



Climate information for Health

Based on GFS and Extended Range Weather Forecast

(Valid from 03rd May to 16th May 2024)

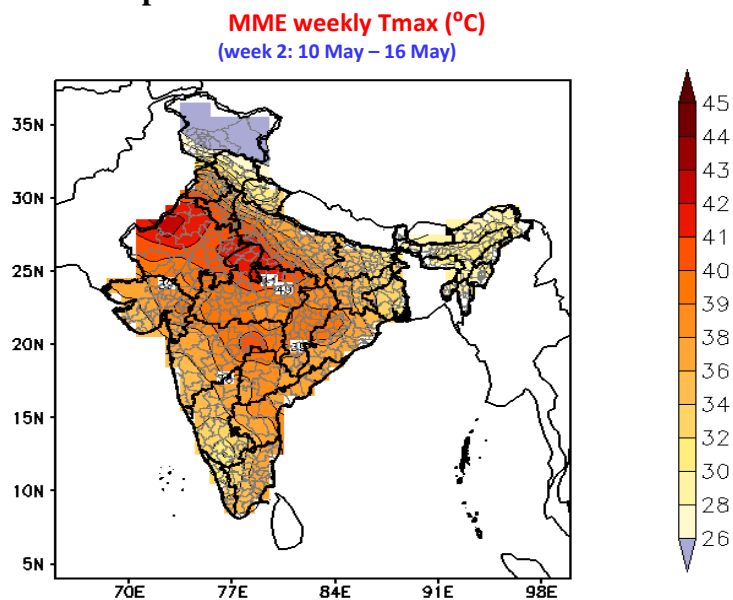
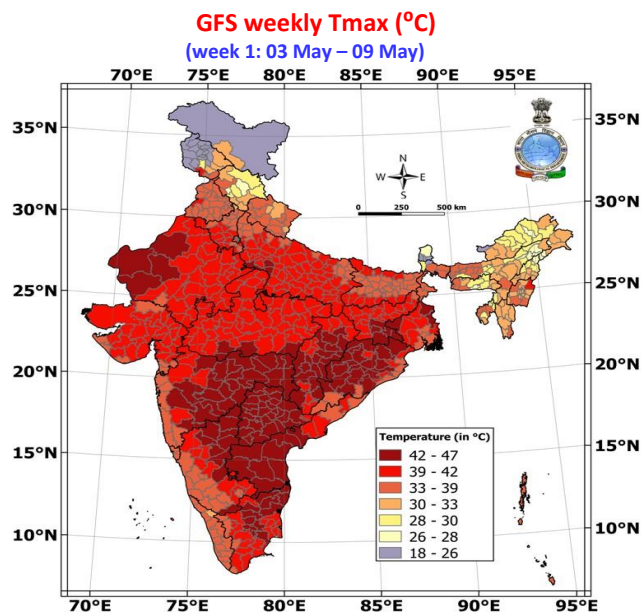
Issued on 03rd May, 2024

