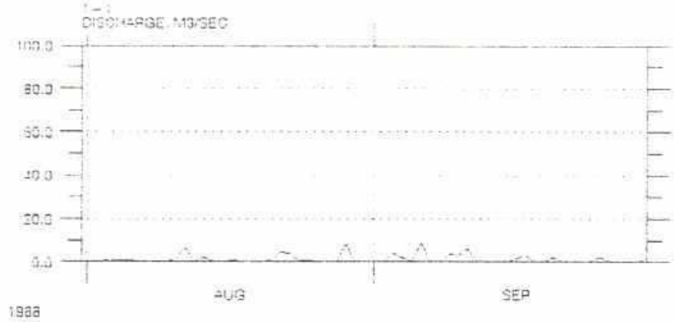

BU-5
DISCHARGE, M3/SEC
100.0
80.0
60.0
40.0
20.0
0.0
AUG

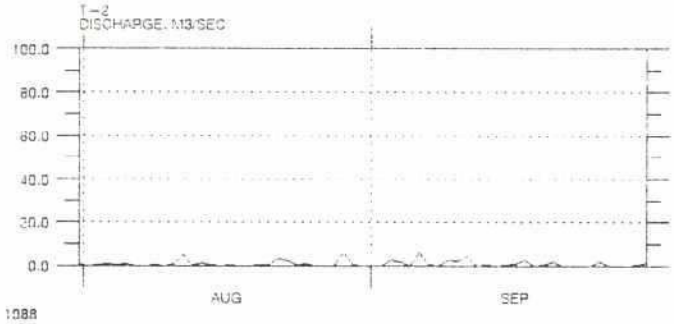
MIKE 11

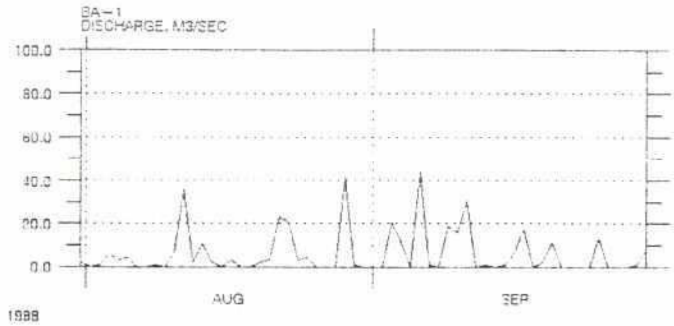


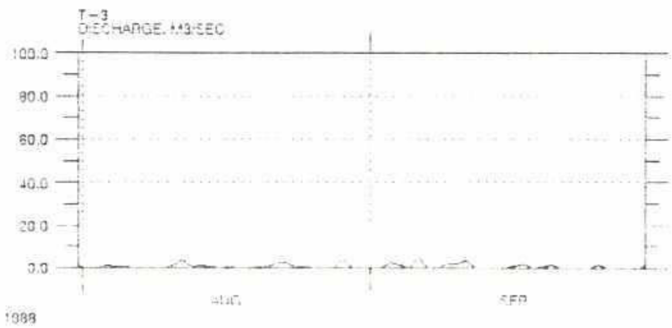


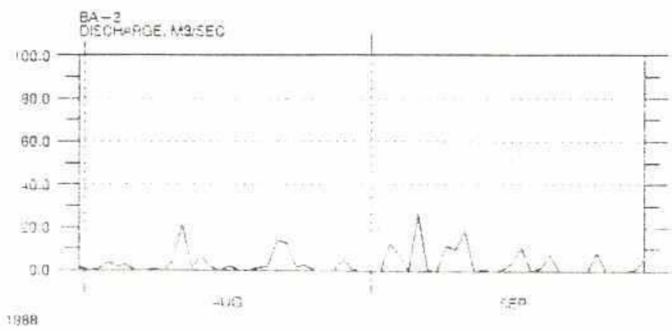






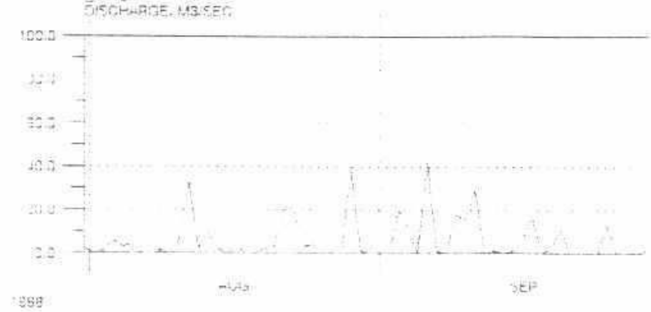


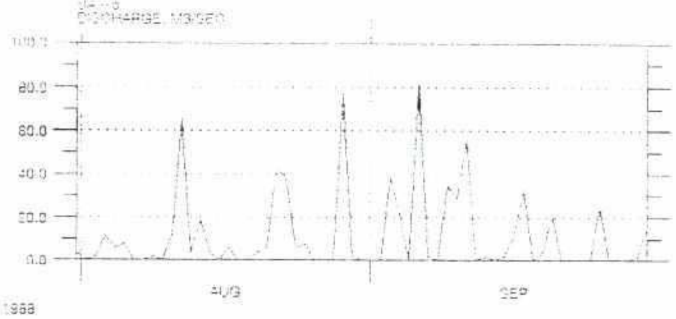


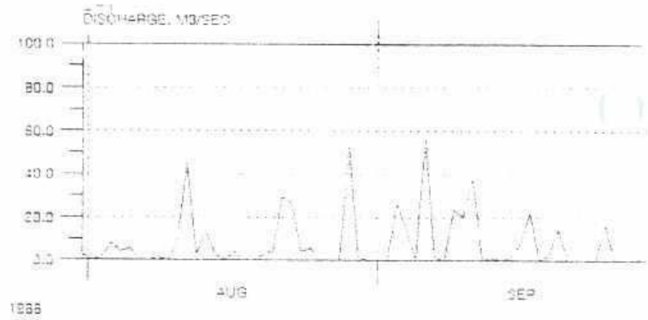


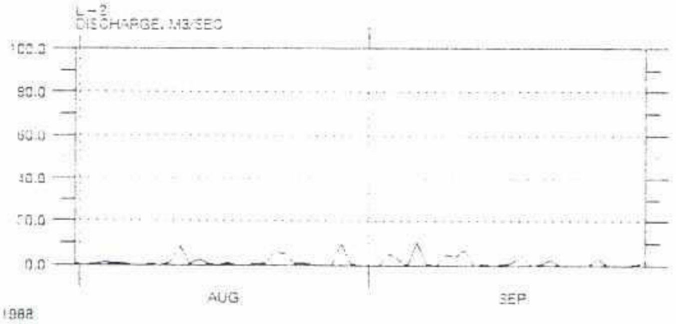
MIKE 11

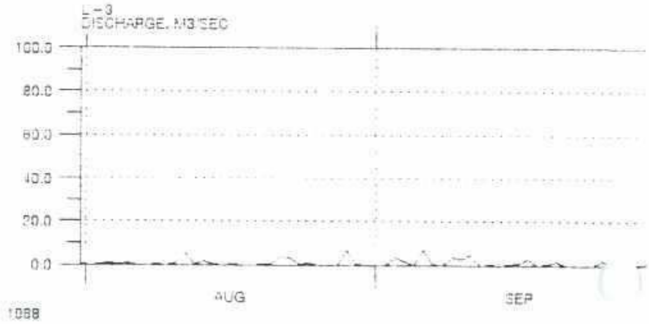
Dwg no











MIKE 11

Dwg no

Q - NAYARHAT

DATA BASE : WL	IDENTIFICATION: Q-NAYARHAT
EDITED : 13-MAY-1991, 15:34	

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	1242
8- 2	
12: 0	1250
8- 3	
12: 0	1263
8- 4	
12: 0	1275
8- 5	
12: 0	1275
8- 6	
12: 0	1280
8- 7	
12: 0	1275
8- 8	
12: 0	1255
8- 9	
12: 0	1230
8-10	
12: 0	1213
8-11	
12: 0	1218
8-12	
12: 0	1209
8-13	
12: 0	1213
8-14	
12: 0	1213
8-15	
12: 0	1222
8-16	
12: 0	1238
8-17	
12: 0	1238
8-18	
12: 0	1259
8-19	
12: 0	1275
8-20	
12: 0	1288
8-21	
12: 0	1309
8-22	
12: 0	1325
8-23	
12: 0	1351
8-24	
12: 0	1372
8-25	
12: 0	1405
8-26	
12: 0	1452
8-27	
12: 0	1512
8-28	
12: 0	1655
8-29	
12: 0	1899
8-30	
12: 0	2135
8-31	
12: 0	2349
9- 1	
12: 0	2509
9- 2	
12: 0	2611
9- 3	
12: 0	2657
9- 4	
12: 0	2629
9- 5	
12: 0	2585
9- 6	
12: 0	2514
9- 7	
12: 0	2419
9- 8	
12: 0	2316
9- 9	
12: 0	2223
9-10	
12: 0	2223
9-11	
12: 0	2172
9-12	
12: 0	2140
9-13	
12: 0	2094
9-14	
12: 0	2016
9-15	
12: 0	1944
9-16	
12: 0	1908
9-17	
12: 0	1850
9-18	
12: 0	1796
9-19	
12: 0	1739
9-20	
12: 0	1677
9-21	
12: 0	1616
9-22	
12: 0	1546
9-23	
12: 0	1473
9-24	
12: 0	1401

8DE

DATA BASE	: WL	IDENTIFICATION:	Q-NAYARHAT
EDITED	: 13-MAY-1991, 15:34		

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	1330
9-26	
12: 0	1259
9-27	
12: 0	1193
9-28	
12: 0	1120
9-29	
12: 0	1059
9-30	
12: 0	1003

DATA BASE	: WL	IDENTIFICATION:	Q-TU12A0.5
EDITED	: 7-JUN-1991, 09:51		

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	415.0
8- 2	
12: 0	415.0
8- 3	
12: 0	420.0
8- 4	
12: 0	430.0
8- 5	
12: 0	420.0
8- 6	
12: 0	415.0
8- 7	
12: 0	415.0
8- 8	
12: 0	400.0
8- 9	
12: 0	390.0
8-10	
12: 0	385.0
8-11	
12: 0	390.0
8-12	
12: 0	390.0
8-13	
12: 0	390.0
8-14	
12: 0	395.0
8-15	
12: 0	400.0
8-16	
12: 0	410.0
8-17	
12: 0	410.0
8-18	
12: 0	415.0
8-19	
12: 0	420.0
8-20	
12: 0	425.0
8-21	
12: 0	425.0
8-22	
12: 0	440.0
8-23	
12: 0	455.0
8-24	
12: 0	480.0
8-25	
12: 0	480.0
8-26	
12: 0	485.0
8-27	
12: 0	515.0

Q-TU12A0.5

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	595.0
8-29	
12: 0	670.0
8-30	
12: 0	860.0
8-31	
12: 0	1010
9- 1	
12: 0	1140
9- 2	
12: 0	1240
9- 3	
12: 0	1340
9- 4	
12: 0	1350
9- 5	
12: 0	1290
9- 6	
12: 0	1240
9- 7	
12: 0	1150
9- 8	
12: 0	1090
9- 9	
12: 0	1020
9-10	
12: 0	1005
9-11	
12: 0	950.0
9-12	
12: 0	910.0
9-13	
12: 0	865.0
9-14	
12: 0	855.0
9-15	
12: 0	800.0
9-16	
12: 0	730.0
9-17	
12: 0	665.0
9-18	
12: 0	640.0
9-19	
12: 0	640.0
9-20	
12: 0	625.0
9-21	
12: 0	595.0
9-22	
12: 0	550.0
9-23	
12: 0	490.0
9-24	
12: 0	480.0

DATA BASE : WL IDENTIFICATION: Q-TU12A0.5
EDITED : 7-JUN-1991, 09:51

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	440.0
9-26	
12: 0	415.0
9-27	
12: 0	390.0
9-28	
12: 0	375.0
9-29	
12: 0	355.0
9-30	
12: 0	340.0

Q-B7A0.8

DATA BASE : WL	IDENTIFICATION: Q-B7A0.8
EDITED : 1-JUN-1991, 12:14	

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	38.00
8- 2	
12: 0	38.00
8- 3	
12: 0	40.00
8- 4	
12: 0	41.00
8- 5	
12: 0	40.00
8- 6	
12: 0	40.00
8- 7	
12: 0	38.00
8- 8	
12: 0	37.00
8- 9	
12: 0	37.00
8-10	
12: 0	35.00
8-11	
12: 0	35.00
8-12	
12: 0	36.00
8-13	
12: 0	37.00
8-14	
12: 0	37.00
8-15	
12: 0	37.00
8-16	
12: 0	37.00
8-17	
12: 0	37.00
8-18	
12: 0	37.00
8-19	
12: 0	38.00
8-20	
12: 0	38.00
8-21	
12: 0	40.00
8-22	
12: 0	41.00
8-23	
12: 0	41.00
8-24	
12: 0	42.00
8-25	
12: 0	43.00
8-26	
12: 0	44.00
8-27	
12: 0	46.00
8-28	
12: 0	50.00
8-29	
12: 0	54.00
8-30	
12: 0	59.00
8-31	
12: 0	64.00
9- 1	
12: 0	69.00
9- 2	
12: 0	74.00
9- 3	
12: 0	79.00
9- 4	
12: 0	82.00
9- 5	
12: 0	85.00
9- 6	
12: 0	86.00
9- 7	
12: 0	86.00
9- 8	
12: 0	86.00
9- 9	
12: 0	86.00
9-10	
12: 0	87.00
9-11	
12: 0	85.00
9-12	
12: 0	82.00
9-13	
12: 0	82.00
9-14	
12: 0	81.00
9-15	
12: 0	78.00
9-16	
12: 0	76.00
9-17	
12: 0	74.00
9-18	
12: 0	71.00
9-19	
12: 0	67.00
9-20	
12: 0	65.00
9-21	
12: 0	62.00
9-22	
12: 0	58.00
9-23	
12: 0	54.00
9-24	
12: 0	50.00

DATA BASE EDITED	: WL : 1-JUN-1991, 12:14	IDENTIFICATION:	Q-B7A0.8
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	47.00		
9-26			
12: 0	44.00		
9-27			
12: 0	40.00		
9-28			
12: 0	37.00		
9-29			
12: 0	34.00		
9-30			
12: 0	30.00		

DATA BASE EDITED	: WL : 13-MAY-1991, 15:29	IDENTIFICATION:	Q-DEMRA179
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	1830		
8- 2			
12: 0	1835		
8- 3			
12: 0	1862		
8- 4			
12: 0	1840		
8- 5			
12: 0	1814		
8- 6			
12: 0	1782		
8- 7			
12: 0	1735		
8- 8			
12: 0	1729		
8- 9			
12: 0	1724		
8-10			
12: 0	1698		
8-11			
12: 0	1703		
8-12			
12: 0	1698		
8-13			
12: 0	1714		
8-14			
12: 0	1735		
8-15			
12: 0	1766		
8-16			
12: 0	1787		
8-17			
12: 0	1808		
8-18			
12: 0	1835		
8-19			
12: 0	1851		
8-20			
12: 0	1856		
8-21			
12: 0	1856		
8-22			
12: 0	1862		
8-23			
12: 0	1878		
8-24			
12: 0	1888		
8-25			
12: 0	1904		
8-26			
12: 0	1947		
8-27			

Q-DEMRA 179

12: 0	1996
8-28	
12: 0	2078
8-29	
12: 0	2177
8-30	
12: 0	2272
8-31	
12: 0	2357
9- 1	
12: 0	2430
9- 2	
12: 0	2482
9- 3	
12: 0	2522
9- 4	
12: 0	2551
9- 5	
12: 0	2569
9- 6	
12: 0	2574
9- 7	
12: 0	2563
9- 8	
12: 0	2540
9- 9	
12: 0	2534
9-10	
12: 0	2540
9-11	
12: 0	2517
9-12	
12: 0	2494
9-13	
12: 0	2471
9-14	
12: 0	2412
9-15	
12: 0	2402
9-16	
12: 0	2362
9-17	
12: 0	2323
9-18	
12: 0	2289
9-19	
12: 0	2199
9-20	
12: 0	2150
9-21	
12: 0	2083
9-22	
12: 0	2012
9-23	
12: 0	1958
9-24	
12: 0	1883

DATA BASE	WL	IDENTIFICATION:	Q-DEMRA179
EDITED	: 13-MAY-1991, 15:29		

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	1819
9-26	
12: 0	1766
9-27	
12: 0	1698
9-28	
12: 0	1636
9-29	
12: 0	1579
9-30	
12: 0	1523

KALAGACHIA

DATA BASE : WL	IDENTIFICATION: KALAGACHIA
EDITED : 13-MAY-1991, 11:29	

HOURS:MIN	WATER LEVEL, METER
1988	
8- 1	
12: 0	4.82
8- 2	
12: 0	4.85
8- 3	
12: 0	4.87
8- 4	
12: 0	4.83
8- 5	
12: 0	4.75
8- 6	
12: 0	4.56
8- 7	
12: 0	4.50
8- 8	
12: 0	4.44
8- 9	
12: 0	4.47
8-10	
12: 0	4.54
8-11	
12: 0	4.48
8-12	
12: 0	4.49
8-13	
12: 0	4.53
8-14	
12: 0	4.57
8-15	
12: 0	4.63
8-16	
12: 0	4.66
8-17	
12: 0	4.71
8-18	
12: 0	4.80
8-19	
12: 0	4.83
8-20	
12: 0	4.87
8-21	
12: 0	4.85
8-22	
12: 0	4.88
8-23	
12: 0	4.89
8-24	
12: 0	4.93
8-25	
12: 0	5.00
8-26	
12: 0	5.03
8-27	
12: 0	5.20
8-28	
12: 0	5.40
8-29	
12: 0	5.57
8-30	
12: 0	5.72
8-31	
12: 0	5.84
9- 1	
12: 0	5.91
9- 2	
12: 0	5.95
9- 3	
12: 0	5.97
9- 4	
12: 0	5.95
9- 5	
12: 0	5.94
9- 6	
12: 0	5.92
9- 7	
12: 0	5.87
9- 8	
12: 0	5.83
9- 9	
12: 0	5.78
9-10	
12: 0	5.80
9-11	
12: 0	5.76
9-12	
12: 0	5.74
9-13	
12: 0	5.82
9-14	
12: 0	5.67
9-15	
12: 0	5.56
9-16	
12: 0	5.51
9-17	
12: 0	5.39
9-18	
12: 0	5.09
9-19	
12: 0	5.00
9-20	
12: 0	4.91
9-21	
12: 0	4.89
9-22	
12: 0	4.75
9-23	
12: 0	4.69
9-24	
12: 0	4.58

DATA BASE : WL	IDENTIFICATION: KALAGACHIA
EDITED : 13-MAY-1991, 11:29	

HOURS:MIN	WATER LEVEL, METER
9-25	
12: 0	4.49
9-26	
12: 0	4.47
9-27	
12: 0	4.16
9-28	
12: 0	4.36
9-29	
12: 0	4.25
9-30	
12: 0	4.14

DATA BASE : WL	IDENTIFICATION: Q-KALIGAN2.1
EDITED : 6-JUN-1991, 16:52	

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	4219
8- 2	
12: 0	4295
8- 3	
12: 0	4387
8- 4	
12: 0	4353
8- 5	
12: 0	4290
8- 6	
12: 0	4263
8- 7	
12: 0	4227
8- 8	
12: 0	4143
8- 9	
12: 0	4085
8-10	
12: 0	4082
8-11	
12: 0	4055
8-12	
12: 0	4045
8-13	
12: 0	4040
8-14	
12: 0	4061
8-15	
12: 0	4114
8-16	
12: 0	4160
8-17	
12: 0	4202
8-18	
12: 0	4286
8-19	
12: 0	4374
8-20	
12: 0	4486
8-21	
12: 0	4570
8-22	
12: 0	4616
8-23	
12: 0	4631
8-24	
12: 0	4754
8-25	
12: 0	4826
8-26	
12: 0	5027
8-27	
12: 0	5342

Q - KALIGAN 2.1

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	6075
8-29	
12: 0	6639
8-30	
12: 0	7461
8-31	
12: 0	8455
9- 1	
12: 0	11542
9- 2	
12: 0	13278
9- 3	
12: 0	13885
9- 4	
12: 0	13915
9- 5	
12: 0	13037
9- 6	
12: 0	12627
9- 7	
12: 0	11951
9- 8	
12: 0	11323
9- 9	
12: 0	10687
9-10	
12: 0	10582
9-11	
12: 0	10004
9-12	
12: 0	9471
9-13	
12: 0	9141
9-14	
12: 0	8908
9-15	
12: 0	8459
9-16	
12: 0	8077
9-17	
12: 0	7781
9-18	
12: 0	7501
9-19	
12: 0	6995
9-20	
12: 0	6703
9-21	
12: 0	6178
9-22	
12: 0	5727
9-23	
12: 0	5426
9-24	
12: 0	5187

DATA BASE : WL IDENTIFICATION: Q-KALIGAN2.1
EDITED : 6-JUN-1991, 16:52

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	4904
9-26	
12: 0	4727
9-27	
12: 0	4523
9-28	
12: 0	4431
9-29	
12: 0	4244
9-30	
12: 0	4135

DATA BASE : RAIN	IDENTIFICATION: D-1 (No.1)
EDITED : 16-MAY-1991, 16:04	

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	2.200
8- 2	
12: 0	0.000
8- 3	
12: 0	1.100
8- 4	
12: 0	6.600
8- 5	
12: 0	3.300
8- 6	
12: 0	4.400
8- 7	
12: 0	0.000
8- 8	
12: 0	0.000
8- 9	
12: 0	1.100
8-10	
12: 0	0.000
8-11	
12: 0	6.600
8-12	
12: 0	37.60
8-13	
12: 0	2.200
8-14	
12: 0	11.10
8-15	
12: 0	2.200
8-16	
12: 0	0.000
8-17	
12: 0	3.300
8-18	
12: 0	0.000
8-19	
12: 0	0.000
8-20	
12: 0	2.200
8-21	
12: 0	3.300
8-22	
12: 0	24.30
8-23	
12: 0	22.10
8-24	
12: 0	3.300
8-25	
12: 0	4.400
8-26	
12: 0	0.000
8-27	
12: 0	0.000
8-28	
12: 0	0.000
8-29	
12: 0	44.30
8-30	
12: 0	1.100
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	22.10
9- 4	
12: 0	12.20
9- 5	
12: 0	0.000
9- 6	
12: 0	46.50
9- 7	
12: 0	1.100
9- 8	
12: 0	0.000
9- 9	
12: 0	19.90
9-10	
12: 0	16.60
9-11	
12: 0	32.10
9-12	
12: 0	0.000
9-13	
12: 0	1.100
9-14	
12: 0	0.000
9-15	
12: 0	1.100
9-16	
12: 0	6.600
9-17	
12: 0	18.80
9-18	
12: 0	0.000
9-19	
12: 0	2.200
9-20	
12: 0	12.20
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE EDITED	: RAIN : 16-MAY-1991, 16:04	IDENTIFICATION:	D-1 (No.1)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	14.40		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	1.100		
9-30			
12: 0	8.900		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:02	IDENTIFICATION:	D-2 (No.2)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	3.900		
8- 2			
12: 0	0.000		
8- 3			
12: 0	2.000		
8- 4			
12: 0	11.70		
8- 5			
12: 0	5.900		
8- 6			
12: 0	7.800		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	2.000		
8-10			
12: 0	0.000		
8-11			
12: 0	11.70		
8-12			
12: 0	66.40		
8-13			
12: 0	3.900		
8-14			
12: 0	19.50		
8-15			
12: 0	3.900		
8-16			
12: 0	0.000		
8-17			
12: 0	5.900		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	3.900		
8-21			
12: 0	5.900		
8-22			
12: 0	43.00		
8-23			
12: 0	39.10		
8-24			
12: 0	5.900		
8-25			
12: 0	7.800		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		

D-2
(No.2)

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	0.000
8-29	
12: 0	78.20
8-30	
12: 0	2.000
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	39.10
9- 4	
12: 0	21.50
9- 5	
12: 0	0.000
9- 6	
12: 0	82.10
9- 7	
12: 0	2.000
9- 8	
12: 0	0.000
9- 9	
12: 0	35.20
9-10	
12: 0	29.30
9-11	
12: 0	56.70
9-12	
12: 0	0.000
9-13	
12: 0	2.000
9-14	
12: 0	0.000
9-15	
12: 0	2.000
9-16	
12: 0	11.70
9-17	
12: 0	33.20
9-18	
12: 0	0.000
9-19	
12: 0	3.900
9-20	
12: 0	21.50
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

MIKE 11 SYSTEM Page: 1

DATA BASE : RAIN IDENTIFICATION: D-2 (No.2)
EDITED : 16-MAY-1991, 17:02

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	25.40
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	2.000
9-30	
12: 0	15.60

MIKE 11 SYSTEM Page: 2

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:06	IDENTIFICATION:	D-3 (No.3)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	5.500		
8- 2			
12: 0	0.000		
8- 3			
12: 0	2.700		
8- 4			
12: 0	16.50		
8- 5			
12: 0	8.200		
8- 6			
12: 0	11.00		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	2.700		
8-10			
12: 0	0.000		
8-11			
12: 0	16.50		
8-12			
12: 0	93.40		
8-13			
12: 0	5.500		
8-14			
12: 0	27.50		
8-15			
12: 0	5.500		
8-16			
12: 0	0.000		
8-17			
12: 0	8.200		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	5.500		
8-21			
12: 0	8.200		
8-22			
12: 0	60.40		
8-23			
12: 0	59.40		
8-24			
12: 0	8.200		
8-25			
12: 0	11.00		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		
8-28			
12: 0	0.000		
8-29			
12: 0	109.8		
8-30			
12: 0	2.700		
8-31			
12: 0	0.000		
9- 1			
12: 0	0.000		
9- 2			
12: 0	0.000		
9- 3			
12: 0	54.90		
9- 4			
12: 0	30.20		
9- 5			
12: 0	0.000		
9- 6			
12: 0	115.3		
9- 7			
12: 0	2.700		
9- 8			
12: 0	0.000		
9- 9			
12: 0	49.40		
9-10			
12: 0	41.20		
9-11			
12: 0	79.60		
9-12			
12: 0	0.000		
9-13			
12: 0	2.700		
9-14			
12: 0	0.000		
9-15			
12: 0	2.700		
9-16			
12: 0	16.50		
9-17			
12: 0	46.70		
9-18			
12: 0	0.000		
9-19			
12: 0	5.500		
9-20			
12: 0	30.20		
9-21			
12: 0	0.000		
9-22			
12: 0	0.000		
9-23			
12: 0	0.000		
9-24			
12: 0	0.000		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:06	IDENTIFICATION:	D-3 (No.3)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	35.70		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	2.700		
9-30			
12: 0	22.00		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:10	IDENTIFICATION:	BU-1 (No.4)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	2.000		
8- 2			
12: 0	0.000		
8- 3			
12: 0	1.000		
8- 4			
12: 0	6.000		
8- 5			
12: 0	3.000		
8- 6			
12: 0	4.000		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	1.000		
8-10			
12: 0	0.000		
8-11			
12: 0	6.000		
8-12			
12: 0	34.20		
8-13			
12: 0	2.000		
8-14			
12: 0	10.10		
8-15			
12: 0	2.000		
8-16			
12: 0	0.000		
8-17			
12: 0	3.000		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	2.000		
8-21			
12: 0	3.000		
8-22			
12: 0	22.10		
8-23			
12: 0	20.10		
8-24			
12: 0	3.000		
8-25			
12: 0	4.000		
8-26			
12: 0	0.000		
8-27			
12: 0	.000		

BU-1
(No.4)

8-28	
12: 0	0.000
8-29	
12: 0	40.20
8-30	
12: 0	1.000
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	20.10
9- 4	
12: 0	11.10
9- 5	
12: 0	0.000
9- 6	
12: 0	42.20
9- 7	
12: 0	1.000
9- 8	
12: 0	0.000
9- 9	
12: 0	18.10
9-10	
12: 0	15.10
9-11	
12: 0	29.20
9-12	
12: 0	0.000
9-13	
12: 0	1.000
9-14	
12: 0	0.000
9-15	
12: 0	1.000
9-16	
12: 0	6.000
9-17	
12: 0	17.10
9-18	
12: 0	0.000
9-19	
12: 0	2.000
9-20	
12: 0	11.10
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

MIKE 11 SYSTEM Page: 1

DATA BASE	: RAIN	IDENTIFICATION:	BU-1
EDITED	: 16-MAY-1991, 17:10		(No.4)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	13.10
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	1.000
9-30	
12: 0	8.000

MIKE 11 SYSTEM Page: 2

DATA BASE : RAIN	IDENTIFICATION: BU-2 (No.5)
EDITED : 16-MAY-1991, 17:14	

HOURS:MIN	DISCHARGE, M3/SEC
1988 8- 1	
12: 0	0.200
8- 2	
12: 0	0.000
8- 3	
12: 0	0.100
8- 4	
12: 0	0.500
8- 5	
12: 0	0.200
8- 6	
12: 0	0.300
8- 7	
12: 0	0.000
8- 8	
12: 0	0.000
8- 9	
12: 0	0.100
8-10	
12: 0	0.000
8-11	
12: 0	0.500
8-12	
12: 0	2.700
8-13	
12: 0	0.200
8-14	
12: 0	0.800
8-15	
12: 0	0.200
8-16	
12: 0	0.000
8-17	
12: 0	0.200
8-18	
12: 0	0.000
8-19	
12: 0	0.000
8-20	
12: 0	0.200
8-21	
12: 0	0.200
8-22	
12: 0	1.700
8-23	
12: 0	1.600
8-24	
12: 0	0.200
8-25	
12: 0	0.300
8-26	
12: 0	0.000
8-27	
12: 0	0.000
8-28	
12: 0	0.000
8-29	
12: 0	3.100
8-30	
12: 0	0.100
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	1.600
9- 4	
12: 0	0.900
9- 5	
12: 0	0.000
9- 6	
12: 0	3.300
9- 7	
12: 0	0.100
9- 8	
12: 0	0.000
9- 9	
12: 0	1.400
9-10	
12: 0	1.200
9-11	
12: 0	2.300
9-12	
12: 0	0.000
9-13	
12: 0	0.100
9-14	
12: 0	0.000
9-15	
12: 0	0.100
9-16	
12: 0	0.500
9-17	
12: 0	1.300
9-18	
12: 0	0.000
9-19	
12: 0	0.200
9-20	
12: 0	0.900
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

BU-2 (No.5)

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:14	IDENTIFICATION:	BU-2 (No.5)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	1.000
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.100
9-30	
12: 0	0.600

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:18	IDENTIFICATION:	BU-3 (No.6)

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	1.900
8- 2	
12: 0	0.000
8- 3	
12: 0	0.900
8- 4	
12: 0	5.700
8- 5	
12: 0	2.800
8- 6	
12: 0	3.800
8- 7	
12: 0	0.000
8- 8	
12: 0	0.000
8- 9	
12: 0	0.900
8-10	
12: 0	0.000
8-11	
12: 0	5.700
8-12	
12: 0	32.10
8-13	
12: 0	1.900
8-14	
12: 0	9.400
8-15	
12: 0	1.900
8-16	
12: 0	0.000
8-17	
12: 0	2.800
8-18	
12: 0	0.000
8-19	
12: 0	0.000
8-20	
12: 0	1.900
8-21	
12: 0	2.800
8-22	
12: 0	20.80
8-23	
12: 0	18.90
8-24	
12: 0	2.800
8-25	
12: 0	3.800
8-26	
12: 0	0.000
8-27	
12: 0	0.000

BU-3
(No.6)

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	0.000
8-29	
12: 0	37.80
8-30	
12: 0	0.900
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	18.90
9- 4	
12: 0	10.40
9- 5	
12: 0	0.000
9- 6	
12: 0	39.70
9- 7	
12: 0	0.900
9- 8	
12: 0	0.000
9- 9	
12: 0	17.00
9-10	
12: 0	14.20
9-11	
12: 0	27.40
9-12	
12: 0	0.000
9-13	
12: 0	0.900
9-14	
12: 0	0.000
9-15	
12: 0	0.900
9-16	
12: 0	5.700
9-17	
12: 0	16.10
9-18	
12: 0	0.000
9-19	
12: 0	1.900
9-20	
12: 0	10.40
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE : RAIN IDENTIFICATION: BU-3
EDITED : 16-MAY-1991, 17:18 (No.6)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	12.30
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.900
9-30	
12: 0	7.600

DATA BASE : RAIN	IDENTIFICATION:	BU-4 (No.7)
EDITED : 16-MAY-1991, 17:23		

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	4.500
8- 2	
12: 0	0.000
8- 3	
12: 0	2.300
8- 4	
12: 0	13.50
8- 5	
12: 0	6.800
8- 6	
12: 0	9.000
8- 7	
12: 0	0.000
8- 8	
12: 0	0.000
8- 9	
12: 0	2.300
8-10	
12: 0	0.000
8-11	
12: 0	13.50
8-12	
12: 0	76.80
8-13	
12: 0	4.500
8-14	
12: 0	22.60
8-15	
12: 0	4.500
8-16	
12: 0	0.000
8-17	
12: 0	6.800
8-18	
12: 0	0.000
8-19	
12: 0	0.000
8-20	
12: 0	4.500
8-21	
12: 0	6.800
8-22	
12: 0	49.70
8-23	
12: 0	45.20
8-24	
12: 0	6.800
8-25	
12: 0	9.000
8-26	
12: 0	0.000
8-27	
12: 0	0.000
8-28	
12: 0	0.000
8-29	
12: 0	90.30
8-30	
12: 0	2.300
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	45.20
9- 4	
12: 0	24.80
9- 5	
12: 0	0.000
9- 6	
12: 0	94.80
9- 7	
12: 0	2.300
9- 8	
12: 0	0.000
9- 9	
12: 0	40.60
9-10	
12: 0	33.90
9-11	
12: 0	65.50
9-12	
12: 0	0.000
9-13	
12: 0	2.300
9-14	
12: 0	0.000
9-15	
12: 0	2.300
9-16	
12: 0	13.50
9-17	
12: 0	38.40
9-18	
12: 0	0.000
9-19	
12: 0	4.500
9-20	
12: 0	24.80
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:23	IDENTIFICATION:	BU-4 (No.7)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	29.40		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	2.300		
9-30			
12: 0	18.10		

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:26	IDENTIFICATION:	BU-5 (No.8
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.500		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.200		
8- 4			
12: 0	1.400		
8- 5			
12: 0	0.700		
8- 6			
12: 0	1.000		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.200		
8-10			
12: 0	0.000		
8-11			
12: 0	1.400		
8-12			
12: 0	8.200		
8-13			
12: 0	0.500		
8-14			
12: 0	2.400		
8-15			
12: 0	0.500		
8-16			
12: 0	0.000		
8-17			
12: 0	0.700		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.500		
8-21			
12: 0	0.700		
8-22			
12: 0	5.300		
8-23			
12: 0	4.800		
8-24			
12: 0	0.700		
8-25			
12: 0	1.000		
8-26			
12: 0	0.000		
8-27			

BU-5
(No. 8)

HOURS:MIN	DISCHARGE, M3/SEC
12: 0	0.000
8-28 12: 0	0.000
8-29 12: 0	9.600
8-30 12: 0	0.200
8-31 12: 0	0.000
9- 1 12: 0	0.000
9- 2 12: 0	0.000
9- 3 12: 0	4.800
9- 4 12: 0	2.600
9- 5 12: 0	0.000
9- 6 12: 0	10.10
9- 7 12: 0	0.200
9- 8 12: 0	0.000
9- 9 12: 0	4.300
9-10 12: 0	3.600
9-11 12: 0	7.000
9-12 12: 0	0.000
9-13 12: 0	0.200
9-14 12: 0	0.000
9-15 12: 0	0.200
9-16 12: 0	1.400
9-17 12: 0	4.100
9-18 12: 0	0.000
9-19 12: 0	0.500
9-20 12: 0	2.600
9-21 12: 0	0.000
9-22 12: 0	0.000
9-23 12: 0	0.000
9-24 12: 0	0.000

HOURS:MIN	DISCHARGE, M3/SEC
9-25 12: 0	3.100
9-26 12: 0	0.000
9-27 12: 0	0.000
9-28 12: 0	0.000
9-29 12: 0	0.200
9-30 12: 0	1.900

DATA BASE : RAIN	IDENTIFICATION:	BU-6 (No.9)
EDITED : 16-MAY-1991, 17:29		

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	1.800
8- 2	
12: 0	0.000
8- 3	
12: 0	0.900
8- 4	
12: 0	5.500
8- 5	
12: 0	2.700
8- 6	
12: 0	3.600
8- 7	
12: 0	0.000
8- 8	
12: 0	0.000
8- 9	
12: 0	0.900
8-10	
12: 0	0.000
8-11	
12: 0	5.500
8-12	
12: 0	31.00
8-13	
12: 0	1.800
8-14	
12: 0	9.100
8-15	
12: 0	1.800
8-16	
12: 0	0.000
8-17	
12: 0	2.700
8-18	
12: 0	0.000
8-19	
12: 0	0.000
8-20	
12: 0	1.800
8-21	
12: 0	2.700
8-22	
12: 0	20.00
8-23	
12: 0	18.20
8-24	
12: 0	2.700
8-25	
12: 0	3.600
8-26	
12: 0	0.000
8-27	
12: 0	0.000
8-28	
12: 0	0.000
8-29	
12: 0	36.40
8-30	
12: 0	0.900
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	18.20
9- 4	
12: 0	10.00
9- 5	
12: 0	0.000
9- 6	
12: 0	38.20
9- 7	
12: 0	0.900
9- 8	
12: 0	0.000
9- 9	
12: 0	16.40
9-10	
12: 0	13.70
9-11	
12: 0	26.40
9-12	
12: 0	0.000
9-13	
12: 0	0.900
9-14	
12: 0	0.000
9-15	
12: 0	0.900
9-16	
12: 0	5.500
9-17	
12: 0	15.50
9-18	
12: 0	0.000
9-19	
12: 0	1.800
9-20	
12: 0	10.00
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:29	IDENTIFICATION:	BU-6 (No.9)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	11.80		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	0.900		
9-30			
12: 0	7.300		

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:32	IDENTIFICATION:	BU-7 (No.10)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.200		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.100		
8- 4			
12: 0	0.700		
8- 5			
12: 0	0.400		
8- 6			
12: 0	0.500		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.100		
8-10			
12: 0	0.000		
8-11			
12: 0	0.700		
8-12			
12: 0	4.100		
8-13			
12: 0	0.200		
8-14			
12: 0	1.200		
8-15			
12: 0	0.200		
8-16			
12: 0	0.000		
8-17			
12: 0	0.400		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.200		
8-21			
12: 0	0.400		
8-22			
12: 0	2.600		
8-23			
12: 0	2.400		
8-24			
12: 0	0.400		
8-25			
12: 0	0.500		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		

BU-7
(No.10)

8-28	
12: 0	0.000
8-29	
12: 0	4.800
8-30	
12: 0	0.100
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	2.400
9- 4	
12: 0	1.300
9- 5	
12: 0	0.000
9- 6	
12: 0	5.100
9- 7	
12: 0	0.100
9- 8	
12: 0	0.000
9- 9	
12: 0	2.200
9-10	
12: 0	1.800
9-11	
12: 0	3.500
9-12	
12: 0	0.000
9-13	
12: 0	0.100
9-14	
12: 0	0.000
9-15	
12: 0	0.100
9-16	
12: 0	0.700
9-17	
12: 0	2.000
9-18	
12: 0	0.000
9-19	
12: 0	0.200
9-20	
12: 0	1.300
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE : RAIN	IDENTIFICATION: BU-7 (No.10)
EDITED : 16-MAY-1991, 17:32	

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	1.600
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.100
9-30	
12: 0	1.000

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:35	IDENTIFICATION:	BU-8 (No.11)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.200		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.100		
8- 4			
12: 0	0.600		
8- 5			
12: 0	0.300		
8- 6			
12: 0	0.400		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.100		
8-10			
12: 0	0.000		
8-11			
12: 0	0.600		
8-12			
12: 0	3.300		
8-13			
12: 0	0.200		
8-14			
12: 0	1.000		
8-15			
12: 0	0.200		
8-16			
12: 0	0.000		
8-17			
12: 0	0.300		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.200		
8-21			
12: 0	0.300		
8-22			
12: 0	2.100		
8-23			
12: 0	1.900		
8-24			
12: 0	0.300		
8-25			
12: 0	0.400		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		
8-28			
12: 0	0.000		
8-29			
12: 0	3.900		
8-30			
12: 0	0.100		
8-31			
12: 0	0.000		
9- 1			
12: 0	0.000		
9- 2			
12: 0	0.000		
9- 3			
12: 0	1.900		
9- 4			
12: 0	1.100		
9- 5			
12: 0	0.000		
9- 6			
12: 0	4.000		
9- 7			
12: 0	0.100		
9- 8			
12: 0	0.000		
9- 9			
12: 0	1.700		
9-10			
12: 0	1.400		
9-11			
12: 0	2.800		
9-12			
12: 0	0.000		
9-13			
12: 0	0.100		
9-14			
12: 0	0.000		
9-15			
12: 0	0.100		
9-16			
12: 0	0.600		
9-17			
12: 0	1.600		
9-18			
12: 0	0.000		
9-19			
12: 0	0.200		
9-20			
12: 0	1.100		
9-21			
12: 0	0.000		
9-22			
12: 0	0.000		
9-23			
12: 0	0.000		
9-24			
12: 0	0.000		

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:35	IDENTIFICATION:	BU-8 (No.11)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	1.300		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	0.100		
9-30			
12: 0	0.800		

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:38	IDENTIFICATION:	T-1 (No.12)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.400		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.200		
8- 4			
12: 0	1.300		
8- 5			
12: 0	0.600		
8- 6			
12: 0	0.800		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.200		
8-10			
12: 0	0.000		
8-11			
12: 0	1.300		
8-12			
12: 0	7.100		
8-13			
12: 0	0.400		
8-14			
12: 0	2.100		
8-15			
12: 0	0.400		
8-16			
12: 0	0.000		
8-17			
12: 0	0.600		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.400		
8-21			
12: 0	0.600		
8-22			
12: 0	4.600		
8-23			
12: 0	4.200		
8-24			
12: 0	0.600		
8-25			
12: 0	0.800		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		

T-1 (No.12)

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	0.000
8-29	
12: 0	8.400
8-30	
12: 0	0.200
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	4.200
9- 4	
12: 0	2.300
9- 5	
12: 0	0.000
9- 6	
12: 0	8.800
9- 7	
12: 0	0.200
9- 8	
12: 0	0.000
9- 9	
12: 0	3.800
9-10	
12: 0	3.200
9-11	
12: 0	6.100
9-12	
12: 0	0.000
9-13	
12: 0	0.200
9-14	
12: 0	0.000
9-15	
12: 0	0.000
9-16	
12: 0	1.300
9-17	
12: 0	3.600
9-18	
12: 0	0.000
9-19	
12: 0	0.400
9-20	
12: 0	2.300
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE : RAIN IDENTIFICATION: T-1
EDITED : 16-MAY-1991, 17:38 (No.12)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	2.700
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.200
9-30	
12: 0	1.700

