



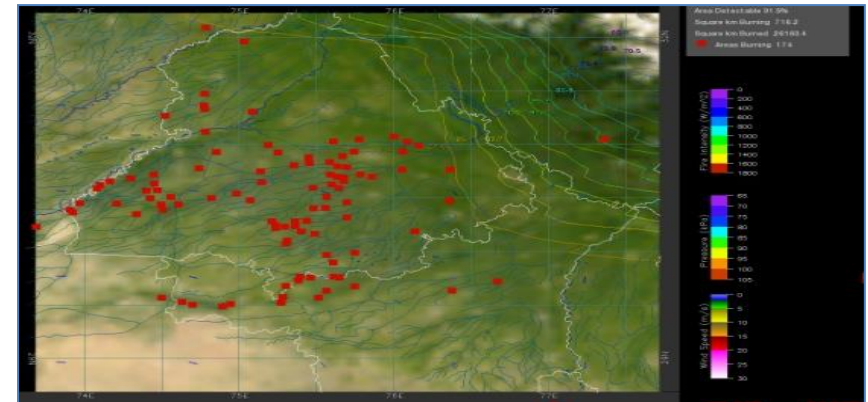
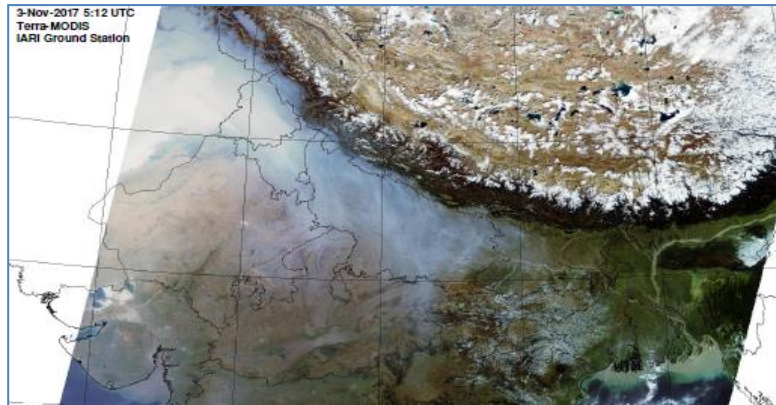
Bulletin No. 01

Events Date:
15-Sep-2025

Issued on:
15-Sep-2025



MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2025



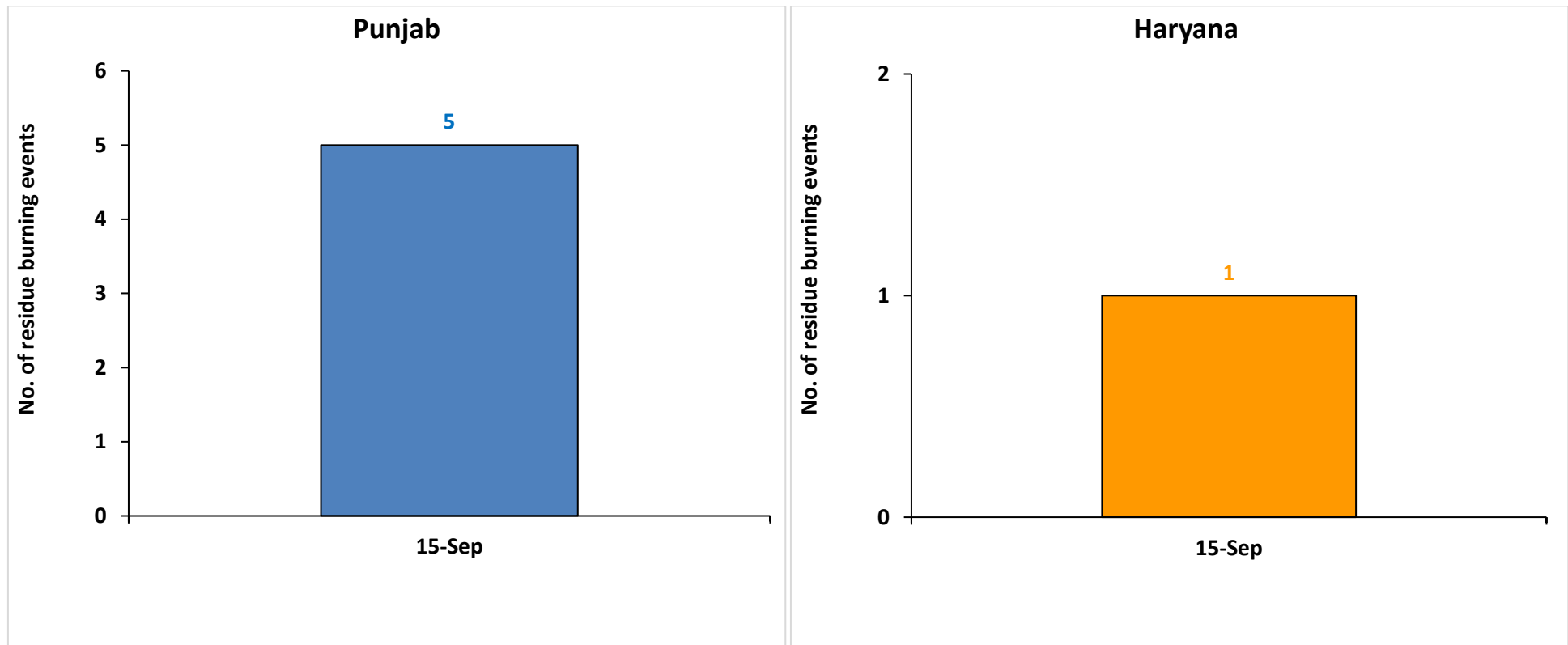
Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS)
Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

