



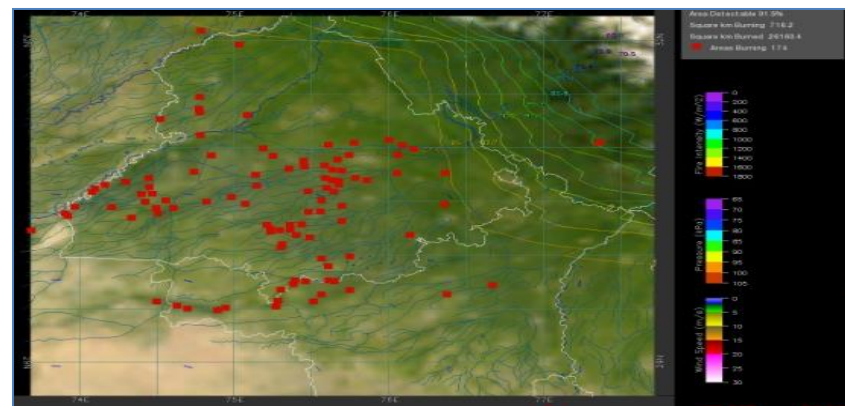
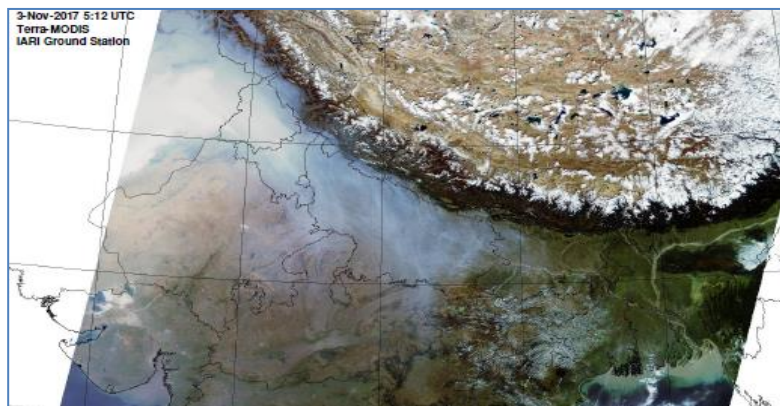
**Bulletin
No. 31**

**Events Date:
15-Oct-2023**

**Issued on:
15-Oct-2023**



MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2023



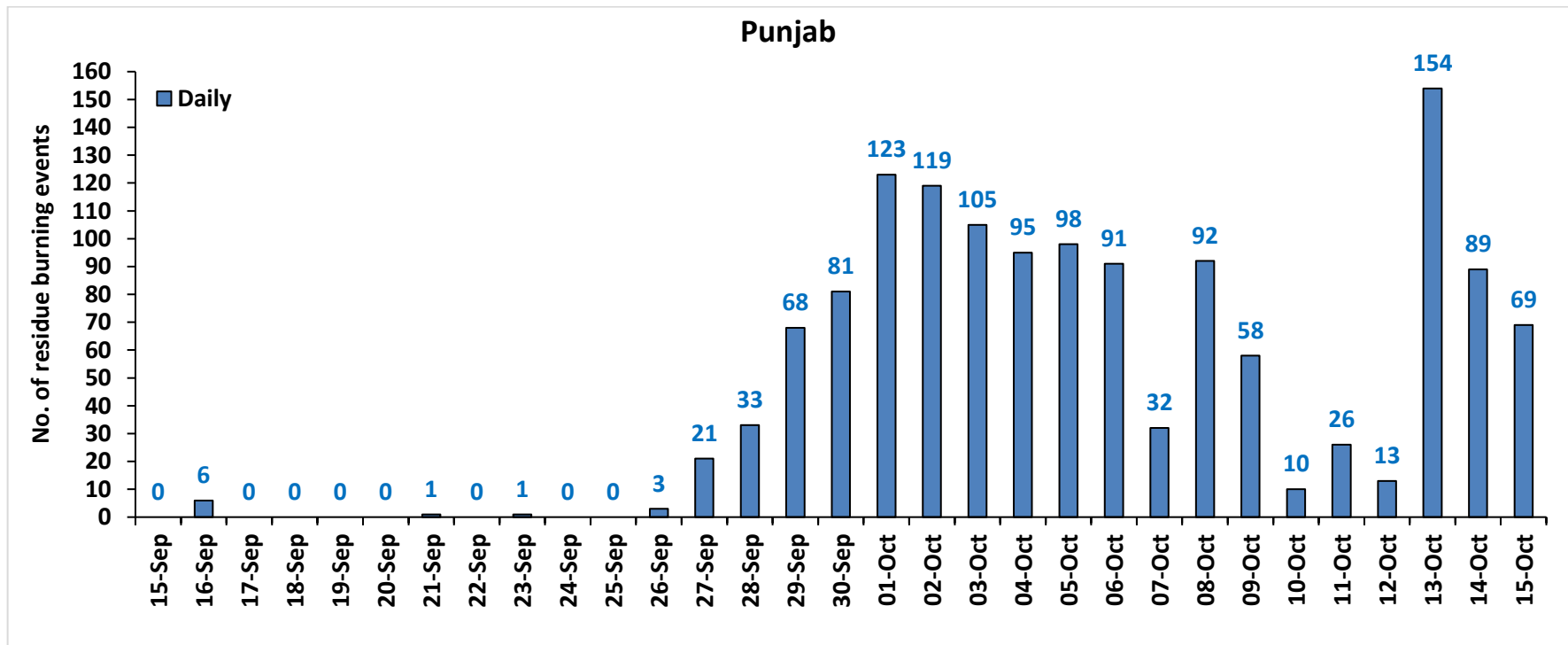
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

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

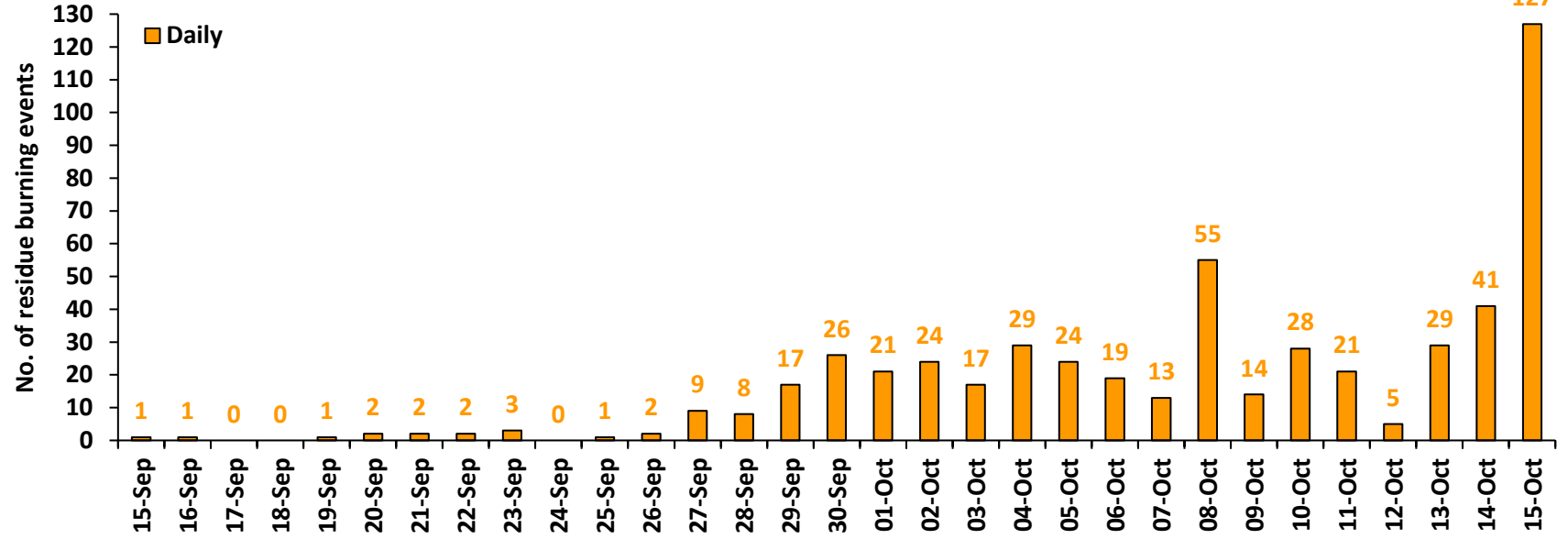
Highlights for 15-Oct-2023

- 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 **331** residue burning events in the six study States on 15-Oct-2023.
- The state wise events detected on 15-Oct-2023 were **69** in Punjab, **127** in Haryana, **35** in UP, **00** in Delhi, **34** in Rajasthan and **66** in MP.
- Total **2791** burning events were detected in the six states between 15-Sept-2023 and 15-Oct-2023, which are distributed as **1388**, **542**, **312**, **02**, **223** and **324** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.

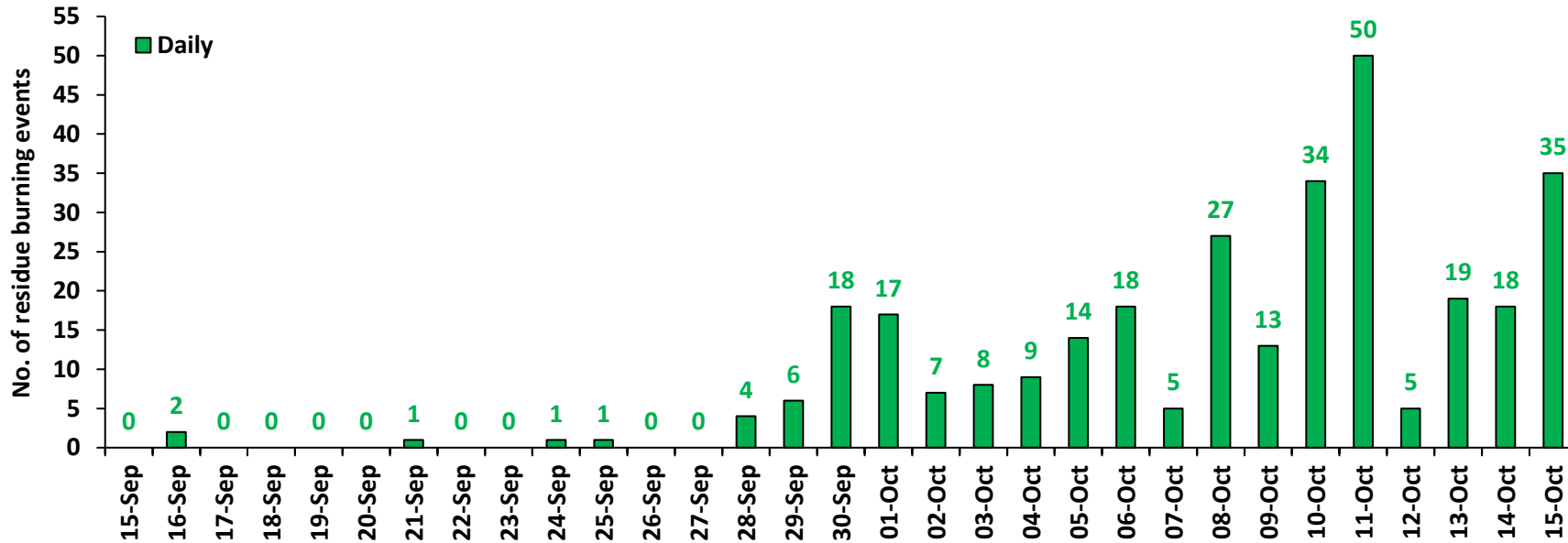
Temporal distribution of rice residue burning events for the study States in 2023