DATA BASE : RAIN	IDENTIFICATION: T-2 (No.13)
EDITED : 16-MAY-1991, 17:41	

HOURS:MIN	DISCHARGE, M3/SEC
1988 8- 1 12: 0	0.300
8- 2 12: 0	0.000
8- 3 12: 0	0.100
8- 4 12: 0	0.900
8- 5 12: 0	0.100
8- 6 12: 0	0.600
8- 7 12: 0	0.000
8- 8 12: 0	0.000
8- 9 12: 0	0.100
8-10 12: 0	0.000
8-11 12: 0	0.900
8-12 12: 0	5.000
8-13 12: 0	0.300
8-14 12: 0	1.500
8-15 12: 0	0.300
8-16 12: 0	0.000
8-17 12: 0	0.400
8-18 12: 0	0.000
8-19 12: 0	0.000
8-20 12: 0	0.300
8-21 12: 0	0.400
8-22 12: 0	3.200
8-23 12: 0	2.900
8-24 12: 0	0.400
8-25 12: 0	0.600
8-26 12: 0	0.000
8-27 12: 0	0.000
8-28 12: 0	0.000
8-29 12: 0	5.900
8-30 12: 0	0.100
8-31 12: 0	0.000
9- 1 12: 0	0.000
9- 2 12: 0	0.000
9- 3 12: 0	2.900
9- 4 12: 0	1.600
9- 5 12: 0	0.000
9- 6 12: 0	6.200
9- 7 12: 0	0.100
9- 8 12: 0	0.000
9- 9 12: 0	2.700
9-10 12: 0	2.200
9-11 12: 0	4.300
9-12 12: 0	0.000
9-13 12: 0	0.100
9-14 12: 0	0.000
9-15 12: 0	0.100
9-16 12: 0	0.900
9-17 12: 0	2.500
9-18 12: 0	0.000
9-19 12: 0	0.300
9-20 12: 0	1.600
9-21 12: 0	0.000
9-22 12: 0	0.000
9-23 12: 0	0.000
9-24 12: 0	0.000

T-2 (No.13)

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:41	IDENTIFICATION:	T-2 (No.13)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	1.900		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	0.100		
9-30			
12: 0	1.200		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:50	IDENTIFICATION:	T-3 (No.14)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.200		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.100		
8- 4			
12: 0	0.700		
8- 5			
12: 0	0.300		
8- 6			
12: 0	0.400		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.100		
8-10			
12: 0	0.000		
8-11			
12: 0	0.700		
8-12			
12: 0	3.800		
8-13			
12: 0	0.200		
8-14			
12: 0	1.100		
8-15			
12: 0	0.200		
8-16			
12: 0	0.000		
8-17			
12: 0	0.300		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.200		
8-21			
12: 0	0.300		
8-22			
12: 0	2.400		
8-23			
12: 0	2.200		
8-24			
12: 0	0.300		
8-25			
12: 0	0.400		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		

T-3
(No.14)

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	0.000
8-29	
12: 0	4.500
8-30	
12: 0	0.100
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	2.200
9- 4	
12: 0	1.200
9- 5	
12: 0	0.000
9- 6	
12: 0	4.700
9- 7	
12: 0	0.100
9- 8	
12: 0	0.000
9- 9	
12: 0	2.000
9-10	
12: 0	1.700
9-11	
12: 0	3.200
9-12	
12: 0	0.000
9-13	
12: 0	0.100
9-14	
12: 0	0.000
9-15	
12: 0	0.100
9-16	
12: 0	0.700
9-17	
12: 0	1.900
9-18	
12: 0	0.000
9-19	
12: 0	0.200
9-20	
12: 0	1.200
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE EDITED : RAIN : 16-MAY-1991, 17:50 IDENTIFICATION: T-3 (No.14)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	1.400
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.100
9-30	
12: 0	0.900

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:52	IDENTIFICATION:	BA-1 (No.15)
HOURS:MIN	DISCHARGE, MJ/SEC		
1988			
8- 1			
12: 0	2.100		
8- 2			
12: 0	0.000		
8- 3			
12: 0	1.000		
8- 4			
12: 0	6.200		
8- 5			
12: 0	3.100		
8- 6			
12: 0	4.200		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	1.000		
8-10			
12: 0	0.000		
8-11			
12: 0	6.200		
8-12			
12: 0	35.40		
8-13			
12: 0	2.100		
8-14			
12: 0	10.40		
8-15			
12: 0	2.100		
8-16			
12: 0	0.000		
8-17			
12: 0	3.100		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	2.100		
8-21			
12: 0	3.100		
8-22			
12: 0	22.90		
8-23			
12: 0	20.80		
8-24			
12: 0	3.100		
8-25			
12: 0	4.200		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		
8-28			
12: 0	0.000		
8-29			
12: 0	41.60		
8-30			
12: 0	1.000		
8-31			
12: 0	0.000		
9- 1			
12: 0	0.000		
9- 2			
12: 0	0.000		
9- 3			
12: 0	20.80		
9- 4			
12: 0	11.40		
9- 5			
12: 0	0.000		
9- 6			
12: 0	43.70		
9- 7			
12: 0	1.000		
9- 8			
12: 0	0.000		
9- 9			
12: 0	18.70		
9-10			
12: 0	15.60		
9-11			
12: 0	30.20		
9-12			
12: 0	0.000		
9-13			
12: 0	1.000		
9-14			
12: 0	0.000		
9-15			
12: 0	1.000		
9-16			
12: 0	6.200		
9-17			
12: 0	17.70		
9-18			
12: 0	0.000		
9-19			
12: 0	2.100		
9-20			
12: 0	11.40		
9-21			
12: 0	0.000		
9-22			
12: 0	0.000		
9-23			
12: 0	0.000		
9-24			
12: 0	0.000		

BA-1 (No.15)

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:52	IDENTIFICATION:	BA-1 (No.15)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	13.50		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	1.000		
9-30			
12: 0	8.300		

DATA BASE EDITED	RAIN : 16-MAY-1991, 17:55	IDENTIFICATION:	BA-2 (No.16)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	1.300		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.600		
8- 4			
12: 0	3.800		
8- 5			
12: 0	1.900		
8- 6			
12: 0	2.500		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.600		
8-10			
12: 0	0.000		
8-11			
12: 0	3.800		
8-12			
12: 0	21.60		
8-13			
12: 0	1.300		
8-14			
12: 0	6.400		
8-15			
12: 0	1.300		
8-16			
12: 0	0.000		
8-17			
12: 0	1.900		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	1.300		
8-21			
12: 0	1.900		
8-22			
12: 0	14.00		
8-23			
12: 0	12.70		
8-24			
12: 0	1.900		
8-25			
12: 0	2.500		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		

BA-2
(No.16)

HOURS:MIN	DISCHARGE, M3/SEC
8-28	
12: 0	0.000
8-29	
12: 0	5.500
8-30	
12: 0	0.600
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	12.70
9- 4	
12: 0	7.000
9- 5	
12: 0	0.000
9- 6	
12: 0	26.70
9- 7	
12: 0	0.600
9- 8	
12: 0	0.000
9- 9	
12: 0	11.50
9-10	
12: 0	9.600
9-11	
12: 0	18.50
9-12	
12: 0	0.000
9-13	
12: 0	0.600
9-14	
12: 0	0.000
9-15	
12: 0	0.600
9-16	
12: 0	3.800
9-17	
12: 0	10.80
9-18	
12: 0	0.000
9-19	
12: 0	1.300
9-20	
12: 0	7.000
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE : RAIN IDENTIFICATION: BA-2
EDITED : 16-MAY-1991, 17:55 (No.16)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	8.300
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.600
9-30	
12: 0	5.100

DATA BASE EDITED	: RAIN : 16-MAY-1991, 17:59	IDENTIFICATION:	BA-3 (No.17)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	2.000		
8- 2			
12: 0	0.000		
8- 3			
12: 0	1.000		
8- 4			
12: 0	6.100		
8- 5			
12: 0	3.100		
8- 6			
12: 0	4.100		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	1.000		
8-10			
12: 0	0.000		
8-11			
12: 0	6.100		
8-12			
12: 0	34.60		
8-13			
12: 0	2.000		
8-14			
12: 0	10.20		
8-15			
12: 0	2.000		
8-16			
12: 0	0.000		
8-17			
12: 0	3.100		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	2.000		
8-21			
12: 0	3.100		
8-22			
12: 0	22.40		
8-23			
12: 0	20.30		
8-24			
12: 0	3.100		
8-25			
12: 0	4.100		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		
8-28			
12: 0	0.000		
8-29			
12: 0	40.70		
8-30			
12: 0	1.000		
8-31			
12: 0	0.000		
9- 1			
12: 0	0.000		
9- 2			
12: 0	0.000		
9- 3			
12: 0	20.30		
9- 4			
12: 0	11.20		
9- 5			
12: 0	0.000		
9- 6			
12: 0	42.70		
9- 7			
12: 0	1.000		
9- 8			
12: 0	0.000		
9- 9			
12: 0	18.30		
9-10			
12: 0	15.30		
9-11			
12: 0	29.50		
9-12			
12: 0	0.000		
9-13			
12: 0	1.000		
9-14			
12: 0	0.000		
9-15			
12: 0	1.000		
9-16			
12: 0	6.100		
9-17			
12: 0	17.30		
9-18			
12: 0	0.000		
9-19			
12: 0	2.000		
9-20			
12: 0	11.20		
9-21			
12: 0	0.000		
9-22			
12: 0	0.000		
9-23			
12: 0	0.000		
9-24			
12: 0	0.000		

DATA BASE : RAIN	IDENTIFICATION:	BA-3
EDITED : 16-MAY-1991, 17:59		(No.17)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	13.20
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	1.000
9-30	
12: 0	8.100

DATA BASE : RAIN	IDENTIFICATION:	BA-4
EDITED : 16-MAY-1991, 18:04		(No.18)

HOURS:MIN	DISCHARGE, M3/SEC
1988	
8- 1	
12: 0	2.000
8- 2	
12: 0	0.000
8- 3	
12: 0	1.000
8- 4	
12: 0	6.000
8- 5	
12: 0	3.000
8- 6	
12: 0	4.000
8- 7	
12: 0	0.000
8- 8	
12: 0	0.000
8- 9	
12: 0	1.000
8-10	
12: 0	0.000
8-11	
12: 0	6.000
8-12	
12: 0	34.00
8-13	
12: 0	2.000
8-14	
12: 0	10.00
8-15	
12: 0	2.000
8-16	
12: 0	0.000
8-17	
12: 0	3.000
8-18	
12: 0	0.000
8-19	
12: 0	0.000
8-20	
12: 0	2.000
8-21	
12: 0	3.000
8-22	
12: 0	22.00
8-23	
12: 0	20.00
8-24	
12: 0	3.000
8-25	
12: 0	4.000
8-26	
12: 0	0.000
8-27	
12: 0	0.000

BA-4
(No.18)

8-28	
12: 0	0.000
8-29	
12: 0	39.90
8-30	
12: 0	1.000
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	20.00
9- 4	
12: 0	11.00
9- 5	
12: 0	0.000
9- 6	
12: 0	41.90
9- 7	
12: 0	1.000
9- 8	
12: 0	0.000
9- 9	
12: 0	18.00
9-10	
12: 0	15.00
9-11	
12: 0	29.00
9-12	
12: 0	0.000
9-13	
12: 0	1.000
9-14	
12: 0	0.000
9-15	
12: 0	1.000
9-16	
12: 0	6.000
9-17	
12: 0	17.00
9-18	
12: 0	0.000
9-19	
12: 0	2.000
9-20	
12: 0	11.00
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	13.00
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	1.000
9-30	
12: 0	8.000

BA-5
(No.19)

DATA BASE EDITED	: RAIN : 16-MAY-1991, 18:07	IDENTIFICATION:	BA-5 (No.19)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	3.800		
8- 2			
12: 0	0.000		
8- 3			
12: 0	1.900		
8- 4			
12: 0	11.50		
8- 5			
12: 0	5.800		
8- 6			
12: 0	7.700		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	1.900		
8-10			
12: 0	0.000		
8-11			
12: 0	11.50		
8-12			
12: 0	65.40		
8-13			
12: 0	3.800		
8-14			
12: 0	19.20		
8-15			
12: 0	3.800		
8-16			
12: 0	0.000		
8-17			
12: 0	5.800		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	3.800		
8-21			
12: 0	5.800		
8-22			
12: 0	42.30		
8-23			
12: 0	38.50		
8-24			
12: 0	5.800		
8-25			
12: 0	7.700		
8-26			
12: 0	0.000		
8-27			
12: 0	0.000		
8-28			
12: 0	0.000		
8-29			
12: 0	76.90		
8-30			
12: 0	1.900		
8-31			
12: 0	0.000		
9- 1			
12: 0	0.000		
9- 2			
12: 0	0.000		
9- 3			
12: 0	38.50		
9- 4			
12: 0	21.20		
9- 5			
12: 0	0.000		
9- 6			
12: 0	80.80		
9- 7			
12: 0	1.900		
9- 8			
12: 0	0.000		
9- 9			
12: 0	34.60		
9-10			
12: 0	28.80		
9-11			
12: 0	55.80		
9-12			
12: 0	0.000		
9-13			
12: 0	1.900		
9-14			
12: 0	0.000		
9-15			
12: 0	1.900		
9-16			
12: 0	11.50		
9-17			
12: 0	32.70		
9-18			
12: 0	0.000		
9-19			
12: 0	3.800		
9-20			
12: 0	21.20		
9-21			
12: 0	0.000		
9-22			
12: 0	0.000		
9-23			
12: 0	0.000		
9-24			
12: 0	0.000		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 18:07	IDENTIFICATION:	BA-5 (No.19)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	25.00		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	1.900		
9-30			
12: 0	15.40		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 18:09	IDENTIFICATION:	L-1 (No.20)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	2.700		
8- 2			
12: 0	0.000		
8- 3			
12: 0	1.300		
8- 4			
12: 0	8.000		
8- 5			
12: 0	4.000		
8- 6			
12: 0	5.300		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	1.300		
8-10			
12: 0	0.000		
8-11			
12: 0	8.000		
8-12			
12: 0	45.10		
8-13			
12: 0	2.700		
8-14			
12: 0	13.30		
8-15			
12: 0	2.700		
8-16			
12: 0	0.000		
8-17			
12: 0	4.000		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	2.700		
8-21			
12: 0	4.000		
8-22			
12: 0	29.20		
8-23			
12: 0	26.50		
8-24			
12: 0	4.000		
8-25			
12: 0	5.300		
8-26			
12: 0	0.000		
8-27			

L-1
(No.20)

8-28	
12: 0	0.000
8-29	
12: 0	53.00
8-30	
12: 0	1.300
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	26.50
9- 4	
12: 0	14.60
9- 5	
12: 0	0.000
9- 6	
12: 0	55.70
9- 7	
12: 0	1.300
9- 8	
12: 0	0.000
9- 9	
12: 0	23.90
9-10	
12: 0	19.90
9-11	
12: 0	38.40
9-12	
12: 0	0.000
9-13	
12: 0	1.300
9-14	
12: 0	0.000
9-15	
12: 0	1.300
9-16	
12: 0	8.000
9-17	
12: 0	22.50
9-18	
12: 0	0.000
9-19	
12: 0	2.700
9-20	
12: 0	14.60
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

DATA BASE : RAIN IDENTIFICATION: L-1
EDITED : 16-MAY-1991, 18:09
(No.20)

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	17.20
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	1.300
9-30	
12: 0	10.60

C22

DATA BASE EDITED	: RAIN : 16-MAY-1991, 18:12	IDENTIFICATION:	L-2 (No.21)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.500		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.200		
8- 4			
12: 0	1.500		
8- 5			
12: 0	0.700		
8- 6			
12: 0	1.000		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.200		
8-10			
12: 0	0.000		
8-11			
12: 0	1.500		
8-12			
12: 0	8.400		
8-13			
12: 0	0.500		
8-14			
12: 0	2.500		
8-15			
12: 0	0.500		
8-16			
12: 0	0.000		
8-17			
12: 0	0.700		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.500		
8-21			
12: 0	0.700		
8-22			
12: 0	5.500		
8-23			
12: 0	5.000		
8-24			
12: 0	0.700		
8-25			
12: 0	1.000		
8-26			
12: 0	0.000		
8-27			
8-28			
12: 0	0.000		
8-29			
12: 0	9.900		
8-30			
12: 0	0.200		
8-31			
12: 0	0.000		
9- 1			
12: 0	0.000		
9- 2			
12: 0	0.000		
9- 3			
12: 0	5.000		
9- 4			
12: 0	2.700		
9- 5			
12: 0	0.000		
9- 6			
12: 0	10.40		
9- 7			
12: 0	0.200		
9- 8			
12: 0	0.000		
9- 9			
12: 0	4.500		
9-10			
12: 0	3.700		
9-11			
12: 0	7.200		
9-12			
12: 0	0.000		
9-13			
12: 0	0.200		
9-14			
12: 0	0.000		
9-15			
12: 0	0.200		
9-16			
12: 0	1.500		
9-17			
12: 0	4.200		
9-18			
12: 0	0.000		
9-19			
12: 0	0.500		
9-20			
12: 0	2.700		
9-21			
12: 0	0.000		
9-22			
12: 0	0.000		
9-23			
12: 0	0.000		
9-24			
12: 0	0.000		

L-2 (No.21)

DATA BASE EDITED	: RAIN : 16-MAY-1991, 18:12	IDENTIFICATION:	L-2 (Nb.21)
HOURS:MIN	DISCHARGE, M3/SEC		
9-25			
12: 0	3.200		
9-26			
12: 0	0.000		
9-27			
12: 0	0.000		
9-28			
12: 0	0.000		
9-29			
12: 0	0.200		
9-30			
12: 0	2.000		

DATA BASE EDITED	: RAIN : 16-MAY-1991, 18:15	IDENTIFICATION:	L-3 (Nb.22)
HOURS:MIN	DISCHARGE, M3/SEC		
1988			
8- 1			
12: 0	0.300		
8- 2			
12: 0	0.000		
8- 3			
12: 0	0.200		
8- 4			
12: 0	1.000		
8- 5			
12: 0	0.500		
8- 6			
12: 0	0.700		
8- 7			
12: 0	0.000		
8- 8			
12: 0	0.000		
8- 9			
12: 0	0.200		
8-10			
12: 0	0.000		
8-11			
12: 0	1.000		
8-12			
12: 0	5.800		
8-13			
12: 0	0.300		
8-14			
12: 0	1.700		
8-15			
12: 0	0.300		
8-16			
12: 0	0.000		
8-17			
12: 0	0.500		
8-18			
12: 0	0.000		
8-19			
12: 0	0.000		
8-20			
12: 0	0.300		
8-21			
12: 0	0.500		
8-22			
12: 0	3.800		
8-23			
12: 0	3.400		
8-24			
12: 0	0.500		
8-25			
12: 0	0.700		
8-26			
12: 0	0.000		
8-27			

L-3
(No. 22)

12: 0	0.000
8-28	
12: 0	0.000
8-29	
12: 0	6.800
8-30	
12: 0	0.200
8-31	
12: 0	0.000
9- 1	
12: 0	0.000
9- 2	
12: 0	0.000
9- 3	
12: 0	3.400
9- 4	
12: 0	1.900
9- 5	
12: 0	0.000
9- 6	
12: 0	7.200
9- 7	
12: 0	0.200
9- 8	
12: 0	0.000
9- 9	
12: 0	3.100
9-10	
12: 0	2.600
9-11	
12: 0	4.900
9-12	
12: 0	0.000
9-13	
12: 0	0.200
9-14	
12: 0	0.000
9-15	
12: 0	0.200
9-16	
12: 0	1.000
9-17	
12: 0	2.900
9-18	
12: 0	0.000
9-19	
12: 0	0.300
9-20	
12: 0	1.900
9-21	
12: 0	0.000
9-22	
12: 0	0.000
9-23	
12: 0	0.000
9-24	
12: 0	0.000

2218

DATA BASE : RAIN	IDENTIFICATION: L-3 (No. 22)
EDITED : 16-MAY-1991, 18:15	

HOURS:MIN	DISCHARGE, M3/SEC
9-25	
12: 0	2.200
9-26	
12: 0	0.000
9-27	
12: 0	0.000
9-28	
12: 0	0.000
9-29	
12: 0	0.200
9-30	
12: 0	1.400

5) Manning's Roughness Coefficient of Without Project

MAN1

```
+-----------------------------------------------------------------------+
! G.5          SUPPLEMENTARY  DATA     - GENERAL  OVERVIEW               !
+-----------------------------------------------------------------------+
!                                                                       !
!                                                  Number of            !
!      1  INITIAL CONDITIONS ....................    0  locations      !
!                                                                       !
!      2  WIND FACTORS ..........................    0       "          !
!                                                                       !
!      3  RESISTANCE NUMBER .....................   10       "          !
!                                                                       !
!      4  FLOW DESCRIPTION ......................    0       "          !
!                                                                       !
!      5  DEFAULT VALUES ........................    1  page           !
!                                                                       !
!      6  WATER LOSS PARAMETERS .................    0  locations      !
!                                                                       !
!      7  TEXT ..................................    0  lines          !
!                                                                       !
!                                                                       !
!      Select: <Enter> or (1-7)                                         !
+-----------------------------------------------------------------------+
 <Esc> return to Menu G                                  <F1> Help Menu
```

G.5.3 RESISTANCE NUMBERS

	Global resistance number	33.333

Manning's roughness coefficient n=0.030

Branches where local resistance numbers are applicable:

	River name	River chainage	Res. number
1	DHALESWARI	19.700	40.000
2	DHALESWARI	25.600	40.000
3	DHALESWARI	30.800	40.000
4	DHALESWARI	37.200	40.000
5	DHALESWARI	46.200	40.000
6	DHALESWARI	47.200	40.000
7	DHALESWARI	51.700	40.000
8	DHALESWARI	54.500	40.000
9	DHALESWARI	56.300	40.000
10	DHALESWARI	60.200	40.000

Manning's roughness coefficient n=0.025

Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=ret

MAN 1

G.5.5 DEFAULT VALUES

DELTA	0.50	THETA	1.00
DELHS	0.0100000	EPS	0.00010
DELH	0.100	DH_NODE	0.010
SPILFC	0.00	STORFC	0.0
ALPHA	1.00		
NR_ITER	1	ITER1_MAX	10
MAXITER_STEADY	100		

WIND STRESS	0	0 : Without 1: With
RESISTANCE NUMBER	1	0 : Chezy 1: Manning(M) 2: Manning(n)
NODE COMPATIBILITY	0	0 : Water level 1: Energy

STORING FOR PRINT / PLOT		0: No storing 1: Storing
Computed velocities ...	1	
Velocities in weirs ...	0	

Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=ret

6). Results of Calibration of Without Project

```
+-----------------------------------------------------------------------------+
!  H2  CALCULATION  - HYDRODYNAMIC MODEL                                      !
+-----------------------------------------------------------------------------+
!                                                       Filenames             !
!       CATCHMENT AND RIVER DATA                  :        RIVER1.RDF         !
!       NAM - RESULT FILE                         :              .NRF         !
!       TIME VARYING BOUNDARIES                   :        BOUND1.BSF         !
!                                                                             !
!       SUPPLEMENTARY DATA                        :          MAN1.SSF         !
!       RESULT FILE                               :        RES-B7.RRF         !
!       Initial conditions  (1: auto, 2: SSF fil, 3: hotstart) :  1           !
!                                                                             !
!                                                                             !
!       ______________________________________________                        !
!                                                                             !
!                                                                             !
!       Simulation start (default: boundary start)    :  1988  8  1  12  0    !
!       Simulation time (hours)          <  1440.00   :  1440.00              !
!       Timestep (minutes)                            :    60.00              !
!       No. timesteps between saving of results       :    24                 !
!                                                           /                 !
+-----------------------------------------------------------------------------+
Do you want the calculation to start ? (Y/N)
```

GRID POINT RESULT SUMMARY

WATER LEVEL.

	Location	Minimum meter	Maximum meter
DHALESWARI	0.000	5.10	9.59
DHALESWARI	0.500	5.10	9.59
DHALESWARI	0.800	5.10	9.59
DHALESWARI	0.800	5.10	9.59
DHALESWARI	2.760	5.09	9.59
DHALESWARI	4.720	5.09	9.58
DHALESWARI	6.680	5.08	9.58
DHALESWARI	8.640	5.08	9.58
DHALESWARI	10.600	5.07	9.58
DHALESWARI	12.275	5.11	9.57
DHALESWARI	13.950	5.08	9.57
DHALESWARI	15.625	5.03	9.57
DHALESWARI	17.300	4.99	9.57
DHALESWARI	18.500	4.98	9.50
DHALESWARI	19.700	4.97	9.34
DHALESWARI	21.667	4.96	9.21
DHALESWARI	23.633	4.95	9.06
DHALESWARI	25.600	4.94	8.88
DHALESWARI	27.333	4.92	8.73
DHALESWARI	29.067	4.91	8.56
DHALESWARI	30.800	4.89	8.37
DHALESWARI	32.100	4.87	8.19
DHALESWARI	34.000	4.86	8.04
DHALESWARI	35.600	4.82	7.91
DHALESWARI	37.200	4.72	7.80
DHALESWARI	38.900	4.64	7.68
DHALEGWARI	40.600	4.57	7.57
DHALESWARI	42.300	4.52	7.45
DHALESWARI	44.000	4.18	7.34
DHALESWARI	45.700	4.45	7.21
DHALESWARI	45.700	4.45	7.21
DHALESWARI	46.200	4.43	7.16
DHALESWARI	47.200	4.40	7.04
DHALESWARI	48.700	4.35	6.87
DHALESWARI	50.200	4.30	6.66
DHALESWARI	51.700	4.23	6.40
DHALESWARI	53.100	4.19	6.25
DHALESWARI	54.500	4.18	6.16
DHALESWARI	56.300	4.15	6.01
DHALESWARI	57.700	4.15	6.01
DHALESWARI	57.700	4.15	6.01
DHALESWARI	58.950	4.13	5.99
DHALESWARI	60.200	4.14	5.97
BANSI	0.000	5.68	9.85
BANSI	2.000	5.54	9.74
BANSI	3.867	5.47	9.67
BANSI	5.733	5.43	9.62
BANSI	7.600	5.40	9.58
BANSI	9.000	5.40	9.59
BURIGANGA	0.000	4.54	7.49
BURIGANGA	1.100	4.53	7.46
BURIGANGA	2.950	4.52	7.42
BURIGANGA	4.800	4.50	7.36
BURIGANGA	5.900	4.50	7.36
BURIGANGA	7.000	4.	7.35

	Location	Minimum meter	Maximum meter
BURIGANGA	8.500	4.49	7.33
BURIGANGA	10.000	4.48	7.30
BURIGANGA	11.500	4.47	7.27
BURIGANGA	12.650	4.46	7.25
BURIGANGA	13.800	4.45	7.23
BURIGANGA	15.150	4.45	7.21
BURIGANGA	16.500	4.44	7.21
BURIGANGA	17.500	4.43	7.21
TURAG	0.000	5.91	9.66
TURAG	1.880	5.85	9.60
TURAG	3.760	5.77	9.55
TURAG	5.610	5.68	9.49
TURAG	7.520	5.58	9.42
TURAG	9.400	5.48	9.36
TURAG	10.750	5.41	9.31
TURAG	12.100	5.38	9.27
TURAG	13.000	5.33	9.23
TURAG	15.000	5.22	9.09
TURAG	15.000	5.22	9.09
TURAG	15.100	5.22	9.09
TURAG	16.200	5.21	9.08
TURAG	17.300	5.19	9.06
TURAG	18.700	5.18	9.06
TURAG	20.000	5.18	9.05
TURAG	21.250	5.17	9.05
TURAG	22.500	5.17	9.04
TURAG	24.050	5.15	9.01
TURAG	25.600	5.10	7.88
TURAG	27.000	5.08	7.95
TURAG	27.000	5.08	7.95
TURAG	27.300	5.08	7.90
TURAG	28.350	5.07	7.87
TURAG	29.400	4.94	7.79
TURAG	30.550	4.82	7.72
TURAG	31.700	4.75	7.68
TURAG	32.200	4.73	7.66
TURAG	33.967	4.64	7.60
TURAG	35.733	4.57	7.51
TURAG	37.500	4.51	7.19
LAKHYA	0.000	4.85	7.02
LAKHYA	1.150	4.80	6.96
LAKHYA	2.300	4.74	6.90
LAKHYA	3.600	4.67	6.83
LAKHYA	3.600	4.67	6.83
LAKHYA	5.033	4.59	6.72
LAKHYA	6.467	4.53	6.61
LAKHYA	7.900	4.48	6.57
LAKHYA	9.633	4.43	6.47
LAKHYA	11.367	4.37	6.38
LAKHYA	13.100	4.30	6.28
LAKHYA	15.050	4.25	6.20
LAKHYA	17.000	4.22	6.14
LAKHYA	18.950	4.19	6.10
LAKHYA	20.900	4.18	6.06
LAKHYA	22.400	4.16	6.04

	Location	Minimun meter	Maximum meter
LAKHYA	23.900	4.15	6.01
BALU	0.000	5.09	7.66
BALU	1.900	5.09	7.66
BALU	2.700	5.09	7.66
BALU	4.200	5.09	7.66
BALU	5.700	5.09	7.65
BALU	7.200	5.08	7.65
BALU	7.200	5.08	7.65
BALU	8.200	5.06	7.62
BALU	10.050	5.01	7.56
BALU	11.900	4.96	7.47
BALU	12.900	4.93	7.43
BALU	14.200	4.88	7.37
BALU	15.500	4.85	7.32
BALU	16.600	4.83	7.29
BALU	17.700	4.83	7.28
BALU	19.000	4.82	7.25
BALU	20.500	4.79	7.19
BALU	22.000	4.76	7.14
BALU	23.500	4.71	7.06
BALU	24.867	4.72	6.99
BALU	26.233	4.70	6.93
BALU	27.600	4.68	6.88
BALU	28.700	4.67	6.83
TONGI	0.000	5.22	8.09
TONGI	1.300	5.20	8.04
TONGI	3.000	5.19	8.01
TONGI	4.700	5.18	7.98
TONGI	6.400	5.18	7.95
TONGI	8.000	5.17	7.88
TONGI	8.300	5.17	7.87
TONGI	9.825	5.13	7.80
TONGI	11.350	5.13	7.75
TONGI	12.875	5.11	7.72
TONGI	14.400	5.10	7.69
TONGI	16.000	5.08	7.65
KARNATALI	0.000	5.39	9.59
KARNATALI	1.600	5.33	9.41
KARNATALI	3.200	5.28	9.24
KARNATALI	4.800	5.23	9.05
KARNATALI	6.400	5.18	8.84
KARNATALI	8.233	5.14	8.56
KARNATALI	10.067	5.11	8.26
KARNATALI	11.900	5.08	7.95

DISCHARGE,

	Location	Minimun m3/sec	Maximum m3/sec
DHALESWARI	0.250	1013.296	2666.020
DHALESWARI	0.650	1013.330	2663.982
DHALESWARI	1.780	362.112	1037.536
DHALESWARI	3.740	363.344	1021.138
DHALESWARI	5.700	364.889	1010.276
DHALESWARI	7.660	366.345	1010.276
DHALESWARI	9.620	260.401	1010.276
DHALESWARI	11.438	358.269	1010.276
DHALESWARI	13.113	386.051	1010.276
DHALESWARI	14.788	387.730	1010.276
DHALESWARI	16.163	88.877	1010.276
DHALESWARI	17.900	372.597	1010.682
DHALESWARI	19.100	1019.276	11671.205
DHALESWARI	20.683	1010.276	11673.789
DHALESWARI	22.650	1010.276	11671.111
DHALESWARI	24.617	1010.276	11674.324
DHALESWARI	26.467	1010.276	11674.153
DHALESWARI	29.200	1010.276	11671.621
DHALESWARI	29.933	1010.276	11674.612
DHALESWARI	31.600	1010.276	11674.694
DHALESWARI	33.200	1010.276	11675.207
DHALESWARI	34.800	1010.276	11675.283
DHALESWARI	36.400	1010.276	11675.943
DHALESWARI	38.050	1010.276	11676.392
DHALESWARI	39.750	1010.276	11677.027
DHALESWARI	41.450	1010.276	11677.233
DHALESWARI	43.150	1010.276	11707.913
DHALESWARI	44.850	1010.276	11710.974
DHALESWARI	45.950	1615.537	17108.068
DHALESWARI	46.700	1615.537	17100.318
DHALESWARI	47.950	1615.537	17397.887
DHALESWARI	49.430	1615.537	17401.760
DHALESWARI	50.950	1615.537	17403.902
DHALESWARI	52.400	1615.537	17402.266
DHALESWARI	53.800	1615.537	17402.510
DHALESWARI	55.400	1615.537	17405.396
DHALESWARI	57.000	1615.537	17404.209
DHALESWARI	58.325	3525.000	20763.648
DHALESWARI	59.575	3525.000	20762.773
BANSI	1.000	1003.204	2655.993
BANSI	2.933	1012.184	2675.963
BANSI	4.800	982.588	2673.764
BANSI	6.667	1006.532	2671.293
BANSI	8.300	1011.583	2667.801
BURIGANGA	0.550	605.261	2675.460
BURIGANGA	2.025	605.261	2685.943
BURIGANGA	3.875	605.261	2686.413
BURIGANGA	5.350	605.261	2686.933
BURIGANGA	6.450	605.261	2687.120
BURIGANGA	7.750	605.261	2688.951
BURIGANGA	9.250	605.261	2689.001
BURIGANGA	10.750	605.261	2689.075
BURIGANGA	12.075	605.261	2689.255
BURIGANGA	13.225	605.261	2689.500
BURIGANGA	14.475	605.261	2689.166

	Location	Minimum m3/sec	Maximum m3/sec
BURIGANGA	15.825	605.261	2691.013
BURIGANGA	17.000	605.261	2680.893
TURAG	0.948	311.177	1319.672
TURAG	2.420	343.307	1349.110
TURAG	1.700	345.554	1318.589
TURAG	6.580	353.318	1359.184
TURAG	8.160	356.392	1358.719
TURAG	10.075	358.355	1358.442
TURAG	11.425	359.737	1358.220
TURAG	12.550	360.743	1358.032
TURAG	14.300	361.665	1357.907
TURAG	15.050	227.112	728.780
TURAG	15.850	228.031	729.606
TURAG	16.750	228.698	730.270
TURAG	18.000	229.625	732.636
TURAG	19.350	231.464	737.288
TURAG	20.625	233.239	741.692
TURAG	21.875	234.509	745.236
TURAG	23.275	235.837	750.285
TURAG	24.825	236.716	755.164
TURAG	26.300	238.406	848.963
TURAG	27.150	605.261	2671.386
TURAG	27.825	605.261	2671.234
TURAG	28.875	605.261	2671.696
TURAG	29.975	605.261	2674.354
TURAG	31.125	605.261	2674.381
TURAG	31.950	605.261	2674.474
TURAG	33.083	605.261	2674.730
TURAG	34.850	605.261	2675.000
TURAG	36.617	605.261	2675.370
LAKHYA	0.575	1523.286	2573.633
LAKHYA	1.725	1523.879	2572.929
LAKHYA	2.930	1521.118	2572.210
LAKHYA	4.317	1750.580	3111.673
LAKHYA	5.730	1751.300	3110.810
LAKHYA	7.183	1752.077	3109.926
LAKHYA	8.767	1763.591	3164.688
LAKHYA	10.500	1764.661	3163.976
LAKHYA	12.233	1765.818	3163.461
LAKHYA	14.075	1770.387	3180.707
LAKHYA	16.025	1771.649	3180.429
LAKHYA	17.975	1773.305	3180.428
LAKHYA	19.925	1774.087	3180.394
LAKHYA	21.650	1776.877	3180.869
LAKHYA	23.150	1776.312	3181.032
BALU	0.950	30.177	87.555
BALU	2.300	30.389	89.391
BALU	3.450	30.734	91.556
BALU	4.950	30.852	94.385
BALU	6.450	29.115	96.993
BALU	7.700	79.163	728.959
BALU	9.125	79.463	729.136
BALU	10.975	79.463	729.363
BALU	12.400	79.163	736.544
BALU	13.550	79.463	736.758

	Location	Minimum m3/sec	Maximum m3/sec
BALU	11.850	79.163	737.011
BALU	16.050	79.163	748.523
BALU	17.150	79.163	749.753
BALU	18.350	79.163	773.913
BALU	19.750	79.163	771.452
BALU	21.250	79.163	768.471
BALU	22.750	78.163	765.333
BALU	21.183	79.163	814.527
BALU	25.550	78.463	813.143
BALU	26.917	79.163	811.787
BALU	28.150	79.163	810.687
TONGI	0.650	41.141	629.230
TONGI	2.150	41.463	629.229
TONGI	3.850	41.463	629.212
TONGI	5.550	41.463	629.243
TONGI	7.200	41.463	629.272
TONGI	8.150	41.463	629.416
TONGI	9.063	41.463	631.611
TONGI	10.588	41.463	631.690
TONGI	12.113	41.463	631.809
TONGI	13.638	41.463	633.536
TONGI	15.200	41.463	631.877
KARNATALI	0.800	232.538	1908.763
KARNATALI	2.100	231.724	1906.195
KARNATALI	4.000	231.724	1906.218
KARNATALI	5.600	231.721	1906.277
KARNATALI	7.317	231.724	1906.353
KARNATALI	9.150	231.721	1906.436
KARNATALI	10.983	231.724	1906.458

DATA FILE : RIVER1.RDF BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF CALCULATED : 11-JUN-1991, 10:15

HOURS:MIN	DHALESWARI 19.700	DHALESWARI 51.500	DHALESWARI 60.200	BANSI 0.000	BANSI 7.600
1988	WATER LEVEL, meter				
8- 1					
12: 0	4.97	4.82	4.82	5.68	5.40
8- 2					
12: 0	6.50	4.88	4.85	6.97	6.80
8- 3					
12: 0	6.60	4.90	4.87	7.06	6.83
8- 4					
12: 0	6.62	4.86	4.83	7.02	6.86
8- 5					
12: 0	6.58	4.79	4.75	6.98	6.85
8- 6					
12: 0	6.53	4.60	4.56	6.96	6.82
8- 7					
12: 0	6.50	4.54	4.50	6.94	6.78
8- 8					
12: 0	6.46	4.48	4.44	6.90	6.74
8- 9					
12: 0	6.43	4.50	4.47	6.86	6.71
8-10					
12: 0	6.42	4.57	4.54	6.85	6.70
8-11					
12: 0	6.42	4.51	4.48	6.86	6.70
8-12					
12: 0	6.44	4.53	4.49	6.89	6.73
8-13					
12: 0	6.42	4.56	4.53	6.86	6.70
8-14					
12: 0	6.43	4.60	4.57	6.87	6.71
8-15					
12: 0	6.45	4.66	4.63	6.89	6.73
8-16					
12: 0	6.48	4.69	4.66	6.91	6.75
8-17					
12: 0	6.50	4.74	4.71	6.94	6.77
8-18					
12: 0	6.55	4.83	4.80	6.98	6.81
8-19					
12: 0	6.59	4.86	4.83	7.02	6.85
8-20					
12: 0	6.64	4.90	4.87	7.06	6.90
8-21					
12: 0	6.67	4.89	4.85	7.10	6.93
8-22					
12: 0	6.71	4.92	4.88	7.16	6.98
8-23					
12: 0	6.74	4.93	4.89	7.19	7.00
8-24					
12: 0	6.77	4.97	4.93	7.21	7.03
8-25					
12: 0	6.81	5.04	5.00	7.25	7.07
8-26					
12: 0	6.88	5.07	5.03	7.33	7.13
8-27					
12: 0	7.00	5.24	5.20	7.45	7.25
8-28					
12: 0	7.25	5.44	5.40	7.70	7.48
8-29					
12: 0	7.53	5.63	5.57	8.05	7.78
8-30					
12: 0	7.79	5.79	5.72	8.33	8.04
8-31					
12: 0	8.07	5.92	5.84	8.64	8.33
9- 1					
12: 0	8.66	6.03	5.91	9.19	8.90
9- 2					
12: 0	9.09	6.11	5.95	9.61	9.34
9- 3					
12: 0	9.30	6.16	5.97	9.82	9.55
9- 4					
12: 0	9.34	6.15	5.95	9.85	9.58
9- 5					
12: 0	9.20	6.13	5.94	9.71	9.45
9- 6					
12: 0	9.10	6.10	5.92	9.62	9.35
9- 7					
12: 0	8.95	6.01	5.87	9.44	9.19
9- 8					
12: 0	8.78	5.98	5.83	9.26	9.02
9- 9					
12: 0	8.63	5.92	5.78	9.11	8.87
9-10					
12: 0	8.58	5.93	5.80	9.06	8.82
9-11					
12: 0	8.48	5.89	5.76	8.97	8.72
9-12					
12: 0	8.34	5.85	5.71	8.82	8.58
9-13					
12: 0	8.25	5.92	5.82	8.73	8.49
9-14					
12: 0	8.17	5.77	5.67	8.63	8.40
9-15					
12: 0	8.05	5.66	5.56	8.50	8.28
9-16					
12: 0	7.93	5.60	5.51	8.40	8.17
9-17					
12: 0	7.84	5.48	5.39	8.30	8.08
9-18					
12: 0	7.71	5.18	5.09	8.17	7.95
9-19					
12: 0	7.55	5.08	5.00	8.02	7.80
9-20					
12: 0	7.44	4.99	4.91	7.90	7.69
9-21					
12: 0	7.29	4.96	4.89	7.75	7.54
9-22					
12: 0	7.12	4.81	4.75	7.58	7.38
9-23					
12: 0	6.98	4.74	4.69	7.44	7.24
9-24					
12: 0	6.87	4.63	4.58	7.32	7.13

DATA FILE : RIVER1.RDF	BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF	CALCULATED : 11-JUN-1991, 10:45

HOURS:MIN	DHALESWARI 19.700	DHALESWARI 54.500	DHALESWARI 60.200	BANSI 0.000	BANSI 7.600
9-25					
12: 0	6.76	1.54	1.49	7.20	7.03
9-26					
12: 0	6.66	1.51	4.47	7.09	6.93
9-27					
12: 0	6.57	1.50	4.46	6.98	6.84
9-28					
12: 0	6.50	1.40	1.36	6.90	6.76
9-29					
12: 0	6.41	4.29	4.25	6.79	6.67
9-30					
12: 0	6.33	4.18	1.14	6.71	6.60

DATA FILE : RIVER1.RDF	BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF	CALCULATED : 11-JUN-1991, 10:45

HOURS:MIN	BURIGANGA 7.000	BURIGANGA 16.500	TURAG 27.300	LAKHYA 2.300	BALU 0.000
1988	WATER LEVEL, meter				
8- 1					
12: 0	4.86	4.84	5.08	5.35	5.33
8- 2					
12: 0	5.12	5.09	5.50	5.42	5.51
8- 3					
12: 0	5.16	5.12	5.56	5.46	5.58
8- 4					
12: 0	5.11	5.10	5.58	5.44	5.61
8- 5					
12: 0	5.08	5.03	5.54	5.36	5.57
8- 6					
12: 0	4.92	4.87	5.46	5.22	5.48
8- 7					
12: 0	4.84	4.80	5.38	5.12	5.38
8- 8					
12: 0	4.78	4.73	5.32	5.07	5.32
8- 9					
12: 0	4.78	4.74	5.29	5.08	5.29
8-10					
12: 0	4.83	4.79	5.30	5.11	5.29
8-11					
12: 0	4.80	4.75	5.31	5.09	5.32
8-12					
12: 0	4.83	4.78	5.40	5.16	5.47
8-13					
12: 0	4.84	4.80	5.37	5.14	5.40
8-14					
12: 0	4.87	4.83	5.37	5.18	5.39
8-15					
12: 0	4.92	4.88	5.39	5.23	5.40
8-16					
12: 0	4.95	4.91	5.40	5.25	5.41
8-17					
12: 0	5.00	4.96	5.44	5.31	5.46
8-18					
12: 0	5.08	5.04	5.49	5.38	5.50
8-19					
12: 0	5.12	5.08	5.54	5.42	5.54
8-20					
12: 0	5.17	5.13	5.58	5.46	5.59
8-21					
12: 0	5.17	5.13	5.60	5.45	5.61
8-22					
12: 0	5.22	5.17	5.68	5.52	5.73
8-23					
12: 0	5.25	5.19	5.73	5.55	5.79
8-24					
12: 0	5.27	5.22	5.72	5.55	5.74
8-25					
12: 0	5.33	5.29	5.75	5.60	5.76
8-26					
12: 0	5.38	5.33	5.79	5.64	5.79
8-27					

