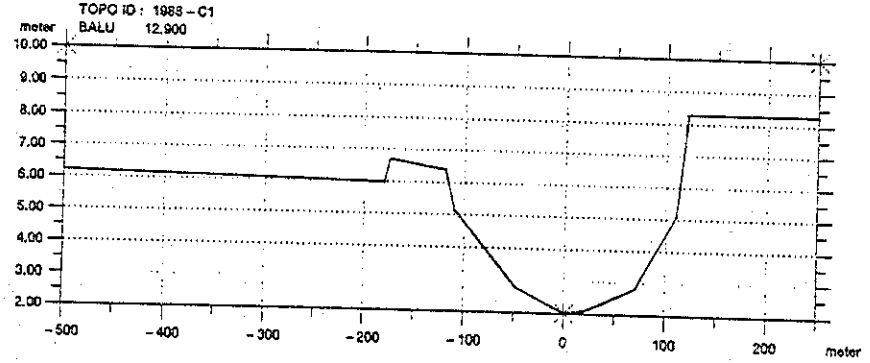
9. Hydraulic Simulatin of 1988 Floods for With Flood Mitigation Plan

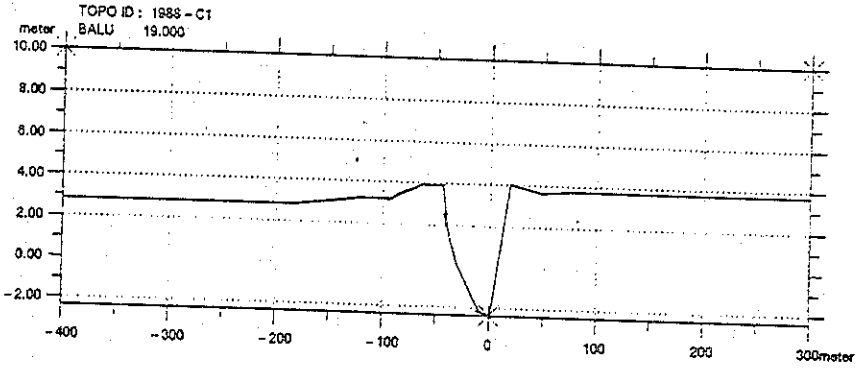
9.1 With Polder Dike/Wall and Without River Dredging

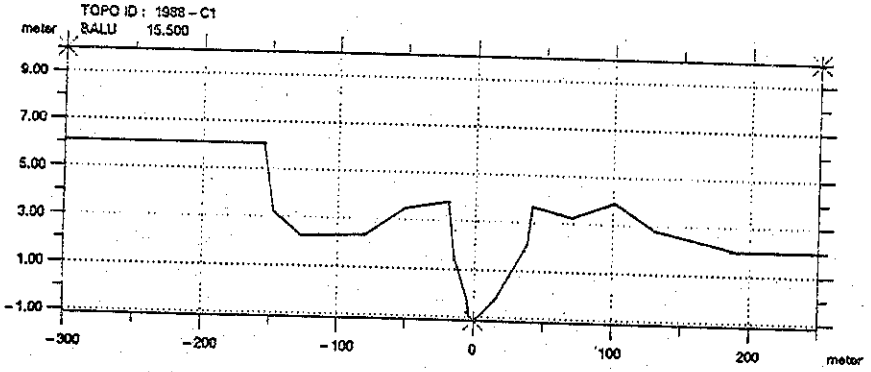
PROCESS OF HYDRAULIC SIMULATION OF 1988 FLOODS FOR WITH FLOOD MITIGATION PROJECTS (WITH POLDER DIKE/WALL AND WITHOUT RIVER DREDGING)

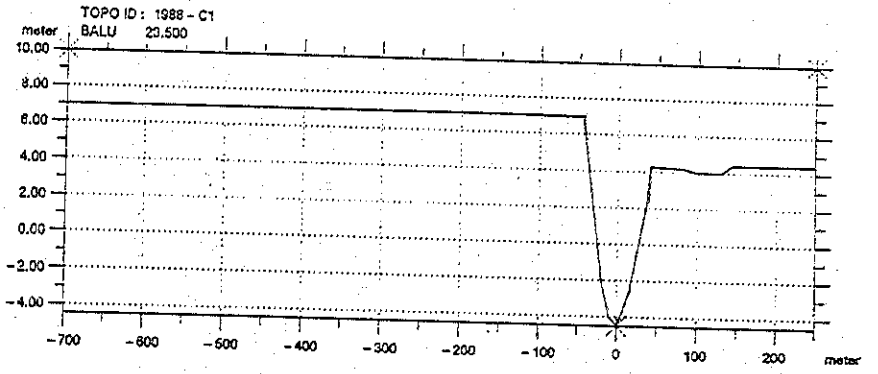
(1)	River System :	Same as the condition of Without Flood Mitigation Project
(2)	River Cross Section:	Taking into account the locations of polder dike/wall, input the revised river cross sections.
(3)	Boundary Condition :	Boundary discharges, water level at Kalagachia(BWDB Sta.71) and rainfall ruoffs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

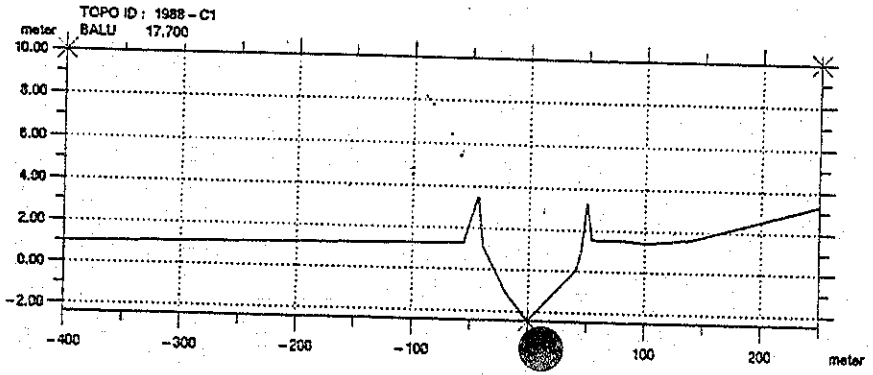
1). Revised River Cross Sections

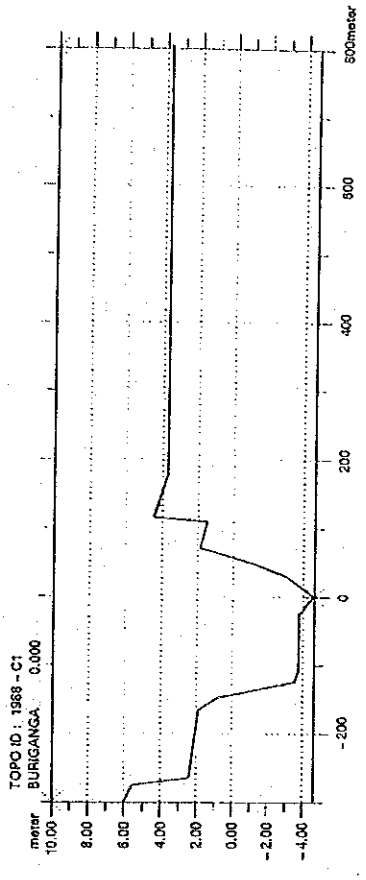








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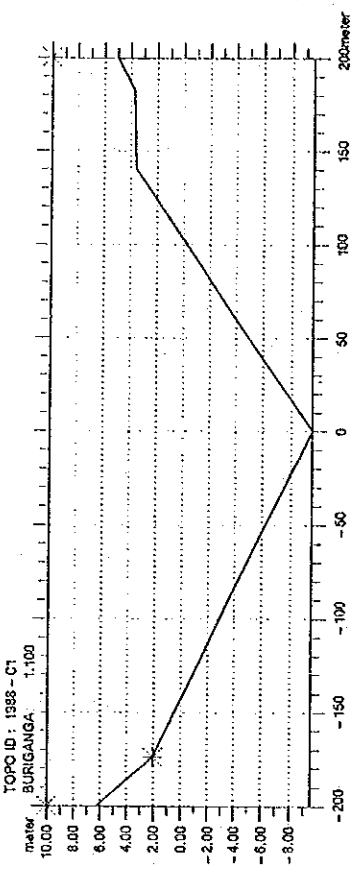
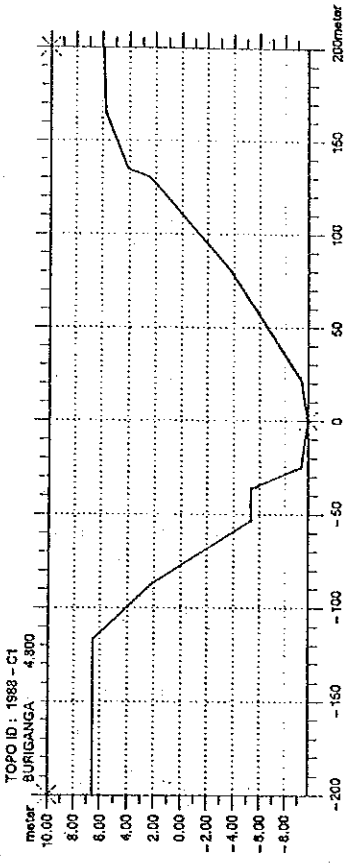
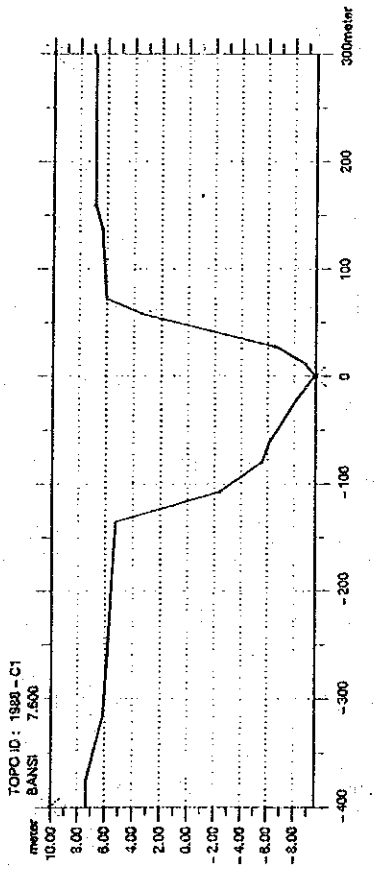
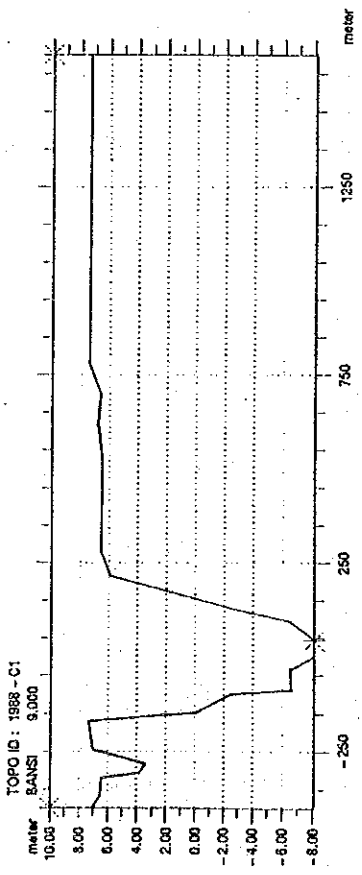
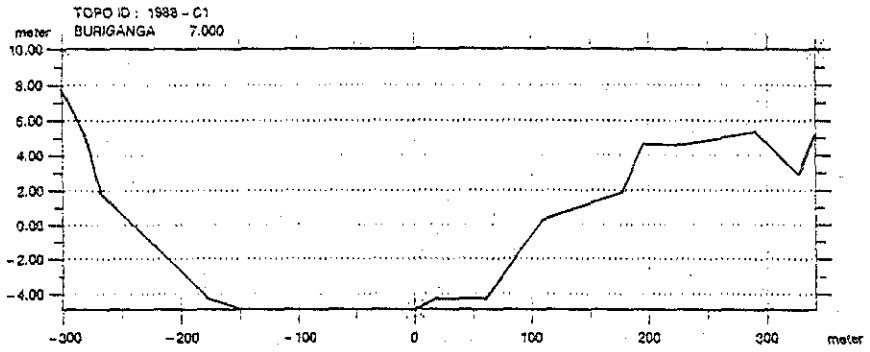
BURIGANGA 0.000
meter
500meter

