

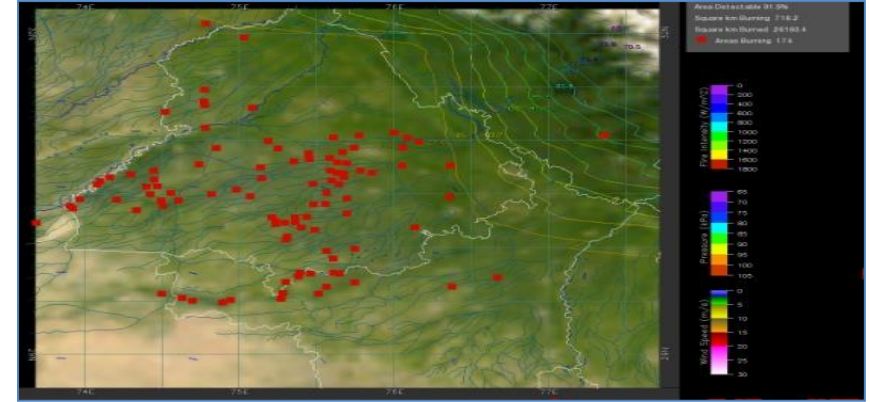
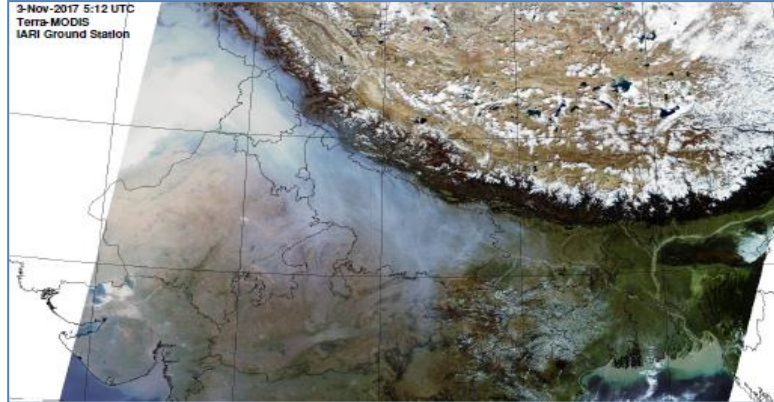


MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2024

Bulletin
No. 24

Events Date:
08-Oct-2024

Issued on:
08-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

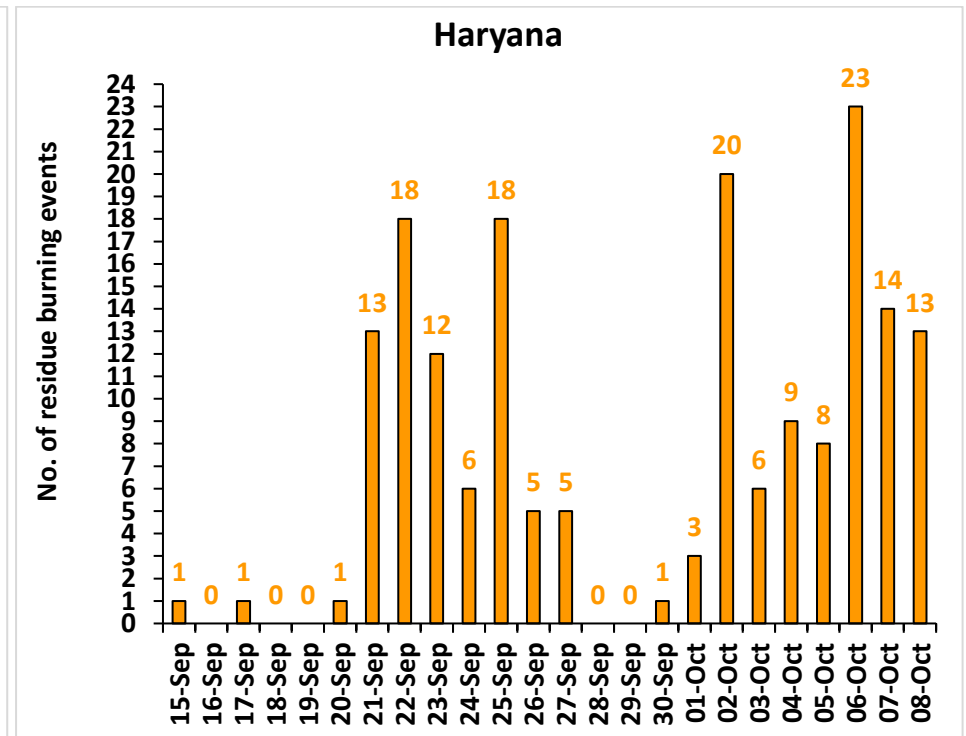
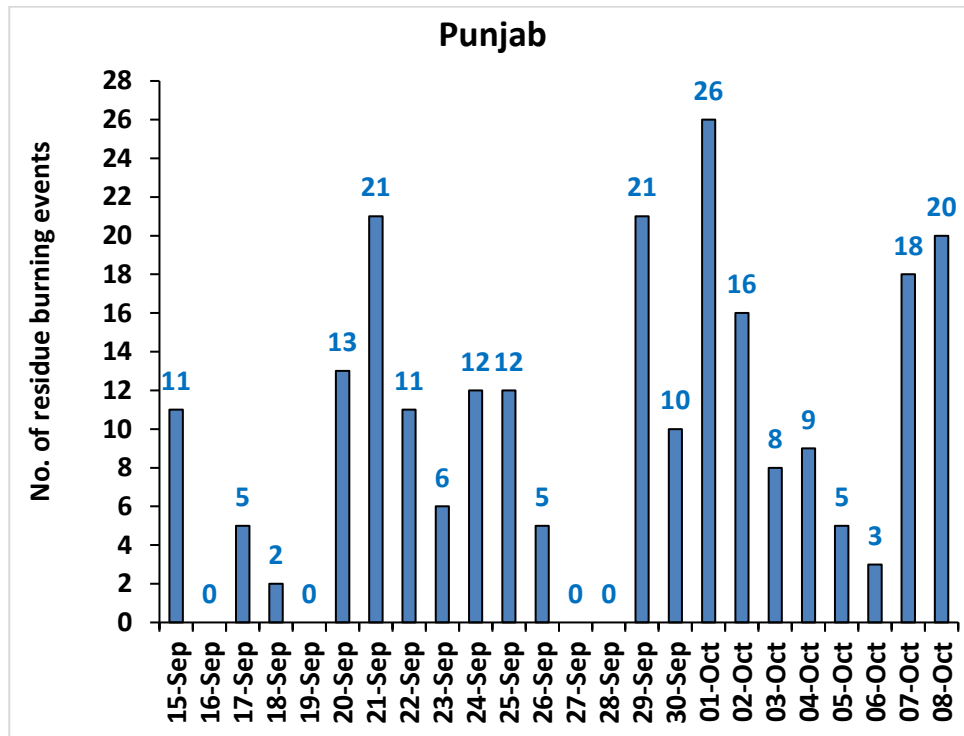
<https://creams.iari.res.in>



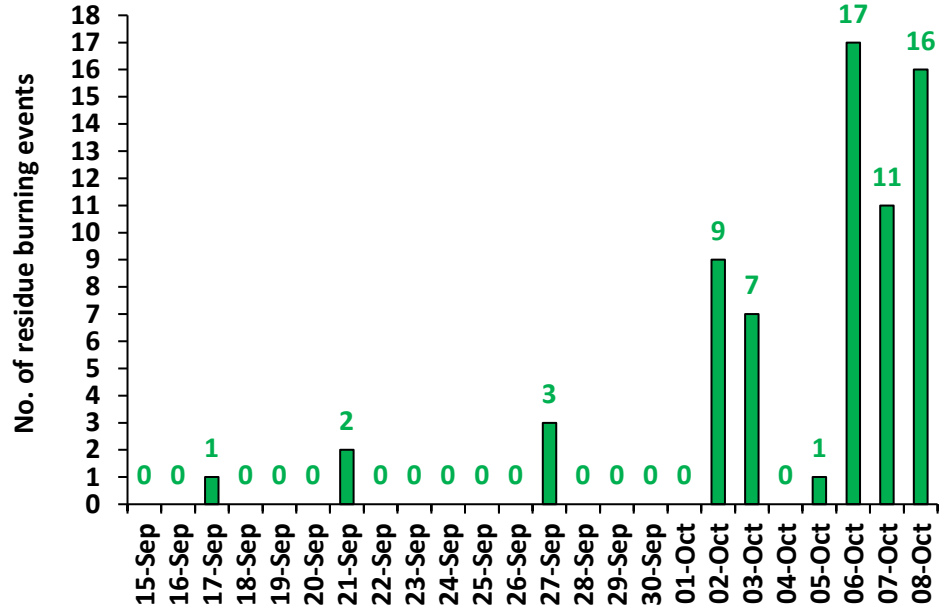
Highlights for 08-Oct-2024

- 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 **57** residue burning events in the six study States on **08-Oct-2024**.
- The state wise events detected on **08-Oct-2024** were **20** in Punjab, **13** in Haryana, **16** in UP, **00** in Delhi, **01** in Rajasthan and **07** in MP.
- Total **546** burning events were detected in the six states between **15-Sept-2024** and **08-Oct-2024**, which are distributed as **234**, **177**, **67**, **00**, **17** and **51** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.
- Detection of burning events was hampered by the presence of scattered clouds over parts of Rajasthan and Madhya Pradesh states.

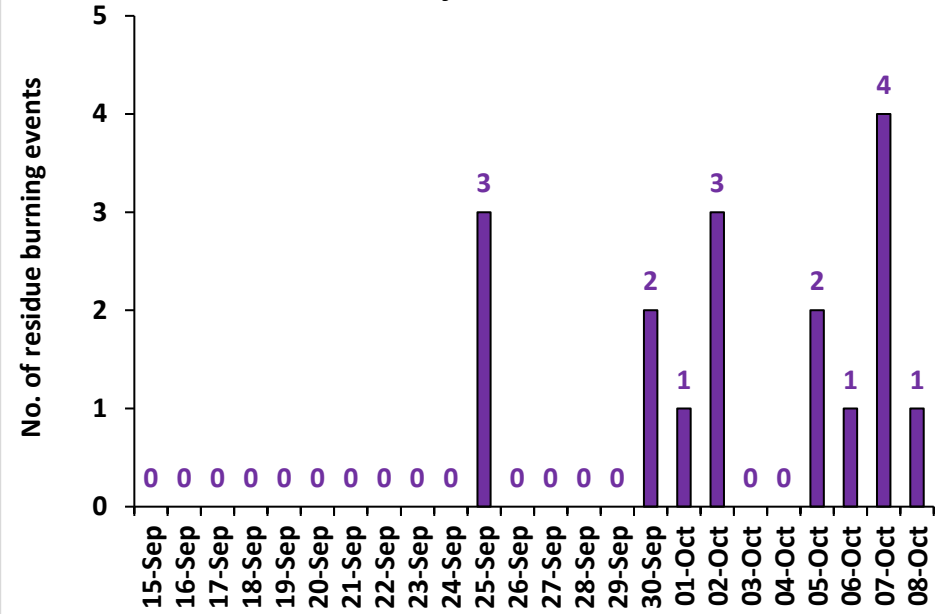
Temporal distribution of rice residue burning events for the study States in 2024



