

TR- 151

HYDROLOGICAL YEAR BOOK GHATAPRABHA SUB-BASIN
1988-89

NATIONAL INSTITUTE OF HYDROLOGY
JAL VIGYAN BHAVAN
ROORKEE-247 667 (UP)
INDIA

CONTENTS

| | | |
|------|---|----|
| 1.0 | INTRODUCTION | 1 |
| 2.0 | THE RIVER AND THE CATCHMENT | 2 |
| 3.0 | DEFINITION OF TERMS | 5 |
| 4.0 | WATER RESOURCES DEVELOPMENT | 6 |
| 5.0 | NETWORK OF HYDROMETEOROLOGICAL STATIONS | 8 |
| 6.0 | NETWORK OF HYDROLOGICAL STATIONS | 10 |
| 7.0 | MAPS | |
| 7.1 | Ghataprabha sub-basin in Krishna basin | 12 |
| 7.2 | Contours in Ghataprabha sub-basin | 13 |
| 7.3 | Hydrometeorological stations in Ghataprabha sub-basin | 14 |
| 7.4 | Gauge-discharge and silt sites in Ghataprabha sub-basin | 15 |
| 7.5 | Raingauge stations in Ghataprabha sub-basin | 16 |
| 7.6 | Ground water observation wells in Ghataprabha sub-basin | 17 |
| 7.7 | Soil type in Ghataprabha sub-basin | 18 |
| 7.8 | Isohyets - Ghataprabha sub-basin | 19 |
| 7.9 | Land use in Ghataprabha sub-basin | 20 |
| 7.10 | Drought prone area in Ghataprabha sub-basin | 21 |
| 8.0 | FIGURES | |
| 8.1 | Hydrograph at site Hudli (from Jun. 1,1988 to Oct. 31,1988) | 22 |
| 8.2 | Hydrograph at Daddi Site (from Jun. 1,1988 to Oct. 31,1988) | 23 |
| 8.3 | Cross-section at Adakur road bridge | 24 |
| 8.4 | Cross-section at Tarewadi weir | 25 |
| 9.0 | GHATAPRABHA RESERVOIR DATA | |
| 9.1 | Ten daily inflow data | 26 |
| 9.2 | Annual peak inflow series of Ghataprabha reservoir | 27 |
| 10.0 | HYDROLOGICAL DATA | |
| 10.1 | Ten daily discharge data of Daddi site | 28 |

| | | | | |
|------|-----------------------|---------|--|----|
| 10.2 | Daily gauge-discharge | | | 29 |
| | (a) Daddi | 1988-89 | | 30 |
| | (b) Hudli | 1988-89 | | |
| 10.3 | Ground Water Levels | | | |
| | (a) District Belgaum | 1986-89 | | 31 |
| | (b) District Bijapur | 1973-89 | | 33 |
| 11.0 | METEOROLOGICAL DATA | | | |
| 11.1 | Daily Rainfall | | | |
| | (a) Belgaum | | | 34 |
| | (b) Chikodi | | | 35 |
| | (c) Daddi | | | 36 |
| | (d) Gokak | | | 37 |
| | (e) Hidkal Dam | | | 38 |
| | (f) Hukkeri | | | 39 |
| | (g) Raibag | | | 40 |
| | (h) Almatti | | | 41 |
| | (i) Biligi | | | 42 |
| | (j) Mudhol | | | 43 |
| 11.2 | Hourly Rainfall | | | |
| | (a) Belgaum | | | 44 |
| 11.3 | Daily Temperature | | | |
| | Kudchi-Belgaum | 1988-89 | | 56 |
| | Hidkal dam site | 1988-89 | | 57 |
| 11.4 | Daily Wind | | | |
| | Kudchi-Belgaum | 1988-89 | | 58 |
| | Hidkal dam site | 1988-89 | | 59 |
| 11.5 | Daily Vapour Pressure | | | |
| | Kudchi-Belgaum | 1988-89 | | 60 |
| | Hidkal dam site | 1988-89 | | 61 |
| 11.6 | Daily Evaporation | | | |
| | Kudchi-Belgaum | 1988-89 | | 62 |
| | Hidkal dam site | 1988-89 | | 63 |

PREFACE

Water resources management needs an efficient planning for utilisation of the limited resources available in the country. For this purpose we should have the proper network of data supply and maintenance of the available data in a planned manner. Various agencies like IMD and state departments are engaged in publishing rainfall data on a regular basis. Central Water Commission and state irrigation departments are publishing the stream flow data. Groundwater data are collected by Central Ground Water Board and State Groundwater Agencies. Since planning requires much more hydrological information, which is not readily available, it is desirable to have all these in a concise format at one place.

This hydrological year book for Ghataprabha sub-basin contains necessary details regarding the river basin, present status of the water resources development, existing network of hydrological stations and their salient features. This also contains a number of maps such as contour map, location of raingauge and stage-discharge sites, ground water observation wells, soil and land use map, annual isohyetal map and drought prone area map. The cross-sections for the available sites have also been given. The monthly rainfall, daily flow data etc. have also been presented. This publication relates to the hydrological year 1988-89 and it includes hourly and daily rainfall data, vapour pressure, wind velocity, temperature, pan

evaporation data for the observation site, daily gauge and discharge data for the measuring sites and the monthly data of ground water levels of the observation wells.

In this publication an attempt has been made to put all the available data and information, relating to the Ghataprabha catchment, together. There may be certain shortcomings due to the non-availability of sufficient data. Suggestions from users would be of help to improve the contents of hydrological year books for other basins.

For the preparation of this volume, the data available in the Forest Atlas of Survey of India, the IMD and CWC publications, data supplied by WRDO, Bangalore and Bagalkot and various other agencies have been made use of. The Institute would like to express its sincere gratitude to these organisations for providing the necessary data.

This publication was prepared by Sh. Surendra Kumar, Sc. 'B', Sh. Mathewkutty Jose, SRA, Sh. B.K. Purandara, SRA, Sh. N. Varadharajan, RA, Sh U.V.N.Rao, and Sh. M.K. Sharma, RA, under the guidance of Sh. K.S. Ramasastry, SC. 'E' & Head of the Regional Centre, National Institute of Hydrology, Belgaum.

SATISH CHANDRA
DIRECTOR

1.0 INTRODUCTION

There are various organisations engaged in the measurement of quantity and quality of the water flowing in any basin, in India. These recorded data are maintained either in the form of manuscript or magnetic tape. For particular hydrological analysis, the data which are available with the various organisations operating in the basin are required. Therefore, there is a need for combining these scattered data and put them at one place. Keeping these in view, a hydrological year book for Ghataprabha in the Krishna Basin for year the year 1988-89, is prepared.

The National Institute of Hydrology, Roorkee has published a hydrological year book for Hemavati sub-basin in Cavery Basin for the year 1985-86. It includes information regarding soil, climatic conditions, land use pattern, drought prone areas etc. and hydrometeorological data. It also includes maps showing raingauge, stream gauge, sediment sites, reservoirs, cross-section of the river etc. On the same pattern, the hydrological year book for Ghataprabha is prepared with a view of providing maximum hydrological information about the sub-basin.

2.0 THE RIVER AND THE CATCHMENT :

The Ghataprabha river is one of the right bank tributaries of the Krishna in its upper reaches. The catchment of the sub-basin lies approximately between the northern latitudes of $15^{\circ} 45'$ and $16^{\circ} 25'$ and eastern longitudes $74^{\circ} 00'$ and $75^{\circ} 55'$

The Ghataprabha originates from the Western Ghats in Maharashtra at an altitude of 884 m, flows westwards for 60 km through the Ratnagiri and Kolhapur districts of Maharashtra, forms the border between Maharashtra and Karnataka for 8 km and then enters Karnataka. In Karnataka, the river flows for 216 km through the Belgaum district past Bagalkot. After a run of 283 km, the river joins the Krishna on the right bank at Kudli Sangam at an elevation of 500 m, about 16 km from Alamatti. Its principal tributaries are the Tamraparni, the Hiranyakeshi and the Markandeya.

Most of the sub-basin is flat to gently undulating except for isolated hillocks and valleys. The sub-basin is approximately triangular in shape. The northern boundary of the sub-basin is the common ridge between the Krishna and the Ghataprabha river. The southern boundary is the common ridge between the Ghataprabha and Malaprabha river and runs through Belgaum, Bailhongal, Soundatti, Ramdurg, Badami and Bagalkot taluks up to the confluence of Ghataprabha with the Krishna (Map 7.1)

The geological formations met within the sub-basin are: (i) Deccan trap of tertiary age, (ii) Sedimentary formations known as "Kaladgi group" comprising lime stone, shale and quartzites, (iii) Schistose, gneiss and other crystalline rocks and (iv) Laterite rocks. The types of soils generated from the formations are mostly permeable.

The climate of the sub-basin is marked by hot summer and mild winter. The monsoon sets early in June and continues to the end of October. The winter is from November to mid February and the summer is from mid February to end of May. December and April are the coldest and hottest months respectively. Humidity is low in dry weather being around 45 percent and in the monsoon, it is as high as 91 percent.

The sub-basin experiences only the south-west monsoon and the period is generally from June to October, July being the rainiest month. Rainfall during October is generally low.

SALIENT FEATURES

| | | |
|-------------------------|---|--|
| Sub-basin | : | Ghataprabha |
| Basin | : | Krishna |
| River | : | |
| (1) Origin | : | Sahyadri Hills near Amboli in Western Ghats in Maharashtra. |
| (2) Length | : | (a) Total : 283 km (b) Direction : Eastward |
| (3) Tributaries | : | The Tamaraparani, The Hiranyakeshi and the Markandeya. |
| (4) State/Districts | : | Distts. Ratnagiri, Kolhapur in Maharashtra state and Belgaum, Bijapur in Karnataka State |
| (5) Confluence | : | Kudli Sangam about 16 km from Almatti |
| Basin | | |
| (1) Location | : | Maharashtra and Karnataka state |
| (2) Toposheet Reference | : | 47 P, 47 I |
| (3) Catchment Area | : | 8829 sq. km |
| (4) Soil | : | Mainly Medium black soils, Deep black soils and mixed red and black soils. |
| (5) Average Height | : | 692 m. |
| (6) Average slope | : | 1.35 m/Km |

3.0 DEFINITION OF TERMS

- Discharge : The volume of water past a section per unit of time. The discharge values are presented in cumecs.
- Stage : The water level expressed in metres at the gauging site.
- Rainfall Depth : The amount of water received over the catchment as rainfall and is expressed as depth. Values are given in mm .
- ORG : Ordinary raingauge station. Rainfall between 8.30 am of previous day to 8.30 am of the current day recorded daily.
- SRRG : Self-recording raingauge. Makes continuous recording of rainfall automatically.
- Cumecs : Cubic metre per second.

4.0 WATER RESOURCES DEVELOPMENT

There is only one major project and one medium project in the sub-basin and are briefly described below:

(1) Ghataprabha Project:

The Ghataprabha Project is located near Hidkal in Hukkeri Taluk in Belgaum District. The total catchment area up to dam site is 1412 sq. km with an yield of 69.6 MCM. At full reservoir level (FRL) of 662.94 m, the storage capacity of reservoir is 1448 MCM. The total command area covered by the project is 3,17,447 hectares. It has two canals at its left and right having capacity of 66.56 and 80.70 MCM respectively.

(2) Kaleskop Project:

The gross command area and culturable command area falling under this project are 1718 and 1625 hectares respectively.

(3) Dupdal Weir:

The weir located at Dupdal in Belgaum district has gross storage capacity of 9.62 MCM.

(4) Minor Irrigation Projects:

There are 43 minor irrigation projects proposed in the sub-basin with an annual irrigation of 7447 ha. In total, there are 289 minor schemes with a designed irrigation of 32,499 ha.

(b) Proposed Projects:

Markandeya Project, a proposed major project will have GCA and CCA of 43,320 and 32,389 hectares respectively with an annual irrigation 32,389 ha. Chitri Project, a medium one, will have GCA, CCA and annual irrigation 9464, 7670 and 7287 hectares respectively.

5.0 NETWORK OF HYDROMETEOROLOGICAL STATIONS

Various hydrological parameters like rainfall, temperature, evaporation, relative humidity, wind velocity, vapour pressure, soil temperature and soil moisture are observed at hydrometeorological observatories. The Water Resources Development Organisation, Karnataka, India Meteorological Department and Regional Centre National Institute of Hydrology, Belgaum and Irrigation Department, Maharashtra are maintaining the observatories in the Ghataprabha sub-basin. The list of the hydrometeorological stations is given in Table 5.1 to Table 5.2 as well as in the Map 7.3.

TABLE 5.1 LIST OF SELF RECORDING RAINGAUGE STATIONS :

| NO. | NAME OF THE STATION | LOCATION | | ELEVATION(m) (above msl) | AGENCY |
|-----|---------------------|----------|--------|-----------------------------|--------|
| | | N.LAT. | E.LONG | | |
| 1. | BELGAUM | 15°51' | 74°32' | 753 | IMD |
| 2. | KHANAPUR | 15°38' | 74°30' | 655 | WRDO |
| 3. | HIDKAL DAMSITE | 16°09' | 73°34' | 625 | WRDO |
| 4. | HALKARNI | 5°54' | 74°16' | 700 | NIH |
| 5. | KUDACHI | 6°37' | 74°51' | 550 | WRDO |
| 6. | TAREWADI | | | | ID,M |

TABLE 5.2 LIST OF ORDINARY RAINGAUGE STATIONS :

| NO. | NAME OF THE STATION | LOCATION | | ELEVATION(m) (above msl) | AGENCY |
|-----|---------------------|----------|--------|-----------------------------|------------|
| | | N.LAT. | E.LONG | | |
| 1 | ALMATTI | | | | WRDO |
| 2. | BAGALKOT | 16°12' | 75°42' | | WRDO |
| 3. | BELGAUM | 15°51' | 74°32' | 753 | IMD |
| 4. | BILAGI | 16°21' | 75°37' | | WRDO |
| 5. | CHANDGAD | 15°56' | 74°11' | | NIH; ID, M |
| 6. | CHIKODI | 16°26' | 74°35' | 607 | WRDO |
| 7. | GADHINGLAJ | 16°13' | 74°21' | | ID, M |
| 8. | GOKAK | 16°10' | 74°50' | 556 | WRDO |
| 9. | HUKKERI | 16°14' | 74°36' | 661 | WRDO |
| 10. | HALKARNI | 15°54' | 74°16' | 700 | NIH |
| 11. | HIDKAL DAM | 16°09' | 73°34' | 625 | WRDO |
| 12. | KHANAPUR | 15°38' | 74°30' | 655 | WRDO |
| 13. | KUDCHI | 16°37' | 74°51' | 550 | WRDO |
| 14. | MAHAGAON | | | | NIH |
| 15. | MUDHOL | 16°20' | 75°97' | | WRDO |
| 16. | NESRI | | | | NIH |
| 17. | DADDI | 16°40' | 74°26' | 694 | WRDO |
| 18. | TAREWADI | | | | ID, M |

5.3 LIST OF HYDROMETEOROLOGICAL STATIONS

| NO. | NAME OF THE STATION | LOCATION | | ELEVATION(m) (above msl) | AGENCY |
|-----|---------------------|----------|---------|-----------------------------|--------|
| | | N.LAT. | E.LONG | | |
| 1. | Hidkal Dam | 16° 9' | 73° 34' | 625.00 | ID, K |
| 2. | Belgaum | 15° 51' | 74° 37' | 747.40 | IMD |
| 3. | Halkarni | 15° 54' | 74° 16' | 700.00 | NIH |
| 4. | Tarewadi | | | | ID, M |
| 5. | Almatti | | | | WRDO |

6.0 NETWORK OF HYDROLOGICAL STATIONS

In the Ghataprabha sub-basin, there are 12 gauge and discharge sites which are being maintained by Central Water Commission, Water Resources Development Organisation of Karnataka State and other State Govt. organisations. But the data of only two stations namely Daddi and Hudli sites were available and have been reported. The discharge is being measured by current meter. A brief description of the G/D site is given as below :

DADDI SITE

| | | |
|---------------------|---|--------------|
| Name of the station | : | Daddi |
| Catchment area | : | 1150 sq. km. |
| Zero of the gauge | : | 674.143 m |
| River system | : | Krishna |
| River | : | Ghataprabha |
| Started from | : | Dec, 1978 |

The Daddi G/D site is maintained by Central Water Commission. The discharge data are computed on the basis of current meter readings taken at 0.6 times the depth of flow from the water surface.

HUDLI SITE

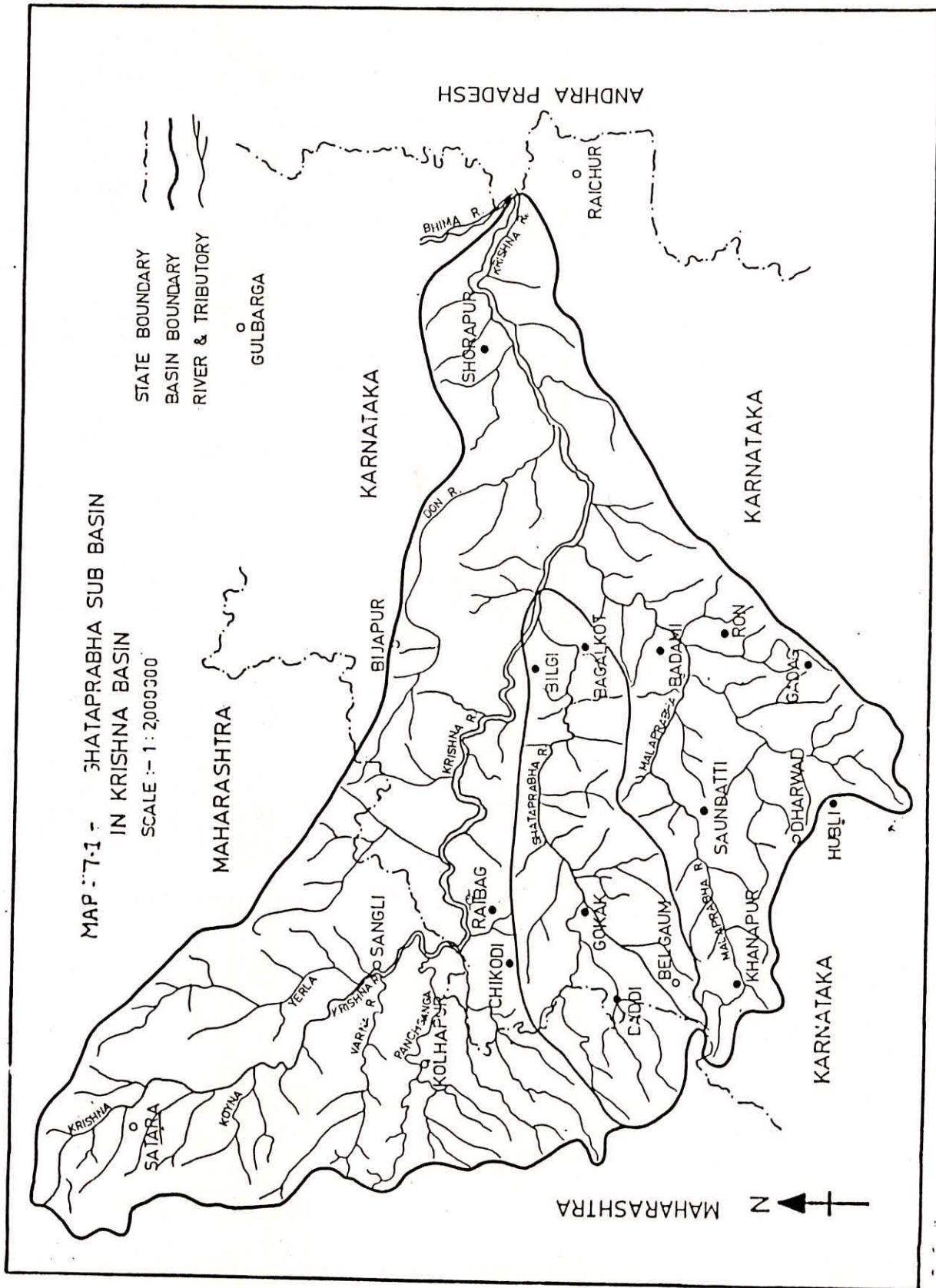
| | | |
|---------------------|---|---------------|
| Name of the station | : | Hudli |
| Catchment area | : | 280 sq. km. |
| Zero of the gauge | : | 675.20 m |
| River system | : | Krishna |
| Stream | : | Markandeya |
| Started from | : | July, 1969 |
| Name of the nalla | : | Bellari Nalla |

The Bellari Nalla near Hudli village was under stage gauging from July, 1969 to May, 1978. The discharge data were computed by the table of stage-discharge prepared by slope area method (slope of the reach at the site is 1:520).

