

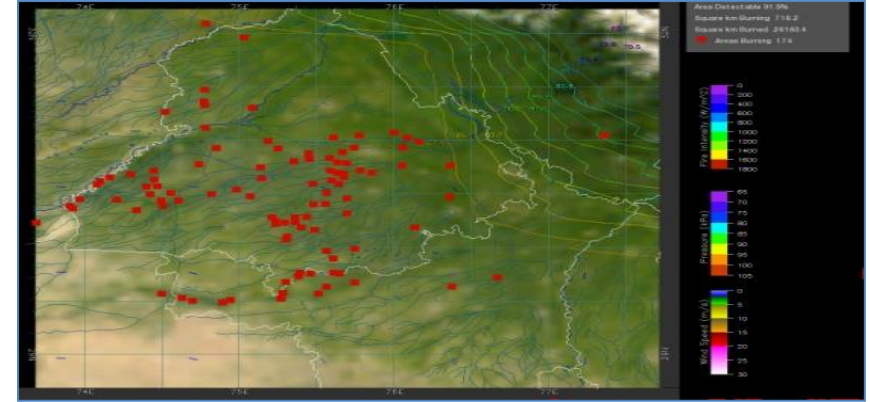
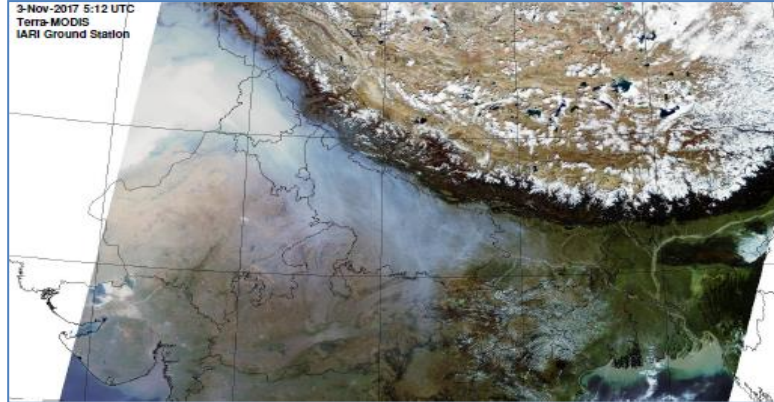


MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2024

Bulletin
No. 39

Events Date:
23-Oct-2024

Issued on:
23-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

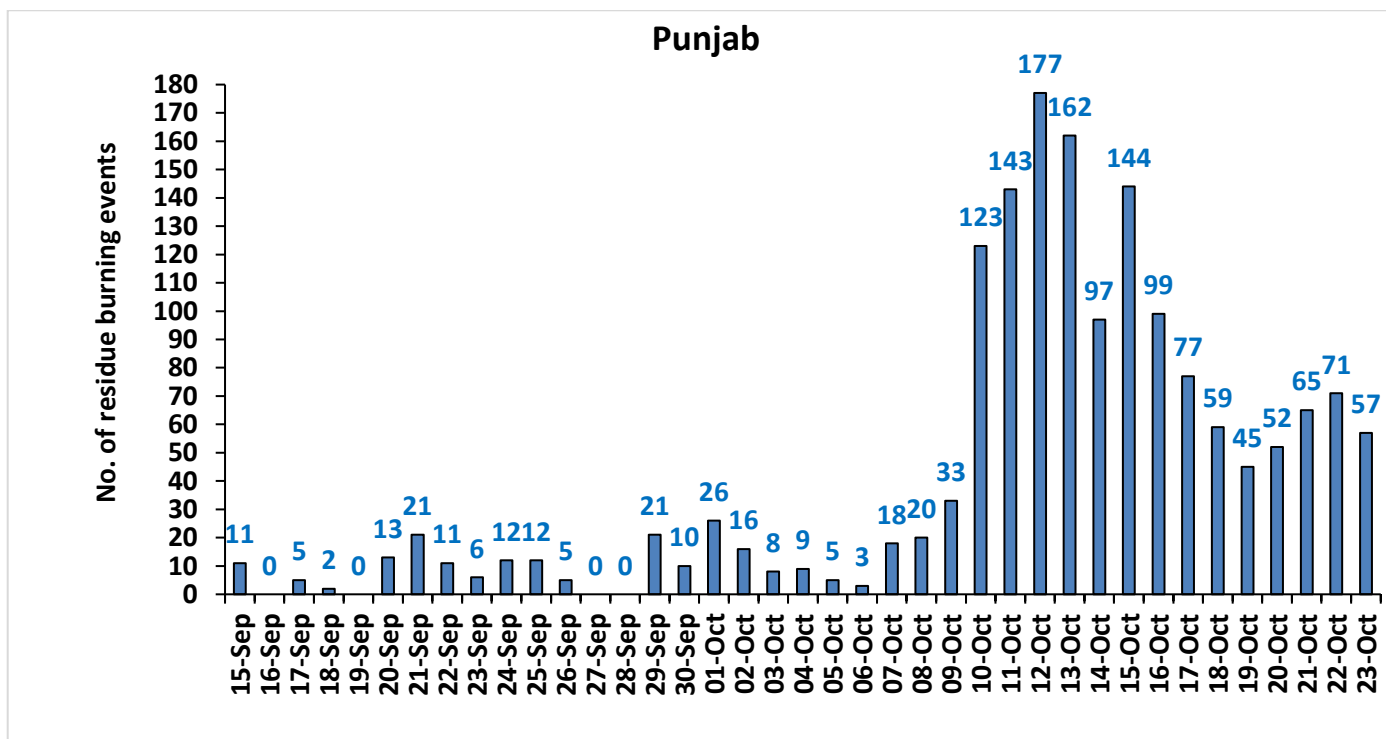
<https://creams.iari.res.in>



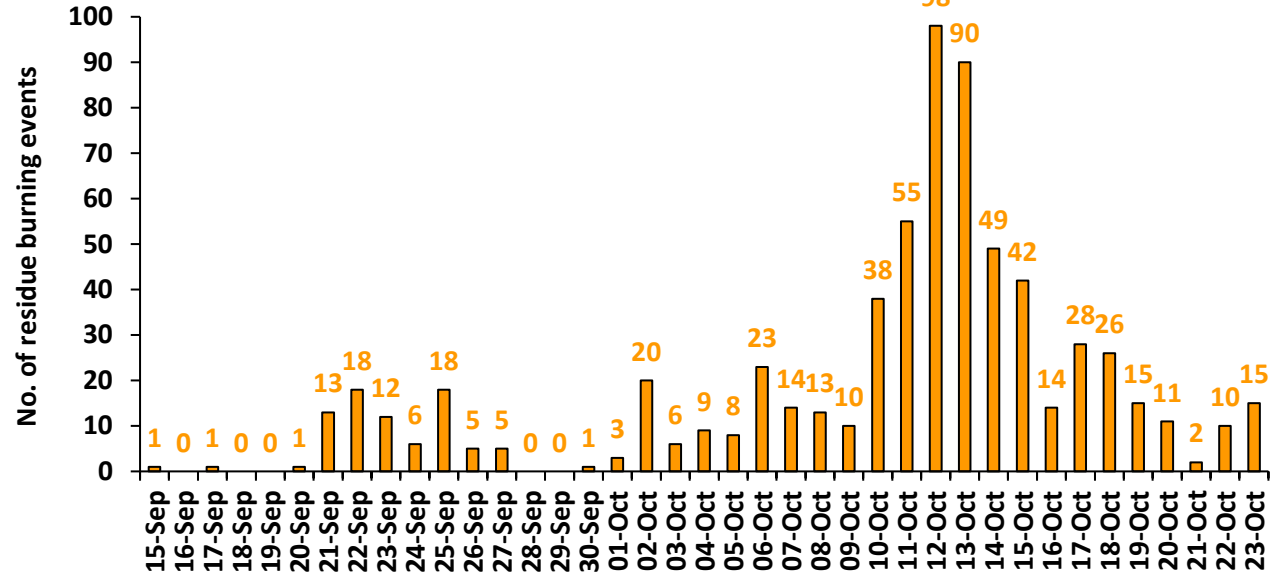
Highlights for 23-Oct-2024

- The active fire events due to rice residue burning were monitored using satellite remote sensing, following the "Standard Protocol " recommended by CAQM.
- Satellites detected **384** residue burning events in the six study States on **23-Oct-2024**.
- The state wise events detected on **23-Oct-2024** were **57** in Punjab, **15** in Haryana, **68** in UP, **00** in Delhi, **50** in Rajasthan and **194** in MP.
- Total **4262** burning events were detected in the six states between **15-Sept-2024** and **23-Oct-2024**, which are distributed as **1638**, **680**, **808**, **11**, **382** and **743** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.
- Detection of burning events was hampered by the presence of scattered clouds over Rajasthan and western Madhya Pradesh states.

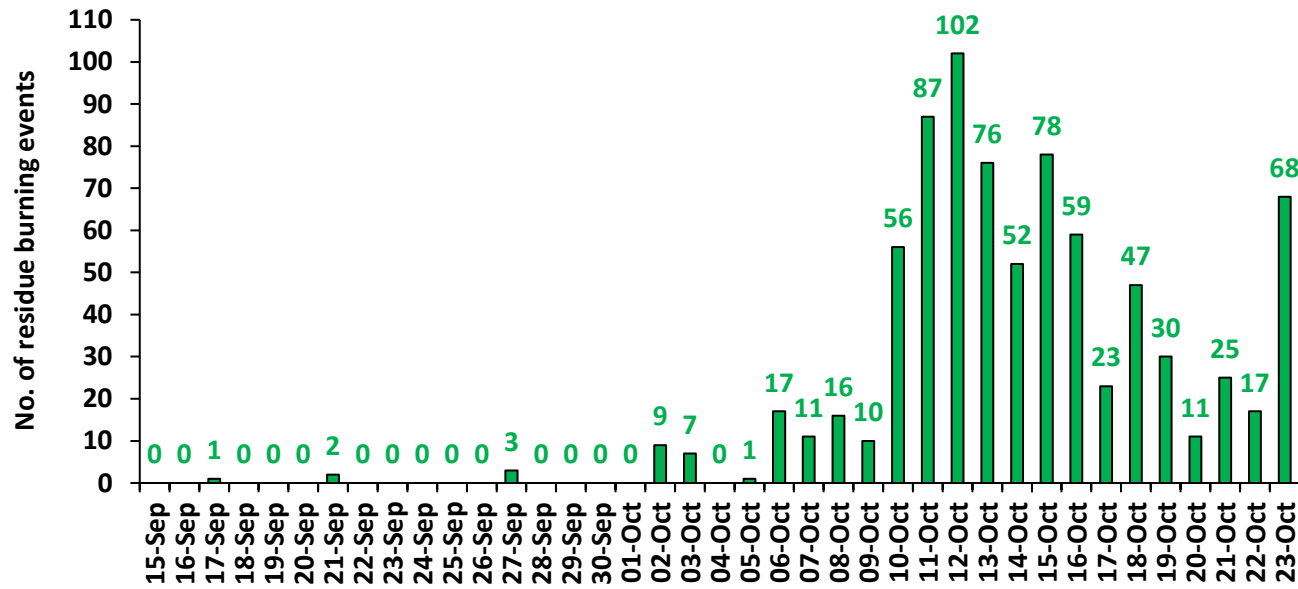
Temporal distribution of rice residue burning events for the study States in 2024