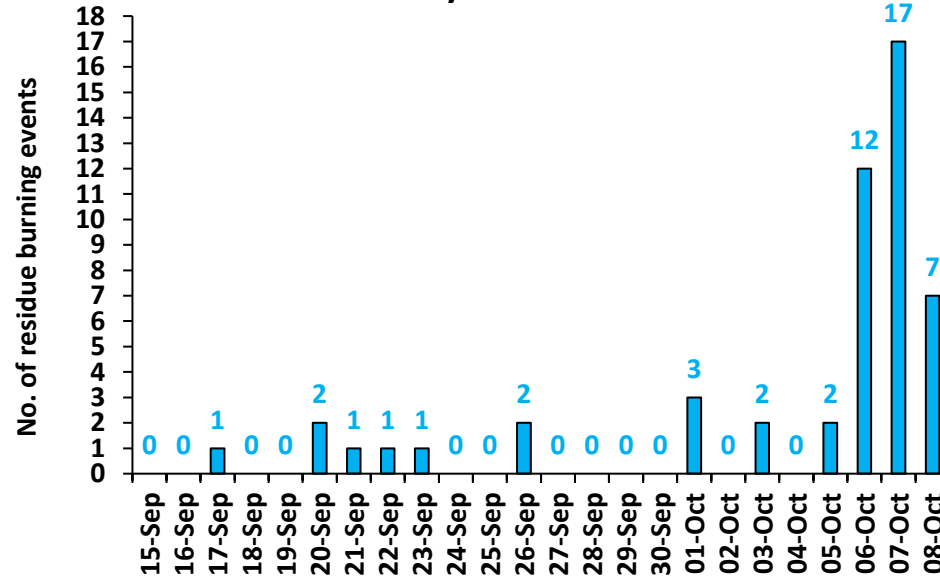
Uttar Pradesh



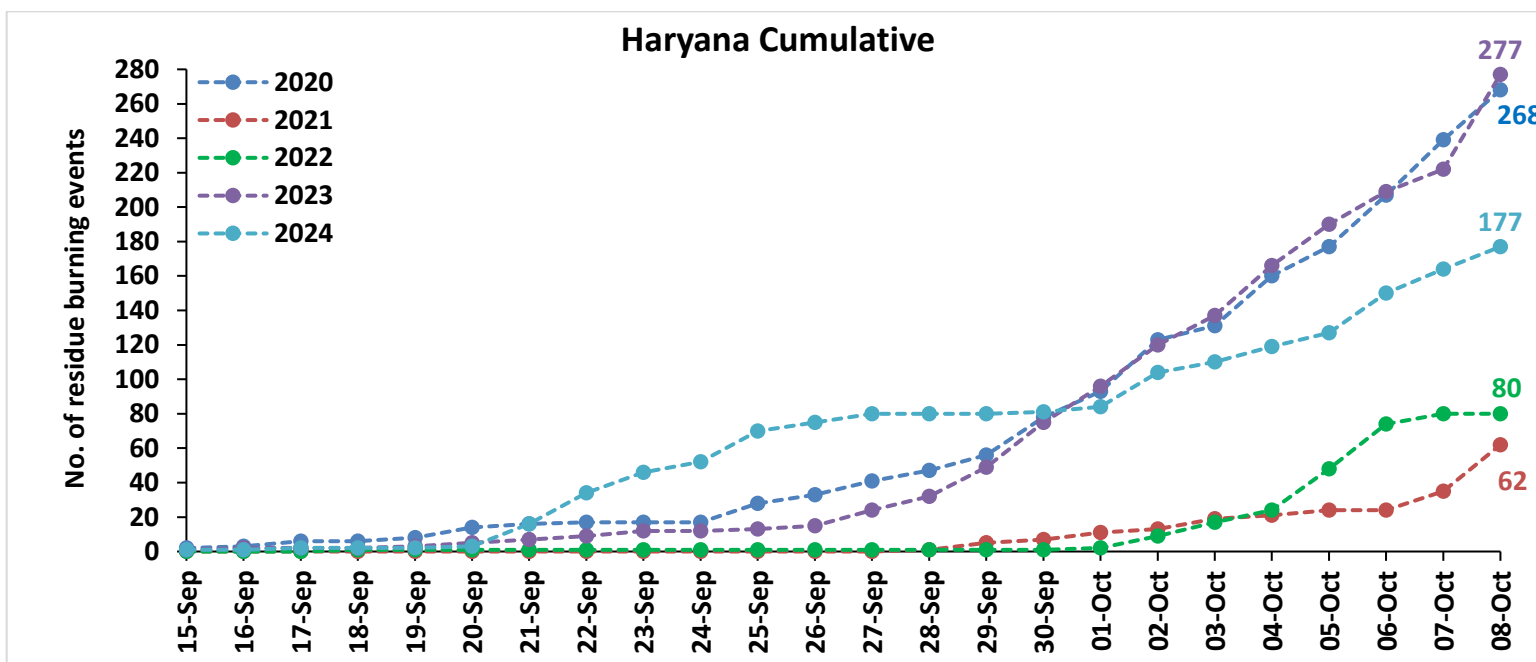
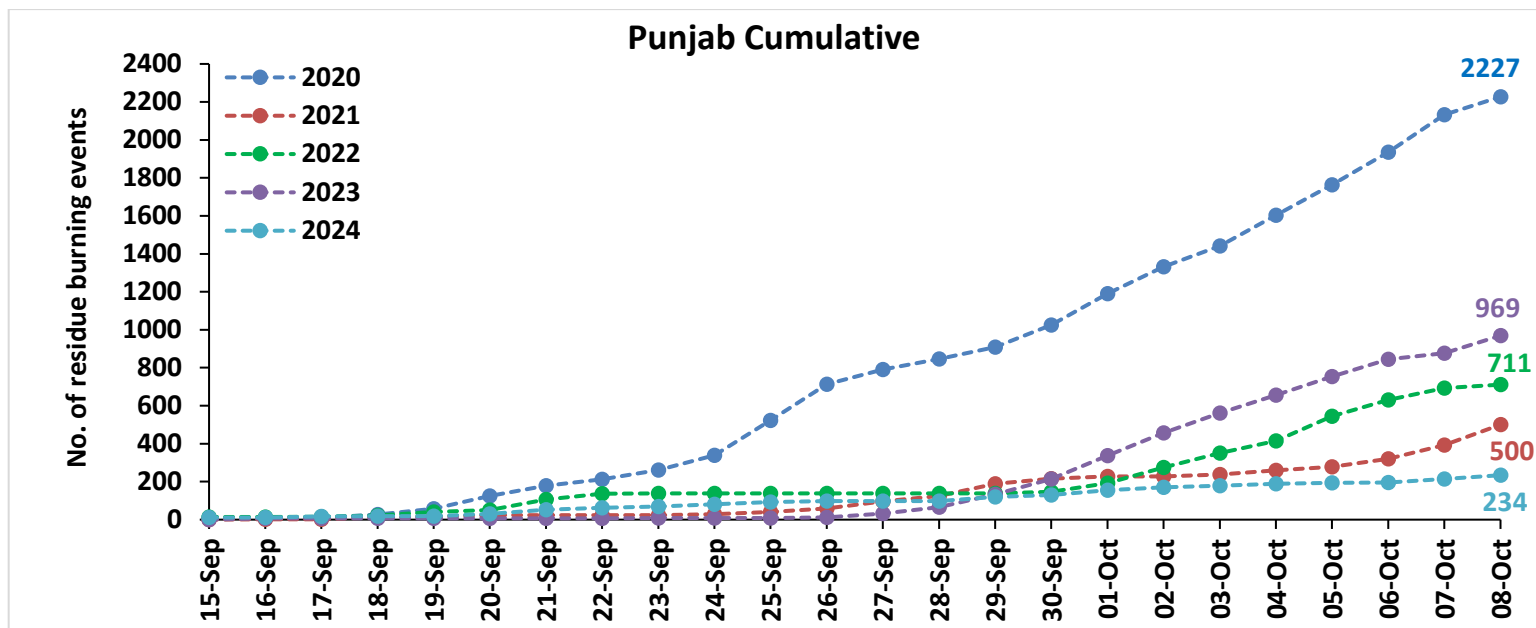
Rajasthan

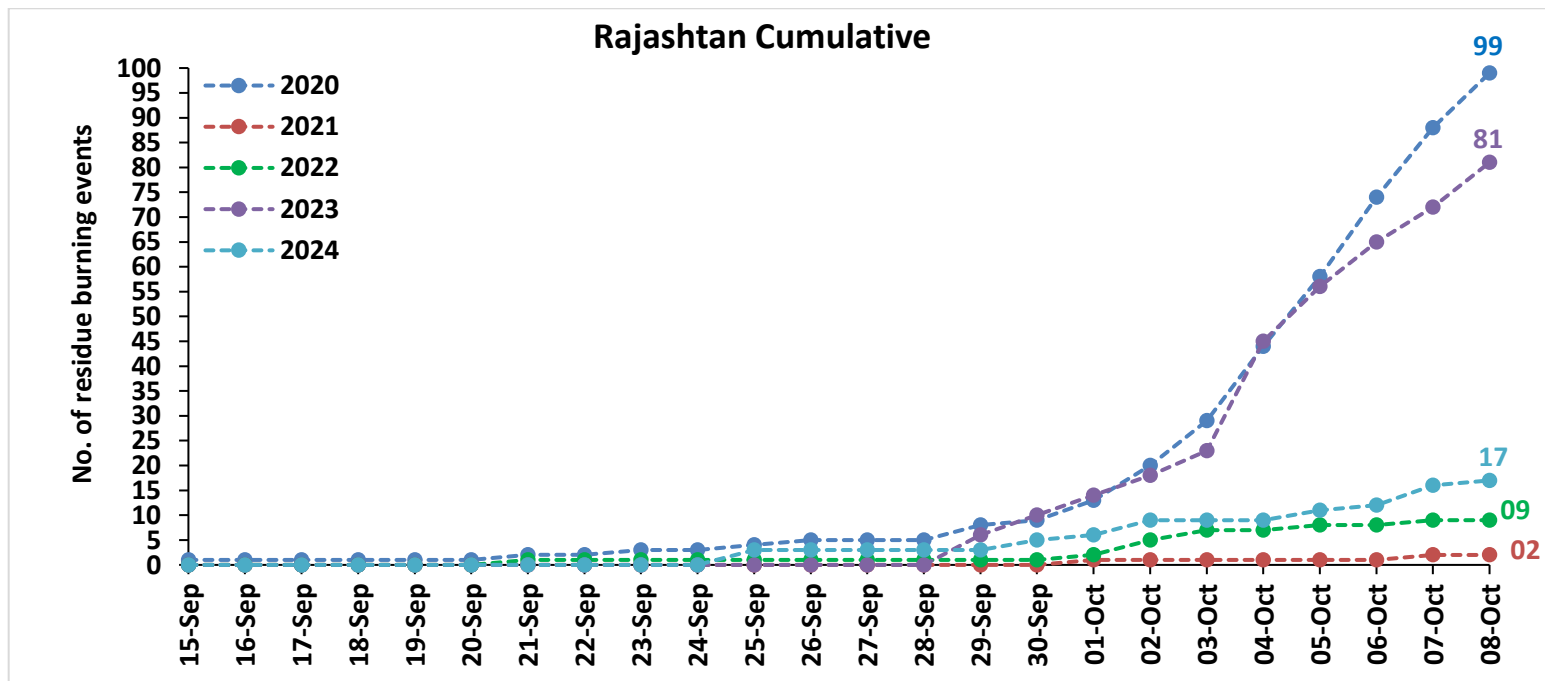
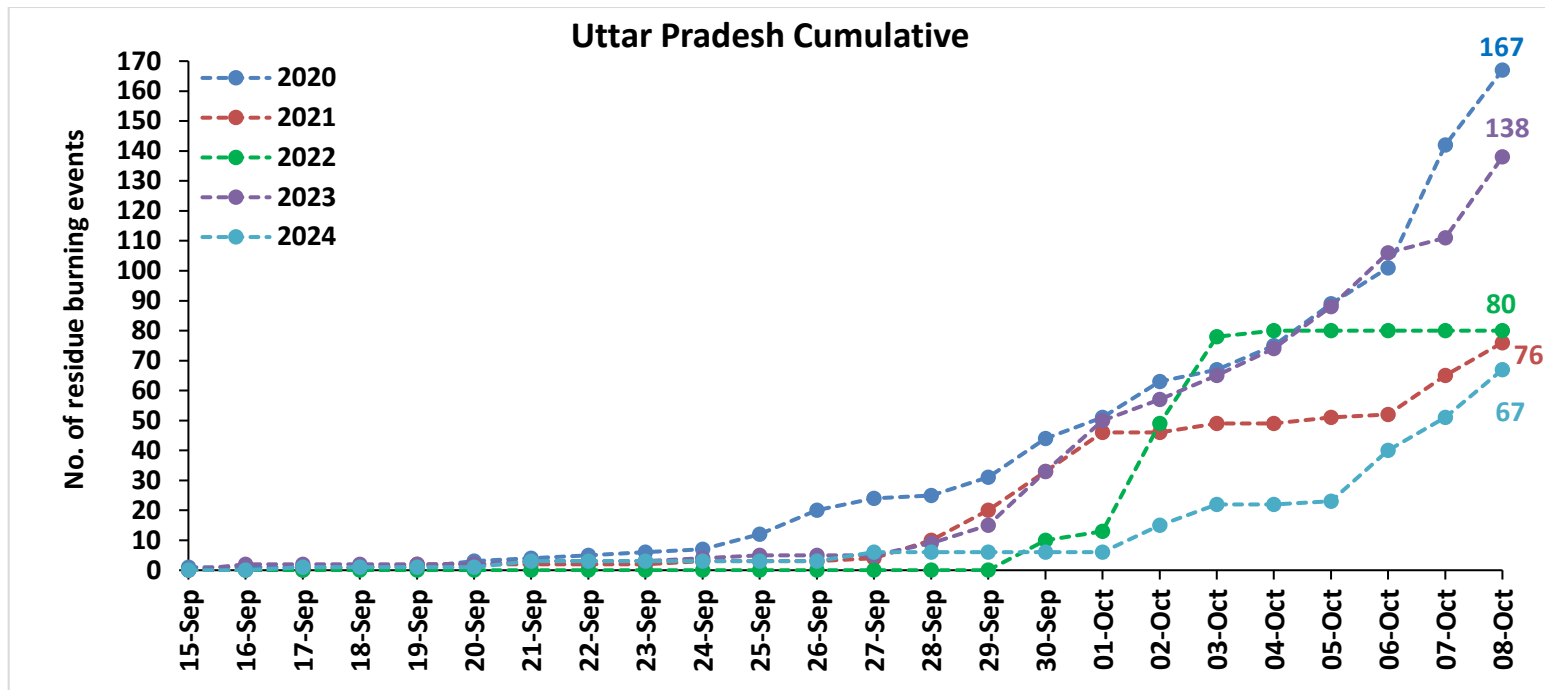


