

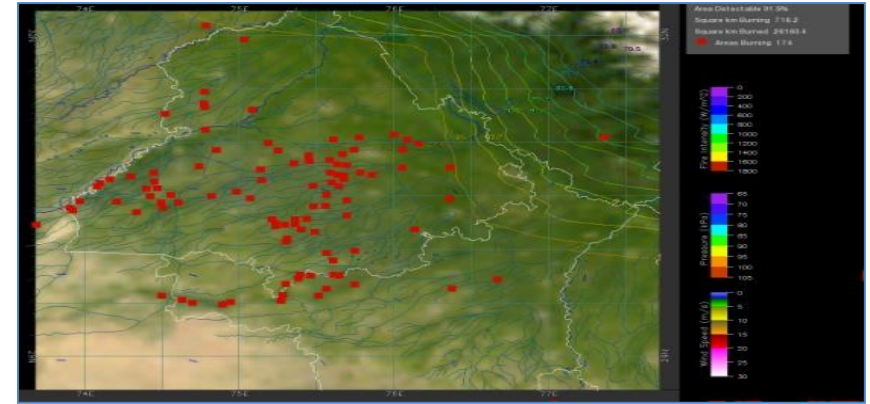
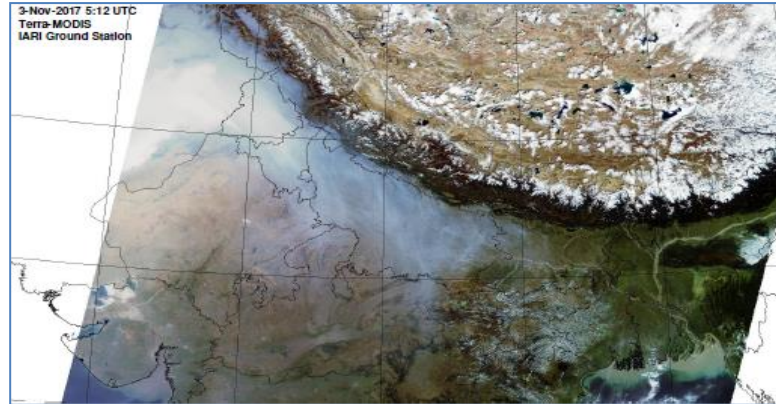


MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2024

Bulletin
No. 18

Events Date:
02-Oct-2024

Issued on:
02-Oct-2024



Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS)
Laboratory,

Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

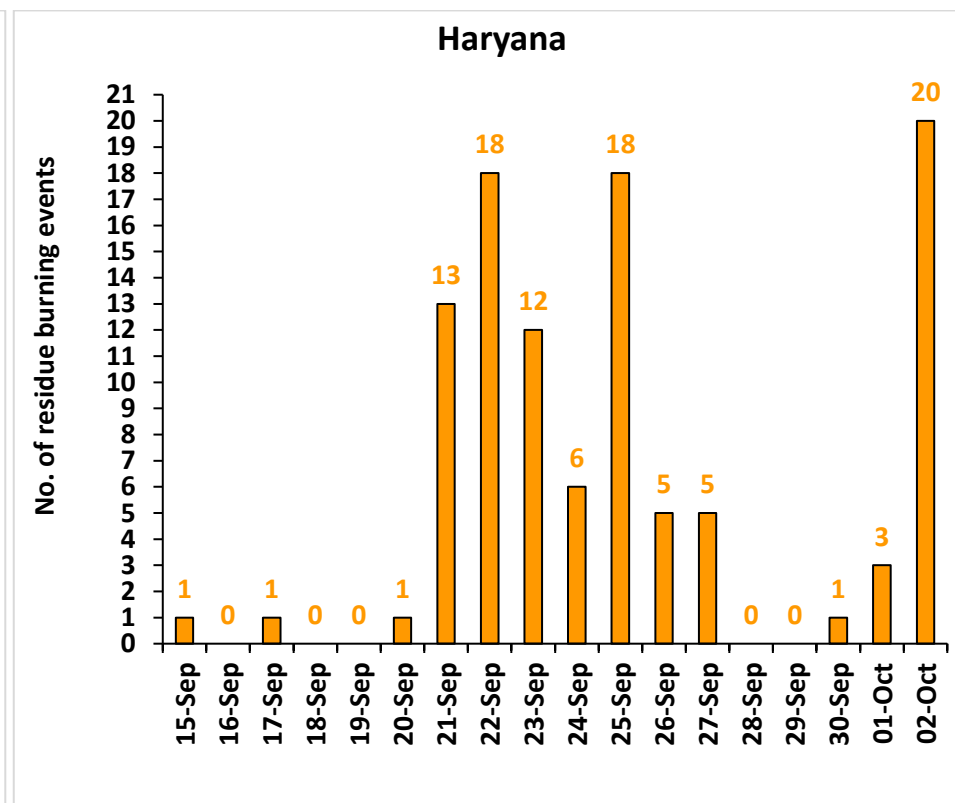
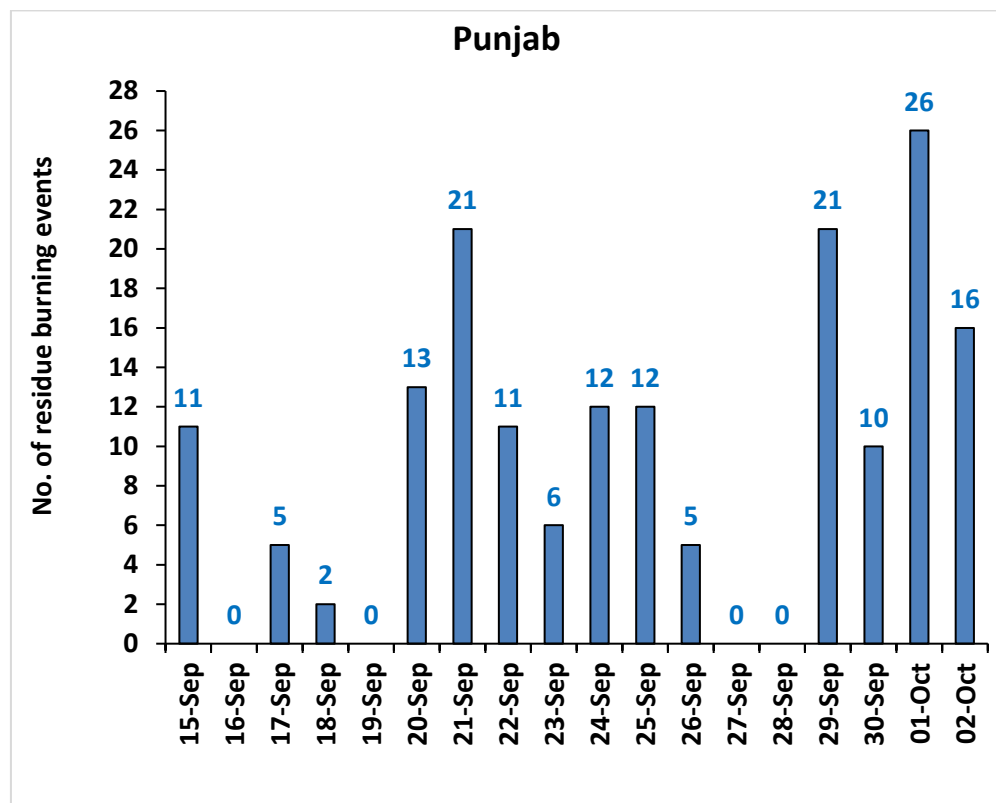
<https://creams.iari.res.in>



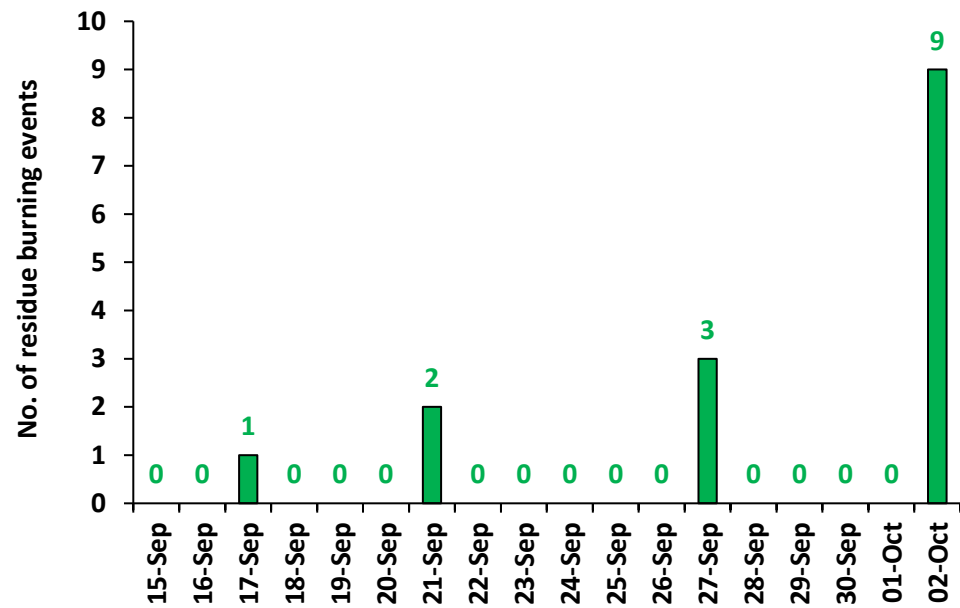
Highlights for 02-Oct-2024

- 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 **48** residue burning events in the six study States on **02-Oct-2024**.
- The state wise events detected on **02-Oct-2024** were **16** in Punjab, **20** in Haryana, **09** in UP, **00** in Delhi, **03** in Rajasthan and **00** in MP.
- Total **310** burning events were detected in the six states between **15-Sept-2024** and **02-Oct-2024**, which are distributed as **171**, **104**, **15**, **00**, **09** and **11** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.

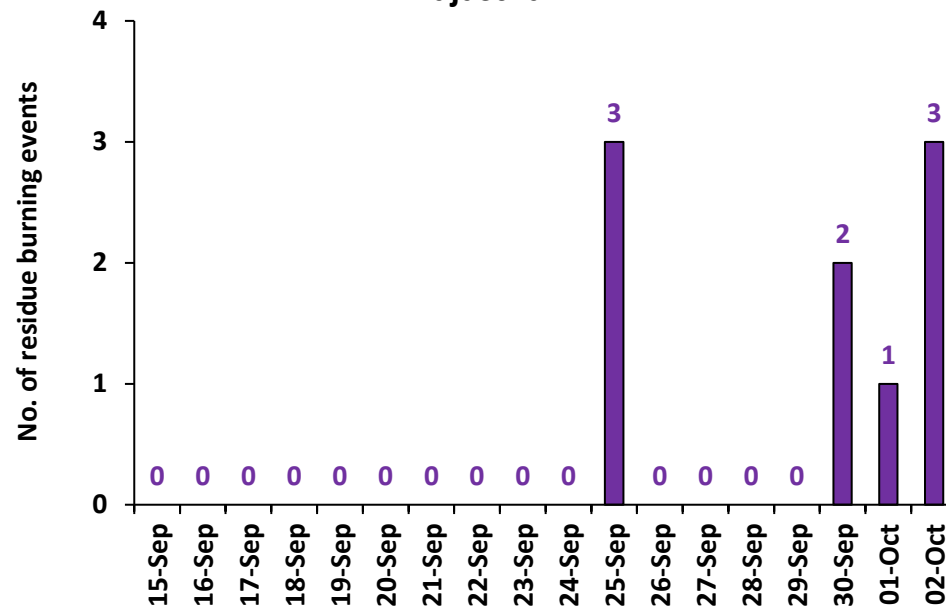
Temporal distribution of rice residue burning events for the study States in 2024