Office of Climate Research and Services, India Meteorological Department, Pune

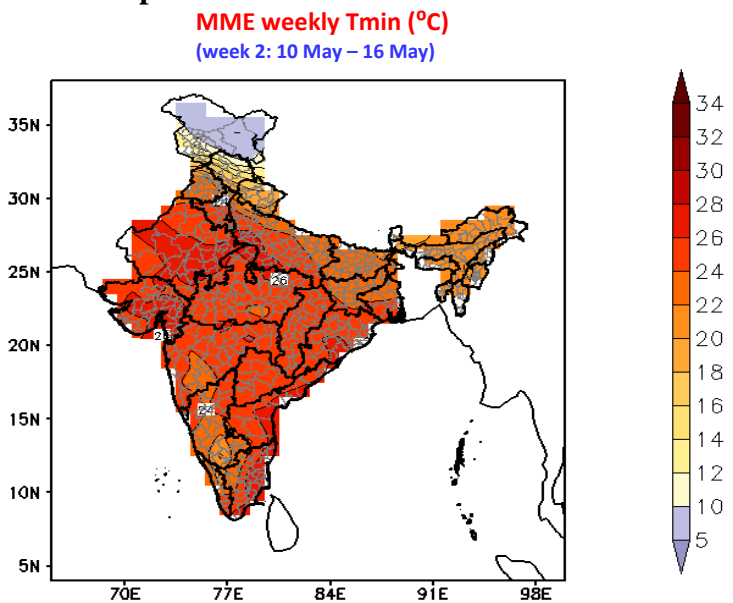
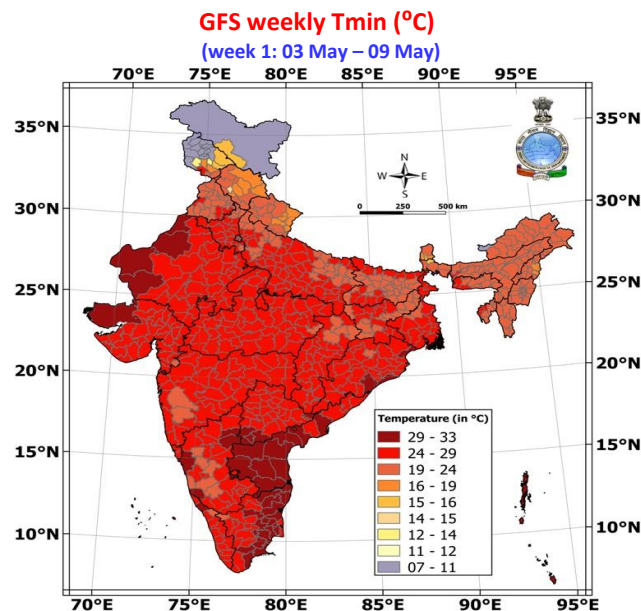
Climate information for coming two weeks is provided for the transmission windows of temperature favorable for development of vector borne diseases like malaria and dengue based on GFS and ERFS.

Weekly Prediction of maximum and minimum temperature

Predicted Maximum Temperature



Predicted Minimum Temperature



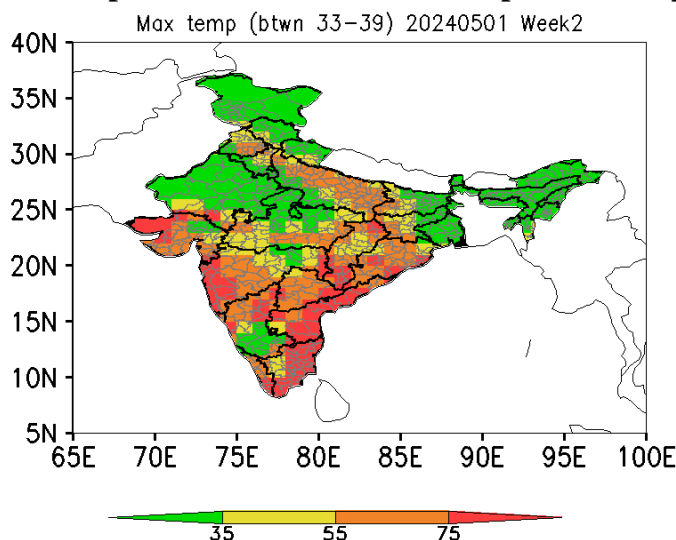
Weather Warning

Major districts of Maharashtra, Chhattisgarh, Telangana, Odisha, Andhra Pradesh, some districts of Karnataka, Jharkhand, Tamil Nadu, few districts of Uttar Pradesh (Agra), Rajasthan (Barmer, Jaisalmer, Jodhpur), Madhya Pradesh (Balaghat, Betul, Burhanpur) and West Bengal (Puruliya) will experience maximum temperature above 42°C during 03rd to 09th May 2024.