The current meter gauging was started on 25.6.1978. Since then current meter gauging is in progress. There is a bridge on U/S of the gauge posts. Current meter gauging is done on the D/S side of the bridge by lowering the current meter to the required depth i.e. at $0.6d$ at three points in each span of the bridge. The bridge has five spans.

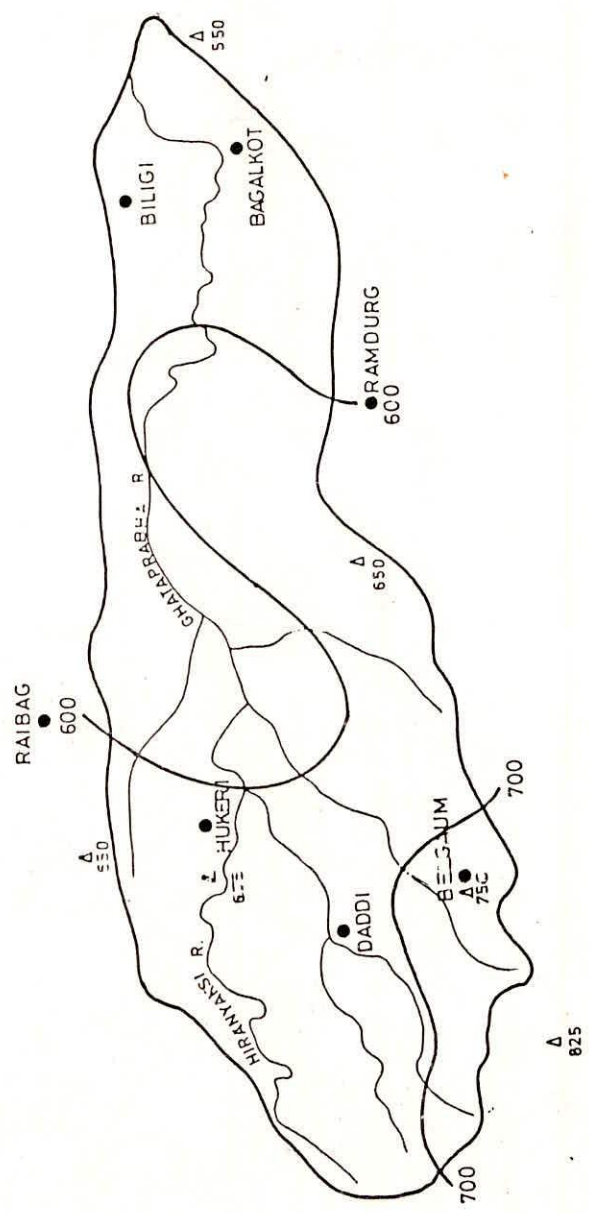
All the other gauge and discharge sites are shown on the Map 7.4.

7.0 - MAPS



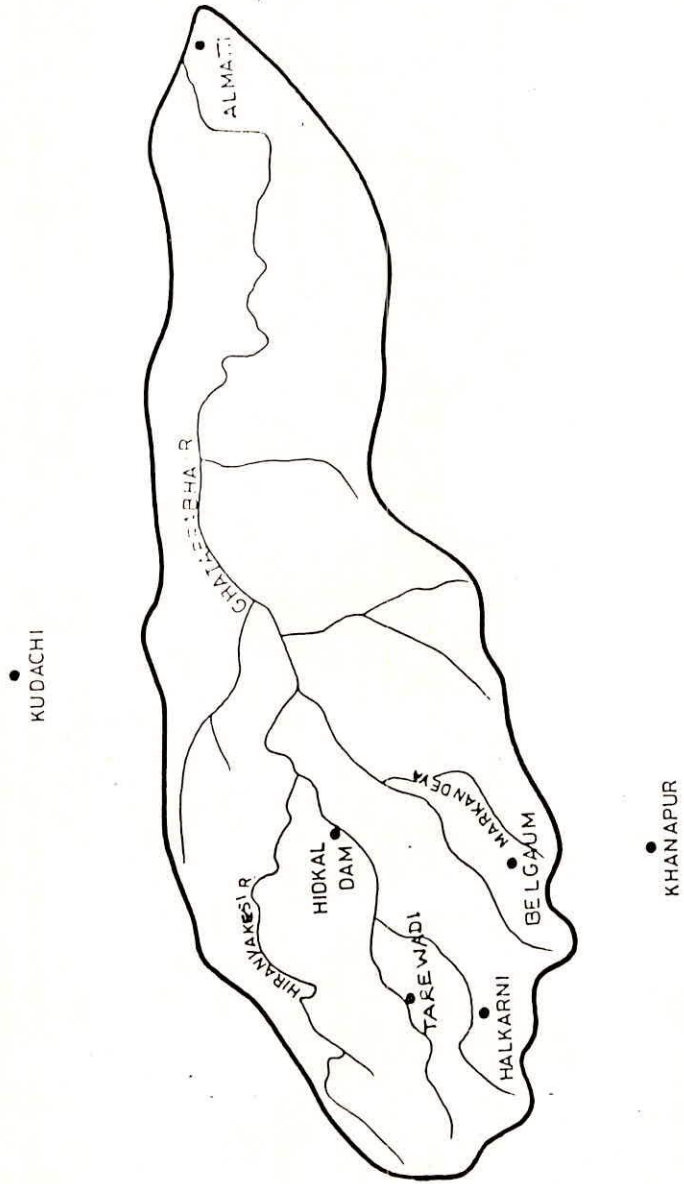
MAP: 7-2- CONTOURS IN
GHATAPRABHA SUB-BASIN

SCALE - 1 : 1,000,000

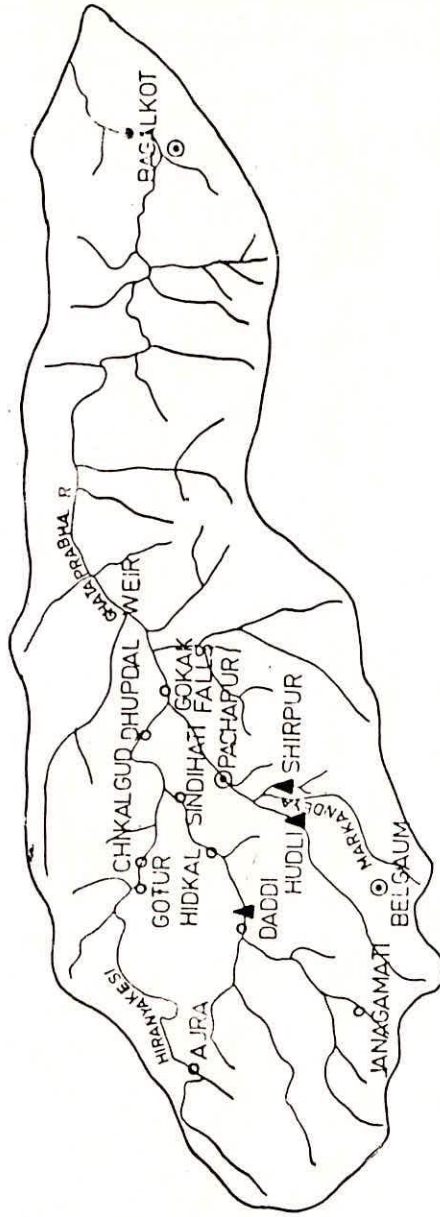


MAP: 7-3 - HYDROMETEROLOGICAL STATIONS
IN GHATAPRABHA SUB-BASIN

SCALE - 1 : 1,000,000



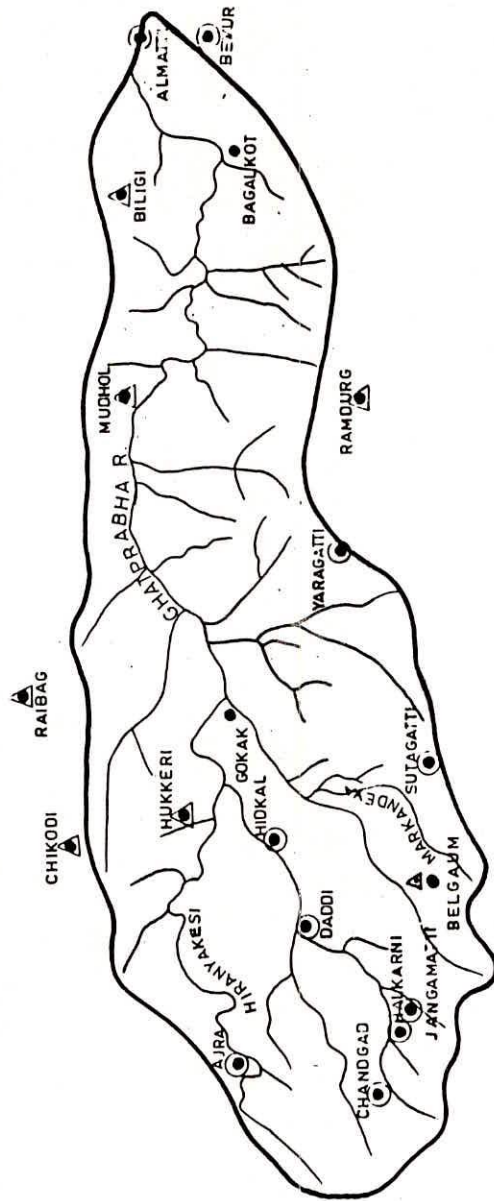
MAP: 7.4 - GAUGE DISCHARGE AND
SILT SITES IN GHATAPRABHA SUB-BASIN
SCALE = 1 : 1,000,000



- ▲ GAUGE SITE
- GAUGE DISCHARGE SITE
- GAUGE, DISCHARGE & SILT SITE

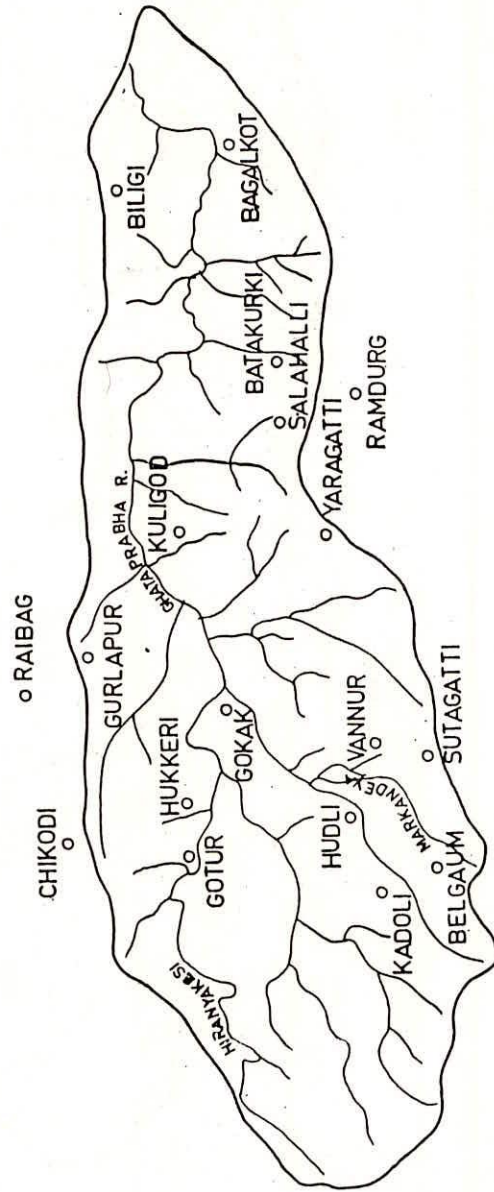
**MAP: 7.5- RAINGAUGE STATIONS
IN GHATAPRABHA SUB-BASIN**

SCALE: 1:1,000,000

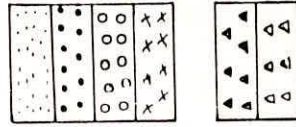
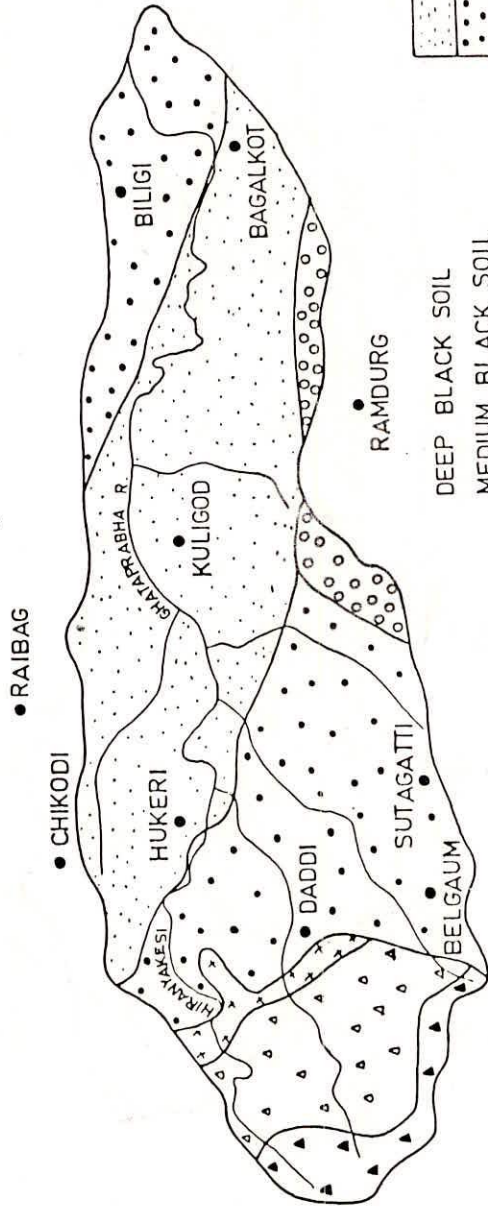


- IMD RAINGAUGE STATION
- ▲ RAINGAUGE STATION MAINTAINED BY OTHER AGENCIES & DATA PROCESSED BY IMD.
- ⊙ RAINGAUGE STATION OTHER THAN THE ABOVE TWO CATEGORIES

MAP: 7.6 - GROUND WATER LEVEL
OBSERVATION WELLS IN GHATAPRABHA
SUB BASIN
SCALE = 1:1,000,000

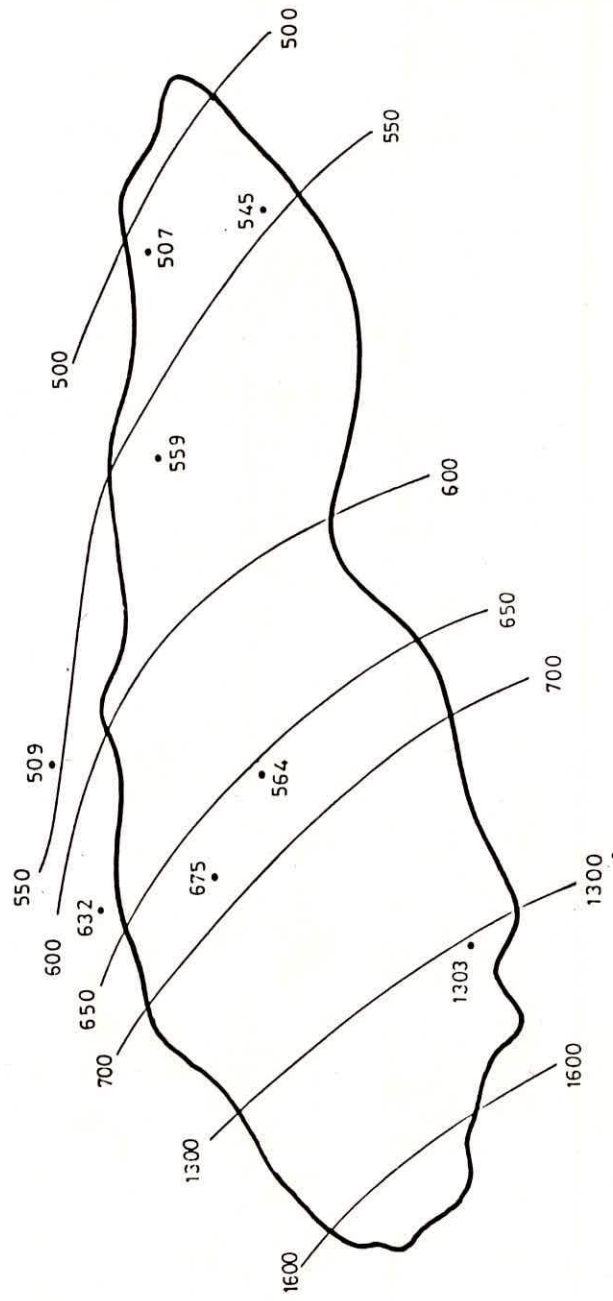


MAP: 7-7- SOIL TYPE
 IN GHATAPRABHA SUB BASIN
 SCALE :- 1:1,000,000



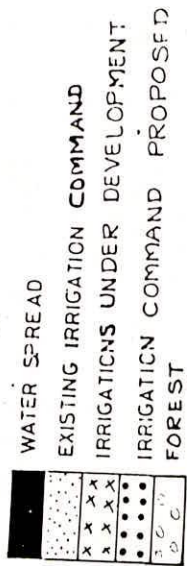
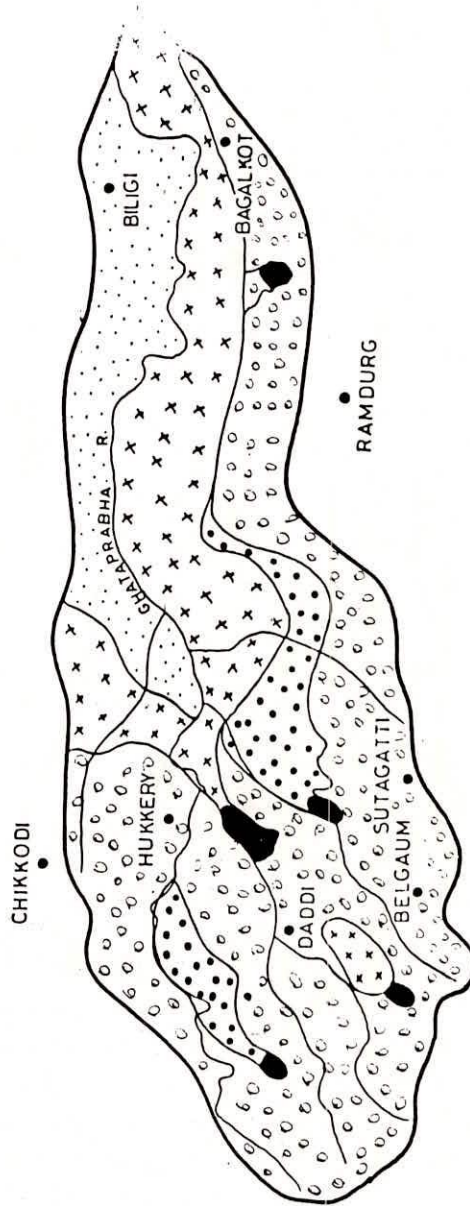
DEEP BLACK SOIL
 MEDIUM BLACK SOIL
 MIXED RED AND BLACK SOIL
 COARSE SHALLOW BLACK SOIL
 LATERITIC SOIL :-
 a) COARSE SHALLOW SOIL
 b) MEDIUM DEEP SOIL

MAP: 7.8-ISOHYETS - GHATAPRABHA SUB-BASIN



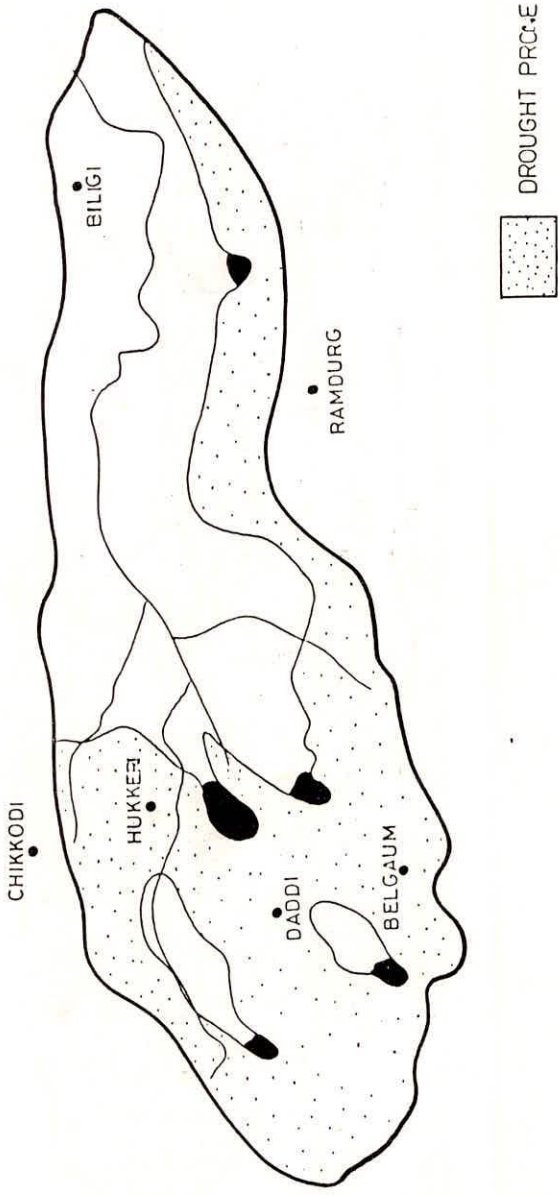
MAP: 7.9 - LAND-USE IN
GHATAPRABHA SUB-BASIN