12: 0	5.51	5.19	5.90	5.78	5.89
8-28					
12: 0	5.77	5.72	6.11	5.98	6.09
8-29					
12: 0	6.01	5.97	6.45	6.25	6.47
8-30					
12: 0	6.25	6.18	6.67	6.38	6.62
8-31					
12: 0	6.46	6.39	6.90	6.52	6.81
9- 1					
12: 0	6.79	6.70	7.21	6.65	7.05
9- 2					
12: 0	7.10	6.99	7.59	6.75	7.31
9- 3					
12: 0	7.30	7.17	7.83	6.87	7.58
9- 4					
12: 0	7.35	7.21	7.90	6.88	7.65
9- 5					
12: 0	7.26	7.12	7.81	6.85	7.58
9- 6					
12: 0	7.21	7.06	7.79	6.90	7.66
9- 7					
12: 0	7.08	6.94	7.64	6.79	7.48
9- 8					
12: 0	6.92	6.80	7.46	6.71	7.29
9- 9					
12: 0	6.81	6.69	7.36	6.69	7.26
9-10					
12: 0	6.77	6.66	7.30	6.69	7.22
9-11					
12: 0	6.72	6.60	7.26	6.68	7.22
9-12					
12: 0	6.61	6.50	7.12	6.58	7.05
9-13					
12: 0	6.57	6.48	7.04	6.59	6.96
9-14					
12: 0	6.46	6.36	6.93	6.48	6.88
9-15					
12: 0	6.32	6.22	6.82	6.38	6.77
9-16					
12: 0	6.22	6.13	6.71	6.31	6.68
9-17					
12: 0	6.10	6.01	6.62	6.23	6.62
9-18					
12: 0	5.85	5.75	6.42	5.98	6.40
9-19					
12: 0	5.68	5.59	6.25	5.83	6.22
9-20					
12: 0	5.57	5.48	6.16	5.75	6.16
9-21					
12: 0	5.47	5.39	6.05	5.67	6.04
9-22					
12: 0	5.30	5.23	5.90	5.52	5.89
9-23					
12: 0	5.18	5.12	5.76	5.43	5.75
9-24					
12: 0	5.06	4.99	5.64	5.30	5.63

DATA FILE : RIVER1.RDF BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF CALCULATED : 11-JUN-1991, 10:45

HOURS:MIN	BURIGANGA 7.000	BURIGANGA 16.500	TURAG 27.300	LAKHYA 2.300	BALU 0.000
9-25					
12: 0	4.95	4.89	5.57	5.22	5.59
9-26					
12: 0	4.88	4.82	5.47	5.13	5.16
9-27					
12: 0	4.83	4.78	5.38	5.07	5.36
9-28					
12: 0	4.73	4.68	5.29	4.96	5.27
9-29					
12: 0	4.61	4.56	5.18	4.84	5.16
9-30					
12: 0	4.49	4.44	5.10	4.71	5.09

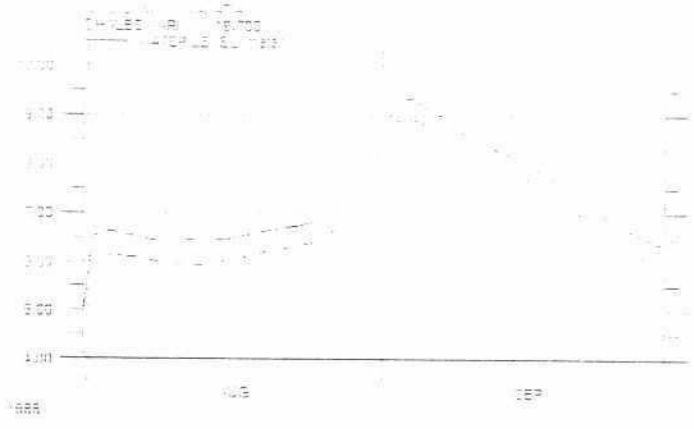
208

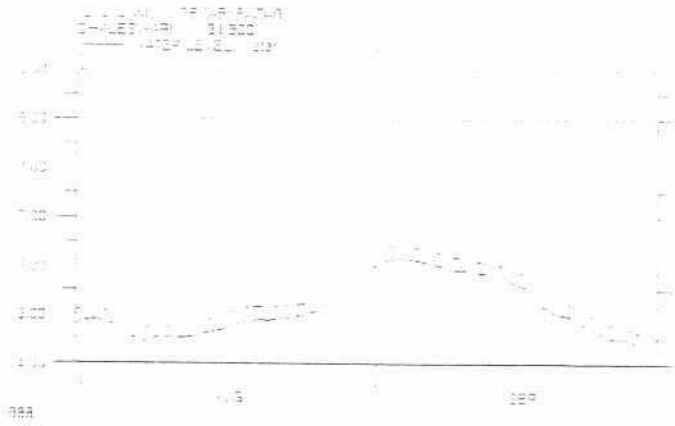
DATA FILE : RIVER1.RDF BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF CALCULATED : 11-JUN-1991, 10:15

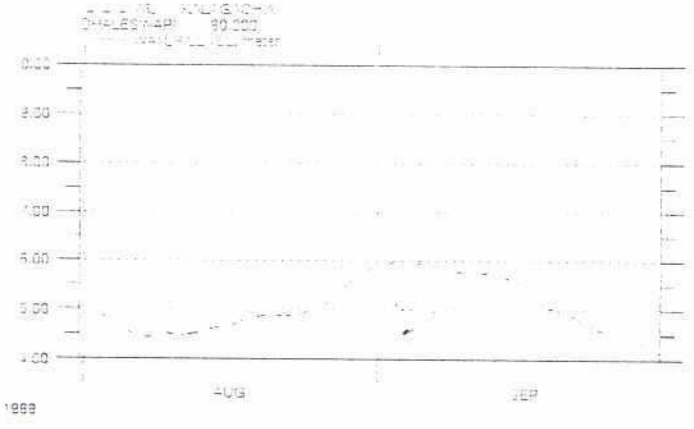
HOURS:MIN	BALU 27.600	TONGI 8.000
	WATER LEVEL, meter	
1988		
8- 1		
12: 0	5.28	5.33
8- 2		
12: 0	5.35	5.55
8- 3		
12: 0	5.39	5.62
8- 4		
12: 0	5.37	5.66
8- 5		
12: 0	5.30	5.63
8- 6		
12: 0	5.15	5.54
8- 7		
12: 0	5.06	5.45
8- 8		
12: 0	5.00	5.39
8- 9		
12: 0	5.01	5.36
8-10		
12: 0	5.05	5.36
8-11		
12: 0	5.03	5.38
8-12		
12: 0	5.11	5.51
8-13		
12: 0	5.08	5.47
8-14		
12: 0	5.12	5.45
8-15		
12: 0	5.16	5.46
8-16		
12: 0	5.19	5.47
8-17		
12: 0	5.21	5.51
8-18		
12: 0	5.31	5.56
8-19		
12: 0	5.35	5.60
8-20		
12: 0	5.39	5.64
8-21		
12: 0	5.39	5.67
8-22		
12: 0	5.46	5.77
8-23		
12: 0	5.49	5.81
8-24		
12: 0	5.48	5.81
8-25		
12: 0	5.54	5.82
8-26		
12: 0	5.57	5.85
8-27		
12: 0	5.91	6.15
8-28		
12: 0	6.20	6.52
8-29		
12: 0	6.32	6.72
8-30		
12: 0	6.46	6.94
8-31		
12: 0	6.39	7.22
9- 1		
12: 0	6.71	7.52
9- 2		
12: 0	6.83	7.80
9- 3		
12: 0	6.85	7.88
9- 4		
12: 0	6.81	7.80
9- 5		
12: 0	6.88	7.83
9- 6		
12: 0	6.75	7.67
9- 7		
12: 0	6.66	7.18
9- 8		
12: 0	6.64	7.11
9- 9		
12: 0	6.64	7.36
9-10		
12: 0	6.63	7.35
9-11		
12: 0	6.53	7.18
9-12		
12: 0	6.53	7.08
9-13		
12: 0	6.42	7.00
9-14		
12: 0	6.32	6.88
9-15		
12: 0	6.25	6.78
9-16		
12: 0	6.17	6.70
9-17		
12: 0	5.91	6.50
9-18		
12: 0	5.76	6.33
9-19		
12: 0	5.69	6.25
9-20		
12: 0	5.60	6.11
9-21		
12: 0	5.45	5.99
9-22		
12: 0	5.36	5.84
9-23		
12: 0	5.23	5.72
9-24		

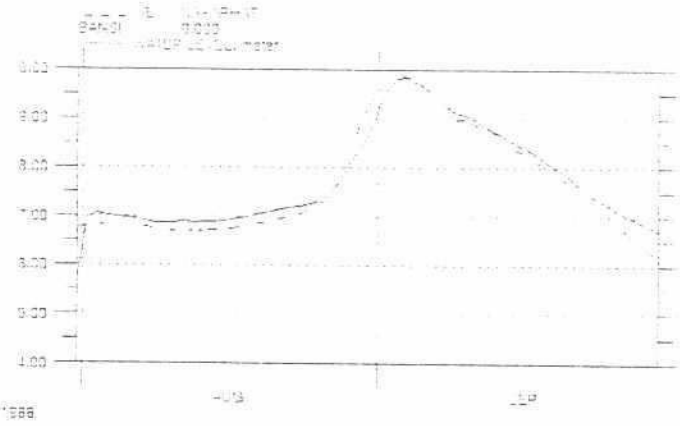
DATA FILE : RIVER1.RDF		BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF		CALCULATED : 11-JUN-1991, 10:43

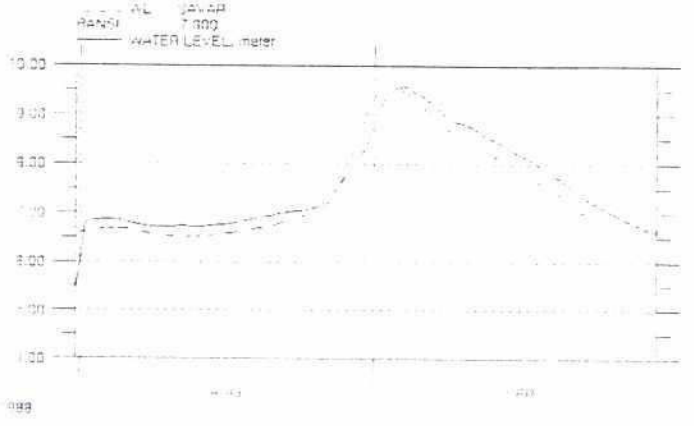
	BALU	TONGI
HOURS:MIN	27.600	8.000
9-25		
12: 0	5.16	5.66
9-26		
12: 0	5.07	5.54
9-27		
12: 0	5.01	5.44
9-28		
12: 0	4.90	5.35
9-29		
12: 0	4.78	5.24
9-30		
12: 0	4.68	5.17

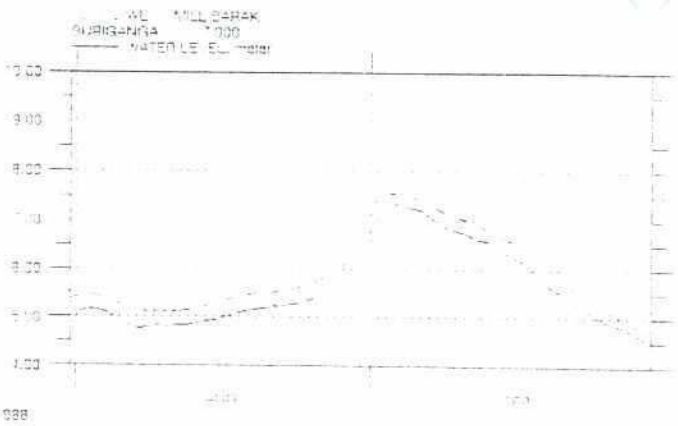


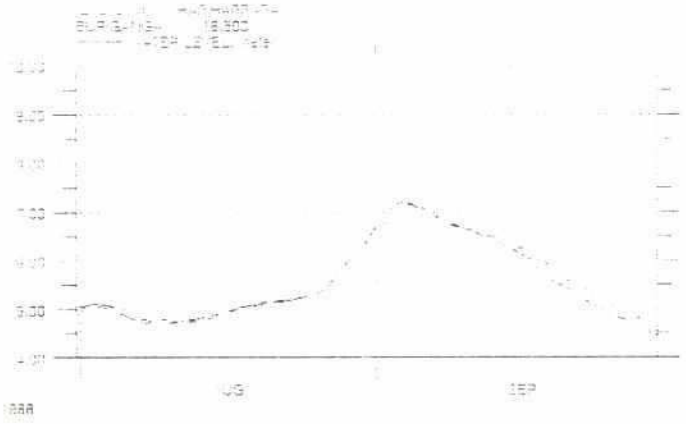


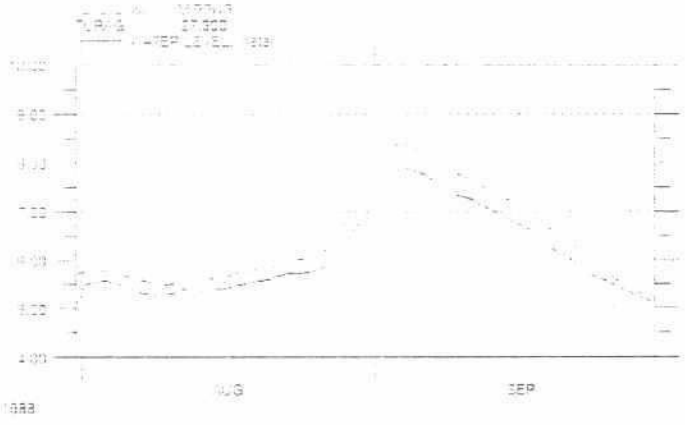


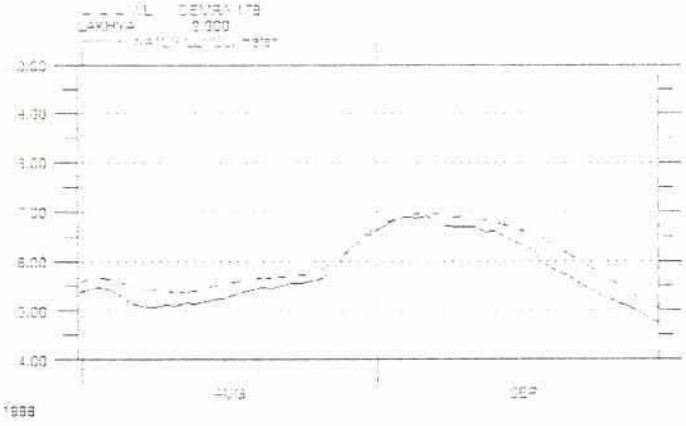


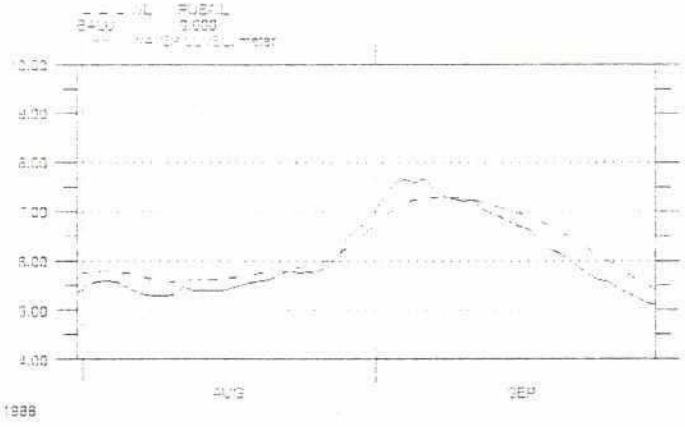


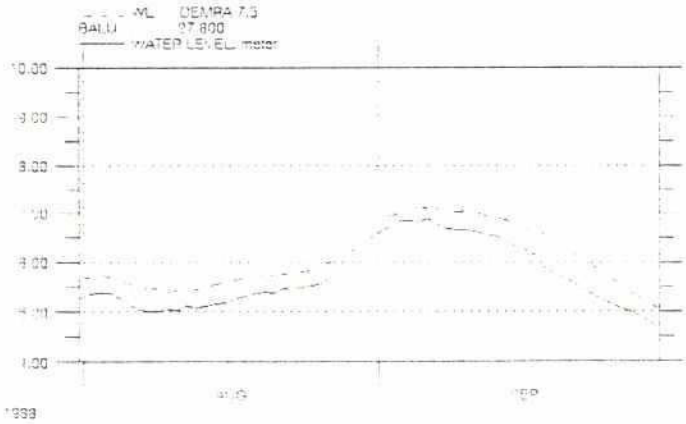


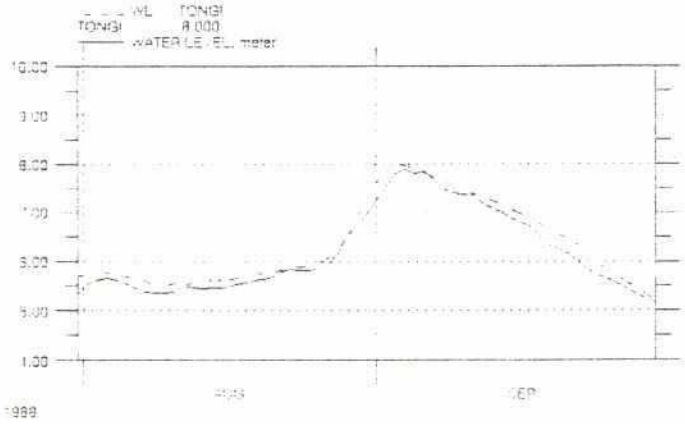












DATA FILE : RIVER1.RDF			BOUNDARY FILE: BOUND1.BSF		
RESULT FILE : RES-B7.RRF			CALCULATED : 11-JUN-1991, 10:43		
HOURS:MIN	DHALESWARI 31.600	DHALESWARI 55.400	DHALESWARI 59.575	BANSI 1.000	BURIGANGA 7.750
1988	DISCHARGE, m3/sec				
8- 1					
12: 0	1010	1616	3525	1212	605.3
8- 2					
12: 0	1806	3649	7639	1180	907.1
8- 3					
12: 0	1956	5853	7873	1269	959.1
8- 1					
12: 0	1919	6006	8093	1249	1022
8- 5					
12: 0	1907	6017	8081	1284	1030
8- 6					
12: 0	1885	6101	8171	1299	1052
8- 7					
12: 0	1832	5883	7842	1288	999.0
8- 8					
12: 0	1716	5779	7719	1267	976.5
8- 9					
12: 0	1655	5581	7186	1235	936.9
8-10					
12: 0	1616	5474	7330	1214	906.3
8-11					
12: 0	1626	5641	7572	1216	955.4
8-12					
12: 0	1660	5777	7811	1208	1054
8-13					
12: 0	1619	5610	7552	1213	989.7
8-14					
12: 0	1618	5567	7527	1212	959.6
8-15					
12: 0	1652	5550	7494	1222	938.1
8-16					
12: 0	1700	5605	7561	1238	933.5
8-17					
12: 0	1742	5648	7630	1239	943.4
8-18					
12: 0	1813	5665	7646	1259	933.7
8-19					
12: 0	1913	5838	7855	1275	959.3
8-20					
12: 0	2023	5961	7994	1288	978.3
8-21					
12: 0	2134	6166	8237	1309	1019
8-22					
12: 0	2227	6334	8501	1325	1095
8-23					
12: 0	2286	6482	8693	1351	1149
8-24					
12: 0	2356	6429	8553	1372	1096
8-25					
12: 0	2434	6454	8568	1405	1075
8-26					
12: 0	2625	6668	881	1452	1088
8-27					
12: 0	6541	7426	9611	1654	1134
8-29					
12: 0	7338	8610	11181	1897	1430
8-30					
12: 0	8191	9534	12112	2133	1546
8-31					
12: 0	9204	10667	13362	2347	1697
9- 1					
12: 0	11712	13205	16072	2505	1925
9- 2					
12: 0	13635	15606	18650	2611	2247
9- 3					
12: 0	14507	16978	20267	2636	2559
9- 4					
12: 0	14675	17105	20763	2629	2689
9- 5					
12: 0	14023	16781	20084	2586	2625
9- 6					
12: 0	13584	16388	19869	2511	2637
9- 7					
12: 0	12938	15638	18939	2420	2516
9- 8					
12: 0	12232	14683	17816	2317	2318
9- 9					
12: 0	11613	11037	17259	2221	2266
9-10					
12: 0	11386	13625	16787	2223	2188
9-11					
12: 0	10966	13339	16577	2173	2206
9-12					
12: 0	10412	12582	15610	2111	2048
9-13					
12: 0	9982	11849	14763	2095	1877
9-14					
12: 0	9738	11780	14721	2017	1888
9-15					
12: 0	9316	11293	14177	1945	1829
9-16					
12: 0	8916	10771	13586	1909	1747
9-17					
12: 0	8623	10530	13375	1851	1737
9-18					
12: 0	8334	10307	13086	1797	1689
9-19					
12: 0	7836	9533	12123	1710	1556
9-20					
12: 0	7493	9152	11726	1677	1524
9-21					
12: 0	7004	8525	10944	1617	1426
9-22					
12: 0	6531	8056	10414	1547	1353
9-23					
12: 0	6149	7485	9734	1474	1245
9-24					
12: 0	5862	7170	9344	1401	1185

DATA FILE : RIVER1.RDF	BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF	CALCULATED : 11-JUN-1991, 10:45

HOURS:MIN	DHALESWARI 31.600	DHALESWARI 55.400	DHALESWARI 59.575	BANSI 1.000	BURIGANGA 7.750
9-25					
12: 0	5578	6881	9040	1330	1174
9-26					
12: 0	5313	6153	8472	1259	1081
9-27					
12: 0	5063	6105	8020	1193	1005
9-28					
12: 0	4907	5983	7855	1120	983.4
9-29					
12: 0	4705	5767	7576	1059	957.3
9-30					
12: 0	4556	5612	7100	1003	948.0

DATA FILE : RIVER1.RDF	BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF	CALCULATED : 11-JUN-1991, 10:45

HOURS:MIN	TURAG 0.910	TURAG 18.000	LAKHYA 0.575	LAKHYA 11.075	BALU 0.950
1988	DISCHARGE, m3/sec				
8- 1					
12: 0	115.0	373.5	1830	1909	38.00
8- 2					
12: 0	113.0	215.5	1835	1981	37.93
8- 3					
12: 0	419.1	267.3	1862	2031	39.83
8- 4					
12: 0	429.2	283.9	1840	2072	40.78
8- 5					
12: 0	420.9	291.3	1814	2049	40.26
8- 6					
12: 0	416.0	289.3	1782	2042	40.14
8- 7					
12: 0	415.8	278.2	1735	1952	38.33
8- 8					
12: 0	401.2	267.4	1729	1933	37.19
8- 9					
12: 0	390.7	254.9	1724	1909	37.03
8-10					
12: 0	385.2	244.1	1698	1866	34.97
8-11					
12: 0	389.5	251.3	1703	1924	34.90
8-12					
12: 0	388.0	268.0	1698	2067	35.15
8-13					
12: 0	391.5	285.4	1711	1947	37.76
8-14					
12: 0	394.6	261.7	1735	1965	36.73
8-15					
12: 0	399.9	263.2	1766	1953	37.03
8-16					
12: 0	409.5	261.5	1787	1960	36.96
8-17					
12: 0	409.5	262.7	1808	1991	36.77
8-18					
12: 0	411.4	263.0	1835	1994	36.81
8-19					
12: 0	419.4	266.8	1851	2022	37.88
8-20					
12: 0	421.3	269.4	1856	2041	37.79
8-21					
12: 0	424.8	275.7	1856	2068	39.95
8-22					
12: 0	437.8	289.8	1862	2173	40.38
8-23					
12: 0	454.0	320.7	1878	2213	40.90
8-24					
12: 0	479.8	323.9	1888	2129	42.27
8-25					
12: 0	479.6	310.3	1901	2124	42.80
8-26					
12: 0	484.6	308.1	1947	2153	43.91
8-27					
12: 0	512.6	300.5	1995	2107	45.10

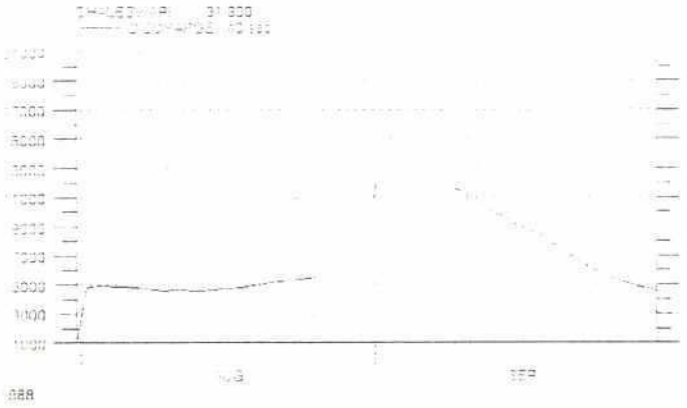
8-28					
12: 0	589.9	313.7	2077	2253	49.06
8-29					
12: 0	662.1	371.6	2176	2603	52.12
8-30					
12: 0	853.8	486.7	2271	2606	58.70
8-31					
12: 0	1003	547.4	2356	2717	63.02
9- 1					
12: 0	1133	592.3	2429	2882	67.71
9- 2					
12: 0	1234	577.9	2482	3034	72.94
9- 3					
12: 0	1335	663.1	2521	3293	77.77
9- 4					
12: 0	1350	729.6	2551	3356	82.08
9- 5					
12: 0	1293	732.7	2569	3298	85.61
9- 6					
12: 0	1239	723.4	2574	3481	85.20
9- 7					
12: 0	1156	717.8	2564	3288	87.55
9- 8					
12: 0	1093	649.0	2540	3159	86.61
9- 9					
12: 0	1022	621.2	2534	3206	86.00
9-10					
12: 0	1006	612.3	2540	3175	87.16
9-11					
12: 0	951.3	606.9	2517	3222	84.99
9-12					
12: 0	914.0	591.2	2495	3032	83.09
9-13					
12: 0	866.9	527.3	2471	2920	82.12
9-14					
12: 0	856.6	532.6	2443	2920	81.49
9-15					
12: 0	803.0	515.9	2402	2861	78.54
9-16					
12: 0	733.0	477.1	2362	2808	76.32
9-17					
12: 0	667.6	450.3	2323	2823	74.25
9-18					
12: 0	644.0	445.7	2290	2731	72.27
9-19					
12: 0	641.7	417.7	2200	2577	67.49
9-20					
12: 0	626.0	413.9	2150	2557	65.15
9-21					
12: 0	597.6	407.2	2083	2418	62.64
9-22					
12: 0	553.1	383.4	2013	2335	58.62
9-23					
12: 0	493.6	343.7	1958	2211	54.50
9-24					
12: 0	481.5	320.9	1883	2157	50.45

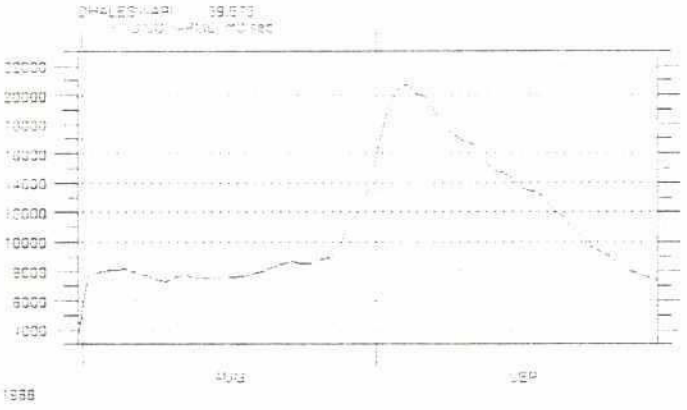
DATA FILE : RIVER1.RDF BOUNDARY FILE: BOUND1.BSF
RESULT FILE : RES-B7.RRF CALCULATED : 11-JUN-1991, 10:45

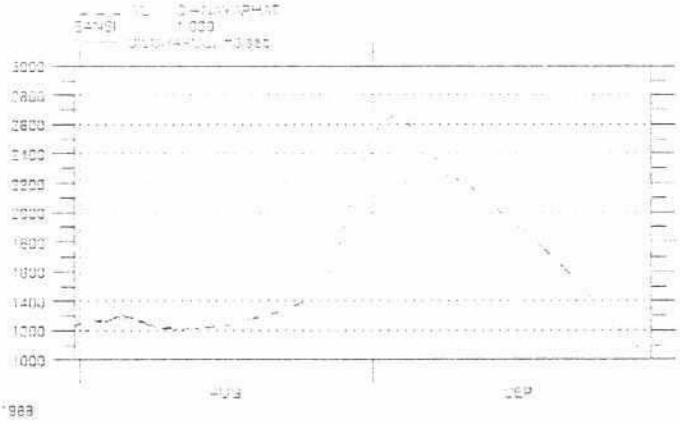
HOURS:MIN	TURAG 0.940	TURAG 18.000	LAKHYA 0.575	LAKHYA 11.075	BALU 0.950
9-25					
12: 0	441.8	306.0	1819	2117	17.06
9-26					
12: 0	417.6	290.8	1766	2015	44.64
9-27					
12: 0	392.0	260.0	1698	1911	10.30
9-28					
12: 0	376.5	247.8	1636	1856	37.36
9-29					
12: 0	356.8	239.1	1579	1797	31.38
9-30					
12: 0	341.2	229.6	1523	1770	30.18

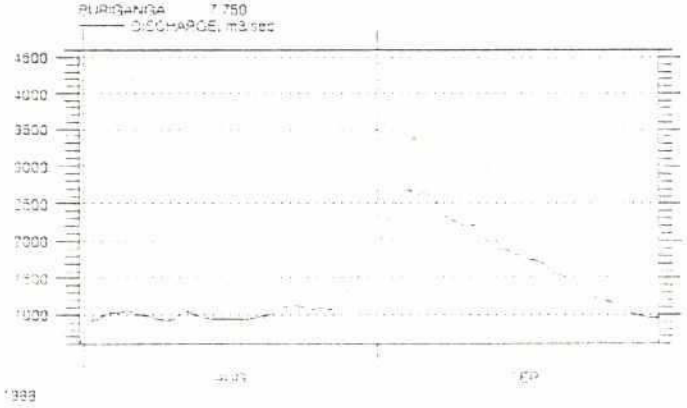
DATA FILE : RIVER1.RDF		BOUNDARY FILE: BOUND1.BSF	
RESULT FILE : RES-B7.RRF		CALCULATED : 11-JUN-1991, 10:45	
HOURS:MIN	BALU 18.350	TONGI 8.150	KARNATALI 5.600
1988	DISCHARGE, m3/sec		
8- 1			
12: 0	79.46	41.46	231.7
8- 2			
12: 0	155.9	131.2	713.1
8- 3			
12: 0	176.5	138.7	714.4
8- 4			
12: 0	205.0	111.5	707.2
8- 5			
12: 0	211.6	148.1	700.6
8- 6			
12: 0	223.7	151.4	700.7
8- 7			
12: 0	205.8	155.2	697.2
8- 8			
12: 0	196.1	151.3	687.7
8- 9			
12: 0	184.4	143.5	677.7
8-10			
12: 0	173.9	141.4	673.3
8-11			
12: 0	196.0	138.1	672.6
8-12			
12: 0	260.3	111.0	671.0
8-13			
12: 0	215.1	142.1	665.7
8-14			
12: 0	202.1	133.1	669.2
8-15			
12: 0	181.9	139.0	673.6
8-16			
12: 0	176.5	142.0	680.5
8-17			
12: 0	180.2	139.2	685.2
8-18			
12: 0	170.1	140.1	691.9
8-19			
12: 0	175.9	142.7	705.9
8-20			
12: 0	183.6	144.1	718.7
8-21			
12: 0	199.1	148.2	731.7
8-22			
12: 0	243.8	133.8	740.6
8-23			
12: 0	263.1	142.2	744.6
8-24			
12: 0	228.1	164.3	755.8
8-25			
12: 0	215.7	164.0	769.3
8-26			
12: 0	210.1	169.6	794.1
8-27			
12: 0	196.3	171.9	832.1
8-28			
12: 0	209.6	192.7	919.7
8-29			
12: 0	333.0	198.1	1021
8-30			
12: 0	346.3	292.8	1131
8-31			
12: 0	388.2	358.0	1260
9- 1			
12: 0	478.5	431.8	1573
9- 2			
12: 0	592.1	532.6	1811
9- 3			
12: 0	723.1	601.7	1901
9- 4			
12: 0	760.0	629.1	1906
9- 5			
12: 0	718.0	612.1	1820
9- 6			
12: 0	773.9	542.0	1755
9- 7			
12: 0	684.1	540.3	1676
9- 8			
12: 0	605.5	500.1	1599
9- 9			
12: 0	605.0	441.5	1519
9-10			
12: 0	579.3	424.7	1495
9-11			
12: 0	596.9	392.6	1437
9-12			
12: 0	514.0	393.6	1376
9-13			
12: 0	452.4	363.9	1333
9-14			
12: 0	433.7	331.3	1299
9-15			
12: 0	435.0	334.4	1248
9-16			
12: 0	414.4	302.4	1203
9-17			
12: 0	423.4	269.6	1166
9-18			
12: 0	391.7	274.1	1132
9-19			
12: 0	353.2	260.6	1076
9-20			
12: 0	356.9	241.0	1029
9-21			
12: 0	320.6	236.2	965.6
9-22			
12: 0	300.4	219.9	903.1
9-23			
12: 0	270.1	198.8	855.2
9-24			
12: 0	256.0	189.1	819.9

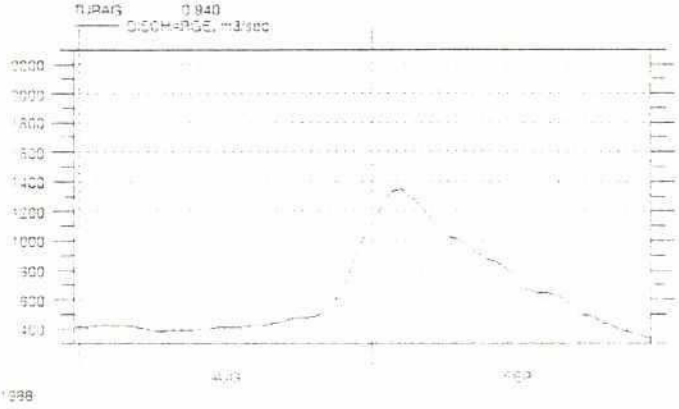
DATA FILE : RIVER1.RDF		BOUNDARY FILE: BOUND1.BSF	
RESULT FILE : RES-B7.RRF		CALCULATED : 11-JUN-1991, 10:45	
	BALU	TONGI	KARNATALI
HOURS:MIN	18.350	8.150	5.600
9-25			
12: 0	271.9	168.9	782.2
9-26			
12: 0	233.2	168.3	749.7
9-27			
12: 0	209.8	159.3	721.5
9-28			
12: 0	201.9	153.5	701.1
9-29			
12: 0	199.6	146.7	675.8
9-30			
12: 0	206.6	136.2	656.6