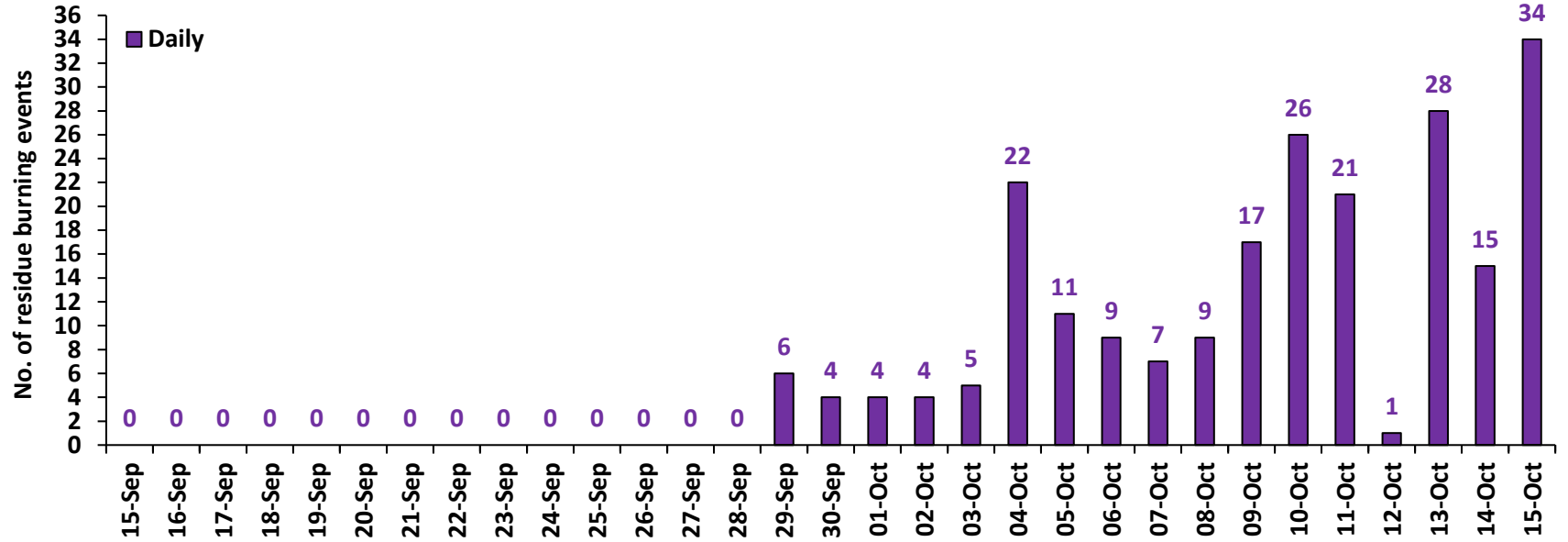
Haryana



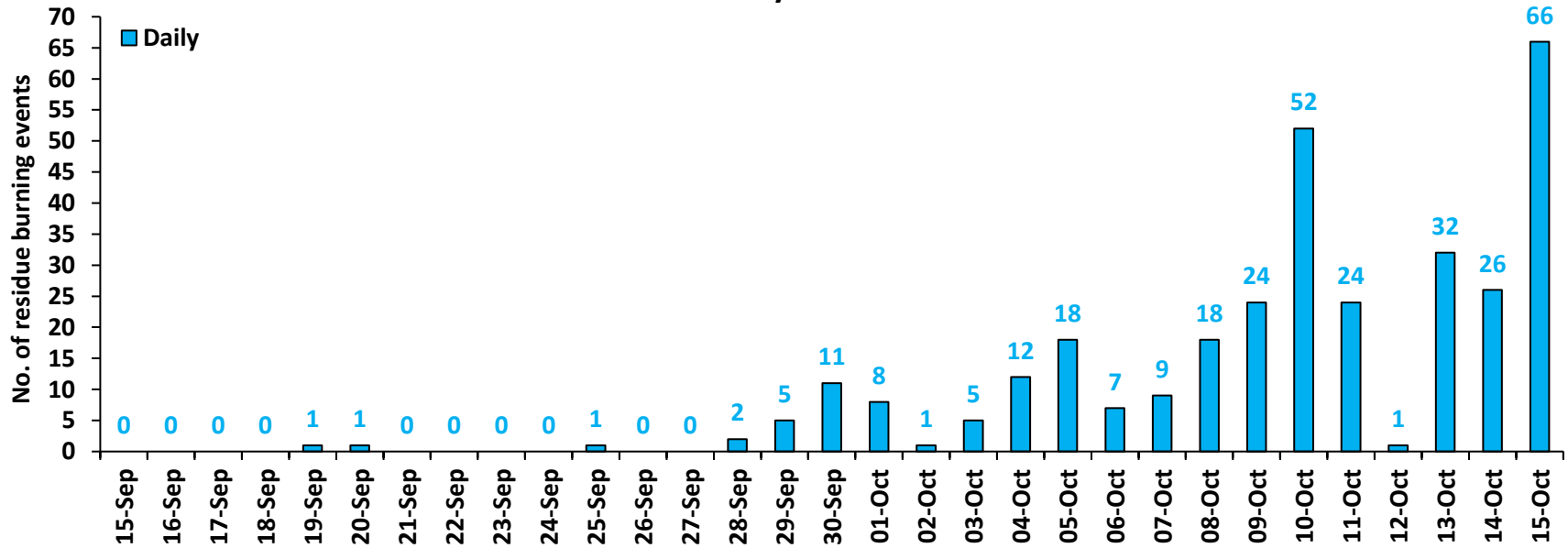
Uttar Pradesh

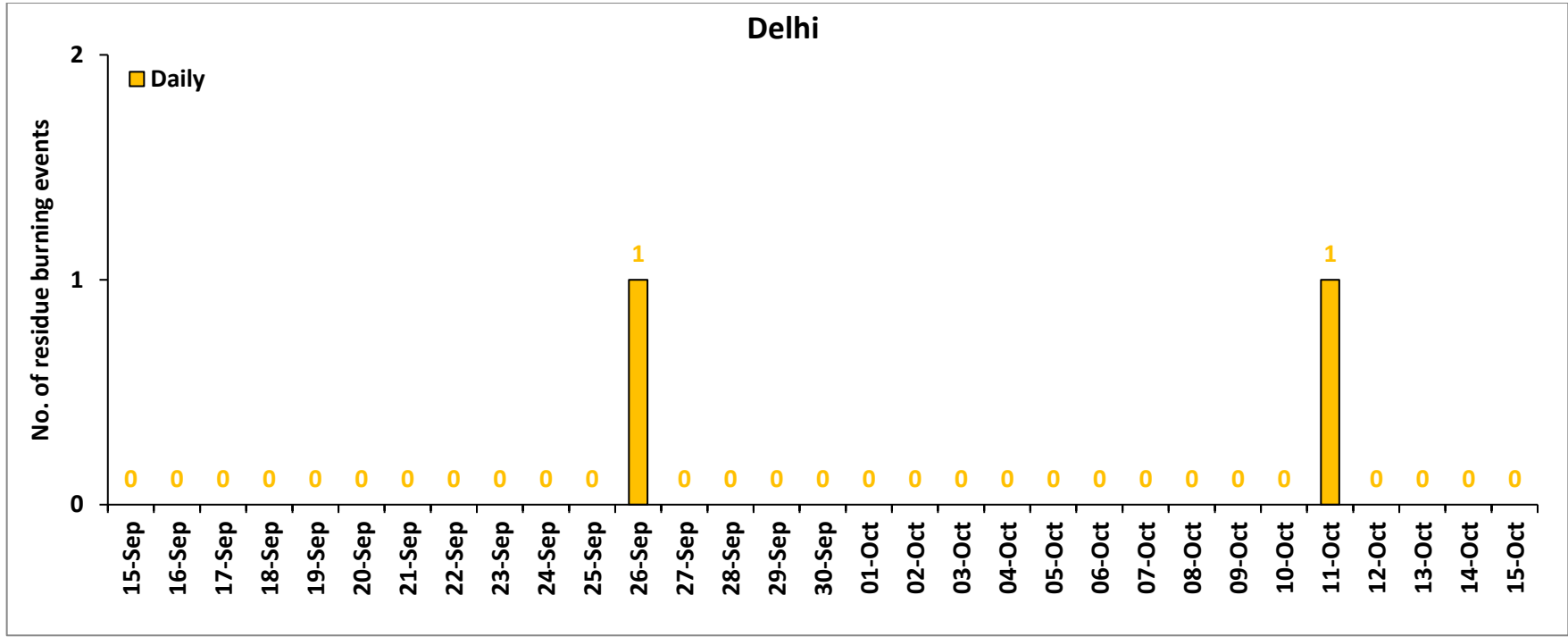


Rajasthan

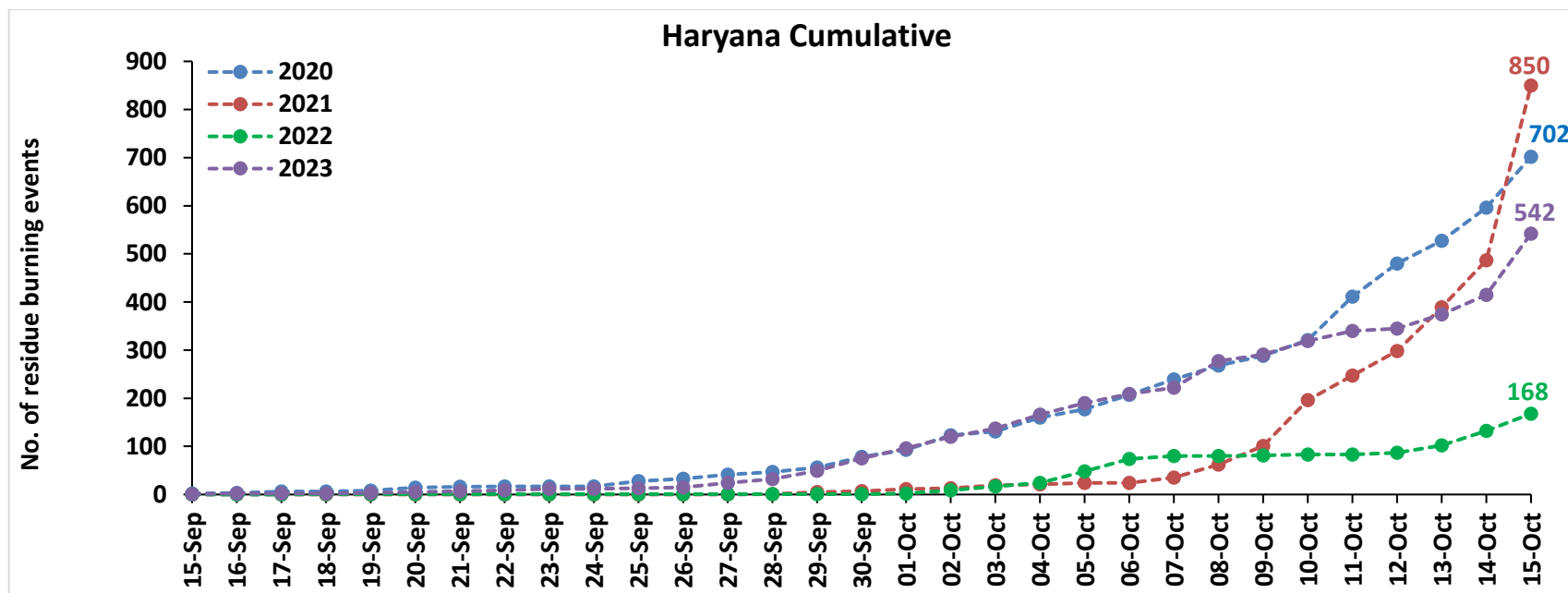
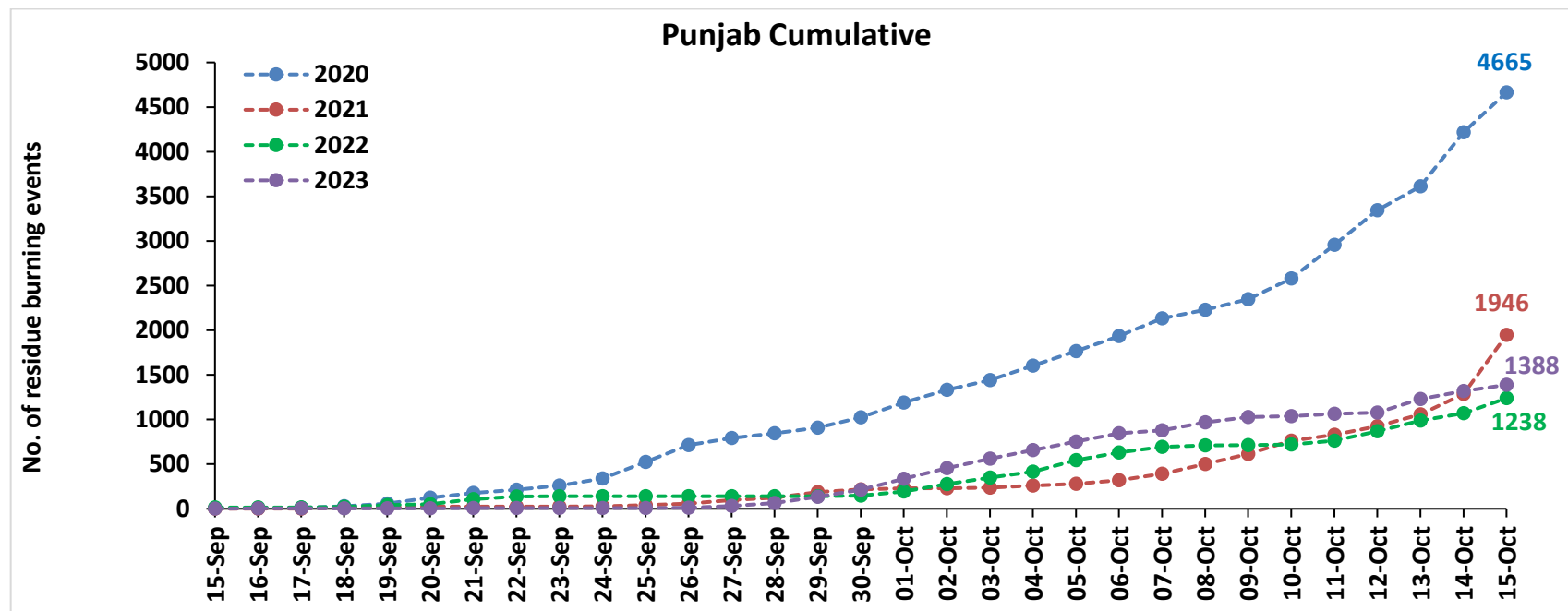


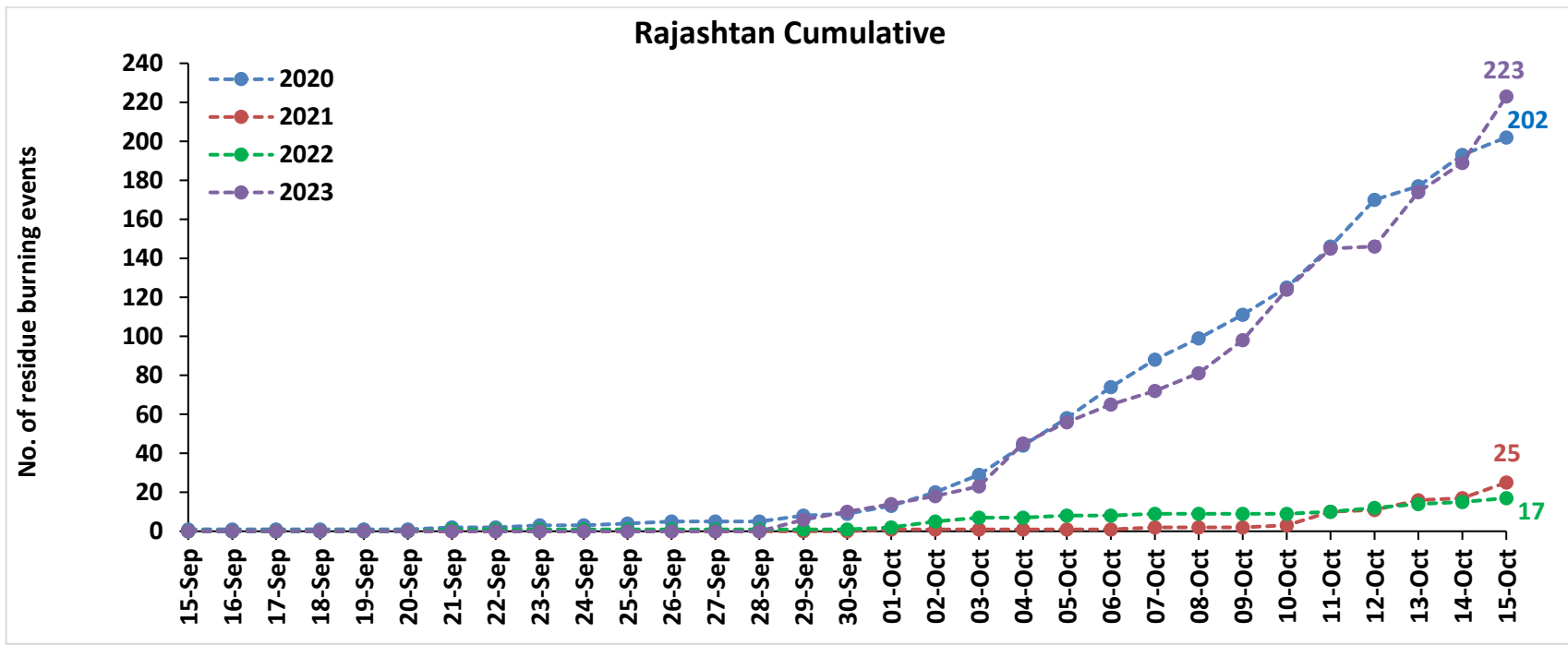
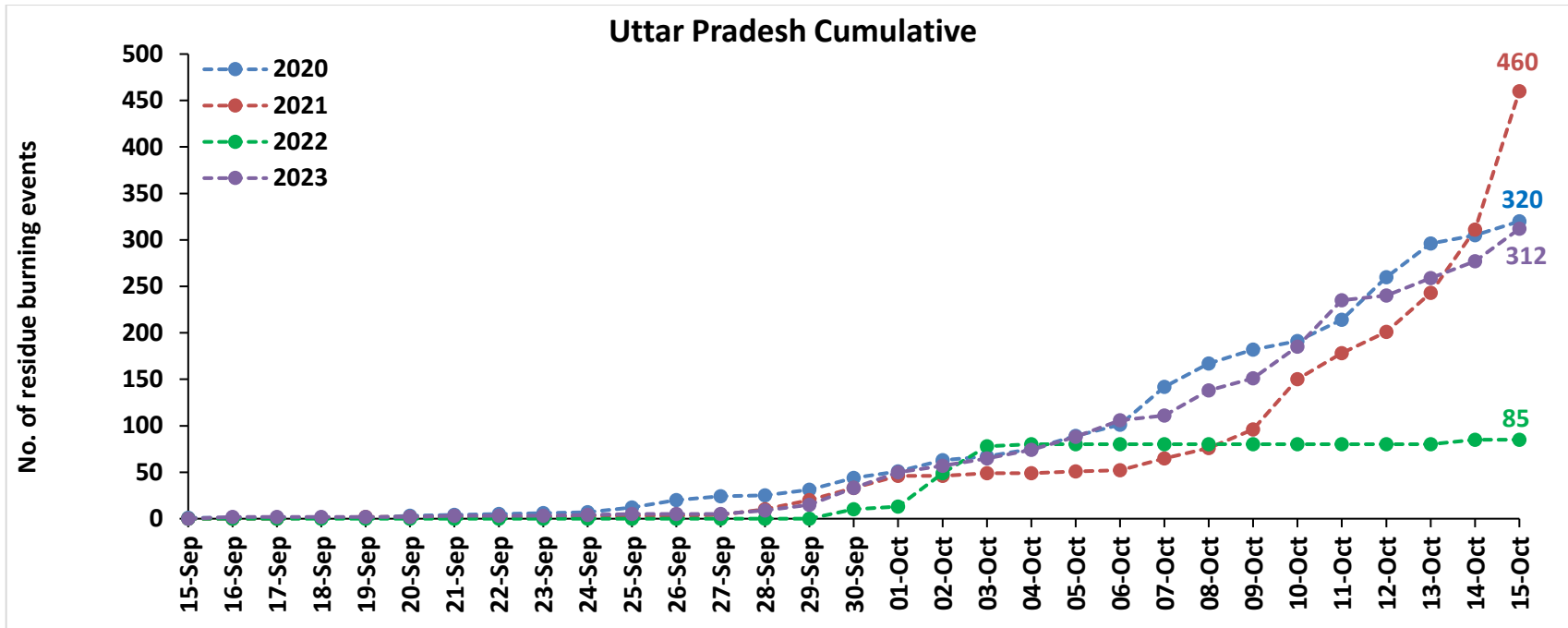
Madhya Pradesh