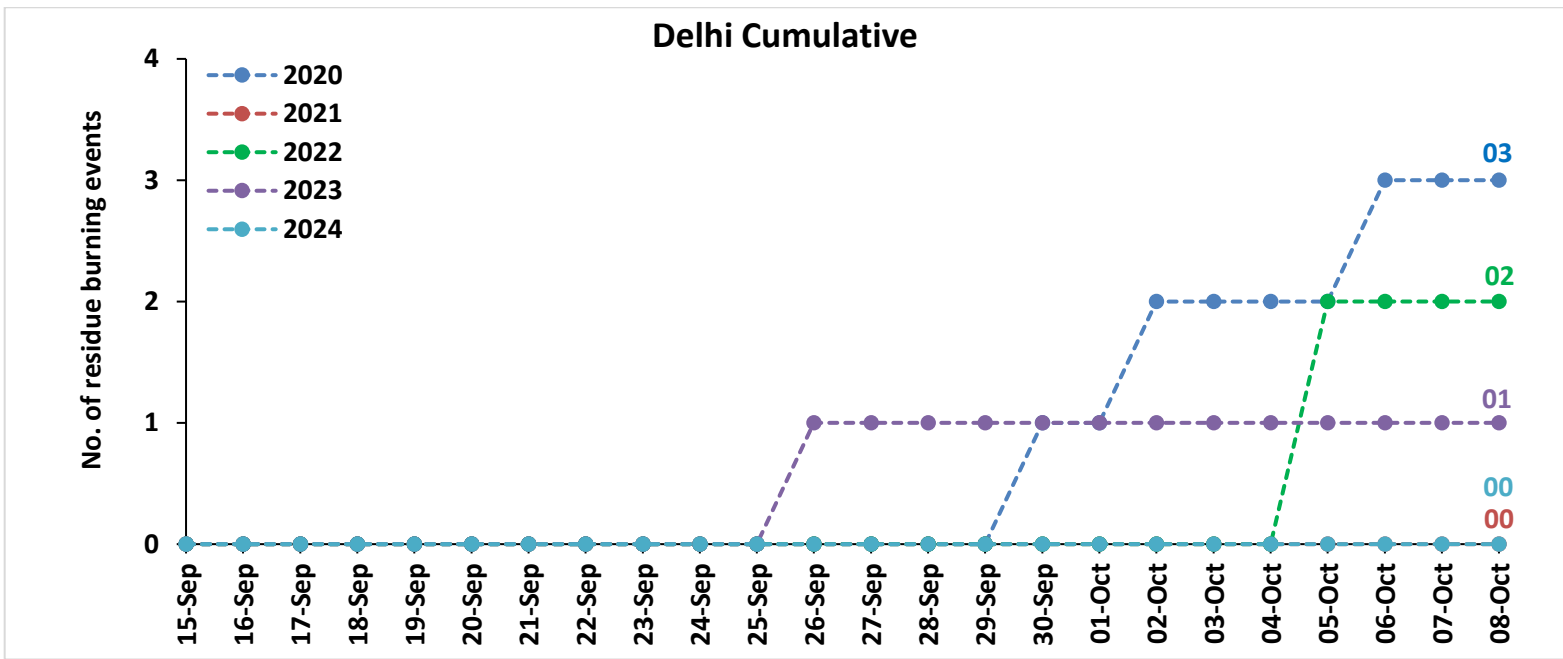
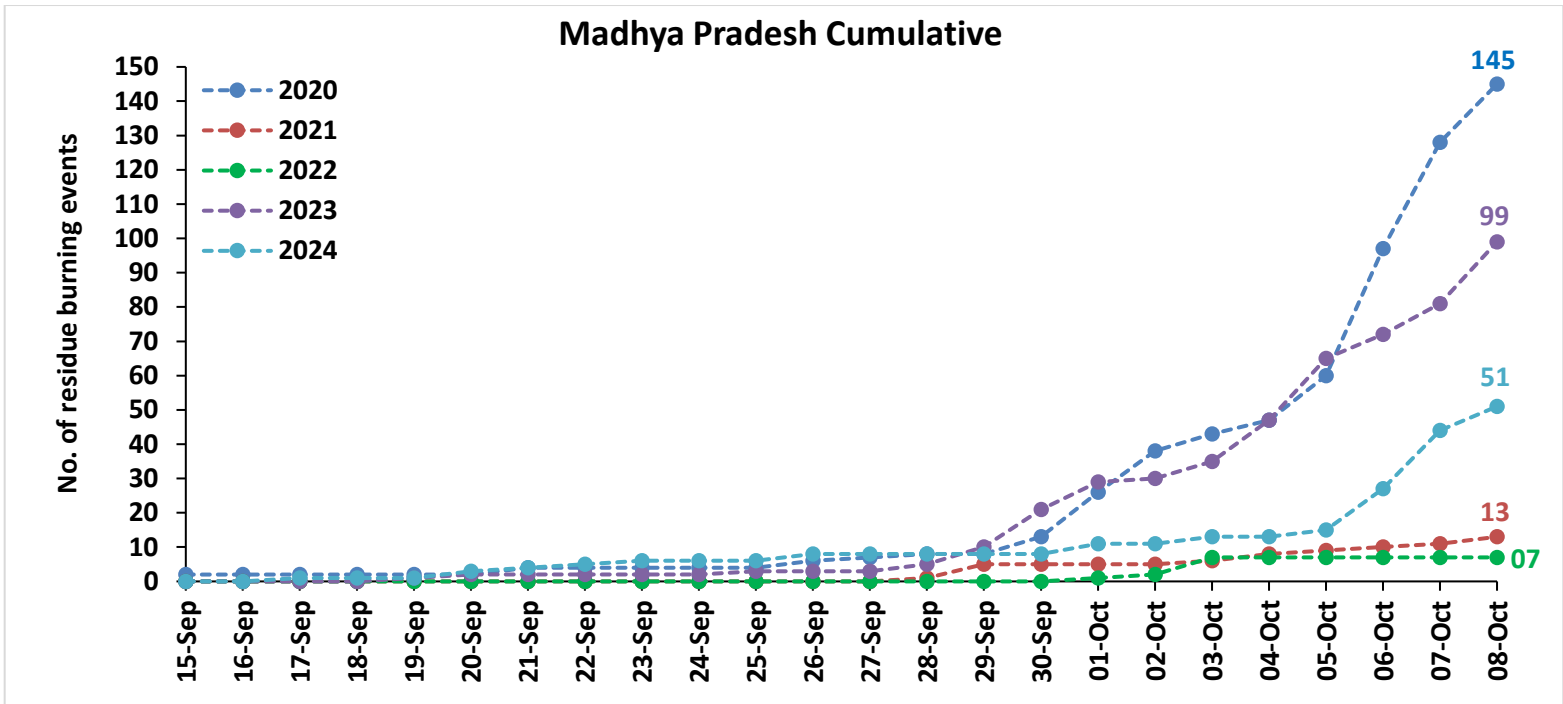
Madhya Pradesh



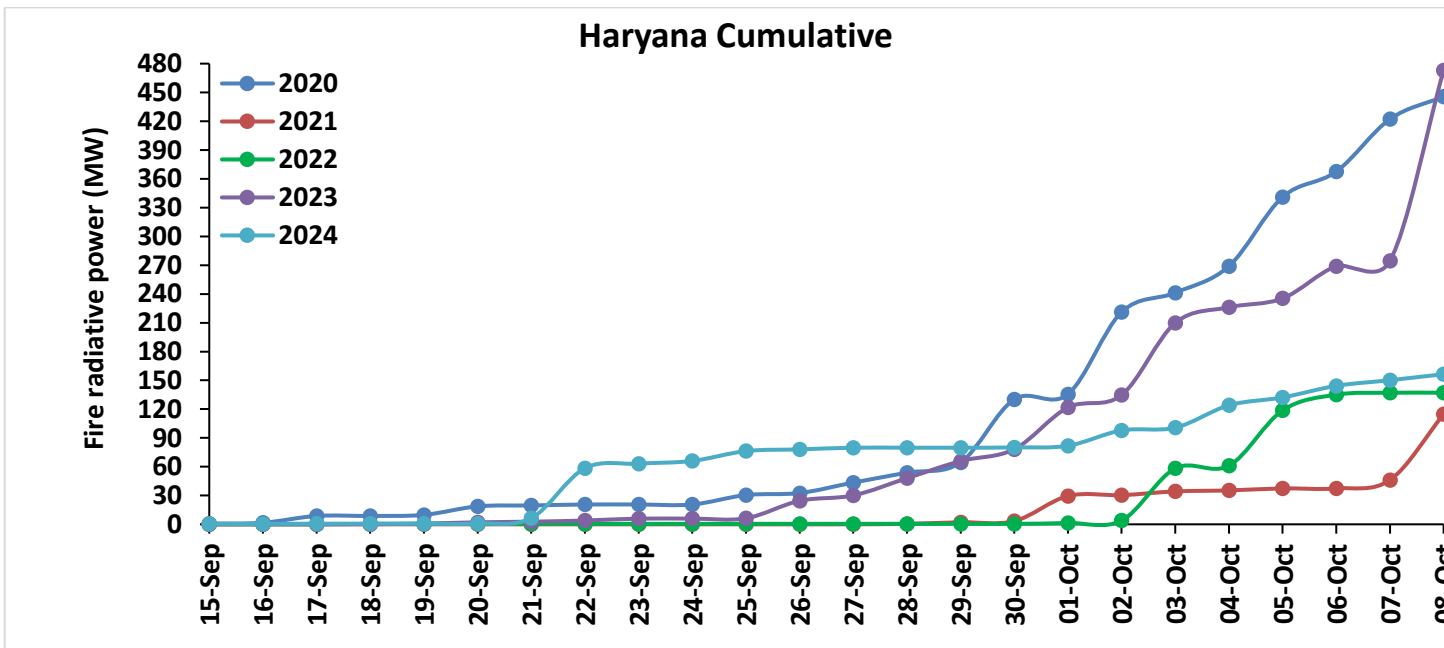
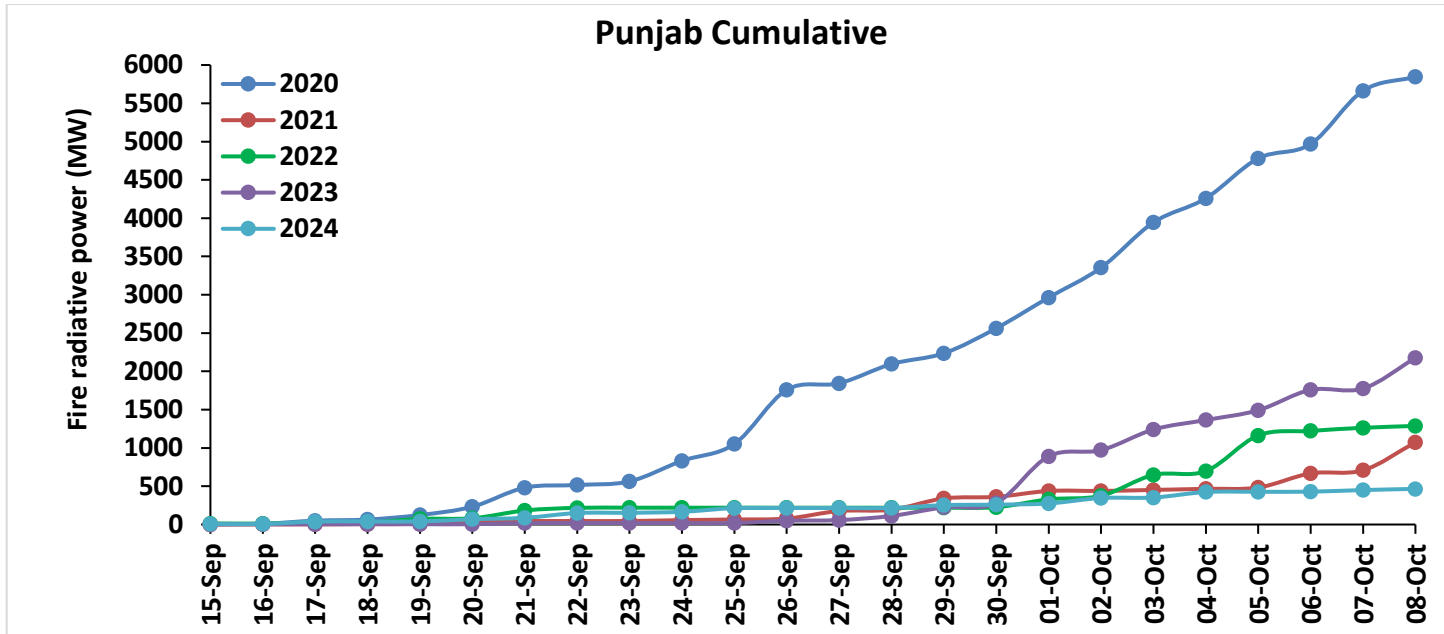
Comparison of residue burning events in current year (2024) with previous years (2020, 2021, 2022 and 2023) for the study States

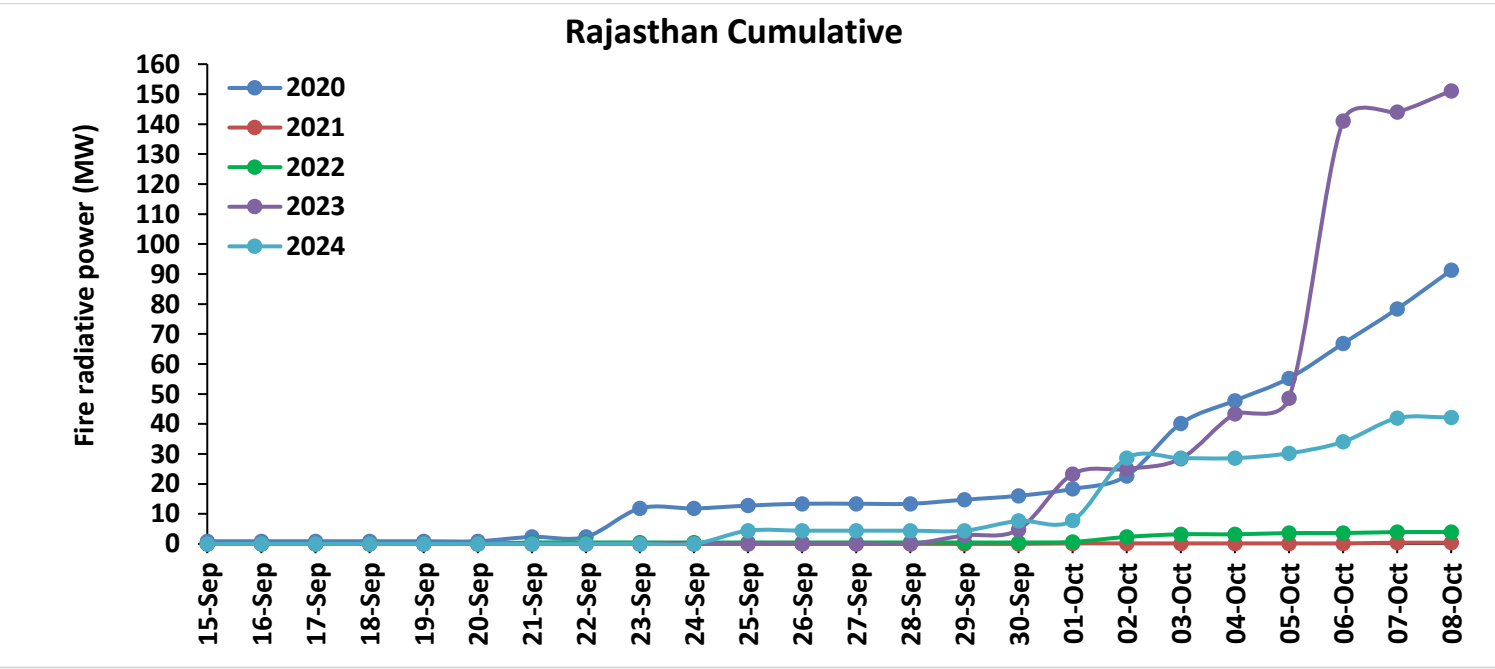
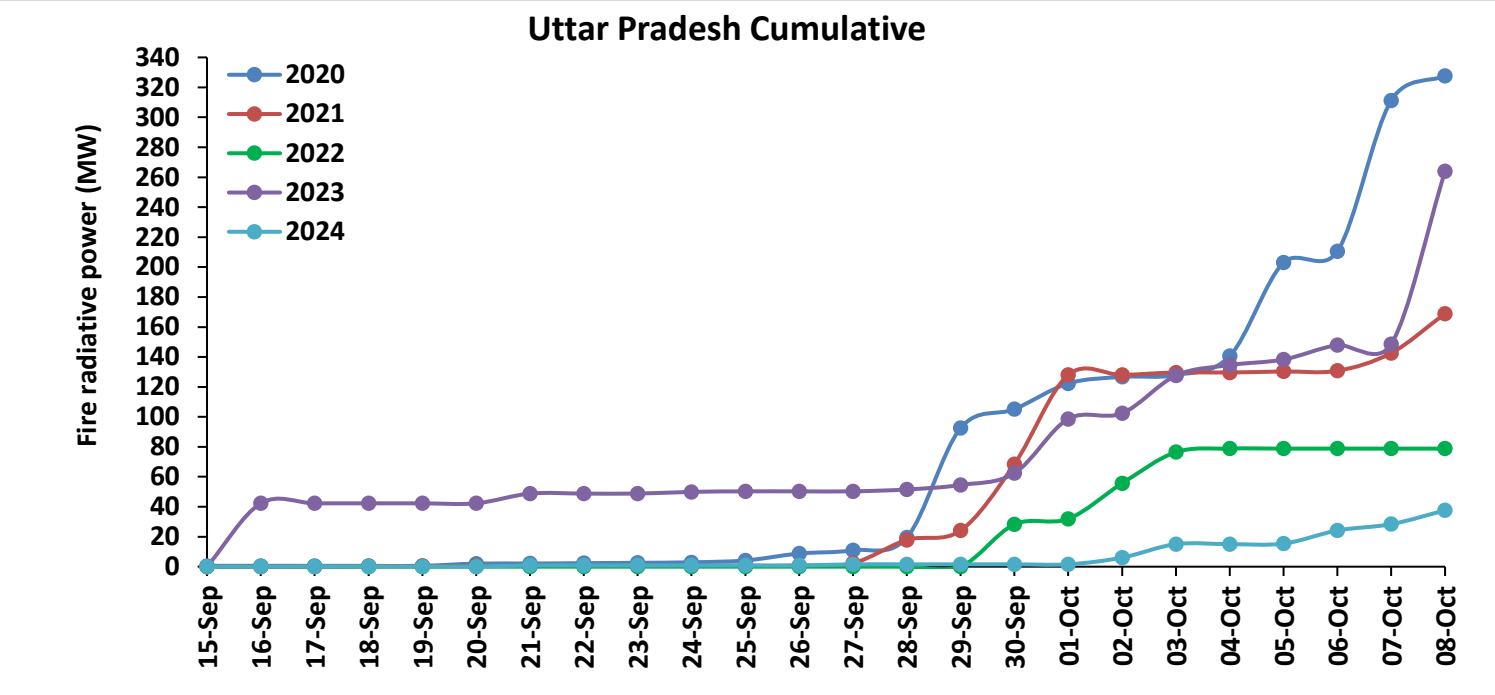