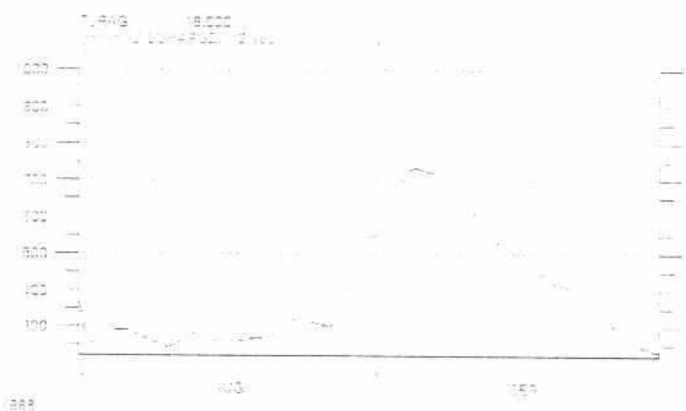


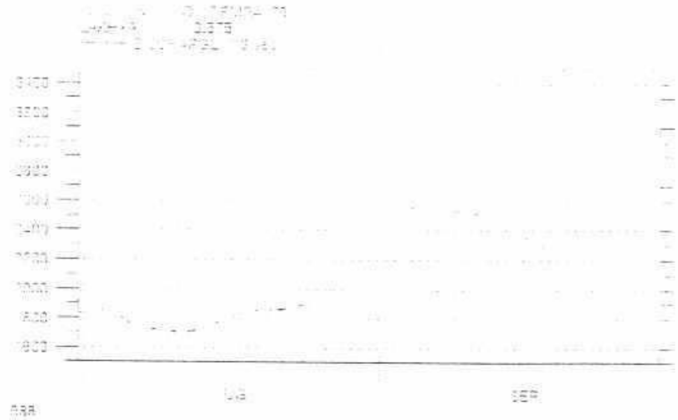


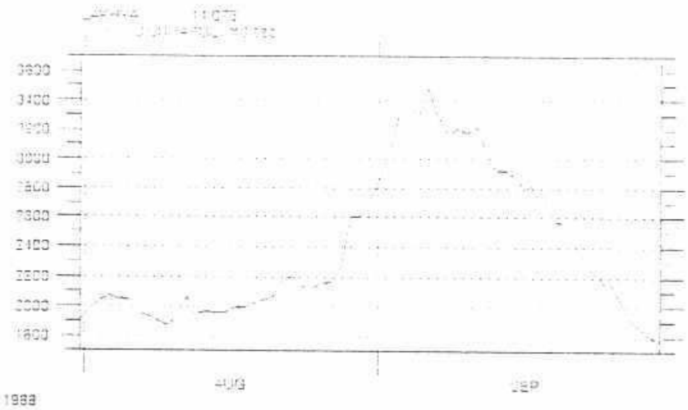


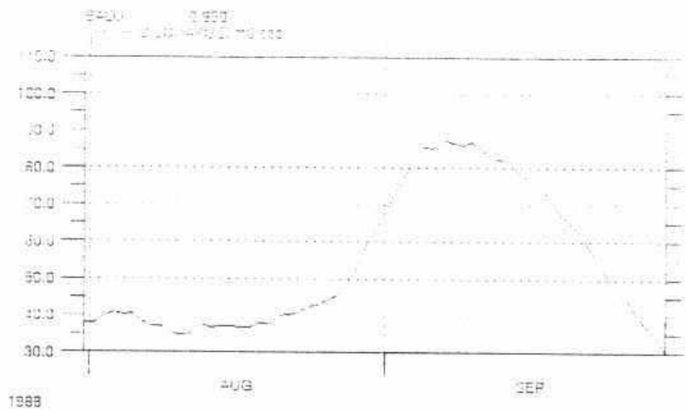


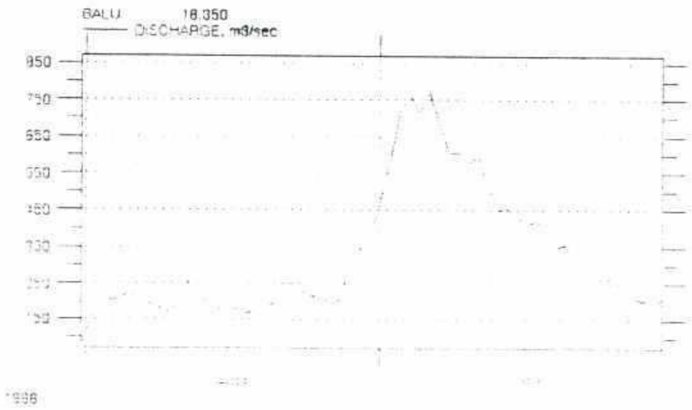
22B

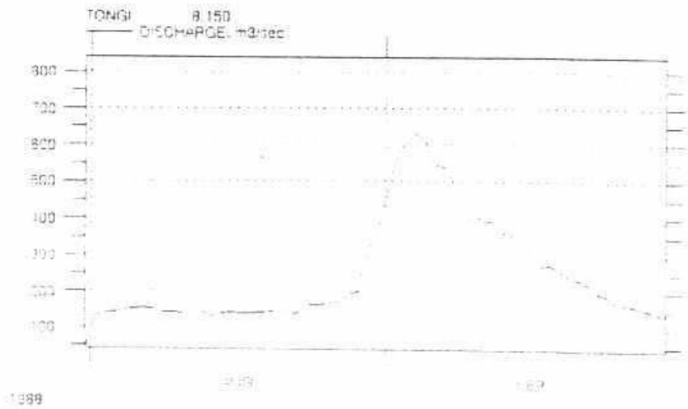


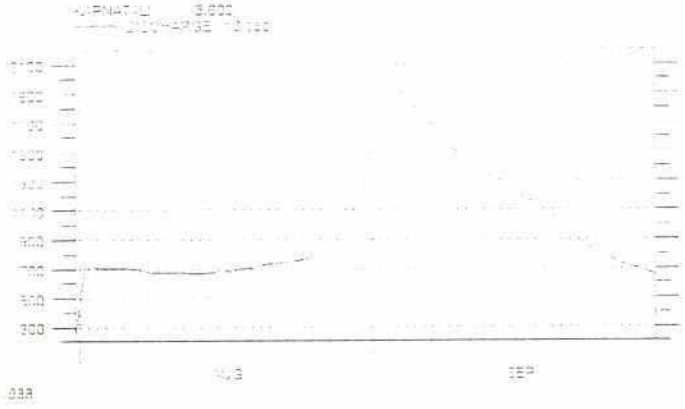



3600
3400
3000
2600
2400
2200
2000
1800
AUG
SEP
1988


100.0
80.0
70.0
60.0
50.0
40.0
30.0
AUG
SEP
1988

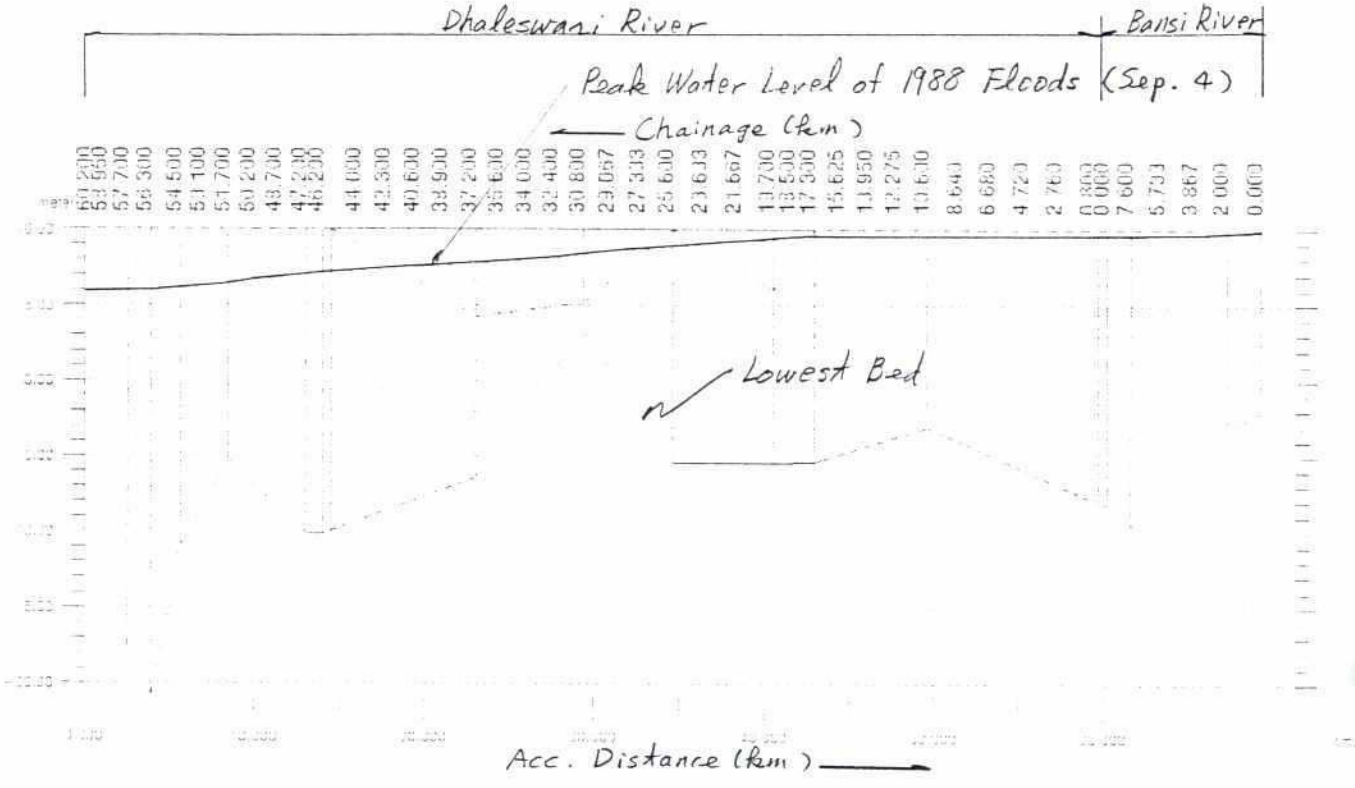

BALU 18.350
DISCHARGE, m3/sec
850
750
650
550
450
350
250
150
1988


TONGI 8.150
DISCHARGE, m3/sec
800
700
600
500
400
300
200
100
1988

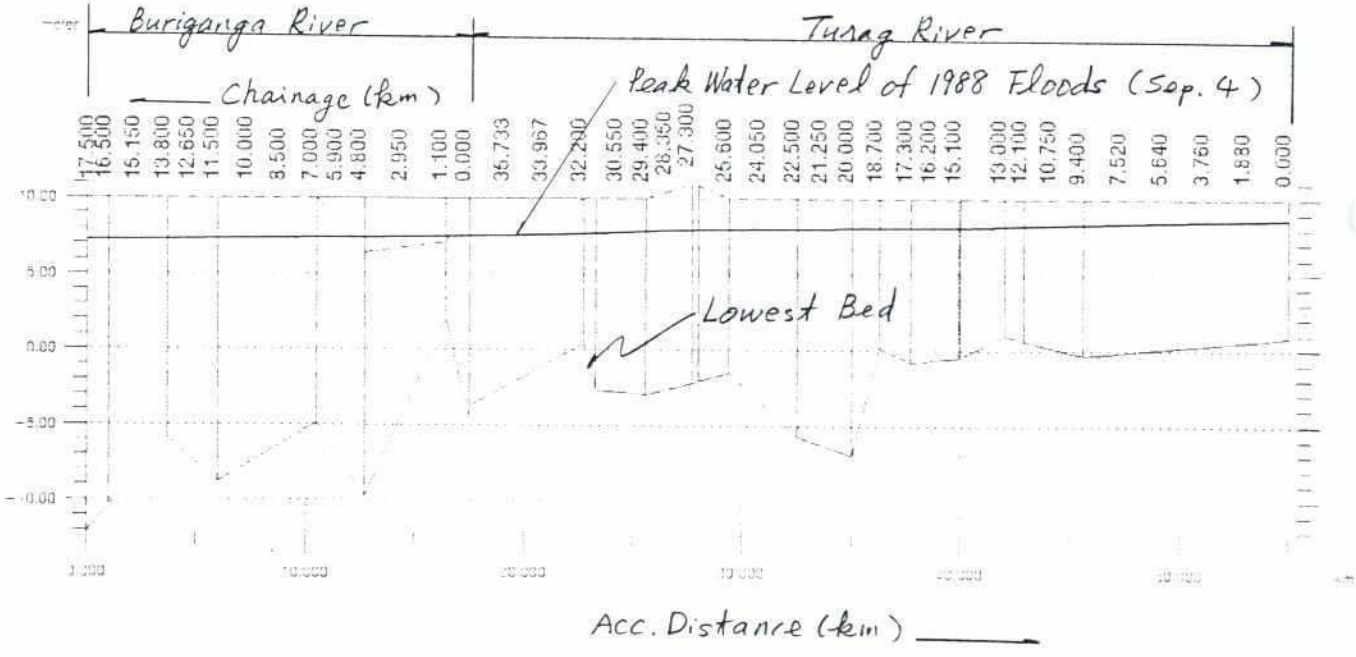


229

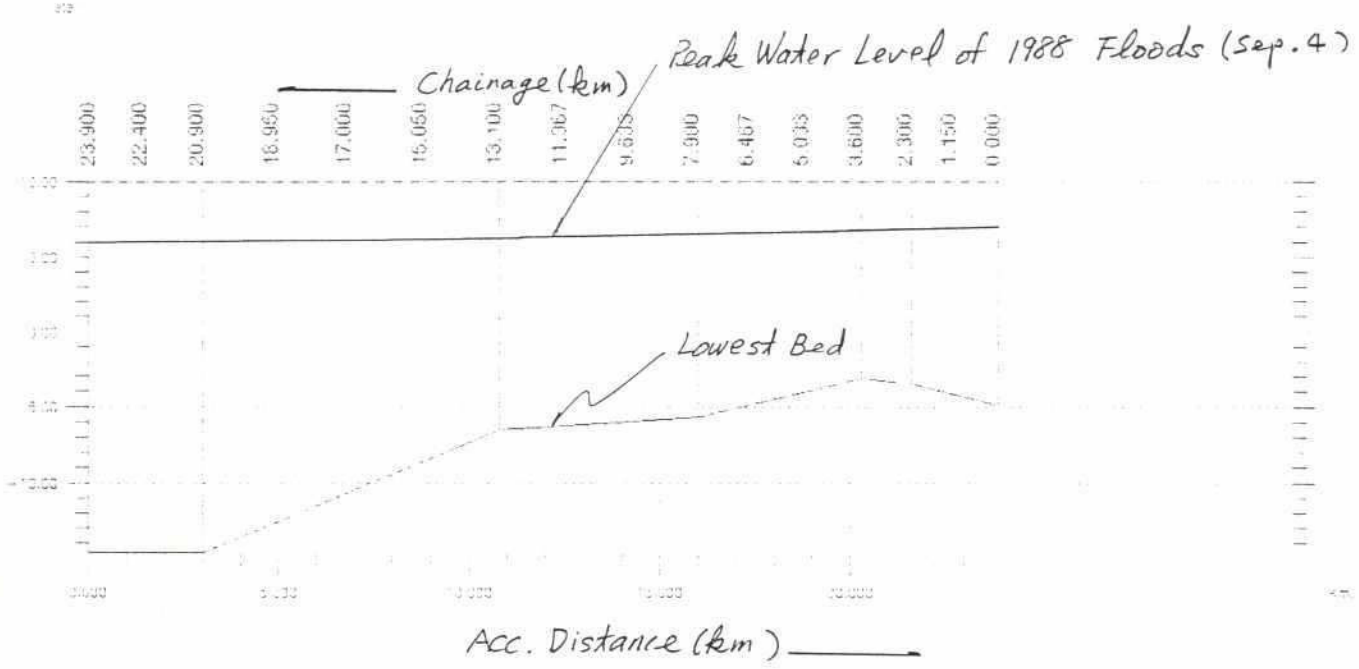
Dhaleswari River and Bansi River



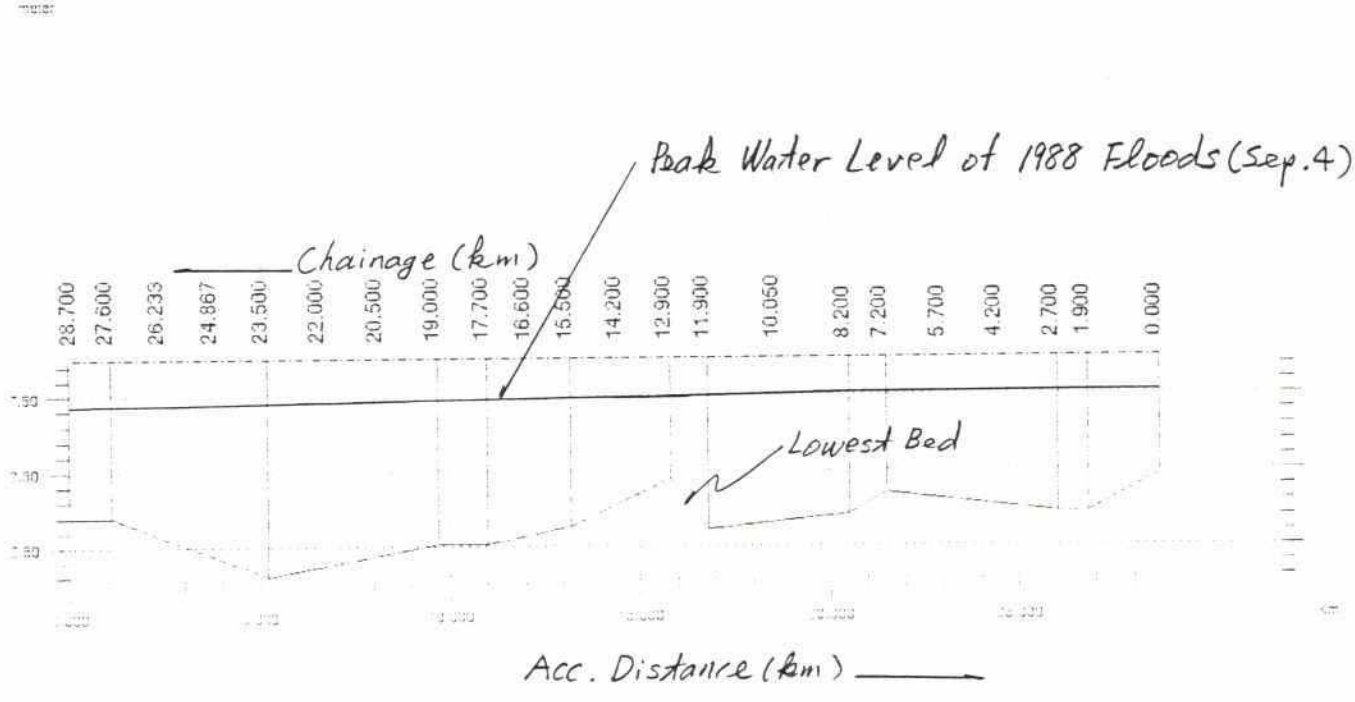
Buriganga River and Turag River



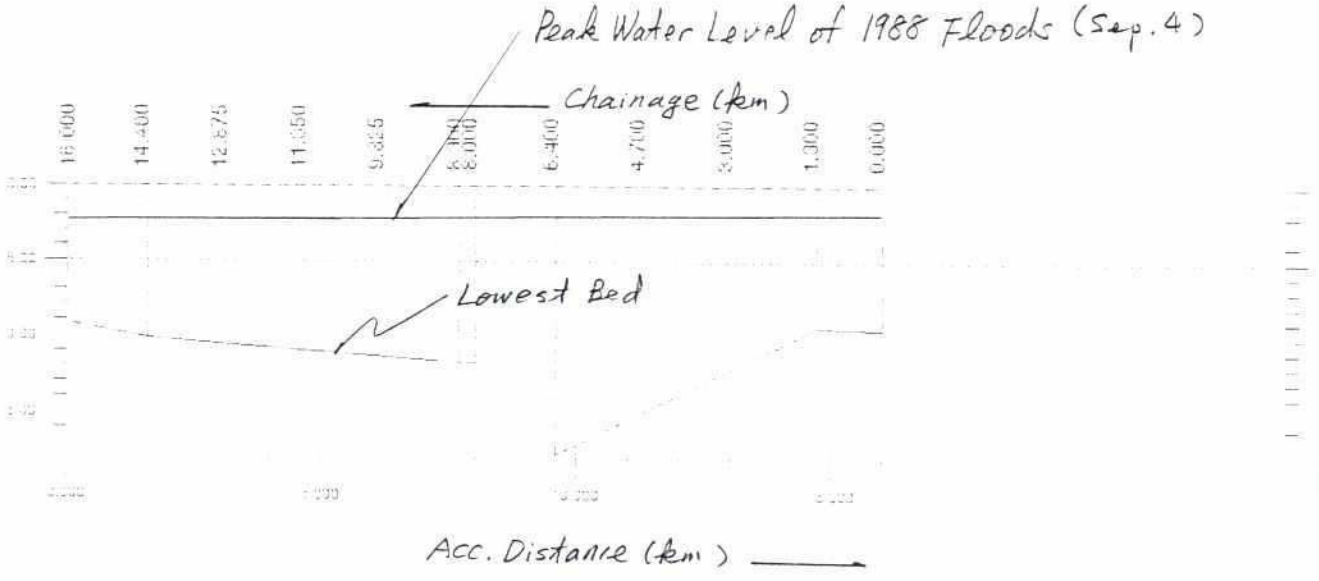
Lakhya River



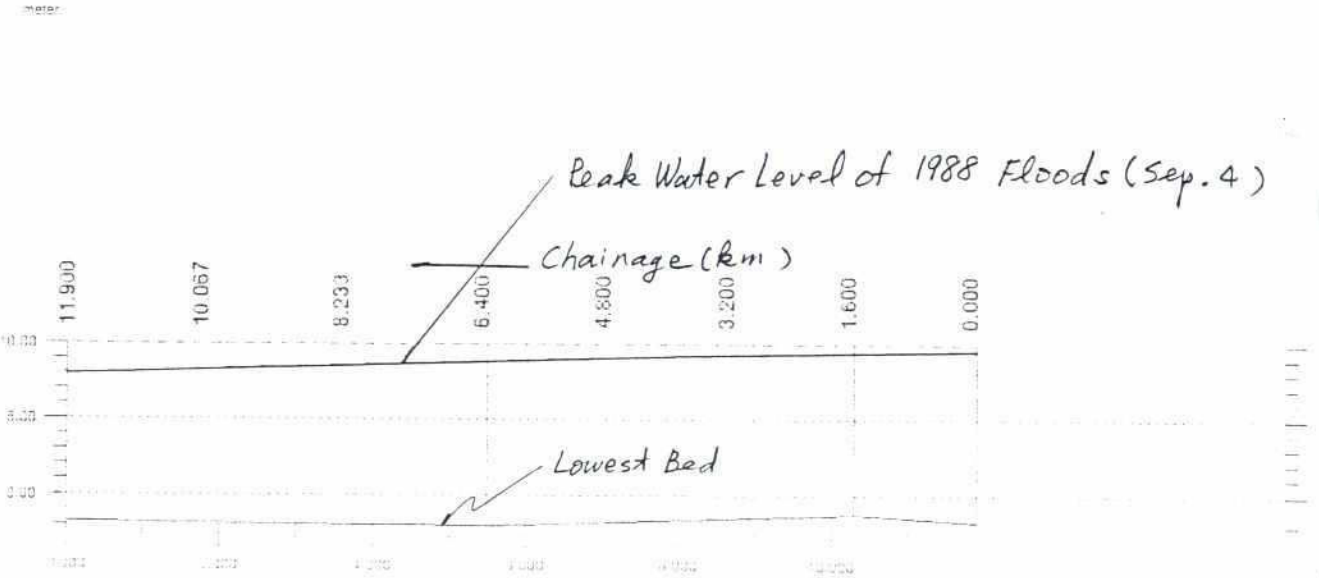
Balu River



Torgi Khal



Kasnatali River



GRID POINT RESULT SUMMARY

VELOCITY.

	Location	Minimum m/sec	Maximum m/sec
DHALESWARI	0.000	0.000	0.422
DHALESWARI	0.250	0.000	0.422
DHALESWARI	0.500	0.000	0.422
DHALESWARI	0.650	0.000	0.421
DHALESWARI	0.800	0.000	0.420
DHALESWARI	0.800	0.000	0.192
DHALESWARI	1.780	0.000	0.198
DHALESWARI	2.760	0.000	0.204
DHALESWARI	3.710	0.000	0.210
DHALESWARI	4.720	0.000	0.217
DHALESWARI	5.700	0.000	0.225
DHALESWARI	6.680	0.000	0.234
DHALESWARI	7.660	0.000	0.244
DHALESWARI	8.640	0.000	0.256
DHALESWARI	9.620	0.000	0.269
DHALESWARI	10.600	0.000	0.285
DHALESWARI	11.438	0.000	0.283
DHALESWARI	12.275	0.000	0.273
DHALESWARI	13.113	0.000	0.263
DHALESWARI	13.950	0.000	0.258
DHALESWARI	14.788	0.000	0.250
DHALESWARI	15.625	0.000	0.242
DHALESWARI	16.463	0.000	0.234
DHALESWARI	17.300	0.000	0.226
DHALESWARI	17.900	0.000	0.197
DHALESWARI	18.500	0.000	0.711
DHALESWARI	19.100	0.000	1.158
DHALESWARI	19.700	0.000	1.013
DHALESWARI	20.683	0.000	1.011
DHALESWARI	21.667	0.000	1.049
DHALESWARI	22.650	0.000	1.109
DHALESWARI	23.633	0.000	1.177
DHALESWARI	24.617	0.000	1.253
DHALESWARI	25.600	0.000	1.339
DHALESWARI	26.467	0.000	1.300
DHALESWARI	27.333	0.000	1.264
DHALESWARI	28.200	0.000	1.244
DHALESWARI	29.067	0.000	1.226
DHALESWARI	29.933	0.000	1.233
DHALESWARI	30.800	0.000	1.334
DHALESWARI	31.600	0.000	1.293
DHALESWARI	32.100	0.000	1.255
DHALESWARI	33.200	0.000	1.195
DHALESWARI	34.000	0.000	1.170
DHALESWARI	34.800	0.000	1.152
DHALESWARI	35.600	0.000	1.135
DHALESWARI	36.400	0.000	1.117
DHALESWARI	37.200	0.000	1.100
DHALESWARI	38.050	0.000	1.136
DHALESWARI	38.900	0.000	1.174
DHALESWARI	39.750	0.000	1.213
DHALESWARI	40.600	0.000	1.254
DHALESWARI	41.450	0.000	1.297
DHALESWARI	42.300	0.000	1.344
DHALESWARI	43.150	0.000	1.393
DHALESWARI	44.000	0.000	1.444
DHALESWARI	44.850	0.000	1.498
DHALESWARI	45.700	0.000	1.556
DHALESWARI	45.700	0.000	1.841
DHALESWARI	45.950	0.000	1.861
DHALESWARI	46.200	0.000	1.887
DHALESWARI	46.700	0.000	1.934
DHALESWARI	47.200	0.000	1.983
DHALESWARI	47.950	0.000	2.028
DHALESWARI	48.700	0.000	2.067
DHALESWARI	49.150	0.000	2.109
DHALESWARI	50.200	0.000	2.137
DHALESWARI	50.950	0.000	2.212
DHALESWARI	51.700	0.000	2.270
DHALESWARI	52.100	0.000	2.150
DHALESWARI	53.100	0.000	2.042
DHALESWARI	53.300	0.000	1.936
DHALESWARI	54.500	0.000	1.840
DHALESWARI	55.100	0.000	1.953
DHALESWARI	56.300	0.000	2.091
DHALESWARI	57.000	0.000	1.960
DHALESWARI	57.700	0.000	1.482
DHALESWARI	57.700	0.000	2.000
DHALESWARI	58.325	0.000	1.833
DHALESWARI	58.950	0.000	1.687
DHALESWARI	59.575	0.000	1.555
DHALESWARI	60.200	0.000	1.442
BANSI	0.000	0.000	1.214
BANSI	1.000	0.000	1.193
BANSI	2.000	0.000	1.173
BANSI	2.933	0.000	1.091
BANSI	3.867	0.000	1.020
BANSI	4.800	0.000	0.955
BANSI	5.733	0.000	0.897
BANSI	6.667	0.000	0.843
BANSI	7.600	0.000	0.798
BANSI	8.300	0.000	0.553
BANSI	9.000	0.000	0.422
BURIGANGA	0.000	0.000	0.712
BURIGANGA	0.550	0.000	0.675
BURIGANGA	1.100	0.000	0.646
BURIGANGA	2.025	0.000	0.688
BURIGANGA	2.950	0.000	0.730
BURIGANGA	3.875	0.000	0.813
BURIGANGA	4.800	0.000	0.918
BURIGANGA	5.350	0.000	0.793
BURIGANGA	5.900	0.000	0.697
BURIGANGA	6.450	0.000	0.618
BURIGANGA	7.000	0.000	0.556
BURIGANGA	7.750	0.000	0.575
BURIGANGA	8.500	0.000	0.596
BURIGANGA	9.250	0.000	0.618
BURIGANGA	10.000	0.000	0.641
BURIGANGA	10.750	0.000	0.665
BURIGANGA	11.500	0.000	0.691

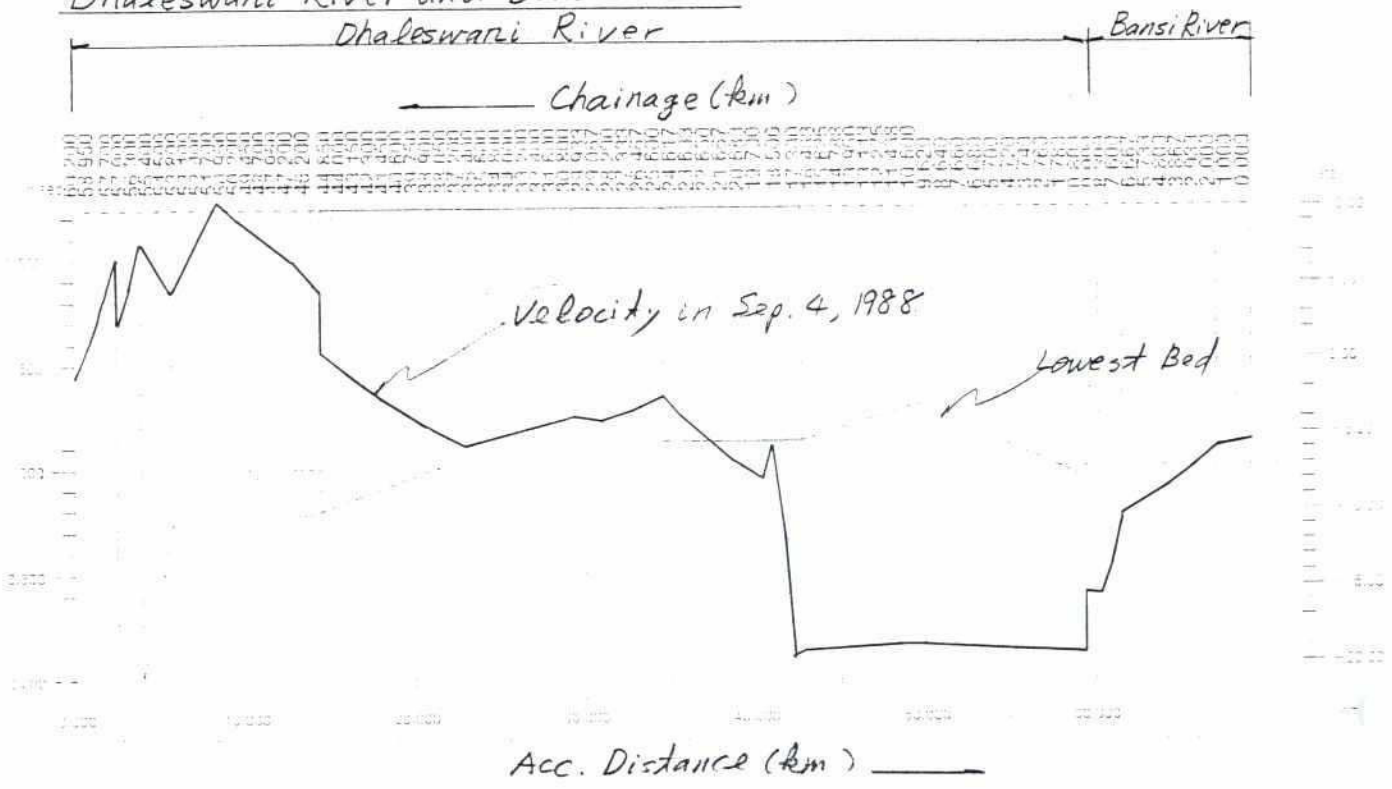
	Location	Minimum m/sec	Maximum m/sec
BURIGANGA	12.075	0.000	0.699
BURIGANGA	12.650	0.000	0.708
BURIGANGA	13.225	0.000	0.711
BURIGANGA	13.800	0.000	0.721
BURIGANGA	11.475	0.000	0.636
BURIGANGA	15.150	0.000	0.569
BURIGANGA	15.825	0.000	0.513
BURIGANGA	16.500	0.000	0.175
BURIGANGA	17.000	0.000	0.272
BURIGANGA	17.500	0.000	0.192
TURAG	0.000	0.000	0.487
TURAG	0.940	0.000	0.192
TURAG	1.880	0.000	0.197
TURAG	2.820	0.000	0.502
TURAG	3.760	0.000	0.508
TURAG	4.700	0.000	0.515
TURAG	5.640	0.000	0.525
TURAG	6.580	0.000	0.535
TURAG	7.520	0.000	0.544
TURAG	8.460	0.000	0.552
TURAG	9.100	0.000	0.561
TURAG	10.075	0.000	0.547
TURAG	10.750	0.000	0.534
TURAG	11.425	0.000	0.524
TURAG	12.100	0.000	0.516
TURAG	12.550	0.000	0.592
TURAG	13.000	0.000	0.701
TURAG	14.000	0.000	0.766
TURAG	15.000	0.000	0.845
TURAG	15.000	0.000	0.162
TURAG	15.050	0.000	0.168
TURAG	15.100	0.000	0.474
TURAG	15.650	0.000	0.414
TURAG	16.200	0.000	0.369
TURAG	16.750	0.000	0.361
TURAG	17.300	0.000	0.355
TURAG	18.000	0.000	0.281
TURAG	18.700	0.000	0.233
TURAG	19.350	0.000	0.203
TURAG	20.000	0.000	0.180
TURAG	20.625	0.000	0.218
TURAG	21.250	0.000	0.273
TURAG	21.875	0.000	0.320
TURAG	22.500	0.000	0.386
TURAG	23.275	0.000	0.436
TURAG	24.050	0.000	0.499
TURAG	24.825	0.000	0.565
TURAG	25.600	0.000	0.683
TURAG	26.300	0.000	0.610
TURAG	27.000	0.000	0.551
TURAG	27.000	0.000	1.719
TURAG	27.150	0.000	1.741
TURAG	27.300	0.000	1.762
TURAG	27.825	0.000	1.131
TURAG	28.350	0.000	1.209

	Location	Minimum m/sec	Maximum m/sec
TURAG	28.875	0.000	1.130
TURAG	29.400	0.000	1.199
TURAG	29.977	0.000	0.987
TURAG	30.550	0.000	0.838
TURAG	31.125	0.000	0.712
TURAG	31.700	0.000	0.635
TURAG	31.950	0.000	0.603
TURAG	32.200	0.000	0.574
TURAG	33.083	0.000	0.545
TURAG	33.967	0.000	0.619
TURAG	34.850	0.000	0.642
TURAG	35.733	0.000	0.666
TURAG	36.617	0.000	0.688
TURAG	37.500	0.000	0.712
LAKHYA	0.000	0.000	0.906
LAKHYA	0.575	0.000	0.929
LAKHYA	1.150	0.000	0.950
LAKHYA	1.725	0.000	0.962
LAKHYA	2.300	0.000	0.972
LAKHYA	2.950	0.000	0.984
LAKHYA	3.600	0.000	0.996
LAKHYA	3.600	0.000	1.273
LAKHYA	4.317	0.000	1.219
LAKHYA	5.033	0.000	1.169
LAKHYA	5.750	0.000	1.122
LAKHYA	6.467	0.000	1.078
LAKHYA	7.183	0.000	1.037
LAKHYA	7.900	0.000	1.006
LAKHYA	8.767	0.000	1.031
LAKHYA	9.633	0.000	1.018
LAKHYA	10.500	0.000	1.066
LAKHYA	11.367	0.000	1.086
LAKHYA	12.233	0.000	1.108
LAKHYA	13.100	0.000	1.133
LAKHYA	14.075	0.000	1.078
LAKHYA	15.050	0.000	1.023
LAKHYA	16.025	0.000	0.980
LAKHYA	17.000	0.000	0.939
LAKHYA	17.975	0.000	0.907
LAKHYA	18.950	0.000	0.878
LAKHYA	19.925	0.000	0.852
LAKHYA	20.900	0.000	0.828
LAKHYA	21.650	0.000	0.829
LAKHYA	22.400	0.000	0.831
LAKHYA	23.150	0.000	0.833
LAKHYA	23.900	0.000	0.834
BALU	0.000	0.000	0.158
BALU	0.950	0.000	0.126
BALU	1.900	0.000	0.108
BALU	2.300	0.000	0.096
BALU	2.700	0.000	0.086
BALU	3.450	0.000	0.090
BALU	4.200	0.000	0.094
BALU	4.950	0.000	0.098
BALU	5.700	0.000	0.102

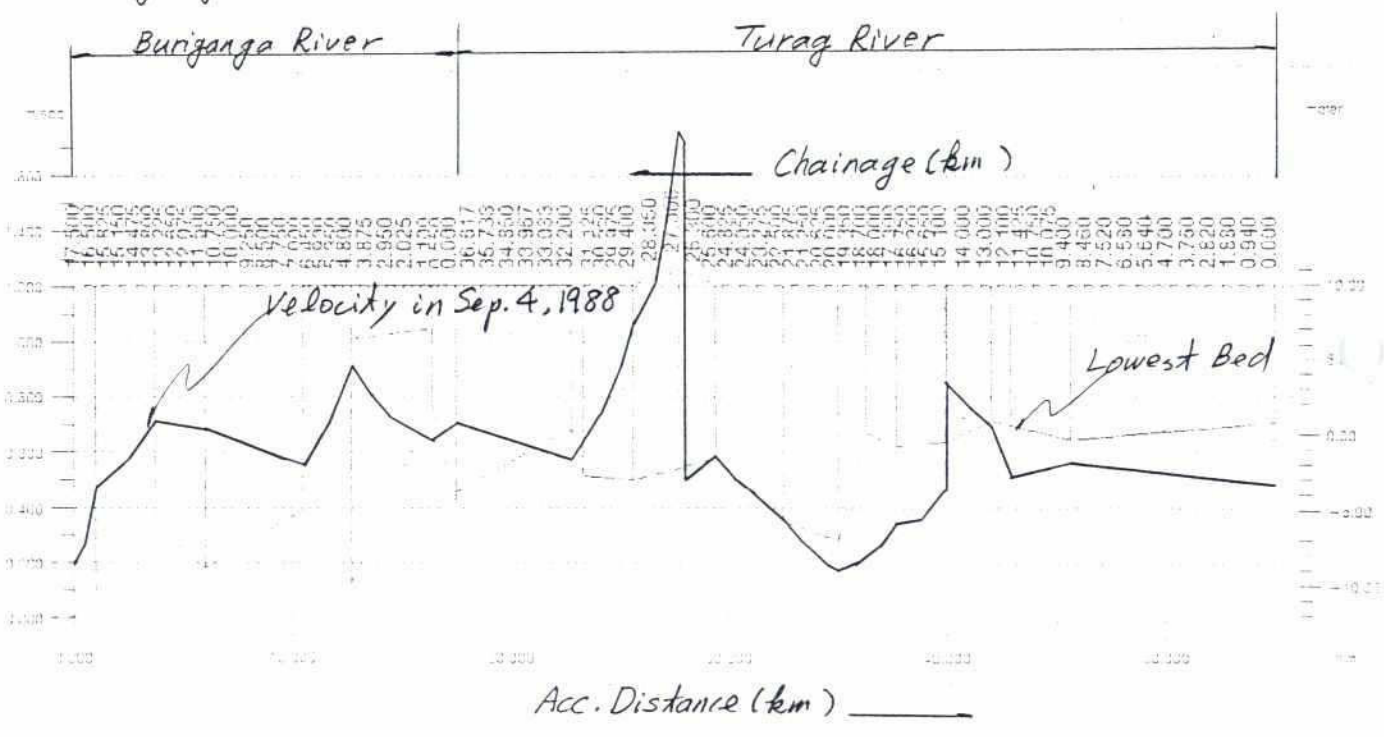
	Location	Minimun m/sec	Maximum m/sec
BALU	6.150	0.000	0.108
BALU	7.200	0.000	0.111
BALU	7.200	0.000	0.729
BALU	7.700	0.000	0.646
BALU	8.200	0.000	0.578
BALU	9.125	0.000	0.619
BALU	10.050	0.000	0.667
BALU	10.975	0.000	0.727
BALU	11.900	0.000	0.802
BALU	12.100	0.000	0.727
BALU	12.900	0.000	0.662
BALU	13.550	0.000	0.639
BALU	14.200	0.000	0.617
BALU	14.850	0.000	0.628
BALU	15.500	0.000	0.643
BALU	16.050	0.000	0.576
BALU	16.600	0.000	0.517
BALU	17.150	0.000	0.166
BALU	17.700	0.000	0.427
BALU	18.350	0.000	0.198
BALU	19.000	0.000	0.585
BALU	19.750	0.000	0.599
BALU	20.500	0.000	0.615
BALU	21.250	0.000	0.642
BALU	22.000	0.000	0.672
BALU	22.750	0.000	0.733
BALU	23.500	0.000	0.834
BALU	24.183	0.000	0.820
BALU	24.867	0.000	0.773
BALU	25.550	0.000	0.728
BALU	26.233	0.000	0.688
BALU	26.917	0.000	0.652
BALU	27.600	0.000	0.619
BALU	28.150	0.000	0.623
BALU	28.700	0.000	0.627
TONGI	0.000	0.000	0.878
TONGI	0.650	0.000	0.678
TONGI	1.300	0.000	0.558
TONGI	2.150	0.000	0.543
TONGI	3.000	0.000	0.528
TONGI	3.850	0.000	0.519
TONGI	4.700	0.000	0.509
TONGI	5.550	0.000	0.511
TONGI	6.400	0.000	0.513
TONGI	7.200	0.000	0.677
TONGI	8.000	0.000	0.996
TONGI	8.150	0.000	0.986
TONGI	8.300	0.000	0.976
TONGI	9.063	0.000	0.870
TONGI	9.825	0.000	0.783
TONGI	10.588	0.000	0.697
TONGI	11.350	0.000	0.627
TONGI	12.113	0.000	0.568
TONGI	12.875	0.000	0.520
TONGI	13.638	0.000	0.478
TONGI	14.400	0.000	0.442
TONGI	15.200	0.000	0.438
TONGI	16.000	0.000	0.518
KARNATALI	0.000	0.000	1.388
KARNATALI	0.800	0.000	1.197
KARNATALI	1.600	0.000	1.051
KARNATALI	2.400	0.000	1.089
KARNATALI	3.200	0.000	1.102
KARNATALI	4.000	0.000	1.179
KARNATALI	4.800	0.000	1.230
KARNATALI	5.600	0.000	1.287
KARNATALI	6.400	0.000	1.350
KARNATALI	7.317	0.000	1.108
KARNATALI	8.233	0.000	1.170
KARNATALI	9.150	0.000	1.527
KARNATALI	10.067	0.000	1.587
KARNATALI	10.983	0.000	1.616
KARNATALI	11.900	0.000	1.646

220

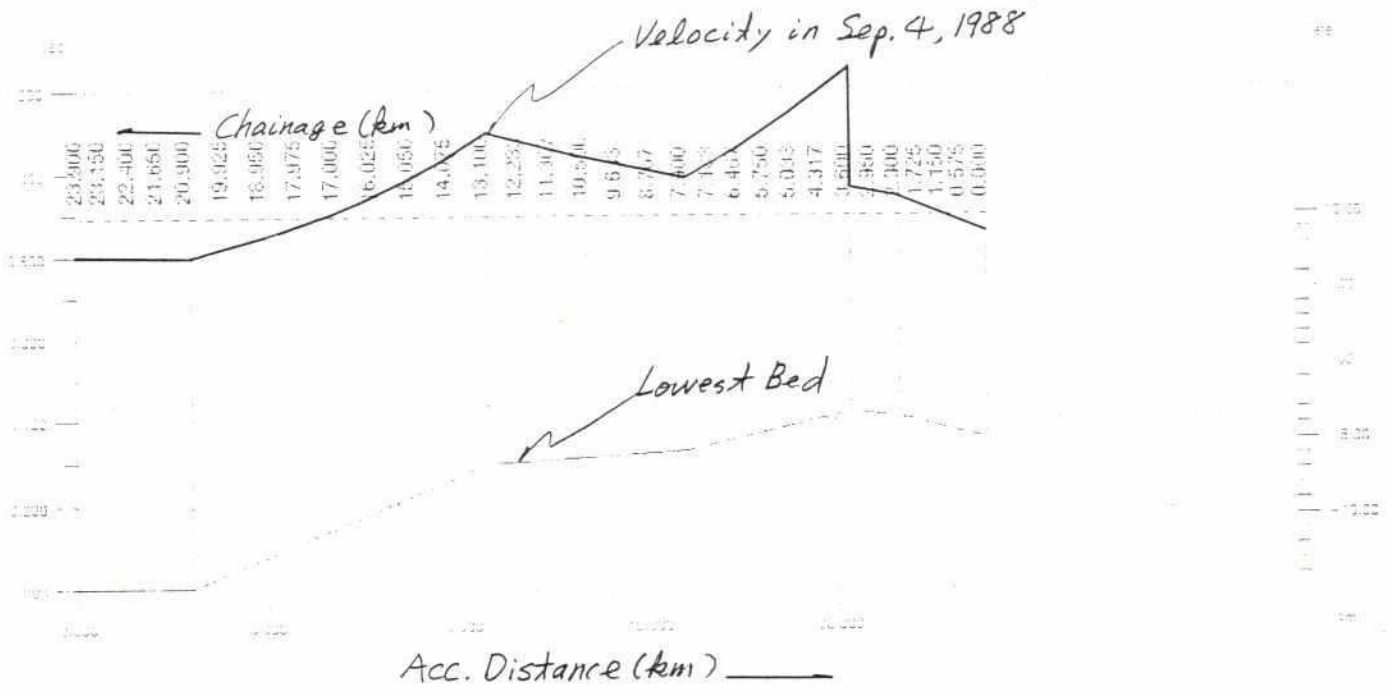
Dhaleswari River and Bansi River



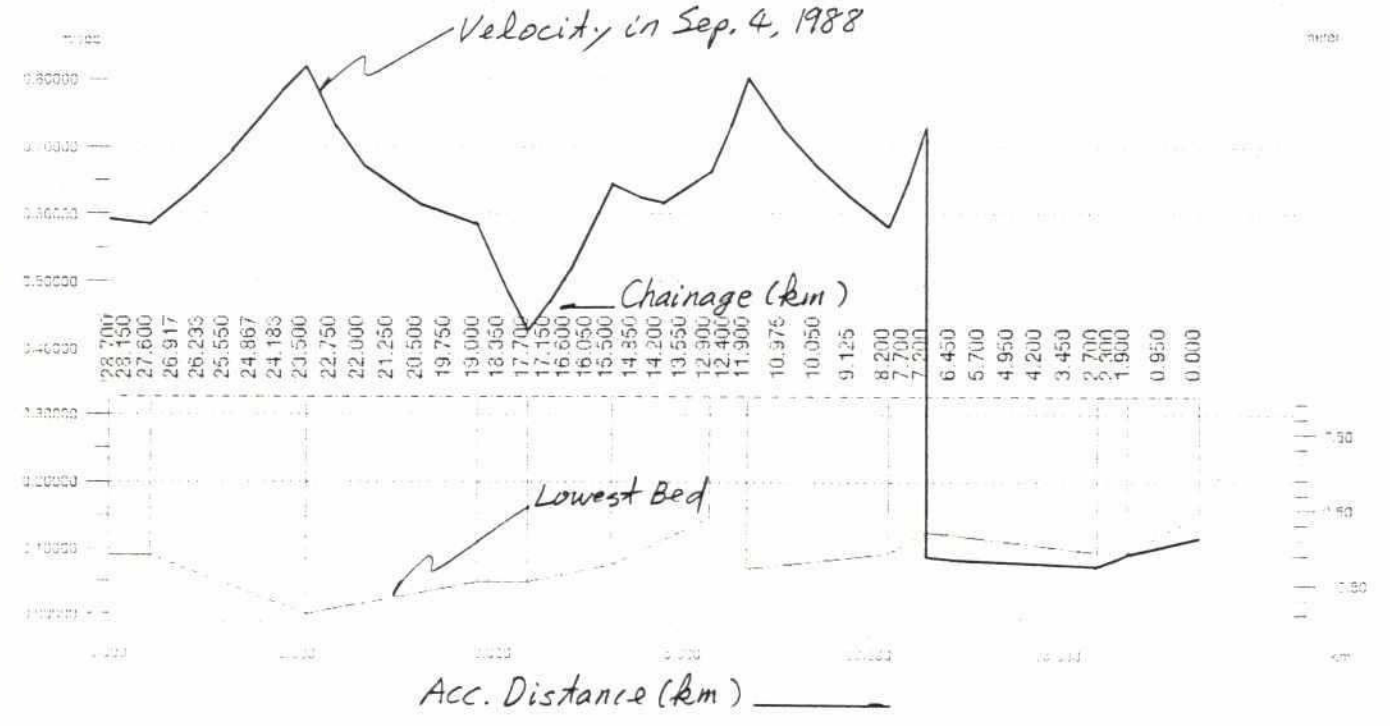
Buriganga River and Turag River



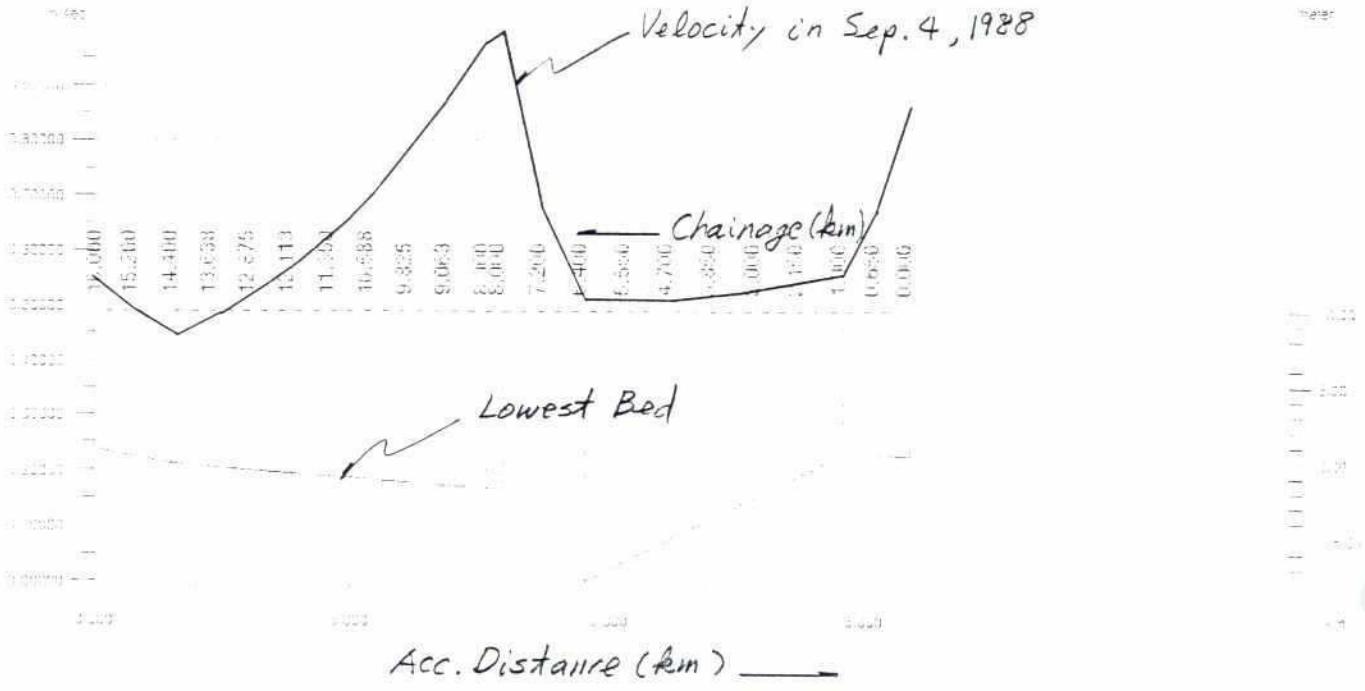
Lakhya River



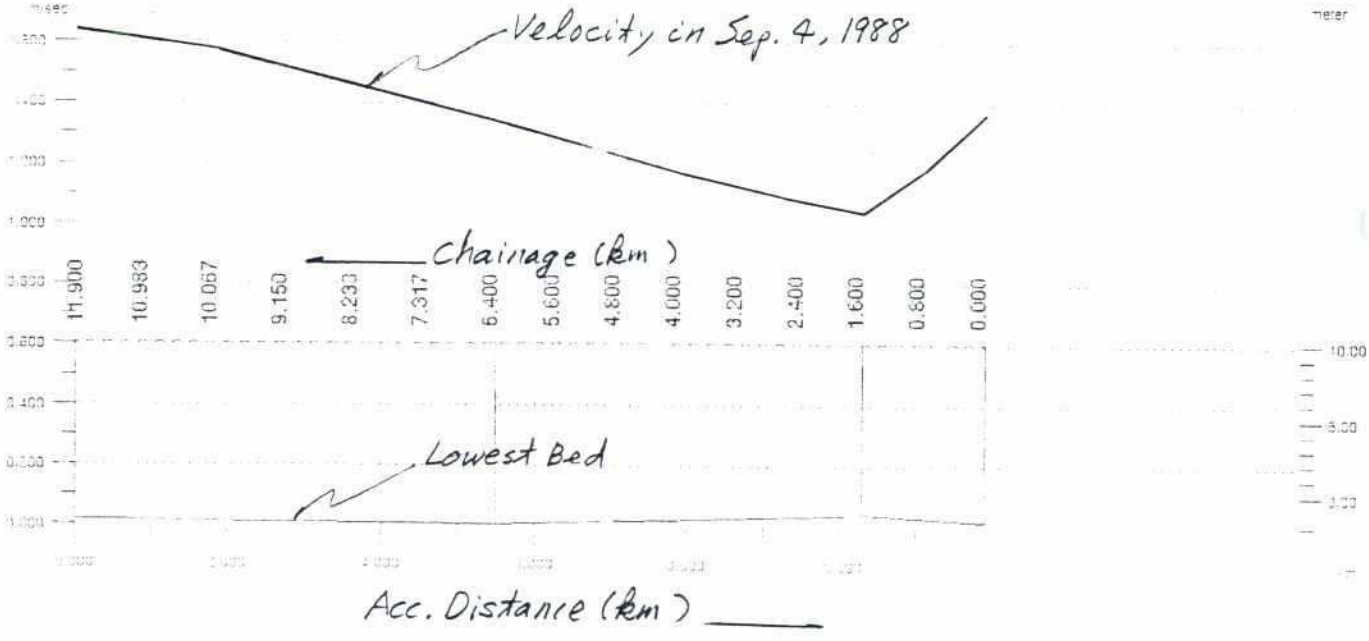
Balu River



Tongi Khal



Karnatali River



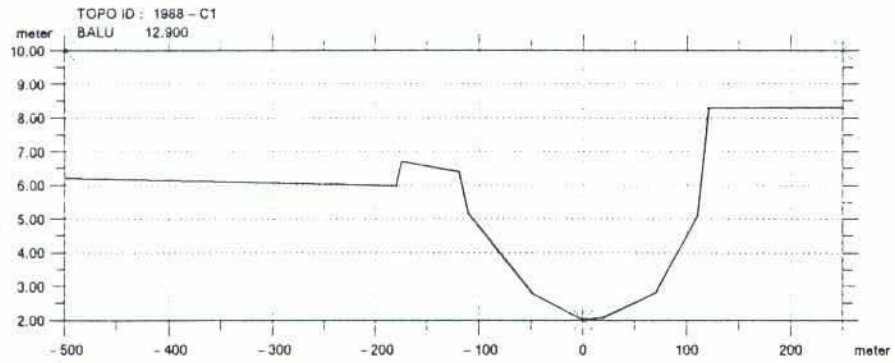
9. Hydraulic Simulatin of 1988 Floods for With Flood Mitigation Plan

