



**Presentation on**

**Online Surface Water Information**  
**System (eSWIS)**

**by**  
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**Central Water Commission**  
**New Delhi**

# Existing System

**Consists of following 3 different Software's :**

- \* SWDES 3.0**
  - \* Current desktop based data entry application.**
- \* HYMOS**
  - \* Current application for secondary data validation.**
- \* WISDOM**
  - \* Current application for data dissemination.**

# Existing System

## SWDES 3.0

- \* Stand-alone software.
- \* Requires installation. One local database file is installed every time.
- \* Updating-software is a tedious process.
- \* Tough data integration from field to software: manually data reception and registration.
- \* Registered-data need to be sent from every place in order to put it all together.
- \* The entire process requires long time and efforts.

# Existing System

## **HYMOS**

- ❖ **Commercial-software. Not available everywhere due to physical-license issues.**
- ❖ **Proprietary software.**
- ❖ **Dataflow is not fully integrated. Data need to be exported from SWDES.**

## **WISDOM**

- ❖ **Outdated software, runs only in Window 97 version**
- ❖ **Difficult to maintain**

# Development of Surface Water Information System (e-SWIS)

- \* **Work was awarded to M/s EPTISA, Spain on 19-11-2012.**
- \* **Complete work is divided in three parts:**
  1. **Supply, installation and Commissioning**
  2. **Hosting and maintenance of eSWIS on internet during warranty period**
  3. **Post warranty AMC of eSWIS system**
- \* **Completion period for Part-1 is 12 months, their after 3 years warranty and 7 years post warranty AMC are proposed.**

# Objective

**Replacement of current Surface Water Data Entry System (SWDES), Water Information System domain (WISDOM) and HYMOS from Desktop based software's to Open source web based software, keeping the current functionality and adding new functionalities.**

# Broad Features

- \* Based on web and desktop applications
- \* Data and functionality will be integrated.
- \* Easy access to information to users.
- \* Easy backup procedure.
- \* Complete security control over data and functionality
- \* Data can be entered from anywhere.
- \* Data access will be controlled and restricted to authorized users.
- \* Time from data-entering to data-dissemination will be largely decreased.
- \* Data can be entered **offline** and it will be sent when online connection is available.

# Benefit & Strength

Strengths	Benefits
<ul style="list-style-type: none"><li>❑ Data and functionality will be integrated in a unique system</li><li>❑ Data will be managed and will be stored in a central repository</li></ul>	Users will be able to access common information at the same time from anywhere
<ul style="list-style-type: none"><li>❑ Functionality will be available from anywhere with just an Internet connection</li><li>❑ Data could also be entered offline and to be sent to the central repository when online connection is available</li></ul>	Users will be able to work at any time from anywhere
<ul style="list-style-type: none"><li>❑ System upgrading functionality will be easier and directly available for all the users</li></ul>	All the users will work with the same software version
<ul style="list-style-type: none"><li>❑ Complete security control over data and functionality</li><li>❑ Each user will be able to do the tasks according to his profile</li></ul>	Each profile user will have their own access limitations based on their level of responsibility
<ul style="list-style-type: none"><li>❑ Easy backup procedure</li><li>❑ System will be available 24x7x365</li></ul>	The system will be available at any time
<ul style="list-style-type: none"><li>❑ There will be a staff structure for the maintenance of the systems, software and data</li><li>❑ Warranty and post-warranty will be provided for a period of 10 years</li></ul>	Users will continuously have support from experienced staff
<ul style="list-style-type: none"><li>❑ Time from data-entering to data-dissemination will be broadly decreased</li></ul>	Latest Data will be available online for the users in a short time



- \* **Administrative hierarchy** – Various Administrative Hierarchy for all Implementing Agencies including CWC has been created and can be accessed as per permission granted. New user can be added in this hierarchy.
- \* **Geographical hierarchy**- Details of Basin, Rivers, Tributaries, Sub-tributary has been created and is editable.
- \* **Administrative Divisions**- Details of Regional Offices of IA'S has been created and is editable.
- \* Various reports can be generated.
- \* Based on above hierarchies different level users can be created with separate login ID and password.

# eSWIS- Security Features

- \* Web hosting to maintain the web application at a Tier III, ISO-20000-1 and ISO 27000 certified server farm/data center. The system is completely secured from the all types of internet threats.
- \* The highest level of user is system administrator, who will be able to create users and groups of users and assign permissions to access data and functionality.
- \* It is possible for the administrator to assign, for example, permission for a user to see all CWC hydrological data but only permission to edit the data for the basin(s) in which he/she works.
- \* The eSWIS provides a simple login and password facility to access data for which access permissions assigned by the administrator.



# Security management

Data flow among the system and final user will be **encrypted** at all times

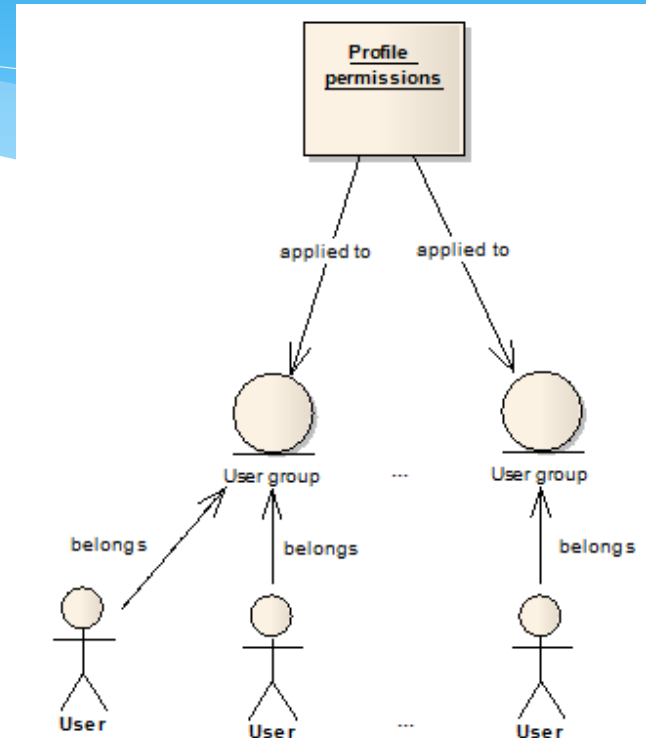
In order to protect data-access, the new eSWIS is based on a system which manages the following entities:

- ❑ Profiles
- ❑ User groups
- ❑ Users

## Profile assignment

- Facility access level
- Data permission level
- Module access level

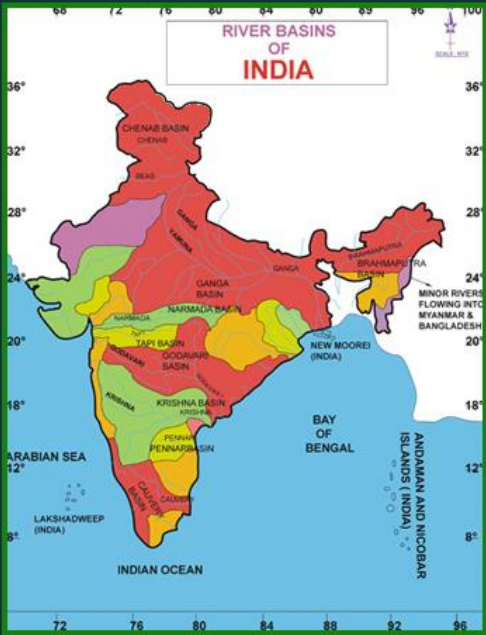
# Data Security



# Users

<b>Data Entry Operator</b>	A data entry operator can enter data and can save it and application will show “Data is pending for approval”, and the data will be saved in a secondary database.
<b>Data In-charge</b>	A data in-charge have the same access level of permission as data entry operator and in addition he/she can approve data and only approved data will be stored in main database.
<b>Admin</b>	An admin have permission to access all the modules.

# Login to eSWIS: <https://180.92.171.80/eSWDES>



## Central Water Commission

 LOGIN NAME:   
PASSWORD:   
WORKAREA:  



# Home Page



## Main Switchboard



**Static/Semistatic characteristics**



**Sediment module**



**Flood Forecast module**



**Reservoir / Diversion Scheme module**



**Meteorological module**



**Water Quality module**



**Data Validation**



**HMD Manager**



**Hydrological module**



**Snow module**



**Utilities**



**External links**



# Security: To Manage Users

Security management



**Users** Groups

Login:   
Name:

Search  
 Clear filter

User:

Add | 1

SELECTION	EDIT	DISABLE	LOGIN	NAME	MAIL	PHONE	SAVED BY	SAVED AT
<input type="checkbox"/>		Yes	lgdhyddeo1	AAAA			chanchal	25-Aug-2014
<input type="checkbox"/>		No	hgddndeo1	AAAAAA			admin	24-Apr-2014
<input type="checkbox"/>		No	kar	ABCD			chanchal	06-Aug-2014
<input type="checkbox"/>		No	ABHISHEK	ABHISHEK SHAW			chanchal	10-Sep-2014
<input type="checkbox"/>		No	admin	Administrator			admin	23-May-2014
<input type="checkbox"/>		No	ffm6	A K Chaudhury	fmdte@nic.in	011-26106523	ffm	29-Apr-2014
<input type="checkbox"/>		No	lydagr	A.K. Mittal			ffm	07-Jun-2014
<input type="checkbox"/>		No	agn	Ana de Gracia			admin	22-Oct-2013
<input type="checkbox"/>		No	uyddeldi1	Anil Kumar Mittal		011-26858452	uyddeldi1	03-Mar-2015
<input type="checkbox"/>		No	ffm2	Anshu Prakash Mishra	ffmcwc@gmail.com		chanchal	29-Apr-2014
<input type="checkbox"/>		No	azg	Antonio Zapata Garcia	zapantonio@gmail.com	670 000 000	admin	09-Jan-2014
<input type="checkbox"/>		No	bhopal	Bhopal			chanchal	25-Aug-2014
<input type="checkbox"/>		No	cdjapr	CD CWC Jaipur			cdjapr	12-Aug-2014
<input type="checkbox"/>		No	chanchal	Chanchal Chakraborty	chanchalchakrabortykol@gmail.com	9871356330	chanchal	15-Nov-2014

1-25 of 220

Actions on selected :

Delete

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# Security : To add a User

Security management ← || ☰ ?

**Users** **Groups**

### Edit User

**Data User**

Login:  Password:  Repeat Password:

Name:  Mail:  Phone:

Designation:

**Agency**

+ Add ✖ Delete ||

SELECTION	HIS AGENCY	REGIONAL OFFICE	STATE/REGIONAL OFFICE	DIVISIONAL OFFICE	SUB DIVISIONAL OFFICE	SECTION OFFICE
<input type="checkbox"/>	ID, Karnataka	SDPC, ID Karnataka, Bangalore				

1-1 of 1

**Group of User**

**All Groups**

- Meteorological - Director
- Admin group
- Group Hydrological & Meteorological
- Meteorological Enty
- Snow Hydrology

**My Groups**

- StateAccessDataEntry

Working on: CWC Hydrometeorological Online database User name: Chanchal Chakraborty User group: 8 groups





# Security :To create a Group

Security management



Users Groups

## Edit Group

### Data Group

Name:

Admin group

Data Permission Level:

DataInCharge

### Role SWDES

- Access Module Characteristics
- Access Module Flood
- Access Module Snow

- Access Module Meteorological
- Access Module Sediment
- Access Module Data Validation

- Access Module Hydrological
- Access Module Water Quality
- Access Master

### Other Application

- Access Application Flood Forecast

- Access Application hmdmanager

### Users of Group

All Users

CWC Water Level (waterlevel)  
LBD CWC Jalpaiguri (lbdjpg)  
UBD CWC Dibrugarh (ubddib)  
MD CWC Burla (mdburla)  
Division-I (Division I)  
meteo (meteo)  
Snow Hydrology Div (snowhydrology)  
Helen Houghton-Carr (hahc)  
water quality (waterquality)  
S K Singh (mgd1kndeo1)  
sarwan kumar (test)  
M C Deka (mbdghydeo1)  
AAAAAA (hgddndeo1)  
HGDCWC Dehradun (hgdddn)  
A.K. Mittal (lydagr)

My Users

Administrator (admin)  
Leonardo Llamas (llll)  
Francisco Barrio (fbl)  
Jesús Lunar (jlp)  
Francisco Jiménez (fjo)  
Ana de Gracia (agn)  
Antonio Zapata Garcia (azg)  
Manolo Sánchez Borrallo (msb)  
Chanchal Chakraborty (chanchal)  
Maria J. Hernández (mjht)  
Narendra Dev (narendradev)  
Jose Luis Carro (joseluiscarro)

Save Discard Go Back

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# eSWIS- Modules

- \* **Static/Semi Static Characteristics Module**
- \* **Meteorological Module**
- \* **Hydrological Module**
- \* **Sediment Module**
- \* **Water Quality Module**
- \* **Snow Module**
- \* **Flood Forecast Module**
- \* **Reservoir/Diversion Scheme Module**
- \* **Data Validation Module**
- \* **Data Availability Module**
- \* **Import/ Export**
- \* **Flood Dissemination Module**

# Static/Semi Static Characteristics Module

- \* **Static information about the station, creation of new stations**
- \* **Static information for Current Meter**
- \* **Series for different parameters with different frequency for which data is to be maintained**
- \* **Cross-section data**
- \* **Elevation- Area Capacity curve**
- \* **Record of Reduced level/Zero of gauge**
- \* **Salient features of Reservoir**
- \* **Generation of various reports**

# Static/Semistatic Characteristics

e - Surface Water Information System - Data Entry



## Static/Semistatic characteristics

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes



Station management



Reduced Level of Zero of the Gauge



Series characteristics



X-Section data



Current meter characteristics



Salient features of Reservoir / Diversion schemes



Go back

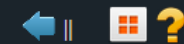
Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# To Manage States, Districts, Tahsils and Cities

Administrative Division management



State Code:

State Name:



## States:

Add | Report

SELECTION	GO INTO	CODE	NAME	USED	SAVED BY	SAVED AT
<input type="checkbox"/>	<input checked="" type="radio"/>	01	Andhra Pradesh	Yes	Chanchal Chakraborty	12-Sep-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	02	Arunachal Pradesh	Yes	Training Users	05-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	03	Assam	Yes	Training Users	05-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	04	Bihar	Yes	Training Users	05-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	05	Goa	Yes	Training Users	03-Sep-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	06	Gujarat	Yes	Training Users	27-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	07	Haryana	Yes	Training Users	05-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	08	Himachal Pradesh	Yes	Training Users	05-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	09	Jammu & Kashmir	Yes	Training Users	05-Aug-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	10	Karnataka	Yes	Training Users	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	11	Kerala	Yes	Training Users	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	12	Madhya Pradesh	Yes	Training Users	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	13	Maharashtra	Yes	Training Users	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	14	Manipur	No	Training Users	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	15	Meghalaya	No	Training Users	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	16	Mizoram	No	Training Users	07-Feb-2014

1-25 of 37

Actions on selected :



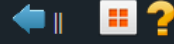
Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# To Manage Rivers

## Geographic hierarchy management



Basin Code:

Basin Name:



### Basins:

**+ Add** | **Report**

SELECTION	GO INTO	CODE	NAME	SAVED BY	SAVED AT
<input type="checkbox"/>	<input checked="" type="radio"/>	001	Indus	Chanchal Chakraborty	12-Sep-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	002	Ganga	Training Users	02-Sep-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	003	Subarnarekha	UBD CWC Dibrugarh	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	004	Brahmani-Baitarani	UBD CWC Dibrugarh	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	005	Mahanadi	UBD CWC Dibrugarh	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	006	Godavari	UBD CWC Dibrugarh	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	007	Krishna	Administrator	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	008	Pennar	Training Users	02-Sep-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	009	Cauvery	Administrator	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	010	Tapi	UBD CWC Dibrugarh	08-Jul-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	011	Narmada	Administrator	07-Feb-2014
<input type="checkbox"/>	<input checked="" type="radio"/>	012	Mahi	Administrator	07-Feb-2014
				Chanchal	

1-25 of 42

Actions on selected :



# To Manage Divisions, Agencies

## Administrative hierarchy management



Agency Name:



### Agencies:

[+ Add](#) | [Report](#)

SELECTION	GO INTO	EDIT	NAME	TYPE CODE	USED	SAVED BY	SAVED AT
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	-	-	Yes	Administrator	23-Dec-2013 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	CGWB	Hydrological data held by CWC	Yes	Administrator	29-Nov-2013 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	CWC	CWC Hydrological data	Yes	Chanchal Chakraborty	12-Sep-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Goa	Hydrological data held by CWC	Yes	Chanchal Chakraborty	01-Sep-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	GWD Andhra Pradesh	Hydrological data held by CWC	Yes	Training Users	03-Sep-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Himachal Pradesh	Hydrological data held by CWC	Yes	Chanchal Chakraborty	24-Aug-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	I&CAD Andhra Pradesh	Hydrological data held by CWC	Yes	Kiran Kumar Reddy	01-Sep-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	I&CAD Deptt., AP	Hydrological data held by CWC	Yes	Administrator	07-Feb-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Karnataka	Hydrological data held by CWC	Yes	Administrator	07-Feb-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Kerala	Hydrological data held by CWC	Yes	Administrator	07-Feb-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Kerela	Hydrological data held by CWC	Yes	Francisco Jimenez	17-Jan-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Maharashtra	Hydrological data held by CWC	Yes	Administrator	07-Feb-2014 12:00:00 am
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	N & WRD, Gujarat	Hydrological data held by CWC	Yes	Chanchal Chakraborty	27-Aug-2014 12:00:00 am

1-22 of 22

Actions on selected :



Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# To Manage Parameters

## Data types management



Code:

Description:

Type of parameter:

Group:

Search

Clear filter

### Data types:

Add | Report

SELECTION	PARAM ID	DESCRIPTION	VALUE TYPE	UNITS	MEASUREMENT TYPE	PARAMETER TYPE	GROUP	AUTOMA	MANUAL	PREDEFIN VALUES	SAVED BY	SAVED AT	USED
<input type="checkbox"/>	ADC	Observed Discharge by ADCP	Numeric	m3/sec	Instantaneous / Average	Flow		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Administrator	26-Feb-2014	Yes
<input type="checkbox"/>	FIN	Inflow	Numeric	m3/sec	Instantaneous / Average	Inflow		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Jesús Lunar	12-Nov-2013	Yes
<input type="checkbox"/>	FOL	Outflow through Canal and losses Inflow	Numeric	m3/sec	Instantaneous / Average	Outflow	Outflow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Antonio Zapata García	07-Feb-2014	Yes
<input type="checkbox"/>	FOU	Outflow through river Inflow	Numeric	m3/sec	Instantaneous / Average	Outflow	Outflow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Antonio Zapata García	07-Feb-2014	Yes
<input type="checkbox"/>	HHA	WL by AWLR (MSL)	Numeric	Meters (m)	Instantaneous / Average	Water Level		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ana de Gracia	26-Sep-2013	Yes
<input type="checkbox"/>	HHD	WL by DWLR (MSL)	Numeric	Meters (m)	Instantaneous / Average	Water Level		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ana de Gracia	26-Sep-2013	Yes
<input type="checkbox"/>	HHS	WL by Staff Gauge (MSL)	Numeric	Meters (m)	Instantaneous / Average	Water Level		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ana de Gracia	26-Sep-2013	Yes
<input type="checkbox"/>	HHT	WL by Telemetry	Numeric	Meters (m)	Instantaneous / Average	Water Level		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ana de Gracia	26-Sep-2013	Yes
<input type="checkbox"/>	HHX	Max WL by gauge 1 (MSL)	Numeric	Meters (m)	Instantaneous / Average	Water Level		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ana de Gracia	26-Sep-2013	Yes
<input type="checkbox"/>	HHY	Max WL by gauge 2 (MSL)	Numeric	Meters (m)	Instantaneous / Average	Water Level		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ana de Gracia	26-Sep-2013	No

1-25 of 226

#### Actions on selected :

Group datatypes when they need to be used together such as Min. & Max measures for instance

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups





# Station Management

Station Management



## Edit station

### Generic

Code:	Station Name:	Zero RL (m):
<input type="text"/>	<input type="text"/>	<input type="text"/>
Latitude (degree):	Latitude (minute):	Latitude (seconds):
<input type="text"/>	<input type="text"/>	<input type="text"/>
Longitude (degree):	Longitude (minute):	Longitude (seconds):
<input type="text"/>	<input type="text"/>	<input type="text"/>
State:	District:	Tashil / Taluk:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Major Basin:	Independend River:	Tributary:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Sub Tributary:	Sub Sub Tributary:	Local River:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Altitude (m):	Dits. to Outlet (km):	Ref Toposheet No:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Catchment Area (sqkm):		
<input type="text"/>		

### Image

Choose File No ...sen

### Agency

Owner Agency:

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# Series Management

Series management



## Station



Code: -- No station --  
 Name: -- No station --  
 Local River / Basin:  
 Division:  
 Sub-division:  
 Today Zero-RL:



## Data type



Code: ADC  
 Description: Observed Discharge by ADCP  
 Parameter type: Flow  
 Type of measurement: Instantaneous / Average  
 Unit: m3/sec  
 Group: --

## Series for Observed Discharge by ADCP

### Time Interval ( $\Delta T$ )

Equidistant  Non-equidistant

Time Interval Unit: -- Select a time interval --

Divider: 1

### Data limits

Minimum: \_\_\_\_\_ m3/sec  
 Lower warning level: \_\_\_\_\_ m3/sec  
 Upper warning level: \_\_\_\_\_ m3/sec  
 Maximum: \_\_\_\_\_ m3/sec  
 Rate of rise: \_\_\_\_\_ m3/sec /  $\Delta T$   
 Rate of fall: \_\_\_\_\_ m3/sec /  $\Delta T$

### Miscellaneous

Remarks:

Enable autotransfer

### Time observation

Edit | Fill time labels from this time: -- : --

SELECTION	ORDER	TIME LABEL	IS VALUE OF A PREVIOUS DAY?
-----------	-------	------------	-----------------------------

No records

Save Save & Add another Go Back



# Current Meter Characteristics

## Current Meter characteristics



Meter No:

Meter Type: -- All --

Meter Make: -- All --

Search

Clear filter

### Current Meter:

Add | Report

SELECTION	GO INTO	EDIT	METER No.	TYPE	MAKE	DATE OF MANUFACTURE	SAVED BY	SAVED AT	USED
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	W750-JLP	CUP	NTI		Administrator	09-Jan-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1357	Cup Type	UKEW	Saturday 30 April 2005	Administrator	16-Feb-2014	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2028A	CUP TYPE	WPI	Tuesday 1 June 2004	Administrator	16-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	404 SEM	cup type	SEM	Monday 10 July 2000	Administrator	16-Feb-2014	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	410	LYNX	IIT Chennai	Tuesday 18 July 2006	Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	427(L)	CUP	LYNX	Friday 18 December 1998	Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	669	cup	Engr	Tuesday 10 July 2007	Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	707 A	CUP TYPE	WPI	Sunday 1 September 2002	Administrator	16-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9872 A	CUP	UKEW	Friday 13 June 2003	Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.06067	Cup type	UKEW	Sunday 1 January 2006	Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00.69	cup	lynx		Administrator	15-Feb-2014	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00015	Cup	AMW	Monday 8 November 1999	Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0069	cup	president		Administrator	15-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	021	Cup type	Semitron	Tuesday 27 June 2000	Administrator	16-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	021A	CUP	SEMITRON	Monday 1 October 2001	Administrator	16-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0301	CUP TYPE	CPM	Thursday 1 January 2004	Administrator	16-Feb-2014	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0301 A	CUP	UKE	Monday 9 March 2005	Administrator	16-Feb-2014	Yes

1-25 of 4,176

Actions on selected :

Modify Delete



# Reduced Level of Zero of the Gauge

Reduced Level of Zero of the Gauge



**Edit Reduced Level of gauge zero**

## Particulars for RL Gauge Zero

Station Code:	Station Name:	
<input type="text"/>	<input type="text"/>	
Start Date:	End Date:	RL of Gauge Zero:
<input type="text" value="dd - mm - yyyy"/>	<input type="text" value="dd - mm - yyyy"/>	<input type="text"/>
Datum of Elevation:		
<input type="text"/>		

## Bench Mark

Reference Bench Mark NO:	R L w.r.t M.S.L	Distance:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary Bench Mark NO:	R L w.r.t M.S.L	Distance:
<input type="text"/>	<input type="text"/>	<input type="text"/>

## Surveyor / Inspecting Officer

Reason for re-survey:	
<input type="text"/>	
Name of Surveyor:	Designation of Surveyor:
<input type="text"/>	<input type="text"/>
Name of Inspecting Officer:	Designation of Inspecting Officer:
<input type="text"/>	<input type="text"/>

Current Logged user

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



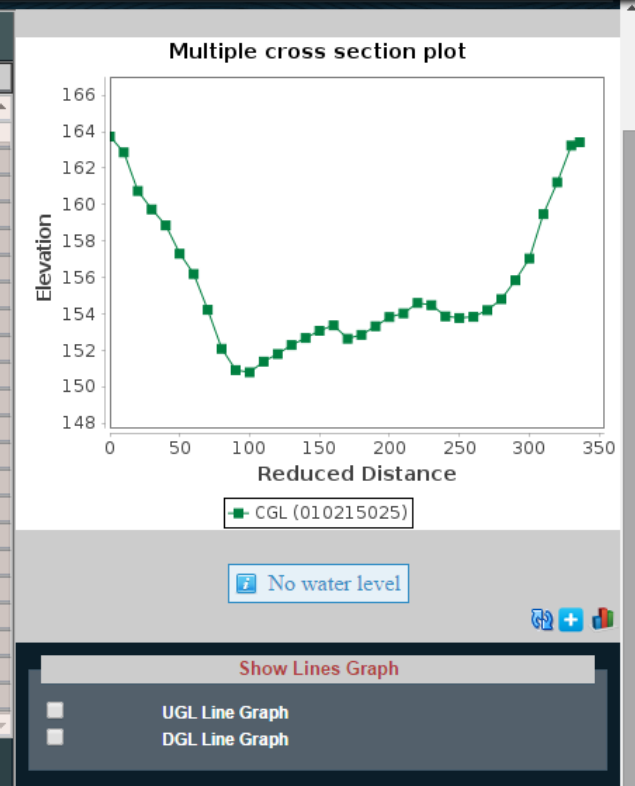
# X-Section

## X-Section data

Add 
  Delete 
  Edit 
 | 
  Add Multiple Cell

SELECTION	SNo.	REDUCED DIST (m)	UGL	CGL	DGL
<input type="checkbox"/>	2	10	-999	162.87	-999
<input type="checkbox"/>	3	20	-999	160.75	-999
<input type="checkbox"/>	4	30	-999	159.74	-999
<input type="checkbox"/>	5	40	-999	158.86	-999
<input type="checkbox"/>	6	50	-999	157.31	-999
<input type="checkbox"/>	7	60	-999	156.19	-999
<input type="checkbox"/>	8	70	-999	154.225	-999
<input type="checkbox"/>	9	80	-999	152.095	-999
<input type="checkbox"/>	10	90	-999	150.92	-999
<input type="checkbox"/>	11	100	-999	150.795	-999
<input type="checkbox"/>	12	110	-999	151.385	-999
<input type="checkbox"/>	13	120	-999	151.805	-999
<input type="checkbox"/>	14	130	-999	152.29	-999
<input type="checkbox"/>	15	140	-999	152.675	-999
<input type="checkbox"/>	16	150	-999	153.08	-999
<input type="checkbox"/>	17	160	-999	153.375	-999
<input type="checkbox"/>	18	170	-999	152.645	-999
<input type="checkbox"/>	19	180	-999	152.855	-999
<input type="checkbox"/>	20	190	-999	153.325	-999
<input type="checkbox"/>	21	200	-999	153.825	-999
<input type="checkbox"/>	22	210	-999	154.03	-999
<input type="checkbox"/>	23	220	-999	154.6	-999
<input type="checkbox"/>	24	230	-999	154.485	-999
<input type="checkbox"/>	25	240	-999	153.87	-999

1-25 of 35



UGL

UGL

Base Value

CGL

CGL

Base Value +

DGL

DGL

Base Value



# Meteorological Module

- \* **Rainfall**
- \* **Temperature**
- \* **Pressure**
- \* **Humidity**
- \* **Wind**
- \* **Evaporation**
- \* **Sunshine hours**
- \* **Data for all meteorological parameters can be entered either parameter wise or all climatic data at one place.**
- \* **Data frequency is dynamic**
- \* **Provision of primary validation**
- \* **Graphical view is generated while entering the data**
- \* **Basic statistical function is available**
- \* **Various reports including validation report can be generated**
- \* **Comparison tools are available**



# Meteorological Module

## Meteorological module



  
**All Climate data**

  
**Rainfall data**


  
**Humidity data**


  
**Evaporation data**

  
**Pressure data**

  
**Wind data**

  
**Go back**

  
**Temperature data**

  
**Sunshine data**



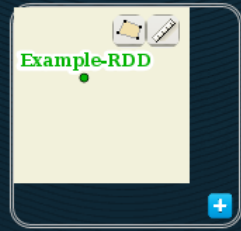
# Rainfall Daily Data Entry

Meteorological data entry



Station

Code: EXAMPLE-1  
 Name: Example-RDD  
 Local River / Basin: Tungabhadra  
 Division: Test  
 Sub-division: Test  
 Today Zero-RL: 507.436



Period

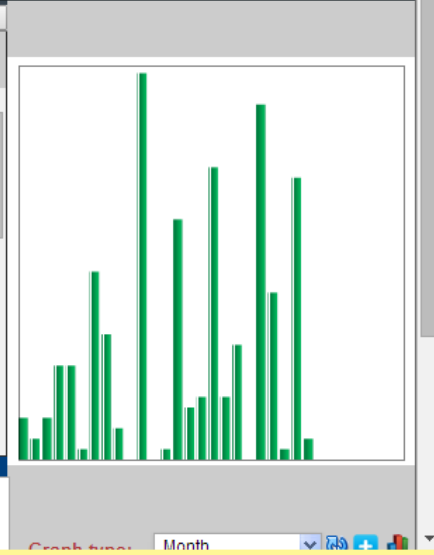
Year: 2011  
 Month: July

There is available data for station EXAMPLE-1 from 1-2011 to 6-2014



Zero Save Discard Delete | 
 Monthly report Periodic report Annual report | 
 Show Audition info

DATE	RAINFALL - SRG AT 8:00 AM	CUMULATIVE RAINFALL - SRG (mm)	REMARKS
1	0.8	0.8	
2	0.4	1.2	
3	0.8	2	
4	1.8	3.8	
5	1.8	5.6	
6	0.2	5.8	
7	3.6	9.4	
8	2.4	11.8	
9	0.6	12.4	
10	0	12.4	
11	7.4	19.8	
12	0	19.8	
13	0.2	20	
<b>Total Rainfall:</b>		51.8	
<b>Max. Rainfall value:</b>		7.4	



Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups





# Yearly Report of Daily Rainfall



Central Water Commission  
Annual Report on Rainfall - SRG



Station Code: 001-HGDDDN

Station Name: Badrinath

River: Alaknanda

Division: Executive Engineer, Himalayan Ganga Division, Dehradun

Year: 2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01					-999	0.00	0.00	18.00	6.50	0.80	0.00	0.00
02					-999	3.40	1.30	3.40	1.00	0.00	0.00	0.00
03					-999	0.00	14.50	5.00	4.30	0.00	0.00	0.00
04					-999	0.00	0.00	25.00	2.00	0.00	0.00	0.00
05					-999	0.00	5.40	42.00	2.60	0.00	0.00	0.00
06					-999	0.00	7.60	7.00	9.10	0.00	0.00	0.00
07					-999	0.00	0.40	0.00	3.40	0.00	0.00	0.00
08					-999	0.30	2.50	25.10	0.00	0.00	0.00	0.00
09					-999	0.00	0.00	6.00	0.00	0.00	0.00	0.00
10					-999	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11					-999	0.00	0.00	2.00	6.40	0.00	0.00	0.00
12					-999	0.00	6.30	0.00	2.20	0.00	0.00	0.00
13					-999	0.00	2.00	7.00	4.20	0.00	0.00	-999
14					-999	0.00	7.40	0.00	0.00	0.00	0.00	0.00
15					-999	0.00	0.00	0.00	0.00	51.00	0.00	-999
16					-999	0.00	40.00	39.00	0.00	20.00	0.00	-999
17					-999	0.00	16.60	10.00	0.00	0.00	0.00	-999
18					-999	0.00	31.00	-999	0.00	0.00	0.00	-999
19					-999	0.00	84.00	0.00	0.00	0.00	0.00	-999
20					-999	0.00	39.00	0.00	0.00	0.00	0.00	-999
21					-999	0.00	21.00	0.00	0.00	0.00	0.00	-999
22					-999	0.00	3.00	0.00	0.00	0.00	0.00	-999
23					-999	2.40	3.00	0.00	0.00	0.00	0.00	-999
24					-999	0.00	7.00	0.00	0.00	0.00	0.00	-999
25					-999	7.40	11.00	0.00	0.00	2.80	0.00	-999
26					-999	2.50	4.00	0.00	2.40	18.00	0.00	-999
27					0.00	0.00	5.60	0.00	0.00	0.00	0.00	-999
28					-999	0.00	12.20	1.00	0.00	0.00	0.00	-999
29					0.00	13.40	22.40	0.80	0.60	4.00	0.00	-999
30					-999	0.00	5.00	0.00	0.40	0.00	0.00	-999
31					2.00	6.60	0.00	0.00	0.00	0.00	0.00	-999
<b>Missing</b>	0	0	0	0	28	0	0	1	0	0	0	18
<b>Rainy</b>	0	0	0	0	1	6	25	14	13	6	0	0
<b>Maximum</b>					2.00	13.40	84.00	42.00	9.10	51.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00	0.00	2.00	29.40	358.80	191.30	45.10	96.60	0.00	0.00
<b>Cumulativ</b>	0.00	0.00	0.00	0.00	2.00	31.40	390.20	581.50	626.60	723.20	723.20	723.20

Annual 723.20

... : N.A.      -999 : MISSING



# Hydrological Module

- \* **Water Level**
- \* **Discharge**

- \* **Data for all Hydrological parameters can be entered**
- \* **Data frequency is dynamic**
- \* **Provision of primary validation**
- \* **Graphical view is generated while entering the data**
- \* **Basic statistical function is available**
- \* **Various reports including validation report can be generated**
- \* **Comparison tools are available**



# Hydrological Module

## Hydrological module



Water Level



Flow measurement



Summary stage-discharge data



Go back



# Water Level Data Entry

Hydrological data entry



Station



Code: 001-MAHGAND  
 Name: Chakaliya  
 Local River / Basin: Anas  
 Division: Executive Engineer, Mahi Division, Gandhinagar  
 Sub-division: Mahi Sub-Division, Kadana  
 Today Zero-RL: 0



Period



Year: 2014  
 Month: July

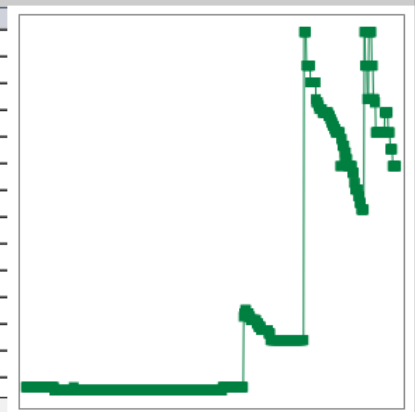
There is available data for station 001-MAHGAND from 6-2014 to 3-2015

Water level

Hourly

Edition: Save Discard Delete Monthly report Periodic report Show Audition info

DATE	12:00 am	1:00 am	2:00 am	3:00 am	4:00 am	5:00 am	6:00 am	7:00 am	8:00 am	9:00 am	10:00 am	11:00 am	12:00 pm
1	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14
2	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14
3	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.14	218.13	218.13	218.13	218.13
4	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
5	218.14	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
6	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
7	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
8	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
9	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
10	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
11	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
12	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13
14	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13	218.13



Reduced level	As entered	As in form	Remarks in case of mismatch
0	Average Water level: 218.358		
From 30/05/14 To date: --	Max. Water level value: 218.996		

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Data Entry Form for Flow Measurement

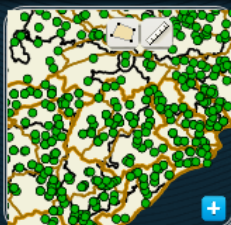
Flow measurement



## Station



Code: 004B  
Name: PARMANPUR  
Local River / Basin:  
Division:  
Sub-division:  
Today Zero-RL:



## Date

Year: 2008  
Month: October  
Day: 15  
Observation Number: 1  
Time From: 08 : 00  
Time To: 09 : 00

## General

Mode of Crossing:  
Location of Discharge Site: Permanent site  
Sounding Taken with: from X-Section  
Condition of Water: Silty water  
Weather Condition: Slightly cloudy  
Velocity of Wind (kms./hr):  
Method of Velocity Observation: Current Meter  
Sounding Weight used: None  
Avg. Atmospheric Temp.(°C):  
Wind Direction wrt Current: None  
Remarks:  
Avg. River Water Temp.(°C): 29  
Strength of Wind: Slight

## Gauge Information

Save Discard Transfer to Summary Go Back

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# Stage Discharge Data Entry

## Stage Discharge Summary



**Station**

Code: AKL00S8  
 Name: HARALAHALLI  
 Local River / Basin: Tungabhadra  
 Division: Executive Engineer (CD), Bangalore  
 Sub-division: Upper Tunga Subdn, Devangere  
 Today Zero-RL: 507.436



Select a station by field or clicking on the map. Expand the map using the button below.

