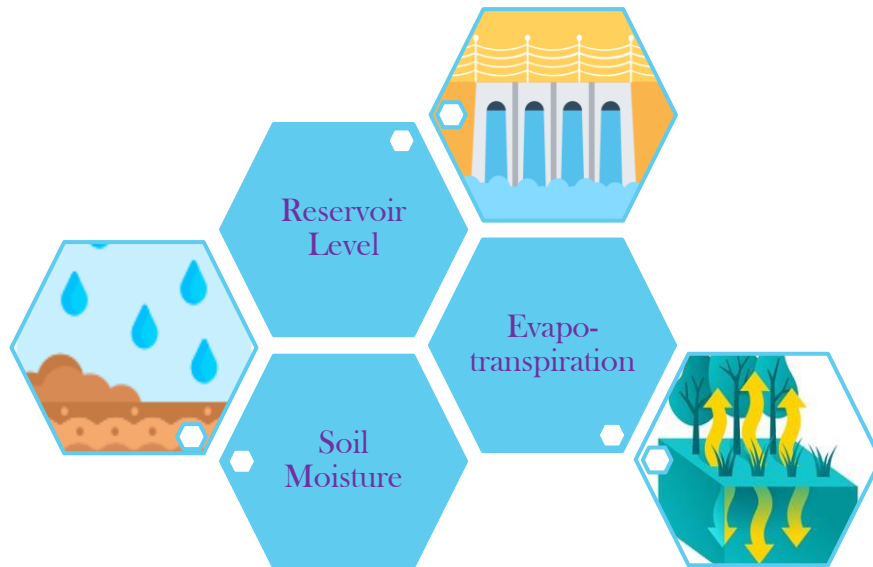




India-WRIS Revamped Modules: *Functionalities and Overview*



NATIONAL WATER INFORMATICS CENTRE

Government of India

Ministry of Jal Shakti

Department of Water Resources, RD & GR

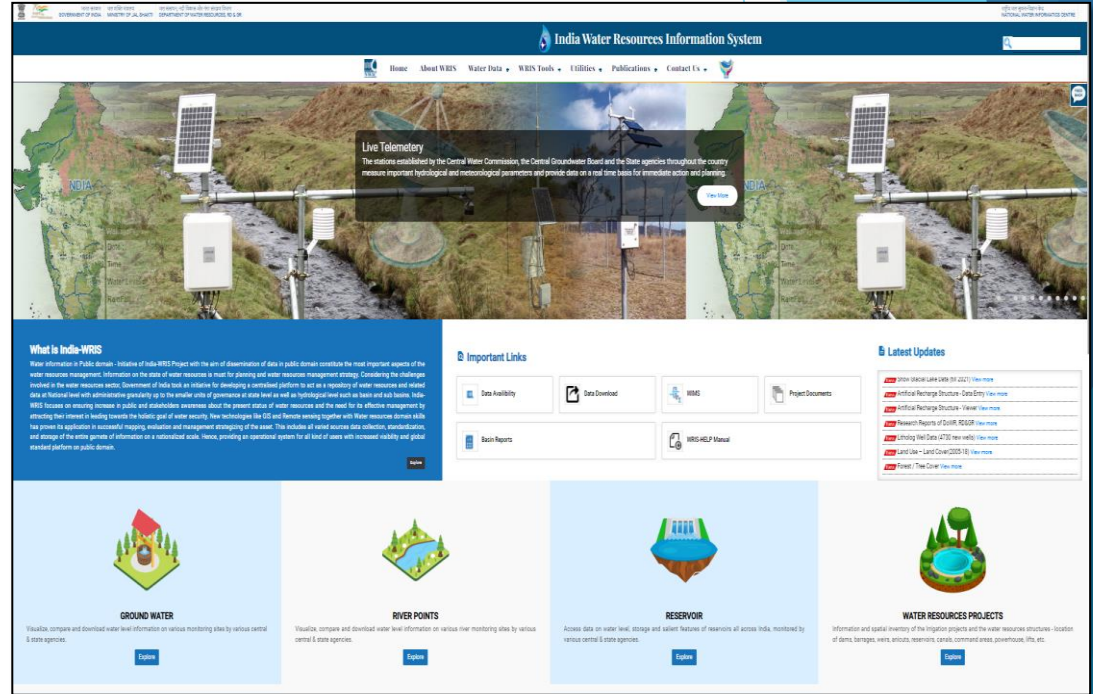


India-WRIS : India Water Resources Information System

A brief introduction

A 'Single Window Solution' for comprehensive, authoritative and consistent data & information of India's water resources in a standardized national GIS framework for planning, development and management of water resources in the country.

Empowering citizens with accurate, adequate and contemporary information on the state of water resources of the country and enlightened public involvement in water management decisions.



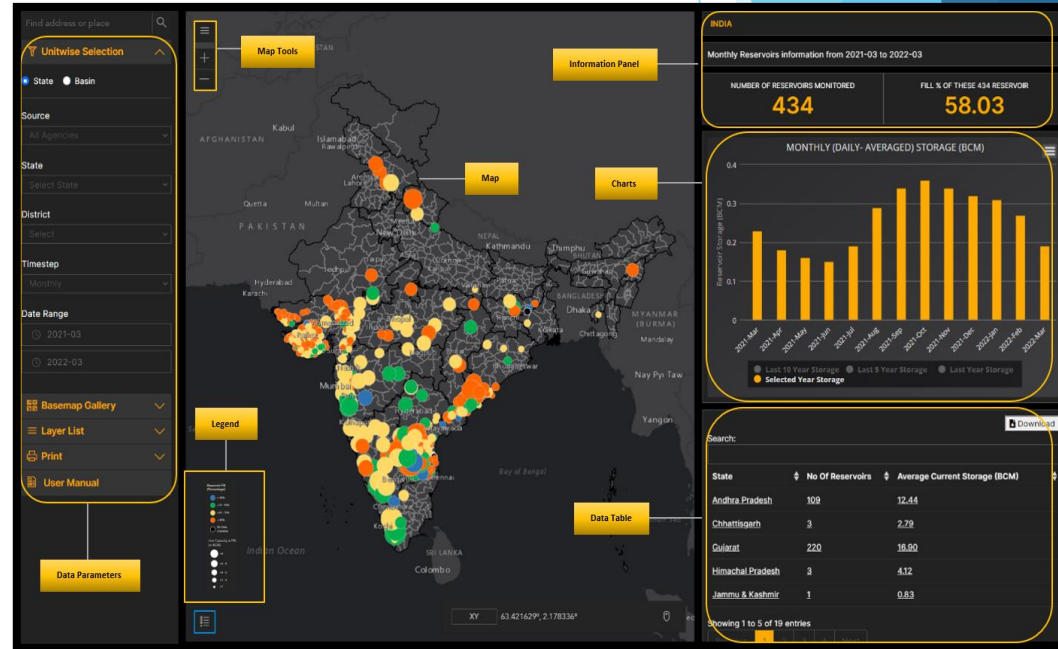
Home Page & Front GUI of India-WRIS



1. Reservoir Level Module

A module that displays the amount of water (in terms of billion cubic meters) stored in reservoirs across the country, based on data from different sources. The data is obtained for both geographical and basin views.