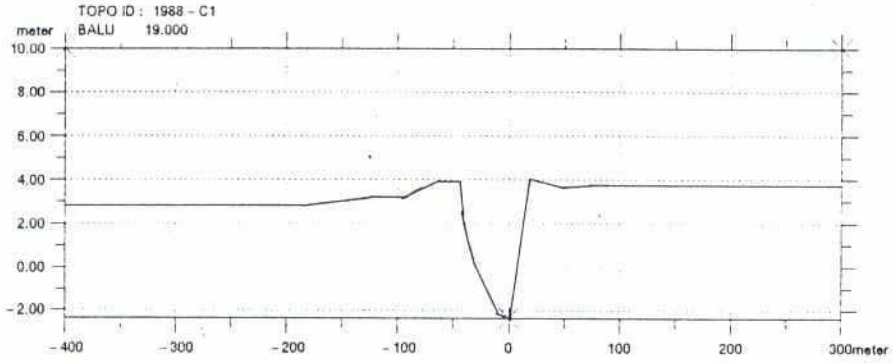
9.1 With Polder Dike/Wall and Without River Dredging

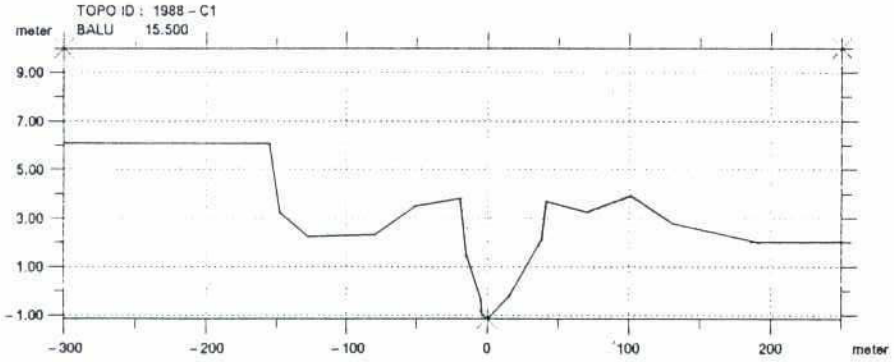
PROCESS OF HYDRAULIC SIMULATION OF 1988 FLOODS FOR WITH FLOOD MITIGATION PROJECTS (WITH POLDER DIKE/WALL AND WITHOUT RIVER DREDGING)

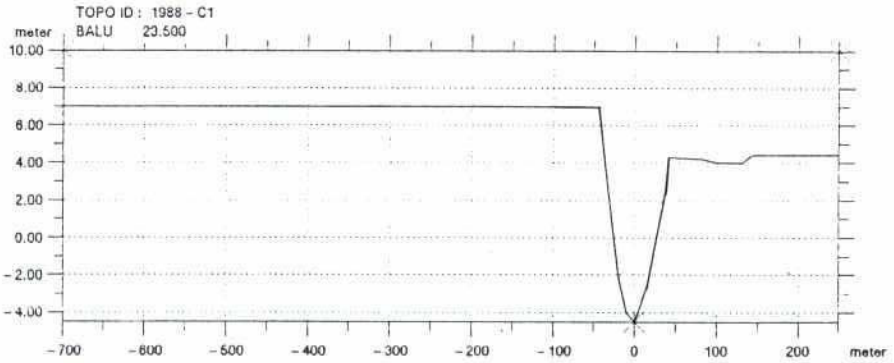
(1)	River System :	Same as the condition of Without Flood Mitigation Project
(2)	River Cross Section:	Taking into account the locations of polder dike/wall, input the revised river cross sections.
(3)	Boundary Condition :	Boundary discharges, water level at Kalagachia(BWDB Sta.71) and rainfall ruoffs are same as the condition of Without Flood Mitigation Project.
(4)	Manning's Rough-: ness Coefficient	Same as the condition of Without Flood Mitigation Project

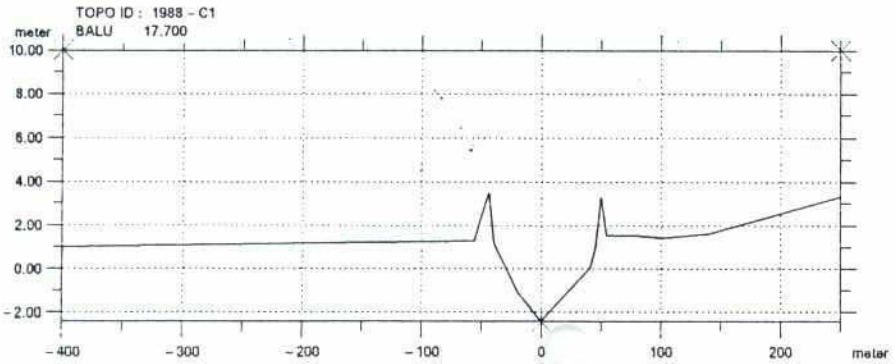
1). Revised River Cross Sections

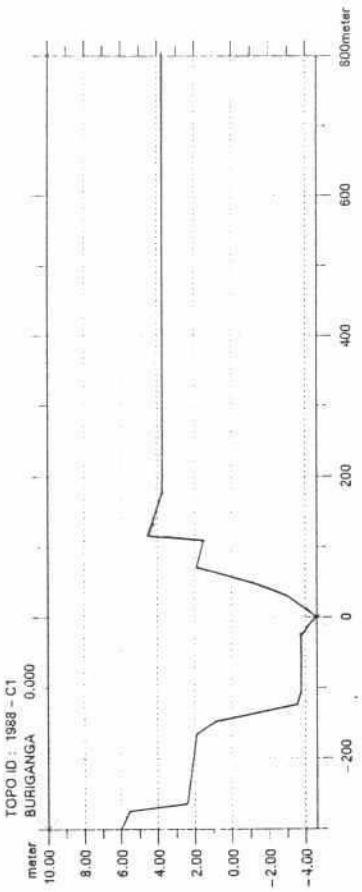


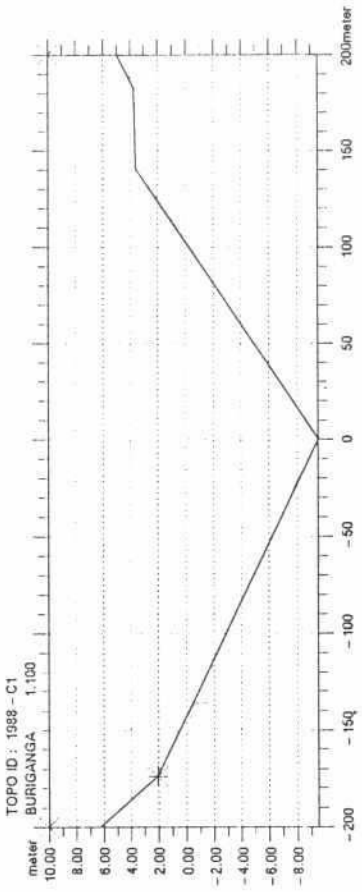


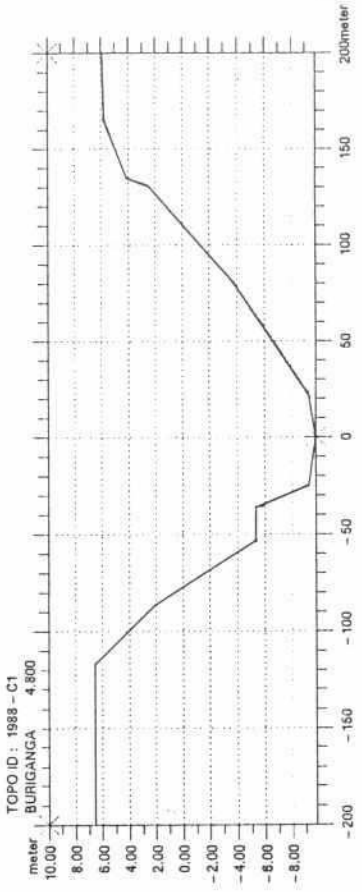


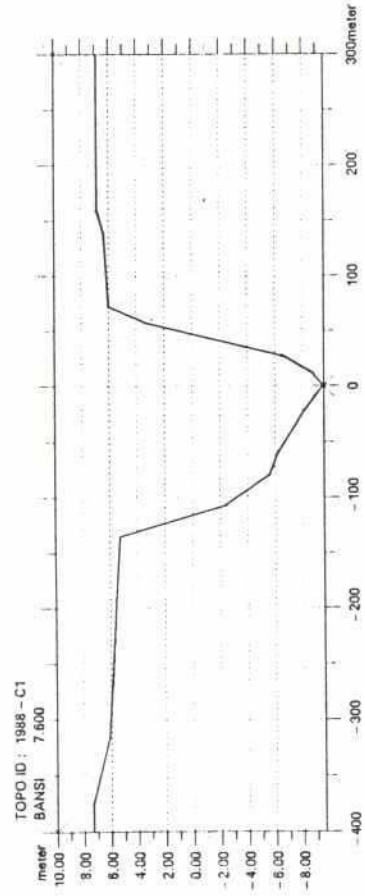


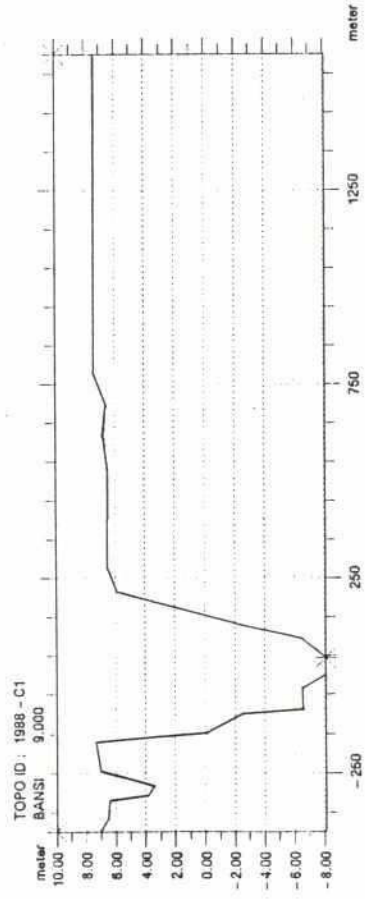


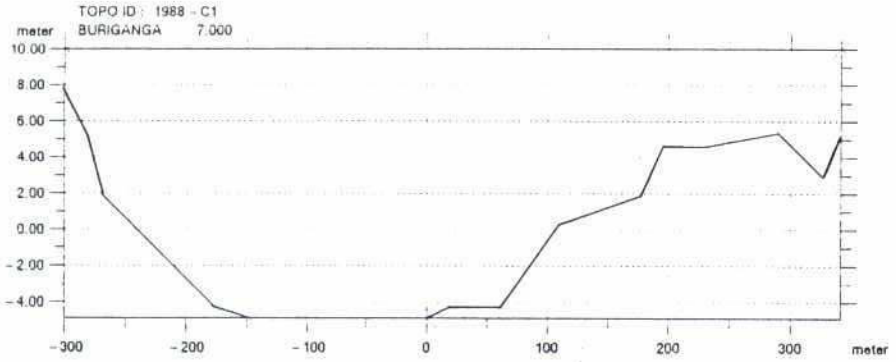

TOPO ID : 1988 - C1
BURIGANGA 0.000
meter
800meter

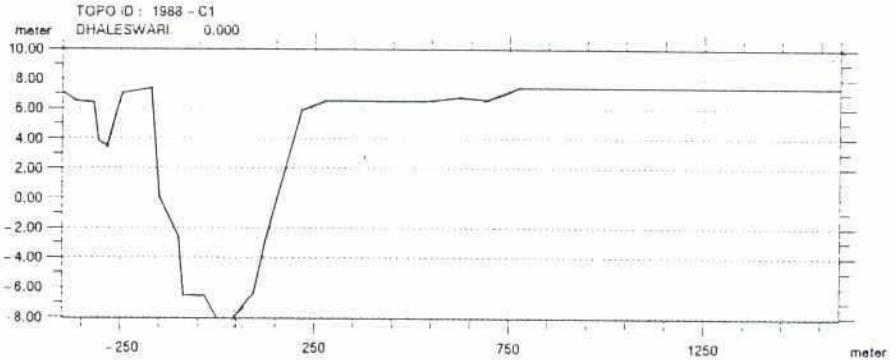

TOPO ID : 1988 - C1
BURIGANGA 1.100
meter
200meter

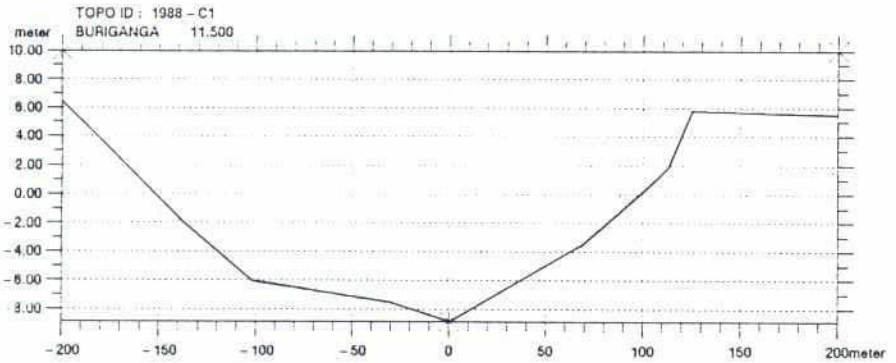

TOPO ID : 1988 - C1
BURIGANGA 4.800
meter
200meter

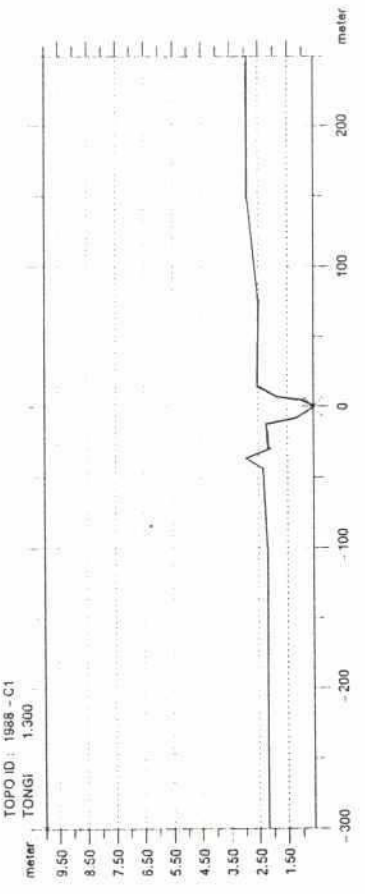

TOPO ID : 1988 - C1
BANSI 7.600
meter
300meter

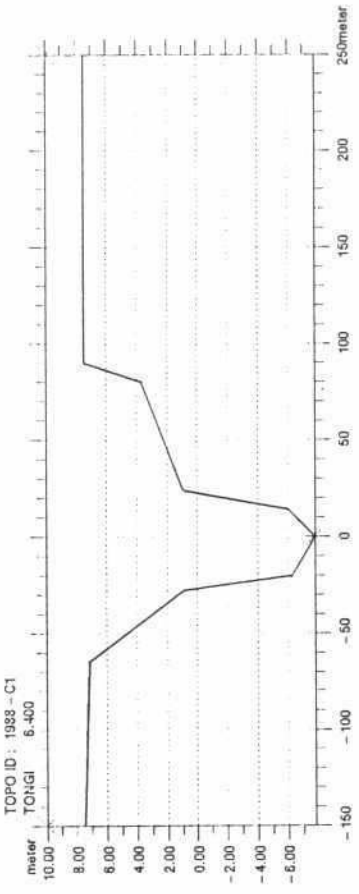

TOPO ID : 1988 - C1
BANSI 9.000
meter
meter

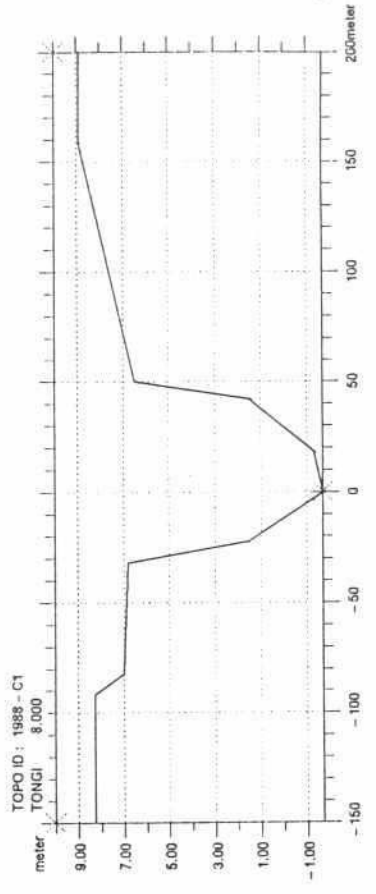

TOPO ID : 1988 - C1
meter BURIGANGA 7.000
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-300
-200
-100
0
100
200
300
meter

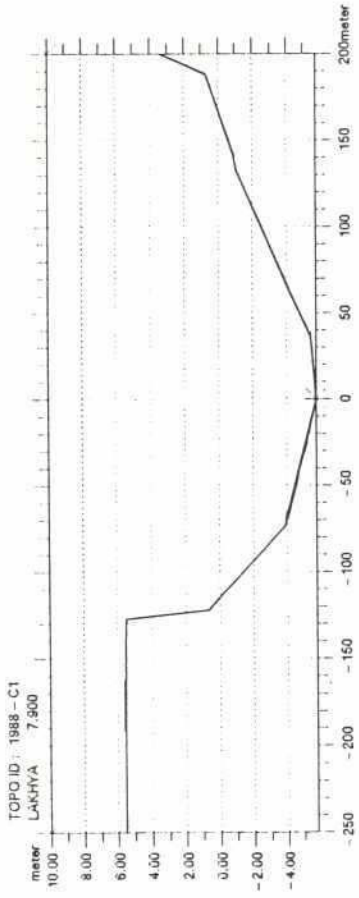

TOPO ID : 1988 - C1
meter DHALESWARI 0.000
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-250
250
750
1250
meter

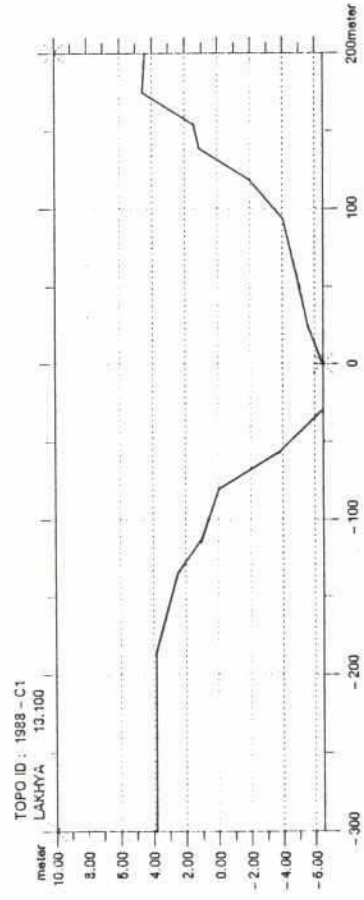

TOPO ID : 1988 - C1
meter BURIGANGA 11.500
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-200
-150
-100
-50
0
50
100
150
200meter


TOPO ID : 1988 - C1
TONGI 1.300
meter
meter

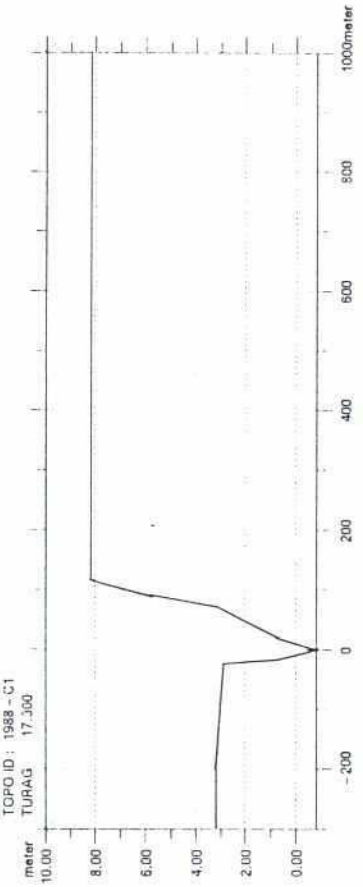

TOPO ID : 1988 - C1
TONGI 8.400
meter
250meter

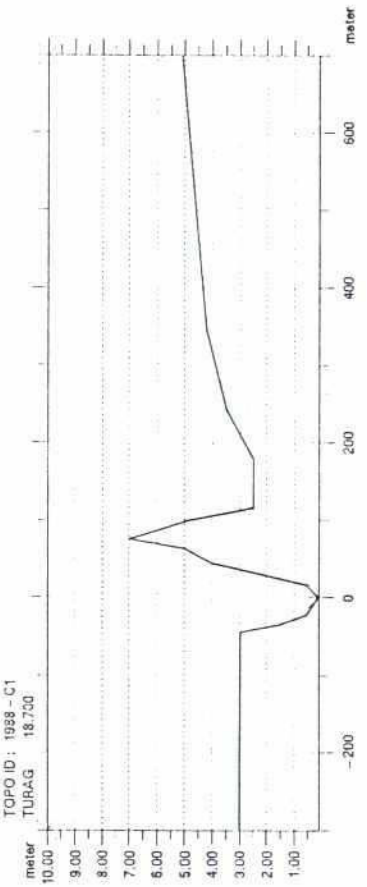

TOPO ID : 1988 - C1
TONGI 8.000
meter
200meter

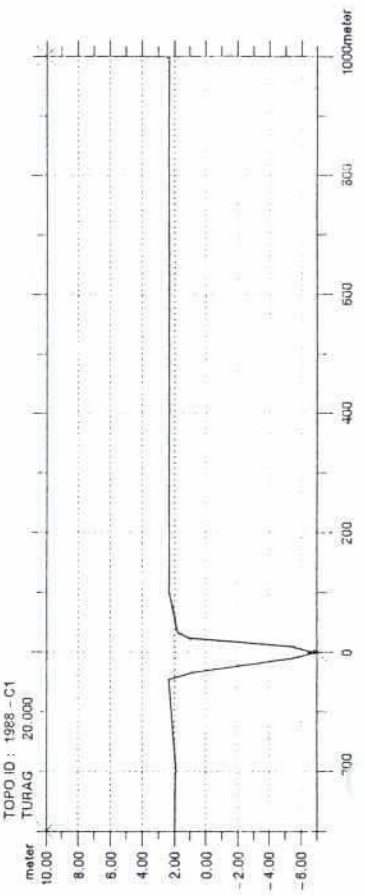

TOPO ID : 1988 - C1
LAKHYA 7.900
meter
200meter

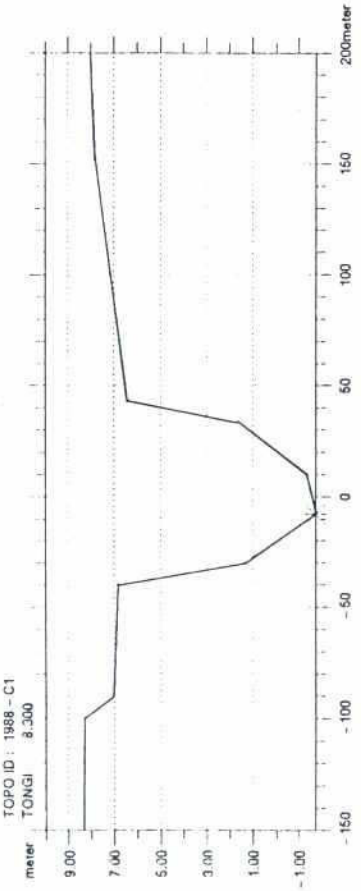

TOPO ID : 1988 - C1
LAKHYA 13.100
meter
200meter

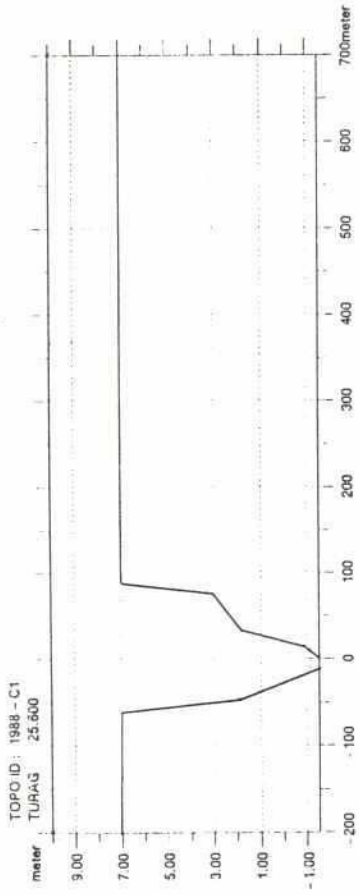
202


TOPO ID : 1988 - C1
TURAG 17.300
meter
10.00
8.00
6.00
4.00
2.00
0.00
- 200
0
200
400
600
800
1000meter


TOPO ID : 1988 - C1
TURAG 18.700
meter
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
- 200
0
200
400
600
meter


TOPO ID : 1988 - C1
TURAG 20.000
meter
10.00
8.00
6.00
4.00
2.00
0.00
- 2.00
- 4.00
- 6.00
- 200
0
200
400
600
800
1000meter


TOPO ID : 1988 - C1
TONGI 8.300
meter
9.00
7.00
5.00
3.00
1.00
- 1.00
- 150
- 100
- 50
0
50
100
150
200meter


TOPO ID : 1988 - C1
TURAG 25.600
meter
9.00
7.00
5.00
3.00
1.00
- 1.00
- 200
- 100
0
100
200
300
400
500
600
700meter

268

```
1988-C1
BALU
        12.900
COORDINATES
    1          90.479          23.837
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          14
   -500.00       10.00        1.00      <1>
   -500.00        6.20        3.33
   -180.00        6.00        3.33
   -175.00        6.70        3.33
   -120.00        6.10        3.33
   -110.00        5.10        1.00
    -50.00        2.80        1.00
      0.00        2.00        1.00      <2>
     20.00        2.10        1.00
     70.00        2.80        1.00
    110.00        5.10        1.00
    120.00        8.30        1.00
    250.00        8.30        3.33
    250.00       10.00        3.33      <3>
**********
```

$n_2/n_1 = 1.00$

$n_2/n_1 = 3.33$

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
BALU
        15.500
COORDINATES
    1          90.488          23.821
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          21
   -300.00       10.00        1.00      <1>
   -300.00        6.10        3.33
   -155.00        6.10        3.33
   -118.00        3.25        3.33
   -128.00        2.25        3.33
    -80.00        2.30        3.33
    -50.00        3.50        3.33
    -19.00        3.80        3.33
    -15.00        1.50        1.00
     -5.00       -0.30        1.00
     -4.00       -1.00        1.00
      0.00       -1.15        1.00      <2>
     15.00       -0.20        1.00
     38.00        2.10        1.00
     41.00        3.70        1.00
     70.00        3.25        3.33
    101.00        3.90        3.33
    130.00        2.80        3.33
    190.00        2.00        3.33
    250.00        2.00        3.33
    250.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

Note : n_1 : Manning's roughness coefficient of river channel

n_2 : Manning's roughness coefficient of flood plain

```
1988-C1
BALU
        17.700
COORDINATES
    1          90.486          23.802

FLOW DIRECTION
0
DATUM
       0.00
PROFILE          16
   -400.00       10.00        1.00      <1>
   -400.00        1.00        3.33
    -56.00        1.30        3.33
    -44.00        3.50        3.33
    -40.00        1.20        1.00
    -20.00       -1.10        1.00
      0.00       -2.10        1.00      <2>
     40.00        0.00        1.00
     45.00        1.00        1.00
     50.00        3.30        1.00
     54.00        1.50        3.33
     80.00        1.50        3.33
    100.00        1.40        3.33
    140.00        1.60        3.33
    250.00        3.31        3.33
    250.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
BALU
        19.000
COORDINATES
    1          90.480          23.790
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          20
   -400.00       10.00        1.00      <1>
   -400.00        2.80        3.33
   -184.00        2.80        3.33
   -124.00        3.20        3.33
    -94.00        3.20        3.33
    -64.00        3.90        3.33
    -41.00        3.90        3.33
    -41.00        2.50        1.00
    -37.00        1.20        1.00
    -34.00        0.85        1.00
    -31.00        0.20        1.00
    -10.00       -2.10        1.00
      0.00       -2.35        1.00      <2>
      3.00       -1.70        1.00
     16.00        3.00        1.00
     19.00        4.00        1.00
     18.00        3.65        3.33
     79.00        3.75        3.33
    300.00        3.75        3.33
    300.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

1988-C1
BALU
23.500
COORDINATES

1	90.486	23.758

FLOW DIRECTION
0
DATUM
0.00

PROFILE	17		
-700.00	10.00	1.00	<1>
-700.00	7.00	3.33	
-54.00	7.00	3.33	
-44.00	7.00	3.33	
-34.00	2.90	1.00	
-19.00	-2.30	1.00	
-9.00	-4.10	1.00	
0.00	-4.50	1.00	<2>
16.00	-2.50	1.00	
36.00	2.20	1.00	
41.00	4.30	1.00	
81.00	4.20	3.33	
101.00	4.00	3.33	
131.00	4.00	3.33	
141.00	4.40	3.33	
250.00	4.40	3.33	
250.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-C1
BANSI
7.600
COORDINATES

1	90.244	23.845

FLOW DIRECTION
0
DATUM
0.00

PROFILE	20		
-400.00	10.00	1.00	<1>
-400.00	7.29	3.33	
-375.56	7.29	3.33	
-316.41	6.13	3.33	
-256.96	5.76	3.33	
-195.38	5.55	3.33	
-135.01	5.24	3.33	
-106.96	-2.56	1.00	
-80.44	-5.61	1.00	
-60.93	-6.22	1.00	
-21.65	-8.05	1.00	
0.00	-9.58	1.00	<2>
12.85	-8.66	1.00	
27.18	-6.53	1.00	
57.67	3.38	1.00	
72.00	6.05	1.00	
136.33	6.36	3.33	
160.42	6.88	3.33	
300.00	6.88	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-C1
BANSI
9.000
COORDINATES

1	90.250	23.833

FLOW DIRECTION
0
DATUM
0.00

PROFILE	24		
-400.00	10.00	1.00	<1>
-400.00	7.13	3.33	
-368.90	6.53	3.33	
-320.10	6.45	3.33	
-307.90	3.81	3.33	
-283.50	3.32	3.33	
-247.00	7.03	3.33	
-170.70	7.37	3.33	
-149.40	0.00	1.00	
-100.60	-2.46	1.00	
-88.40	-6.55	1.00	
-33.54	-6.55	1.00	
0.00	-8.07	1.00	
42.76	-8.07	1.00	<2>
94.51	-6.34	1.00	
125.00	-2.74	1.00	
216.46	5.89	1.00	
277.44	6.54	1.00	
527.44	6.50	3.33	
618.90	6.75	3.33	
692.07	6.60	3.33	
777.44	7.40	3.33	
1600.00	7.40	3.33	
1600.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-C1
BURIGANGA
0.000
COORDINATES

1	90.348	23.742

FLOW DIRECTION
0
DATUM
0.00

PROFILE	18		
-300.00	10.00	1.00	<1>
-300.00	6.00	3.30	
-275.00	5.60	3.30	
-265.00	2.40	3.30	
-165.00	1.90	3.30	
-149.00	0.90	1.00	
-123.00	-3.60	1.00	
-105.00	-3.75	1.00	
-25.00	-3.75	1.00	
0.00	-4.60	1.00	<2>
30.00	-3.00	1.00	
50.00	-1.00	1.00	
70.00	1.90	1.00	
109.00	1.50	3.30	
115.00	1.50	3.30	
175.00	3.75	3.30	
800.00	3.75	3.30	
800.00	10.00	3.30	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

2 0 4

```
1988-C1
BURIGANGA
          1.100
COORDINATES
     1          90.368          23.706
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          9
    -200.00       10.00        1.00      <1>
    -200.00        6.25        3.30
    -173.78        2.05        1.00      <2>
       0.00       -9.52        1.00
     125.00        2.05        1.00
     140.24        3.55        1.00
     182.92        3.75        3.30
     200.00        4.99        3.30
     200.00       10.00        3.30      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
BURIGANGA
          1.800
COORDINATES
     1          90.402          23.708
FLOW DIRECTION
0
DATUM
       0.00
PROFILE         15
    -200.00       10.00        1.00      <1>
    -200.00        6.56        3.33
    -117.07        6.56        3.33
     -87.80        2.33        1.00
     -53.66       -5.28        1.00
     -36.59       -5.28        1.00
     -21.95       -9.27        1.00
       0.00       -9.85        1.00      <2>
      21.95       -9.27        1.00
      80.49       -3.76        1.00
     129.27        2.33        1.00
     134.15        4.09        1.00
     165.86        5.83        1.00
     200.00        5.97        3.33
     200.00       10.00        3.33      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
BURIGANGA
          7.000
COORDINATES
     1          90.418          23.698
FLOW DIRECTION
0
DATUM
       0.00
PROFILE         17
    -300.00       10.00        1.00      <1>
    -300.00        7.69        3.33
    -280.56        5.18        1.00
    -268.29        1.82        1.00
    -176.83       -4.26        1.00
    -146.34       -4.87        1.00
       0.00       -4.87        1.00      <2>
      18.29       -4.26        1.00
      60.98       -4.26        1.00
     109.76        0.30        1.00
     176.83        1.82        1.00
     195.12        4.61        1.00
     228.66        4.57        3.33
     289.64        5.34        3.33
     326.22        2.91        3.33
     341.46        5.18        3.33
     341.46       10.00        3.33      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
BURIGANGA
         11.500
COORDINATES
     1          90.451          23.669
FLOW DIRECTION
0
DATUM
       0.00
PROFILE         11
    -200.00       10.00        1.00      <1>
    -200.00        6.43        3.33
    -138.72       -1.82        1.00
    -102.44       -6.10        1.00
     -29.88       -7.56        1.00
       0.00       -8.84        1.00      <2>
      66.77       -3.66        1.00
     112.80        1.82        1.00
     125.00        5.75        1.00
     200.00        5.52        3.33
     200.00       10.00        3.33      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
DHALESWARI
          0.000
COORDINATES
    1          90.250          23.833
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          24
   -400.00       10.00        1.00      <1>
   -400.00        7.13        3.33
   -368.90        6.53        3.33
   -320.10        6.45        3.33
   -307.90        3.81        3.33
   -283.50        3.32        3.33
   -247.00        7.03        3.33
   -170.70        7.37        3.33
   -149.40        0.00        1.00
   -100.60       -2.46        1.00
    -88.40       -6.55        1.00
    -33.54       -6.55        1.00
      0.00       -8.07        1.00
     42.76       -8.07        1.00      <2>
     94.51       -6.34        1.00
    125.00       -2.74        1.00
    216.46        5.89        1.00
    277.44        6.54        1.00
    527.44        6.50        3.33
    618.90        6.75        3.33
    692.07        6.60        3.33
    777.44        7.40        3.33
   1600.00        7.40        3.33
   1600.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
LAKHYA
          7.900
COORDINATES
    1          90.527          23.695
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          16
   -250.00       10.00        1.00      <1>
   -250.00        5.55        3.33
   -209.45        5.55        3.33
   -174.39        5.58        3.33
   -127.13        5.52        3.33
   -122.25        0.71        1.00
    -74.08       -3.86        1.00
    -29.27       -5.08        1.00
      0.00       -5.69        1.00      <2>
     36.28       -5.38        1.00
    103.97       -2.34        1.00
    131.71       -1.12        1.00
    153.35       -0.51        1.00
    187.50        0.71        1.00
    200.00        3.30        1.00
    200.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
LAKHYA
         13.100
COORDINATES
    1          90.523          23.654
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          18
   -300.00       10.00        1.00      <1>
   -300.00        3.84        3.33
   -186.28        3.84        3.33
   -135.37        2.47        1.00
   -113.62        1.13        1.00
    -79.88       -0.09        1.00
    -56.71       -3.75        1.00
    -28.96       -6.49        1.00
      0.00       -6.49        1.00      <2>
     24.39       -5.58        1.00
     54.27       -4.97        1.00
     93.29       -4.05        1.00
    118.60       -1.92        1.00
    138.11        1.13        1.00
    154.88        1.51        1.00
    174.39        4.57        1.00
    200.00        4.45        3.33
    200.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TONGI
          1.300
COORDINATES
    1          90.361          23.883
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          18
   -300.00       10.00        1.00      <1>
   -300.00        2.20        3.33
   -104.00        2.20        3.33
    -44.00        2.35        3.33
    -37.00        3.00        3.33
    -31.00        2.20        3.33
    -12.00        2.25        3.33
     -8.00        1.20        1.00
      0.00        0.60        1.00      <2>
      4.00        1.00        1.00
      7.00        1.90        1.00
     14.00        2.55        1.00
     58.00        2.50        3.33
     74.00        2.50        3.33
    148.00        2.90        3.33
    206.00        2.90        3.33
    250.00        2.90        3.33
    250.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