### Period



Year: 2009  
 Month: July

There is available data for station AKL00S8 from 12-1966 to 5-2012

Reduced level	0	From date: 30/06/09	To date: 01/07/09	DAY	TIME	OBS No.	MEAN GAUGE (m)	WL w.r.t M. S. L (m)	DISCHARGE (Q) (m <sup>3</sup> /s)	Observed / Computed	AREA (A)	SURFACE SLOPE (S)	TOP WIDTH	WETTED PERIMETER	HYD. RADIUS	VELOCITY	MANNING	GRADIENT	FALL	MODE CROSSING
Reduced level	0	From date: 02/07/09	To date: 03/07/09	1	9:00 AM	1	0.31	0.31	30.094	Observed	81.95	0.0002	164	164	0.5	0.367	0.024	0	-999	Boat with Cableway
Reduced level	0	From date: 04/07/09	To date: 05/07/09	2	9:00 AM	1	0.34	0.34	31.474	Observed	85.69	0.0002	164	164	0.523	0.367	0.025	0	-999	Boat with Cableway
Reduced level	0	From date: 05/07/09	To date: 06/07/09	3	9:00 AM	1	0.43	0.43	41.071	Observed	103.665	0.0002	171	171	0.606	0.396	0.026	0	-999	Boat with Cableway
Reduced level	0	From date: 06/07/09	To date: 07/07/09	4	9:00 AM	1	0.49	0.49	44.926	Observed	113.035	0.0002	179	179	0.631	0.397	0.026	0.24	-999	Boat with Cableway
Reduced level	0	From date: 07/07/09	To date: 08/07/09	5	8:00 AM	1	2.1	2.1	295.7	Computed	-999	-999	-999	-999	-	-	-	-999	-999	
Reduced level	0	From date: 08/07/09	To date: 07/07/09	6	9:15 AM	1	3.33	3.33	647.237	Observed	767.94	0.0002	287	287	2.676	0.843	0.032	0	-999	Boat with Cableway
Reduced level	0	From date: 07/07/09	To date: 08/07/09	7	9:15 AM	1	3.675	3.675	774.115	Observed	858	0.0002	294	294	2.918	0.902	0.032	0.288	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	8	9:15 AM	1	4.24	4.24	988.823	Observed	1,031	0.0002	304	304	3.391	0.959	0.033	-0.192	-999	Boat with Cableway
Reduced level	0	From date: 07/07/09	To date: 08/07/09	9	9:15 AM	1	3.56	3.56	724.78	Observed	827.01	0.0002	291	291	2.842	0.876	0.032	-0.192	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	10	9:30 AM	1	3.605	3.605	740.933	Observed	845.85	0.0002	294	294	2.877	0.876	0.033	0.08	-999	Boat with Cableway
Reduced level	0	From date: 07/07/09	To date: 08/07/09	11	9:45 AM	1	4.57	4.57	1,134.669	Observed	1,133.925	0.0002	312.5	312.5	3.629	1.001	0.033	0.549	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	12	9:15 AM	1	4.13	4.13	971.4	Computed	-999	-999	-999	-999	-	-	-	-999	-999	
Reduced level	0	From date: 08/07/09	To date: 07/07/09	13	9:15 AM	1	3.415	3.415	675.862	Observed	793.07	0.0002	290	290	2.735	0.852	0.032	-0.096	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	14	9:15 AM	1	3.56	3.56	725.553	Observed	829.37	0.0002	292	292	2.84	0.875	0.032	-0.192	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	15	9:15 AM	1	3.78	3.78	798.482	Observed	888.5	0.0002	295	295	3.012	0.899	0.033	1.344	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	16	9:15 AM	1	5.71	5.71	1,816.952	Observed	1,513.5	0.0002	330	330	4.586	1.2	0.032	2.112	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	17	9:30 AM	1	7.45	7.45	3,216.394	Observed	2,180.66	0.0002	372	372	5.862	1.475	0.031	0.96	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	18	9:30 AM	1	8.05	8.05	3,629.027	Observed	2,415.35	0.000167	397	397	6.084	1.502	0.029	0.16	-999	Boat with Cableway
Reduced level	0	From date: 08/07/09	To date: 07/07/09	19	8:00 AM	1	7.44	7.44	3,028	Computed	-999	-999	-999	-999	-	-	-	-999	-999	

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Sediment Module

- \* **Data for all Sediment parameters can be entered**
- \* **Data frequency is dynamic**
- \* **Provision of primary validation**
- \* **Basic statistical function is available**
- \* **Various reports including validation report can be generated**
- \* **Comparison tools are available**



# Sediment Module

e - Surface Water Information System - Data Entry

Sediment module

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Suspended sediment summary



Suspended sediment measurement



Go back

CGWB Hydrological Online Database

User name: Chanchal Chakraborty





# Data Entry for Suspended Sediment

## Suspended Sediment Measurement



### Date

Year: 2010 Month: July Day: 1 Observation Number: 1

### 2.- Define Group

Compartment: 1 Group No: 1 Section No / RD: +

COMPORTAMENT NO	GROUPS	RD	DISCHARGE
1	1	240	0.533
1	1	252	0
1	1	47	0
1	1	254	0
1	1	48	0
1	1	228	2.464
1	1	216	4.506
1	1	60	5.75
1	1	204	8.463
1	1	144	10.02
1	1	192	9.463

### 3 - Coarse Medium Sediment

Enable edition

COMP. No	GROUP. No	GROUP RD	No OF SAMPLING BOTTLES	VOLUME OF COMPOSITE SAMPLES (lit)	GROUP DISCHARGE (m3/s)	GROUP RUNOFF (Ha m)	DISH No COARSE	WEIGHT EMPTY DISH COARSE	WEIGHT DISH + DRY SEDIMENT COARSE (g)	WEIGHT SEDIMENT COARSE (g)	CONCENTRATION COARSE (g/lit)	LOAD COARSE (tonnes/day)	DISH No MEDIUM	WEIGHT EMPTY DISH MEDIUM	WEIGHT DISH + DRY SEDIMENT MEDIUM (g)	WEIGHT SEDIMENT MEDIUM (g)	CONCENTRATION MEDIUM (g/lit)
1	1	240, 252, 47, 254, 48, 228, 216, 60, 204, 144, 192, 180, 168	15	9.97	0	0		-999	-999					-999	-999		

Save Discard Transfer to Summary Go Back



# Data Entry for Suspended Sediment Summary

## Suspended Sediment Summary



**Station**

Code: AKL00S8  
 Name: HARALAHALLI  
 Local River / Basin: Tungabhadra  
 Division: Executive Engineer (CD), Bangalore  
 Sub-division: Upper Tunga Subdn, Devangere  
 Today Zero-RL: 507.436



Select a station by field or clicking on the map. Expand the map using the button below.

### Period

Year: 2011  
 Month: July

There is available data for station AKL00S8 from 12-1966 to 5-2012

Reduced level  
 507.436  
 From date: 13/12/66 To date: 01/01/50

Enable edition | 
  Report | 
  Report only for Sediment Entered | 
  Graph

DAY	TIME	OBS. No	MEAN GAUGE (m)	WL w.r.t M.S.L. (m)	DISCHARGE (Q) (m <sup>3</sup> /s)	Observed / Computed	COARSE FRACTION (C)	MEDIUM FRACTION (M)	SAND-SILT FRACTION (C+M)	FINE FRACTION (F)	TOTAL SUSPENDED SEDIMENT (C+M+F)	REMARKS
1	9:00 AM	1	2.47	509.906	398.593	Observed	-999	-999	-999	-999	-999	
2	9:00 AM	1	1.83	509.266	242.752	Observed	-999	-999	-999	-999	-999	
3	8:00 AM	1	1.58	509.016	194	Computed	-999	-999	-999	-999	-999	Sunday,Flow is available.
4	9:00 AM	1	1.22	508.656	135.747	Observed	-999	-999	-999	-999	-999	
5	9:15 AM	1	1.69	509.126	212.399	Observed	-999	-999	-999	-999	-999	AEE'S Inspection with site CM
6	9:00 AM	1	1.465	508.901	172.601	Observed	-999	-999	-999	-999	-999	
7	9:00 AM	1	1.58	509.016	193.922	Observed	-999	-999	-999	-999	-999	
8	9:00 AM	1	1.77	509.206	226.834	Observed	-999	-999	-999	-999	-999	
9	9:00 AM	1	1.76	509.196	222.615	Observed	-999	-999	-999	-999	-999	
10	8:00 AM	1	1.84	509.276	244.7	Computed	-999	-999	-999	-999	-999	Sunday,Flow is available.
11	9:00 AM	1	1.71	509.146	213.799	Observed	-999	-999	-999	-999	-999	
12	9:00 AM	1	1.13	508.566	112.661	Observed	-999	-999	-999	-999	-999	
13	9:00 AM	1	1.14	508.576	118.011	Observed	-999	-999	-999	-999	-999	
14	9:00 AM	1	1.59	509.026	195.959	Observed	-999	-999	-999	-999	-999	
15	9:00 AM	1	1.515	508.951	178.712	Observed	-999	-999	-999	-999	-999	
16	9:00 AM	1	2.27	509.706	355.08	Observed	-999	-999	-999	-999	-999	
17	8:00 AM	1	2.31	509.746	353.5	Computed	-999	-999	-999	-999	-999	Sunday,Flow is available.
18	9:15 AM	1	4.95	512.386	1,338.27	Observed	-999	-999	-999	-999	-999	
19	9:15 AM	1	5.905	513.341	2,006.449	Observed	-999	-999	-999	-999	-999	
20	9:15 AM	1	5.55	512.986	1,748.43	Observed	-999	-999	-999	-999	-999	

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Water Quality Module

- \* **Information of WQ Labs can be entered**
- \* **Data for all WQ parameters can be entered**
- \* **Data frequency is dynamic**
- \* **Basic statistical function is available**
- \* **Various reports including validation report can be generated**
- \* **Comparison tools are available**
- \* **Various reports viz to viz different standard is available**



# Water Quality Module

e - Surface Water Information System - Data Entry

Water Quality module

Security | Calculator | Administrative division | Geographic hierarchy | Administrative hierarchy | Datatypes | Import | Export



Laboratory information



Reports



Options



Parameter information



Graphs



Go back



Sample data entry



Analysis Quality Control

User name: Chanchal Chakraborty



# Data Entry for Laboratory Information

**Laboratory information**

**Laboratory**

Lab. Code: BHA\_UBD  
 HP Level: Level II  
 Lab. Name: Bhalukpong  
 HP Domain: Central Water Commission

Agency: CWC  
 Divisional Office: U Brahmaputra Div., Dibrugarh  
 State/Regional Office: B & B BO, Shillong  
 State: -  
 Circle Office: H.O.Circle, Guwahati  
 City: -

Address: Assistant Engineer, SSD, CWC, Naharlagan- 791110

Pin Code: 791110  
 Email / Internet: -  
 Fax: -  
 Telephone: -  
 Laboratory Incharge: D. BARMAN  
 Contact Person: ASSISTANT ENGINEER, SSD,NAHARLAGAN

Remarks:

---

**Parameters**

+ Add - Delete Edit

SELECTION	PARAMETER PACK	PARAMETER	ANALYSIS METHOD	CUSTOMIZED VISIBLE	VISIBLE
<input type="checkbox"/>	Organic Matter	BOD3-27	Bottle incubation for 3-days a	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Nutrients	o-PO4-P	Ascorbic Acid Spectrophotometr	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Field Determinations	Odour_Code	Qualitative Human Receptor	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Coliforms	Tcol-MPN	Standard multiple tube ferment	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Save Discard Go Back

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Data Entry for Parameter Information

Parameter information



Parameter:

+ Add | Columns Report

<input type="checkbox"/> SELECT	EDIT	PARAMETER CODE	NAME	PARAMETER PACK	SAVED BY	SAVED AT
<input type="checkbox"/>		24D	2,4-D	Pesticides		12-Mar-2014
<input type="checkbox"/>		Ag	Silver	Trace and Toxic	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Al	Aluminium	Other inorganics	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Aldrin	Aldrin	Pesticides	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Alk-Phen	Alkalinity, phenolphthalein	Alkalinity	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		ALK-TOT	Alkalinity, total	Alkalinity	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		As	Arsenic	Trace and Toxic	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		B	Boron	Other inorganics	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		BHC	gamma-BHC (Benzene HexaChlorid)	Pesticides	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		BOD3-27	Biochemical Oxygen demand (3da)	Organic Matter	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Ca	Calcium	Biological	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Cd	Cadmium	Biological	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		ChlF-a	Chlorophyll-a	Biological	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Cl	Chloride	Major Ions	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		CN	Cyanide	Coliforms	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		CO3	Carbonate	Major Ions	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		COD	Chemical Oxygen Demand	Organic Matter	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Colour_Cod	Colour	Field Determinations	Ana de Gracia	27-Aug-2013
<input type="checkbox"/>		Cr	Chromium	Trace and Toxic	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		Cu	Copper	Trace and Toxic	Ana de Gracia	03-Sep-2013
<input type="checkbox"/>		DDT	DDT	Pesticides	Ana de Gracia	03-Sep-2013

1-25 of 70

Actions on selected:



Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups



# Report for Parameter Information



Central Water Commission Report on



## Parameters

Parameter ID	Parameter Name	Category 1	Category 2	Unit	LWL	UWL	Minimum	Maximum	Decimal
<b>Level I</b>									
<b>Dissolved Oxygen Saturation</b>									
DO_SAT%	General parameters	Chemical	Other	Percentage	0.00	150.00	0.00	300.00	0
<b>Electrical Conductivity_Field</b>									
EC_FLD	Field Determinations	Physical	Other	µmho/cm	50.00	5000.00	5.00	10000.00	0
<b>Odour</b>									
Odour_Code	Field Determinations	Chemical	Other	-	0.00	0.00	0.00	0.00	0
<b>pH_Field</b>									
pH_FLD	Field Determinations	Chemical	Other	pH unit	5.50	9.00	2.00	14.00	1
<b>Secchi Depth</b>									
Secchi	Field Determinations	Physical	Other	Meters	0.01	50.00	0.00	100.00	2
<b>Temperature</b>									
Temp	Field Determinations	Physical	Other	Degrees	10.00	40.00	0.10	50.00	1
<b>Dissolved oxygen</b>									
DO	Field Determinations	Biological	Other	mg/L	0.00	15.00	0.00	30.00	1
<b>Colour</b>									
Colour_Cod	Field Determinations	Physical	Other	-	0.00		0.00		0
<b>Level II</b>									
<b>Chlorophyll-a</b>									
Chlf-a	Biological	Biological	Organics	µg/L	5.00	500.00	1.00	1000.00	1
<b>Carbonate</b>									
CO3	Major Ions	Chemical	Salts	mg/L	0.00	200.00	0.00	1000.00	1
<b>Chemical Oxygen Demand</b>									
COD	Organic Matter	Chemical	Organics	mg/L	5.00	5000.00	1.00	10000.00	1
<b>DDT</b>									



# Snow Module

- \* Data for all snow parameters can be entered either parameter wise or all parameter at one place
- \* Data frequency is dynamic
- \* Provision of primary validation
- \* Graphical view is generated while entering the data
- \* Basic statistical function is available
- \* Various reports including validation report can be generated
- \* Comparison tools are available





# Snow Module

e - Surface Water Information System - Data Entry



Snow module

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Snowfall data



Snow Stake data



Snow Water Equivalent



Combined snowfall



Snow Survey



Snow Survey Summary



Meteorological data



Go back



# Data Entry for Snow

Snow data entry



Station



Code: 001SHD  
 Name: Kufri  
 Local River / Basin: Alaknanda  
 Division: Executive Engineer (Snow Hydrology), Shimla  
 Sub-division: Snow hydrology Sub-Division, Shimla



Period



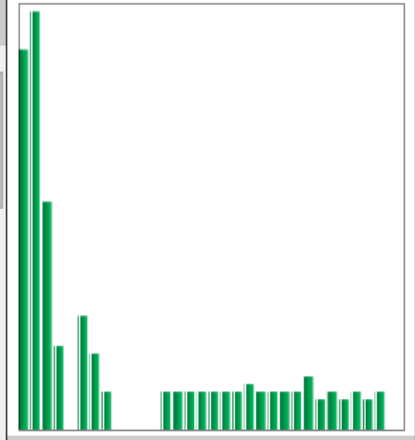
Year: 2014  
 Month: July

There is available data for station 001SHD from 2-2014 to 7-2014

- Snow fall
- Snow stake
- Snow weather
- Snow survey summary
- Water equivalent

Edition: **Zero** Save Discard Delete | 
 Tools: Monthly report Periodic report Annual report | 
 Quick links: Show Audition info

Series code	DATE	S.No	9:00 AM	CUMULATIVE SNOWFALL (cm)	REMARKS
MOD - Snowfall					
		1	50	50	snowfall
		2	55	105	no
		3	30	135	
		4	11	146	
		5	0	146	
		6	15	161	
		7	10	171	
		8	5	176	
		9	0	176	
		10	0	176	
		11	0	176	
		12	0	176	
	13	5	181		
<b>Total Snowfall:</b>		As entered 271	As in form	Remarks in case of mismatch	
<b>Max. Snowfall value:</b>		55			



Graph type: Month

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Graph Compare

Compare intervals

METEOROLOGICAL HYDROLOGICAL SNOW FLOOD

**By Station**

Station 1:  
 Code: 001-MBDGHY  
 Name: Guwahati  
 Local River / Basin:  
 Division:  
 Sub-division:  
 Today Zero-RL:

Station 2:  
 Code: 002-MBDGHY  
 Name: Goalpara  
 Local River / Basin:  
 Division:  
 Sub-division:  
 Today Zero-RL:

Parameter Type: Water Level

Data Type:  
 Code: HHS  
 Description: WL by Staff Gauge (MSL)  
 Parameter type:  
 Type of measurement: Instantaneous / Average  
 Unit:  
 Group:

Time interval:  
 Unit: Hour  
 Divider: 1  
 Hourly

Date: 13-08-2014  
 Multiple Plot

Generate

**By Parameter**

**By Interval**

Hydrological Graph

Water Level Aug 2014

Day	Station 001-MBDGHY (m)	Station 002-MBDGHY (m)
1	47.8	35.2
2	47.8	35.2
3	47.8	35.2
4	47.8	35.2
5	47.8	35.2
6	47.8	35.2
7	47.8	35.2
8	47.8	35.2
9	47.8	35.2
10	47.8	35.2
11	47.8	35.2
12	47.8	35.2
13	47.8	35.2
14	47.8	35.2
15	47.8	35.2
16	48.5	35.5
17	49.5	36.2
18	49.8	36.5
19	49.8	36.5
20	49.8	36.5
21	49.8	36.5
22	49.8	36.5
23	49.5	36.5
24	49.5	36.5
25	49.5	36.5
26	49.8	36.5
27	49.8	36.5
28	49.8	36.5
29	49.8	36.5
30	49.5	36.5
31	49.0	36.5

Legend:  
 ■ WL by Staff Gauge (MSL) Hourly 001-MBDGHY  
 ● WL by Staff Gauge (MSL) Hourly 002-MBDGHY  
 X No data

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Flood Forecasting Module

- \* Data for all base and flood forecasting station can be entered
- \* Data of Inflow and level forecast can be entered
- \* Data frequency is dynamic
- \* Provision of primary validation
- \* Graphical view is generated while entering the data
- \* Basic statistical function is available
- \* Various reports including validation report can be generated
- \* Comparison tools are available





# Data Entry for Level Forecast

## Level Forecast data



### Station



Code: 001-MBDGHY  
 Name: Guwahati  
 Local River / Basin: Brahmaputra  
 Division: Executive Engineer, Middle Brahmaputra Division (MBD), Guwahati  
 Sub-division: Middle Brahmaputra Sub-Division, Guwahati



Select a station by field or clicking on the map  
 Expand the map using the button below

### Period



Year: 2014

Enable/Disable period filter

Series code  
 HHS - WL by Staff Gauge (MSL)

Data type  
 WL by Staff Gauge (MSL)  
 Time Unit: Divider  
 4 1  
 Meters

Levels  
 HFL: 51.46  
 Last date of HFL: 21/07/04  
 Danger level: 49.68  
 Warning Level: 48.68

Water level  
 Current water level: 44.35

Add 
  Delete 
  Edit 
 | Records to add: 1 
  As admin, you can save old forecast

SELECTION	FORECAST NO	ISSUED DATE	ISSUED TIME	DATE VALIDITY OF FORECAST	TIME VALIDITY OF FORECAST	LEVEL (m)	TREND	REMARKS	ACTUAL LEVEL	VARIATION OF FORECAST FROM ACTUAL	SAVED BY
<input type="checkbox"/>	19	27-Sep-2014	06:00	28-Sep-2014	06:00	48.65	Falling		48.58	-0.07	MBD CWC Gu
<input type="checkbox"/>	18	26-Sep-2014	11:00	27-Sep-2014	11:00	48.75	Rising		48.69	-0.06	MBD CWC Gu
<input type="checkbox"/>	17	31-Aug-2014	06:00	01-Sep-2014	06:00	48.65	Falling		48.67	0.02	MBD CWC Gu
<input type="checkbox"/>	16	30-Aug-2014	06:00	31-Aug-2014	06:00	48.85	Falling		48.93	0.08	MBD CWC Gu
<input type="checkbox"/>	15	29-Aug-2014	06:00	30-Aug-2014	06:00	49.5	Falling		49.47	-0.03	MBD CWC Gu
<input type="checkbox"/>	14	28-Aug-2014	06:00	29-Aug-2014	06:00	49.9	Falling		49.81	-0.09	MBD CWC Gu
<input type="checkbox"/>	13	27-Aug-2014	06:00	28-Aug-2014	06:00	49.95	Falling		50.07	0.12	MBD CWC Gu
<input type="checkbox"/>	12	26-Aug-2014	06:00	27-Aug-2014	06:00	50.05	Rising		50.04	-0.01	MBD CWC Gu
<input type="checkbox"/>	11	25-Aug-2014	06:00	26-Aug-2014	06:00	49.7	Rising		49.79	0.09	MBD CWC Gu
<input type="checkbox"/>	10	24-Aug-2014	06:00	25-Aug-2014	06:00	49.25	Rising		49.33	0.08	MBD CWC Gu
<input type="checkbox"/>	9	23-Aug-2014	06:00	24-Aug-2014	06:00	49.22	Steady		49.22	0	MBD CWC Gu
<input type="checkbox"/>	8	22-Aug-2014	06:00	23-Aug-2014	06:00	49.15	Falling		49.2	0.05	MBD CWC Gu
<input type="checkbox"/>	7	21-Aug-2014	06:00	22-Aug-2014	06:00	49.3	Falling		49.22	-0.08	MBD CWC Gu
<input type="checkbox"/>	6	20-Aug-2014	06:00	21-Aug-2014	06:00	49.35	Falling		49.42	0.07	MBD CWC Gu
<input type="checkbox"/>	5	19-Aug-2014	06:00	20-Aug-2014	06:00	49.45	Falling		49.58	0.13	MBD CWC Gu
<input type="checkbox"/>	4	18-Aug-2014	06:00	19-Aug-2014	06:00	49.65	Falling		49.65	0	MBD CWC Gu
<input type="checkbox"/>	3	17-Aug-2014	06:00	18-Aug-2014	06:00	49.5	Falling		49.71	0.11	MBD CWC Gu

1-19 of 19

Graph

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
 User group: 8 groups



# Data Entry for Inflow Forecast

## Inflow Forecast data



### Station



Code: 001-MGD2LKN  
 Name: NARORA  
 Local River / Basin: Ganga  
 Division: Executive Engineer, Middle Ganga Division-II, Lucknow  
 Sub-division: Middle Ganga Upper Ramganga, Sub-Division, Moradabad



Select a station by field or clicking on the map  
 Expand the map using the button below

### Period

Year: 2014

Enable/Disable period filter

Series code  
 FIN - Inflow

Data type  
 Inflow  
 Time Unit 3  
 Divider 1  
 m3/sec

Levels

HFL: --  
 Last date of HFL: 23/09/10  
 Danger level: --  
 Warning Level: --

Water level

Current water level: 179.07

Records to add: 1

As admin, you can save old forecast

SELECTION	FORECAST NO	ISSUED DATE	ISSUED TIME	DATE VALIDITY OF FORECAST	TIME VALIDITY OF FORECAST	INFLOW (m3/sec)	TREND	REMARKS	ACTUAL INFLOW	% VARIATION OF FORECAST FROM ACTUAL	SAVED BY
<input type="checkbox"/>	33	23-Aug-2014	08:42	24-Aug-2014	00:00	1,699.2	Falling		1774.3	4.233	MGDIICWC
<input type="checkbox"/>	32	22-Aug-2014	08:34	23-Aug-2014	00:00	2,322.2	Falling		2094.6	-10.866	MGDIICWC
<input type="checkbox"/>	31	21-Aug-2014	18:30	22-Aug-2014	00:00	2,690.4	Falling		2775.4	3.063	MGDIICWC
<input type="checkbox"/>	31	21-Aug-2014	09:54	22-Aug-2014	00:00	3,625	Falling	Revised	2775.4	-30.612	MGDIICWC
<input type="checkbox"/>	30	20-Aug-2014	09:05	21-Aug-2014	00:00	4,956	Falling		4713.9	-5.136	MGDIICWC
<input type="checkbox"/>	29	19-Aug-2014	08:40	20-Aug-2014	00:00	5,437.4	Falling		6426.2	15.387	MGDIICWC
<input type="checkbox"/>	28	18-Aug-2014	19:05	19-Aug-2014	00:00	6,230.4	Falling		6876.4	9.394	MGDIICWC
<input type="checkbox"/>	28	18-Aug-2014	09:17	19-Aug-2014	00:00	5,437.4	Falling	Revised	6876.4	20.927	MGDIICWC
<input type="checkbox"/>	27	17-Aug-2014	09:25	18-Aug-2014	00:00	6,853.4	Rising		6577.7	-4.191	MGDIICWC
<input type="checkbox"/>	26	16-Aug-2014	08:40	17-Aug-2014	00:00	4,814.4	Rising		4422.6	-8.859	MGDIICWC
<input type="checkbox"/>	25	15-Aug-2014	09:00	16-Aug-2014	00:00	2,747	Falling		2935.1	6.409	MGDIICWC
<input type="checkbox"/>	24	14-Aug-2014	08:40	15-Aug-2014	00:00	2,832	Falling		2963.9	4.45	MGDIICWC
<input type="checkbox"/>	23	13-Aug-2014	08:37	14-Aug-2014	00:00	3,398.4	Steady		3286.1	-3.417	MGDIICWC
<input type="checkbox"/>	22	12-Aug-2014	08:40	13-Aug-2014	00:00	3,200.2	Falling		3538.2	9.553	MGDIICWC
<input type="checkbox"/>	21	11-Aug-2014	08:50	12-Aug-2014	00:00	3,200.2	Falling		3611.7	11.394	MGDIICWC
<input type="checkbox"/>	20	10-Aug-2014	08:47	11-Aug-2014	00:00	3,964.8	Rising		3593.4	-10.336	MGDIICWC

1-25 of 36

Graph



# Data Entry for Flood Data

## Flood data entry



### Data type



**Code:** HHS  
**Description:** WL by Staff Gauge (MSL)  
**Parameter type:** Water Level  
**Type of measurement:** Instantaneous / Average  
**Unit:** Meters

**Agency:** CWC  
**Regional Office:** Chief Engineer, KGBO, Hyderabad  
**Circle Office:** Superintending Engineer (Godavari Cl...  
**Divisional:** Executive Engineer(LGD), Hyderabad

