



**Government of India
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Date: 02nd July, 2022
Time of Issue: 1345 hrs IST**

- Subject:** i) The Southwest Monsoon has covered the entire country today, the 02nd July 2022.
ii) A Low Pressure Area is likely to form over north Odisha & neighbourhood during next 48 hours.
iii) Enhanced rainfall activity likely over Odisha, Gujarat, Konkan & Goa during next 5 days, over Central India on 04th & 05th and over Northwest India on 05th & 06th July 2022.

Weather observed during past 24 hours ending at 0830 hrs IST of today:

- **Extremely heavy rainfall** at isolated places occurred over Gujarat Region and; **heavy to very heavy rainfall** at isolated places occurred over Konkan & Goa, Nagaland, East Rajasthan, Telangana and Coastal Karnataka and **heavy rainfall** at isolated places over Bihar, Odisha, Gangetic West Bengal, Jharkhand, East Uttar Pradesh, Himachal Pradesh, West Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Chhattisgarh, Rayalaseema, Coastal Andhra Pradesh & Yanam, South Interior Karnataka and Kerala & Mahe. (**Annexure I**)

Advance of Southwest Monsoon:

- The Southwest Monsoon has further advanced into remaining parts of North Arabian Sea, Gujarat and Rajasthan today, the 02nd July 2022. Thus, the Southwest Monsoon has covered the entire country today, the 02nd July 2022, against the normal date of 08th July (6 days before the normal date of covering the entire India). (**Table-1: Past 20-years data of Date of Monsoon cover entire country and Monsoon Onset over Kerala (MOK) (2003-2022)**)
- The monsoon trough passes through Bikaner, Alwar, Hardoi, Daltonganj, Shantiniketan and thence eastwards to Northeast Bay of Bengal and extends upto 0.9 km above mean sea level.

Rainfall/thunderstorm Forecast & Warnings: (Multi-hazard warning is given in Annexure III)

- **Enhanced rainfall activity likely over Odisha, Gujarat, Konkan & Goa during next 5 days, over Central India on 04th & 05th and over Northwest India on 05th & 06th July 2022.**
 - ❖ A cyclonic circulation lies over central parts of Rajasthan in lower and middle tropospheric levels and a trough runs from this circulation to westcentral Arabian Sea in middle tropospheric levels. There are strong westerly winds along the west peninsular coast in the lower levels.
 - ❖ Also a cyclonic circulation lies over Bangladesh and neighborhood extending upto upper tropospheric levels. A Low Pressure Area is likely to form over north Odisha & neighbourhood during next 48 hours.

Under their influence;

