

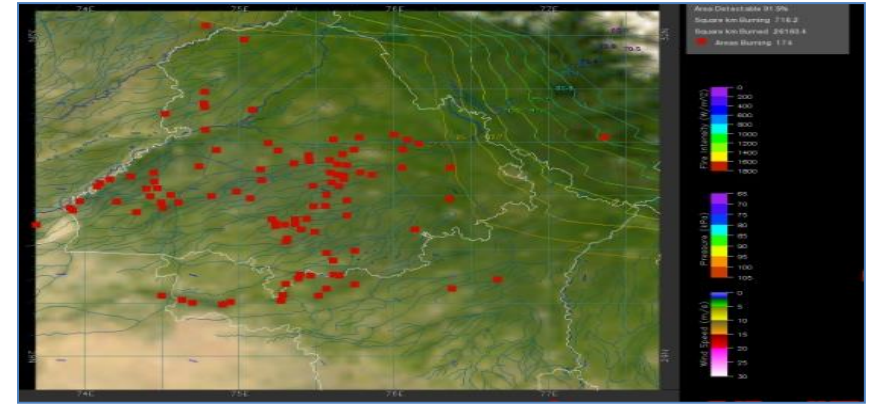
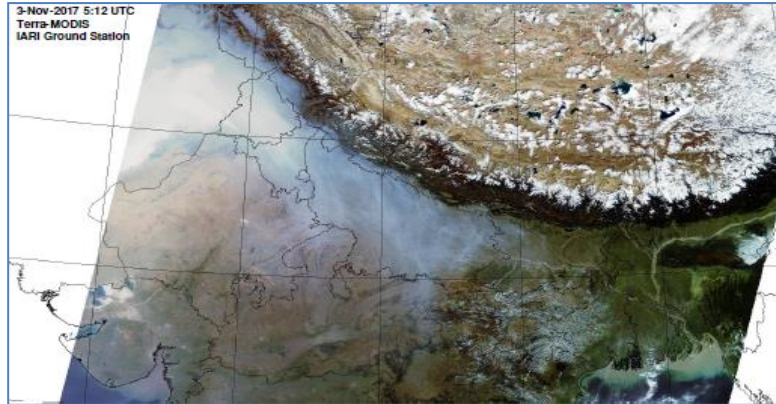


# MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2025

Bulletin  
No. 11

Events Date:  
25-Sep-2025

Issued on:  
25-Sep-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

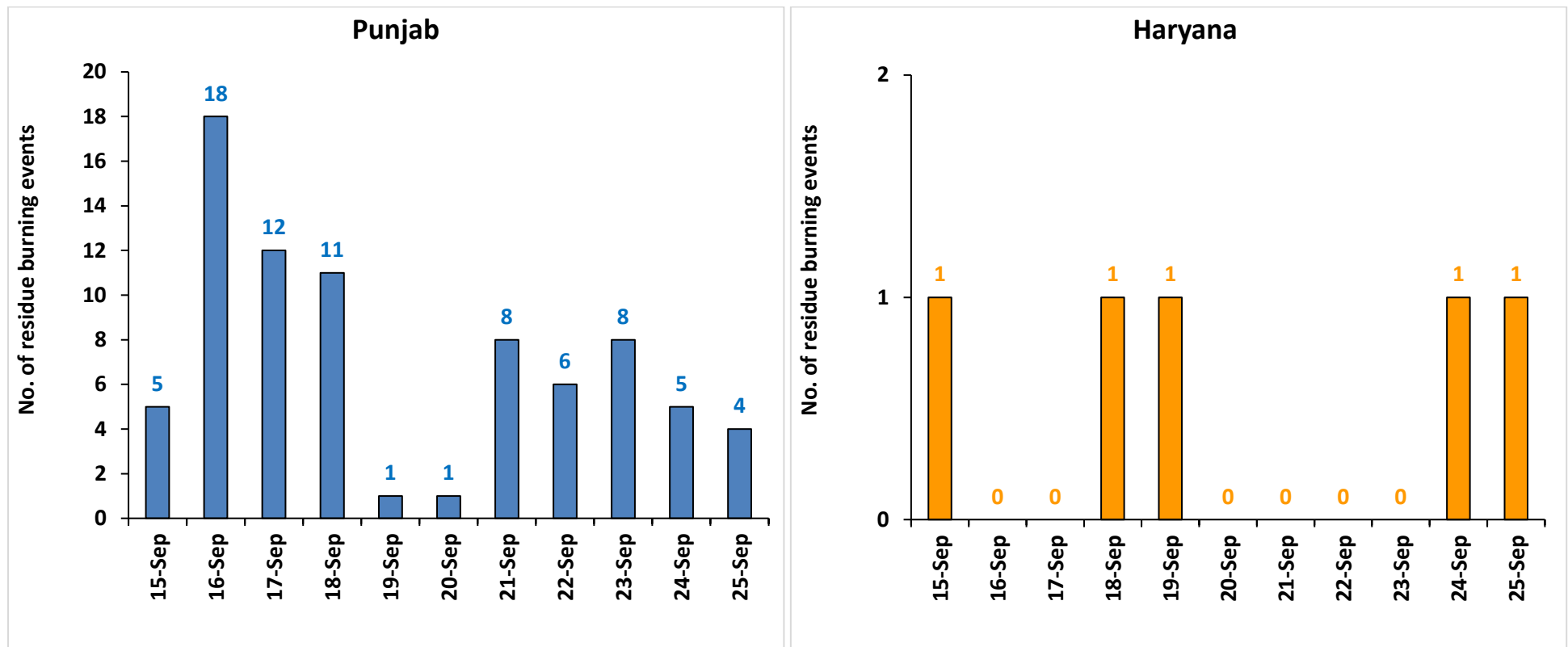
<https://creams.iari.res.in>



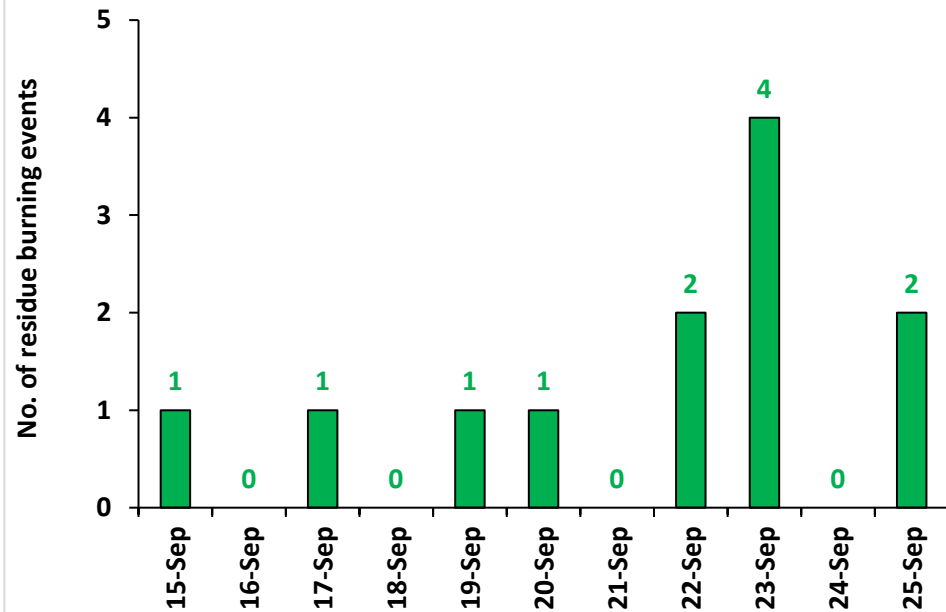
## Highlights for 25-Sep-2025

- 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 **08** residue burning events in the six study States on **25-Sep-2025**.
- The state wise events detected on **25-Sep-2025** were **04** in Punjab, **01** in Haryana, **02** in UP, **00** in Delhi, **00** in Rajasthan and **01** in MP.
- Detection of residue burning events was hampered by the presence of clouds over Uttar Pradesh and Madhya Pradesh states.