### Date



Day: 11 - 09 - 2014

There is available data for data type HHS from 10-2013 to 1-2014

- Rainfall
- Water level
- Inflow
- Outflow

Hourly Edition: Save Discard Delete Quick links: Show Audition info

STATION	HFL	DL	WL	Collapse entry form																							
				00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
002-LGDHYD - Kaleswaram	107.05	104.75	103.5	99.09	99.04	98.97	98.89	98.84	98.81	98.78	98.75	98.72	98.68	98.65	98.62	98.59	98.57	98.54	98.53	98.49	98.47	98.46	98.45	98.44	98.43	98.41	98.39
003-Igdhyd - Nowrangpur	559.33	-999	-999	551.39	551.38	551.37	551.36	551.35	551.34	551.33	551.32	551.3	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.29	551.3
004-Igdhyd - Kosagumda	557.98	-999	-999	549.46	549.45	549.44	549.43	549.42	549.41	549.4	549.39	549.39	549.39	549.39	549.4	549.41	549.43	549.45	549.47	549.49	549.5	549.51	549.5	549.5	549.48	549.46	549.44
006-LGDHYD - Jagdalpur	544.68	540.8	539.5	536.24	536.24	536.24	536.23	536.23	536.23	536.23	536.23	536.22	536.22	536.21	536.21	536.21	536.21	536.2	536.19	536.18	536.17	536.17	536.17	536.17	536.17	536.17	536.17
011-LGDHYD - Chindnar	-999	-999	-999	332.98	332.96	332.94	332.93	332.93	332.92	332.92	332.9	332.88	332.86	332.84	332.82	332.8	332.8	332.8	332.79	332.78	332.77	332.76	332.76	332.76	332.75	332.74	332.73
012-Igdhyd - Tumnar	-999	-999	-999	318.46	318.46	318.45	318.45	318.45	318.44	318.44	318.43	318.43	318.43	318.43	318.43	318.43	318.42	318.42	318.42	318.42	318.45	318.5	318.51	318.52	318.53	318.54	318.55
013-Igdhyd - Pathagudem	103.61	-999	-999	92.14	92.13	92.12	92.11	92.1	92.09	92.08	92.13	92.25	92.35	92.5	92.65	92.83	92.93	92.95	92.95	92.95	92.93	92.91	92.85	92.75	92.66	92.58	92.51
014-Igdhyd - Perur	-999	-999	-999	78.35	78.3	78.26	78.22	78.18	78.15	78.13	78.09	78.06	78.03	78	77.97	77.94	77.91	77.88	77.86	77.84	77.84	77.84	77.82	77.81	77.78	77.75	77.72
015-LGDHYD - Eturnagaram	77.66	75.79	73.29	71.72	71.69	71.64	71.58	71.54	71.49	71.44	71.41	71.38	71.35	71.32	71.28	71.25	71.22	71.21	71.19	71.17	71.15	71.13	71.11	71.08	71.07	71.05	71.03
016-LGDHYD - Dummugudem	60.25	55	53	50.55	50.46	50.37	50.28	50.19	50.1	50.01	49.95	49.89	49.82	49.77	49.71	49.65	49.59	49.53	49.47	49.41	49.41	49.41	49.4	49.38	49.35	49.32	49.29

Working on: CWC Hydrometeorological Online database

User name: Chanchal Chakraborty  
User group: 8 groups





# Various Flood Forecast reports

## Flood Forecast reports



Year:

### Annual/Seasonal Flood Forecasting Report

- Basin-wise flood forecasting information
- State-wise flood forecasting information
- Performance of flood forecasting stations (Division-wise)
- Performance of flood forecasting stations (Basin-wise)
- Performance of flood forecasting stations (State-wise)
- Unprecedented flood situation
- High flood situation
- Low and moderate flood situation

Select all [Generate](#)

### Central Flood Control Room Daily Bulletins

- Flood Situation Summary
- Unprecedented Flood Situation
- High Flood Situation
- Moderate Flood Situation
- Low Flood Situation
- Reservoirs / Barrages level and inflow forecasts

Date:

Select all [Generate](#)

### Weekly Bulletins prepared by Divisions

- Maximum level and forecast performance Num. bulletin:
- Stage above warning and danger level Num. bulletin:
- Stage in High and Unprecedented flood situation Num. bulletin:
- Rainfall above 50 mm at all stations in the period Num. bulletin:

From Date:  To Date:

Select all [Generate](#)

### Daily Bulletins prepared by Division

- Water level and Forecast
- Rainfall for all stations
- Statewise Water level and Forecast

Date:

Select all [Generate](#)

### Red Bulletin

- Red Bulletin

Num. bulletin:

[Generate](#)

### Orange Bulletin

- Orange Bulletin

Num. bulletin:

[Generate](#)

### Bangladesh Message report

- Bangladesh morning report
- Bangladesh evening report

Date:

Select all [Generate](#)



# Report- Daily Flood Bulletin issued by CFCR



## Central Water Commission

Government of India  
Central Water Commission  
Flood Forecast Monitoring Directorate  
Central Flood Control Room

Tele fax: 2610 6523  
E-Mail: fmdte@nic.in

Date:	31/07/2014
Bulletin No:	92

Room No.208 (S),  
Sewa Bhavan, R.K. Puram,  
New Delhi-110066

### FLOOD SITUATION SUMMARY

#### PART - I: LEVEL FORECAST

S.No.	Flood Situations	Numbers of Forecasting Sites
A	Unprecedented Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled)	0
B	High Flood Situation: (Site (s) where water level is less than the previous Highest Flood Level (HFL) but within 0.50 m of HFL)	0
C	Moderate Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below the "High Flood Situation" i.e. below 0.50 m of HFL)	6
D	Low Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level)	11
Total number of sites above Warning Level ( A+B+C+D)		17

#### PART - II: INFLOW FORECAST

Number of sites for which inflow forecasts issued: (Where Inflows are equal or exceed the specified Warning Limit for a particular reservoir / barrage)	8
--	---

Name: Chanchal Chakraborty

Designation Software Developer



# Weekly Report prepared by Division



## Central Water Commission



Weekly Report on Maximum Flood Level and Flood Forecast Information

Bulletin No: 8 Week: 01/07/2014 - 07/07/2014

Division: Executive Engineer, Upper Brahmaputra Division (UBD), Dibrugarh

S No	Station	River	Warning Level (m)	Danger Level (m)	HFL (m)	Maximum Water Level Observed during the week			Forecast issued during the week			Cumulative Forecast issued from start of Season		
						Level (m)	Date	Time	Forecast Issued	Forecast within Limit	% Accuracy	Forecast Issued	Forecast within Limi	% Accuracy
1	Badatighat	SUBANSIRI	81.53	82.53	86.84	81.47	02/07/2014	10:00	0	0	0.00	0	0	0.00
2	Chenimari (Khowang)	Buridehing	101.11	102.11	103.92	100.09	01/07/2014	00:00	0	0	0.00	0	0	0.00
3	Dharamtul	KOPILI	55.00	56.00	58.09	52.21	05/07/2014	15:00	0	0	0.00	0	0	0.00
4	Dibrugarh	Brahmaputra	104.70	105.70	106.48	105.31	02/07/2014	01:00	13	13	100.00	42	41	97.62
5	Golaghat	DHANSIRI (S)	88.50	89.50	91.30	87.38	06/07/2014	06:00	0	0	0.00	0	0	0.00
6	Kampur	Kopili	59.50	60.50	61.86	56.89	04/07/2014	22:00	0	0	0.00	0	0	0.00
7	NT Road Crossing Jia-Bharali	JIABHARALI	76.00	77.00	78.50	76.98	01/07/2014	00:00	21	21	100.00	87	85	97.70
8	Naharkatia	Buridehing	119.40	120.40	122.69	116.50	01/07/2014	06:00	0	0	0.00	0	0	0.00
9	Nanglamoraghat	DESANG	93.46	94.46	96.49	93.10	01/07/2014	05:00	0	0	0.00	0	0	0.00
10	Neamatighat	Brahmaputra	84.04	85.04	87.37	85.91	02/07/2014	09:00	7	7	100.00	30	29	96.67
11	Numaligarh	DHANSIRI (S)	76.42	77.42	79.87	76.75	06/07/2014	18:00	5	5	100.00	5	5	100.00
12	Sivasagar	DIKHOW	91.40	92.40	95.62	90.78	02/07/2014	16:00	0	0	0.00	0	0	0.00
13	Tezpur	Brahmaputra	64.23	65.23	66.59	64.78	03/07/2014	13:00	7	7	100.00	12	12	100.00
	TOTAL								53	53	100.00	176	172	97.73



# Flood Dissemination Module

- \* **List based Dissemination**
- \* **Map Based Dissemination**
- \* **Current Flood Situation**
- \* **Flood Bulletins**
- \* **Unprecedented flood situations**
- \* **Flood Hydrograph**
- \* **Displaying both original and revised forecasts.**
- \* **Sending reports as SMS to a defined list of mobile phone numbers through the service provider as engaged by CWC.**
- \* **Sending reports as emails to a defined list of email addresses**
- \* **Generating the SMS of special flood situation as defined and in the format as designed by the divisional/central administrator**

## Central Water Commission Flood Forecast

HOME SITE MAP CONTACT US

Search...

HOME » Flood Forecast

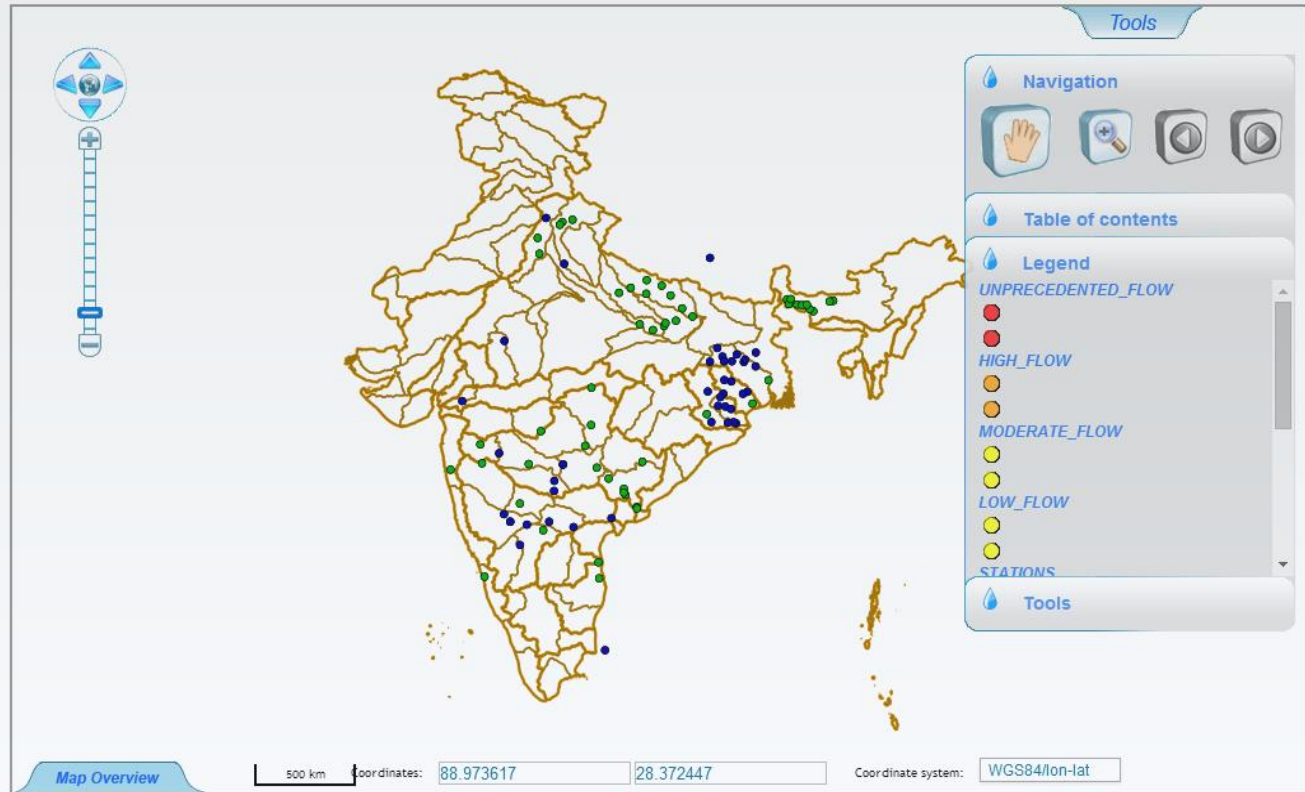
- DATA FLOW MAP BASED
- DATA FLOW LIST BASED
- FLOOD FORECASTED BULLETINS
- HYDROGRAPH
- CURRENT FLOOD FORECAST
- EMAIL CONTACT LIST MANAGEMENT
- SMS CONTACT LIST MANAGEMENT

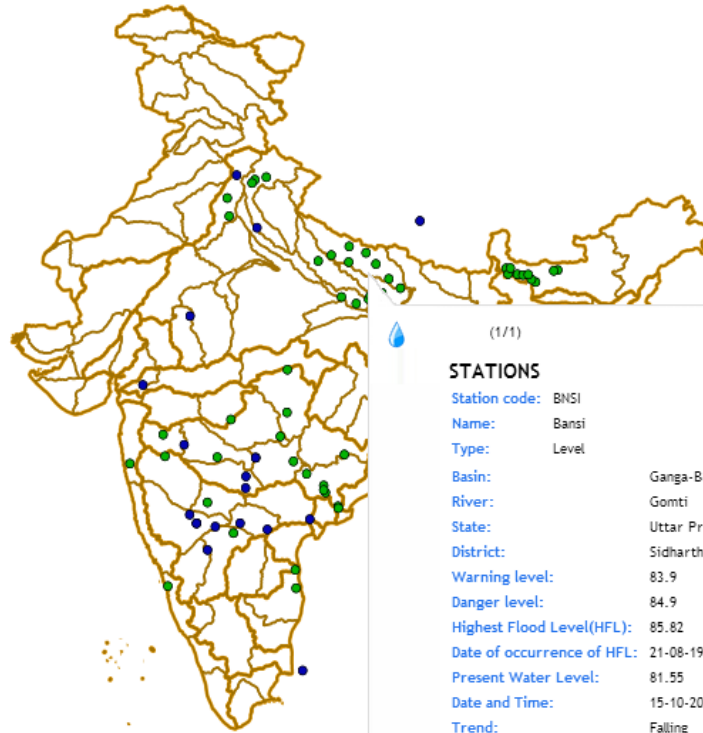
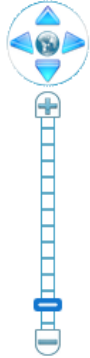
### Special Flood Message

Lasted Data Flood Forecast

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(1/1)

**STATIONS**

Station code:	BNSI
Name:	Bansi
Type:	Level
Basin:	Ganga-Brahm-Meghna Basin
River:	Gomti
State:	Uttar Pradesh
District:	Sidharthnagar
Warning level:	83.9
Danger level:	84.9
Highest Flood Level(HFL):	85.82
Date of occurrence of HFL:	21-08-1998
Present Water Level:	81.55
Date and Time:	15-10-2013 00:00
Trend:	Falling

Map Overview

500 km

Coordinates:

Coordinate system:





# Flood Forecast

[HOME](#) » [DATA FLOW LIST BASED](#)

- ▶ DATA FLOW MAP BASED
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- ▶ FLOOD FORECASTED BULLETINS
- ▶ HYDROGRAPH
- ▶ CURRENT FLOOD FORECAST
- ▶ EMAIL CONTACT LIST MANAGEMENT
- ▶ SMS CONTACT LIST MANAGEMENT

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## List Based Selection

### Filter

State Name

- Select value -

District Name

- No Data -

Basin Name

- Select value -

River Name

- No Data -

Clear Filter





### Sites

Flood Forecast Sites

Site Name	State	District	Basin	River	Forecast
-----------	-------	----------	-------	-------	----------

## Flood Forecast

[HOME](#) » [DATA FLOW LIST BASED](#) » [FLOOD-FORECASTED-SITE](#)

- ▶ DATA FLOW MAP BASED 
- ▶ DATA FLOW LIST BASED 
- ▶ FLOOD FORECASTED BULLETINS 
- ▶ HYDROGRAPH 
- ▶ CURRENT FLOOD FORECAST 

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### Flood Forecasted Site

Site Name : Domohani

District Name:	Jalpaiguri	Warning Level (WL):	85.65
River Name:	Teesta	Danger Level (DL):	85.95
Basin Name:	BRAHMAPUTRA	Highest Flood Level (HFL):	89.3
Division Name:	<b>Executive Engineer, Lower Brahmaputra Division (LBD), Jalpaiguri</b>	HFL Attained date:	04-10-1968

#### PRESENT WATER LEVEL

Date: 29-07-2014 18:00	Value: 85.71	Trend: Rising
------------------------	--------------	---------------

#### CUMULATIVE DAILY RAINFALL

Date: 29-07-2014 08:30	Value: 0.0
------------------------	------------

#### FORECASTED LEVEL

Flood Forecasted NO.:	86	Date:	30/07/2014 01:00:00
Value:	85.65	Trend:	Falling

Go Back







# Central Water Commission

## Flood Forecast


[HOME](#) | [SITE MAP](#) | [CONTACT US](#)

Search...

[HOME](#) » [FLOOD FORECASTED BULLETINS](#)

### Flood Forecasted Bulletins


▶ DATA FLOW MAP BASED 


▶ DATA FLOW LIST BASED 


▶ FLOOD FORECASTED BULLETINS 


For Level Forecasted Sites

For Inflow Forecasting Sites

▶ HYDROGRAPH 

▶ CURRENT FLOOD FORECAST 

▶ EMAIL CONTACT LIST MANAGEMENT 

▶ SMS CONTACT LIST MANAGEMENT 

- ▶ [For Level Forecasting Sites](#)
- ▶ [For Inflow Forecasting Sites](#)



## Flood Forecast

HOME » FLOOD FORECASTED BULLETINS » FOR LEVEL FORECASTED SITES » LOW FLOOD SITUATION REPORT

- ▶ DATA FLOW MAP BASED
- ▶ DATA FLOW LIST BASED
- ▶ FLOOD FORECASTED BULLETINS

For Level Forecasted Sites

- Unprecedented Flood Situation Report
- High Flood Situation Report
- Moderate Flood Situation Report
- Low Flood Situation Report
- Summary Of 'Sites' Above Warning Level
- For Inflow Forecasting Sites

- ▶ HYDROGRAPH
- ▶ CURRENT FLOOD FORECAST

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### Flood Forecasted Bulletins

#### PART-I: DAILY WATER LEVELS AND FORECASTS FOR LEVEL FORECAST SITES (A COMPILATION AND ANALYSIS REPORT)

D : Low Flood Situations :

S.NO.	NAME OF RIVER	FLOOD FORECASTING SITE	DISTRICT/ NEAREST TOWN	STATE	METEOROLOGICAL SUBDIVISION	WARNING LEVEL (M)	DANGER LEVEL (M)	PREVIOUS HIGHEST FLOOD LEVEL		NORMAL WATER LEVEL (M)	ACTUAL LEVEL WITH TREND		LEVEL (M)	DATE/YEAR
								LEVEL (M)	DATE/YEAR		LEVEL (M)	TREND		
1	Brahmaputra	Goalpara	Goalpara	Assam		35.27	36.27	37.43	1954-07-31	33.78452	35.33	Rising	35.27	29/7/12
2	Brahmaputra	Dibrugarh	Dibrugarh	Assam	Assam & Meghalaya	104.7	105.7	106.48	1998-09-03	104.45308	104.9	Steady	104.98	29/7/12
3	Brahmaputra	Beki Road bridge	Barpeta	Assam	Assam & Meghalaya	44.1	45.1	46.2	2000-08-04	44.062565	44.79	Falling	44.74	29/7/12
4	JIABHARALI	NT Road Crossing Jia-Bharali	Sonitpur	Assam	Assam & Meghalaya	76.0	77.0	78.5	2007-07-26	76.12514	76.4	Rising	76.4	29/7/12
5	Brahmaputra	Dhubri	Dhubri	Assam	Assam & Meghalaya	27.62	28.62	30.36	1988-08-28	26.973448	28.4	Rising	28.36	29/7/12
6	Ganga	Darauli	Siwan	Bihar	Bihar	59.82	60.82	61.74	1998-08-29	57.69398	59.96	Rising	59.94	29/7/12
7	Ganga	Baltara	Khangaria	Bihar	Bihar	32.85	33.85	36.4	1987-08-15	30.537455	33.03	Steady	33.07	29/7/12
8	Ganga	Ayodhya	Faizabad	Uttar Pradesh	East Uttar Pradesh	91.73	92.73	94.01	2009-10-11	90.34639	92.55	Steady	92.4	29/7/12
9	Ganga	Turtipar	Ballia	Uttar Pradesh	East Uttar Pradesh	63.01	64.01	66.0	1998-08-28	60.67969	63.456	Steady	63.48	29/7/12
10	Vamsadhara	Kashinagar	Gajapati	Orissa	Odisha	53.6	54.6	58.935	1980-09-18	52.703907	53.95	Rising	53.85	29/7/12
11	Teesta	Domohani	Jalpaiguri	West Bengal	Sub Himalayan West Bengal	85.65	85.95	89.3	1968-10-04	85.09356	85.65	Falling	85.65	29/7/12

[Go Back](#)



## Central Water Commission Flood Forecast

HOME » HYDROGRAPH

- ▶ DATA FLOW MAP BASED
- ▶ DATA FLOW LIST BASED
- ▶ FLOOD FORECASTED BULLETINS
- ▶ HYDROGRAPH
- ▶ CURRENT FLOOD FORECAST

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## Hydrograph

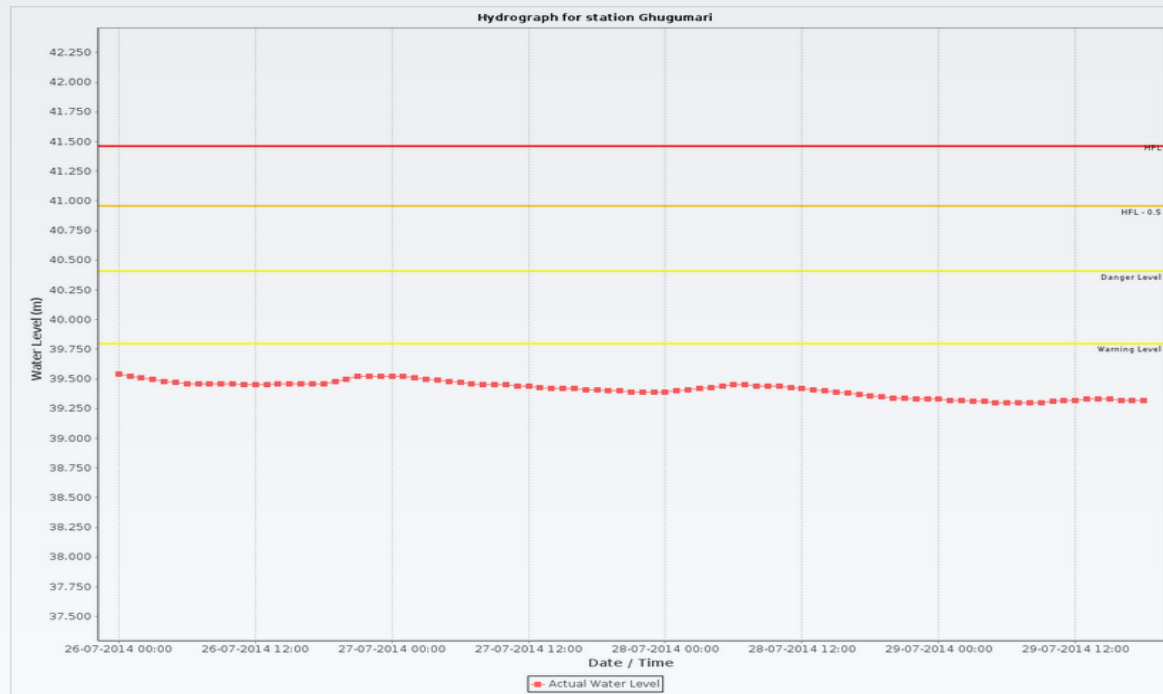
### Filter

State Name

West Bengal

Station Name

Ghugumari



## Flood Forecast

[HOME](#) > [CURRENT FLOOD FORECAST](#)

- [▶ DATA FLOW MAP BASED](#) 
- [▶ DATA FLOW LIST BASED](#) 
- [▶ FLOOD FORECASTED BULLETINS](#) 
- [▶ HYDROGRAPH](#) 
- [▶ CURRENT FLOOD FORECAST](#) 

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### Current Flood Forecast

#### LEVEL FORECASTING SITES

S. NO.:	Site Name:	State:	Basin:
1	Ayodhya	Uttar Pradesh	Ganga
2	Baltara	Bihar	Ganga
3	Basua	Bihar	Ganga
4	Beki Road bridge	Assam	BRAHMAPUTRA
5	Darauli	Bihar	Ganga
6	Dhubri	Assam	BRAHMAPUTRA
7	Dibrugarh	Assam	BRAHMAPUTRA
8	Domohani	West Bengal	BRAHMAPUTRA
9	Elginbridge	Uttar Pradesh	Ganga
10	Goalpara	Assam	BRAHMAPUTRA
11	Kashinagar	Orissa	EFR B Mahanadi-Godavari
12	NT Road Crossing Jia-Bharali	Assam	BRAHMAPUTRA
13	Neamatighat	Assam	BRAHMAPUTRA
14	Numaligarh	Assam	BRAHMAPUTRA
15	Tezpur	Assam	BRAHMAPUTRA
16	Turtipar	Uttar Pradesh	Ganga




#### INFLOW FORECASTING SITES

S. NO.:	Site Name:	State:	Basin:
1	Almatti Dam	Karnataka	Krishna
2	HATHNUR	Maharashtra	Tapi
3	Hirakud Dam	Orissa	Mahanadi
4	MADHUBAN DAM	Gujarat	WFR South of Tapi
5	NARORA	Uttar Pradesh	GANGA
6	Narayanpur Dam	Karnataka	Krishna
7	Tungabhadra Dam	Karnataka	Krishna
8	Ukai Dam	Gujarat	Tapi



## Flood Forecast

[HOME](#) » [CURRENT FLOOD FORECAST](#) » [FLOOD-FORECASTED-SITE](#)

- [▶ DATA FLOW MAP BASED](#) 
- [▶ DATA FLOW LIST BASED](#) 
- [▶ FLOOD FORECASTED BULLETINS](#) 
- [▶ HYDROGRAPH](#) 
- [▶ CURRENT FLOOD FORECAST](#) 
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### Flood Forecasted Site

Site Name : Dummagudem

District Name:	Khammam	Warning Level (WL):	53.0
River Name:	Godavari	Danger Level (DL):	55.0
Basin Name:	Godavari	Highest Flood Level (HFL):	60.25
Division Name:	<b>Executive Engineer(LGD), Hyderabad</b>	HFL Attained date:	16-08-1986

#### PRESENT WATER LEVEL

Date: 15-04-2014 01:00	Value: 60.0	Trend: Rising
------------------------	-------------	---------------

#### CUMULATIVE DAILY RAINFALL

NOT AVAILABLE
---------------

#### FORECASTED LEVEL

Flood Forecasted NO.:	28	Date:	17/04/2014 12:00:00
Value:	<b>61.0</b>	Trend:	Rising

[Go Back](#)



[HOME](#) > [EMAIL CONTACT LIST MANAGEMENT](#)

- [▶ DATA FLOW MAP BASED](#) 
- [▶ DATA FLOW LIST BASED](#) 
- [▶ FLOOD FORECASTED BULLETINS](#) 
- [▶ HYDROGRAPH](#) 
- [▶ CURRENT FLOOD FORECAST](#) 
- [▶ EMAIL CONTACT LIST MANAGEMENT](#) 
- [▶ SMS CONTACT LIST MANAGEMENT](#) 

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### Contact List Management

Division:

Please select a file to upload contact data:

 smsmail.xlsx

### Email

To:

NAME	DE SIGNATION	MAIL ID	CHECKED
Chanchal		chanchalchakrabortykol@gmail.com	<input checked="" type="checkbox"/>
Chanchal1		jesus@eptisa.com	<input checked="" type="checkbox"/>
S Lakshminarayan		slakshminarayanan8162@gmail.com	<input checked="" type="checkbox"/>
VD Roy		vdroy@yahoo.com	<input checked="" type="checkbox"/>
Rajesh Kumar			<input checked="" type="checkbox"/>
NK Manglik			<input checked="" type="checkbox"/>
Ramjeet Varma			<input checked="" type="checkbox"/>
Ap Mishra			<input checked="" type="checkbox"/>
JK Arora			<input checked="" type="checkbox"/>
Vikrant Varma			<input checked="" type="checkbox"/>
Narendra Dev			<input checked="" type="checkbox"/>
narendra Singh			<input checked="" type="checkbox"/>
Vipin Kumar			<input checked="" type="checkbox"/>
Bharat			<input checked="" type="checkbox"/>
Kiran Reddy			<input checked="" type="checkbox"/>
Vijay Singh			<input checked="" type="checkbox"/>

Subject:

Text\*:

Attached File:

- No file chosen
- No file chosen
- No file chosen





[HOME](#) » [SMS CONTACT LIST MANAGEMENT](#)

- ▶ DATA FLOW MAP BASED
- ▶ DATA FLOW LIST BASED
- ▶ FLOOD FORECASTED BULLETINS
- ▶ HYDROGRAPH
- ▶ CURRENT FLOOD FORECAST
- ▶ EMAIL CONTACT LIST MANAGEMENT
- ▶ SMS CONTACT LIST MANAGEMENT

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### Contact List Management

Division:

CWC

Please select a file to upload contact data:

Choose File No file chosen

Upload Data

### SMS

To:

NAME	DESIGNATION	MOBILE	CHECKED
Chanchal		919871356330	<input checked="" type="checkbox"/>
Chanchal1		919732566376	<input checked="" type="checkbox"/>
S Lakshminarayan		918800677536	<input checked="" type="checkbox"/>
VD Roy		919868534451	<input checked="" type="checkbox"/>
Rajesh Kumar		919650550015	<input checked="" type="checkbox"/>
NK Manglik		919868207648	<input checked="" type="checkbox"/>
Ramjeet Varma		917827227275	<input checked="" type="checkbox"/>
Ap Mishra		917838275194	<input checked="" type="checkbox"/>
JK Arora		919891678773	<input checked="" type="checkbox"/>
Vikrant Varma		919990513629	<input checked="" type="checkbox"/>
Narendra Dev		919891361010	<input checked="" type="checkbox"/>
narendra Singh		919013311910	<input checked="" type="checkbox"/>
Vipin Kumar		919716929134	<input checked="" type="checkbox"/>
Bharat		919871492878	<input checked="" type="checkbox"/>
Kiran Reddy		919845020730	<input checked="" type="checkbox"/>
Vijay Singh		919711571765	<input checked="" type="checkbox"/>

Text\*:

Send SMS



# Mobile Application for Stage Discharge Summery



e-SWDES

Go back



[...]