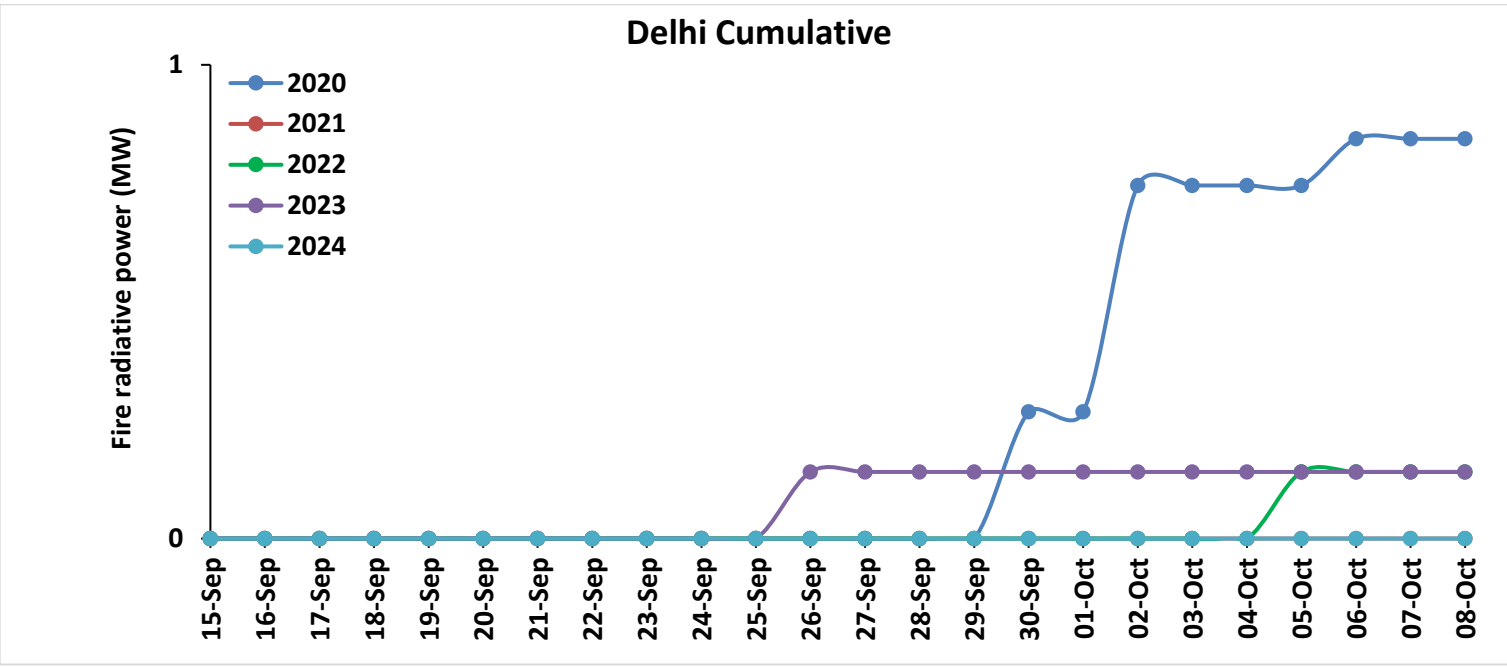
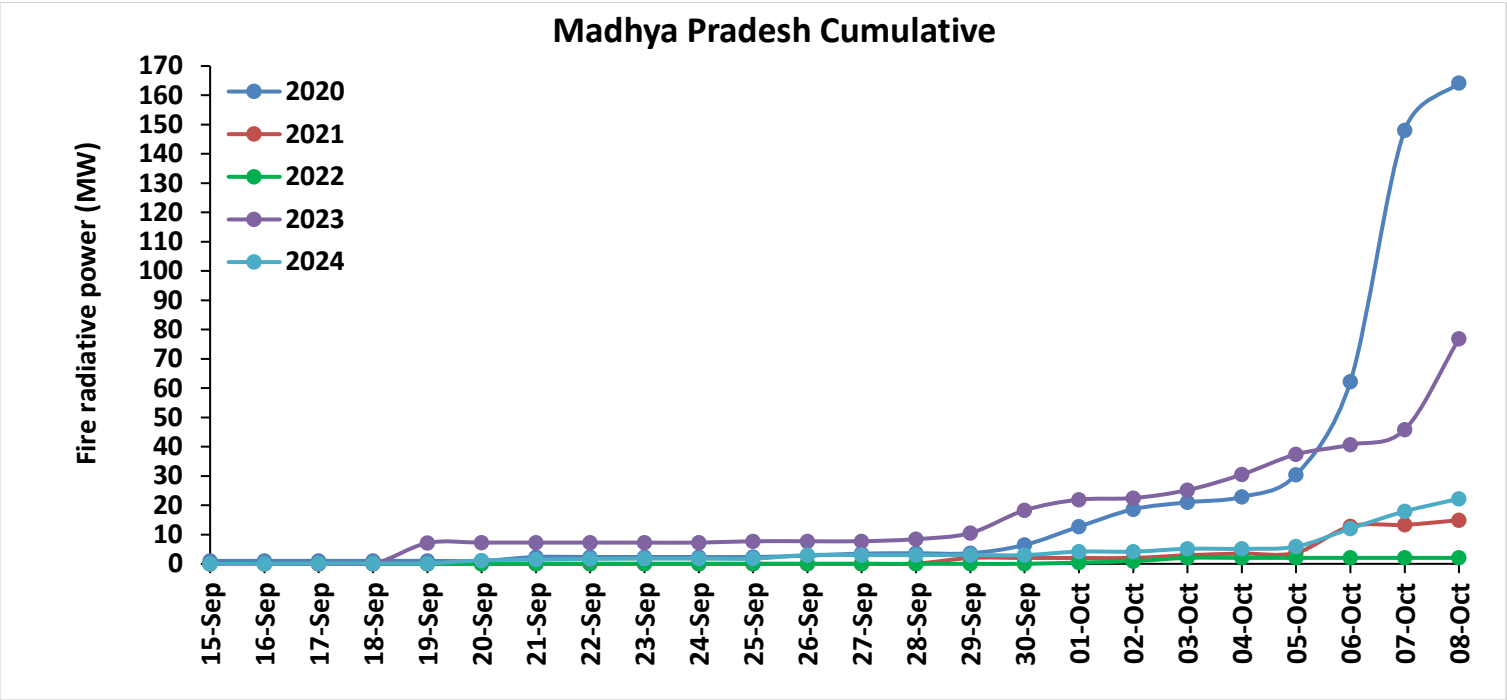




Comparison of residue burning fire power in current year (2024) with previous years (2020,2021,2022 and 2023) for the study States

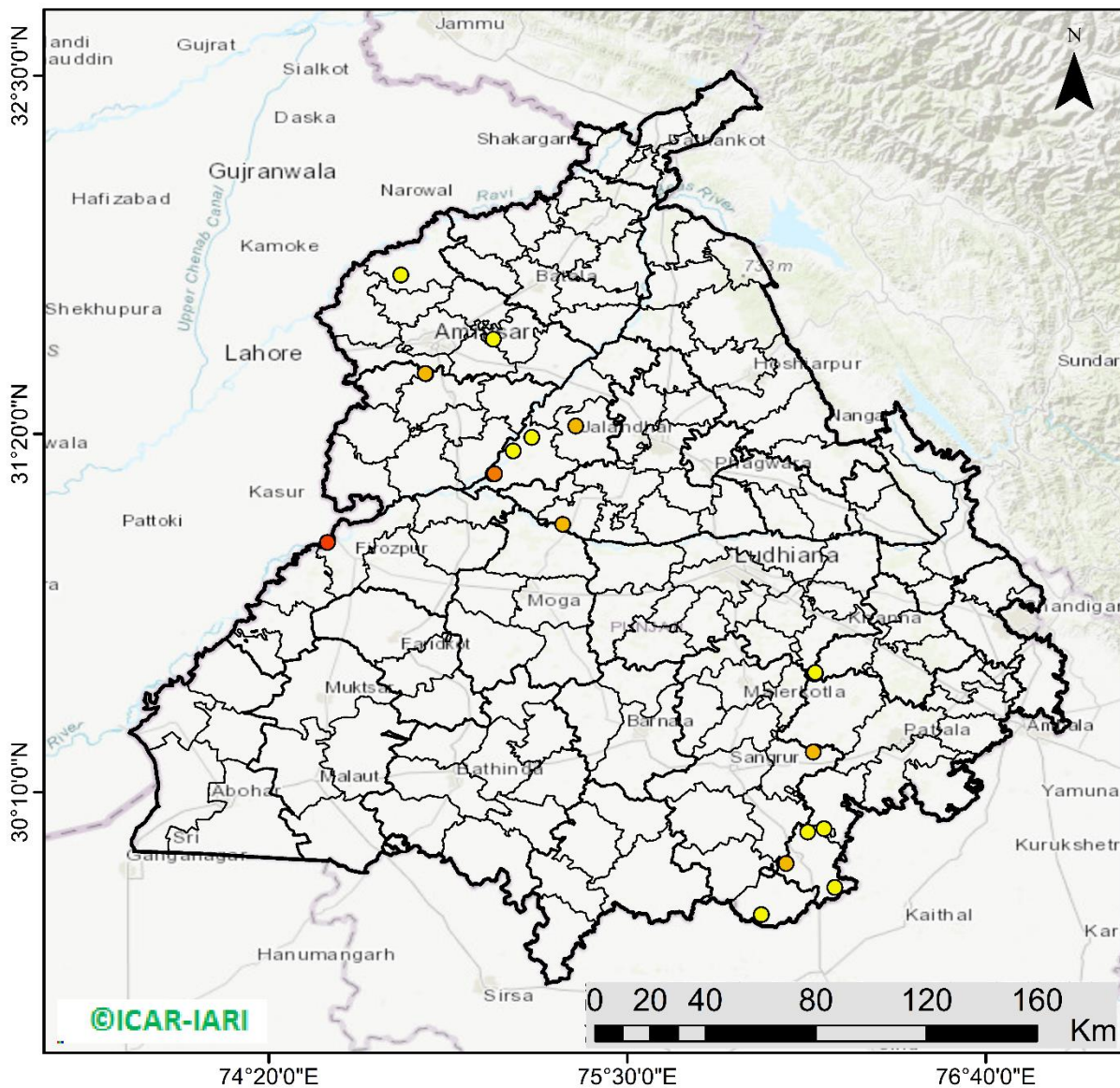






Punjab

RICE RESIDUE BURNING IN PUNJAB



20 burning events detected in Punjab during (08th Oct 2024)