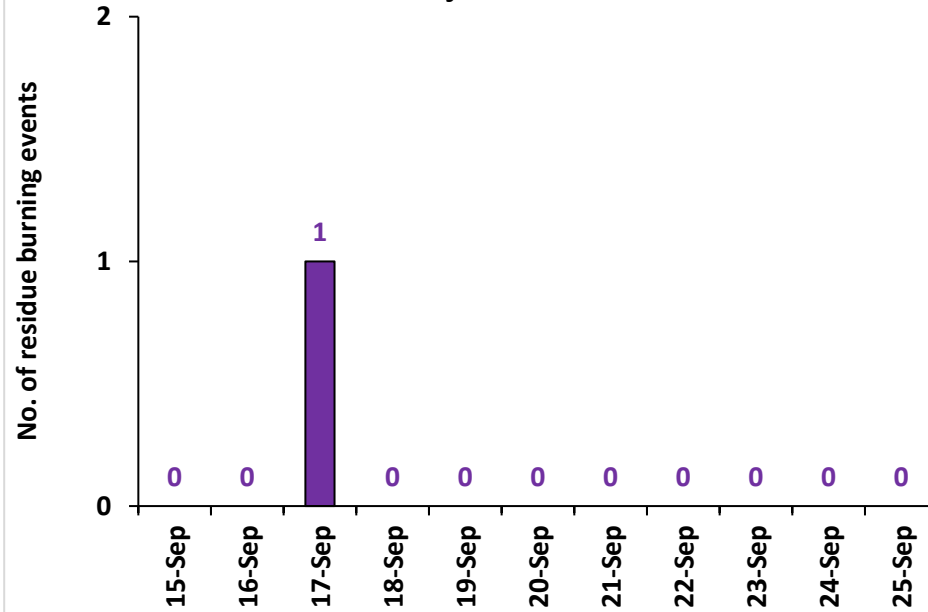
### Temporal distribution of rice residue burning events for the study States in 2025



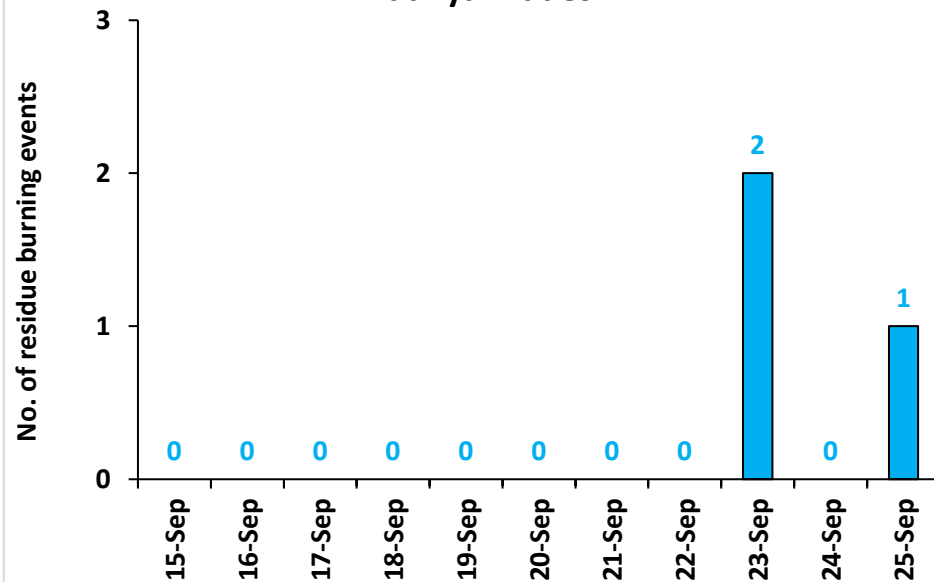
### Uttar Pradesh



### Rajasthan

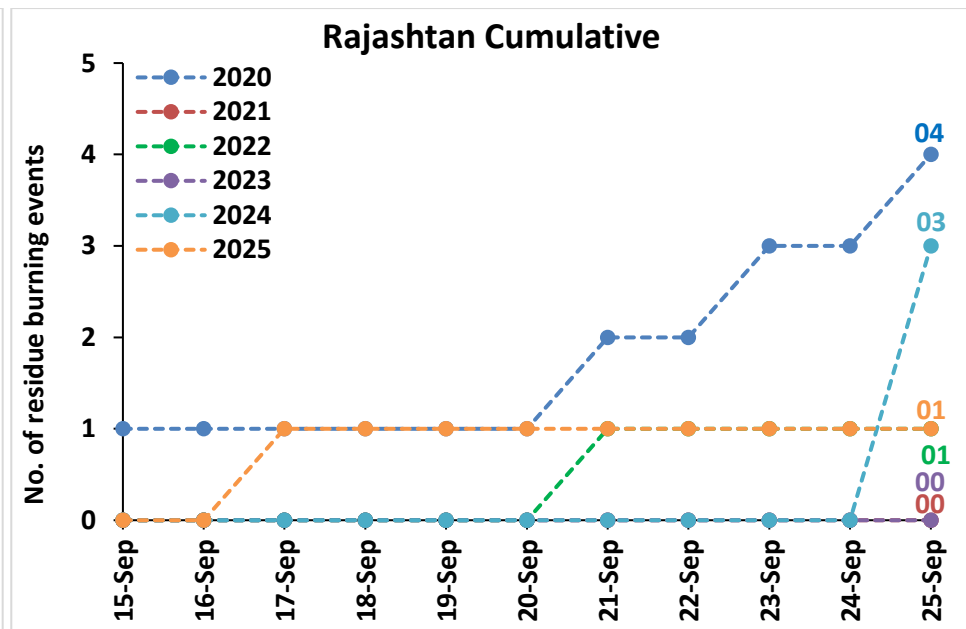
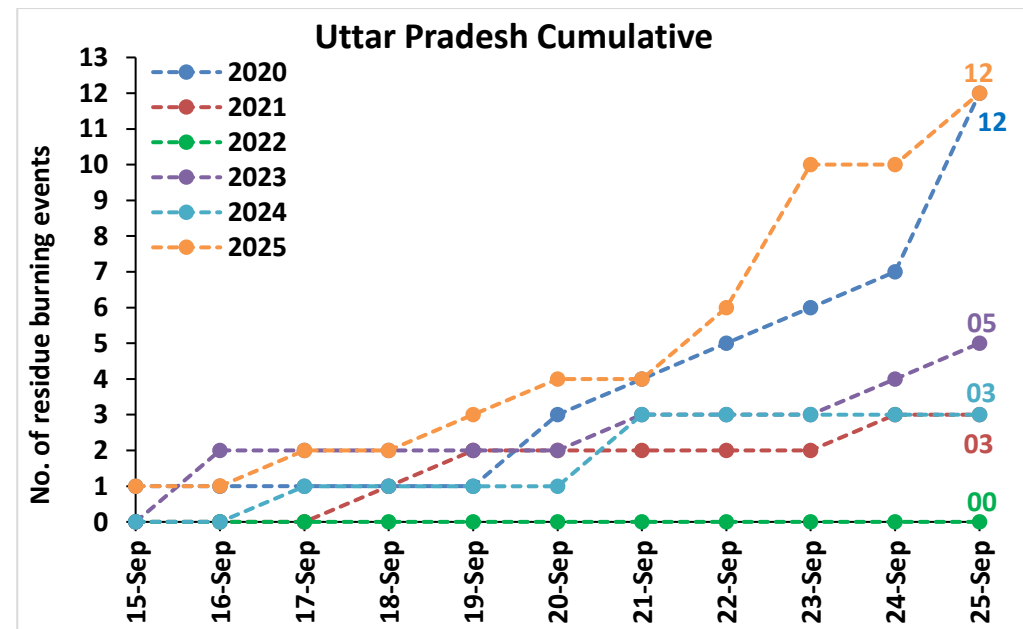
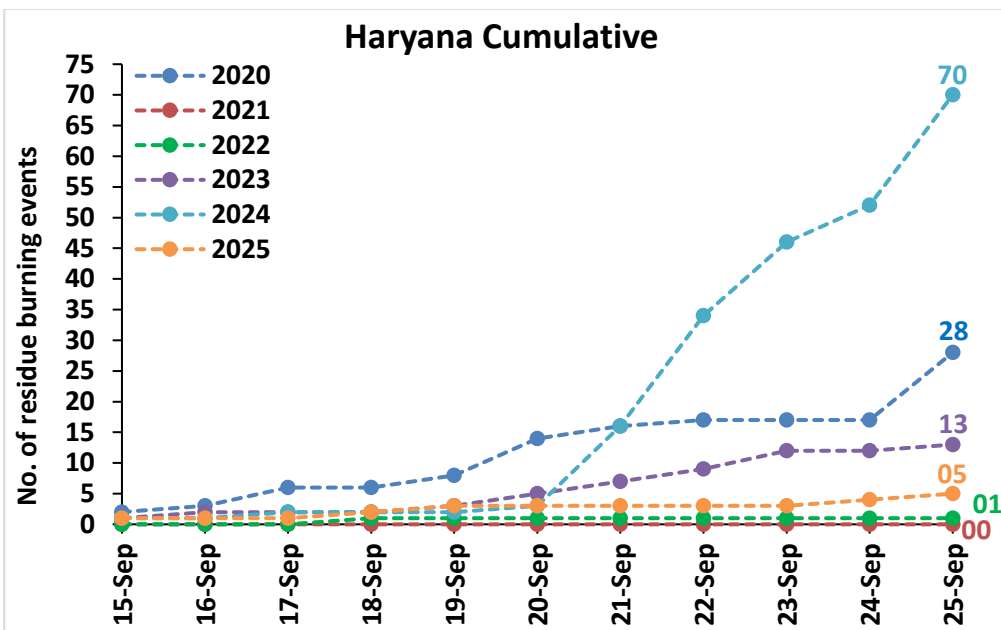
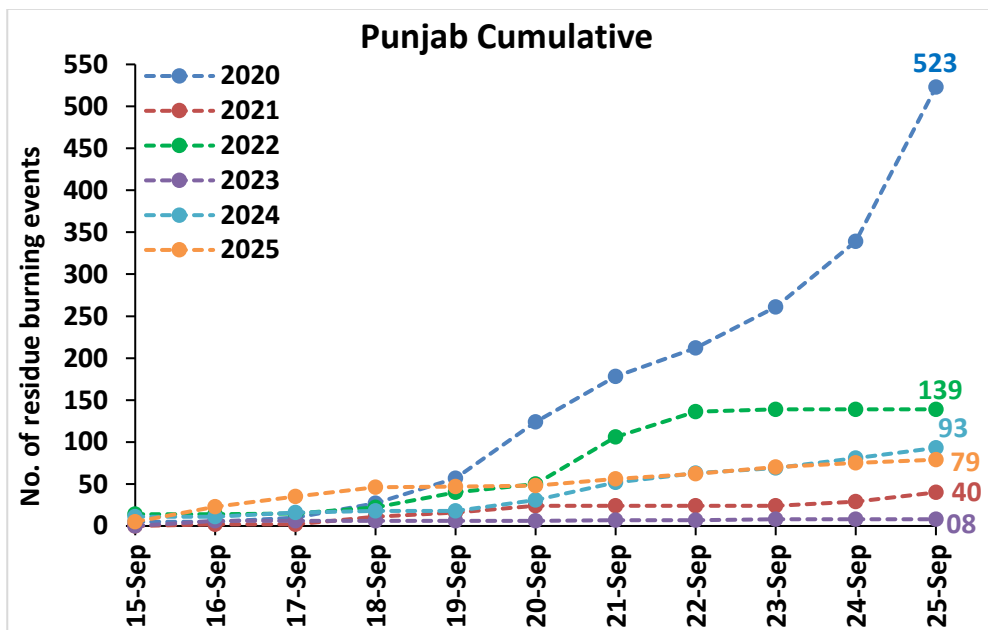