Selection



Data

DAY:	31
TIME:	9:15 AM
OBS No.:	1
MEAN GAUGE (m):	<input type="text" value="5.58"/>
WL w.r.t M.S.L (m):	<input type="text" value="5.58"/>
DISCHARGE (Q) (m <sup>3</sup> /s):	<input type="text" value="1740.183"/>
Observed / Computed:	<input type="text" value="Observed"/>
AREA (A):	<input type="text" value="1488.3"/>
SURFACE SLOPE (S):	<input type="text" value="0.0002"/>
TOP WIDTH:	<input type="text" value="330"/>
WETTED PERIMETER:	<input type="text" value="330.784"/>
HYD. RADIUS:	<input type="text" value="4.499"/>
VELOCITY:	<input type="text" value="1.169"/>
MANNING:	<input type="text" value="0.033"/>
GRADIENT:	<input type="text" value="0"/>
FALL:	<input type="text" value="-999"/>
MODE CROSSING:	<input type="text" value="Boat with Cableway"/>
METHOD VELOCITY:	<input type="text" value="Current Meter"/>
No VERTICAL / FLOAT:	<input type="text" value="23"/>
VELOCITY MAX:	<input type="text" value="0"/>
WEATHER COND:	<input type="text" value="Heavily cloudy"/>
WIND VELOCITY:	<input type="text" value="8"/>
WIND DIR w.r.t FLOW:	<input type="text" value="WSW - 247.5"/>
REMARKS:	<input type="text"/>





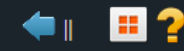
# Reservoir Module

- \* **Data for all reservoir monitoring station can be entered**
- \* **Data frequency is dynamic**
- \* **Provision of primary validation**
- \* **Graphical view is generated while entering the data**
- \* **Basic statistical function is available**
- \* **Various reports including validation report can be generated**
- \* **Comparison tools are available**



# Salient Feature of Reservoir

Reservoir data



Project:

Reservoir:

Search

Clear filter

Advanced Search - Selection can be done using Division or River through advanced search

## Salient features of Reservoir:

Add | Report | Columns Report

SELECTION	View	Edit	PROJECT	STATION CODE	STATION NAME	SAVED BY	SAVED AT	USED
<input type="checkbox"/>			Dantiwada	01 02 02 005	Banas at Dantiwada	Administrator	19-Feb-2014	No
<input type="checkbox"/>			Hydrology	CHA-HAS-GD	HASSAPUR	Training Users	02-Sep-2014	No
<input type="checkbox"/>			Kadana Dam	01 02 13 009	Mahi at Kadana Dam	Administrator	19-Feb-2014	No
<input type="checkbox"/>			krishna	03001111	xaxd1	Training Users	02-Sep-2014	No
<input type="checkbox"/>			Krishnaraja Sagar	EXAMPLE-1	Example-RDD	Chanchal Chakraborty	16-Sep-2014	No
<input type="checkbox"/>			Mahi Bajaj Sagar Dam	01 02 13 002	Mahi at Mahi Bajaj Sagar Dam	Administrator	19-Feb-2014	No
<input type="checkbox"/>			Nagpur	31071980	NAGPUR	Training Users	02-Sep-2014	No
<input type="checkbox"/>			phondaghat	pHONDAGHAT	LORE	Training Users	02-Sep-2014	No
<input type="checkbox"/>			PRAKASAM BARAGE	AP001	dowliaswaram	Training Users	02-Sep-2014	No
<input type="checkbox"/>			Sipudam	01 02 02 006	Sipu at Sipudam(Bhakudar)	Administrator	19-Feb-2014	No
<input type="checkbox"/>			Test -1	EXAMPLE-1	Example-RDD	Chanchal Chakraborty	21-Aug-2014	No
<input type="checkbox"/>			tezopur	B3000E2	BHALUKPONG	UBD CWC Dibrugarh	08-Jul-2014	No
<input type="checkbox"/>			Tillari Project	CHA-HAS-GD	HASSAPUR	Training Users	02-Sep-2014	No
<input type="checkbox"/>			upper krishna project	022	devangaon	Training Users	02-Sep-2014	No
<input type="checkbox"/>			zuari-uguem	ZUA-UGU-GD	UGUEM	Training Users	02-Sep-2014	No

1-15 of 15

Actions on selected :

Delete



# Data Validation Module

- \* **For Primary and Secondary Validation of the data**
- \* **Advanced statistical function is available**
- \* **Various validation report can be generated**
- \* **Comparison tools are available**
- \* **Stage-Discharge curve can be generated**

# Secondary Validation

## 1. Validation

### a. Tests on timing errors

i) Facility to display several stations side by side to detect timing errors

### b. Inspection of temporal variation

i) Graphical display of multiple station data in single graph, i.e. flow + rainfall

ii) Graphical display of residual series, residual mass curves

c. Inspection of longitudinal/spatial variation

- i) Tabular and graphical display of data along a profile
- ii) Graphical display of variables on a map

d. Test of relations

- i) Scatter plots between variables
- ii) Time series relations by regression, including time shifts, regression of multiple variables, including flow/discharge

e. Double mass analysis

- i) Comparison of time series to aggregated or averaged groupings of other series

f. Hydrological validation

- i) Volume and time distribution comparisons between observed runoff and basin rainfall

## 2. Data correction

### a. Data correction

- i) Linear Interpolation of missing values
- ii) Use of regression relations
- iii) Constant correction across a range of values
- iv) Drift correction across a range of values
- v) Time-shifting data

## 3. Processing

### a. Fitting rating equations

- i) Simple equations
- ii) Complex equations, including backwater corrections, shifts due to scour and deposition, unsteady flow
- iii) Calculations for standard weirs and flumes

### b. Extrapolation of rating equations

- i) Logarithmic extrapolation, stage-area stage-velocity, Chezy & Manning equations

### c. Validation of rating equations

- i) Test new data against existing ratings

### d. Hydraulic computations

- i) Calculation of backwater effects by observations of levels and cross sections at downstream points

### e. Stage-Discharge Computations

- i) Calculate discharge from stage by calculated ratings

### f. Establishment of sediment rating equation

- i) Calculation of sediment ratings in a similar manner to discharge

# Data compilation

## a. Aggregation and disaggregation

i) Transformation of data by aggregation or disaggregation to different time intervals

## b. Creation of derived series

i) Minima, maxima, peak over threshold

## c. Computation of areal rainfall

i) Basin rainfall by station weights, Thiessen polygons, Kriging

## d. Evapotranspiration

i) Calculation of PE from meteorological observations



# Secondary Validation

URL: <http://180.92.171.80/eSWDESSV>

e - Surface Water Information System - Data Entry



Static/Semistatic characteristics



Sediment module



Flood Forecast module



Reservoir / Diversion Scheme module

Meteorological module



Water Quality module



Data Validation



HMD Manager

Hydrological module



Snow module



Utilities



External links

Secondary Validation:



Main view



Time Series Analysis



Gap filling & Correction



Stage-discharge



Compilation & Generation



Sediment

Working on: CWC Hydrometeorological Secondary Validation database

User name: Chanchal Chakraborty  
User group: 8 groups



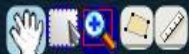
# Select Stations By Location

Secondary validation - Main view



By location

By hierarchy



Selection:

- By Station
- By River
- By Basin



## Parameter type Required:



Select All / Unselect all

- Rainfall
- Water level
- Flow
- Met. Temperature
- Discharge
- Met. Evaporation

## Optional:

Select All / Unselect all

- Pressure
- River Temperature
- Gross content
- Sediment
- Water Quality
- Snowfall
- Inflow
- Humidity
- Run-Off Volume
- Reservoir Evaporation
- Snow Stake
- Outflow
- Wind
- Reservoir W.L.
- Snow climatic
- Sunshine
- Diff. inflow & losses
- Snow Survey Summary
- Solar Radiation
- Storage
- Water equivalent

Hide empty series



Series:

User name: Chanchal Chakraborty



# Create a New SCENARIO: Click Add to scenario

Secondary validation - Main view

**Series:**

Filter again + Add to scenario

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	REPLICATOR	START DATE	END DATE	MIN	MAX
<input checked="" type="checkbox"/>	<input type="radio"/>	EXAMPLE-1 - Example-RDD	MPA - Rainfall - ARG Millimeters (mm)	Daily			Thursday 1 July 2010	Saturday 31 July 2010	1	20
<input checked="" type="checkbox"/>	<input type="radio"/>	EXAMPLE-1 - Example-RDD	MPS - Rainfall - SRG Millimeters (mm)	Daily			Friday 1 June 2001	Wednesday 2 April 2014	0	79
<input type="checkbox"/>	<input type="radio"/>	EXAMPLE-1 - Example-RDD	MPS - Rainfall - SRG Millimeters (mm)	Twice Daily	Cyclic		Monday 1 August 2011	Wednesday 31 August 2011	0	8.4

1-3 of 3

**Graph**

Actions on current scenario:

Time series analysis Gap filling Stage-discharge Compilation & Generation

**Current Scenario:**

-- No scenario loaded / saved yet --

Data series + New scenario Save scenario Load scenario Load last scenario used 'Rating Curve'

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	POSITION	BASIC TIME UNIT	REPLICATOR
<b>No series</b>							

**From:** Year: -- Select a year -- Month: -- Select a month --

Working on: CWC Hydrometeorological Secondary Validation database

User name: Chanchal Chakraborty  
User group: 8 groups



# Save Scenario

Secondary validation - Main view



## Series:

Filter again + Add to scenario

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	REPLICATOR	START DATE	END DATE	MIN	MAX
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EXAMPLE-1 - Example-RDD	MPA - Rainfall - ARG Millimeters (mm)	Daily			Thursday 1 July 2010	Saturday 31 July 2010	1	20
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EXAMPLE-1 - Example-RDD	MPS - Rainfall - SRG Millimeters (mm)	Daily			Friday 1 June 2001	Wednesday 2 April 2014	0	79
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EXAMPLE-1 - Example-RDD	MPS - Rainfall - SRG Millimeters (mm)	Twice Daily	Cyclic		Monday 1 August 2011	Wednesday 31 August 2011	0	8.4

1-3 of 3

## Graph

Actions on current scenario (2 series):



## Current Scenario:

-- No scenario loaded / saved yet --

Data series + New scenario Save scenario Load scenario Load last scenario used 'Rating Curve'

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	POSITION	BASIC TIME UNIT	REPLICATOR
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EXAMPLE-1 - Example-RDD	MPS - Rainfall - SRG Millimeters (mm)	Daily			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	EXAMPLE-1 - Example-RDD	MPA - Rainfall - ARG Millimeters (mm)	Daily			

From:

Year: 2001  
Month: June

Year: 2014

User name: Chanchal Chakraborty

User group: 8 groups



# Load Scenario

Secondary validation - Main view



1-1 of 0

## Graph

Actions on current scenario :

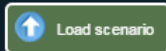


Back |

SELECTION	SCENARIO NAME	SAVED AT
<input type="checkbox"/>	Cauvery	24-Feb-2015
<input type="checkbox"/>	CAUVERY	24-Feb-2015
<input type="checkbox"/>	Cauvery rainfall	24-Feb-2015
<input type="checkbox"/>	CauveryRainfall	24-Feb-2015
<input type="checkbox"/>	HHS-Mahanadi	28-Nov-2014
<input type="checkbox"/>	Kran	23-Feb-2015
<input type="checkbox"/>	Konta WL Discharge	20-Feb-2015
<input type="checkbox"/>	Mahanadi	24-Feb-2015
<input type="checkbox"/>	MPA MPS	25-Mar-2015
<input type="checkbox"/>	Narmada rainfall	23-Feb-2015
<input type="checkbox"/>	RainFall	05-Nov-2014
<input type="checkbox"/>	Rainfall at Tapi	18-Nov-2014
<input type="checkbox"/>	RainFallData	07-Nov-2014
<input type="checkbox"/>	Rating Curve	17-Feb-2015
<input type="checkbox"/>	Water-Level	25-Nov-2014

1-15 of 15

Actions on selected scenario:



Working on: CWC Hydrometeorological Secondary Validation database

User name: Chanchal Chakraborty  
User group: 8 groups



# Modules of Secondary validation

## SECONDARY VALIDATION:

- Time Series Analysis
- Gap Filling and Correction
- Stage-Discharge
- Compilation and Generation
- Sediment rating Equation



# Time Series Analysis :Sub Modules

## Time Series Analysis :

- ❑ General Inspection of Series :
  - Graphical Analysis
  - Inspection of Values
  - Computation of Relation Curve
- ❑ Inspection Longitudinal variation
- ❑ Double Mass Analysis
- ❑ Other Analysis



# Graphical Analysis

Secondary validation - Main view



Time series analysis | Gap filling & Correction | Stage-discharge | Compilation and generation | Sediment Rating Equation

General inspection of series | Inspection longitudinal variation | Double mass analysis | Other analysis

Graphic analysis | Inspection of values | Computation of relation curves

### Range date

From: 01-06-2003

To: 31-08-2003

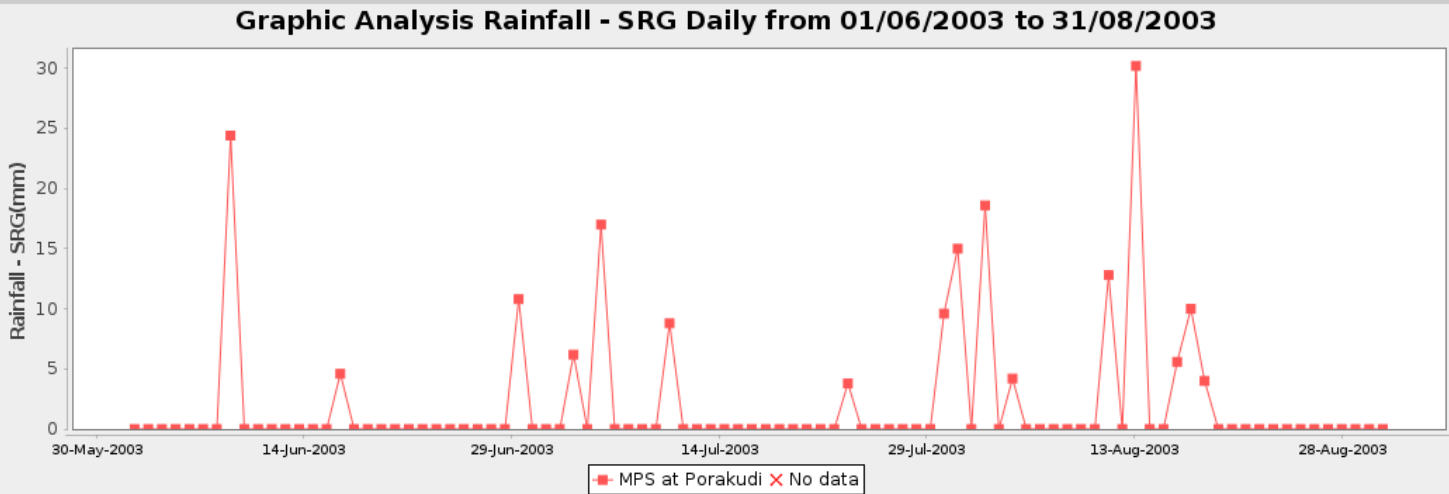
### Graph type

- Scatter
- Lines
- Bar

### Axis

- X-Axis: -- Select value for X-Axis --
- Logarithmic scale on X-Axis
- Y-Axis: -- Select value for Y-Axis --
- Logarithmic scale on Y-Axis
- Y'-Axis: -- Select value for Y'-Axis --

Actions:



Fix graph to data range

Zoom: 1





# Inspection of value

## Secondary validation - Main view



<input checked="" type="checkbox"/>	<input type="checkbox"/>	CCP00B1 - T.Narasipur	MPS - Rainfall - SRG Millimeters (mm)	Daily	Lon: 76.8861 Lat:12.23	Tuesday 1 September 2009	Monday 30 April 2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CC000K5 - URACHIKOTTAI	MPS - Rainfall - SRG Millimeters (mm)	Daily	Lon: 77.7014 Lat:11.4778	Sunday 1 June 2003	Thursday 31 May 2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CC000R5 - Kollegal	MPS - Rainfall - SRG Millimeters (mm)	Daily	Lon: 77.1 Lat:12.1892	Monday 1 May 1995	Monday 30 April 2012

10

Time series analysis | Gap filling & Correction | Stage-discharge | Compilation and generation | Sediment Rating Equation

General inspection of series | Inspection longitudinal variation | Double mass analysis | Other analysis

Graphic analysis | **Inspection of values** | Computation of relation curves

**Range date**

From: 01-06-2003  
To: 30-09-2003

Inspection days

Inspection months

Inspection seasons

Spring      Summer

Month: -- Select a month    Month: -- Select a month

Day:                            Day:                           

Autum      Winter

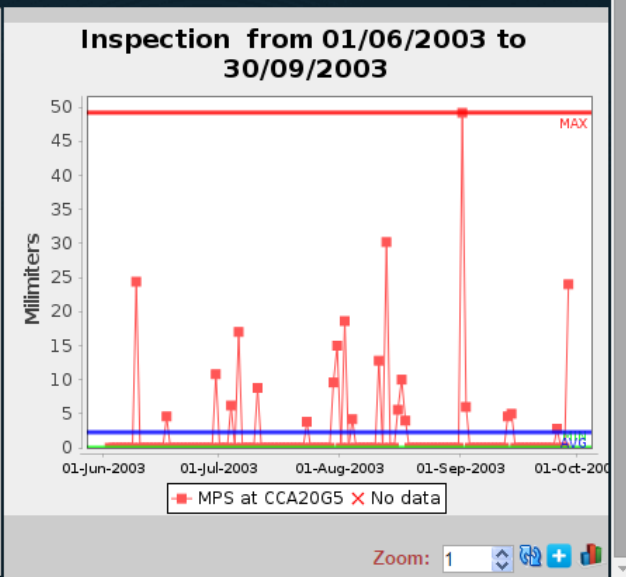
Month: -- Select a month    Month: -- Select a month

Day:                            Day:                           

**Report Data Section**

<input type="checkbox"/> SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<input type="checkbox"/>	<input type="checkbox"/>	CC000K5 - URACHIKOTTAI	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CC000R5 - Kollegal	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CC000Y5 - Kudige	MPS - Rainfall - SRG Millimeters
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>CCA20G5 - Porakudi</b>	<b>MPS - Rainfall - SRG Millimeters</b>
<input type="checkbox"/>	<input type="checkbox"/>	CCG00E3 - SAVANDAPUR	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CCG10E9 - THENGUMARAHADA	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CCK00L9 - KUDLUR	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CCP00B1 - T.Narasipur	MPS - Rainfall - SRG Millimeters
<input type="checkbox"/>	<input type="checkbox"/>	CCP00T8 - MUTHANKERA	MPS - Rainfall - SRG Millimeters

1-10 of 10



# Inspection of value

Secondary validation - Main view

<input checked="" type="checkbox"/>	<input type="checkbox"/>	CCP00B1 - T.Narasipur	MPS - Rainfall - SRG Millimeters (mm)	Daily	Lon: 76.8861 Lat:12.23	Tuesday 1 September 2009	Monday 30 April 2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CC000K5 - URACHIKOTTAI	MPS - Rainfall - SRG Millimeters (mm)	Daily	Lon: 77.7014 Lat:11.4778	Sunday 1 June 2003	Thursday 31 May 2012
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CC000R5 - Kollegal	MPS - Rainfall - SRG Millimeters (mm)	Daily		Monday 1 May 1995	Monday 30 April 2012

Time series analysis | Gap filling & Correction | Stage-disc...

General inspection of series | Inspection longitudinal variatio...

Graphic analysis | **Inspection of values** | Computation of rel...

Range date

From: 01-06-2003  
To: 30-09-2003

Inspection days

Inspection months

Inspection seasons

Spring Summer  
Month: -- Select a month Month: -- Select a month  
Day: Day:

Autum Winter  
Month: -- Select a month Month: -- Select a month  
Day: Day:

**Series review**

**Series info**

Code: CCA20G5  
Name: Porakudi  
Data type: MPS - Rainfall - SRG Millimeters (mm)  
Time Interval: Daily  
Saved at: 24-Feb-2015  
Remarks:

**Geographic & Administrative hierarchy**

Basin: Cauvery  
River: --  
Tributary: -

**Report**

DATETIME	VALUE	REMARK
01-Jun-2003 8:00 am	0	
02-Jun-2003 8:00 am	0	
03-Jun-2003 8:00 am	0	
04-Jun-2003 8:00 am	0	
05-Jun-2003 8:00 am	0	
06-Jun-2003 8:00 am	0	
07-Jun-2003 8:00 am	0	
08-Jun-2003 8:00 am	24.4	
09-Jun-2003 8:00 am	0	
10-Jun-2003 8:00 am	0	
11-Jun-2003 8:00 am	0	
12-Jun-2003 8:00 am	0	

1-122 of 122

**Format Report Selector**

Pdf  
 Excel  
 Doc

Generate Close

om 01/06/2003 to 09/2003

Millimeters

Zoom: 1

Working on: CWC Hydrometeorological Secondary Validation database Scenario: Cauvery rainfall

User name: Chanchal Chakraborty  
User group: 8 groups



# Computation of Relation Curve

Secondary validation - Main view



Graphic analysis Inspection of values **Computation of relation curves**

## Range date

From: 01-06-2003

To: 30-09-2004

## Axis

X-Axis: THENGUMARAHADA MPS - Ra

Y-Axis: Kollegal MPS - Rainfall - SRG M

## Method Interpolation

Polynomial

Degree

1

Power

Exponential

## Goodness test

Mean quadratic error

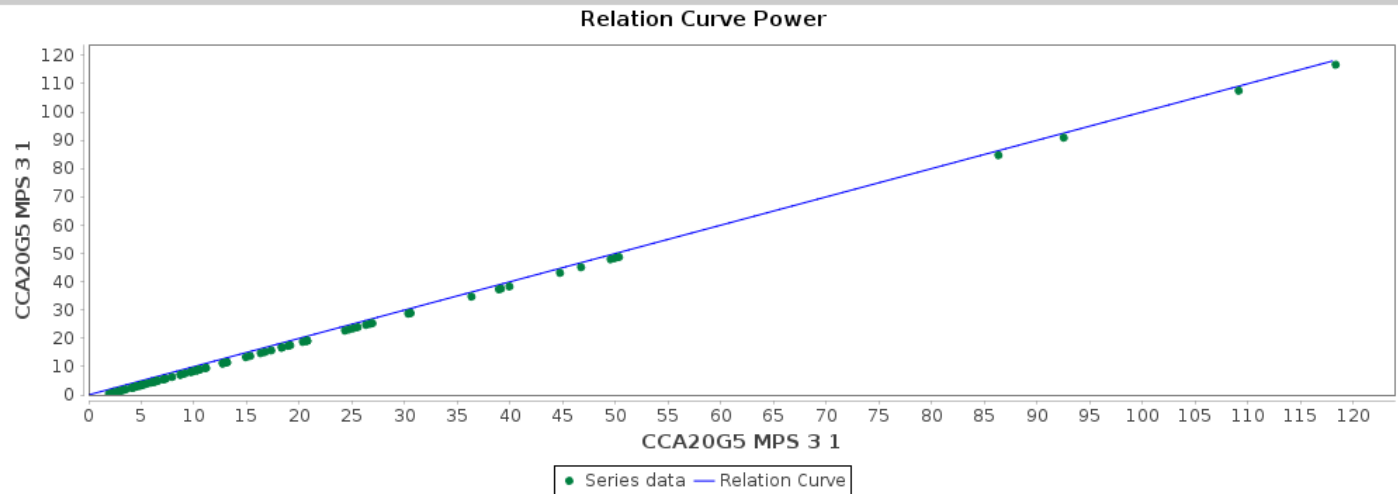
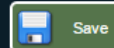
Actions:



## Generated curve

Series: CCA20G5 MPS Daily  
CCA20G5 MPS Daily

Equations:  $1 * X^1$  Type: Power Standard error: 0



Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Cauvery rainfall

User name: Chanchal Chakraborty  
User group: 8 groups



# Inspection Longitudinal variation

Secondary validation - Main view



General inspection of series   **Inspection longitudinal variation**   Double mass analysis   Other analysis

Range date

From: 01-06-2014

To: 30-11-2014

Inspection days

Inspection months

Inspection seasons

Spring

Summer

Month: -- Select a month

Month: -- Select a month

Day: [dropdown]

Day: [dropdown]

Autum

Winter

Month: -- Select a month

Month: -- Select a month

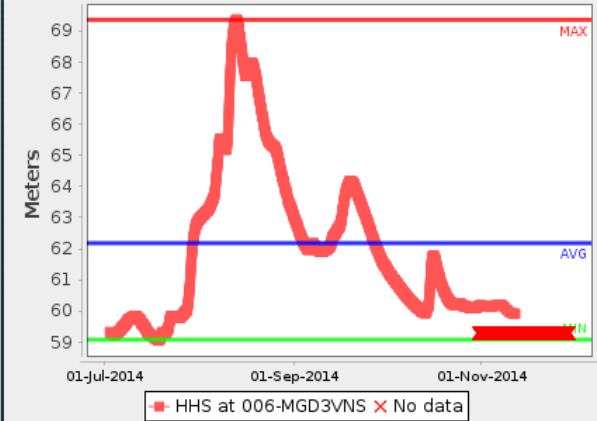
Day: [dropdown]

Day: [dropdown]

Report Data Section

<input checked="" type="checkbox"/> SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	006.MGD3VNS - VARANASI	HHS - WL by Staff Gauge (Meters (m))

Inspection from 01/06/2014 to 30/11/2014



Zoom: 1

Range date

From: 01-06-2014

To: 30-11-2014

Graph type

Scatter

Lines

Graphic Analysis WL by Staff Gauge (MSL) Hourly from 01/06/2014 to 30/11/2014



Working on: CWC Hydrometeorological Online database

Scenario: WL-Rainfall

User name: Chanchal Chakraborty

User group: 8 groups



# Double Mass Analysis

Secondary validation - Main view



<input type="checkbox"/>	<input checked="" type="checkbox"/>	004-mgd3vns - SITAMARHI	MPS - Rainfall - SRG Milimeters (mm)	Monthly	Lon: 82.2872 Lat: 25.2772
<input type="checkbox"/>	<input checked="" type="checkbox"/>	006-MGD3VNS - VARANASI	MPS - Rainfall - SRG Milimeters (mm)	Daily	Lon: 83.0333 Lat: 25.3167
<input type="checkbox"/>	<input checked="" type="checkbox"/>	003-MGD3VNS - ALLAHABAD	HHS - WL by Staff Gauge (MSL) Meters	Monthly	Lon: 81.9167

To: Year: 2014  
Month: November

- Time series analysis
- Gap filling & Correction
- Stage-discharge
- Compilation and generation
- Sediment Rating Equation
- General inspection of series
- Inspection longitudinal variation
- Double mass analysis**
- Other analysis

**Range date**

From: 01-06-2014  
To: 30-11-2014

**Accumulation**

Data  
 Percentage (%)

**Selected series**

Test series: SITAMARHI MPS - Rainfall - SRG Mil

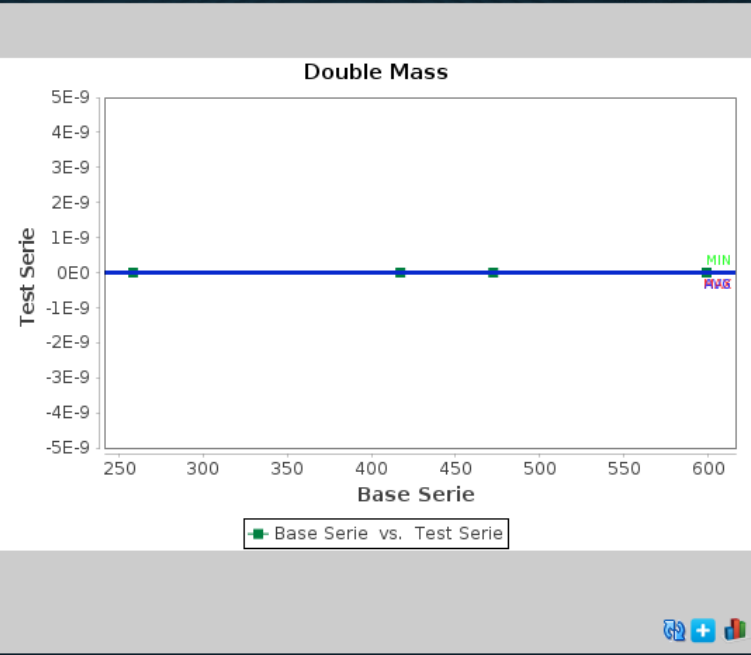
Base series:

SELECTION	SERIES	WEIGHT
<input checked="" type="checkbox"/>	ALLAHABAD MPS - Rainfall - SRG Milimeters (mm) Daily	1

**Report Data Section**

Period	Base Value	Base Accum.	Base % Accum.	Test Value	Test Accum.	Test % Accum.	Ratio Accum.	Ratio % Accum.
Wednesday 9 July 2014	0	19.6						
Thursday 10 July 2014	0	19.6						
Friday 11 July 2014	0	19.6						
Saturday 12 July 2014	0	19.6						
Sunday 13 July 2014	20.8	40.4						
Monday 14 July 2014	0	40.4						
Tuesday 15 July 2014	0	40.4						
Wednesday 16 July 2014	0	40.4						
Thursday								

1-100 of 154



# Other Analysis: Residual Series

Secondary validation - Main view

006-MGD3VNS - VARANASI MPS - Rainfall - SRG Millimeters (mm) Daily Lon: 83.0333 Lat:25.3167  
003-MGD3VNS - ALLAHABAD HHS - WL by Staff Gauge (MSL) Meters Monthly Lon: 81.9167

To: Month: November

Time series analysis Gap filling & Correction Stage-discharge Compilation and generation Sediment Rating Equation

General inspection of series Inspection longitudinal variation Double mass analysis Other analysis

Options

- Residual series  
VARANASI HHS - WL by Staff Gauge (MSL) M  
Not advisable to use for Rainfall
- Balances  

SELECTION	SERIES	COEFFICIENT
<input type="checkbox"/>	VARANASI HHS - WL by Staff Gauge (MSL) Meters (m) Hourly	
<input type="checkbox"/>	SITAMARHI	
- Residual mass curves  
-- Select a series --

Range date

From: 01-06-2014  
To: 30-11-2014

Actions: Execute Report

Residual Serie Chart

Zoom: 1

Working on: CWC Hydrometeorological Online database Scenario: WL-Rainfall

User name: Chanchal Chakraborty  
User group: 8 groups



# Other Analysis : Balamce

Secondary validation - Main view

006-MGD3VNS - VARANASI MPS - Rainfall - SRG Millimeters (mm) Daily Lon: 83.0333 Lat:25.3167  
003-MGD3VNS - ALLAHABAD HHS - WL by Staff Gauge (MSL) Meters Monthly Lon: 81.9167

To: Month: November

Time series analysis Gap filling & Correction Stage-discharge Compilation and generation Sediment Rating Equation

General inspection of series Inspection longitudinal variation Double mass analysis **Other analysis**

**Options**

- Residual series  
VARANASI HHS - WL by Staff Gauge (MSL) M
- Not advisable to use for Rainfall
- Balances

SELECTION	SERIES	COEFFICIENT
<input checked="" type="checkbox"/>	ALLAHABAD HHS - WL by Staff Gauge (MSL) Meters (m) Hourly	2
<input type="checkbox"/>	ALLAHABAD	

- Residual mass curves  
-- Select a series --

**Range date**

From: 01-06-2014  
To: 30-11-2014

Actions: Execute Report

**Balances Chart**

Value

Time

Result Series

Zoom: 1

Working on: CWC Hydrometeorological Online database Scenario: WL-Rainfall

User name: Chanchal Chakraborty  
User group: 8 groups



# Gap Filling & Correction

## Gap Filling & Correction :

- Relation Curve
- Constant Correction
- Using Existing records
- Shifting
- Drift Correction





# Relation Curve

Secondary validation - Main view



CCG00Q8 - NELLITHURAI - MPS - Rainfall - SRG Millimeters (mm) Daily

- Time series analysis
  - Gap filling & Correction**
  - Stage-discharge
  - Compilation and generation
  - Sediment Rating Equation
- Relation curves**
  - Constant correction
  - Using existing records
  - Shifting
  - Drift correction

**Range date**

From: 01-09-2008  
To: 31-05-2012

**Method Interpolation**

Linear interpolation of missing values  
Maximum Interpolation Distance: 100

Enter a number of time intervals. This means that gaps larger than this maximum will not be filled-in. Linear = Polynomial degree 1. For Rainfall this method is recommended only for Hourly

Polynomial  
Power  
Exponential

No relation curves for the selected series

## Input Gap Filling

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SRG Millimeters (mm)

**Series review**

**Series info**

Code: CCG00Q8  
Name: NELLITHURAI  
Data type: MPS - Rainfall - SRG Millimeters (mm)  
Time Interval: Daily  
Saved at: 24-Feb-2015  
Remarks:

**Geographic & Administrative hierarchy**

Basin: Cauvery  
River: --  
Tributary: Bhavani

**Report**

DATETIME	VALUE	REMARK
01-Sep-2008 8:30 am	0.6	
02-Sep-2008 8:30 am	4.2	
03-Sep-2008 8:30 am	0	
04-Sep-2008 8:30 am	2	
05-Sep-2008 8:30 am	0	

## Result Gap Filling

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SRG Millimeters (mm)

**Series review**

**Series info**

Code: CCG00Q8  
Name: NELLITHURAI  
Data type: MPS - Rainfall - SRG Millimeters (mm)  
Time Interval: Daily  
Saved at: 26-Mar-2015  
Remarks: GENERATED FROM LINEAR INTERPOLATION

**Geographic & Administrative hierarchy**

Basin: Cauvery  
River: --  
Tributary: Bhavani

**Report**

DATETIME	VALUE	REMARK	COMPUTED
01-Sep-2008 8:30 am	0.6		No
02-Sep-2008 8:30 am	4.2		No
03-Sep-2008 8:30 am			No

Working on: CWC Hydrometeorological Secondary Valid



# Constant Correction

Secondary validation - Main view



Time series analysis **Gap filling & Correction** Stage-discharge Compilation and generation Sediment Rating Equation

Relation curves **Constant correction** Using existing records Shifting Drift correction

### Range date

From: 01-09-2000  
To: 31-05-2001

### Method Interpolation

#### Block-type filling-in

Filling-in data according to the 'block-type filling-in' option comprises the replacement of missing data by the last non-missing value before any gap.