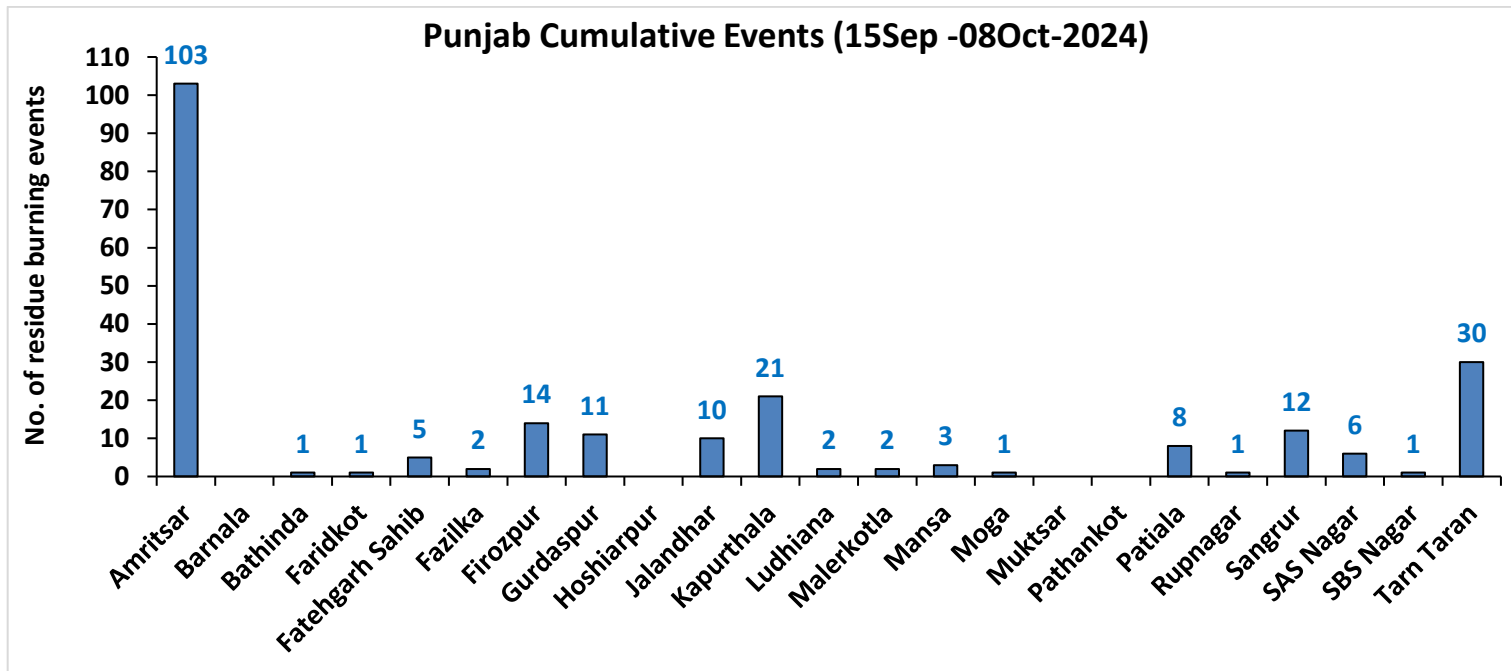
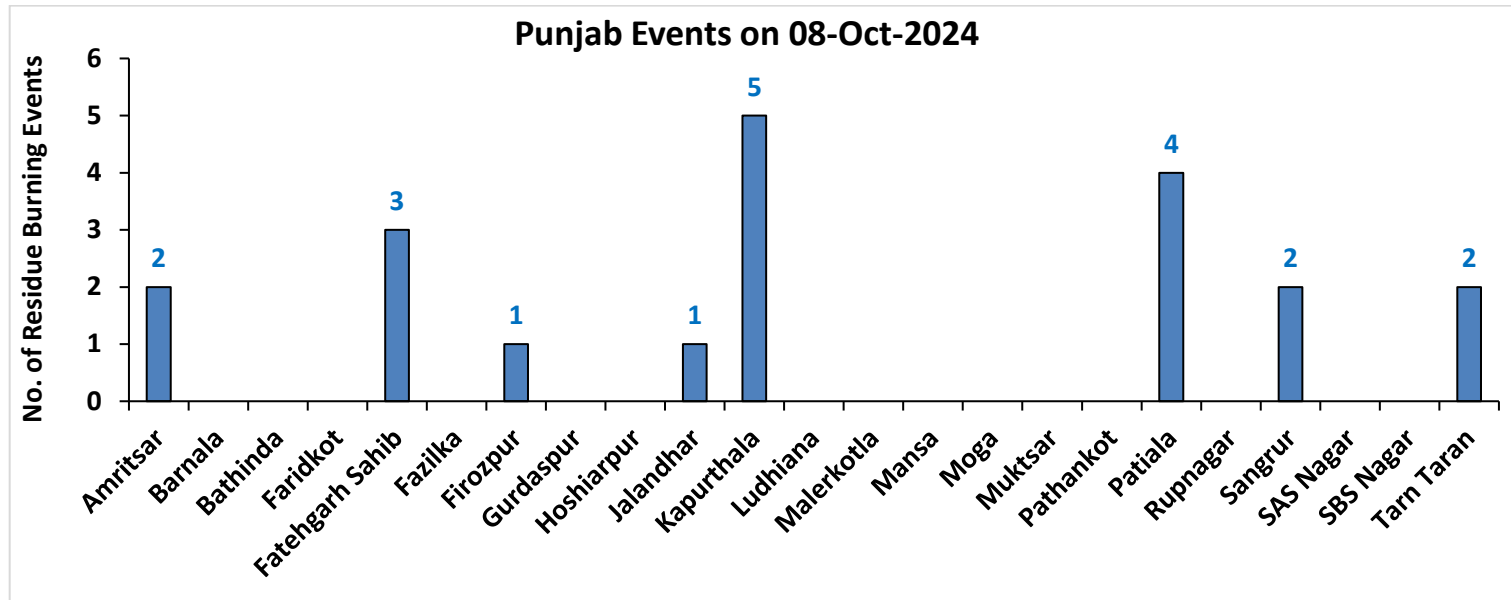
Fire Intensity (W/m²)

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



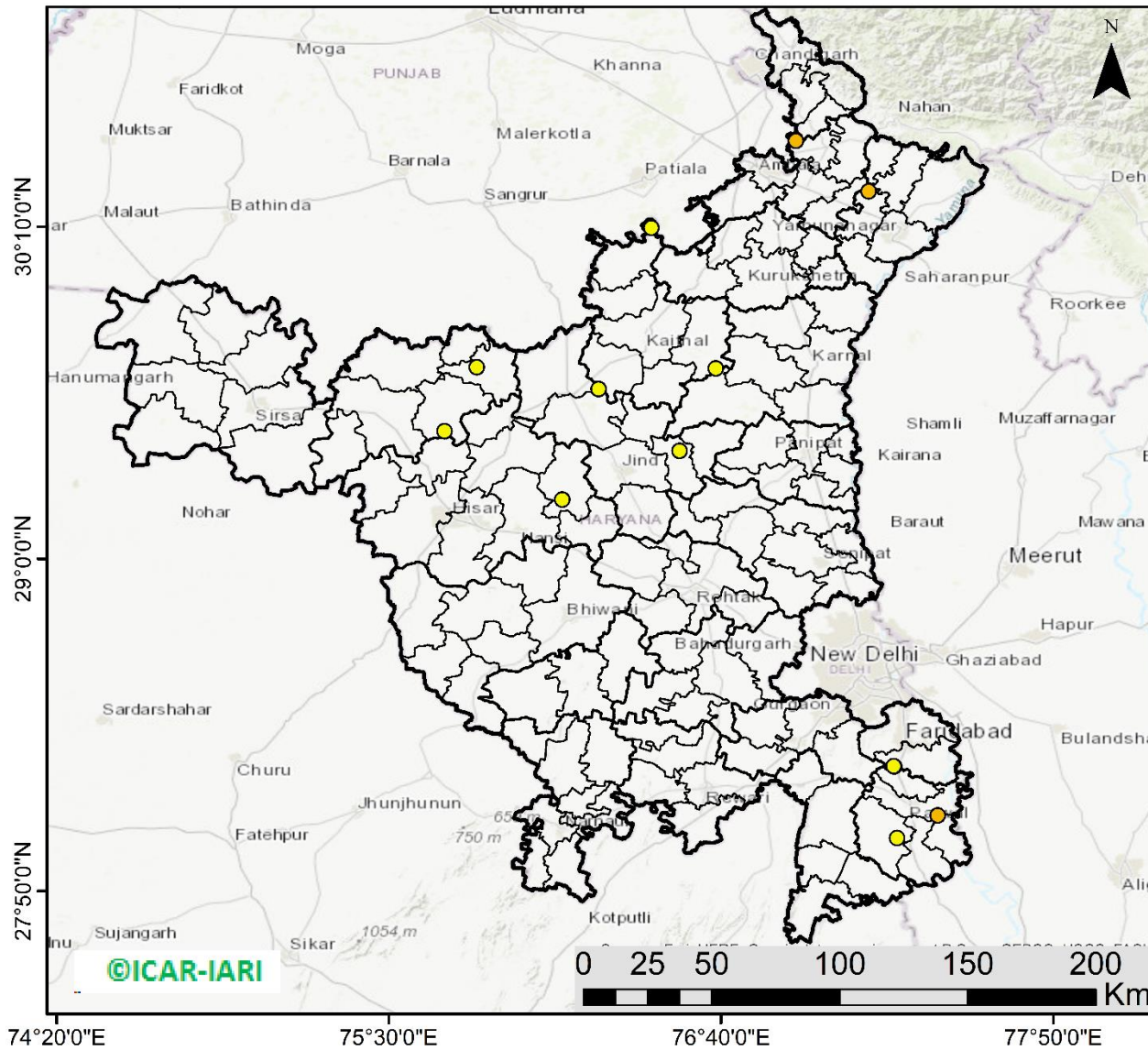
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (15Sep-08Oct-2024)



Haryana

RICE RESIDUE BURNING IN HARYANA



13 burning events detected in Haryana on **(08th Oct 2024)**

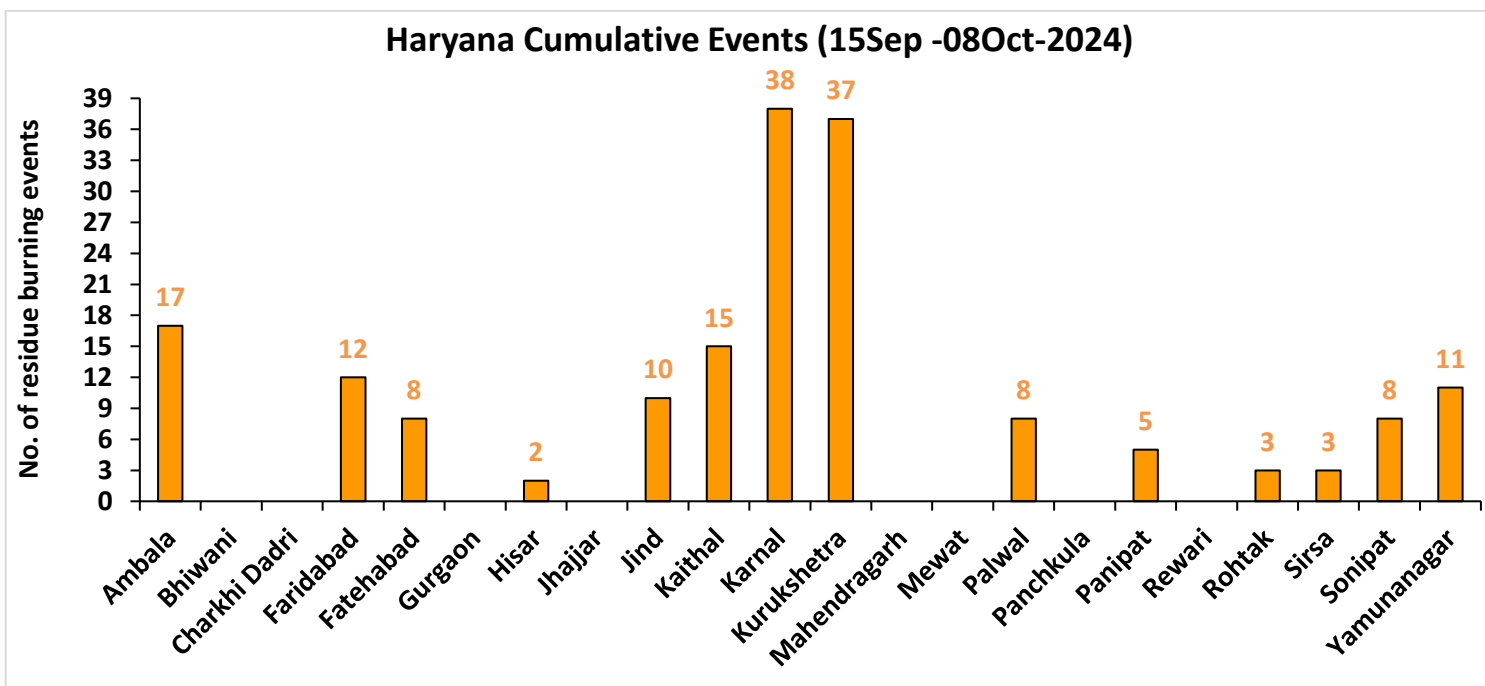
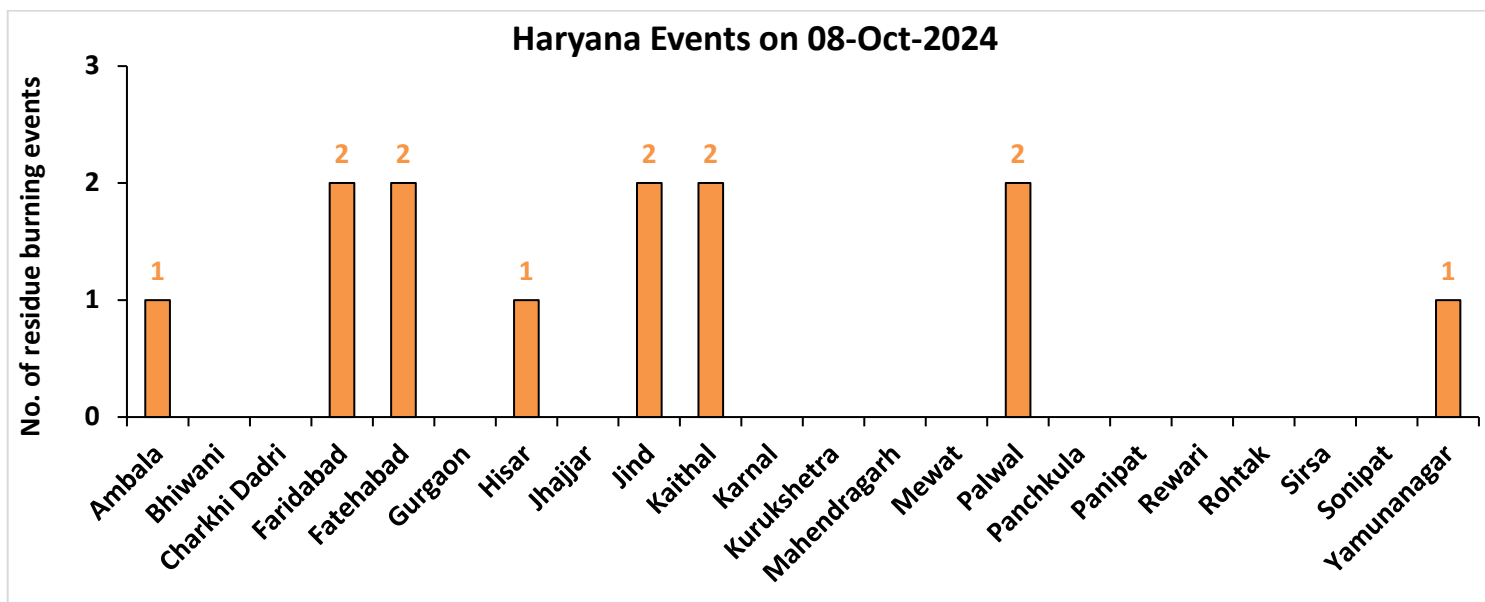
Fire Intensity (W/m²)