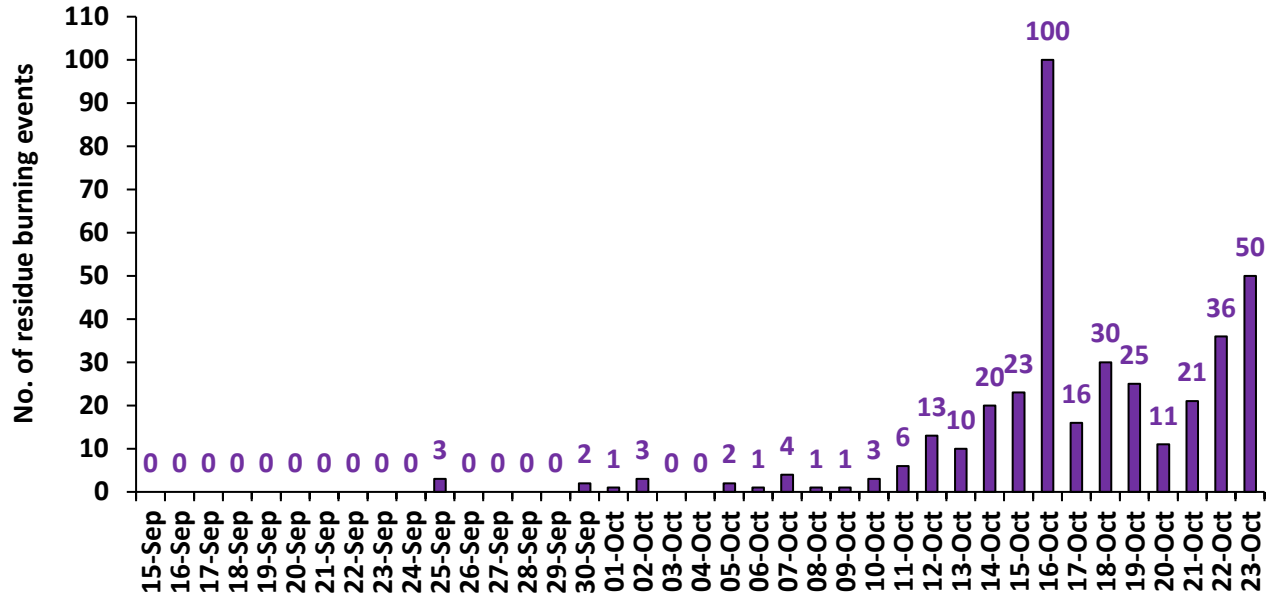
Haryana



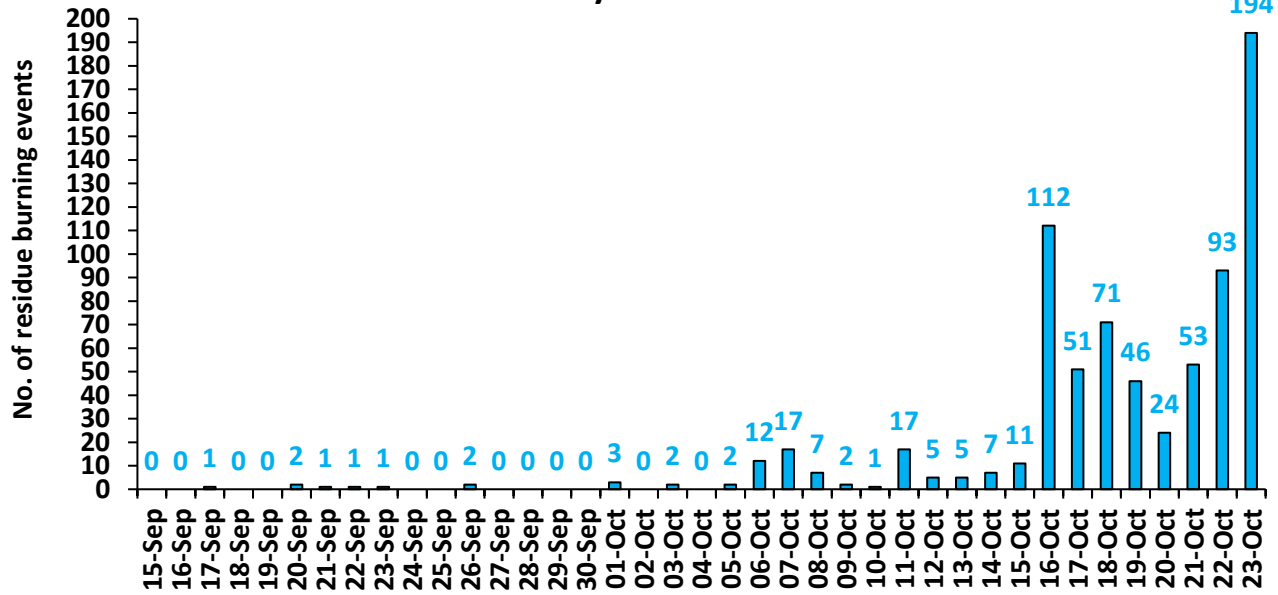
Uttar Pradesh



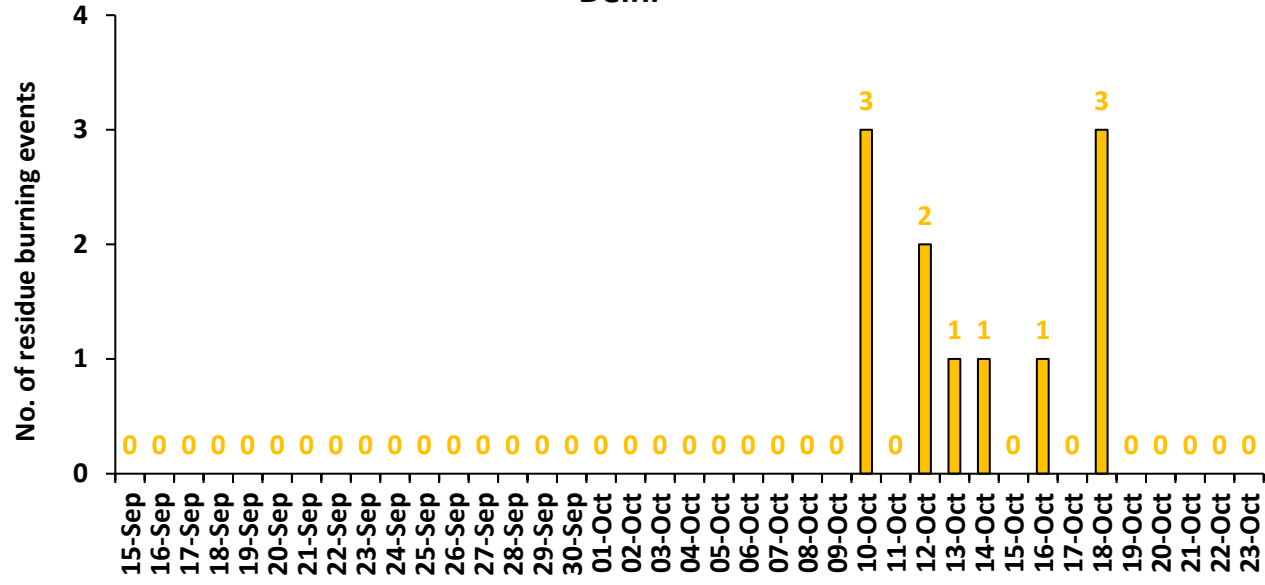
Rajasthan



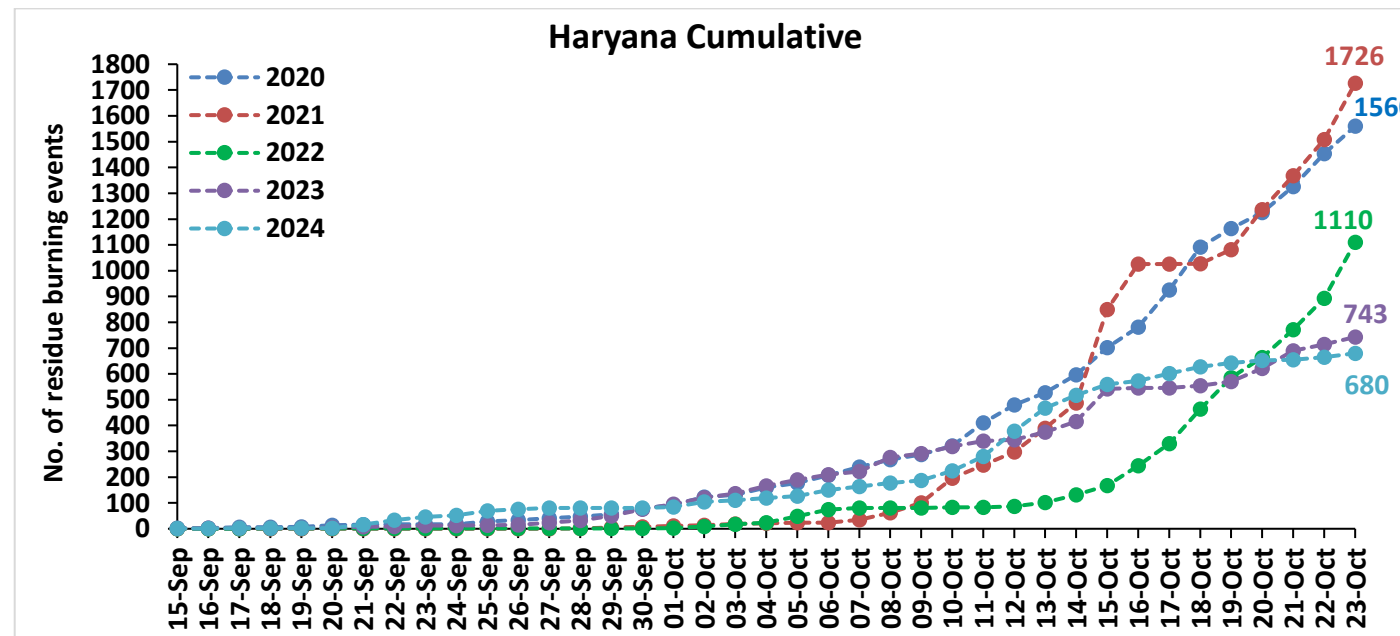
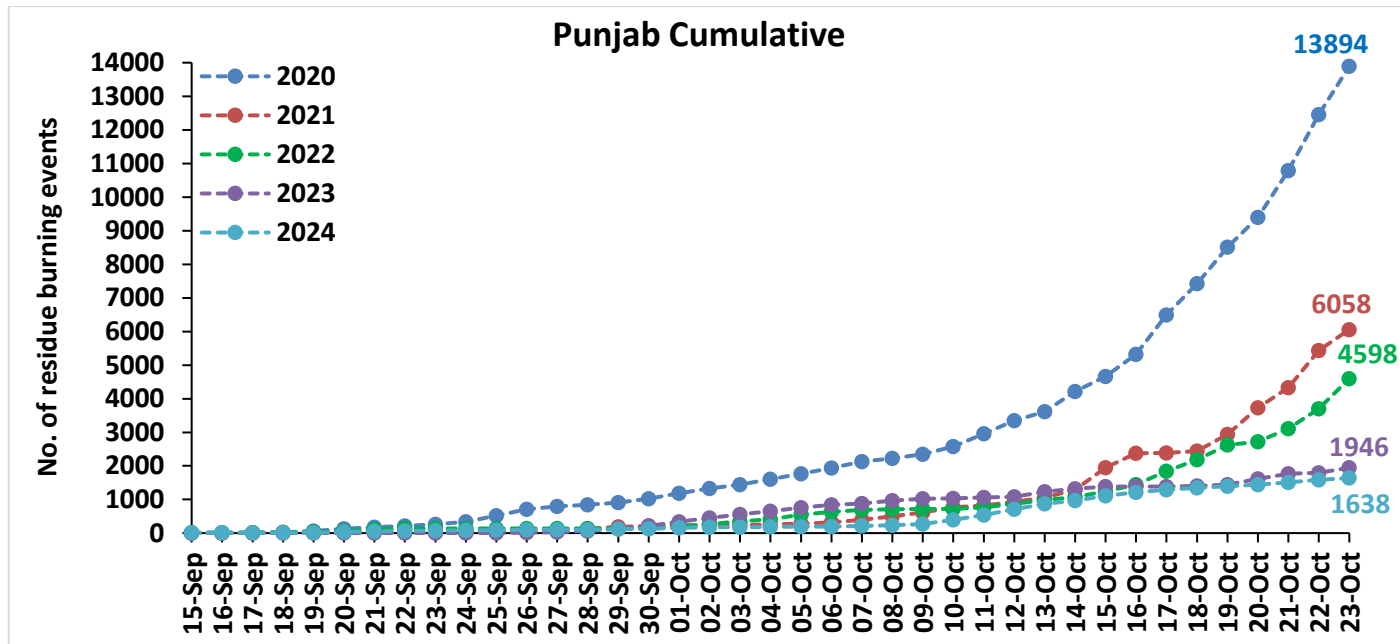
Madhya Pradesh

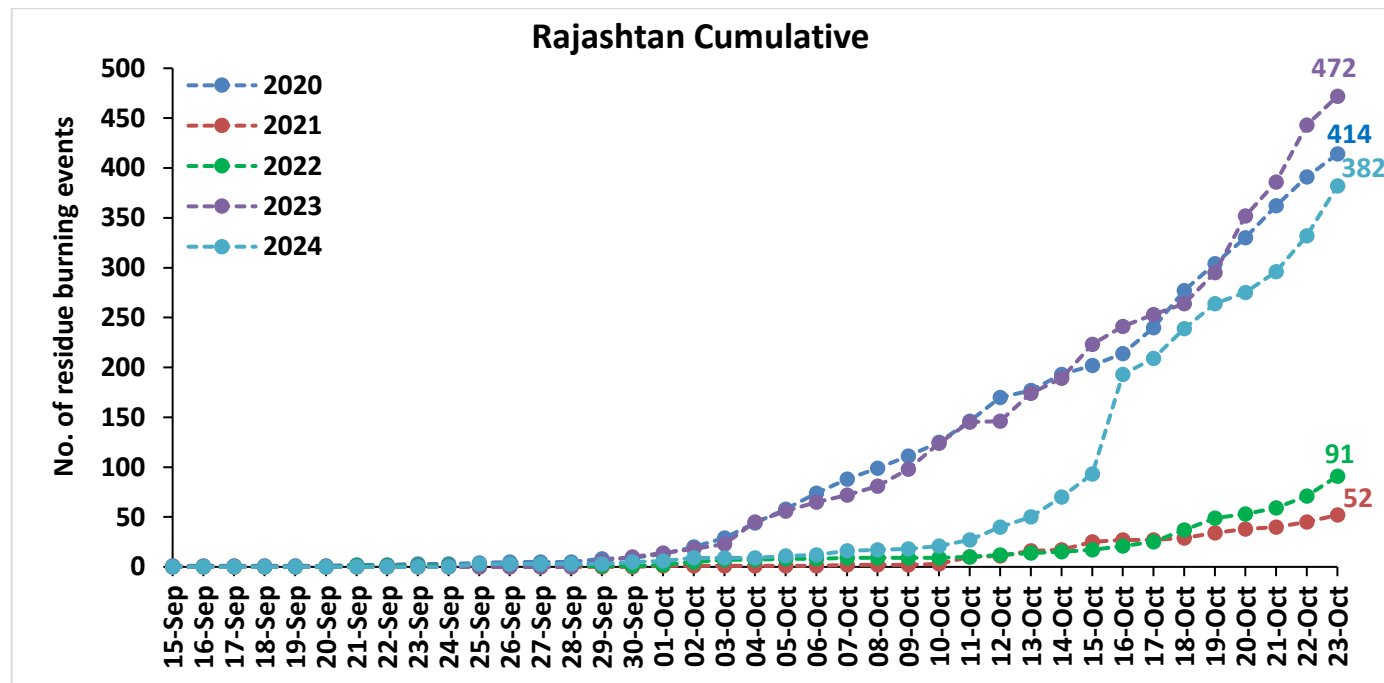
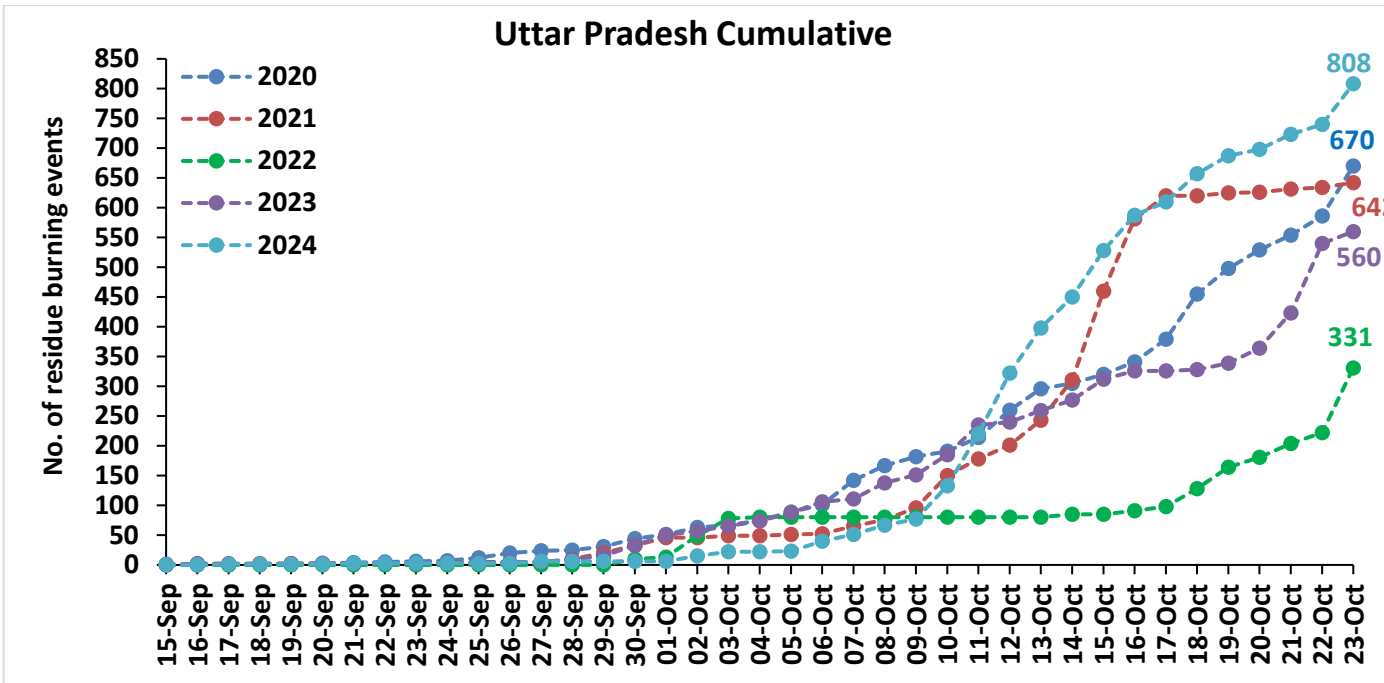


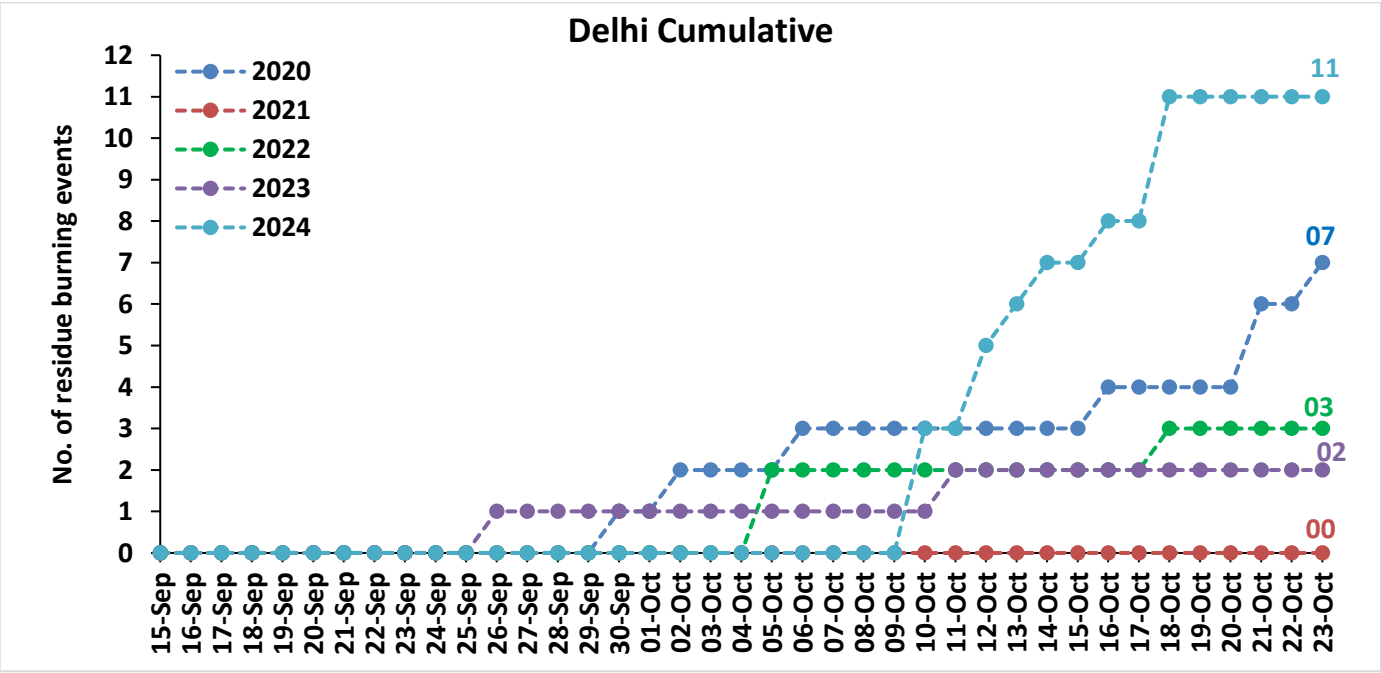
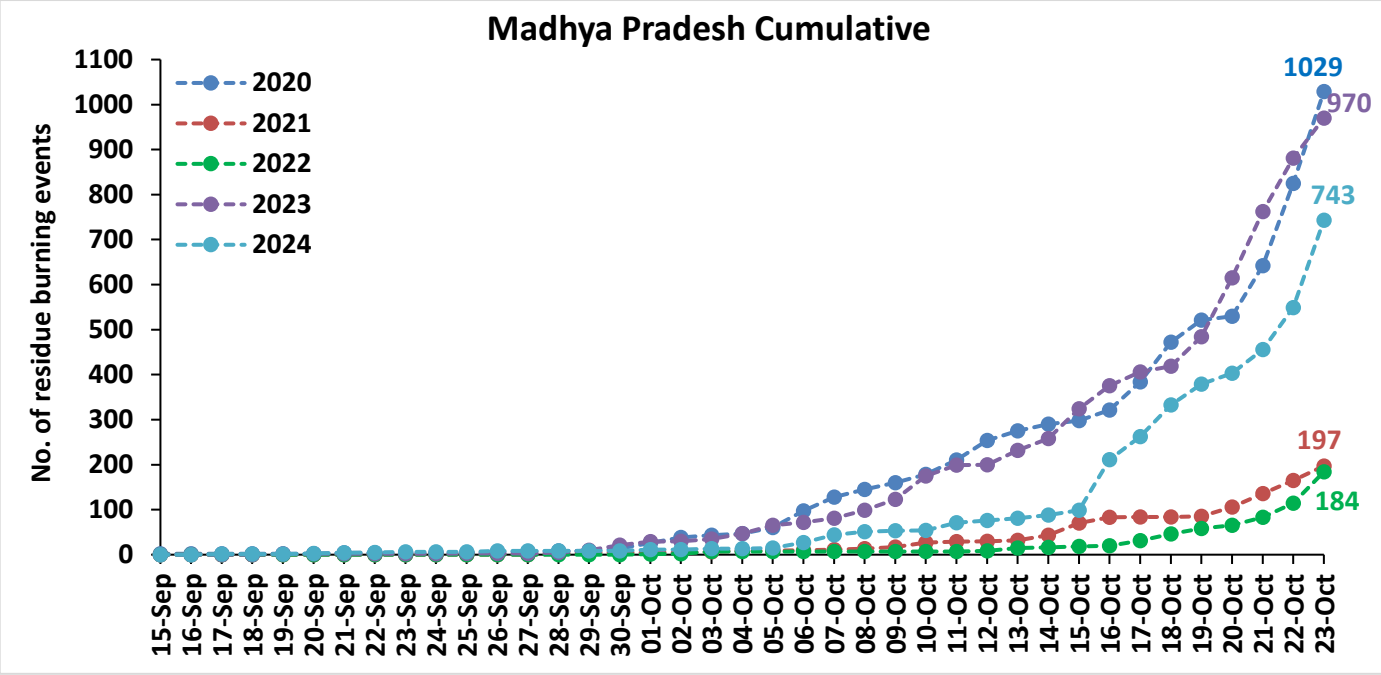
Delhi