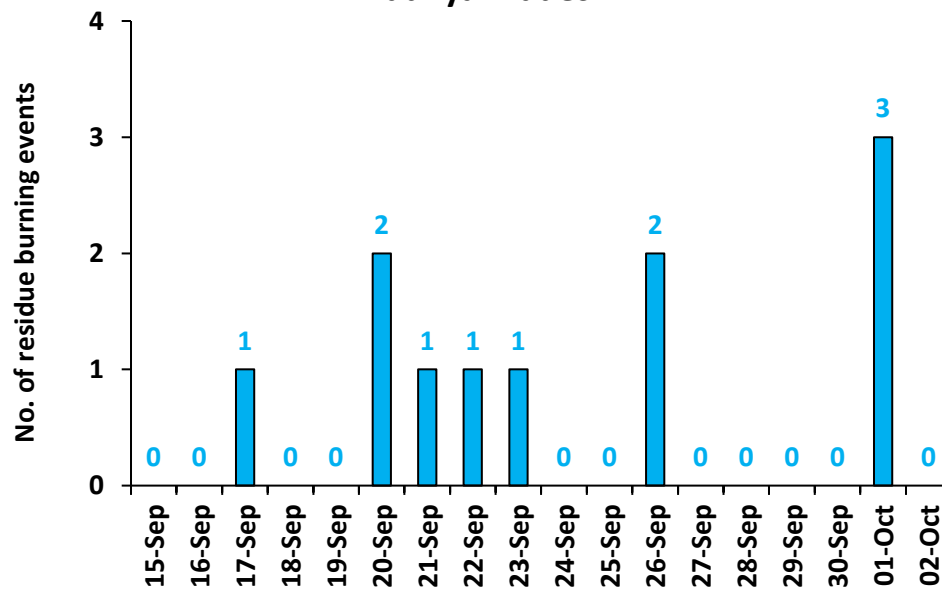
Uttar Pradesh



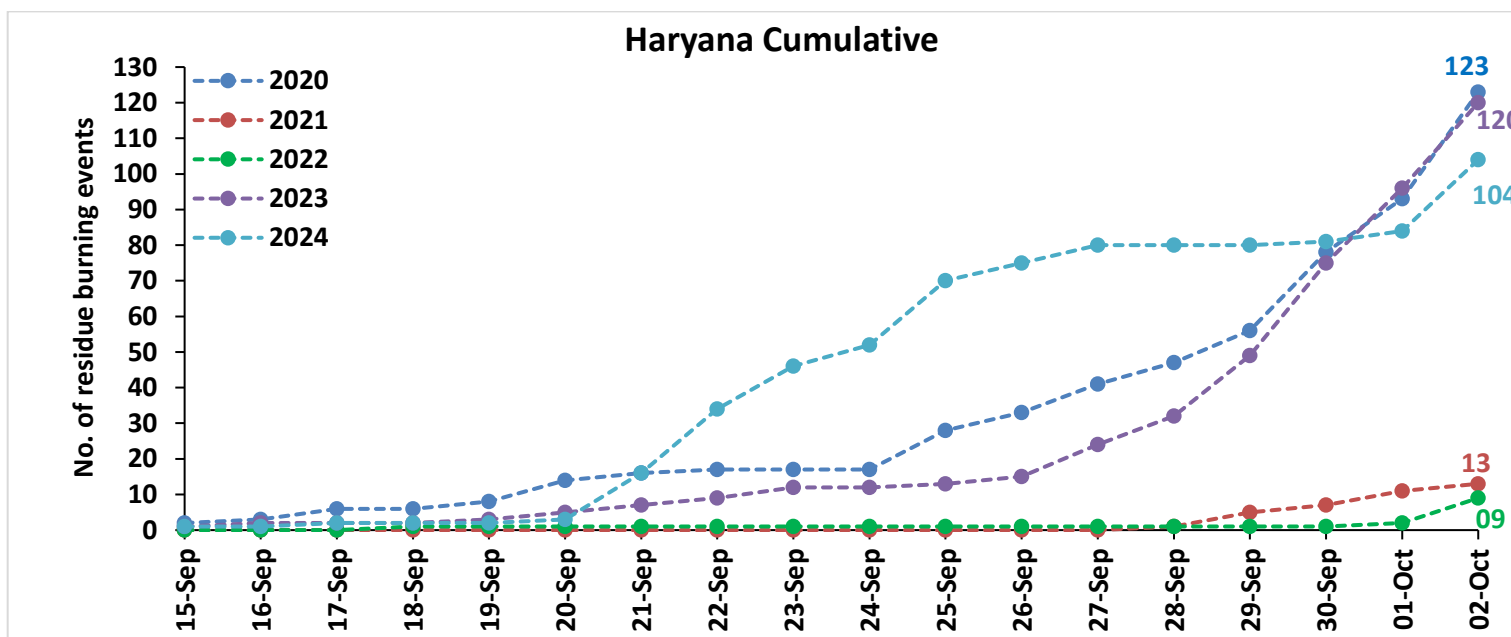
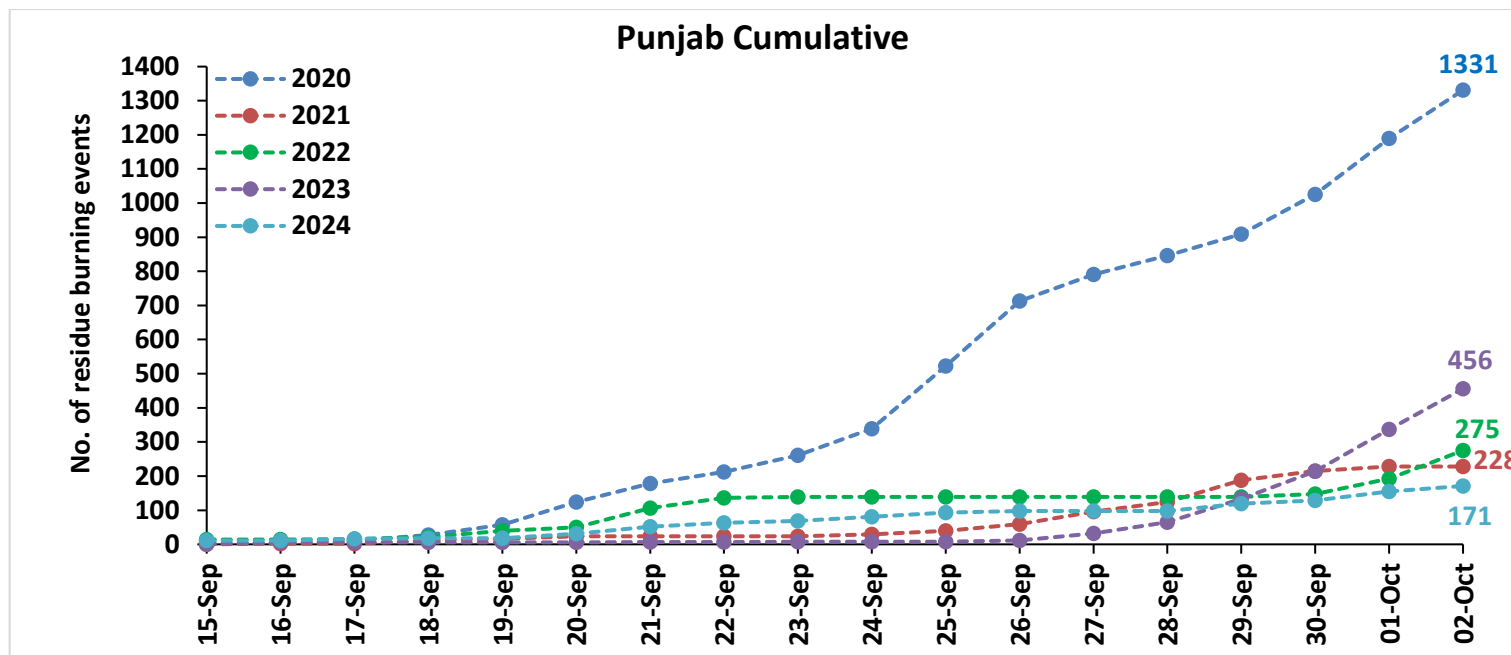
Rajasthan

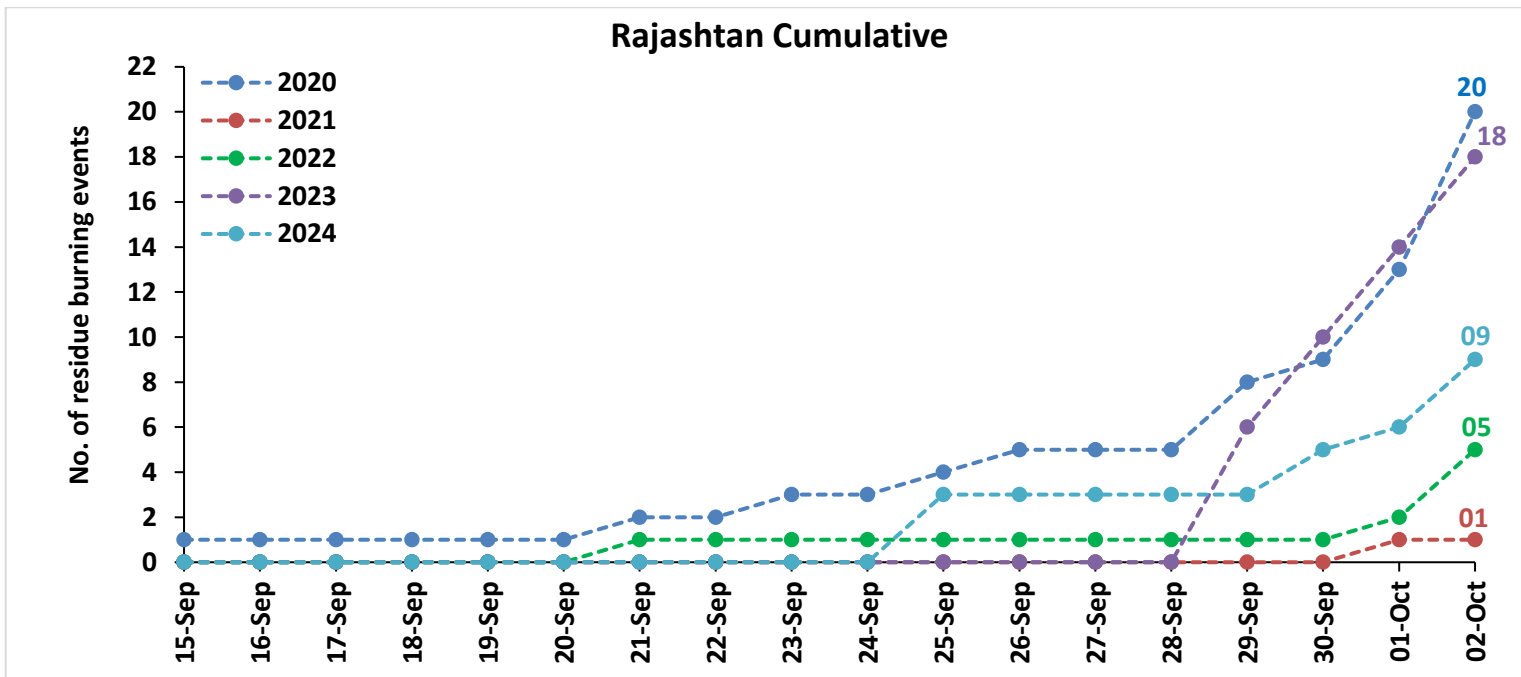
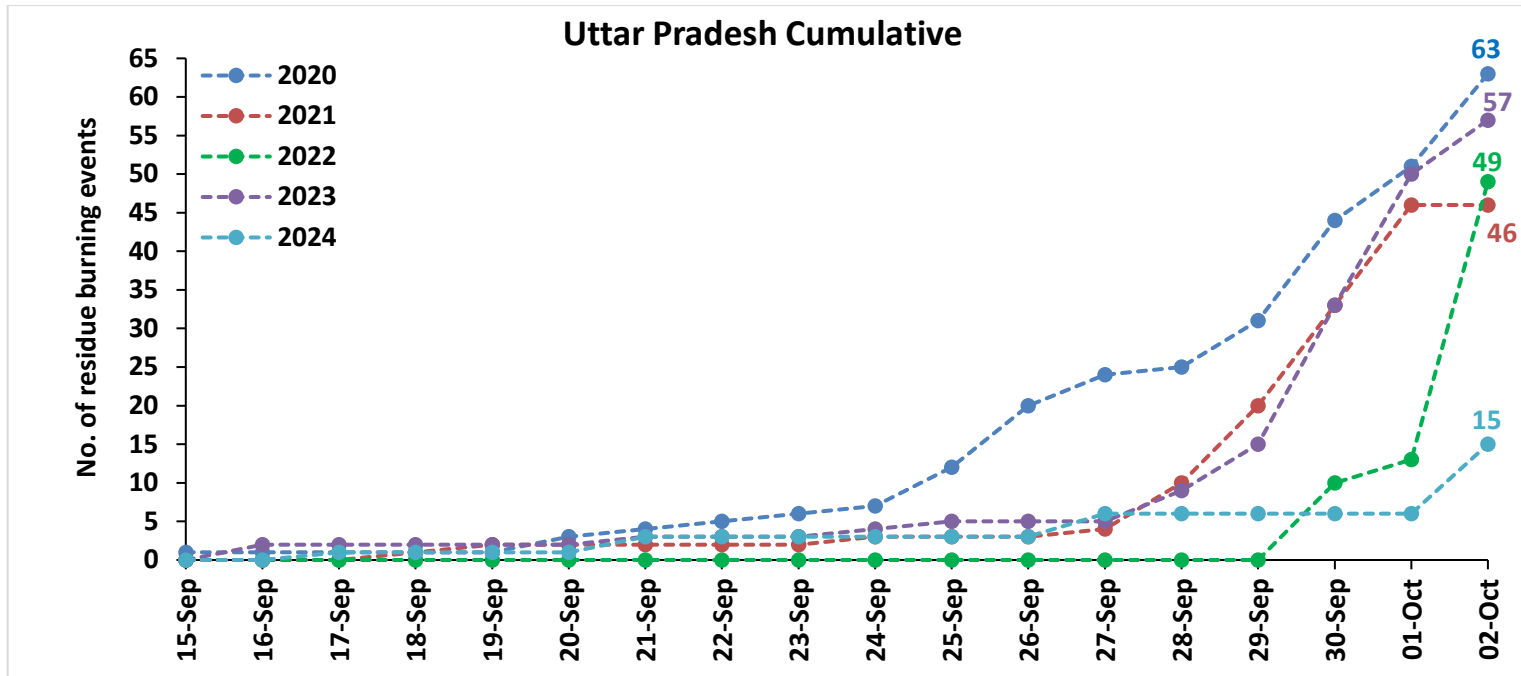