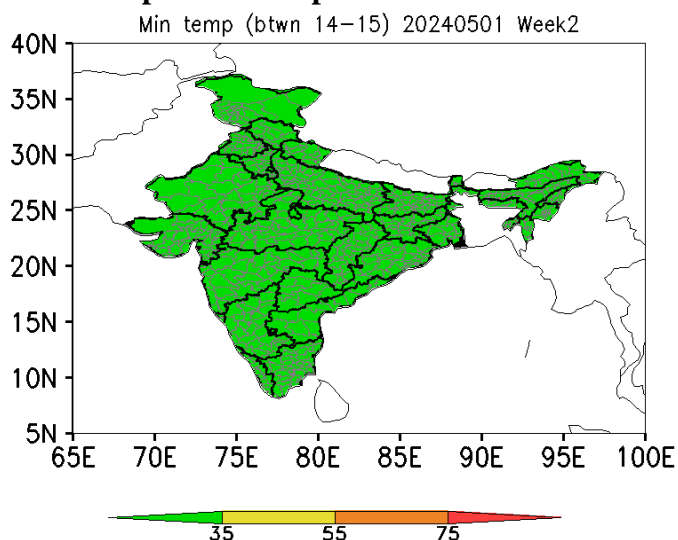
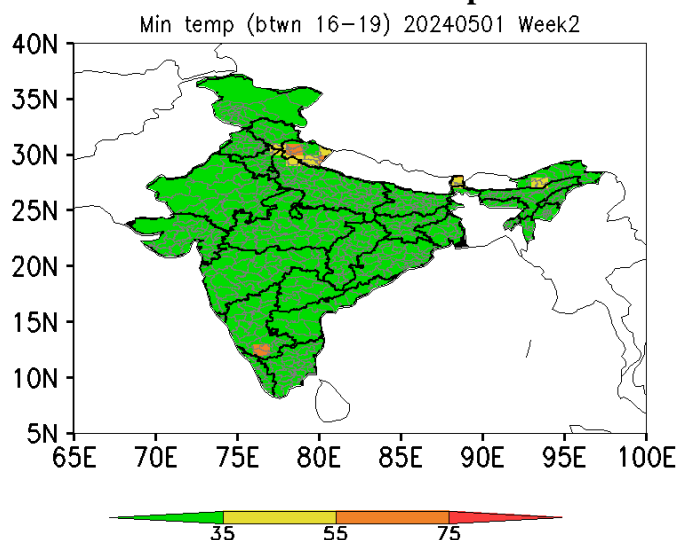
GFS based weekly evolution of transmission window for Malaria and Dengue for Week-I				
Week	VBD	Threshold temp.		Regions within the range of predicted temperatures for Tmax/Tmin or both in Threshold temperatures range.
		Th-Tmax	Th-Tmin	
03 rd to 09 th May 2024	Malaria (<i>Plasmodium falciparum</i>)	33-39 ⁰ C	16-19 ⁰ C	All districts of Goa, Uttarakhand (except Chamoli, Rudraprayag), Punjab (except Firozpur), Kerala (except Wayanad), major districts of Bihar, some districts of Jammu & Kashmir, Himachal Pradesh, Haryana, Delhi, Uttar Pradesh, Assam, Tripura, West Bengal, Odisha, Gujarat, Maharashtra, Karnataka, Tamil Nadu, few districts of Rajasthan (Sirohi), Jharkhand (Sahebganj), Sikkim (East, West Sikkim), Meghalaya (South, West and South-West Garo Hills), Mizoram (Saiha), Manipur (Churachandpur, Chandel, Tamenglong), Nagaland (Kiphire, Tuensang) and Andhra Pradesh (Srikakulam, Vishakhapatnam).
	Malaria (<i>Plasmodium Vivax</i>)	33-39 ⁰ C	14-15 ⁰ C	All districts of Goa, Uttarakhand (except Champawat, Chamoli, Rudraprayag), Punjab (except Firozpur), Kerala (except Wayanad), major districts of Bihar, some districts of Haryana, Delhi, Uttar Pradesh, Assam, Tripura, West Bengal, Odisha, Gujarat, Maharashtra, Karnataka, Tamil Nadu, few districts of Jammu & Kashmir (Kathua, Samba), Himachal Pradesh (Hamirpur, Kangra, Una), Rajasthan (Sirohi), Jharkhand (Sahebganj), Meghalaya (South, West and South-West Garo Hills), Mizoram (Saiha), Manipur (Churachandpur, Chandel, Tamenglong) and Andhra Pradesh (Srikakulam, Vishakhapatnam).
	Dengue	Not known	11.9 ⁰ C	Nil.
ERFS based weekly evolution of transmission window for Malaria and Dengue for Week-II				
10 th to 16 th May 2024	Malaria (<i>Plasmodium falciparum</i>)	33-39 ⁰ C	16-19 ⁰ C	Goa, Jharkhand, Andhra Pradesh, major parts of Uttarakhand, Uttar Pradesh, Bihar, West Bengal, Odisha, Telangana, Gujarat, Karnataka, Tamil Nadu, some parts of Himachal Pradesh, Punjab, Haryana, Madhya Pradesh, Chhattisgarh Kerala, isolated parts of Jammu & Kashmir, Rajasthan, Assam and Manipur.
	Malaria (<i>Plasmodium Vivax</i>)	33-39 ⁰ C	14-15 ⁰ C	Goa, Jharkhand, Andhra Pradesh, major parts of Uttar Pradesh, Bihar, West Bengal, Odisha, Telangana, Gujarat, Karnataka, Tamil Nadu, some parts of Himachal Pradesh, Punjab, Haryana, Uttarakhand, Madhya Pradesh, Chhattisgarh Kerala, isolated parts of Jammu & Kashmir and Rajasthan.
	Dengue	Not known	11.9 ⁰ C	Some parts of Jammu & Kashmir and isolated parts of Himachal Pradesh.