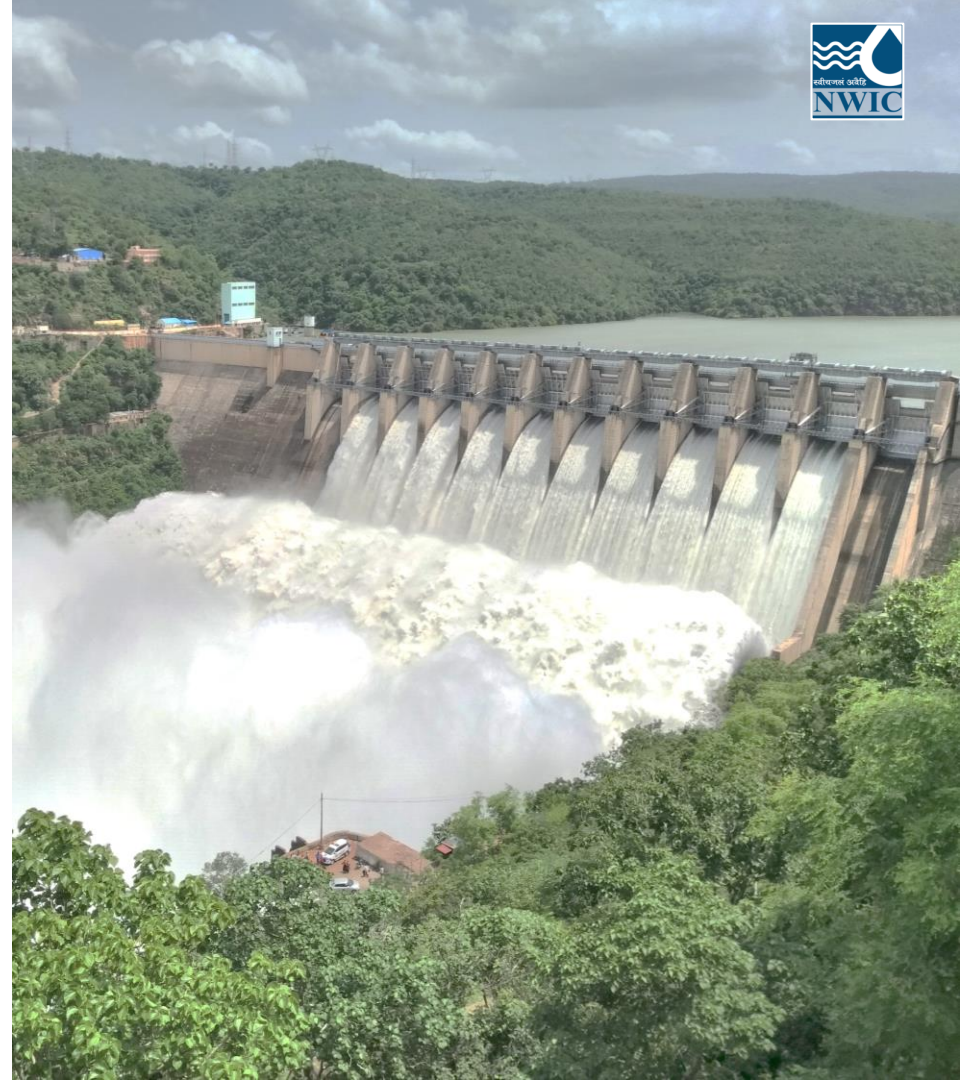
- Historical and real-time data of Reservoir
- Powerful visualizations like heat maps, tables, charts to view and analyze the data at different administrative and hydrological hierarchies
- Data Availability – From 01.01.1990 to till date
- Data Visualization – Points/Charts/Stats/Admin view/Basin view





BASIC INFORMATION

- ☐ Type of Module : *Dynamic*
- ☐ Agency : *APWRIMS, CWC and Gujarat SW*
- ☐ Gridded / Point : *Point*
- ☐ Nature of Data : *Water Level and Storage*
- ☐ Unit : *BCM and m*
- ☐ Data Frequency : *Daily*
- ☐ Data Availability : – *From 01.01.1990 to till date*
- ☐ Spatial data : *State Boundary, District Boundary,*
- ☐ Reservoir stations and Reservoir Fill (%)
- ☐ Attributes displayed in data panel (State wise and Basin wise) :
 1. *State*
 2. *No. of Reservoirs and Average Current Storage (bcm)*
- ☐ Chart :
 1. *Average Undefined Storage (Previous 10 Year)*
 2. *Average Undefined Storage (Previous 5 Year)*
 3. *Undefined Storage (Previous Year)*
 4. *Undefined Storage (Selected Period)*





DATA TABLE

INFO PANEL

INDIA	
Monthly Reservoirs Information from 2021-03 to 2022-04	
NUMBER OF RESERVOIRS MONITORED	LIVE CAPACITY AT FRL (In BCM)
434	210.48
AVERAGE STORAGE (In BCM)	FILL % OF THESE 434 RESERVOIR
102.19	48.55

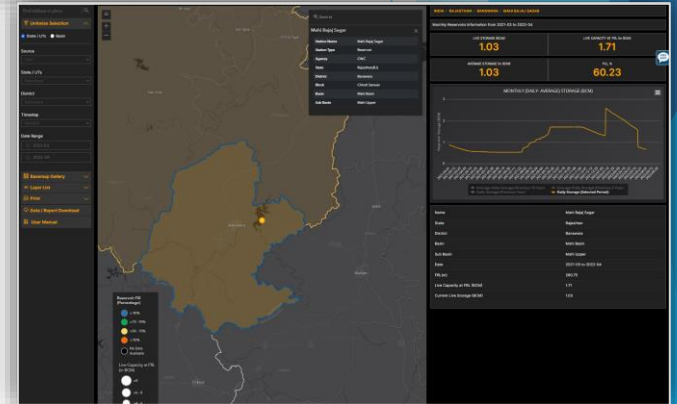
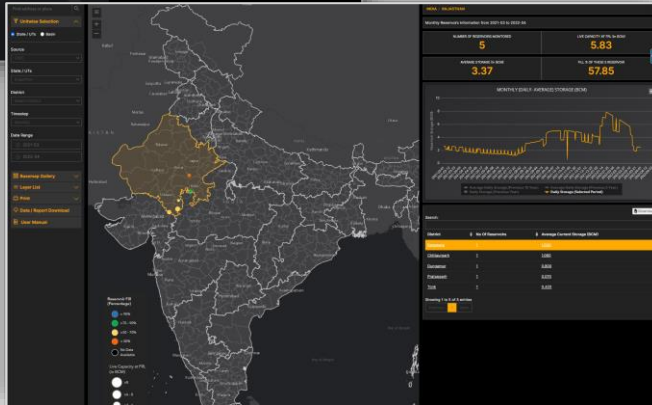
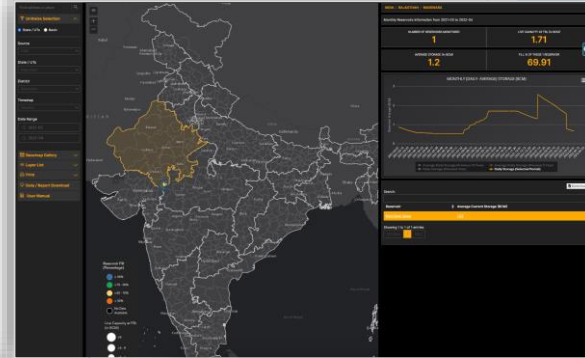
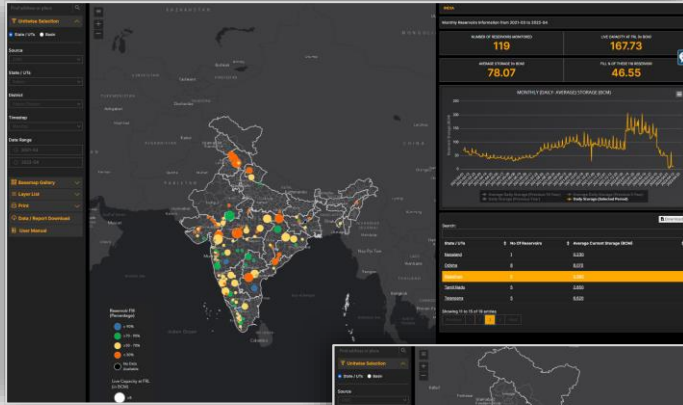
Search:		Download
State / UTs	Value	
Andaman & Nicobar	0	
Andhra Pradesh	30.43	
Arunachal Pradesh	44.22	
Assam	52.3	
Bihar	23.48	
Showing 1 to 5 of 37 entries		
Previous	1 2 3 4 5 ... 8 Next	

Search:		Download
District	Value	
Agar Malwa	40.53	
Alirajour	22.91	
Anuppur	25.47	
Ashoknagar	37.77	
Balaghat	30.66	
Showing 1 to 5 of 52 entries		
Previous	1 2 3 4 5 ... 11 Next	