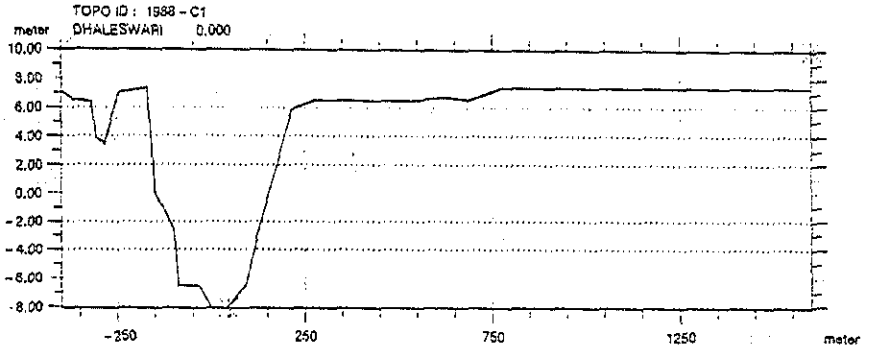

TOPO ID : 1988 - C1
BURIGANGA 1.100
meter
200meter

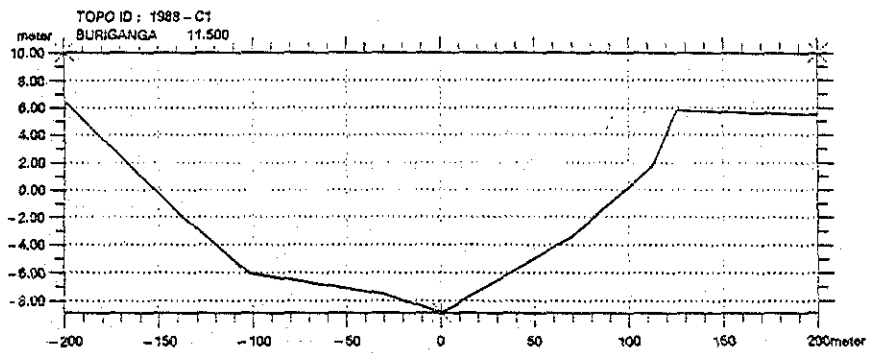

TOPO ID : 1988 - C1
BURIGANGA 4.800
meter
200meter

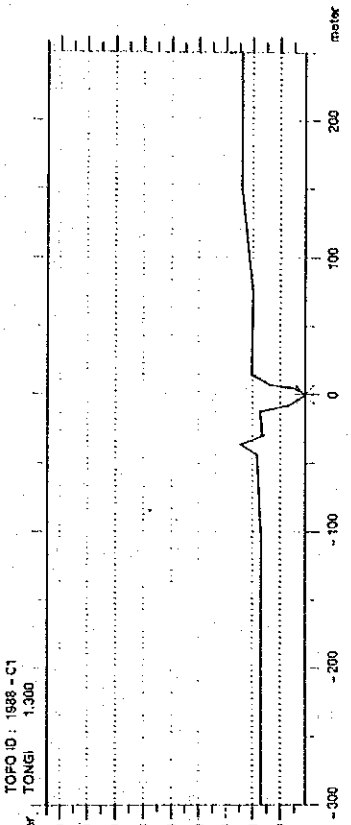

TOPO ID : 1988 - C1
BANSI 7.500
meter
300meter

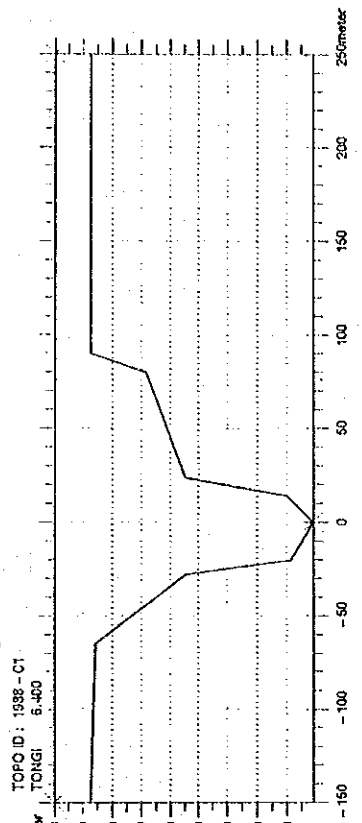

TOPO ID : 1988 - C1
BANSI 9.000
meter

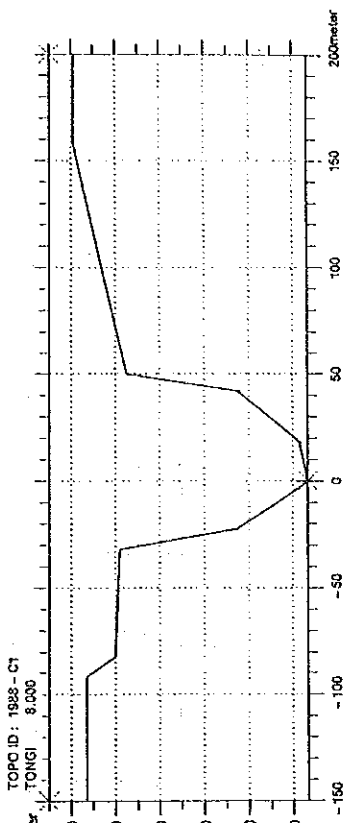

TOPO ID : 1988 - C1
BURIGANGA 7.000
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-300
-200
-100
0
100
200
300
meter

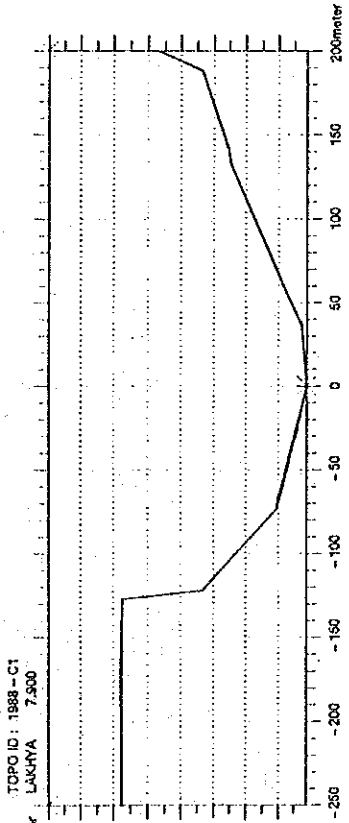

TOPO ID : 1988 - C1
DHALESWARI 0.000
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-250
250
750
1250
meter

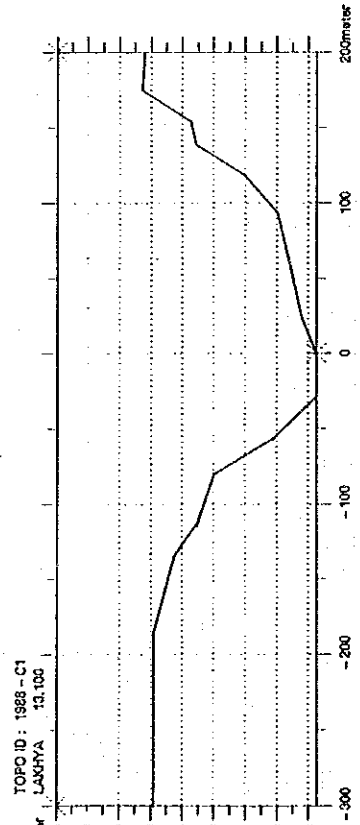

TOPO ID : 1988 - C1
BURIGANGA 11.500
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-200
-150
-100
-50
0
50
100
150
200meter

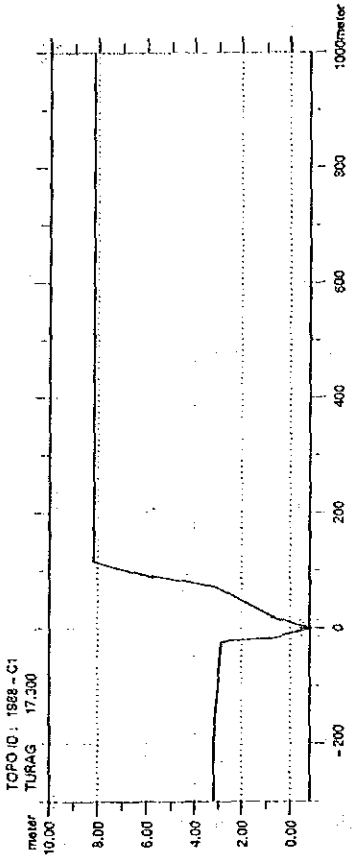

TOPO ID : 1988 - C1
TONGI 1.300
meter
meter
9.50
8.50
7.50
6.50
5.50
4.50
3.50
2.50
1.50
200
100
0
-100
-200
-300

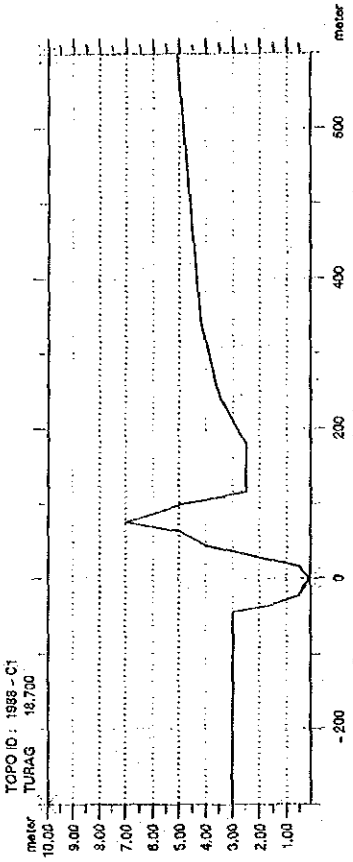

TOPO ID : 1988 - C1
TONGI 6.400
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
250meter
200
150
100
50
0
-50
-100
-150

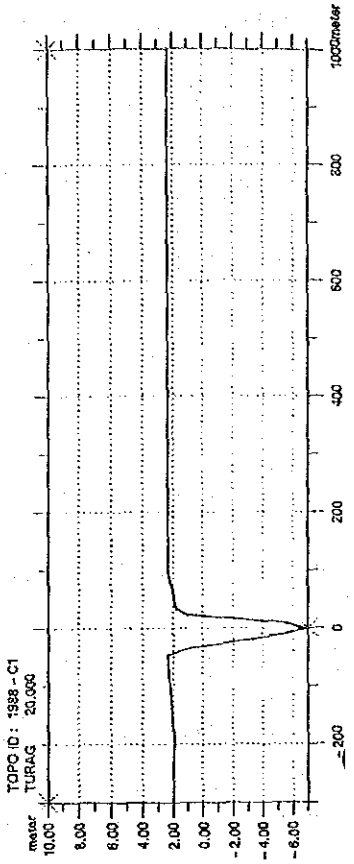

TOPO ID : 1988 - C1
TONGI 8.000
meter
9.00
7.00
5.00
3.00
1.00
-1.00
200meter
150
100
50
0
-50
-100
-150

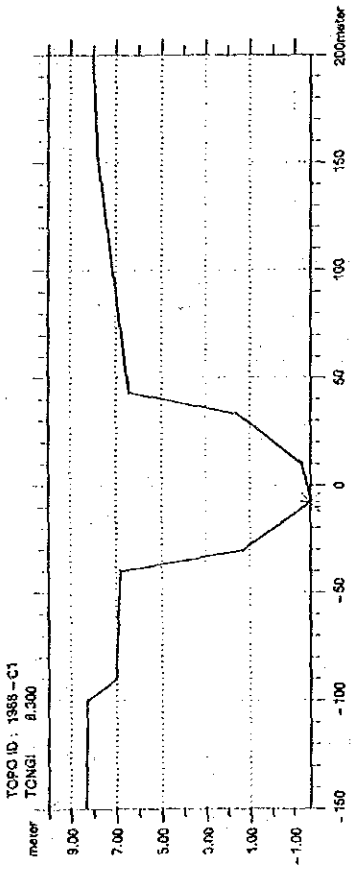

TOPO ID : 1988 - C1
LAKHYA 7.900
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
200meter
150
100
50
0
-50
-100
-150
-200
-250

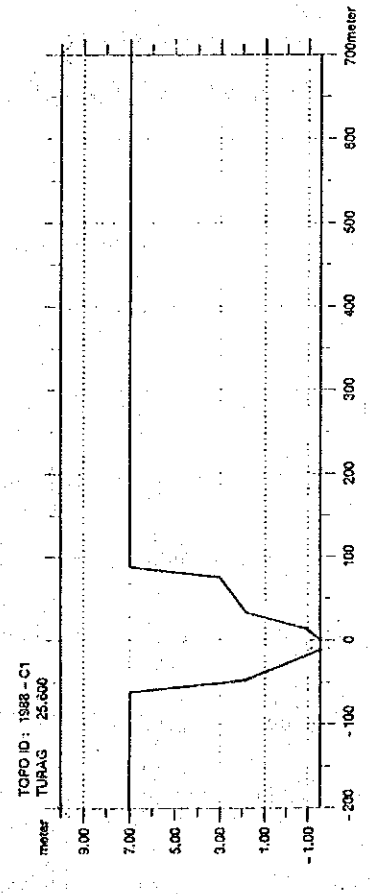

TOPO ID : 1988 - C1
LAKHYA 13.100
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
200meter
150
100
0
-100
-200
-300


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


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
600
400
200
0
- 200


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
1000meter
800
600
400
200
0
-200


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


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

```
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
   -148.00        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       -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       -2.40        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
    -44.00        3.90        3.33
    -41.00        2.50        1.00
    -37.00        1.20        1.00
    -34.00        0.86        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
    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	
-24.65	-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>

****

$n_1 = 0.030$

$n_2 = 0.100$

```
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
     -24.95       -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>