Weekly probabilistic outlook for prevalence of transmission window for Malaria

Predicted probabilistic Maximum Temperature map



Predicted probabilistic Minimum Temperature map

Probabilistic weekly evolution of transmission window for Malaria (*Plasmodium falciparum*).Second week (10th to 16th May 2024):

1	<u>75</u> probability level		Major districts of Andhra Pradesh, Tamil Nadu, some districts of Gujarat, Maharashtra, Karnataka, Telangana, Chhattisgarh, Odisha, Kerala, few districts of Rajasthan and Goa.
2	<u>55-75</u> probability level		Major districts of Uttar Pradesh, Odisha, Telangana, Kerala, some districts of Uttarakhand, Punjab, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra, Goa, Karnataka, Andhra Pradesh, few districts of Haryana, Rajasthan and Tamil Nadu.
3	<u>35-55</u> probability level		Sikkim, some districts of Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh, Bihar, Mizoram, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, Tamil Nadu, few districts of Jammu & Kashmir, Arunachal Pradesh, Andhra Pradesh, Karnataka and Kerala.
4	<u>Less than 35</u> probability level		Major districts in rest of states.

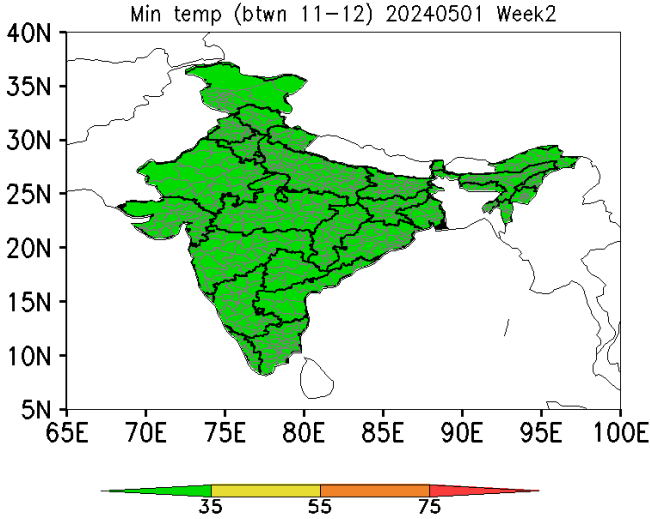
Probabilistic weekly evolution of transmission window for Malaria (<i>Plasmodium vivax</i>)			
Second week (10 th to 16 th May 2024):			
1	<u>75</u> probability level		Major districts of Andhra Pradesh, Tamil Nadu, some districts of Gujarat, Maharashtra, Karnataka, Telangana, Chhattisgarh, Odisha, Kerala, few districts of Rajasthan and Goa.
2	<u>55-75</u> probability level		Major districts of Uttar Pradesh, Odisha, Telangana, Kerala, some districts of Punjab, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra, Goa, Karnataka, Andhra Pradesh, few districts of Haryana, Rajasthan and Tamil Nadu.
3	<u>35-55</u> probability level		Some districts of Himachal Pradesh, Uttarakhand, Punjab, Haryana, Uttar Pradesh, Bihar, Mizoram, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, Tamil Nadu, few districts of Jammu & Kashmir, Andhra Pradesh, Karnataka and Kerala.
4	<u>Less than 35</u> probability level		Major districts in rest of states.