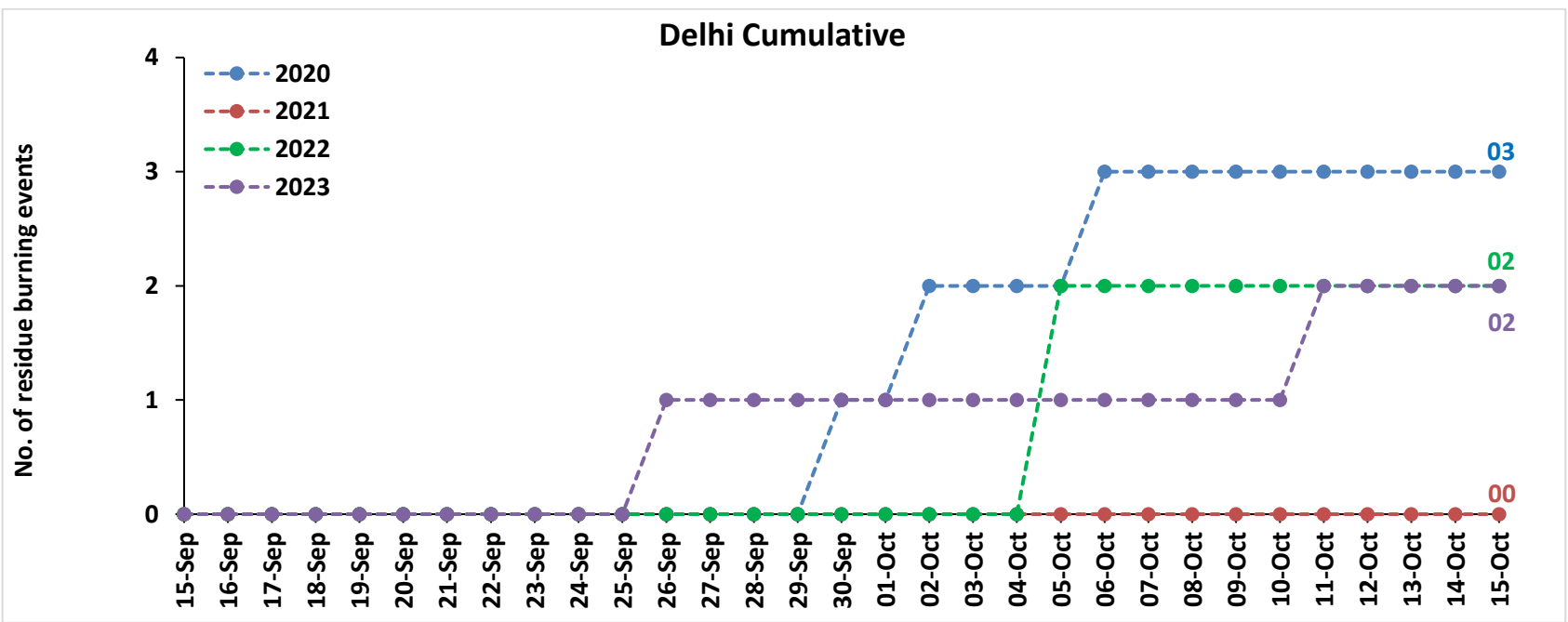
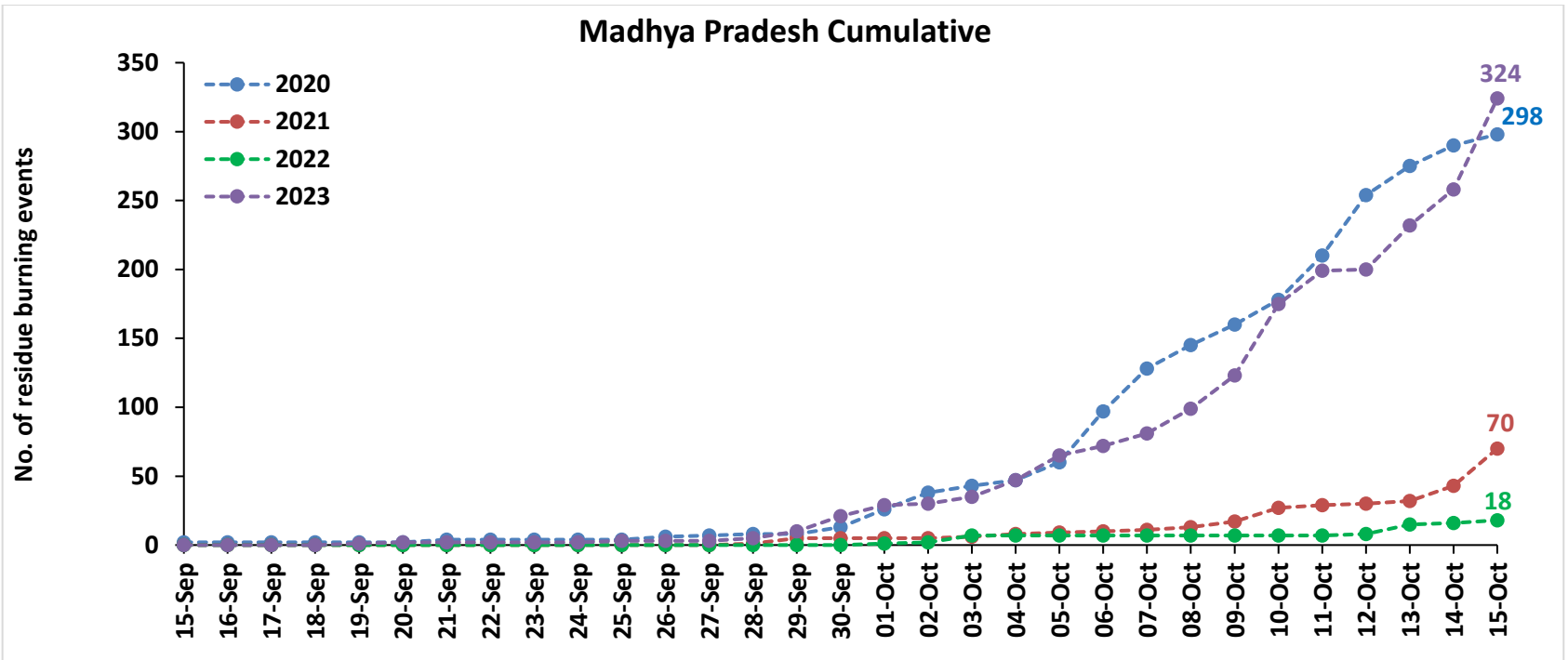




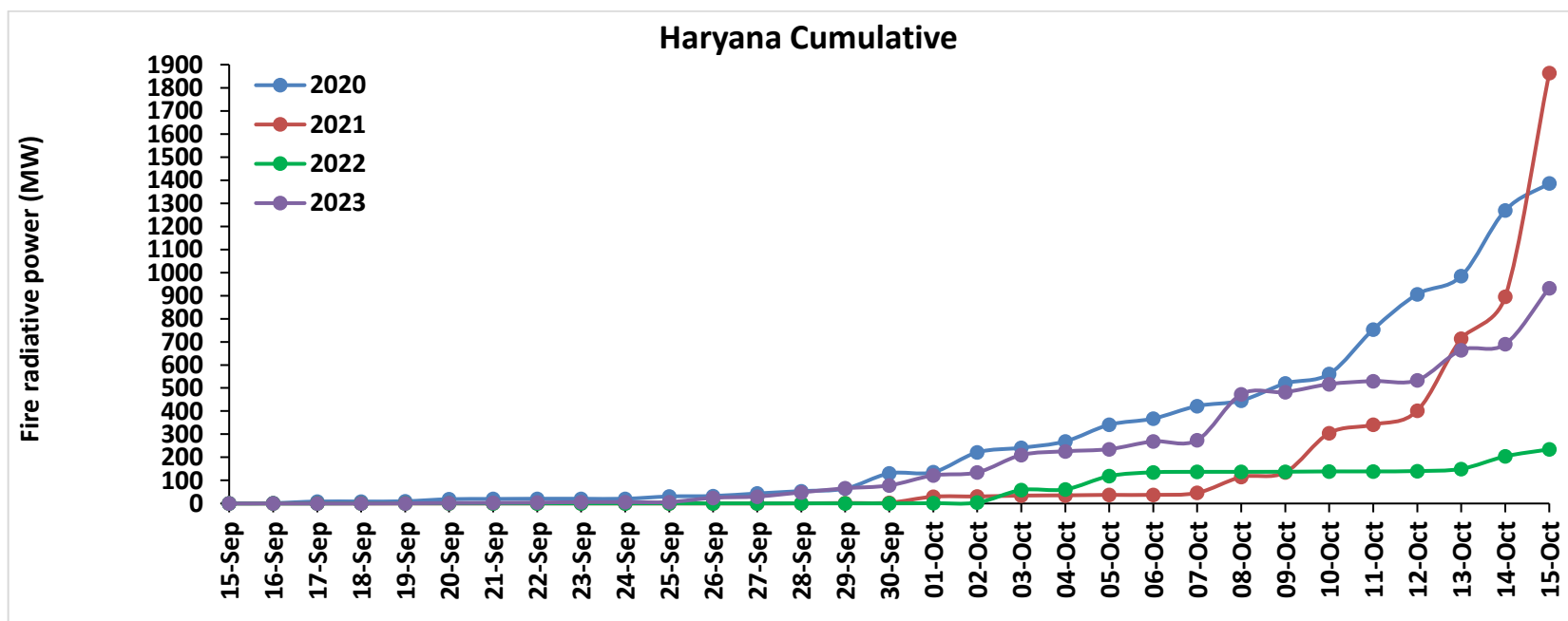
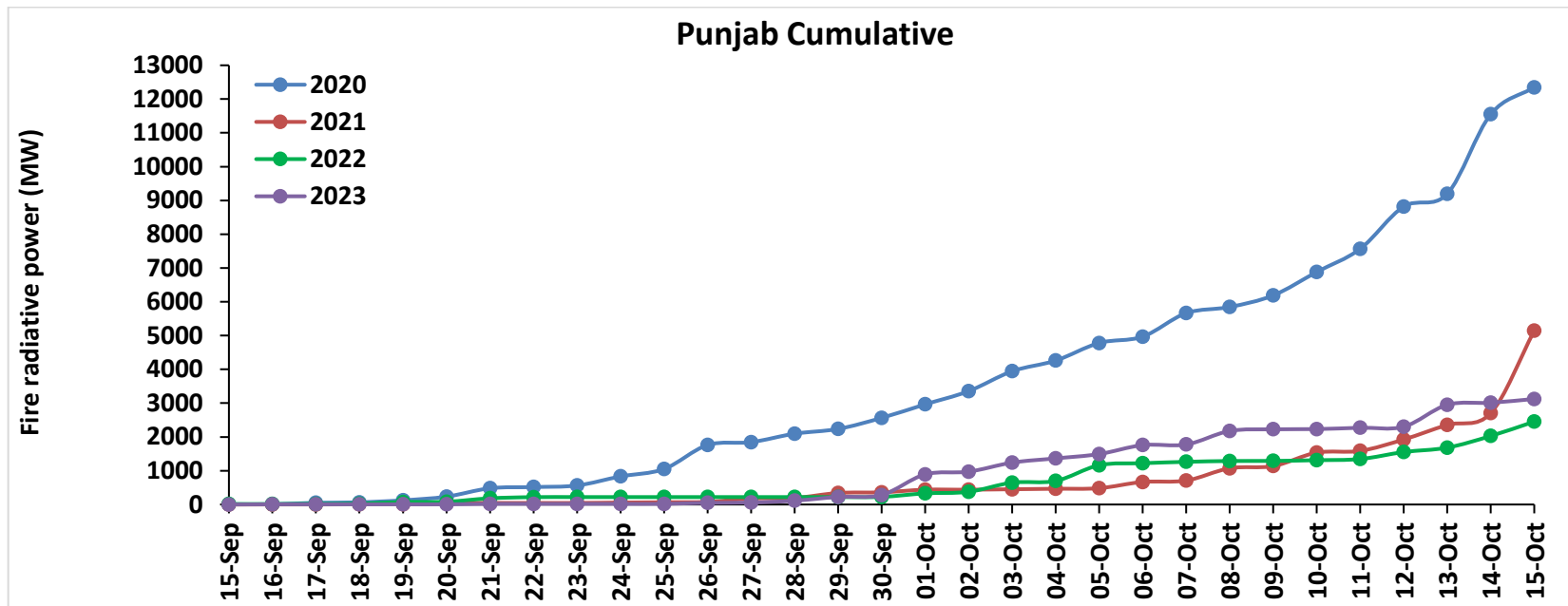
Comparison of residue burning events in current year (2023) with previous years (2020, 2021 and 2022) for the study State