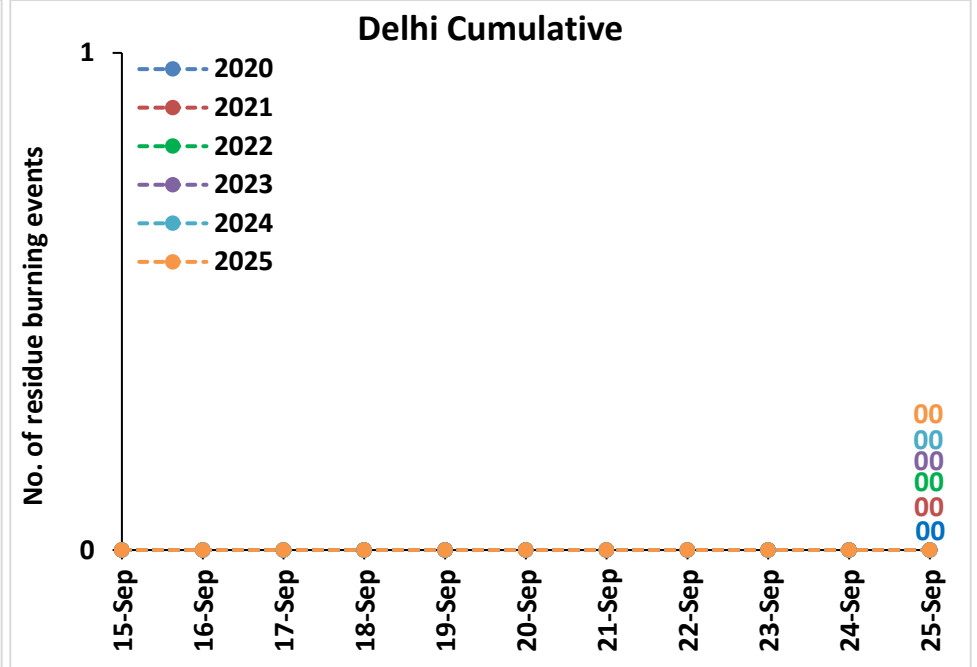
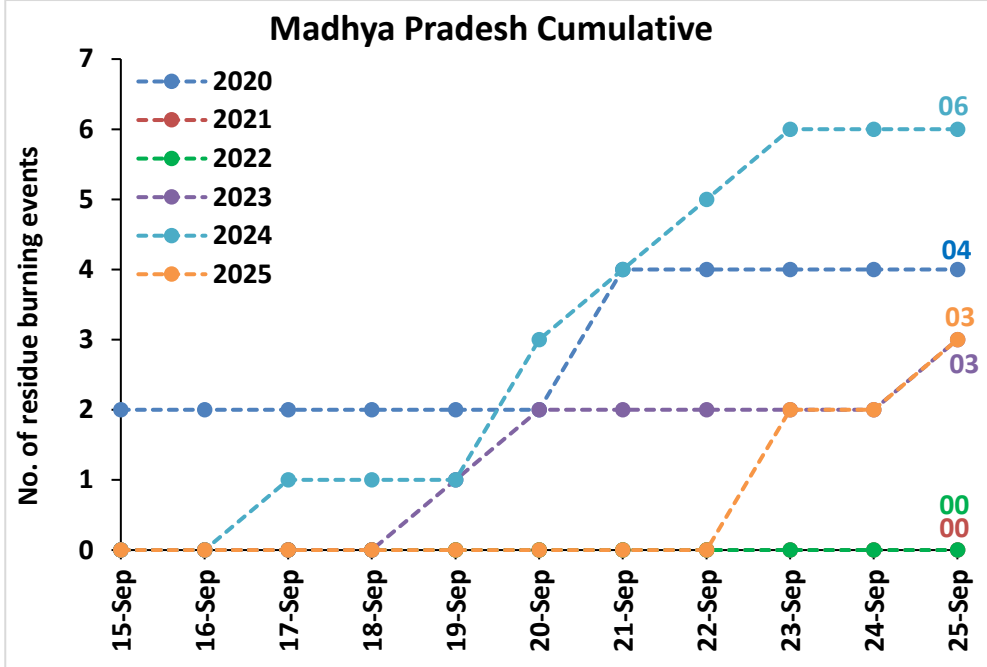
### Madhya Pradesh



**Comparison of residue burning fire power in current year (2025) with previous years (2020,2021,2022, 2023 and 2024) for the study**