****

$n_1 = 0.030$
$n_2 = 0.100$

```
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          90.405          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
    -46.00        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
     35.90        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	5.40	9.59
DHALESWARI	0.500	5.40	9.59
DHALESWARI	0.800	5.40	9.59
DHALESWARI	0.800	5.40	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	5.14	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	9.34
DHALESWARI	21.667	4.96	9.21
DHALESWARI	23.633	4.95	9.06
DHALESWARI	25.600	4.94	8.86
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	7.49
BURIGANGA	1.100	4.53	7.47
BURIGANGA	2.950	4.51	7.42
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	4.14	7.21
BURIGANGA	16.500	4.14	7.21
BURIGANGA	17.500	4.14	7.21
TURAG	0.000	5.93	8.70
TURAG	1.880	5.86	8.65
TURAG	3.760	5.79	8.60
TURAG	5.610	5.70	8.51
TURAG	7.520	5.61	8.48
TURAG	9.100	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	13.000	5.26	8.16
TURAG	13.000	5.26	8.16
TURAG	13.100	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	8.04
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	22.350	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	5.01	7.64
BALU	11.900	4.99	7.56
BALU	12.900	4.96	7.51
BALU	14.200	4.90	7.43
BALU	15.500	4.86	7.38
BALU	16.600	4.84	7.35
BALU	17.700	4.81	7.31
BALU	19.000	4.82	7.30
BALU	20.500	4.79	7.21
BALU	22.000	4.76	7.18
BALU	23.500	4.71	7.08
BALU	21.867	4.72	7.01
BALU	26.233	4.70	6.96
BALU	27.600	4.69	6.91
BALU	28.700	4.67	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	5.11	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	364.103	1008.298
DHALESWARI	7.660	365.550	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	11674.814
DHALESWARI	21.617	1007.462	11675.091
DHALESWARI	26.167	1007.462	11675.332
DHALESWARI	28.200	1007.462	11675.592
DHALESWARI	29.933	1007.462	11675.710
DHALESWARI	31.600	1007.462	11675.897
DHALESWARI	33.200	1007.462	11676.031
DHALESWARI	31.800	1007.462	11676.921
DHALESWARI	36.100	1007.462	11677.148
DHALESWARI	38.050	1007.462	11678.026
DHALESWARI	39.750	1007.462	11678.738
DHALESWARI	11.150	1007.462	11679.206
DHALESWARI	43.150	1007.462	11710.017
DHALESWARI	11.850	1007.462	11713.222
DHALESWARI	45.950	1593.622	17414.793
DHALESWARI	16.700	1593.622	17107.236
DHALESWARI	17.950	1593.622	17104.635
DHALESWARI	19.450	1593.622	17108.389
DHALESWARI	50.950	1593.622	17410.621
DHALESWARI	52.100	1593.622	17409.236
DHALESWARI	53.800	1593.622	17409.689
DHALESWARI	55.100	1593.622	17112.463
DHALESWARI	57.000	1593.622	17411.188
DHALESWARI	58.325	3525.000	20768.273
DHALESWARI	59.575	3525.000	20767.371
BANSI	1.000	1003.207	2655.974
BANSI	2.933	1012.466	2675.990
BANSI	4.800	986.283	2673.841
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	5.050	586.160	2691.425
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	345.452	1348.840
TURAG	6.580	353.186	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	4.317	1753.582	3409.713
LAKHYA	5.750	1754.262	3408.950
LAKHYA	7.183	1754.854	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	14.850	101.378	735.275
BALU	16.050	101.378	716.721
BALU	17.150	101.378	716.982
BALU	18.350	101.378	771.116
BALU	19.750	101.378	768.822
BALU	21.250	101.378	766.101
BALU	22.750	101.378	763.315
BALU	24.193	101.378	812.617
BALU	25.550	101.378	811.342
BALU	26.917	101.378	810.058
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	627.125
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	632.827
KARNATALI	0.800	235.497	1907.239
KARNATALI	2.100	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	0.421
DHALESWARI	0.800	0.000	0.426
DHALESWARI	0.800	0.000	0.193
DHALESWARI	1.780	0.000	0.198
DHALESWARI	2.760	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	0.711
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	1.019
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	1.334
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	1.344
DHALESWARI	43.150	0.000	1.393
DHALESWARI	44.000	0.000	1.445
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	1.861
DHALESWARI	46.200	0.000	1.882
DHALESWARI	46.700	0.000	1.933
DHALESWARI	47.200	0.000	1.981
DHALESWARI	47.950	0.000	2.023
DHALESWARI	48.700	0.000	2.061