SCALE - 1 : 1,000,000

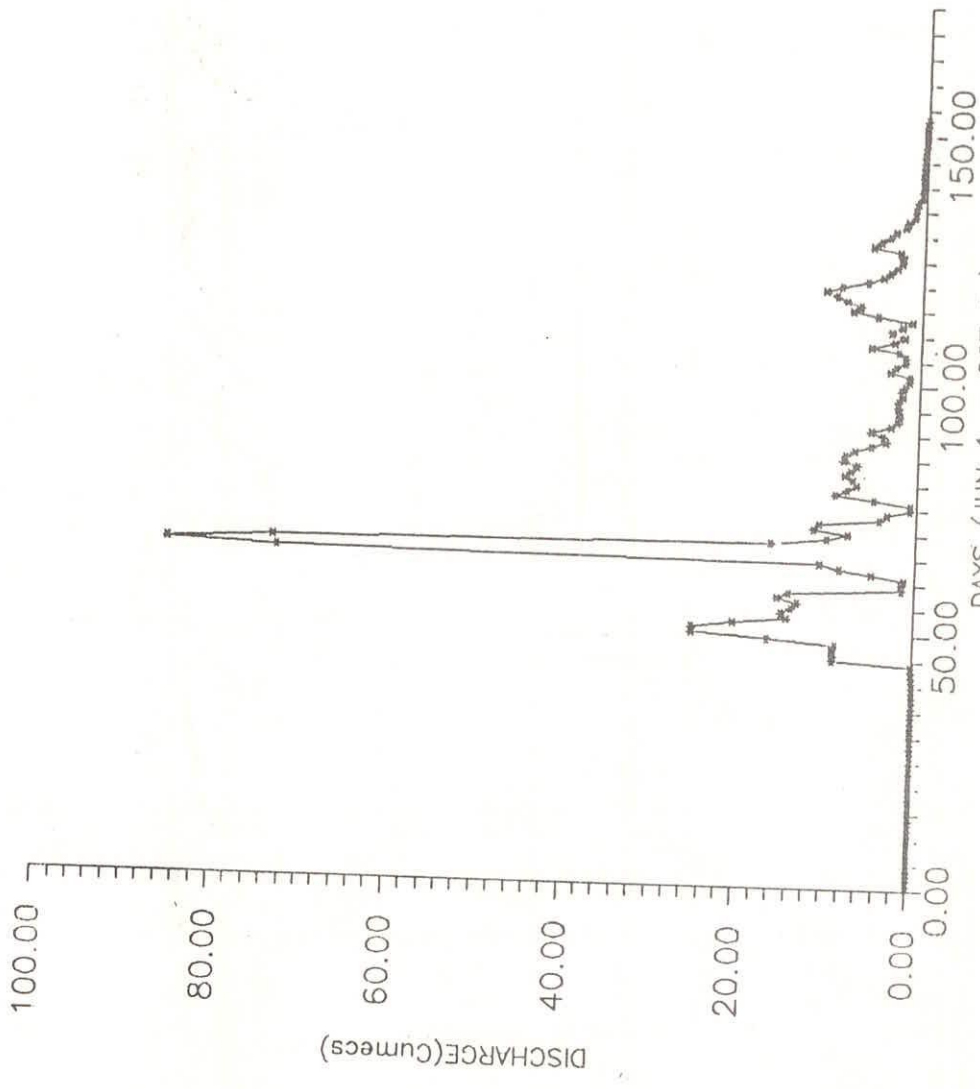


MAP: 7.10 - DROUGHT PRONE AREA
GHATAPRABHA SUB-BASIN

SCALE - 1 : 1,000,000



8.0 - FIGURES



DAYS (JUN 1 - OCT 31)
 HYDROGRAPH AT SITE HUDLI
 (From 1 JUN;1988 To 31 OCT;1988)
 FIG: 8.1

HYDROGRAPH AT DACC (GHATAPADA)
FROM 14 JUN TO 3 OCT 1968

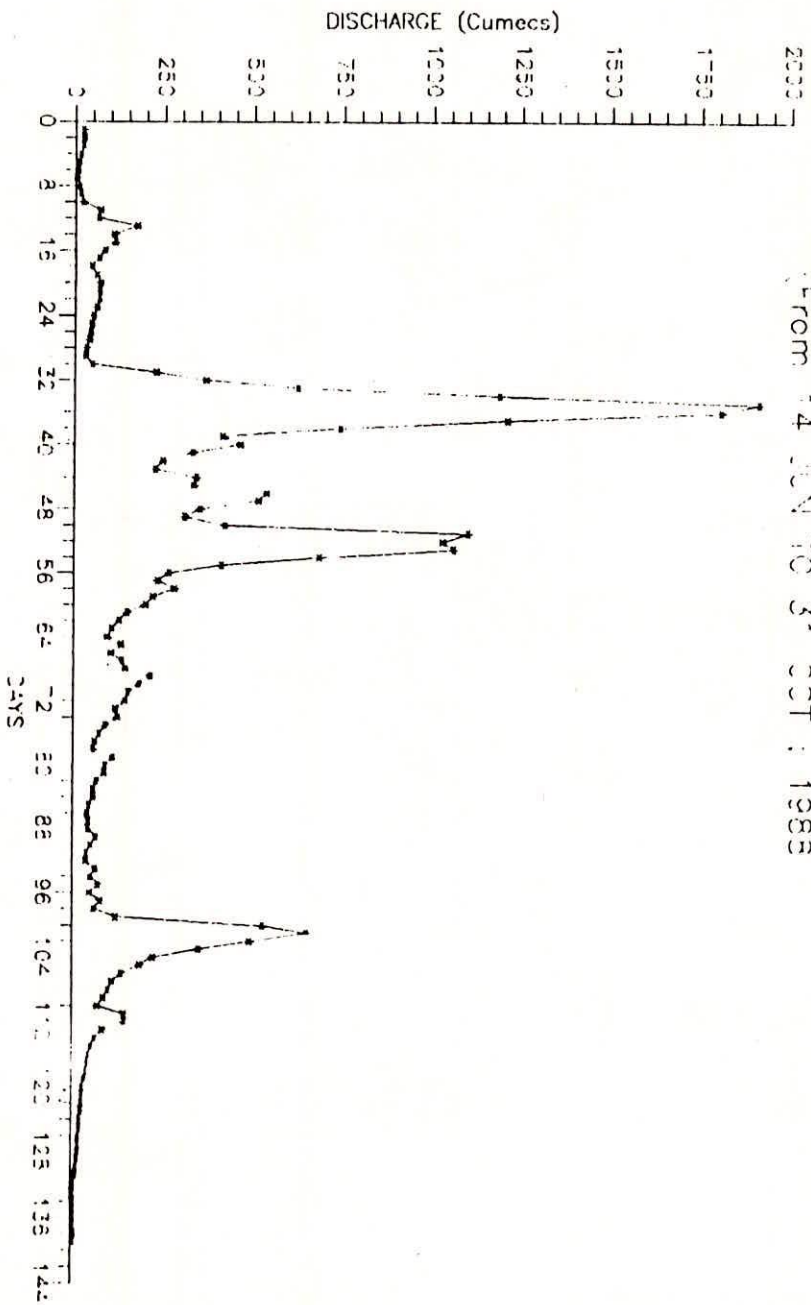


FIG: 8-2

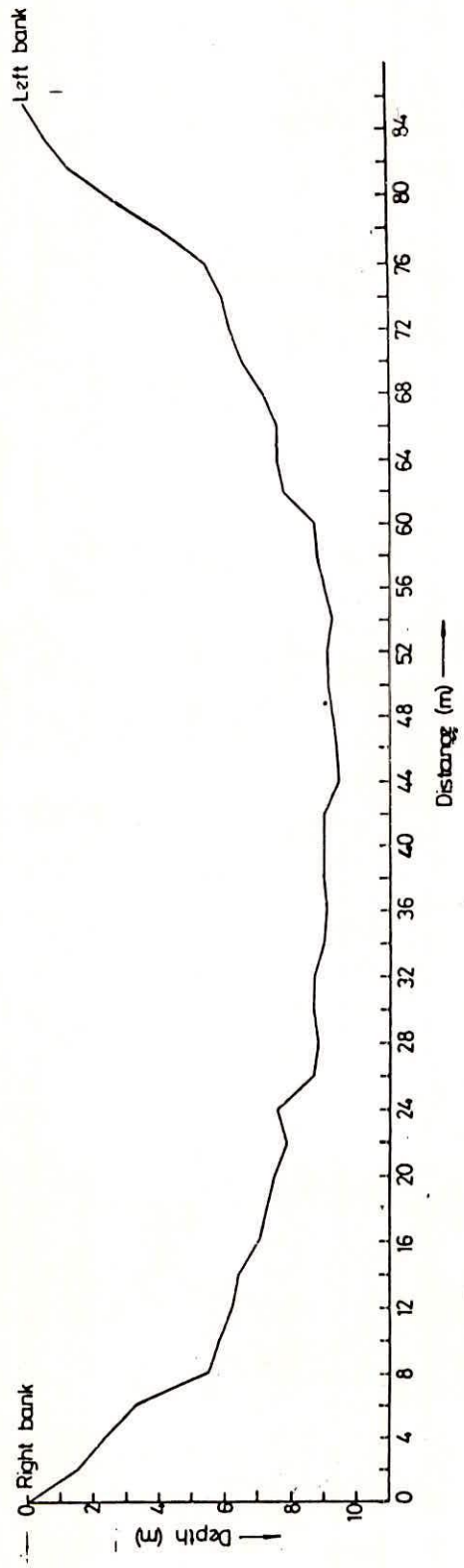


Fig.8.3 : CROSS-SECTION OF RIVER GHATAPRABHA AT ADAKUR ROAD BRIDGE

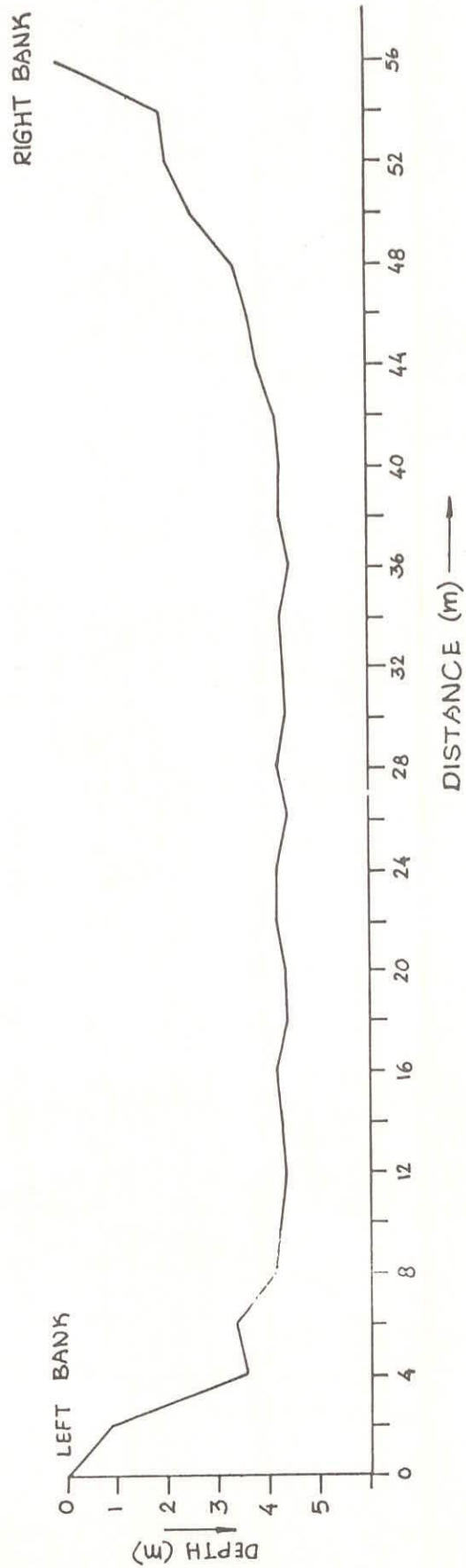


FIG. 8.4 : CROSS SECTION OF RIVER GHATAPRABHA AT TAREKADI WEIR

9.1 10 DAILY INFLOW(CUMecs) AND OUTFLOW(CUMecs) DATA
HIDKAL RESERVOIR

| | JUNE | | JULY | | AUGUST | | SEPTEMBER | | OCTOBER | | NOVEMBER | |
|--------------|--------|---------|--------|---------|---------|---------|-----------|---------|---------|---------|----------|---------|
| | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW |
| YEAR:1986-87 | | | | | | | | | | | | |
| 0.00 | -0.99 | 1966.13 | -0.99 | 3022.14 | -0.99 | 167.04 | -0.99 | 216.03 | -0.99 | 194.65 | -0.99 | -0.99 |
| 238.50 | -0.99 | 2142.60 | -0.99 | 4036.53 | -0.99 | 106.58 | -0.99 | 44.60 | -0.99 | 73.08 | -0.99 | -0.99 |
| 2516.40 | -0.99 | 2789.58 | -0.99 | 972.78 | -0.99 | 516.47 | -0.99 | 12.32 | -0.99 | 0.00 | -0.99 | -0.99 |
| YEAR:1987-88 | | | | | | | | | | | | |
| 0.00 | 43.75 | 2760.55 | 5.66 | 329.97 | 642.58 | 715.90 | 459.60 | 534.14 | 337.22 | 63.43 | 218.88 | 218.88 |
| 283.28 | 44.54 | 2069.77 | 11.33 | 821.52 | 426.78 | 291.63 | 802.04 | 213.11 | 563.30 | 38.76 | 269.65 | 269.65 |
| 249.27 | 5.66 | 1097.18 | 293.18 | 1898.17 | 28.46 | 448.30 | 486.42 | 67.78 | 898.79 | 0.00 | 135.58 | 135.58 |
| YEAR:1988-89 | | | | | | | | | | | | |
| 1.64 | 90.47 | 519.75 | 582.38 | 6581.65 | 4282.83 | 701.37 | 701.37 | 759.17 | 759.17 | 0.00 | 921.81 | 921.81 |
| 81.50 | 81.21 | 6881.60 | 277.47 | 1721.95 | 975.76 | 483.65 | 483.65 | 209.28 | 723.65 | 0.00 | 854.10 | 854.10 |
| 685.43 | 94.24 | 4837.43 | 8.50 | 1479.54 | 1274.18 | 3260.60 | 3260.63 | 81.58 | 1003.80 | 0.00 | 830.78 | 830.78 |

| | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | | APRIL | | MAY | |
|--------------|----------|---------|---------|---------|----------|---------|--------|---------|--------|---------|--------|---------|
| | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW | INFLOW | OUTFLOW |
| YEAR:1986-87 | | | | | | | | | | | | |
| 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | -0.99 |
| 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | -0.99 |
| 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | 0.00 | -0.99 | -0.99 |
| YEAR:1987-88 | | | | | | | | | | | | |
| 0.00 | 853.23 | 0.00 | 781.80 | 0.00 | 90.33 | 0.00 | 53.12 | 0.00 | 206.23 | 0.00 | 97.04 | 97.04 |
| 0.00 | 305.28 | 0.00 | 862.70 | 0.00 | 96.93 | 0.00 | 58.42 | 0.00 | 427.13 | 0.00 | 107.04 | 107.04 |
| 0.00 | 117.65 | 0.00 | 100.98 | 0.00 | 42.47 | 0.00 | 104.63 | 0.00 | 252.36 | 0.00 | 98.57 | 98.57 |
| YEAR:1988-89 | | | | | | | | | | | | |
| 0.00 | 831.28 | 0.00 | 832.85 | 0.00 | 840.69 | 0.00 | 849.55 | 0.00 | 140.30 | 0.00 | 283.11 | 283.11 |
| 0.00 | 796.55 | 0.00 | 932.00 | 0.00 | 852.27 | 0.00 | 616.70 | 0.00 | 62.89 | 0.00 | 95.28 | 95.28 |
| 0.00 | 888.43 | 0.00 | 937.81 | 0.00 | 640.15 | 0.00 | 626.05 | 0.00 | 76.45 | 0.00 | 59.18 | 59.18 |

9.2 ANNUAL MAXIMUM INFLOW LEVELS AT CHATAPRAHAR RESE. JIR

| SL. NO. | YEAR | DATE | MAXIMUM INFLOW (Cumecs) | REMARK |
|---------|---------|----------|-------------------------|--------|
| 1. | 1986-87 | 12.08.86 | 842.42 | |
| 2. | 1987-88 | 09.07.87 | 618.32 | |
| 3. | 1988-89 | 19.08.88 | 2009.29 | |
| 4. | 1989-90 | 25.07.89 | 2016.14 | |

10.0 - HYDROLOGICAL DATA

10-1. TEN DAILY DISCHARGE DATA

RIVER : GHATARRABHA

STATION : DADDI

| | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV |
|--------------|-------|-------|------|------|------|-------|---------|---------|---------|---------|--------|--------|
| YEAR 1978-79 | | | | | | | | | | | | |
| | 18.20 | 8.90 | 0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.80 | 2970.00 | 8125.20 | 310.90 | 464.90 |
| | 11.70 | 7.30 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5213.00 | 1663.00 | 527.20 | 185.70 | 114.60 |
| | 14.10 | 8.30 | 0.00 | 0.00 | 0.00 | 0.00 | | | 829.00 | 953.90 | 94.30 | 132.50 |
| YEAR 1979-80 | | | | | | | | | | | | |
| | 50.50 | 11.00 | 0.00 | 0.00 | 0.00 | 0.00 | 59.00 | 8163.20 | 5772.50 | 1248.30 | 524.90 | 38.80 |
| | 28.80 | 3.20 | 0.80 | 0.00 | 0.00 | 0.00 | 340.90 | 1988.20 | 2543.50 | 455.70 | 149.00 | 23.00 |
| | 23.40 | 1.80 | 0.00 | 0.00 | 0.00 | 0.00 | 3291.10 | 2421.20 | 2945.30 | 623.30 | 62.30 | 45.70 |
| YEAR 1980-81 | | | | | | | | | | | | |
| | 17.80 | 2.30 | 0.00 | 0.00 | 0.00 | 0.00 | 158.60 | 5623.70 | 5693.20 | 627.90 | 351.90 | 52.30 |
| | 7.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 66.10 | 2504.40 | 4824.80 | 735.10 | 145.20 | 73.30 |
| | 12.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1123.40 | 2326.60 | 2352.30 | 974.60 | 59.30 | 83.60 |
| YEAR 1981-82 | | | | | | | | | | | | |
| | 20.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.90 | 264.60 | 2987.00 | 805.40 | 151.80 | 129.20 |
| | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 519.40 | 2680.60 | 6196.20 | 384.60 | 75.90 | 89.30 |
| | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 | 48.80 | 830.50 | 7791.40 | 3091.20 | 251.70 | 170.80 | 44.70 |
| YEAR 1982-83 | | | | | | | | | | | | |
| | 15.30 | 1.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 506.60 | 386.10 | 75.20 |
| | 12.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1141.70 | 205.10 | 55.70 |
| | 7.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1283.70 | 123.60 | 32.00 |
| YEAR 1983-84 | | | | | | | | | | | | |
| | 27.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5520.60 | 2105.30 | 672.30 | 327.30 | 64.00 |
| | 3.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1312.90 | 3341.10 | 2569.80 | 600.30 | 254.60 | 28.80 |
| | 15.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 817.90 | 2849.30 | 1742.50 | 333.40 | 100.10 | 27.80 |
| YEAR 1984-85 | | | | | | | | | | | | |
| | 23.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2394.70 | -0.99 | 521.70 | -0.99 | -0.99 |
| | 9.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1187.60 | 2117.60 | -0.99 | 331.90 | -0.99 | -0.99 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1853.00 | 2253.40 | -0.99 | 94.60 | -0.99 | -0.99 |
| YEAR 1985-86 | | | | | | | | | | | | |
| | 17.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1510.50 | 3240.90 | 262.90 | 151.90 | 145.60 |
| | 13.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 337.20 | 2859.90 | 3389.20 | 104.80 | 69.20 | 57.80 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2408.50 | 2490.60 | 801.10 | 256.00 | 112.70 | 24.60 |
| YEAR 1986-87 | | | | | | | | | | | | |
| | 16.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.20 | 2945.52 | 371.97 | 762.85 | 580.95 | 70.04 |
| | 2.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 304.62 | 2002.80 | 901.78 | 357.84 | 238.00 | 38.16 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 166.23 | 995.80 | 1884.93 | 445.69 | 150.23 | 41.22 |
| YEAR 1987-88 | | | | | | | | | | | | |
| | 11.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 557.53 | | | | |
| | 21.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 107.03 | 7438.70 | | | | |
| | 4.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 727.44 | 4508.50 | | | | |