20 f

```
1988-C1
TONGI
          6.400
COORDINATES
    1          90.394          23.887
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          14
   -150.00       10.00        1.00      <1>
   -150.00        7.50        3.33
    -65.00        7.20        3.33
    -28.00        1.00        1.00
    -20.00       -6.30        1.00
      0.00       -7.80        1.00      <2>
     14.00       -6.00        1.00
     20.00       -2.00        1.00
     24.00        1.00        1.00
     80.00        3.70        1.00
     90.00        7.50        3.33
    105.00        7.50        3.33
    250.00        7.50        3.33
    250.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TONGI
          8.000
COORDINATES
    1          90.105          23.881
FLOW DIRECTION
0

DATUM
       0.00
PROFILE          13
   -150.00       10.00        1.00      <1>
   -150.00        8.30        3.33
    -92.00        8.30        3.33
    -82.00        7.00        3.33
    -32.00        6.80        3.33
    -22.00        1.50        1.00
      0.00       -1.70        1.00      <2>
     18.00       -1.30        1.00
     42.00        1.50        1.00
     50.00        6.50        1.00
    158.00        8.90        3.33
    200.00        8.90        3.33
    200.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TONGI
          8.300
COORDINATES
    1          90.406          23.879
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          13
   -150.00       10.00        1.00      <1>
   -150.00        8.31        3.33
   -100.00        8.30        3.33
    -90.00        7.00        3.33
    -40.00        6.80        3.33
    -31.00        1.50        1.00
     -8.00       -1.70        1.00      <2>
     10.00       -1.30        1.00
     33.00        1.50        1.00
     43.00        6.40        1.00
    150.00        7.80        3.33
    200.00        8.00        3.33
    200.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TURAG
         17.300
COORDINATES
    1          90.348          23.857
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          13
   -300.00       10.00        1.00      <1>
   -300.00        3.20        3.33
   -204.00        3.20        3.33
    -24.00        2.90        3.33
    -16.00        0.65        1.00
      0.00       -0.80        1.00      <2>
     22.00        0.80        1.00
     72.00        3.15        1.00
     90.00        5.80        3.33
    116.00        8.20        3.33
    226.00        8.20        3.33
   1000.00        8.20        3.33
   1000.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TURAG
        18.700
COORDINATES
    1          90.340          23.846
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          18
   -300.00       10.00        1.00      <1>
   -300.00        3.01        3.33
    -45.00        3.00        3.33
    -35.00        1.50        1.00
    -25.00        0.70        1.00
    -15.00        0.40        1.00
      0.00        0.10        1.00      <2>
     15.00        0.50        1.00
     45.00        4.00        1.00
     63.00        5.10        3.33
     75.00        7.00        3.33
     98.00        5.00        3.33
    115.00        2.50        3.33
    180.00        2.50        3.33
    242.00        3.50        3.33
    345.00        4.20        3.33
    700.00        5.10        3.33
    700.00       10.00        3.33      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TURAG
        20.000
COORDINATES
    1          90.342          23.837
FLOW DIRECTION
0
DATUM

      0.00
PROFILE          17
   -300.00       10.00        1.00      <1>
   -300.00        2.00        3.33
   -250.00        2.00        3.33
   -190.00        1.90        3.33
   -126.00        2.10        3.33
    -45.00        2.30        3.33
    -33.00        0.80        1.00
    -20.00       -2.90        1.00
    -12.00       -5.10        1.00
      0.00       -7.00        1.00      <2>
     10.00       -5.20        1.00
     25.00        1.00        1.00
     35.00        1.80        1.00
    103.00        2.30        3.33
    150.00        2.30        3.33
   1000.00        2.30        3.33
   1000.00       10.00        3.33      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-C1
TURAG
        25.600
COORDINATES
    1          90.343          23.797
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          14
   -200.00       10.00        1.00      <1>
   -200.00        7.01        3.33
    -82.00        7.00        3.33
    -62.00        7.00        3.33
    -47.00        1.80        1.00
    -12.00       -1.50        1.00
      0.00       -1.50        1.00      <2>
     15.00       -0.70        1.00
     32.00        1.80        1.00
     76.00        3.10        1.00
     88.00        7.00        1.00
     93.00        7.00        3.33
    700.00        7.00        3.33
    700.00       10.00        3.33      <3>
*********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

2). Results of Calibration

GRID POINT RESULT SUMMARY

WATER LEVEL,

	Location	Minimum meter	Maximum meter
DHALESWARI	0.000	5.10	9.59
DHALESWARI	0.500	5.10	9.59
DHALESWARI	0.800	5.10	9.59
DHALESWARI	0.800	5.10	9.59
DHALESWARI	2.760	5.39	9.59
DHALESWARI	4.720	5.37	9.58
DHALESWARI	6.680	5.35	9.58
DHALESWARI	8.640	5.31	9.58
DHALESWARI	10.600	5.22	9.58
DHALESWARI	12.275	5.11	9.57
DHALESWARI	13.950	5.07	9.57
DHALESWARI	15.625	5.03	9.57
DHALESWARI	17.300	4.99	9.57
DHALESWARI	18.500	4.98	9.50
DHALESWARI	19.700	4.97	9.31
DHALESWARI	21.667	4.96	9.21
DHALESWARI	23.633	4.95	9.06
DHALESWARI	25.600	4.91	8.88
DHALESWARI	27.333	4.92	8.73
DHALESWARI	29.067	4.91	8.56
DHALESWARI	30.800	4.89	8.37
DHALESWARI	32.400	4.87	8.19
DHALESWARI	34.000	4.86	8.04
DHALESWARI	35.600	4.82	7.91
DHALESWARI	37.200	4.72	7.80
DHALESWARI	38.900	4.64	7.68
DHALESWARI	40.600	4.57	7.57
DHALESWARI	42.300	4.52	7.45
DHALESWARI	44.000	4.48	7.34
DHALESWARI	45.700	4.44	7.21
DHALESWARI	45.700	4.44	7.21
DHALESWARI	46.200	4.43	7.16
DHALESWARI	47.200	4.40	7.05
DHALESWARI	48.700	4.35	6.87
DHALESWARI	50.200	4.30	6.66
DHALESWARI	51.700	4.23	6.40
DHALESWARI	53.100	4.19	6.25
DHALESWARI	54.500	4.18	6.16
DHALESWARI	56.300	4.15	6.01
DHALESWARI	57.700	4.15	6.01
DHALESWARI	57.700	4.15	6.01
DHALESWARI	58.950	4.15	5.99
DHALESWARI	60.200	4.14	5.97
BANSI	0.000	5.67	9.85
BANSI	2.000	5.54	9.74
BANSI	3.867	5.47	9.67
BANSI	5.733	5.43	9.62
BANSI	7.600	5.40	9.58
BANSI	9.000	5.40	9.59
BURIGANGA	0.000	4.54	7.19
BURIGANGA	1.100	4.53	7.17
BURIGANGA	2.950	4.51	7.12
BURIGANGA	4.800	4.50	7.37
BURIGANGA	5.900	4.50	7.36
BURIGANGA	7.000	4.19	7.35
BURIGANGA	8.500	4.18	7.33
BURIGANGA	10.000	4.18	7.30
BURIGANGA	11.500	4.17	7.27
BURIGANGA	12.650	4.16	7.25
BURIGANGA	13.800	4.15	7.23
BURIGANGA	15.150	4.11	7.21
BURIGANGA	16.500	4.11	7.21
BURIGANGA	17.500	4.11	7.21
TURAG	0.000	5.93	8.75
TURAG	1.880	5.86	8.65
TURAG	3.760	5.79	8.60
TURAG	5.640	5.70	8.34
TURAG	7.520	5.61	8.18
TURAG	9.400	5.50	8.41
TURAG	10.750	5.44	8.37
TURAG	12.100	5.41	8.33
TURAG	13.000	5.37	8.29
TURAG	15.000	5.26	8.16
TURAG	15.000	5.26	8.16
TURAG	15.100	5.26	8.15
TURAG	16.200	5.23	8.13
TURAG	17.300	5.20	8.09
TURAG	18.700	5.17	8.07
TURAG	20.000	5.17	8.06
TURAG	21.250	5.16	8.05
TURAG	22.500	5.16	8.01
TURAG	24.050	5.14	8.02
TURAG	25.600	5.08	7.98
TURAG	27.000	5.07	7.95
TURAG	27.000	5.07	7.95
TURAG	27.300	5.07	7.91
TURAG	28.350	5.05	7.88
TURAG	29.400	4.94	7.80
TURAG	30.550	4.82	7.73
TURAG	31.700	4.75	7.69
TURAG	32.200	4.73	7.67
TURAG	33.967	4.63	7.61
TURAG	35.733	4.57	7.55
TURAG	37.500	4.54	7.49
LAKHYA	0.000	4.86	7.05
LAKHYA	1.150	4.80	6.99
LAKHYA	2.300	4.74	6.93
LAKHYA	3.600	4.67	6.86
LAKHYA	3.600	4.67	6.86
LAKHYA	5.033	4.59	6.75
LAKHYA	6.467	4.53	6.66
LAKHYA	7.900	4.49	6.58
LAKHYA	9.633	4.43	6.48
LAKHYA	11.367	4.37	6.38
LAKHYA	13.100	4.30	6.28
LAKHYA	15.050	4.25	6.20
LAKHYA	17.000	4.22	6.14
LAKHYA	18.950	4.19	6.10
LAKHYA	20.900	4.18	6.06
LAKHYA	22.400	4.16	6.04

	Location	Minimun meter	Maximum meter
LAKHYA	23.900	1.15	6.01
BALU	0.000	5.12	7.73
BALU	1.900	5.12	7.73
BALU	2.700	5.12	7.73
BALU	4.200	5.12	7.73
BALU	5.700	5.12	7.73
BALU	7.200	5.12	7.73
BALU	7.200	5.12	7.73
BALU	8.200	5.09	7.70
BALU	10.050	5.04	7.64
BALU	11.900	1.99	7.56
BALU	12.900	1.96	7.51
BALU	14.200	1.90	7.45
BALU	15.300	1.86	7.38
BALU	16.600	1.84	7.35
BALU	17.700	1.81	7.31
BALU	19.000	4.82	7.30
BALU	20.300	1.79	7.21
BALU	22.000	1.76	7.18
BALU	23.500	1.71	7.08
BALU	21.867	1.72	7.01
BALU	26.233	1.70	6.96
BALU	27.600	1.69	6.91
BALU	28.700	1.67	6.86
TONGI	0.000	5.26	8.16
TONGI	1.300	5.24	8.11
TONGI	3.000	5.22	8.06
TONGI	4.700	5.22	8.03
TONGI	6.400	5.21	8.01
TONGI	8.000	5.20	7.94
TONGI	8.300	5.20	7.93
TONGI	9.825	5.18	7.86
TONGI	11.350	5.16	7.82
TONGI	12.875	5.14	7.79
TONGI	14.400	5.13	7.76
TONGI	16.000	5.12	7.73
KARNATALI	0.000	5.39	9.59
KARNATALI	1.600	5.33	9.42
KARNATALI	3.200	5.28	9.25
KARNATALI	4.800	5.22	9.05
KARNATALI	6.400	5.17	8.84
KARNATALI	8.233	5.13	8.56
KARNATALI	10.067	5.09	8.26
KARNATALI	11.900	5.07	7.95

DISCHARGE.

	Location	Minimun m3/sec	Maximum m3/sec
DHALESWARI	0.250	1013.726	2668.781
DHALESWARI	0.650	1013.980	2667.037
DHALESWARI	1.780	361.224	1040.340
DHALESWARI	3.710	362.590	1023.819
DHALESWARI	5.700	361.103	1008.298
DHALESWARI	7.660	365.350	1007.462
DHALESWARI	9.620	264.854	1007.462
DHALESWARI	11.438	366.743	1007.462
DHALESWARI	13.113	385.268	1007.462
DHALESWARI	11.788	386.964	1007.462
DHALESWARI	16.463	86.712	1007.462
DHALESWARI	17.900	368.368	1010.437
DHALESWARI	19.100	1007.462	11671.681
DHALESWARI	20.683	1007.462	11671.362
DHALESWARI	22.650	1007.462	11671.811
DHALESWARI	24.617	1007.462	11673.091
DHALESWARI	26.467	1007.462	11673.332
DHALESWARI	28.200	1007.462	11673.592
DHALESWARI	29.933	1007.462	11673.710
DHALESWARI	31.600	1007.462	11673.897
DHALESWARI	33.200	1007.462	11676.341
DHALESWARI	34.800	1007.462	11676.921
DHALESWARI	36.400	1007.462	11677.496
DHALESWARI	38.050	1007.462	11678.026
DHALESWARI	39.750	1007.462	11678.758
DHALESWARI	41.450	1007.462	11679.206
DHALESWARI	43.150	1007.462	11710.017
DHALESWARI	44.850	1007.462	11713.222
DHALESWARI	45.950	1593.622	17414.793
DHALESWARI	46.700	1593.622	17407.236
DHALESWARI	47.950	1593.622	17404.636
DHALESWARI	49.450	1593.622	17408.389
DHALESWARI	50.950	1593.622	17410.621
DHALESWARI	52.100	1593.622	17409.236
DHALESWARI	53.800	1593.622	17409.689
DHALESWARI	55.400	1593.622	17412.163
DHALESWARI	57.000	1593.622	17411.188
DHALESWARI	58.323	3525.000	20768.273
DHALESWARI	59.573	3525.000	20767.371
BANSI	1.000	1003.207	2655.971
BANSI	2.933	1012.166	2675.990
BANSI	1.800	986.283	2673.811
BANSI	6.667	1012.669	2671.644
BANSI	8.300	1011.535	2667.984
BURIGANGA	0.550	586.160	2680.156
BURIGANGA	2.025	586.160	2690.299
BURIGANGA	3.875	586.160	2690.601
BURIGANGA	5.039	586.160	2691.423
BURIGANGA	6.450	586.160	2691.498
BURIGANGA	7.750	586.160	2693.292
BURIGANGA	9.250	586.160	2693.336
BURIGANGA	10.750	586.160	2693.317
BURIGANGA	12.075	586.160	2693.422
BURIGANGA	13.225	586.160	2693.816
BURIGANGA	14.475	586.160	2693.531

	Location	Minimum m3/sec	Maximum m3/sec
BURIGANGA	15.825	586.160	2693.262
BURIGANGA	17.000	586.160	2688.341
TURAG	0.940	341.155	1349.720
TURAG	2.820	343.432	1349.257
TURAG	4.700	345.152	1348.840
TURAG	6.580	355.186	1359.529
TURAG	8.460	356.819	1359.199
TURAG	10.075	358.164	1358.967
TURAG	11.425	359.541	1358.826
TURAG	12.550	360.539	1358.697
TURAG	14.000	360.855	1358.627
TURAG	15.050	222.613	731.751
TURAG	15.650	223.551	732.532
TURAG	16.750	223.947	732.576
TURAG	18.000	224.268	732.872
TURAG	19.350	225.153	735.216
TURAG	20.625	226.296	738.214
TURAG	21.875	227.252	741.169
TURAG	23.275	235.735	759.008
TURAG	24.825	236.290	757.940
TURAG	26.300	238.262	851.907
TURAG	27.150	586.160	2675.370
TURAG	27.825	586.160	2675.177
TURAG	28.875	586.160	2675.319
TURAG	29.975	586.160	2678.268
TURAG	31.125	586.160	2678.489
TURAG	31.950	586.160	2678.664
TURAG	33.083	586.160	2678.994
TURAG	34.850	586.160	2679.438
TURAG	36.617	586.160	2679.973
LAKHYA	0.575	1523.292	2573.615
LAKHYA	1.725	1523.882	2572.882
LAKHYA	2.950	1524.474	2572.113
LAKHYA	4.217	1733.582	3109.719
LAKHYA	5.750	1734.262	3408.950
LAKHYA	7.183	1734.854	3408.343
LAKHYA	8.767	1765.994	3463.483
LAKHYA	10.500	1766.857	3463.021
LAKHYA	12.233	1767.795	3462.681
LAKHYA	14.075	1772.221	3479.975
LAKHYA	16.025	1773.468	3479.750
LAKHYA	17.975	1775.160	3479.701
LAKHYA	19.925	1775.965	3479.718
LAKHYA	21.650	1778.620	3480.124
LAKHYA	23.150	1778.231	3480.368
BALU	0.950	30.171	87.636
BALU	2.300	30.392	89.571
BALU	3.450	30.713	91.829
BALU	4.950	30.601	94.790
BALU	6.450	28.789	97.532
BALU	7.700	101.378	727.096
BALU	9.125	101.378	727.299
BALU	10.975	101.378	727.566
BALU	12.400	101.378	734.781
BALU	13.550	101.378	734.989

	Location	Minimum m3/sec	Maximum m3/sec
BALU	11.850	101.378	735.273
BALU	16.050	101.378	746.721
BALU	17.150	101.378	716.982
BALU	18.350	101.378	771.116
BALU	19.750	101.378	768.828
BALU	21.250	101.378	766.101
BALU	22.750	101.378	763.315
BALU	24.183	101.378	842.647
BALU	25.550	101.378	841.342
BALU	26.917	101.378	840.058
BALU	28.150	101.378	838.897
TONGI	0.650	63.710	627.049
TONGI	2.150	63.378	627.077
TONGI	3.850	63.378	627.123
TONGI	5.550	63.378	627.163
TONGI	7.200	63.378	627.198
TONGI	8.150	63.378	627.358
TONGI	9.063	63.378	629.510
TONGI	10.588	63.378	629.633
TONGI	12.113	63.378	629.759
TONGI	13.638	63.378	631.518
TONGI	15.200	63.378	632.887
KARNATALI	0.800	235.497	1907.239
KARNATALI	2.400	234.538	1906.351
KARNATALI	4.000	234.538	1906.383
KARNATALI	5.600	234.538	1906.456
KARNATALI	7.317	234.538	1906.539
KARNATALI	9.150	234.538	1906.633
KARNATALI	10.983	234.538	1906.751

GRID POINT RESULT SUMMARY

VELOCITY,

	Location	Minimum m/sec	Maximum m/sec
DHALESWARI	0.000	0.000	0.432
DHALESWARI	0.250	0.000	0.427
DHALESWARI	0.500	0.000	0.422
DHALESWARI	0.650	0.000	0.424
DHALESWARI	0.800	0.000	0.426
DHALESWARI	0.800	0.000	0.193
DHALESWARI	1.780	0.000	0.198
DHALESWARI	2.700	0.000	0.204
DHALESWARI	3.740	0.000	0.211
DHALESWARI	4.720	0.000	0.218
DHALESWARI	5.700	0.000	0.226
DHALESWARI	6.680	0.000	0.234
DHALESWARI	7.660	0.000	0.244
DHALESWARI	8.640	0.000	0.256
DHALESWARI	9.620	0.000	0.269
DHALESWARI	10.600	0.000	0.286
DHALESWARI	11.438	0.000	0.285
DHALESWARI	12.275	0.000	0.273
DHALESWARI	13.113	0.000	0.265
DHALESWARI	13.950	0.000	0.258
DHALESWARI	14.788	0.000	0.250
DHALESWARI	15.625	0.000	0.242
DHALESWARI	16.463	0.000	0.234
DHALESWARI	17.300	0.000	0.226
DHALESWARI	17.900	0.000	0.197
DHALESWARI	18.500	0.000	0.741
DHALESWARI	19.100	0.000	1.158
DHALESWARI	19.700	0.000	1.013
DHALESWARI	20.683	0.000	1.011
DHALESWARI	21.667	0.000	1.019
DHALESWARI	22.650	0.000	1.109
DHALESWARI	23.633	0.000	1.177
DHALESWARI	24.617	0.000	1.253
DHALESWARI	25.600	0.000	1.339
DHALESWARI	26.467	0.000	1.300
DHALESWARI	27.333	0.000	1.264
DHALESWARI	28.200	0.000	1.244
DHALESWARI	29.067	0.000	1.225
DHALESWARI	29.933	0.000	1.233
DHALESWARI	30.800	0.000	1.331
DHALESWARI	31.600	0.000	1.293
DHALESWARI	32.400	0.000	1.255
DHALESWARI	33.200	0.000	1.195
DHALESWARI	34.000	0.000	1.170
DHALESWARI	34.800	0.000	1.152
DHALESWARI	35.600	0.000	1.135
DHALESWARI	36.400	0.000	1.117
DHALESWARI	37.200	0.000	1.100
DHALESWARI	38.050	0.000	1.136
DHALESWARI	38.900	0.000	1.174
DHALESWARI	39.750	0.000	1.213
DHALESWARI	40.600	0.000	1.254
DHALESWARI	41.450	0.000	1.297
DHALESWARI	42.300	0.000	1.341
DHALESWARI	43.150	0.000	1.393
DHALESWARI	44.000	0.000	1.448
DHALESWARI	44.850	0.000	1.498
DHALESWARI	45.700	0.000	1.550
DHALESWARI	45.700	0.000	1.841
DHALESWARI	45.950	0.000	1.864
DHALESWARI	46.200	0.000	1.888
DHALESWARI	46.700	0.000	1.935
DHALESWARI	47.200	0.000	1.984
DHALESWARI	47.950	0.000	2.023
DHALESWARI	48.700	0.000	2.061
DHALESWARI	49.150	0.000	2.110
DHALESWARI	50.200	0.000	2.137
DHALESWARI	50.950	0.000	2.213
DHALESWARI	51.700	0.000	2.271
DHALESWARI	52.100	0.000	2.151
DHALESWARI	53.100	0.000	2.042
DHALESWARI	53.800	0.000	1.936
DHALESWARI	51.500	0.000	1.811
DHALESWARI	55.400	0.000	1.951
DHALESWARI	56.300	0.000	2.082
DHALESWARI	57.000	0.000	1.861
DHALESWARI	57.700	0.000	1.623
DHALESWARI	57.700	0.000	2.007
DHALESWARI	58.323	0.000	1.833
DHALESWARI	58.950	0.000	1.687
DHALESWARI	59.575	0.000	1.555
DHALESWARI	60.200	0.000	1.442
BANSI	0.000	0.000	1.211
BANSI	1.000	0.000	1.193
BANSI	2.000	0.000	1.173
BANSI	2.933	0.000	1.093
BANSI	3.867	0.000	1.023
BANSI	4.800	0.000	0.960
BANSI	5.733	0.000	0.904
BANSI	6.667	0.000	0.853
BANSI	7.600	0.000	0.807
BANSI	8.300	0.000	0.563
BANSI	9.000	0.000	0.432
BURIGANGA	0.000	0.000	0.782
BURIGANGA	0.550	0.000	0.766
BURIGANGA	1.100	0.000	0.751
BURIGANGA	2.025	0.000	0.790
BURIGANGA	2.950	0.000	0.831
BURIGANGA	3.875	0.000	0.875
BURIGANGA	4.800	0.000	0.924
BURIGANGA	5.350	0.000	0.799
BURIGANGA	5.900	0.000	0.703
BURIGANGA	6.450	0.000	0.621
BURIGANGA	7.000	0.000	0.562
BURIGANGA	7.750	0.000	0.588
BURIGANGA	8.500	0.000	0.617
BURIGANGA	9.250	0.000	0.647
BURIGANGA	10.000	0.000	0.681
BURIGANGA	10.750	0.000	0.717
BURIGANGA	11.500	0.000	0.757

	Location	Minimum m/sec	Maximum m/sec
BURIGANGA	12.075	0.000	0.717
BURIGANGA	12.650	0.000	0.737
BURIGANGA	13.225	0.000	0.729
BURIGANGA	13.800	0.000	0.721
BURIGANGA	14.175	0.000	0.637
BURIGANGA	15.150	0.000	0.570
BURIGANGA	15.825	0.000	0.518
BURIGANGA	16.500	0.000	0.475
BURIGANGA	17.000	0.000	0.274
BURIGANGA	17.500	0.000	0.192
TURAG	0.000	0.000	0.482
TURAG	0.940	0.000	0.187
TURAG	1.880	0.000	0.191
TURAG	2.820	0.000	0.196
TURAG	3.760	0.000	0.302
TURAG	4.700	0.000	0.309
TURAG	5.640	0.000	0.519
TURAG	6.580	0.000	0.529
TURAG	7.520	0.000	0.537
TURAG	8.460	0.000	0.543
TURAG	9.400	0.000	0.534
TURAG	10.075	0.000	0.540
TURAG	10.750	0.000	0.527
TURAG	11.425	0.000	0.519
TURAG	12.100	0.000	0.510
TURAG	12.550	0.000	0.584
TURAG	13.000	0.000	0.689
TURAG	14.000	0.000	0.754
TURAG	15.000	0.000	0.836
TURAG	15.000	0.000	0.159
TURAG	15.050	0.000	0.165
TURAG	15.100	0.000	0.171
TURAG	15.050	0.000	0.500
TURAG	16.200	0.000	0.534
TURAG	16.750	0.000	0.599
TURAG	17.300	0.000	0.680
TURAG	18.000	0.000	0.529
TURAG	18.700	0.000	0.133
TURAG	19.350	0.000	0.322
TURAG	20.000	0.000	0.256
TURAG	20.625	0.000	0.285
TURAG	21.250	0.000	0.320
TURAG	21.875	0.000	0.349
TURAG	22.500	0.000	0.382
TURAG	23.275	0.000	0.432
TURAG	24.050	0.000	0.495
TURAG	24.825	0.000	0.571
TURAG	25.600	0.000	0.703
TURAG	26.300	0.000	0.639
TURAG	27.000	0.000	0.566
TURAG	27.000	0.000	1.763
TURAG	27.150	0.000	1.763
TURAG	27.300	0.000	1.764
TURAG	27.825	0.000	1.135
TURAG	28.350	0.000	1.210
TURAG	28.875	0.000	1.130
TURAG	29.400	0.000	1.192
TURAG	29.975	0.000	0.981
TURAG	30.550	0.000	0.834
TURAG	31.125	0.000	0.708
TURAG	31.700	0.000	0.635
TURAG	31.950	0.000	0.603
