



Climate information for Health

Based on GFS and Extended Range Weather Forecast

(Valid from 16th August to 29th August 2024)

Issued on 16th August, 2024

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

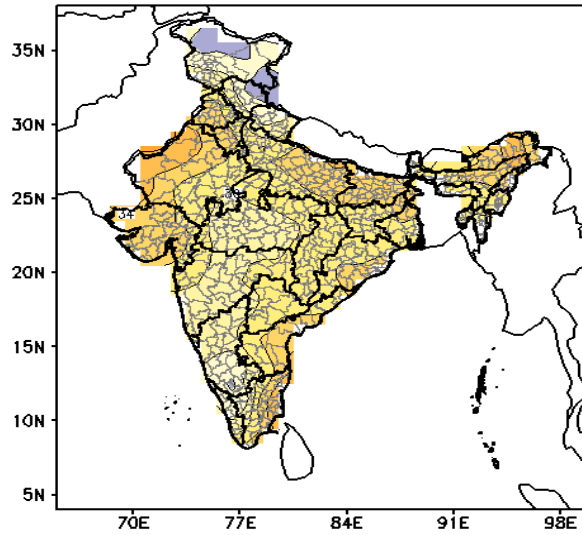
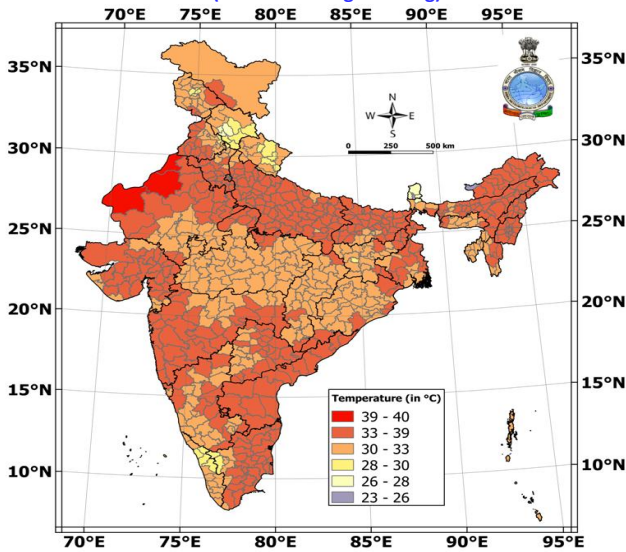
Climate information for coming two weeks is provided for the transmission windows of temperature favorable for development of vector borne diseases like malaria and dengue based on GFS and ERFS.

Weekly Prediction of maximum and minimum temperature

Predicted Maximum Temperature

GFS weekly Tmax (°C)
(week 1: 16 Aug – 22 Aug)

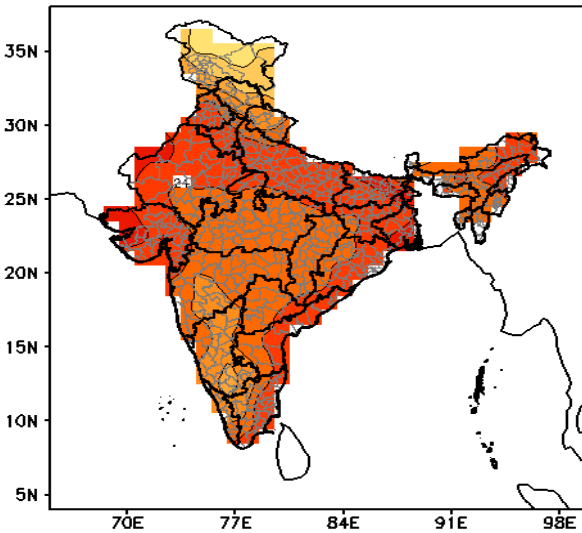
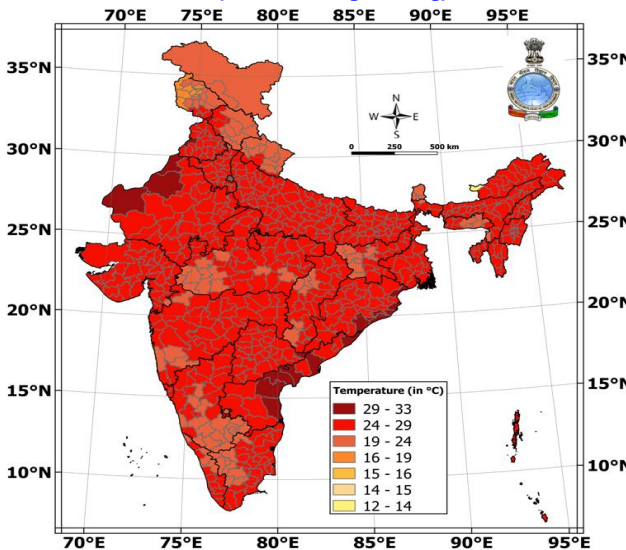
MME weekly Tmax (°C)
(week 2: 23 Aug – 29 Aug)