10.2 GAUGE-DISCHARGE DATA FOR THE YEAR 1988-89

STATION : DADDI

UNITS : STAGE (Mts) DISCHARGE (Cumecs)

| DATE | JUN | | JUL | | AUG | | SEP | | OCT | | NOV | |
|------|---------|--------|---------|---------|---------|---------|---------|--------|---------|--------|---------|------|
| | S | D | S | D | S | D | S | D | S | D | S | D |
| 1 | - | - | 675.411 | 44.97 | 676.593 | 310.00 | 675.811 | 112.60 | 675.643 | 86.79 | 674.888 | 5.27 |
| 2 | - | - | 675.508 | 60.98 | 676.933 | 422.50 | 675.653 | 88.72 | 675.588 | 70.00 | 674.883 | 4.68 |
| 3 | - | - | 675.573 | 70.00 | 678.233 | 1100.00 | 675.678 | 87.26 | 675.963 | 144.00 | 674.873 | 4.43 |
| 4 | - | - | 675.573 | 69.61 | 678.123 | 1028.00 | 675.523 | 65.00 | 675.981 | 145.60 | 674.853 | 4.24 |
| 5 | - | - | 675.553 | 68.01 | 678.173 | 1060.00 | 675.493 | 57.24 | 675.648 | 84.00 | 674.823 | 3.76 |
| 6 | - | - | 675.518 | 59.82 | 677.533 | 685.00 | 675.458 | 56.88 | 675.523 | 62.61 | 674.823 | 4.00 |
| 7 | - | - | 675.463 | 52.55 | 676.903 | 412.50 | 675.393 | 46.63 | 675.448 | 52.29 | 674.753 | 2.21 |
| 8 | - | - | 675.401 | 47.14 | 676.448 | 265.60 | 675.363 | 40.89 | 675.398 | 46.14 | 674.723 | 1.78 |
| 9 | - | - | 675.376 | 44.45 | 676.318 | 233.40 | 675.393 | 43.85 | 675.363 | 43.00 | 674.783 | 2.50 |
| 10 | - | - | 675.323 | 40.00 | 676.493 | 281.40 | 675.353 | 42.41 | 675.318 | 39.69 | 674.778 | 2.36 |
| 11 | - | - | 675.273 | 32.03 | 676.303 | 220.90 | 675.523 | 65.00 | 675.283 | 33.22 | 674.768 | 2.14 |
| 12 | - | - | 675.256 | 30.46 | 676.233 | 200.20 | 675.441 | 50.09 | 675.243 | 29.32 | 674.738 | 1.72 |
| 13 | - | - | 675.418 | 48.21 | 675.998 | 148.70 | 675.343 | 39.00 | 675.233 | 28.47 | 674.713 | 1.60 |
| 14 | 675.113 | 22.61 | 676.316 | 226.90 | 675.888 | 127.50 | 675.303 | 37.30 | 675.203 | 26.88 | 674.533 | 0.88 |
| 15 | 675.158 | 23.86 | 676.808 | 367.90 | 675.763 | 107.50 | 675.523 | 65.00 | 675.153 | 24.86 | 674.718 | 1.66 |
| 16 | 675.153 | 22.80 | 677.438 | 623.20 | 675.713 | 94.51 | 675.411 | 49.34 | 675.138 | 22.00 | 674.723 | 1.77 |
| 17 | 675.038 | 16.05 | 678.203 | 1186.00 | 675.928 | 133.80 | 675.593 | 72.34 | 675.123 | 22.65 | 674.743 | 2.05 |
| 18 | 674.968 | 10.77 | 679.523 | 1910.00 | 675.773 | 104.30 | 675.388 | 47.00 | 675.103 | 19.19 | 674.773 | 2.37 |
| 19 | 674.906 | 6.97 | 679.353 | 1805.00 | 675.923 | 135.40 | 675.598 | 76.67 | 675.083 | 18.67 | 674.673 | 1.24 |
| 20 | 674.873 | 4.57 | 678.408 | 1209.00 | 675.958 | 143.90 | 675.496 | 59.67 | 675.073 | 17.00 | 674.733 | 2.00 |
| 21 | 675.013 | 12.85 | 677.643 | 742.00 | 676.283 | 216.00 | 675.858 | 120.50 | 675.068 | 15.57 | 674.613 | 0.88 |
| 22 | 675.033 | 16.06 | 676.913 | 415.00 | 676.128 | 182.00 | 677.198 | 530.00 | 675.008 | 12.07 | 674.553 | 0.35 |
| 23 | 675.153 | 22.79 | 677.043 | 465.00 | 676.023 | 152.70 | 677.453 | 653.50 | 674.953 | 10.00 | 674.593 | 0.55 |
| 24 | 675.593 | 70.44 | 676.653 | 332.00 | 675.968 | 143.50 | 677.093 | 494.70 | 674.853 | 4.53 | 674.603 | 0.59 |
| 25 | 675.543 | 64.63 | 676.393 | 247.00 | 675.986 | 145.00 | 676.733 | 352.50 | 674.863 | 4.59 | 674.613 | 0.67 |
| 26 | 676.086 | 173.80 | 676.313 | 225.00 | 675.843 | 117.10 | 676.308 | 223.60 | 674.863 | 4.62 | 674.573 | 0.48 |
| 27 | 675.848 | 107.40 | 676.703 | 342.50 | 675.873 | 123.30 | 676.158 | 187.70 | 674.883 | 5.16 | 674.523 | 0.25 |
| 28 | 675.838 | 111.50 | 676.678 | 335.00 | 675.663 | 88.00 | 675.908 | 135.70 | 674.883 | 5.20 | 674.543 | 0.30 |
| 29 | 675.641 | 81.77 | 677.213 | 537.50 | 675.593 | 72.75 | 675.806 | 110.70 | 674.893 | 5.03 | 674.513 | 0.23 |
| 30 | 675.551 | 66.20 | 677.163 | 515.00 | 675.538 | 61.08 | 675.753 | 99.65 | 674.893 | 7.00 | 674.453 | 0.00 |
| 31 | | | 676.733 | 352.50 | 675.488 | 55.38 | | | 674.883 | 5.13 | | |

NOTE : No flow from Dec.88 to May 89

10.2 DAILY STAGE(m) AND DISCHARGE(Cumecs) DATA

(b) STATION : HUDLI

YEAR : 1988-89

| MONTH | JUNE | | JULY | | AUGUST | | SEPTEMBER | | OCTOBER | | NOVEMBER | | REMARKS |
|-------|-------|-------|------|-------|--------|-------|-----------|-------|---------|-------|----------|-------|---------|
| | DATE | STAGE | DIS. | STAGE | DIS. | STAGE | DIS. | STAGE | DIS. | STAGE | DIS. | STAGE | |
| 1 | 0.00 | 0.00 | 0.00 | 0.25 | 0.02 | 1.77 | 5.07 | 0.69 | 2.54 | 0.80 | 3.89 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 2.68 | 8.70 | 0.75 | 2.26 | 0.78 | 3.07 | 0.00 | 0.00 |
| 3 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 3.32 | 11.03 | 0.73 | 2.40 | 0.75 | 2.56 | 0.00 | 0.00 |
| 4 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 3.62 | 73.11 | 0.72 | 2.51 | 0.75 | 2.42 | 0.00 | 0.00 |
| 5 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 | 3.92 | 85.53 | 0.71 | 2.47 | 0.77 | 2.83 | 0.00 | 0.00 |
| 6 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 3.90 | 73.62 | 0.70 | 1.98 | 0.88 | 5.86 | 0.00 | 0.00 |
| 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.47 | 16.65 | 0.68 | 2.22 | 0.85 | 4.98 | 0.00 | 0.00 |
| 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.12 | 10.25 | 0.68 | 1.18 | 0.80 | 3.99 | 0.00 | 0.00 |
| 9 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.07 | 7.85 | 0.67 | 1.32 | 0.77 | 3.38 | 0.00 | 0.00 |
| 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.97 | 11.80 | 0.66 | 1.25 | 0.74 | 2.28 | 0.00 | 0.00 |
| 11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.17 | 11.15 | 0.81 | 3.51 | 0.70 | 1.96 | 0.00 | 0.00 |
| 12 | -0.04 | 0.00 | 0.00 | 0.20 | 0.11 | 1.00 | 4.26 | 0.74 | 2.88 | 2.68 | 1.24 | 0.00 | 0.00 |
| 13 | 0.60 | 0.00 | 0.00 | 0.30 | 0.15 | 1.07 | 3.36 | 0.73 | 1.75 | 0.67 | 1.25 | 0.00 | 0.00 |
| 14 | 0.00 | 0.00 | 0.00 | 0.34 | 0.18 | 0.69 | 0.81 | 0.72 | 1.77 | 0.65 | 1.10 | 0.00 | 0.00 |
| 15 | 0.10 | 0.00 | 0.00 | 0.95 | 0.30 | 0.67 | 0.72 | 0.75 | 2.58 | 0.63 | 0.99 | 0.00 | 0.00 |
| 16 | 0.17 | 0.00 | 0.00 | 0.90 | 0.15 | 1.05 | 5.00 | 0.89 | 5.73 | 0.62 | 0.51 | 0.00 | 0.00 |
| 17 | 0.10 | 0.00 | 0.00 | 0.85 | 0.47 | 1.05 | 9.46 | 0.80 | 3.12 | 0.62 | 0.51 | 0.00 | 0.00 |
| 18 | 0.12 | 0.00 | 0.00 | 0.95 | 0.02 | 1.05 | 8.02 | 0.73 | 2.00 | 0.61 | 0.46 | 0.00 | 0.00 |
| 19 | 0.10 | 0.00 | 0.00 | 1.35 | 16.82 | 0.96 | 7.02 | 0.80 | 3.94 | 0.60 | 0.40 | 0.00 | 0.00 |
| 20 | 0.13 | 0.00 | 0.00 | 1.92 | 25.51 | 0.90 | 7.42 | 0.75 | 2.28 | 0.58 | 0.55 | 0.00 | 0.00 |
| 21 | 0.10 | 0.00 | 0.00 | 1.97 | 25.59 | 0.88 | 8.35 | 0.71 | 1.16 | 0.56 | 0.47 | 0.00 | 0.00 |
| 22 | 0.08 | 0.00 | 0.00 | 1.75 | 20.78 | 0.90 | 7.70 | 0.81 | 5.10 | 0.55 | 0.40 | 0.00 | 0.00 |
| 23 | 0.09 | 0.00 | 0.00 | 1.48 | 14.61 | 0.85 | 6.92 | 0.93 | 7.97 | 0.55 | 0.42 | 0.00 | 0.00 |
| 24 | 0.09 | 0.00 | 0.00 | 1.37 | 15.28 | 0.84 | 8.55 | 0.92 | 7.10 | 0.54 | 0.39 | 0.00 | 0.00 |
| 25 | 0.20 | 0.00 | 0.00 | 1.30 | 14.18 | 0.82 | 8.30 | 0.97 | 8.69 | 0.53 | 0.38 | 0.00 | 0.00 |
| 26 | 0.12 | 0.00 | 0.00 | 1.25 | 13.46 | 0.90 | 7.30 | 1.08 | 9.81 | 0.52 | 0.28 | 0.00 | 0.00 |
| 27 | 0.12 | 0.00 | 0.00 | 1.35 | 15.73 | 0.78 | 5.41 | 1.09 | 11.16 | 0.52 | 0.20 | 0.00 | 0.00 |
| 28 | 0.10 | 0.00 | 0.00 | 1.30 | 14.40 | 0.76 | 3.78 | 1.00 | 9.31 | 0.51 | 0.18 | 0.00 | 0.00 |
| 29 | 0.10 | 0.00 | 0.00 | 1.02 | 1.49 | 0.76 | 4.16 | 0.91 | 6.33 | 0.51 | 0.18 | 0.00 | 0.00 |
| 30 | 0.20 | 0.00 | 0.00 | 0.97 | 1.57 | 0.74 | 5.49 | 0.83 | 4.62 | 0.50 | 0.16 | 0.00 | 0.00 |
| 31 | | | | 0.99 | 1.30 | 0.72 | 3.25 | | | 0.49 | 0.14 | | |

NOTE: No flow from Dec-88 to May 89

10.3 GROUND WATER LEVELS (m)
(a) DISTRICT BELGAUM

| STATION | YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC |
|------------------|------|-------|-------|-------|-----------|-----------|-----------|-------|-----------|-----------|-----------|-------|-------|
| CHIKODI | | | | | | | | | | | | | |
| | 1986 | 8.85 | DRY | DRY | DRY | DRY | 7.55 | 7.70 | 5.15 | 6.05 | 4.10 | 5.65 | 7.51 |
| | 1987 | 6.99 | 11.00 | DRY | DRY | DRY | 4.20 | 6.90 | 6.40 | 7.42 | 6.10 | 6.10 | 6.66 |
| | 1988 | 6.75 | WET | DRY | DRY | DRY | 11.85 | 7.15 | 6.65 | 1.80 | 1.85 | 2.10 | 3.50 |
| | 1989 | 3.75 | 7.35 | 7.50 | 11.60 | WRT | 8.19 | 9.15 | 4.45 | 6.35 | 3.57 | 5.60 | 7.50 |
| RAIBAG | | | | | | | | | | | | | |
| | 1986 | 4.05 | DRY | DRY | DRY | DRY | DRY | 4.00 | 4.20 | 4.06 | 4.33 | 6.10 | 5.07 |
| | 1987 | 4.50 | 5.20 | 6.25 | DRY | DRY | DRY | 2.99 | 4.30 | 4.15 | 3.60 | 4.85 | 4.15 |
| | 1988 | 3.25 | 8.13 | 16.30 | 16.40 | 16.20 | 17.00 | 4.90 | 2.75 | 1.25 | 1.35 | 1.85 | 2.15 |
| | 1989 | 3.23 | 2.50 | 2.65 | COLLAPSED | | COLLAPSED | | COLLAPSED | | 6.06 | 4.51 | 4.55 |
| GURLAPUR | | | | | | | | | | | | | |
| | 1986 | DRY | DRY | DRY | 15.40 | 15.95 | 15.80 | 13.70 | 5.63 | 8.10 | 5.35 | 6.15 | 7.05 |
| | 1987 | 7.20 | 7.30 | 11.25 | 11.85 | 12.07 | 17.00 | DRY | 5.29 | 4.45 | 5.35 | 7.20 | 8.55 |
| | 1988 | 9.25 | 12.25 | 12.70 | 15.90 | 16.45 | 13.50 | 11.15 | 6.10 | 4.00 | 5.10 | 7.90 | 6.20 |
| | 1989 | 7.30 | 7.80 | 9.20 | 13.35 | 15.02 | 15.55 | 15.40 | 5.87 | 2.52 | 5.57 | 6.19 | 6.25 |
| KULIGOD | | | | | | | | | | | | | |
| | 1986 | 12.42 | DRY | DRY | DRY | 14.97 | 10.33 | 10.70 | 11.17 | 11.97 | 8.62 | 9.90 | 10.28 |
| | 1987 | 10.60 | 12.20 | 12.08 | 14.90 | DRY | 14.80 | 15.05 | 9.80 | 10.50 | 15.00 | 8.95 | 7.02 |
| | 1988 | 7.95 | 8.75 | 9.76 | 10.05 | DRY | DRY | 10.55 | 9.17 | 8.12 | 7.82 | 8.70 | 9.14 |
| | 1989 | 9.80 | 10.50 | 10.55 | COLLAPSED | COLLAPSED | COLLAPSED | | 9.05 | COLLAPSED | COLLAPSED | | |
| RANDURG | | | | | | | | | | | | | |
| | 1986 | 5.25 | DRY | DRY | 6.25 | 6.35 | 6.10 | 5.95 | 5.35 | 4.35 | 4.60 | 4.55 | 4.65 |
| | 1987 | 5.15 | 5.36 | 5.61 | 5.73 | 5.95 | 6.12 | 6.75 | 7.45 | 8.30 | 4.67 | 4.55 | 4.68 |
| | 1988 | 4.45 | 5.54 | 6.05 | DRY | DRY | 10.25 | 5.65 | 5.00 | 5.00 | 5.44 | 5.90 | 6.15 |
| | 1989 | 5.48 | 5.65 | 5.85 | 6.00 | 6.60 | 6.85 | 5.00 | 4.85 | 4.45 | 4.25 | 4.40 | 4.53 |
| SALAHALLI | | | | | | | | | | | | | |
| | 1986 | 7.40 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | 5.20 | 4.60 | 4.75 |
| | 1987 | 5.30 | 5.85 | 6.40 | 7.00 | 7.35 | 7.10 | 7.75 | 5.70 | 5.75 | 3.50 | 3.50 | 3.65 |
| | 1988 | 3.90 | 3.95 | 4.10 | 3.35 | 5.50 | 5.05 | 5.56 | 4.29 | 4.25 | 4.00 | 3.95 | 4.00 |
| | 1989 | 4.10 | 4.30 | 4.45 | 4.68 | 4.86 | 4.70 | 4.35 | 3.95 | 5.80 | 2.92 | 3.31 | 3.55 |
| BATAKURKI | | | | | | | | | | | | | |
| | 1986 | 15.40 | DRY | DRY | DRY | 14.90 | 12.90 | 13.65 | 13.80 | 14.10 | 10.40 | 8.05 | 9.38 |
| | 1987 | 10.95 | 11.21 | 12.00 | 12.52 | 12.00 | 13.60 | 13.01 | 9.65 | 8.01 | 5.80 | 5.82 | 8.22 |
| | 1988 | 9.20 | 9.38 | 9.80 | 9.80 | 10.30 | 10.00 | 12.35 | 12.40 | 10.75 | 10.10 | 10.10 | 11.00 |
| | 1989 | 11.15 | 11.60 | 11.68 | 12.10 | 12.25 | 12.77 | 12.45 | 12.25 | 11.90 | 6.70 | 7.96 | 9.24 |

10.3 GROUND WATER LEVELS (m)
(a) DISTRICT: BELGAUM

| STATION | YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BELGAUM | | | | | | | | | | | | | |
| | 1986 | 8.17 | - | - | 9.60 | 6.83 | 7.88 | 3.65 | 3.85 | 3.70 | 4.45 | 4.40 | 5.30 |
| | 1987 | 5.65 | 5.90 | 5.62 | 6.00 | 4.80 | - | - | 4.12 | 2.70 | 3.06 | 3.16 | 6.15 |
| | 1988 | 6.22 | 6.50 | 6.40 | 6.50 | 6.60 | - | 1.00 | 0.76 | 3.20 | 4.45 | 6.20 | 7.25 |
| | 1989 | 7.90 | 8.75 | 7.20 | 7.80 | 7.50 | 3.07 | 0.70 | 2.70 | 3.80 | 5.10 | 6.10 | 6.70 |
| KADOLI | | | | | | | | | | | | | |
| | 1986 | DRY | DRY | DRY | DRY | DRY | DRY | 6.50 | 1.10 | 0.40 | 2.95 | 5.00 | 6.37 |
| | 1987 | 9.00 | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |
| | 1988 | DRY | DRY | DRY | 13.47 | - | 8.80 | 4.90 | 4.20 | 0.65 | 0.51 | 1.15 | 6.65 |
| | 1989 | 6.65 | 8.35 | 10.25 | 11.30 | 12.05 | 11.20 | 1.05 | 0.70 | 0.85 | 4.63 | 5.65 | 6.95 |
| SUTTAGATTI | | | | | | | | | | | | | |
| | 1986 | 9.30 | - | - | - | 9.90 | 9.80 | 8.92 | - | 8.60 | 8.80 | 8.55 | 9.03 |
| | 1987 | - | 9.55 | 10.05 | 10.00 | 9.90 | 10.05 | 10.03 | 10.05 | 9.65 | 10.16 | 10.11 | 9.50 |
| | 1988 | 9.70 | 10.50 | WET | DRY | 10.70 | 10.70 | 10.20 | 5.60 | 5.45 | 5.05 | 6.15 | 6.25 |
| | 1989 | 6.45 | 6.80 | 7.00 | 7.50 | 9.70 | 9.45 | 8.35 | 6.10 | 6.80 | 5.65 | 6.05 | 7.50 |
| VANNOR | | | | | | | | | | | | | |
| | 1986 | 12.65 | - | - | DRY | DRY | DRY | 13.40 | - | 13.31 | 13.30 | 13.25 | 13.45 |
| | 1987 | 13.50 | 13.55 | - | 13.40 | DRY | DRY | DRY | 13.40 | 12.66 | 13.50 | 13.60 | 6.30 |
| | 1988 | 6.42 | 14.40 | WET | DRY | DRY | 11.20 | 11.65 | 11.70 | 10.98 | 10.11 | 10.00 | DRY |
| | 1989 | - | - | - | - | - | - | - | 12.90 | - | - | 7.59 | 7.90 |
| HUDLI | | | | | | | | | | | | | |
| | 1986 | 9.30 | - | - | DRY | DRY | 9.25 | 5.45 | 7.55 | 7.19 | 6.85 | 6.68 | 8.10 |
| | 1987 | 8.57 | 9.10 | DRY | DRY | DRY | DRY | DRY | DRY | 8.60 | 8.75 | 8.77 | 8.72 |
| | 1988 | 10.95 | DRY | DRY | DRY | DRY | DRY | 15.20 | 15.00 | 14.65 | 12.60 | 12.40 | 14.30 |
| | 1989 | 12.10 | 12.55 | 13.00 | 13.20 | 13.58 | 13.10 | 12.20 | 11.93 | 12.39 | 12.95 | 11.90 | 12.16 |
| GOKAK | | | | | | | | | | | | | |
| | 1986 | DRY | DRY | DRY | DRY | 5.50 | 6.00 | 5.60 | 5.35 | 4.25 | 4.10 | 4.92 | 5.82 |
| | 1987 | 7.02 | 5.25 | 5.25 | 5.65 | 5.92 | 4.90 | 5.15 | 4.79 | 4.82 | 4.65 | 4.60 | 3.80 |
| | 1988 | 4.00 | 4.77 | 4.58 | DRY | DRY | 4.60 | 4.10 | 3.90 | 5.15 | 4.04 | 3.95 | 4.05 |
| | 1989 | 4.25 | 4.75 | 4.35 | 4.40 | 6.20 | 4.20 | 4.30 | 4.10 | 3.70 | 3.77 | 3.85 | 3.92 |
| HUKKERI | | | | | | | | | | | | | |
| | 1986 | 4.48 | DRY | DRY | 5.73 | 7.88 | 4.83 | 3.98 | 3.87 | 3.73 | 3.78 | 3.06 | 3.37 |
| | 1987 | 4.05 | 7.80 | 5.35 | 6.67 | DRY | 4.25 | 4.25 | 3.72 | 3.20 | 2.97 | 2.98 | 4.04 |
| | 1988 | 2.95 | 3.94 | 4.05 | 3.49 | 4.45 | 4.55 | 3.50 | 2.60 | 2.25 | 1.30 | 1.04 | 1.95 |
| | 1989 | 2.10 | 2.75 | 2.83 | 2.99 | 3.15 | 3.50 | 3.39 | 2.60 | 1.85 | 1.90 | 2.05 | 2.25 |