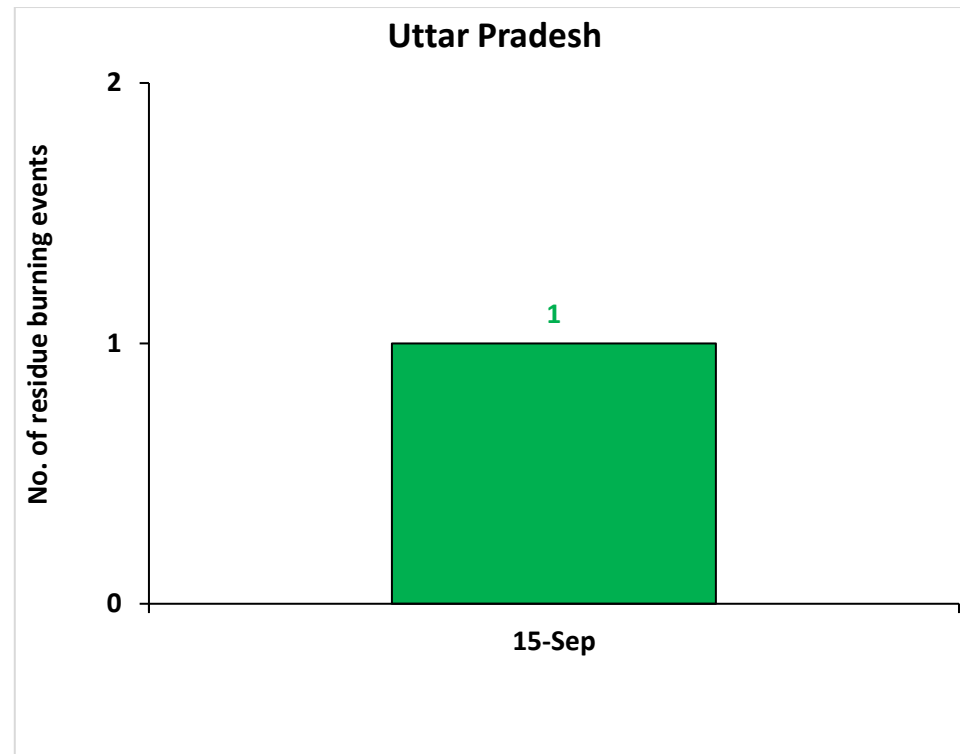
<http://creams.iari.res.in>

Highlights for 15-Sep-2025

- The active fire events due to rice residue burning were monitored using satellite remote sensing, following the "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data".
- Satellites detected **07** residue burning events in the six study States on 15-Sep-2025.
- The state wise events detected on 15-Sep-2025 were **05** in Punjab, **01** in Haryana, **01** in UP, **00** in Delhi, **00** in Rajasthan and **00** in MP.
- Detection of residue burning events was hampered by the presence of clouds over Uttar Pradesh and Madhya Pradesh states.

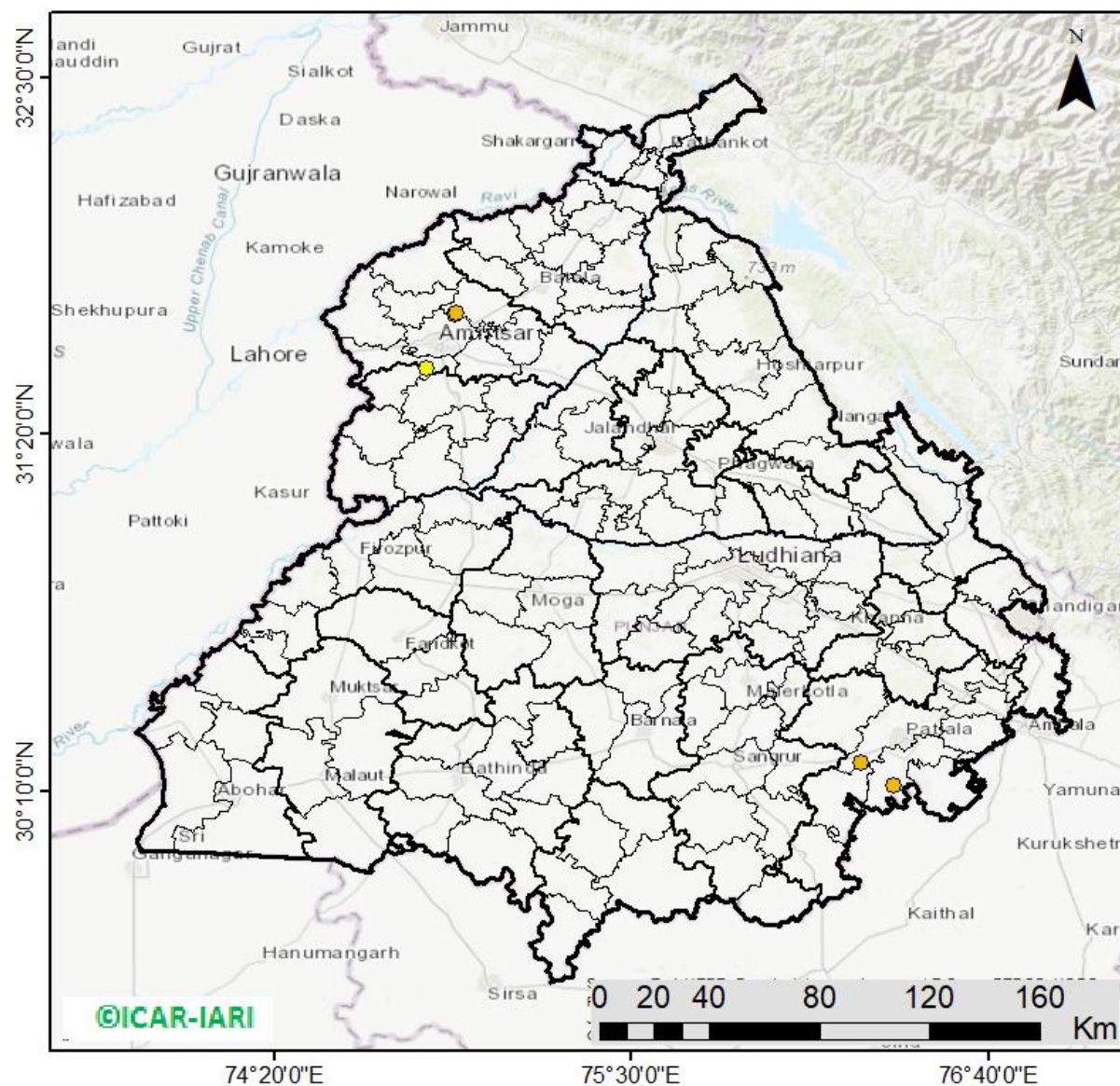
Temporal distribution of rice residue burning events for the study States in 2025