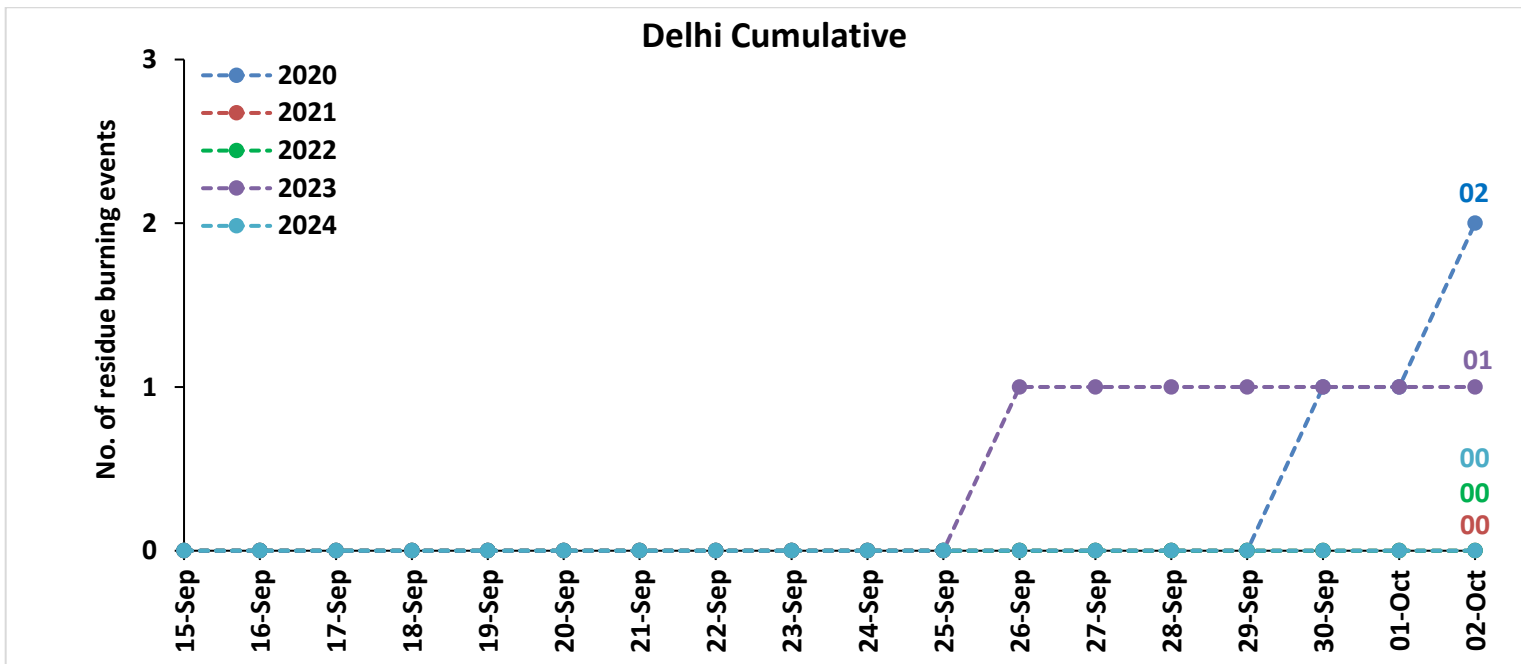
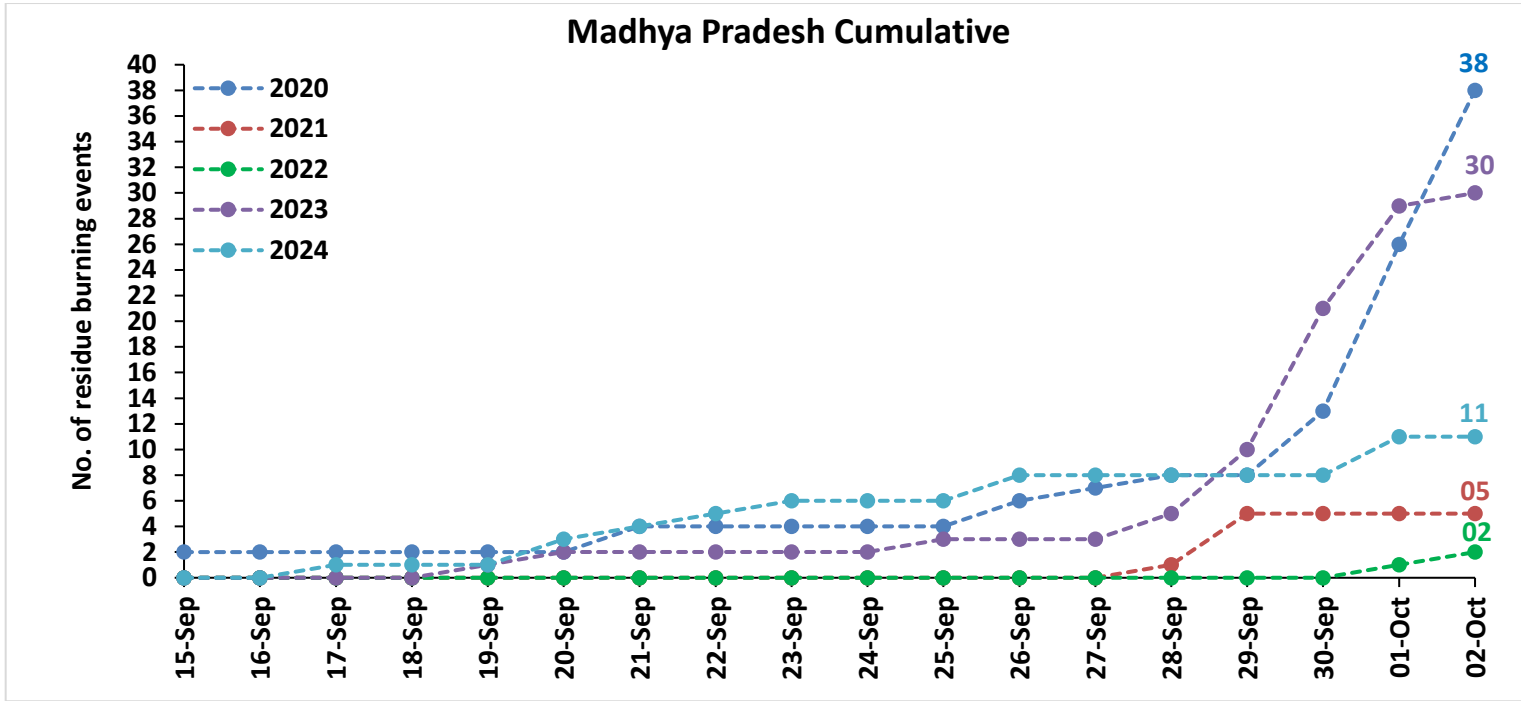
Madhya Pradesh



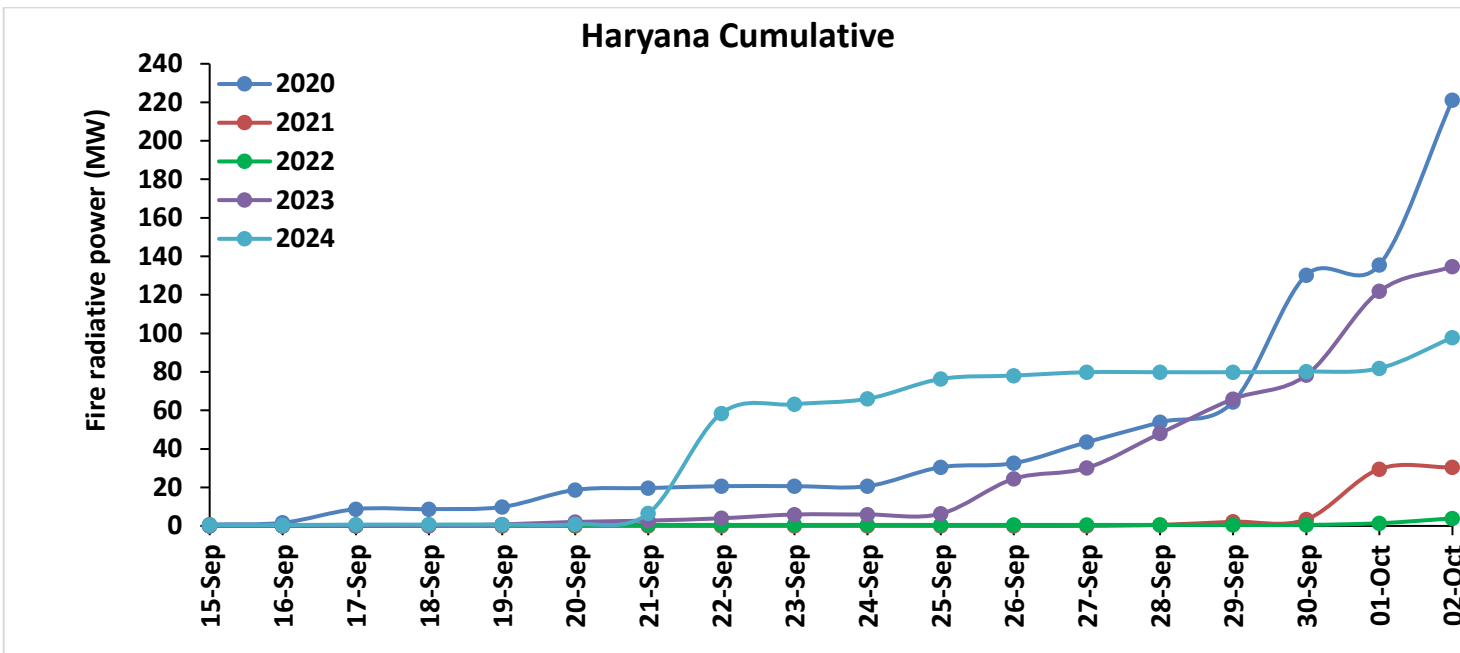
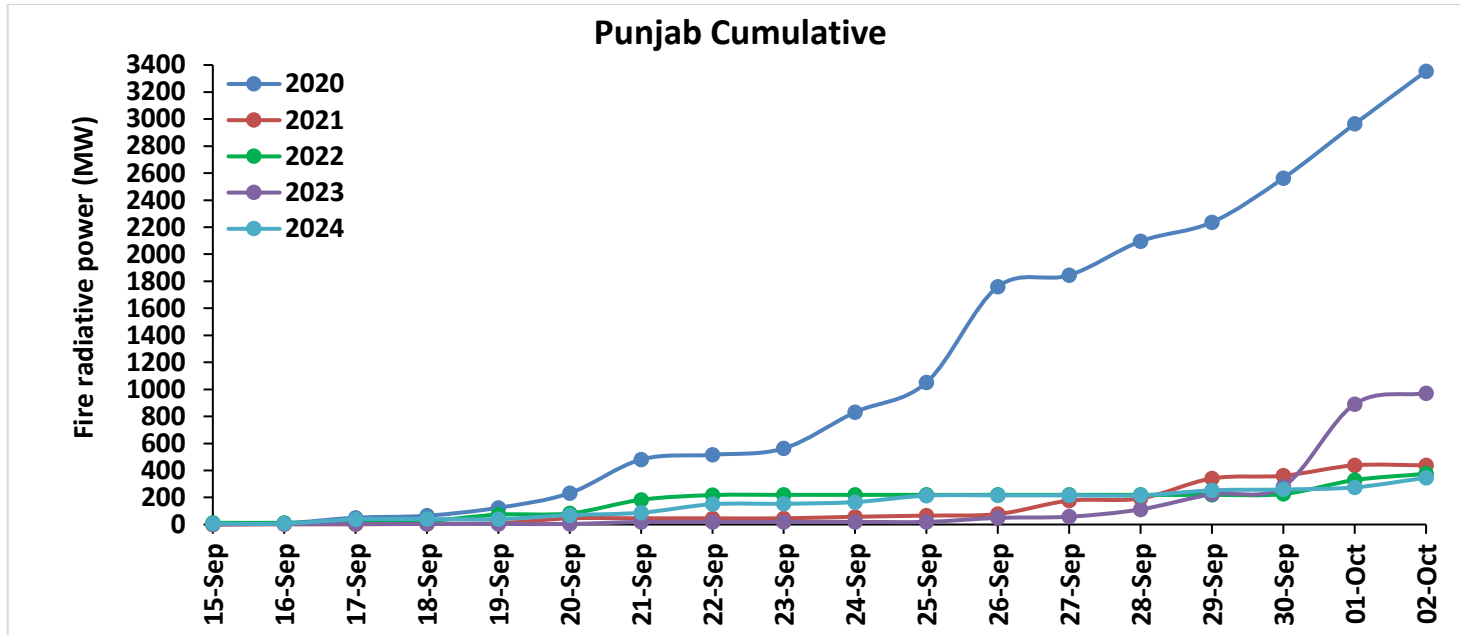
Comparison of residue burning events in current year (2024) with previous years (2020, 2021, 2022 and 2023) for the study States