10.3 GROUND WATER LEVELS (m)
(b) DISTRICT:BIJAPUR

| STATION | YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC |
|----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BAGALKOT | | | | | | | | | | | | | |
| | 1973 | DRY | DRY | DRY | DRY | DRY | 15.45 | 14.35 | 14.75 | 14.95 | 14.80 | 14.70 | 14.80 |
| | 1974 | 15.05 | 15.20 | 15.40 | 15.60 | 16.00 | 16.22 | 16.25 | 15.92 | 15.45 | 13.00 | 13.47 | 13.67 |
| | 1975 | 13.90 | 13.35 | 14.71 | 15.10 | 15.08 | 15.00 | 14.80 | 15.85 | 14.58 | 12.10 | 12.25 | 12.75 |
| | 1976 | 13.03 | 13.33 | 13.55 | 14.00 | 14.45 | 13.95 | 14.00 | 13.21 | 14.45 | 14.95 | 14.95 | 15.23 |
| | 1977 | 15.80 | DRY | 15.25 | 15.40 | 15.57 | 14.95 | DRY | DRY | DRY | DRY | 13.45 | 14.40 |
| | 1978 | 14.85 | 15.00 | 15.25 | 15.65 | 15.37 | 15.29 | 15.50 | 15.18 | 14.20 | 11.75 | 13.70 | 14.08 |
| | 1979 | 14.35 | 14.70 | 15.91 | 16.50 | 15.45 | 15.25 | 15.35 | 16.05 | 15.35 | 13.85 | 14.05 | 14.18 |
| | 1980 | 14.36 | 14.70 | 14.85 | 15.63 | 15.45 | 15.50 | 15.35 | 15.35 | 15.15 | 15.25 | 15.65 | 15.85 |
| | 1981 | 15.95 | 15.95 | 16.10 | 16.75 | 16.85 | 15.95 | 14.25 | 15.65 | 14.35 | 13.60 | 13.95 | 14.25 |
| | 1982 | 14.65 | 15.01 | 15.35 | 14.50 | 14.55 | 14.60 | 15.35 | 15.45 | 15.35 | NR | 14.30 | 14.45 |
| | 1983 | 15.20 | 15.70 | 16.05 | 16.10 | 16.45 | 16.90 | DRY | 15.45 | DRY | DRY | 15.25 | DRY |
| | 1984 | 15.45 | DRY | DRY | 16.25 | DRY | 17.05 | DRY | 16.15 | DRY | DRY | 16.05 | DRY |
| | 1985 | 16.55 | DRY | DRY | 17.05 | DRY | 17.45 | DRY | 17.55 | DRY | DRY | 17.45 | DRY |
| | 1986 | 17.86 | NR | NR | 18.05 | 18.35 | 19.45 | 18.40 | 18.30 | 18.85 | 18.35 | 18.15 | 18.25 |
| | 1987 | 18.35 | 18.45 | 18.45 | Tr | Tr | Tr | Tr | 15.00 | 13.70 | 12.00 | 10.70 | 10.87 |
| | 1988 | 11.05 | 11.20 | 11.35 | 11.50 | 11.60 | 11.90 | 12.40 | DRY | Tr | Tr | Tr | Tr |
| | 1989 | Tr | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY | DRY |

BIL. GI

| | | | | | | | | | | | | | |
|--|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| | 1973 | DRY | DRY | DRY | DRY | DRY | 7.80 | 7.50 | 6.05 | 3.90 | 2.00 | 2.06 | 2.33 |
| | 1974 | 3.50 | 3.90 | 4.62 | 5.88 | 6.90 | 7.10 | 6.67 | 6.87 | DRY | 2.01 | 2.30 | 1.75 |
| | 1975 | 2.57 | 3.12 | 3.41 | 3.97 | 4.75 | 4.26 | 4.20 | 5.26 | 3.30 | 2.82 | 1.90 | 2.00 |
| | 1976 | DRY | DRY | 2.31 | DRY | 3.90 | 3.83 | 3.55 | 3.33 | 3.12 | 3.50 | 3.96 | 4.40 |
| | 1977 | 4.54 | 5.10 | DRY | 5.86 | 5.60 | DRY | DRY | DRY | DRY | 4.90 | DRY | DRY |
| | 1978 | 4.92 | 5.05 | 7.63 | 10.10 | 10.95 | 10.50 | 10.75 | 10.95 | 5.75 | 6.65 | 6.85 | 7.05 |
| | 1979 | 7.05 | 7.75 | 8.05 | 8.85 | 8.87 | 6.18 | 6.07 | 7.15 | 4.80 | 4.75 | 5.81 | 5.53 |
| | 1980 | 5.62 | 5.76 | 5.85 | 9.60 | 11.45 | 10.15 | 9.35 | 8.75 | 3.70 | 3.49 | 3.55 | 3.75 |
| | 1981 | 4.35 | 4.65 | DRY | 5.45 | 5.95 | 4.95 | 4.05 | 4.15 | 3.15 | 2.90 | 2.70 | 6.20 |
| | 1982 | 3.05 | 3.20 | 3.50 | 4.00 | 4.05 | 3.90 | 3.75 | 4.25 | 4.50 | 4.15 | DRY | 3.15 |
| | 1983 | 3.35 | 3.55 | 3.85 | 4.30 | 4.55 | 4.70 | DRY | 5.05 | DRY | DRY | 5.35 | DRY |
| | 1984 | 5.65 | DRY | DRY | 6.65 | DRY | 7.15 | DRY | 6.55 | DRY | DRY | 4.45 | DRY |
| | 1985 | 4.45 | DRY | DRY | 6.35 | DRY | 6.25 | DRY | 6.75 | DRY | DRY | 7.75 | DRY |
| | 1986 | 7.55 | NR | NR | 8.00 | 8.15 | 9.15 | 9.35 | 9.25 | 9.55 | 9.73 | 8.85 | 9.05 |
| | 1987 | 10.05 | 10.15 | 10.17 | Tr | Tr | Tr | 9.75 | 9.00 | 7.75 | 7.40 | 5.45 | 5.60 |
| | 1988 | 5.15 | 5.20 | 5.67 | 6.10 | 6.20 | 6.25 | 6.35 | 6.20 | 5.90 | 5.25 | 5.30 | 5.35 |
| | 1989 | 5.45 | 6.10 | 6.25 | 6.55 | 6.70 | 7.00 | 6.55 | 6.80 | 6.00 | 5.45 | 5.60 | 5.65 |

11.0 - METEOROLOGICAL DATA

11.1 DAILY RAINFALL (mm) DATA
 (b) STATION :CHIKODI YEAR :1988-89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 00.0 | 1.0 | 25.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 4.5 | 3.5 | 40.0 | 11.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 00.0 | 58.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 00.0 | 00.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 5 | 00.0 | 00.0 | 15.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 6 | 12.0 | 6.0 | 2.5 | 00.0 | 12.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 |
| 7 | 1.0 | 00.0 | 10.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 17.5 |
| 8 | 9.0 | 00.0 | 4.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.5 | 00.0 | 1.0 |
| 9 | 00.0 | 00.0 | 00.0 | 2.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 4.5 | 1.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 00.0 | 13.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 4.0 | 10.5 | 4.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 1.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 27.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 1.1 | 11.5 | 00.0 | 29.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 3.0 | 6.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 16.5 | 8.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 15.0 | 7.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 1.0 |
| 18 | 00.0 | 12.0 | 5.5 | 70.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 19 | 00.0 | 23.0 | 00.0 | 7.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 20 | 00.0 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 13.0 | 2.0 | 00.0 | 4.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 5.0 | 6.5 | 00.0 |
| 22 | 00.0 | 6.5 | 00.0 | 14.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 00.0 | 00.0 | 4.0 | 7.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 24 | 3.0 | 5.5 | 00.0 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 25 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 11.5 | 00.0 | 00.0 |
| 26 | 1.0 | 1.5 | 00.0 | 21.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 3.0 | 5.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 28 | 00.0 | 7.0 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 | 00.0 | 00.0 |
| 29 | 00.0 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 30 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 31 | | 00.0 | 1.5 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 47.1 | 143.5 | 136.4 | 242.2 | 23.5 | 00.0 | 27.4 | 00.0 | 00.0 | 21.0 | 6.5 | 21.5 |
| MEAN | 1.6 | 4.6 | 4.4 | 8.0 | 0.8 | 0.0 | 0.9 | 0.0 | 0.0 | 0.7 | 0.2 | 0.7 |
| MAX | 13.0 | 23.0 | 58.0 | 70.0 | 12.0 | 0.0 | 27.4 | 0.0 | 0.0 | 11.5 | 6.5 | 17.5 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.1 DAILY RAINFALL DATA(mm)

(c) STATION: DADDI

YEAR:1988 - 89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 00.0 | 3.1 | 2.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 00.0 | 14.0 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 00.0 | 67.8 | 00.0 | 2.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 00.0 | 00.0 | 4.2 | 5.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 5 | 00.0 | 00.0 | 16.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 6 | 8.8 | 00.0 | 6.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.3 |
| 7 | 00.0 | 00.0 | 9.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 17.8 |
| 8 | 34.0 | 00.0 | 0.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 |
| 9 | 00.0 | 00.0 | 1.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 00.0 | 8.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 1.9 | 13.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 1.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 6.0 | 6.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 3.4 | 36.1 | 00.0 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 00.0 | 21.2 | 00.0 | 6.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 32.0 | 2.7 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 28.0 | 22.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 18 | 00.0 | 38.4 | 7.4 | 1.9 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.6 |
| 19 | 00.0 | 65.0 | 2.9 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 20 | 00.0 | 11.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 00.0 | 3.4 | 3.5 | 16.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 18.0 | 00.0 |
| 22 | 3.1 | 7.3 | 0.7 | 31.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 1.0 | 15.0 | 1.3 | 9.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 12.8 | 00.0 |
| 24 | 9.9 | 8.2 | 00.0 | 3.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.4 | 00.0 |
| 25 | 4.1 | 3.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.5 | 00.0 | 00.0 |
| 26 | 24.1 | 4.0 | 00.0 | 10.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 00.0 | 16.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 28 | 00.0 | 5.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.8 | 00.0 | 00.0 |
| 29 | 00.0 | 10.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 30 | 00.0 | 3.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 31 | | 3.0 | 0.5 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 94.4 | 318.1 | 175.6 | 115.7 | 2.5 | 00.0 | 00.0 | 00.0 | 00.0 | 3.3 | 34.2 | 42.7 |
| MEAN | 3.1 | 10.3 | 5.7 | 3.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.1 | 1.4 |
| MAX | 34.0 | 65.0 | 67.8 | 31.8 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 12.8 | 17.8 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0. | 0.0 | 0.0 |

11.1 DAILY RAINFALL DATA(mm)

(d) STATION: GOKAK

YEAR:1988 - 89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 00.0 | 00.0 | 25.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 00.0 | 00.0 | 20.0 | 11.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 00.0 | 16.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 |
| 4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.8 |
| 6 | 34.2 | 00.0 | 00.0 | 00.0 | 26.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 5.8 |
| 7 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 8 | 30.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 9 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 5.0 | 15.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 1.0 | 00.0 | 00.0 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 00.0 | 8.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 44.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 1.0 | 7.2 | 00.0 | 20.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 00.0 | 10.0 | 00.0 | 14.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 15.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 4.0 | 50.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 18 | 00.0 | 12.2 | 00.0 | 45.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.6 | 20.8 |
| 19 | 00.0 | 6.0 | 00.0 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.2 |
| 20 | 00.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 22 | 00.0 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 00.0 | 00.0 | 00.0 | 6.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 24 | 00.0 | 4.0 | 00.0 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 25 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 26 | 5.2 | 9.2 | 00.0 | 87.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 00.0 | 6.2 | 00.0 | 5.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 28 | 00.0 | 00.0 | 12.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 29 | 00.0 | 4.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 30 | 00.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 31 | | 00.0 | 00.0 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 86.6 | 88.0 | 101.4 | 277.8 | 37.4 | 00.0 | 44.0 | 00.0 | 00.0 | 00.0 | 3.6 | 38.6 |
| MEAN | 2.9 | 2.8 | 3.3 | 9.3 | 1.2 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 |
| MAX | 34.2 | 15.2 | 16.0 | 87.4 | 26.4 | 0.0 | 44.0 | 0.0 | 0.0 | 0.0 | 3.6 | 20.8 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.1 DAILY RAINFALL (mm) DATA
 (e) STATION : HIDKAL DAM

YEAR :1988-89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 00.0 | 00.0 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 2.0 | 4.8 | 41.8 | 35.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 1.2 | 00.0 |
| 3 | 00.0 | 0.2 | 23.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 00.0 | 00.0 | 3.8 | 8.6 | 0.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 5 | 00.0 | 00.0 | 1.6 | 00.0 | 8.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 6 | 27.6 | 00.0 | 1.8 | 00.0 | 1.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 7 | 3.2 | 0.4 | 12.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 9.8 |
| 8 | 11.8 | 00.0 | 0.8 | 00.0 | 0.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.6 |
| 9 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 0.2 | 00.0 | 5.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.4 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 00.0 | 16.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 0.2 | 00.0 | 00.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 3.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 19.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 0.6 | 11.8 | 00.0 | 37.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 0.2 | 1.4 | 00.0 | 1.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 | 00.0 | 00.0 |
| 16 | 00.0 | 9.0 | 1.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 8.4 | 42.6 | 11.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 18 | 00.0 | 23.0 | 6.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 4.2 | 24.2 |
| 19 | 00.0 | 23.8 | 0.6 | 20.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.6 |
| 20 | 00.0 | 3.8 | 0.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 0.2 | 1.6 | 00.0 | 2.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 11.2 | 00.0 |
| 22 | 00.0 | 16.4 | 1.0 | 8.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 00.0 | 0.8 | 0.6 | 4.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 15.0 | 00.0 |
| 24 | 3.8 | 9.6 | 0.2 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 4.8 | 00.0 |
| 25 | 2.0 | 2.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 1.8 | 00.0 | 00.0 |
| 26 | 4.8 | 13.6 | 00.0 | 28.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 1.8 | 8.6 | 00.0 | 14.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.8 | 00.0 | 00.0 |
| 28 | 0.6 | 1.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 29 | 6.6 | 1.8 | 0.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 1.8 | 00.0 | 00.0 |
| 30 | 00.0 | 0.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 31 | | 1.2 | 1.0 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 67.4 | 141.8 | 107.8 | 207.6 | 46.0 | 00.0 | 19.8 | 00.0 | 00.0 | 6.8 | 36.4 | 37.2 |
| MEAN | 2.3 | 4.6 | 3.5 | 6.9 | 1.5 | 0.0 | 0.6 | 0.0 | 0.0 | 0.2 | 1.2 | 1.2 |
| MAX | 27.6 | 23.8 | 42.6 | 37.2 | 35.0 | 0.0 | 19.8 | 0.0 | 0.0 | 2.0 | 15.0 | 24.2 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.1 DAILY RAINFALL (mm) DATA

(f) STATION : HUKKERI

YEAR : 1988-89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|
| 1 | 00.0 | 00.0 | 3.6 | 23.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 00.0 | 2.2 | 122.2 | 23.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 00.0 | 31.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 00.0 | 00.0 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 5 | 00.0 | 00.0 | 4.4 | 00.0 | 1.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 6 | 3.0 | 00.0 | 00.0 | 00.0 | 4.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 7 | 18.2 | 00.0 | 11.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 16.6 |
| 8 | 5.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.4 |
| 9 | 2.6 | 00.0 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 22.4 | 10.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 3.0 | 27.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 00.0 | 00.0 | 1.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 12.8 | 3.8 | 00.0 | 00.0 | 00.0 | 00.0 | 13.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 1.0 | 7.2 | 00.0 | 19.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 00.0 | 1.2 | 00.0 | 4.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 8.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 10.2 | 25.2 | 11.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 18 | 00.0 | 17.4 | 1.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 5.2 |
| 19 | 00.0 | 16.2 | 1.0 | 5.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 20 | 00.0 | 1.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 4.2 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.5 | 00.0 |
| 22 | 6.2 | 5.0 | 00.0 | 8.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 7.4 | 4.8 | 1.8 | 4.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 17.8 | 00.0 |
| 24 | 3.2 | 3.0 | 1.0 | 3.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.9 | 00.0 | 00.0 |
| 25 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 1.2 | 00.0 | 00.0 |
| 26 | 00.0 | 4.8 | 00.0 | 21.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 00.0 | 7.6 | 00.0 | 16.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 28 | 00.0 | 1.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 4.8 | 00.0 | 00.0 |
| 29 | 00.0 | 3.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 30 | 00.0 | 2.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 31 | | 00.0 | 00.0 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 64.2 | 121.2 | 100.5 | 269.2 | 28.8 | 00.0 | 12.6 | 00.0 | 00.0 | 6.9 | 24.3 | 24.2 |
| MEAN | 2.1 | 3.9 | 3.2 | 9.0 | 0.9 | 0.0 | 0.4 | 0.0 | 0.0 | 0.2 | 0.8 | 0.8 |
| MAX | 18.2 | 22.4 | 31.2 | 122.2 | 23.2 | 0.0 | 13.6 | 0.0 | 0.0 | 4.8 | 17.8 | 16.6 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.1 DAILY RAINFALL DATA(mm)

(g) STATION: RAIBAG

YEAR:1988 - 89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 00.0 | 00.0 | 3.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 00.0 | 6.0 | 102.0 | 12.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 00.0 | 82.0 | 9.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 00.0 | 00.0 | 1.0 | 5.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 5 | 00.0 | 00.0 | 6.0 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 6 | 19.2 | 10.0 | 00.0 | 8.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 15.0 |
| 7 | 2.0 | 00.0 | 6.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 8 | 13.0 | 00.0 | 1.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 9 | 00.0 | 00.0 | 1.2 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 17.0 | 22.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 00.0 | 12.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 10.9 | 8.2 | 33.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 4.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 00.0 | 5.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 3.0 | 1.5 | 00.0 | 30.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 5.0 | 3.4 | 22.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 13.0 | 9.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.6 |
| 18 | 00.0 | 3.5 | 26.0 | 78.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 19 | 00.0 | 10.9 | 00.0 | 14.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 4.0 |
| 20 | 00.0 | 3.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 00.0 | 1.0 | 00.0 | 0.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 22 | 00.0 | 3.5 | 00.0 | 4.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 00.0 | 00.0 | 12.0 | 4.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 24 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 25 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 26 | 00.0 | 5.0 | 00.0 | 36.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 4.2 | 3.0 | 3.6 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 29.0 | 00.0 | 00.0 |
| 28 | 00.0 | 0.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 29 | 00.0 | 6.0 | 7.8 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 30 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 31 | | 00.0 | 4.5 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 45.4 | 99.0 | 199.9 | 371.1 | 12.0 | 00.0 | 2.0 | 00.0 | 00.0 | 29.0 | 00.0 | 22.6 |
| MEAN | 1.5 | 3.2 | 6.5 | 12.4 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.9 | 0.0 | 0.7 |
| MAX | 19.2 | 35.0 | 82.0 | 102.0 | 12.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.0 | 0.0 | 15.0 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.1 DAILY RAINFALL DATA(mm)