Punjab

RICE RESIDUE BURNING IN PUNJAB



05 burning events
detected in Punjab during
(15th Sep 2025)

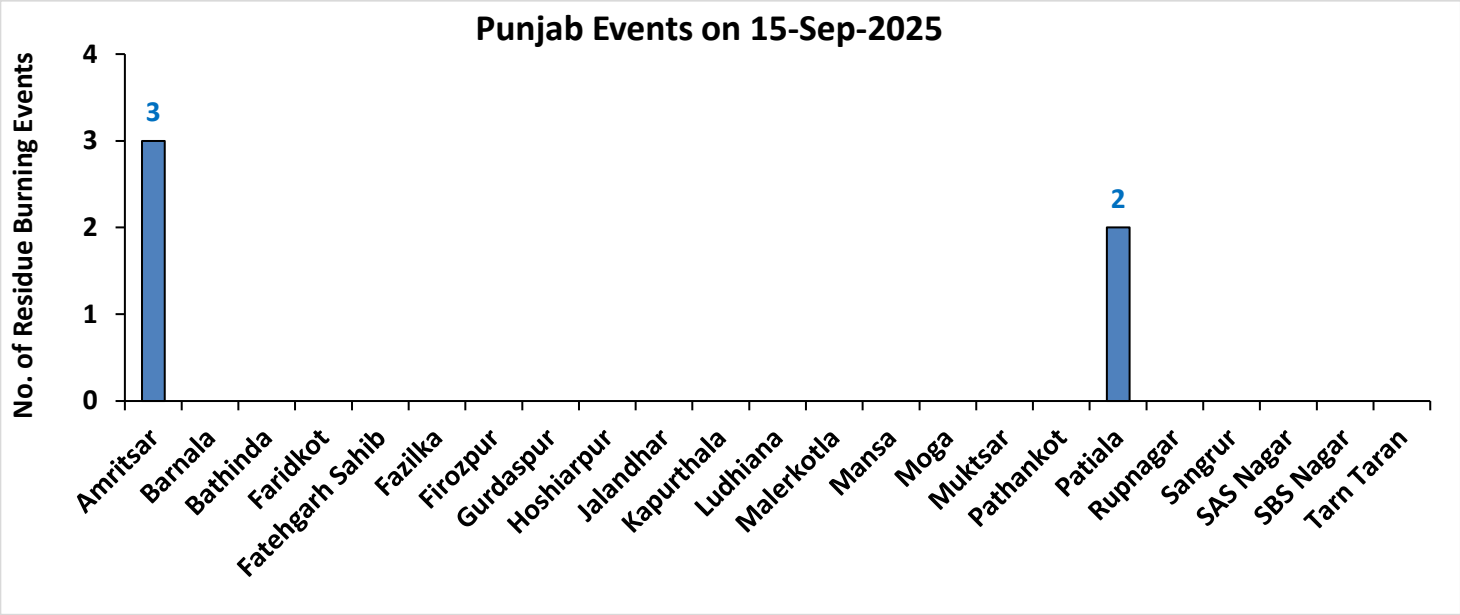
Fire Intensity (W/m²)