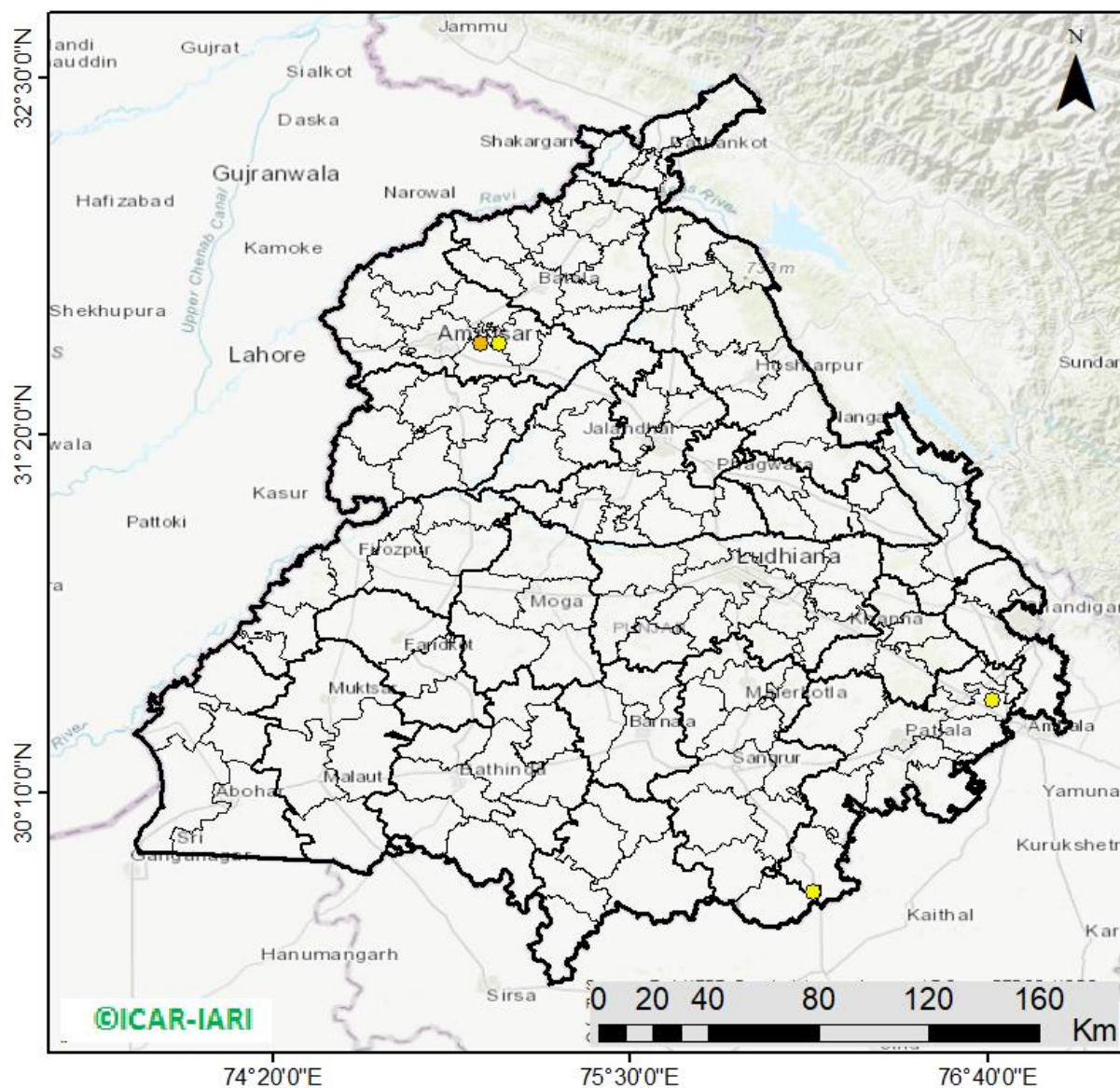
**States**





## Punjab

### RICE RESIDUE BURNING IN PUNJAB



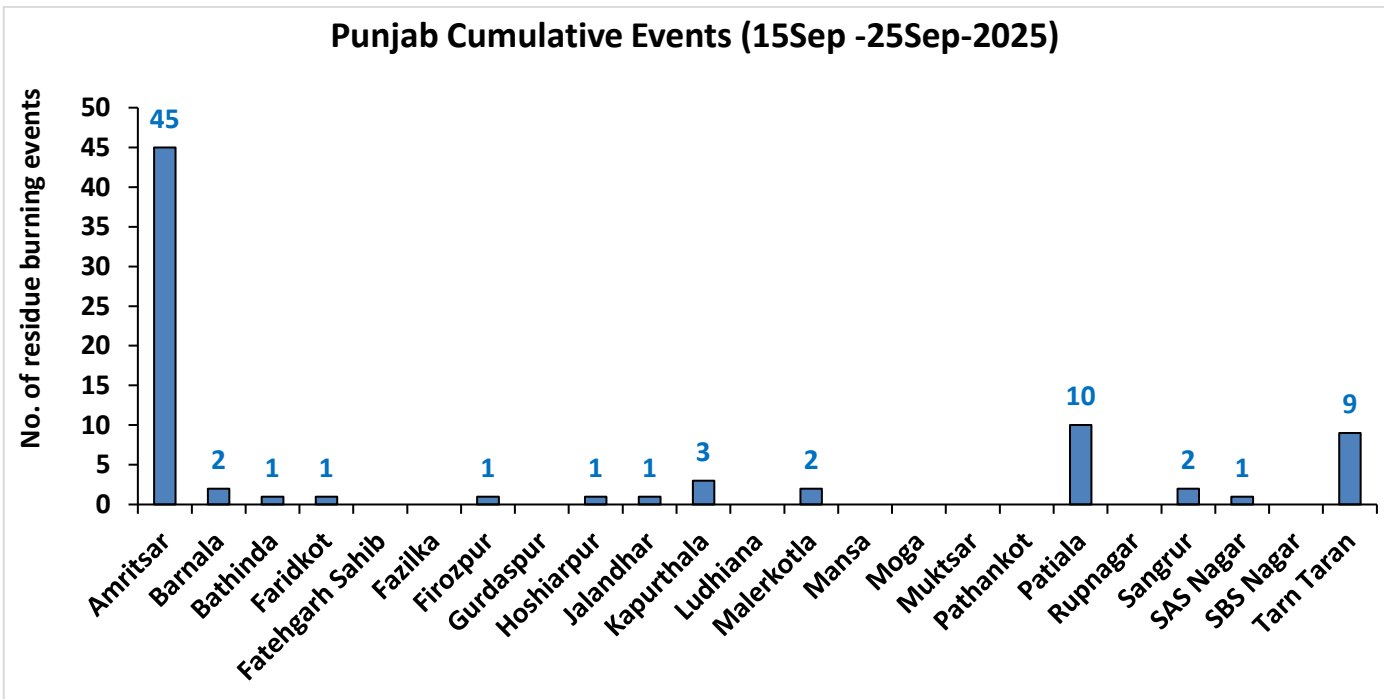
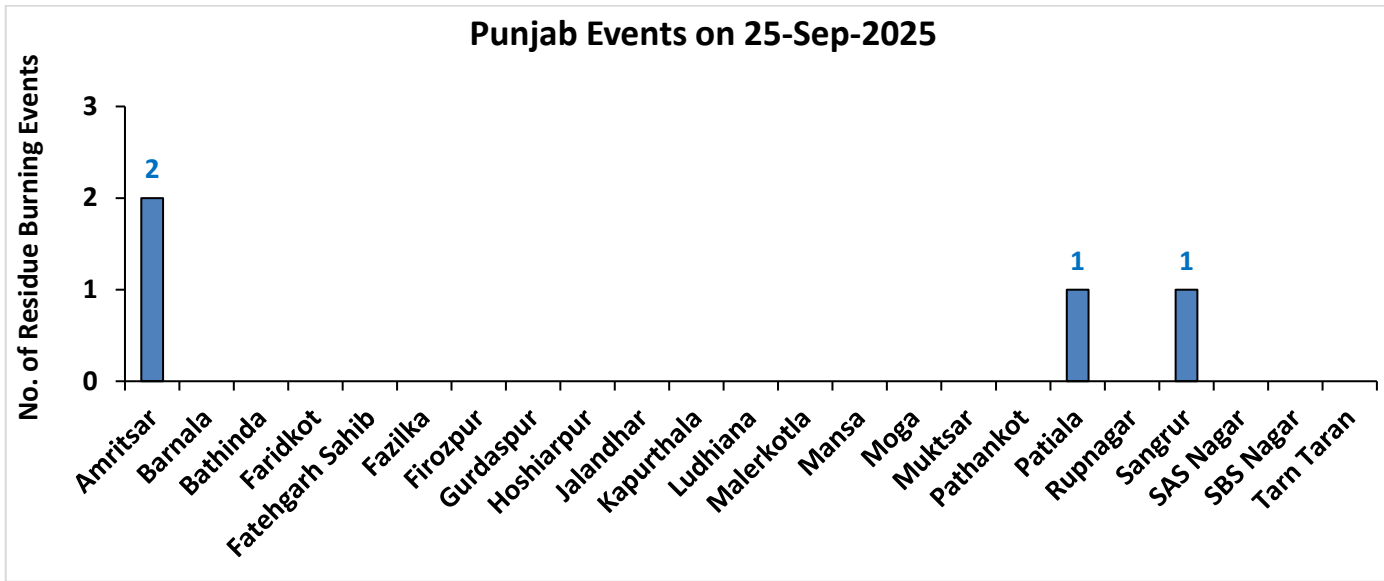
**04** burning events  
detected in Punjab during  
(25th Sep 2025)