(b) STATION: ALMATTI

YEAR:1988 - 89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 00.0 | 0.3 | 48.0 | 3.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 00.0 | 1.0 | 3.0 | 11.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 35.0 | 7.0 | 36.5 | 11.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 7.5 | 00.0 | 0.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 24.0 |
| 5 | 00.0 | 00.0 | 3.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.0 |
| 6 | 6.8 | 0.5 | 00.0 | 6.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 7 | 2.0 | 00.0 | 0.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 |
| 8 | 8.5 | 00.0 | 0.1 | 0.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 9 | 00.0 | 0.5 | 18.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 10.5 | 00.0 | 1.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 00.0 | 2.0 | 21.0 | 7.5 | 00.0 | 00.0 | 36.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 00.0 | 00.0 | 00.0 | 3.0 | 00.0 | 00.0 | 8.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 00.0 | 2.0 | 00.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 6.3 | 3.0 | 2.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 9.1 | 4.1 | 7.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 11.0 |
| 18 | 00.0 | 3.5 | 8.5 | 7.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 6.0 | 14.8 |
| 19 | 00.0 | 1.0 | 1.5 | 2.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.5 |
| 20 | 00.0 | 1.1 | 2.4 | 2.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.3 | 00.0 |
| 22 | 00.0 | 1.2 | 00.0 | 3.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 0.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 24.8 | 00.0 |
| 24 | 0.5 | 1.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 25 | 00.0 | 00.0 | 1.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 4.0 | 00.0 | 00.0 |
| 26 | 00.0 | 4.5 | 8.5 | 27.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 3.5 | 1.0 | 0.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 2.0 | 00.0 | 00.0 |
| 28 | 2.2 | 1.0 | 0.5 | 0.5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 0.4 | 00.0 | 00.0 |
| 29 | 00.0 | 2.0 | 21.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 1.0 | 00.0 | 00.0 |
| 30 | 00.0 | 2.5 | 8.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 31 | | 0.4 | 2.0 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 31.2 | 85.6 | 113.2 | 159.9 | 26.5 | 00.0 | 44.2 | 00.0 | 00.0 | 7.4 | 31.1 | 58.3 |
| MEAN | 1.0 | 2.8 | 3.7 | 5.3 | 0.9 | 0.0 | 1.4 | 0.0 | 0.0 | 0.2 | 1.0 | 1.9 |
| MAX | 8.5 | 35.0 | 21.0 | 48.0 | 11.5 | 0.0 | 36.2 | 0.0 | 0.0 | 4.0 | 24.8 | 24.0 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.1 DAILY RAINFALL DATA(mm)

(1) STATION: BILIGI

YEAR:1988 - 89

| MONTH DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|---------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| 1 | 00.0 | 3.2 | 00.0 | 16.2 | 3.4 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 2 | 00.0 | 00.0 | 1.3 | 19.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 3 | 00.0 | 00.0 | 27.1 | 46.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 4 | 00.0 | 00.0 | 7.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 5.2 |
| 5 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 5.3 |
| 6 | 00.0 | 1.2 | 00.0 | 10.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.2 |
| 7 | 3.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 8 | 7.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 9 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 10 | 00.0 | 00.0 | 00.0 | 3.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 11 | 00.0 | 00.0 | 00.0 | 5.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 12 | 00.0 | 00.0 | 00.0 | 15.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 13 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 49.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 14 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 10.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 15 | 00.0 | 00.0 | 00.0 | 1.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 16 | 00.0 | 2.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 17 | 00.0 | 4.5 | 5.3 | 1.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 1.1 |
| 18 | 00.0 | 1.3 | 3.2 | 3.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 28.2 |
| 19 | 00.0 | 00.0 | 1.2 | 4.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 3.2 |
| 20 | 00.0 | 2.0 | 4.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 21 | 00.0 | 00.0 | 00.0 | 0.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 22 | 00.0 | 2.0 | 00.0 | 6.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 23 | 00.0 | 00.0 | 00.0 | 0.1 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 24 | 3.1 | 13.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 25 | 2.3 | 00.0 | 4.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 26 | 1.2 | 4.2 | 1.3 | 7.3 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 27 | 00.0 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 28 | 1.1 | 1.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 |
| 29 | 00.0 | 25.2 | 6.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 30 | 00.0 | 2.0 | 5.2 | 00.0 | 00.0 | 00.0 | 00.0 | 00.0 | | 00.0 | 00.0 | 00.0 |
| 31 | | 1.0 | 9.2 | | 00.0 | | 00.0 | 00.0 | | 00.0 | | 00.0 |
| TOTAL | 17.9 | 64.1 | 75.7 | 139.1 | 3.4 | 00.0 | 59.3 | 00.0 | 00.0 | 00.0 | 00.0 | 46.2 |
| MEAN | 0.6 | 2.1 | 2.4 | 1.3 | 0.1 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| MAX | 7.1 | 25.2 | 27.1 | 46.2 | 3.4 | 0.0 | 49.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.2 |
| MIN | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

11.2 (contd....)

STATION : BELGAUM
YEAR : 1988-89

MONTH : AUGUST

| HOURS DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | TOTAL |
|------------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 01 | 0.1 | 0.1 | 0.8 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 1.5 | 1.0 | 1.5 | 0.5 | 0.2 | 1.3 | 2.0 | 1.7 | 3.0 | 0.3 | 7.2 | 0.7 | 0.6 | 31.0 |
| 02 | 1.0 | 0.0 | 0.5 | 5.7 | 1.3 | 1.4 | 8.4 | 0.4 | 5.5 | 5.0 | 15.0 | 5.8 | 5.5 | 3.3 | 0.2 | 0.0 | 0.1 | 0.1 | 0.6 | 2.5 | 0.4 | 1.7 | 0.0 | 0.0 | 65.4 |
| 03 | 3.7 | 1.0 | 0.3 | 0.2 | 0.7 | 0.2 | 0.0 | 0.0 | 0.4 | 1.2 | 0.2 | 0.6 | 3.0 | 5.3 | 0.7 | 0.2 | 0.5 | 0.6 | 0.2 | 0.5 | 0.7 | 1.1 | 0.9 | 5.2 | 27.4 |
| 04 | 9.5 | 1.7 | 0.2 | 0.0 | 0.3 | 0.8 | 0.2 | 0.0 | 0.0 | 0.1 | 1.2 | 0.2 | 0.5 | 1.8 | 9.0 | 2.4 | 1.1 | 5.0 | 1.8 | 1.5 | 0.7 | 0.0 | 0.0 | 0.0 | 38.0 |
| 05 | 2.8 | 0.0 | 0.0 | 0.3 | 0.1 | 0.6 | 0.2 | 0.0 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 | 1.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 |
| 06 | 0.0 | 0.2 | 5.8 | 3.0 | 2.3 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 12.5 |
| 07 | 2.2 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 |
| 08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 4.0 | 1.6 | 0.1 | 0.1 | 20.5 |
| 09 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.5 | 0.0 | 0.0 | 0.3 | 0.0 | 3.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.5 | 0.2 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 |
| 11 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 2.0 |
| 16 | 0.0 | 0.0 | 0.0 | 1.0 | 3.5 | 2.2 | 1.3 | 2.0 | 2.5 | 0.2 | 0.8 | 0.5 | 8.0 | 2.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 24.6 |
| 17 | 10.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 11.0 |
| 18 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 2.5 | 1.0 | 0.2 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 |
| 21 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 |
| 22 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 23 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 24 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.9 | 1.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.3 |
| 25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | 6.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 7.0 |

11.2 (contd....)

STATION : BELGAUM

YEAR : 1988-89

MONTH : SEPTEMBER

| HOURS DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | TOTAL |
|---------------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 01 | 6.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 7.0 |
| 02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 2.3 |
| 03 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |
| 05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 06 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 11.5 |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 0.8 | 0.7 | 1.0 | 1.0 | 1.0 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.2 |
| 28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 1.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 |

SRRG WAS OUT OF ORDER FROM 12-9-88 TO 20-9-88

11.2 (cont'd....)

STATION : BELSAUM

YEAR : 1988-89

MONTH : JULY

| HOURS DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | TOTAL |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 01 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.2 |
| 02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 1.8 | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 3.5 |
| 03 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 |
| 04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 05 | 0.3 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 1.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 06 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 3.7 |
| 07 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 08 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 0.7 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 0.2 | 1.2 | 0.1 | 1.0 | 1.0 | 0.0 | 0.1 | 1.1 | 0.3 | 1.8 | 0.3 | 0.9 | 1.2 | 0.5 | 0.0 | 0.3 | 1.3 | 0.8 | 2.4 | 4.5 | 2.3 | 0.1 | 0.1 | 0.0 | 19.0 |
| 28 | 0.1 | 0.3 | 0.3 | 2.3 | 0.1 | 0.0 | 3.9 | 0.3 | 0.7 | 0.5 | 1.5 | 0.7 | 0.2 | 0.1 | 0.2 | 0.0 | 0.3 | 0.3 | 0.1 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 21.5 |
| 29 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 |
| 30 | 0.0 | 0.0 | 0.0 | 0.7 | 0.4 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 |
| 31 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 1.0 | 2.2 | 0.3 | 3.4 | 0.1 | 0.4 | 3.0 | 0.8 | 0.2 | 0.0 | 0.1 | 0.1 | 0.8 | 0.6 | 0.0 | 0.1 | 13.4 |

11.2 STATION : BELGAUM
 (a) YEAR : 1988-89

MONTH : JUNE

| HOURS DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | TOTAL |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 01 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 03 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 1.0 | 1.2 | 1.3 | 0.0 | 0.0 | 0.2 | 0.3 | 1.5 | 0.5 | 2.3 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 13.8 |
| 06 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 |
| 07 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 27.8 | 0.9 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.3 | 0.2 | 0.0 | 41.0 |
| 08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 |
| 09 | 0.0 | 0.5 | 0.0 | 1.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 2.4 |
| 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 2.0 |
| 11 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.1 | 0.0 | 1.4 |
| 12 | 0.0 | 0.0 | 0.0 | 1.0 | 0.2 | 0.6 | 0.2 | 0.6 | 0.9 | 1.0 | 1.0 | 0.0 | 0.0 | 1.3 | 2.2 | 1.0 | 1.2 | 0.7 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 12.0 |
| 13 | 2.2 | 0.4 | 0.0 | 0.1 | 0.8 | 0.5 | 0.0 | 0.1 | 0.0 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 |
| 14 | 0.2 | 0.1 | 0.9 | 1.3 | 0.2 | 0.0 | 0.0 | 0.3 | 0.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 |
| 15 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| 16 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 |
| 18 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 |
| 22 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.3 | 0.5 | 0.0 | 1.6 | 1.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.5 |
| 23 | 0.0 | 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.3 | 0.6 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 1.5 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 |
| 24 | 0.6 | 0.4 | 0.3 | 0.2 | 0.7 | 0.8 | 0.3 | 0.2 | 0.1 | 0.1 | 1.0 | 0.5 | 0.7 | 0.4 | 0.5 | 0.2 | 0.5 | 0.0 | 0.0 | 0.4 | 0.3 | 1.7 | 0.1 | 0.0 | 10.0 |
| 25 | 0.7 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.2 | 1.0 | 1.3 | 0.2 | 0.3 | 0.0 | 0.0 | 0.5 | 0.1 | 0.0 | 0.1 | 0.1 | 0.5 | 1.1 | 1.1 | 0.0 | 7.0 |
| 26 | 0.0 | 0.0 | 0.4 | 0.2 | 0.4 | 0.7 | 1.3 | 9.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 | 14.2 |
| 27 | 1.7 | 0.1 | 0.0 | 0.1 | 4.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.4 |
| 28 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 9.3 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0 |
| 29 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 1.7 |
| 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 |

11.3 DAILY TEMPERATURE DATA
STATION : KUDCHI

YEAR : 1988-89

| MONTH | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 37.0 | 31.5 | 26.0 | 28.0 | 30.0 | 32.5 | 29.5 | 30.0 | 33.0 | 36.0 | 36.0 | 38.5 |
| 2 | 37.0 | 33.5 | 28.0 | 28.0 | 30.0 | 33.0 | 28.5 | 30.0 | 34.0 | 36.5 | 37.5 | 39.0 |
| 3 | 37.0 | 32.0 | 26.5 | 29.0 | 30.0 | 32.0 | 29.0 | 29.5 | 34.5 | 37.0 | 39.0 | 41.0 |
| 4 | 37.5 | 31.0 | 26.5 | 27.0 | 31.5 | 34.0 | 30.0 | 29.0 | 34.5 | 37.5 | 38.0 | 40.0 |
| 5 | 37.0 | 30.5 | 28.0 | 29.5 | 30.5 | 32.5 | 31.0 | 30.0 | 35.0 | 37.0 | 38.5 | 39.0 |
| 6 | 37.0 | 32.0 | 28.5 | 29.5 | 32.0 | 34.0 | 32.0 | 30.5 | 35.0 | 38.0 | 38.0 | 38.0 |
| 7 | 36.5 | 30.0 | 27.0 | 30.0 | 31.0 | 31.5 | 30.0 | 31.0 | 35.0 | 37.0 | 39.0 | 36.0 |
| 8 | 34.5 | 30.0 | 29.0 | 30.0 | 32.0 | 31.5 | 31.0 | 31.0 | 35.5 | 37.0 | 39.5 | 37.0 |
| 9 | 35.0 | 31.0 | 28.5 | 30.0 | 31.5 | 31.5 | 30.5 | 30.0 | 35.0 | 36.0 | 40.0 | 31.0 |
| 10 | 35.5 | 32.0 | 29.5 | 29.5 | 32.0 | 31.5 | 31.5 | 30.5 | 34.5 | 36.5 | 40.0 | 40.0 |
| 11 | 36.0 | 32.0 | 28.5 | 29.0 | 32.0 | 31.5 | 30.5 | 30.0 | 35.0 | 36.0 | 40.0 | 41.0 |
| 12 | 33.0 | 33.0 | 28.5 | 31.5 | 33.0 | 32.0 | 31.5 | 31.0 | 35.5 | 35.0 | 40.0 | 42.0 |
| 13 | 33.0 | 31.0 | 29.5 | 30.0 | 32.0 | 30.5 | 30.0 | 32.5 | 35.0 | 35.0 | 38.5 | 42.0 |
| 14 | 30.5 | 31.0 | 30.0 | 29.0 | 32.5 | 30.5 | 29.0 | 33.0 | 35.0 | 35.0 | 36.0 | 40.0 |
| 15 | 30.0 | 30.0 | 31.0 | 33.0 | 33.5 | 31.0 | 19.0 | 30.5 | 35.5 | 37.0 | 39.0 | 40.0 |
| 16 | 30.0 | 26.5 | 32.0 | 34.5 | 33.5 | 30.0 | 25.5 | 30.0 | 35.0 | 36.0 | 41.0 | 39.0 |
| 17 | 31.0 | 26.0 | 29.5 | 31.5 | 34.0 | 31.0 | 28.0 | 31.0 | 34.0 | 35.0 | 41.5 | 38.5 |
| 18 | 32.0 | 26.0 | 28.0 | 31.0 | 34.0 | 31.0 | 29.5 | 31.0 | 36.0 | 36.0 | 40.5 | 39.0 |
| 19 | 33.0 | 26.5 | 26.0 | 30.0 | 33.5 | 31.5 | 28.0 | 32.0 | 36.0 | 36.5 | 40.5 | 37.0 |
| 20 | 34.0 | 25.0 | 25.0 | 30.0 | 35.0 | 34.0 | 27.5 | 33.0 | 35.0 | 37.0 | 41.0 | 37.0 |
| 21 | 34.0 | 28.0 | 25.0 | 30.0 | 35.0 | 33.0 | 29.0 | 31.0 | 31.5 | 38.5 | 40.0 | 38.0 |
| 22 | 32.5 | 28.0 | 28.0 | 28.0 | 34.0 | 34.0 | 29.5 | 32.0 | 34.5 | 38.0 | 40.0 | 39.0 |
| 23 | 32.0 | 27.5 | 29.0 | 27.5 | 34.0 | 32.5 | 30.0 | 33.0 | 35.5 | 37.5 | 38.5 | 39.0 |
| 24 | 31.0 | 27.0 | 28.0 | 28.0 | 33.0 | 33.0 | 30.5 | 33.5 | 34.0 | 37.0 | 38.0 | 38.0 |
| 25 | 32.0 | 28.5 | 28.5 | 28.0 | 33.5 | 32.5 | 30.5 | 31.5 | 34.5 | 39.0 | 38.0 | 36.0 |
| 26 | 31.5 | 29.0 | 29.0 | 31.0 | 34.0 | 32.0 | 31.5 | 34.0 | 34.0 | 34.5 | 35.0 | 35.5 |
| 27 | 29.5 | 27.5 | 30.0 | 32.0 | 33.0 | 33.0 | 32.5 | 34.0 | 35.5 | 34.0 | 39.0 | 35.5 |
| 28 | 30.0 | 26.5 | 30.5 | 31.5 | 33.0 | 32.5 | 31.0 | 34.0 | 36.0 | 31.0 | 40.0 | 36.0 |
| 29 | 31.0 | 28.0 | 30.0 | 29.5 | 33.5 | 32.5 | 30.0 | 33.0 | - | 30.0 | 38.0 | 37.0 |
| 30 | 30.5 | 26.5 | 29.5 | 28.0 | 33.0 | 32.0 | 29.0 | 33.0 | - | 33.5 | 38.0 | 35.5 |
| 31 | - | 27.0 | 26.0 | - | 32.0 | - | 29.0 | 33.0 | - | 34.0 | - | 35.0 |
| MEAN | 33.4 | 29.2 | 28.4 | 29.8 | 32.6 | 32.1 | 29.5 | 31.5 | 34.8 | 35.9 | 39.0 | 38.1 |
| MAX | 37.5 | 33.5 | 32.0 | 34.5 | 35.0 | 34.0 | 32.5 | 34.0 | 36.0 | 39.0 | 41.5 | 42.0 |
| MIN | 29.5 | 25.0 | 25.0 | 27.0 | 30.0 | 30.0 | 19.0 | 28.0 | 31.5 | 30.0 | 35.0 | 31.0 |