DHALESWARI	49.450	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	52.800	0.000	1.936
DHALESWARI	51.500	0.000	1.811
DHALESWARI	55.400	0.000	1.954
DHALESWARI	56.300	0.000	2.082
DHALESWARI	57.000	0.000	1.861
DHALESWARI	57.700	0.000	1.683
DHALESWARI	57.700	0.000	2.007
DHALESWARI	58.325	0.000	1.803
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	1.190
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	6.150	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	14.475	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	0.487
TURAG	1.880	0.000	0.491
TURAG	2.820	0.000	0.496
TURAG	3.760	0.000	0.502
TURAG	4.700	0.000	0.509
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	0.545
TURAG	9.400	0.000	0.554
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	0.459
TURAG	15.050	0.000	0.465
TURAG	15.100	0.000	0.471
TURAG	15.650	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	0.433
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	0.574
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	1.435
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	0.831
TURAG	31.125	0.000	0.708
TURAG	31.700	0.000	0.633
TURAG	31.950	0.000	0.603
TURAG	32.200	0.000	0.571
TURAG	33.083	0.000	0.595
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	0.904
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	1.135
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	1.094
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	0.095
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

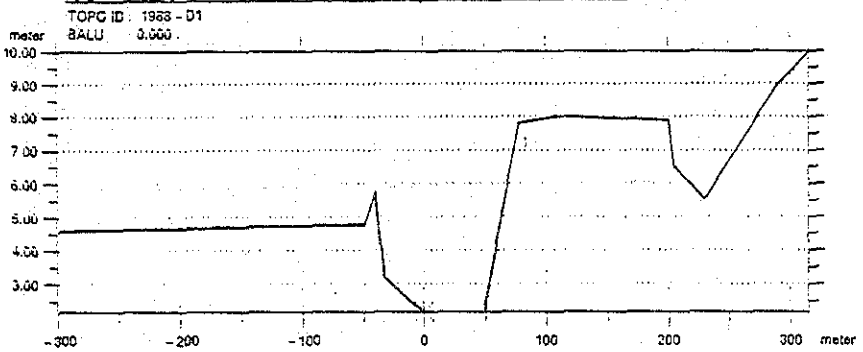
	Location	Minimum m/sec	Maximum m/sec
BALU	6.150	0.000	0.107
BALU	7.200	0.000	0.112
BALU	7.200	0.000	0.716
BALU	7.700	0.000	0.634
BALU	8.200	0.000	0.567
BALU	9.125	0.000	0.608
BALU	10.050	0.000	0.655
BALU	10.975	0.000	0.713
BALU	11.900	0.000	0.787
BALU	12.100	0.000	0.709
BALU	12.900	0.000	0.643
BALU	13.350	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	0.497
BALU	17.700	0.000	0.440
BALU	18.350	0.000	0.521
BALU	19.000	0.000	0.626
BALU	19.750	0.000	0.647
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	0.704
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
TONGI	14.400	0.000	0.436
TONGI	15.200	0.000	0.480
TONGI	16.000	0.000	0.532
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	1.584
KARNATALI	10.983	0.000	1.613
KARNATALI	11.900	0.000	1.613

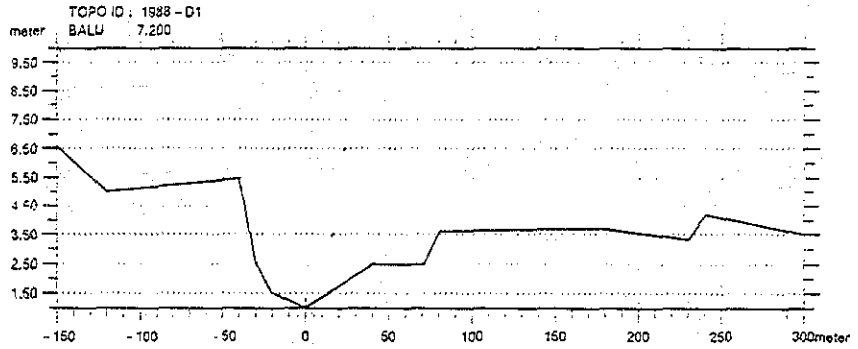
9.2 With River Dredging and Without Polder Dike/Wall

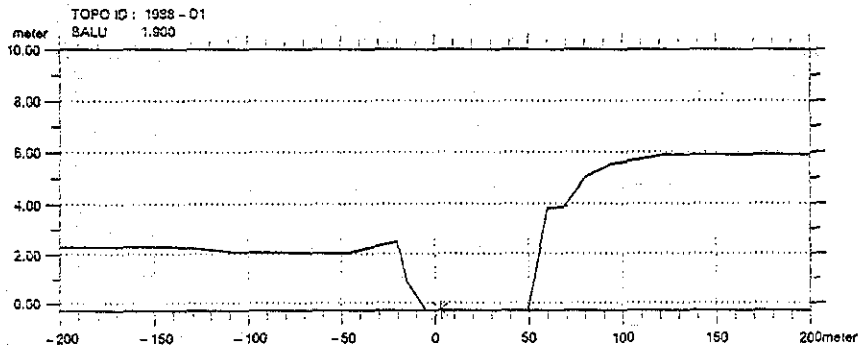
PROCESS OF HYDRAULIC SIMULATION OF 1988 FLOODS FOR WITH FLOOD MITIGATION PROJECTS (WITH RIVER DREDGING AND WITHOUT POLDER DIKE/WALL)

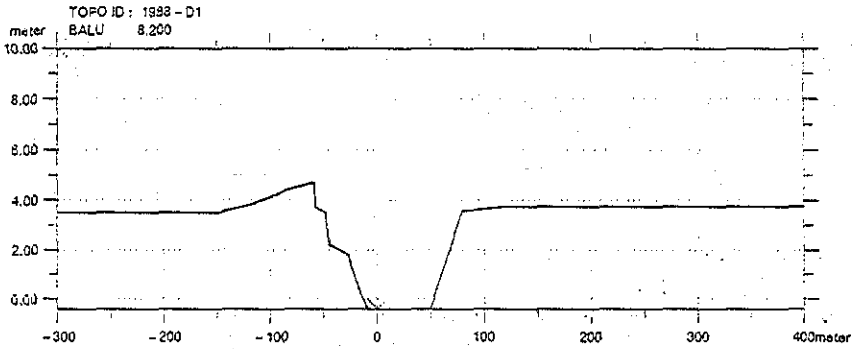
(1)	River System :	Same as the condition of Without Flood Mitigation Project
(2)	River Cross Section:	Taking into account the river dredging, input the revised river cross sections.
(3)	Boundary Condition :	Boundary discharges, water level at Kalagachia(BWDB Sta.71) and rainfall ruoffs are same as the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

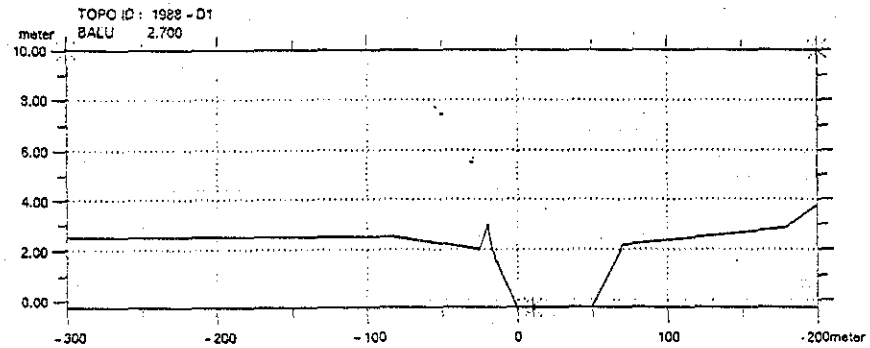
1) Revised River Cross Sections

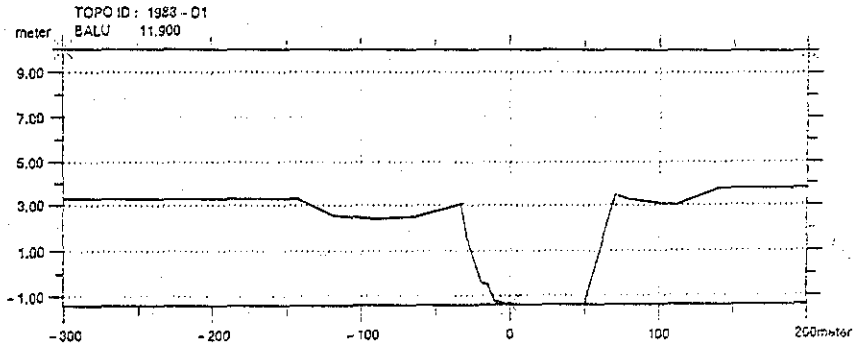


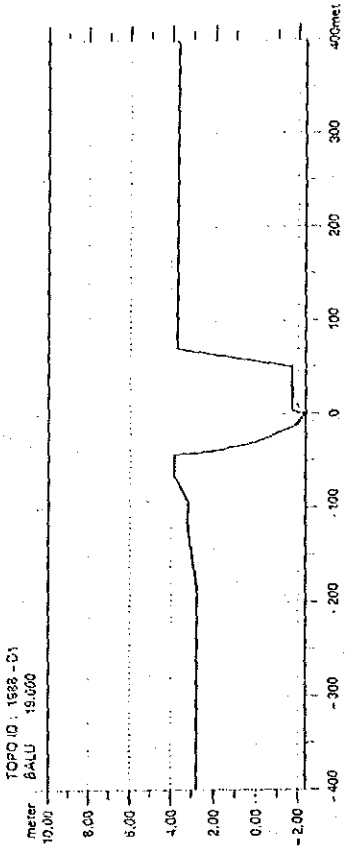








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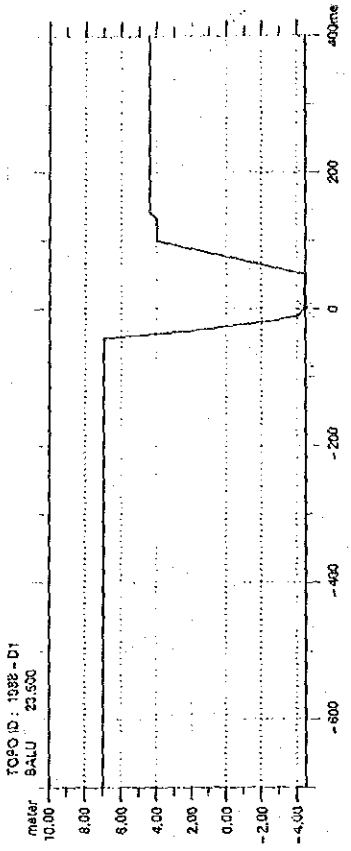
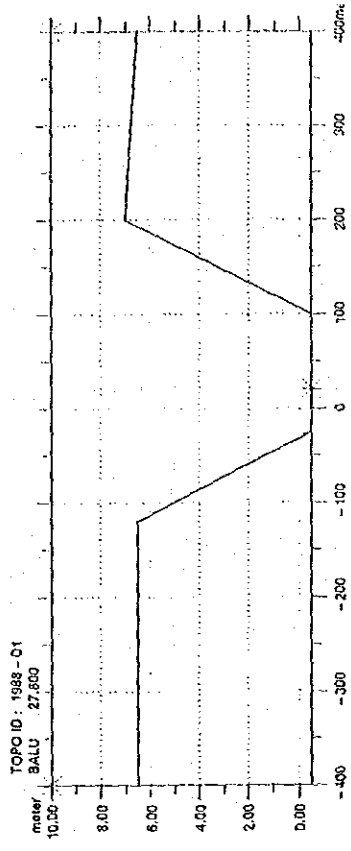
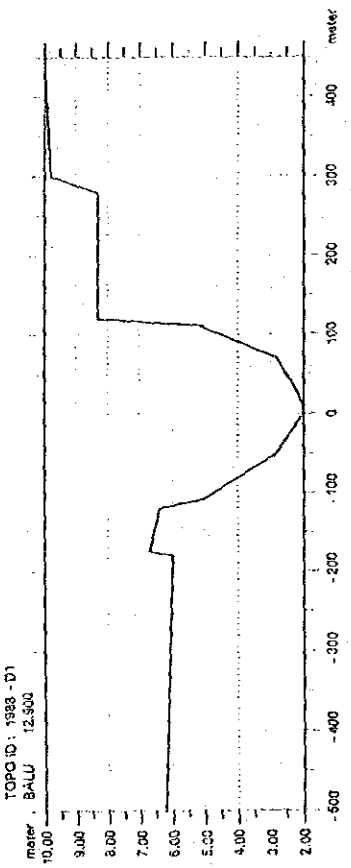
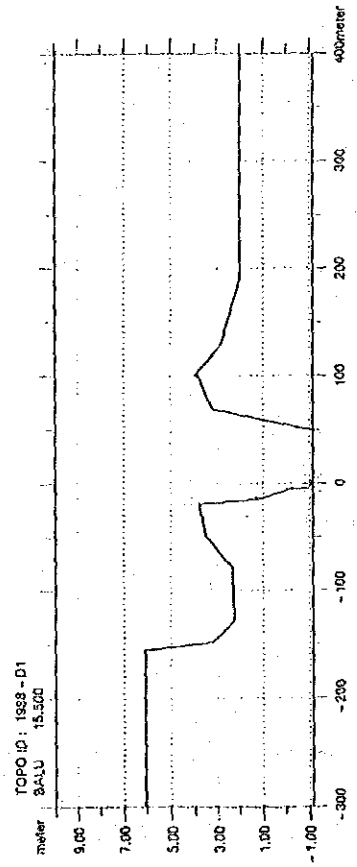
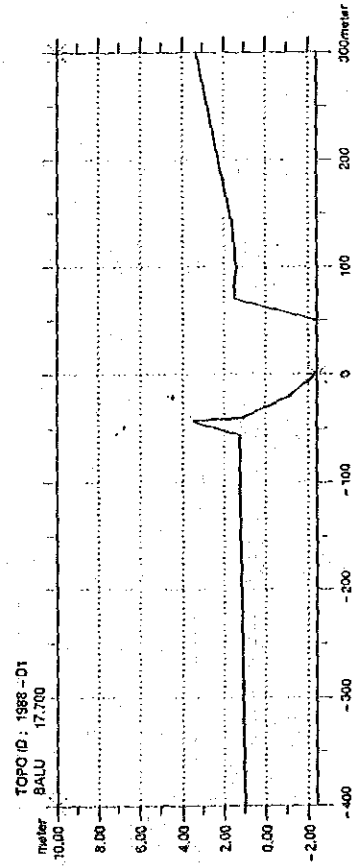
300
400meter

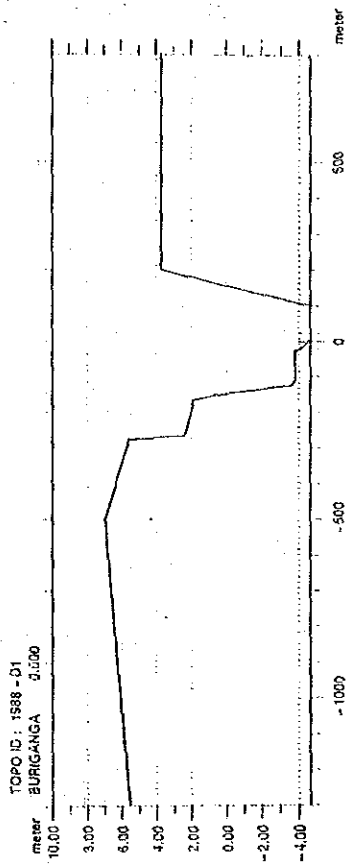

TOPO ID : 1988 - D1
BALU 23.500
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-600
-400
-200
0
200
400meter

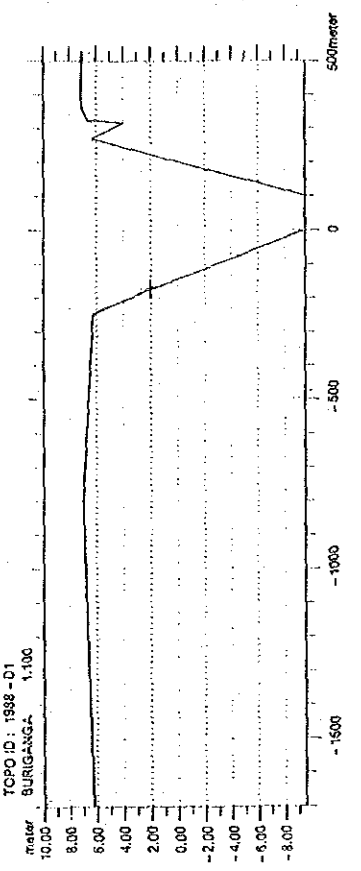

TOPO ID : 1988 - D1
BALU 27.600
meter
10.00
8.00
6.00
4.00
2.00
0.00
-400
-300
-200
-100
0
100
200
300
400meter

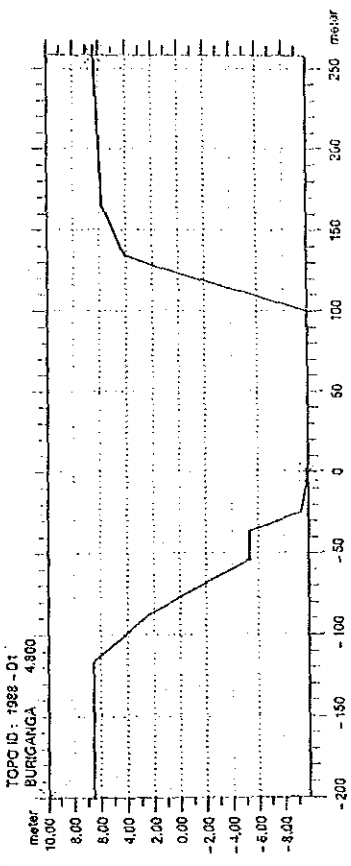

TOPO ID : 1988 - D1
BALU 12.500
meter
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
-500
-400
-300
-200
-100
0
100
200
300
400
meter

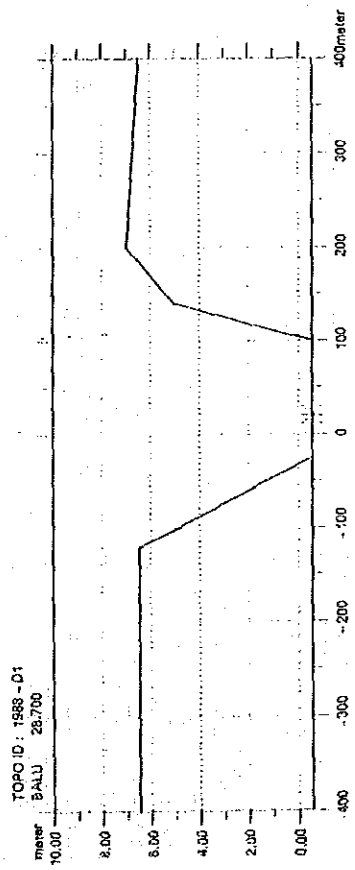

TOPO ID : 1988 - D1
BALU 15.500
meter
9.00
7.00
5.00
3.00
1.00
-1.00
-300
-200
-100
0
100
200
300
400meter

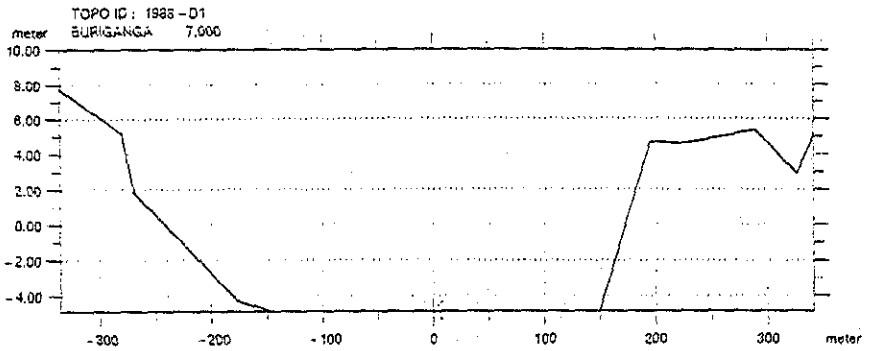

TOPO ID : 1988 - D1
BALU 17.700
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-400
-300
-200
-100
0
100
200
300meter

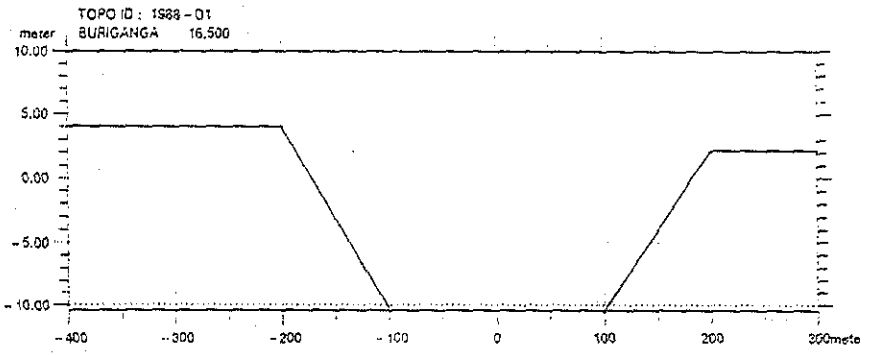