### Goodness test

T-Student test  
Level of significance  
1  
 Mean quadratic error

Actions:



Successfully generated

### Input Gap Filling

Report			
SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SRG Milimeters (mm)
<input type="checkbox"/>	<input type="checkbox"/>	CCP00T8 - MUTHANKERA	MPS - Rainfall - SRG Milimeters (mm)

### Result Gap Filling

Report			
SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<input type="checkbox"/>	<input type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SRG Milimeters (mm)

### Graph

#### Graph

Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Cauvery

User name: Chanchal Chakraborty  
User group: 8 groups



# Using Existing Record

Secondary validation - Main view



- Time series analysis
- Gap filling & Correction**
- Stage-discharge
- Compilation and generation
- Sediment Rating Equation
- Relation curves
- Constant correction
- Using existing records**
- Shifting
- Drift correction

**Range date**

From: 01-09-2004

To: 31-05-2005

**Method Interpolation**

Aggregation  Disaggregation

**Goodness test**

T-Student test  
Level of significance: 1

Mean quadratic error

### Input Gap Filling

Report

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
<b>Select an interpolation method</b>			

### Result Gap Filling

Delete Report

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE
-----------	----------------	---------	-----------

Actions:

Execute

Graph

Graph



# Shifting

## Secondary validation - Main view



- Time series analysis
- Gap filling & Correction**
- Stage-discharge
- Compilation and generation
- Sediment Rating Equation
- Relation curves
- Constant correction
- Using existing records
- Shifting**
- Drift correction

### Range date

From: 01-04-2003

To: 30-09-2003

### Series comparison

SELECTION	REVIEW ENTRIES	STATION	DATA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SR
<input type="checkbox"/>	<input type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SR
<input type="checkbox"/>	<input type="checkbox"/>	CCP00T8 - MUTHANKERA	MPS - Rainfall - SR
<input type="checkbox"/>	<input type="checkbox"/>	CCK00L9 - KUDLUR	MPS - Rainfall - SR
<input type="checkbox"/>	<input type="checkbox"/>	CC000K5 - URACHIKOTTAI	MPS - Rainfall - SR
<input type="checkbox"/>	<input type="checkbox"/>	CCG00Q8 - NELLITHURAI	MPS - Rainfall - SR

### Report

DATE	Observed NELLITHURAI	Corrected THENGUMARAHADA
26-Jun-2003 8:30:00 am	0	0
27-Jun-2003 8:30:00 am	0	0
28-Jun-2003 8:30:00 am	0	0
29-Jun-2003 8:30:00 am	0	0
30-Jun-2003 8:30:00 am	0	0
01-Jul-2003 8:30:00 am	0	0
02-Jul-2003 8:30:00 am	0	0
03-Jul-2003 8:30:00 am	0	0
04-Jul-2003 8:30:00 am	1.6	2.5
05-Jul-2003 8:30:00 am	3	0
06-Jul-2003 8:30:00 am	0	0
07-Jul-2003 8:30:00 am	0	0
08-Jul-2003 8:30:00 am	0	0
09-Jul-2003 8:30:00 am	0	0
10-Jul-2003 8:30:00 am	3.6	0
11-Jul-2003 8:30:00 am	0	0
12-Jul-2003 8:30:00 am	0	0
13-Jul-2003 8:30:00 am	0	0
14-Jul-2003 8:30:00 am	0	0

26-50 of 122

Actions on selected :

- Execute
- Save All
- Discard

### Corrected Series:

- Delete
- Report

Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Cauvery

User name: Chanchal Chakraborty

User group: 8 groups



# Drift Correction

Secondary validation - Main view



Time series analysis **Gap filling & Correction** Stage-discharge Compilation and generation Sediment Rating Equation

Relation curves Constant correction Using existing records Shifting **Drift correction**

Range date

From: 01-08-2003  
To: 31-08-2003

Drift correction parameters

Corrected value:  $Y = X + 2 * dt. + 2$

Actions on selected :



Corrected Series:

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	REPLICATOR	START DATE	END DATE	REMARK	MIN	MAX	AVG
<input type="checkbox"/>	<input checked="" type="checkbox"/>	CCGI0E9 - THENGUMARAHADA	MPS - Rainfall - SRG Millimeters (mm)	Daily			Sunday 1 June 2003	Monday 30 April 2012	GENERATED FROM DRIFT CORRECTION COEFFICIENT: 2.0 CONSTANT: 2.0	0	70	3.85

Graph

Working on: CWC Hydrometeorological Secondary Validation database Scenario: Cauvery

User name: Chanchal Chakraborty  
User group: 8 groups



# Stage-Discharge

Stage-Discharge :

- ❑ Fitting rating Curves
- ❑ Validation of Rating Equations
- ❑ Extrapolation of Rating Curve
- ❑ Stage-Discharge Computation



# Fitting of rating Curves :PART I

Secondary validation - Main view



- Time series analysis
  - Gap filling & Correction
  - Stage-discharge**
  - Compilation and generation
  - Sediment Rating Equation
- Fitting Rating Curves**
  - Validation of rating equations
  - Extrapolation of rating curves
  - Stage-discharge computation

Range date

From: 01-05-2005  
To: 31-08-2008

Hydraulic Computation Options

- Single channel rating curve
- Rating curve with backwater constant-fall correction
- Rating curve with backwater normal-fall correction
- Rating curve with unsteady flow correction
- Compound channel rating curve

Extra parameters:

Lowest water level for Jones correction:

Maximum value for 1/S0 vw:

Value for constant-fall:

Value for lower threshold of h for correction:

Parabolic

Power

Number of intervals in h:

Range from: 284 to 294.69

H-LOWER	H-UPPER	A-CORRECTION
284	288	0

Edit | Report | Ignore Computed values

SELECTION	DAY	Time	OBS No.	WL w.r.t M.S.L. (h)	DISCHARGE (Q)	Fall	Gradient w.r.t	Obs./Comp.	FLAG
<input type="checkbox"/>	01-May-2005	8:00 am	1	284.39	108	-999	-999	Computed	1
<input type="checkbox"/>	02-May-2005	8:00 am	1	284.36	100.4	-999	-999	Observed	1
<input type="checkbox"/>	03-May-2005	8:00 am	1	284.33	93.2	-999	-999	Observed	1
<input type="checkbox"/>	04-May-2005	8:00 am	1	284.38	102	-999	-999	Observed	1
<input type="checkbox"/>	05-May-2005	8:00 am	1	284.39	101	-999	-999	Observed	1
<input type="checkbox"/>	06-May-2005	8:00 am	1	284.37	97.7	-999	-999	Observed	1
<input type="checkbox"/>	07-May-2005	8:00 am	1	284.31	85.14	-999	-999	Observed	1
<input type="checkbox"/>	08-May-2005	8:00 am	1	284.36	98	-999	-999	Computed	1
<input type="checkbox"/>	09-May-2005	8:00 am	1	284.36	96.53	-999	-999	Observed	1
<input type="checkbox"/>	10-May-2005	8:00 am	1	284.42	106.3	-999	-999	Observed	1
<input type="checkbox"/>	11-May-2005	8:00 am	1	284.37	97.96	-999	-999	Observed	1
<input type="checkbox"/>	12-May-2005	8:00 am	1	284.37	96.87	-999	-999	Observed	1
<input type="checkbox"/>	13-May-2005	8:00 am	1	284.55	146.6	-999	-999	Observed	1
<input type="checkbox"/>	14-May-2005	8:00 am	1	284.53	141.1	-999	-999	Observed	1
<input type="checkbox"/>	15-May-2005	8:00 am	1	284.49	138	-999	-999	Computed	1

1-35 of 1,219

Measured data Chart from -- to Aug 31, 2011



Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Rating Curve

User name: Chanchal Chakraborty  
User group: 8 groups



# Fitting of rating Curves : PART II

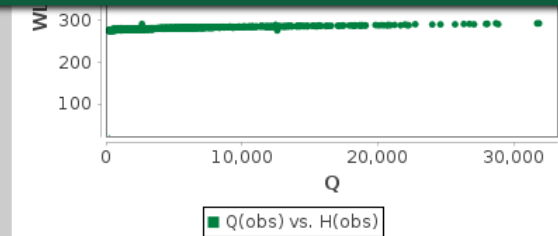
## Secondary validation - Main view



Range from: 284 to 294.69

H-LOWER	H-UPPER	A-CORRECTION
284	288	0
288	294.69	0

Fixed value for parameter a:



### Actions:



### Generated curve

Station: 010215019 - Narmada at Hoshangabad

- Equations:
- $Q = 112.61 H^2 - 63689.96 H + 9005398.63$  Type: Polynomial Low: 284 High: 288 Standard error: 22.454
  - $Q = 112.61 H^2 - 63689.96 H + 9005398.63 - 42.38 H^2 + 24583.59 H - 3565103.42$  Type: Polynomial Low: 288 High: 294.69 Standard error: 1,014.151

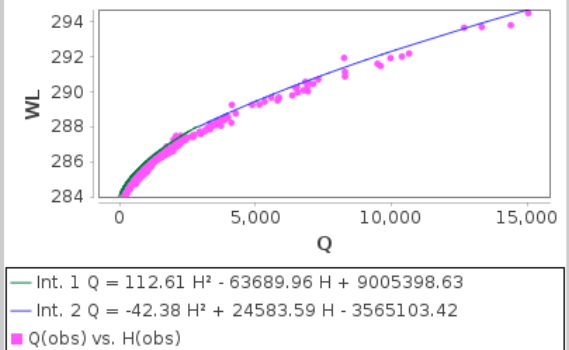


### Report

DATE	TIME	WL (M.S.L.)	Q MEASURED (m³/s)	Q COMPUTED (m³/s)	DIFF Q (m³/s)	REL. DIFF Q (%)
01-May-2005	8:00 am	284.39	108	99.652	-8.348	-8.377
02-May-2005	8:00 am	284.36	100.4	88.963	-11.437	-12.855
03-May-2005	8:00 am	284.33	93.2	78.488	-14.712	-18.744
04-May-2005	8:00 am	284.38	102	96.067	-5.933	-6.176
05-May-2005	8:00 am	284.39	101	99.652	-1.348	-1.352
06-May-2005	8:00 am	284.37	97.7	92.504	-5.196	-5.617
07-May-2005	8:00 am	284.31	85.14	71.621	-13.519	-18.877
08-May-2005	8:00 am	284.36	98	88.963	-9.037	-10.158
09-May-2005	8:00 am	284.36	96.53	88.963	-7.567	-8.505
10-May-2005	8:00 am	284.42	106.3	110.533	4.233	3.83
11-May-2005	8:00 am	284.37	97.96	92.504	-5.456	-5.898
12-May-2005	8:00 am	284.37	96.87	92.504	-4.366	-4.72
13-May-2005	8:00 am	284.55	146.6	160.018	13.418	8.385

### Rating Curve Chart

$R^2 = 0.998$



1-25 of 1,219



Working on: CWC Hydrometeorological Secondary Validation database



Scenario: Rating Curve



User name: Chanchal Chakraborty

User group: 8 groups





Range date

Hydraulic Computation Options

Constant-fall correction  
 Variable-fall correction  
 None

Rating curves

5 31/08/08 Generated at: 26/03/15 12:00 am

C(a)	C(b)	C(c)	data	St. ERROR
103.411	24,583.591	-42.377	54	1,014.151

Report

DAY	Time	OBS No.	WL w.r.t M.S.L (h)
01-May-2011	8:00 am	1	284.6
02-May-2011	9:00 am	1	284.55
03-May-2011	9:00 am	1	284.62
04-May-2011	9:00 am	1	284.74
05-May-2011	9:00 am	1	284.67
06-May-2011	9:00 am	1	284.58
07-May-2011	9:00 am	1	284.57
08-May-2011	8:00 am	1	284.65
09-May-2011	9:00 am	1	284.63
10-May-2011	9:00 am	1	284.61
11-May-2011	9:00 am	1	284.61
12-May-2011	9:00 am	1	284.55
13-May-2011	9:00 am	1	284.55
14-May-2011	8:10 am	1	284.7
15-May-2011	8:00 am	1	284.72
16-May-2011	9:00 am	1	284.72
17-May-2011	8:00 am	1	284.73
18-May-2011	9:00 am	1	284.74
19-May-2011	9:00 am	1	284.69
20-May-2011	9:00 am	1	284.66
21-May-2011	9:00 am	1	284.66
22-May-2011	8:00 am	1	284.64
23-May-2011	9:00 am	1	284.57
24-May-2011	9:00 am	1	284.56
25-May-2011	9:00 am	1	284.56
26-May-2011	9:00 am	1	284.53
27-May-2011	9:00 am	1	284.5
28-May-2011	9:00 am	1	284.46
29-May-2011	8:00 am	1	284.52

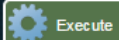
# Validation of rating Equation : PART II

Secondary validation - Main view

28-May-2011	9:00 am	1	284.46	114.116
29-May-2011	8:00 am	1	284.52	121.166
30-May-2011	9:00 am	1	284.54	124.803
31-May-2011	9:00 am	1	284.53	118.73
01-Jun-2011	9:00 am	1	284.5	115.724
02-Jun-2011	9:00 am	1	284.48	113.056
03-Jun-2011	9:00 am	1	284.46	109.916
04-Jun-2011	9:00 am	1	284.44	101.324

1-35 of 123

Actions:



Execute

## equation 1

Station: 010215019 - Narmada at Hoshangabad

Standar Deviation Obs. Q: 1682.363 Standar Deviation Cal. Q: 1682.363 Correlation Coef. 0.99727 Overall Standard Error: 215.612

Report

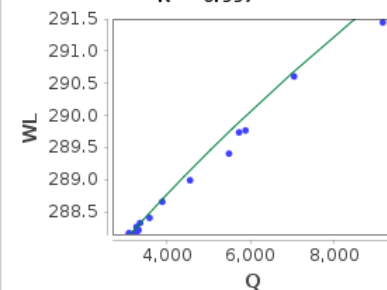
DATE	TIME	WL (M.S.L.)	Q MEASURED (m <sup>3</sup> /s)	Q COMPUTED (m <sup>3</sup> /s)	DIFF Q (m <sup>3</sup> /s)	REL. DIFF Q (%)
------	------	-------------	--------------------------------	--------------------------------	----------------------------	-----------------

No records

1-1 of 0

Rating Curve Chart

R<sup>2</sup> = 0.997



— Int. 1 Q = -42.38 H<sup>2</sup> + 24583.59 H - 35651  
 ■ Q(obs) vs. H(obs)

Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Rating Curve

User name: Chanchal Chakraborty  
 User group: 8 groups



# Extrapolation of rating curve

Stage-Discharge :

- Logarithmic Scale Method
- Stage-Area Velocity
- Manning Cross-section Properties
- With Rating Curve



# Logarithmic Scale Method

## Secondary validation - Main view



Fitting Rating Curves   Validation of rating equations   **Extrapolation of rating curves**   Stage-discharge computation

Logarithmic Scale Method   **Stage-Area-Velocity**   Manning Cross-Section properties   With Rating Curve

### Range date

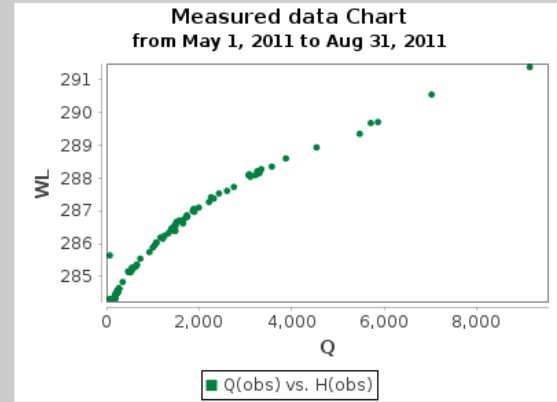
From: 01 - 05 - 2011  
To: 31 - 08 - 2011

### Levels at which parameters will be computed

Lower limit: \_\_\_\_\_ Levels each: \_\_\_\_\_  
Upper limit: \_\_\_\_\_ Extrapolate up to: \_\_\_\_\_  
Data: \_\_\_\_\_

Edit | Report | Ignore Computed values

SELECTION	DAY	Time	OBS No.	WL w.r.t M.S.L (h)	DISCHARGE (Q)	Fall	Gradient w.r.t	Obs./Comp.	FLAG
<input type="checkbox"/>	10-May-2011	9:00 am	1	284.61	164.028	-999	0	Observed	1
<input type="checkbox"/>	11-May-2011	9:00 am	1	284.61	162.436	-999	0	Observed	1
<input type="checkbox"/>	12-May-2011	9:00 am	1	284.55	126.858	-999	0	Observed	1
<input type="checkbox"/>	13-May-2011	9:00 am	1	284.55	127.221	-999	0	Observed	1
<input type="checkbox"/>	14-May-2011	8:10 am	1	284.7	183.955	-999	-999	Observed	1
<input type="checkbox"/>	15-May-							Computed	



1-35 of 123

Min. WL.: 284.24   13/06/11   Min. Q.: 0   12/06/11  
Max. WL.: 291.5   24/07/11   Max. Q.: 9075.814   24/07/11

### Cross Sectional Profiles

SELECTION	CODE	NAME	DATE
<input checked="" type="checkbox"/>	010215019	Namada at Hoshangabad	11-Jun-2005

### Multiple cross section plot



Working on: CWC Hydrometeorological Secondary Validation database   Scenario: Rating Curve

User name: Chanchal Chakraborty  
User group: 8 groups



# Stage –Area Velocity

Secondary validation - Main view



Fitting Rating Curves   Validation of rating equations   **Extrapolation of rating curves**   Stage-discharge computation

Logarithmic Scale Method   **Stage-Area-Velocity**   Manning Cross-Section properties   With Rating Curve

Range date

From: 01-05-2011  
To: 31-08-2011

Levels at which parameters will be computed

Lower limit:    Levels each:   
Upper limit:    Extrapolate up to:   
Data:

Edit   Report   Ignore Computed values

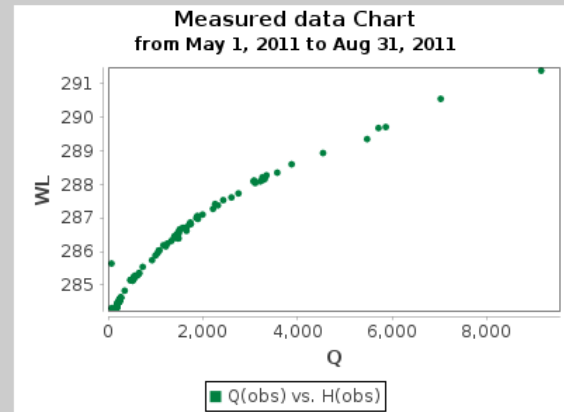
SELECTION	DAY	Time	OBS No.	WL w.r.t M.S.L. (h)	DISCHARGE (Q)	Fall	Gradient w.r.t.	Obs./Comp.	FLAG
<input type="checkbox"/>	01-May-2011	8:00 am	1	284.6	147.895	-999	-999	Computed	1
<input type="checkbox"/>	02-May-2011	9:00 am	1	284.55	126.286	-999	0	Observed	1
<input type="checkbox"/>	03-May-2011	9:00 am	1	284.62	168.735	-999	0	Observed	1
<input type="checkbox"/>	04-May-2011	9:00 am	1	284.74	199.671	-999	0	Observed	1
<input type="checkbox"/>	05-May-2011	9:00 am	1	284.67	165.454	-999	0	Observed	1
<input type="checkbox"/>	06-May-2011	9:00 am	1	284.58	134.018	-999	0	Observed	1

1-35 of 123

Min. WL.: 284.24   13/06/11   Min. Q.: 0   12/06/11  
Max. WL.: 291.5   24/07/11   Max. Q.: 9075.814   24/07/11

Cross Sectional Profiles

SELECTION	CODE	NAME	DATE
<input type="checkbox"/>	010215019	Narmada at Hoshanqabad	11-Jun-2005



Working on: CWC Hydrometeorological Secondary Validation database   Scenario: Rating Curve

User name: Chanchal Chakraborty  
User group: 8 groups



# Manning Cross-Section Properties

Secondary validation - Main view



Range date

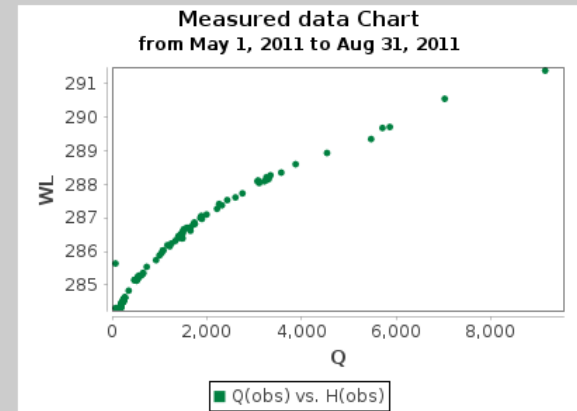
From: 01-05-2011  
To: 31-08-2011

Levels at which parameters will be computed

Level at Cross-section variation  
Lower limit:   
Upper limit:   
Levels each:

SELECTION	DAY	Time	OBS No.	WL w.r.t M.S.L. (h)	DISCHARGE (Q)	Fall	Gradient w.r.t	Obs./Comp.	FLAG
<input type="checkbox"/>	13-May-2011	9:00 am	1	284.55	127.221	-999	0	Observed	1
<input type="checkbox"/>	14-May-2011	8:10 am	1	284.7	183.955	-999	-999	Observed	1
<input type="checkbox"/>	15-May-2011	8:00 am	1	284.72	191.966	-999	-999	Computed	1
<input type="checkbox"/>	16-May-2011	9:00 am	1	284.72	190.174	-999	0	Observed	1
<input type="checkbox"/>	17-May-2011	8:00 am	1	284.73	195.852	-999	-999	Computed	1
<input type="checkbox"/>	18-May-								

1-35 of 123

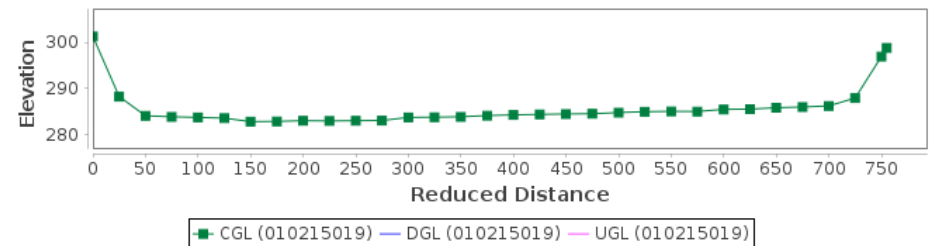


Min. WL.: 284.24      13/06/11      Min. Q.: 0      12/06/11  
Max. WL.: 291.5      24/07/11      Max. Q.: 9075.814      24/07/11

Cross Sectional Profiles

SELECTION	CODE	NAME	DATE
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	11-Jun-2005
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	27-Aug-2005
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	04-Jan-2006
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	05-Jun-2006
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	16-Sep-2006
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	20-Jan-2007
<input type="checkbox"/>	010215019	Narmada at Hoshangabad	08-May-2007

Multiple cross section plot



Working on: CWC Hydrometeorological Secondary Validation database      Scenario: Rating Curve

User name: Chanchal Chakraborty  
User group: 8 groups



# With Rating Curve

Secondary validation - Main view



Logarithmic Scale Method   Stage-Area-Velocity   Manning Cross-Section properties   **With Rating Curve**

### Range date

From: 01-05-2011

To: 31-08-2011

### Levels at which parameters will be computed

Levels each:

Extrapolate up to:

Data:

Min. WL.: 284.24   13/06/11   Min. Q.: 0   12/06/11  
 Max. WL.: 291.5   24/07/11   Max. Q.: 9075.814   24/07/11

### Hydraulic Computation Options

- Select a rating curve option --
- Single channel rating curve
- Rating curve with backwater constant-fall correction
- Rating curve with backwater normal-fall correction
- Rating curve with unsteady flow correction

### Rating curves

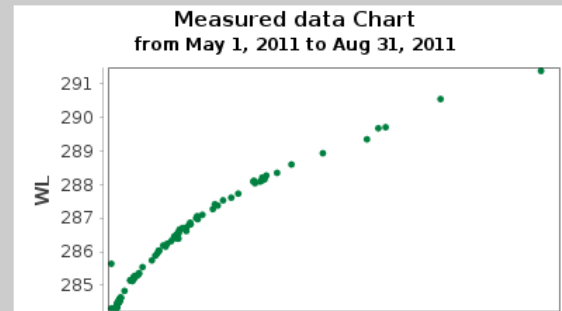
equation 1 - Data period: 01/05/05 31/08/08 Generated at: 26/03/15 12:00 am

LOW	HIGH	C(a)	C(b)	C(c)	data	St. ERROR
No stage-discharge data						

Edit | Report | Ignore Computed values

SELECTION	DAY	Time	OBS No.	WL w.r.t M.S.L. (h)	DISCHARGE (Q)	Fall	Gradient w.r.t.	Obs./Comp.	FLAG
<input type="checkbox"/>	01-May-2011	8:00 am	1	284.6	147.895	-999	-999	Computed	1
<input type="checkbox"/>	02-May-2011	9:00 am	1	284.55	126.286	-999	0	Observed	1
<input type="checkbox"/>	03-May-2011	9:00 am	1	284.62	168.735	-999	0	Observed	1
<input type="checkbox"/>	04-May-2011	9:00 am	1	284.74	199.671	-999	0	Observed	1
<input type="checkbox"/>	05-May-2011	9:00 am	1	284.67	165.454	-999	0	Observed	1
<input type="checkbox"/>	06-May-2011	9:00 am	1	284.58	134.018	-999	0	Observed	1
<input type="checkbox"/>	07-May-2011	9:00 am	1	284.57	132.106	-999	0	Observed	1
<input type="checkbox"/>	08-May-2011	8:00 am	1	284.65	165.683	-999	-999	Computed	1
<input type="checkbox"/>	09-May-2011	9:00 am	1	284.63	166.639	-999	0	Observed	1
<input type="checkbox"/>	10-May-2011	9:00 am	1	284.61	164.028	-999	0	Observed	1
<input type="checkbox"/>	11-May-2011	9:00 am	1	284.61	162.436	-999	0	Observed	1
<input type="checkbox"/>	12-May-2011	9:00 am	1	284.55	126.858	-999	0	Observed	1
<input type="checkbox"/>	13-May-2011	9:00 am	1	284.55	127.221	-999	0	Observed	1
<input type="checkbox"/>	14-May-2011	8:10 am	1	284.7	183.955	-999	-999	Observed	1

1-35 of 123



# Stage-Discharge Computation

## Stage Discharge Computation:

- ❑ With Rating Curve
- ❑ Weirs and Flumes





# With Rating Curves

Secondary validation - Main view



Time series analysis | Gap filling & Correction | **Stage-discharge** | Compilation and generation | Sediment Rating Equation

Fitting Rating Curves | Validation of rating equations | Extrapolation of rating curves | **Stage-discharge computation**

**With Rating Curves** | Weirs & flumes

### Range date

From: 01-05-2011  
To: 31-08-2011

### Hydraulic Computation Options

- Select a rating curve option --
- Single channel rating curve
- Rating curve with backwater constant-fall correction
- Rating curve with backwater normal-fall correction
- Rating curve with unsteady flow correction

### Rating curves

equation 1 - Data period: 01/05/05 31/08/08 Generated at: 26/03/15 12:00 am

LOW	HIGH	C(a)	C(b)	C(c)	data	St. ERROR
-----	------	------	------	------	------	-----------

No stage-discharge data

### Input series:

<input type="checkbox"/> SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	REPLICATOR
<input type="checkbox"/>	<input checked="" type="radio"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Hourly	Cyclic	
<input type="checkbox"/>	<input checked="" type="radio"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Thrice Daily	Cyclic	
<input type="checkbox"/>	<input checked="" type="radio"/>	010215019 - Narmada at Hoshangabad	HHS - WL by Staff Gauge (MSL) Meters (m)	Daily		
<input type="checkbox"/>	<input checked="" type="radio"/>	010215019 - Narmada at Hoshangabad	HHS - WL by Staff Gauge (MSL) Meters (m)	Thrice Daily	Cyclic	
<input type="checkbox"/>	<input checked="" type="radio"/>	010215019 - Narmada at Hoshangabad	HHS - WL by Staff Gauge (MSL) Meters (m)	Hourly		
<input type="checkbox"/>	<input checked="" type="radio"/>	AKL00S8 - HARALAHALLI	HZS - Water Level by Staff Gauge (0) Meters (m)	Thrice Daily	Cyclic	
<input type="checkbox"/>	<input checked="" type="radio"/>	EXAMPLE-2 - Example-NSWDC	HHS - WL by Staff Gauge (MSL) Meters (m)	Thrice Daily	Cyclic	
<input type="checkbox"/>	<input checked="" type="radio"/>	EXAMPLE-2 - Example-NSWDC	HHS - WL by Staff Gauge (MSL) Meters (m)	Hourly	Cyclic	
<input type="checkbox"/>	<input checked="" type="radio"/>	010215019 - Narmada at Hoshangabad	HZS - Water Level by Staff Gauge (0) Meters (m)	Daily		

Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Rating Curve

User name: Chanchal Chakraborty  
User group: 8 groups



# Weirs & Flumes

Secondary validation - Main view



Fitting Rating Curves   Validation of rating equations   Extrapolation of rating curves   **Stage-discharge computation**

With Rating Curves   **Weirs & flumes**

### Selection

Discharge:  Select one Discharge series  
Water level:   
Downstream level:

### Range date

From:   
To:

### Correction options

Include Velocity Head Correction  
 Check on modular limit

### Cross sections

Upstream:   
Downstream:

SELECTION	DATE
<input type="button" value="i"/> No records	

1-1 of 0

**Broad Crested Weirs**   Sharp Crested Weirs   Short Crested Weirs   Flumes

Structure	SILL LEVEL	SILL HEIGHT	STRUCTURE LENGTH	WEIR WIDTH	TRIANGLE_HEIGHT	STRUCTURE HEIGHT
Rectangular						

Working on: CWC Hydrometeorological Secondary Validation database   Scenario: Rating Curve

User name: Chanchal Chakraborty  
 User group: 8 groups



# Compilation And Generation

## Compilation And Generation

- Aggregation
- Disaggregation
- Creation of Derived Series
- Computation of Areal Rainfall
- Calculation of Evatranspitation



# Aggregation

Secondary validation - Main view



Time series analysis | Gap filling & Correction | Stage-discharge | **Compilation and generation** | Sediment Rating Equation

**Aggregation** | Disaggregation | Creation of derived series | Computation of areal rainfall | Calculation of evapotranspiration

### Output series definition

Unit: Day  
 Divider: 1  
 Daily

### Range date

From: 01-05-2011  
 To: 31-08-2011

### Options

- Time shift
- Ignoring missing value
- Value of first timestep

Actions on selected :



<input checked="" type="checkbox"/> SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	REPLICATOR	START DATE	END DATE
<input checked="" type="checkbox"/>	<input type="radio"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Hourly	Cyclic		Wednesday 1 June 2011	Tuesday 30 2011

1-1 of 1

### Generated Series:

Delete |  Report

<input checked="" type="checkbox"/> SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	START DATE	END DATE	REMARK
<input checked="" type="checkbox"/>	<input type="radio"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Daily		Wednesday 1 June 2011	Tuesday 30 August 2011	AGGREGATE

Working on: CWC Hydrometeorological Secondary Validation database | Scenario: Rating Curve

User name: Chanchal Chakraborty  
 User group: 8 groups



# Disaggregation

Secondary validation - Main view



Time series analysis | Gap filling & Correction | Stage-discharge | **Compilation and generation** | Sediment Rating Equation

Aggregation | **Disaggregation** | Creation of derived series | Computation of areal rainfall | Calculation of evapotranspiration

**Output series definition**

Unit:    
 Divider:    
 Hourly

**Range date**

From:    
 To:

**Options**

Interpolation

Actions on selected :

Execute

**Generated Series:**

Delete | Report

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	START DATE	END DATE	REMARK
<input checked="" type="checkbox"/>	<input type="checkbox"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Hourly		Wednesday 1 June 2011	Tuesday 30 August 2011	DISAGGREGATE

Working on: CWC Hydrometeorological Secondary Validation database

Scenario: Rating Curve

User name: Chanchal Chakraborty   
 User group: 8 groups



# Creation of Derived Series

Secondary validation - Main view



Time series analysis | Gap filling & Correction | Stage-discharge | **Compilation and generation** | Sediment Rating Equation

Aggregation | Disaggregation | **Creation of derived series** | Computation of areal rainfall | Calculation of evapotranspiration

### Output series definition

Unit:   
Divider:   
Twice Non-Equidistant

### Range date

From:   
To:

### Options

- Max
- Min
- Mean
- Median
- Multiply
- By
- Add
- Subtract

Actions on selected :



### Generated Series:

|

<input type="checkbox"/> SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	START DATE	END DATE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AKL00SB - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Thrice Daily	Cyclic	Wednesday 1 June 2011	Wednesday 31 August 2011

1-1 of 1

Working on: CWC Hydrometeorological Secondary Validation database | Scenario: Rating Curve