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



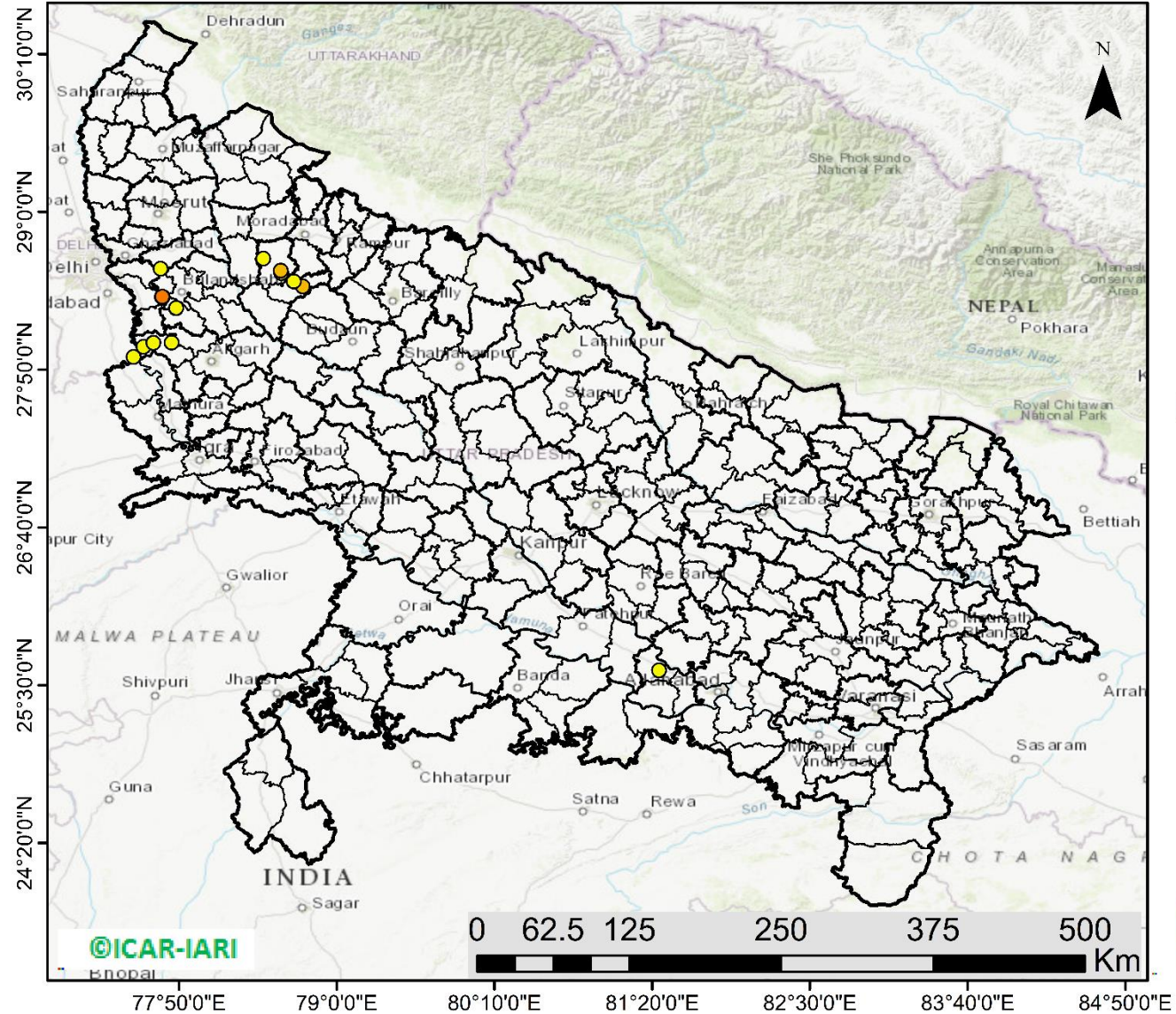
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (15Sep-08Oct-2024)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



16 burning events detected in Uttar Pradesh on (08th Oct 2024)

Fire Intensity (W/m²)

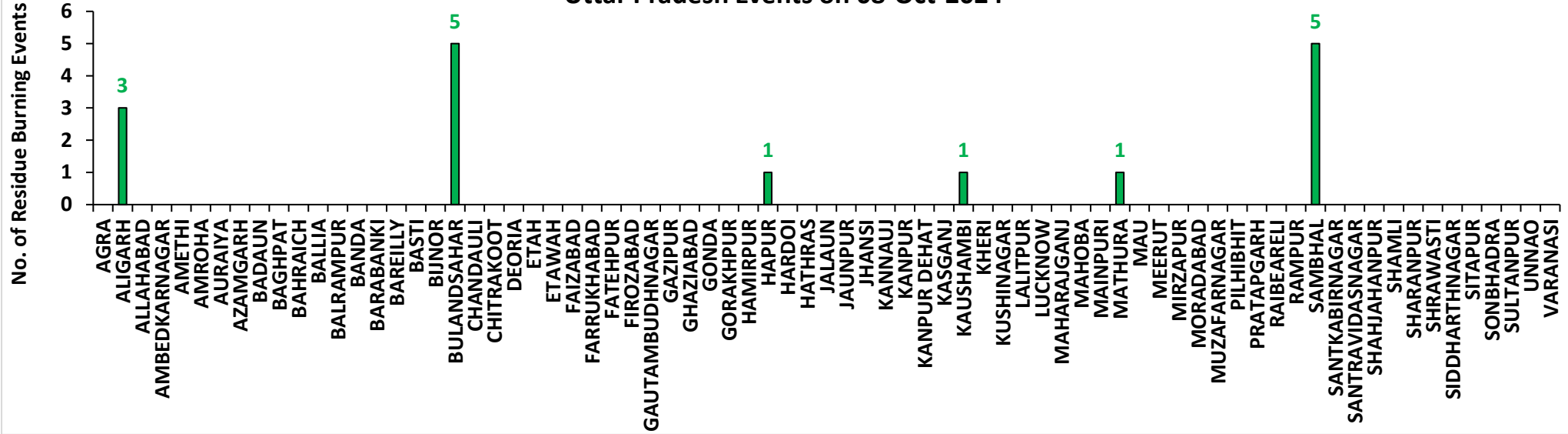
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



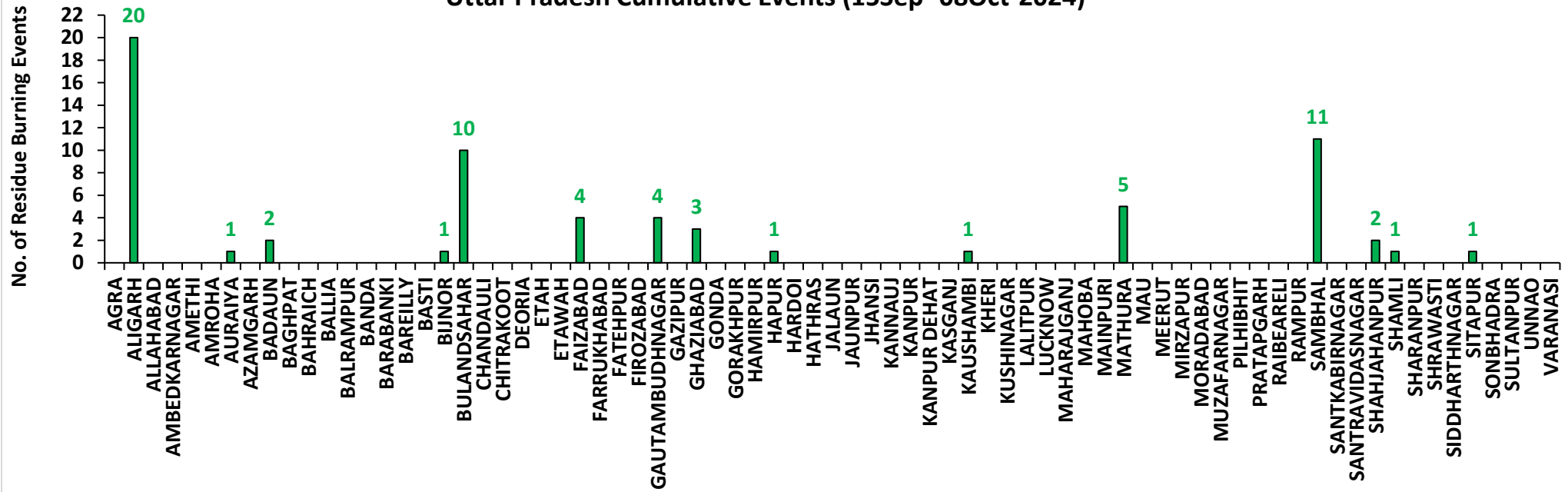
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep-08Oct-2024)

Uttar Pradesh Events on 08-Oct-2024

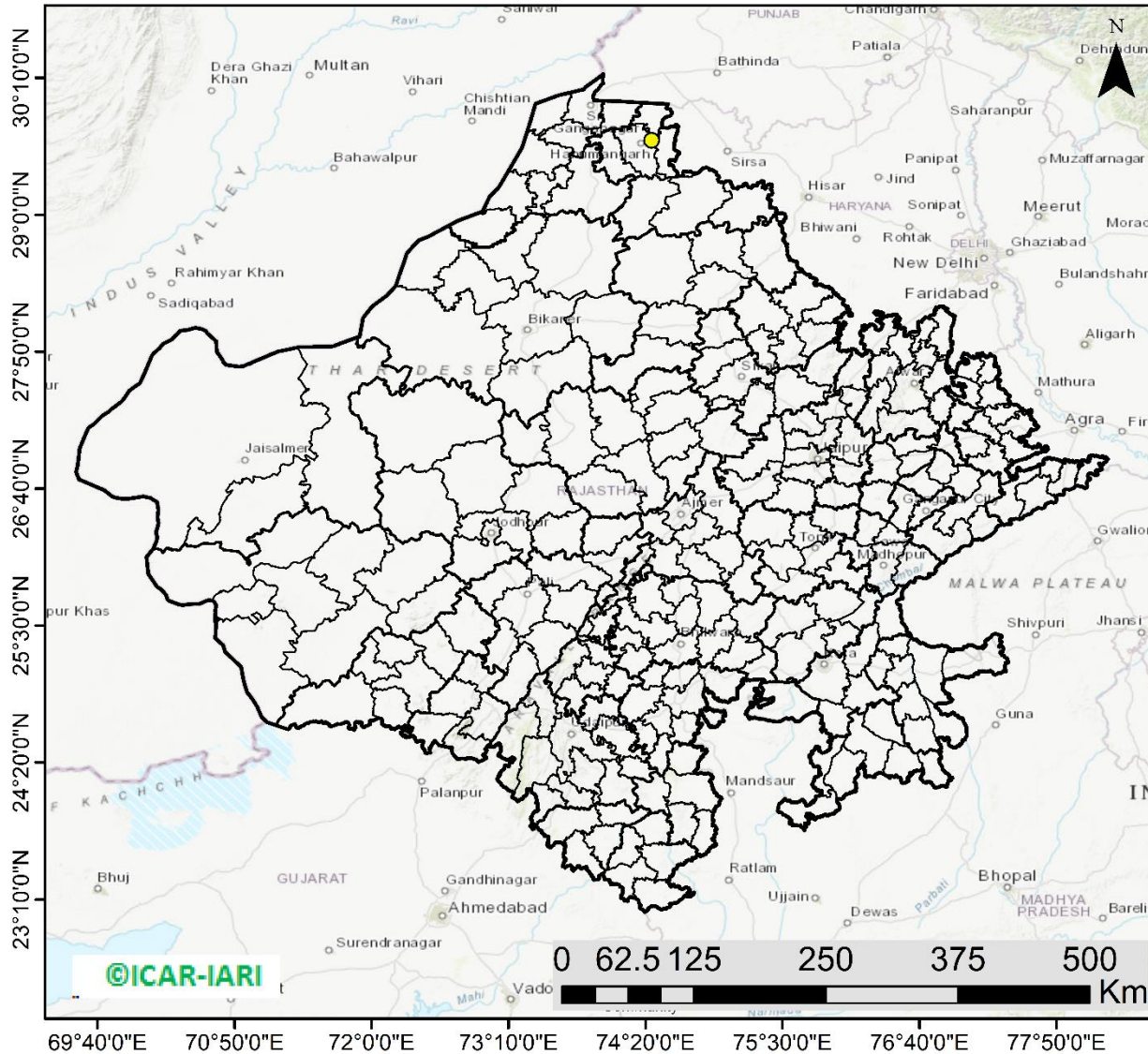


Uttar Pradesh Cumulative Events (15Sep -08Oct-2024)



Rajasthan

RICE RESIDUE BURNING IN RAJASTHAN



01 burning events detected in Rajasthan on (08th Oct 2024)