TOPO ID : 1988 - D1
BURIGANGA 2.000
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
meter
500
0
-500
-1000

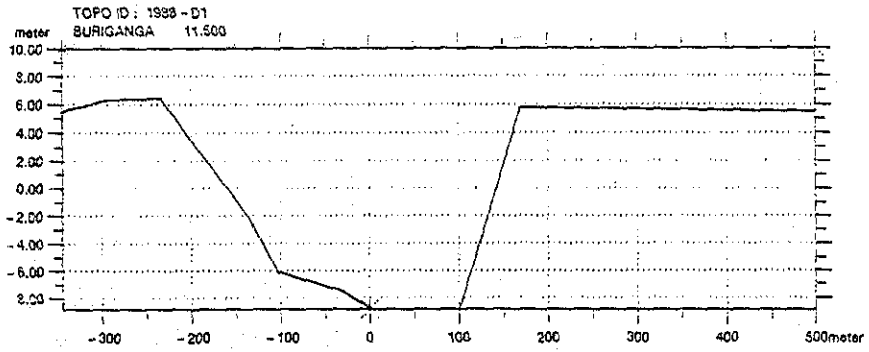

TOPO ID : 1988 - D1
BURIGANGA 1.100
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
500meter
0
-500
-1000
-1500

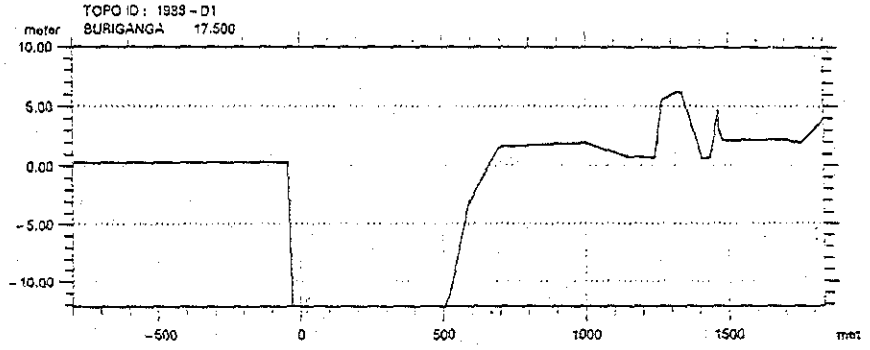

TOPO ID : 1988 - D1
BURIGANGA 4.800
meter
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
250 meter
200
150
100
50
0
- 50
- 100
- 150
-200

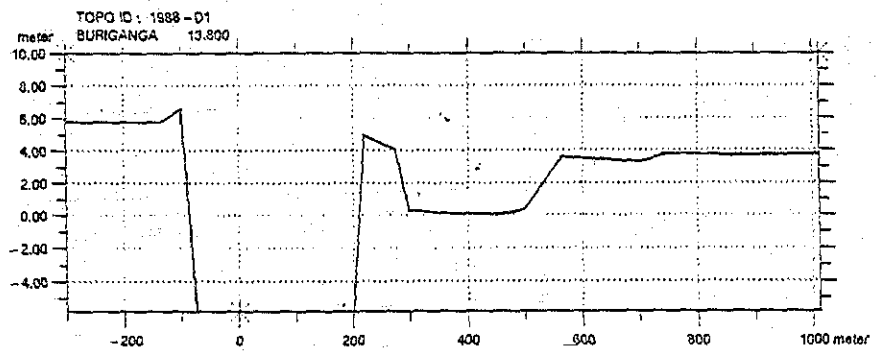

TOPO ID : 1988 - D1
BALU 28.700
meter
10.00
8.00
6.00
4.00
2.00
0.00
400meter
300
200
100
0
-100
-200
-300
-400

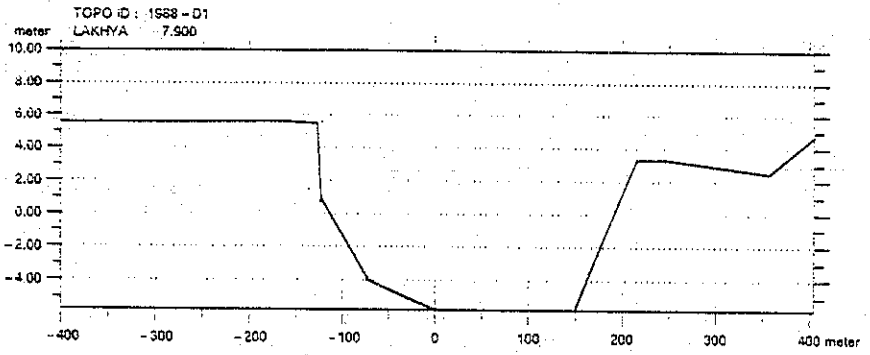

TOPO ID : 1988 - D1
meter BURIGANGA 7.000
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-300
-200
-100
0
100
200
300
meter

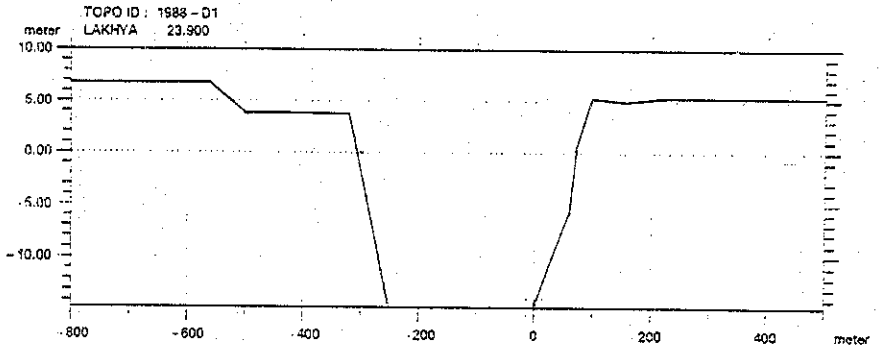

TOPO ID : 1988 - D1
meter BURIGANGA 16.500
10.00
5.00
0.00
-5.00
-10.00
-400
-300
-200
-100
0
100
200
300mete

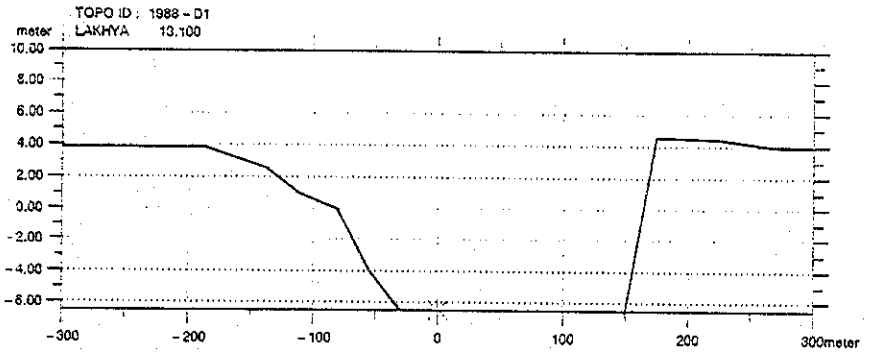

TOPO ID : 1988 - D1
meter BURIGANGA 11.500
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-8.00
-300
-200
-100
0
100
200
300
400
500meter

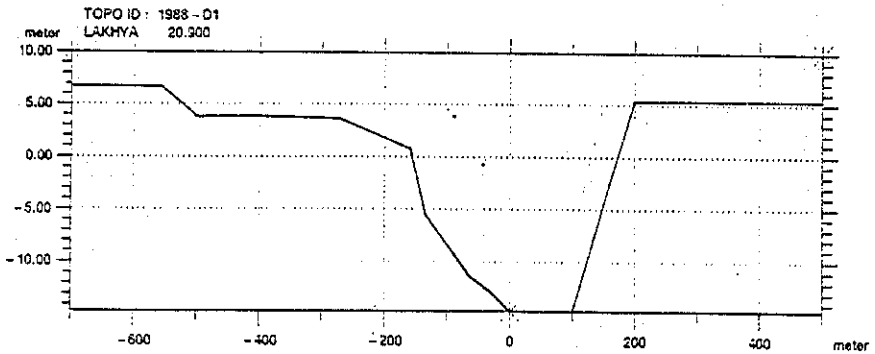

TOPO ID : 1988 - D1
meter BURIGANGA 17.500
10.00
5.00
0.00
-5.00
-10.00
-500
0
500
1000
1500
met

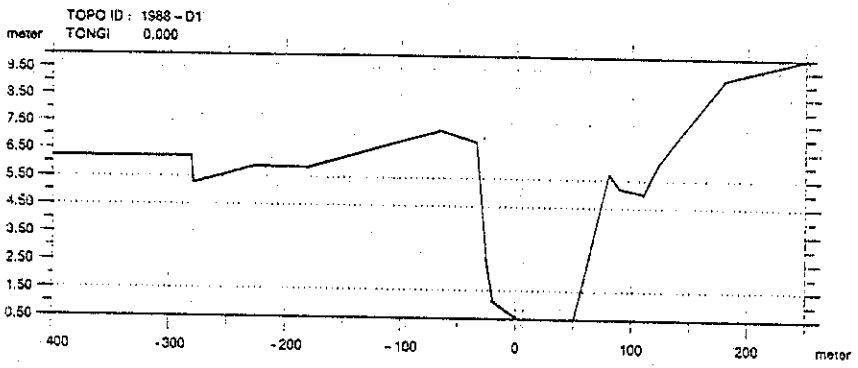

TOPO ID : 1988 - D1
meter BURIGANGA 13.800
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-200
0
200
400
600
800
1000 meter

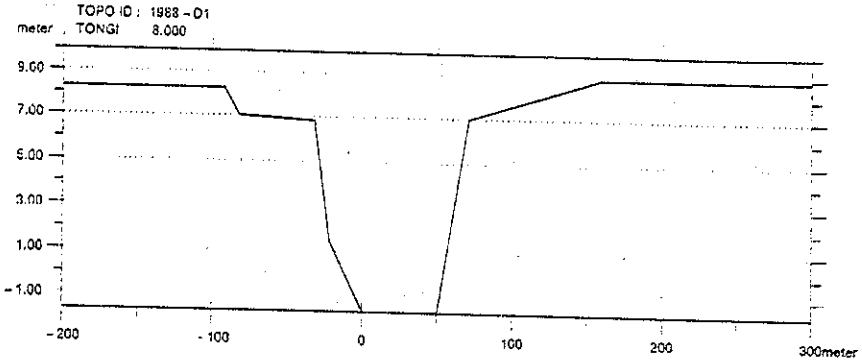

TOPO ID : 1988 - D1
meter LAKHYA 7.900
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-400 -300 -200 -100 0 100 200 300 400 meter

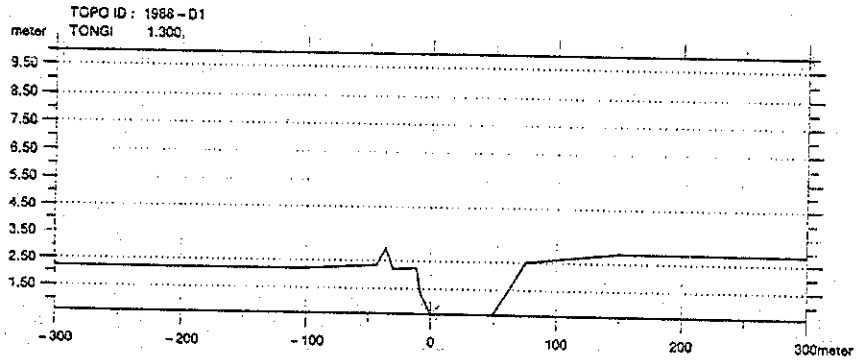

TOPO ID : 1988 - D1
meter LAKHYA 23.900
10.00
5.00
0.00
-5.00
-10.00
-800 -600 -400 -200 0 200 400 meter

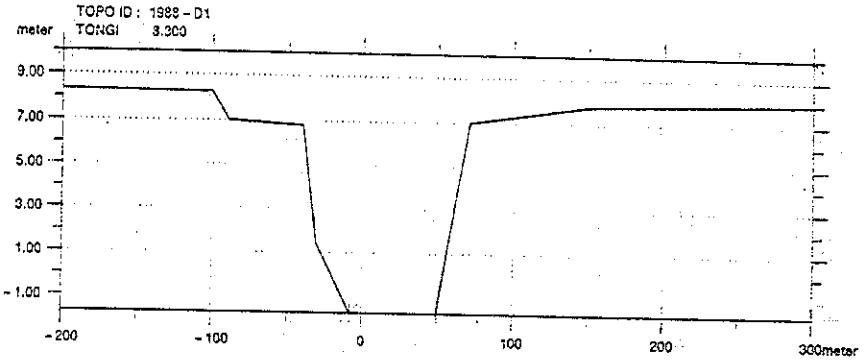

TOPO ID : 1988 - D1
meter LAKHYA 13.100
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-300 -200 -100 0 100 200 300meter

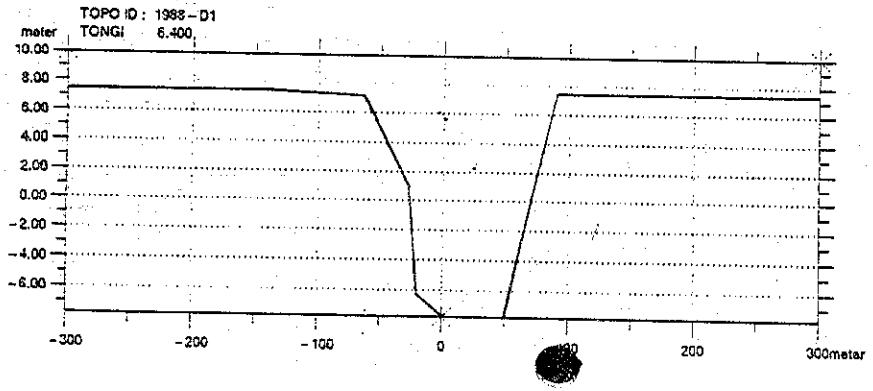

TOPO ID : 1988 - D1
meter LAKHYA 20.900
10.00
5.00
0.00
-5.00
-10.00
-600 -400 -200 0 200 400 meter

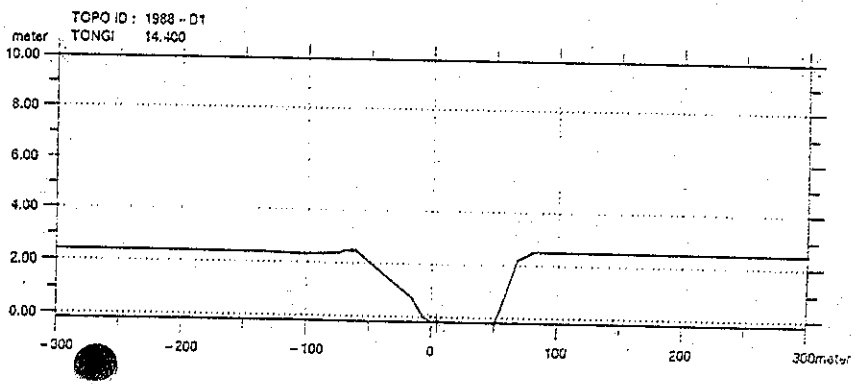

TOPO ID : 1988 - D1
meter TONGI 0.000
9.50
8.50
7.50
6.50
5.50
4.50
3.50
2.50
1.50
0.50
400
-300
-200
-100
0
100
200
meter

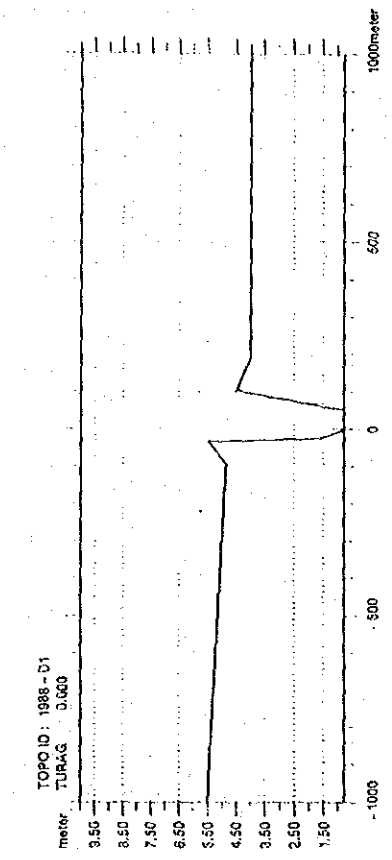

TOPO ID : 1988 - D1
meter TONGI 8.000
9.00
7.00
5.00
3.00
1.00
-1.00
-200
-100
0
100
200
300meter

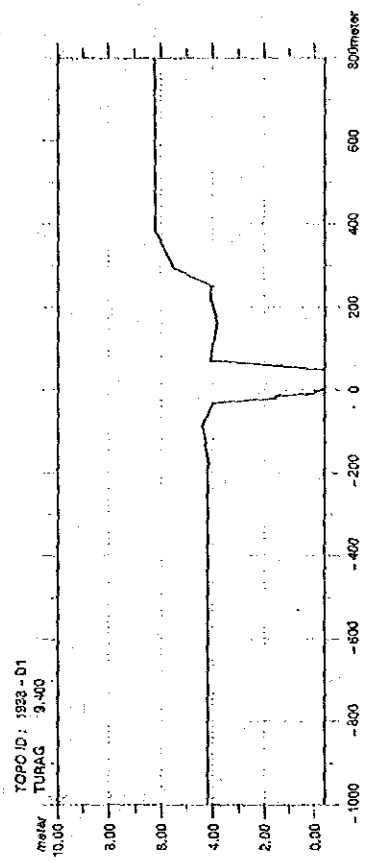

TOPO ID : 1988 - D1
meter TONGI 1.300
9.50
8.50
7.50
6.50
5.50
4.50
3.50
2.50
1.50
-300
-200
-100
0
100
200
300meter

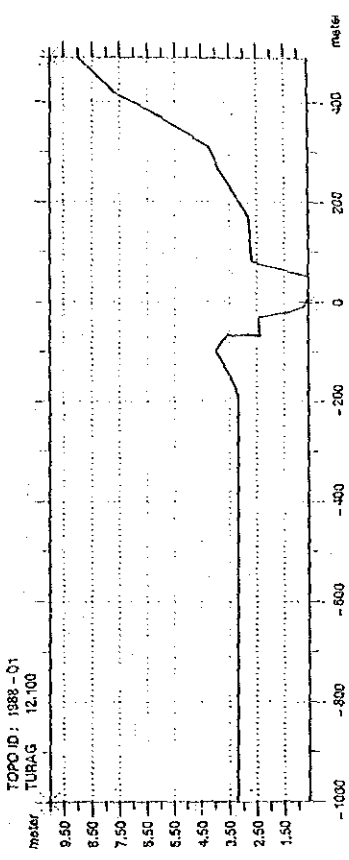

TOPO ID : 1988 - D1
meter TONGI 3.300
9.00
7.00
5.00
3.00
1.00
-1.00
-200
-100
0
100
200
300meter

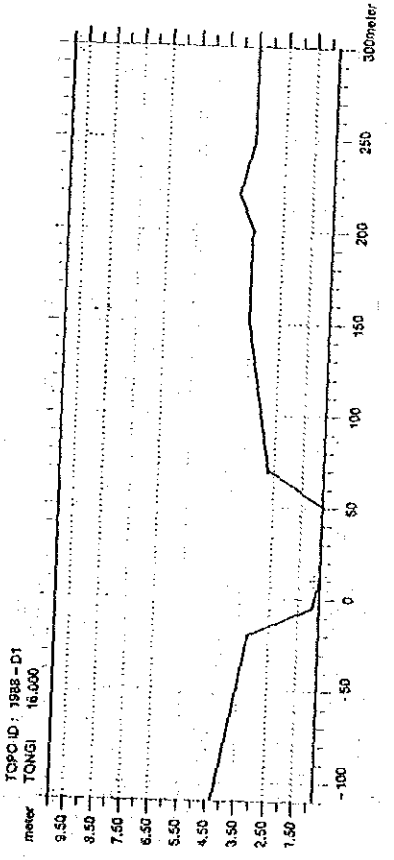

TOPO ID : 1988 - D1
meter TONGI 6.400
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
-4.00
-6.00
-300
-200
-100
0
200
300meter

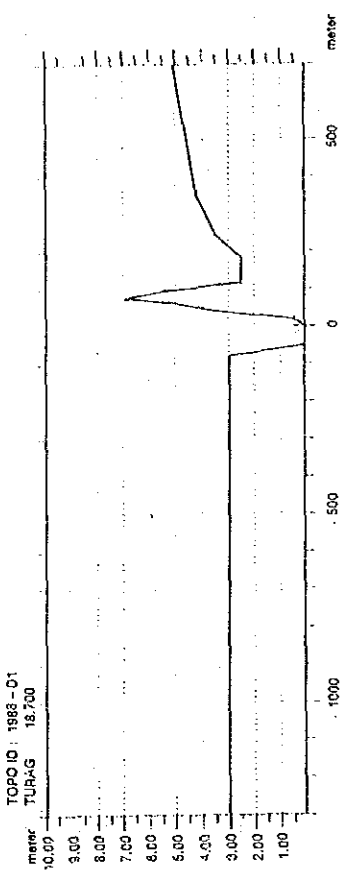

TOPO ID : 1988 - D1
meter TONGI 14.400
10.00
8.00
6.00
4.00
2.00
0.00
-300
-200
-100
0
100
200
300meter

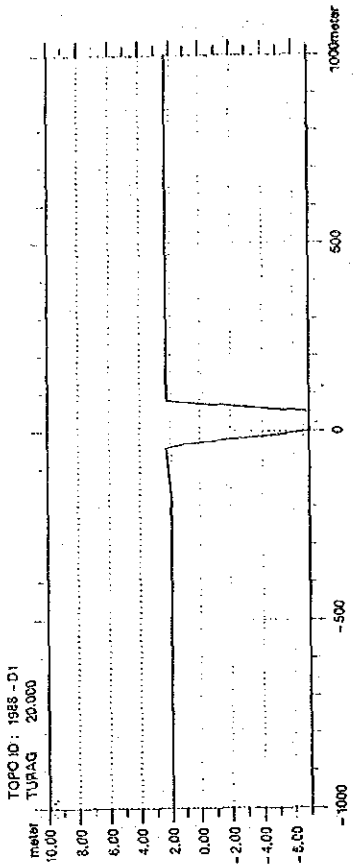

TOPO ID : 1988 - D1
TURAG 0.000
meter
1000meter

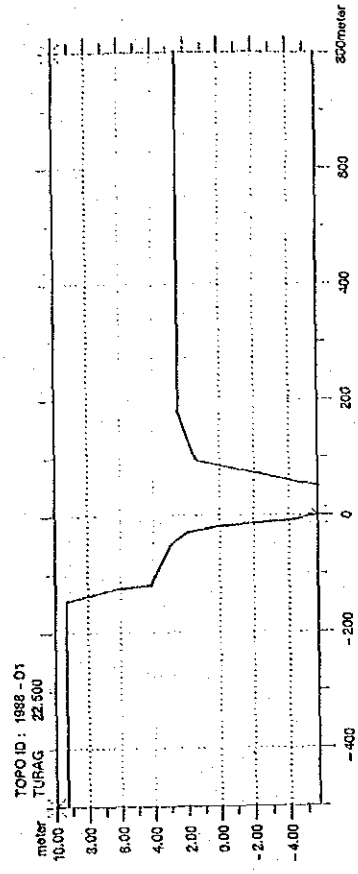

TOPO ID : 1988 - D1
TURAG 9.400
meter
300meter

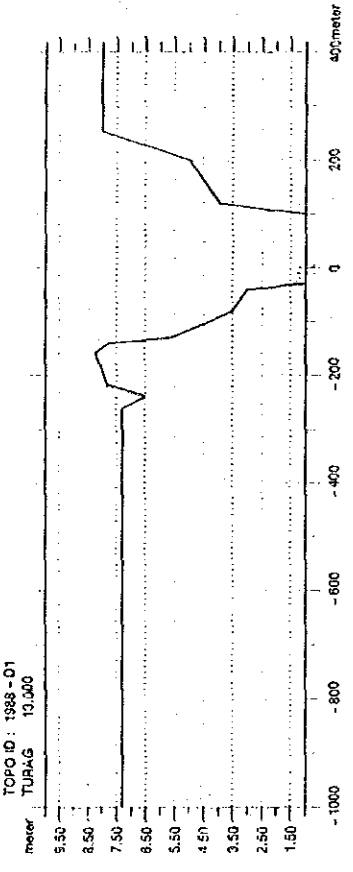

TOPO ID : 1988 - D1
TURAG 12.100
meter

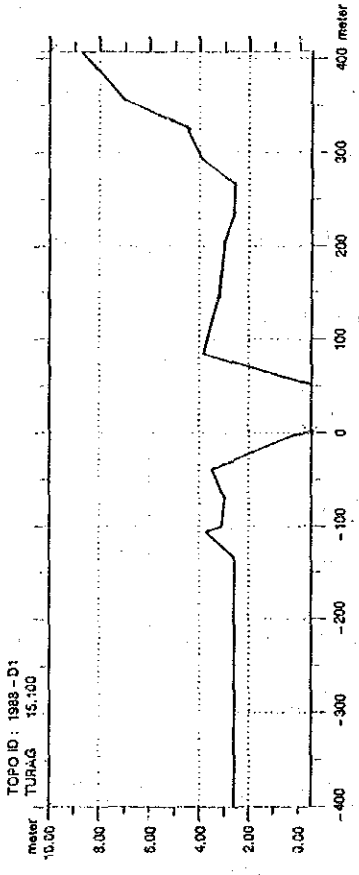

TOPO ID : 1988 - D1
TONGI 16.000
meter
300meter

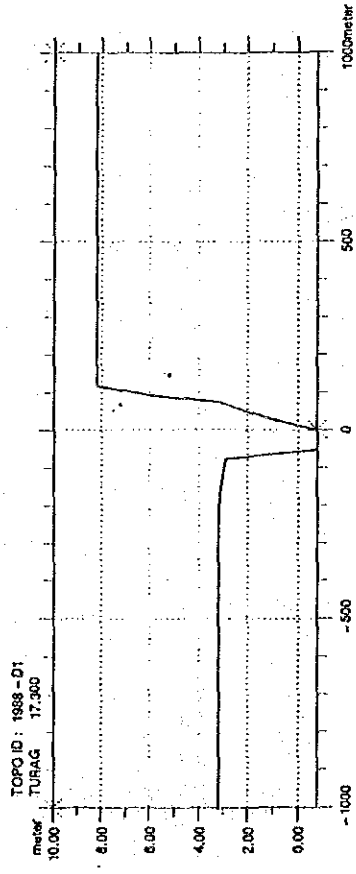

TOPO ID : 1988 - D1
TURAG 18.700
meter
meter
500
0
-500
-1000

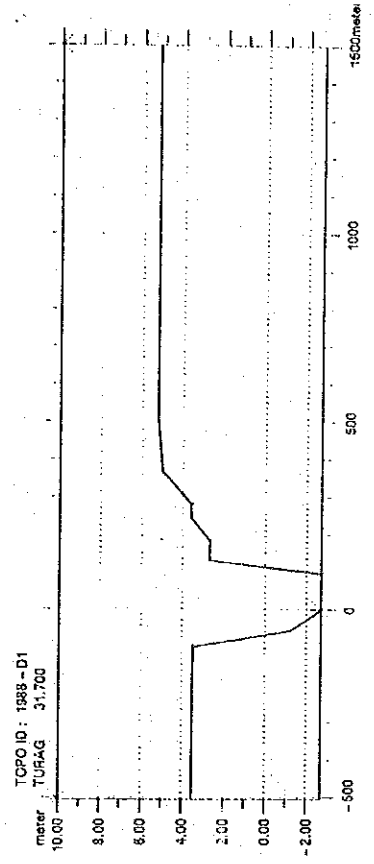

TOPO ID : 1988 - D1
TURAG 20.000
meter
1000meter
500
0
-500
-1000


TOPO ID : 1988 - D1
TURAG 22.500
meter
800meter
800
400
200
0
-200
-400


TOPO ID : 1988 - D1
TURAG 13.300
meter
400meter
200
0
-200
-400
-600
-800
-1000


TOPO ID : 1988 - D1
TURAG 15.100
meter
400 meter
300
200
100
0
-100
-200
-300
-400


TOPO ID : 1988 - D1
TURAG 17.300
meter
1000meter
500
0
-500
-1000


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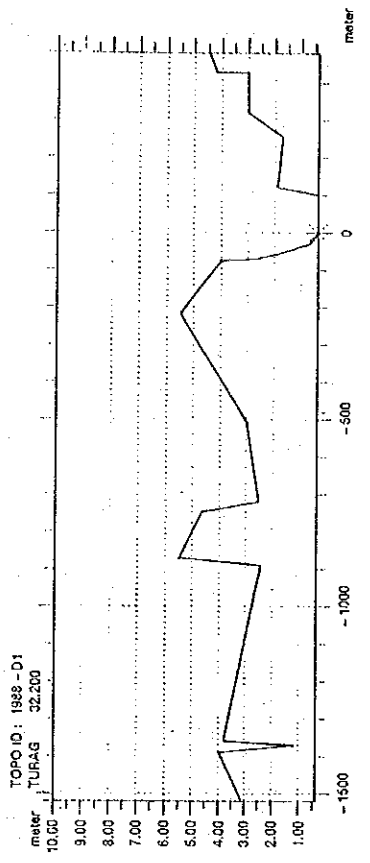
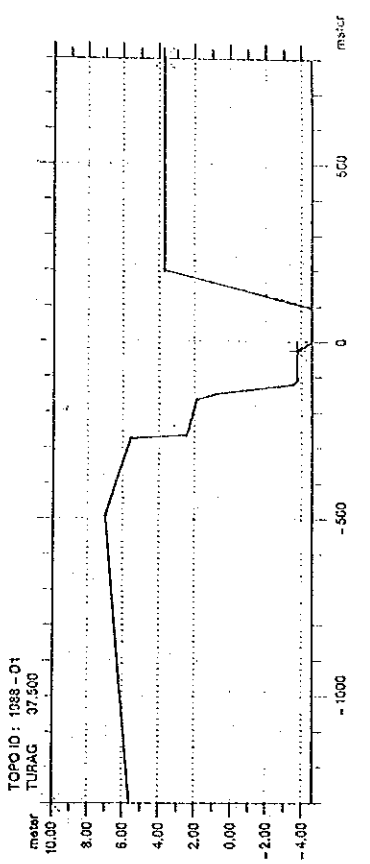
8.00
6.00
4.00
2.00
0.00
-2.00
1500meter
1000
500
0
-500


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
meter
0
-500
-1000
-1500


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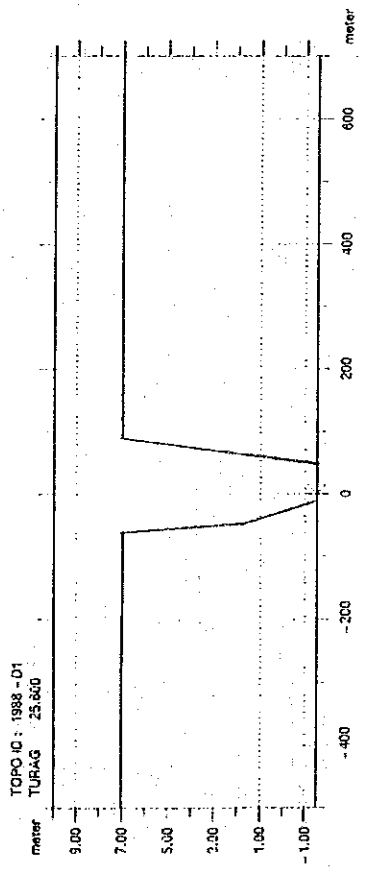