11.3 DAILY TEMPERATURE DATA FOR THE YEAR 1988-89

STATION : HIDKAL DAM SITE

UNITS : DEGREE CELCIUS

| DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 35.0 | 31.0 | 26.5 | 27.5 | 27.5 | 32.0 | 26.0 | 28.0 | 33.0 | 34.5 | 35.5 | 37.0 |
| 2 | 36.0 | 29.5 | 25.0 | 27.5 | 28.5 | 31.5 | 28.5 | 28.5 | 31.5 | 34.0 | 36.5 | 38.5 |
| 3 | 35.0 | 27.5 | 25.5 | 28.0 | 29.0 | 30.0 | 29.0 | 27.5 | 32.0 | 33.5 | 37.0 | 38.0 |
| 4 | 34.0 | 28.0 | 25.5 | 27.0 | 28.5 | 32.0 | 31.0 | 28.5 | 33.0 | 35.0 | 37.0 | 36.5 |
| 5 | 34.0 | 29.0 | 26.0 | 27.0 | 29.5 | 32.0 | 29.5 | 30.0 | 32.0 | 35.0 | 37.0 | 34.0 |
| 6 | 34.0 | 27.0 | 25.0 | 28.5 | 30.0 | 30.5 | 29.0 | 30.0 | 33.0 | 35.0 | 36.5 | 35.5 |
| 7 | 33.5 | 29.0 | 27.0 | 29.0 | 30.0 | 30.0 | 29.0 | 31.0 | 32.5 | 35.0 | 37.0 | 35.5 |
| 8 | 33.0 | 30.0 | 27.0 | 28.0 | 29.5 | 29.5 | 28.0 | 29.0 | 32.0 | 35.0 | 38.0 | 35.5 |
| 9 | 29.5 | 30.0 | 27.5 | 27.5 | 28.5 | 29.0 | 29.0 | 28.5 | 33.5 | 34.0 | 38.0 | 36.5 |
| 10 | 28.0 | 29.5 | 27.0 | 27.0 | 29.0 | 30.0 | 29.0 | 28.5 | 33.5 | 34.0 | 38.0 | 38.5 |
| 11 | 29.0 | 31.5 | 27.0 | 29.0 | 30.0 | 30.5 | 30.0 | 29.0 | 33.5 | 33.0 | 37.5 | 39.0 |
| 12 | 28.5 | 30.5 | 27.0 | 28.0 | 30.5 | 29.5 | 28.0 | 28.5 | 33.0 | 32.5 | 34.5 | 38.0 |
| 13 | 28.0 | 30.5 | 28.0 | 28.0 | 32.0 | 28.5 | 26.5 | 30.5 | 32.5 | 32.5 | 36.5 | 37.0 |
| 14 | 25.5 | 28.5 | 28.0 | 31.0 | 31.5 | 28.5 | 19.0 | 30.0 | 33.0 | 34.5 | 38.0 | 38.5 |
| 15 | 26.0 | 25.5 | 29.0 | 30.5 | 31.5 | 28.5 | 24.0 | 30.0 | 32.0 | 33.0 | 38.5 | 38.5 |
| 16 | 29.0 | 24.5 | 27.0 | 29.0 | 32.0 | 28.5 | 25.5 | 28.0 | 32.0 | 33.0 | 37.5 | 37.5 |
| 17 | 30.0 | 24.5 | 26.5 | 27.0 | 32.0 | 29.0 | 28.0 | 31.0 | 32.0 | 34.0 | 37.0 | 35.5 |
| 18 | 31.0 | 23.5 | 24.5 | 28.5 | 32.5 | 29.0 | 27.0 | 30.5 | 33.5 | 34.0 | 38.0 | 35.5 |
| 19 | 32.0 | 24.0 | 25.0 | 28.5 | 32.0 | 30.0 | 27.0 | 29.5 | 34.0 | 34.5 | 38.5 | 35.0 |
| 20 | 31.0 | 26.5 | 26.0 | 25.5 | 32.0 | 30.0 | 28.5 | 31.0 | 29.0 | 35.5 | 37.5 | 36.0 |
| 21 | 30.5 | 27.5 | 26.5 | 25.0 | 31.5 | 30.0 | 28.0 | 31.0 | 30.0 | 36.0 | 36.5 | |
| 22 | 29.0 | 24.5 | 26.5 | 24.5 | 31.5 | 30.0 | 28.0 | 30.5 | 34.0 | 34.5 | 36.0 | |
| 23 | 28.0 | 25.5 | 27.0 | 25.0 | 31.5 | 30.0 | 29.0 | 31.0 | 32.5 | 35.5 | 36.0 | |
| 24 | 28.0 | 26.0 | 27.5 | 25.0 | 31.0 | 30.5 | 30.5 | 30.5 | 32.0 | 36.0 | 35.0 | |
| 25 | 29.0 | 26.5 | 27.0 | 27.5 | 31.0 | 29.0 | 31.0 | 31.5 | 31.5 | 33.0 | 32.0 | |
| 26 | 27.0 | 24.0 | 28.0 | 29.5 | 32.0 | 29.5 | 31.0 | 32.0 | 33.0 | 32.0 | 36.5 | |
| 27 | 28.0 | 23.5 | 28.0 | 28.0 | 30.5 | 30.0 | 29.0 | 32.0 | 34.0 | 31.0 | 37.5 | |
| 28 | 28.5 | 25.5 | 28.0 | 28.0 | 31.0 | 29.0 | 27.0 | 32.0 | 34.5 | 28.5 | 36.5 | |
| 29 | 28.0 | 26.0 | 28.0 | 25.0 | 31.0 | 28.5 | 28.0 | 32.0 | | 32.0 | 37.0 | |
| 30 | 28.0 | 25.5 | 26.0 | 28.0 | 30.0 | 28.0 | 28.0 | 30.5 | | 33.0 | 36.0 | |
| 31 | | 24.5 | 26.6 | | 30.5 | | 28.5 | 31.5 | | 34.5 | | |

11.4 DAILY WIND SPEED(Km/hr) DATA
STATION : KUDCHI

YEAR : 1988-89

| MONTH | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|-------|------|------|------|------|-----|-----|-----|-----|-----|-----|------|------|
| 1 | 13.5 | 9.7 | 14.3 | 6.7 | 8.9 | 3.6 | 2.8 | 3.5 | 3.0 | 3.2 | 3.9 | 8.2 |
| 2 | 16.0 | 10.7 | 15.0 | 2.7 | 6.0 | 2.8 | 3.5 | 4.4 | 2.5 | 3.3 | 5.7 | 8.5 |
| 3 | 14.8 | 10.1 | 12.5 | 4.0 | 8.0 | 3.7 | 4.2 | 3.2 | 3.0 | 5.0 | 5.2 | 8.9 |
| 4 | 11.5 | 9.8 | 10.8 | 3.2 | 8.6 | 4.0 | 3.2 | 2.5 | 3.0 | 3.5 | 5.5 | 6.1 |
| 5 | 11.8 | 10.4 | 11.0 | 4.5 | 6.3 | 4.8 | 3.9 | 2.8 | 2.7 | 2.4 | 5.3 | 6.2 |
| 6 | 9.3 | 7.9 | 5.9 | 5.7 | 6.5 | 5.8 | 3.2 | 3.3 | 2.8 | 2.7 | 3.7 | 7.4 |
| 7 | 6.9 | 11.3 | 9.3 | 7.8 | 5.2 | 5.4 | 2.4 | 2.8 | 3.2 | 3.5 | 3.5 | 6.0 |
| 8 | 6.5 | 11.9 | 8.6 | 8.0 | 5.5 | 4.3 | 4.5 | 3.0 | 2.3 | 3.3 | 3.2 | 3.4 |
| 9 | 4.3 | 11.6 | 5.2 | 8.9 | 3.9 | 4.3 | 2.0 | 2.3 | 2.6 | 3.7 | 4.1 | 5.8 |
| 10 | 6.0 | 8.8 | 10.9 | 6.8 | 2.5 | 4.1 | 2.8 | 2.6 | 3.0 | 4.5 | 6.0 | 6.7 |
| 11 | 9.2 | 6.3 | 10.2 | 5.5 | 3.3 | 4.6 | 3.3 | 2.0 | 3.7 | 6.3 | 5.8 | 6.5 |
| 12 | 9.3 | 8.0 | 8.9 | 3.1 | 2.8 | 4.2 | 4.3 | 1.9 | 3.6 | 3.2 | 8.9 | 6.2 |
| 13 | 6.9 | 15.3 | 8.3 | 2.1 | 2.9 | 4.0 | 8.7 | 1.8 | 3.1 | 3.7 | 8.7 | 12.0 |
| 14 | 11.4 | 14.3 | 7.1 | 3.7 | 3.9 | 3.3 | 6.0 | 4.0 | 3.9 | 4.3 | 7.0 | 12.8 |
| 15 | 13.3 | 12.3 | 8.7 | 3.8 | 3.6 | 3.8 | 4.4 | 3.6 | 3.0 | 5.3 | 7.5 | 13.2 |
| 16 | 14.0 | 16.3 | 8.6 | 4.5 | 2.8 | 3.4 | 3.5 | 3.0 | 4.3 | 6.0 | 9.4 | 12.4 |
| 17 | 13.6 | 16.1 | 10.1 | 7.3 | 3.8 | 3.1 | 3.4 | 3.4 | 3.2 | 5.3 | 6.7 | 12.5 |
| 18 | 12.1 | 12.6 | 9.2 | 7.4 | 3.3 | 2.9 | 3.8 | 3.1 | 3.0 | 3.9 | 4.8 | 14.1 |
| 19 | 11.5 | 13.9 | 9.9 | 5.5 | 3.9 | 1.7 | 4.0 | 2.0 | 3.8 | 4.1 | 5.2 | 12.5 |
| 20 | 13.7 | 11.9 | 10.3 | 9.3 | 3.8 | 1.8 | 4.9 | 2.2 | 4.6 | 7.0 | 5.5 | 15.5 |
| 21 | 13.2 | 13.5 | 10.3 | 9.4 | 2.8 | 2.2 | 4.6 | 2.2 | 2.5 | 3.7 | 5.3 | 15.8 |
| 22 | 14.5 | 12.6 | 10.2 | 8.9 | 3.1 | 2.4 | 3.4 | 3.5 | 3.5 | 8.8 | 9.5 | 14.9 |
| 23 | 14.6 | 10.4 | 9.5 | 12.0 | 2.8 | 3.5 | 2.9 | 2.8 | 5.5 | 4.9 | 9.1 | 15.8 |
| 24 | 13.4 | 11.0 | 7.8 | 12.3 | 3.1 | 4.2 | 3.0 | 3.7 | 4.6 | 6.8 | 6.8 | 14.5 |
| 25 | 8.9 | 12.5 | 7.9 | 7.8 | 3.0 | 3.3 | 2.2 | 4.2 | 3.8 | 5.7 | 5.4 | 16.8 |
| 26 | 8.8 | 11.3 | 6.5 | 5.5 | 3.0 | 1.9 | 2.5 | 3.7 | 3.2 | 5.8 | 7.1 | 15.5 |
| 27 | 9.1 | 13.3 | 7.3 | 5.8 | 2.6 | 2.1 | 2.7 | 2.8 | 3.5 | 5.8 | 8.1 | 13.7 |
| 28 | 10.8 | 13.9 | 6.2 | 10.4 | 3.0 | 2.8 | 4.1 | 2.2 | 3.4 | 3.3 | 12.2 | 13.7 |
| 29 | 10.0 | 12.9 | 8.5 | 8.4 | 3.0 | 1.8 | 4.0 | 3.9 | - | 3.3 | 10.3 | 13.5 |
| 30 | 9.9 | 11.8 | 8.3 | 8.6 | 3.1 | 2.9 | 4.1 | 3.4 | - | 2.9 | 11.0 | 12.2 |
| 31 | - | 11.8 | 9.2 | - | 2.4 | - | 3.1 | 2.6 | - | 3.1 | - | 10.6 |
| MEAN | 11.0 | 11.8 | 9.3 | 6.7 | 4.1 | 3.4 | 3.7 | 3.0 | 3.4 | 4.5 | 6.7 | 11.0 |
| MAX | 16.0 | 16.3 | 15.0 | 12.3 | 8.9 | 5.8 | 8.7 | 4.4 | 5.5 | 8.8 | 12.2 | 16.8 |
| MIN | 4.3 | 6.3 | 5.2 | 2.1 | 2.4 | 1.7 | 2.2 | 1.8 | 2.3 | 2.4 | 3.2 | 3.4 |

11.4 DAILY WIND SPEEDS FOR THE YEAR 1988-89

STATION : HIDKAL DAM

UNIT : Km/hr

| DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|
| 1 | 15.2 | 13.5 | 19.1 | 10.0 | 12.6 | 2.1 | 2.7 | 3.1 | 3.0 | 3.8 | 3.4 | 9.3 |
| 2 | 17.6 | 13.9 | 19.9 | 5.3 | 10.5 | 3.0 | 2.4 | 2.7 | 3.0 | 4.9 | 8.2 | 12.2 |
| 3 | 17.5 | 15.8 | 15.7 | 8.9 | 12.8 | 2.8 | 3.0 | 3.0 | 3.3 | 4.2 | 7.1 | 10.6 |
| 4 | 14.9 | 14.5 | 14.1 | 10.5 | 12.4 | 3.4 | 2.7 | 2.8 | 3.5 | 4.3 | 8.1 | 8.3 |
| 5 | 16.1 | 14.7 | 13.7 | 10.5 | 10.3 | 3.9 | 2.7 | 2.4 | 3.2 | 5.7 | 7.2 | 6.8 |
| 6 | 12.5 | 14.7 | 11.8 | 11.4 | 9.6 | 4.2 | 2.6 | 2.5 | 3.4 | 4.4 | 7.7 | 6.6 |
| 7 | 6.7 | 13.5 | 10.4 | 11.6 | 7.6 | 4.5 | 2.0 | 3.7 | 4.8 | 5.2 | 3.6 | 7.7 |
| 8 | 2.0 | 13.2 | 11.9 | 10.2 | 10.0 | 4.0 | 5.7 | 4.9 | 2.9 | 3.1 | 4.2 | 3.5 |
| 9 | 14.0 | 14.1 | 12.9 | 12.5 | 6.5 | 3.3 | 2.8 | 2.2 | 2.8 | 5.8 | 5.5 | 8.3 |
| 10 | 15.1 | 10.8 | 12.6 | 10.2 | 5.3 | 3.6 | 2.5 | 2.4 | 4.8 | 6.3 | 8.3 | 8.8 |
| 11 | 18.7 | 10.4 | 13.8 | 8.9 | 3.6 | 3.7 | 2.9 | 2.2 | 6.8 | 8.8 | 10.5 | 8.1 |
| 12 | 20.3 | 14.3 | 12.6 | 5.7 | 3.9 | 3.5 | 3.5 | 2.8 | 3.2 | 4.4 | 10.0 | 14.5 |
| 13 | 18.5 | 18.0 | 11.0 | 5.0 | 4.1 | 3.0 | 7.2 | 2.5 | 3.3 | 5.2 | 11.0 | 15.6 |
| 14 | 19.1 | 16.0 | 14.6 | 6.4 | 6.0 | 3.1 | 5.8 | 2.7 | 3.7 | 5.6 | 7.7 | 15.5 |
| 15 | 18.6 | 16.7 | 10.2 | 4.6 | 4.3 | 3.7 | 3.2 | 3.1 | 3.3 | 6.5 | 9.0 | 16.1 |
| 16 | 20.2 | 17.7 | 12.2 | 9.5 | 3.0 | 3.0 | 2.5 | 3.5 | 3.6 | 7.5 | 11.4 | 15.2 |
| 17 | 16.8 | 14.1 | 12.4 | 12.9 | 7.1 | 3.3 | 2.6 | 2.9 | 3.1 | 8.9 | 8.5 | 17.3 |
| 18 | 18.2 | 15.0 | 15.0 | 17.5 | 5.4 | 2.4 | 3.5 | 2.2 | 4.2 | 4.5 | 6.5 | 16.0 |
| 19 | 15.4 | 16.7 | 15.9 | 10.3 | 5.3 | 3.3 | 3.0 | 2.2 | 5.1 | 3.4 | 5.3 | 13.2 |
| 20 | 17.7 | 17.1 | 17.1 | 16.6 | 6.2 | 2.9 | 3.2 | 2.7 | 3.8 | 6.9 | 2.7 | 14.7 |
| 21 | 16.6 | 15.2 | 14.9 | 24.3 | 3.4 | 2.8 | 4.2 | 2.5 | 3.0 | 6.3 | 9.2 | |
| 22 | 18.2 | 13.9 | 13.9 | 20.5 | 2.7 | 3.2 | 3.0 | 3.4 | 3.6 | 6.7 | 7.6 | |
| 23 | 17.7 | 12.7 | 14.8 | 22.2 | 3.0 | 5.4 | 2.9 | 2.1 | 4.9 | 4.7 | 10.3 | |
| 24 | 17.2 | 13.4 | 13.6 | 16.8 | 3.1 | 7.0 | 2.4 | 3.9 | 5.0 | 8.0 | 6.3 | |
| 25 | 15.4 | 15.7 | 13.5 | 7.0 | 2.6 | 4.8 | 1.8 | 4.7 | 3.4 | 2.7 | 5.8 | |
| 26 | 15.5 | 13.2 | 12.1 | 12.1 | 2.9 | 3.7 | 3.0 | 4.2 | 3.6 | 16.0 | 9.0 | |
| 27 | 15.7 | 15.6 | 9.8 | 11.0 | 2.8 | 2.4 | 1.6 | 2.5 | 5.0 | 2.2 | 4.5 | |
| 28 | 16.4 | 19.6 | 10.4 | 15.9 | 3.6 | 3.7 | 3.6 | 2.6 | 4.0 | 2.3 | 4.6 | |
| 29 | 14.0 | 17.6 | 12.1 | 11.9 | 2.2 | 2.5 | 3.4 | 3.7 | | 2.0 | 12.5 | |
| 30 | 15.0 | 17.2 | 13.4 | 13.8 | 2.9 | 2.5 | 3.3 | 3.3 | | 2.0 | 15.2 | |
| 31 | | 16.0 | 14.0 | | 2.8 | | 2.8 | 3.2 | | 2.8 | | |

1.5 DAILY VAPOUR PRESSURE (mb) DATA
STATION : KUDCHI

YEAR : 1988-89

| MONTH | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | REMARKS |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| DATE | | | | | | | | | | | | | |
| 1 | 22.5 | 24.1 | 25.5 | 24.5 | 24.3 | 17.0 | 9.1 | 14.0 | 15.0 | 12.1 | 17.6 | 15.0 | |
| 2 | 22.5 | 22.9 | 25.3 | 25.6 | 28.7 | 18.3 | 8.3 | 15.5 | 11.8 | 12.8 | 18.9 | 19.5 | |
| 3 | 22.5 | 26.2 | 25.6 | 27.2 | 25.1 | 19.4 | 14.3 | 15.1 | 10.2 | 13.8 | 16.8 | 21.0 | |
| 4 | 20.4 | 24.1 | 27.2 | 29.3 | 26.4 | 17.9 | 19.0 | 15.4 | 12.8 | 13.5 | 14.6 | 23.5 | |
| 5 | 22.1 | 23.4 | 26.0 | 25.1 | 26.9 | 19.9 | 16.4 | 14.3 | 8.4 | 13.8 | 14.6 | 23.2 | |
| 6 | 22.8 | 25.3 | 26.2 | 25.6 | 26.4 | 17.0 | 13.1 | 15.1 | 10.4 | 15.8 | 13.1 | 20.8 | |
| 7 | 24.4 | 24.8 | 27.0 | 25.1 | 22.9 | 17.0 | 12.1 | 19.0 | 10.7 | 18.4 | 9.5 | 21.6 | |
| 8 | 26.2 | 24.4 | 26.0 | 25.1 | 22.0 | 16.8 | 10.4 | 16.1 | 13.5 | 13.8 | 9.5 | 24.5 | |
| 9 | 26.9 | 24.4 | 26.0 | 23.8 | 22.0 | 14.0 | 16.8 | 18.3 | 10.8 | 15.0 | 9.5 | 17.7 | |
| 10 | 26.4 | 26.0 | 25.0 | 26.5 | 21.3 | 11.7 | 17.9 | 17.2 | 11.2 | 15.8 | 9.5 | 15.1 | |
| 11 | 24.1 | 22.2 | 26.3 | 24.3 | 23.7 | 11.0 | 19.0 | 19.0 | 10.4 | 14.6 | 12.7 | 13.9 | |
| 12 | 24.5 | 26.4 | 25.3 | 28.3 | 26.1 | 10.4 | 11.3 | 16.8 | 14.6 | 12.4 | 12.4 | 16.6 | |
| 13 | 26.5 | 26.9 | 25.1 | 28.9 | 26.1 | 13.0 | 20.5 | 16.8 | 9.1 | 12.4 | 13.9 | 21.7 | |
| 14 | 25.5 | 25.1 | 23.7 | 26.9 | 15.8 | 11.3 | 14.9 | 17.0 | 11.4 | 13.1 | 15.0 | 23.5 | |
| 15 | 25.5 | 27.4 | 22.9 | 27.3 | 17.5 | 11.3 | 16.9 | 16.1 | 8.4 | 14.2 | 15.4 | 21.7 | |
| 16 | 24.1 | 26.5 | 25.0 | 28.4 | 24.2 | 10.4 | 20.5 | 15.5 | 8.8 | 11.8 | 18.5 | 21.3 | |
| 17 | 22.9 | 25.3 | 25.0 | 24.7 | 15.4 | 11.9 | 16.8 | 16.5 | 10.4 | 11.7 | 17.8 | 24.7 | |
| 18 | 20.5 | 27.4 | 24.1 | 25.8 | 15.0 | 12.0 | 13.1 | 14.7 | 9.7 | 13.8 | 18.5 | 26.1 | |
| 19 | 22.2 | 26.5 | 27.4 | 27.6 | 15.4 | 17.5 | 14.1 | 14.7 | 8.1 | 17.6 | 19.8 | 25.8 | |
| 20 | 22.9 | 28.3 | 25.0 | 25.6 | 15.0 | 12.7 | 15.9 | 13.3 | 7.9 | 16.8 | 18.6 | 25.0 | |
| 21 | 22.0 | 26.3 | 25.0 | 26.6 | 15.4 | 15.4 | 19.0 | 14.0 | 9.8 | 16.8 | 17.4 | 22.5 | |
| 22 | 22.4 | 25.6 | 26.0 | 26.2 | 15.8 | 17.5 | 17.2 | 14.7 | 8.1 | 19.5 | 19.7 | 25.0 | |
| 23 | 23.2 | 24.3 | 27.0 | 25.5 | 14.3 | 17.5 | 18.3 | 15.4 | 7.3 | 15.4 | 19.0 | 22.9 | |
| 24 | 24.4 | 26.6 | 26.0 | 25.5 | 17.5 | 13.7 | 19.0 | 16.4 | 8.3 | 20.5 | 19.7 | 20.0 | |
| 25 | 26.6 | 24.7 | 26.0 | 25.1 | 14.7 | 9.4 | 17.5 | 11.2 | 9.8 | 18.0 | 20.5 | 20.7 | |
| 26 | 26.0 | 24.2 | 28.0 | 26.9 | 11.9 | 13.1 | 14.8 | 9.2 | 16.5 | 19.0 | 22.5 | 18.7 | |
| 27 | 24.3 | 26.5 | 26.0 | 27.6 | 16.5 | 16.1 | 14.4 | 11.2 | 12.1 | 23.9 | 19.4 | 19.1 | |
| 28 | 24.0 | 26.2 | 24.4 | 24.7 | 13.6 | 14.7 | 16.1 | 18.7 | 11.4 | 19.7 | 17.8 | 18.8 | |
| 29 | 23.2 | 24.2 | 23.8 | 25.5 | 11.9 | 16.8 | 13.1 | 15.8 | - | 17.2 | 19.3 | 20.0 | |
| 30 | 24.0 | 25.0 | 24.1 | 23.1 | 12.6 | 10.5 | 16.1 | 14.7 | - | 17.5 | 21.3 | 18.0 | |
| 31 | - | 25.0 | 26.0 | - | 16.8 | - | 13.1 | 15.4 | - | 17.6 | - | 19.2 | |
| MEAN | 23.9 | 25.4 | 25.6 | 26.1 | 18.7 | 14.5 | 15.5 | 15.4 | 10.6 | 15.4 | 16.4 | 20.9 | |
| MAX | 26.9 | 28.3 | 28.0 | 29.3 | 28.7 | 19.9 | 20.5 | 19.0 | 16.5 | 23.9 | 22.5 | 26.1 | |
| MIN | 20.4 | 22.2 | 22.9 | 23.1 | 11.9 | 9.4 | 8.3 | 9.2 | 7.3 | 11.7 | 9.5 | 13.9 | |