User name: Chanchal Chakraborty  
User group: 8 groups

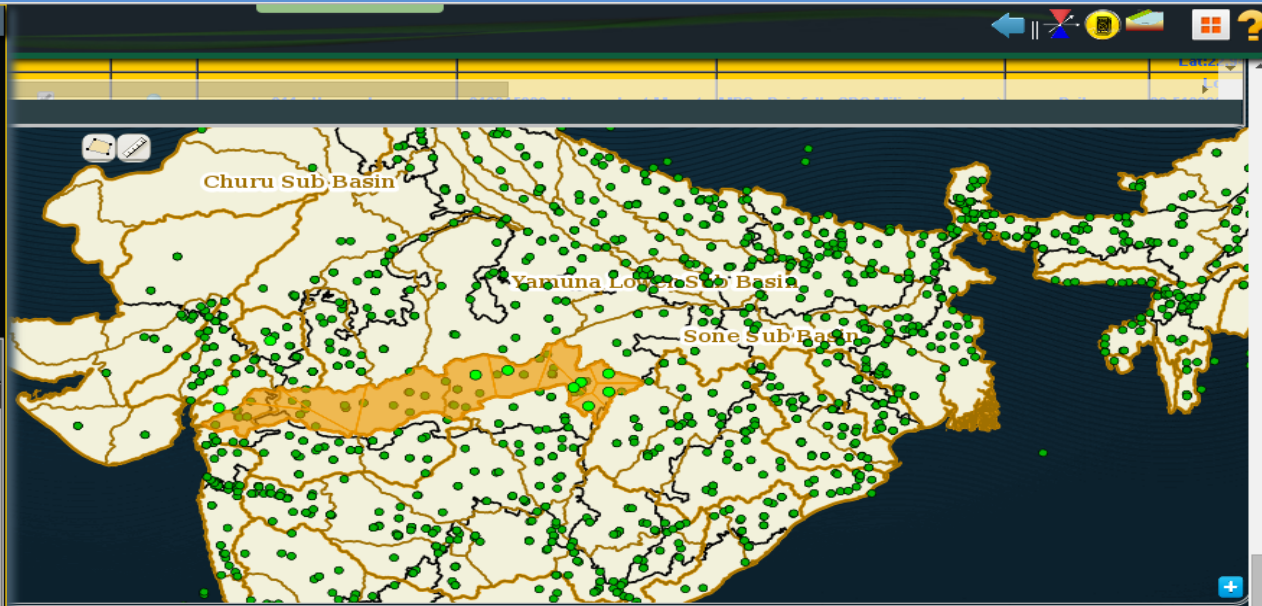


# Computation of Areal Rainfall

## Areal Series review

### Series info

**Basin:** 011  
**Name:** Narmada  
**Data type:** MPH - Rainfall - Areal Rainfall Cubic Hectometer (hm3)  
**Time Interval:** Daily  
**Saved at:** 09-Dec-2014  
**Remarks:** Areal Rainfall Thiessen Method Weights



### Report

DATETIME	VALUE	REMARK
14-Jun-2010 8:00 AM	0	
15-Jun-2010 8:00 AM	553.513	
16-Jun-2010 8:00 AM	574.363	
17-Jun-2010 8:00 AM	251.712	
18-Jun-2010 8:00 AM	73.113	
19-Jun-2010 8:00 AM	31.978	
20-Jun-2010 8:00 AM	37.792	
21-Jun-2010 8:00 AM	91.091	
22-Jun-2010 8:00 AM	709.156	
23-Jun-2010 8:00 AM	180.137	
24-Jun-2010 8:00 AM	491.739	
25-Jun-2010 8:00 AM	0	

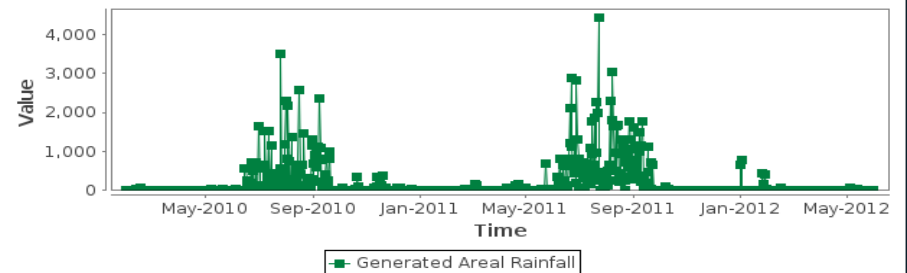
1-200 of 852

Close

### Delete Report

<input checked="" type="checkbox"/> SELECTION	STATION WEIGHTS	REVIEW ENTRIES	CATCHMENT	DATA TYPE
<input checked="" type="checkbox"/>			011 - Narmada	MPH - Rainfall - Areal Rainfall Cubic Hectometer (hm3)

Areal Rainfall Chart from 31/01/2010 to 31/05/2012



Zoom: 1

Working on: CWC Hydrometeorological Secondary Validation database Scenario: sc\_kriging

User name: Jesús Lunar  
User group: Admin group



# Calculation of evapotranspiration

Secondary validation - Main view



Time series analysis | Gap filling & Correction | Stage-discharge | **Compilation and generation** | Sediment Rating Equation

Aggregation | Disaggregation | Creation of derived series | Computation of areal rainfall | **Calculation of evapotranspiration**

## Evapotranspiration Method

- Penman Standard Method
- Penman Standard Modified Method
- Penman Standard with FAO corrections Method
- Pan Evaporation Method
- Christiansen Method
- Radiation Method
- Makkink Method
- Jensen-Haise Method
- Blaney-Criddle Method
- Mass Transfer Method

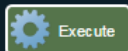
## Method

<input checked="" type="checkbox"/>	Air Pressure (mb)	-- Select some series --
	Air Temperature	-- Select some series --
<input type="radio"/>	Relative Humidity (%)	-- Select some series --
<input type="radio"/>	Dry Bulb Temperature	-- Select some series --
<input type="radio"/>	Wet Bulb Temperature	-- Select some series --
<input type="radio"/>	Dew Point Temperature	-- Select some series --
	Wind Run (Km/h)	-- Select some series --
	Height of wind measurement (m>0)	2
	Salinity	0
	FAO constant (c)	0.8
	PAN Evapotranspiration	
	Pan Coefficient (Kp)	0.8
	Adjustment factor	0.65
	(a) coefficient	
	(b) coefficient	
	Vapour pressure at evaporating surface (e0)	
	Vapour pressure at some fixed level above the evaporating surface (ea)	

## Radiation

Net Radiation	-- Select some series --				
Net Radiation	-- Select some series --				
Net Longwave Radiation	-- Select some series --				
Shortwave Radiation	-- Select some series --				
Sunshine Minutes (n)	-- Select some series --				
Albedo:	0.25				
Short Wave Rad. Par.:	0.25	b1:	0.5		
a1:		Long Wave Rad. Par.:	0.56	b2:	0.09
a2:		a3:	0.1	b3:	0.9

Actions on selected :



Working on: CWC Hydrometeorological Secondary Validation database | Scenario: Rating Curve

User name: Chanchal Chakraborty | User group: 8 groups





# Sediment Rating Equation

## Sediment Rating Equation :

- ❑ Fitting Rating Curves
- ❑ Computation of Sediments



# Secondary validation - Main view



<input checked="" type="checkbox"/>	<input type="checkbox"/>	AKL0058 - HARALARALLI	Thursday 1 December 1968	Saturday 30 June 2012	16/02/15 2:05 pm
<input type="checkbox"/>	<input type="checkbox"/>	EXAMPLE-2 - Example-NSWDC	Tuesday 1 August 2000	Wednesday 28 February 2001	17/02/15 3:10 pm

To:

Year: 2011  
 Month: August

- Time series analysis
- Gap filling & Correction
- Stage-discharge
- Compilation and generation
- Sediment Rating Equation**
- Fitting Rating Curves
- Computation of Sediments

**Range date**

From: 01-05-2011  
 To: 31-08-2011

**Method Interpolation**

Polynomial  
 Degree: 1

Power

Exponential

**Actions:**

Execute

Edit | Report | Ignore -999 values

<input type="checkbox"/> SELECTION	DAY	Time	OBS No.	TOTAL SUSPENDED SOLID (s)	DISCHARGE (Q)	Obs./Comp.	FLAG
<input type="checkbox"/>	17-May-2011	8:00 am	1	2	43.4	Computed	1
<input type="checkbox"/>	18-May-2011	9:00 am	1	2	58.751	Observed	1
<input type="checkbox"/>	19-May-2011	9:00 am	1	24	58.548	Observed	1
<input type="checkbox"/>	20-May-2011	9:00 am	1	25	65.552	Observed	1
<input type="checkbox"/>	21-May-2011	9:00 am	1	21	56.211	Observed	1
<input type="checkbox"/>	22-May-2011	8:00 am	1	2	50.35	Computed	1
<input type="checkbox"/>	23-May-2011	9:00 am	1	12	47.266	Observed	1
<input type="checkbox"/>	24-May-2011	9:00 am	1	21	42.312	Observed	1
<input type="checkbox"/>	25-May-2011	9:00 am	1	2	40.651	Observed	1
<input type="checkbox"/>	26-May-2011	9:00 am	1	22	37.78	Observed	1
<input type="checkbox"/>	27-May-2011	9:00 am	1	22	35.302	Observed	1
<input type="checkbox"/>	28-May-2011	9:00 am	1	22	35.716	Observed	1
<input type="checkbox"/>	29-May-2011	8:00 am	1	22	50.35	Computed	1

1-35 of 123

Report



# Secondary validation - Main view

## Current Scenario:

Rating Curve

Data series Change scenario

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	POSITION	BASIC TIME UNIT	REPLICATOR
<input type="checkbox"/>	<input type="radio"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Hourly	Lon: 75.6758 Lat:14.8317	Cyclic	
<input checked="" type="checkbox"/>	<input type="radio"/>	AKL00S8 - HARALAHALLI	HHS - WL by Staff Gauge (MSL) Meters (m)	Daily	Lon: 75.6758 Lat:14.8317	Cyclic	
<input type="checkbox"/>	<input type="radio"/>	AKL00S8 - HARALAHALLI	HZS - Water Level by Staff Gauge (0) Meters (m)	Thrice Daily	Lon: 75.6758 Lat:14.8317	Cyclic	
<input type="checkbox"/>	<input type="radio"/>	EXAMPLE 2 - Example NSMDC	HHS - WL by Staff Gauge (MSL) Meters	Thrice Daily	Lon: 80.0267	Cyclic	

**From:**

Year: 2011  
Month: May

**To:**

Year: 2011  
Month: August

- Time series analysis
- Gap filling & Correction
- Stage-discharge
- Compilation and generation
- Sediment Rating Equation**
- Fitting Rating Curves
- Computation of Sediments

**Range date**

From: 01-05-2011  
To: 31-08-2011

**Rating curves**

LOW	HIGH	(%)	(%)	(%)	(%)	(%)	(%)

**Input series:**

Delete

SELECTION	REVIEW ENTRIES	STATION	DATA TYPE	TIME INTERVAL	BASIC TIME UNIT	REPLICATOR
No data found						



# Import & Export

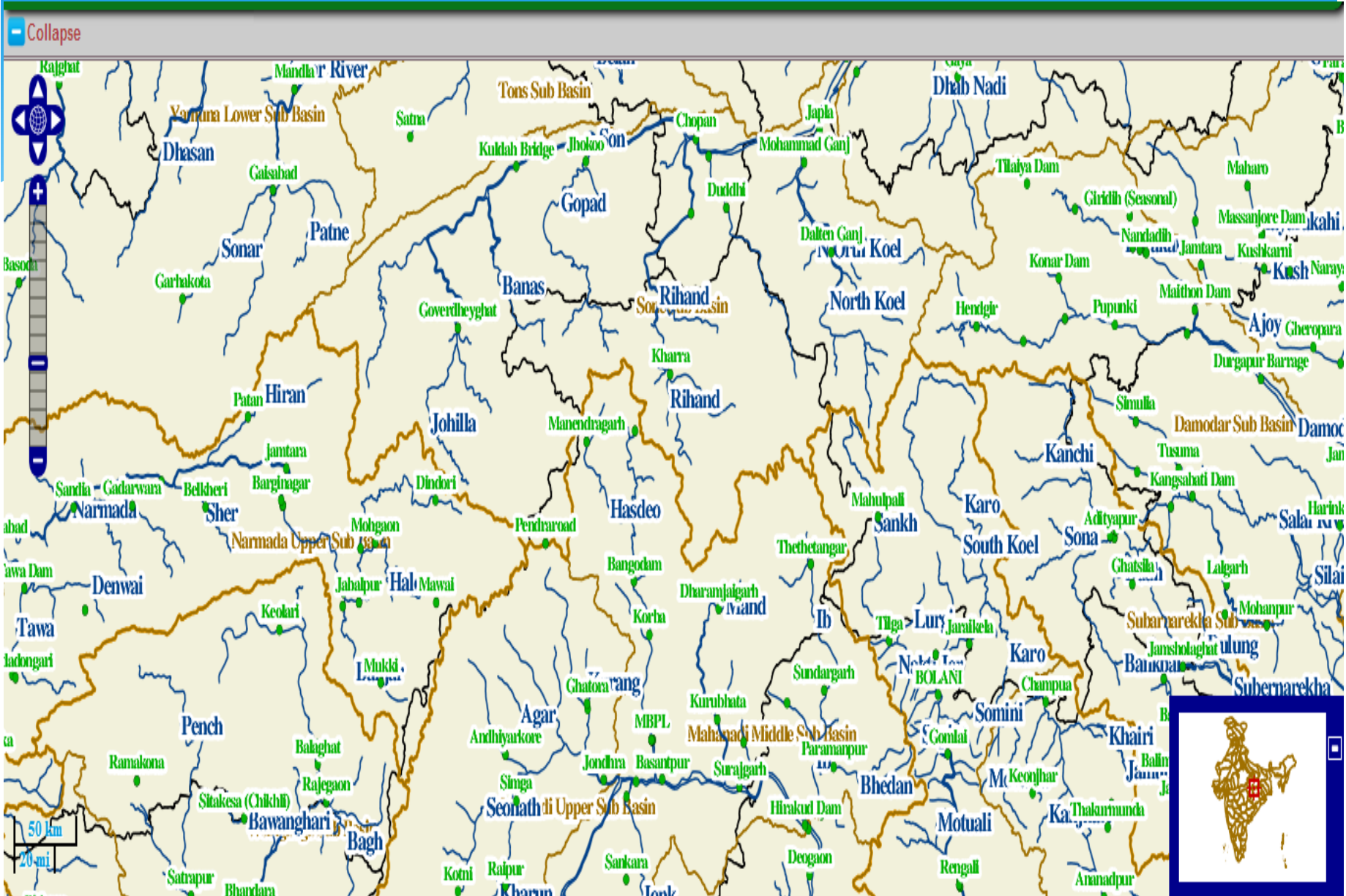
- \* Facility for importing data from various formats such as Excel, IMD, SWDES is available.
- \* Facility for exporting data to various formats such as Excel, Mike-11 etc is available.
- \* Various report such as year books etc can be generated.

# Data Dissemination

## □ Web based metadata catalogue

- Metadata and data availability for all stations is available on-line, but permissions for accessing actual data will be subject to control by the administrator.
- User will be able to view various details like name of station or agency to which station belong, type of observations taken at station, period of data availability etc for both map based and list based options.
- The catalogue will show station of different IAs/States separately and also in different possible combinations such as in a single basin user shall have the option to select agencies, type of stations, state/IAs etc. or any of them.
- This module will be available for all the people and will not require a login. It allows querying and searching all metadata/information available.
- user can order requisite data.

# Representation of HO site on Map



# Data Dissemination

URL: <http://180.92.171.80/wsdd>

**By station**

Code: 013-UYDDEL

Name: Baghpat

Local River / Basin: Yamuna

Division: Executive Engineer, Upper Yamuna Division, New Delhi

Sub-division: Yamuna Sub-Division, New Delhi

**By series**

Series code

- HHS 4 1
- HHT 4 1
- MPS 3 1
- MPT 4 1

**Data type**  
WL by Staff Gauge (MSL)

**Time Unit** 4    **Divider** 1

**Unit** Meters

**Period**

Year: 2014

Search

Clear filter

Advanced Search - Selection can be done using Division or River through advanced search

Pushing button 'Generate Records' will generate missing records for the selected station or series within the selected period.

SELECTION	MEDATATA	SERIES	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
<input type="checkbox"/>			✗	✗	✗	✗	✗	✗	✗	✗	✗
			Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data
<input checked="" type="checkbox"/>	✗	013-UYDDEL    MPT 4 1	Data Entered ✗	Data Entered ✗	Data Entered ✗	Data Entered ✗	Data Entered ✓	Data Entered ✓	Data Entered ✗	Data Entered ✗	Data Entered ✗
			Data Approved ✗	Data Approved ✗	Data Approved ✗	Data Approved ✗	Data Approved ✓	Data Approved ✓	Data Approved ✗	Data Approved ✗	Data Approved ✗
			Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗
			Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data

1-4 of 4

**Actions on selected :**

Modify    Approve    Publish    Unpublish    Metadata



# Add Metadata for the station

Book Register



## Layer Station Metadata

Select layer station

Layer Station:

003-MBDGHY - Matunga

### Layer Station Metadata information

Station Type:

Station Phone:

Data price per month:

Responsible:

Responsible Remarks:

Organization:

Station e-Mail:

Data price current:

Responsible Phone:

Account Number:

Location:

Station Remarks:

General remarks:

Responsible e-Mail:



Save



Go Back

User name: Chanchal Chakraborty






# Publish the Approved Data

**By station**

Code: 01 02 17 016  
 Name: Tapi at Ukai  
 Local River / Basin: Tapi  
 Division: Test  
 Sub-division: Test  
 Today Zero-RL: 47.853



**By series**

Series code  
 HHS 4 1  
 HZS 4 1  
 MEP 3 1  
 MPS 3 1

Data type  
 WL by Staff Gauge (MSL)  
 Time Unit Divider  
 4 1  
 Unit: Meters

Period



Year: 1998



Advanced Search - Selection can be done using Division or River through advanced search

Pushing button 'Generate Records' will generate missing records for the selected station or series within the selected period.

Generate records | Report

SELECTION	MEDATATA	SERIES	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
<input type="checkbox"/>		01 02 17 016	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗	Data Published ✗
			Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data
<input checked="" type="checkbox"/>	✓	01 02 17 016 MPS 3 1	Data Entered ✓	Data Entered ✓	Data Entered ✓	Data Entered ✓	Data Entered ✓	Data Entered ✓	Data Entered ✓	Data Entered ✓	Data Entered ✓
			Data Approved ✓	Data Approved ✓	Data Approved ✓	Data Approved ✓	Data Approved ✓	Data Approved ✓	Data Approved ✓	Data Approved ✓	Data Approved ✓
			Data Published ✓	Data Published ✓	Data Published ✓	Data Published ✓	Data Published ✓	Data Published ✓	Data Published ✓	Data Published ✓	Data Published ✓
			Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data	Date of receipt data

1-3 of 3

Actions on selected :



# Category of Users

- ❖ Website address for data entry: <https://180.92.171.80/eSWDES>
  - ❖ With secondary validation: [180.92.171.80/eSWDESSV](https://180.92.171.80/eSWDESSV)
  - ❖ For Flood Forecasting application: [www.india-water.gov.in/ffs](http://www.india-water.gov.in/ffs)
  - ❖ Mobile Application: <https://180.92.171.80/eSWDES/eswdes-mobile.html>
  - ❖ Feedback of eSWIS can be mailed at: [\*\*eswis.feedback@gmail.com\*\*](mailto:eswis.feedback@gmail.com)
  - ❖ Support team of eSWIS:
    - Email id: [\*\*rdcdte-cwc@nic.in\*\*](mailto:rdcdte-cwc@nic.in)
    - Telephone No.: 011-26100285
    - Fax No.: 011-26181267
    - Mobile No.: 09868207648 (Mr. N.K.Manglik, Director, River Data Dte., CWC)
- 09871356330 (Mr. Chanchal Chokerbortey, M/s Eptisa)

# THANKS



### Edit Group

#### Data Group

Name:

Data Permission Level:

#### Role SWDES

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Access Module Characteristics  | <input type="checkbox"/> Access Module Meteorological  | <input type="checkbox"/> Access Module Hydrological  |
| <input checked="" type="checkbox"/> Access Module Flood | <input type="checkbox"/> Access Module Sediment        | <input type="checkbox"/> Access Module Water Quality |
| <input type="checkbox"/> Access Module Snow             | <input type="checkbox"/> Access Module Data Validation | <input type="checkbox"/> Access Master               |

#### Other Application

- Access Application Flood Forecast       Access Application hmdmanager

#### Users of Group

- All Users
- Administrator (admin)
  - Jesús Lunar (jlp)
  - Francisco Barrio (fbl)
  - Ana de Gracia (agn)
  - Manolo Sánchez Borrallo (msb)
  - Leonardo Llamas (lll)
  - Francisco Jiménez (fjo)
  - Antonio Zapata García (azg)

- My Users
- Division-I (Division I)
- -

### Edit User

#### Data User

Login:	Password:	Repeat Password:
Division I	*****	*****
Name:	Mail:	Phone:
Division-I		

#### Agency

Add Delete

SELECTION	HIS AGENCY	REGIONAL OFFICE	STATE/REGIONAL OFFICE	DIVISIONAL OFFICE	SUB DIVISIONAL OFFICE	SECTION OFFICE
<input type="checkbox"/>	CWC	Chief Engineer, KGBO, Hyderabad	Superintending Engineer (Godavari Circle), Hyderabad	Executive Engineer(LGD), Hyderabad		

1-1 of 1

#### Group of User

##### All Groups

Meteorological - Director  
Admin group  
Group Hydrological & Meteorological

##### My Groups

FF Division

Save Discard Go Back

# Administrative Division management



## Administrative Division management

State Code:

State Name:



### States:

**+ Add** | **Report**

<input type="checkbox"/> SELECT	GO INTO	CODE	NAME	USED	SAVED BY	SAVED AT
<input type="checkbox"/>	<input checked="" type="radio"/>	--	-	Yes	Administrator	22-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	01	Andhra Pradesh	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	02	Arunachal Pradesh	No	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	03	Assam	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	04	Bihar	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	05	Goa	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	06	Gujarat	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	07	Haryana	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	08	Himachal Pradesh	No	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	09	Jammu & Kashmir	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	10	Karnataka	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	11	Kerala	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	12	Madhya Pradesh	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	13	Maharashtra	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	14	Manipur	No	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input checked="" type="radio"/>	15	Meghalaya	No	Administrator	23-Dec-2013 7:30:00 PM

1-25 of 36

**Actions on selected:**

# Geographic hierarchy management



## Geographic hierarchy management

Basin Code:

Basin Name:



### Basins:

SELECTION	GO INTO	CODE	NAME	SAVED BY	SAVED AT
<input type="checkbox"/>	<input checked="" type="radio"/>	001	Indus	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	002	Ganga-Brahm-Meghna Basin	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	003	Subarnarekha	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	004	Brahmani-Baitarani	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	005	Mahanadi	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	006	Godavari	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	007	Krishna	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	008	Pennar	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	009	Cauvery	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	010	Tapi	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	011	Narmada	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	012	Mahi	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	013	Sabarmati	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	014	WFR of Kach.-Saur. & Luni	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	015	WFR South of Tapi	Administrator	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	016	EFR B Mahanadi-Godavari	Administrator	23-Dec-2013

1-25 of 25

Actions on selected :



# Administrative hierarchy management



## Administrative hierarchy management

Agency Name:

### Agencies:

+ Add || Report

SELECTION	GO INTO	EDIT	NAME	TYPE CODE	USED	SAVED BY	SAVED AT
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	CWC	CWC Hydrological data	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	I&CAD Deptt., AP	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Karnataka	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Kerala	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Maharashtra	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	N & WRD, Gujarat	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	PWD, Tamil Nadu	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	WRD, Chhattisgarh	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	WRD, Madhya Pradesh	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	WRD, Orissa	Hydrological data held by CWC	Yes	Administrator	23-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	ID, Kerela	Hydrological data held by CWC	Yes	Administrator	22-Dec-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	CGWB	Hydrological data held by CWC	Yes	Administrator	28-Nov-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	GWD Andhra Pradesh	Hydrological data held by CWC	Yes	Administrator	28-Nov-2013 7:30:00 PM
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	-	-	Yes	Administrator	22-Dec-2013 7:30:00 PM

1-14 of 14

Actions on selected :

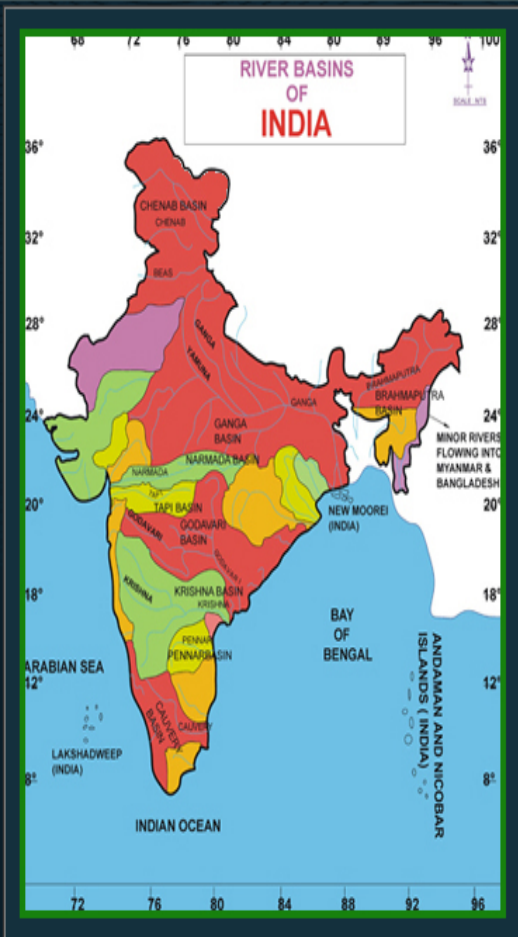






### Main Switchboard

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Static/Semistatic characteristics



Meteorological module



Hydrological module



Sediment module



Water Quality module



Snow module



Flood Forecast module



Data Validation



Utilities



Reservoir / Diversion Scheme data



HMD Manager



External links



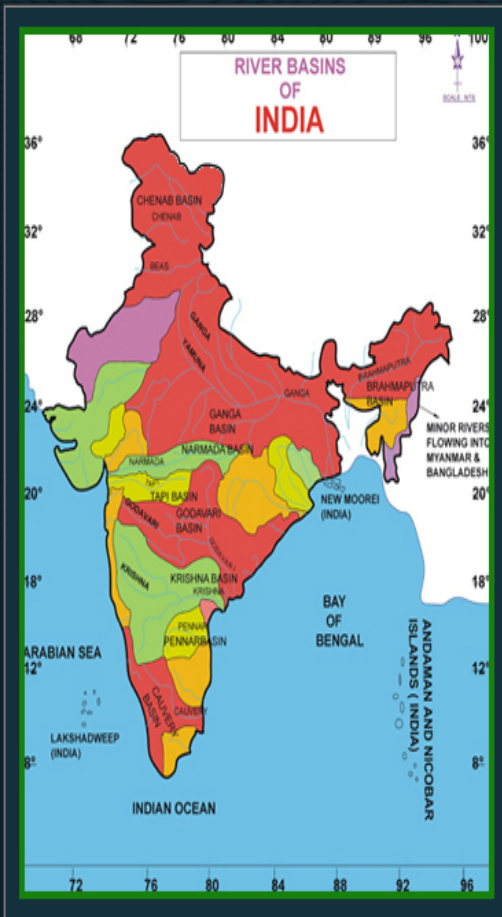
# Static/Semistatic Characteristics

e - Surface Water Information System - Data Entry



Static/Semistatic characteristics

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Station management



Series characteristics



Current meter characteristics



Reduced Level of Zero of the Gauge



X-Section data



Salient features of Reservoir / Diversion schemes



Elevation-Area Capacity data



Go back

# Station management

## Station Management



### Station



Code: -- No station --

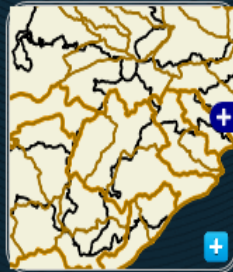
Name: -- No station --

Local River / Basin:

Division:

Sub-division:

Today Zero-RL:



Advanced Search

### Station:

Add
 Number of Stations based on Network Type
 Number of Stations based on Station Owner
 Characteristics
 Station Book Register
 Data Availability

SELECTION	EDIT	CODE	NAME	LOCAL RIVER	DIVISION	SUB DIVISION	ZERO-RL	RLA	ETS	NETS	CTS	SDM	SDS	SM	SDDS	CSP	SAVED BY	SAVED AT	USED
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 01 001	Luni at Balotra	Luni	Mahi Division, CWA Ahmedabad	B.L.Sub Divn, Palanpur	102										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 01 002	Luni at Gandhav	Luni	Mahi Division, CWA Ahmedabad	B.L.Sub Divn, Palanpur	31										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 02 001	Banas at Swaroopganj	Banas	Mahi Division, Gandhinagar	B.L.Sub Divn, Palanpur	334.45										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 02 002	Banas at Abu Road	Banas	Mahi Division, Gandhinagar	B.L.Sub Divn, Palanpur	254.85										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 02 003	Banas at Sarotry	Banas	Mahi Division, CWA Ahmedabad	B.L.Sub Divn, Palanpur	186										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 02 004	Balaram at Chitrasani	Balaram	Mahi Division, CWA Ahmedabad	B.L.Sub Divn, Palanpur	184										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 02 005	Banas at Dantiwada	Banas	Mahi Division, Gandhinagar	B.L.Sub Divn, Palanpur	146.04										Francisco Barrio	10-Dec-2013	Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	01 02 02 006	Sipu at Sipudam(Bhakudar)	Sipu	Mahi Division, CWA Ahmedabad	B.L.Sub Divn, Palanpur	163										Francisco Barrio	10-Dec-2013	Yes

1-25 of 595

Actions on selected:



# Station management

Station Management



**Edit station**

## Generic

Code:	Station Name:	Zero RL (m):
<input type="text"/>	<input type="text"/>	<input type="text"/>
Latitude (degree):	Latitude (minute):	Latitude (seconds):
<input type="text"/>	<input type="text"/>	<input type="text"/>
Longitude (degree):	Longitude (minute):	Longitude (seconds):
<input type="text"/>	<input type="text"/>	<input type="text"/>
State:	District:	Tashil / Taluk:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Major Basin:	Independent River:	Tributary:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Sub Tributary:	Sub Sub Tributary:	Local River:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Altitude (m):	Dits. to Outlet (km):	Ref Toposheet No:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Catchment Area (sqkm):		
<input type="text"/>		

## Agency

Owner Agency:
<input type="text"/>

Save Save And go to Series Discard Go Back

# Station Management

Station Management



## Agency

Owner Agency:

CWC

HIS Agency:

CWC

State/Regional Office:

M & E RO, Bhubaneswar

Circle Office:

S.E., Bhubaneswar

Divisional Office:

E.E., Burla

Sub divisional Office:

Burla

Section Office:

Mohulpali

## Category

Date of establishment:

Start Date

31-05-2003

End Date

dd-mm-yyyy

Meteorological

Sub-Category

Precipitation (Standard - SRG)

Network type

HIS (New)

Station Owner

CWC

Start Date

dd-mm-yyyy

End Date

dd-mm-yyyy

Start Date

dd-mm-yyyy

End Date

dd-mm-yyyy

Start Date

dd-mm-yyyy

End Date

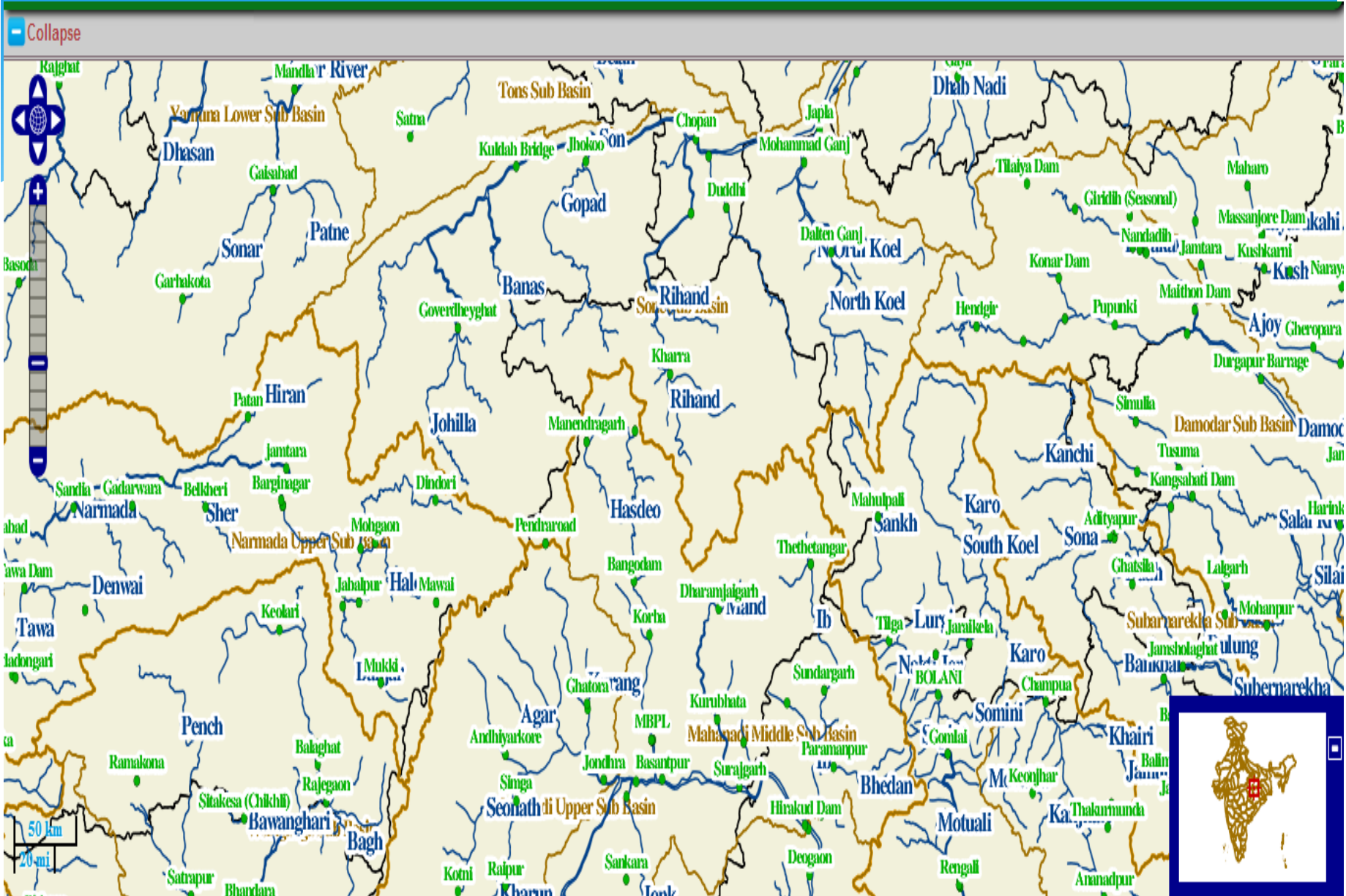
dd-mm-yyyy

Start Date

End Date

Save Save And go to Series Discard Go Back

# Representation of HO site on Map



# Series management



## Series management

Category: -- No module --  
 Parameter type: -- No parameter type --  
 Data type code: -- No data type --  
 Time interval unit: -- No time interval unit --