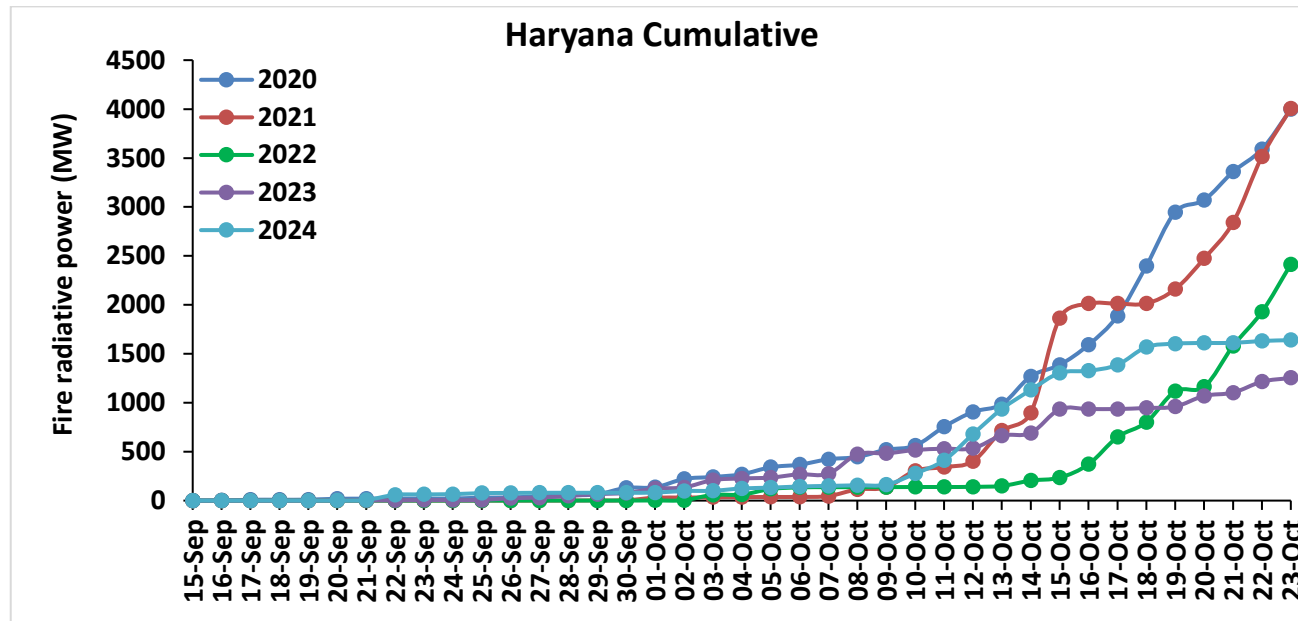
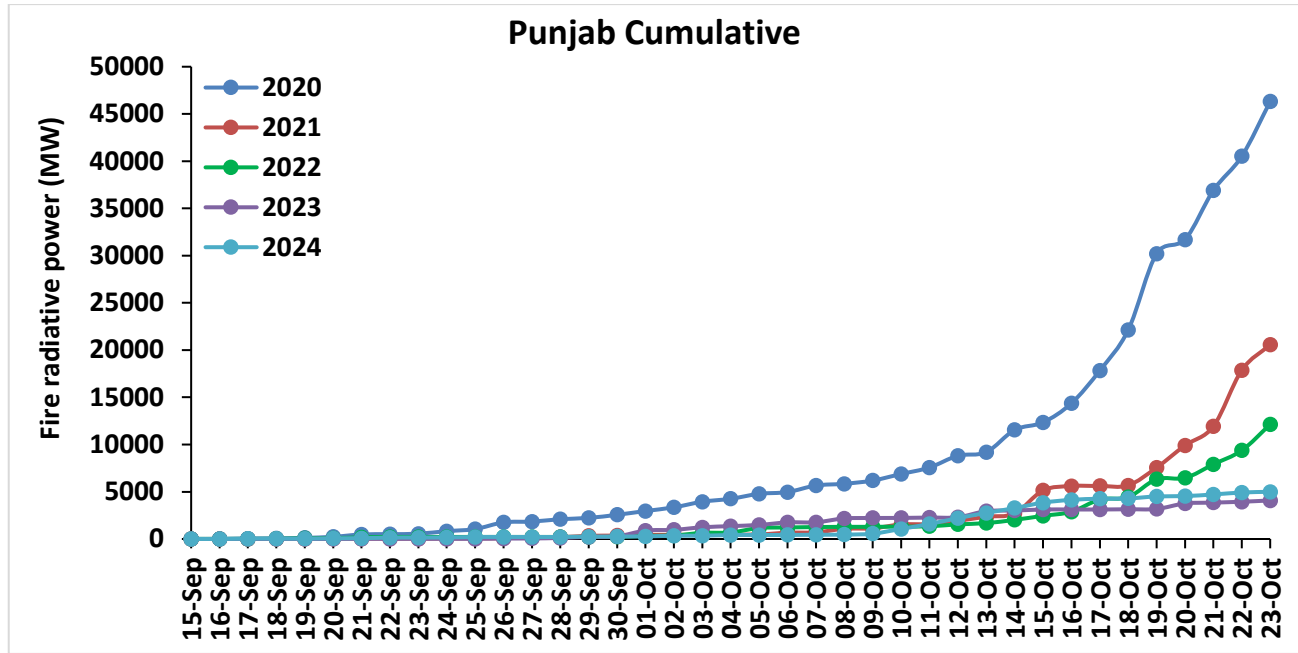
Comparison of residue burning events in current year (2024) with previous years (2020, 2021, 2022 and 2023) for the study States



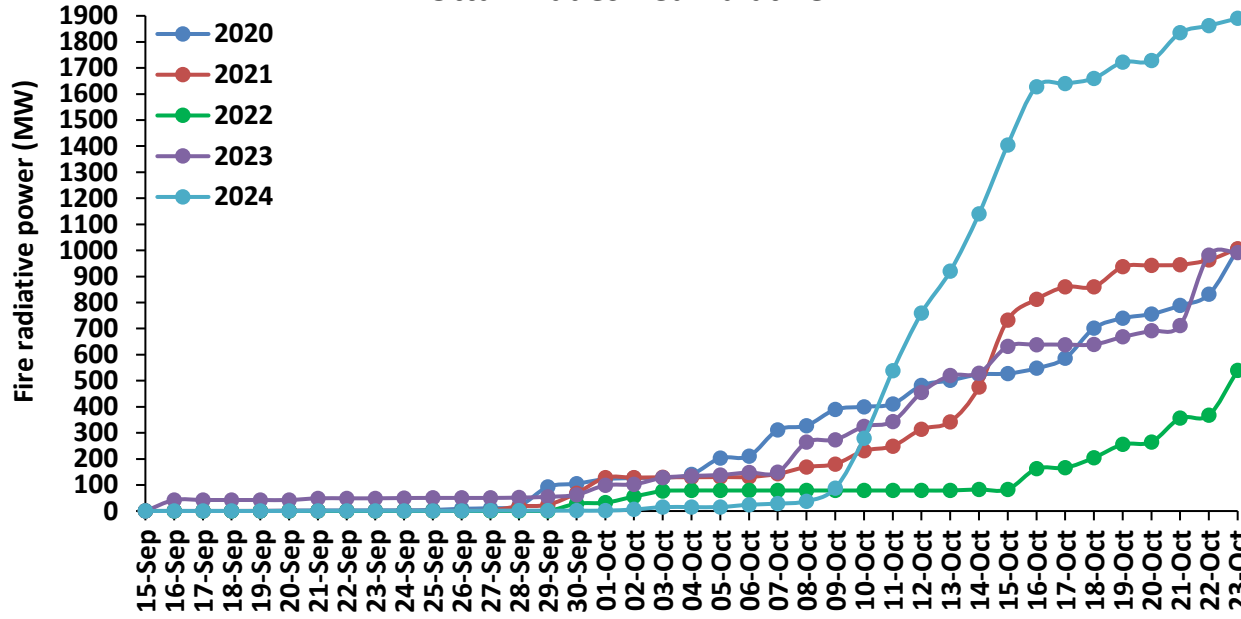




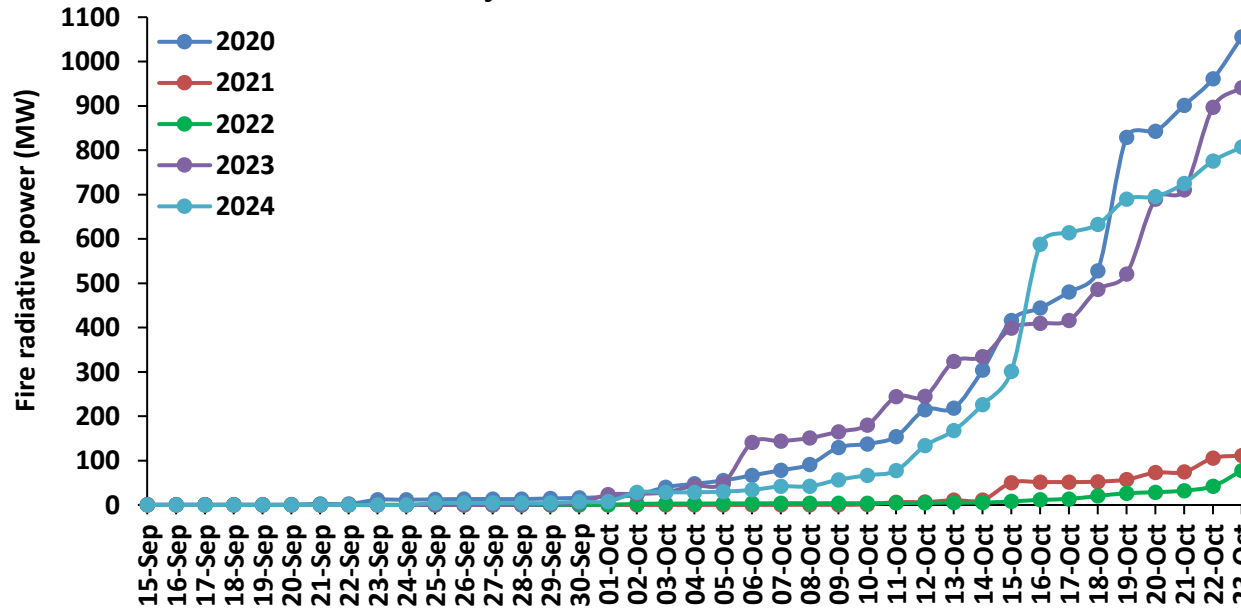
Comparison of residue burning fire power in current year (2024) with previous years (2020,2021,2022 and 2023) for the study States



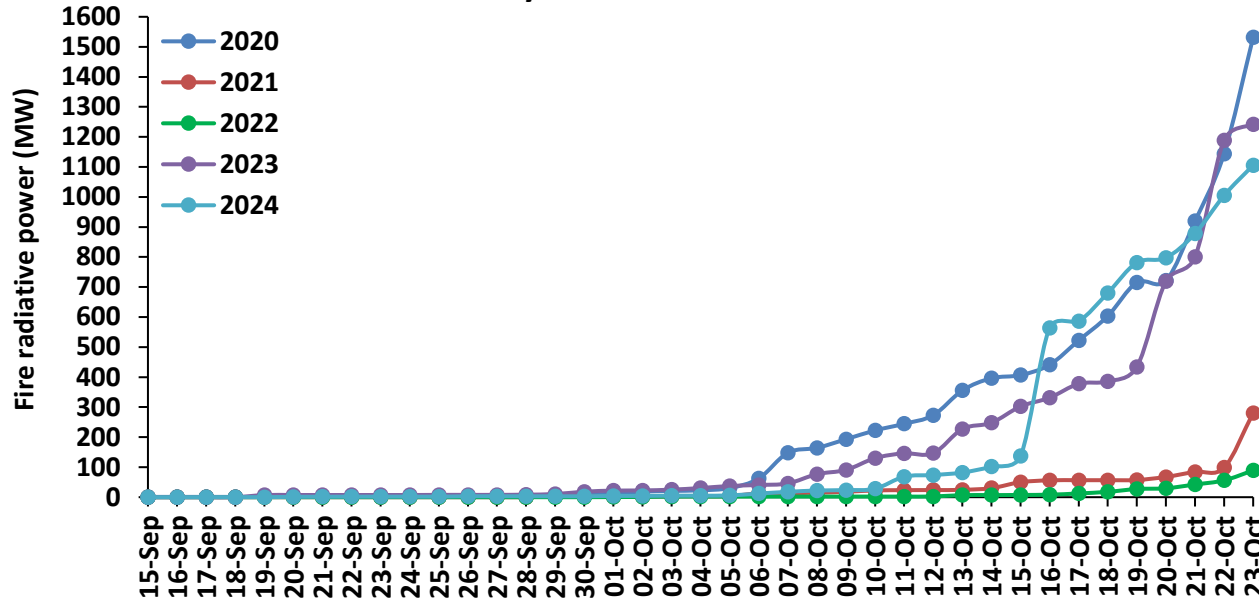
Uttar Pradesh Cumulative



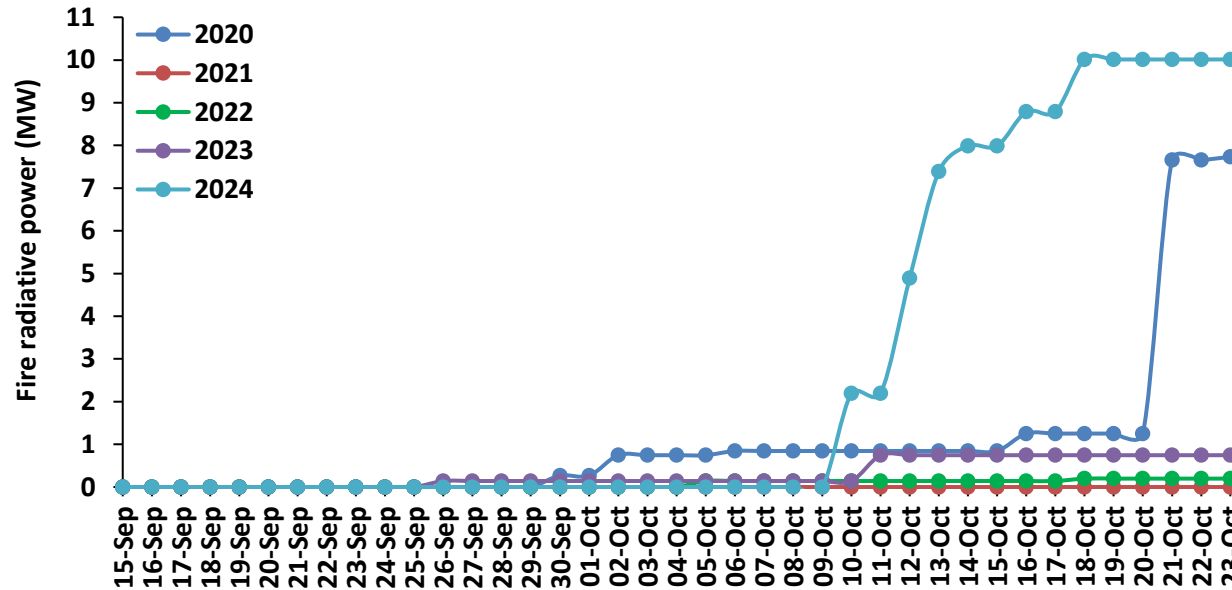
Rajasthan Cumulative



Madhya Pradesh Cumulative

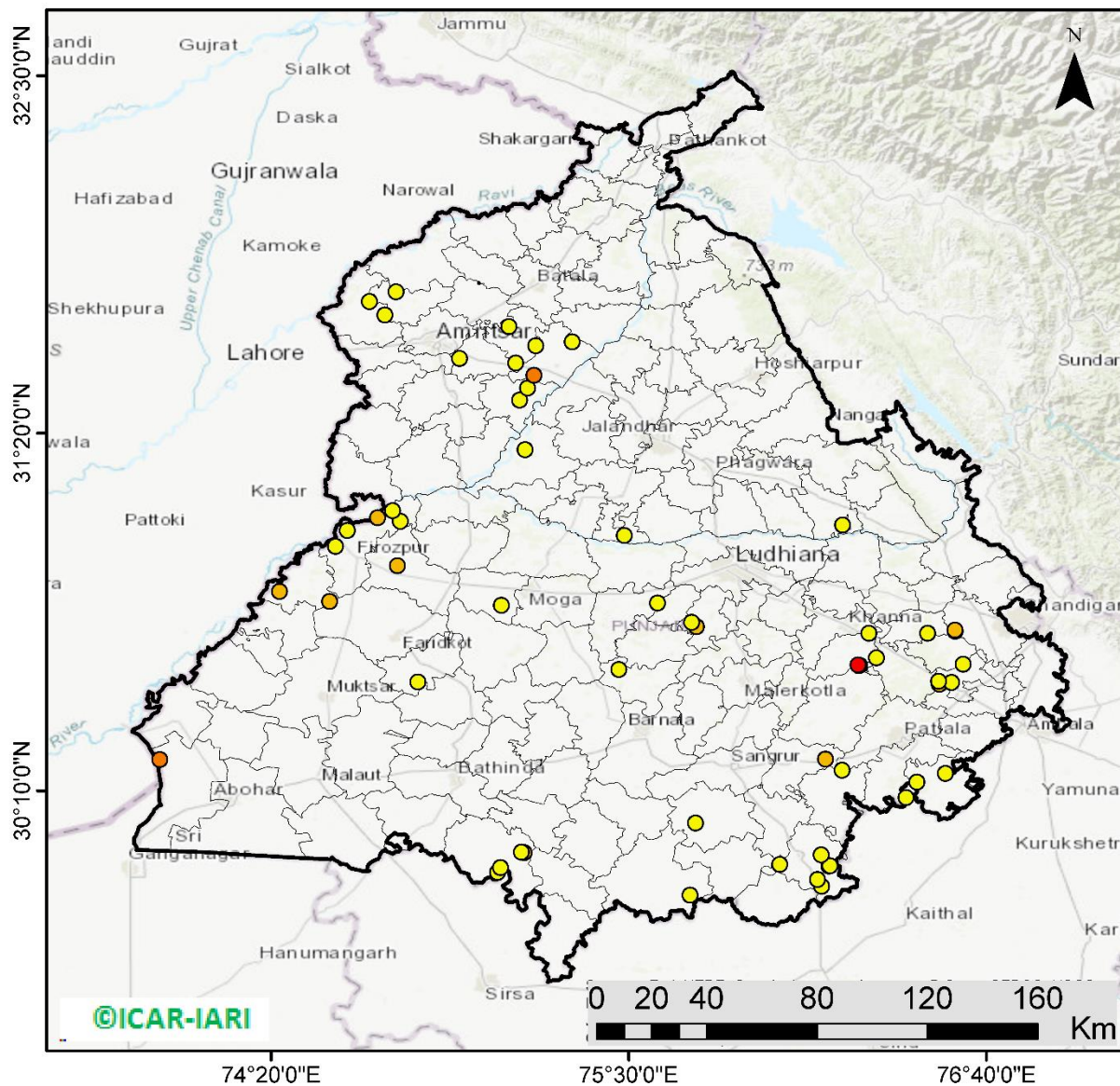


Delhi Cumulative



Punjab

RICE RESIDUE BURNING IN PUNJAB



57 burning events detected in Punjab during (23rd Oct 2024)