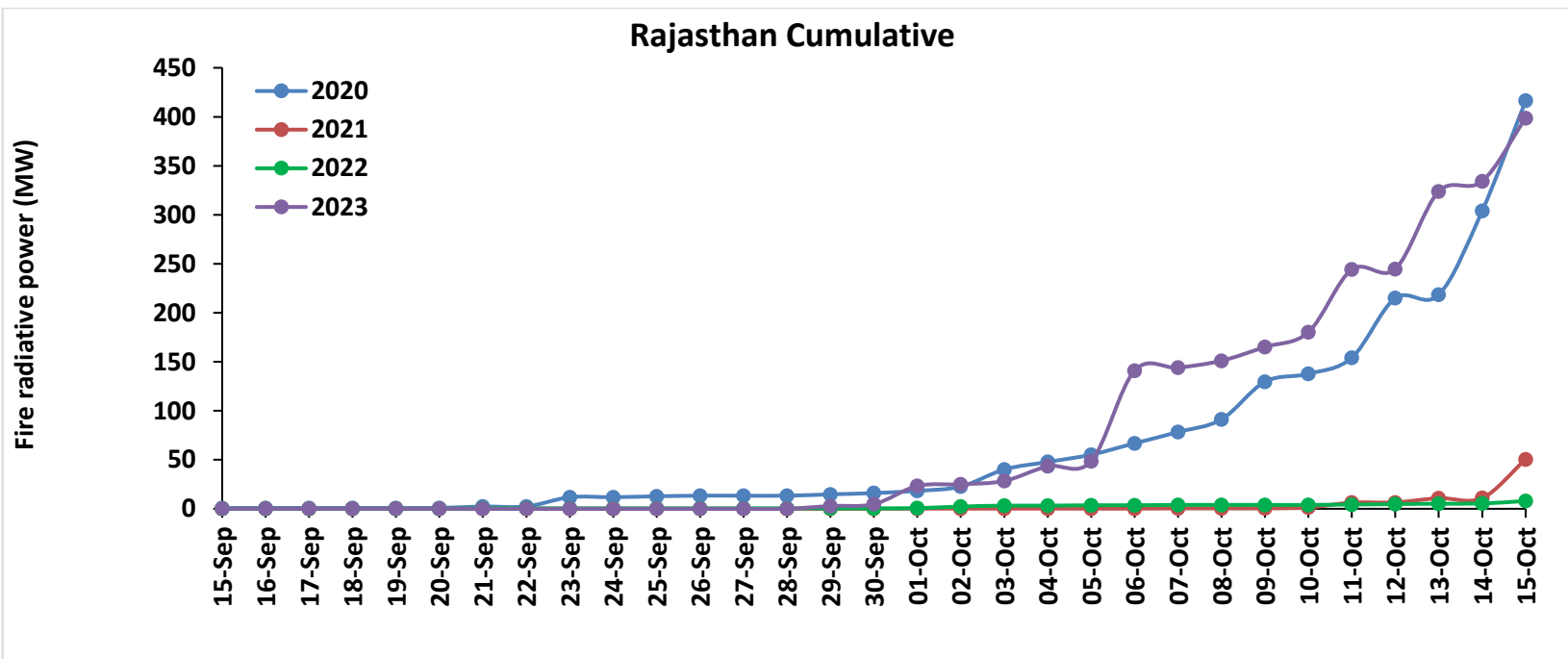
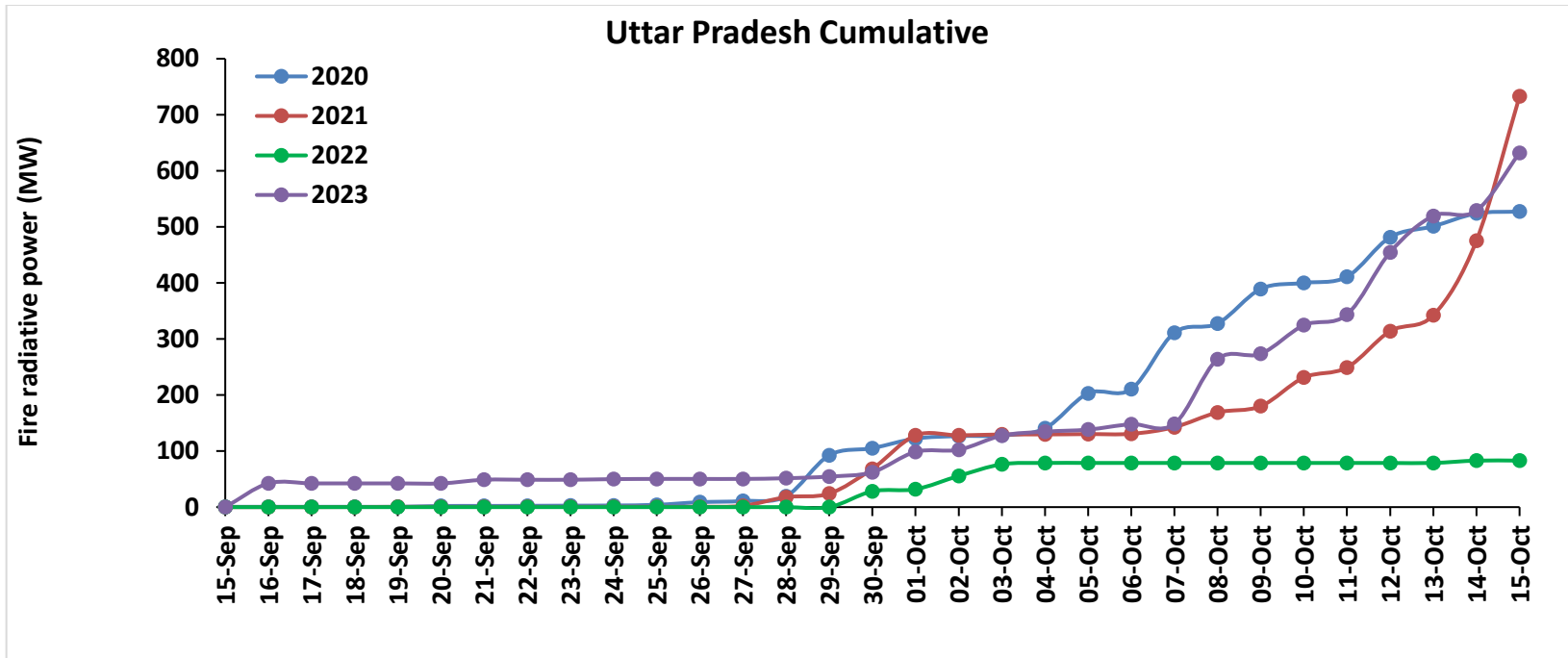


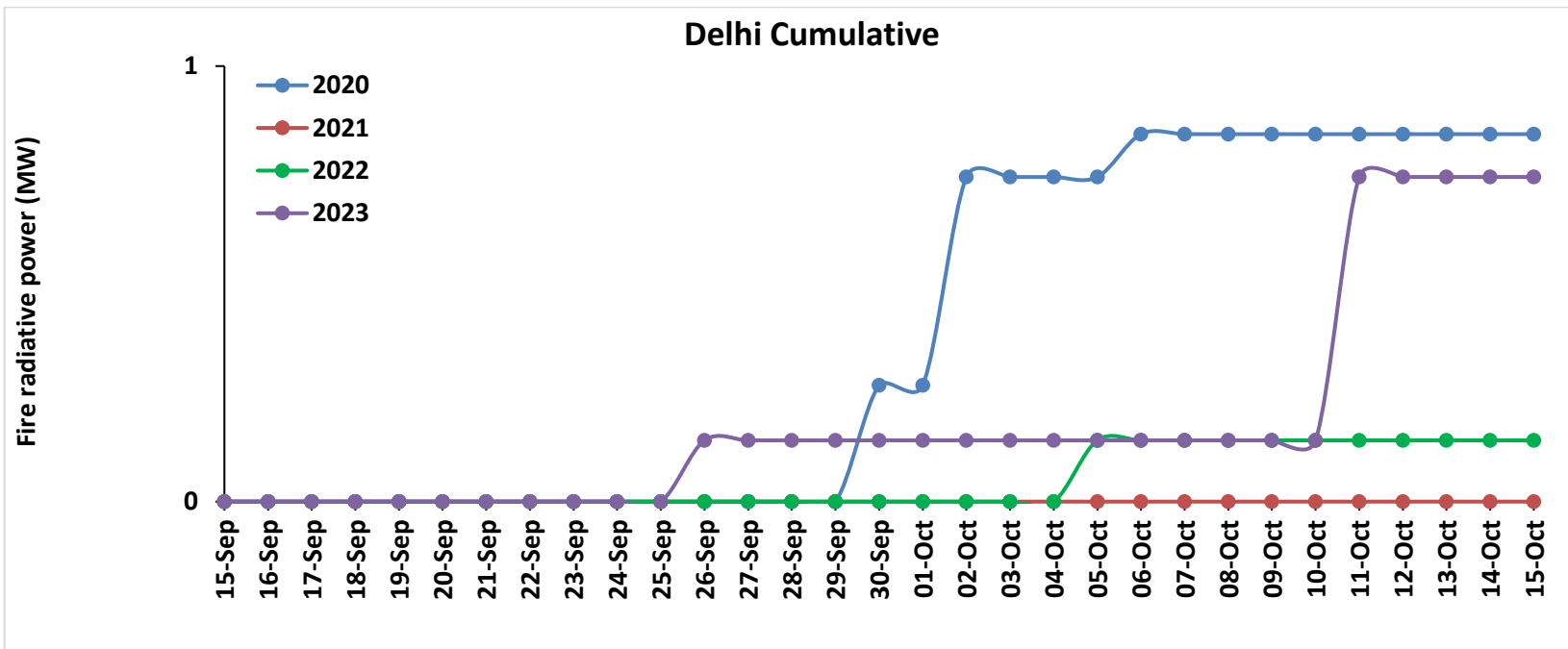
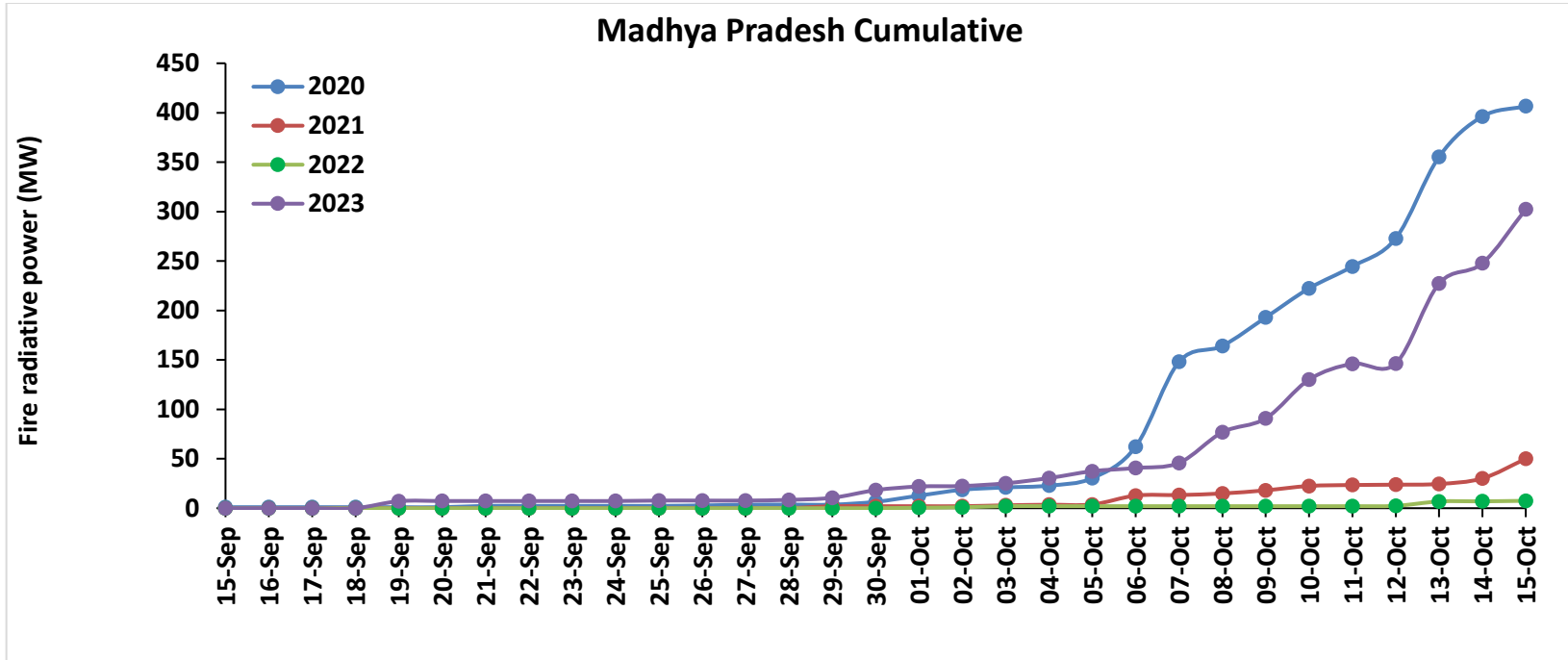




Comparison of residue burning fire power in current year (2023) with previous years (2020, 2021 and 2022) for the study States