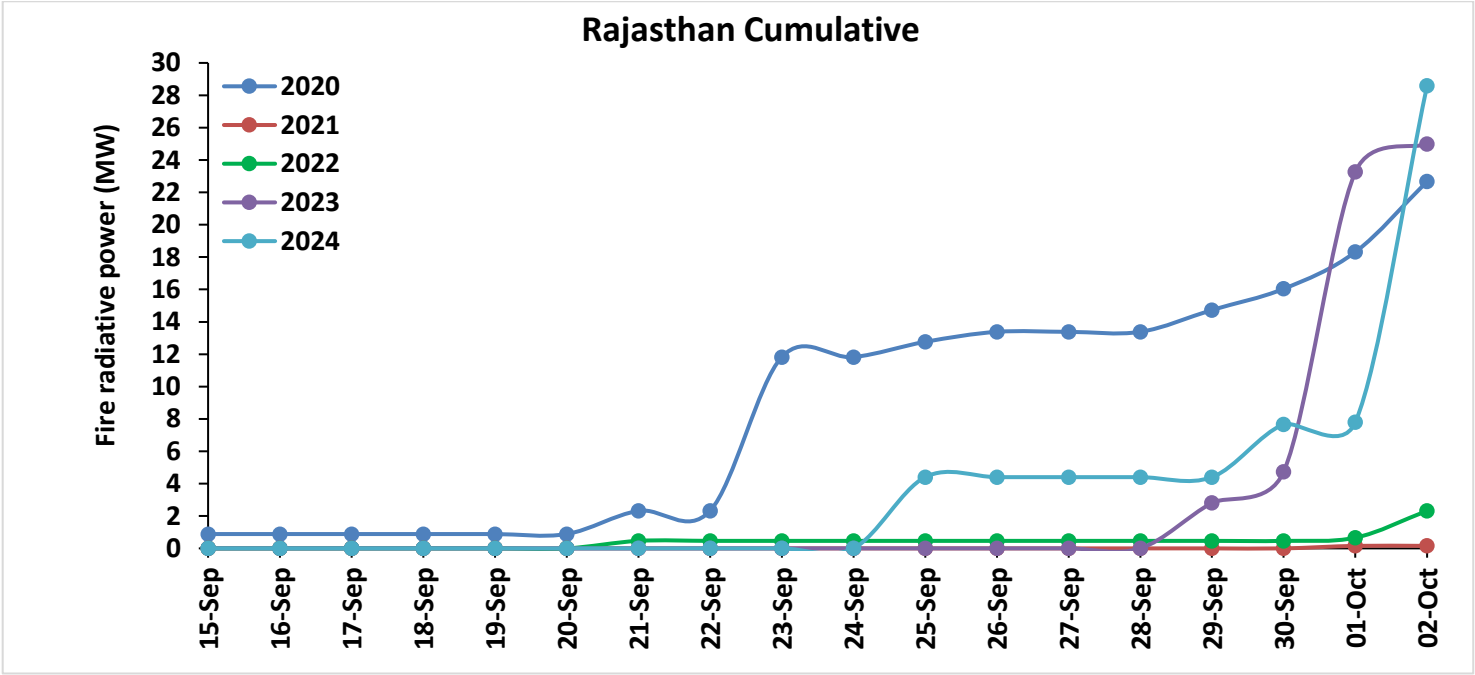
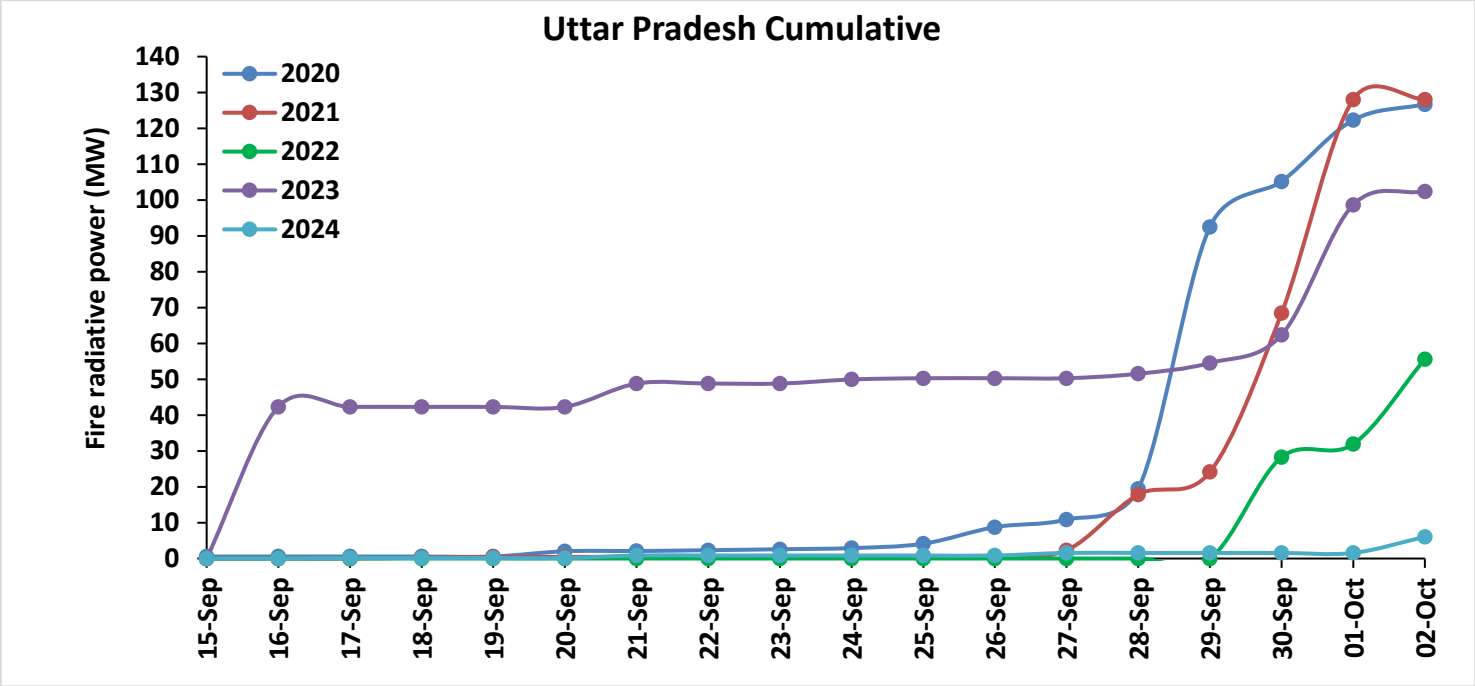


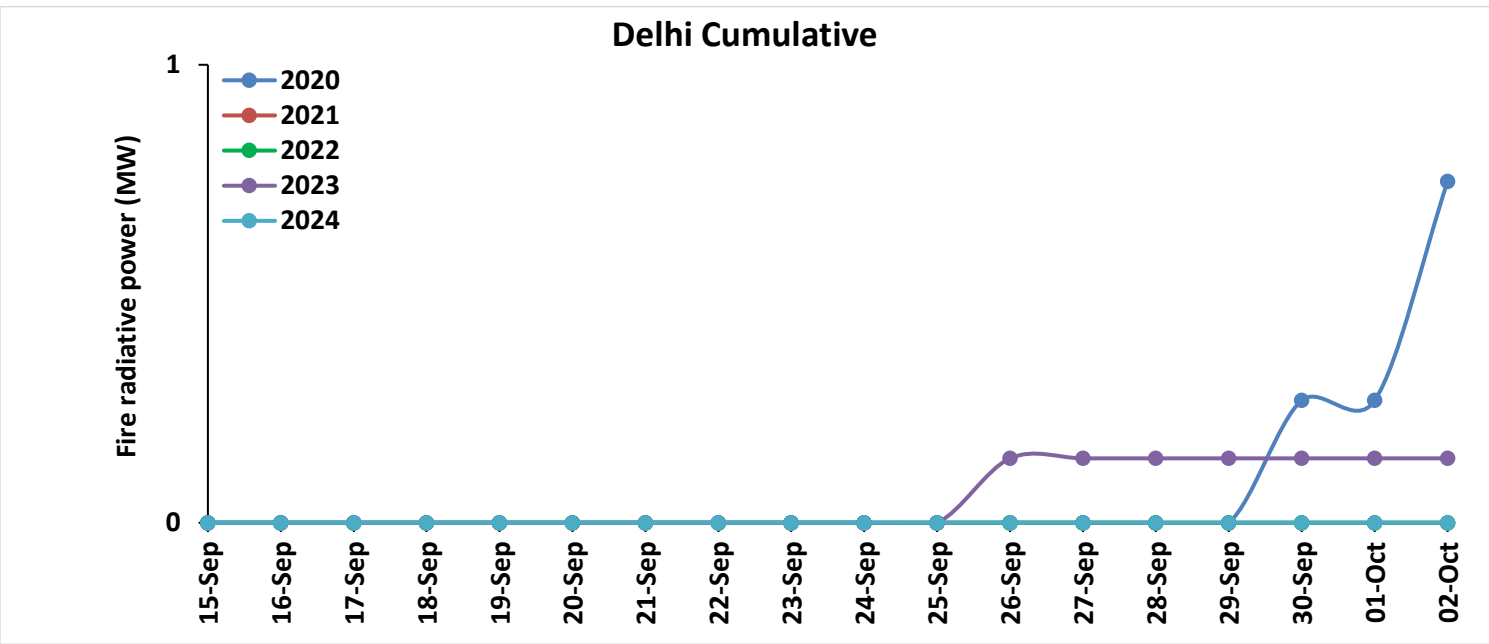
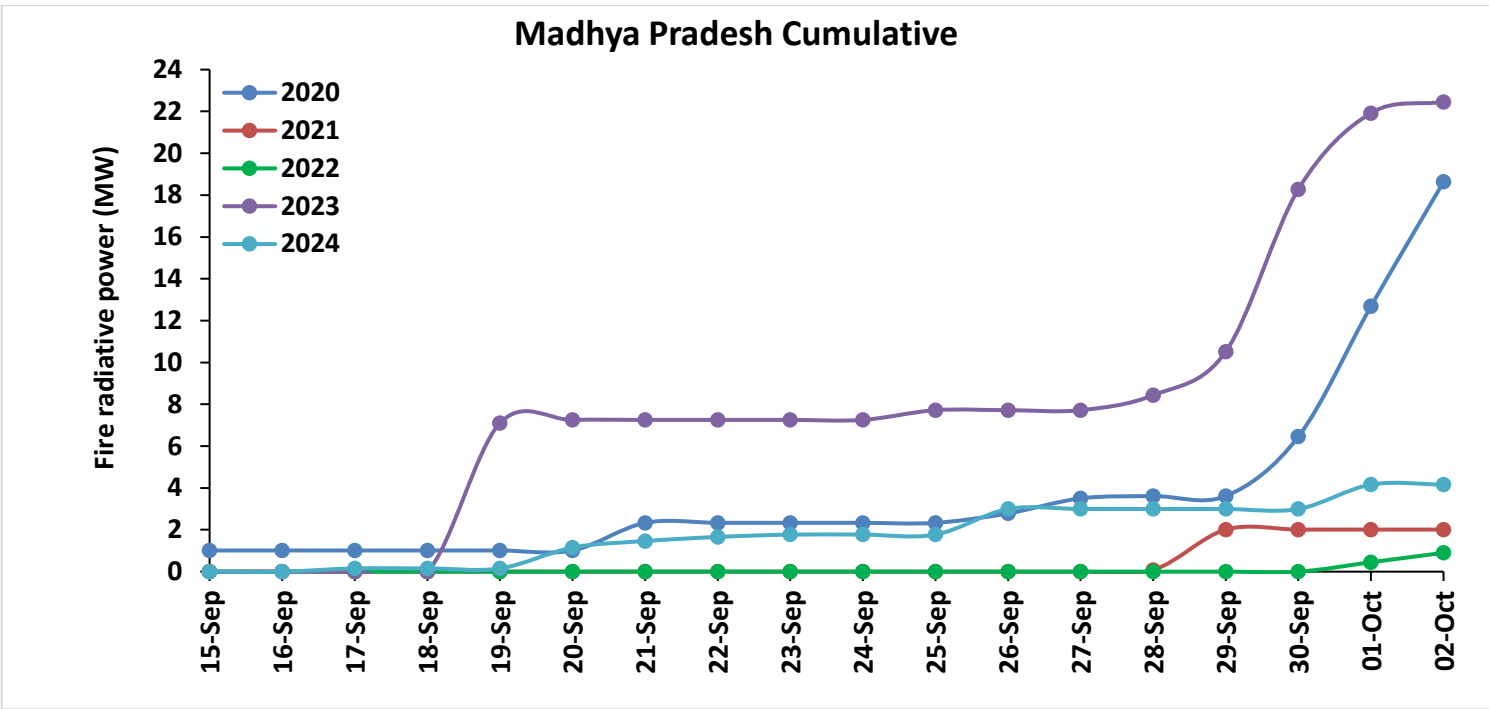




Comparison of residue burning fire power in current year (2024) with previous years (2020,2021,2022 and 2023) for the study States

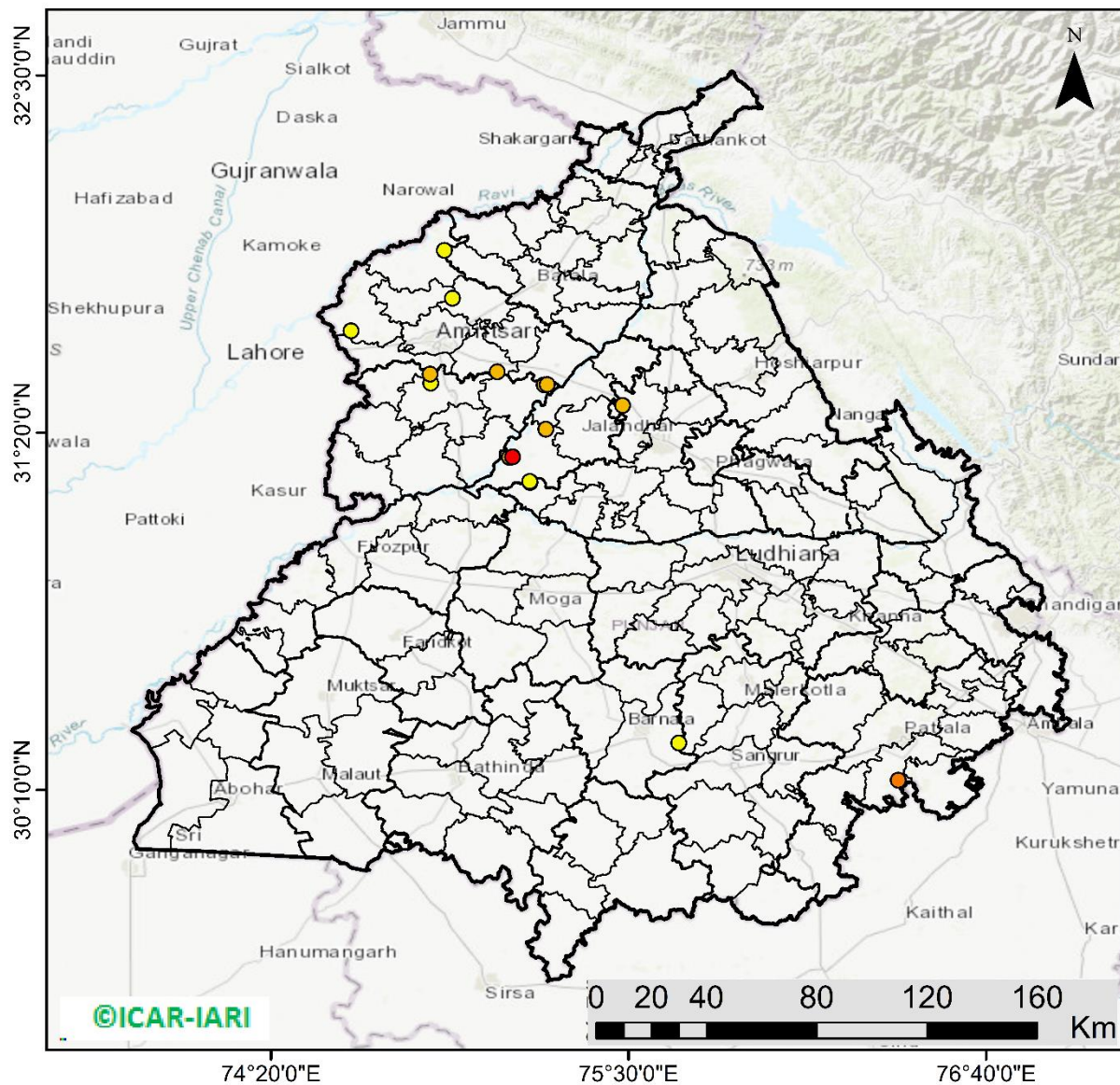






Punjab

RICE RESIDUE BURNING IN PUNJAB



16 burning events detected in Punjab during (02nd Oct 2024)