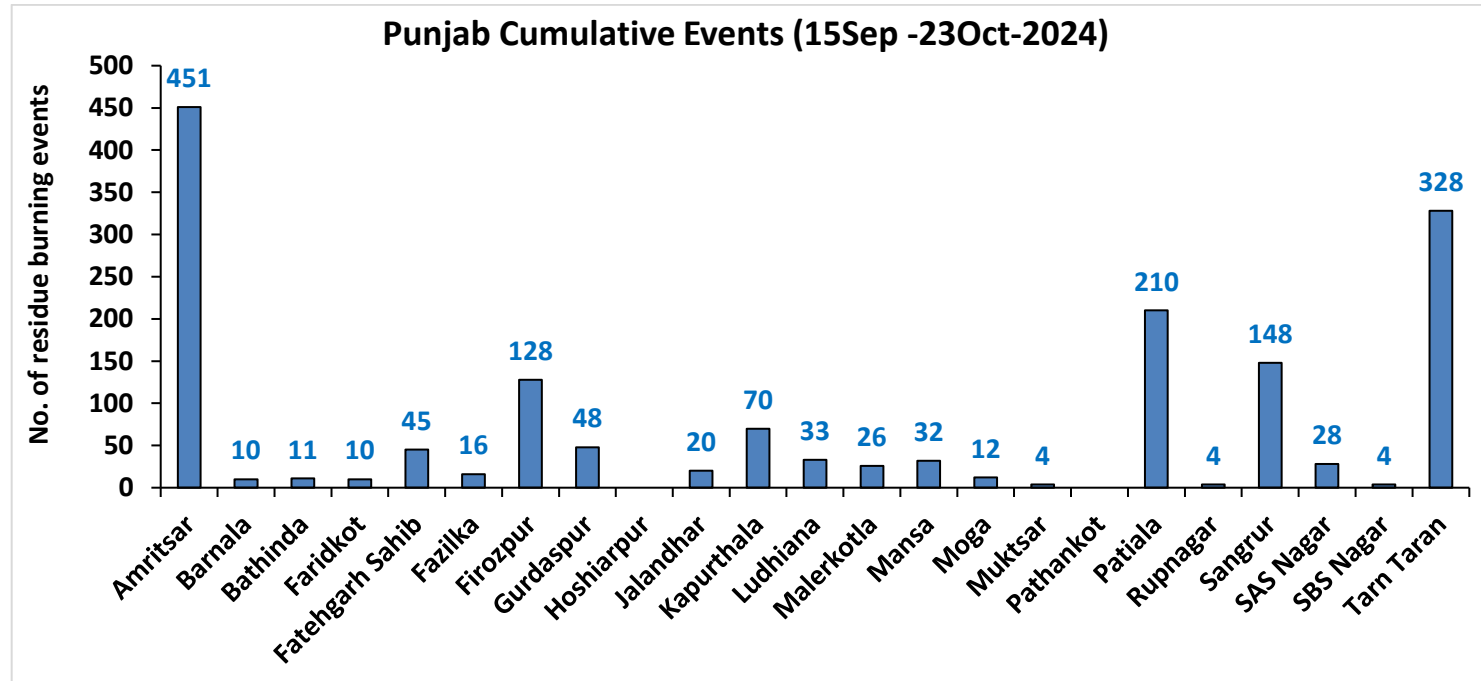
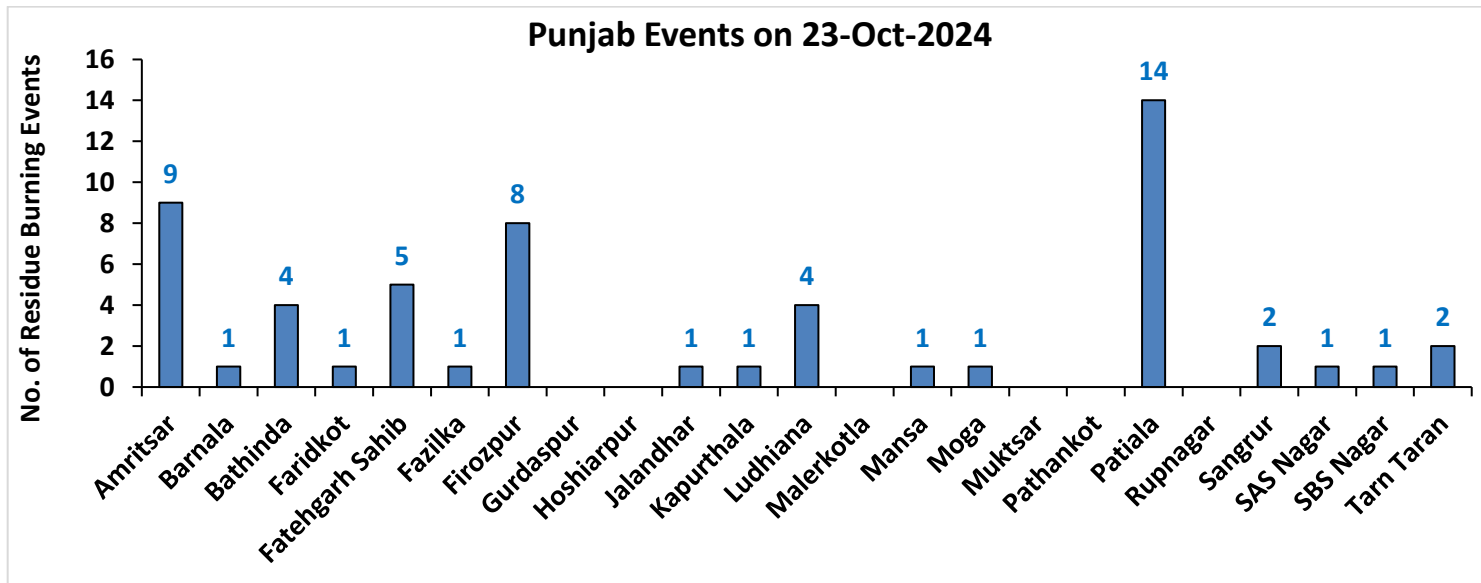
Fire Intensity (W/m²)

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



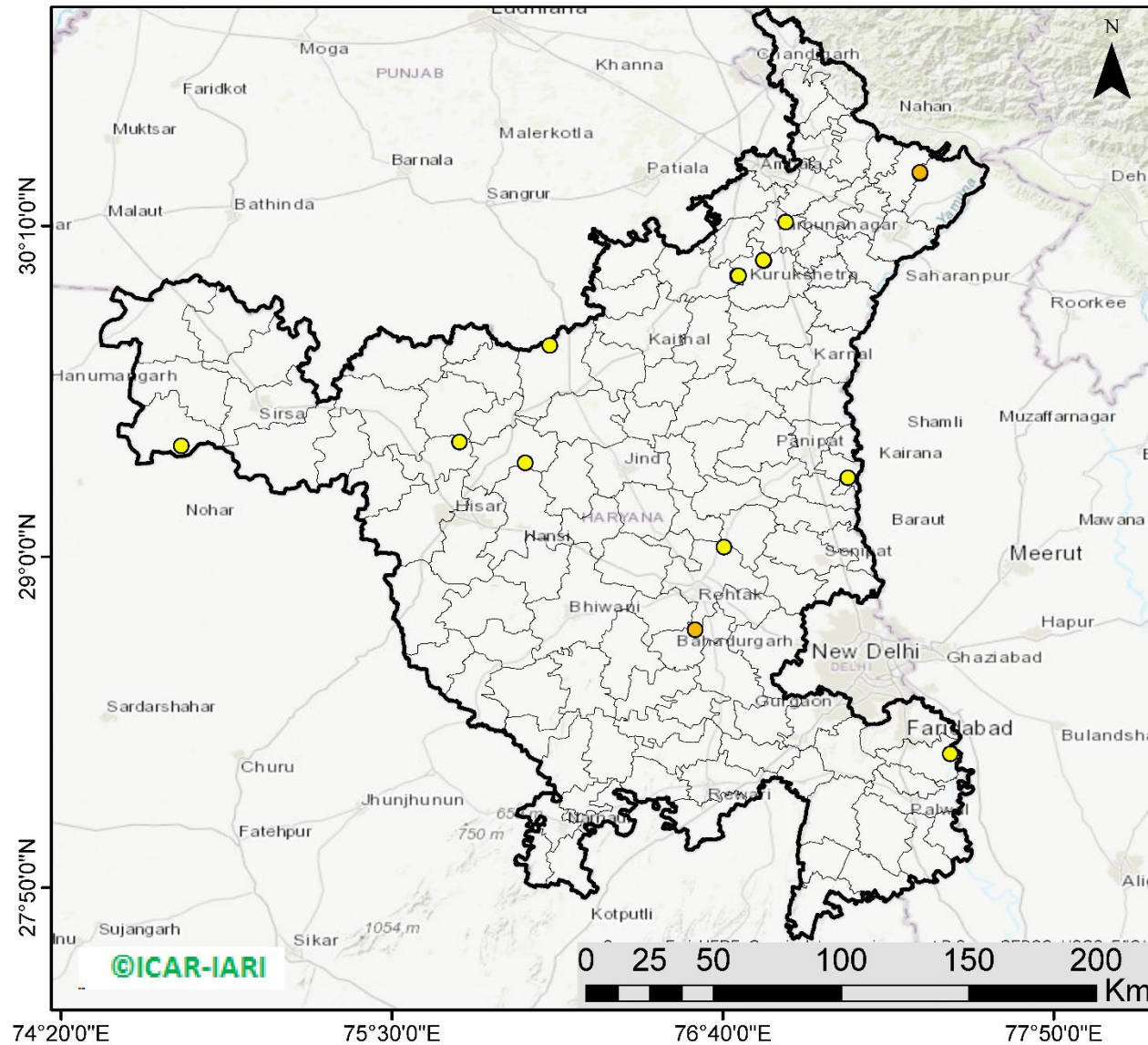
http://103.111.37.126/icar_geoportal/

District-wise cumulative number of residues burning events in Punjab (15Sep-23Oct-2024)



Haryana

RICE RESIDUE BURNING IN HARYANA



15 burning events detected in Haryana on (23rd Oct 2024)

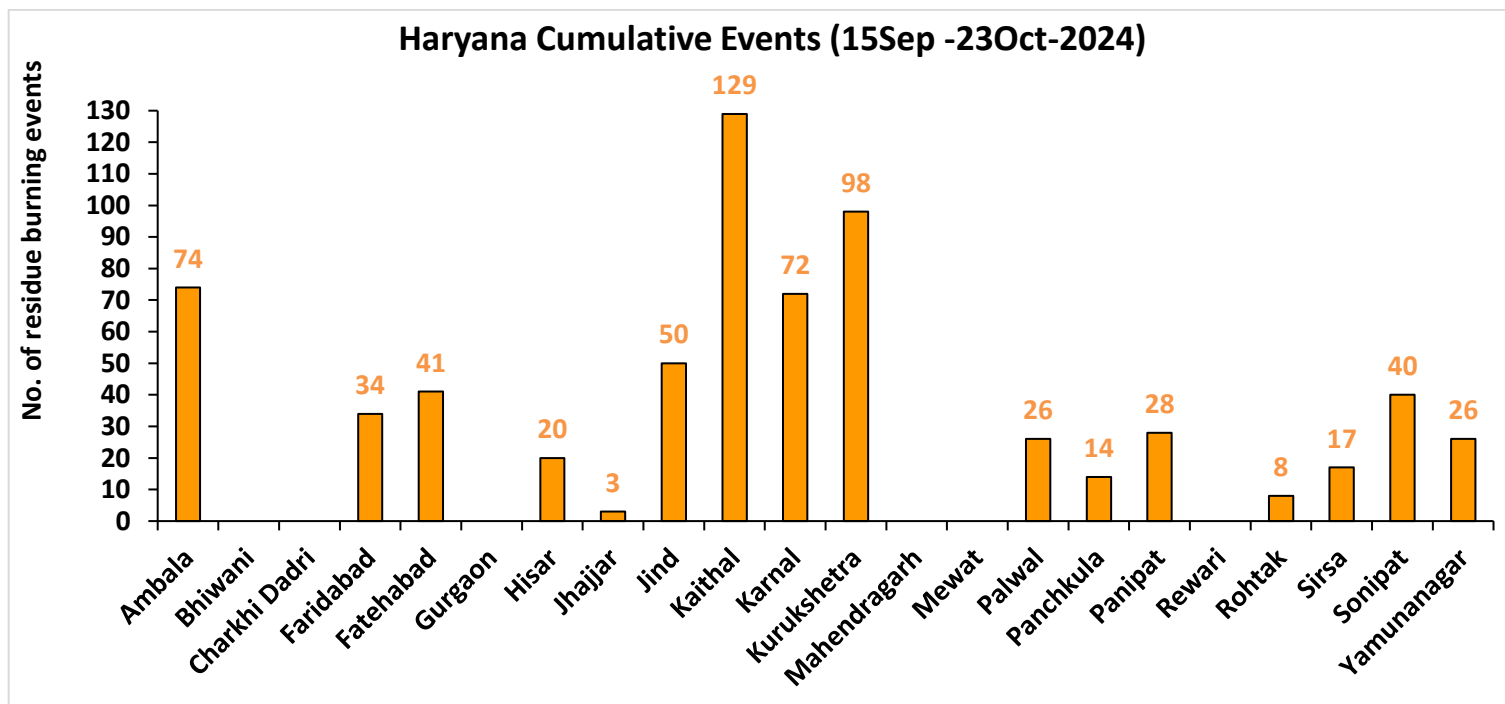
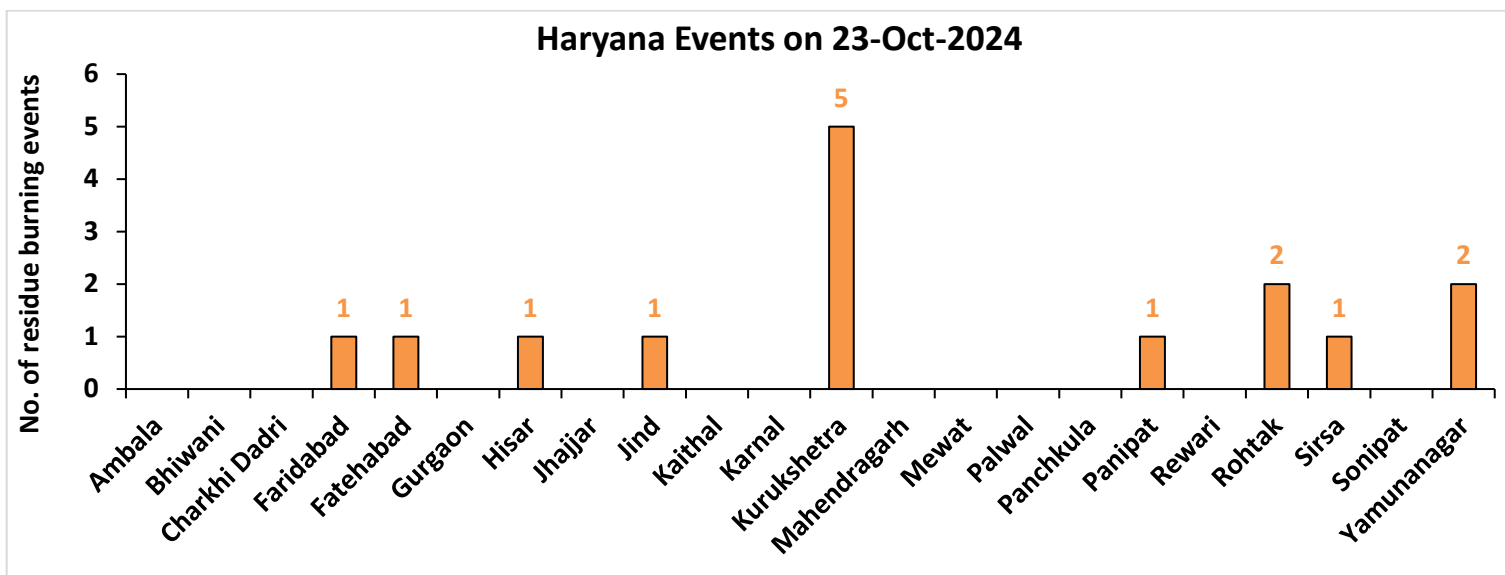
Fire Intensity (W/m²)

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



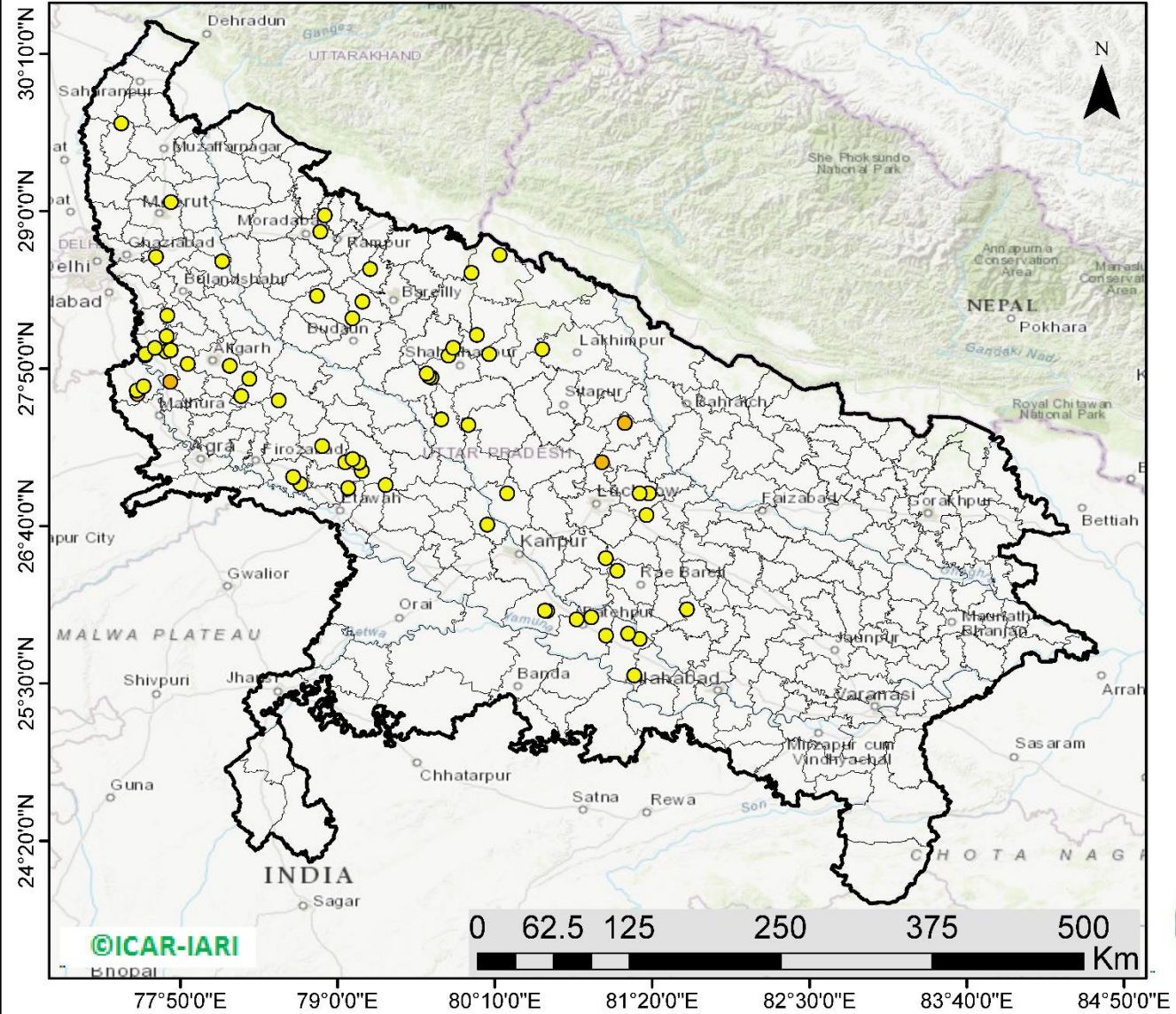
http://103.111.37.126/icar_geoportal/

District-wise cumulative number of residues burning events in Haryana (15Sep-23Oct-2024)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



68 burning events detected in Uttar Pradesh on (23rd Oct 2024)