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



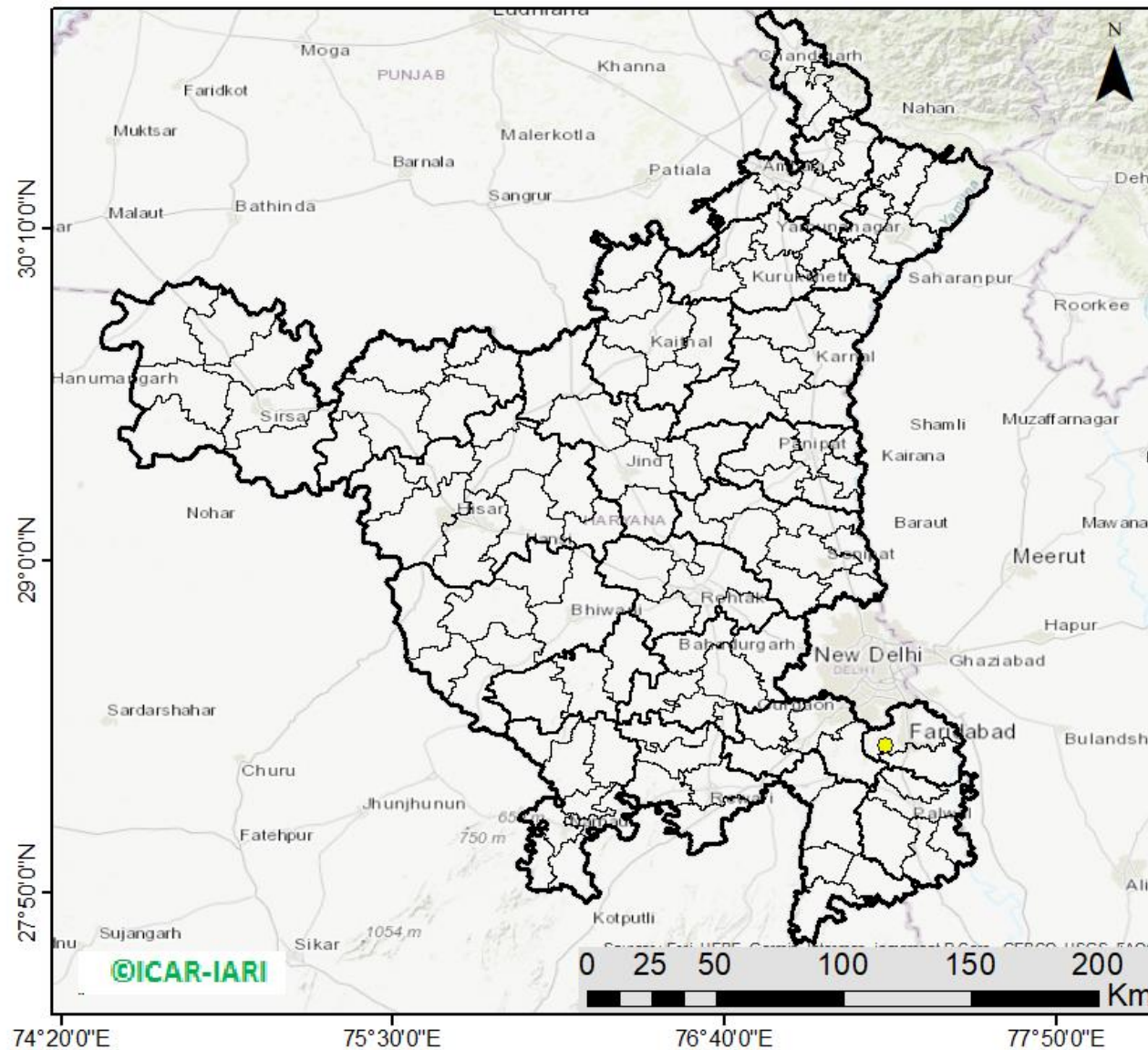
http://103.111.37.126/icar_geoportal/

District-wise number of residues burning events (15-Sep-2025)



Haryana

RICE RESIDUE BURNING IN HARYANA



01 burning events
detected in Haryana on
(15th Sep 2025)

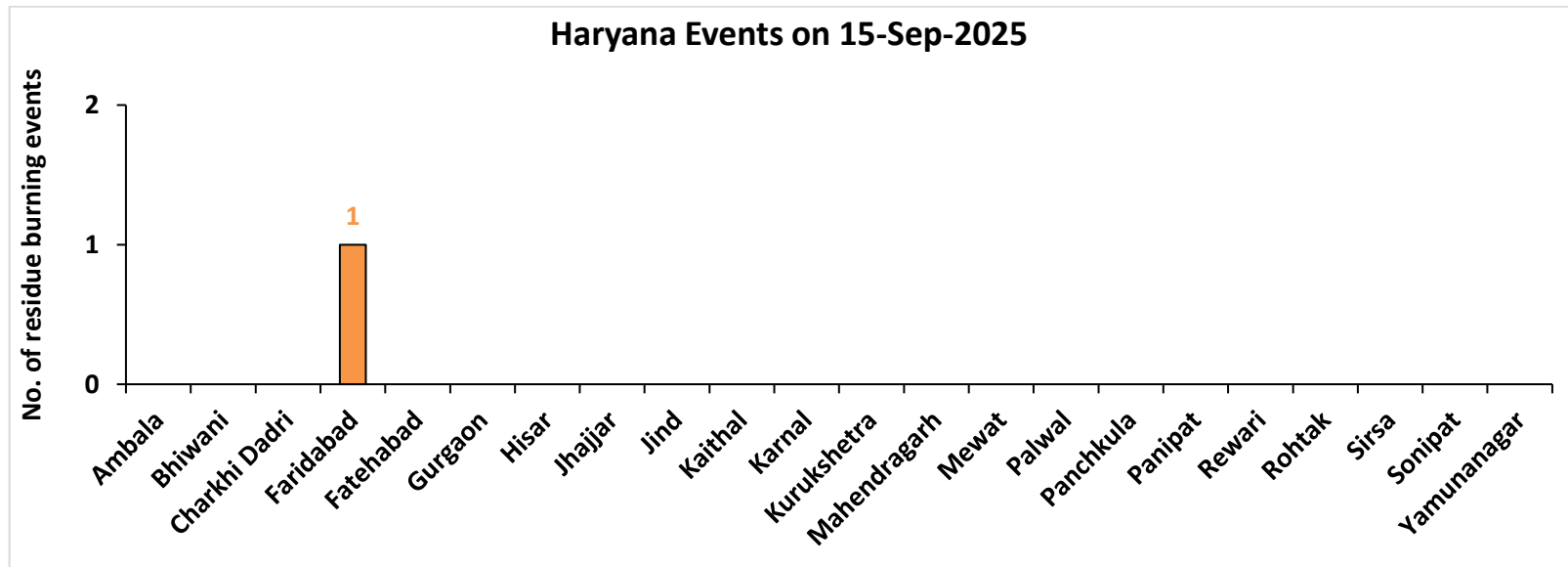
Fire Intensity (W/m²)