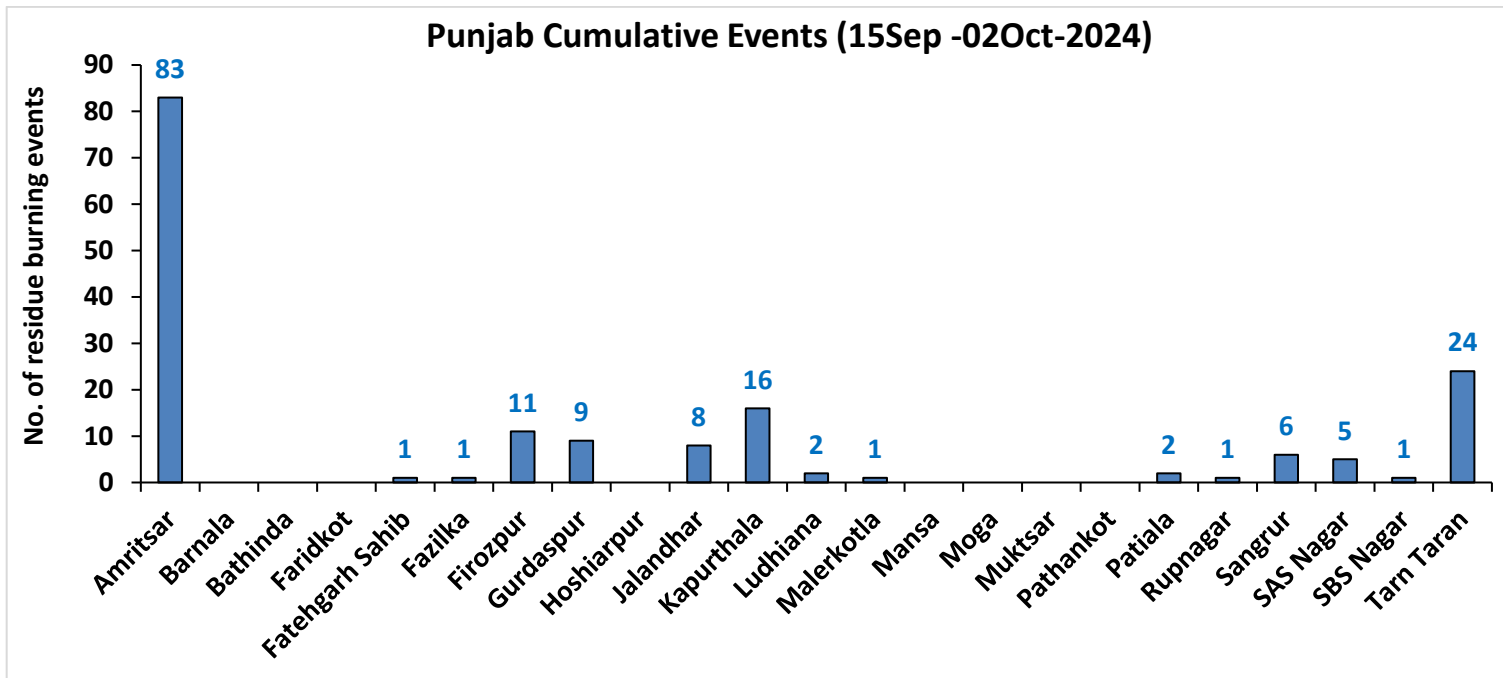
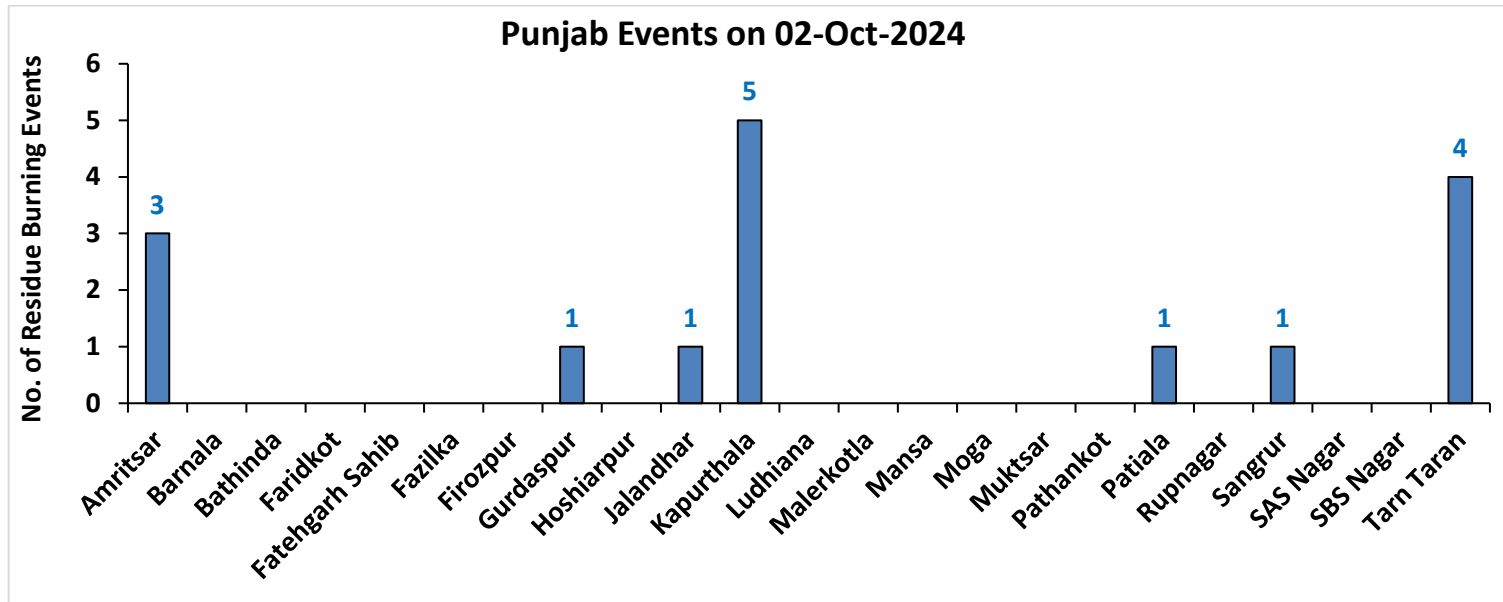
Fire Intensity (W/m²)

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



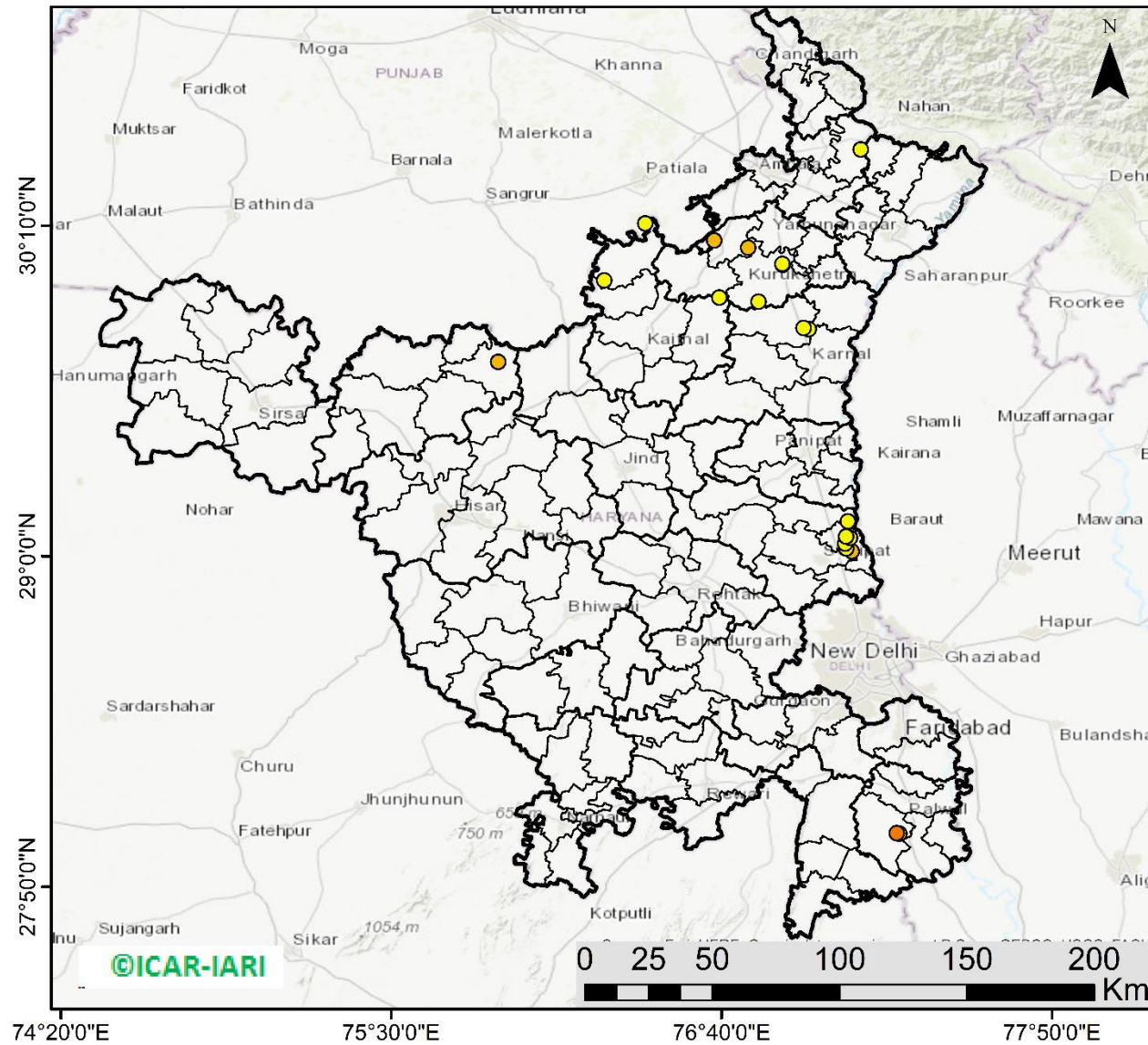
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (15Sep-02Oct-2024)



Haryana

RICE RESIDUE BURNING IN HARYANA



20 burning events detected in Haryana on (02nd Oct 2024)