Predicted Minimum Temperature

GFS weekly Tmin (°C)
(week 1: 16 Aug – 22 Aug)

MME weekly Tmin (°C)
(week 2: 23 Aug – 29 Aug)



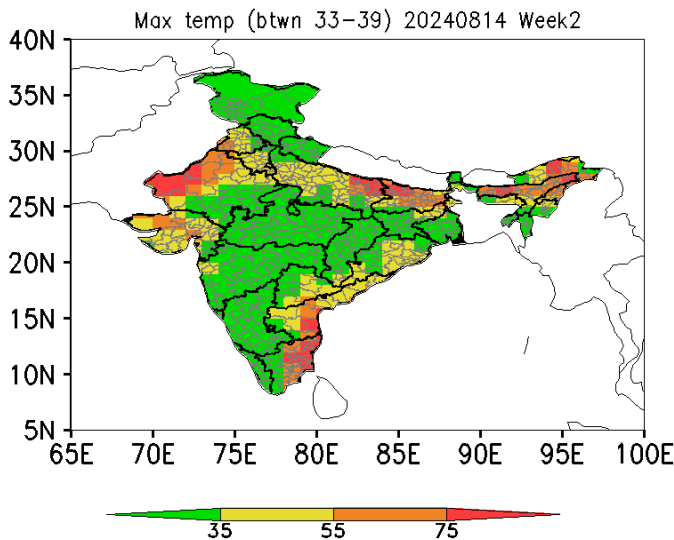
Weather Warning

Bikaner, Ganganagar and Jaisalmer districts of Rajasthan will experience maximum temperature above 39°C during 16th to 22nd August 2024.