#### Fire Intensity (W/m<sup>2</sup>)

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

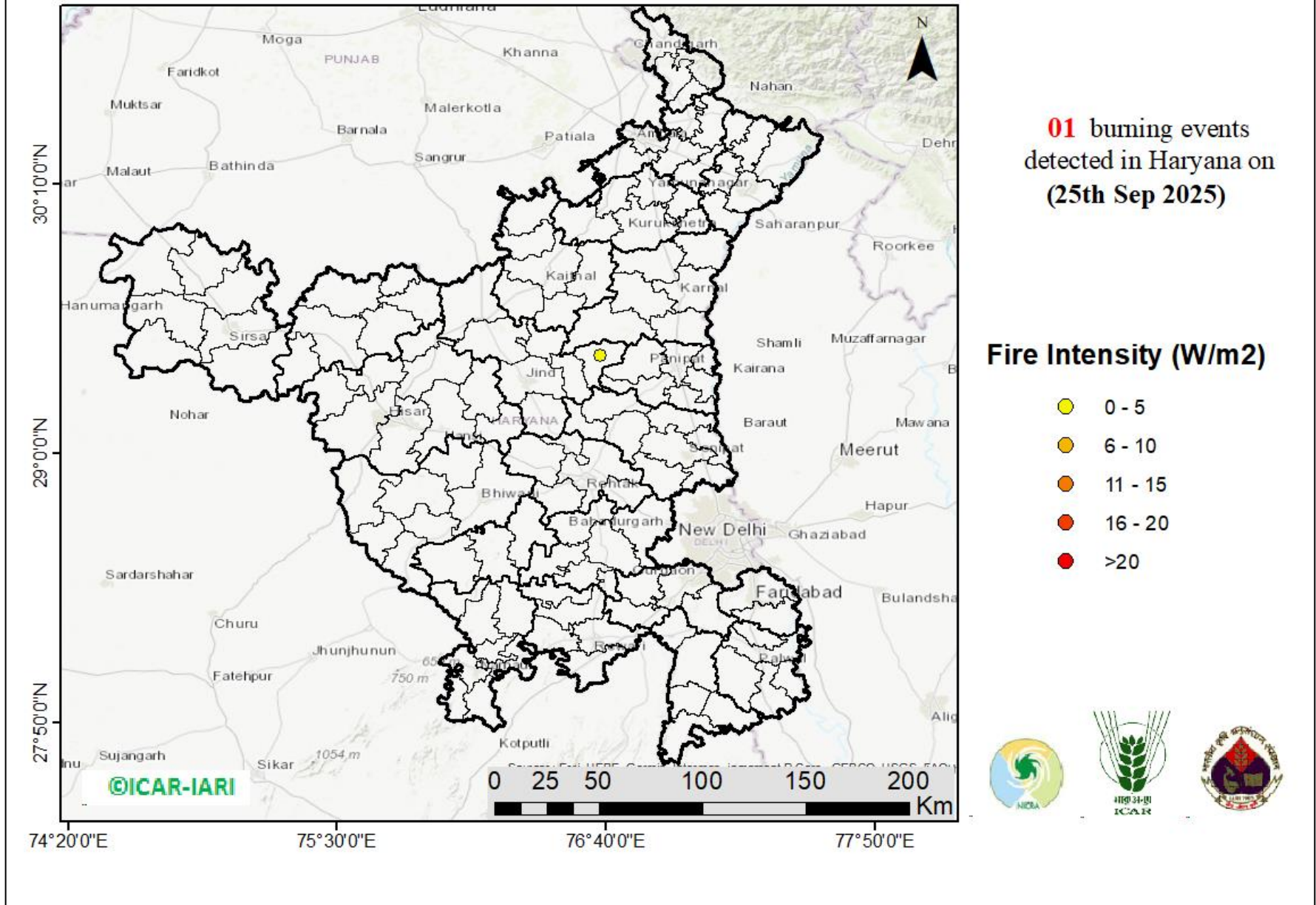


## District-wise cumulative number of residues burning events (15Sep-25Sep-2025)

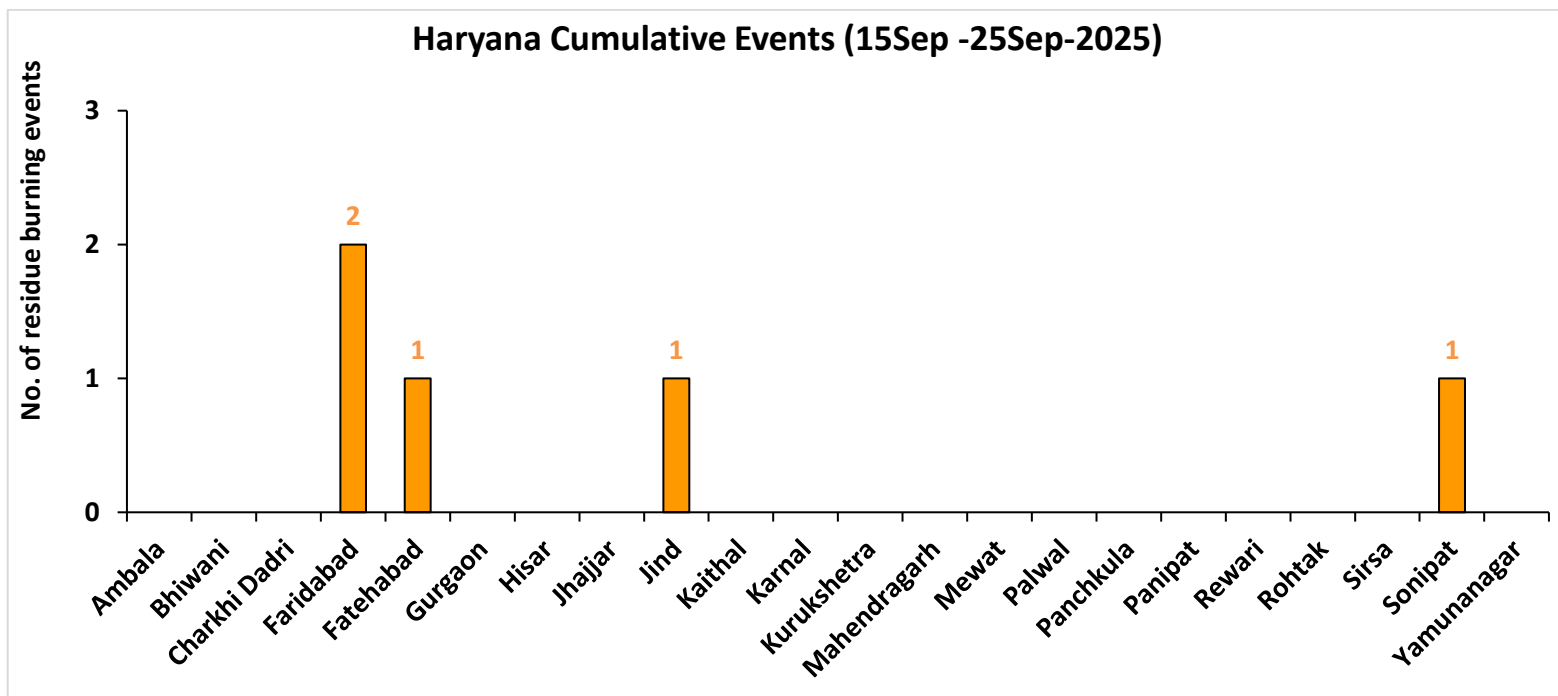
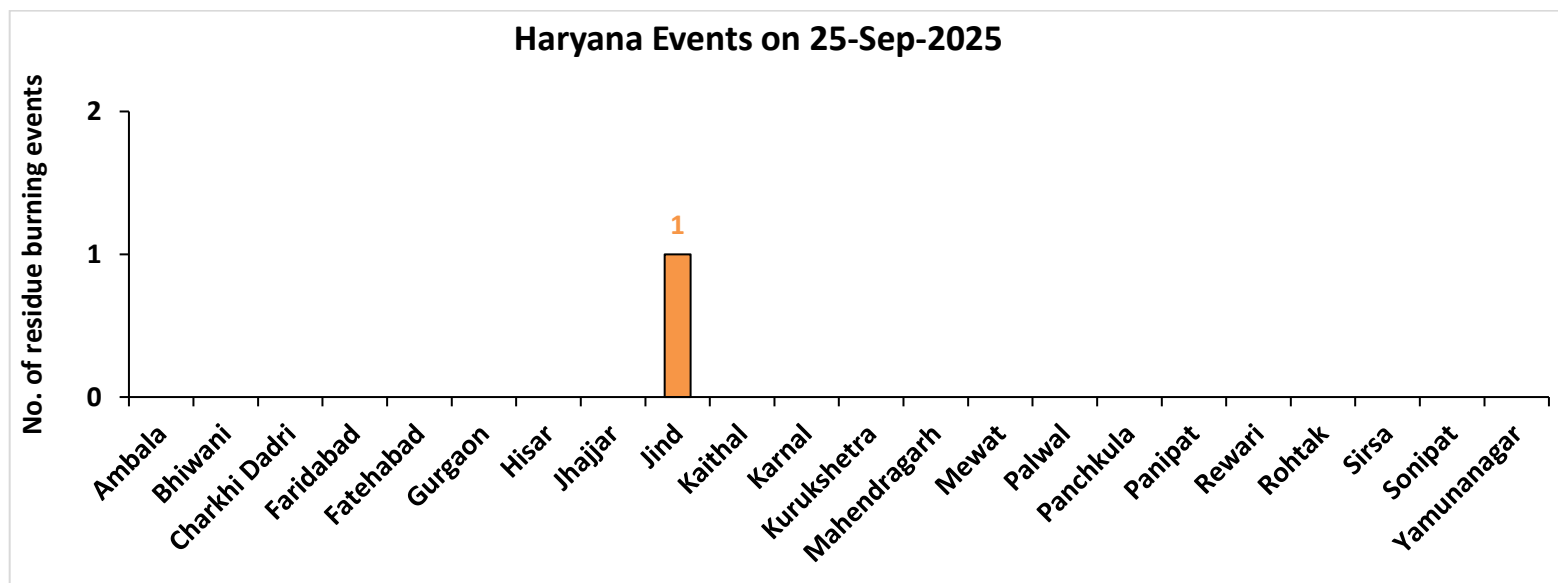