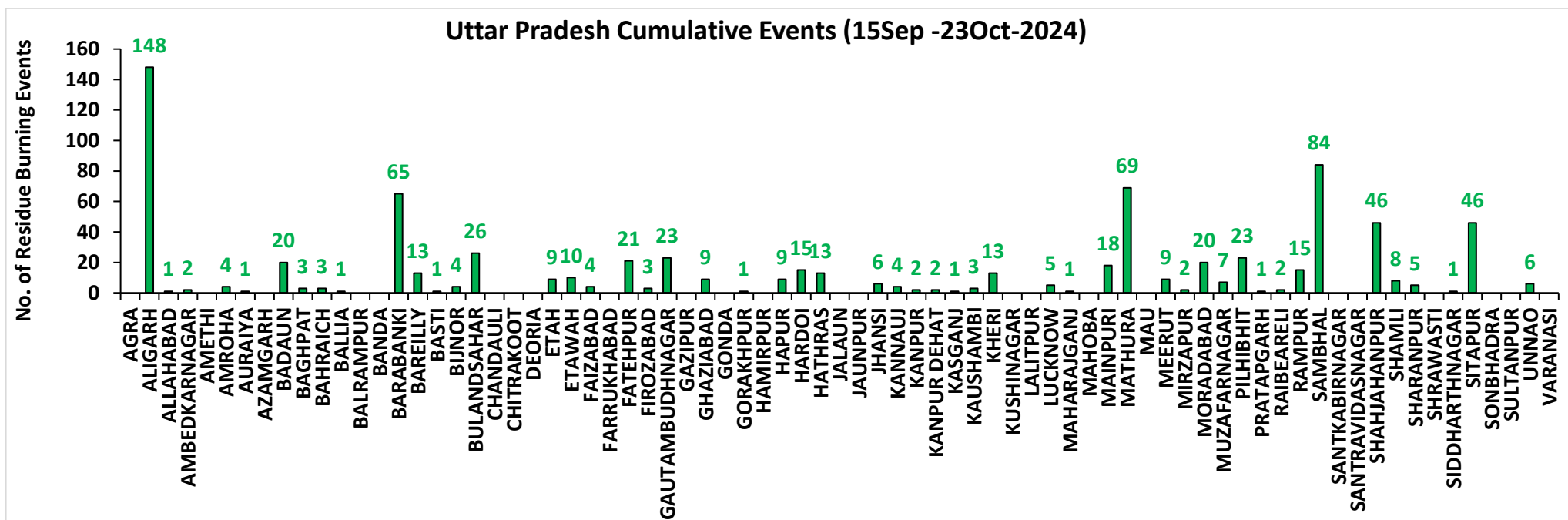
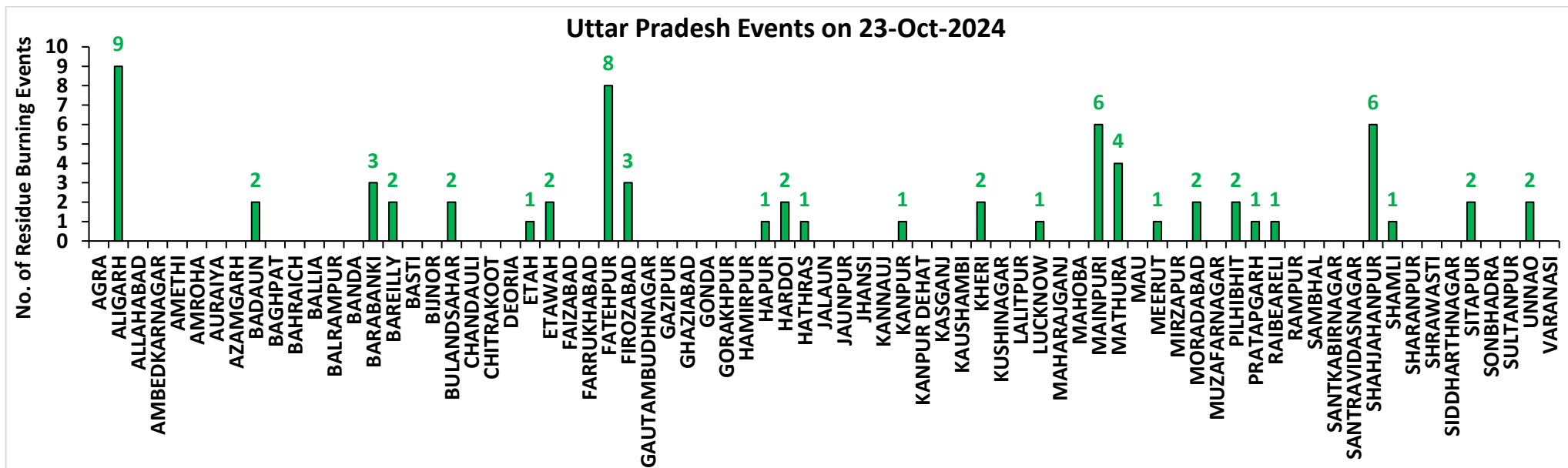
Fire Intensity (W/m2)

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



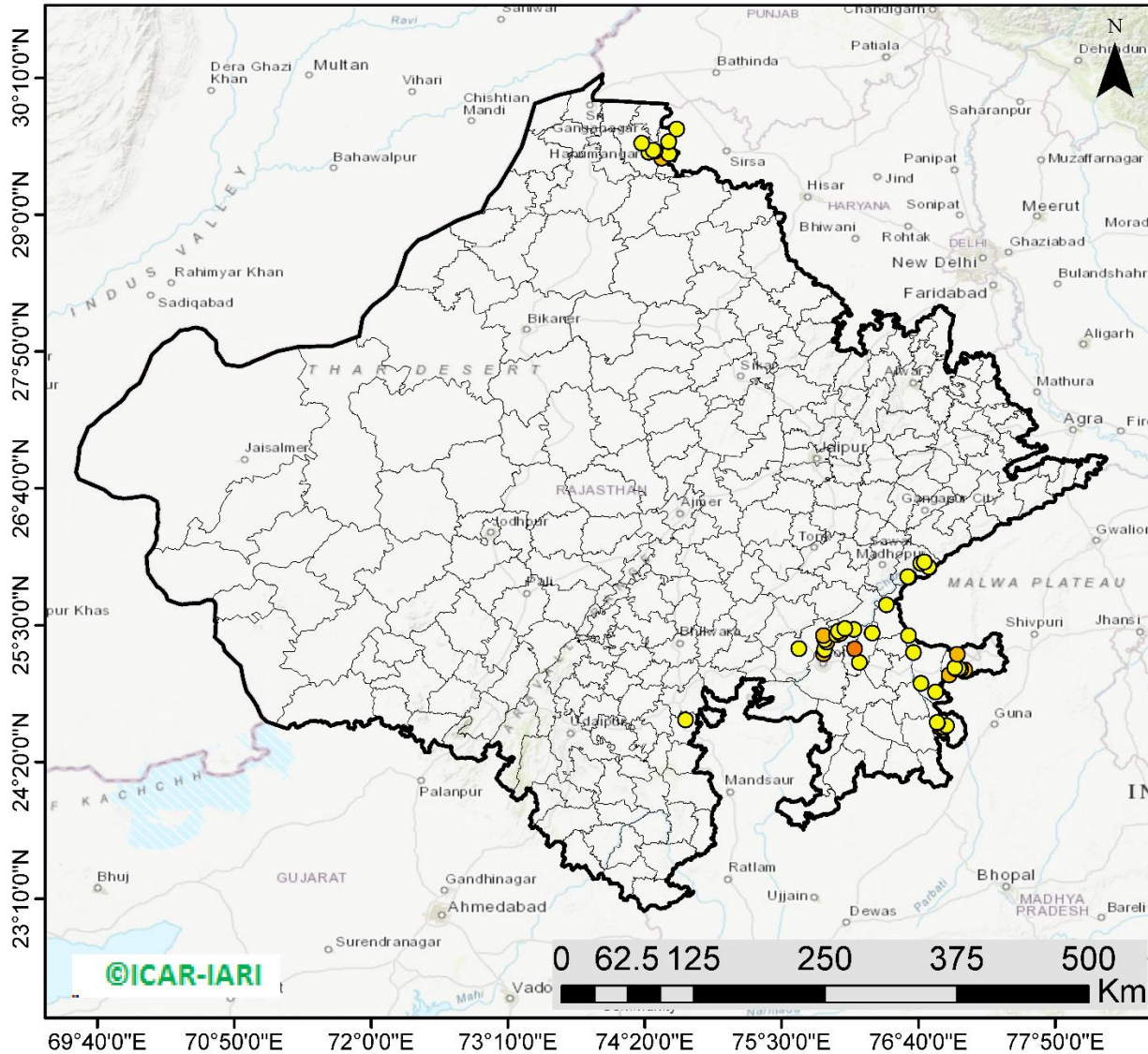
http://103.111.37.126/icar_geoportal/

District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep-23Oct-2024)



Rajasthan

RICE RESIDUE BURNING IN RAJASTHAN



50 burning events
detected in Rajasthan on
(23rd Oct 2024)

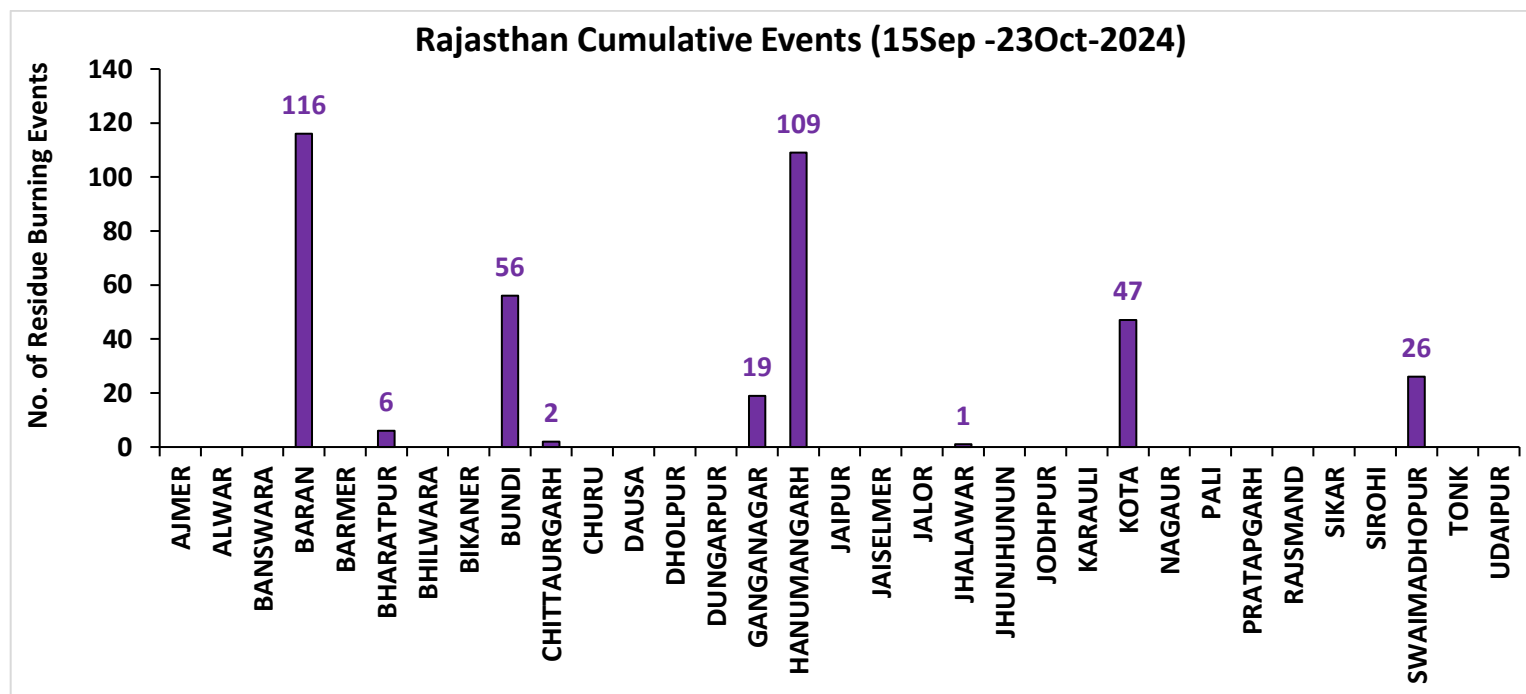
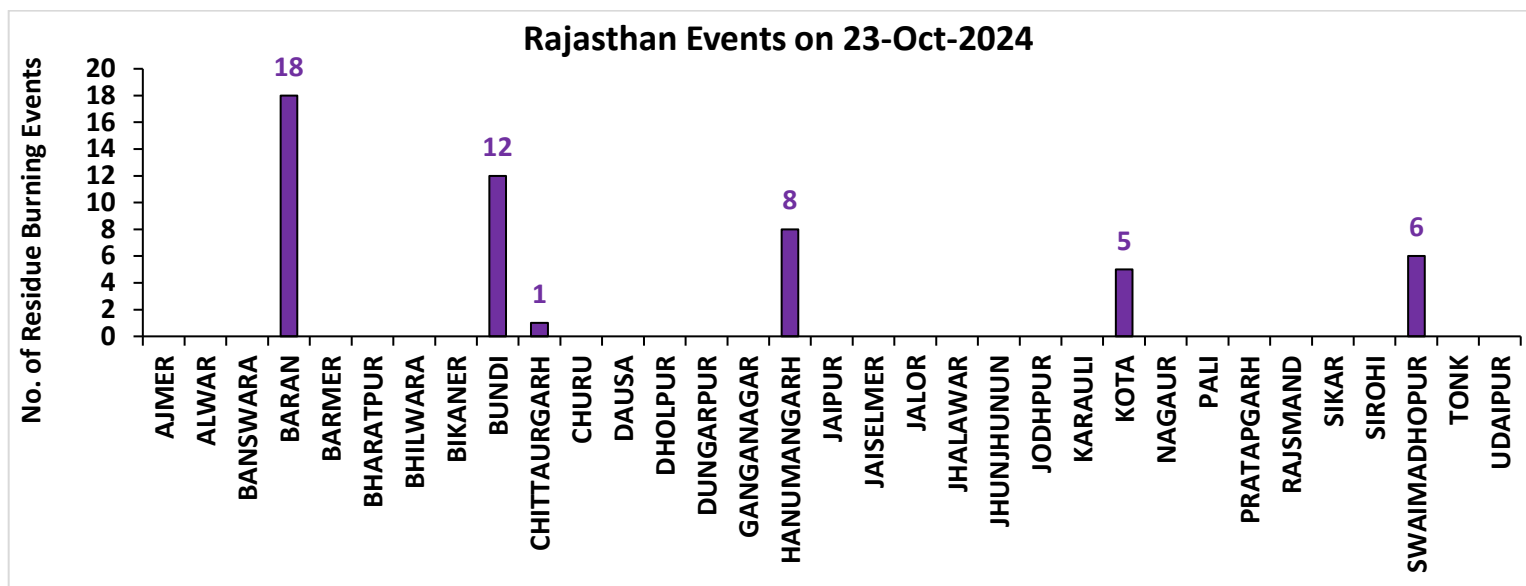
Fire Intensity (W/m²)

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



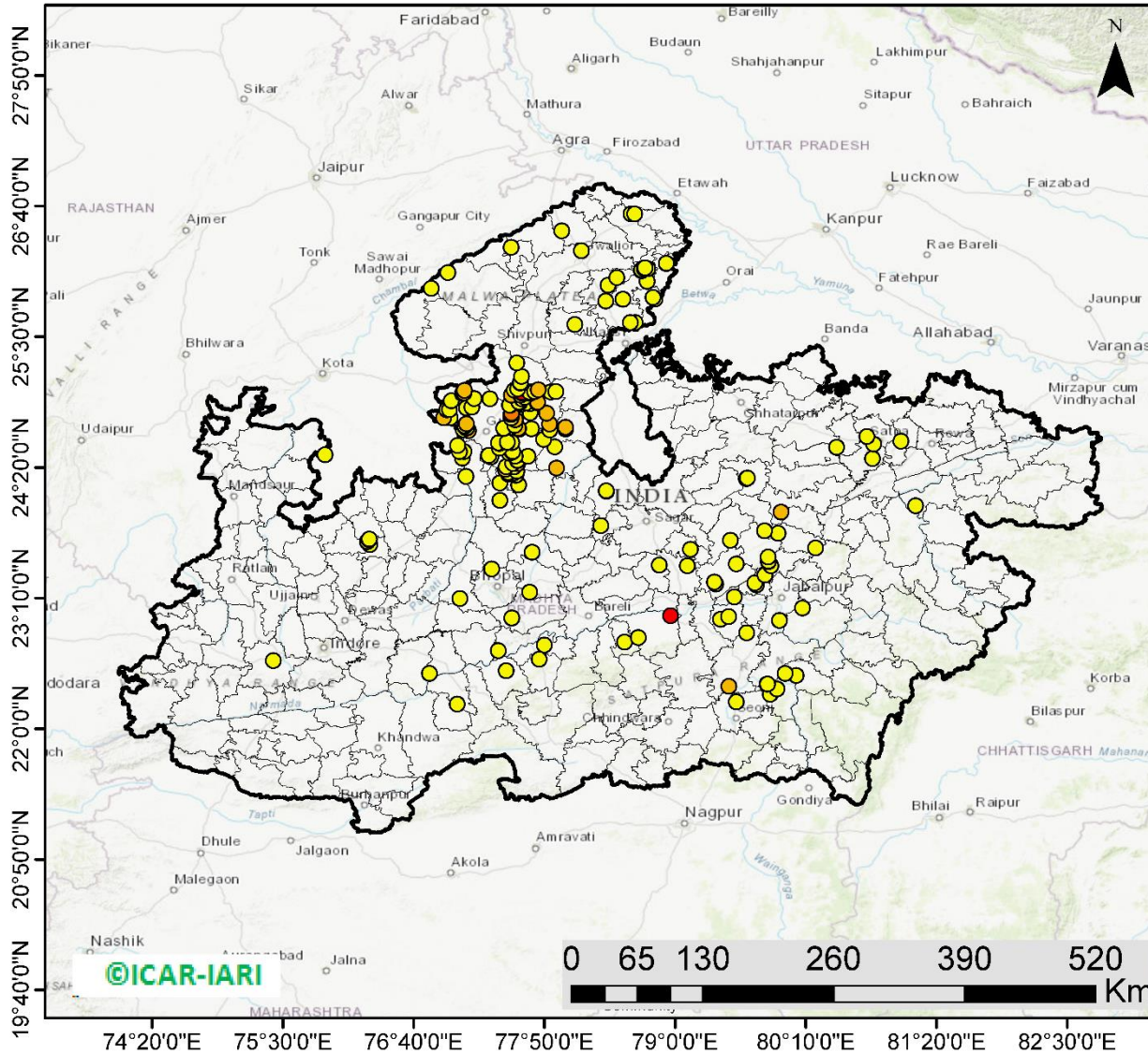
http://103.111.37.126/icar_geoportal/

District-wise cumulative number of residues burning events in Rajasthan (15Sep-23Oct-2024)



Madhya Pradesh

RICE RESIDUE BURNING IN MADHYA PRADESH



194 burning events detected in MP on (23rd Oct 2024)