### Station



Code: -- No station --  
 Name: -- No station --  
 Local River / Basin:  
 Division:  
 Sub-division:  
 Today Zero-RL:



Advanced Search

## Series:

+ Add

SELECTION	EDIT	STATION	DATA TYPE	TIME INTERVAL UNIT	DIVIDER	BASIC TIME UNIT	REPLICATOR	DATA LIMITS	REMARKS	USED
<input type="checkbox"/>	<input checked="" type="radio"/>	AGU10R6 - Ghargaon	HHA - WL by AWLR (MSL)	Hour	1					No
<input type="checkbox"/>	<input checked="" type="radio"/>	APE00C5 - Kamalapuram	HHS - WL by Staff Gauge (MSL)	Day	3	Cyclic				No
<input type="checkbox"/>	<input checked="" type="radio"/>	AB000N5 - Sularpet	HHS - WL by Staff Gauge (MSL)	Hour	1					Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	AP000I1 - Chennur	HHS - WL by Staff Gauge (MSL)	Day	3	Cyclic				No
<input type="checkbox"/>	<input checked="" type="radio"/>	APC00G7 - Nandipalli	HHS - WL by Staff Gauge (MSL)	Day	3	Cyclic				No
<input type="checkbox"/>	<input checked="" type="radio"/>	APC00G7 - Nandipalli	HHS - WL by Staff Gauge (MSL)	Hour	1					Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	AP000I1 - Chennur	HHS - WL by Staff Gauge (MSL)	Hour	1					Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	AKLD0C6 - SHIMOGA	HHS - WL by Staff Gauge (MSL)	Day	3	Cyclic				No
<input type="checkbox"/>	<input checked="" type="radio"/>	AKLE0A4 - HOLEHONNUR	HHS - WL by Staff Gauge (MSL)	Hour	1			Maximum: 96.5 Upper Warn. Level: 93.5 Lower Warn. Level: 89.5 Minimum: 88.5		Yes
<input type="checkbox"/>	<input checked="" type="radio"/>	AKLB0D3 - BYLADAHALLI	HHS - WL by Staff Gauge (MSL)	Day	3	Cyclic				No

1-25 of 3,520

Actions on selected :



# Series management

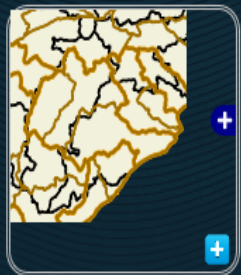


## Series management

### Station



Code: 01 02 01 001  
Name: Luni at Balotra  
Local River / Basin: Luni  
Division: --  
Sub-division: B.L.Sub Divn, Palanpur  
Today Zero-RL: --



### Data type



Code: FIN  
Description: Inflow  
Parameter type: Inflow  
Type of measurement: Instantaneous / Average  
Unit: m3/sec  
Group: --

### Series for Inflow

#### Time Interval ( $\Delta T$ )

Equidistant  Non-equidistant  
Time Interval Unit: -- Select a time interval --  
Divider: 1

#### Data limits

Minimum:		m3/sec
Lower warning level:		m3/sec
Upper warning level:		m3/sec
Maximum:		m3/sec
Rate of rise:		m3/sec $\Delta T$
Rate of fall:		m3/sec $\Delta T$

#### Remarks

#### Time observation

Edit || Fill time labels from this time: --:--

SELECTION	ORDER	TIME LABEL	IS VALUE OF A PREVIOUS DAY?
No records			



# Current Meter

## Current Meter characteristics



Meter No:

Meter Type:

Meter Make:



### Current Meter:

Add Report

SELECTION	GO INTO	EDIT	METER NO.	TYPE	MAKE	DATE OF MANUFACTURE	USED	SAVED BY	SAVED AT
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	W750-JLP	CUP	UKEW		Yes	Jesús Lunar	02-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	1357	Cup Type	UKEW	Friday 29 April 2005	Yes	Francisco Barrio	10-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2028A	Cup	UKE	Monday 31 May 2004	Yes	Francisco Barrio	10-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	404 SEM	cup type	SEM	Sunday 9 July 2000	No	Francisco Barrio	10-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	410	LYNX	IIT Chennai	Monday 17 July 2006	Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	427(L)	CUP	LYNX	Thursday 17 December 1998	Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	669	cup	Engr	Monday 9 July 2007	Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	707 A	CUP	UKEW	Saturday 31 August 2002	Yes	Administrator	22-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	9872 A	CUP	UKEW	Thursday 12 June 2003	Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	.06067	Cup type	UKEW	Saturday 31 December 2005	Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	00.69	cup	lynx		No	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	00015	Cup	AMW	Sunday 7 November 1999	Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	0069	cup	president		Yes	Francisco Barrio	12-Nov-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	021	Cup type	Semitron	Monday 26 June 2000	Yes	Francisco Barrio	10-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	021A	CUP	SEMITRON	Sunday 30 September 2001	Yes	Francisco Barrio	10-Dec-2013
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	0301	CUP TYPE	CPM	Wednesday 31 December 2003	Yes	Francisco Barrio	10-Dec-2013

1-25 of 2,993

Actions on selected:



# Reduced Level



## Reduced Level of Zero of the Gauge

### Station



Code: -- No station --

Name: -- No station --

Local River / Basin:

Division:

Sub-division:

Today Zero-RL:



From Date Start: dd/mm/yyyy

To Date Start: dd/mm/yyyy



Advanced Search

### Reduce Level of gauge zero:

+ Add || Columns Report

SELECTION	EDIT	CODE	NAME	START DATE	END DATE	ZERO-RL	SAVED BY	SAVED AT	USED
<input type="checkbox"/>	<input type="radio"/>	01 02 01 001	Luni at Balotra	03-Jul-1990			Administrator	11-Dec-2013 7:30:00 PM	Yes
<input type="checkbox"/>	<input type="radio"/>	01 02 01 001	Luni at Balotra	31-Dec-1998	30-Dec-2010	102	Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 01 002	Luni at Gandhav	19-Oct-1975			Francisco Barrio	20-Nov-2013 7:30:00 PM	Yes
<input type="checkbox"/>	<input type="radio"/>	01 02 02 001	Banas at Swaroopganj	07-Jul-1989			Francisco Barrio	20-Nov-2013 7:30:00 PM	Yes
<input type="checkbox"/>	<input type="radio"/>	01 02 02 002	Banas at Abu Road	31-Dec-1984			Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 003	Banas at Sarotry	11-Jun-1980			Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 004	Balaram at Chitrasani	31-Dec-1984			Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 005	Banas at Dantivada	06-May-1978			Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 005	Banas at Dantivada	09-May-1978	30-May-2010	146.304	Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 006	Sipu at Sipudam(Bhakudar)	13-Jun-1978	30-May-1993	157.5	Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 006	Sipu at Sipudam(Bhakudar)	31-May-1993			Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 02 007	Banas at Kamalpur	31-May-1980			Francisco Barrio	20-Nov-2013 7:30:00 PM	No
<input type="checkbox"/>	<input type="radio"/>	01 02 04 001	Rupen at Sapawada	31-Jul-1989	03-Apr-1997	36.65	Francisco Barrio	20-Nov-2013 7:30:00 PM	No

1-25 of 9,997

Actions on selected:



Working on: CWC Hydrometeorological Online database AMAZON (localhost)



User name: Administrator

User group: Admin group



# Reduced Level



Reduced Level of Zero of the Gauge

## Edit Reduced Level of gauge zero

### Particulars for RL Gauge Zero

Station Code:	Station Name:	
<input type="text"/>	<input type="text"/>	
Start Date:	End Date:	RL of Gauge Zero:
<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="dd/mm/yyyy"/>	<input type="text"/>
Datum of Elevation:		
<input type="text"/>		

### Bench Mark

Reference Bench Mark NO:	RL w.r.t M.S.L	Distance:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary Bench Mark NO:	RL w.r.t M.S.L	Distance:
<input type="text"/>	<input type="text"/>	<input type="text"/>

### Surveyor / Inspecting Officer

Reason for re-survey:	
<input type="text"/>	
Name of Surveyor:	Designation of Surveyor:
<input type="text"/>	<input type="text"/>
Name of Inspecting Officer:	Designation of Inspecting Officer:
<input type="text"/>	<input type="text"/>



# X-Section

## X-Section data



### Station



Code: -- No station --  
Name: -- No station --  
Local River / Basin:  
Division:  
Sub-division:  
Today Zero-RL:



Advanced Search

### X-Section stations:

Add Report Data Section

GO INTO	CODE	NAME	SAVED BY	SAVED AT
	01 02 01 001	Luni at Balotra	Francisco Barrio	10-Dec-2013
	01 02 01 002	Luni at Gandhav	Francisco Barrio	10-Dec-2013
	01 02 02 002	Banas at Abu Road	Francisco Barrio	10-Dec-2013
	01 02 02 003	Banas at Sarotry	Francisco Barrio	10-Dec-2013
	01 02 02 004	Balaram at Chitrasani	Francisco Barrio	10-Dec-2013
	01 02 02 007	Banas at Kamalpur	Francisco Barrio	10-Dec-2013
	01 02 04 001	Rupen at Sapawada	Francisco Barrio	10-Dec-2013
	01 02 07 001	Bhadar at Ganod	Francisco Barrio	10-Dec-2013
	01 02 09 001	Shetrunji at Lowara	Francisco Barrio	10-Dec-2013
	01 02 12 001	Wakal at Kotra( Jotasan )	Francisco Barrio	10-Dec-2013
	01 02 12 003	Sabarmati at Kheroj	Administrator	22-Dec-2013
	01 02 12 006	Sabarmati at Derol Bridge	Administrator	22-Dec-2013
	01 02 12 008	Sabarmati at Subhash Bridge	Administrator	22-Dec-2013
	01 02 12 010	Watrak at Gadvel (Ratanpur)	Administrator	22-Dec-2013
	01 02 12 012	Watrak at Kheda	Administrator	22-Dec-2013
	01 02 12 013	Sabarmati at Vautha	Administrator	22-Dec-2013

# X-Section

## X-Section data



### Station

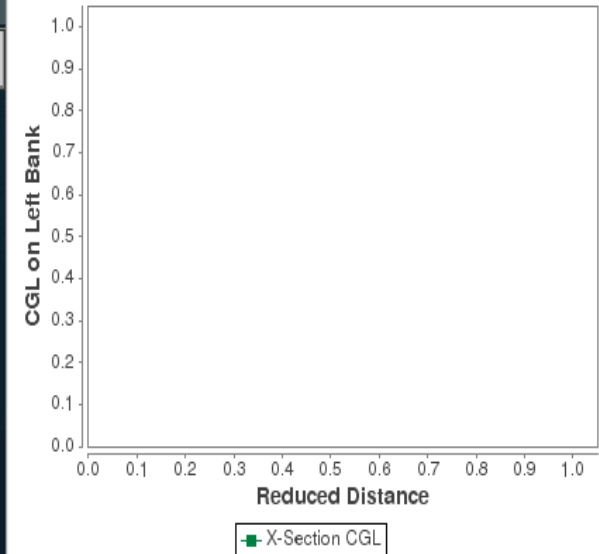
Station Code:  Station Name:  R.L of Zero Gauge:   
Water Level:  Date:  Gauge Line Reference:

Select a valid date to calculate RL Zero gauge and Water level

SELECTION	SNO.	REDUCED DIST (M)	UGL	CGL	DGL
-----------	------	------------------	-----	-----	-----

No X-Section Master Data found

### Multiple cross section plot



### UGL

UGL  
Base Value   
Dist From CGL

### CGL

CGL  
Base Value    
Standard Bank Side

### DGL

DGL  
Base Value   
Dist From CGL



# Salient features of Reservoir



## Reservoir data

### Station



Code: 01 02 02 005  
Name: Banas at Dantiwada  
Local River / Basin:  
Division:  
Sub-division:  
Today Zero-RL:



### Edit salient features of Reservoir:

#### General Features

Project Name: Dantiwada		
Project Type: Minor	Project Purpose: Irrigation	Structure Type: Gravity
Start Year Construction:	End Year Construction:	Date of Commissioning: dd/mm/yyyy
Volume Content of Structure (cum):	Cultivable Command Area (Million Hectares):	Sanctioned Command Area (Million Hectares):
Developed Command Area (Million Hectares):	Designed Hydro Power (MW):	Total Construction Cost (Rs. in Lakhs):

#### Hydrological Features

Free Catchment Area (Sq. Km.):	Intercepted Catchment Area (Sq. Km.):	Total Catchment Area (Sq. Km.):
Gross Storage at FRL (Mcum):	Dead Storage (Mcum):	Net Storage (Mcum):



# Elevation-Area-Capacity

Elevation - Area - Capacity data

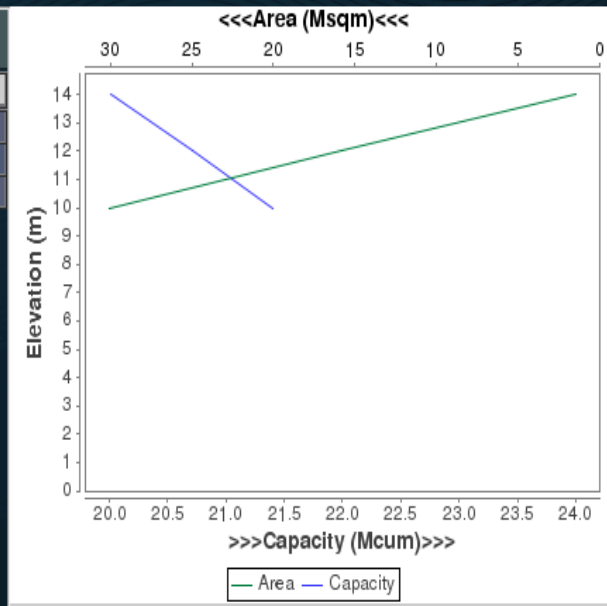


## Reservoir Elevation Area Capacity

Reservoir:

Start Date:  End Date:  Units:

SELECTED	SERIAL NO	ELEVATION	AREA	CAPACITY
<input type="checkbox"/>	1	10	20	20
<input type="checkbox"/>	2	12	22	25
<input type="checkbox"/>	3	14	24	30



1-3 of 3

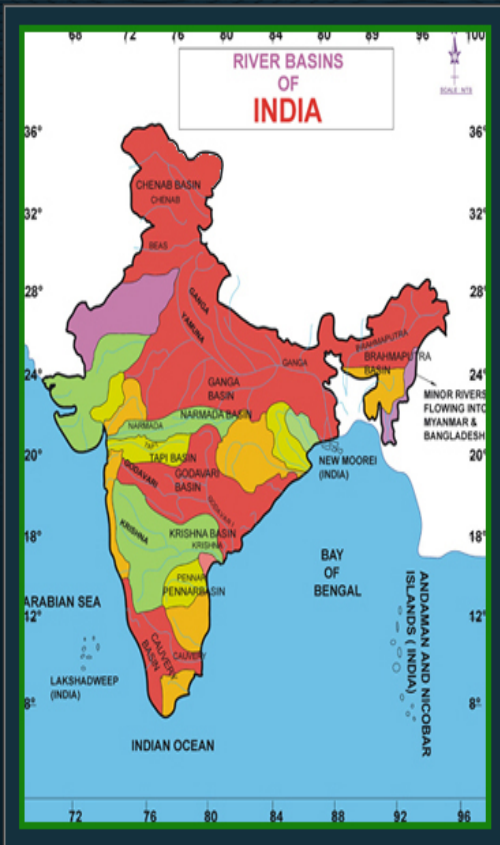
# Meteorological Module

e - Surface Water Information System - Data Entry



## Meteorological module

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



All Climate data



Rainfall data



Humidity data



Evaporation data



Pressure data



Wind data



Go back



Temperature data



Sunshine data

Working on: CWC Hydrometeorological Online database AMAZON (localhost)

User name: Administrator  
User group: Admin group



EN ? 14:36  
16-01-2014



# Data Entry - Meteorological module

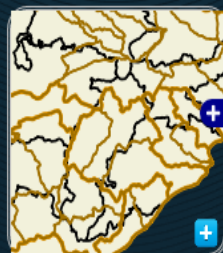
Meteorological data entry



## Station



Code: AB000N5  
 Name: Sulerpet  
 Local River / Basin: Kalingi  
 Division: Executive Engineer (HD), Chennai  
 Sub-division: PPSD, Chennai  
 Today Zero-RL: -2



## Period



Year: 2011  
 Month: October

There is available data for station **AB000N5** from **11-1989** to **12-2013**

- Rainfall
- Pressure
- Temperature
- Humidity
- Wind
- Sunshine
- Evaporation

## Twice Daily

**DATA IS PENDING APPROVAL**

IMPORT:

EDITION:

TOOLS:

Approve data now

Import IMD

Enable edition

Monthly report

Periodic report

Annual report

Series code

MPS - Rainfall - SRG

Expand entry form

Multiselection

Data type

Rainfall - SRG

Time Unit Divider

3 2

Data limits

Maximum: --

Upper Warning Level: --

Lower Warning Level: --

Minimum: --

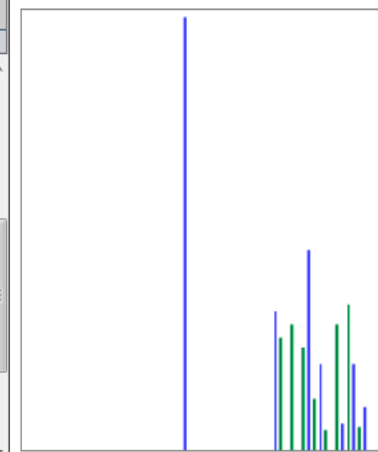
Rate of raise: --

Rate of fall: --

Units: Millimeters

DATE	RAINFALL - SRG AT 8:30 AM	RAINFALL - SRG AT 5:30 PM	TOTAL DURING THE DAY	CUMULATIVE RAINFALL - SRG (MM)	REMARKS
14	0	0	0	0	
15	0	52.4	52.4	52.4	
16	0	0	0	52.4	
17	0	0	0	52.4	
18	0	0	0	52.4	
19	0	0	0	52.4	
20	0	0	0	52.4	
21	0	0	0	52.4	
22	0	0	0	52.4	
23	0	16.8	16.8	69.2	
24	13.6	0	13.6	82.8	
25	15.2	0	15.2	98	
26	12.4	24.2	36.6	134.6	
27	6.2	10.4	16.6	151.2	

	AS ENTERED	AS IN FORM	REMARKS IN CASE OF MISMATCH
Total Rainfall:	208	208	
Max. Rainfall value:	52.4	52.4	



# Hydrological Module

e - Surface Water Information System - Data Entry



Hydrological module

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Water Level



Flow measurement



Summary stage-discharge data



Go back

# Data Entry - Hydrological module

## Hydrological data entry



### Station

Code: 01 02 01 001  
 Name: Luni at Balotra  
 Local River / Basin: Luni  
 Division: Mahi Division, CWC Ahmedabad  
 Sub-division: B.L.Sub Divn, Palanpur  
 Today Zero-RL: 102



### Period



Year: 2010  
 Month: April

There is available data for station 01 02 01 001 from 8-1999 to 10-2010

- Water level
- W.L. Temperature

Thrice Daily
IMPORT: Import IMD
EDITION: Enable edition
TOOLS: Transfer to
Monthly report
Periodic report
Annual report
Monthly & Temp.

Series code	Expand entry form							
HHS - WL by Staff Gauge (MSL)	DATE	WL BY STAFF GAUGE (MSL) AT 8:00 AM	WL BY STAFF GAUGE (MSL) AT 1:00 PM	WL BY STAFF GAUGE (MSL) AT 6:00 PM	AVERAGE HHS DURING THE DAY	MAX HHS DURING THE DAY	MIN HHS DURING THE DAY	REMARKS
	1	-999	-999	-999	0	-999	-999	
	2	-999	-999	-999	0	-999	-999	
	3	-999	-999	-999	0	-999	-999	
	4	-999	-999	-999	0	-999	-999	
	5	-999	-999	-999	0	-999	-999	
	6	-999	-999	-999	0	-999	-999	
	7	-999	-999	-999	0	-999	-999	
	8	-999	-999	-999	0	-999	-999	
	9	-999	-999	-999	0	-999	-999	
	10	-999	-999	-999	0	-999	-999	
	11	-999	-999	-999	0	-999	-999	
	12	-999	-999	-999	0	-999	-999	
	13	-999	-999	-999	0	-999	-999	
	14	-999	-999	-999	0	-999	-999	
	15	-999	-999	-999	0	-999	-999	

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

# Data Entry - Hydrological module

## Stage Discharge Summary



**Station**

Code: 01 02 01 001

Name: Luni at Balotra

Local River / Basin: Luni

Division: Mahi Division, CWC Ahmedabad

Sub-division: B.L.Sub Divn, Palanpur

Today Zero-RL: --



Select a station by field or clicking on the map. Expand the map using the button below.

**Period**



Year: 2010

Month: April



Reduced level

104

From date: 01/01/99 To date: 31/12/10

Save Discard Dry / No Flow Report Graph

DAY	TIME	OBS NO.	MEAN GAUGE	WL W.R.T M.S.L	DISCHRG (Q)	OBSERVED / COMPUTED	AREA (A)	SURFACE SLOPE (S)	TOP WIDTH	WETTED PERIMETER	HYD. RADIUS	VELOCITY	MANNING	GRADIENT	FALL	MODE CROSSING
15	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
16	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
17	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
18	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
19	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
20	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
21	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
22	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
23	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
24	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
25	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
26	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
27	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
28	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
29	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading
30	8:00 AM	1	-999	-999	-999	Observe	-999	-999	-999	-999	-	-	-	-999	-999	Wading

# Data Entry - Hydrological module



Flow measurement

## Edit Hydrological Flow Measurement

### Date

Year:	Month:	Day:
2012	September	29
Observation Number:	Time From:	Time To:
1	08 : 00	09 : 00

### General

Mode of Crossing:	Method of Velocity Observation:	
Wading		
Location of Discharge Site:	Distance from Permanent Site (m):	US / DS:
TemporarySite	250	US
Sounding Taken with:		
WadingRod		
Condition of Water:	Avg. Atmospheric Temp.(°C):	Avg. River Water Temp.(°C):
SlightlySiltyWater	28	28
Weather Condition:	Wind Direction wrt Current:	Strength of Wind:
SlightlyCloudy	135	Calm
Velocity of Wind (kms./hr):	Remarks:	
0		

### Gauge Information

	Permanent Site (m)	Temporary Site (m)		Coincident Gauge Observation for Fall
Gauge reading at Start:	0,6		Twin Station Code:	
Gauge reading at End:	0,6		Time at Fall Observation:	-- : --
Mean Gauge Reading:	0,6		Fall:	

Save Discard Go Back



# Sediment Module

e - Surface Water Information System - Data Entry



Sediment module

Security | Calculator | Administrative division | Geographic hierarchy | Administrative hierarchy | Datatypes | Import | Export



Suspended sediment summary



Suspended sediment measurement



Go back

# Data Entry - Sediment

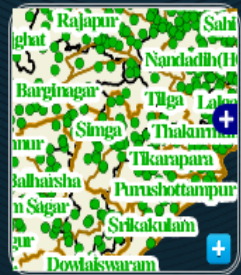


## Suspended Sediment Summary

Station



Code: AKL0058  
 Name: HARALAHALLI  
 Local River / Basin: Tungabhadra  
 Division: Executive Engineer (CD), Bangalore  
 Sub-division: Upper Tunga Subdn, Devangere  
 Today Zero-RL: 507.436



Select a station by field or clicking on the map  
 Expand the map using the button below

Period



Year: 2012  
 Month: April

There is available data for station **AKL0058** from **12-1966** to **5-2012**

Enable edition | Report

DAY	TIME	OBS. N°	MEAN GAUGE (M)	WL W.R.T M.S.L. (M)	DISCHARGE (Q) (M <sup>3</sup> /S)	OBSERVED / COMPUTED	COARSE FRACTION (C)	MEDIUM FRACTION (M)	SAND-SILT FRACTION (C+M)	FINE FRACTION (F)	TOTAL SUSPENDED SEDIMENT (C+M+F)	REMARKS
1	8:00 AM	1	-0.1	507.336	0	Observed	0	0	0	0	0	Sunday, No Flow
2	8:00 AM	1	-0.1	507.336	0	Observed	0	0	0	0	0	No flow
3	8:00 AM	1	-0.08	507.356	0	Observed	0	0	0	0	0	No flow
4	8:45 AM	1	0	507.436	6.694	Observed	0	0	0	0.029	0.029	
5	8:00 AM	1	0.07	507.506	13.4	Computed	0	0	0	0.03	0.03	P.H. Flow is available.
6	8:00 AM	1	0.07	507.506	13.4	Computed	0	0	0	0.03	0.03	P.H. Flow is available.
7	8:45 AM	1	0.07	507.506	12.91	Observed	0	0	0	0.031	0.031	
8	8:00 AM	1	0.09	507.526	16.71	Computed	0	0	0	0.032	0.032	Sunday, Flow is available.
9	8:45 AM	1	0.14	507.576	20.901	Observed	0	0	0	0.033	0.033	
10	8:45 AM	1	0.14	507.576	19.998	Observed	0	0	0	0.034	0.034	
11	8:45 AM	1	0.14	507.576	19.968	Observed	0	0	0	0.032	0.032	
12	8:45 AM	1	0.14	507.576	20.076	Observed	0	0	0	0.031	0.031	
13	8:45 AM	1	0.12	507.556	18.186	Observed	0	0	0	0.03	0.03	
14	8:45 AM	1	0.17	507.606	23.398	Observed	0	0	0	0.031	0.031	
15	8:00 AM	1	0.27	507.706	30.7	Computed	0	0	0	0.033	0.033	Sunday, Flow is available.
16	8:45 AM	1	0.24	507.676	30.284	Observed	0	0	0	0.034	0.034	
17	8:45 AM	1	0.18	507.616	24.058	Observed	0	0	0	0.032	0.032	
18	8:45 AM	1	0.15	507.586	21.46	Observed	0	0	0	0.031	0.031	
19	9:00 AM	1	0.18	507.616	24.183	Observed	0	0	0	0.033	0.033	AE's inspection with Site CM.
20	8:45 AM	1	0.21	507.646	26.39	Observed	0	0	0	0.034	0.034	
21	9:00 AM	1	0.42	507.856	45.792	Observed	0	0	0	0.039	0.039	



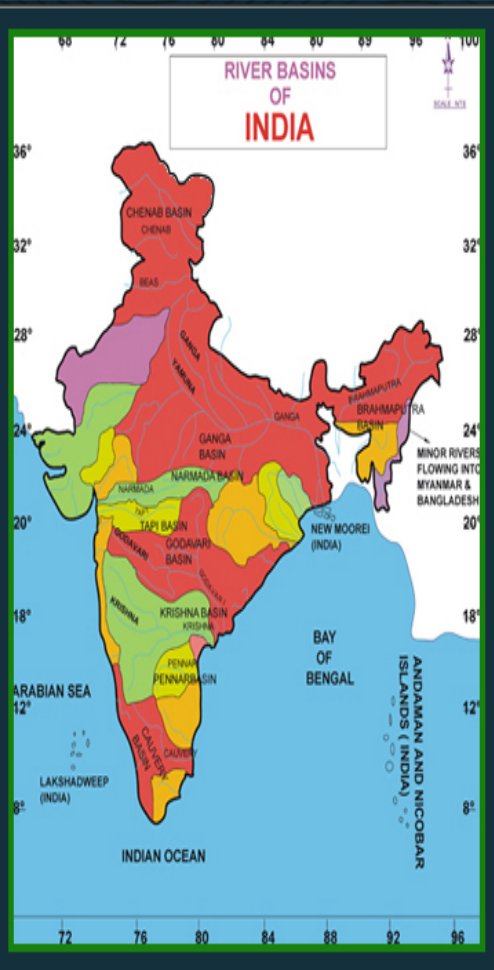
# Water Quality Module

e - Surface Water Information System - Data Entry



Water Quality module

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Laboratory information



Reports



Options



Parameter information



Graphs



Go back



Sample data entry



Analysis Quality Control



# Data Entry – Water Quality

## Laboratory information



Laboratory Code:

Laboratory Name:



### Laboratory Information:

<span>+ Add</span>    <span>Report</span> <span>Columns Report</span>						
SELECTION	EDIT	LAB ID	NAME	SAVED BY	SAVED AT	USED
<input type="checkbox"/>	<input type="radio"/>	CAP-HYD1	CWC KGBO Hyderabad (LKD)	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CAP-HYD2	CWC KGBO Hyderabad (UGD)	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CAP-HYD3	CGWB Hyderabad	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CGU-AHM1	CWC NTBO Ahmedabad	Administrator	24-Dec-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	CGU-AHM2	CGWB Ahmedabad	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CGU-SURA	CWC NTBO Surat	Administrator	24-Dec-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	CKA-BAN1	CWC CSRO Bangalore	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CKA-BAN2	CGWB Bangalore	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CKE-COCH	CWC CSRO Cochin	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CKE-THIR	CGWB Thiruvananthapuram	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CMH-NAG1	CWC MONC Nagpur	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CMH-NAG2	CGWB Nagpur	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CMH-PUNE	CWC KGBO Pune	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CMP-BHOP	CGWB Bhopal	Administrator	24-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CMP-BPL	CWC NBO BHOPAL	Administrator	23-Dec-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	CMP-BPL 1	CWC NBO BHOPAL	Administrator	23-Dec-2013	No
<input type="checkbox"/>	<input type="radio"/>	CMP-RAIP	CGWB Raipur	Administrator	24-Dec-2013	No

1-25 of 80

Actions on selected:



Working on: CWC Hydrometeorological Online database AMAZON (localhost)



User name: Administrator

User group: Admin group



# Data Entry – Water Quality

Laboratory information



**Edit Laboratory**

## Laboratory

Lab. Code:	Lab. Name:	HP Domain:
<input type="text"/>	<input type="text"/>	<input type="text"/>
HP Level:		
<input type="text"/>		

Agency:	State/Regional Office:	Circle Office:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Divisional Office:	State:	City:
<input type="text"/>	<input type="text"/>	<input type="text"/>

Address:

Pin Code:	Fax:	Telephone:
<input type="text"/>	<input type="text"/>	<input type="text"/>
Email / Internet:	Laboratory Incharge:	Contact Person:
<input type="text"/>	<input type="text"/>	<input type="text"/>

Remarks:



# Data Entry – Water Quality



## Parameter information

Parameter Code:

Parameter Pack Code:



### Parameter:

**+ Add** || **Columns Report**

SELECTION	EDIT	PARAMETER CODE	NAME	PARAMETER PACK	SAVED BY	SAVED AT
<input type="checkbox"/>	<input type="radio"/>	24D	2,4-D	Pesticides		05-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Ag	Silver	Trace and Toxic	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Al	Aluminium	Other inorganics	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Aldrin	Aldrin	Pesticides	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Alk-Phen	Alkalinity, phenolphthalein	Alkalinity	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	ALK-TOT	Alkalinity, total	Alkalinity	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	As	Arsenic	Trace and Toxic	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	B	Boron	Other inorganics	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	BHC	gamma-BHC (Benzene HexaChlorid	Pesticides	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	BOD3-27	Biochemical Oxygen demand (3da	Organic Matter	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Ca	Calcium	Biological	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Cd	Cadmium	Biological	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Chl-a	Chlorophyll-a	Biological	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	Cl	Chloride	Major Ions	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	CN	Cyanide	Other inorganics	Ana de Gracia	02-Sep-2013
<input type="checkbox"/>	<input type="radio"/>	CO3	Carbonate	Major Ions	Ana de Gracia	02-Sep-2013

1-25 of 69

Actions on selected :



# Data Entry – Water Quality



Parameter information

**Edit Parameter**

## Parameter Information

Parameter Code:

24D

HYMOS:

Q2D - 2,4-D

Group:

PST - Pesticides

Yearbook Category:

Pesticides

Category I:

Chemical

Category II:

Trace Organics

HP Level:

Level II+

SW/GW:

Both

Unit:

µg/L

N° of Decimals:

3

Minimum:

0.1

Maximum:

1,000

Lower Warning Level:

0.1

Drinking Standard:

Upper Warning Level:

1,000

Irrigation Standard:



# Data Entry – Water Quality

## Sample data entry



### Station



Code: -- No station --

Name: -- No station --

Local River / Basin:

Division:

Sub-division:

Today Zero-RL:



Laboratories:

From Date Start: dd/mm/yyyy

To Date Start: dd/mm/yyyy



Advanced Search

## Sample Collection:

+ Add | Report

SELECTION	GO INTO	EDIT	SAMPLE ID	STATION	LABORATORY	COLLECTION DATE	COLLECTION TIME	SAVED BY	SAVED AT	USED
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	83	Banas at Abu Road	CWC NTBO Ahmedabad	30-Nov-2006	19:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	1619	Banas at Abu Road	CWC NTBO Ahmedabad	01-Jan-2012	19:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	168	Banas at Abu Road	CWC NTBO Ahmedabad	31-Aug-2007	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	157	Banas at Abu Road	CWC NTBO Ahmedabad	31-Jul-2007	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	146	Banas at Abu Road	CWC NTBO Ahmedabad	01-Jul-2007	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	135	Banas at Abu Road	CWC NTBO Ahmedabad	31-May-2007	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	117	Banas at Abu Road	CWC NTBO Ahmedabad	31-Jan-2007	19:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	105	Banas at Abu Road	CWC NTBO Ahmedabad	30-Sep-2006	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	94	Banas at Abu Road	CWC NTBO Ahmedabad	31-Oct-2006	19:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	10	Banas at Abu Road	CWC NTBO Ahmedabad	31-May-2006	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	1543	Banas at Abu Road	CWC NTBO Ahmedabad	31-May-2011	20:30:00	Francisco Barrio	27-Nov-2013	Yes
<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	835	Banas at Abu Road	CWC NTBO Ahmedabad	01-May-2011	20:30:00	Francisco Barrio	27-Nov-2013	Yes

1-25 of 25

Actions on selected:



# Data Entry – Water Quality

Sample data entry



**Edit Sample Collection**

## Collection information

Sample Code :	Station :	Laboratory :
<input type="text" value="21"/>	<input type="text" value="01 02 02 002 - Banas at Abu Road"/>	<input type="text" value="CGU-AHM1 - CWC NTBO Ahmedabad"/>
Agency :	Lab. Sample Id :	Additional :
<input type="text" value="41 - CWC"/>	<input type="text" value="20"/>	<input type="text" value="A"/>
Date :	Time :	
<input type="text" value="30/06/2006"/>	<input type="text" value="03 : 30"/>	

## Collection details

Medium :	Matrix :	Type Code :
<input type="text" value="WAT - Water"/>	<input type="text" value="FRW - Fresh Water"/>	<input type="text" value="GRB - Grab"/>
Source :	Monitoring Type :	Depth (cm) :
<input type="text" value="RIV - River"/>	<input type="text" value="BAS - Baseline"/>	<input type="text"/>
Project :	Collector :	Point of Sampling :
<input type="text" value="MWQRI"/>	<input type="text"/>	<input type="text"/>
Approach :	<input type="checkbox"/> Purging	Type Of Pump :
<input type="text"/>		<input type="text"/>
Pump Installation Or Suction Depth :	Rest Water Level :	Pump Discharge :
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Pumping Duration :	Water Level After Pumping :	Volume Purged :
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>



# Data Entry – Water Quality

Water Quality Reports



Laboratory Information



Parameter Information



Parameter Analysis



Drinking and irrigation water standards



Sample and validation register



Analysis Data Summary

# Snow Module



## Snow module



Snowfall data



Snow Stake data



Snow Water Equivalent



Combined snowfall



Snow Survey



Snow Survey Summary



Meteorological data



Go back



# Data Entry – Snow

## Snow data entry



**Station**

Code: AA  
 Name: aa  
 Local River / Basin: Ayyar  
 Division: Executive Engineer, Himalayan Ganga Division, Dehradun  
 Sub-division: Alaknanda Sub-Division, Srinagar  
 Today Zero-RL: 0



### Period



Year: 2013  
 Month: December

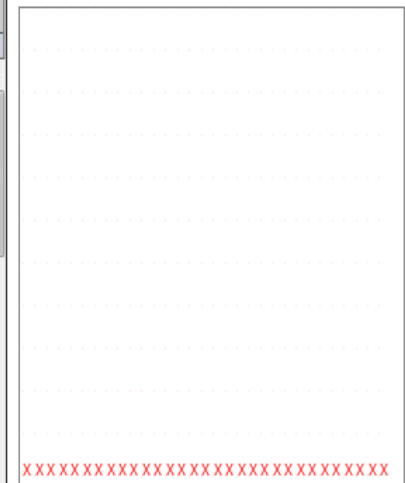
There is no available data for the selected station

- Snow fall
- Snow stake
- Snow weather
- Snow survey summary
- Water equivalent
- Pressure
- Temperature
- Humidity
- Wind
- Sunshine
- Evaporation

### Daily

- IMPORT: Import IMD | EDITION: Enable edition | TOOLS: Monthly report | Periodic report | Annual report

Series code	Expand entry form				
MOD - Snowfall	DATE	S.NO	8:00 AM	CUMULATIVE SNOWFALL (CM)	REMARKS
	1	1	-999	0	
	2	1	-999	0	
	3	1	-999	0	
	4	1	-999	0	
	5	1	-999	0	
	6	1	-999	0	
	7	1	-999	0	
	8	1	-999	0	
	9	1	-999	0	
	10	1	-999	0	
	11	1	-999	0	
	12	1	-999	0	
	13	1	-999	0	
	14	1	-999	0	
	15	1	-999	0	
	<b>AS ENTERED</b>		<b>AS IN FORM</b>		<b>REMARKS IN CASE OF MISMATCH</b>
	Total Snowfall:	0			
	Max. Snowfall value:	0			



Graph type: Month

Date Start:

dd/mm/yyyy

Date End:

dd/mm/yyyy

Weather at the time of sampling:

### Snow condition and snow course

Snow Sample Obtained with

Ground under snow

Ice layer on ground:

Thickness (cm):

### General snow conditions

Snow line elevation (m)

Ground Melting

New Snow at Snow course (cm):

Evidence of snowslides:

### General Stream Flow Conditions

General Stream flow conditions

Small Stream Running

Small streams bridged over by snow:

# Flood Forecast Module

e - Surface Water Information System - Data Entry



Flood Forecast module

Security Calculator Administrative division Geographic hierarchy Administrative hierarchy Datatypes Import Export



Forecast:



Level Forecast data



Inflow Forecast data



Reports

Data entry:



Flood entry by parameter



Go back

# Data Entry – Flood Forecast



## Flood data entry

### Station



Code: 50  
 Name: Dummagudem  
 Local River / Basin: -  
 Division: Lower Godavari Div., Hyderabad  
 Sub-division: Lower Godavari 1, Bhadrachalam  
 Today Zero-RL: 40



### Period



Year: 2013  
 Month: December

There is available data for station 50 from 12-2013 to 12-2013

- Rainfall
- Water level
- Inflow

### Hourly

- IMPORT: EDIT: TOOLS:
- Import IMD
  - Enable edition
  - Monthly report
  - Periodic report

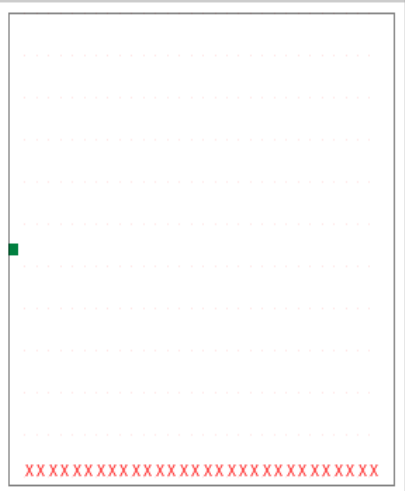
Series code	Expand entry form																							
HHS - WL by Staff Gauge (MSL)	DATE	7:30 PM	8:30 PM	9:30 PM	10:30 PM	11:30 PM	12:30 AM	1:30 AM	2:30 AM	3:30 AM	4:30 AM	5:30 AM	6:30 AM	7:30 AM	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:30 PM	1:30 PM	2:30 PM	3:30 PM	4:30 PM	5:30 PM
HZS - Water Level by Staff Gauge		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	2	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	3	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	4	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	5	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	6	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	7	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	8	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	9	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	10	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	11	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	12	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	13	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	14	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999
	15	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999	-999

**Data type**  
 WL by Staff Gauge (MSL)

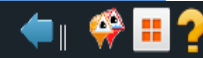
**Time Unit Divider**  
 4 1

**Data limits**

▲ **Maximum:** --  
 ▲ **Upper Warning Level:** --  
 ▼ **Lower Warning Level:** --  
 ▼ **Minimum:** --  
 ▲ **Rate of raise:** --  
 ▼ **Rate of fall:** --  
**Units:** Meters



# Data Entry – Flood Forecast



## Level Forecast data

### Station



Code: 50

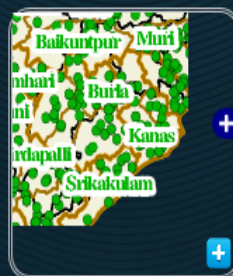
Name: Dummagudem

Local River / Basin: -

Division: Lower Godavari Div., Hyderabad

Sub-division: Lower Godavari 1, Bhadrachalam

Today Zero-RL: 40



Select a station by field or clicking on the map  
Expand the map using the button below

Enable/Disable period filter

### Period



Year: 2013

+ Add   ✖ Delete   ✎ Edit

SELECTION	GO INTO	STATION	FORECAST NO	ISSUED DATE	ISSUED TIME	SAVED AT
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	1	18-Jul-2013	02:15:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	2	18-Jul-2013	02:15:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	3	18-Jul-2013	08:00:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	4	18-Jul-2013	08:00:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	5	18-Jul-2013	08:00:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	6	18-Jul-2013	12:45:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	7	18-Jul-2013	12:45:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	8	18-Jul-2013	12:45:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	9	19-Jul-2013	02:20:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	10	19-Jul-2013	02:20:00	23-Dec-2013
<input type="checkbox"/>	<input checked="" type="radio"/>	50 - Dummagudem	11	25-Dec-2013	10:35:00	25-Dec-2013

# Data Entry – Flood Forecast



## Level Forecast data

Series code: Station code: 50 Forecast N°: 12 Issued date: 28-Dec-2013 7:30:00 PM Issued time: 09:13:00

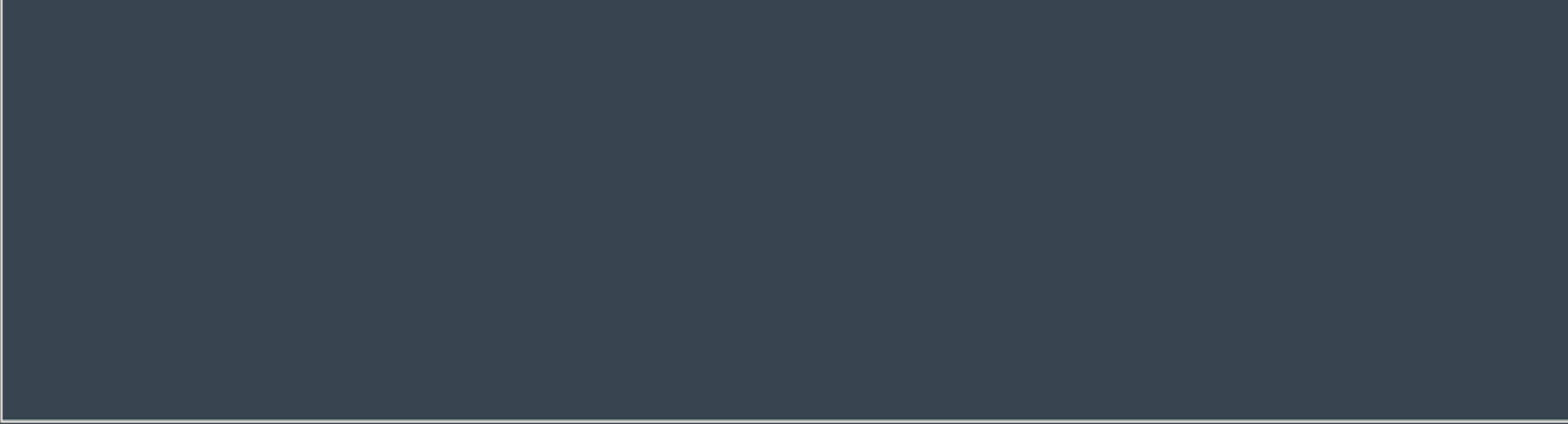
HHS - WL by Staff Gauge (MSL)  
HZS - Water Level by Staff Gauge

Save Discard || Records to add: 5

Data type  
WL by Staff Gauge (MSL)  
Time Unit Divider  
4 1

SELECTION	DATE	TIME	LEVEL	TREND	REMARKS
<input type="checkbox"/>	30/12/2013	01:13	22	Falling	
<input type="checkbox"/>	30/12/2013	12:13	20	Falling	
<input type="checkbox"/>	29/12/2013	11:13	18	Falling	
<input type="checkbox"/>	29/12/2013	10:13	15	Falling	
<input type="checkbox"/>	29/12/2013	09:13	10	Falling	

Data limits  
▲ Highest Flood Level: --  
Last date of highest flood level: --  
▲ Danger level: --  
▲ Warning Level: --  
Units: Meters



Graph

# Data Entry – Flood Forecast



## Level Forecast data

- Series code
- HHS - WL by Staff Gauge (MSL)
- HZS - Water Level by Staff Gauge

Station code: 50 Forecast N°: 12 Issued date: 28-Dec-2013 7:30:00 PM Issued time: 09:13:00

Records to add:

SELECTION	DATE	TIME	LEVEL	TREND	REMARKS
<input type="checkbox"/>	29-Dec-2013	09:13:00	10	Falling	
<input type="checkbox"/>	29-Dec-2013	10:13:00	15	Falling	
<input type="checkbox"/>	29-Dec-2013	11:13:00	18	Falling	
<input type="checkbox"/>	30-Dec-2013	00:13:00	20	Falling	
<input type="checkbox"/>	30-Dec-2013	01:13:00	22	Falling	

**Data type**  
 WL by Staff Gauge (MSL)  
**Time Unit Divider**  
 4 1

**Data limits**  
 ▲ Highest Flood Level: --  
 Last date of highest flood level: --  
 ▲ Danger level: --  
 ▲ Warning Level: --  
 Units: Meters

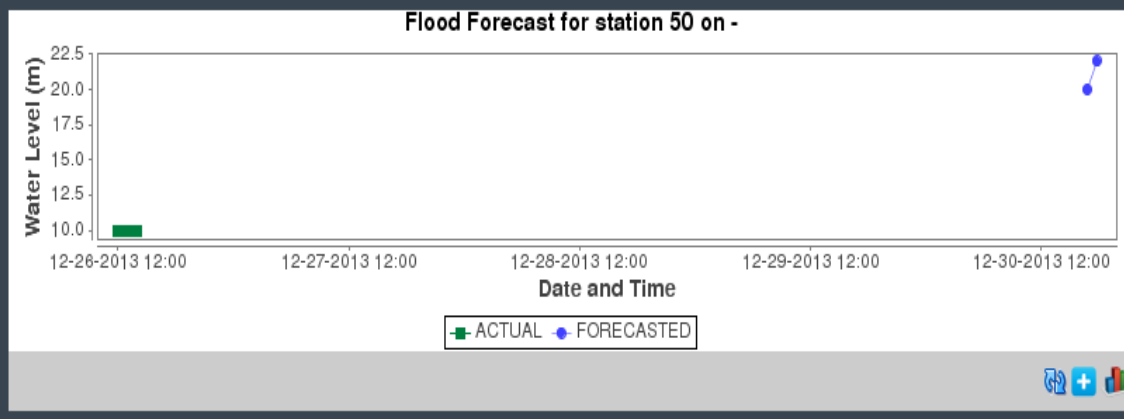
1.5 of 5

### Graph

Graph range date



From: 14/12/2013  
 To: 13/01/2014



# Data Entry – Reservoir / Diversion Scheme data

## Reservoir / Diversion Scheme data



**Station**

Code: AB000N5  
 Name: Sulurpet  
 Local River / Basin: Kalingi  
 Division: Executive Engineer (HD), Chennai  
 Sub-division: PPSD, Chennai  
 Today Zero-RL: -2



### Period

Year: 2010  
 Month: December

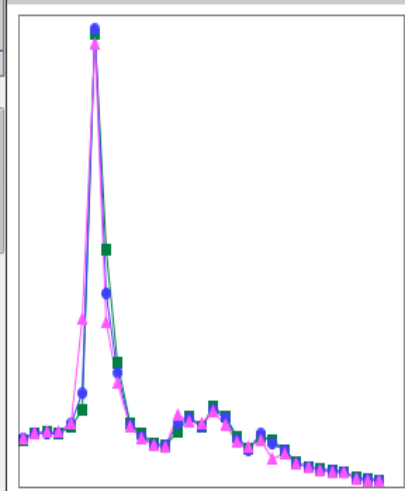
There is available data for station **AB000N5** from **10-1988** to **5-2012**

**Water level** | **Reservoir Temperature** | **Storage**

**Thrice Daily** | **DATA IS PENDING APPROVAL** | **IMPORT:** | **EDITION:** | **TOOLS:**

Approve data now | Import IMD | Enable edition | Transfer to | Monthly report | Periodic report | Annual report | Monthly & Temp.

DATE	WL BY STAFF GAUGE (MSL) AT 3:30 AM	WL BY STAFF GAUGE (MSL) AT 8:30 AM	WL BY STAFF GAUGE (MSL) AT 1:30 PM	AVERAGE HHS DURING THE DAY	MAX HHS DURING THE DAY	MIN HHS DURING THE DAY	REMARKS
1	1.52	1.525	1.525	1.523	1.525	1.52	
2	1.545	1.55	1.55	1.548	1.55	1.545	
3	1.555	1.545	1.56	1.553	1.56	1.545	
4	1.55	1.55	1.56	1.553	1.56	1.55	
5	1.58	1.595	1.6	1.592	1.6	1.58	
6	1.66	1.74	2.1	1.833	2.1	1.66	
7	3.47	3.49	3.42	3.46	3.49	3.42	
8	2.43	2.22	2.08	2.243	2.43	2.08	
9	1.89	1.84	1.79	1.84	1.89	1.79	
10	1.6	1.59	1.58	1.59	1.6	1.58	
11	1.545	1.535	1.525	1.535	1.545	1.525	
12	1.5	1.495	1.495	1.497	1.5	1.495	
13	1.49	1.49	1.485	1.488	1.49	1.485	
14	1.56	1.595	1.64	1.598	1.64	1.56	
15	1.63	1.62	1.605	1.618	1.63	1.605	



Average Water level: 1.602 | **AS ENTERED** | **AS IN FORM** | **REMARKS IN CASE OF MISMATCH**



# Data Entry – Reservoir / Diversion Scheme data

## Reservoir / Diversion Scheme data



### Station

Code: AB000N5  
 Name: Sularpet  
 Local River / Basin: Kalingi  
 Division: Executive Engineer (HD), Chennai  
 Sub-division: PPSD, Chennai  
 Today Zero-RL: -2



### Period



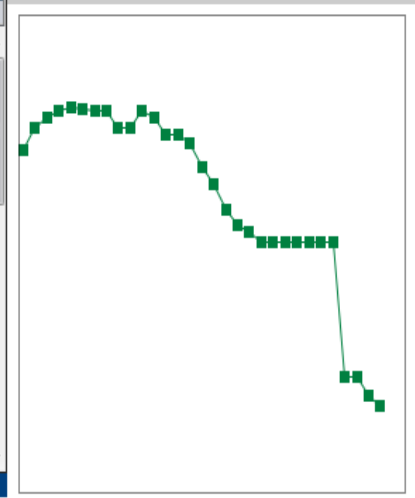
Year: 2010  
 Month: December

There is available data for station **AB000N5** from **10-1988** to **5-2012**

Water level
Reservoir Temperature
Storage

Daily
IMPORT: Import IMD
EDITION: Enable edition
TOOLS: Transfer to
Monthly report
Periodic report
Annual report

Series code	Expand entry form		
STO - Storage in BCM	DATE	STORAGE IN BCM AT 3:00 AM	REMARKS
	1	8.192	
	2	8.233	
	3	8.25	
	4	8.262	
	5	8.27	
	6	8.265	
	7	8.262	
	8	8.262	
	9	8.233	
	10	8.233	
	11	8.262	
	12	8.25	
	13	8.221	
	14	8.221	
	15	8.204	
	<b>AS ENTERED</b>	<b>AS IN FORM</b>	<b>REMARKS IN CASE OF MISMATCH</b>
<b>Average Storage:</b>	8.108		
<b>Max. Storage value:</b>	8.27		





HOME » DATA FLOW LIST BASED



Logged as admin

Disconnect

### List Based Selection

#### Filter

State Name

Andhra Pradesh

District Name

- Select value -

Basin Name

- Select value -

River Name

- No Data -

Region Name

- Select value -

Division Name

- No Data -

Clear Filter

#### Sites

Flood Forecast Sites

Bhadrachalam  
Bhatpally  
Dowlaiswaram  
Dummagudem  
Eturunagaram  
Gotta Barrage  
Kaleswaram  
Koida  
Kunavaram  
Mancheril  
Mantralayam  
Nellore  
Nizamabad  
Nizamsagar

# Flood Forecast



## Flood Forecast

[HOME](#) [SITE MAP](#) [CONTACT US](#)

Search...

HOME

▶ DATA FLOW MAP BASED

▶ DATA FLOW LIST BASED

▶ FLOOD FORECASTED BULLETINS

▶ HYDROGRAPH

▶ CURRENT FLOOD FORECAST

▶ EMAIL LIST MANAGEMENT

▶ SMS LIST MANAGEMENT

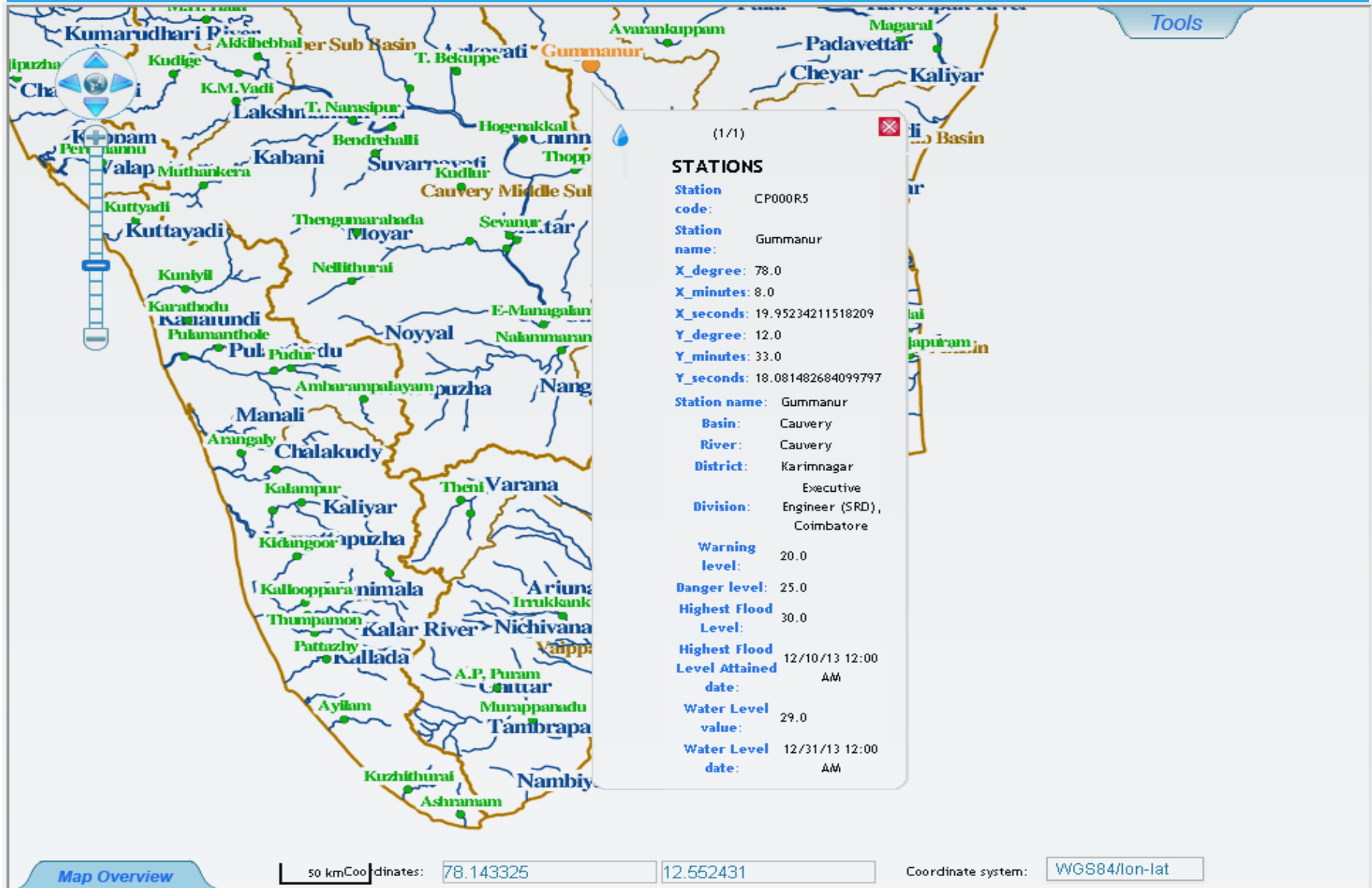
Logged as admin

Disconnect

Tools



# Flood Forecast Web Application





HOME » DATA FLOW LIST BASED » FLOOD-FORECASTED-SITE

▶ DATA FLOW MAP BASED

▶ DATA FLOW LIST BASED

▶ FLOOD FORECASTED BULLETINS

▶ HYDROGRAPH

▶ CURRENT FLOOD FORECAST

▶ EMAIL LIST MANAGEMENT

▶ SMS LIST MANAGEMENT

Logged as admin

Disconnect

### Flood Forecasted Site

Site Name : Dummagudem

<b>District Name:</b>	Khammam	<b>Warning Level (WL):</b>	53.0
<b>River Name:</b>	Godavari	<b>Danger Level (DL):</b>	55.0
<b>Basin Name:</b>	Godavari	<b>Highest Flood Level (HFL):</b>	60.25
<b>Division Name:</b>	Lower Godavari Div., Hyderabad	<b>HFL Attained date:</b>	8/14/86 12:00 AM

#### PRESENT WATER LEVEL

#### CUMULATIVE DAILY RAINFALL

NO FLOOD FORECAST

Go Back



## Flood Forecast

HOME > FLOOD FORECASTED BULLETINS > FOR LEVEL FORECASTED SITES > MODERATE FLOOD SITUATION REPORT

▶ DATA FLOW MAP BASED

▶ DATA FLOW LIST BASED

▶ FLOOD FORECASTED BULLETINS

For Level Forecasted Sites

Unprecedented Flood Situation Report  
High Flood Situation Report

**Moderate Flood Situation Report**

Low Flood Situation Report

Summary Of 'Sites' Above Warning Level

For Inflow Forecasting Sites

▶ HYDROGRAPH

▶ CURRENT FLOOD FORECAST

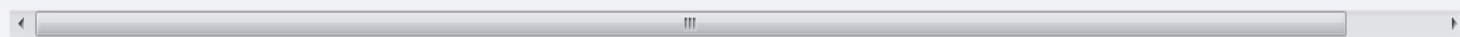
▶ EMAIL LIST

### Flood Forecasted Bulletins

#### PART-I: DAILY WATER LEVELS AND FORECASTS FOR LEVEL FORECAST SITES (A COMPILATION AND ANALYSIS REPORT)

C : Moderate Flood Situations :

S.NO	NAME OF RIVER	FLOOD FORECASTING SITE	DISTRICT / NEAREST TOWN	STATE	SUB DIVISION	WARNING LEVEL (M)	DANGER LEVEL (M)	PREVIOUS HIGHEST FLOOD LEVEL		NORMAL WATER LEVEL (M)	ACTUAL LEVEL AT 0800 HOURS WITH TREND		FORECAST			
								LEVEL (M)	DATE/YEAR		LEVEL (M)	TREND	LEVEL (M)	DATE	TIME (HOURS)	
1	Cauvery	Gummanur	Karimnagar	Andhra Pradesh	Lower Cauvery Sub-Division, Tiruhirappalli	20.0	25.0	30.0	2013-12-10		28.0					



Go Back

# Flood Forecast Web Application

DATA FLOW LIST BASED

FLOOD FORECASTED BULLETINS

HYDROGRAPH

CURRENT FLOOD FORECAST

EMAIL LIST MANAGEMENT

SMS LIST MANAGEMENT

Logged as admin

Disconnect


- Select value -







[HOME](#) » [EMAIL LIST MANAGEMENT](#)


### Email List Management

▶ DATA FLOW MAP BASED 

▶ DATA FLOW LIST BASED 

▶ FLOOD FORECASTED BULLETINS 

▶ HYDROGRAPH 

▶ CURRENT FLOOD FORECAST 

▶ EMAIL LIST MANAGEMENT 

▶ SMS LIST MANAGEMENT 

Logged as admin

Disconnect

List Email	Message
slakshminarayanan8162@gmail.com rdccte-cwc@nic.in kvenkattappareddy@eptisa.com chanchalchakrabortykol@gmail.com manuel.sanchez@ti.eptisa.com francisco.jimenez@ti.eptisa.com	Sir/Madam  Daily Flood Bulletin issued by CFCR, CWC, New Delhi is attached with a request that in case of any discrepancy in email address, this office may kindly be intimated for updating and timely dissemination of Flood Bulletin.  Regards V.D. ROY Director (FFM) CWC, New Delhi





HOME » SMS LIST MANAGEMENT

▶ DATA FLOW MAP BASED

▶ DATA FLOW LIST BASED

▶ FLOOD FORECASTED BULLETINS

▶ HYDROGRAPH

▶ CURRENT FLOOD FORECAST

▶ EMAIL LIST MANAGEMENT

▶ SMS LIST MANAGEMENT

Logged as admin

Disconnect

### List Station

Station Code	Numbers	Message
AB000N5	8800677536,9711527127,9811047051	Present Water Level in the station is upper than danger level

### SMS List Management

Name	Mobile Number
Mohd Sahid, PS to Min(WR)	9818693332
Dr Arijit Dey, OSD to Minister	9818549424
Dr. S K Sarkar, Secretary, MoWR	9811149324
G Mohan Kumar, Adtl. Secy, MOWR	8800511955
Rajesh Kumar, Chairman, CWC	9711527127
Devendra Sharma, M(RM), CWC	9811047051
Rajesh Kumar, M(WP&P), CWC	9711527127
A B Pandya M (D&R), CWC	9910264141
N K Mathur, Com(G), MOWR	9818472745
K N Keshri, CE(FM), CWC	9818493497
N S Samant, JS(A), MOWR	8800110172
A Purkayashtha, JS(Drought Management), MOA	
Dev Kumar, Dir, NDM	
R. K. Srivastava, JS(DM), MHA	
Satnarayan, PS to VC, NDMA	
Duty Officer, NDMA, Control Room	
Duty Officer, NDMA, Control Room	
Bibhas Kumar, Chairman, GFCC	
S Masood Hussain, Member @, GFCC	



# System Architecture

- All databases will be managed using PostgreSQL. Open-source database which:
  - Is scaleable as the number of CPUs and amount of RAM increase.
  - Stores GIS information installing the component PostGIS spatial
- PostGIS will be the Spatial Database Management System which is plugin for PostgreSQL
- Both libraries and web services will be developed using Java 1.6
- In order to support most features of Java, application server will be Apache-Tomcat: J2EE application-server opensource