# Haryana

## RICE RESIDUE BURNING IN HARYANA

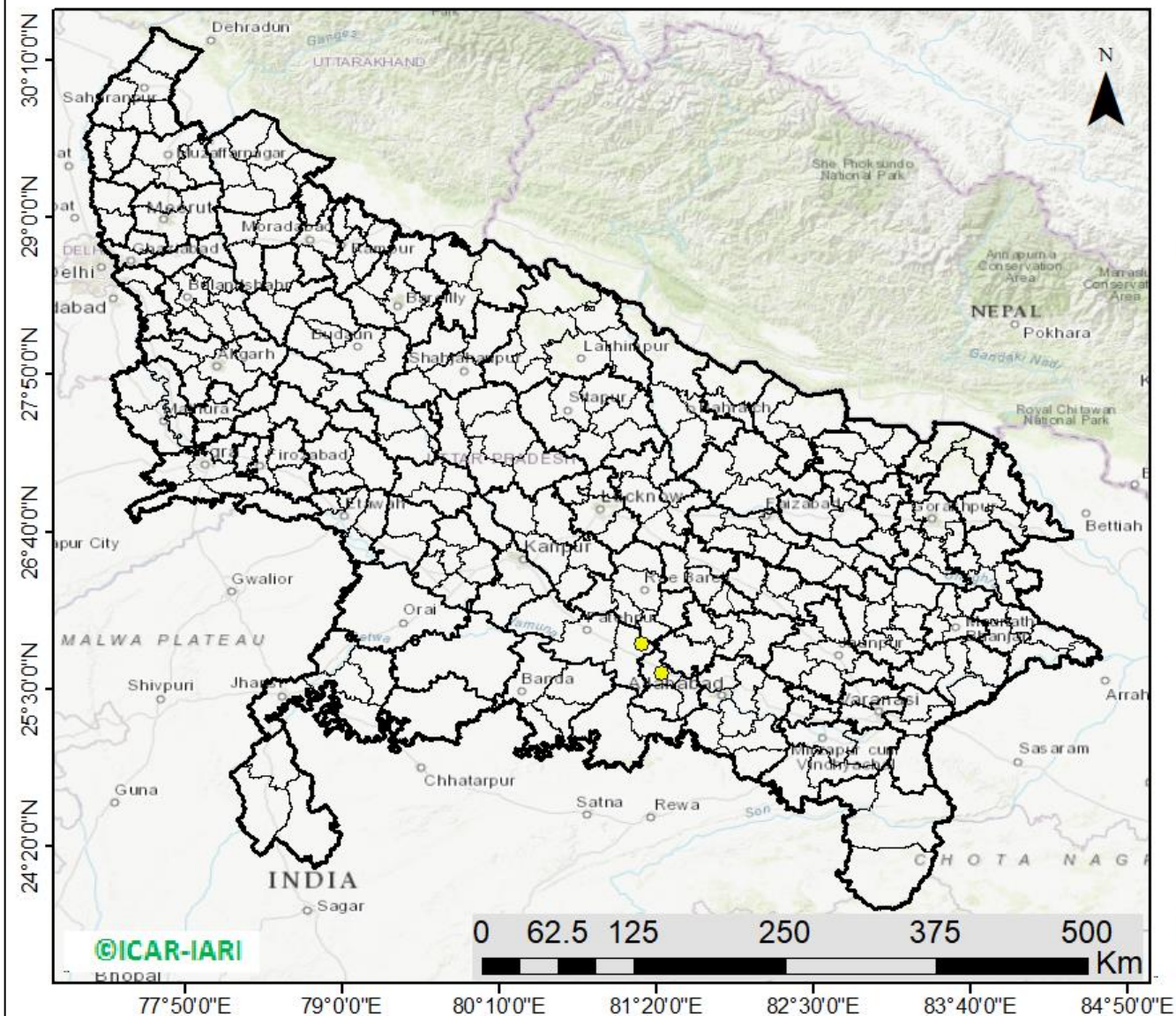


## District-wise cumulative number of residues burning events in Haryana (15Sep-25Sep-2025)



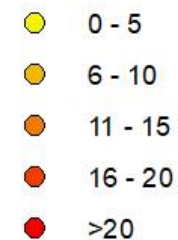
## Uttar Pradesh

### RICE RESIDUE BURNING IN UTTAR PRADESH

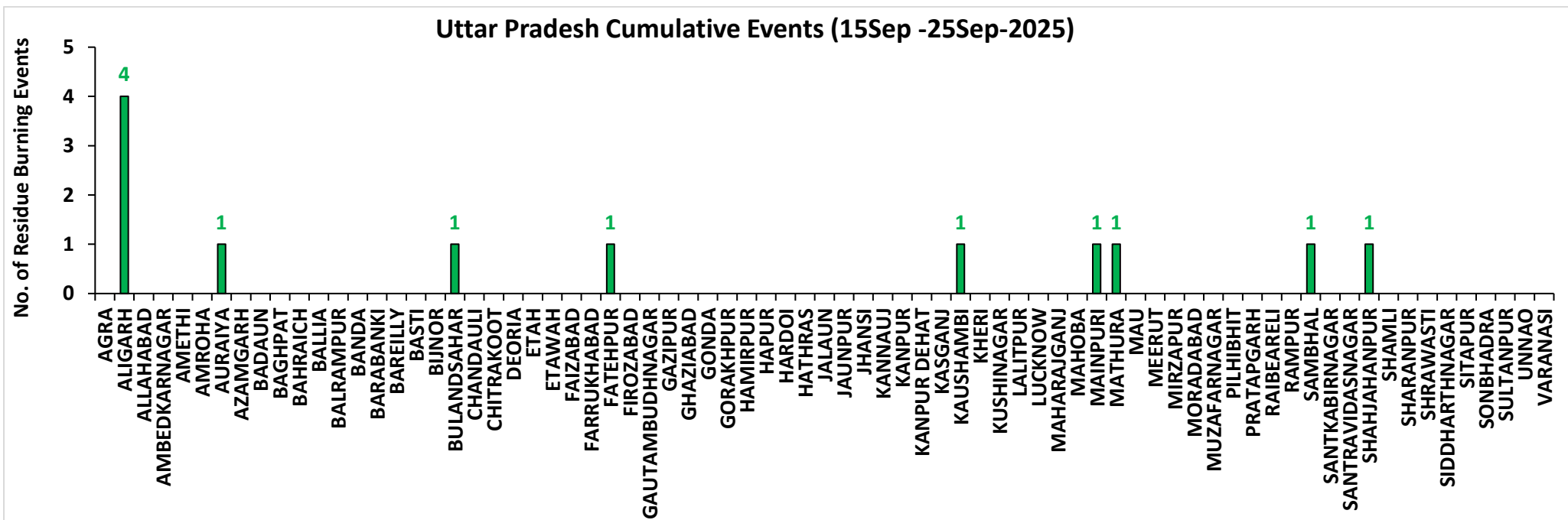
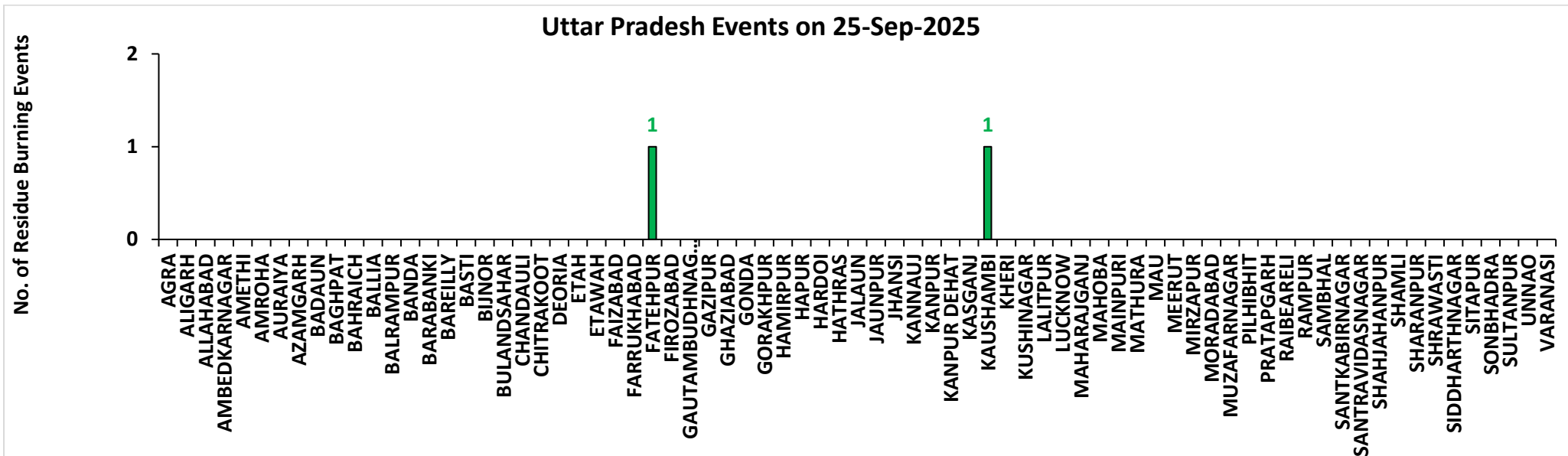