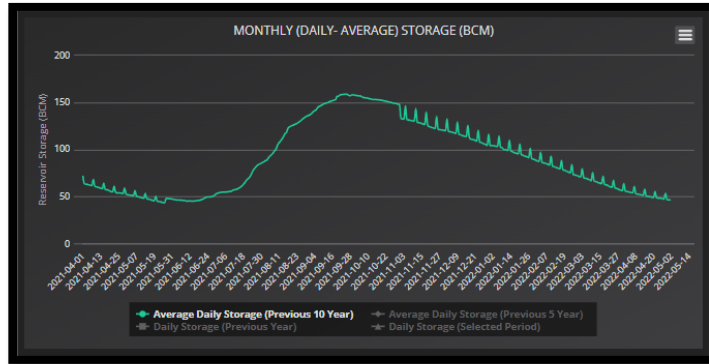
Search:		Download
Daily	Value	
2022-04-18	40.6	
2022-04-19	40.46	
Showing 1 to 2 of 2 entries		
Previous	1 Next	



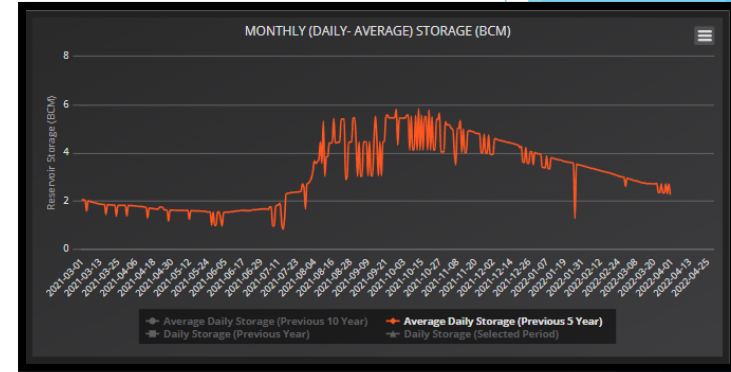
DATA DISPLAY



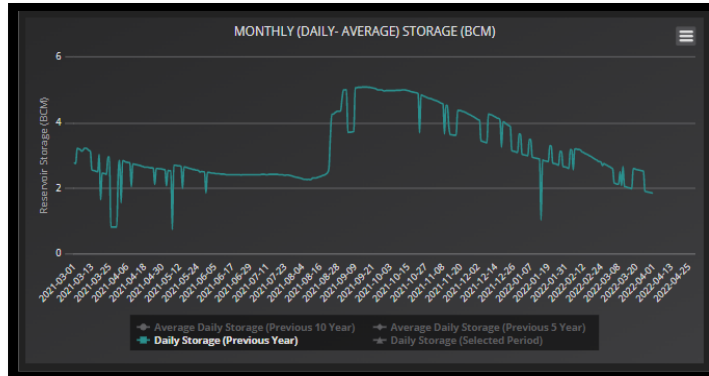
CHARTS VIEW



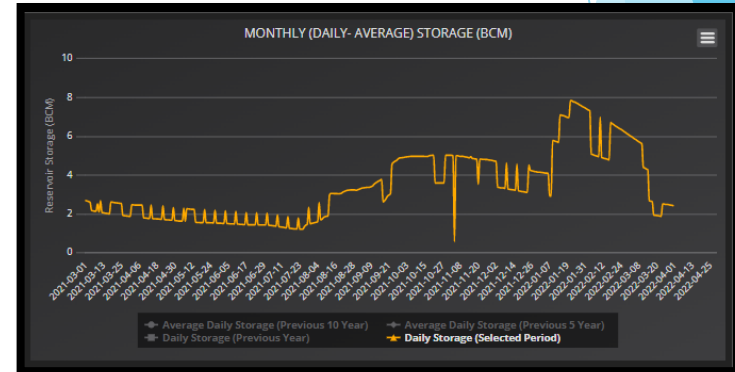
Average Monthly/Daily Storage (Previous 10 Year)



Average Daily/Monthly Storage (Previous 5 Year)



Daily/Monthly Storage (Previous Year)



Daily Storage (Selected Period)



DATA DOWNLOAD

Export

Layout Map only

Title
Map

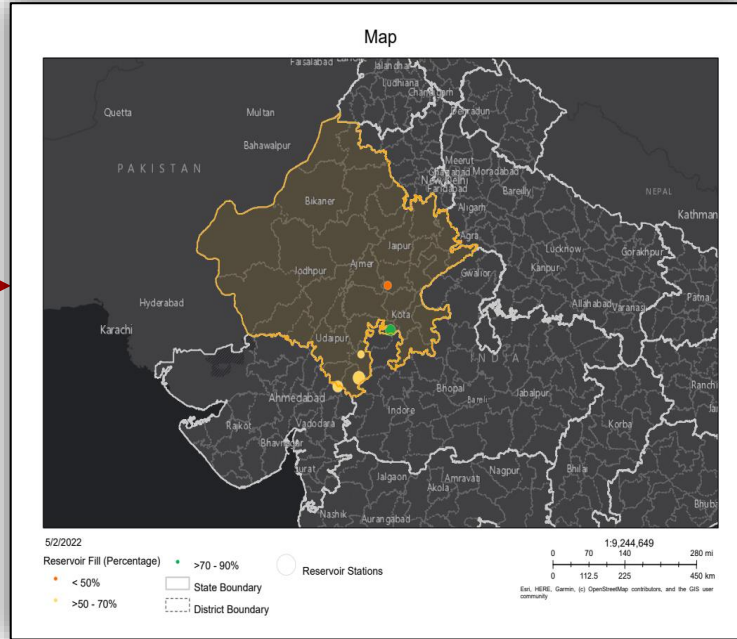
Page setup
Letter ANSI A landscape

File format
PDF

Advanced options

Export

Exported files
☒ Map.pdf



MAP DOWNLOAD

Search:

Download

District	No Of Reservoirs	Average Current Storage (BCM)
Banswara	1	1.030
Chittaurgarh	1	1.060
Dungarpur	1	0.800
Pratapgarh	1	0.070
Tonk	1	0.420

Showing 1 to 5 of 5 entries

Previous Next

District Wise Reservoir Report from 2021-03 to 2022-04

District	No Of Reservoirs	Average Current Storage (BCM)
Banswara	1	1.03
Chittaurgarh	1	1.06
Dungarpur	1	0.8
Pratapgarh	1	0.07
Tonk	1	0.42



REPORT DOWNLOAD

- Unitwise Selection
- Basemap Gallery
- Layer List
- Print
- Data / Report Download
- User Manual

Data / Report Download

Source

CWC

▼

View

State / UTs

▼

District

Select

▼

Timestep

Yearly

▼

End date

🕒

Select

Report Type

Storage Timeseries

▼

Storage Timeseries

Level Timeseries

Level & Storage Timeseries

Reservoirs

Select

▼

Start Date

🕒

Select

Download

Close

Source

CWC

View

State / UTs

District

Ajmer x

+32

Timestep

Daily

End date

2022-04-12

Report Type

Level & Storage Timeseries

State / UTs

Rajasthan x

Reservoirs

Bisalpur x

+4

Start Date

2022-04-01

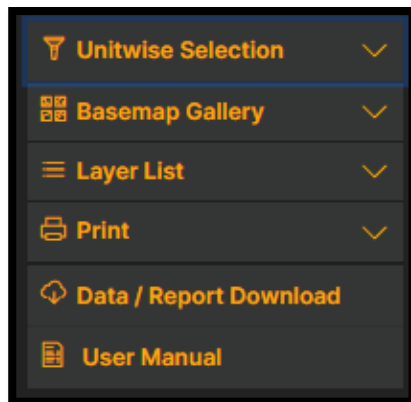
Download



Close

[illegible]



USER MANUAL






User Guide-Reservoir

In this guide you will know how to use the different modules, functions and tools for easy access and download data. This feature displays the amount of water(in terms of billion cubic meters) stored in reservoirs across the country, based on data from different sources. The data is obtained for both geographical and basin views.

Home page of this module shown as below-



- Search** - On the top in left side panel there is search bar option where user can find any address on the map.
- Zoom In & Zoom Out** - On click the map you can zoom in and out of the map with one hand or there is options + and - symbols display left side on the map viewer.
- Unit-wise selection** - In this tool user have two choices user can either select state wise or basin wise it depends on users data requirement. If user select State radio button there is an options to select any of the state and district from the drop down menu. If user select Basin radio button the options are change with Basin and Sub Basin. User have to choose Time steps in which format they need data daily/monthly/yearly after selecting this there is an option for Data range user can select the range for which they need data.