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



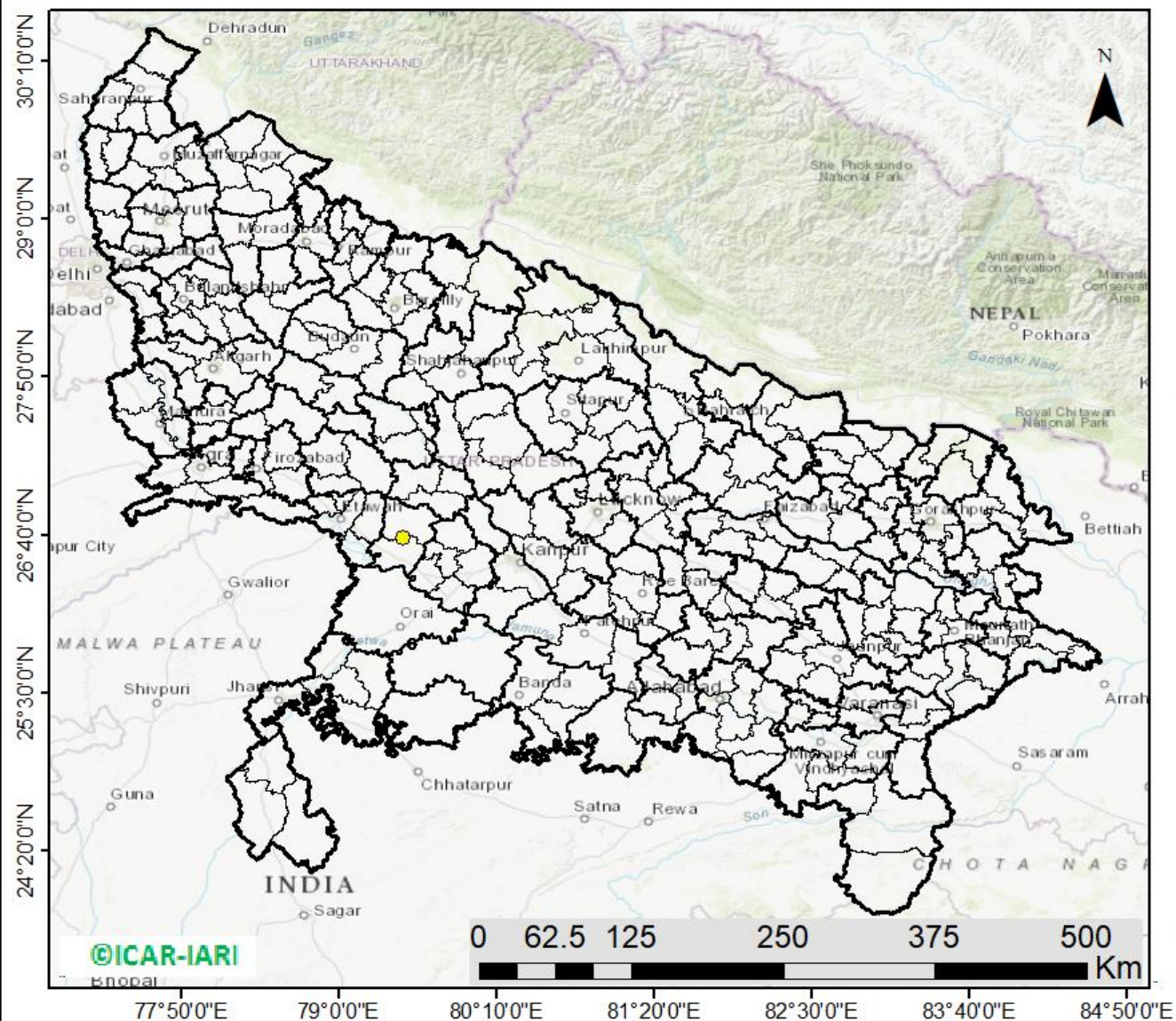
http://103.111.37.126/icar_geoportail/

District-wise number of residues burning events (15-Sep-2025)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



01 burning events
detected in Uttar Pradesh on
(15th Sep 2025)