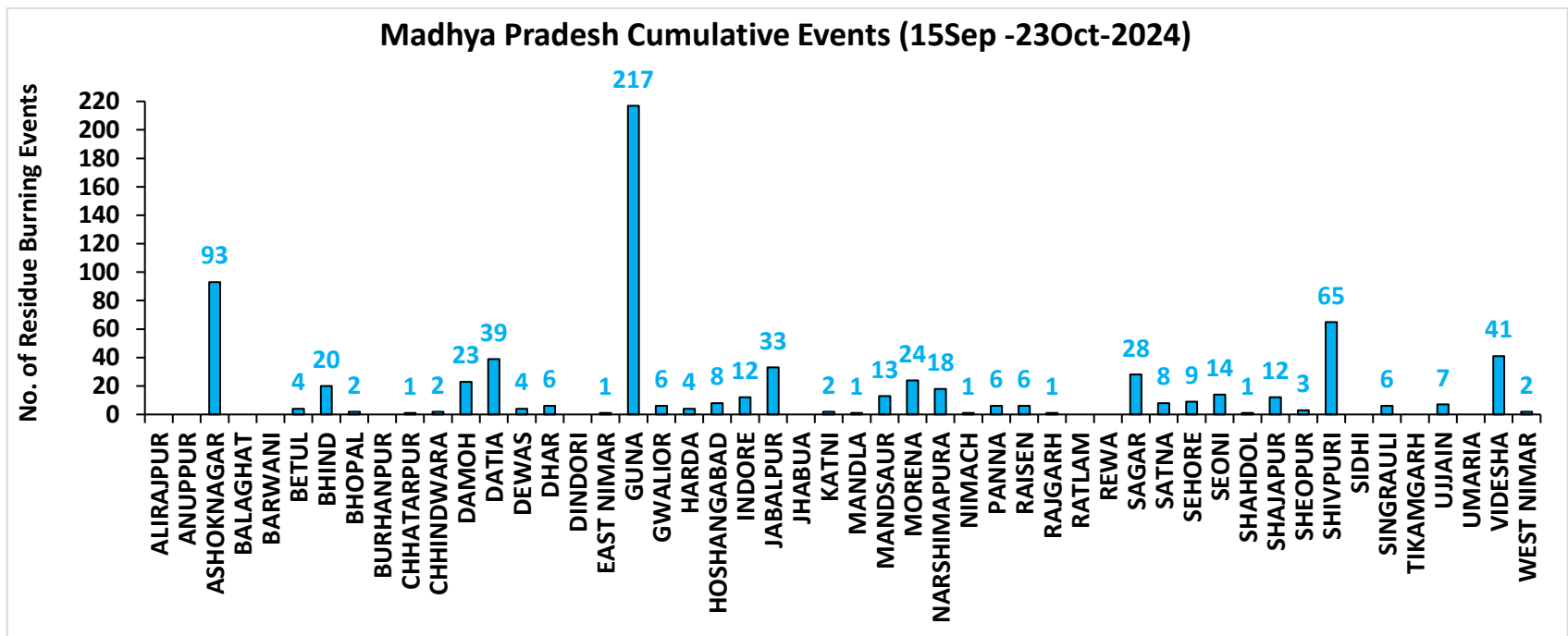
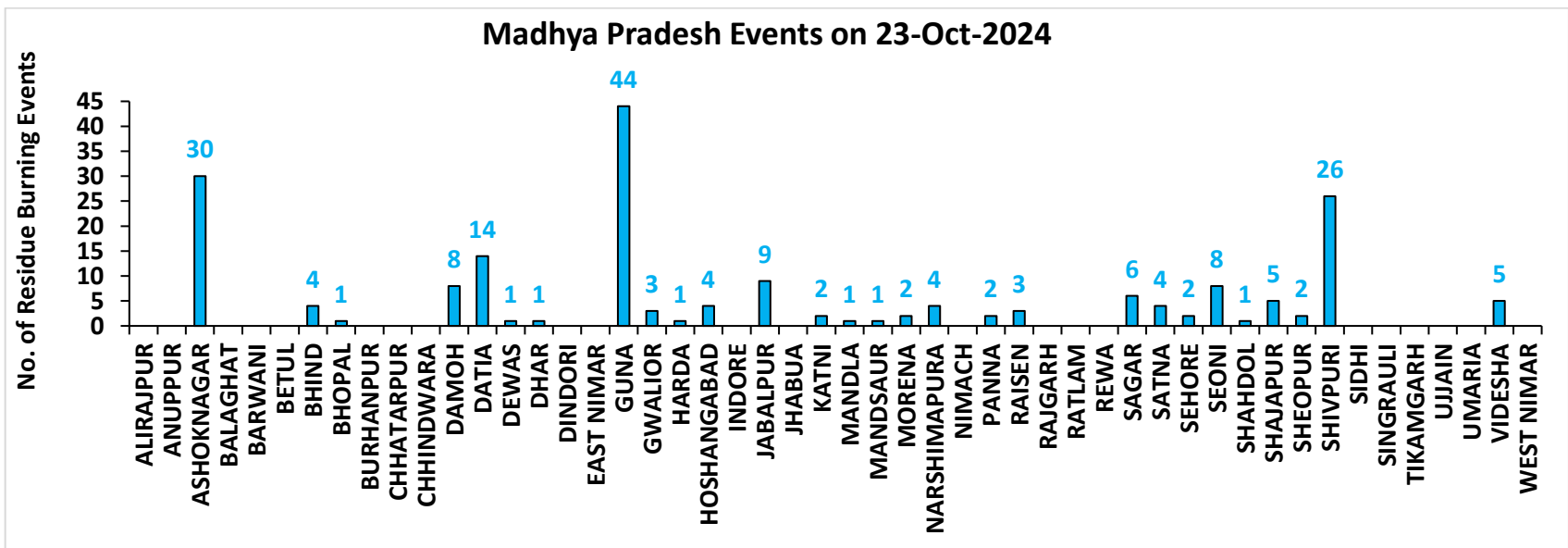
Fire Intensity (W/m²)

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



http://103.111.37.126/icar_geportal/

District-wise cumulative number of residues burning events in Madhya Pradesh (15Sep-23Oct-2024)



District-wise cumulative number of residues burning events detected in 2020, 2021, 2022, 2023 and 2024
(Period: 15 September-23 October)

(a) Punjab

District	15 Sep-23 Oct				
	2020	2021	2022	2023	2024
Amritsar	2311	945	992	729	451
Barnala	66	47	26	11	10
Bathinda	185	71	56	8	11
Faridkot	738	285	34	29	10
Fatehgarh Sahib	390	286	137	61	45
Fazilka	218	82	39	15	16
Firozpur	1738	394	231	114	128
Gurdaspur	1145	394	459	23	48
Hoshiarpur	177	58	30	2	0
Jalandhar	326	273	218	35	20
Kapurthala	728	391	288	97	70
Ludhiana	350	389	161	52	33
Malerkotla	0	0	0	5	26
Mansa	122	32	33	65	32
Moga	251	131	100	38	12
Muktsar	218	85	15	2	4
Pathankot	7	0	0	0	0
Patiala	1220	500	358	215	210
Rupnagar	60	46	28	1	4
Sangrur	393	146	163	123	148
SAS NAGAR (Mohali)	70	54	33	64	28
SBS Nagar	26	34	3	4	4
Tarn Taran	3155	1415	1194	253	328
Total	13894	6058	4598	1946	1638

(b) Haryana

District	15 Sep-23 Oct				
	2020	2021	2022	2023	2024
AMBALA	182	85	76	95	74
BHIWANI	0	0	0	2	0
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	1	1	1	2	34
FATEHABAD	94	109	99	111	41
GURGAON	0	0	0	0	0
HISAR	10	8	19	43	20
JHAJJAR	1	0	0	4	3
JIND	51	71	93	94	50
KAITHAL	317	476	303	95	129
KARNAL	409	531	171	51	72
KURUKSHETRA	332	316	224	86	98
MAHENDRAGARH	0	0	0	0	0
MEWAT	0	0	0	0	0
PALWAL	24	25	15	37	26
PANCHKULA	0	0	0	1	14
PANIPAT	12	20	17	16	28
REWARI	0	0	0	0	0
ROHTAK	2	0	0	5	8
SIRSA	27	17	18	8	17
SONIPAT	15	7	8	46	40
YAMUNANAGAR	83	60	66	47	26
Total	1560	1726	1110	743	680

(c) Uttar Pradesh

District	15 Sep-23 Oct																
	2020	2021	2022	2023	2024	GAUTAMBUDHNAGAR	5	7	3	7	23	MUZAFARNAGAR	3	2	1	0	7
AGRA	2	0	0	0	0	GAZIPUR	0	0	0	0	0	PILHIBHIT	9	108	47	66	23
ALIGARH	48	21	17	72	148	GHAZIABAD	3	2	2	10	9	PRATAPGARH	3	0	0	0	1
ALLAHABAD	0	1	1	2	1	GONDA	0	0	0	0	0	RAIBEARELI	1	0	0	1	2
AMBEDKARNAGAR	0	0	0	0	2	GORAKHPUR	1	0	0	0	1	RAMPUR	48	50	19	25	15
AMETHI	0	1	4	1	0	HAMIRPUR	1	0	0	0	0	SAMBHAL	7	7	5	12	84
AMROHA	2	0	0	2	4	HAPUR	7	1	0	0	9	SANTKABIRNAGAR	0	0	0	1	0
AURAIYA	19	6	6	10	1	HARDOI	16	6	2	9	15	SANTRAVIDASNAGAR	0	0	0	0	0
AZAMGARH	0	0	0	0	0	HATHRAS	0	0	0	2	13	SHAHJAHANPUR	50	181	114	29	46
BADAUN	1	6	0	2	20	JALAUN	0	0	0	0	0	SHAMLI	20	15	5	5	8
BAGHPAT	4	1	1	1	3	JAUNPUR	0	0	0	1	0	SHARANPUR	44	20	4	1	5
BAHRAICH	14	2	4	1	3	JHANSI	21	6	0	18	6	SHRAWASTI	7	0	0	1	0
BALLIA	0	0	0	0	1	KANNAUJ	5	1	0	1	4	SIDDHARTHANAGAR	0	0	0	0	1
BALRAMPUR	2	1	1	1	0	KANPUR	5	7	10	18	2	SITAPUR	17	9	0	4	46
BANDA	0	0	0	0	0	KANPUR DEHAT	14	1	0	9	2	SONBHADRA	0	0	0	0	0
BARABANKI	19	20	11	39	65	KASGANJ	2	2	0	1	1	SULTANPUR	0	0	0	0	0
BAREILLY	24	15	2	13	13	KAUSHAMBI	14	3	2	15	3	UNNAO	6	1	0	6	6
BASTI	3	1	0	0	1	KHERI	48	54	29	7	13	VARANASI	1	0	0	0	0
BIJNOR	6	4	2	5	4	KUSHINAGAR	0	0	0	0	0	Total	670	642	331	560	808
BULANDSAHAR	16	2	3	6	26	LALITPUR	0	1	3	1	0						
CHANDAULI	0	0	0	0	0	LUCKNOW	2	0	1	2	5						
CHITRAKOOT	0	1	2	3	0	MAHARAJGANJ	0	0	0	1	1						
DEORIA	0	0	0	2	0	MAHOBA	11	0	0	0	0						
ETAH	12	6	1	11	9	MAINPURI	14	7	7	13	18						
ETAWAH	6	7	4	28	10	MATHURA	41	34	6	70	69						
FAIZABAD	1	0	0	2	4	MAU	0	0	0	0	0						
FARRUKHABAD	1	0	0	0	0	MEERUT	15	4	2	2	9						
FATEHPUR	23	6	8	15	21	MIRZAPUR	6	5	2	0	2						
FIROZABAD	12	4	0	3	3	MORADABAD	8	3	0	3	20						

(d) Delhi

District	15 Sep-23 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	3	2	8
NORTH EAST	0	0	0	0	0
NORTH WEST DELHI	3	0	0	0	3
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	1	0	0	0	0
Total	7	0	3	2	11

(e) Rajasthan

District	15 Sep-23 Oct				
	2020	2021	2022	2023	2024
AJMER	2	0	0	0	0
ALWAR	1	0	0	0	0
BANSWARA	0	0	0	0	0
BARAN	103	0	7	188	116
BARMER	2	0	0	0	0
BHARATPUR	2	0	0	2	6
BHILWARA	3	0	0	0	0
BIKANER	1	0	0	0	0
BUNDI	23	2	34	72	56
CHITTAURGARH	0	2	2	8	2
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	3	0	5	9	19
HANUMANGARH	210	47	15	55	109
JAIPUR	2	0	0	0	0
JAISELMER	2	0	0	0	0
JALOR	0	0	0	0	0
JHALAWAR	1	0	2	8	1
JHUNJHUNUN	1	0	0	0	0
JODHPUR	1	0	0	0	0
KARALI	1	0	0	0	0
KOTA	37	1	23	96	47
NAGOUR	0	0	0	0	0
PALI	2	0	0	0	0
PRATAPGARH	4	0	0	0	0
RAJSMAND	0	0	0	0	0
SIKAR	0	0	0	0	0
SIROHI	1	0	0	0	0
SWAIMADHOPUR	10	0	3	34	26
TONK	2	0	0	0	0
UDAIPUR	0	0	0	0	0
Total	414	52	91	472	382

(f) Madhya Pradesh

District	15 Sep-23 Oct										
	2020	2021	2022	2023	2024	PANNA	6	1	0	0	6
ALIRAJPUR	0	0	0	0	0	RAISEN	68	2	7	20	6
ANUPPUR	0	0	0	0	0	RAJGARH	7	1	3	9	1
ASHOKNAGAR	35	1	5	58	93	RATLAM	0	0	0	1	0
BALAGHAT	0	0	0	0	0	REWA	11	0	1	1	0
BARWANI	0	0	0	0	0	SAGAR	18	13	14	25	28
BETUL	4	1	1	3	4	SATNA	33	8	1	6	8
BHIND	11	1	5	26	20	SEHORE	15	7	22	19	9
BHOPAL	12	5	3	12	2	SEONI	106	56	23	29	14
BURHANPUR	0	0	0	1	0	SHAHDOL	0	0	0	0	1
CHHATARPUR	4	0	0	3	1	SHAJAPUR	5	0	0	7	12
CHHINDWARA	12	9	4	11	2	SHEOPUR	33	0	3	97	3
DAMOH	35	13	12	18	23	SHIVPURI	17	0	8	29	65
DATIA	116	8	6	111	39	SIDHI	0	0	0	0	0
DEWAS	3	0	0	7	4	SINGRAULI	0	0	0	0	6
DHAR	22	0	0	25	6	TIKAMGARH	1	0	0	3	0
DINDORI	0	0	0	1	0	UJJAIN	5	0	0	14	7
EAST NIMAR	3	5	4	2	1	UMARIA	0	0	0	0	0
GUNA	24	2	11	188	217	VIDESHA	71	9	12	39	41
GWALIOR	97	0	3	27	6	WEST NIMAR	15	1	0	8	2
HARDA	10	13	4	17	4	Total	1029	197	184	970	743
HOSHANGABAD	129	21	15	64	8						
INDORE	2	0	0	12	12						
JABALPUR	29	6	4	28	33						
JHABUA	0	0	0	0	0						
KATNI	19	0	0	2	2						
MANDLA	4	1	0	2	1						
MANDSAUR	3	0	0	1	13						
MORENA	23	5	3	27	24						
NARSHIMAPURA	21	8	10	17	18						
NIMACH	0	0	0	0	1						

State-wise and date-wise number of paddy residue burning events detected in 2020 ,2021 ,2022, 2023 and 2024
(Period: 15 September-23 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
09-Oct	121	114	3	58	33	20	39	1	14	10	15	20	0	13	10
10-Oct	232	150	4	10	123	33	95	2	28	38	9	54	0	34	56
11-Oct	377	64	45	26	143	90	51	0	21	55	23	28	0	50	87
12-Oct	388	97	104	13	177	69	51	4	5	98	46	23	0	5	102

13-Oct	266	132	120	154	162	47	91	15	29	90	36	42	0	19	76
14-Oct	605	229	82	89	97	69	98	30	41	49	9	68	5	18	52
15-Oct	449	660	169	69	144	106	363	36	127	42	15	149	0	35	78
16-Oct	654	429	206	0	99	80	176	76	4	14	21	121	6	14	59
17-Oct	1172	14	403	1	77	143	0	86	0	28	38	39	7	0	23
18-Oct	938	57	342	18	59	166	1	134	8	26	76	0	30	2	47
19-Oct	1080	496	436	37	45	72	55	122	16	15	43	5	36	11	30
20-Oct	890	788	96	174	52	62	155	78	51	11	31	1	17	25	11
21-Oct	1392	597	393	146	65	101	131	107	68	2	25	5	23	59	25
22-Oct	1665	1111	582	30	71	128	140	122	25	10	32	3	18	117	17
23-Oct	1438	620	902	152	57	106	218	217	29	15	84	8	109	20	68
Total	13894	6058	4598	1946	1638	1560	1726	1110	743	680	670	642	331	560	808

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
09-Oct	0	0	0	0	0	12	0	0	17	1	15	4	0	24	2
10-Oct	0	0	0	0	3	14	1	0	26	3	18	10	0	52	1
11-Oct	0	0	0	1	0	21	7	1	21	6	32	2	0	24	17
12-Oct	0	0	0	0	2	24	1	2	1	13	44	1	1	1	5
13-Oct	0	0	0	0	1	7	5	2	28	10	21	2	7	32	5
14-Oct	0	0	0	0	1	16	1	1	15	20	15	11	1	26	7
15-Oct	0	0	0	0	0	9	8	2	34	23	8	27	2	66	11
16-Oct	1	0	0	0	1	12	2	4	18	100	23	13	2	51	112
17-Oct	0	0	0	0	0	26	0	4	12	16	63	1	11	31	51
18-Oct	0	0	1	0	3	37	2	12	11	30	88	0	15	13	71
19-Oct	0	0	0	0	0	27	5	12	31	25	49	1	12	65	46
20-Oct	0	0	0	0	0	26	4	4	57	11	9	21	7	131	24
21-Oct	2	0	0	0	0	32	2	6	34	21	112	30	18	147	53
22-Oct	0	0	0	0	0	29	5	12	57	36	183	29	31	119	93
23-Oct	1	0	0	0	0	23	7	20	29	50	204	32	70	89	194
Total	7	0	3	2	11	414	52	91	472	382	1029	197	184	970	743