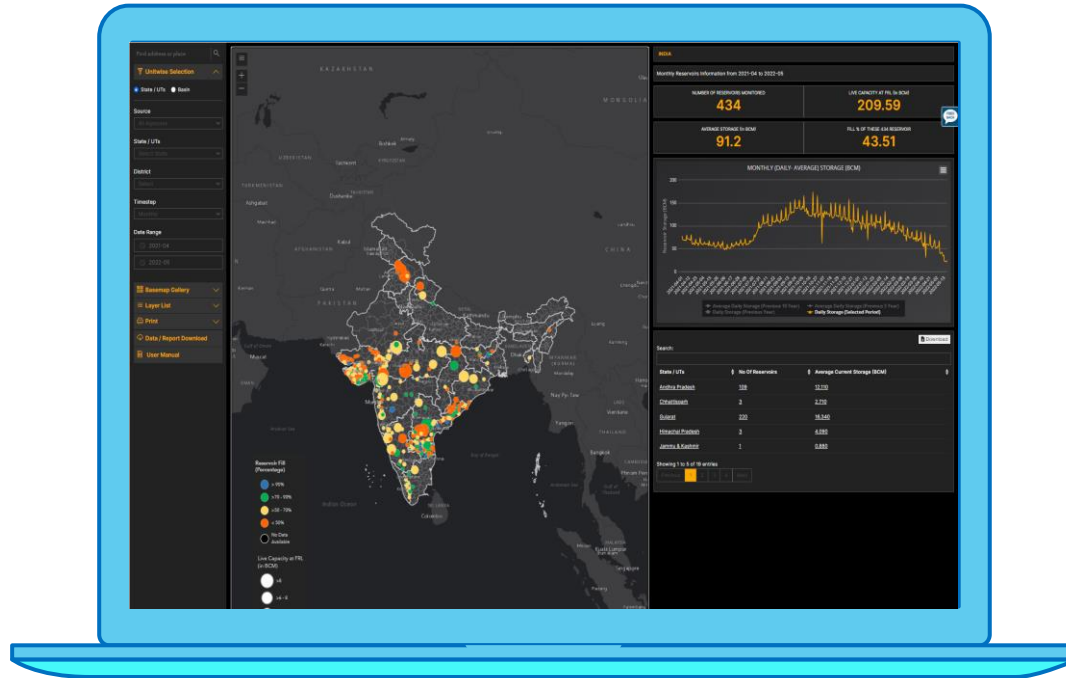
*The data in data panel and map viewer can be viewed in two ways, either State/District or Basin wise.

When the parameters are selected in data panel widget may be clicked for viewing respective data. Some data have download option user can download it with Download button.

1

LIVE DEMONSTRATION

Reservoir Level

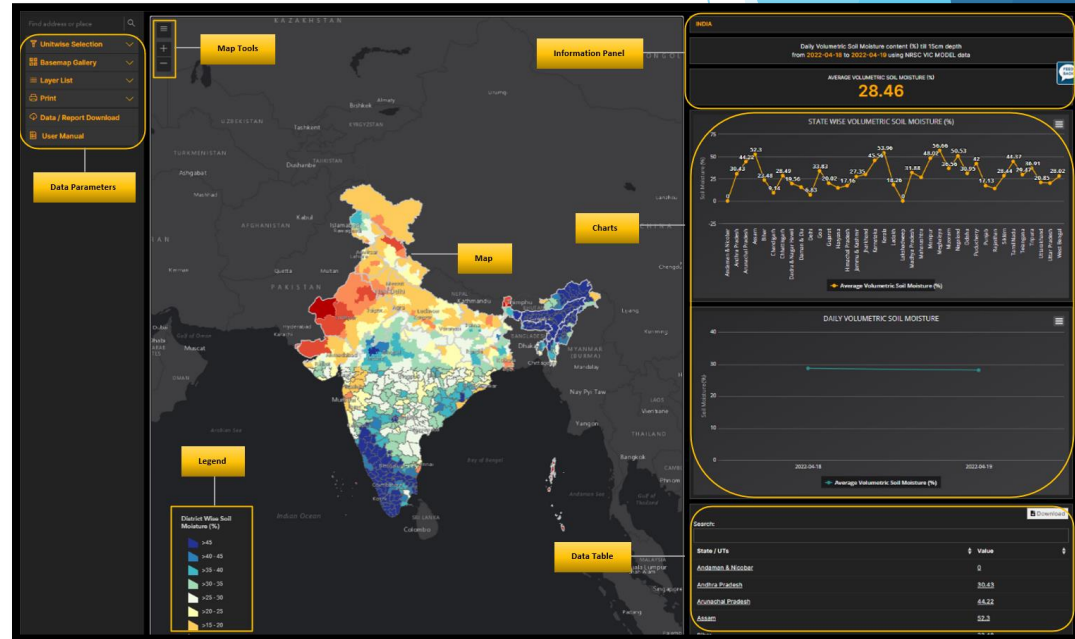




2. Soil Moisture Module

A module that shows the volume of soil moisture content in percentage (%) till 15 centimetres depth, for a given time period using the given source information.

- **Data Availability** – From 2018 to till date
- **NRSC VIC Model Gridded data** (0.05 x 0.05-degree)
- **Data Visualization** –
Heatmaps/Charts/Stats/Admin view/Basin view

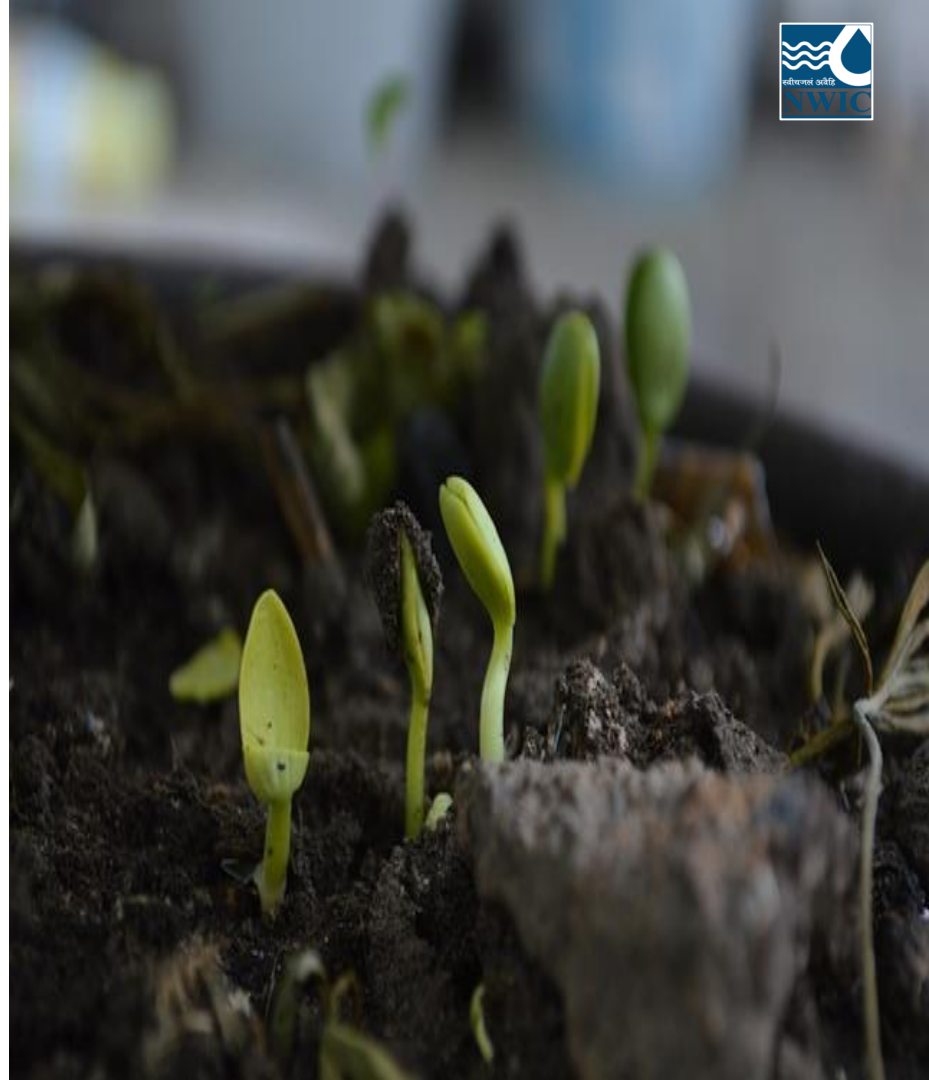


Soil Moisture Module



BASIC INFORMATION

- ☐ Type of Module : Dynamic
- ☐ Agency : NRSC VIC Model
- ☐ Gridded / Point : Gridded (0.05 x 0.05)
- ☐ Unit : Volumetric Soil Moisture Content (%)
- ☐ Data Frequency : Daily
- ☐ Data Availability : From 01.06.2018 to till date
- ☐ Spatial data : State Boundaries, District Boundaries, Basin and Sub-Basin Boundaries, India Boundary and Soil Moisture Heatmap
- ☐ Attributes displayed in data panel (State wise and Basin wise) :
 1. State
 2. Volumetric Soil Moisture Content (%) till 15 cm depth.
- ☐ Chart : Volumetric Soil Moisture Content (%) till 15 cm depth.