TURAG	32.200	0.000	0.571
TURAG	33.083	0.000	0.597
TURAG	33.967	0.000	0.619
TURAG	34.850	0.000	0.642
TURAG	35.733	0.000	0.666
TURAG	36.617	0.000	0.688
TURAG	37.500	0.000	0.711
LAKHYA	0.000	0.000	0.901
LAKHYA	0.575	0.000	0.927
LAKHYA	1.150	0.000	0.951
LAKHYA	1.725	0.000	0.960
LAKHYA	2.300	0.000	0.970
LAKHYA	2.950	0.000	0.982
LAKHYA	3.600	0.000	0.994
LAKHYA	3.600	0.000	1.265
LAKHYA	4.317	0.000	1.231
LAKHYA	5.033	0.000	1.199
LAKHYA	5.750	0.000	1.170
LAKHYA	6.467	0.000	1.143
LAKHYA	7.183	0.000	1.119
LAKHYA	7.900	0.000	1.104
LAKHYA	8.767	0.000	1.121
LAKHYA	9.633	0.000	1.128
LAKHYA	10.500	0.000	1.133
LAKHYA	11.367	0.000	1.141
LAKHYA	12.233	0.000	1.147
LAKHYA	13.100	0.000	1.156
LAKHYA	14.075	0.000	1.091
LAKHYA	15.050	0.000	1.035
LAKHYA	16.025	0.000	0.986
LAKHYA	17.000	0.000	0.941
LAKHYA	17.975	0.000	0.908
LAKHYA	18.950	0.000	0.878
LAKHYA	19.925	0.000	0.852
LAKHYA	20.900	0.000	0.828
LAKHYA	21.650	0.000	0.829
LAKHYA	22.400	0.000	0.831
LAKHYA	23.150	0.000	0.833
LAKHYA	23.900	0.000	0.834
BALU	0.000	0.000	0.154
BALU	0.950	0.000	0.125
BALU	1.900	0.000	0.107
BALU	2.300	0.000	0.093
BALU	2.700	0.000	0.085
BALU	3.150	0.000	0.089
BALU	4.200	0.000	0.093
BALU	4.950	0.000	0.097
BALU	5.700	0.000	0.101

	Location	Minimum m/sec	Maximum m/sec
BALU	6.150	0.000	0.197
BALU	7.200	0.000	0.112
BALU	7.200	0.000	0.716
BALU	7.700	0.000	0.631
BALU	8.200	0.000	0.567
BALU	9.125	0.000	0.608
BALU	10.050	0.000	0.655
BALU	10.975	0.000	0.713
BALU	11.900	0.000	0.787
BALU	12.100	0.000	0.709
BALU	12.900	0.000	0.613
BALU	13.550	0.000	0.652
BALU	14.200	0.000	0.662
BALU	14.850	0.000	0.721
BALU	15.500	0.000	0.799
BALU	16.050	0.000	0.672
BALU	16.600	0.000	0.576
BALU	17.150	0.000	0.197
BALU	17.700	0.000	0.110
BALU	18.350	0.000	0.321
BALU	19.000	0.000	0.626
BALU	19.750	0.000	0.617
BALU	20.500	0.000	0.670
BALU	21.250	0.000	0.705
BALU	22.000	0.000	0.744
BALU	22.750	0.000	0.819
BALU	23.500	0.000	0.940
BALU	24.183	0.000	0.898
BALU	24.867	0.000	0.825
BALU	25.550	0.000	0.760
BALU	26.233	0.000	0.701
BALU	26.917	0.000	0.655
BALU	27.600	0.000	0.612
BALU	28.150	0.000	0.616
BALU	28.700	0.000	0.620
TONGI	0.000	0.000	0.857
TONGI	0.650	0.000	0.695
TONGI	1.300	0.000	0.591
TONGI	2.150	0.000	0.574
TONGI	3.000	0.000	0.558
TONGI	3.850	0.000	0.544
TONGI	4.700	0.000	0.531
TONGI	5.550	0.000	0.524
TONGI	6.400	0.000	0.517
TONGI	7.200	0.000	0.678
TONGI	8.000	0.000	0.982
TONGI	8.150	0.000	0.972
TONGI	8.300	0.000	0.962
TONGI	9.063	0.000	0.863
TONGI	9.825	0.000	0.782
TONGI	10.588	0.000	0.695
TONGI	11.350	0.000	0.626
TONGI	12.113	0.000	0.565
TONGI	12.875	0.000	0.515
TONGI	13.638	0.000	0.472

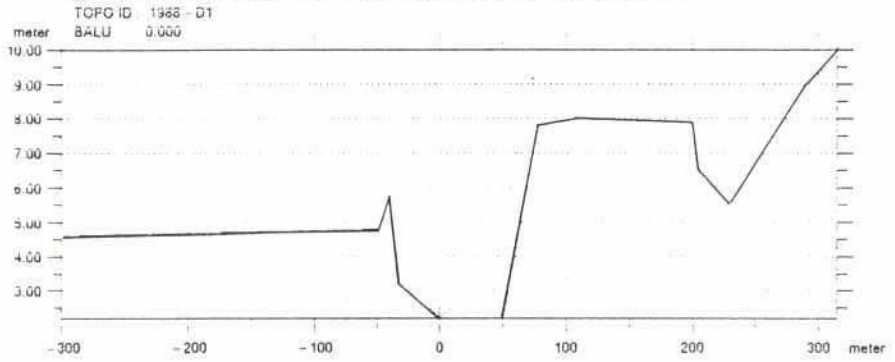
	Location	Minimum m/sec	Maximum m/sec
TONGI	14.400	0.000	0.436
TONGI	15.200	0.000	0.480
TONGI	16.000	0.000	0.539
KARNATALI	0.000	0.000	1.386
KARNATALI	0.800	0.000	1.195
KARNATALI	1.600	0.000	1.050
KARNATALI	2.400	0.000	1.087
KARNATALI	3.200	0.000	1.131
KARNATALI	4.000	0.000	1.178
KARNATALI	4.800	0.000	1.229
KARNATALI	5.600	0.000	1.286
KARNATALI	6.400	0.000	1.348
KARNATALI	7.317	0.000	1.406
KARNATALI	8.233	0.000	1.468
KARNATALI	9.150	0.000	1.521
KARNATALI	10.067	0.000	1.581
KARNATALI	10.983	0.000	1.613
KARNATALI	11.900	0.000	1.613

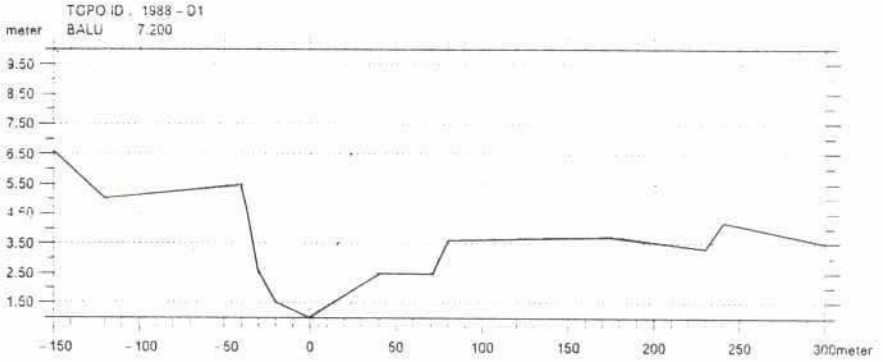
9.2 With River Dredging and Without Polder Dike/Wall

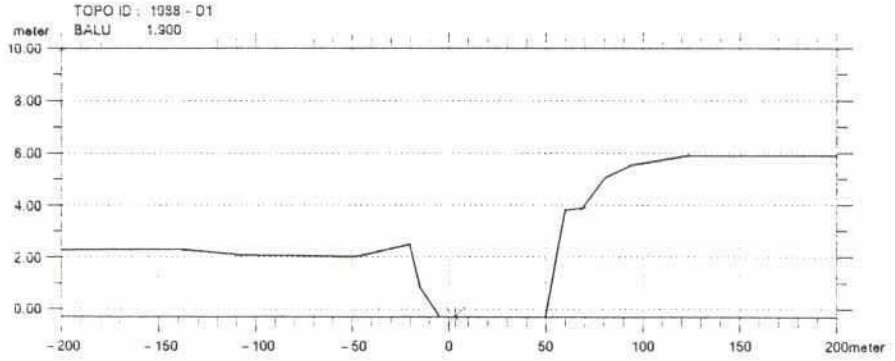
PROCESS OF HYDRAULIC SIMULATION OF 1988 FLOODS FOR WITH FLOOD MITIGATION PROJECTS (WITH RIVER DREDGING AND WITHOUT POLDER DIKE/WALL)

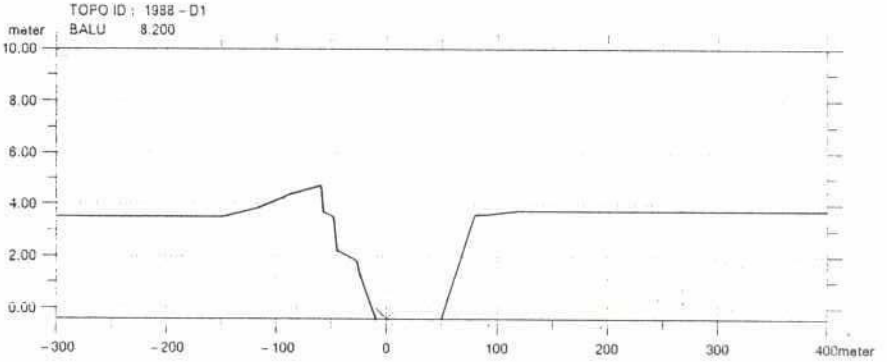
(1)	River System :	Same as the condition of Without Flood Mitigation Project
(2)	River Cross Section:	Taking into account the river dredging, input the revised river cross sections.
(3)	Boundary Condition :	Boundary discharges, water level at Kalagachia(BWDB Sta.71) and rainfall ruoffs are same as the condition of Without Flood Mitigation Project.
(4)	Manning's Rough-: ness Coefficient	Same as the condition of Without Flood Mitigation Project

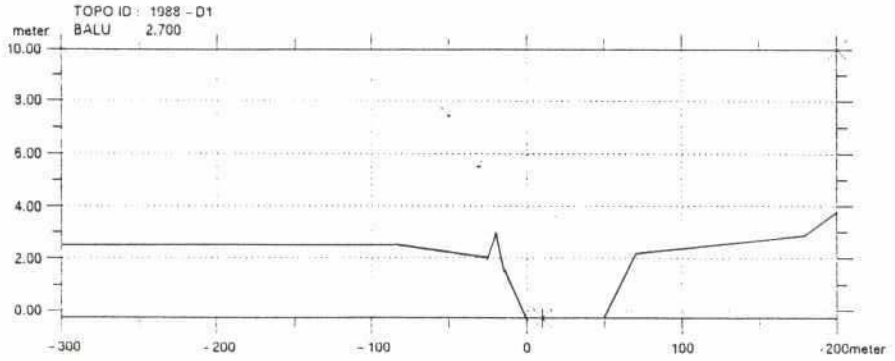
1) Revised River Cross Sections

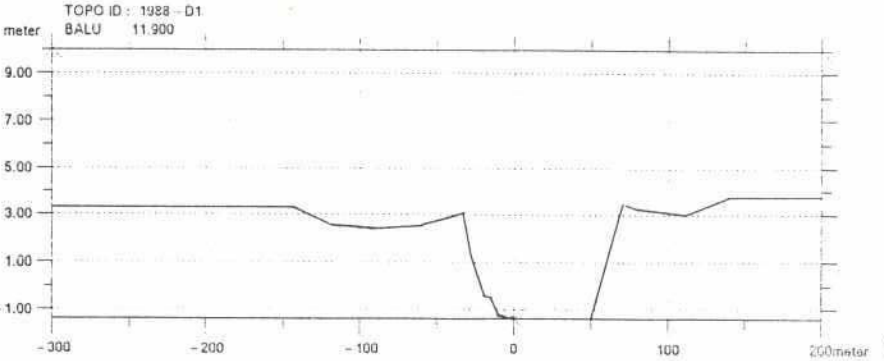


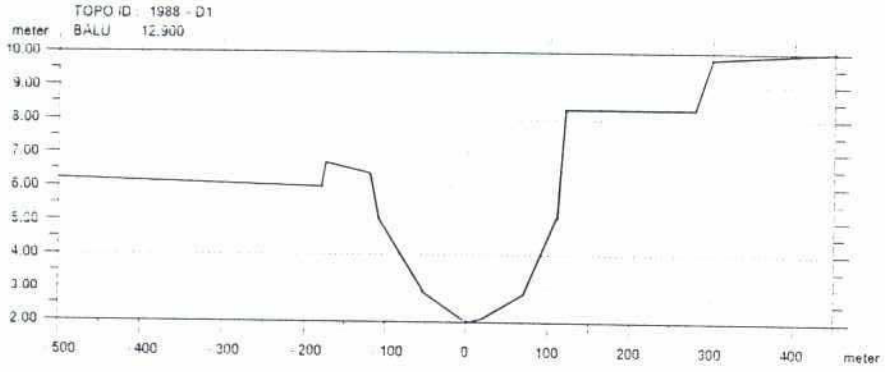


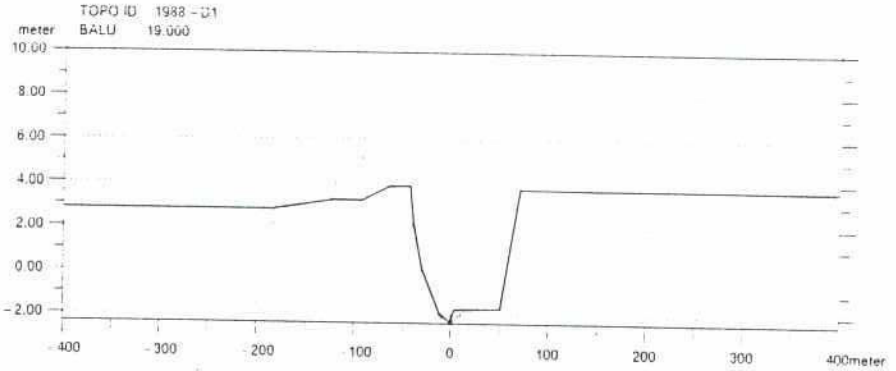


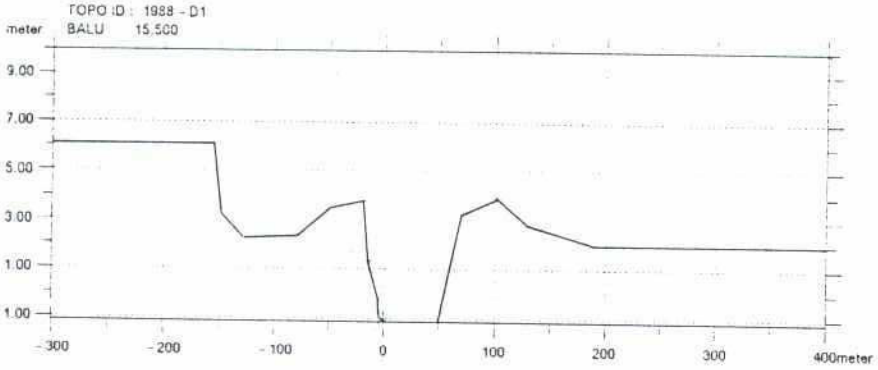


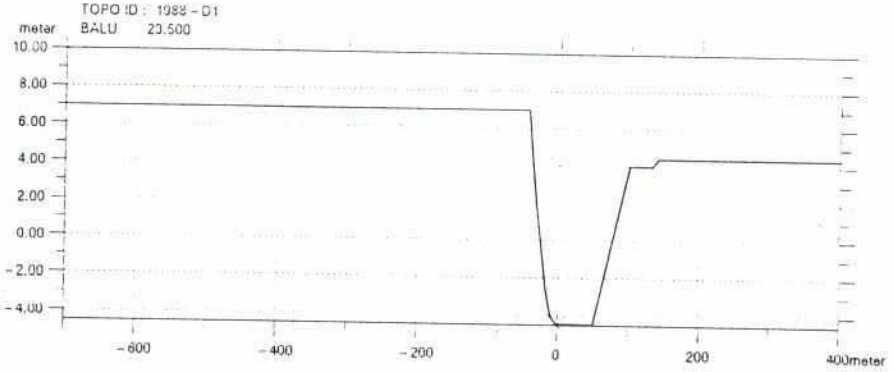


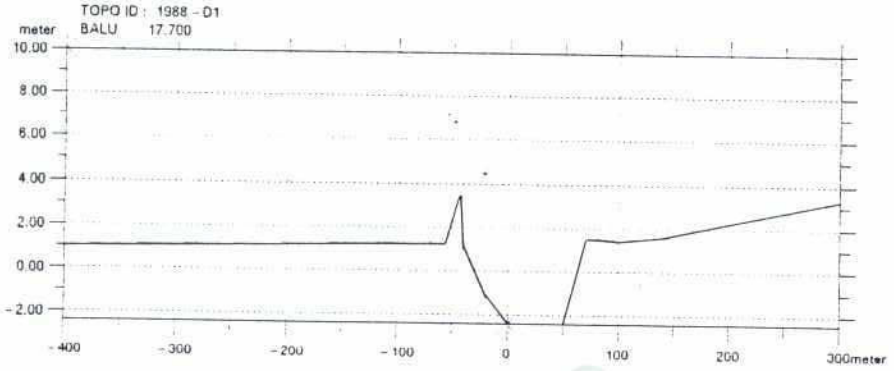


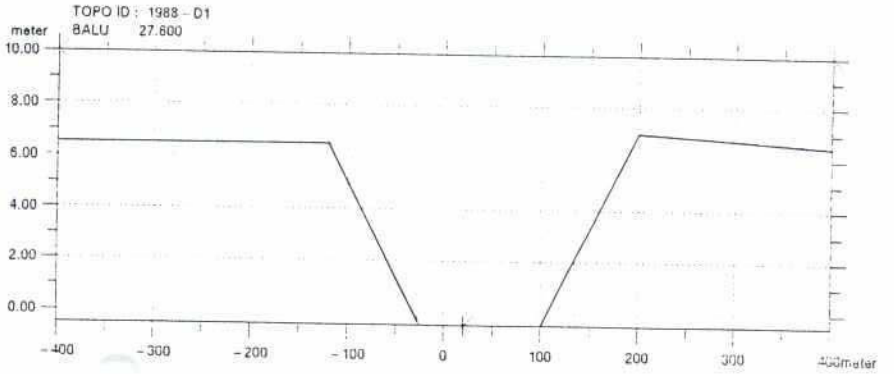

TOPO ID : 1988 - D1
meter BALU 12.900
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
500
400
300
200
100
0
100
200
300
400
meter

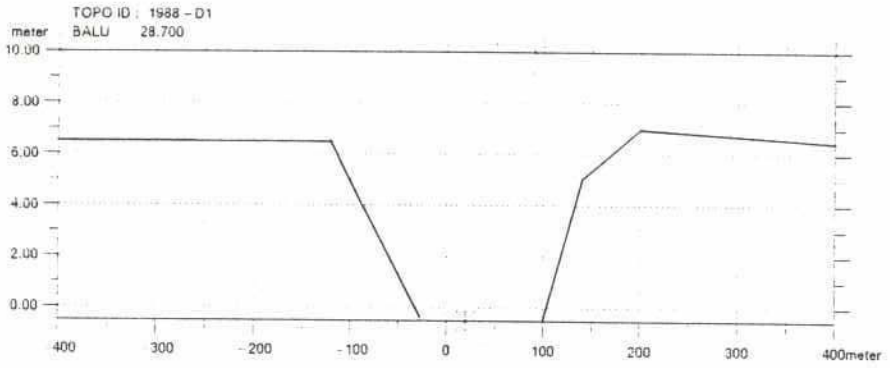

TOPO ID 1988 - D1
meter BALU 19.000
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
400
300
200
100
0
100
200
300
400meter

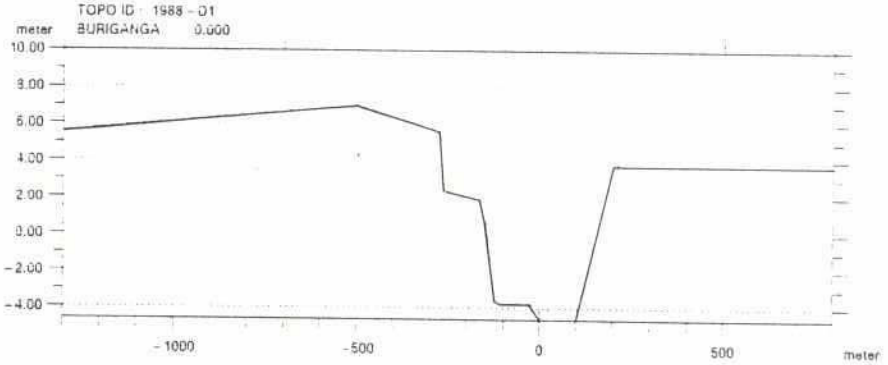

TOPO ID : 1988 - D1
meter BALU 15.500
9.00
7.00
5.00
3.00
1.00
-1.00
300
200
100
0
100
200
300
400meter

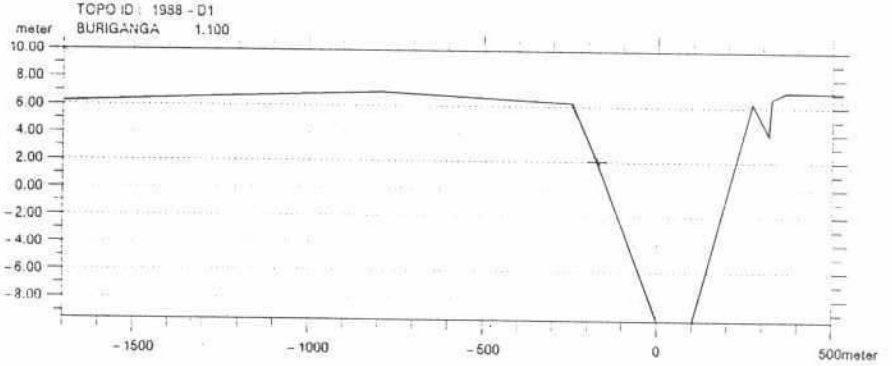

TOPO ID : 1988 - D1
meter BALU 23.500
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
600
400
200
0
200
400meter

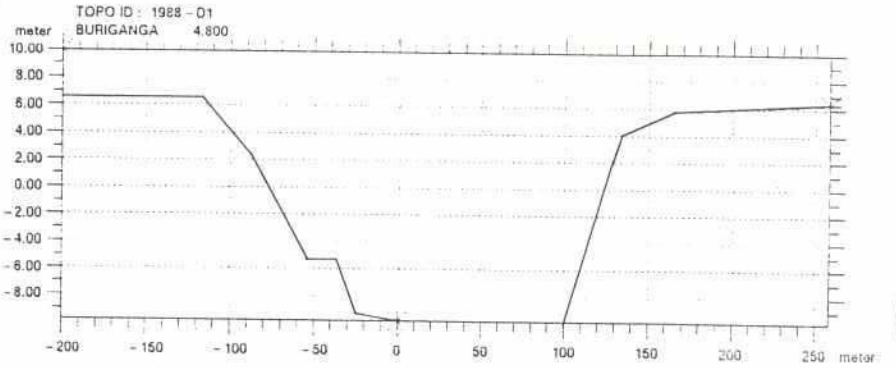

TOPO ID : 1988 - D1
meter BALU 17.700
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
400
300
200
100
0
100
200
300meter

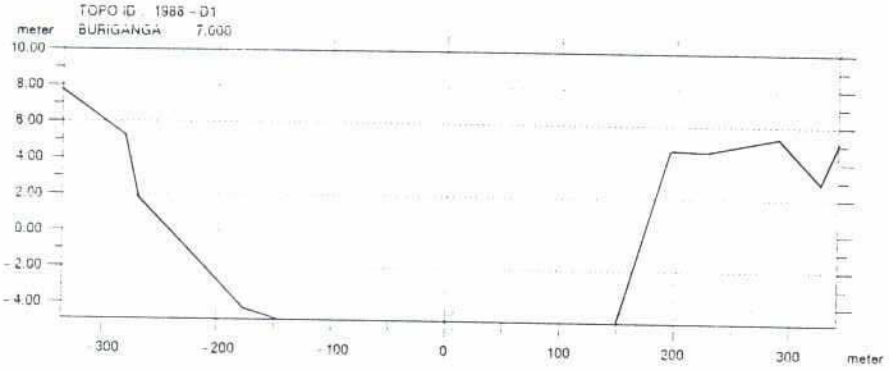

TOPO ID : 1988 - D1
meter BALU 27.600
10.00
8.00
6.00
4.00
2.00
0.00
400
300
200
100
0
100
200
300
400meter

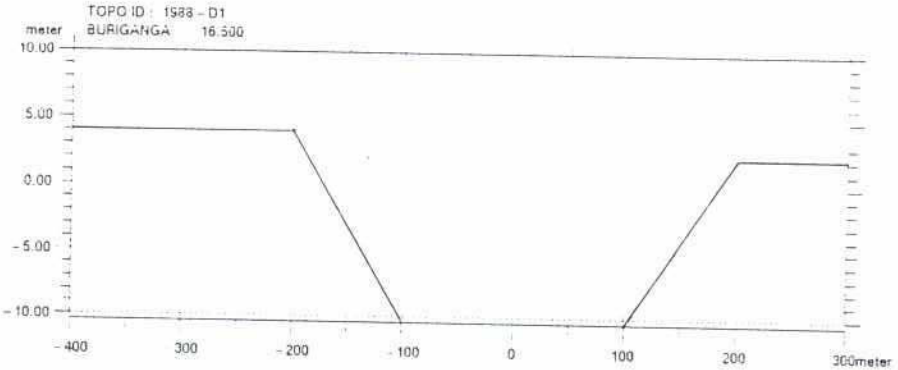

TOPO ID : 1988 - D1
meter BALU 28.700
10.00
8.00
6.00
4.00
2.00
0.00
400
300
-200
-100
0
100
200
300
400meter

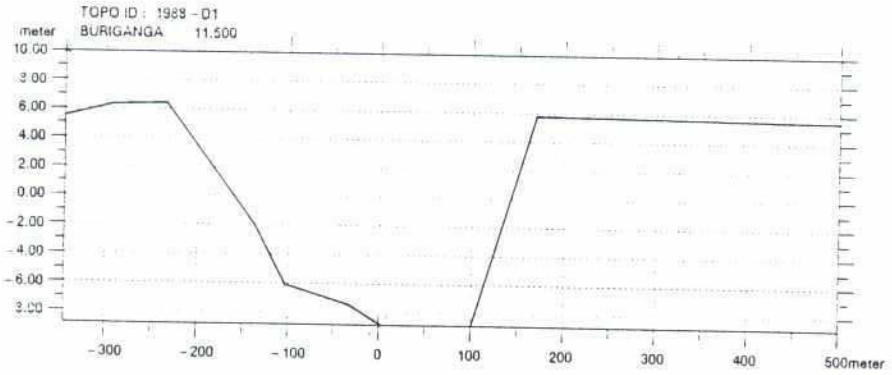

TOPO ID : 1988 - D1
meter BURIGANGA 0.000
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-1000
-500
0
500
meter

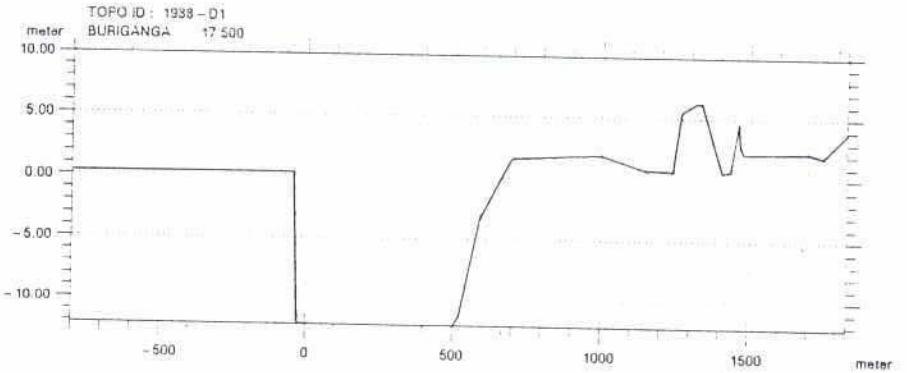

TOPO ID : 1988 - D1
meter BURIGANGA 1.100
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-1500
-1000
-500
0
500meter

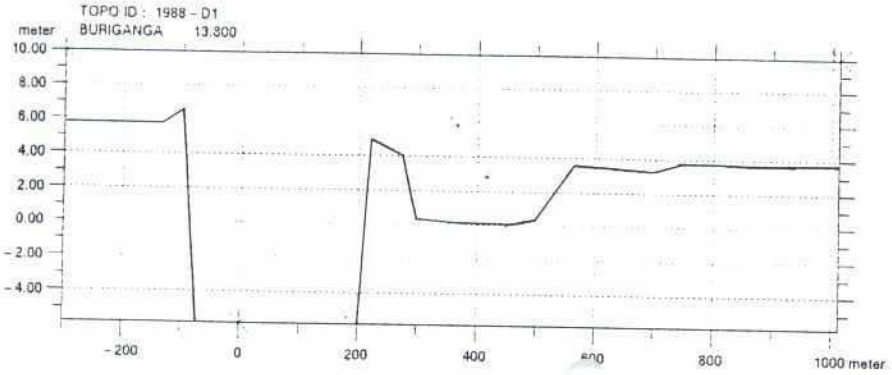

TOPO ID : 1988 - D1
meter BURIGANGA 4.800
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-200
-150
-100
-50
0
50
100
150
200
250 meter

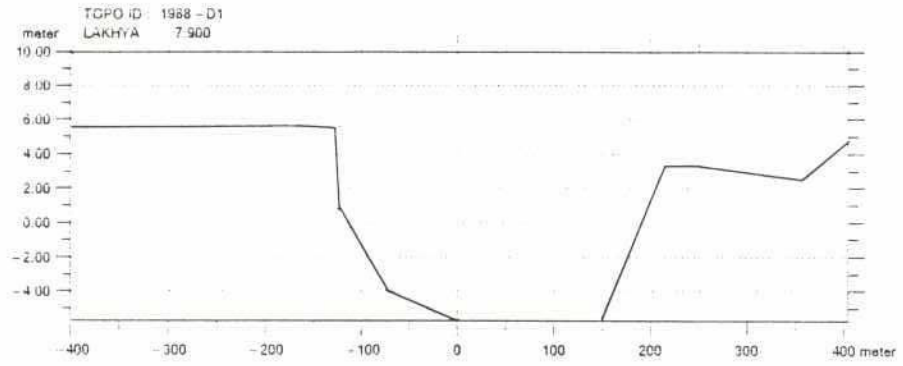

TOPO ID : 1988 - D1
meter BURIGANGA 7.000
10.00
8.00
6.00
4.00
2.00
0.00
- 2.00
- 4.00
-300
-200
-100
0
100
200
300
meter

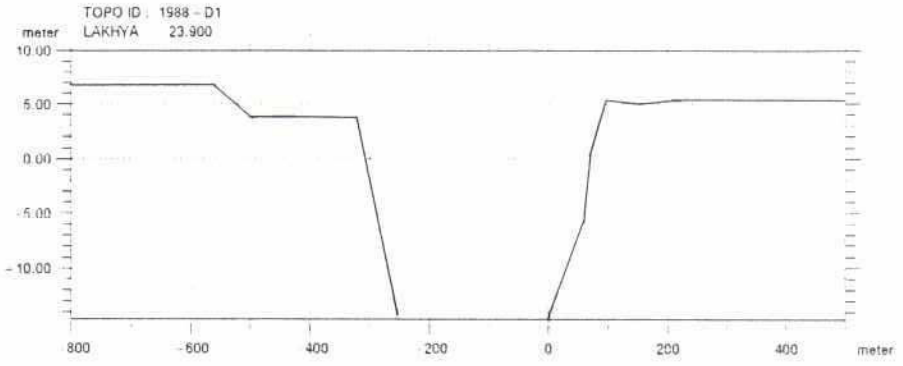

TOPO ID : 1988 - D1
meter BURIGANGA 16.500
10.00
5.00
0.00
- 5.00
- 10.00
-400
300
-200
-100
0
100
200
300meter

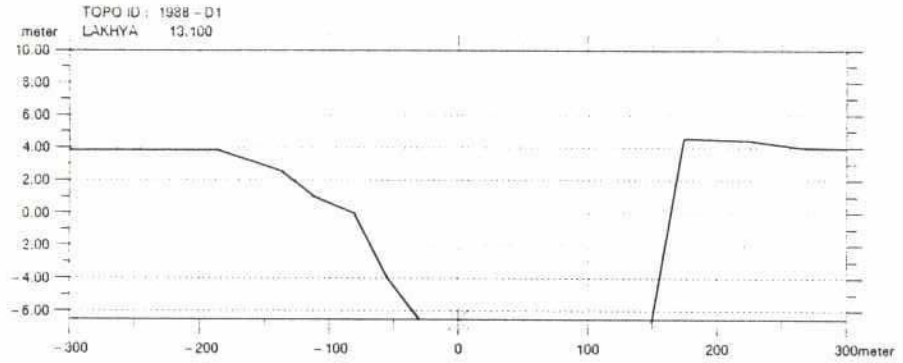

TOPO ID : 1988 - D1
meter BURIGANGA 11.500
10.00
8.00
6.00
4.00
2.00
0.00
- 2.00
- 4.00
- 6.00
8.00
-300
-200
-100
0
100
200
300
400
500meter

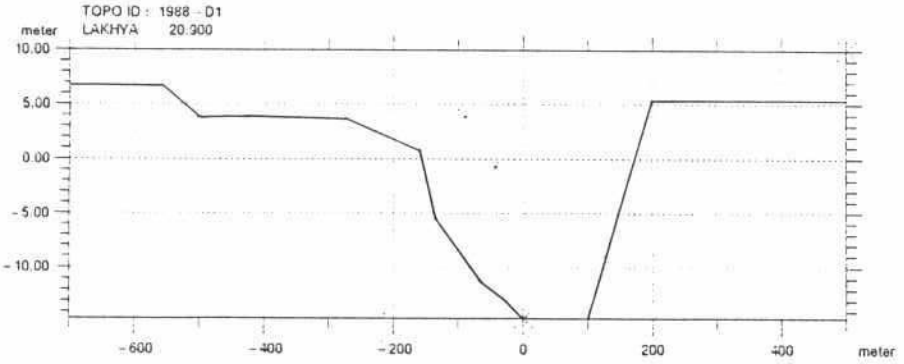

TOPO ID : 1988 - D1
meter BURIGANGA 17.500
10.00
5.00
0.00
- 5.00
- 10.00
-500
0
500
1000
1500
meter

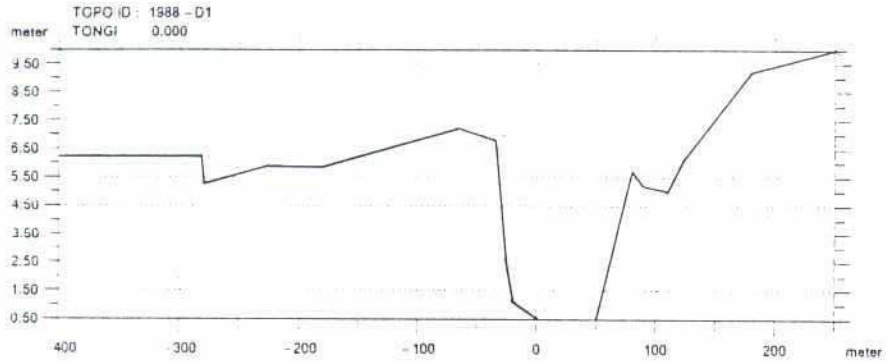

TOPO ID : 1988 - D1
meter BURIGANGA 13.300
10.00
8.00
6.00
4.00
2.00
0.00
- 2.00
- 4.00
-200
0
200
400
600
800
1000 meter

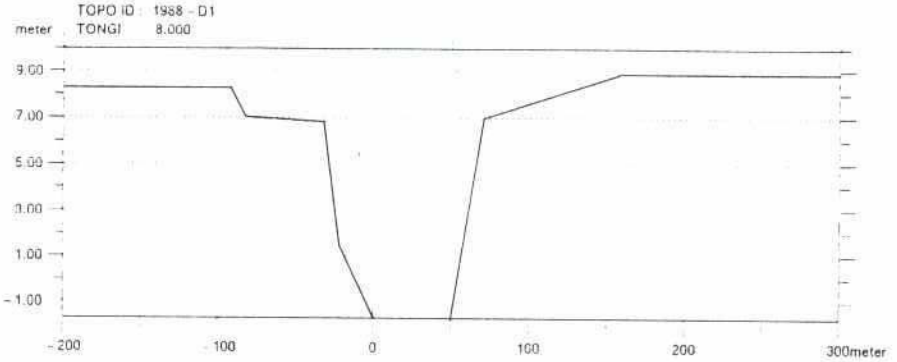

TOPO ID : 1988 - D1
meter LAKHYA 7.900
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-400
-300
-200
-100
0
100
200
300
400 meter

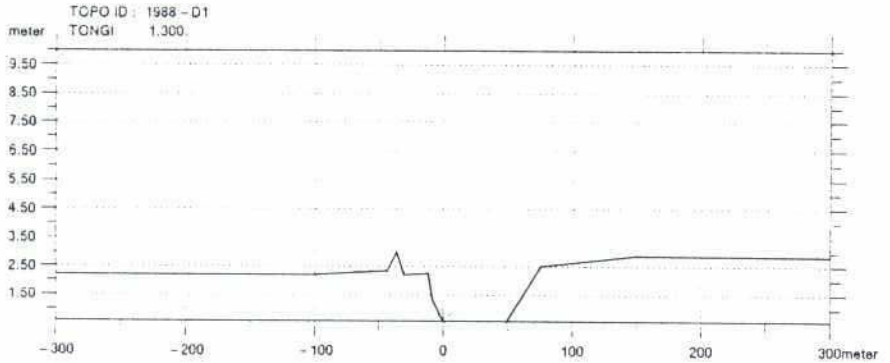

TOPO ID : 1988 - D1
meter LAKHYA 23.900
10.00
5.00
0.00
-5.00
-10.00
800
-600
400
200
0
200
400
meter

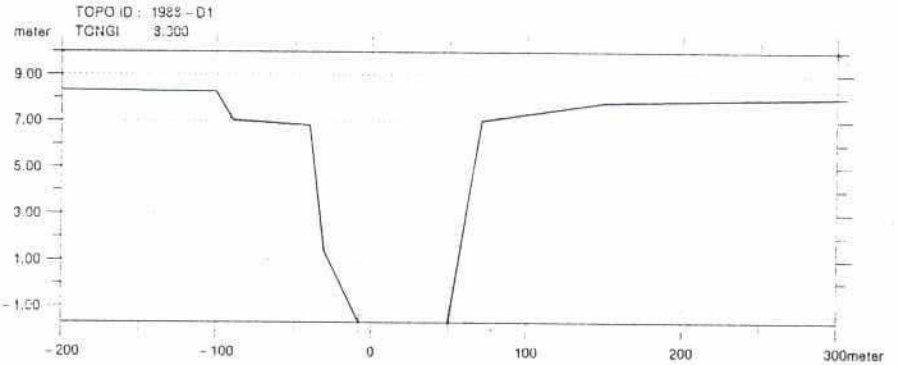

TOPO ID : 1988 - D1
meter LAKHYA 13.100
10.00
8.00
6.00
4.00
2.00
0.00
2.00
-4.00
-6.00
-300
-200
-100
0
100
200
300meter

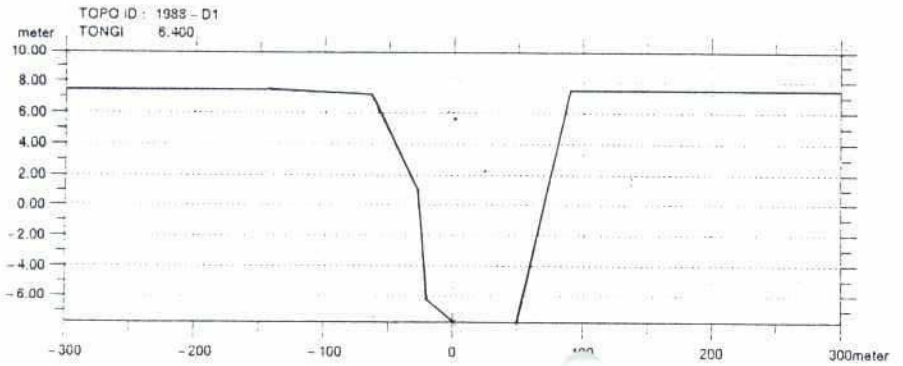

TOPO ID : 1988 - D1
meter LAKHYA 20.900
10.00
5.00
0.00
-5.00
-10.00
-600
-400
-200
0
200
400
meter

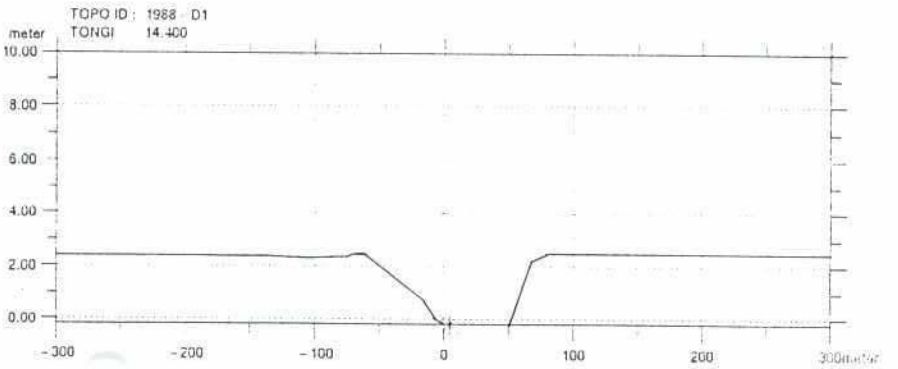

TOPO ID : 1988 - D1
TONGI 0.000
meter
9.50
8.50
7.50
6.50
5.50
4.50
3.50
2.50
1.50
0.50
400
300
200
100
0
100
200
meter

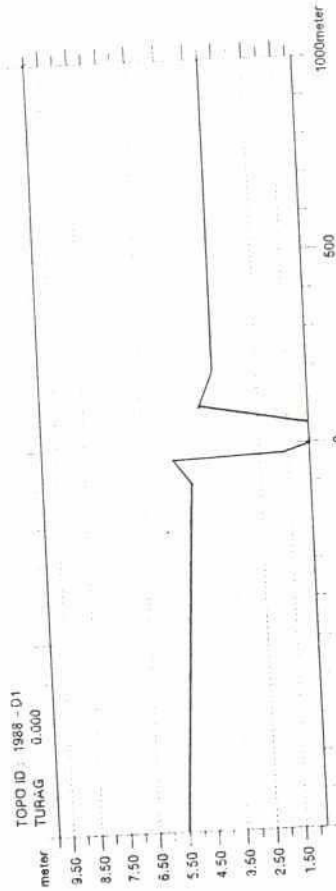

TOPO ID : 1988 - D1
TONGI 8.000
meter
9.00
7.00
5.00
3.00
1.00
-1.00
200
100
0
100
200
300meter

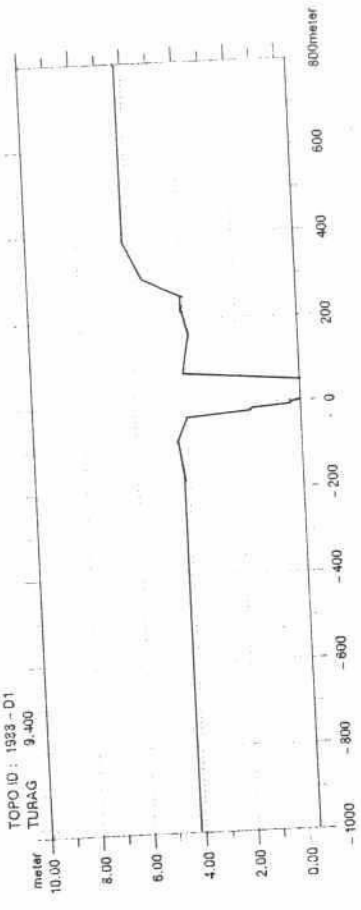

TOPO ID : 1988 - D1
TONGI 1.300
meter
9.50
8.50
7.50
6.50
5.50
4.50
3.50
2.50
1.50
300
200
100
0
100
200
300meter

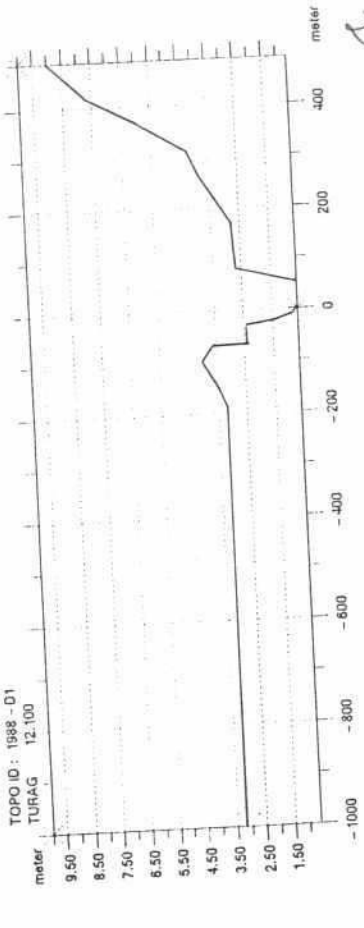

TOPO ID : 1988 - D1
TONGI 8.300
meter
9.00
7.00
5.00
3.00
1.00
-1.00
200
100
0
100
200
300meter

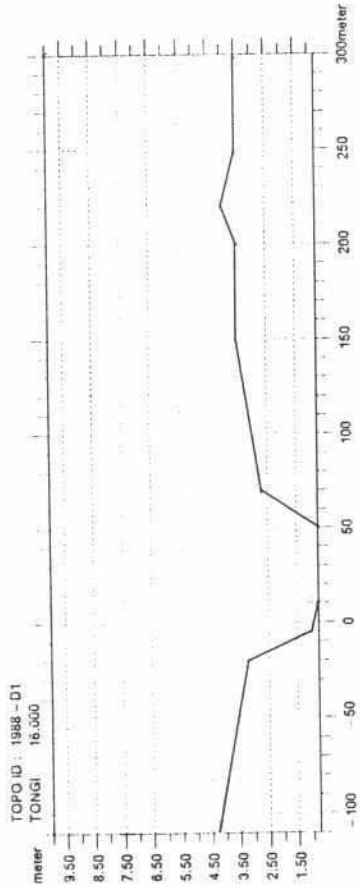

TOPO ID : 1988 - D1
TONGI 6.400
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
300
200
100
0
200
300meter

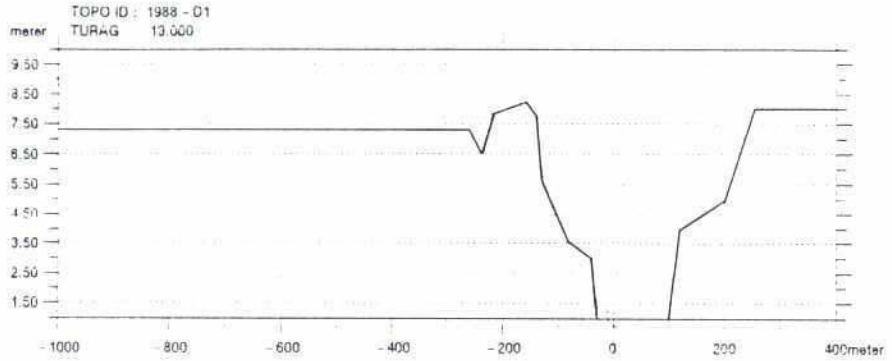

TOPO ID : 1988 - D1
TONGI 14.400
meter
10.00
8.00
6.00
4.00
2.00
0.00
300
200
100
0
100
200

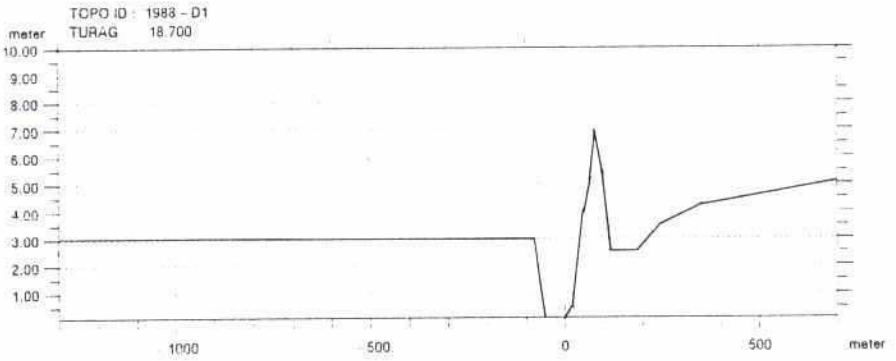

TOPO ID : 1988 - D1
TURAG 0.000
meter
1000meter

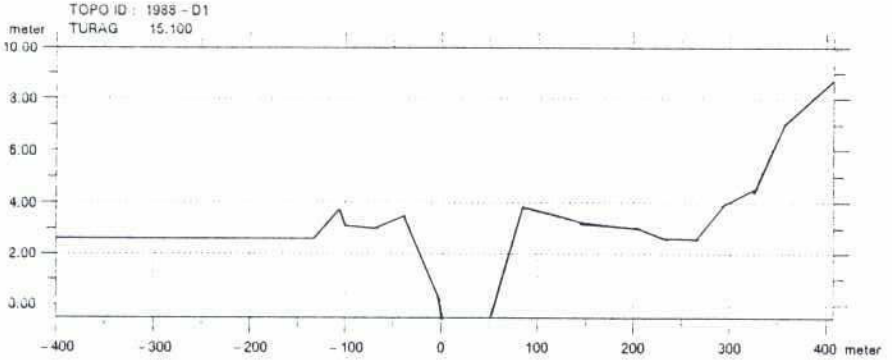

TOPO ID : 1988 - D1
TURAG 9.400
meter
800meter

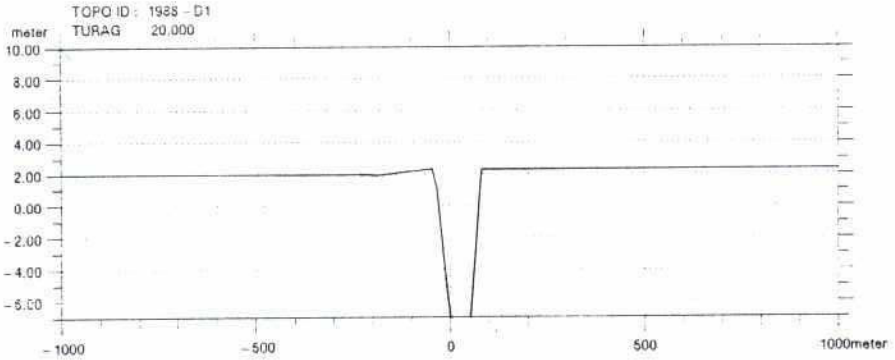

TOPO ID : 1988 - D1
TURAG 12.100
meter

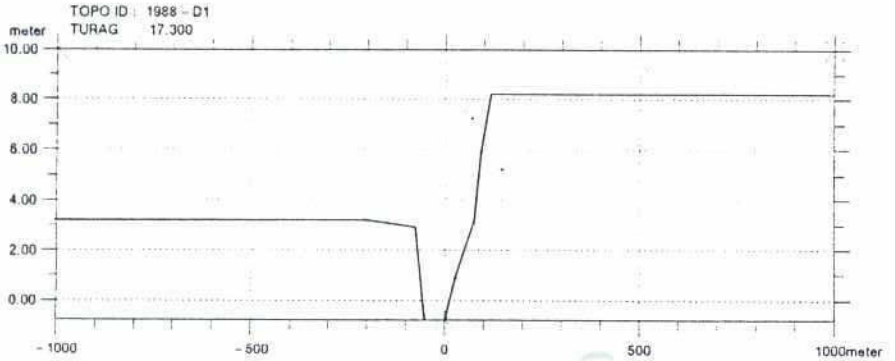

TOPO ID : 1988 - D1
TONGI 16.000
meter
300meter

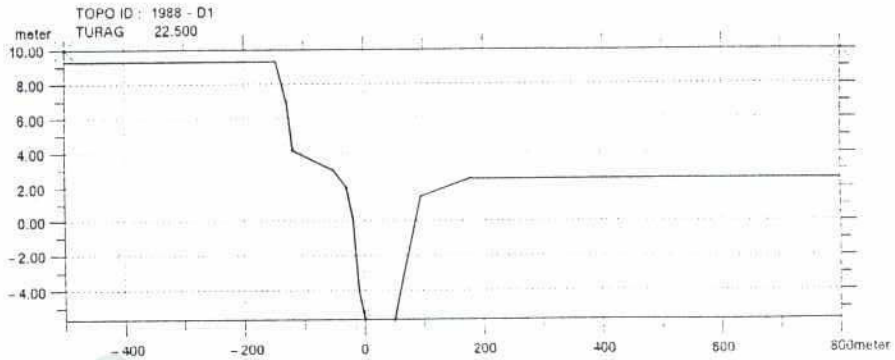

TOPO ID : 1988 - D1
meter TURAG 13.000
9.50
8.50
7.50
6.50
5.50
4.50
3.50
2.50
1.50
-1000
-800
-600
-400
-200
0
200
400meter

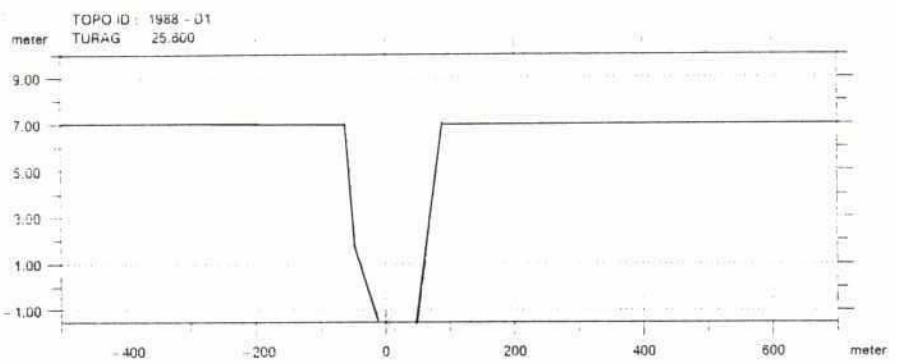

TOPO ID : 1988 - D1
meter TURAG 18.700
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
1000
500
0
500
meter

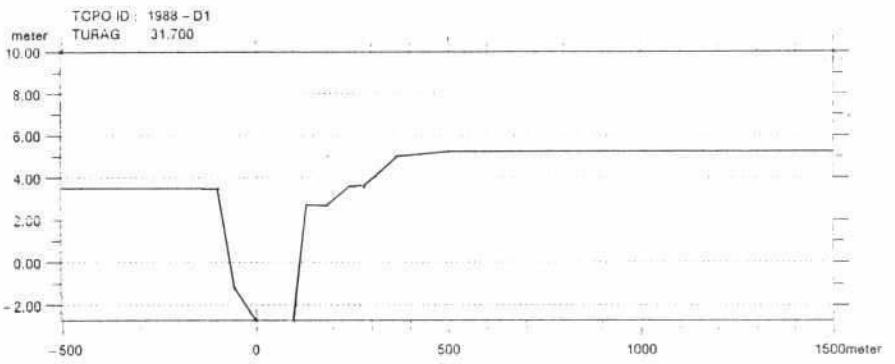

TOPO ID : 1988 - D1
meter TURAG 15.100
10.00
8.00
6.00
4.00
2.00
0.00
-400
-300
-200
-100
0
100
200
300
400 meter

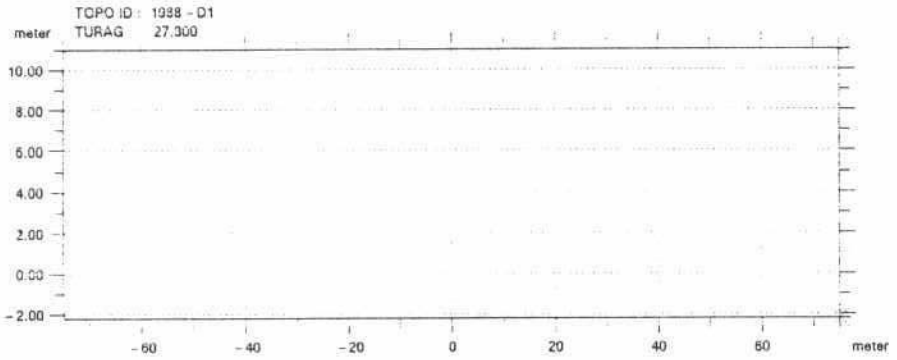

TOPO ID : 1988 - D1
meter TURAG 20.000
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-1000
-500
0
500
1000meter

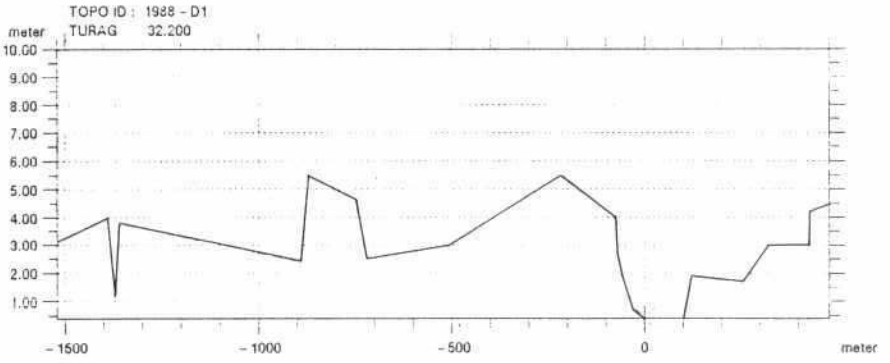

TOPO ID : 1988 - D1
meter TURAG 17.300
10.00
8.00
6.00
4.00
2.00
0.00
-1000
-500
0
500
1000meter

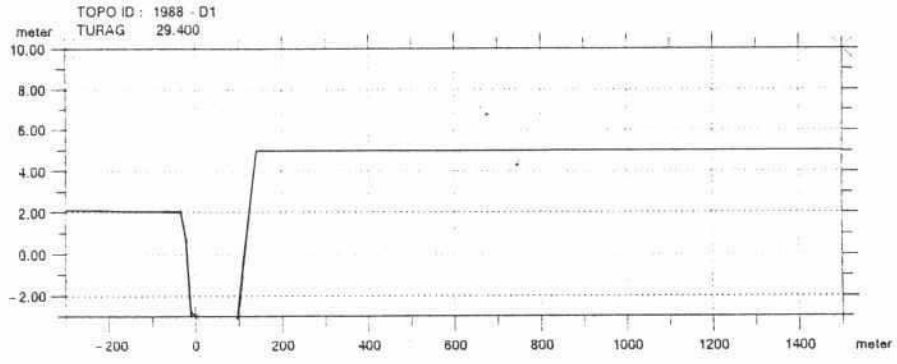

TOPO ID : 1988 - D1
meter TURAG 22.500
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-400
-200
0
200
400
600
800meter

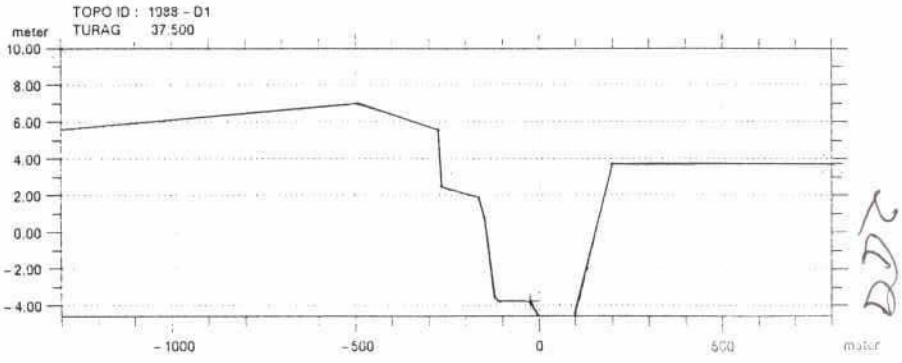

TOPO ID : 1988 - D1
TURAG 25.600
meter
9.00
7.00
5.00
3.00
1.00
-1.00
-400
-200
0
200
400
600
meter


TOPO ID : 1988 - D1
TURAG 31.700
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-500
0
500
1000
1500meter


TOPO ID : 1988 - D1
TURAG 27.300
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-60
-40
-20
0
20
40
60
meter


TOPO ID : 1988 - D1
TURAG 32.200
meter
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
-1500
-1000
-500
0
meter


TOPO ID : 1988 - D1
TURAG 29.400
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-200
0
200
400
600
800
1000
1200
1400
meter


TOPO ID : 1988 - D1
TURAG 37.500
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-1000
-500
0
500
meter

D272

1988-D1
BALU
8.200
COORDINATES
1 90.167 23.871
FLOW DIRECTION
0
DATUM
0.00
PROFILE 23

-300.00	10.00	1.00	<1>
-300.00	3.50	3.33	
-150.00	3.50	3.33	
-120.00	3.80	3.33	
-90.00	1.35	3.33	
-60.00	4.75	3.33	
-58.00	3.70	1.00	
-48.00	3.50	1.00	
-44.00	2.20	1.00	
-26.00	1.80	1.00	
-24.00	4.25	1.00	
-15.00	0.20	1.00	
0.00	-0.40	1.00	<2>
4.00	-0.40	1.00	
15.00	-0.40	1.00	
17.00	-0.40	1.00	
25.00	-0.40	1.00 ← $n_2/n_1 = 1.00$	
50.00	-0.40	1.00	
80.00	3.60	1.00	
90.00	3.60	3.33 ← $n_2/n_1 = 3.33$	
120.00	3.75	3.33	
400.00	3.75	3.33	
400.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
BALU
11.900
COORDINATES
1 90.175 23.844
FLOW DIRECTION
0
DATUM
0.00
PROFILE 21

-300.00	10.00	1.00	<1>
-300.00	3.30	3.33	
-143.00	3.30	3.33	
-118.00	2.50	3.33	
-93.00	2.10	3.33	
-63.00	2.50	3.33	
-33.00	3.10	3.33	
-28.00	1.30	1.00	
-19.00	-0.10	1.00	
-15.00	-0.50	1.00	
-10.00	-1.20	1.00	
0.00	-1.40	1.00	<2>
3.00	-1.40	1.00	
16.00	-1.40	1.00	
20.00	-1.40	1.00	
22.00	-1.40	1.00	
24.00	-1.40	1.00	
50.00	-1.40	1.00	
70.00	3.50	1.00	
80.00	3.25	3.33	
111.00	3.00	3.33	
140.00	3.75	3.33	
200.00	3.75	3.33	
200.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

Note : n_1 : Manning's roughness coefficient of river channel
n_2 : Manning's roughness coefficient of flood plain

1988-D1
BALU
12.900
COORDINATES
1 90.179 23.837
FLOW DIRECTION
0
DATUM
0.00
PROFILE 15

-500.00	10.00	1.00	<1>
-500.00	6.20	3.33	
-180.00	6.00	3.33	
-175.00	6.70	3.33	
-120.00	6.40	3.33	
-110.00	5.10	1.00	
-50.00	2.80	1.00	
0.00	2.00	1.00	<2>
20.00	2.10	1.00	
70.00	2.80	1.00	
110.00	5.10	1.00	
120.00	8.30	1.00	
280.00	8.30	3.33	
300.00	9.80	3.33	
450.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
BALU
15.500
COORDINATES
1 90.188 23.821
FLOW DIRECTION
0
DATUM
0.00
PROFILE 21

-300.00	10.00	1.00	<1>
-300.00	6.10	3.33	
-155.00	6.10	3.33	
-118.00	3.25	3.33	
-128.00	2.25	3.33.	
-80.00	2.30	3.33	
-50.00	3.50	3.33	
-19.00	3.80	3.33	
-15.00	1.50	1.00	
-5.00	-0.30	1.00	
-1.00	-1.00	1.00	
0.00	-1.15	1.00	<2>
15.00	-1.15	1.00	
38.00	-1.15	1.00	
50.00	-1.15	1.00	
70.00	3.25	1.00	
101.00	3.90	3.33	
130.00	2.80	3.33	
190.00	2.00	3.33	
400.00	2.00	3.33	
400.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BALU
        17.700
COORDINATES
    1          90.186          23.802
FLOW DIRECTION
0
DATUM
       0.00

PROFILE          16
   -100.00       10.00        1.00      <1>
   -100.00        1.00        3.33
    -56.00        1.30        3.33
    -14.00        3.50        3.33
    -10.00        1.20        1.00
    -20.00       -1.10        1.00
      0.00       -2.40        1.00      <2>
     10.00       -2.40        1.00
     45.00       -2.40        1.00
     50.00       -2.40        1.00
     70.00        1.50        1.00
     80.00        1.50        3.33
    100.00        1.10        3.33
    140.00        1.60        3.33
    300.00        3.31        3.33
    300.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BALU
        19.000
COORDINATES
    1          90.480          23.790
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          20
   -400.00       10.00        1.00       1>
   -100.00        2.80        3.33
   -184.00        2.80        3.33
   -121.00        3.20        3.33
    -91.00        3.20        3.33
    -61.00        3.90        3.33
    -41.00        3.90        3.33
    -11.00        2.50        1.00
    -37.00        1.20        1.00
    -34.00        0.85        1.00
    -31.00        0.20        1.00
    -10.00       -2.10        1.00
      0.00       -2.35        1.00      <2>
      3.00       -1.70        1.00
     16.00       -1.70        1.00
     19.00       -1.70        1.00
     50.00       -1.70        1.00
     70.00        3.75        1.00
    100.00        3.75        3.33
    400.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BALU
        23.500
COORDINATES
    1          90.486          23.758
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          16
   -700.00       10.00        1.00      <1>
   -700.00        7.00        3.33
    -54.00        7.00        3.33
    -41.00        7.00        3.33
    -34.00        2.90        1.00
    -19.00       -2.30        1.00
     -9.00       -1.10        1.00
      0.00       -1.50        1.00      <2>
     16.00       -1.50        1.00
     36.00       -1.50        1.00
     50.00       -1.50        1.00
    100.00        1.00        1.00
    131.00        1.00        3.33
    141.00        1.40        3.33
    400.00        1.40        3.33
    400.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BALU
        27.600
COORDINATES
    1          90.500          23.731
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          10
   -400.00       10.00        1.00      <1>
   -100.00        6.51        3.33
   -120.00        6.50        3.33
    -25.00       -0.50        1.00
     20.00       -0.50        1.00      <2>
     75.00       -0.50        1.00
    100.00       -0.50        1.00
    200.00        7.00        1.00
    400.00        6.50        3.33
    400.00       10.00        3.33      <3>
**********
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BALU
          28.700
COORDINATES
    1           90.501              23.730
FLOW DIRECTION
0
DATUM
      0.00
PROFILE             11
   -100.00       10.00        1.00        <1>
   -100.00        6.51        3.33
   -120.00        6.50        3.33
    -25.00       -0.50        1.00
     20.00       -0.50        1.00        <2>
     75.00       -0.50        1.00
    100.00       -0.50        1.00
    110.00        5.00        1.00
    200.00        7.00        1.00
    400.00        6.50        3.33
    400.00       10.00        3.33        <3>
******************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BURIGANGA
            0.000
COORDINATES
    1           90.318              23.712
FLOW DIRECTION
0
DATUM
      0.00
PROFILE             18
  -1300.00       10.00        1.00        <1>
  -1300.00        5.60        3.30
   -500.00        7.00        3.30
   -275.00        5.60        3.30
   -265.00        2.10        3.30
   -165.00        1.90        3.30
   -119.00        0.90        1.00
   -123.00       -3.60        1.00
   -105.00       -3.75        1.00
    -25.00       -3.75        1.00
      0.00       -1.60        1.00        <2>
     30.00       -1.60        1.00
     50.00       -1.60        1.00
     70.00       -1.60        1.00
    100.00       -1.60        1.00
    200.00        3.75        1.00
    800.00        3.75        3.30
    800.00       10.00        3.30        <3>
******************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BURIGANGA
            1.100
COORDINATES
    1           90.368              23.706
FLOW DIRECTION
0
DATUM
      0.00
PROFILE             13
  -1700.00       10.00        1.00        <1>
  -1700.00        6.25        3.30
   -800.00        7.00        3.30
   -213.90        6.25        3.30
   -173.78        2.05        1.00        <2>
      0.00       -9.52        1.00
    100.00       -9.52        1.00
    268.29        6.29        1.00
    317.07        3.95        3.30
    323.17        6.63        3.30
    359.75        7.08        3.30
    500.00        7.08        3.30        <3>
    500.00       10.00        3.30
******************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
BURIGANGA
            4.800
COORDINATES
    1           90.102              23.708
FLOW DIRECTION
0
DATUM

      0.00
PROFILE             15
   -200.00       10.00        1.00        <1>
   -200.00        6.56        3.33
   -117.07        6.56        3.33
    -87.80        2.33        1.00
    -53.66       -5.28        1.00
    -36.59       -5.28        1.00
    -21.95       -9.27        1.00
      0.00       -9.85        1.00        <2>
     21.95       -9.85        1.00
    100.00       -9.85        1.00
    129.27        2.33        1.00
    131.15        1.09        1.00
    165.86        5.83        1.00
    197.56        5.97        3.33
    258.51        6.10        3.33        <3>
******************************
```