- Widespread rainfall with **thunderstorm/lightning** very likely over Konkan & Goa, Coastal Karnataka and Kerala & Mahe and scattered to fairly widespread rainfall activity over Gujarat State, Madhya Maharashtra and Interior Karnataka during next 5 days.
- Isolated **heavy rainfall** very likely over Gujarat State, Konkan & Goa, Coastal Karnataka and Kerala & Mahe during next 5 days; over Madhya Maharashtra during 04th-06th; South Interior Karnataka on 02nd, 04th, 05th & 06th; Tamil Nadu, Puducherry & Karaikal on 02nd, 05th & 06th July, 2022.
- **Isolated heavy to very heavy rainfall also very likely over Konkan & Goa on 02nd & 04th and Coastal Karnataka on 02nd & 06th and over Gujarat Region, Madhya Maharashtra & Kerala-Mahe on 05th & 06th July, 2022. Isolated extremely heavy rainfall also likely over Konkan & Goa on 05th & 06th July, 2022.**
- Fairly widespread/widespread rainfall with isolated thunderstorm/lightning very likely over Central India (Madhya Pradesh, Chhattisgarh and Vidarbha) during next 5 days.
- Isolated **heavy rainfall** very likely over West Madhya Pradesh on 02nd, 05th & 06th July and East Madhya Pradesh & Chhattisgarh during next 5 days. **Isolated heavy to very heavy rainfall also very likely over Chhattisgarh during 03rd-06th; Vidarbha on 05th; East Madhya Pradesh on 06th July; 2022. Isolated extremely heavy rainfall also likely over Chhattisgarh on 05th July, 2022.**
- Fairly widespread/widespread rainfall with **thunderstorm/lightning** very likely to continue over Bihar, Jharkhand, Odisha and Gangetic West Bengal during next 5 days.
- Isolated **heavy rainfall** very likely over Sub-Himalayan West Bengal on 02nd, 05th & 06th; Jharkhand & Gangetic West Bengal on 02nd & 03rd; Bihar during 02nd-04th July and Odisha during next 5 days. **Isolated heavy to very heavy rainfall also likely over Odisha during 02nd-05th July, 2022.**
- Fairly widespread/widespread rainfall with isolated **thunderstorm/lightning** very likely over Uttarakhand and Himachal Pradesh during next 5 days. Isolated/scattered rainfall with isolated thunderstorm/lightning very likely over Haryana-Chandigarh-Delhi, Punjab and Rajasthan during 02nd-04th July and scattered/ fairly widespread activity thereafter.
- Isolated **heavy rainfall** very likely over Himachal Pradesh & Uttarakhand on 02nd, 03rd, 05th & 06th July; West Rajasthan on 02nd & 06th; East Rajasthan on 05th & 06th; Punjab, Haryana-Chandigarh & Rajasthan on 06th July and Uttar Pradesh on 05th & 06th July, 2022. **Isolated heavy to very heavy rainfall also very likely over East Rajasthan on 02nd and Uttarakhand on 05th & 06th and Himachal Pradesh on 06th July, 2022.**

Table -1: Past 20-years data of Date of Monsoon cover entire country and Monsoon Onset over Kerala (MOK) (2003-2022)