INFO PANEL

INDIA

Daily Volumetric Soil Moisture content (%) till 15cm depth
from 2022-04-18 to 2022-04-19 using NRSC VIC MODEL data

AVERAGE VOLUMETRIC SOIL MOISTURE (%)
28.46

DATA TABLE



Search: [Download](#)

State / UTs	Value
Madhya Pradesh	31.88
Maharashtra	28.41
Manipur	48.02
Meghalaya	56.66
Mizoram	36.56

Showing 21 to 25 of 37 entries

[Previous](#) [1](#) [...](#) [4](#) [5](#) [6](#) [7](#) [8](#) [Next](#)

Search: [Download](#)

District	Value
Agar Malwa	40.53
Alirajpur	22.91
Anuppur	25.47
Ashoknagar	37.77
Balaghat	30.66

Showing 1 to 5 of 52 entries

[Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [...](#) [18](#) [Next](#)

Search: [Download](#)

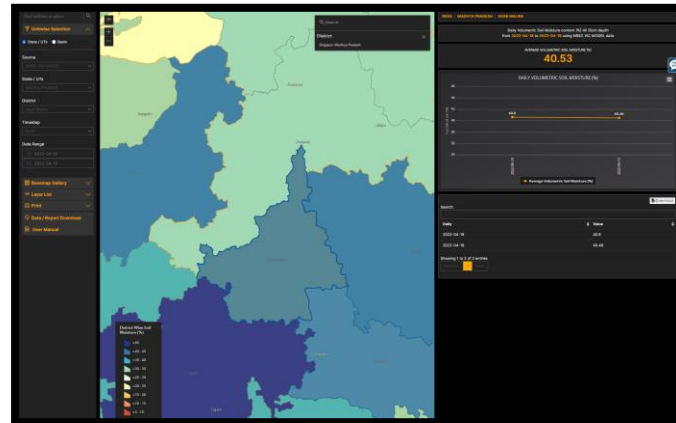
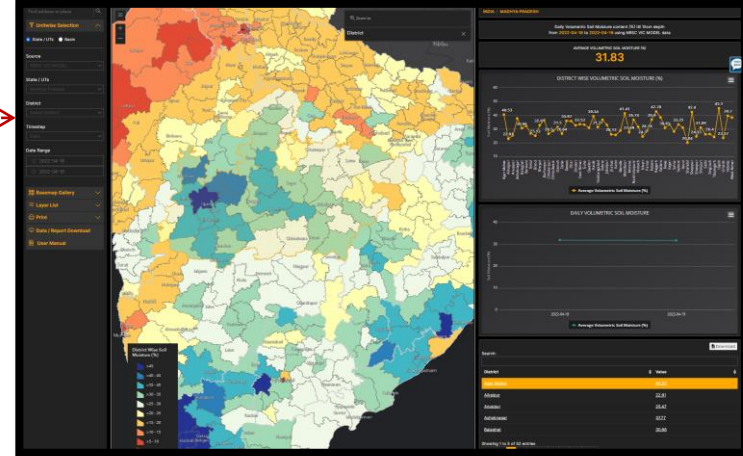
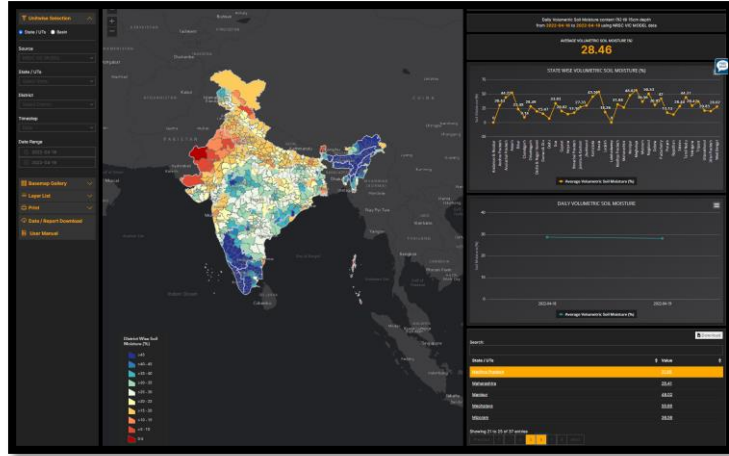
Daily	Value
2022-04-18	40.6
2022-04-19	40.46

Showing 1 to 2 of 2 entries

[Previous](#) [1](#) [Next](#)



DATA DISPLAY





REPORT DOWNLOAD

Unitwise Selection

Basemap Gallery

Layer List

Print

Data / Report Download

User Manual

Data / Report Download

Report Type

Select Report Type

Select Report Type

State / UTs Wise Report

District Wise Report

Basin Wise Report

Subbasin Wise Report

Source

NRSC VIC MOD

Start Date

Select

End Date

Select

DownloadClose

Data / Report Download

Report Type

District Wise Report

Source

NRSC VIC MODEL

State / UTs

Jharkhand

District

East Singhbhum

Timestep

Daily

Start Date

2022-04-01

End date

2022-04-19

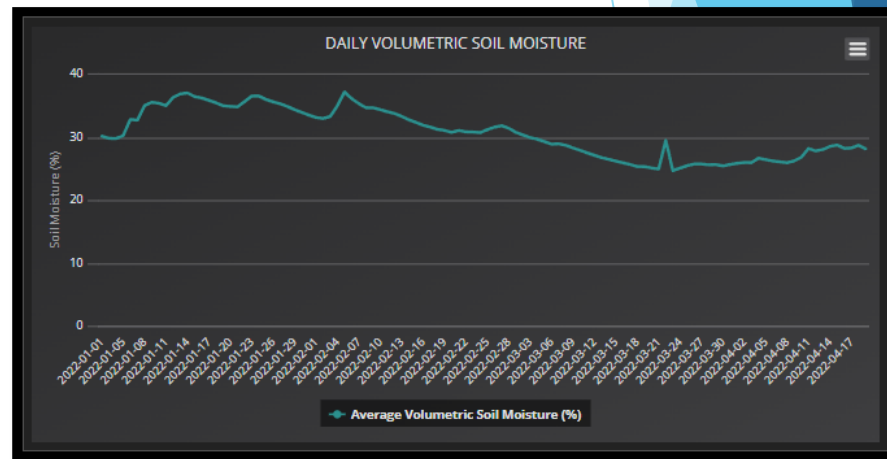
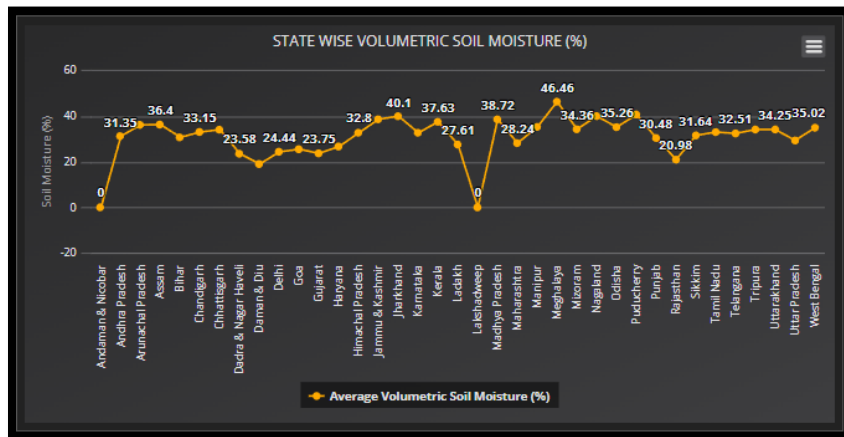
DownloadClose