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
BURIGANGA
7.000
COORDINATES
1 90.418 23.698
FLOW DIRECTION
0
DATUM
0.00
PROFILE 16

-335.36	10.00	1.00	<1>
-335.36	7.69	3.33	
-280.56	5.18	1.00	
-268.29	1.82	1.00	
-176.83	-1.26	1.00	
-146.34	-1.87	1.00	
0.00	-1.87	1.00	<2>
18.29	-1.87	1.00	
60.98	-1.87	1.00	
150.00	-1.87	1.00	
195.12	-1.61	1.00	
228.66	1.57	3.33	
289.64	5.31	3.33	
326.22	2.91	3.33	
341.46	5.18	3.33	
341.46	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
BURIGANGA
11.500
COORDINATES
1 90.451 23.669
FLOW DIRECTION
0
DATUM
0.00
PROFILE 11

-311.51	10.00	1.00	<1>
-314.51	5.54	3.33	
-292.69	6.31	3.33	
-231.76	6.43	3.33	
-138.72	-1.82	1.00	
-102.11	-6.10	1.00	
-29.88	-7.56	1.00	
0.00	-8.84	1.00	<2>
66.77	-8.81	1.00	
100.00	-8.84	1.00	
170.00	5.75	1.00	
154.27	5.52	3.33	
500.00	5.52	3.33	
500.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
BURIGANGA
13.800
COORDINATES
1 90.465 23.652
FLOW DIRECTION
0
DATUM
0.00
PROFILE 22

-300.00	10.00	1.00	<1>
-300.00	5.74	3.33	
-134.00	5.74	3.33	
-98.17	6.61	3.33	
-73.17	-5.85	1.00	
0.00	-5.85	1.00	<2>
48.78	-5.85	1.00	
73.17	-5.85	1.00	
200.00	-5.85	1.00	
220.00	5.00	1.00	
271.39	4.05	3.33	
298.78	0.31	3.33	
371.95	0.10	3.33	
445.12	0.03	3.33	
500.00	0.41	3.33	
560.98	3.60	3.33	
695.12	3.30	3.33	
743.90	3.75	3.33	
801.83	3.78	3.33	
868.90	3.68	3.33	
1012.20	3.72	3.33	
1012.20	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
BURIGANGA
16.500
COORDINATES
1 90.468 23.633
FLOW DIRECTION
0
DATUM
0.00
PROFILE 9

-400.00	10.00	1.00	<1>
-400.00	4.00	1.00	
-200.00	1.00	3.33	
-100.50	-10.10	3.33	
0.00	-10.10	1.00	
100.00	-10.10	1.00	<2>
200.00	2.20	1.00	
300.00	2.20	1.00	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
BURIGANGA
17.500
COORDINATES
1 90.158 23.629
FLOW DIRECTION
0
DATUM
0.00
PROFILE 29

-800.00	10.00	1.00	<1>
-800.00	0.33	3.33	
-12.68	0.33	3.33	
-27.68	-12.10	1.00	
0.00	-12.16	1.00	<2>
6.10	-12.16	1.00	
67.07	-12.16	1.00	
365.86	-12.16	1.00	
500.00	-12.16	1.00	
518.29	-11.55	1.00	
591.76	-3.01	1.00	
692.26	1.55	1.00	
908.53	1.85	3.33	
993.90	1.92	3.33	
1146.34	0.80	3.33	
1243.90	0.64	3.33	
1268.29	5.57	3.33	
1310.97	6.22	3.33	
1335.36	6.25	3.33	
1408.53	0.57	3.33	
1438.93	0.70	3.33	
1463.41	1.93	3.33	
1469.51	2.77	3.33	
1481.71	2.16	3.33	
1560.97	2.23	3.33	
1695.12	2.31	3.33	
1756.10	1.93	3.33	
1835.36	4.03	3.33	
1835.36	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
LAKHYA
7.900
COORDINATES
1 90.327 23.695
FLOW DIRECTION
0
DATUM
0.00
PROFILE 19

-100.00	10.00	1.00	1>
-100.00	5.55	3.33	
-209.15	5.55	3.33	
-171.39	5.58	3.33	
-127.13	5.52	3.33	
-122.25	0.71	1.00	
-71.08	-3.86	1.00	
-29.27	-5.08	1.00	
0.00	-5.69	1.00	<2>
36.28	-5.69	1.00	
103.97	-5.69	1.00	
131.71	-5.69	1.00	
150.00	-5.69	1.00	
214.03	3.30	1.00	
217.87	3.30	3.33	
308.23	2.84	3.33	
355.19	2.16	3.33	
104.71	1.73	3.33	
104.71	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
LAKHYA
13.100
COORDINATES
1 90.523 23.651
FLOW DIRECTION
0
DATUM
0.00
PROFILE 20

-300.00	10.00	1.00	<1>
-300.00	3.84	3.33	
-186.28	3.84	3.33	
-135.37	2.47	1.00	
-113.62	1.13	1.00	
-79.88	-0.09	1.00	
-56.71	-3.75	1.00	
-28.96	-6.49	1.00	
0.00	-6.19	1.00	<2>
21.39	-6.49	1.00	
54.27	-6.49	1.00	
93.29	-6.49	1.00	
118.60	-6.19	1.00	
138.11	-6.49	1.00	
150.00	-6.19	1.00	
174.39	4.57	1.00	
225.00	1.45	3.33	
269.81	3.96	3.33	
300.00	3.96	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
LAKHYA
20.900
COORDINATES
1 90.515 23.585
FLOW DIRECTION
0
DATUM
0.00
PROFILE 22

-700.00	10.00	1.00	<1>
-700.00	6.71	3.33	
-558.81	6.71	3.33	
-197.25	3.71	3.33	
-151.88	3.89	3.33	
-307.32	3.75	3.33	
-271.39	3.59	3.33	
-228.66	2.52	3.33	
-159.15	0.62	1.00	
-136.58	-5.48	1.00	
-61.59	-11.58	1.00	
-35.06	-12.59	1.00	
0.00	-11.63	1.00	<2>
41.16	-11.63	1.00	
60.67	-11.63	1.00	
72.56	-11.63	1.00	
94.51	-11.63	1.00	
100.00	-11.63	1.00	
200.00	5.30	1.00	
212.07	5.37	3.33	
500.00	5.37	3.33	
500.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
LAKHYA
23.900
COORDINATES
1 90.537 23.568
FLOW DIRECTION
0
DATUM
0.00

PROFILE	22		
-800.00	10.00	1.00	<1>
-800.00	6.71	3.33	
-558.81	6.71	3.33	
-197.25	3.74	3.33	
-151.88	3.89	3.33	
-320.00	3.75	3.33	
-250.00	-11.63	1.00	
-228.66	-14.63	1.00	
-159.15	-11.63	1.00	
-136.58	-14.63	1.00	
-61.59	-14.63	1.00	
-35.06	-14.63	1.00	
0.00	-11.63	1.00	<2>
41.16	-8.53	1.00	
60.67	-5.48	1.00	
72.56	0.62	1.00	
91.51	5.37	1.00	
157.32	5.02	3.33	
208.67	5.30	3.33	
212.07	5.37	3.33	
500.00	5.37	3.33	
500.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
0.000
COORDINATES
1 90.358 23.879
FLOW DIRECTION
0
DATUM
0.00

PROFILE	23		
-100.00	10.00	1.00	<1>
-100.00	6.20	3.33	
-282.00	6.20	3.33	
-280.00	5.30	3.33	
-225.00	5.90	3.33	
-180.00	5.85	3.33	
-65.00	7.20	3.33	
-31.00	6.80	3.33	
-26.00	2.50	1.00	
-20.00	1.20	1.00	
0.00	0.50	1.00	<2>
11.00	0.50	1.00	
23.00	0.50	1.00	
28.00	0.50	1.00	
43.00	0.50	1.00	
45.00	0.50	1.00	
50.00	0.50	1.00	
80.00	5.70	1.00	
90.00	5.20	3.33	
110.00	5.00	3.33	
125.00	6.20	3.33	
180.00	9.20	3.33	
250.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
1.300
COORDINATES
1 90.361 23.883
FLOW DIRECTION
0
DATUM
0.00

PROFILE	18		
-300.00	10.00	1.00	<1>
-300.00	2.20	3.33	
-104.00	2.20	3.33	
-44.00	2.35	3.33	
-37.00	3.00	3.33	
-31.00	2.20	3.33	
-12.00	2.25	3.33	
-8.00	1.20	1.00	
0.00	0.60	1.00	<2>
4.00	0.60	1.00	
7.00	0.60	1.00	
14.00	0.60	1.00	
50.00	0.60	1.00	
71.00	2.50	1.00	
148.00	2.90	3.33	
206.00	2.90	3.33	
300.00	2.90	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
6.100
COORDINATES
1 90.391 23.887
FLOW DIRECTION
0
DATUM
0.00

PROFILE	11		
-300.00	10.00	1.00	<1>
-300.00	7.50	3.33	
-150.00	7.50	3.33	
-65.00	7.20	3.33	
-28.00	1.00	1.00	
-20.00	-6.30	1.00	
0.00	-7.80	1.00	<2>
11.00	-7.80	1.00	
20.00	-7.80	1.00	
50.00	-7.80	1.00	
90.00	7.50	1.00	
105.00	7.50	3.33	
300.00	7.50	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
8.000
COORDINATES

1	90.105	23.881

FLOW DIRECTION
0
DATUM
0.00

PROFILE	15		
-200.00	10.00	1.00	<1>
-200.00	8.30	3.33	
-192.00	8.30	3.33	
-92.00	8.30	3.33	
-82.00	7.00	3.33	
-32.00	6.80	3.33	
-22.00	1.50	1.00	
0.00	-1.70	1.00	<2>
18.00	-1.70	1.00	
12.00	-1.70	1.00	
50.00	-1.70	1.00	
70.00	7.00	1.00	
158.00	8.90	3.33	
300.00	8.90	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
8.300
COORDINATES

1	90.106	23.879

FLOW DIRECTION
0
DATUM
0.00

PROFILE	11		
-200.00	10.00	1.00	<1>
-200.00	8.31	3.33	
-100.00	8.30	3.33	
-96.00	7.00	3.33	
-40.00	6.80	3.33	
-31.00	1.50	1.00	
-8.00	-1.70	1.00	<2>
10.00	-1.70	1.00	
33.00	-1.70	1.00	
50.00	-1.70	1.00	
70.00	7.00	1.00	
150.00	7.80	3.33	
300.00	8.00	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
14.400
COORDINATES

1	90.158	23.892

FLOW DIRECTION
0
DATUM
0.00

PROFILE	20		
-300.00	10.00	1.00	<1>
-300.00	2.40	3.33	
-138.00	2.10	3.33	
-108.00	2.30	3.33	
-78.00	2.35	3.33	
-68.00	2.50	3.33	
-62.00	2.50	3.33	
-38.00	1.60	1.00	
-16.00	0.75	1.00	
-6.00	-0.05	1.00	
-2.00	-0.10	1.00	
0.00	-0.20	1.00	
1.00	-0.20	1.00	<2>
29.00	-0.20	1.00	
31.00	-0.20	1.00	
50.00	-0.20	1.00	
68.00	2.20	1.00	
79.00	2.50	3.33	
300.00	2.50	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TONGI
16.000
COORDINATES

1	90.161	23.886

FLOW DIRECTION
0
DATUM
0.00

PROFILE	11		
-110.00	10.00	1.00	<1>
-110.00	1.30	3.33	
-20.00	3.20	3.33	
-5.00	1.00	1.00	
10.00	0.80	1.00	<2>
25.00	0.80	1.00	
50.00	0.80	1.00	
70.00	2.70	1.00	
150.00	3.50	1.00	
200.00	3.50	3.33	
220.00	1.00	3.33	
250.00	3.50	3.33	
300.00	3.50	3.33	
300.00	10.00	3.33	<3>

****

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
TURAG
          0.000
COORDINATES
    1          90.373          23.976
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          12
  -1000.00       10.00        1.00      <1>
  -1000.00        5.51        3.33
   -100.00        1.90        3.33
    -35.00        5.50        3.33
    -28.00        1.80        1.00
      0.00        0.80        1.00      <2>
     28.00        0.80        1.00
     50.00        0.80        1.00
    100.00        4.50        1.00
    190.00        4.00        3.33
   1000.00        4.00        3.33
   1000.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
TURAG
          9.100
COORDINATES
    1          90.338          23.915
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          21
  -1000.00       10.00        1.00      <1>
  -1000.00        1.20        3.33
   -182.00        1.20        3.33
    -82.00        1.40        3.33
    -30.00        1.00        3.33
    -20.00        1.55        1.00
    -12.00        1.10        1.00
    -10.00        0.25        1.00
      0.00       -0.10        1.00      <2>
     18.00       -0.40        1.00
     28.00       -0.10        1.00
     50.00       -0.10        1.00
     70.00        1.10        1.00
    101.00        4.00        3.33
    163.00        3.80        3.33
    222.00        1.05        3.33
    252.00        4.10        3.33
    292.00        5.50        3.33
    381.00        6.20        3.33
    800.00        6.20        3.33
    800.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
TURAG
         12.100
COORDINATES
    1          90.338          23.894
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          21
  -1000.00       10.00        1.00      <1>
  -1000.00        3.20        3.33
   -190.00        3.20        3.33
   -160.00        3.40        3.33
   -130.00        3.70        3.33
   -100.00        4.00        3.33
    -70.00        3.60        3.33
    -66.00        2.10        3.33
    -30.00        2.10        3.33
    -22.00        1.60        1.00
    -10.00        0.80        1.00
      0.00        0.60        1.00      <2>
     50.00        0.60        1.00
     80.00        2.70        1.00
    170.00        2.80        3.33
    260.00        3.80        3.33
    310.00        1.25        3.33
    370.00        6.00        3.33
    120.00        7.75        3.33
    190.00        9.00        3.33
    190.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
TURAG
         13.000
COORDINATES
    1          90.312          23.892
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          18
  -1000.00       10.00        1.00      <1>
  -1000.00        7.31        3.33
   -260.00        7.30        3.33
   -210.00        6.50        3.33
   -220.00        7.80        3.33
   -160.00        8.20        3.33
   -110.00        7.80        3.33
   -130.00        5.50        1.00
    -80.00        3.50        1.00
    -10.00        3.00        1.00
    -30.00        1.00        1.00
    -10.00        1.00        1.00      <2>
    100.00        1.00        1.00
    120.00        1.00        1.00
    200.00        5.00        1.00
    250.00        8.00        1.00
    400.00        8.00        3.33
    100.00       10.00        3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-01
TURAG
        15.100
COORDINATES
    1          90.353          23.875
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          21
   -400.00       10.00       1.00      <1>
   -400.00        2.60       3.33
   -134.00        2.60       3.33
   -106.00        3.75       3.33
   -100.00        3.10       3.33
    -70.00        3.00       3.33
    -38.00        3.50       3.33
    -24.00        2.10       1.00
     -1.00        0.35       1.00
      0.00       -0.50       1.00      <2>
      8.00       -0.50       1.00
     22.00       -0.50       1.00
     31.00       -0.50       1.00
     50.00       -0.50       1.00
     81.00        3.80       1.00
    144.00        3.25       3.33
    204.00        3.00       3.33
    234.00        2.60       3.33
    266.00        2.60       3.33
    294.00        3.90       3.33
    321.00        1.50       3.33
    357.00        7.00       3.33
    408.00        8.75       3.33
    408.00       10.00       3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-01
TURAG
        17.300
COORDINATES
    1          90.318          23.857
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          14
  -1000.00       10.00       1.00      <1>
  -1000.00        3.20       3.33
   -326.00        3.20       3.33
   -201.00        3.20       3.33
    -80.00        2.90       3.33
    -50.00       -0.80       1.00
      0.00       -0.80       1.00      <2>
     22.00        0.80       1.00
     72.00        3.15       1.00
     90.00        5.80       3.33
    116.00        8.20       3.33
    226.00        8.20       3.33
   1000.00        8.20       3.33
   1000.00       10.00       3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-01
TURAG
        18.700
COORDINATES
    1          90.340          23.846
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          18
  -1300.00       10.00       1.00      <1>
  -1300.00        3.01       3.33
    -80.00        3.00       3.33
    -50.00        0.10       1.00
    -25.00        0.10       1.00
    -15.00        0.10       1.00
      0.00        0.10       1.00      <2>
     15.00        0.50       1.00
     15.00        1.00       1.00
     63.00        5.10       3.33
     75.00        7.00       3.33
     98.00        5.00       3.33
    115.00        2.50       3.33
    180.00        2.50       3.33
    212.00        3.50       3.33
    315.00        4.20       3.33
    700.00        5.10       3.33
    700.00       10.00       3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-01
TURAG
        20.000
COORDINATES
    1          90.312          23.837
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          17
  -1000.00       10.00       1.00      <1>
  -1000.00        2.00       3.33
   -250.00        2.00       3.33
   -190.00        1.90       3.33
   -126.00        2.10       3.33
    -45.00        2.30       3.33
    -33.00        0.80       1.00
    -20.00       -2.90       1.00
    -12.00       -5.10       1.00
      0.00       -7.00       1.00      <2>
     10.00       -7.00       1.00
     50.00       -7.00       1.00
     80.00        2.30       1.00
    103.00        2.30       3.33
    150.00        2.30       3.33
   1000.00        2.30       3.33
   1000.00       10.00       3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

1988-D1
TURAG
22.500
COORDINATES
1 90.310 23.821
FLOW DIRECTION
0
DATUM
0.00
PROFILE 22

-500.00	10.00	1.00	<1>
-500.00	9.30	3.33	
-115.00	9.30	3.33	
-130.00	7.20	3.33	
-119.00	1.20	3.33	
-110.00	1.00	3.33	
-65.00	3.20	3.33	
-50.00	3.00	3.33	
-28.00	2.00	3.33	
-18.00	0.20	1.00	
-9.00	-3.90	1.00	
0.00	-5.70	1.00	<2>
10.00	-5.70	1.00	
11.00	-5.70	1.00	
22.00	-5.70	1.00	
30.00	-5.70	1.00	
50.00	-5.70	1.00	
95.00	1.50	1.00	
180.00	2.50	3.33	
205.00	2.50	3.33	
800.00	2.50	3.33	
800.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
TURAG
25.600
COORDINATES
1 90.313 23.797
FLOW DIRECTION
0
DATUM
0.00
PROFILE 15

-500.00	10.00	1.00	<1>
-500.00	7.01	3.33	
-312.00	7.01	3.33	
-82.00	7.00	3.33	
-62.00	7.00	3.33	
-17.00	1.80	1.00	
-12.00	-1.50	1.00	
0.00	-1.50	1.00	<2>
15.00	-1.50	1.00	
32.00	-1.50	1.00	
50.00	-1.50	1.00	
88.00	7.00	1.00	
93.00	7.00	3.33	
700.00	7.00	3.33	
700.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
TURAG
27.300
COORDINATES
1 90.340 23.783
FLOW DIRECTION
0
DATUM
0.00
PROFILE 5

-75.00	11.00	1.00	<1>
-75.00	-2.20	1.00	
0.00	-2.20	1.00	
75.00	-2.20	1.00	<2>
75.00	11.00	1.00	<3>

****

$n_1 = 0.030$

1988-D1
TURAG
29.100
COORDINATES
1 90.316 23.770
FLOW DIRECTION
0
DATUM
0.00
PROFILE 15

-300.00	10.00	1.00	<1>
-300.00	2.11	3.33	
-100.00	2.10	3.33	
-34.00	2.10	3.33	
-23.00	0.90	1.00	
-10.00	-2.70	1.00	
0.00	-3.00	1.00	<2>
17.00	-3.00	1.00	
20.00	-3.00	1.00	
33.00	-3.00	1.00	
81.00	-3.00	1.00	
100.00	-3.00	1.00	
110.00	5.00	1.00	
1500.00	5.01	3.33	
1500.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

243

1988-D1
TURAG
31.700
COORDINATES

1	90.333	23.753

FLOW DIRECTION
0
DATUM
0.00
PROFILE 18

-505.00	10.00	1.00	<1>
-505.00	3.51	3.33	
-185.00	3.50	1.00	
-95.00	3.48	1.00	
-55.00	-1.20	1.00	
-5.00	-2.55	1.00	
0.00	-2.70	1.00	<2>
21.00	-2.70	1.00	
41.00	-2.70	1.00	
100.00	-2.70	1.00	
130.00	2.70	1.00	
180.00	2.70	3.33	
240.00	3.55	3.33	
280.00	3.60	3.33	
361.00	5.00	3.33	
505.00	5.25	3.33	
1500.00	5.25	3.33	
1500.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
TURAG
32.200
COORDINATES

1	90.333	23.719

FLOW DIRECTION
0
DATUM
0.00
PROFILE 21

-1520.00	10.00	1.00	<1>
-1520.00	3.10	3.33	
-1390.00	1.00	3.33	
-1370.00	1.00	3.33	
-1360.00	3.80	3.33	
-890.00	2.40	3.33	
-870.00	5.50	3.33	
-745.00	4.60	3.33	
-720.00	2.50	3.33	
-510.00	3.00	3.33	
-220.00	5.50	3.33	
-75.00	1.00	3.33	
-70.00	2.80	1.00	
-60.00	2.00	1.00	
-30.00	0.70	1.00	
0.00	0.40	1.00	<2>
100.00	0.10	1.00	
120.00	1.90	1.00	
255.00	1.70	1.00	
320.00	3.00	1.00	
430.00	3.00	1.00	
430.00	4.20	1.00	
480.00	1.50	3.33	
480.00	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
TURAG
37.500
COORDINATES

1	90.348	23.712

FLOW DIRECTION
0
DATUM
0.00
PROFILE 18

-1300.00	10.00	1.00	<1>
-1300.00	5.60	3.30	
-500.00	7.00	3.30	
-275.00	5.60	3.30	
-265.00	2.40	3.30	
-165.00	1.90	3.30	
-149.00	0.90	1.00	
-123.00	-3.60	1.00	
-105.00	-3.75	1.00	
-25.00	-3.75	1.00	<2>
0.00	-1.60	1.00	
30.00	-4.60	1.00	
50.00	-1.60	1.00	
70.00	-4.60	1.00	
100.00	-4.60	1.00	
200.00	3.75	1.00	
800.00	3.75	3.30	<3>
800.00	10.00	3.30	

****

$n_1 = 0.030$
$n_2 = 0.100$

2) Results of Calibration

GRID POINT RESULT SUMMARY

WATER LEVEL,

	Location	Minimun meter	Maximum meter
DHALESWARI	0.000	5.38	9.57
DHALESWARI	0.300	5.37	9.56
DHALESWARI	0.800	5.37	9.56
DHALESWARI	0.800	5.37	9.56
DHALESWARI	2.760	5.36	9.56
DHALESWARI	4.720	5.35	9.56
DHALESWARI	6.680	5.33	9.56
DHALESWARI	8.640	5.29	9.56
DHALESWARI	10.600	5.21	9.55
DHALESWARI	12.275	5.13	9.55
DHALESWARI	13.950	5.06	9.55
DHALESWARI	15.625	5.02	9.55
DHALESWARI	17.300	4.98	9.55
DHALESWARI	18.500	4.97	9.49
DHALESWARI	19.700	4.97	9.32
DHALESWARI	21.667	4.96	9.19
DHALESWARI	23.633	4.94	9.05
DHALESWARI	25.600	4.93	8.86
DHALESWARI	27.333	4.92	8.71
DHALESWARI	29.067	4.91	8.55
DHALESWARI	30.800	4.89	8.35
DHALESWARI	32.400	4.87	8.17
DHALESWARI	34.000	4.86	8.02
DHALESWARI	35.600	4.82	7.89
DHALESWARI	37.200	4.72	7.78
DHALESWARI	38.900	4.63	7.67
DHALESWARI	40.600	4.57	7.55
DHALESWARI	42.300	4.52	7.41
DHALESWARI	44.000	4.18	7.32
DHALESWARI	45.700	4.14	7.20
DHALESWARI	45.700	4.14	7.20
DHALESWARI	46.200	4.13	7.14
DHALESWARI	47.200	4.10	7.03
DHALESWARI	48.700	4.05	6.86
DHALESWARI	50.200	4.00	6.65
DHALESWARI	51.700	4.23	6.39
DHALESWARI	53.100	4.19	6.25
DHALESWARI	54.500	4.18	6.16
DHALESWARI	56.300	4.15	6.01
DHALESWARI	57.700	4.15	6.01
DHALESWARI	57.700	4.15	6.01
DHALESWARI	58.950	4.15	5.99
DHALESWARI	60.200	4.14	5.97
BANSI	0.000	5.65	9.83
BANSI	2.000	5.52	9.71
BANSI	3.867	5.45	9.64
BANSI	5.733	5.40	9.60
BANSI	7.600	5.38	9.56
BANSI	9.000	5.38	9.57
BURIGANGA	0.000	4.49	7.35
BURIGANGA	1.100	4.49	7.34
BURIGANGA	2.950	4.48	7.32
BURIGANGA	4.800	4.47	7.28
BURIGANGA	5.900	4.47	7.28
BURIGANGA	7.000	4.47	7.27
BURIGANGA	8.500	4.47	7.26
BURIGANGA	10.000	4.46	7.21
BURIGANGA	11.500	4.46	7.23
BURIGANGA	12.650	4.45	7.22
BURIGANGA	13.800	4.45	7.21
BURIGANGA	15.150	4.45	7.20
BURIGANGA	16.500	4.44	7.19
BURIGANGA	17.500	4.44	7.20
TURAG	0.000	5.42	8.23
TURAG	1.880	5.36	8.20
TURAG	3.760	5.29	8.14
TURAG	5.610	5.22	8.09
TURAG	7.520	5.13	8.02
TURAG	9.400	5.05	7.95
TURAG	10.750	4.99	7.91
TURAG	12.100	4.93	7.87
TURAG	13.000	4.91	7.82
TURAG	15.000	4.84	7.70
TURAG	15.000	4.84	7.70
TURAG	15.100	4.84	7.70
TURAG	16.200	4.83	7.69
TURAG	17.300	4.82	7.69
TURAG	18.700	4.81	7.68
TURAG	20.000	4.80	7.68
TURAG	21.250	4.80	7.68
TURAG	22.500	4.80	7.68
TURAG	24.050	4.80	7.67
TURAG	25.600	4.78	7.65
TURAG	27.000	4.77	7.63
TURAG	27.000	4.77	7.63
TURAG	27.300	4.76	7.58
TURAG	28.350	4.71	7.58
TURAG	29.400	4.69	7.54
TURAG	30.550	4.66	7.51
TURAG	31.700	4.63	7.48
TURAG	32.200	4.61	7.47
TURAG	33.967	4.51	7.42
TURAG	35.733	4.51	7.38
TURAG	37.500	4.49	7.35
LAKHYA	0.000	4.66	6.77
LAKHYA	1.150	4.60	6.70
LAKHYA	2.300	4.54	6.63
LAKHYA	3.600	4.46	6.55
LAKHYA	3.600	4.46	6.55
LAKHYA	5.033	4.39	6.44
LAKHYA	6.467	4.34	6.37
LAKHYA	7.900	4.31	6.32
LAKHYA	9.633	4.28	6.26
LAKHYA	11.367	4.24	6.19
LAKHYA	13.100	4.21	6.12
LAKHYA	15.050	4.18	6.08
LAKHYA	17.000	4.17	6.05
LAKHYA	18.950	4.16	6.03
LAKHYA	20.900	4.16	6.02
LAKHYA	22.400	4.15	6.01

	Location	Minimum meter	Maximum meter
LAKHYA	23.900	4.15	6.01
BALU	0.000	4.75	7.30
BALU	1.900	4.74	7.30
BALU	2.700	4.74	7.30
BALU	4.200	4.74	7.29
BALU	5.700	4.74	7.29
BALU	7.200	4.74	7.29
BALU	7.200	4.71	7.29
BALU	9.200	4.71	7.26
BALU	10.050	4.69	7.19
BALU	11.900	4.67	7.13
BALU	12.900	4.64	7.06
BALU	14.200	4.57	6.97
BALU	15.500	4.55	6.91
BALU	16.600	4.54	6.88
BALU	17.700	4.53	6.87
BALU	19.000	4.52	6.83
BALU	20.500	4.51	6.80
BALU	22.000	4.50	6.76
BALU	23.500	4.50	6.72
BALU	24.867	4.49	6.68
BALU	26.233	4.48	6.64
BALU	27.600	4.47	6.60
BALU	28.700	4.46	6.55
TONGI	0.000	4.84	7.70
TONGI	1.300	4.82	7.66
TONGI	3.000	4.81	7.63
TONGI	4.700	4.81	7.61
TONGI	6.400	4.81	7.59
TONGI	8.000	4.80	7.54
TONGI	8.300	4.80	7.53
TONGI	9.825	4.79	7.47
TONGI	11.350	4.78	7.42
TONGI	12.875	4.77	7.38
TONGI	14.400	4.76	7.35
TONGI	16.000	4.71	7.29
KARNATALI	0.000	5.37	9.56
KARNATALI	1.600	5.29	9.37
KARNATALI	3.200	5.23	9.18
KARNATALI	4.800	5.17	8.96
KARNATALI	6.400	5.10	8.71
KARNATALI	8.233	5.04	8.38
KARNATALI	10.067	4.99	8.02
KARNATALI	11.900	4.77	7.63

DISCHARGE.

	Location	Minimum m3/sec	Maximum m3/sec
DHALESWARI	0.250	1013.272	2665.296
DHALESWARI	0.650	1013.576	2663.234
DHALESWARI	1.780	336.777	989.451
DHALESWARI	3.710	337.998	981.392
DHALESWARI	5.700	339.533	981.392
DHALESWARI	7.660	341.028	981.392
DHALESWARI	9.620	229.198	981.392
DHALESWARI	11.438	342.421	981.392
DHALESWARI	13.113	360.909	981.392
DHALESWARI	14.788	362.699	981.392
DHALESWARI	16.463	69.364	981.392
DHALESWARI	17.900	343.070	981.392
DHALESWARI	19.100	981.392	11591.183
DHALESWARI	20.683	981.392	11590.906
DHALESWARI	22.650	981.392	11591.321
DHALESWARI	24.617	981.392	11591.664
DHALESWARI	26.467	981.392	11591.975
DHALESWARI	28.200	981.392	11592.383
DHALESWARI	29.933	981.392	11592.853
DHALESWARI	31.600	981.392	11593.310
DHALESWARI	33.200	981.392	11593.721
DHALESWARI	34.800	981.392	11594.321
DHALESWARI	36.400	981.392	11595.248
DHALESWARI	38.050	981.392	11596.233
DHALESWARI	39.750	981.392	11597.213
DHALESWARI	41.450	981.392	11598.170
DHALESWARI	43.150	981.392	11629.781
DHALESWARI	44.850	981.392	11628.198
DHALESWARI	45.950	1623.176	17259.242
DHALESWARI	46.700	1623.176	17266.377
DHALESWARI	47.950	1623.176	17270.535
DHALESWARI	49.150	1623.176	17269.086
DHALESWARI	50.950	1623.176	17268.186
DHALESWARI	52.100	1623.176	17269.785
DHALESWARI	53.800	1623.176	17271.172
DHALESWARI	55.100	1623.176	17272.197
DHALESWARI	57.000	1623.176	17272.541
DHALESWARI	58.325	3525.000	20776.426
DHALESWARI	59.575	3525.000	20777.305
BANSI	1.000	1003.209	2656.022
BANSI	2.933	1012.172	2676.036
BANSI	4.800	983.636	2673.853
BANSI	6.667	1008.316	2671.479
BANSI	8.300	1014.660	2668.206
BURIGANGA	0.550	641.784	2622.085
BURIGANGA	2.025	641.784	2632.360
BURIGANGA	3.875	641.784	2632.729
BURIGANGA	5.350	641.784	2631.446
BURIGANGA	6.150	641.784	2631.771
BURIGANGA	7.750	641.784	2635.229
BURIGANGA	9.250	641.784	2636.021
BURIGANGA	10.750	641.784	2635.929
BURIGANGA	12.075	641.784	2635.860
BURIGANGA	13.225	641.784	2636.210
BURIGANGA	14.475	641.784	2636.792

	Location	Minimum m/sec	Maximum m/sec
BURIGANGA	12.075	0.000	0.519
BURIGANGA	12.650	0.000	0.542
BURIGANGA	13.225	0.000	0.534
BURIGANGA	13.800	0.000	0.526
BURIGANGA	11.475	0.000	0.509
BURIGANGA	15.150	0.000	0.193
BURIGANGA	15.825	0.000	0.480
BURIGANGA	16.500	0.000	0.169
BURIGANGA	17.000	0.000	0.246
BURIGANGA	17.500	0.000	0.167
TURAG	0.000	0.000	0.470
TURAG	0.910	0.000	0.477
TURAG	1.880	0.000	0.485
TURAG	2.820	0.000	0.493
TURAG	3.760	0.000	0.503
TURAG	4.700	0.000	0.513
TURAG	5.610	0.000	0.526
TURAG	6.580	0.000	0.540
TURAG	7.520	0.000	0.552
TURAG	8.460	0.000	0.564
TURAG	9.400	0.000	0.576
TURAG	10.075	0.000	0.563
TURAG	10.750	0.000	0.551
TURAG	11.425	0.000	0.544
TURAG	12.100	0.000	0.538
TURAG	12.550	0.000	0.619
TURAG	13.000	0.000	0.733
TURAG	11.000	0.000	0.754
TURAG	15.000	0.000	0.780
TURAG	15.000	0.000	0.348
TURAG	15.050	0.000	0.349
TURAG	13.100	0.000	0.350
TURAG	15.650	0.000	0.318
TURAG	16.200	0.000	0.290
TURAG	16.750	0.000	0.275
TURAG	17.300	0.000	0.262
TURAG	18.000	0.000	0.222
TURAG	18.700	0.000	0.194
TURAG	19.350	0.000	0.160
TURAG	20.000	0.000	0.136
TURAG	20.625	0.000	0.160
TURAG	21.250	0.000	0.193
TURAG	21.875	0.000	0.216
TURAG	22.500	0.000	0.244
TURAG	23.275	0.000	0.284
TURAG	24.050	0.000	0.340
TURAG	24.825	0.000	0.419
TURAG	25.600	0.000	0.593
TURAG	26.300	0.000	0.531
TURAG	27.000	0.000	0.480
TURAG	27.000	0.000	1.716
TURAG	27.150	0.000	1.749
TURAG	27.300	0.000	1.784
TURAG	27.825	0.000	1.320
TURAG	28.350	0.000	1.047
TURAG	28.875	0.000	0.941
TURAG	29.100	0.000	0.861
TURAG	29.975	0.000	0.762
TURAG	30.550	0.000	0.682
TURAG	31.125	0.000	0.618
TURAG	31.700	0.000	0.563
TURAG	31.950	0.000	0.571
TURAG	32.200	0.000	0.577
TURAG	33.083	0.000	0.573
TURAG	33.967	0.000	0.570
TURAG	34.850	0.000	0.565
TURAG	35.733	0.000	0.561
TURAG	36.617	0.000	0.554
TURAG	37.500	0.000	0.518
LAKHYA	0.000	0.000	0.957
LAKHYA	0.575	0.000	0.976
LAKHYA	1.150	0.000	0.995
LAKHYA	1.725	0.000	1.005
LAKHYA	2.300	0.000	1.015
LAKHYA	2.950	0.000	1.029
LAKHYA	3.600	0.000	1.043
LAKHYA	3.600	0.000	1.392
LAKHYA	4.317	0.000	1.297
LAKHYA	5.033	0.000	1.213
LAKHYA	5.750	0.000	1.136
LAKHYA	6.467	0.000	1.067
LAKHYA	7.183	0.000	1.005
LAKHYA	7.900	0.000	0.956
LAKHYA	8.767	0.000	0.973
LAKHYA	9.633	0.000	0.983
LAKHYA	10.500	0.000	0.994
LAKHYA	11.367	0.000	1.006
LAKHYA	12.233	0.000	1.019
LAKHYA	13.100	0.000	1.034
LAKHYA	14.075	0.000	0.938
LAKHYA	15.050	0.000	0.856
LAKHYA	16.025	0.000	0.790
LAKHYA	17.000	0.000	0.734
LAKHYA	17.975	0.000	0.691
LAKHYA	18.950	0.000	0.653
LAKHYA	19.925	0.000	0.620
LAKHYA	20.900	0.000	0.591
LAKHYA	21.650	0.000	0.565
LAKHYA	22.400	0.000	0.540
LAKHYA	23.150	0.000	0.518
LAKHYA	23.900	0.000	0.497
BALU	0.000	0.000	0.162
BALU	0.950	0.000	0.121
BALU	1.900	0.000	0.104
BALU	2.300	0.000	0.089
BALU	2.700	0.000	0.078
BALU	3.450	0.000	0.084
BALU	4.200	0.000	0.091
BALU	4.950	0.000	0.098
BALU	5.700	0.000	0.107

	Location	Minimum m/sec	Maximum m/sec
BALU	6.150	0.000	0.116
BALU	7.200	0.000	0.128
BALU	7.200	0.000	0.950
BALU	7.700	0.000	0.729
BALU	8.200	0.000	0.591
BALU	9.123	0.000	0.613
BALU	10.050	0.000	0.936
BALU	10.975	0.000	0.663
BALU	11.900	0.000	0.700
BALU	12.100	0.000	0.784
BALU	12.900	0.000	0.887
BALU	13.350	0.000	0.803
BALU	14.200	0.000	0.733
BALU	14.850	0.000	0.710
BALU	15.500	0.000	0.693
BALU	16.050	0.000	0.629
BALU	16.600	0.000	0.573
BALU	17.150	0.000	0.523
BALU	17.700	0.000	0.494
BALU	18.350	0.000	0.529
BALU	19.000	0.000	0.577
BALU	19.750	0.000	0.579
BALU	20.500	0.000	0.581
BALU	21.250	0.000	0.591
BALU	22.000	0.000	0.602
BALU	22.750	0.000	0.618
BALU	23.500	0.000	0.660
BALU	24.183	0.000	0.674
BALU	24.867	0.000	0.662
BALU	25.550	0.000	0.651
BALU	26.233	0.000	0.641
BALU	26.917	0.000	0.632
BALU	27.600	0.000	0.624
BALU	28.150	0.000	0.653
BALU	28.700	0.000	0.685
TONGI	0.000	0.000	0.861
TONGI	0.650	0.000	0.681
TONGI	1.300	0.000	0.563
TONGI	2.150	0.000	0.511
TONGI	3.000	0.000	0.527
TONGI	3.850	0.000	0.512
TONGI	4.700	0.000	0.199
TONGI	5.550	0.000	0.191
TONGI	6.400	0.000	0.181
TONGI	7.200	0.000	0.652
TONGI	8.000	0.000	0.997
TONGI	8.150	0.000	0.949
TONGI	8.300	0.000	0.906
TONGI	9.063	0.000	0.852
TONGI	9.825	0.000	0.803
TONGI	10.588	0.000	0.730
TONGI	11.350	0.000	0.670
TONGI	12.113	0.000	0.617
TONGI	12.875	0.000	0.573
TONGI	13.638	0.000	0.533

	Location	Minimum m/sec	Maximum m/sec
TONGI	14.400	0.000	0.499
TONGI	15.200	0.000	0.577
TONGI	16.000	0.000	0.687
KARNATALI	0.000	0.000	1.111
KARNATALI	0.800	0.000	1.219
KARNATALI	1.600	0.000	1.100
KARNATALI	2.400	0.000	1.111
KARNATALI	3.200	0.000	1.132
KARNATALI	4.000	0.000	1.211
KARNATALI	4.800	0.000	1.301
KARNATALI	5.600	0.000	1.365
KARNATALI	6.400	0.000	1.435
KARNATALI	7.317	0.000	1.504
KARNATALI	8.233	0.000	1.579
KARNATALI	9.150	0.000	1.648
KARNATALI	10.067	0.000	1.723
KARNATALI	10.983	0.000	1.758
KARNATALI	11.900	0.000	1.794

JICA