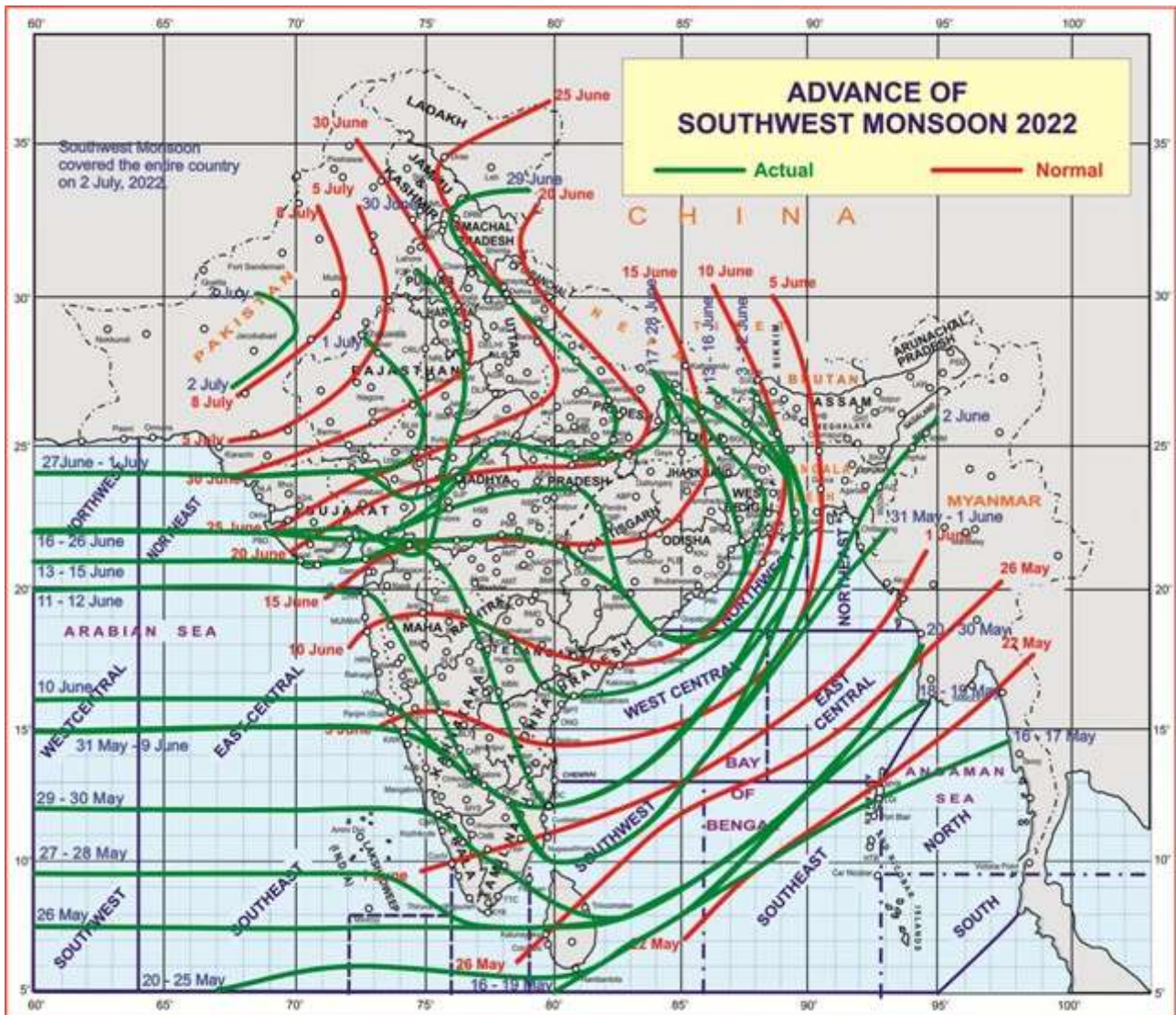
Year	Date of monsoon onset over Kerala	Date of Monsoon cover entire country
2003	8-Jun	5-Jul
2004	18-May	18-Jul
2005	5-Jun	30-Jun
2006	26-May	24-Jul
2007	28-May	4-Jul
2008	31-May	10-Jul
2009	23-May	3-Jul
2010	31-May	6-Jul
2011	29-May	8-Jul
2012	5-Jun	11-Jul
2013	1-Jun	16-Jun
2014	6-Jun	17-Jul
2015	5-Jun	26-Jun
2016	8-Jun	13-Jul
2017	30-May	19-Jul
2018	29-May	29-Jun
2019	8-Jun	19-Jul
2020	1-Jun	26-Jun
2021	3-Jun	13-Jul
2022	29-May	2 July