State	District	Date	Soil Moisture (in %)
Jharkhand	East Singhbhum	2022-04-01	28.70
Jharkhand	East Singhbhum	2022-04-02	28.49
Jharkhand	East Singhbhum	2022-04-03	28.30
Jharkhand	East Singhbhum	2022-04-04	28.11
Jharkhand	East Singhbhum	2022-04-05	27.94
Jharkhand	East Singhbhum	2022-04-06	27.78
Jharkhand	East Singhbhum	2022-04-07	27.63
Jharkhand	East Singhbhum	2022-04-08	27.48
Jharkhand	East Singhbhum	2022-04-09	28.78
Jharkhand	East Singhbhum	2022-04-10	28.53
Jharkhand	East Singhbhum	2022-04-11	28.30
Jharkhand	East Singhbhum	2022-04-12	28.09
Jharkhand	East Singhbhum	2022-04-13	27.88
Jharkhand	East Singhbhum	2022-04-14	27.70
Jharkhand	East Singhbhum	2022-04-15	27.52
Jharkhand	East Singhbhum	2022-04-16	27.33
Jharkhand	East Singhbhum	2022-04-17	27.13
Jharkhand	East Singhbhum	2022-04-18	27.03
Jharkhand	East Singhbhum	2022-04-19	26.85

16

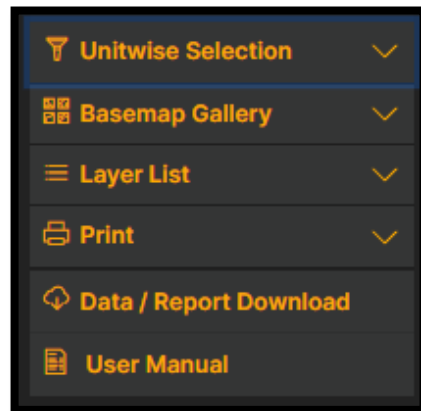




CHARTS VIEW





USER MANUAL

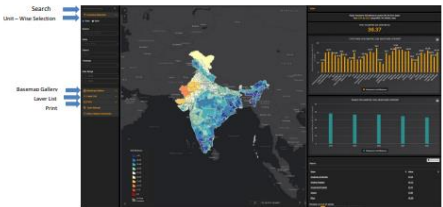




User Guide-Soil moisture

In this guide you will know how to use the different modules, functions and tools for easy access and download data. This feature displays the yearly volumetric soil moisture content (%) till 15cm depth from 2018 using NRSC VIC MODEL data.

Home page of this module shown as below-



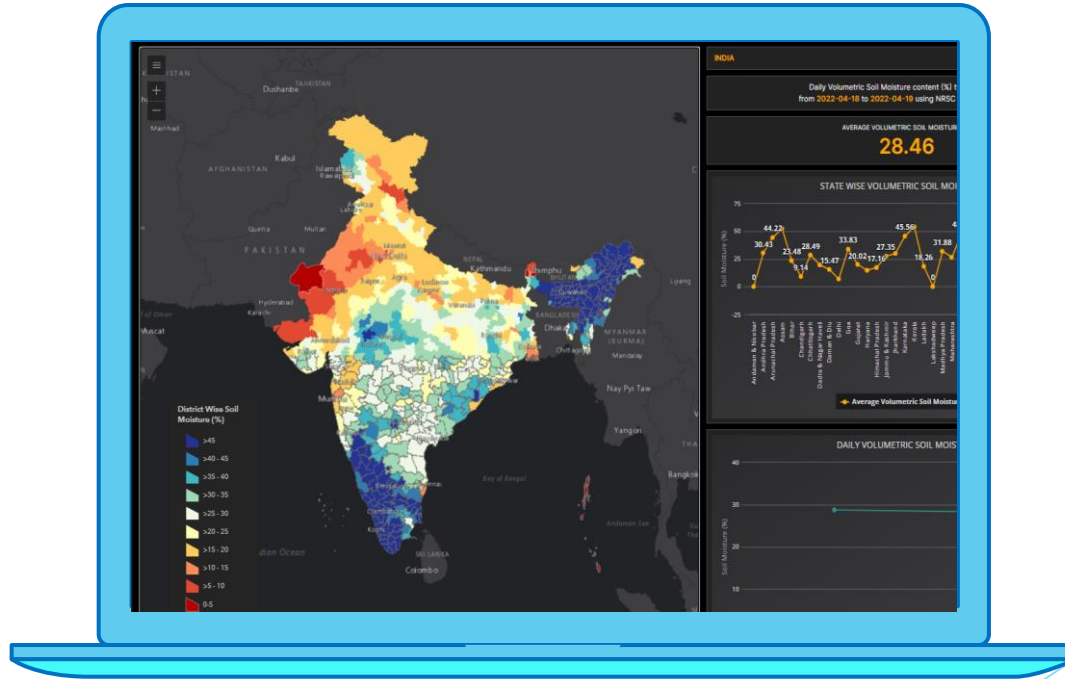
- **Search** - On the top in left side panel there is search bar option where user can find any address on the map.
- **Zoom In & Zoom Out** - On click the map you can zoom in and out of the map with one hand or there is options + and - symbols display left side on the map viewer.
- **Unit-wise selection** - In this tool user have two choices user can either select state wise or basin wise it depends on users data requirement. If user select State radio button there is an options to select any of the state and district from the drop down menu. If user select Basin radio button the options are change with Basin and Sub Basin. User have to choose Time steps in which format they need data daily/monthly/yearly after selecting this there is an option for Data range user can select the range for which they need data.

*The data in data panel and map viewer can be viewed in two ways, either State/District or Basin wise.

1

LIVE DEMONSTRATION

Soil Moisture

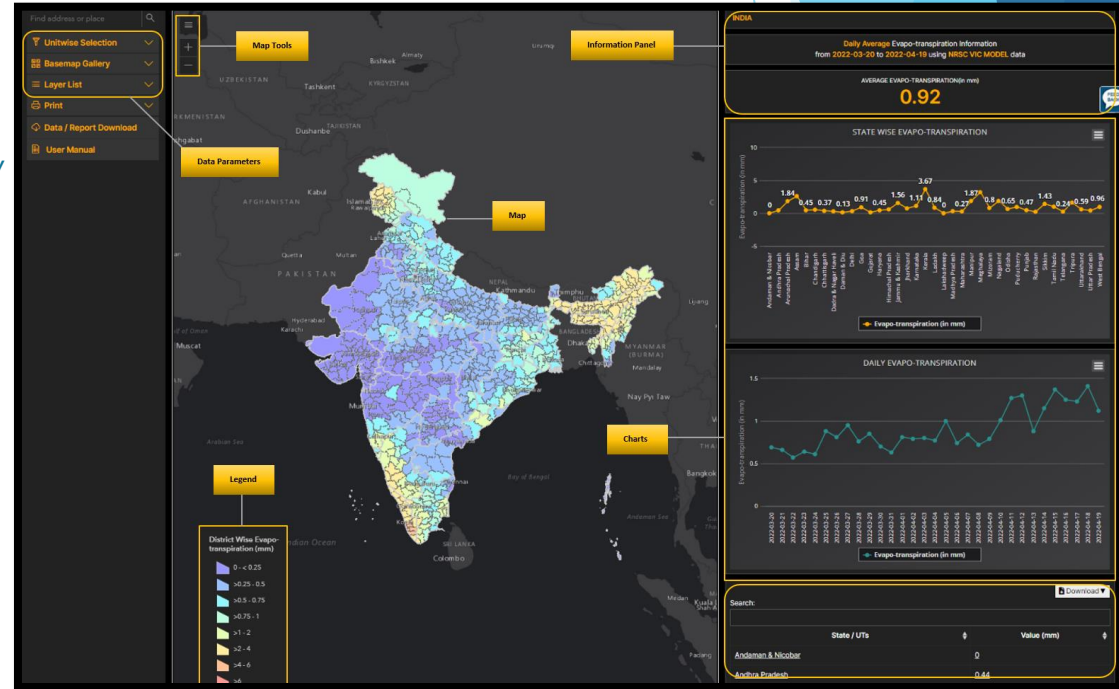
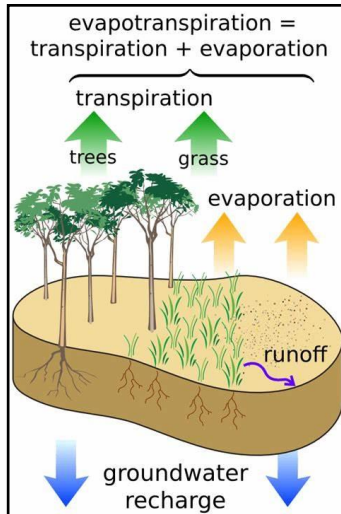




3. Evapo-transpiration Module

A module that shows evapotranspiration data for different states and basins for a given set of data parameters.