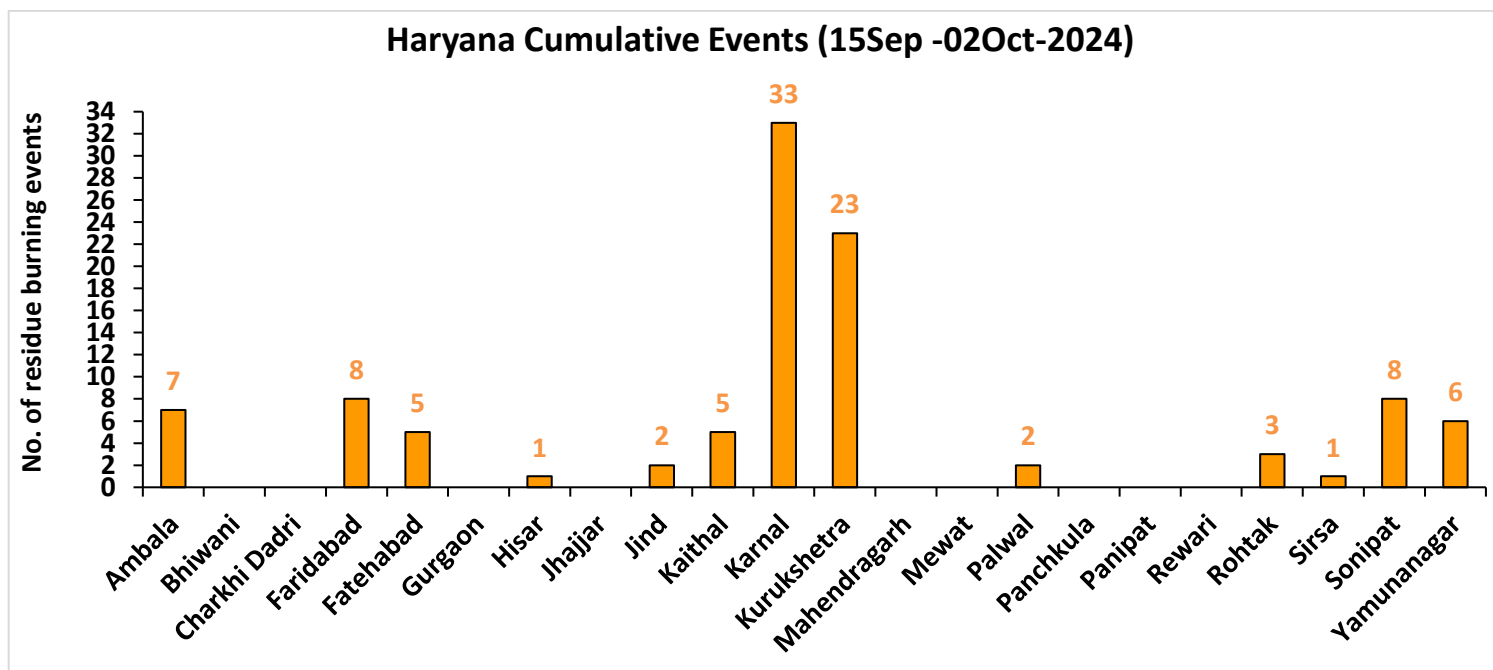
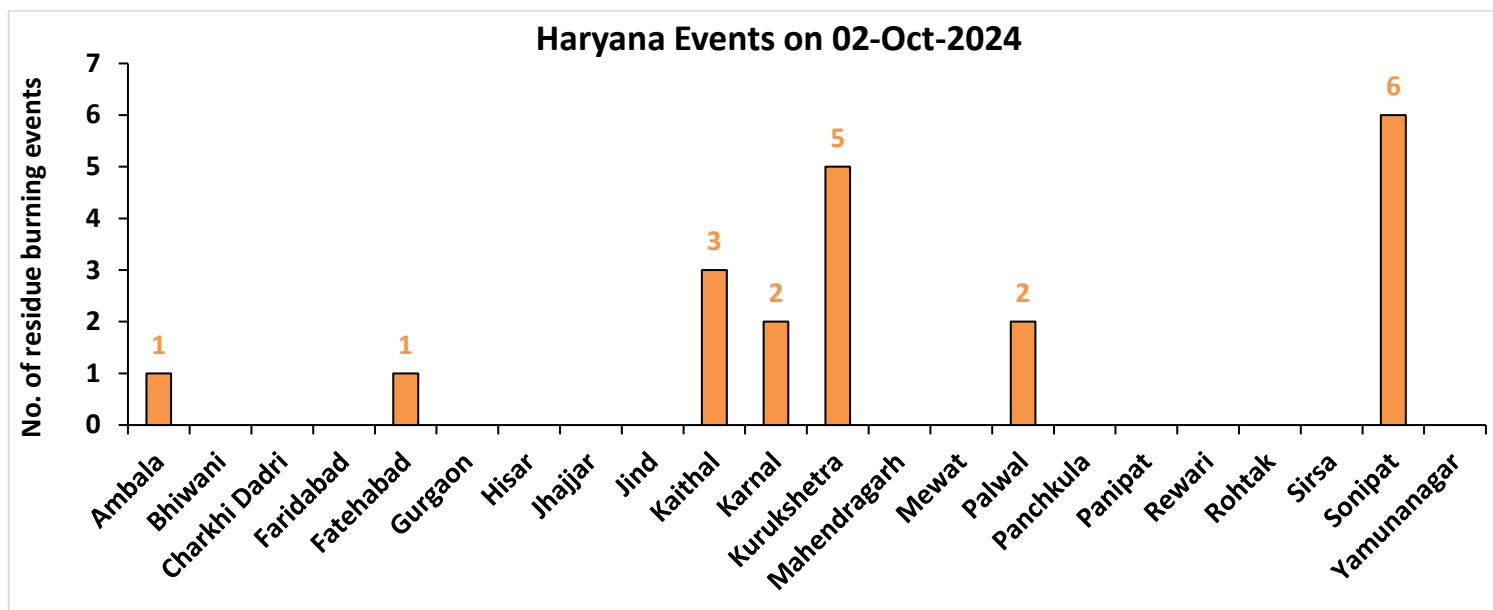
Fire Intensity (W/m²)

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



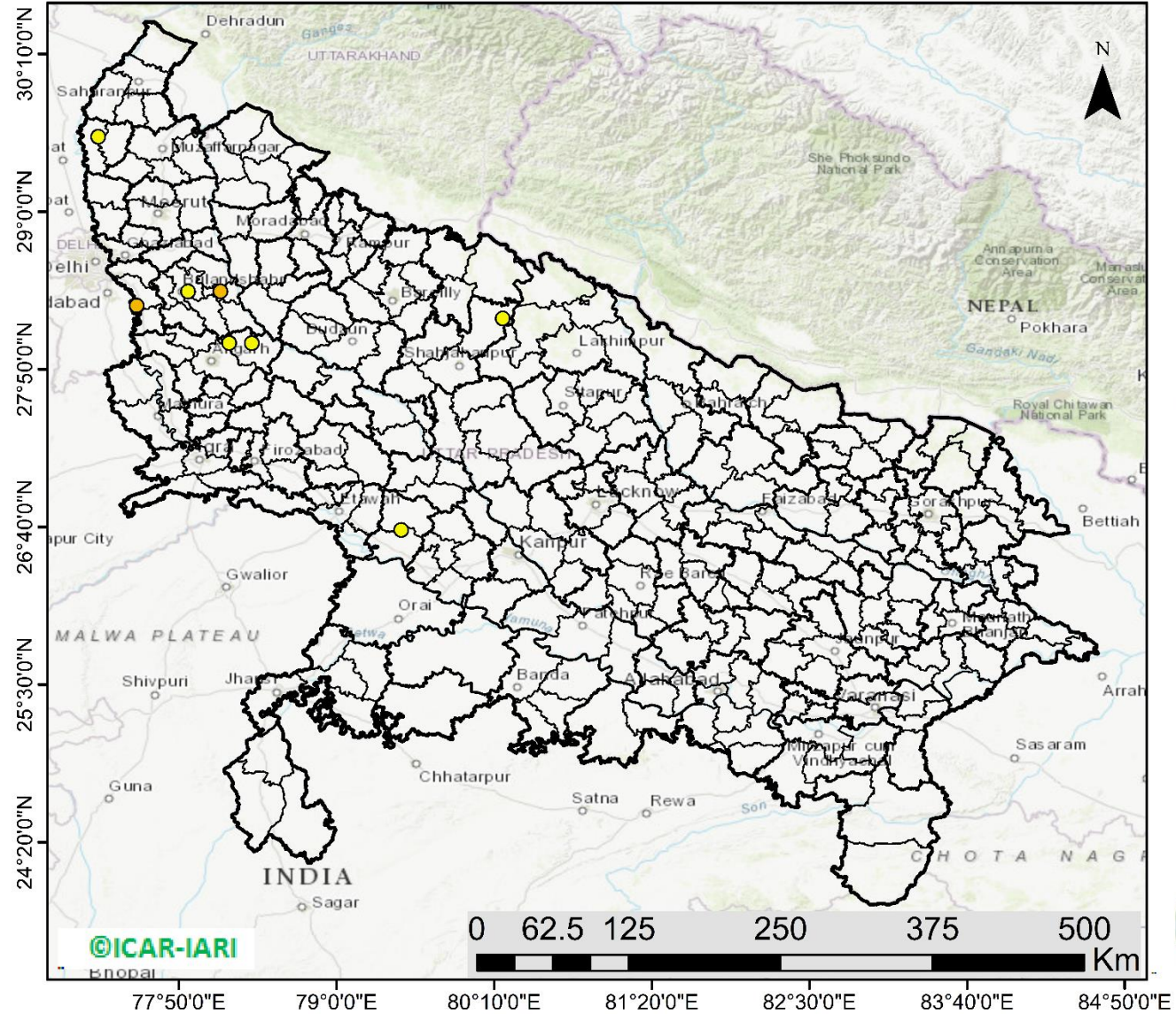
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (15Sep-02Oct-2024)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



09 burning events detected in Uttar Pradesh on (02nd Oct 2024)

Fire Intensity (W/m2)

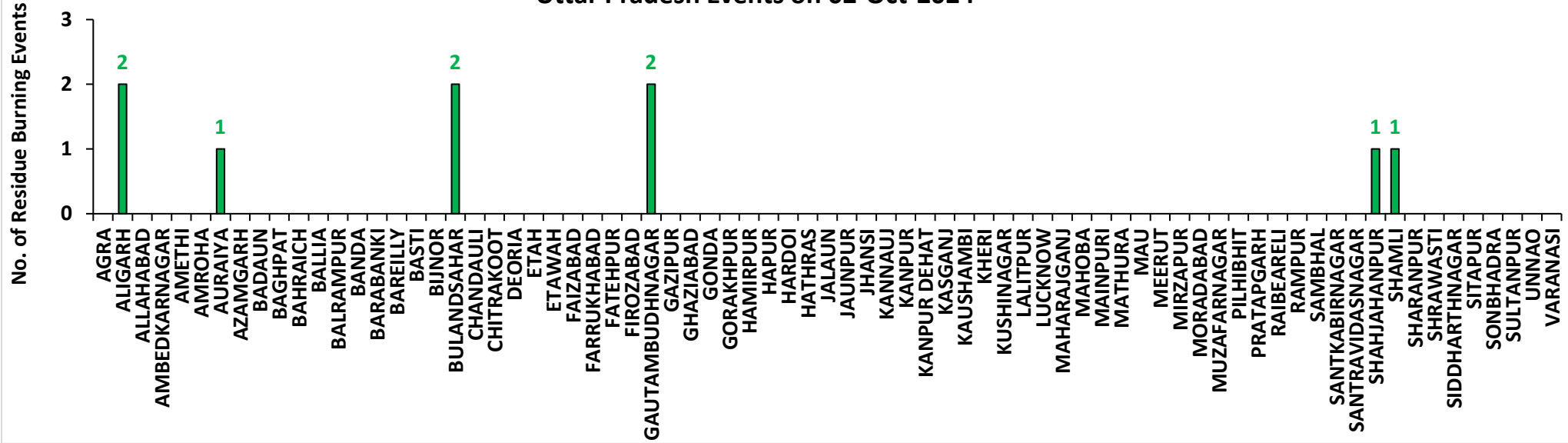
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



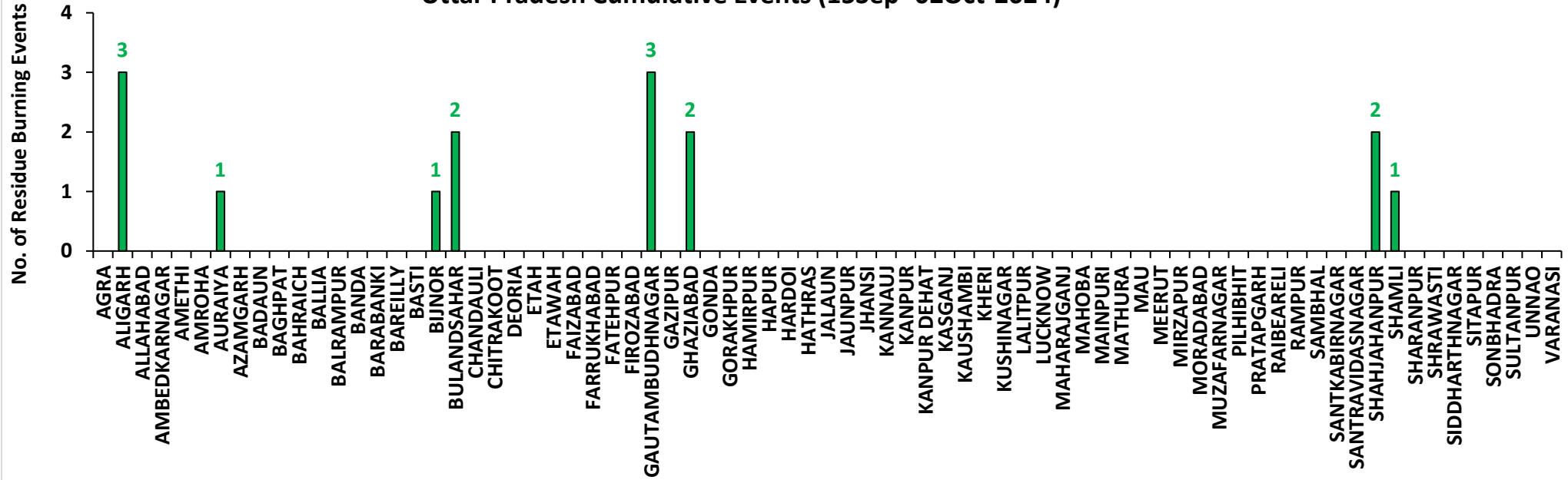
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep-02Oct-2024)