Glossary:

SN	Malaria VBD	Threshold minimum temp (Th-Tmin)	Threshold maximum temp (Th-Tmax)
1	<i>Plasmodium falciparum</i>	16-19°C	33-39°C
2	<i>Plasmodium vivax</i>	14-15°C	

Weekly probabilistic outlook for prevalence of transmission window for Dengue

Predicted probabilistic Minimum Temperature map



Probabilistic weekly evolution of transmission window for Dengue			
Second week (10 th to 16 th May 2024):			
1	<u>75</u> probability level		Nil.
2	<u>55-75</u> probability level		Nil.
3	<u>35-55</u> probability level		Nil.
4	<u>Less than 35</u> probability level		All states.

Glossary:

SN	VBD	Threshold minimum temp (Th-Tmin)	Threshold maximum temp (Th-Tmax)
1	Dengue virus	11.9°C	Not known

Verification of previous week 26th April to 02nd May 2024 weather warning issued for development of vector borne diseases.

Following table provides the verification of previous week 26th April to 02nd May 2024 temperature forecast issued in last week bulletin with realized temperature.

Week	VBD	Threshold temp.	Regions within the range of predicted temperatures for Tmax/Tmin or both in Threshold temperatures range.	Regions within the range of realised temperatures for Tmax/Tmin or both in Threshold temperatures range.
26th Apr to 02nd May 2024	Malaria (<i>Plasmodium falciparum</i> and <i>Vivax</i>)	33-39 °C	All districts of Punjab, Delhi, Mizoram, Goa, Uttarakhand (except Chamoli, Rudraprayag), Manipur (except Chandel, Ukhrul), Kerala (except Kollam), major districts of Haryana, Assam, Meghalaya, Nagaland, Tripura, some districts of Uttar Pradesh, West Bengal, Arunachal Pradesh, Maharashtra, Karnataka, Tamil Nadu, few districts of Jammu & Kashmir (Kathua, Jammu, Samba), Himachal Pradesh (Kangra, Solan, Una) and Rajasthan (Sirohi).	All districts of Delhi, Rajasthan, Gujarat, Goa, Madhya Pradesh (except Sidhi, Rewa, Burhanpur), Kerala (except Kozikod), major districts of Haryana, Uttar Pradesh, Bihar, Karnataka, Tamil Nadu, some districts of Maharashtra, Chhattisgarh, Jharkhand, Assam West Bengal, Odisha, Andhra Pradesh, few districts of Arunachal Pradesh (Tawang), Manipur (Chandel), Mizoram (Lawngtlai) and Meghalaya (South-west & West Garo Hills).
	Malaria (<i>Plasmodium falciparum</i>)	16-19°C	All districts of Sikkim, major districts of Uttarakhand, few districts of Jammu & Kashmir (Kathua, Samba), Himachal Pradesh (Kangra, Shimla, Una) and West Bengal (Kalimpong).	All districts of Sikkim, major districts of Punjab, Arunachal Pradesh, Nagaland, some districts of Haryana, Uttar Pradesh, Assam, Meghalaya, few districts of Himachal Pradesh (Solan) Uttarakhand (Haridwar, Nanital, Udham Singh Nagar), Rajasthan (Ganganagar, Hanumangarh) and West Bengal (Darjeeling, Jalpaiguri, Kalimpong).
	Malaria (<i>Plasmodium vivax</i>)	14-15°C	Some districts of Himachal Pradesh.	Few districts of Uttarakhand (Almora, Dehradun).
	Dengue virus	11.9°C	Hamirpur district of Himachal Pradesh.	Few districts of Himachal Pradesh (Chamba, Kangra, Shimla).