- Data Availability – From 2018 to till date
- NRSC VIC Model Gridded data (0.05 x 0.05-degree)
- Data Visualization –
Heatmaps/Charts/Stats/Admin view/Basin view





BASIC INFORMATION



- ☐ *Type of Module : Dynamic*
- ☐ *Agency : NRSC VIC Model*
- ☐ *Gridded / Point : Gridded (0.05 x 0.05)*
- ☐ *Unit : mm*
- ☐ *Data Frequency : Daily*
- ☐ *Data Availability : From 01.06.2018 to till date*
- ☐ *Spatial data : State Boundary, District Boundary, Basin and Sub-Basin Boundary, India Boundary and Evapotranspiration Heatmap*
- ☐ *Attributes displayed in data panel (State wise and Basin wise) :*
 1. *State*
 2. *Evapo-transpiration in mm*
- ☐ *Chart : Evapo-transpiration (mm)*





INFO PANEL

INDIA
Daily Average Evapo-transpiration Information from 2022-03-19 to 2022-04-19 using NRSC VIC MODEL data
AVERAGE EVAPO-TRANSPIRATION(in mm) 0.91

Search:	Download
Daily	Value (mm)
2022-03-19	0.15
2022-03-20	0.86
2022-03-21	0.34
2022-03-22	0.3
2022-03-23	0.3
Showing 1 to 5 of 32 entries	
Previous	1 2 3 4 5 6 7 Next

DATA TABLE

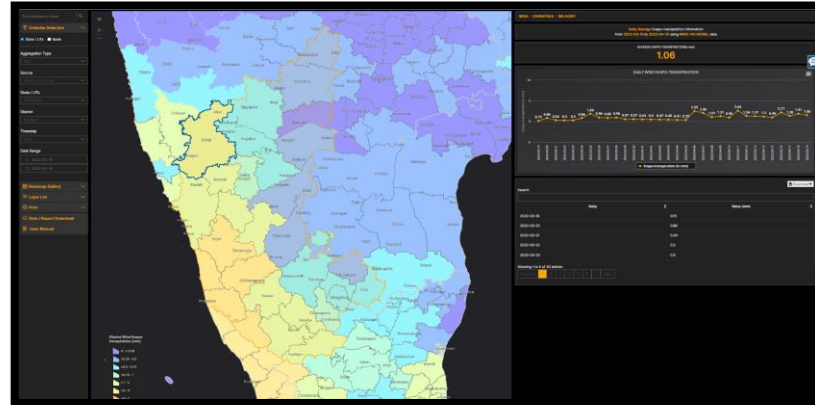
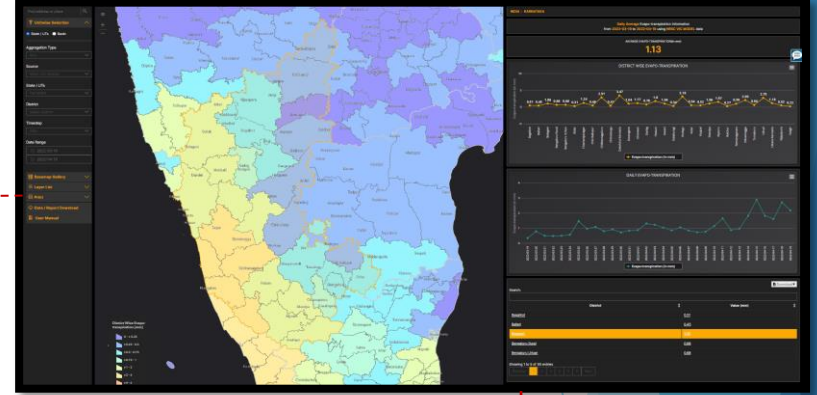
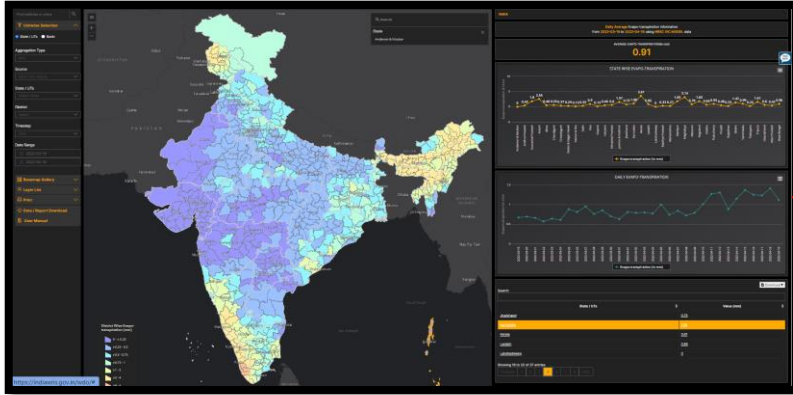


Search:	Download
State / UTs	Value (mm)
Jharkhand	0.75
Karnataka	1.08
Kerala	3.61
Ladakh	0.85
Lakshadweep	0
Showing 16 to 20 of 37 entries	
Previous	1 2 3 4 5 ... 8 Next

Search:	Download
District	Value (mm)
Bagalkot	0.51
Ballari	0.45
Belagavi	1.06
Bengaluru Rural	0.68
Bengaluru Urban	0.68
Showing 1 to 5 of 30 entries	
Previous	1 2 3 4 5 6 Next



DATA DISPLAY





DATA DOWNLOAD

Export

Layout Map only

Title
Map

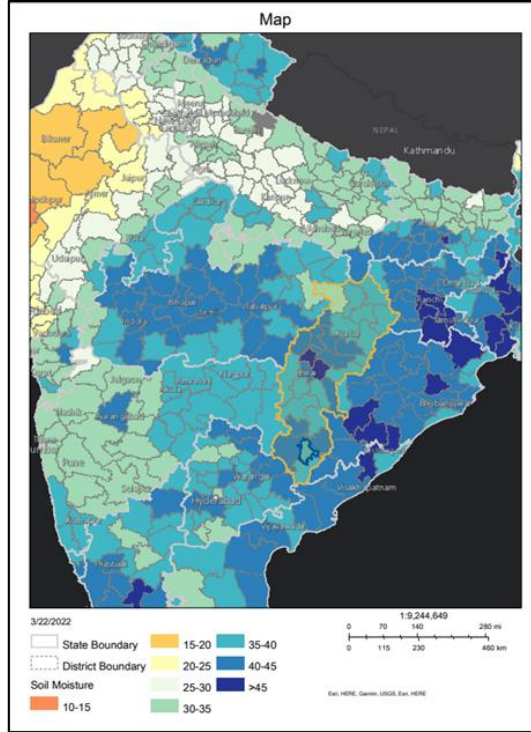
Page setup
Letter ANSI A landscape

File format
PDF

Advanced options

Export

Exported files
Map.pdf



MAP DOWNLOAD

Search: Download

District	Value (mm)
Bagalkot	0.51
Ballari	0.45
Belagavi	1.06
Bengaluru Rural	0.68
Bengaluru Urban	0.68

Showing 1 to 5 of 30 entries

Previous Next

File Home Insert Page Layout Formulas Data Review View Help

Clipboard Font Paragraph Styles Alignment Number

Undo Redo Cut Copy Paste Format Painter Merge & Center

General Conditional Formatting Styles Cell Styles Insert Delete Format Cells Autosum Find & Filter

Comments Share

District Wise Evapo-transpiration data of Karnataka from 2022-03-19 to 2022-04-19