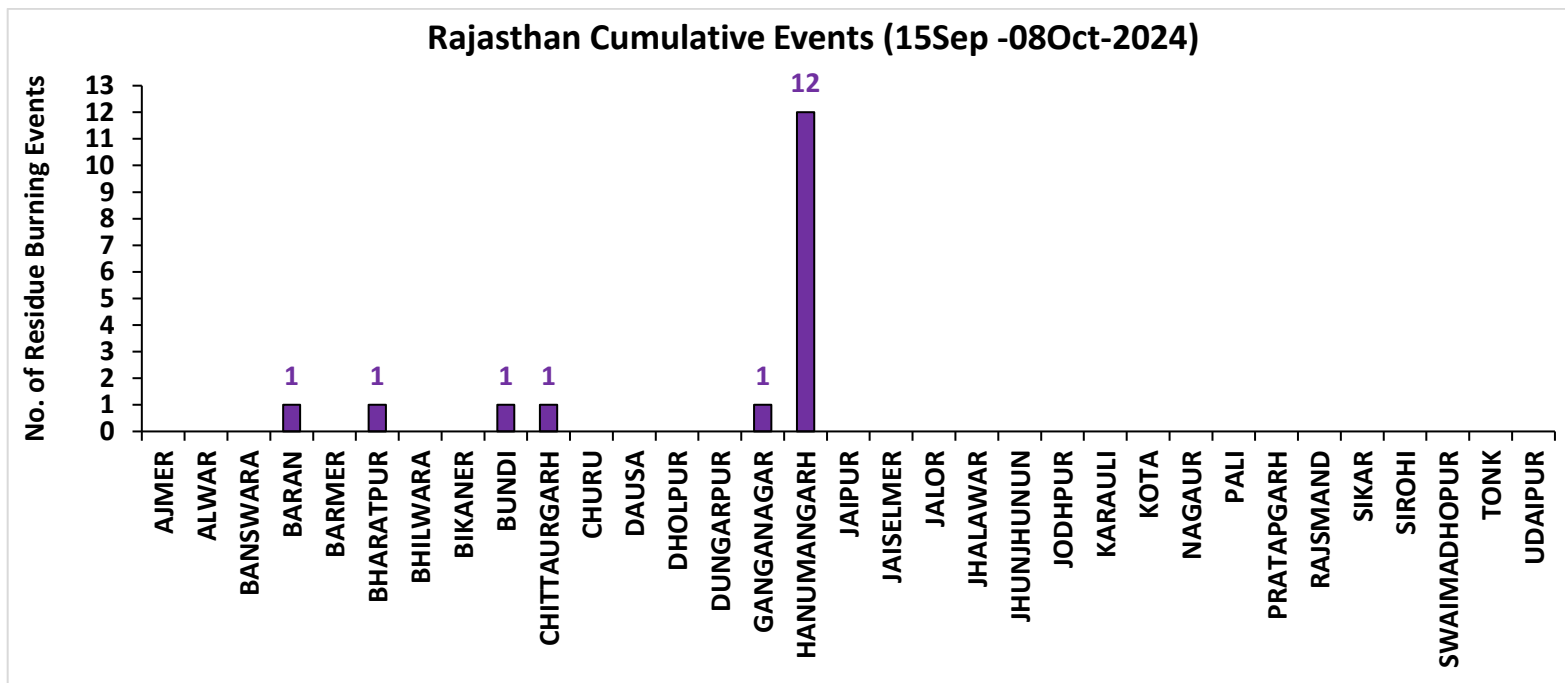
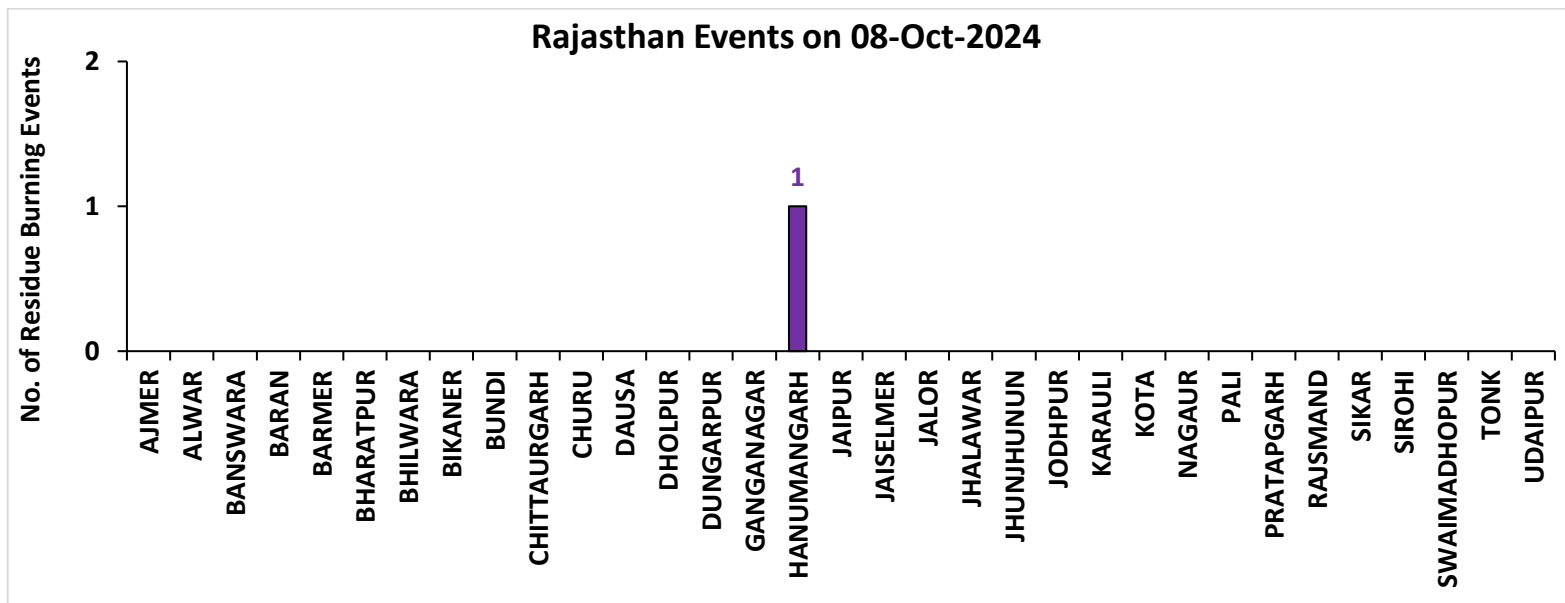
Fire Intensity (W/m²)

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



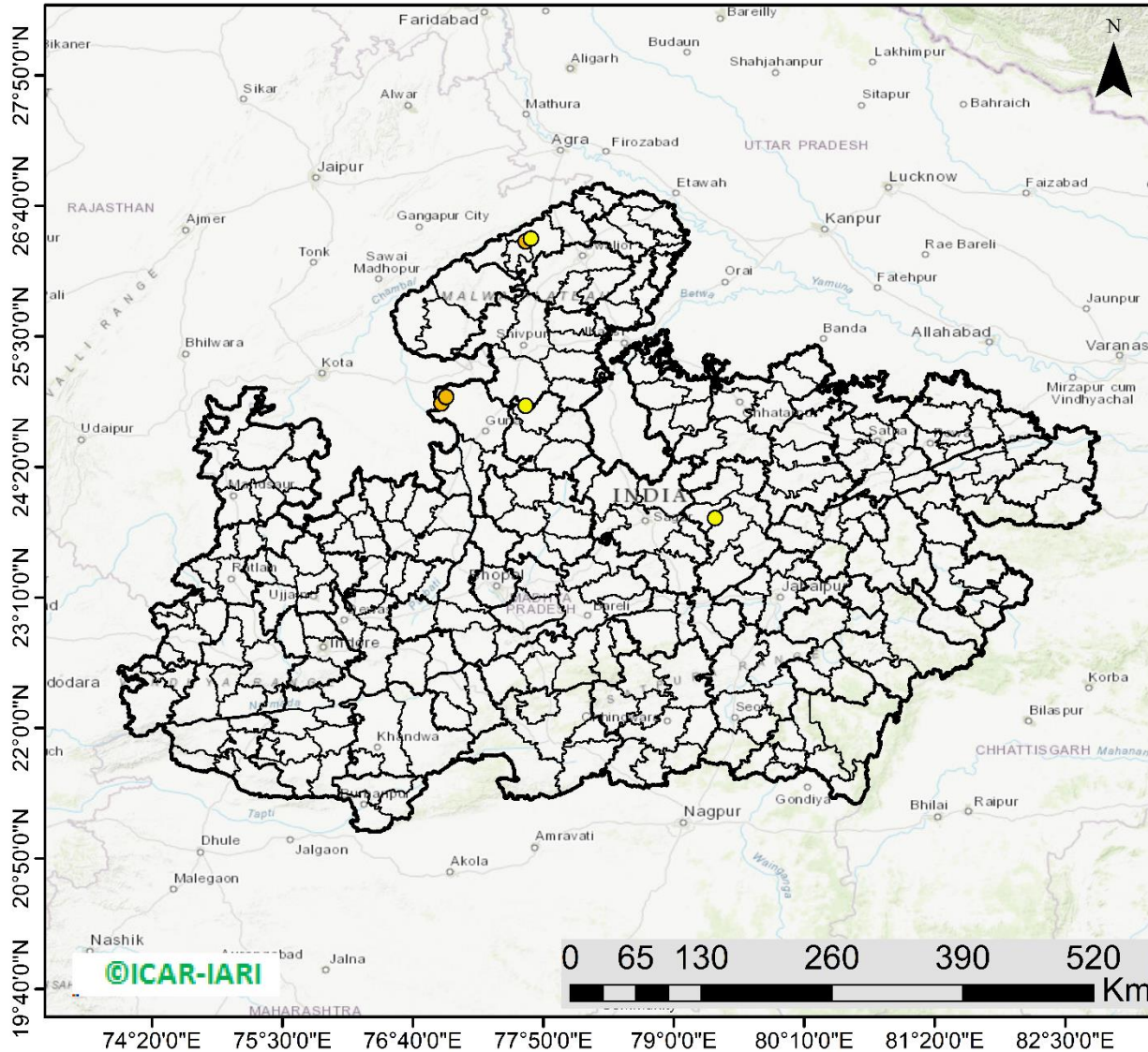
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Rajasthan (15Sep-08Oct-2024)



Madhya Pradesh

RICE RESIDUE BURNING IN MADHYA PRADESH



07 burning events detected in MP on (08th Oct 2024)

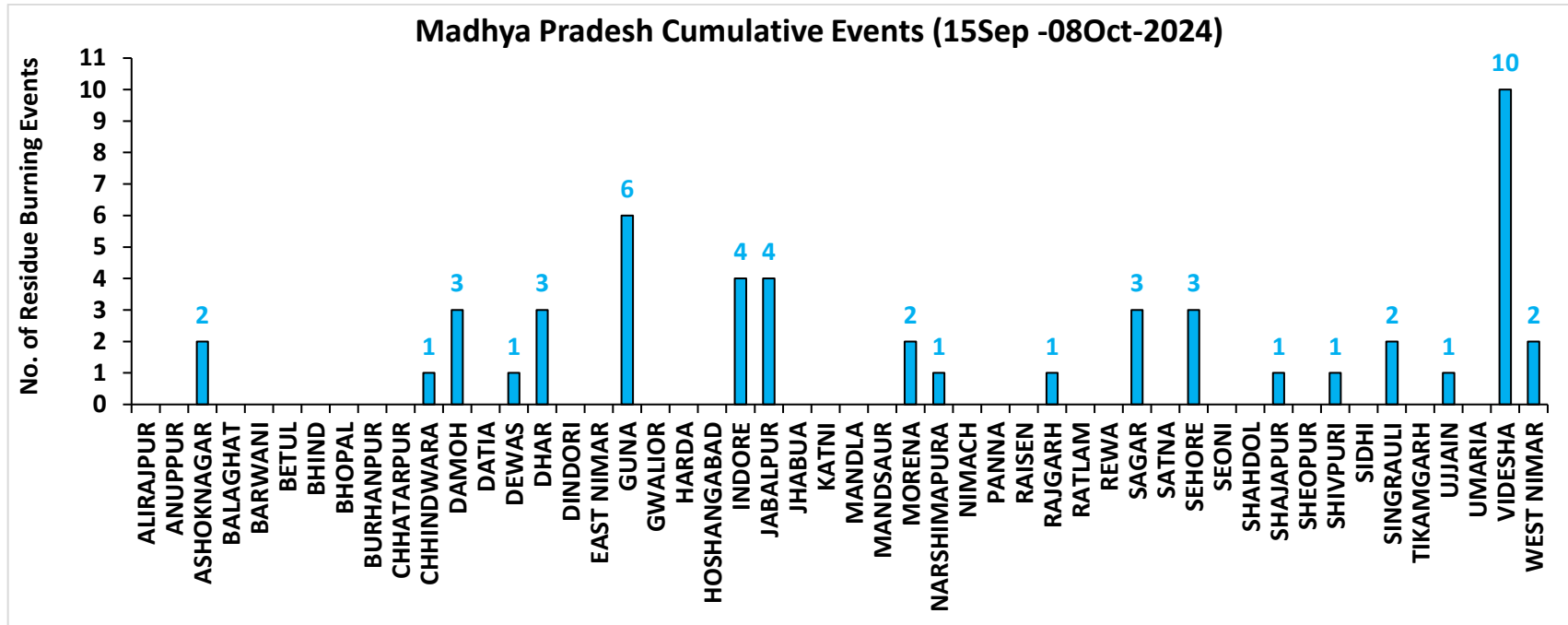
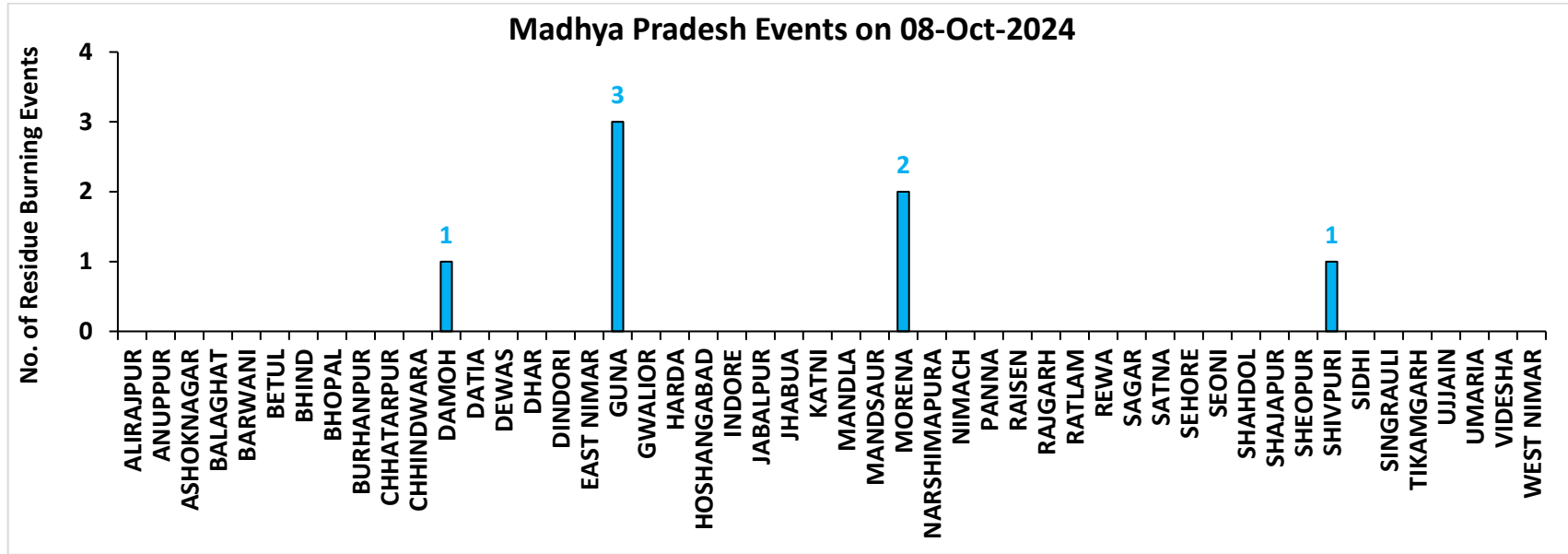
Fire Intensity (W/m²)

- 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 Madhya Pradesh (15Sep-08Oct-2024)



District-wise cumulative number of residues burning events detected in 2020, 2021, 2022, 2023 and 2024
(Period: 15 September-08 October)

(a) Punjab

District	15 Sep-08 Oct				
	2020	2021	2022	2023	2024
Amritsar	1243	248	454	559	103
Barnala	5	0	3	6	0
Bathinda	0	0	0	0	1
Faridkot	14	14	3	6	1
Fatehgarh Sahib	28	8	4	9	5
Fazilka	1	1	0	3	2
Firozpur	59	13	16	20	14
Gurdaspur	101	8	9	10	11
Hoshiarpur	4	0	0	2	0
Jalandhar	21	10	13	14	10
Kapurthala	35	15	22	58	21
Ludhiana	59	33	9	8	2
Malerkotla	0	0	0	2	2
Mansa	4	1	1	4	3
Moga	14	2	2	2	1
Muktsar	1	1	1	0	0
Pathankot	0	0	0	0	0
Patiala	118	28	26	62	8
Rupnagar	6	2	0	1	1
Sangrur	48	5	12	24	12
SAS NAGAR (Mohali)	11	8	4	38	6
SBS Nagar	5	1	2	2	1
Tarn Taran	450	102	130	139	30
Total	2227	500	711	969	234