11.5 DAILY VAPOUR PRESSURES FOR THE YEAR 1988-89

STATION : HIDKAL DAM

UNIT : mb

| DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 26.9 | 26.0 | 23.5 | 23.3 | 22.2 | 19.2 | 9.0 | 8.1 | 11.3 | 8.2 | 12.5 | 15.2 |
| 2 | 27.6 | 23.8 | 25.6 | 25.3 | 23.3 | 20.6 | 6.5 | 10.4 | 11.3 | 10.1 | 14.8 | 17.5 |
| 3 | 26.9 | 23.5 | 25.6 | 25.6 | 25.6 | 20.8 | 12.2 | 11.4 | 11.3 | 10.1 | 14.0 | 21.2 |
| 4 | 26.9 | 23.5 | 27.4 | 25.3 | 23.5 | 20.8 | 15.7 | 13.7 | 11.6 | 9.3 | 14.1 | 17.5 |
| 5 | 25.1 | 23.5 | 27.4 | 23.5 | 23.5 | 20.6 | 15.9 | 11.8 | 12.7 | 13.7 | 11.9 | 24.3 |
| 6 | 26.9 | 23.8 | 27.4 | 23.5 | 23.5 | 16.9 | 12.3 | 11.6 | 11.2 | 14.9 | 14.3 | 21.2 |
| 7 | 27.1 | 23.5 | 23.5 | 25.6 | 22.6 | 19.2 | 12.2 | 13.4 | 14.1 | 14.4 | 9.8 | 19.7 |
| 8 | 27.1 | 23.8 | 25.6 | 23.1 | 18.1 | 11.9 | 14.9 | 16.4 | 9.9 | 13.7 | 9.8 | 23.4 |
| 9 | 26.6 | 24.3 | 26.6 | 23.5 | 23.3 | 16.9 | 14.9 | 14.9 | 11.8 | 19.1 | 15.6 | 26.1 |
| 10 | 23.5 | 24.3 | 25.6 | 23.5 | 25.6 | 13.7 | 12.3 | 13.7 | 13.7 | 20.3 | 22.7 | 24.3 |
| 11 | 26.6 | 24.1 | 25.6 | 23.5 | 21.9 | 13.7 | 12.3 | 12.1 | 11.6 | 20.3 | 19.7 | 20.6 |
| 12 | 26.6 | 23.5 | 23.5 | 23.5 | 22.2 | 12.7 | 12.3 | 15.2 | 12.3 | 14.6 | 15.6 | 14.0 |
| 13 | 23.8 | 24.4 | 23.5 | 25.6 | 22.6 | 12.2 | 12.2 | 12.9 | 12.7 | 12.0 | 11.2 | 21.2 |
| 14 | 25.3 | 23.5 | 26.5 | 24.6 | 18.1 | 12.2 | 18.6 | 13.7 | 12.7 | 13.7 | 15.7 | 22.7 |
| 15 | 23.5 | 26.4 | 23.5 | 25.6 | 18.1 | 11.6 | 12.8 | 13.7 | 9.9 | 14.6 | 15.6 | 20.6 |
| 16 | 24.7 | 25.9 | 24.3 | 25.6 | 22.6 | 10.9 | 17.0 | 11.6 | 9.2 | 18.2 | 15.4 | 21.2 |
| 17 | 23.1 | 25.9 | 24.3 | 23.5 | 18.3 | 11.6 | 16.9 | 12.1 | 9.2 | 11.5 | 19.7 | 23.4 |
| 18 | 25.3 | 26.4 | 24.9 | 25.6 | 18.3 | 12.3 | 12.3 | 9.7 | 10.1 | 11.2 | 15.6 | 23.4 |
| 19 | 24.7 | 24.5 | 24.4 | 24.6 | 16.9 | 12.3 | 12.2 | 11.9 | 10.9 | 11.2 | 22.0 | 22.7 |
| 20 | 23.1 | 27.4 | 25.6 | 24.6 | 14.3 | 15.3 | 12.3 | 13.7 | 7.3 | 15.6 | 20.6 | 23.1 |
| 21 | 23.8 | 27.4 | 24.6 | 24.9 | 14.3 | 13.4 | 16.5 | 14.3 | 6.5 | 19.7 | 21.2 | |
| 22 | 24.3 | 26.6 | 25.3 | 25.6 | 22.2 | 13.4 | 16.5 | 13.7 | 7.8 | 20.1 | 22.6 | |
| 23 | 23.5 | 25.6 | 23.5 | 24.5 | 16.3 | 16.0 | 15.3 | 17.3 | 8.2 | 22.7 | 19.7 | |
| 24 | 26.0 | 25.6 | 24.6 | 25.3 | 17.6 | 16.0 | 15.3 | 14.1 | 7.8 | 15.6 | 22.6 | |
| 25 | 25.3 | 25.9 | 23.5 | 25.3 | 17.6 | 16.0 | 12.1 | 12.7 | 8.2 | 11.3 | 23.4 | |
| 26 | 26.0 | 25.6 | 23.5 | 24.6 | 22.2 | 14.1 | 13.9 | 14.1 | 7.7 | 16.9 | 22.6 | |
| 27 | 25.3 | 25.6 | 23.5 | 25.3 | 16.9 | 15.3 | 13.7 | 14.1 | 13.4 | 16.9 | 21.2 | |
| 28 | 25.0 | 27.4 | 23.5 | 24.1 | 14.9 | 15.3 | 12.1 | 12.7 | 7.0 | 14.8 | 19.7 | |
| 29 | 25.3 | 25.6 | 23.5 | 24.1 | 14.9 | 12.3 | 13.9 | 12.0 | | 16.9 | 22.6 | |
| 30 | 23.5 | 25.6 | 24.6 | 23.3 | 16.9 | 13.5 | 13.9 | 13.9 | | 17.9 | 15.2 | |
| 31 | | 25.6 | 24.6 | | 12.7 | | 8.5 | 9.9 | | 12.5 | | |

11.6 DAILY EVAPORATION (mm) DATA
 STATION : KUDCHI

YEAR : 1988-89

| MONTH | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | REMARKS |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 1 | 10.1 | 7.0 | 3.0 | 3.3 | 2.4 | 5.8 | 5.1 | 4.7 | 5.9 | 7.2 | 8.5 | 11.3 | |
| 2 | 11.7 | 6.3 | 2.1 | 2.0 | 4.9 | 5.6 | 5.1 | 4.7 | 6.3 | 7.8 | 9.4 | 10.1 | |
| 3 | 12.0 | 6.5 | 2.8 | 1.9 | 5.0 | 5.9 | 4.9 | 4.5 | 6.9 | 8.0 | 9.4 | 11.2 | |
| 4 | 10.2 | 4.9 | 2.7 | 2.9 | 5.3 | 6.0 | 4.9 | 4.3 | 6.9 | 7.4 | 9.7 | 10.0 | |
| 5 | 10.5 | 5.5 | 3.4 | 2.4 | 4.2 | 6.4 | 5.1 | 4.5 | 6.6 | 6.4 | 9.9 | 8.4 | |
| 6 | 7.8 | 5.1 | 2.9 | 2.8 | 3.3 | 6.0 | 4.8 | 4.8 | 6.2 | 6.6 | 9.8 | 8.2 | |
| 7 | 5.3 | 4.7 | 2.9 | 4.7 | 4.8 | 6.9 | 4.7 | 4.3 | 6.7 | 7.3 | 10.1 | 6.9 | |
| 8 | 4.0 | 5.9 | 4.0 | 4.7 | 5.5 | 6.2 | 5.0 | 4.0 | 6.2 | 7.8 | 9.7 | 2.3 | |
| 9 | 4.4 | 6.6 | 4.2 | 4.4 | 4.3 | 6.7 | 4.1 | 4.1 | 6.1 | 7.5 | 9.3 | 9.2 | |
| 10 | 5.1 | 5.6 | 4.2 | 2.4 | 4.6 | 6.8 | 4.4 | 4.3 | 6.3 | 6.6 | 8.8 | 11.8 | |
| 11 | 7.4 | 5.9 | 3.0 | 6.1 | 5.4 | 7.0 | 4.4 | 4.1 | 6.6 | 7.8 | 10.3 | 11.8 | |
| 12 | 7.4 | 3.5 | 3.3 | 2.9 | 6.2 | 6.9 | 5.7 | 4.2 | 6.3 | 7.7 | 10.9 | 11.7 | |
| 13 | 2.6 | 7.2 | 4.4 | 1.8 | 5.3 | 6.0 | 3.2 | 4.4 | 6.9 | 7.7 | 11.4 | 12.2 | |
| 14 | 4.2 | 5.6 | 4.6 | 4.2 | 6.1 | 6.0 | 1.9 | 4.9 | 6.7 | 8.4 | 11.3 | 12.2 | |
| 15 | 5.4 | 1.6 | 5.5 | 3.8 | 6.1 | 6.3 | 3.0 | 5.0 | 6.9 | 7.4 | 11.2 | 11.9 | |
| 16 | 7.3 | 2.1 | 3.9 | 3.7 | 5.9 | 5.7 | 3.6 | 4.7 | 8.2 | 8.5 | 11.0 | 11.6 | |
| 17 | 8.6 | 1.5 | 1.9 | 3.5 | 6.6 | 6.0 | 4.6 | 5.1 | 7.3 | 8.5 | 11.3 | 10.7 | |
| 18 | 7.9 | 1.4 | 1.6 | 3.5 | 5.5 | 4.9 | 4.7 | 5.0 | 7.3 | 8.1 | 10.3 | 11.0 | |
| 19 | 9.2 | 1.2 | 2.5 | 5.8 | 5.9 | 5.0 | 4.3 | 4.6 | 8.1 | 7.5 | 9.1 | 8.4 | |
| 20 | 9.6 | 2.8 | 1.5 | 3.7 | 5.7 | 5.0 | 4.3 | 4.5 | 8.6 | 8.7 | 9.8 | 11.3 | |
| 21 | 6.2 | 3.6 | 2.6 | 3.1 | 6.2 | 5.3 | 4.4 | 4.7 | 6.5 | 8.2 | 8.6 | 12.7 | |
| 22 | 6.8 | 2.1 | 3.6 | 1.6 | 6.7 | 4.8 | 4.5 | 4.9 | 7.4 | 8.1 | 9.0 | 11.3 | |
| 23 | 6.6 | 2.7 | 2.7 | 2.9 | 6.3 | 5.1 | 4.4 | 4.6 | 9.6 | 7.7 | 9.6 | 12.2 | |
| 24 | 7.6 | 3.6 | 3.7 | 3.7 | 5.4 | 5.3 | 4.4 | 4.2 | 9.4 | 9.7 | 9.4 | 11.7 | |
| 25 | 4.8 | 4.4 | 4.8 | 4.8 | 6.6 | 5.2 | 4.3 | 5.2 | 7.5 | 7.2 | 6.2 | 11.9 | |
| 26 | 3.8 | 2.2 | 3.5 | 6.9 | 6.5 | 4.7 | 4.3 | 6.4 | 6.8 | 6.8 | 9.3 | 12.8 | |
| 27 | 3.9 | 1.5 | 4.8 | 3.1 | 6.5 | 4.6 | 4.5 | 5.7 | 8.7 | 5.3 | 10.8 | 12.1 | |
| 28 | 6.4 | 3.6 | 3.4 | 5.1 | 5.8 | 4.5 | 4.7 | 5.0 | 7.9 | 4.2 | 11.2 | 11.7 | |
| 29 | 5.2 | 1.6 | 3.8 | 4.1 | 6.3 | 4.2 | 5.1 | 6.1 | - | 6.6 | 10.9 | 11.3 | |
| 30 | 6.0 | 2.5 | 1.6 | 4.9 | 6.6 | 5.2 | 4.6 | 6.0 | - | 6.7 | 12.2 | 10.6 | |
| 31 | - | 1.5 | 3.6 | - | 5.4 | - | 4.6 | 5.5 | - | 7.4 | - | 11.2 | |
| TOTAL | 208.0 | 120.2 | 102.5 | 110.7 | 171.3 | 170.0 | 137.6 | 149.0 | 200.8 | 230.8 | 298.4 | 331.7 | |
| MEAN | 6.9 | 3.9 | 3.3 | 3.7 | 5.5 | 5.7 | 4.4 | 4.8 | 7.2 | 7.5 | 10.0 | 10.7 | |
| MAX | 12.0 | 7.2 | 5.5 | 6.9 | 6.7 | 7.0 | 5.7 | 6.4 | 9.6 | 9.7 | 12.2 | 12.8 | |
| MIN | 2.6 | 1.2 | 1.5 | 1.8 | 2.4 | 4.2 | 1.9 | 4.1 | 5.9 | 4.2 | 6.2 | 2.3 | |

11.6 DAILY EVAPORATION FOR THE YEAR 1988-89
 STATION : HIDKAL DAM
 UNIT :mm

| DATE | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1 | 7.2 | 6.4 | 2.5 | 3.8 | 4.4 | 4.5 | 5.3 | 4.6 | 5.8 | 8.5 | 7.7 | 10.4 |
| 2 | 9.2 | 6.0 | 3.8 | 3.0 | 4.0 | 5.5 | 4.4 | 4.5 | 5.9 | 8.1 | 7.6 | 10.6 |
| 3 | 9.7 | 5.2 | 3.0 | 3.7 | 3.4 | 5.4 | 4.6 | 5.2 | 5.9 | 7.7 | 9.7 | 10.8 |
| 4 | 10.0 | 4.9 | 2.8 | 2.6 | 4.0 | 4.5 | 4.9 | 5.0 | 6.8 | 7.6 | 9.3 | 10.6 |
| 5 | 10.0 | 6.2 | 3.0 | 5.1 | 3.6 | 6.0 | 4.8 | 4.8 | 6.8 | 7.1 | 9.5 | 7.1 |
| 6 | 6.8 | 4.0 | 2.6 | 4.0 | 3.8 | 5.6 | 4.8 | 4.9 | 6.7 | 7.2 | 9.7 | 7.3 |
| 7 | 4.7 | 5.1 | 3.6 | 5.1 | 4.8 | 6.1 | 4.9 | 4.7 | 6.9 | 7.3 | 9.6 | 7.3 |
| 8 | 5.5 | 6.0 | 1.6 | 4.9 | 4.8 | 5.8 | 4.7 | 4.7 | 5.2 | 7.5 | 10.0 | 5.2 |
| 9 | 5.4 | 5.7 | 4.7 | 3.5 | 4.4 | 5.9 | 4.0 | 4.7 | 6.0 | 6.9 | 8.8 | 6.7 |
| 10 | 3.8 | 3.1 | 3.2 | 3.2 | 4.6 | 7.0 | 4.4 | 4.5 | 6.5 | 6.4 | 9.2 | 9.2 |
| 11 | 6.7 | 6.1 | 3.9 | 4.7 | 3.5 | 5.7 | 4.2 | 4.0 | 6.7 | 6.9 | 9.9 | 9.2 |
| 12 | 6.2 | 6.3 | 3.6 | 3.5 | 5.1 | 6.7 | 4.7 | 4.0 | 6.5 | 6.8 | 9.6 | 9.2 |
| 13 | 7.0 | 6.4 | 3.9 | 2.7 | 5.0 | 4.3 | 2.5 | 4.7 | 6.1 | 7.7 | 10.3 | 10.0 |
| 14 | 4.3 | 4.8 | 4.6 | 4.2 | 5.8 | 5.1 | 1.0 | 4.9 | 6.2 | 7.7 | 11.3 | 9.7 |
| 15 | 5.2 | 3.3 | 5.4 | 3.8 | 5.4 | 6.1 | 2.3 | 4.7 | 7.0 | 7.5 | 11.2 | 9.6 |
| 16 | 6.1 | 2.4 | 5.0 | 4.8 | 5.5 | 5.4 | 2.9 | 5.1 | 7.2 | 7.8 | 10.5 | 10.0 |
| 17 | 6.0 | 2.0 | 2.6 | 3.7 | 6.0 | 4.4 | 3.8 | 5.6 | 7.2 | 7.8 | 10.4 | 10.2 |
| 18 | 8.2 | 2.2 | 2.7 | 3.6 | 6.3 | 4.8 | 4.0 | 5.0 | 7.1 | 8.2 | 10.2 | 8.2 |
| 19 | 8.4 | 2.2 | 2.6 | 3.6 | 5.5 | 5.4 | 3.9 | 5.4 | 7.8 | 8.0 | 10.3 | 7.5 |
| 20 | 8.5 | 4.8 | 4.1 | 3.4 | 5.5 | 5.4 | 3.9 | 4.2 | 6.2 | 8.5 | 9.6 | 9.4 |
| 21 | 7.3 | 3.7 | 3.1 | 3.8 | 6.9 | 5.0 | 3.8 | 4.2 | 6.6 | 7.5 | 9.5 | |
| 22 | 5.5 | 2.7 | 3.1 | 2.7 | 6.4 | 4.5 | 4.4 | 5.2 | 6.3 | 7.0 | 9.0 | |
| 23 | 5.8 | 3.1 | 3.5 | 2.8 | 7.1 | 5.6 | 4.3 | 4.8 | 7.3 | 7.2 | 8.2 | |
| 24 | 5.2 | 3.6 | 4.7 | 3.4 | 4.0 | 5.6 | 4.0 | 5.2 | 7.6 | 8.2 | 7.2 | |
| 25 | 5.6 | 4.6 | 4.6 | 3.7 | 5.8 | 5.0 | 4.4 | 4.8 | 7.2 | 6.6 | 9.4 | |
| 26 | 4.4 | 2.6 | 3.8 | 4.0 | 5.6 | 5.3 | 4.3 | 5.4 | 7.4 | 6.0 | 9.8 | |
| 27 | 4.8 | 2.0 | 5.0 | 4.1 | 6.0 | 3.6 | 4.1 | 5.5 | 7.7 | 5.9 | 10.0 | |
| 28 | 5.6 | 4.2 | 4.8 | 4.9 | 6.7 | 4.5 | 4.2 | 5.6 | 7.7 | 4.9 | 10.3 | |
| 29 | 4.6 | 2.9 | 3.9 | 3.7 | 5.7 | 4.0 | 4.7 | 5.1 | | 6.0 | 10.3 | |
| 30 | 5.3 | 4.2 | 2.7 | 4.4 | 4.6 | 4.6 | 5.2 | 5.5 | | 7.5 | 10.9 | |
| 31 | | 2.9 | 3.6 | | 5.7 | | 4.2 | 5.7 | | 6.9 | | |

Director : Satish Chandra

Co-ordinator : S M Seth

Study Group.

Head : K S Ramasastry

Scientist : Surendra Kumar

Scientific Staff : M K Jose
B K Purandara
N Varadarajan
U V N Rao
M K Sharma

isrt