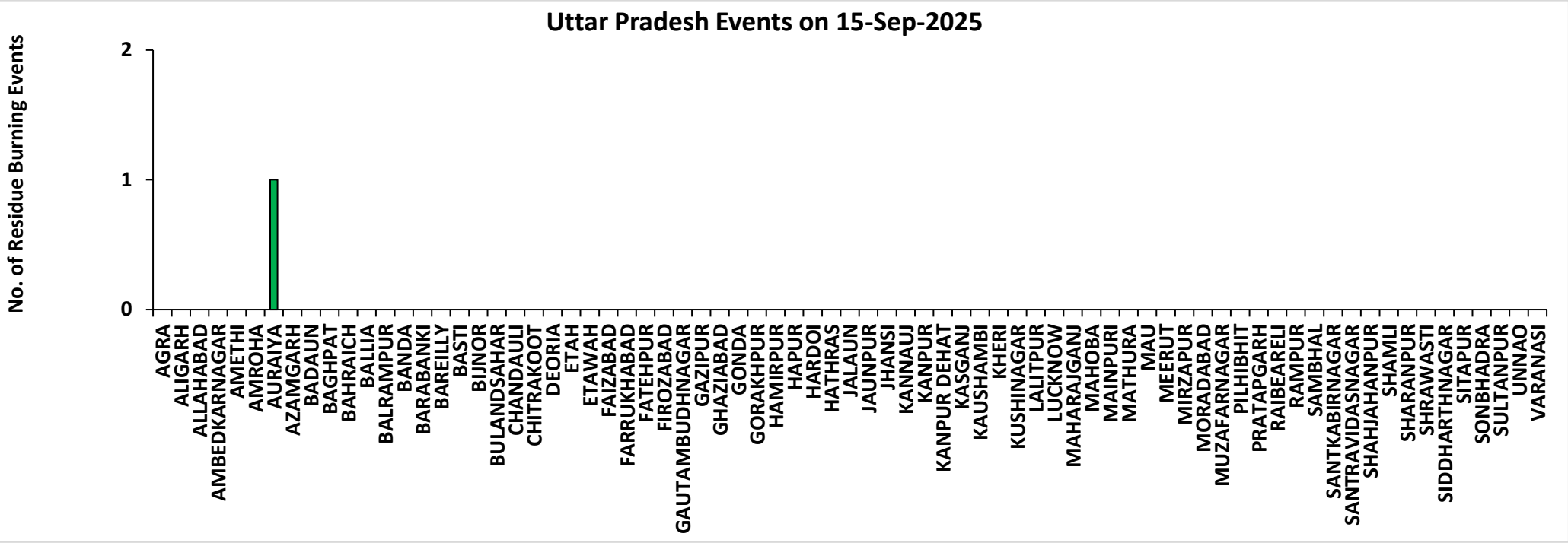
Fire Intensity (W/m²)

- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



http://103.111.37.126/icar_geoportal/

District-wise number of residues burning events (15-Sep-2025)



District-wise cumulative number of residues burning events detected in 2020, 2021, 2022, 2023, 2024 and 2025
(Period: 15 September)

(a) Punjab

District	15 Sep					
	2020	2021	2022	2023	2024	2025
Amritsar	5	0	11	0	9	3
Barnala	0	0	0	0	0	0
Bathinda	0	0	0	0	0	0
Faridkot	0	0	0	0	0	0
Fatehgarh Sahib	0	0	0	0	0	0
Fazilka	0	0	0	0	0	0
Firozpur	0	0	0	0	1	0
Gurdaspur	0	0	0	0	0	0
Hoshiarpur	0	0	0	0	0	0
Jalandhar	0	0	0	0	0	0
Kapurthala	0	0	0	0	0	0
Ludhiana	0	0	0	0	0	0
Malerkotla	0	0	0	0	0	0
Mansa	0	0	0	0	0	0
Moga	0	0	0	0	0	0
Muktsar	0	0	0	0	0	0
Pathankot	0	0	0	0	0	0
Patiala	0	0	0	0	0	2
Rupnagar	0	0	0	0	0	0
Sangrur	0	0	0	0	0	0
SAS NAGAR (Mohali)	0	0	0	0	0	0
SBS Nagar	0	0	0	0	0	0
Tarn Taran	0	0	3	0	1	0
Total	5	0	14	0	11	5

(b) Haryana

District	15 Sep					
	2020	2021	2022	2023	2024	2025
AMBALA	0	0	0	0	0	0
BHIWANI	0	0	0	0	0	0
CHARKHI DADRI	0	0	0	0	0	0
FARIDABAD	0	0	0	0	0	1
FATEHABAD	0	0	0	0	0	0
GURGAON	0	0	0	0	0	0
HISAR	0	0	0	0	0	0
JHAJJAR	0	0	0	0	0	0
JIND	0	0	0	0	0	0
KAITHAL	0	0	0	0	0	0
KARNAL	1	0	0	0	0	0
KURUKSHETRA	0	0	0	0	0	0
MAHENDRAGARH	0	0	0	0	0	0
MEWAT	0	0	0	0	0	0
PALWAL	0	0	0	0	0	0
PANCHKULA	0	0	0	0	0	0
PANIPAT	0	0	0	0	0	0
REWARI	0	0	0	0	0	0
ROHTAK	0	0	0	1	0	0
SIRSA	1	0	0	0	1	0
SONIPAT	0	0	0	0	0	0
YAMUNANAGAR	0	0	0	0	0	0
Total	2	0	0	1	1	1