Uttar Pradesh Events on 02-Oct-2024

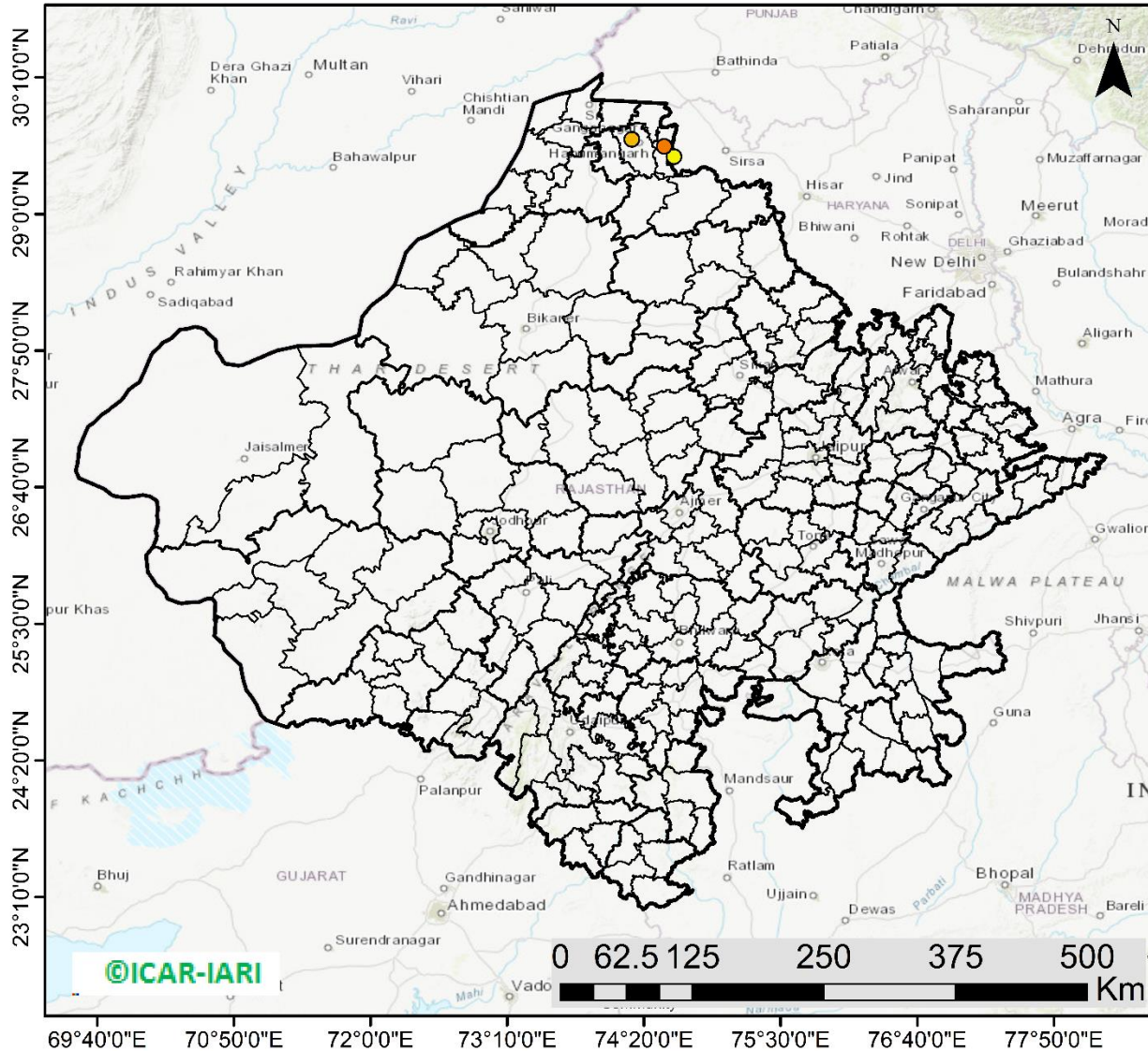


Uttar Pradesh Cumulative Events (15Sep -02Oct-2024)



Rajasthan

RICE RESIDUE BURNING IN RAJASTHAN



03 burning events
detected in Rajasthan on
(02nd Oct 2024)

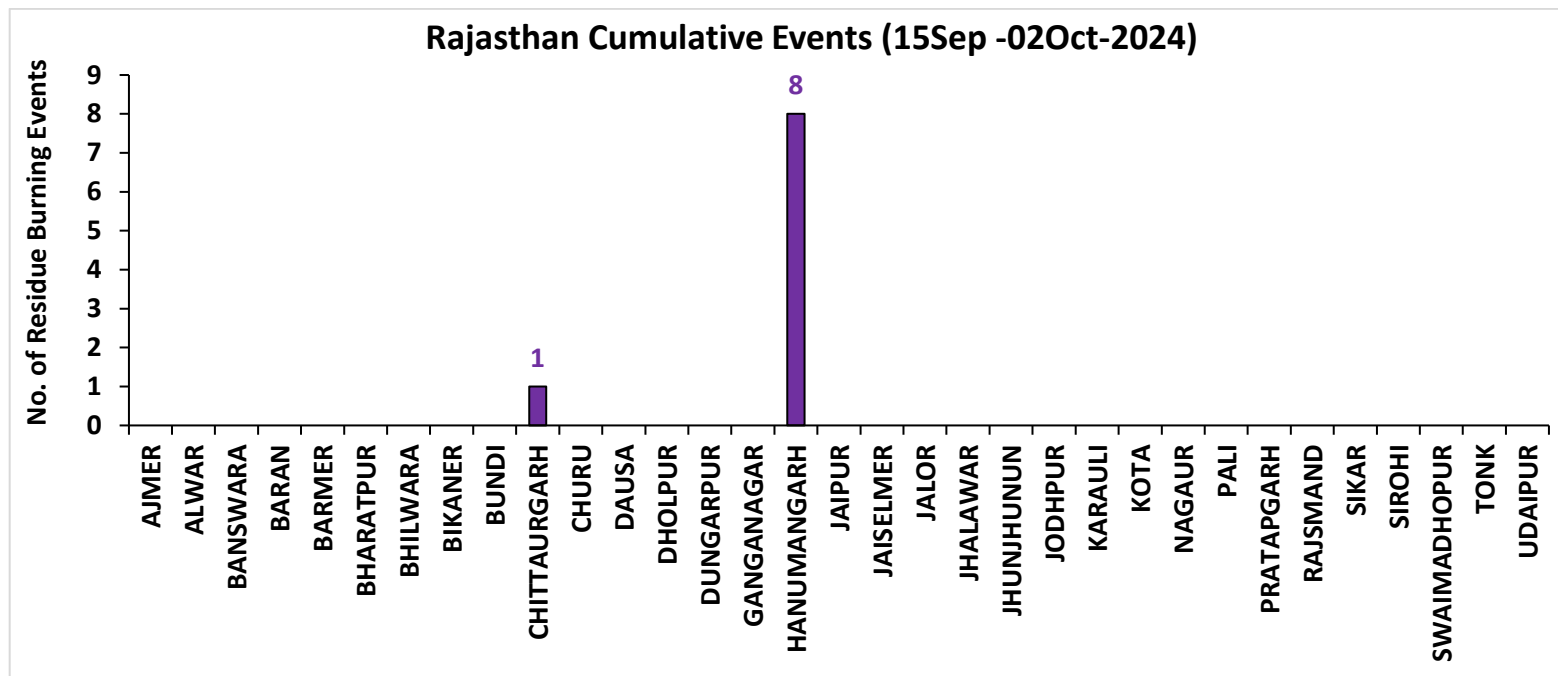
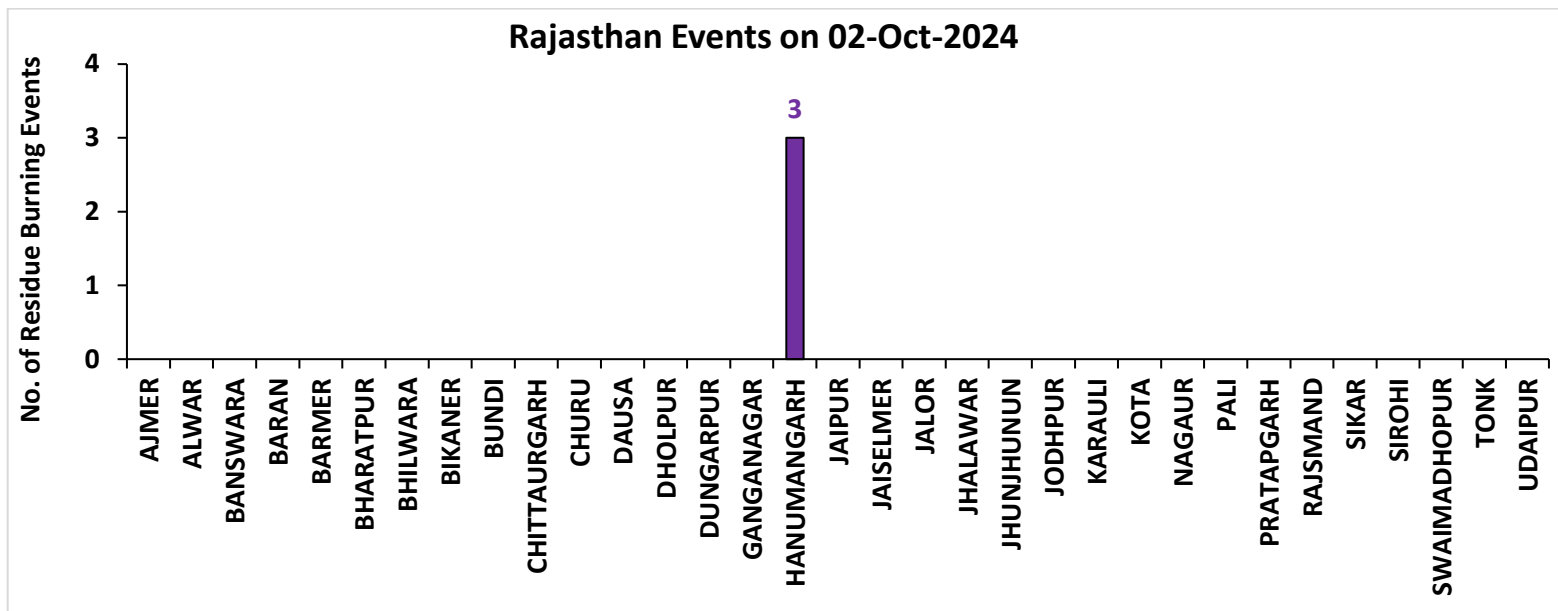
Fire Intensity (W/m²)

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



<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Rajasthan (15Sep-02Oct-2024)



District-wise cumulative number of residues burning events detected in 2020, 2021, 2022, 2023 and 2024
(Period: 15 September-02 October)

(a) Punjab

District	15 Sep-02 Oct				
	2020	2021	2022	2023	2024
Amritsar	891	157	230	333	83
Barnala	2	0	0	1	0
Bathinda	0	0	0	0	0
Faridkot	3	9	0	2	0
Fatehgarh Sahib	12	0	1	4	1
Fazilka	0	1	0	0	1
Firozpur	12	3	3	5	11
Gurdaspur	44	4	3	5	9
Hoshiarpur	3	0	0	1	0
Jalandhar	11	1	2	6	8
Kapurthala	11	2	2	19	16
Ludhiana	30	7	0	4	2
Malerkotla	0	0	0	0	1
Mansa	1	0	0	1	0
Moga	7	0	0	0	0
Muktsar	1	0	1	0	0
Pathankot	0	0	0	0	0
Patiala	46	10	4	14	2
Rupnagar	1	0	0	0	1
Sangrur	14	3	0	3	6
SAS NAGAR (Mohali)	7	0	1	14	5
SBS Nagar	2	0	1	1	1
Tarn Taran	233	31	27	43	24
Total	1331	228	275	456	171

(b) Haryana

District	15 Sep-02 Oct				
	2020	2021	2022	2023	2024
AMBALA	17	0	1	19	7
BHIWANI	0	0	0	0	0
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	0	0	0	0	8
FATEHABAD	12	0	1	6	5
GURGAON	0	0	0	0	0
HISAR	2	0	0	0	1
JHAJJAR	0	0	0	1	0
JIND	0	0	1	5	2
KAITHAL	15	2	1	5	5
KARNAL	35	2	3	14	33
KURUKSHETRA	27	8	2	28	23
MAHENDRAGARH	0	0	0	0	0
MEWAT	0	0	0	0	0
PALWAL	1	0	0	4	2
PANCHKULA	0	0	0	0	0
PANIPAT	6	0	0	4	0
REWARI	0	0	0	0	0
ROHTAK	0	0	0	1	3
SIRSA	1	0	0	0	1
SONIPAT	1	0	0	16	8
YAMUNANAGAR	6	1	0	17	6
Total	123	13	9	120	104

(c) Uttar Pradesh

District	15 Sep-02 Oct																		
	2020	2021	2022	2023	2024	GAUTAMBUDHNAGAR	1	0	0	2	3	MUZAFARNAGAR	0	0	0	0	0		
AGRA	0	0	0	0	0	GAZIPUR	0	0	0	0	0	PILHIBHIT	1	1	1	5	0		
ALIGARH	4	0	0	22	3	GHAZIABAD	1	0	1	3	2	PRATAPGARH	0	0	0	0	0		
ALLAHABAD	0	0	0	0	0	GONDA	0	0	0	0	0	RAIBEARELI	1	0	0	0	0		
AMBEDKARNAGAR	0	0	0	0	0	GORAKHPUR	0	0	0	0	0	RAMPUR	2	3	0	0	0		
AMETHI	0	0	0	0	0	HAMIRPUR	0	0	0	0	0	SAMBHAL	5	0	3	3	0		
AMROHA	0	0	0	1	0	HAPUR	1	0	0	0	0	SANTKABIRNAGAR	0	0	0	0	0		
AURAIYA	10	0	4	2	1	HARDOI	0	0	0	1	0	SANTRAVIDASNAGAR	0	0	0	0	0		
AZAMGARH	0	0	0	0	0	HATHRAS	0	0	0	2	0	SHAHJAHANPUR	5	36	28	8	2		
BADAUN	0	0	0	0	0	JALAUN	0	0	0	0	0	SHAMLI	7	0	0	1	1		
BAGHPAT	1	0	0	0	0	JAUNPUR	0	0	0	0	0	SHARANPUR	3	0	0	0	0		
BAHRAICH	0	0	0	0	0	JHANSI	2	0	0	0	0	SHRAWASTI	0	0	0	0	0		
BALLIA	0	0	0	0	0	KANNAUJ	1	0	0	0	0	SIDDHARTHANAGAR	0	0	0	0	0		
BALRAMPUR	0	0	0	0	0	KANPUR	0	1	0	0	0	SITAPUR	1	0	0	0	0		
BANDA	0	0	0	0	0	KANPUR DEHAT	1	0	0	0	0	SONBHADRA	0	0	0	0	0		
BARABANKI	0	0	0	0	0	KASGANJ	0	0	0	0	0	SULTANPUR	0	0	0	0	0		
BAREILLY	0	0	0	0	0	KAUSHAMBI	1	0	0	1	0	UNNAO	2	0	0	0	0		
BASTI	0	0	0	0	0	KHERI	1	3	7	0	0	VARANASI	0	0	0	0	0		
BIJNOR	1	0	1	0	1	KUSHINAGAR	0	0	0	0	0	Total	63	46	49	57	15		
BULANDSAHAR	1	0	2	1	2	LALITPUR	0	1	2	0	0								
CHANDAULI	0	0	0	0	0	LUCKNOW	0	0	0	0	0								
CHITRAKOOT	0	0	0	0	0	MAHARAJGANJ	0	0	0	0	0								
DEORIA	0	0	0	2	0	MAHOBA	0	0	0	0	0								
ETAH	1	0	0	0	0	MAINPURI	0	0	0	0	0								
ETAWAH	0	0	0	0	0	MATHURA	2	1	0	3	0								
FAIZABAD	0	0	0	0	0	MAU	0	0	0	0	0								
FARRUKHABAD	0	0	0	0	0	MEERUT	6	0	0	0	0								
FATEHPUR	1	0	0	0	0	MIRZAPUR	0	0	0	0	0								
FIROZABAD	0	0	0	0	0	MORADABAD	0	0	0	0	0								