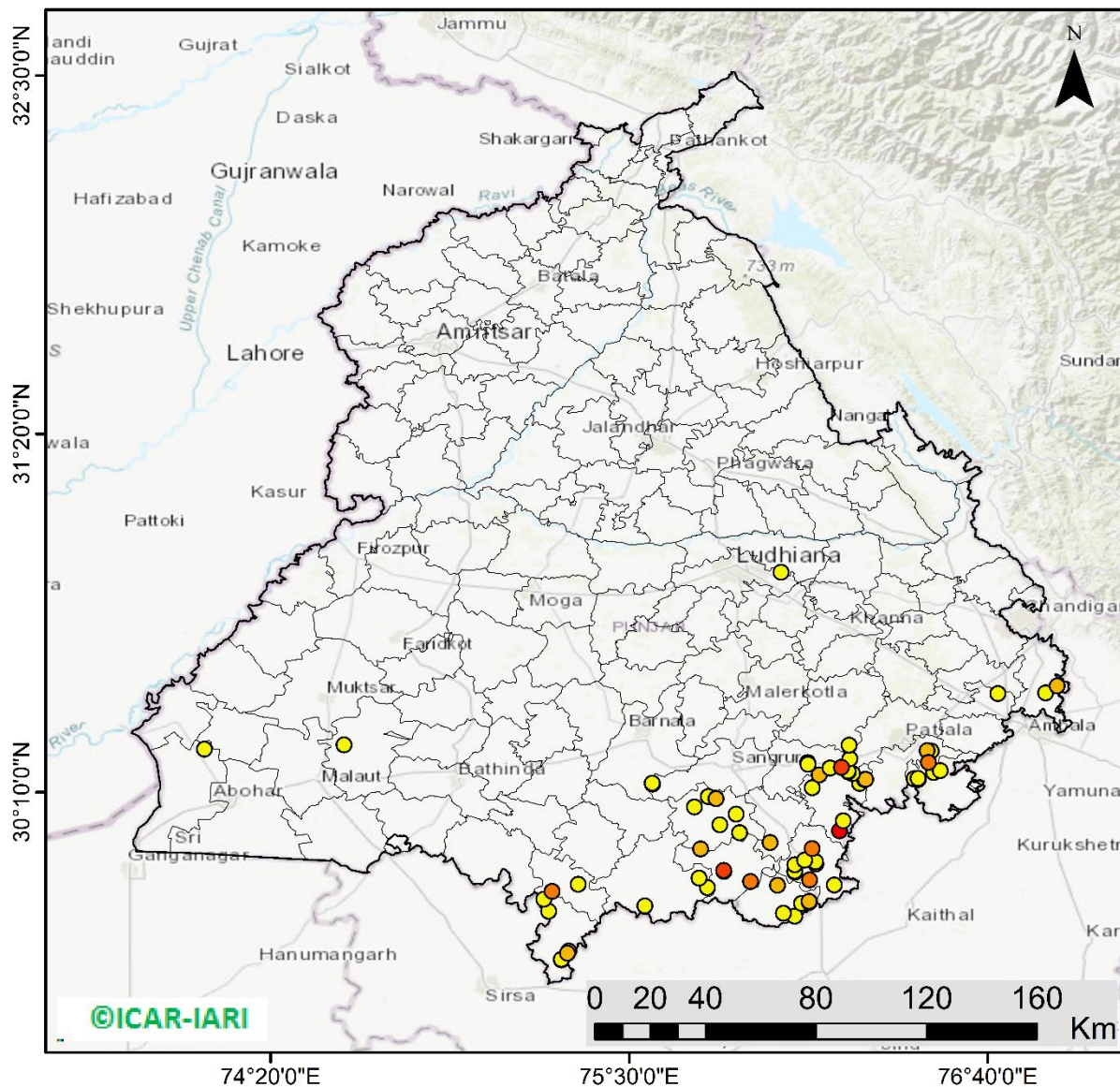






Punjab

RICE RESIDUE BURNING IN PUNJAB



69 burning events detected in Punjab during (15th Oct 2023)

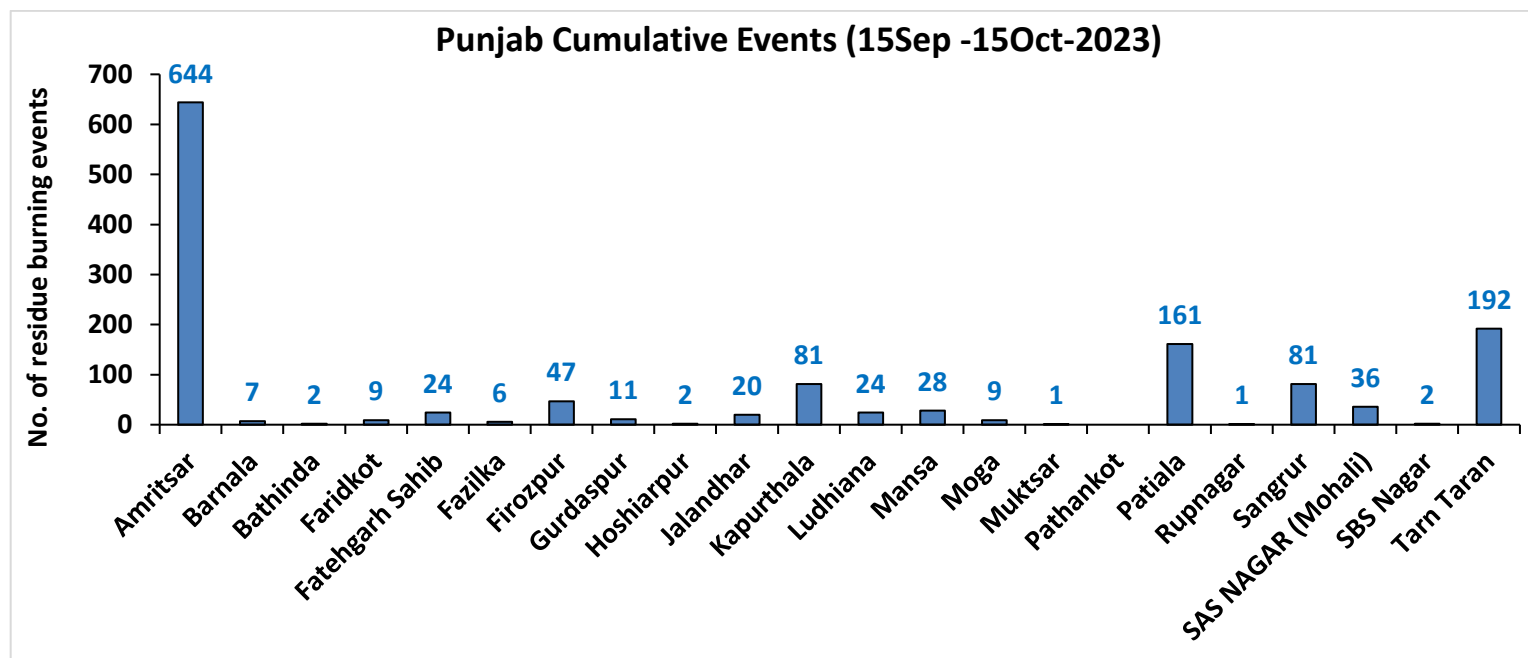
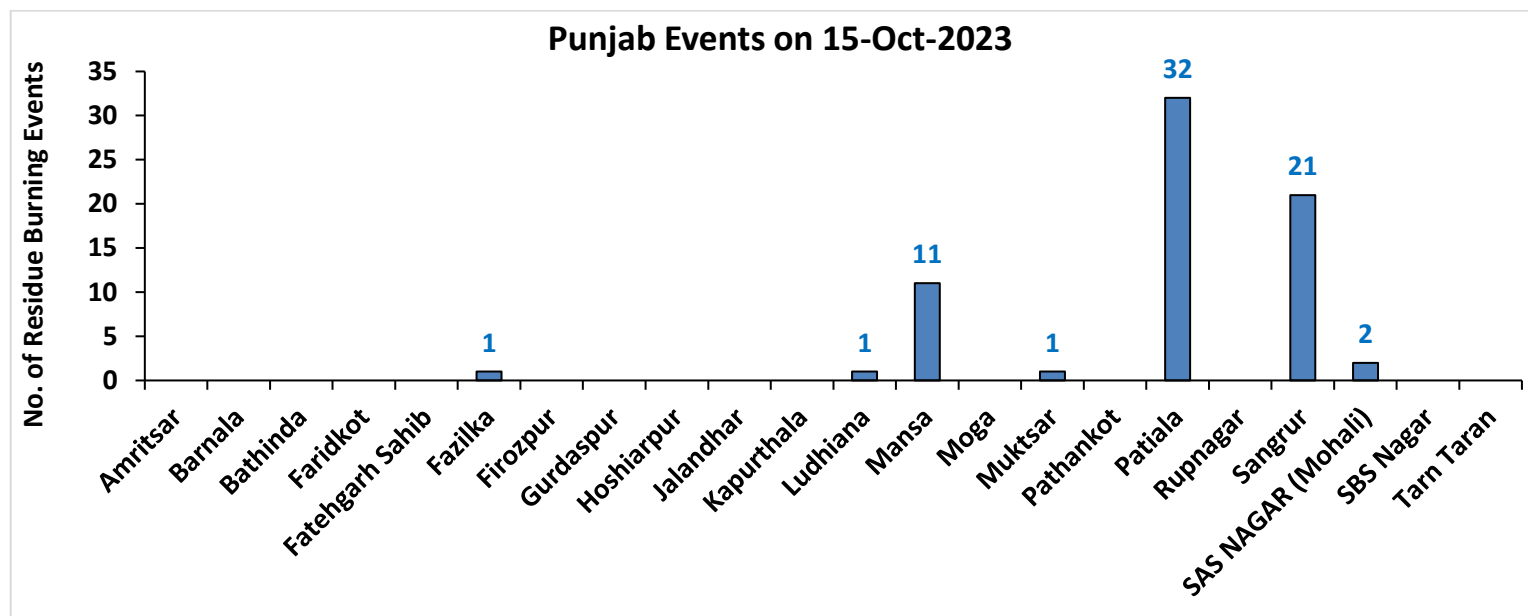
Fire Intensity (W/m²)

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



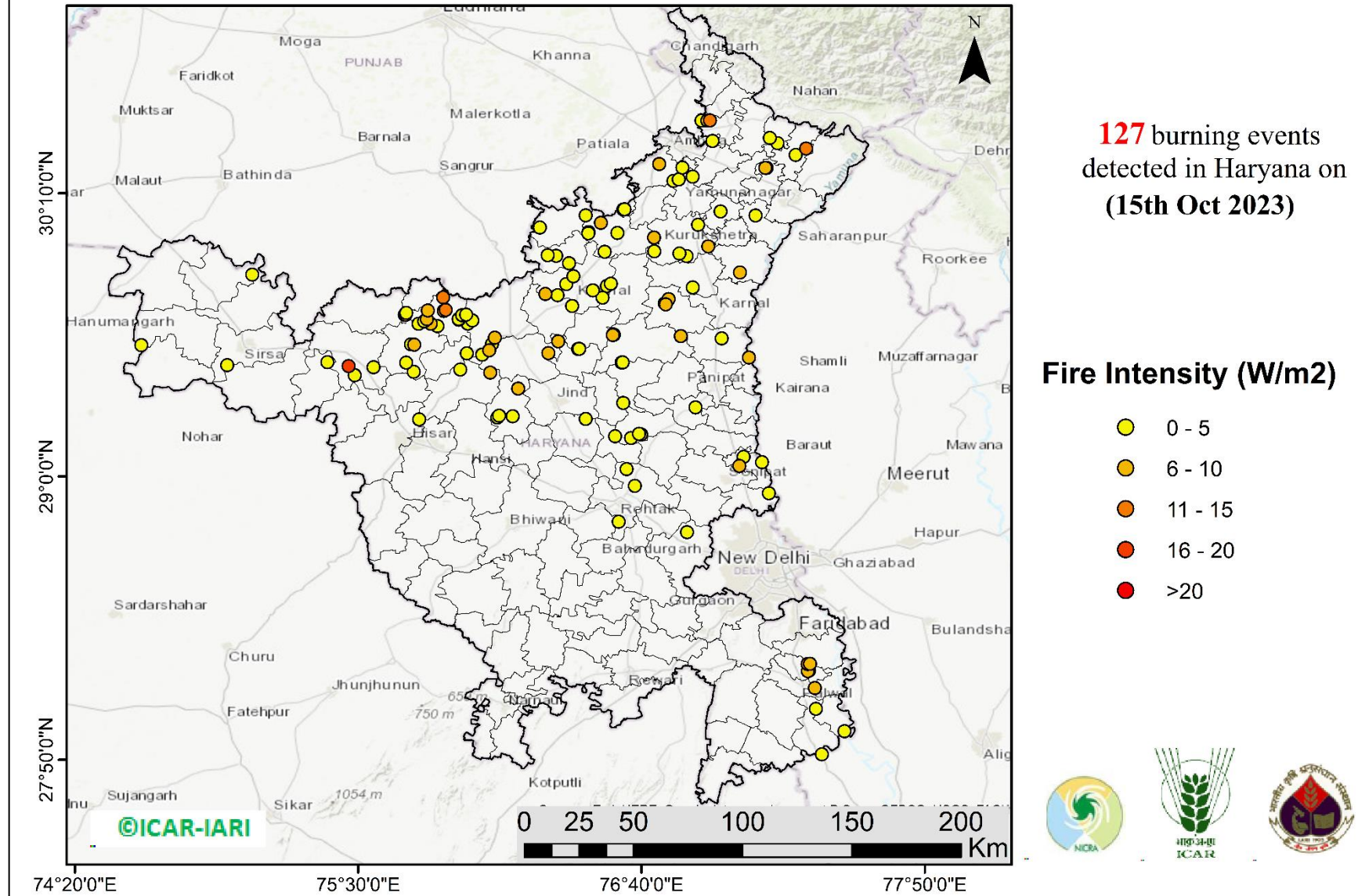
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (15Sep- 15Oct-2023)