(c) Uttar Pradesh

District	15 Sep																		
	2020	2021	2022	2023	2024	2025	GAUTAMBUDHNAGAR	0	0	0	0	0	0	MUZAFARNAGAR	0	0	0	0	0
AGRA	0	0	0	0	0	0	GAZIPUR	0	0	0	0	0	0	PILHIBHIT	0	0	0	0	0
ALIGARH	0	0	0	0	0	0	GHAZIABAD	0	0	0	0	0	0	PRATAPGARH	0	0	0	0	0
ALLAHABAD	0	0	0	0	0	0	GONDA	0	0	0	0	0	0	RAIBEARELI	1	0	0	0	0
AMBEDKARNAGAR	0	0	0	0	0	0	GORAKHPUR	0	0	0	0	0	0	RAMPUR	0	0	0	0	0
AMETHI	0	0	0	0	0	0	HAMIRPUR	0	0	0	0	0	0	SAMBHAL	0	0	0	0	0
AMROHA	0	0	0	0	0	0	HAPUR	0	0	0	0	0	0	SANTKABIRNAGAR	0	0	0	0	0
AURAIYA	0	0	0	0	0	1	HARDOI	0	0	0	0	0	0	SANTRAVIDASNAGAR	0	0	0	0	0
AZAMGARH	0	0	0	0	0	0	HATHRAS	0	0	0	0	0	0	SHAHJAHANPUR	0	0	0	0	0
BADAUN	0	0	0	0	0	0	JALAUN	0	0	0	0	0	0	SHAMLI	0	0	0	0	0
BAGHPAT	0	0	0	0	0	0	JAUNPUR	0	0	0	0	0	0	SHARANPUR	0	0	0	0	0
BAHRAICH	0	0	0	0	0	0	JHANSI	0	0	0	0	0	0	SHRAWASTI	0	0	0	0	0
BALLIA	0	0	0	0	0	0	KANNAUJ	0	0	0	0	0	0	SIDDHARTHANAGAR	0	0	0	0	0
BALRAMPUR	0	0	0	0	0	0	KANPUR	0	0	0	0	0	0	SITAPUR	0	0	0	0	0
BANDA	0	0	0	0	0	0	KANPUR DEHAT	0	0	0	0	0	0	SONBHADRA	0	0	0	0	0
BARABANKI	0	0	0	0	0	0	KASGANJ	0	0	0	0	0	0	SULTANPUR	0	0	0	0	0
BAREILLY	0	0	0	0	0	0	KAUSHAMBI	0	0	0	0	0	0	UNNAO	0	0	0	0	0
BASTI	0	0	0	0	0	0	KHERI	0	0	0	0	0	0	VARANASI	0	0	0	0	0
BIJNOR	0	0	0	0	0	0	KUSHINAGAR	0	0	0	0	0	0	Total	1	0	0	0	1
BULANDSAHAR	0	0	0	0	0	0	LALITPUR	0	0	0	0	0	0						
CHANDAUJI	0	0	0	0	0	0	LUCKNOW	0	0	0	0	0	0						
CHITRAKOOT	0	0	0	0	0	0	MAHARAJGANJ	0	0	0	0	0	0						
DEORIA	0	0	0	0	0	0	MAHOBAB	0	0	0	0	0	0						
ETAH	0	0	0	0	0	0	MAINPURI	0	0	0	0	0	0						
ETAWAH	0	0	0	0	0	0	MATHURA	0	0	0	0	0	0						
FAIZABAD	0	0	0	0	0	0	MAU	0	0	0	0	0	0						
FARRUKHABAD	0	0	0	0	0	0	MEERUT	0	0	0	0	0	0						
FATEHPUR	0	0	0	0	0	0	MIRZAPUR	0	0	0	0	0	0						
FIROZABAD	0	0	0	0	0	0	MORADABAD	0	0	0	0	0	0						

(d) Delhi

District	15 Sep					
	2020	2021	2022	2023	2024	2025
CENTRAL	0	0	0	0	0	0
EAST	0	0	0	0	0	0
NEW DELHI	0	0	0	0	0	0
NORTH	0	0	0	0	0	0
NORTH EAST	0	0	0	0	0	0
NORTH WEST DELHI	0	0	0	0	0	0
SHAHADRA	0	0	0	0	0	0
SOUTH	0	0	0	0	0	0
SOUTH EAST	0	0	0	0	0	0
SOUTH WEST DELHI	0	0	0	0	0	0
WEST DELHI	0	0	0	0	0	0
Total	0	0	0	0	0	0

(e) Rajasthan

District	15 Sep					
	2020	2021	2022	2023	2024	2025
AJMER	0	0	0	0	0	0
ALWAR	0	0	0	0	0	0
BANSWARA	0	0	0	0	0	0
BARAN	0	0	0	0	0	0
BARMER	0	0	0	0	0	0
BHARATPUR	0	0	0	0	0	0
BHILWARA	1	0	0	0	0	0
BIKANER	0	0	0	0	0	0
BUNDI	0	0	0	0	0	0
CHITTAURGARH	0	0	0	0	0	0
CHURU	0	0	0	0	0	0
DAUSA	0	0	0	0	0	0
DHOLPUR	0	0	0	0	0	0
DUNGARPUR	0	0	0	0	0	0
GANGANAGAR	0	0	0	0	0	0
HANUMANGARH	0	0	0	0	0	0
JAIPUR	0	0	0	0	0	0
JAISELMER	0	0	0	0	0	0
JALOR	0	0	0	0	0	0
JHALAWAR	0	0	0	0	0	0
JHUNJHUNUN	0	0	0	0	0	0
JODHPUR	0	0	0	0	0	0
KARALI	0	0	0	0	0	0
KOTA	0	0	0	0	0	0
NAGPUR	0	0	0	0	0	0
PALI	0	0	0	0	0	0
PRATAPGARH	0	0	0	0	0	0
RAJSMAND	0	0	0	0	0	0
SIKAR	0	0	0	0	0	0
SIROHI	0	0	0	0	0	0
SWAIMADHOPUR	0	0	0	0	0	0
TONK	0	0	0	0	0	0
UDAIPUR	0	0	0	0	0	0
Total	1	0	0	0	0	0