(d) Delhi

District	15 Sep-02 Oct				
	2020	2021	2022	2023	2024
CENTRAL	0	0	0	0	0
EAST	0	0	0	0	0
NEW DELHI	0	0	0	0	0
NORTH	1	0	0	1	0
NORTH EAST	0	0	0	0	0
NORTH WEST DELHI	0	0	0	0	0
SHAHADRA	0	0	0	0	0
SOUTH	1	0	0	0	0
SOUTH EAST	0	0	0	0	0
SOUTH WEST DELHI	0	0	0	0	0
WEST DELHI	0	0	0	0	0
Total	2	0	0	1	0

(e) Rajasthan

District	15 Sep-02 Oct				
	2020	2021	2022	2023	2024
AJMER	0	0	0	0	0
ALWAR	1	0	0	0	0
BANSWARA	0	0	0	0	0
BARAN	7	0	1	5	0
BARMER	2	0	0	0	0
BHARATPUR	0	0	0	1	0
BHILWARA	1	0	0	0	0
BIKANER	0	0	0	0	0
BUNDI	1	0	2	2	0
CHITTAURGARH	0	1	0	1	1
CHURU	0	0	0	0	0
DAUSA	0	0	0	0	0
DHOLPUR	0	0	0	0	0
DUNGARPUR	0	0	0	0	0
GANGANAGAR	1	0	0	2	0
HANUMANGARH	4	0	1	1	8
JAIPUR	0	0	0	0	0
JAISELMER	1	0	0	0	0
JALOR	0	0	0	0	0
JHALAWAR	0	0	0	0	0
JHUNJHUNUN	0	0	0	0	0
JODHPUR	1	0	0	0	0
KARALI	0	0	0	0	0
KOTA	0	0	1	6	0
NAGOUR	0	0	0	0	0
PALI	1	0	0	0	0
PRATAPGARH	0	0	0	0	0
RAJSMAND	0	0	0	0	0
SIKAR	0	0	0	0	0
SIROHI	0	0	0	0	0
SWAIMADHOPUR	0	0	0	0	0
TONK	0	0	0	0	0
UDAIPUR	0	0	0	0	0
Total	20	1	5	18	9

(f) Madhya Pradesh

District	15 Sep-02 Oct										
	2020	2021	2022	2023	2024	PANNA	0	0	0	0	0
ALIRAJPUR	0	0	0	0	0	RAISEN	0	0	0	0	0
ANUPPUR	0	0	0	0	0	RAJGARH	1	0	2	1	0
ASHOKNAGAR	5	0	0	1	1	RATLAM	0	0	0	1	0
BALAGHAT	0	0	0	0	0	REWA	0	0	0	0	0
BARWANI	0	0	0	0	0	SAGAR	2	2	0	2	0
BETUL	0	0	0	0	0	SATNA	1	0	0	0	0
BHIND	0	0	0	0	0	SEHORE	1	0	0	1	0
BHOPAL	1	0	0	0	0	SEONI	0	0	0	0	0
BURHANPUR	0	0	0	0	0	SHAHDOL	0	0	0	0	0
CHHATARPUR	0	0	0	1	0	SHAJAPUR	2	0	0	1	0
CHHINDWARA	0	0	0	0	0	SHEOPUR	0	0	0	0	0
DAMOH	5	0	0	2	0	SHIVPURI	0	0	0	0	0
DATIA	0	0	0	1	0	SIDHI	0	0	0	0	0
DEWAS	0	0	0	1	1	SINGRAULI	0	0	0	0	2
DHAR	2	0	0	0	1	TIKAMGARH	0	0	0	0	0
DINDORI	0	0	0	0	0	UJJAIN	3	0	0	1	0
EAST NIMAR	0	0	0	0	0	UMARIA	0	0	0	0	0
GUNA	4	1	0	5	0	VIDESHA	4	1	0	5	3
GWALIOR	3	0	0	0	0	WEST NIMAR	0	0	0	0	0
HARDA	2	1	0	1	0	Total	38	5	2	30	11
HOSHANGABAD	0	0	0	1	0						
INDORE	1	0	0	2	3						
JABALPUR	1	0	0	0	0						
JHABUA	0	0	0	0	0						
KATNI	0	0	0	0	0						
MANDLA	0	0	0	0	0						
MANDSAUR	0	0	0	0	0						
MORENA	0	0	0	3	0						
NARSHIMAPURA	0	0	0	0	0						
NIMACH	0	0	0	0	0						

State-wise and date-wise number of paddy residue burning events detected in 2020 ,2021 ,2022, 2023 and 2024
(Period: 15 September-02 October)

Number of Paddy Residue Burning Events Detected

Date	Punjab					Haryana					Uttar Pradesh				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
15-Sep	5	0	14	0	11	2	0	0	1	1	1	0	0	0	0
16-Sep	0	2	0	6	0	1	0	0	1	0	0	0	0	2	0
17-Sep	5	0	1	0	5	3	0	0	0	1	0	0	0	0	1
18-Sep	17	9	7	0	2	0	0	1	0	0	0	1	0	0	0
19-Sep	30	5	18	0	0	2	0	0	1	0	0	1	0	0	0
20-Sep	67	8	10	0	13	6	0	0	2	1	2	0	0	0	0
21-Sep	54	0	56	1	21	2	0	0	2	13	1	0	0	1	2
22-Sep	34	0	30	0	11	1	0	0	2	18	1	0	0	0	0
23-Sep	49	0	3	1	6	0	0	0	3	12	1	0	0	0	0
24-Sep	78	5	0	0	12	0	0	0	0	6	1	1	0	1	0
25-Sep	184	11	0	0	12	11	0	0	1	18	5	0	0	1	0
26-Sep	190	19	0	3	5	5	0	0	2	5	8	0	0	0	0
27-Sep	78	37	0	21	0	8	0	0	9	5	4	1	0	0	3
28-Sep	55	28	0	33	0	6	1	0	8	0	1	6	0	4	0
29-Sep	63	64	0	68	21	9	4	0	17	0	6	10	0	6	0
30-Sep	116	27	8	81	10	22	2	0	26	1	13	13	10	18	0
01-Oct	165	13	45	123	26	15	4	1	21	3	7	13	3	17	0
02-Oct	141	0	83	119	16	30	2	7	24	20	12	0	36	7	9
Total	1331	228	275	456	171	123	13	9	120	104	63	46	49	57	15

Number of Paddy Residue Burning Events Detected

Date	Delhi					Rajasthan					Madhya Pradesh				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
15-Sep	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0
16-Sep	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	1
18-Sep	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	1	0
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
21-Sep	0	0	0	0	0	1	0	1	0	0	2	0	0	0	1
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23-Sep	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	0	0	0	0	0	1	0	0	0	3	0	0	0	1	0
26-Sep	0	0	0	1	0	1	0	0	0	0	2	0	0	0	2
27-Sep	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
28-Sep	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0
29-Sep	0	0	0	0	0	3	0	0	6	0	0	4	0	5	0
30-Sep	1	0	0	0	0	1	0	0	4	2	5	0	0	11	0
01-Oct	0	0	0	0	0	4	1	1	4	1	13	0	1	8	3
02-Oct	1	0	0	0	0	7	0	3	4	3	12	0	1	1	0
Total	2	0	0	1	0	20	1	5	18	9	38	5	2	30	11

Details of residue burning events in Punjab on 02-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	CHOGAWAN	S-NPP	31.66563	74.59469	13:15:31	D	2.50
2	AMRITSAR	JANDIALA GURU	AQUA	31.53200	75.07200	14:26:48	D	6.00
3	AMRITSAR	MAJITHA	S-NPP	31.77192	74.92589	13:15:31	D	4.90
4	GURDASPUR	FATEHGARH CHURIAN	S-NPP	31.92833	74.89975	13:15:31	D	3.40
5	JALANDHAR	JALANDHAR WEST	AQUA	31.42200	75.48100	14:26:48	D	6.50
6	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.17048	75.17899	13:15:31	D	4.00
7	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.17401	75.17813	13:15:31	D	4.00
8	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.34443	75.23069	13:15:31	D	5.30
9	KAPURTHALA	SULTANPUR LODHI	AQUA	31.25200	75.11200	14:26:48	D	5.40
10	KAPURTHALA	SULTANPUR LODHI	AQUA	31.25400	75.12200	14:26:48	D	33.40
11	PATIALA	SANAUR	S-NPP	30.19850	76.38020	13:15:31	D	12.30
12	SANGRUR	SHER PUR	S-NPP	30.31989	75.66424	13:15:31	D	2.40
13	TARN TARAN	KHADUR SAHIB	AQUA	31.48900	75.22500	14:26:48	D	6.80
14	TARN TARAN	KHADUR SAHIB	AQUA	31.49000	75.23500	14:26:48	D	6.40
15	TARN TARAN	TARN TARAN	S-NPP	31.49480	74.85486	13:15:31	D	4.20
16	TARN TARAN	TARN TARAN	S-NPP	31.52416	74.85259	13:15:31	D	5.20

Details of residue burning events in Haryana on 02-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMBALA	NARAINGARH	S-NPP	30.43517	77.15829	13:15:31	D	2.10
2	FATEHABAD	TOHANA	S-NPP	29.68559	75.87805	13:15:31	D	6.20
3	KAITHAL	GUHLA	S-NPP	29.97297	76.25275	13:15:31	D	3.50
4	KAITHAL	GUHLA	S-NPP	30.17421	76.39728	13:15:31	D	4.10
5	KAITHAL	PUNDRI	S-NPP	29.91248	76.65881	13:15:31	D	3.00
6	KARNAL	KARNAL	S-NPP	29.80102	76.97481	13:15:31	D	1.30
7	KARNAL	NILOKHERI	S-NPP	29.80499	76.95660	13:15:31	D	2.10
8	KURUKSHETRA	ISMAILABAD	S-NPP	30.08829	76.76114	13:15:31	D	5.90
9	KURUKSHETRA	THANESAR	S-NPP	29.89787	76.79757	13:15:31	D	2.90
10	KURUKSHETRA	THANESAR	S-NPP	30.02774	76.88269	13:15:31	D	2.50
11	KURUKSHETRA	THANESAR	S-NPP	30.03113	76.88195	13:15:31	D	2.50
12	PALWAL	HATHIN	S-NPP	28.02044	77.29456	13:15:31	D	2.60
13	PALWAL	HATHIN	S-NPP	28.02246	77.28552	13:15:31	D	12.30
14	SONIPAT	MURTHAL	S-NPP	29.01643	77.12692	13:15:31	D	7.10
15	SONIPAT	MURTHAL	S-NPP	29.02717	77.10735	13:15:31	D	2.70
16	SONIPAT	MURTHAL	S-NPP	29.04412	77.10366	13:15:31	D	2.90
17	SONIPAT	MURTHAL	S-NPP	29.06456	77.12080	13:15:31	D	2.10
18	SONIPAT	MURTHAL	S-NPP	29.06924	77.10684	13:15:31	D	1.30
19	SONIPAT	MURTHAL	S-NPP	29.12268	77.11319	13:15:31	D	3.10
20	KURUKSHETRA	ISMAILABAD	AQUA	30.11400	76.64100	14:26:48	D	6.10

Details of residue burning events in Uttar Pradesh on 02-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ALIGARH	ATRAULI	S-NPP	28.02609	78.37411	13:15:31	D	1.90
2	ALIGARH	KOL	S-NPP	28.02660	78.20635	13:15:31	D	2.90
3	AURAIYA	BIDHUNA	S-NPP	26.64288	79.47939	02:05:32	N	1.00
4	BULANSAHAR	ANUP SHAHR	S-NPP	28.40927	78.14161	13:15:31	D	6.20
5	BULANSAHAR	BULANSHAHR	S-NPP	28.40832	77.90224	13:15:31	D	1.70
6	GAUTAMBUDHNAGAR	GAUTAMBUDHNAGAR	S-NPP	28.30017	77.52213	13:15:31	D	6.30
7	GAUTAMBUDHNAGAR	GAUTAMBUDHNAGAR	S-NPP	28.30354	77.52142	13:15:31	D	6.30
8	SHAHJAHANPUR	PUWANYA	S-NPP	28.20835	80.23065	13:15:31	D	2.80
9	SHAMLI	KAIRANA	S-NPP	29.55350	77.23708	13:15:31	D	2.80

Details of residue burning events in Rajasthan on 02-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	HANUMANGARH	HANUMANGARH	AQUA	29.63700	74.23000	14:26:48	D	6.20
2	HANUMANGARH	TIBI	S-NPP	29.48895	74.59090	13:15:31	D	3.50
3	HANUMANGARH	TIBI	AQUA	29.57700	74.50800	14:26:48	D	14.10

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

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: <http://geoportal.icar.gov.in:8080/geoexplorer/composer/>
(Part of KRISHI Portal: <https://krishi.icar.gov.in> initiative)

The DASHBOARD for paddy residue burning events is available at weblink: [CREAMS Fire Dashboard](#)