**02** burning events  
detected in Uttar Pradesh on  
(25th Sep 2025)

#### Fire Intensity (W/m<sup>2</sup>)

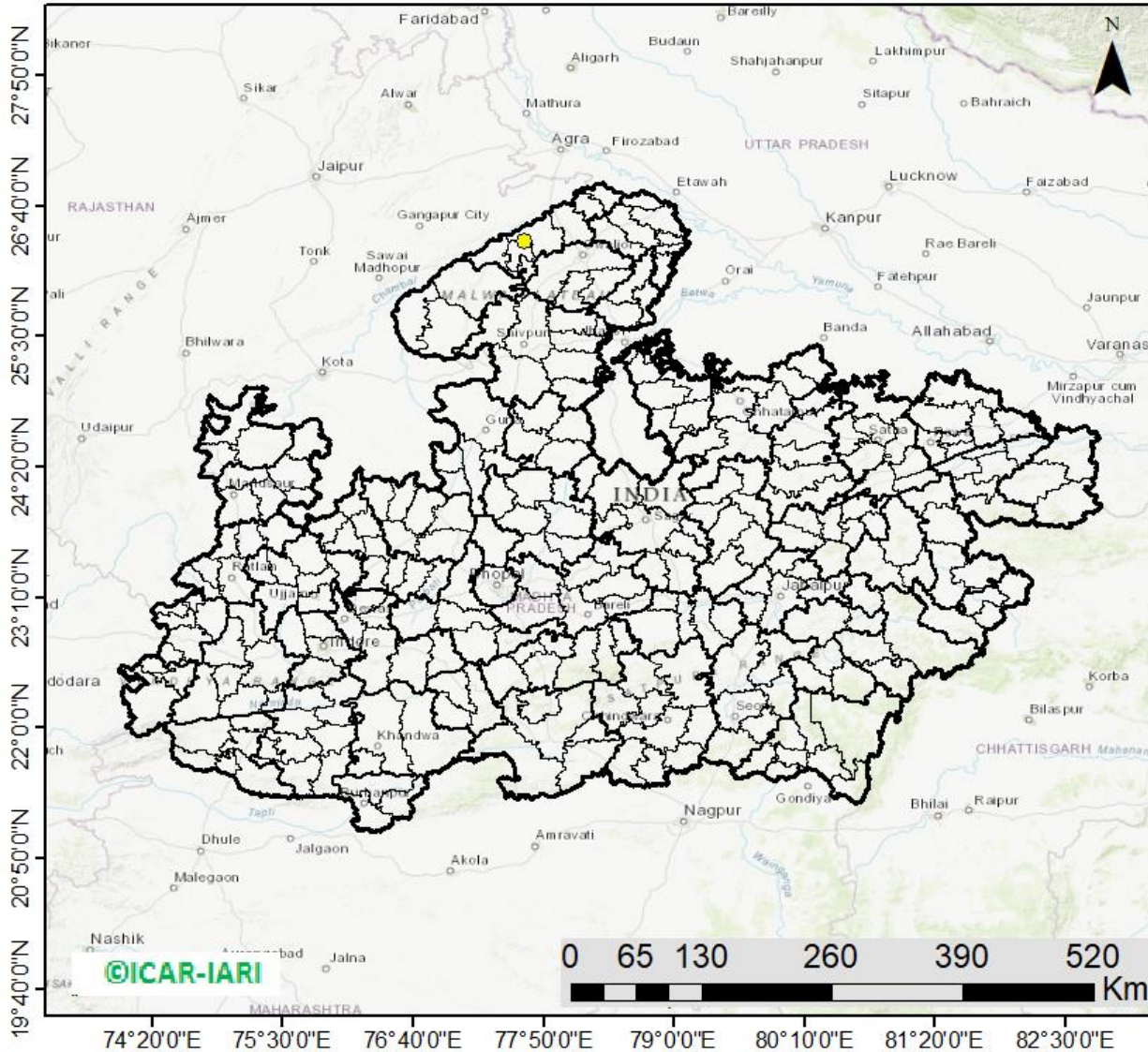


## District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep-25Sep-2025)



# Madhya Pradesh

## RICE RESIDUE BURNING IN MADHYA PRADESH



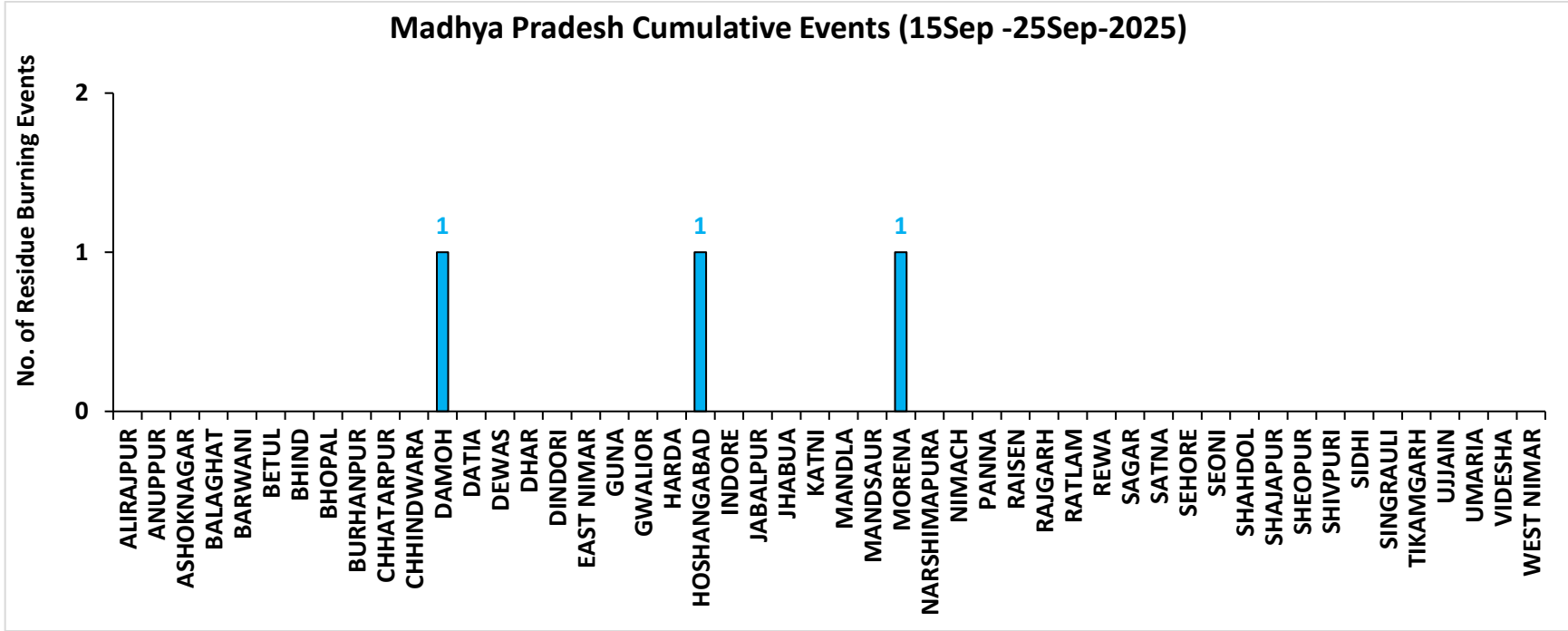
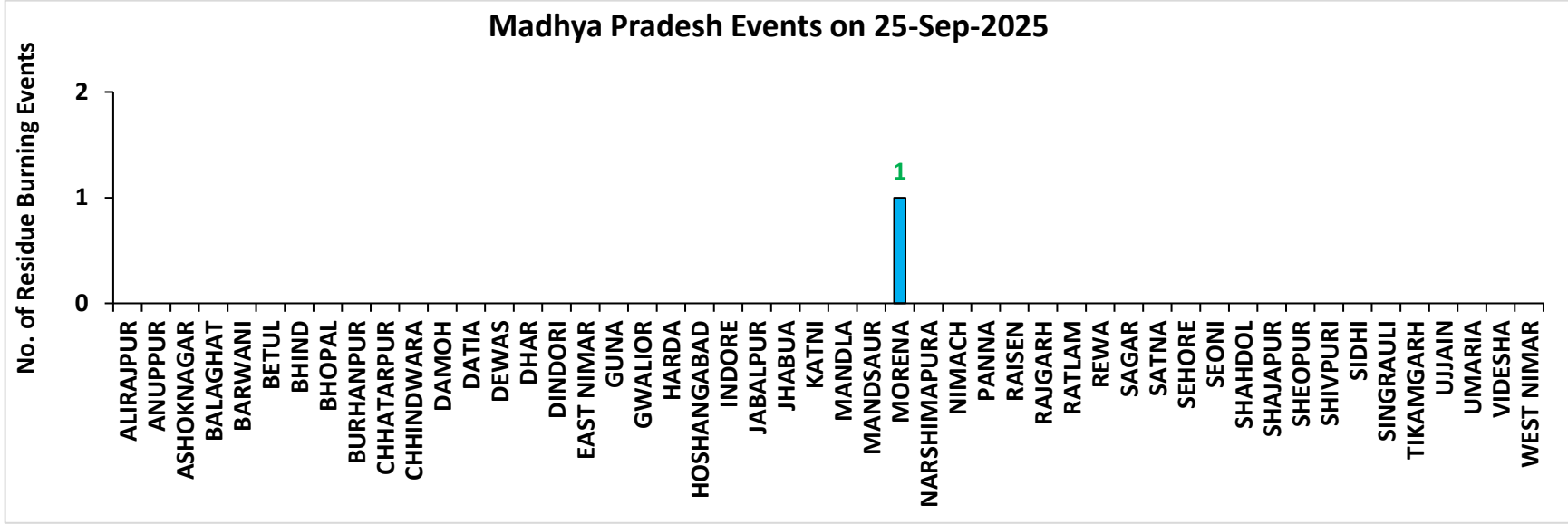
**01** burning events  
detected in MP on  
(25th Sep 2025)

### Fire Intensity (W/m<sup>2</sup>)

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



**District-wise cumulative number of residues burning events in Madhya Pradesh (15Sep-25Sep-2025)**



**District-wise cumulative number of residues burning events detected in 2020, 2021, 2022, 2023, 2024 and 2025**  
**(Period: 15-25 September)**