Haryana

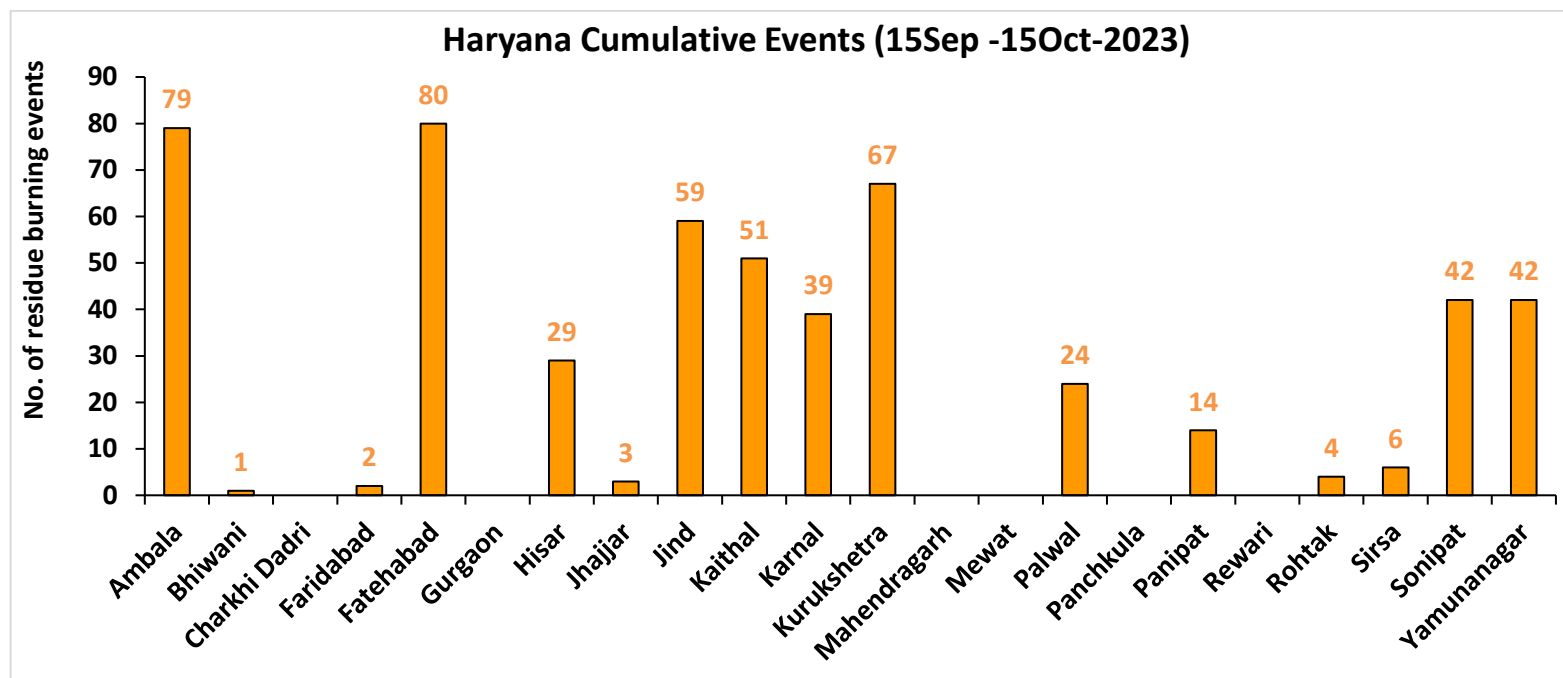
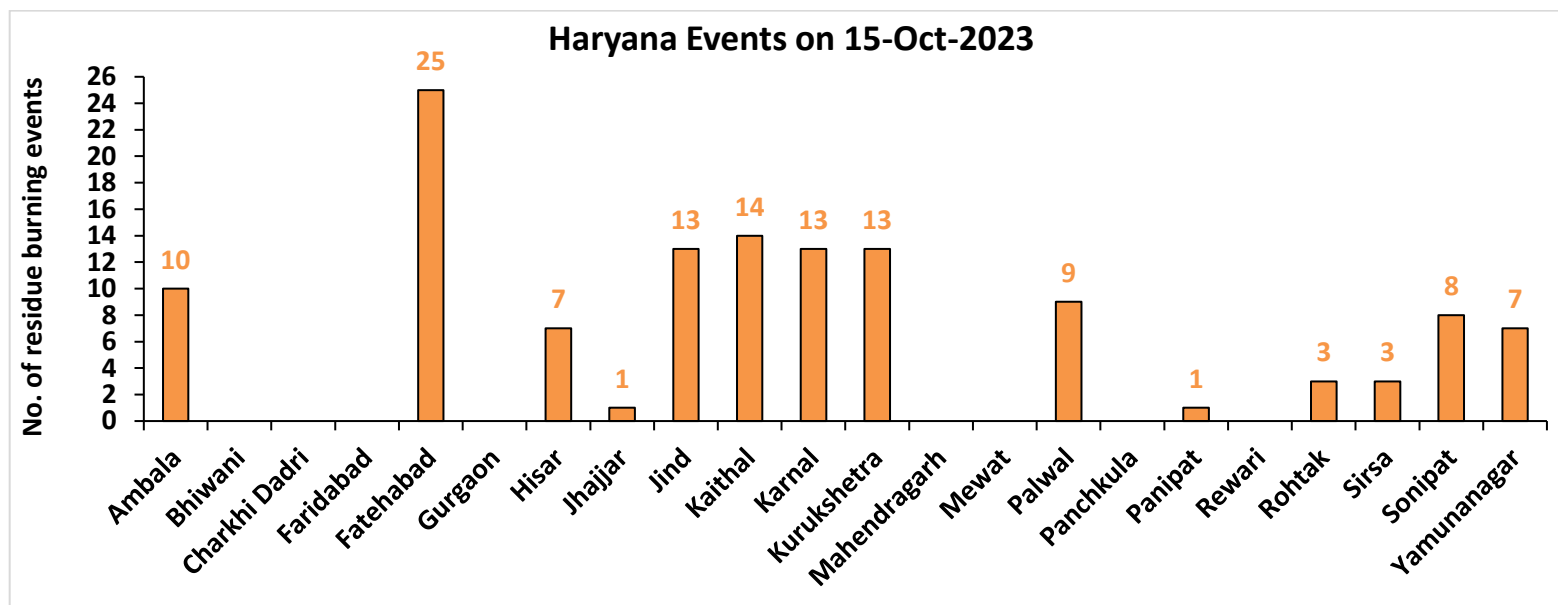
RICE RESIDUE BURNING IN HARYANA



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

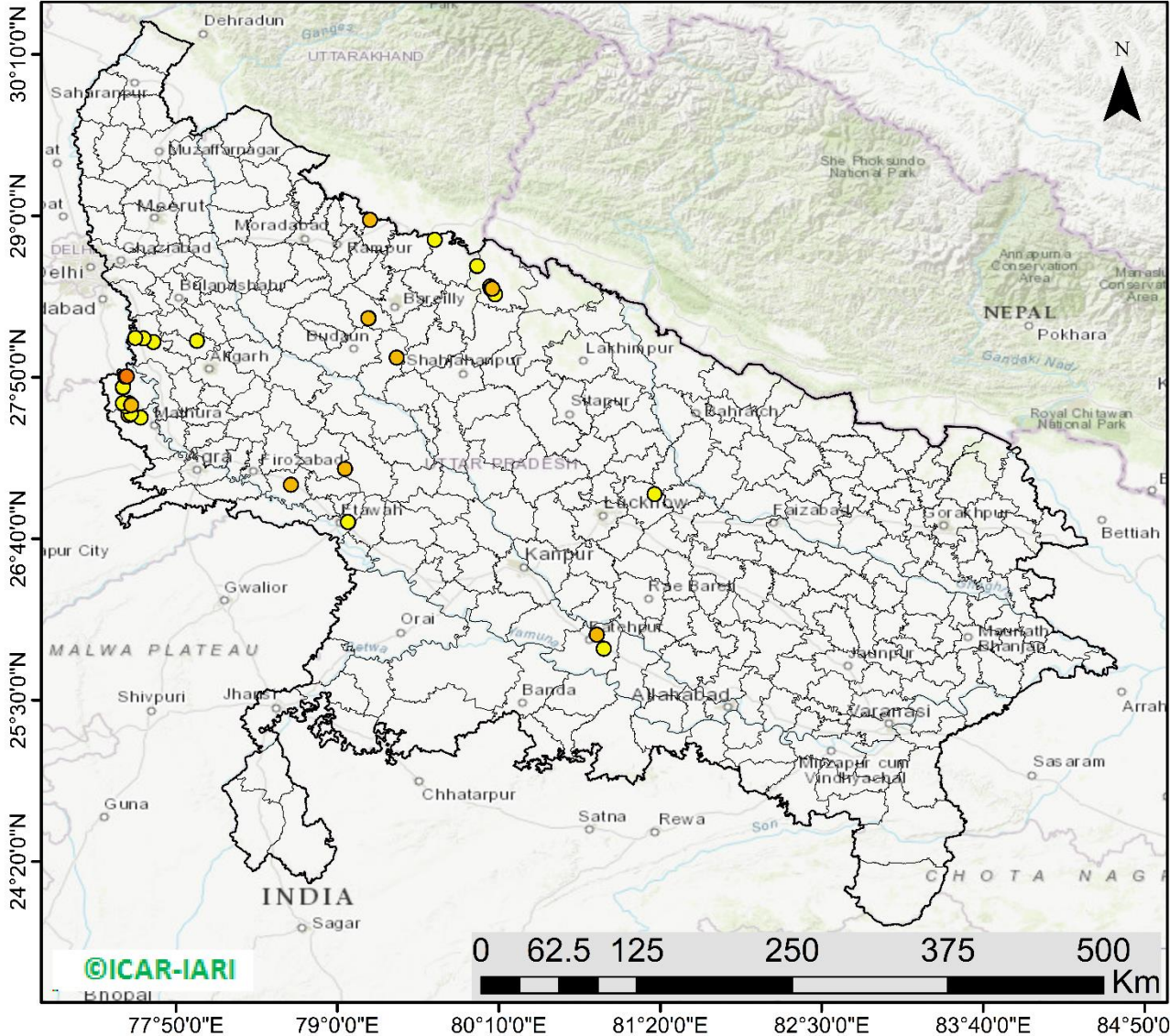


District-wise cumulative number of residues burning events in Haryana (15Sep-15Oct -2023)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



35 burning events detected in Uttar Pradesh on (15th Oct 2023)

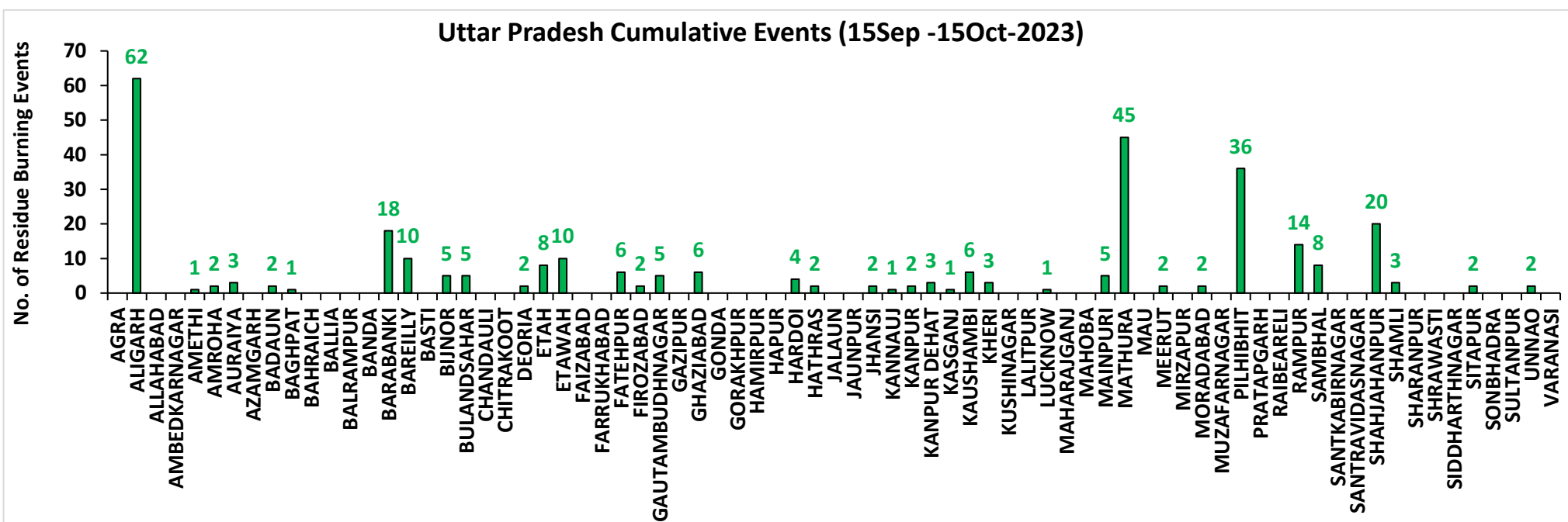
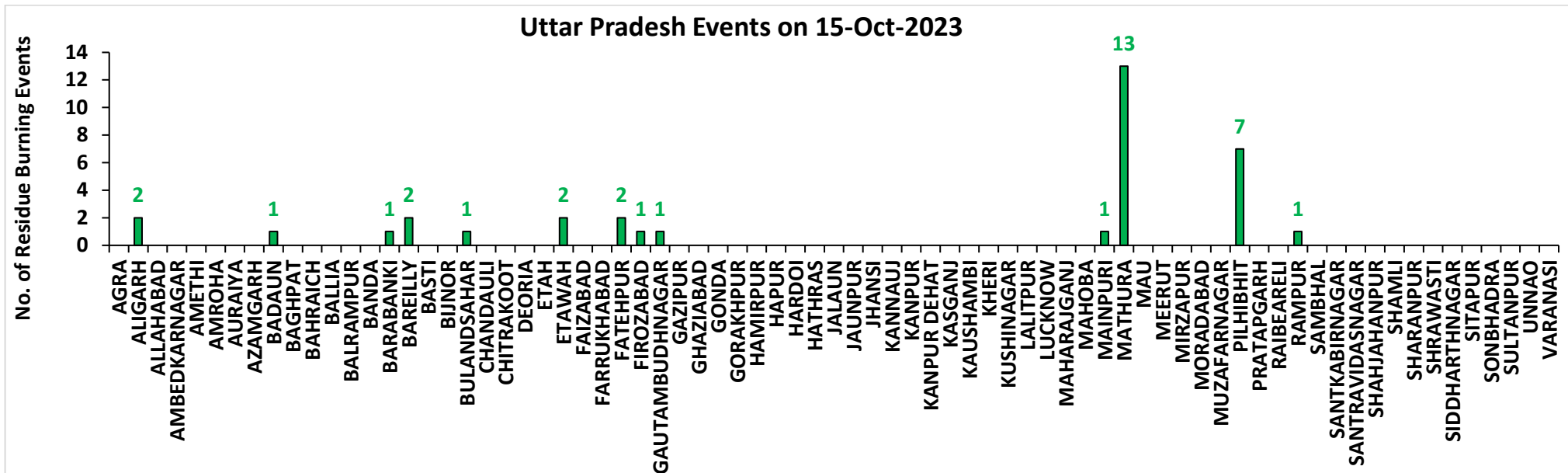
Fire Intensity (W/m2)

