

DETAILS ABOUT FULL CLIMATIC STATIONS

The Ground Water wing of Public Works Department, Tamilnadu is doing scientific studies on various aspects of ground water. This wing is maintaining 45 Full climatic stations and 6 Automatic Weather stations spread over the entire state. These stations have been located in different types of soil in various river basins.

The objectives of full climatic stations are:

- To collect climatic data like Rainfall, Temperature (Maximum, Minimum, Dry Bulb, Wet Bulb), Relative Humidity, Pan Evaporation, Water Temperature, Wind Speed, Wind Direction, Sunshine Hours twice daily through out the state.
- Using all the above data evapo-transpiration by Modified Penmann's method is being calculated.
- The meteorological data thus collected are sent to IMD.
- Some of the stations are either reporting or recording stations for IMD on Co-opting basis.
- The list of meteorological stations and data availability in softcopy (SWDES database) are as follows.

Sl. No.	Station Name	District	Data Availability
Full Climatic Stations			
1	Thiruthani	Thiruvallur	1999-2009
2	Palur	Cuddalore	1999-2009
3	Dusi Ayyangarkulam	Kancheepuram	1999-2009
4	Karunguzhi	Kancheepuram	1999-2009
5	Gollapalli	Vellore	2000-2009
6	Kiladaiyalam	Villupuram	2001-2009
7	Thirukovilur	Villupuram	1999-2009
8	Lekkur	Cuddalore	1999-2009
9	Kilnatchipattu	Thiruvannamalai	1991-2009
10	Melumalai	Krishnagiri	1999-2009
11	Cheranmadevi	Tirunelveli	2000-2009
12	Nambiyar	Tirunelveli	2000-2009
13	Vembakkottai	Virudhunagar	2000-2009
14	Kavalur	Virudhunagar	1989-2009
15	Parthibanur	Sivagangai	1989-2009
16	Savaspuram	Virudhunagar	2004-2009
17	Viralipatty	Dindigul	1973-2009

Sl. No.	Station Name	District	Data Availability
18	Kamatchipuram	Dindigul	1998-2009
19	Kundrakudi	Sivagangai	1999-2009
20	Mayiladumparai	Theni	2000-2009
21	Aralvoimozhi	Kanniyakumari	1993-2009
22	Kalampatty	Tuticorin	1993-2009
23	Mela Eral	Tuticorin	1998-2009
24	Mayanur	Karur	2000-2009
25	Perambalur	Perambalur	2000-2009
26	Pudukkottai	Pudukkottai	1999-2009
27	Rayaraghunadhapuram	Pudukkottai	2001-2009
28	Chithiraichavadi Anicut	Coimbatore	1999-2009
29	Aliyar Dam	Coimbatore	2000-2009
30	Krishnagiri Reservoir	Dharmapuri	1999-2009
31	Vaniyar Reservoir	Dharmapuri	1999-2009
32	Chithode	Erode	1999-2009
33	Grand Anicut	Thanjavur	2000-2009
34	IMTI@Thuvakudi	Trichy	2001-2009
35	Thiruthuraiipoondi	Thiruvarur	2001-2009
36	Sundakkampalayam	Coimbatore	1974-2009
37	Mangalapuram	Namakkal	1986-2009
38	Uthamapalayam	Erode	1993-2009
39	Sethumadai	Coimbatore	1993-2009
40	Kurungulam	Thanjavur	1989-2009
41	Thanjavur	Thanjavur	2001-2009
42	Koradachery	Thiruvarur	2002-2009
43	Lower Anicut	Thanjavur	2000-2009
44	K.Paramathy	Karur	1985-2009
45	Bhavanisagar	Erode	1999-2009
Automatic Weather Station			
46	Yercaud	Salem	Not Working
47	Upper Anicut	Trichy	Not Working
48	Ooty	Nilgiris	Not Working
49	Kodaikanal	Dindigul	Not Working
50	Papanasam	Tirunelveli	Not Working
51	Valparai	Coimbatore	Not Working