-1000


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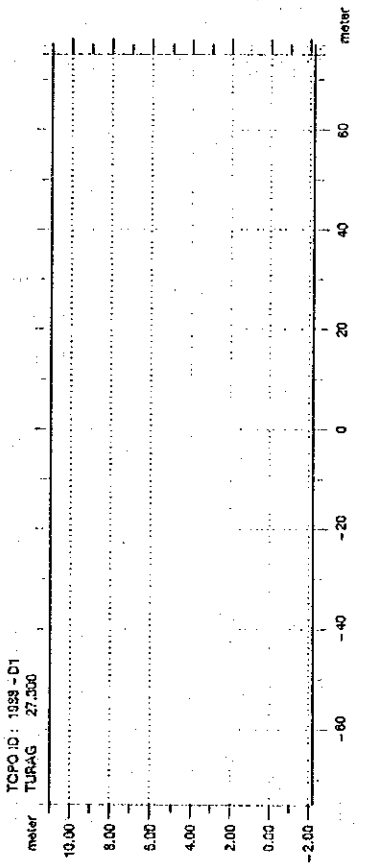
5.00
3.00
1.00
-1.00
meter
600
400
200
0
-200
-400


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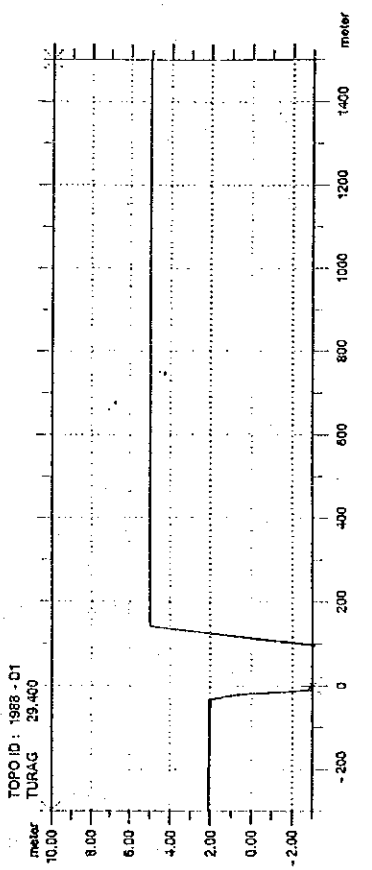
4.00
2.00
0.00
-2.00
meter
60
40
20
0
-20
-40
-60


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

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1988-D1
BALU
        8.200
COORDINATES
    1          90.167          23.874
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       -0.10        1.00
     50.00       -0.40        1.00
     80.00        3.60        1.00
     90.00        3.60        3.33
    120.00        3.75        3.33
    400.00        3.75        3.33
    400.00       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-D1
BALU
       11.900
COORDINATES
    1          90.175          23.814
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          24
   -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       -0.40        1.00
    -15.00       -0.50        1.00
    -10.00       -1.20        1.00
      0.00       -1.40        1.00      <2>
      3.00       -1.10        1.00
     16.00       -1.10        1.00
     20.00       -1.10        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          90.479          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
    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
   -148.00        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
    -44.00       3.50       3.33
    -40.00       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
    110.00       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
    -64.00       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
    400.00       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
    -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      -4.50       1.00
     36.00      -4.50       1.00
     50.00      -4.50       1.00
    100.00       4.00       1.00
    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-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>
   -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      -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 90.504 23.730
FLOW DIRECTION
0
DATUM
0.00
PROFILE 11

-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	-0.50	1.00	
100.00	-0.50	1.00	
140.00	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 90.402 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	
-24.95	-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	
134.15	4.09	1.00	
165.86	5.83	1.00	
197.56	5.97	3.33	
258.54	6.40	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	-4.26	1.00	
-146.34	-4.87	1.00	
0.00	-4.87	1.00	<2>
18.29	-4.87	1.00	
60.98	-4.87	1.00	
150.00	-4.87	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	
341.16	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	14		
-311.51	10.00	1.00	<1>
-314.51	5.51	3.33	
-292.69	6.31	3.33	
-231.76	6.43	3.33	
-138.72	-1.83	1.00	
-102.44	-6.10	1.00	
-29.88	-7.56	1.00	
0.00	-8.84	1.00	<2>
66.77	-8.84	1.00	
100.00	-8.84	1.00	
170.00	5.75	1.00	
454.27	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	
-98.47	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	-5.86	1.00	
220.00	5.00	1.00	
274.39	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	4.00	3.33	
-100.50	-10.40	3.33	
0.00	-10.40	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-D1
BURIGANGA
17.500
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	
-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	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-D1
LAKHYA
7.900
COORDINATES
1 90.527 23.695
FLOW DIRECTION
0
DATUM
0.00
PROFILE 19

-100.00	10.00	1.00	<1>
-400.00	5.55	3.33	
-209.45	5.55	3.33	
-171.39	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	-5.69	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	2.46	3.33	
404.71	1.73	3.33	
404.71	10.00	3.33	<3>

****

$n_1 = 0.030$
$n_2 = 0.100$

1988-D1
LAKHYA
13.100
COORDINATES
1 90.523 23.654
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>
24.39	-6.49	1.00	
54.27	-6.49	1.00	
93.29	-6.49	1.00	
118.60	-6.49	1.00	
138.11	-6.49	1.00	
150.00	-6.19	1.00	
174.39	4.57	1.00	
225.00	4.45	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	6.74	3.33	