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



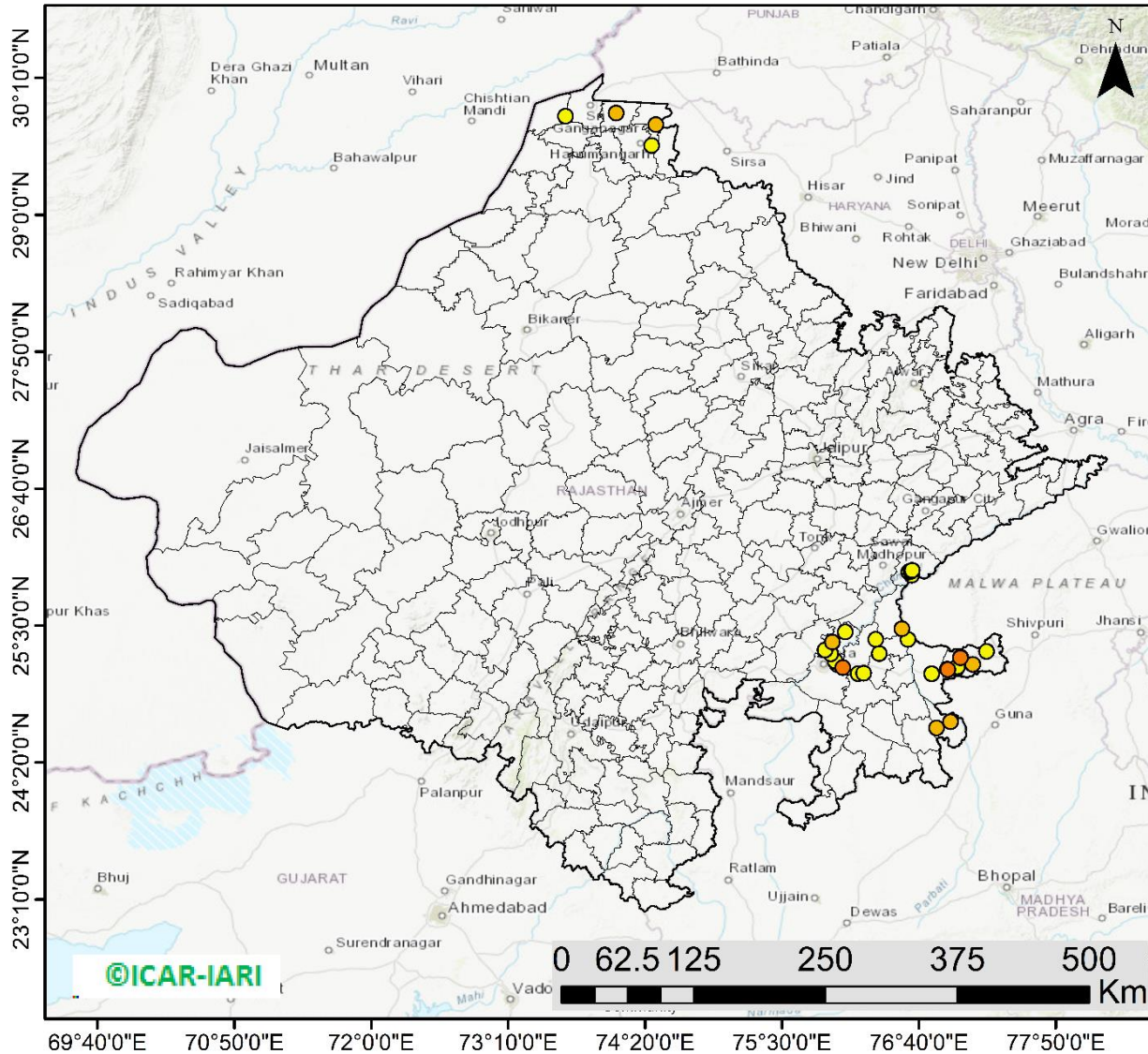
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep-15Oct -2023)



Rajasthan

RICE RESIDUE BURNING IN RAJASTHAN



34 burning events detected in Rajasthan on (15th Oct 2023)

Fire Intensity (W/m²)

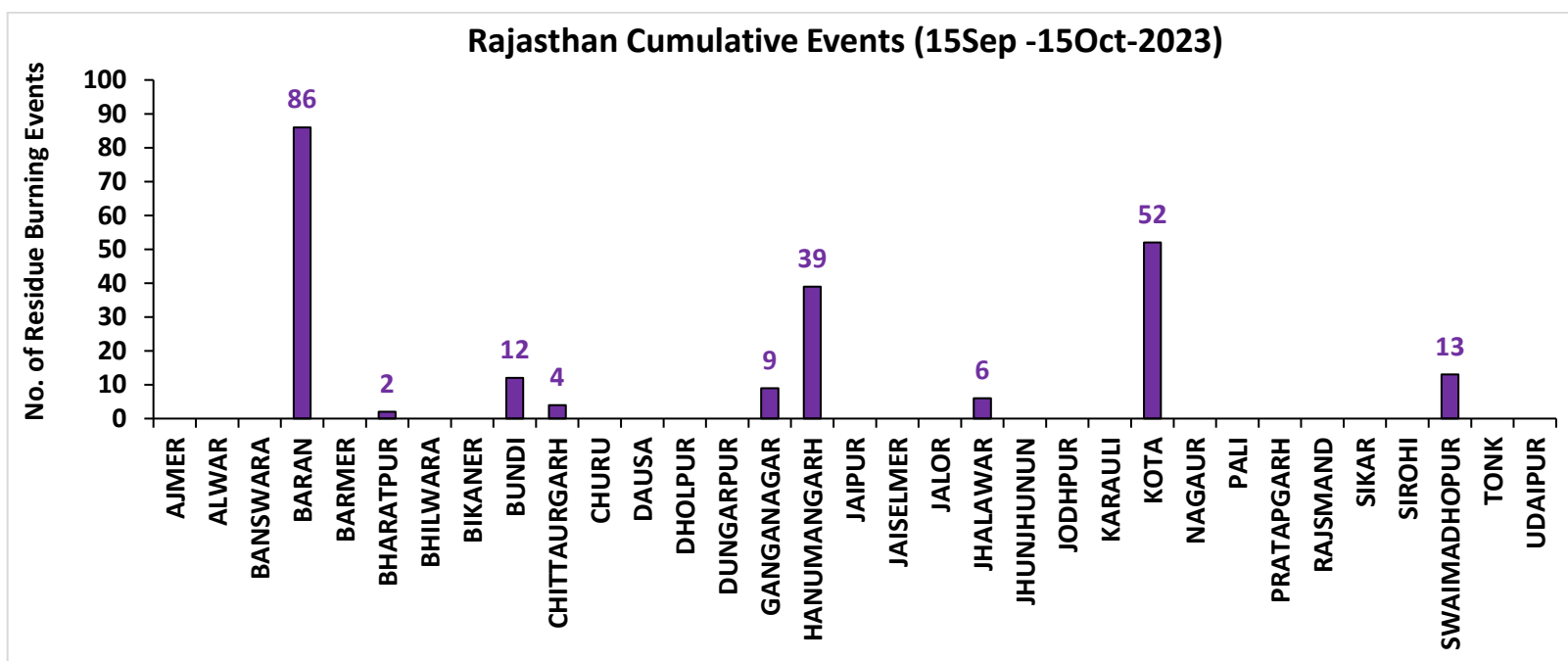
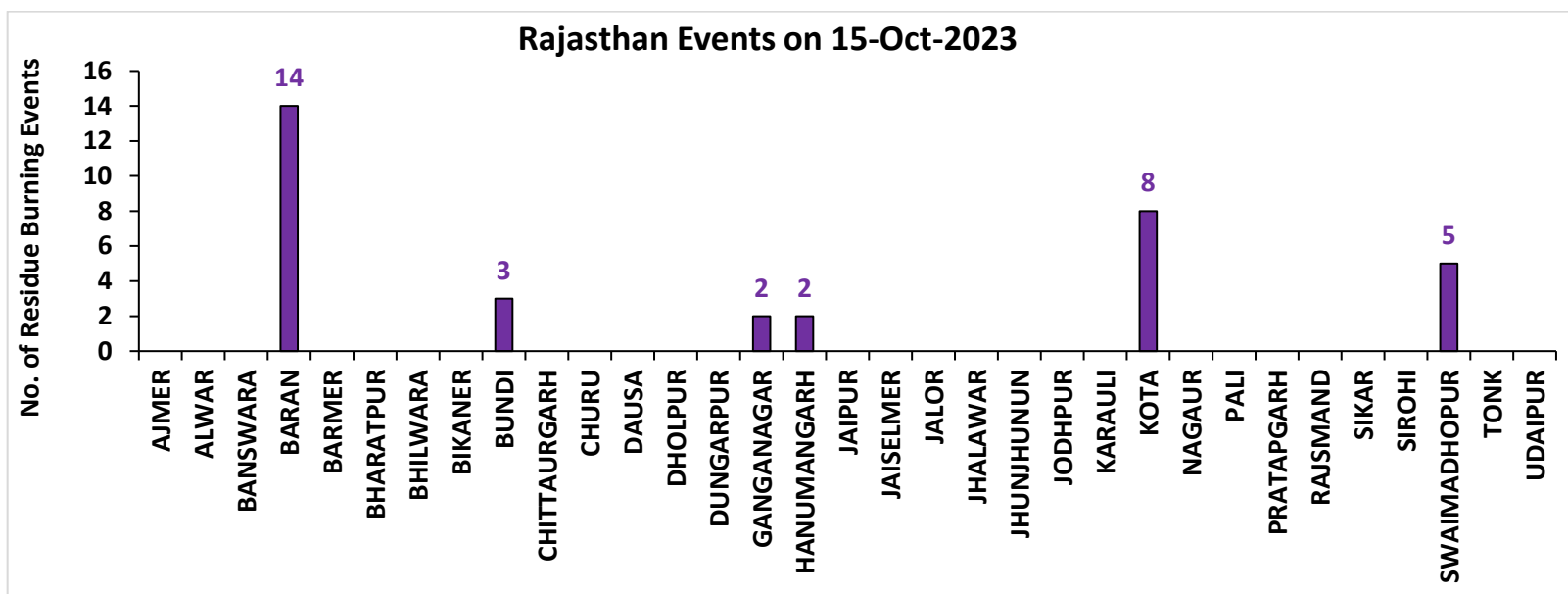
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20

ICAR-IARI



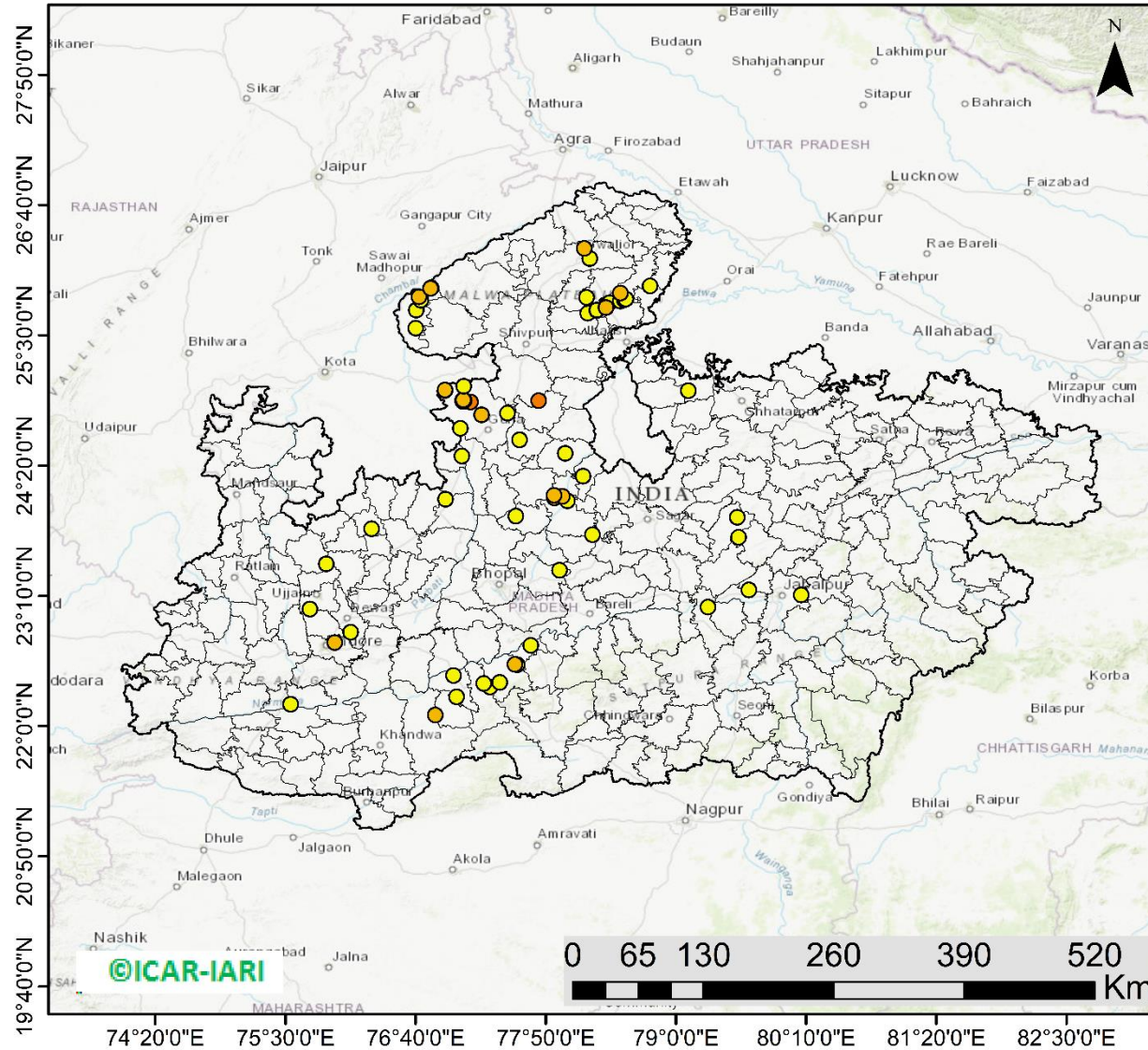
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Rajasthan (15Sep-15Oct -2023)



Madhya Pradesh

RICE RESIDUE BURNING IN MADHYA PRADESH



66 burning events detected in MP on (15th Oct 2023)