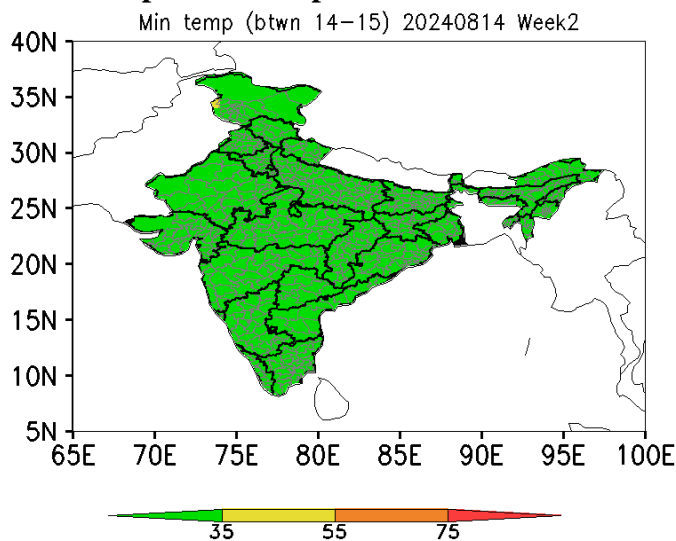
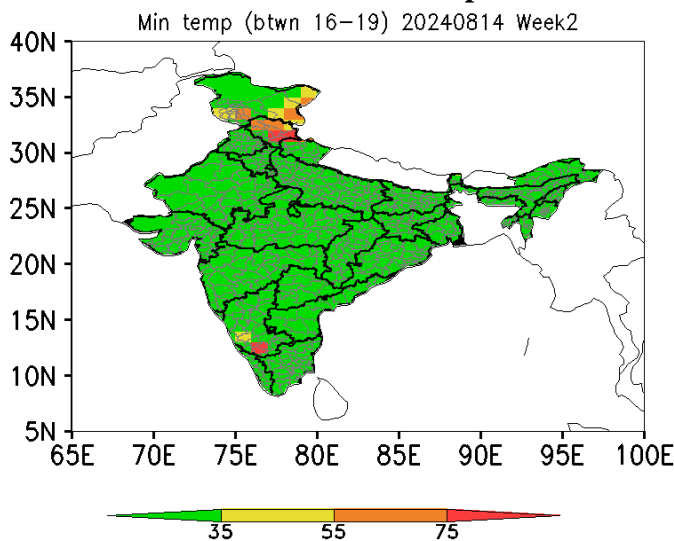
GFS based weekly evolution of transmission window for Malaria and Dengue for Week-I				
Week	VBD	Threshold temp.		Regions within the range of predicted temperatures for Tmax/Tmin or both in Threshold temperatures range.
		Th-Tmax	Th-Tmin	
16 th to 22 nd Aug 2024	Malaria (<i>Plasmodium falciparum</i>)	33-39 ⁰ C	16-19 ⁰ C	All districts of Delhi, Manipur, Nagaland, Andhra Pradesh, Arunachal Pradesh (except Tawang), major districts of Punjab, Haryana, Rajasthan, Gujarat, Uttar Pradesh, Bihar, West Bengal, Assam, Mizoram, Maharashtra, Telangana, Tamil Nadu, some districts of Jammu & Kashmir, Madhya Pradesh, Jharkhand, Karnataka, Odisha, few districts of Ladakh (Kargil), Chhattisgarh (Balarampur, Kanker, Sukma), Meghalaya (East Jaintia Hills, South-west & West Garo Hills) and Goa (North Goa).
	Malaria (<i>Plasmodium Vivax</i>)	33-39 ⁰ C	14-15 ⁰ C	All districts of Delhi, Manipur, Nagaland, Andhra Pradesh, Arunachal Pradesh (except Tawang), major districts of Punjab, Haryana, Rajasthan, Gujarat, Uttar Pradesh, Bihar, West Bengal, Assam, Mizoram, Maharashtra, Telangana, Tamil Nadu, some districts of Madhya Pradesh, Jharkhand, Karnataka, Odisha, few districts of Ladakh (Kargil), Jammu & Kashmir (Kishtwar, Jammu, Samba), Chhattisgarh (Balarampur, Kanker, Sukma), Meghalaya (East Jaintia Hills, South-west & West Garo Hills) and Goa (North Goa).
	Dengue	Not known	11.9 ⁰ C	Nil.
ERFS based weekly evolution of transmission window for Malaria and Dengue for Week-II				
23 rd to 29 th Aug 2024	Malaria (<i>Plasmodium falciparum</i>)	33-39 ⁰ C	16-19 ⁰ C	Major parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Gujarat, Bihar, Arunachal Pradesh, Assam, Nagaland, some parts of Haryana, Rajasthan, Uttar Pradesh, Jharkhand, West Bengal, Odisha, Andhra Pradesh, Karnataka, Tamil Nadu, isolated parts of Uttarakhand and Telangana.
	Malaria (<i>Plasmodium Vivax</i>)	33-39 ⁰ C	14-15 ⁰ C	Major parts of Punjab, Gujarat, Bihar, Arunachal Pradesh, Assam, Nagaland, some parts of Haryana, Rajasthan, Uttar Pradesh, Jharkhand, West Bengal, Odisha, Andhra Pradesh, Tamil Nadu and isolated parts of Telangana.
	Dengue	Not known	11.9 ⁰ C	Nil.

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 (23rd to 29th Aug 2024):

1	75 probability level	Some districts of Rajasthan, Uttar Pradesh, Bihar, Assam, Tamil Nadu, few districts of Himachal Pradesh, Arunachal Pradesh, Karnataka and Andhra Pradesh.
2	55-75 probability level	Major districts of Assam, Nagaland, some districts of Jammu & Kashmir, Himachal Pradesh, Punjab, Rajasthan, Gujarat, Uttar Pradesh, Bihar, Arunachal Pradesh, Tamil Nadu, few districts of Haryana, Jharkhand and Telangana.
3	35-55 probability level	Major districts of Punjab, Haryana, Gujarat, Uttar Pradesh, Odisha, Andhra Pradesh, some districts of Jammu & Kashmir, Rajasthan, Maharashtra, Bihar, Jharkhand, Meghalaya Arunachal Pradesh, Manipur, Telangana, few districts of Himachal Pradesh, West Bengal, Assam, Nagaland, Chhattisgarh and Karnataka.
4	Less than 35 probability level	Major districts in rest of states.