Details of residue burning events in Punjab on 23-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	CHOGAWAN	S-NPP	31.71841	74.70498	13:22:08	D	3.80
2	AMRITSAR	CHOGAWAN	S-NPP	31.76277	74.65442	13:22:08	D	2.50
3	AMRITSAR	HARSHA CHHINA	S-NPP	31.79448	74.74158	13:22:08	D	1.70
4	AMRITSAR	JANDIALA GURU	S-NPP	31.56216	75.13162	13:22:08	D	1.80
5	AMRITSAR	JANDIALA GURU	S-NPP	31.57704	74.94856	13:22:08	D	3.70
6	AMRITSAR	RAYYA	S-NPP	31.52244	75.19128	13:22:08	D	13.40
7	AMRITSAR	RAYYA	S-NPP	31.63094	75.31573	13:22:08	D	2.70
8	AMRITSAR	TARSIKKA	S-NPP	31.61837	75.19724	13:22:08	D	2.80
9	AMRITSAR	TARSIKKA	S-NPP	31.68095	75.10963	13:22:08	D	3.50
10	BARNALA	MAHAL KALAN	S-NPP	30.56210	75.46820	13:22:08	D	2.20
11	BATHINDA	TALWANDI SABO	S-NPP	29.90012	75.07240	13:22:08	D	3.30
12	BATHINDA	TALWANDI SABO	S-NPP	29.91595	75.08212	13:22:08	D	2.60
13	BATHINDA	TALWANDI SABO	S-NPP	29.96446	75.15947	13:22:08	D	5.60
14	BATHINDA	TALWANDI SABO	S-NPP	29.96643	75.15023	13:22:08	D	1.50
15	FARIDKOT	KOT KAPURA	S-NPP	30.52128	74.81226	13:22:08	D	2.80
16	FATEHGARH SAHIB	AMLOH	AQUA	30.57600	76.25300	13:44:47	D	26.00
17	FATEHGARH SAHIB	AMLOH	AQUA	30.57700	76.24800	13:44:47	D	21.00
18	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.68007	76.47520	13:22:08	D	4.10
19	FATEHGARH SAHIB	KHERA	S-NPP	30.68734	76.56484	13:22:08	D	7.10
20	FATEHGARH SAHIB	SIRHIND	S-NPP	30.59999	76.30857	13:22:08	D	4.30
21	FAZILKA	KHUIAN SARWAR	S-NPP	30.26865	73.97112	13:22:08	D	10.90
22	FIROZPUR	FIROZPUR	S-NPP	30.96413	74.54355	13:22:08	D	2.80
23	FIROZPUR	FIROZPUR	S-NPP	31.01582	74.58265	13:22:08	D	4.10
24	FIROZPUR	FIROZPUR	S-NPP	31.04567	74.75572	13:22:08	D	3.20
25	FIROZPUR	FIROZPUR	S-NPP	31.05771	74.68123	13:22:08	D	5.70
26	FIROZPUR	FIROZPUR	S-NPP	31.08021	74.72986	13:22:08	D	3.60
27	FIROZPUR	GHALL KHURD	S-NPP	30.90067	74.74609	13:22:08	D	9.80
28	FIROZPUR	MAMDOT	S-NPP	30.78419	74.52445	13:22:08	D	8.20
29	FIROZPUR	MAMDOT	S-NPP	30.81678	74.36102	13:22:08	D	5.70
30	JALANDHAR	MEHATPUR	S-NPP	30.99974	75.48613	13:22:08	D	3.20
31	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27918	75.16210	13:22:08	D	3.50
32	LUDHIANA	KHANNA	S-NPP	30.68058	76.28388	13:22:08	D	2.30

33	LUDHIANA	PAKHOWAL	S-NPP	30.70157	75.72113	13:22:08	D	5.20
34	LUDHIANA	PAKHOWAL	S-NPP	30.71627	75.70515	13:22:08	D	4.40
35	LUDHIANA	SUDHAR	S-NPP	30.77917	75.59394	13:22:08	D	3.40
36	MANSA	BUDHLADA	S-NPP	29.82629	75.70042	13:22:08	D	4.90
37	MOGA	MOGA 2	S-NPP	30.77140	75.08521	13:22:08	D	4.00
38	PATIALA	BHUNARHERI	S-NPP	30.19483	76.44010	13:22:08	D	2.30
39	PATIALA	BHUNARHERI	S-NPP	30.22327	76.53349	13:22:08	D	3.60
40	PATIALA	PATIALA	S-NPP	30.23344	76.19586	13:22:08	D	2.80
41	PATIALA	PATRAN	S-NPP	29.85504	76.12927	13:22:08	D	3.20
42	PATIALA	PATRAN	S-NPP	29.87706	76.11622	13:22:08	D	2.70
43	PATIALA	PATRAN	S-NPP	29.92091	76.15289	13:22:08	D	2.30
44	PATIALA	PATRAN	S-NPP	29.92156	76.15694	13:22:08	D	2.60
45	PATIALA	PATRAN	S-NPP	29.92605	75.99239	13:22:08	D	2.80
46	PATIALA	PATRAN	S-NPP	29.95727	76.12820	13:22:08	D	2.00
47	PATIALA	RAJPURA	S-NPP	30.51400	76.51297	13:22:08	D	6.30
48	PATIALA	RAJPURA	S-NPP	30.52030	76.55303	13:22:08	D	1.50
49	PATIALA	RAJPURA	S-NPP	30.52393	76.51088	13:22:08	D	2.90
50	PATIALA	RAJPURA	S-NPP	30.57957	76.59086	13:22:08	D	3.40
51	PATIALA	SANAUR	S-NPP	30.14470	76.40507	13:22:08	D	3.20
52	SANGRUR	BHAWANIGARH	S-NPP	30.26954	76.14219	13:22:08	D	6.90
53	SANGRUR	SUNAM	S-NPP	30.06102	75.71777	13:22:08	D	3.40
54	SAS NAGAR	KHARAR	S-NPP	30.69065	76.56415	13:22:08	D	5.50
55	SBS NAGAR	NAWAN SHAHR	S-NPP	31.03329	76.19782	13:22:08	D	1.60
56	TARN TARAN	KHADUR SAHIB	S-NPP	31.44139	75.14433	13:22:08	D	3.70
57	TARN TARAN	KHADUR SAHIB	S-NPP	31.48062	75.17027	13:22:08	D	3.50

Details of residue burning events in Haryana on 23-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	FARIDABAD	BALLABGARH	S-NPP	28.30448	77.46873	13:22:08	D	2.50
2	FATEHABAD	BHUNA	S-NPP	29.40419	75.73853	13:22:08	D	3.20
3	HISAR	BARWALA	S-NPP	29.33042	75.97030	13:22:08	D	4.70
4	JIND	NARWANA	S-NPP	29.74469	76.05683	13:22:08	D	2.00
5	KURUKSHETRA	PEHOWA	S-NPP	29.99032	76.71842	13:22:08	D	4.10
6	KURUKSHETRA	PEHOWA	S-NPP	29.99094	76.72241	13:22:08	D	4.50
7	KURUKSHETRA	SHAHBAD	S-NPP	30.17983	76.88847	13:22:08	D	4.50
8	KURUKSHETRA	THANESAR	S-NPP	30.04374	76.81139	02:12:09	N	2.80
9	KURUKSHETRA	THANESAR	S-NPP	30.04558	76.80975	13:22:08	D	2.70
10	PANIPAT	BAPALI	S-NPP	29.27782	77.10735	13:22:08	D	3.10
11	ROHTAK	ROHTAK	S-NPP	28.74167	76.56940	13:22:08	D	5.30
12	ROHTAK	ROHTAK	S-NPP	29.03330	76.67078	13:22:08	D	2.70
13	SIRSA	ELLENABAD	S-NPP	29.39096	74.75784	13:22:08	D	4.40
14	YAMUNANAGAR	BILASPUR	S-NPP	30.35125	77.36209	13:22:08	D	5.30
15	YAMUNANAGAR	BILASPUR	S-NPP	30.35456	77.36142	13:22:08	D	6.90

Details of residue burning events in Uttar Pradesh on 23-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ALIGARH	IGLAS	S-NPP	27.86758	77.88987	13:22:08	D	3.10
2	ALIGARH	KHAIR	S-NPP	27.93051	77.57336	13:22:08	D	1.50
3	ALIGARH	KHAIR	S-NPP	27.94103	77.57531	13:22:08	D	1.90
4	ALIGARH	KHAIR	S-NPP	27.96109	77.72773	13:22:08	D	2.00
5	ALIGARH	KHAIR	S-NPP	27.96976	77.76210	13:22:08	D	2.80
6	ALIGARH	KHAIR	S-NPP	27.98610	77.64671	13:22:08	D	3.10
7	ALIGARH	KHAIR	S-NPP	28.07318	77.73206	02:12:09	N	0.50
8	ALIGARH	KOL	S-NPP	27.75728	78.34661	13:22:08	D	4.70
9	ALIGARH	KOL	S-NPP	27.85366	78.20031	13:22:08	D	2.40
10	BADAUN	BISAULI	S-NPP	28.20685	79.11076	13:22:08	D	2.00
11	BADAUN	BISAULI	S-NPP	28.37147	78.84806	13:22:08	D	2.70
12	BARABANKI	H Aidargarh	S-NPP	26.74818	81.29222	13:22:08	D	4.60
13	BARABANKI	NAWABGANJ	S-NPP	26.90908	81.30888	13:22:08	D	2.60
14	BARABANKI	NAWABGANJ	S-NPP	26.90950	81.24111	13:22:08	D	3.10
15	BAREILLY	AONLA	S-NPP	28.32911	79.18465	13:22:08	D	2.20
16	BAREILLY	MIRGANJ	S-NPP	28.57053	79.24138	13:22:08	D	1.80
17	BULANSAHAR	KHURJA	S-NPP	28.22682	77.73699	13:22:08	D	1.90
18	BULANSAHAR	SIYANA	S-NPP	28.62800	78.14465	02:12:09	N	0.80
19	ETAH	ETAH	S-NPP	27.59707	78.56387	13:22:08	D	2.90
20	ETAWAH	SAIFAI	S-NPP	26.94531	79.07948	13:22:08	D	3.40
21	ETAWAH	SAIFAI	S-NPP	26.94864	79.07887	13:22:08	D	2.60
22	FATEHPUR	BINKI	S-NPP	26.03842	80.55463	13:22:08	D	2.30
23	FATEHPUR	BINKI	S-NPP	26.03957	80.53750	13:22:08	D	2.10
24	FATEHPUR	FATEHPUR	S-NPP	25.85403	80.99126	13:22:08	D	2.00
25	FATEHPUR	FATEHPUR	S-NPP	25.97501	80.77356	13:22:08	D	4.90
26	FATEHPUR	FATEHPUR	S-NPP	25.99002	80.88311	13:22:08	D	2.30
27	FATEHPUR	KHAGA	S-NPP	25.55930	81.20216	13:22:08	D	3.90
28	FATEHPUR	KHAGA	S-NPP	25.82994	81.24109	13:22:08	D	2.10
29	FATEHPUR	KHAGA	S-NPP	25.86884	81.15519	13:22:08	D	1.40
30	FIROZABAD	SIKOHABAD	S-NPP	26.97873	78.72541	13:22:08	D	4.00
31	FIROZABAD	SIKOHABAD	S-NPP	27.02773	78.67249	13:22:08	D	2.20
32	FIROZABAD	SIKOHABAD	S-NPP	27.03105	78.67189	13:22:08	D	1.20
33	HAPUR	HAPUR	S-NPP	28.66095	77.65319	13:22:08	D	3.00

34	HARDOI	HARDOI	S-NPP	27.41672	79.97041	02:12:09	N	0.40
35	HARDOI	SIWAJIPUR	S-NPP	27.45718	79.77020	13:22:08	D	2.00
36	HATHRAS	SIKANDRA RAO	S-NPP	27.62955	78.28571	13:22:08	D	3.30
37	KANPUR	BILHAUR	S-NPP	26.67634	80.11060	13:22:08	D	2.40
38	KHERI	GOLA	S-NPP	27.97756	80.51849	13:22:08	D	1.90
39	KHERI	MOHMADI	S-NPP	27.94148	80.12507	02:12:09	N	1.90
40	LUCKNOW	BAKSHIKA TALAB	S-NPP	27.13906	80.96194	13:22:08	D	6.80
41	MAINPURI	BHOGAON	S-NPP	26.96970	79.35736	13:22:08	D	2.40
42	MAINPURI	BHOGAON	S-NPP	27.07468	79.18106	13:22:08	D	3.70
43	MAINPURI	BHOGAON	S-NPP	27.13643	79.15780	13:22:08	D	4.10
44	MAINPURI	BHOGAON	S-NPP	27.16284	79.11294	13:22:08	D	4.70
45	MAINPURI	MAINPURI	S-NPP	27.13882	79.05653	13:22:08	D	2.20
46	MAINPURI	MAINPURI	S-NPP	27.25962	78.88715	02:12:09	N	0.60
47	MATHURA	CHHATA	S-NPP	27.64453	77.51677	13:22:08	D	6.60
48	MATHURA	CHHATA	S-NPP	27.67100	77.51158	13:22:08	D	1.10
49	MATHURA	CHHATA	S-NPP	27.70174	77.56163	13:22:08	D	4.20
50	MATHURA	MAT	S-NPP	27.73564	77.75912	13:22:08	D	9.60
51	MEERUT	SARDHANA	S-NPP	29.06684	77.76506	13:22:08	D	4.20
52	MORADABAD	MORADABAD	S-NPP	28.84857	78.87284	13:22:08	D	2.70
53	MORADABAD	MORADABAD	S-NPP	28.96958	78.90508	13:22:08	D	2.30
54	PILHIBHIT	PURANPUR	S-NPP	28.54264	79.99393	13:22:08	D	4.40
55	PILHIBHIT	PURANPUR	S-NPP	28.67572	80.20329	02:12:09	N	0.70
56	PRATAPGARH	LALGANJ	S-NPP	26.04867	81.59119	13:22:08	D	2.20
57	RAIBEARELI	RAEBARELI	S-NPP	26.33573	81.07487	13:22:08	D	3.10
58	SHAHJAHANPUR	PUWANYA	S-NPP	28.08265	80.03404	02:12:09	N	2.30
59	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.76750	79.69675	13:22:08	D	3.60
60	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.77651	79.67796	02:12:09	N	0.90
61	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.79750	79.66261	13:22:08	D	4.50
62	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.92980	79.82372	02:12:09	N	0.80
63	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.98844	79.85835	13:22:08	D	3.90
64	SHAMLI	SHAMLI	S-NPP	29.65062	77.39581	13:22:08	D	4.50
65	SITAPUR	MAHMUDABAD	S-NPP	27.42993	81.13203	13:22:08	D	6.80
66	SITAPUR	MAHMUDABAD	S-NPP	27.43093	81.13047	13:22:08	D	6.50
67	UNNAO	PURWA	S-NPP	26.42866	80.98993	13:22:08	D	1.60
68	UNNAO	SAFIPUR	S-NPP	26.90866	80.25737	13:22:08	D	1.70

Details of residue burning events in Rajasthan on 23-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	BARAN	CHHABRA	S-NPP	24.60884	76.87209	13:22:08	D	2.70
2	BARAN	CHHABRA	S-NPP	24.62656	76.85204	13:22:08	D	24.40
3	BARAN	CHHABRA	S-NPP	24.63115	76.88007	13:22:08	D	4.70
4	BARAN	CHHABRA	S-NPP	24.63911	76.90736	13:22:08	D	3.90
5	BARAN	CHHABRA	S-NPP	24.66500	76.82902	13:22:08	D	4.20
6	BARAN	CHHABRA	S-NPP	24.66840	76.82835	13:22:08	D	4.10
7	BARAN	KISHANGUNJ	S-NPP	24.92880	76.81468	13:22:08	D	4.20
8	BARAN	KISHANGUNJ	S-NPP	25.00228	76.68815	13:22:08	D	1.90
9	BARAN	KISHANGUNJ	S-NPP	25.26522	76.62503	13:22:08	D	4.40
10	BARAN	SHAHBAD	S-NPP	25.07349	76.93044	13:22:08	D	5.20
11	BARAN	SHAHBAD	S-NPP	25.10143	77.05988	13:22:08	D	3.10
12	BARAN	SHAHBAD	S-NPP	25.11346	77.06261	13:22:08	D	6.70
13	BARAN	SHAHBAD	S-NPP	25.11682	77.06194	13:22:08	D	6.70
14	BARAN	SHAHBAD	S-NPP	25.12173	77.02835	13:22:08	D	4.60
15	BARAN	SHAHBAD	S-NPP	25.12534	76.98678	13:22:08	D	1.80
16	BARAN	SHAHBAD	S-NPP	25.12924	77.01054	13:22:08	D	4.90
17	BARAN	SHAHBAD	S-NPP	25.13415	76.97686	13:22:08	D	2.70
18	BARAN	SHAHBAD	S-NPP	25.24964	76.99921	13:22:08	D	5.30
19	BUNDI	BUNDI	S-NPP	25.25397	75.85690	13:22:08	D	5.60
20	BUNDI	BUNDI	S-NPP	25.28823	75.86742	13:22:08	D	2.20
21	BUNDI	BUNDI	S-NPP	25.29171	75.86670	13:22:08	D	2.20
22	BUNDI	BUNDI	S-NPP	25.29769	75.64742	13:22:08	D	4.90
23	BUNDI	KESHORAIPATAN	S-NPP	25.35365	75.88637	13:22:08	D	5.30
24	BUNDI	KESHORAIPATAN	S-NPP	25.37579	75.86858	13:22:08	D	4.60
25	BUNDI	KESHORAIPATAN	S-NPP	25.40984	75.85711	13:22:08	D	6.50
26	BUNDI	KESHORAIPATAN	S-NPP	25.41471	75.97009	13:22:08	D	4.30
27	BUNDI	KESHORAIPATAN	S-NPP	25.42736	76.00233	13:22:08	D	5.10
28	BUNDI	KESHORAIPATAN	S-NPP	25.44598	75.98544	13:22:08	D	2.50
29	BUNDI	KESHORAIPATAN	S-NPP	25.46097	76.11670	13:22:08	D	2.50
30	BUNDI	KESHORAIPATAN	S-NPP	25.46972	76.04139	13:22:08	D	4.90
31	CHITTAURGARH	NIMBAHERA	S-NPP	24.69062	74.68170	02:12:09	N	1.20

32	HANUMANGARH	HANUMANGARH	S-NPP	29.52970	74.36778	13:22:08	D	4.40
33	HANUMANGARH	HANUMANGARH	S-NPP	29.54725	74.40632	13:22:08	D	3.50
34	HANUMANGARH	HANUMANGARH	S-NPP	29.60650	74.30816	13:22:08	D	4.40
35	HANUMANGARH	TIBI	S-NPP	29.47974	74.47739	13:22:08	D	5.30
36	HANUMANGARH	TIBI	S-NPP	29.51595	74.53871	13:22:08	D	1.50
37	HANUMANGARH	TIBI	S-NPP	29.53912	74.42181	13:22:08	D	2.80
38	HANUMANGARH	TIBI	S-NPP	29.62139	74.53801	13:22:08	D	2.90
39	HANUMANGARH	TIBI	S-NPP	29.72846	74.60614	13:22:08	D	3.70
40	KOTA	DIGOD	S-NPP	25.18014	76.16347	13:22:08	D	4.90
41	KOTA	DIGOD	S-NPP	25.29606	76.12313	13:22:08	D	10.40
42	KOTA	DIGOD	S-NPP	25.43047	76.27297	13:22:08	D	1.90
43	KOTA	PIPALDA	S-NPP	25.40895	76.58396	13:22:08	D	3.20
44	KOTA	PIPALDA	S-NPP	25.67191	76.39446	13:22:08	D	3.30
45	SWAIMADHOPUR	KHANDAR	S-NPP	25.90644	76.58229	13:22:08	D	4.90
46	SWAIMADHOPUR	KHANDAR	S-NPP	25.90711	76.58630	13:22:08	D	7.20
47	SWAIMADHOPUR	KHANDAR	S-NPP	25.91254	76.57689	13:22:08	D	3.30
48	SWAIMADHOPUR	KHANDAR	S-NPP	25.99421	76.75499	13:22:08	D	1.20
49	SWAIMADHOPUR	KHANDAR	S-NPP	26.02535	76.68774	13:22:08	D	4.40
50	SWAIMADHOPUR	KHANDAR	S-NPP	26.03738	76.71835	13:22:08	D	2.20