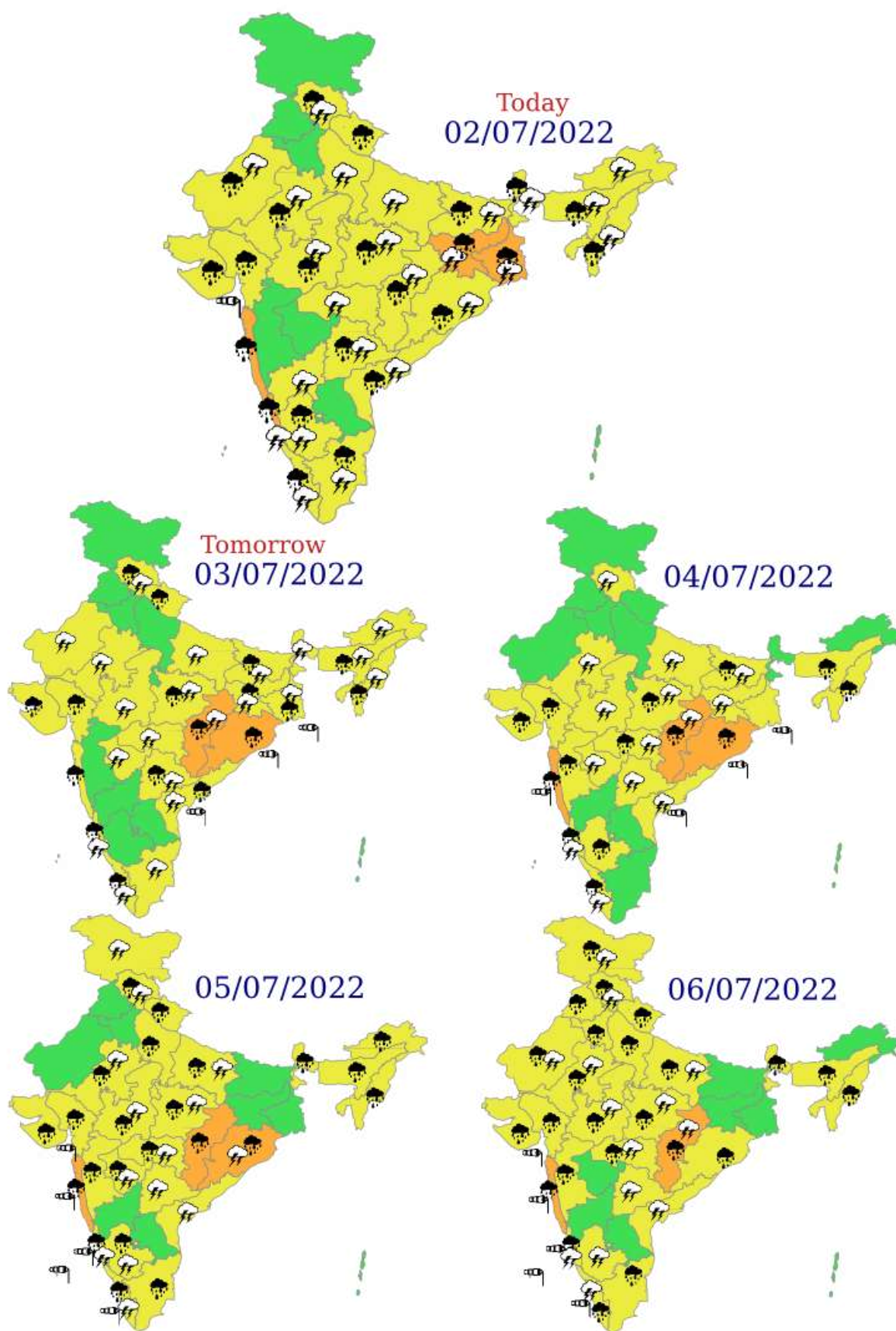
Rainfall (in cm):