Probabilistic weekly evolution of transmission window for Malaria (*Plasmodium vivax*)

Second week (23rd to 29th Aug 2024):

1	75 probability level	Some districts of Rajasthan, Uttar Pradesh, Bihar, Assam, Tamil Nadu, few districts of Arunachal Pradesh and Andhra Pradesh.
2	55-75 probability level	Major districts of Assam, Nagaland, some districts of Punjab, Rajasthan, Gujarat, Uttar Pradesh, Bihar, Arunachal Pradesh, Tamil Nadu, few districts of Haryana, Jharkhand and Telangana.
3	35-55 probability level	Major districts of Punjab, Haryana, Gujarat, Uttar Pradesh, Odisha, Andhra Pradesh, some districts of Rajasthan, Maharashtra, Bihar, Jharkhand, Meghalaya Arunachal Pradesh, Manipur, Telangana, few districts of West Bengal, Assam, Nagaland and Chhattisgarh.
4	Less than 35 probability level	Major districts in rest of states.

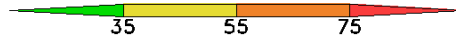
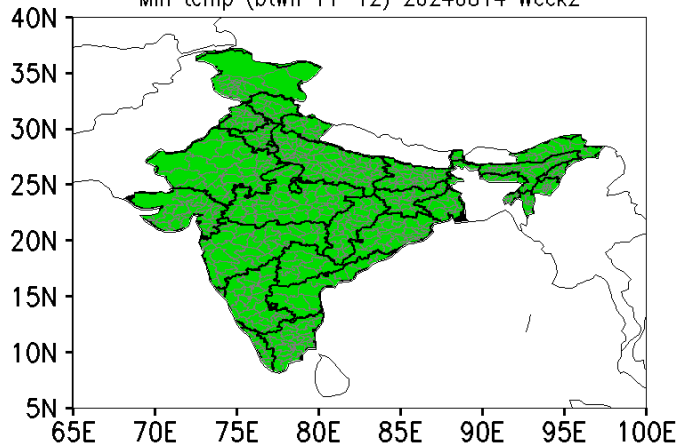
Glossary:

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

Min temp (btwn 11-12) 20240814 Week2



Probabilistic weekly evolution of transmission window for Dengue

Second week (23rd to 29th Aug 2024):

1	75 probability level	Nil.
2	55-75 probability level	Nil.
3	35-55 probability level	Nil.
4	Less than 35 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 09th to 15th August 2024 weather warning issued for development of vector borne diseases.

Following table provides the verification of previous week 09th to 15th August 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.
09 th to 15 th Aug 2024	Malaria (<i>Plasmodium falciparum</i> and <i>Vivax</i>)	33-39 °C	All districts of Manipur, Mizoram, Andhra Pradesh, Arunachal Pradesh (except Namsai, Tawang), Nagaland (except Tuensang), Tripura (except Khowai), Tamil Nadu (except Coimbatore, Erode, Nilgiri), major districts of Punjab, West Bengal, Assam, some districts of Jammu & Kashmir, Uttar Pradesh, Bihar, Jharkhand, Meghalaya, Odisha, Telangana, Karnataka, few districts of Ladakh (Kargil), Haryana (Mewat), Rajasthan (Barmer, Bharatpur, Jodhpur), Gujarat (Kachchh), Chhattisgarh (Balarampur), Maharashtra (Latur, Solapur, Osmanabad) and Kerala (Idukki, Kollam, Thiruvananthapuram).	All districts of Andhra Pradesh (except Srikakulam, Vishakhapatnam, Vizayanagaram), major districts of Tamil Nadu and few districts of Telangana (Khammam, Suryapet, Warangal Urban).
	Malaria (<i>Plasmodium falciparum</i>)	16-19°C	Some districts of Jammu & Kashmir.	All districts of Ladakh, major districts of Jammu & Kashmir, Himachal Pradesh, few districts of Uttarakhand (Chamoli), Arunachal Pradesh (Tawang), Manipur (Chandel) and Karnataka (Chikmagaluru, Hassan, Mysore).
	Malaria (<i>Plasmodium vivax</i>)	14-15°C	Nil.	Nil.
	Dengue virus	11.9°C	Nil.	Nil.