-558.84	6.71	3.33	
-497.25	3.74	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	
-159.45	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
    -558.84        6.71        3.33
    -497.25        3.74        3.33
    -454.88        3.89        3.33
    -320.00        3.75        3.33
    -250.00      -14.63        1.00
    -228.66      -14.63        1.00
    -159.15      -14.63        1.00
    -136.58      -14.63        1.00
     -61.59      -14.63        1.00
     -35.06      -14.63        1.00
       0.00      -14.63        1.00      <2>
      41.16       -8.53        1.00
      60.67       -5.48        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-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
    -190.00        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        0.50        1.00
      23.00        0.50        1.00
      28.00        0.50        1.00
      13.00        0.50        1.00
      15.00        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
      74.00        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
          6.400
COORDINATES
     1          90.394          23.887
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          14
    -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       -0.30        1.00
       0.00       -7.80        1.00      <2>
      14.00       -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          90.405          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
      42.00       -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          90.406          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
     -90.00        7.00        3.33
     -10.00        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          90.458          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
      34.00       -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          90.461          23.886
FLOW DIRECTION
0
DATUM
       0.00
PROFILE          14
    -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        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        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-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        4.90        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
          9.400
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        4.20        3.33
     -82.00        4.40        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       -0.40        1.00      <2>
      18.00       -0.40        1.00
      28.00       -0.40        1.00
      50.00       -0.40        1.00
      70.00        1.10        1.00
     101.00        1.00        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
     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        2.40        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>
      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
     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-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
    -240.00        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>
     100.00        1.00        1.00
     120.00        4.00        1.00
     200.00        5.00        1.00
     250.00        8.00        1.00
     100.00        8.00        3.33
     100.00       10.00        3.33      <3>
********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
1988-D1
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
     -4.00        0.35       1.00
      0.00       -0.50       1.00      <2>
      8.00       -0.50       1.00
     22.00       -0.50       1.00
     34.00       -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
    324.00        4.50       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-D1
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
   -204.00        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-D1
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        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
    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-D1
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       -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>
*********************************
```