**(a) Punjab**

District	15- 25 Sep					
	2020	2021	2022	2023	2024	2025
Amritsar	425	34	121	6	58	45
Barnala	1	0	0	0	0	2
Bathinda	0	0	0	0	0	1
Faridkot	1	1	0	0	0	1
Fatehgarh Sahib	0	0	0	0	1	0
Fazilka	0	0	0	0	0	0
Firozpur	2	0	0	1	3	1
Gurdaspur	5	0	1	0	7	0
Hoshiarpur	0	0	0	1	0	1
Jalandhar	2	0	0	0	3	1
Kapurthala	5	0	0	0	5	3
Ludhiana	5	1	0	0	0	0
Malerkotla	0	0	0	0	0	2
Mansa	1	0	0	0	0	0
Moga	3	0	0	0	0	0
Muktsar	1	0	0	0	0	0
Pathankot	0	0	0	0	0	0
Patiala	11	3	1	0	1	10
Rupnagar	0	0	0	0	1	0
Sangrur	2	0	0	0	2	2
SAS NAGAR (Mohali)	3	0	1	0	5	1
SBS Nagar	0	0	1	0	1	0
Tarn Taran	56	1	14	0	6	9
<b>Total</b>	<b>523</b>	<b>40</b>	<b>139</b>	<b>8</b>	<b>93</b>	<b>79</b>

**(b) Haryana**

District	15- 25 Sep					
	2020	2021	2022	2023	2024	2025
AMBALA	3	0	0	0	6	0
BHIWANI	0	0	0	0	0	0
CHARKHI DADRI	0	0	0	0	0	0
FARIDABAD	0	0	0	0	4	2
FATEHABAD	2	0	0	1	2	1
GURGAON	0	0	0	0	0	0
HISAR	0	0	0	0	0	0
JHAJJAR	0	0	0	0	0	0
JIND	0	0	1	1	1	1
KAITHAL	1	0	0	0	1	0
KARNAL	16	0	0	6	31	0
KURUKSHETRA	4	0	0	1	16	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	1	0	0	0	0	0
REWARI	0	0	0	0	0	0
ROHTAK	0	0	0	1	2	0
SIRSA	1	0	0	0	1	0
SONIPAT	0	0	0	2	0	1
YAMUNANAGAR	0	0	0	1	6	0
<b>Total</b>	<b>28</b>	<b>0</b>	<b>1</b>	<b>13</b>	<b>70</b>	<b>5</b>

## (c) Uttar Pradesh

District	15- 25 Sep																			
	2020	2021	2022	2023	2024	2025	GAUTAMBUDHNAGAR	0	0	0	0	1	0	MUZAFARNAGAR	0	0	0	0	0	0
AGRA	0	0	0	0	0	0	GAZIPUR	0	0	0	0	0	0	PILHIBHIT	0	0	0	1	0	0
ALIGARH	1	0	0	0	0	4	GHAZIABAD	1	0	0	0	1	0	PRATAPGARH	0	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	0
AMBEDKARNAGAR	0	0	0	0	0	0	GORAKHPUR	0	0	0	0	0	0	RAMPUR	0	1	0	0	0	0
AMETHI	0	0	0	0	0	0	HAMIRPUR	0	0	0	0	0	0	SAMBHAL	3	0	0	0	0	1
AMROHA	0	0	0	0	0	0	HAPUR	1	0	0	0	0	0	SANTKABIRNAGAR	0	0	0	0	0	0
AURAIYA	1	0	0	0	0	1	HARDOI	0	0	0	0	0	0	SANTRAVIDASNAGAR	0	0	0	0	0	0
AZAMGARH	0	0	0	0	0	0	HATHRAS	0	0	0	0	0	0	SHAHJAHANPUR	0	0	0	1	1	1
BADAUN	0	0	0	0	0	0	JALAUN	0	0	0	0	0	0	SHAMLI	1	0	0	0	0	0
BAGHPAT	1	0	0	0	0	0	JAUNPUR	0	0	0	0	0	0	SHARANPUR	0	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	0
BALLIA	0	0	0	0	0	0	KANNAUJ	0	0	0	0	0	0	SIDDHARTHANAGAR	0	0	0	0	0	0
BALRAMPUR	0	0	0	0	0	0	KANPUR	0	1	0	0	0	0	SITAPUR	0	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	0
BARABANKI	0	0	0	0	0	0	KASGANJ	0	0	0	0	0	0	SULTANPUR	0	0	0	0	0	0
BAREILLY	0	0	0	0	0	0	KAUSHAMBI	0	0	0	1	0	1	UNNAO	0	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	0
BIJNOR	1	0	0	0	0	0	KUSHINAGAR	0	0	0	0	0	0	<b>Total</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>12</b>
BULANDSAHAR	0	0	0	0	0	1	LALITPUR	0	0	0	0	0	0							
CHANDAULI	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	2	0	0	MAHOBA	0	0	0	0	0	0							
ETAH	0	0	0	0	0	0	MAINPURI	0	0	0	0	0	1							
ETAWAH	0	0	0	0	0	0	MATHURA	0	1	0	0	0	1							
FAIZABAD	0	0	0	0	0	0	MAU	0	0	0	0	0	0							
FARRUKHABAD	0	0	0	0	0	0	MEERUT	1	0	0	0	0	0							
FATEHPUR	0	0	0	0	0	1	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- 25 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- 25 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	1	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	1	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	3	0
JAIPUR	0	0	0	0	0	0
JAISELMER	1	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	1	0	0	0	0	0
KARALI	0	0	0	0	0	0
KOTA	0	0	0	0	0	0
NAGOUR	0	0	0	0	0	0
PALI	0	0	0	0	0	1
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
<b>Total</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>1</b>

(f) Madhya Pradesh

District	15- 25 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	2	0	0	1	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	1	0	1	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	2	0	
DHAR	0	0	0	0	1	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	<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>3</b>	
HOSHANGABAD	0	0	0	1	0	1								
INDORE	0	0	0	0	3	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	1								
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: 15-25 September)

**Number of Paddy Residue Burning Events Detected**

Date	Punjab						Haryana						Uttar Pradesh					
	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
16-Sep	0	2	0	6	0	18	1	0	0	1	0	0	0	0	0	2	0	0
17-Sep	5	0	1	0	5	11	3	0	0	0	1	0	0	0	0	0	1	0
18-Sep	17	9	7	0	2	12	0	0	1	0	0	1	0	1	0	0	0	1
19-Sep	30	5	18	0	0	1	2	0	0	1	0	1	0	1	0	0	0	1
20-Sep	67	8	10	0	13	1	6	0	0	2	1	0	2	0	0	0	0	1
21-Sep	54	0	56	1	21	8	2	0	0	2	13	0	1	0	0	1	2	0
22-Sep	34	0	30	0	11	6	1	0	0	2	18	0	1	0	0	0	0	2
23-Sep	49	0	3	1	6	8	0	0	0	3	12	0	1	0	0	0	0	4
24-Sep	78	5	0	0	12	5	0	0	0	0	6	1	1	1	0	1	0	0
25-Sep	184	11	0	0	12	4	11	0	0	1	18	1	5	0	0	1	0	2
<b>Total</b>	<b>523</b>	<b>40</b>	<b>139</b>	<b>8</b>	<b>93</b>	<b>79</b>	<b>28</b>	<b>0</b>	<b>1</b>	<b>13</b>	<b>70</b>	<b>5</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>12</b>

**Number of Paddy Residue Burning Events Detected**

Date	Delhi						Rajasthan						Madhya Pradesh					
	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
16-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0

<b>21-Sep</b>	0	0	0	0	0	0	1	0	1	0	0	0	2	0	0	0	1	0
<b>22-Sep</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
<b>23-Sep</b>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
<b>24-Sep</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>25-Sep</b>	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	1	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>3</b>

### Details of residue burning events in Punjab on 25-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	JANDIALA GURU	S-NPP	31.63270	75.01210	13:06:41	D	5.20
2	AMRITSAR	TARSIKKA	S-NPP	31.63620	75.07059	13:06:41	D	3.00
3	PATIALA	SHAMBU KALAN	S-NPP	30.47104	76.68464	13:06:41	D	3.50
4	SANGRUR	ANDANA	S-NPP	29.84328	76.09973	13:06:41	D	2.60

### Details of residue burning events in Haryana on 25-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	JIND	SAFIDON	S-NPP	29.42106	76.63947	13:06:41	D	3.80

### Details of residue burning events in Uttar Pradesh on 25-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	FATEHPUR	KHAGA	S-NPP	25.83643	81.22960	13:07:00	D	4.56
2	KAUSHAMBI	SIRATHU	S-NPP	25.61208	81.37667	13:07:00	D	4.76

### Details of residue burning events in Madhya Pradesh on 25-Sep-2025

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	MORENA	KAILARAS	S-NPP	26.34581	77.66409	13:09:00	D	4.26

**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**

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**GIS Maps of fire events can be visualized online on ICAR KRISHI Geoportal website <https://creams.iari.res.in/geokrishi/>  
(Part of KRISHI Portal initiative)**

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