HYDROMETEOROLOGICAL DATA OF TAMILNADU FOR 2004 - A NUT SHELL

Sl. No.	Station	District	Total Annual Rainfall in mm	Average Daily						
				Max. Temp. in oC	Min. Temp. in oC	Relative Humidity	Wind Velocity in KMPH	Sunshine Hours	Evaporation in mm	Evapotranspiration
1	Sundakkampalayam	Coimbatore	700.50	33.26	22.88	72.12	3.41	6.27	3.19	4.71
2	Mangalapuram	Namakkal	1013.80	32.79	24.14	64.18	3.50	6.69	6.91	5.01
3	Kurungulam	Thanjavur	1345.90	33.38	25.08	80.78	1.98	7.94	3.99	5.29
4	K.Paramathi	Karur	725.60	32.31	24.32	67.46	3.88	6.84	5.34	5.15
5	Thanjavur	Thanjavur	1220.80	32.17	25.11	72.68	1.69	6.80	4.54	4.77
6	Koradacheri	Thiruvarur	1944.10	30.50	24.97	80.69	1.55	5.36	3.19	4.27
7	Kilnatchipattu	Thiruvannamalai	1327.20	30.23	22.74	66.13	5.87	6.33	6.12	5.50
8	Melumalai	Krishnagiri	888.00	31.20	20.97	73.10	2.87	6.92	8.93	5.04
9	Lekkur	Cuddalore	1216.60	33.07	25.01	65.44	4.05	7.05	5.77	5.29
10	Thiruthani	Thiruvallur	1195.00	35.24	29.31	68.61	3.67	6.63	3.02	5.24
11	Viraipatti	Dindigul	941.90	33.99	24.95	60.01	7.60	7.12	8.23	5.29
12	Kamatchipuram	Dindigul	1003.40	33.64	24.14	59.78	7.62	7.15	5.64	5.45
14	Aralvoimozhi	Kanniyakumari	903.00	31.22	28.70	69.47	8.56	6.46	9.66	4.60
15	Kalampatti	Tuticorin	651.00	31.16	24.91	74.39	3.89	7.21	5.13	4.68
16	Parthibanur	Sivagangai	813.50	33.67	24.82	69.96	2.59	5.88	4.83	4.99
17	Uthamapalayam	Erode	738.60	29.49	23.21	75.00	4.24	6.15	3.72	4.27
18	Sethumadai	Coimbatore	1019.00	31.27	25.56	74.37	0.13	4.73	4.88	3.86
19	Savasupuram	Virudhunagar	653.20	34.83	26.15	65.00	5.91	6.20	5.41	4.95
20	Mela Eral	Tuticorin	625.20	32.13	24.09	87.44	7.58	6.49	5.47	4.03

❖ The annual rainfall in water shed ranges from 1944.10 mm to 625.20 mm with maximum annual rainfall at Koradachery and the minimum at Mela Eral.

❖ The average daily maximum temperature ranges from 35.24°C to 29.49°C and the average daily minimum temperature ranges from 29.31°C to 20.97°C.

❖ The average daily humidity is found to be high at Mela Eral (87.44%) whereas the same found to be low at Kamatchipuram (59.78%).

❖ The range of daily wind velocity is 8.56 KMPH to 0.13 KMPH. The highest being at Aralvoimozhi and low at Sethumadai.

❖ The highest average daily bright sunshine is observed at Kilnatchipattu (11.05 Hrs.) whereas lowest was observed at Sethumadai (4.28 Hrs.).

❖ The highest average daily bright sunshine is observed at Kurungulam (7.94 Hrs.) whereas lowest was observed at Sethumadai (4.73 Hrs.).

❖ The highest evapotranspiration is found to be 5.50 mm/day at Kilnatchipattu and the lowest was 3.86 mm/day at Sethumadai.

Evapotranspiration for Tamilnadu for the period from 1993 to 2004



The Decreasing trend in the Evapotranspiration shows the change in the land use pattern resulting the decrease of vegetation cover.