$n_1 = 0030$

$n_2 = 0.100$

```
1988-D1
TURAG
        22.500
COORDINATES
    1          90.340          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        4.20       3.33
   -110.00        4.00       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
     14.00       -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
    -47.00        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          90.346          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
    140.00        5.00       1.00
   1500.00        5.01       3.33
   1500.00       10.00       3.33      <3>
**********************************
```

$n_1 = 0.030$

$n_2 = 0.100$

```
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          23.749
FLOW DIRECTION
0
DATUM
      0.00
PROFILE          24
  -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>
    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          23.742
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	9.19
DHALESWARI	19.700	4.97	9.32
DHALESWARI	21.667	4.96	9.19
DHALESWARI	23.633	4.94	9.06
DHALESWARI	25.600	4.93	8.86
DHALESWARI	27.333	4.92	8.71
DHALESWARI	29.067	4.91	8.53
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	7.44
DHALESWARI	44.000	4.48	7.32
DHALESWARI	45.700	4.41	7.20
DHALESWARI	45.700	4.41	7.20
DHALESWARI	46.200	4.43	7.14
DHALESWARI	47.200	4.40	7.03
DHALESWARI	48.700	4.35	6.86
DHALESWARI	50.200	4.30	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	5.43	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	7.27
BURIGANGA	11.500	4.46	7.23
BURIGANGA	12.650	4.45	7.22
BURIGANGA	13.800	4.43	7.21
BURIGANGA	15.150	4.43	7.20
BURIGANGA	16.500	4.41	7.19
BURIGANGA	17.500	4.41	7.20
TURAG	0.000	5.40	8.23
TURAG	1.880	5.36	8.20
TURAG	3.760	5.29	8.14
TURAG	5.640	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	13.000	4.84	7.70
TURAG	13.000	4.84	7.70
TURAG	13.100	4.84	7.70
TURAG	14.200	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	4.74	7.29
BALU	8.200	4.71	7.26
BALU	10.050	4.69	7.19
BALU	11.900	4.67	7.13
BALU	13.900	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	20.300	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	5.01	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	3.740	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	22.630	981.392	14591.321
DHALESWARI	24.017	981.392	11591.661
DHALESWARI	26.167	981.392	11591.873
DHALESWARI	28.200	981.392	11592.385
DHALESWARI	29.933	981.392	14592.833
DHALESWARI	31.600	981.392	11593.319
DHALESWARI	33.200	981.392	11593.721
DHALESWARI	34.800	981.392	14594.021
DHALESWARI	36.400	981.392	11595.218
DHALESWARI	38.030	981.392	11596.233
DHALESWARI	39.750	981.392	14597.213
DHALESWARI	41.150	981.392	11598.170
DHALESWARI	43.150	981.392	11629.781
DHALESWARI	44.850	981.392	11628.198
DHALESWARI	45.950	1623.176	17259.212
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	17268.785
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	20776.126
DHALESWARI	59.573	3525.000	20777.305
BANSI	1.000	1003.209	2656.022
BANSI	2.933	1012.472	2676.036
BANSI	4.800	983.636	2673.853
BANSI	6.667	1008.340	2671.479
BANSI	8.300	1014.660	2668.206
BURIGANGA	0.550	641.784	2622.085
BURIGANGA	2.025	641.784	2632.500
BURIGANGA	3.875	641.784	2632.728
BURIGANGA	5.350	641.784	2634.140
BURIGANGA	6.150	641.784	2634.771
BURIGANGA	7.750	641.784	2635.229
BURIGANGA	9.230	641.784	2636.021
BURIGANGA	10.730	641.784	2635.929
BURIGANGA	12.075	641.784	2635.960
BURIGANGA	13.225	641.784	2636.210
BURIGANGA	14.475	641.784	2636.792

	Location	Minimun m3/sec	Maximum m3/sec
BURIGANGA	15.825	641.784	2631.407
BURIGANGA	17.000	641.781	2644.127
TURAG	0.940	311.112	1319.920
TURAG	2.820	343.689	1349.862
TURAG	4.700	345.608	1349.848
TURAG	6.580	353.363	1360.942
TURAG	8.160	357.238	1361.013
TURAG	10.073	358.946	1361.107
TURAG	11.425	360.491	1361.237
TURAG	12.550	361.755	1361.353
TURAG	14.000	362.119	1361.502
TURAG	15.030	213.765	396.196
TURAG	15.650	214.719	399.131
TURAG	16.750	215.581	398.293
TURAG	18.000	216.788	397.460
TURAG	19.350	219.040	399.091
TURAG	20.625	220.057	603.390
TURAG	21.875	218.447	608.273
TURAG	23.275	219.011	632.206
TURAG	24.825	217.283	631.318
TURAG	26.300	218.832	725.688
TURAG	27.150	641.781	2616.384
TURAG	27.825	641.784	2616.281
TURAG	28.875	641.781	2616.819
TURAG	29.975	641.784	2620.085
TURAG	31.125	641.781	2619.869
TURAG	31.950	641.784	2620.038
TURAG	33.083	641.781	2620.583
TURAG	34.850	641.784	2621.049
TURAG	36.617	641.781	2621.569
LAKHYA	0.575	1523.298	2573.787
LAKHYA	1.725	1523.928	2573.354
LAKHYA	2.950	1524.508	2572.878
LAKHYA	4.317	1769.192	3538.249
LAKHYA	5.750	1770.101	3557.740
LAKHYA	7.183	1770.900	3557.294
LAKHYA	8.767	1782.659	3612.577
LAKHYA	10.500	1783.700	3612.302
LAKHYA	12.233	1784.352	3612.146
LAKHYA	14.073	1789.275	3629.632
LAKHYA	16.025	1790.400	3629.922
LAKHYA	17.975	1792.019	3630.087
LAKHYA	19.925	1793.453	3630.129
LAKHYA	21.650	1794.118	3630.770
LAKHYA	23.150	1796.811	3631.613
BALU	0.950	30.229	87.290
BALU	2.300	30.521	88.851
BALU	3.450	31.023	90.706
BALU	4.950	31.600	93.161
BALU	6.450	31.111	95.414
BALU	7.700	71.821	874.914
BALU	9.125	71.821	875.162
BALU	10.975	71.824	875.474
BALU	12.400	71.824	882.708
BALU	13.550	71.824	882.940

	Location	Minimun m3/sec	Maximum m3/sec
BALU	14.830	71.821	883.251
BALU	16.050	71.821	891.705
BALU	17.150	71.821	895.069
BALU	18.350	71.821	913.742
BALU	19.750	71.824	912.057
BALU	21.250	71.821	910.016
BALU	22.750	71.821	907.987
BALU	24.183	71.821	987.950
BALU	25.550	71.824	987.182
BALU	26.817	71.824	986.529
BALU	28.150	71.824	986.046
TONGI	0.650	33.231	773.816
TONGI	2.150	33.824	773.944
TONGI	3.850	33.824	774.202
TONGI	5.550	33.824	774.432
TONGI	7.200	33.824	774.482
TONGI	8.130	33.821	774.563
TONGI	9.003	33.821	776.861
TONGI	10.588	33.821	776.953
TONGI	12.113	33.821	777.173
TONGI	13.638	33.821	779.025
TONGI	15.200	33.821	780.177
KARNATALI	0.800	260.633	1989.911
KARNATALI	2.100	260.608	1990.257
KARNATALI	4.000	260.608	1990.350
KARNATALI	5.600	260.608	1990.141
KARNATALI	7.317	260.608	1990.574
KARNATALI	9.150	260.608	1990.603
KARNATALI	10.983	260.608	1990.894

GRID POINT RESULT SUMMARY

VELOCITY,

	Location	Minimun m/sec	Maximum m/sec
DHALESWARI	0.000	0.000	0.423
DHALESWARI	0.250	0.000	0.423
DHALESWARI	0.500	0.000	0.423
DHALESWARI	0.650	0.000	0.423
DHALESWARI	0.800	0.000	0.427
DHALESWARI	0.900	0.000	0.181
DHALESWARI	1.780	0.000	0.189
DHALESWARI	2.700	0.000	0.193
DHALESWARI	3.740	0.000	0.201
DHALESWARI	4.720	0.000	0.208
DHALESWARI	5.700	0.000	0.215
DHALESWARI	6.680	0.000	0.224
DHALESWARI	7.660	0.000	0.233
DHALESWARI	8.640	0.000	0.244
DHALESWARI	9.620	0.000	0.257
DHALESWARI	10.600	0.000	0.274
DHALESWARI	11.438	0.000	0.273
DHALESWARI	12.275	0.000	0.261
DHALESWARI	13.113	0.000	0.254
DHALESWARI	13.950	0.000	0.247
DHALESWARI	14.788	0.000	0.239
DHALESWARI	15.625	0.000	0.232
DHALESWARI	16.463	0.000	0.221
DHALESWARI	17.300	0.000	0.216
DHALESWARI	17.900	0.000	0.189
DHALESWARI	18.500	0.000	0.738
DHALESWARI	19.100	0.000	1.161
DHALESWARI	19.700	0.000	1.016
DHALESWARI	20.683	0.000	1.013
DHALESWARI	21.667	0.000	1.047
DHALESWARI	22.650	0.000	1.107
DHALESWARI	23.633	0.000	1.175
DHALESWARI	24.617	0.000	1.251
DHALESWARI	25.600	0.000	1.336
DHALESWARI	26.467	0.000	1.298
DHALESWARI	27.333	0.000	1.261
DHALESWARI	28.200	0.000	1.242
DHALESWARI	29.067	0.000	1.224
DHALESWARI	29.933	0.000	1.232
DHALESWARI	30.800	0.000	1.331
DHALESWARI	31.600	0.000	1.290
DHALESWARI	32.400	0.000	1.252
DHALESWARI	33.200	0.000	1.192
DHALESWARI	34.000	0.000	1.169
DHALESWARI	34.800	0.000	1.151
DHALESWARI	35.600	0.000	1.133
DHALESWARI	36.400	0.000	1.115
DHALESWARI	37.200	0.000	1.098
DHALESWARI	38.050	0.000	1.134
DHALESWARI	38.900	0.000	1.171
DHALESWARI	39.750	0.000	1.210
DHALESWARI	40.600	0.000	1.251
DHALESWARI	41.450	0.000	1.293
DHALESWARI	42.300	0.000	1.340
DHALESWARI	43.150	0.000	1.389
DHALESWARI	44.000	0.000	1.440
DHALESWARI	44.850	0.000	1.491
DHALESWARI	45.700	0.000	1.551
DHALESWARI	45.700	0.000	1.801
DHALESWARI	45.950	0.000	1.851
DHALESWARI	46.200	0.000	1.877
DHALESWARI	46.700	0.000	1.921
DHALESWARI	47.200	0.000	1.973
DHALESWARI	47.950	0.000	2.011
DHALESWARI	48.700	0.000	2.051
DHALESWARI	49.450	0.000	2.096
DHALESWARI	50.200	0.000	2.113
DHALESWARI	50.950	0.000	2.198
DHALESWARI	51.700	0.000	2.255
DHALESWARI	52.400	0.000	2.135
DHALESWARI	53.100	0.000	2.027
DHALESWARI	53.800	0.000	1.922
DHALESWARI	54.500	0.000	1.827
DHALESWARI	55.400	0.000	1.939
DHALESWARI	56.300	0.000	2.065
DHALESWARI	57.000	0.000	1.846
DHALESWARI	57.700	0.000	1.669
DHALESWARI	57.700	0.000	2.008
DHALESWARI	58.325	0.000	1.834
DHALESWARI	58.950	0.000	1.688
DHALESWARI	59.575	0.000	1.556
DHALESWARI	60.200	0.000	1.443
BANSI	0.000	0.000	1.217
BANSI	1.000	0.000	1.197
BANSI	2.000	0.000	1.177
BANSI	2.933	0.000	1.094
BANSI	3.867	0.000	1.023
BANSI	4.800	0.000	0.957
BANSI	5.733	0.000	0.899
BANSI	6.667	0.000	0.847
BANSI	7.600	0.000	0.800
BANSI	8.300	0.000	0.555
BANSI	9.000	0.000	0.423
BURIGANGA	0.000	0.000	0.548
BURIGANGA	0.550	0.000	0.501
BURIGANGA	1.100	0.000	0.464
BURIGANGA	2.025	0.000	0.511
BURIGANGA	2.950	0.000	0.563
BURIGANGA	3.875	0.000	0.655
BURIGANGA	4.800	0.000	0.785
BURIGANGA	5.350	0.000	0.681
BURIGANGA	5.900	0.000	0.601
BURIGANGA	6.450	0.000	0.547
BURIGANGA	7.000	0.000	0.501
BURIGANGA	7.750	0.000	0.510
BURIGANGA	8.500	0.000	0.519
BURIGANGA	9.250	0.000	0.528
BURIGANGA	10.000	0.000	0.537
BURIGANGA	10.750	0.000	0.547
BURIGANGA	11.500	0.000	0.557

	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	0.531
BURIGANGA	13.800	0.000	0.526
BURIGANGA	11.475	0.000	0.509
BURIGANGA	13.150	0.000	0.193
BURIGANGA	13.825	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	0.940	0.000	0.477
TURAG	1.880	0.000	0.185
TURAG	2.820	0.000	0.493
TURAG	3.760	0.000	0.503
TURAG	4.700	0.000	0.513
TURAG	5.640	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	14.000	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	15.100	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

	Location	Minimum m/sec	Maximum m/sec
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	0.565
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	0.548
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	1.215
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	0.124
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	9.200	0.000	0.591
BALU	9.125	0.000	0.613
BALU	10.050	0.000	0.630
BALU	10.975	0.000	0.663
BALU	11.900	0.000	0.700
BALU	12.100	0.000	0.781
BALU	12.900	0.000	0.687
BALU	13.550	0.000	0.803
BALU	11.200	0.000	0.733
BALU	11.850	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	0.484
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	0.544
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	0.491
TONGI	6.400	0.000	0.484
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	14.100	0.000	0.199
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	1.109
KARNATALI	2.400	0.000	1.111
KARNATALI	3.200	0.000	1.122
KARNATALI	4.000	0.000	1.214
KARNATALI	4.800	0.000	1.301
KARNATALI	5.600	0.000	1.365
KARNATALI	6.400	0.000	1.436
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