Details of residue burning events in Madhya Pradesh on 23-Oct-2024

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.39366	77.59415	13:22:08	D	5.00
2	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.39700	77.59351	13:22:08	D	5.00
3	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.43239	77.68604	13:22:08	D	5.00
4	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.43331	77.57461	13:22:08	D	1.20
5	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.45924	77.52176	13:22:08	D	3.90
6	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.47029	77.54758	13:22:08	D	4.40
7	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.47426	77.55081	13:22:08	D	4.20
8	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.55429	77.54359	13:22:08	D	2.30
9	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.55473	77.50358	13:22:08	D	4.40
10	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.55807	77.50294	13:22:08	D	4.40
11	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.58258	77.82760	13:22:08	D	2.70
12	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.67296	77.60838	13:22:08	D	5.00
13	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.67901	77.60325	13:22:08	D	5.10
14	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.68235	77.60261	13:22:08	D	5.10
15	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.70805	77.56979	13:22:08	D	1.30
16	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.75878	77.57278	13:22:08	D	5.60
17	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.80449	77.53614	13:22:08	D	2.80
18	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.81574	77.54195	13:22:08	D	12.60
19	ASHOKNAGAR	CHANDERI	S-NPP	24.67493	78.02249	13:22:08	D	3.60
20	ASHOKNAGAR	CHANDERI	S-NPP	24.69212	78.02318	13:22:08	D	5.50
21	ASHOKNAGAR	ISAGARH	S-NPP	24.66662	77.88261	13:22:08	D	2.70
22	ASHOKNAGAR	ISAGARH	S-NPP	24.67688	77.71869	13:22:08	D	4.20
23	ASHOKNAGAR	ISAGARH	S-NPP	24.71970	77.88028	13:22:08	D	5.40
24	ASHOKNAGAR	ISAGARH	S-NPP	24.81747	77.85468	13:22:08	D	6.00
25	ASHOKNAGAR	ISAGARH	S-NPP	24.82155	77.70771	13:22:08	D	3.20
26	ASHOKNAGAR	ISAGARH	S-NPP	24.89677	77.62978	13:22:08	D	3.40
27	ASHOKNAGAR	ISAGARH	S-NPP	24.91158	77.61503	13:22:08	D	4.10
28	ASHOKNAGAR	ISAGARH	S-NPP	24.91702	77.60604	13:22:08	D	2.20
29	ASHOKNAGAR	MUNGAOLI	S-NPP	24.32674	77.94274	13:22:08	D	5.20
30	ASHOKNAGAR	MUNGAOLI	S-NPP	24.51697	77.92657	13:22:08	D	2.10

31	BHIND	BHIND	S-NPP	26.59555	78.60846	13:22:08	D	2.40
32	BHIND	BHIND	S-NPP	26.59684	78.63991	13:22:08	D	1.30
33	BHIND	LAHAR	S-NPP	26.15281	78.92254	13:22:08	D	0.90
34	BHIND	LAHAR	S-NPP	26.15499	78.92207	13:22:08	D	1.90
35	BHOPAL	HUZUR	S-NPP	23.42609	77.36407	13:22:08	D	2.40
36	DAMOH	DAMOH	S-NPP	23.68140	79.49489	13:22:08	D	1.50
37	DAMOH	HATTA	S-NPP	24.23284	79.63573	13:22:08	D	4.00
38	DAMOH	HATTA	S-NPP	24.23785	79.64661	13:22:08	D	4.50
39	DAMOH	JABERA	S-NPP	23.53172	79.83080	13:22:08	D	3.20
40	DAMOH	PATERA	S-NPP	23.76715	79.79836	13:22:08	D	3.00
41	DAMOH	TENDUKHERA	S-NPP	23.29014	79.36311	13:22:08	D	1.60
42	DAMOH	TENDUKHERA	S-NPP	23.30848	79.35203	13:22:08	D	1.70
43	DAMOH	TENDUKHERA	S-NPP	23.46937	79.54712	13:22:08	D	2.30
44	DATIA	BHANDER	S-NPP	25.83631	78.82253	13:22:08	D	2.10
45	DATIA	BHANDER	S-NPP	25.85059	78.80420	13:22:08	D	1.10
46	DATIA	BHANDER	S-NPP	25.99480	78.75005	13:22:08	D	3.60
47	DATIA	DATIA	S-NPP	25.62706	78.64430	13:22:08	D	1.60
48	DATIA	DATIA	S-NPP	25.62733	78.60114	13:22:08	D	2.40
49	DATIA	DATIA	S-NPP	25.81748	78.38214	13:22:08	D	2.50
50	DATIA	SEONDHA	S-NPP	25.83407	78.53610	13:22:08	D	2.40
51	DATIA	SEONDHA	S-NPP	26.08914	78.70131	13:22:08	D	4.60
52	DATIA	SEONDHA	S-NPP	26.09245	78.70070	13:22:08	D	4.60
53	DATIA	SEONDHA	S-NPP	26.09577	78.70009	13:22:08	D	3.90
54	DATIA	SEONDHA	S-NPP	26.10770	78.75703	13:22:08	D	1.10
55	DATIA	SEONDHA	S-NPP	26.10973	78.72511	13:22:08	D	10.00
56	DATIA	SEONDHA	S-NPP	26.11304	78.72451	13:22:08	D	13.00
57	DATIA	SEONDHA	S-NPP	26.11419	78.73218	13:22:08	D	3.20
58	DEWAS	KHATEGOAN	S-NPP	22.49275	76.80695	13:22:08	D	3.00
59	DHAR	DHAR	S-NPP	22.60757	75.41530	13:22:08	D	3.00
60	GUNA	ARON	S-NPP	24.27209	77.51352	13:22:08	D	2.20
61	GUNA	ARON	S-NPP	24.28290	77.55937	13:22:08	D	2.20
62	GUNA	ARON	S-NPP	24.28673	77.51871	13:22:08	D	3.60
63	GUNA	ARON	S-NPP	24.28883	77.51031	13:22:08	D	2.90
64	GUNA	ARON	S-NPP	24.29788	77.58840	13:22:08	D	3.00
65	GUNA	ARON	S-NPP	24.31412	77.48562	13:22:08	D	5.80

66	GUNA	ARON	S-NPP	24.33670	77.56120	13:22:08	D	1.70
67	GUNA	ARON	S-NPP	24.33944	77.49276	13:22:08	D	2.90
68	GUNA	ARON	S-NPP	24.36631	77.59538	13:22:08	D	6.20
69	GUNA	ARON	S-NPP	24.36951	77.55092	13:22:08	D	3.30
70	GUNA	ARON	S-NPP	24.42553	77.35597	13:22:08	D	1.60
71	GUNA	ARON	S-NPP	24.43915	77.33323	13:22:08	D	2.80
72	GUNA	ARON	S-NPP	24.43978	77.33713	13:22:08	D	4.70
73	GUNA	ARON	S-NPP	24.50367	77.43321	13:22:08	D	2.90
74	GUNA	GUNA	S-NPP	24.54681	77.43312	13:22:08	D	4.30
75	GUNA	GUNA	S-NPP	24.55225	77.42406	13:22:08	D	3.00
76	GUNA	GUNA	S-NPP	24.66224	77.15655	13:22:08	D	5.80
77	GUNA	GUNA	S-NPP	24.66868	77.11053	13:22:08	D	4.60
78	GUNA	GUNA	S-NPP	24.67855	77.47173	13:22:08	D	2.50
79	GUNA	GUNA	S-NPP	24.68190	77.47110	13:22:08	D	2.50
80	GUNA	GUNA	S-NPP	24.68389	77.14011	13:22:08	D	5.00
81	GUNA	GUNA	S-NPP	24.68445	77.13690	13:22:08	D	3.40
82	GUNA	GUNA	S-NPP	24.68509	77.14084	13:22:08	D	3.40
83	GUNA	GUNA	S-NPP	24.69934	77.12181	13:22:08	D	2.60
84	GUNA	GUNA	S-NPP	24.70336	77.12510	13:22:08	D	4.30
85	GUNA	GUNA	S-NPP	24.72277	77.13756	13:22:08	D	7.40
86	GUNA	GUNA	S-NPP	24.77383	77.53803	13:22:08	D	1.20
87	GUNA	GUNA	S-NPP	24.77598	76.99264	13:22:08	D	3.20
88	GUNA	GUNA	S-NPP	24.77692	76.93501	13:22:08	D	5.60
89	GUNA	GUNA	S-NPP	24.84768	76.96218	13:22:08	D	4.70
90	GUNA	GUNA	S-NPP	24.84819	76.98668	13:22:08	D	0.90
91	GUNA	GUNA	S-NPP	24.86252	77.13885	13:22:08	D	2.80
92	GUNA	GUNA	S-NPP	24.87018	77.18604	13:22:08	D	3.50
93	GUNA	GUNA	S-NPP	24.92843	77.00400	13:22:08	D	2.90
94	GUNA	GUNA	S-NPP	24.94647	77.34871	13:22:08	D	3.80
95	GUNA	GUNA	S-NPP	24.94777	77.20762	13:22:08	D	2.40
96	GUNA	GUNA	S-NPP	24.99294	77.10145	13:22:08	D	6.00
97	GUNA	GUNA	S-NPP	24.99885	77.11656	13:22:08	D	5.40
98	GUNA	GUNA	S-NPP	25.02107	77.12038	13:22:08	D	6.70
99	GUNA	KUMBHRAJ	S-NPP	24.41549	77.10252	13:22:08	D	0.60
100	GUNA	KUMBHRAJ	S-NPP	24.47449	77.07500	13:22:08	D	1.50

101	GUNA	RAGHOGARH	S-NPP	24.25313	77.13398	13:22:08	D	2.10
102	GUNA	RAGHOGARH	S-NPP	24.47425	77.11583	13:22:08	D	1.80
103	GUNA	RAGHOGARH	S-NPP	24.52787	77.06046	13:22:08	D	4.00
104	GWALIOR	DABRA	S-NPP	25.95936	78.40268	13:22:08	D	3.90
105	GWALIOR	DABRA	S-NPP	26.02863	78.48030	13:22:08	D	3.10
106	GWALIOR	GWALIOR	S-NPP	26.26760	78.16432	13:22:08	D	4.10
107	HARDA	HARDA	S-NPP	22.21926	77.05637	13:22:08	D	1.40
108	HOSHANGABAD	BABAI	S-NPP	22.74651	77.83457	13:22:08	D	1.80
109	HOSHANGABAD	BANKHERI	S-NPP	22.77258	78.54873	13:22:08	D	1.00
110	HOSHANGABAD	ITARSI	S-NPP	22.61878	77.78697	13:22:08	D	2.20
111	HOSHANGABAD	SEONI MALWA	S-NPP	22.51567	77.49358	13:22:08	D	2.10
112	JABALPUR	JABALPUR	S-NPP	22.96538	79.93220	13:22:08	D	2.00
113	JABALPUR	JABALPUR	S-NPP	23.07754	80.13821	13:22:08	D	2.20
114	JABALPUR	MAJHOULI	S-NPP	23.45483	79.85590	13:22:08	D	3.10
115	JABALPUR	MAJHOULI	S-NPP	23.49123	79.83389	13:22:08	D	2.80
116	JABALPUR	MAJHOULI	S-NPP	23.49456	79.83333	13:22:08	D	2.80
117	JABALPUR	PATAN	S-NPP	23.28315	79.72668	13:22:08	D	4.40
118	JABALPUR	PATAN	S-NPP	23.30140	79.71193	13:22:08	D	3.50
119	JABALPUR	PATAN	S-NPP	23.37217	79.80415	13:22:08	D	1.90
120	JABALPUR	SAHPURA	S-NPP	23.17655	79.52956	13:22:08	D	4.90
121	KATNI	BAHURIBAND	S-NPP	23.61413	80.25552	13:22:08	D	3.70
122	KATNI	BAHURIBAND	S-NPP	23.74387	79.91944	13:22:08	D	4.20
123	MANDLA	NAINPUR	S-NPP	22.47383	80.08188	13:22:08	D	2.80
124	MANDSAUR	BHANPURA	S-NPP	24.44566	75.87749	13:22:08	D	1.70
125	MORENA	JORA	S-NPP	26.44443	77.98872	13:22:08	D	2.80
126	MORENA	KAILARAS	S-NPP	26.29891	77.53664	13:22:08	D	3.40
127	NARSHIMAPURA	GADARWARA	S-NPP	22.81236	78.67261	13:22:08	D	1.10
128	NARSHIMAPURA	GADARWARA	S-NPP	23.00903	78.95977	13:22:08	D	24.40
129	NARSHIMAPURA	GOTECAON	S-NPP	22.97570	79.40694	13:22:08	D	3.10
130	NARSHIMAPURA	GOTECAON	S-NPP	22.99942	79.47926	13:22:08	D	4.00
131	PANNA	PANNA	S-NPP	24.51187	80.44242	13:22:08	D	4.50
132	PANNA	SHAHNAGAR	S-NPP	23.93300	79.94562	13:22:08	D	5.10
133	RAISEN	GOHARGANJ	S-NPP	22.98560	77.54321	13:22:08	D	2.00
134	RAISEN	GOHARGANJ	S-NPP	22.98898	77.54256	13:22:08	D	1.10
135	RAISEN	RAISEN	S-NPP	23.21793	77.70338	13:22:08	D	1.60

136	SAGAR	DEVRI	S-NPP	23.45480	79.11050	13:22:08	D	1.70
137	SAGAR	KESALI	S-NPP	23.46054	78.85988	13:22:08	D	1.30
138	SAGAR	KHURAI	S-NPP	24.11922	78.38745	13:22:08	D	2.60
139	SAGAR	KHURAI	S-NPP	24.12254	78.38683	13:22:08	D	2.60
140	SAGAR	RAHAT GARH	S-NPP	23.81311	78.33865	13:22:08	D	1.60
141	SAGAR	REHLI	S-NPP	23.60082	79.13869	13:22:08	D	1.40
142	SATNA	NAGOD	S-NPP	24.60921	80.71326	13:22:08	D	2.90
143	SATNA	RAMPURBAGHLEAN	S-NPP	24.56749	81.01582	13:22:08	D	3.40
144	SATNA	UCHAHAR	S-NPP	24.41073	80.76194	13:22:08	D	1.80
145	SATNA	UCHAHAR	S-NPP	24.54103	80.77377	13:22:08	D	3.30
146	SEHORE	BUDHNI	S-NPP	22.69673	77.42316	13:22:08	D	4.90
147	SEHORE	SEHORE	S-NPP	23.16179	77.07955	13:22:08	D	2.70
148	SEONI	GHANSAUR	S-NPP	22.39799	79.82196	13:22:08	D	2.90
149	SEONI	GHANSAUR	S-NPP	22.39855	79.82570	13:22:08	D	2.90
150	SEONI	KEWLARI	S-NPP	22.30774	79.84926	13:22:08	D	4.40
151	SEONI	KEWLARI	S-NPP	22.35424	79.91028	13:22:08	D	2.40
152	SEONI	KEWLARI	S-NPP	22.49324	79.98223	13:22:08	D	2.40
153	SEONI	LAKHNADOU	S-NPP	22.37762	79.48144	13:22:08	D	5.10
154	SEONI	LAKHNADOU	S-NPP	22.85454	79.63922	13:22:08	D	3.10
155	SEONI	SEONI	S-NPP	22.23919	79.54800	13:22:08	D	2.10
156	SHAH DOL	BEOHARI	S-NPP	23.99042	81.14865	13:22:08	D	2.50
157	SHAJAPUR	MOMAN BARODIY	S-NPP	23.64417	76.27531	13:22:08	D	3.70
158	SHAJAPUR	MOMAN BARODIY	S-NPP	23.66924	76.25277	13:22:08	D	3.00
159	SHAJAPUR	MOMAN BARODIY	S-NPP	23.66995	76.25349	13:22:08	D	4.00
160	SHAJAPUR	MOMAN BARODIY	S-NPP	23.68682	76.26759	13:22:08	D	4.60
161	SHAJAPUR	MOMAN BARODIY	S-NPP	23.69103	76.27111	13:22:08	D	3.50
162	SHEOPUR	SHEOPUR	S-NPP	25.93159	76.82472	13:22:08	D	2.10
163	SHEOPUR	VIJAYPUR	S-NPP	26.07232	76.97347	13:22:08	D	2.60
164	SHIVPURI	KHANIYADHAN	S-NPP	25.00640	77.88964	13:22:08	D	3.10
165	SHIVPURI	KHANIYADHAN	S-NPP	25.01027	77.93616	13:22:08	D	2.90
166	SHIVPURI	KOLARAS	S-NPP	24.88738	77.52818	13:22:08	D	3.80
167	SHIVPURI	KOLARAS	S-NPP	24.89009	77.52367	13:22:08	D	3.60
168	SHIVPURI	KOLARAS	S-NPP	24.90179	77.70420	13:22:08	D	3.30
169	SHIVPURI	KOLARAS	S-NPP	24.91019	77.67088	13:22:08	D	4.70
170	SHIVPURI	KOLARAS	S-NPP	24.91217	77.76949	13:22:08	D	1.70

171	SHIVPURI	KOLARAS	S-NPP	24.91611	77.77269	13:22:08	D	5.30
172	SHIVPURI	KOLARAS	S-NPP	24.94525	77.63241	13:22:08	D	3.70
173	SHIVPURI	KOLARAS	S-NPP	24.95952	77.65748	13:22:08	D	3.60
174	SHIVPURI	KOLARAS	S-NPP	24.97715	77.53890	13:22:08	D	9.20
175	SHIVPURI	KOLARAS	S-NPP	24.97794	77.62216	13:22:08	D	2.20
176	SHIVPURI	KOLARAS	S-NPP	24.99367	77.70654	13:22:08	D	14.00
177	SHIVPURI	KOLARAS	S-NPP	24.99700	77.70590	13:22:08	D	14.00
178	SHIVPURI	KOLARAS	S-NPP	24.99865	77.63023	13:22:08	D	3.80
179	SHIVPURI	KOLARAS	S-NPP	25.00259	77.63345	13:22:08	D	23.90
180	SHIVPURI	KOLARAS	S-NPP	25.00637	77.70015	13:22:08	D	2.40
181	SHIVPURI	KOLARAS	S-NPP	25.01037	77.74686	13:22:08	D	2.20
182	SHIVPURI	KOLARAS	S-NPP	25.02272	77.56597	13:22:08	D	1.20
183	SHIVPURI	KOLARAS	S-NPP	25.02582	77.77950	13:22:08	D	9.20
184	SHIVPURI	KOLARAS	S-NPP	25.03431	77.59557	13:22:08	D	3.10
185	SHIVPURI	KOLARAS	S-NPP	25.08582	77.61746	13:22:08	D	3.10
186	SHIVPURI	KOLARAS	S-NPP	25.08824	77.62088	13:22:08	D	4.10
187	SHIVPURI	KOLARAS	S-NPP	25.14457	77.62994	13:22:08	D	1.80
188	SHIVPURI	KOLARAS	S-NPP	25.26706	77.58737	13:22:08	D	2.00
189	SHIVPURI	NARWAR	S-NPP	25.60868	78.10646	13:22:08	D	2.50
190	VIDESHA	LETERI	S-NPP	24.03939	77.43717	13:22:08	D	1.50
191	VIDESHA	LETERI	S-NPP	24.19397	77.43643	13:22:08	D	3.70
192	VIDESHA	SIRANJ	S-NPP	24.17478	77.60329	13:22:08	D	2.30
193	VIDESHA	SIRANJ	S-NPP	24.26197	77.57932	13:22:08	D	3.70
194	VIDESHA	VIDESHA	S-NPP	23.57453	77.72430	13:22:08	D	3.50

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	Both
2.	JPSS 1 (NOAA 20)	VIIRS	375	Both
3.	JPSS 2 (NOAA 21)	VIIRS	375	Both
4.	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](#)