- ❖ **Gujarat Region: Surat:** Palsana-21, Bardoli-13, **Banaskantha:**Deodar-19, Deesa-13, Amirgadh-12, **Navsari:** Khergam-14, Jalalpor-9, **Daman:** Daman Fmo-14, **Tapi:** Dolvan-12, Valod-8, **Valsad:** Valsad_ Kvk Aws-11, Vapi-10, **Dadara & Nagar Haveli:** Silvassa & Khanvel -7 each;
- ❖ **Konkan & Goa:- Palghar:** Palghar_agri-18, Dahanu-Imd Obsy-11, **Thane:** Tbia Imd Part Time-13, Ulhasnagar-11, Ambernath & Kalyan-10 each, **Raigad:** Mhasla-11, Roha-10, **Mumbai Suburban:** Santacruz - Imd Obsy-11, Alibag - Imd Part Time-9, **South Goa:** Quepem-9, Sanguem-8, **Ratnagiri:** Mandangad-8, Lanja-7, **North Goa:** Valpoi-7;
- ❖ **Odisha: Baragarh:** Jahbandh-13, Paikamal-8, **Jagatsinghpur:** Kujanga-13, **Raigad:** Gunpur-11, **Puri:** Krishnaprasad-11; **Ganjam:** Polsara-9; **Kandhamal:** Phiringia, Baliguda & Kotagarh-8 each, **Khurda:** Banpur-8, **Boudh:** Kantamal-8, Boudhgarh-7, **Mayurbhanj:** Udala & Kaptipada-7 each, **Kendrapada:** Marshaghai & Kendrapada-7 each;
- ❖ **East Rajasthan: Ajmer:** Ajmer-13, Kishnagarh-12, Pushkar-11, **Udaipur:** Kotda SR-12, **Sirohi:** Abu Road-12, **Bhilwara:** Bhilwara Tehsil-8, **Chhittorgarh:** Chhittorgarh-8, **Jaipur:** Jamwaramgarh Sr-7, **Kota:** Degod-7, **Tonk:** Tonk Tehsil-7,
- ❖ **Nagaland:** Zunheboto-12, Zunheboto (NSDMA) 7;
- ❖ **Telangana: Kumaram Bheem:** Bejjur-12, **Nizamabad:** Navipet-7, Yeda Palle-7;
- ❖ **Coastal Karnataka: Dakshina Kannada:** Mani-12, **Uttara Kannada:** Gersoppa-11, Manki-11, Kumta-7, **Udupi:** Siddapura-10, Kota-8;
- ❖ **Saurashtra & Kutch: Rajkot:** Lodhika-11, Gondal-8, **Bhavnagar:** Vallabhipur -7, **Junagadh:** Mendarda-7, **Jamnagar:** Kalavad-7;
- ❖ **South Interior Karnataka: Chikkamagaluru:** Koppa-10, **Shivamogga:** Shivamogga-7;
- ❖ **West Rajasthan: Nagaur:** Nawa-10, Parbatsar-8, **Pali:** Jawai dam-7;
- ❖ **Kerala & Mahe: Kannur:** Ayyankunnu-10, Peringome-8, **Kasargod:** Muliyar-11, Bayar-9, Kudulu-7,
- ❖ **West Madhya Pradesh: Gwalior:** Chinor-10, **Bhopal:** Bhopal Arera Hills-8, Shivpuri: Kolaras-8, Kolar-7, Rajgarh: Pachore-7;
- ❖ **Bihar: Begusarai-Barauni-9, Bhabua:**Mohania-9, **Saharsa:** Sirmari-7, **Jahanabad:** Ghosi-7;
- ❖ **Chhattisgarh: Balrampur:** Kusmi-9, Bijapur: Bijapur-7,
- ❖ **East Uttar Pradesh:- Gorakhpur:** Mukhlisipur-8,
- ❖ **Madhya Maharashtra: Nashik:** Surgana-7;
- ❖ **East Madhya Pradesh: Anuppur:** Benibari-7;
- ❖ **Jharkhand: Bokaro:** Tenughat-7; **Dumka:** Messenjor-7,
- ❖ **Himachal Pradesh: Solan:** Nalagarh-7,
- ❖ **Coastal Andhra Pradesh & Yanam: Vizianagaram:** Garugubilli & Balajipeta-7 each;

- ❖ Rayalaseema: Chittoor: Satyavedu-7;
- ❖ Gangetic West Bengal: Purulia: Simulia-7; Sagar Islands-8,

Annexure II





EXPECTED IMPACT & ACTION SUGGESTED due to very heavy rainfall over

(i) Odisha during 02nd-05th, Gujarat Region, Kerala & Mahe & Madhya Maharashtra on 05th & 06th; Coastal Karnataka on 02nd & 06th July, 2022.

(ii) Due to isolated very heavy/extremely heavy rainfall over Chhattisgarh & Konkan & Goa during next 5 days.

A. Impact Expected

- Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutcha roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides
- Damage to horticulture and standing crops in some areas due to inundation.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

B. Action Suggested

- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.

Legends:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

- 1) **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)



Heavy Rain



Strong Winds

WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75



Thunderstorm with Lightning



Heat Wave