(f) Madhya Pradesh

District	15 Sep													
	2020	2021	2022	2023	2024	2025	PANNA	0	0	0	0	0	0	
ALIRAJPUR	0	0	0	0	0	0	RAISEN	0	0	0	0	0	0	
ANUPPUR	0	0	0	0	0	0	RAJGARH	0	0	0	0	0	0	
ASHOKNAGAR	0	0	0	0	0	0	RATLAM	0	0	0	0	0	0	
BALAGHAT	0	0	0	0	0	0	REWA	0	0	0	0	0	0	
BARWANI	0	0	0	0	0	0	SAGAR	0	0	0	0	0	0	
BETUL	0	0	0	0	0	0	SATNA	0	0	0	0	0	0	
BHIND	0	0	0	0	0	0	SEHORE	0	0	0	0	0	0	
BHOPAL	0	0	0	0	0	0	SEONI	0	0	0	0	0	0	
BURHANPUR	0	0	0	0	0	0	SHAHDOL	0	0	0	0	0	0	
CHHATARPUR	0	0	0	0	0	0	SHAJAPUR	0	0	0	0	0	0	
CHHINDWARA	0	0	0	0	0	0	SHEOPUR	0	0	0	0	0	0	
DAMOH	0	0	0	0	0	0	SHIVPURI	0	0	0	0	0	0	
DATIA	0	0	0	0	0	0	SIDHI	0	0	0	0	0	0	
DEWAS	0	0	0	0	0	0	SINGRAULI	0	0	0	0	0	0	
DHAR	0	0	0	0	0	0	TIKAMGARH	0	0	0	0	0	0	
DINDORI	0	0	0	0	0	0	UJJAIN	0	0	0	0	0	0	
EAST NIMAR	0	0	0	0	0	0	UMARIA	0	0	0	0	0	0	
GUNA	0	0	0	0	0	0	VIDESHA	0	0	0	0	0	0	
GWALIOR	0	0	0	0	0	0	WEST NIMAR	0	0	0	0	0	0	
HARDA	2	0	0	0	0	0	Total	2	0	0	0	0	0	
HOSHANGABAD	0	0	0	0	0	0								
INDORE	0	0	0	0	0	0								
JABALPUR	0	0	0	0	0	0								
JHABUA	0	0	0	0	0	0								
KATNI	0	0	0	0	0	0								
MANDLA	0	0	0	0	0	0								
MANDSAUR	0	0	0	0	0	0								
MORENA	0	0	0	0	0	0								
NARSHIMAPURA	0	0	0	0	0	0								
NIMACH	0	0	0	0	0	0								

State-wise and date-wise number of paddy residue burning events detected in 2020 ,2021 ,2022, 2023, 2024 and 2025

(Period: 15 September)

Number of Paddy Residue Burning Events Detected

Punjab							Haryana						Uttar Pradesh					
Date	2020	2021	2022	2023	2024	2025	2020	2021	2022	2023	2024	2025	2020	2021	2022	2023	2024	2025
15-Sep	5	0	14	0	11	5	2	0	0	1	1	1	1	0	0	0	0	1
Total	5	0	14	0	11	5	2	0	0	1	1	1	1	0	0	0	0	1

Number of Paddy Residue Burning Events Detected

Delhi							Rajasthan						Madhya Pradesh					
Date	2020	2021	2022	2023	2024	2025	2020	2021	2022	2023	2024	2025	2020	2021	2022	2023	2024	2025
15-Sep	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0

Details of residue burning events in Punjab on 15-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	ATTARI	S-NPP	31.55123	74.83125	12:54:37	D	2.50
2	AMRITSAR	MAJITHA	S-NPP	31.72750	74.92239	14:34:12	D	6.70
3	AMRITSAR	MAJITHA	S-NPP	31.73076	74.92644	14:34:12	D	7.70
4	PATIALA	PATIALA	S-NPP	30.26037	76.25170	12:54:37	D	8.10
5	PATIALA	SANAU	S-NPP	30.18417	76.35749	12:54:37	D	5.40

Details of residue burning events in Haryana on 15-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	FARIDABAD	FARIDABAD	S-NPP	28.34645	77.23123	01:43:55	N	2.60

Details of residue burning events in Uttar Pradesh on 15-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AURAIYA	BIDHUNA	S-NPP	26.64223	79.47709	01:40:00	N	0.42

The study used data received from following Satellites at NRSC Ground Station/ NASA FIRMS

S. No.	Satellite Name	Sensor	Resolution (meter)	Day / Night Passes
1.	Suomi NPP	VIIRS	375 / 750	Both
2.	Terra	MODIS	1000	Both
3.	Aqua	MODIS	1000	Both

**The rice mask for the Punjab and Haryana were provided by MNCFC, MoA&FW, Govt of India
The kharif crop mask for Delhi, Uttar Pradesh, Rajasthan and Madhya Pradesh were provided by NRSC**

Study Team

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**GIS Maps of fire events can be visualized online on ICAR KRISHI Geoportal website: <http://geoportal.icar.gov.in:8080/geoexplorer/composer/>
(Part of KRISHI Portal: <https://krishi.icar.gov.in> initiative)**