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	District	Value (mm)														
2	Bagalkot	0.51														
3	Ballari	0.45														
4	Belagavi	1.06														
5	Bengaluru Rural	0.68														
6	Bengaluru Urban	0.68														
7	Bidar	0.31														
8	Chamarajanagar	1.24														
9	Chik Ballapur	0.48														
10	Chikkamagaluru	2.91														
11	Chitradurga	0.41														
12	Dakshina Kannada	3.47														
13	Davangere	1.04														
14	Dharwad	1.17														
15	Gadag	0.78														
16	Hassan	1.8														
17	Haveri	1.04														
18	Kalaburagi	0.34														
19	Kodagu	3.18														
20	Kolar	0.54														
21	Koppal	0.52														

Sheet1

Accessibility: Good to go



REPORT DOWNLOAD

- Unitwise Selection
- Basemap Gallery
- Layer List
- Print
- Data / Report Download
- User Manual

Data / Report Download

Report Type: **Select Report Type**

Source: NRSC VIC MODEL

Start Date: **Select** End date: **Select**

Download **Close**

Data / Report Download

Report Type: **District Wise Report**

Source: **NRSC VIC MODEL** State / UTs: **Karnataka**

District: **Belagavi** Timestep: **Daily**

Start Date: **2022-04-01** End date: **2022-04-18**

Download **Close**

File Home Insert Page Layout Formulas Data Review View Help

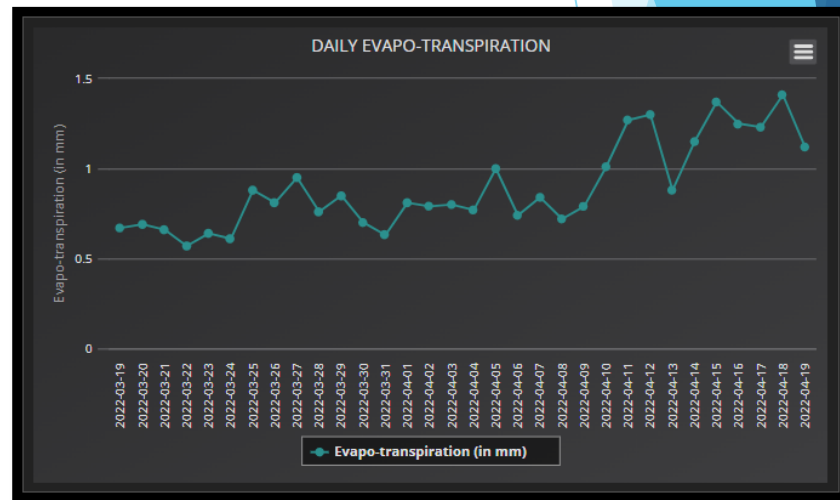
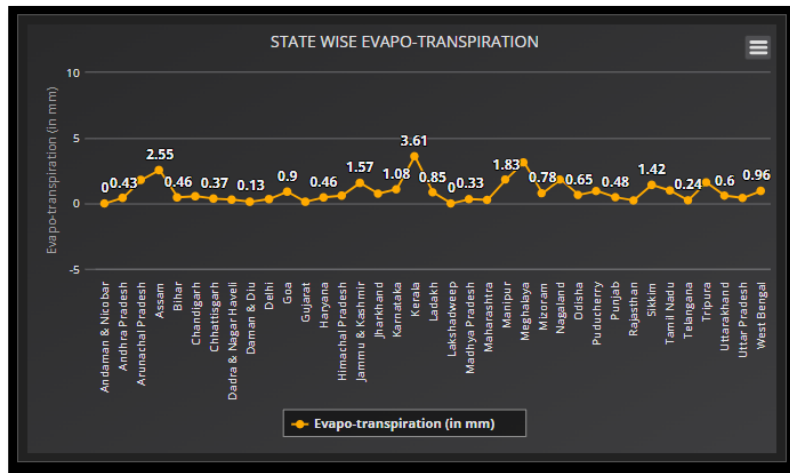
Copy Paste Undo Redo Font Paragraph Styles Alignment Number Conditional Formatting Cell Styles Insert Delete Format Data Tools Editing

State

National Water Informatics Centre
Evapotranspiration_Daily data for Karnataka_Belagavi
Date : 3/5/2022, 9:08:53 am

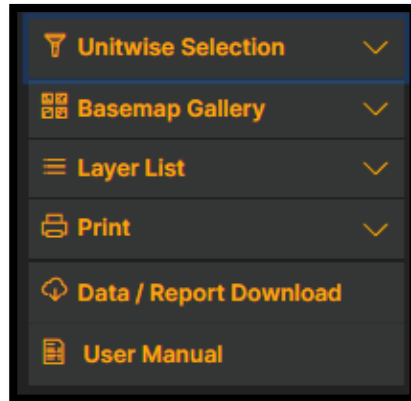
State	District	Date	Evapotranspiration (mm)
Karnataka	Belagavi	2022-04-01	0.50
Karnataka	Belagavi	2022-04-02	0.47
Karnataka	Belagavi	2022-04-03	0.45
Karnataka	Belagavi	2022-04-04	0.41
Karnataka	Belagavi	2022-04-05	0.39
Karnataka	Belagavi	2022-04-06	2.55
Karnataka	Belagavi	2022-04-07	2.06
Karnataka	Belagavi	2022-04-08	1.07
Karnataka	Belagavi	2022-04-09	1.31
Karnataka	Belagavi	2022-04-10	0.95
Karnataka	Belagavi	2022-04-11	2.64
Karnataka	Belagavi	2022-04-12	1.34
Karnataka	Belagavi	2022-04-13	1.31
Karnataka	Belagavi	2022-04-14	1.20
Karnataka	Belagavi	2022-04-15	0.99
Karnataka	Belagavi	2022-04-16	2.21



CHARTS VIEW





USER MANUAL






User Guide- Evapo-transpiration

In this guide you will know how to use the different modules, functions and tools for easy access and download data. This feature shows Evapo-transpiration data for different states and basins for a given set of data parameters

Home page of this module shown as below-



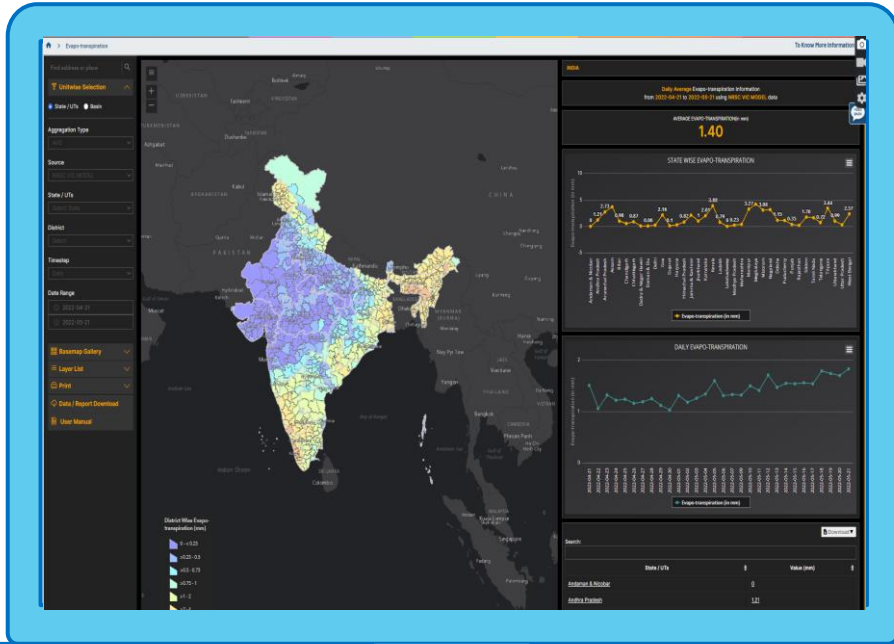
- Search** - On the top in left side panel there is search bar option where user can find any address on the map.
- Zoom In & Zoom Out** - On click the map you can zoom in and out of the map with one hand or there is options + and - symbols display left side on the map viewer.
- Unit-wise selection**- In this tool user have two choices user can either select state wise or basin wise it depends on users data requirement. If user select State radio button there is an options to select any of the state and district from the drop down menu. If user select Basin radio button the options are change with Basin and Sub Basin. User have to choose Time steps in which format they need data daily/monthly/yearly after selecting this there is an option for Data range user can select the range for which they need data.

*The data in data panel and map viewer can be viewed in two ways, either State/District or Basin wise.

When the parameters are selected in data panel widget may be clicked for viewing respective data. Some data have download option user can download it with Download button.

1

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Thank You!

Contact Us at helpdesk-nwic@gov.in

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