(b) Haryana

District	15 Sep-08 Oct				
	2020	2021	2022	2023	2024
AMBALA	37	3	9	56	17
BHIWANI	0	0	0	0	0
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	0	0	0	0	12
FATEHABAD	19	1	3	29	8
GURGAON	0	0	0	0	0
HISAR	3	0	0	8	2
JHAJJAR	1	0	0	2	0
JIND	3	2	8	23	10
KAITHAL	39	10	9	16	15
KARNAL	67	21	20	19	38
KURUKSHETRA	62	20	27	49	37
MAHENDRAGARH	0	0	0	0	0
MEWAT	0	0	0	0	0
PALWAL	5	1	0	7	8
PANCHKULA	0	0	0	0	0
PANIPAT	6	1	1	10	5
REWARI	0	0	0	0	0
ROHTAK	0	0	0	1	3
SIRSA	2	0	0	1	3
SONIPAT	6	1	2	28	8
YAMUNANAGAR	18	2	1	28	11
Total	268	62	80	277	177

(c) Uttar Pradesh

District	15 Sep-08 Oct																		
	2020	2021	2022	2023	2024	GAUTAMBUDHNAGAR	1	0	0	3	4	MUZAFARNAGAR	2	0	0	0	0		
AGRA	0	0	0	0	0	GAZIPUR	0	0	0	0	0	PILHIBHIT	3	2	2	15	0		
ALIGARH	15	0	1	41	20	GHAZIABAD	1	1	1	4	3	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	5	7	0	3	0		
AMETHI	0	0	0	0	0	HAMIRPUR	0	0	0	0	0	SAMBHAL	6	0	4	8	11		
AMROHA	1	0	0	2	0	HAPUR	2	0	0	0	1	SANTKABIRNAGAR	0	0	0	0	0		
AURAIYA	12	0	4	3	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	10	55	53	18	2		
BADAUN	0	0	0	0	2	JALAUN	0	0	0	0	0	SHAMLI	17	2	2	2	1		
BAGHPAT	1	0	0	0	0	JAUNPUR	0	0	0	0	0	SHARANPUR	11	0	0	0	0		
BAHRAICH	2	0	0	0	0	JHANSI	5	0	0	0	0	SHRAWASTI	0	0	0	0	0		
BALLIA	0	0	0	0	0	KANNAUJ	2	0	0	0	0	SIDDHARTHANAGAR	0	0	0	0	0		
BALRAMPUR	0	0	0	0	0	KANPUR	0	1	0	0	0	SITAPUR	4	1	0	0	1		
BANDA	0	0	0	0	0	KANPUR DEHAT	1	0	0	0	0	SONBHADRA	0	0	0	0	0		
BARABANKI	6	0	0	2	0	KASGANJ	1	0	0	0	0	SULTANPUR	0	0	0	0	0		
BAREILLY	5	1	0	3	0	KAUSHAMBI	6	0	0	1	1	UNNAO	2	0	0	1	0		
BASTI	0	0	0	0	0	KHERI	13	3	8	1	0	VARANASI	0	0	0	0	0		
BIJNOR	3	0	1	0	1	KUSHINAGAR	0	0	0	0	0	Total	167	76	80	138	67		
BULANDSAHAR	1	0	2	2	10	LALITPUR	0	1	2	0	0								
CHANDAULI	0	0	0	0	0	LUCKNOW	1	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	4	0	0	0	0	MAINPURI	0	1	0	1	0								
ETAWAH	0	0	0	4	0	MATHURA	3	1	0	15	5								
FAIZABAD	0	0	0	0	4	MAU	0	0	0	0	0								
FARRUKHABAD	0	0	0	0	0	MEERUT	8	0	0	2	0								
FATEHPUR	5	0	0	0	0	MIRZAPUR	5	0	0	0	0								
FIROZABAD	1	0	0	0	0	MORADABAD	1	0	0	2	0								

(d) Delhi

District	15 Sep-08 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	2	0	2	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	3	0	2	1	0

(e) Rajasthan

District	15 Sep-08 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	48	0	3	34	1
BARMER	2	0	0	0	0
BHARATPUR	0	0	0	1	1
BHILWARA	2	0	0	0	0
BIKANER	0	0	0	0	0
BUNDI	1	0	3	2	1
CHITTAURGARH	0	1	0	2	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	2	0	0	4	1
HANUMANGARH	23	1	2	16	12
JAIPUR	0	0	0	0	0
JAISELMER	2	0	0	0	0
JALOR	0	0	0	0	0
JHALAWAR	0	0	0	3	0
JHUNJHUNUN	1	0	0	0	0
JODHPUR	1	0	0	0	0
KARAULI	1	0	0	0	0
KOTA	13	0	1	18	0
NAGAU	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	1	0
TONK	1	0	0	0	0
UDAIPUR	0	0	0	0	0
Total	99	2	9	81	17

(f) Madhya Pradesh

District	15 Sep-08 Oct										
	2020	2021	2022	2023	2024	PANNA	1	0	0	0	0
ALIRAJPUR	0	0	0	0	0	RAISEN	2	0	0	0	0
ANUPPUR	0	0	0	0	0	RAJGARH	1	0	2	4	1
ASHOKNAGAR	7	0	0	4	2	RATLAM	0	0	0	1	0
BALAGHAT	0	0	0	0	0	REWA	1	0	0	0	0
BARWANI	0	0	0	0	0	SAGAR	8	2	1	3	3
BETUL	0	0	0	0	0	SATNA	3	0	0	1	0
BHIND	0	0	0	4	0	SEHORE	4	0	1	4	3
BHOPAL	2	0	0	3	0	SEONI	2	0	0	0	0
BURHANPUR	0	0	0	0	0	SHAHDOL	0	0	0	0	0
CHHATARPUR	2	0	0	1	0	SHAJAPUR	4	0	0	2	1
CHHINDWARA	0	0	0	0	1	SHEOPUR	2	0	0	1	0
DAMOH	6	0	0	4	3	SHIVPURI	1	0	0	0	1
DATIA	5	0	0	6	0	SIDHI	0	0	0	0	0
DEWAS	3	0	0	1	1	SINGRAULI	0	0	0	0	2
DHAR	13	0	0	9	3	TIKAMGARH	1	0	0	0	0
DINDORI	0	0	0	0	0	UJJAIN	5	0	0	3	1
EAST NIMAR	0	1	0	0	0	UMARIA	0	0	0	0	0
GUNA	7	1	1	17	6	VIDESHA	26	2	1	9	10
GWALIOR	14	0	1	2	0	WEST NIMAR	1	0	0	0	2
HARDA	8	7	0	4	0	Total	145	13	7	99	51
HOSHANGABAD	3	0	0	2	0						
INDORE	2	0	0	5	4						
JABALPUR	5	0	0	0	4						
JHABUA	0	0	0	0	0						
KATNI	0	0	0	0	0						
MANDLA	0	0	0	0	0						
MANDSAUR	0	0	0	1	0						
MORENA	5	0	0	8	2						
NARSHIMAPURA	1	0	0	0	1						
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-08 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
03-Oct	110	9	75	105	8	8	6	8	17	6	4	3	29	8	7
04-Oct	162	23	65	95	9	29	2	7	29	9	8	0	2	9	0
05-Oct	161	18	130	98	5	17	3	24	24	8	14	2	0	14	1
06-Oct	171	42	85	91	3	30	0	26	19	23	12	1	0	18	17
07-Oct	197	72	62	32	18	32	11	6	13	14	41	13	0	5	11
08-Oct	95	108	19	92	20	29	27	0	55	13	25	11	0	27	16
Total	2227	500	711	969	234	268	62	80	277	177	167	76	80	138	67

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
03-Oct	0	0	0	0	0	9	0	2	5	0	5	1	5	5	2
04-Oct	0	0	0	0	0	15	0	0	22	0	4	2	0	12	0
05-Oct	0	0	2	0	0	14	0	1	11	2	13	1	0	18	2
06-Oct	1	0	0	0	0	16	0	0	9	1	37	1	0	7	12
07-Oct	0	0	0	0	0	14	1	1	7	4	31	1	0	9	17
08-Oct	0	0	0	0	0	11	0	0	9	1	17	2	0	18	7
Total	3	0	2	1	0	99	2	9	81	17	145	13	7	99	51

Details of residue burning events in Punjab on 08-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	31.85037	74.76331	13:02:59	D	2.90
2	AMRITSAR	TARSIKKA	S-NPP	31.64094	75.06425	13:02:59	D	2.30
3	FATEHGARH SAHIB	AMLOH	S-NPP	30.55219	76.11137	01:52:59	N	4.00
4	FATEHGARH SAHIB	AMLOH	S-NPP	30.55350	76.11298	01:52:59	N	3.50
5	FATEHGARH SAHIB	AMLOH	S-NPP	30.55617	76.11199	01:52:59	N	4.00
6	FIROZPUR	FIROZPUR	S-NPP	30.97972	74.52462	13:02:59	D	15.70
7	JALANDHAR	SHAHKOT	S-NPP	31.03820	75.29009	13:02:59	D	5.50
8	KAPURTHALA	KAPURTHALA	S-NPP	31.35879	75.33254	13:02:59	D	6.00
9	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.20218	75.06394	13:02:59	D	11.70
10	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.20311	75.06843	13:02:59	D	10.70
11	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27745	75.12884	13:02:59	D	4.40
12	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.32188	75.18946	01:52:59	N	0.90
13	PATIALA	PATRAM	S-NPP	29.85648	76.17579	13:02:59	D	4.90
14	PATIALA	PATRAM	S-NPP	29.93419	76.01724	13:02:59	D	5.70
15	PATIALA	PATRAM	S-NPP	30.03644	76.08739	13:02:59	D	2.40
16	PATIALA	SAMANA	S-NPP	30.04725	76.14054	13:02:59	D	3.40
17	SANGRUR	ANDANA	S-NPP	29.76745	75.93661	13:02:59	D	4.40
18	SANGRUR	BHAWANIGARH	S-NPP	30.29716	76.10535	13:02:59	D	6.30
19	TARN TARAN	TARN TARAN	S-NPP	31.52899	74.84457	13:02:59	D	4.40
20	TARN TARAN	TARN TARAN	S-NPP	31.52990	74.84304	13:02:59	D	5.10

Details of residue burning events in Haryana on 08-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMBALA	SHAHZADPUR	S-NPP	30.46783	76.92987	13:02:59	D	5.90
2	FARIDABAD	BALLABGARH	S-NPP	28.27093	77.27520	01:52:59	N	1.10
3	FARIDABAD	BALLABGARH	S-NPP	28.27170	77.27354	01:52:59	N	1.00
4	FATEHABAD	BHUNA	S-NPP	29.44786	75.69604	13:02:59	D	1.30
5	FATEHABAD	TOHANA	S-NPP	29.67258	75.80912	13:02:59	D	2.40
6	HISAR	NARNAUND	S-NPP	29.20780	76.10950	13:02:59	D	3.10
7	JIND	NARWANA	S-NPP	29.59587	76.23729	13:02:59	D	3.50
8	JIND	PILLUKHERA	S-NPP	29.37903	76.52146	13:02:59	D	2.10
9	KAITHAL	GUHLA	S-NPP	30.16216	76.42195	13:02:59	D	3.60
10	KAITHAL	PUNDRI	S-NPP	29.66854	76.64877	13:02:59	D	4.80
11	PALWAL	HATHIN	S-NPP	28.01901	77.28533	13:02:59	D	3.30
12	PALWAL	PALWAL	S-NPP	28.09865	77.42823	13:02:59	D	6.70
13	YAMUNANAGAR	MUSTAFABAD	S-NPP	30.29038	77.18534	13:02:59	D	5.90

Details of residue burning events in Uttar Pradesh on 08-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ALIGARH	KHAIR	S-NPP	28.00107	77.57193	13:02:59	D	2.60
2	ALIGARH	KHAIR	S-NPP	28.03091	77.64474	13:02:59	D	2.70
3	ALIGARH	KHAIR	S-NPP	28.03229	77.77972	13:02:59	D	4.30
4	BULANSAHAR	KHURJA	S-NPP	28.28661	77.81149	13:02:59	D	1.80
5	BULANSAHAR	KHURJA	S-NPP	28.28850	77.81342	13:02:59	D	2.80
6	BULANSAHAR	SIKANDARABAD	S-NPP	28.37026	77.70798	13:02:59	D	6.00
7	BULANSAHAR	SIKANDARABAD	S-NPP	28.37127	77.71333	13:02:59	D	6.00
8	BULANSAHAR	SIKANDARABAD	S-NPP	28.37218	77.71043	13:02:59	D	10.20
9	HAPUR	HAPUR	S-NPP	28.57868	77.69806	13:02:59	D	2.70
10	KAUSHAMBI	SIRATHU	S-NPP	25.60923	81.38492	13:02:59	D	2.60
11	MATHURA	CHHATA	S-NPP	27.92616	77.49776	13:02:59	D	3.70
12	SAMBHAL	CHANDAUSI	S-NPP	28.44795	78.74984	13:02:59	D	7.10
13	SAMBHAL	CHANDAUSI	S-NPP	28.48488	78.68358	13:02:59	D	1.80
14	SAMBHAL	SAMBHAL	S-NPP	28.54636	78.59075	13:02:59	D	2.90
15	SAMBHAL	SAMBHAL	S-NPP	28.56454	78.58652	13:02:59	D	5.20
16	SAMBHAL	SAMBHAL	S-NPP	28.65387	78.45710	13:02:59	D	3.10

Details of residue burning events in Rajasthan on 08-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	HANUMANGARH	HANUMANGARH	S-NPP	29.63380	74.38605	13:02:59	D	1.90

Details of residue burning events in Madhya Pradesh on 08-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m²)
1	DAMOH	PATHARIA	S-NPP	23.87502	79.37013	01:52:59	N	0.60
2	GUNA	GUNA	S-NPP	24.89904	76.92184	13:02:59	D	5.30
3	GUNA	GUNA	S-NPP	24.95596	76.96342	13:02:59	D	2.90
4	GUNA	GUNA	S-NPP	24.95889	76.96458	13:02:59	D	8.20
5	MORENA	JORA	S-NPP	26.37306	77.72298	13:02:59	D	3.30
6	MORENA	KAILARAS	S-NPP	26.34751	77.67570	13:02:59	D	7.30
7	SHIVPURI	KOLARAS	S-NPP	24.87814	77.67636	13:02:59	D	3.10

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](#)