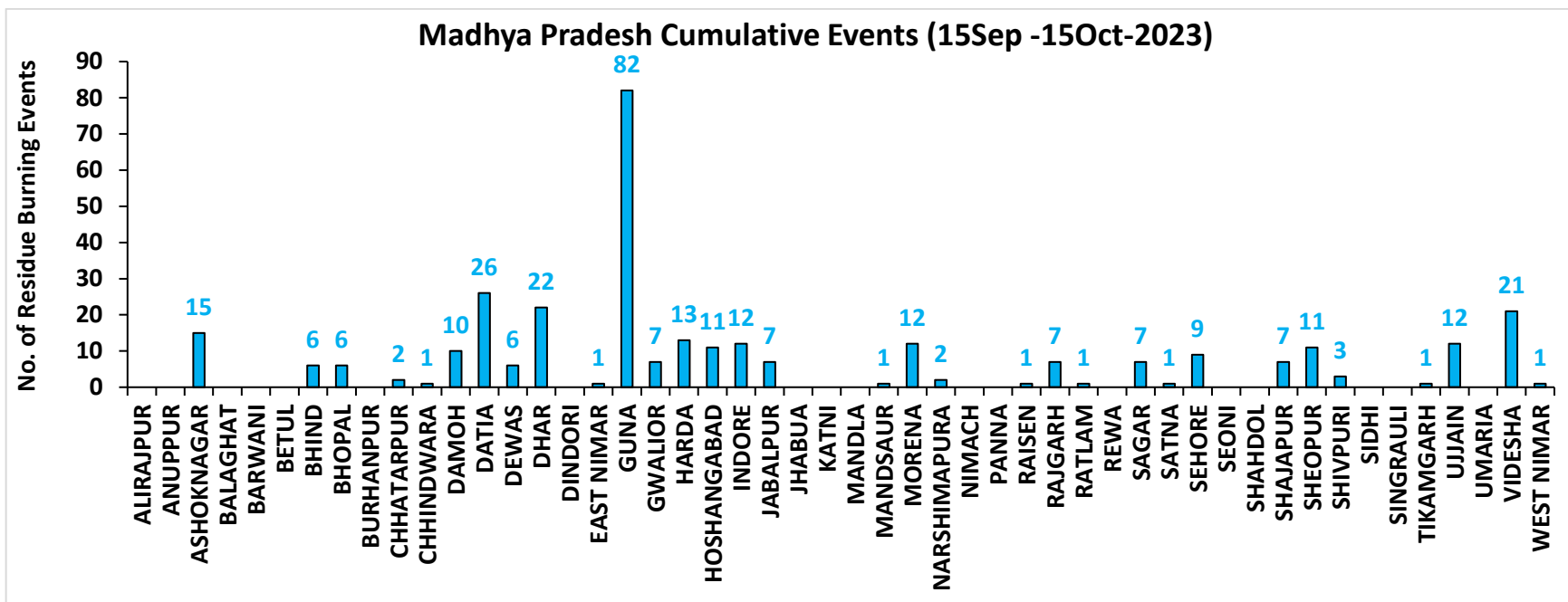
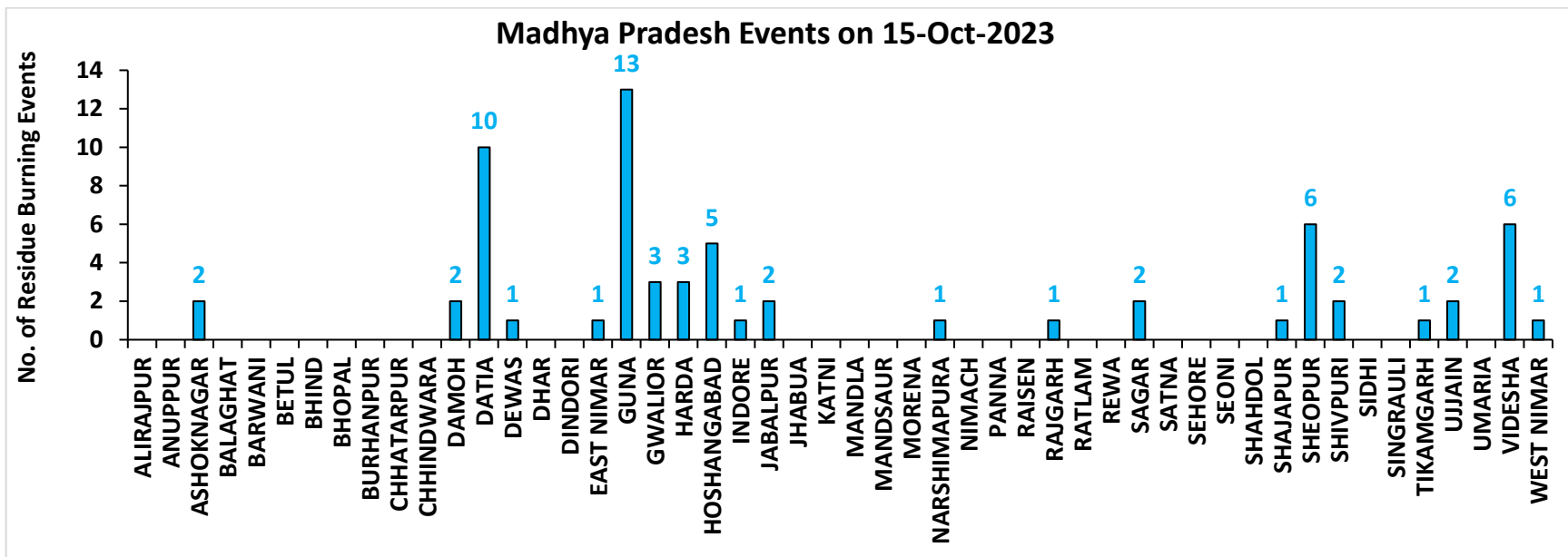
Fire Intensity (W/m²)

- 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-15Oct -2023)



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

(a) Punjab

District	15 Sep-15 Oct			
	2020	2021	2022	2023
Amritsar	1699	532	561	644
Barnala	18	11	7	7
Bathinda	33	5	1	2
Faridkot	107	57	6	9
Fatehgarh Sahib	84	92	11	24
Fazilka	21	24	5	6
Firozpur	270	61	47	47
Gurdaspur	276	104	61	11
Hoshiarpur	28	10	1	2
Jalandhar	80	62	40	20
Kapurthala	145	74	62	81
Ludhiana	118	121	19	24
Mansa	33	1	3	28
Moga	37	33	21	9
Muktsar	16	14	1	1
Pathankot	0	0	0	0
Patiala	412	197	41	161
Rupnagar	12	10	0	1
Sangrur	107	38	27	81
SAS NAGAR (Mohali)	29	22	4	36
SBS Nagar	11	6	2	2
Tarn Taran	1129	472	318	192
Total	4665	1946	1238	1388

(b) Haryana

District	15 Sep-15 Oct			
	2020	2021	2022	2023
AMBALA	86	39	16	79
BHIWANI	0	0	0	1
CHARKHI DADRI	0	0	0	0
FARIDABAD	0	1	0	2
FATEHABAD	41	40	11	80
GURGAON	0	0	0	0
HISAR	6	0	1	29
JHAJJAR	1	0	0	3
JIND	20	23	17	59
KAITHAL	115	203	27	51
KARNAL	214	296	34	39
KURUKSHETRA	151	172	47	67
MAHENDRAGARH	0	0	0	0
MEWAT	0	0	0	0
PALWAL	6	21	0	24
PANCHKULA	0	0	0	0
PANIPAT	7	15	2	14
REWARI	0	0	0	0
ROHTAK	0	0	0	4
SIRSA	7	4	2	6
SONIPAT	9	4	2	42
YAMUNANAGAR	39	32	9	42
Total	702	850	168	542

(c) Uttar Pradesh

District	15 Sep-15 Oct													
	2020	2021	2022	2023	GAUTAMBUDHNAGAR	1	7	0	5	MUZAFARNAGAR	2	2	0	0
AGRA	1	0	0	0	GAZIPUR	0	0	0	0	PILHIBHIT	5	57	2	36
ALIGARH	24	13	1	62	GHAZIABAD	1	2	1	6	PRATAPGARH	0	0	0	0
ALLAHABAD	0	1	0	0	GONDA	0	0	0	0	RAIBEARELI	1	0	0	0
AMBEDKARNAGAR	0	0	0	0	GORAKHPUR	0	0	0	0	RAMPUR	17	47	0	14
AMETHI	0	1	2	1	HAMIRPUR	1	0	0	0	SAMBHAL	6	6	4	8
AMROHA	1	0	0	2	HAPUR	3	0	0	0	SANTKABIRNAGAR	0	0	0	0
AURAIYA	16	2	4	3	HARDOI	6	6	0	4	SANTRAVIDASNAGAR	0	0	0	0
AZAMGARH	0	0	0	0	HATHRAS	0	0	0	2	SHAHJAHANPUR	36	146	53	20
BADAUN	0	1	0	2	JALAUN	0	0	0	0	SHAMLI	18	10	2	3
BAGHPAT	2	1	0	1	JAUNPUR	0	0	0	0	SHARANPUR	18	15	0	0
BAHRAICH	2	2	1	0	JHANSI	6	4	0	2	SHRAWASTI	2	0	0	0
BALLIA	0	0	0	0	KANNAUJ	3	0	0	1	SIDDHARTHANAGAR	0	0	0	0
BALRAMPUR	0	0	0	0	KANPUR	0	1	0	2	SITAPUR	9	8	0	2
BANDA	0	0	0	0	KANPUR DEHAT	3	1	0	3	SONBHADRA	0	0	0	0
BARABANKI	10	5	0	18	KASGANJ	1	2	0	1	SULTANPUR	0	0	0	0
BAREILLY	10	11	0	10	KAUSHAMBI	7	2	0	6	UNNAO	4	0	0	2
BASTI	2	1	0	0	KHERI	30	39	8	3	VARANASI	0	0	0	0
BIJNOR	4	2	1	5	KUSHINAGAR	0	0	0	0	Total	320	460	85	312
BULANSAHAR	6	2	2	5	LALITPUR	0	1	2	0					
CHANDAULI	0	0	0	0	LUCKNOW	2	0	0	1					
CHITRAKOOT	0	0	0	0	MAHARAJGANJ	0	0	0	0					
DEORIA	0	0	0	2	MAHOBA	1	0	0	0					
ETAH	4	6	0	8	MAINPURI	4	6	0	5					
ETAWAH	2	6	0	10	MATHURA	14	24	0	45					
FAIZABAD	1	0	0	0	MAU	0	0	0	0					
FARRUKHABAD	0	0	0	0	MEERUT	9	2	0	2					
FATEHPUR	14	6	0	6	MIRZAPUR	5	5	2	0					
FIROZABAD	4	4	0	2	MORADABAD	2	3	0	2					

(d) Delhi

District	15 Sep-15 Oct			
	2020	2021	2022	2023
CENTRAL	0	0	0	0
EAST	0	0	0	0
NEW DELHI	0	0	0	0
NORTH	2	0	2	2
NORTH EAST	0	0	0	0
NORTH WEST DELHI	0	0	0	0
SHAHADRA	0	0	0	0
SOUTH	1	0	0	0
SOUTH EAST	0	0	0	0
SOUTH WEST DELHI	0	0	0	0
WEST DELHI	0	0	0	0
Total	3	0	2	2

(e) Rajasthan

District	15 Sep-15 Oct			
	2020	2021	2022	2023
AJMER	0	0	0	0
ALWAR	1	0	0	0
BANSWARA	0	0	0	0
BARAN	81	0	4	86
BARMER	2	0	0	0
BHARATPUR	0	0	0	2
BHILWARA	2	0	0	0
BIKANER	1	0	0	0
BUNDI	4	0	6	12
CHITTAURGARH	0	2	2	4
CHURU	0	0	0	0
DAUSA	0	0	0	0
DHOLPUR	0	0	0	0
DUNGARPUR	0	0	0	0
GANGANAGAR	2	0	1	9
HANUMANGARH	74	22	3	39
JAIPUR	0	0	0	0
JAISELMER	2	0	0	0
JALOR	0	0	0	0
JHALAWAR	1	0	0	6
JHUNJHUNUN	1	0	0	0
JODHPUR	1	0	0	0
KARAULI	1	0	0	0
KOTA	23	1	1	52
NAGAU	0	0	0	0
PALI	1	0	0	0
PRATAPGARH	0	0	0	0
RAJSMAND	0	0	0	0
SIKAR	0	0	0	0
SIROHI	1	0	0	0
SWAIMADHOPUR	3	0	0	13
TONK	1	0	0	0
UDAIPUR	0	0	0	0
Total	202	25	17	223

(f) Madhya Pradesh

District	15 Sep-15 Oct								
	2020	2021	2022	2023					
					PANNA	2	0	0	0
ALIRAJPUR	0	0	0	0	RAISEN	10	1	0	1
ANUPPUR	0	0	0	0	RAJGARH	7	1	2	7
ASHOKNAGAR	9	0	0	15	RATLAM	0	0	0	1
BALAGHAT	0	0	0	0	REWA	3	0	0	0
BARWANI	0	0	0	0	SAGAR	13	5	1	7
BETUL	0	0	0	0	SATNA	3	4	0	1
BHIND	2	1	0	6	SEHORE	5	3	1	9
BHOPAL	6	5	1	6	SEONI	9	4	0	0
BURHANPUR	0	0	0	0	SHAHDOL	0	0	0	0
CHHATARPUR	4	0	0	2	SHAJAPUR	5	0	0	7
CHHINDWARA	0	3	0	1	SHEOPUR	6	0	0	11
DAMOH	15	4	0	10	SHIVPURI	5	0	6	3
DATIA	31	7	0	26	SIDHI	0	0	0	0
DEWAS	3	0	0	6	SINGRAULI	0	0	0	0
DHAR	19	0	0	22	TIKAMGARH	1	0	0	1
DINDORI	0	0	0	0	UJJAIN	5	0	0	12
EAST NIMAR	2	1	2	1	UMARIA	0	0	0	0
GUNA	15	1	1	82	VIDESHA	51	8	2	21
GWALIOR	21	0	1	7	WEST NIMAR	2	0	0	1
HARDA	8	8	0	13	Total	298	70	18	324
HOSHANGABAD	9	4	0	11					
INDORE	2	0	0	12					
JABALPUR	6	3	0	7					
JHABUA	0	0	0	0					
KATNI	0	0	0	0					
MANDLA	0	0	0	0					
MANDSAUR	3	0	0	1					
MORENA	14	5	0	12					
NARSHIMAPURA	2	2	1	2					
NIMACH	0	0	0	0					

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

Number of Paddy Residue Burning Events Detected

Date	Punjab				Haryana				Uttar Pradesh			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
15-Sep	5	0	14	0	2	0	0	1	1	0	0	0
16-Sep	0	2	0	6	1	0	0	1	0	0	0	2
17-Sep	5	0	1	0	3	0	0	0	0	0	0	0
18-Sep	17	9	7	0	0	0	1	0	0	1	0	0
19-Sep	30	5	18	0	2	0	0	1	0	1	0	0
20-Sep	67	8	10	0	6	0	0	2	2	0	0	0
21-Sep	54	0	56	1	2	0	0	2	1	0	0	1
22-Sep	34	0	30	0	1	0	0	2	1	0	0	0
23-Sep	49	0	3	1	0	0	0	3	1	0	0	0
24-Sep	78	5	0	0	0	0	0	0	1	1	0	1
25-Sep	184	11	0	0	11	0	0	1	5	0	0	1
26-Sep	190	19	0	3	5	0	0	2	8	0	0	0
27-Sep	78	37	0	21	8	0	0	9	4	1	0	0
28-Sep	55	28	0	33	6	1	0	8	1	6	0	4
29-Sep	63	64	0	68	9	4	0	17	6	10	0	6
30-Sep	116	27	8	81	22	2	0	26	13	13	10	18
01-Oct	165	13	45	123	15	4	1	21	7	13	3	17
02-Oct	141	0	83	119	30	2	7	24	12	0	36	7
03-Oct	110	9	75	105	8	6	8	17	4	3	29	8
04-Oct	162	23	65	95	29	2	7	29	8	0	2	9
05-Oct	161	18	130	98	17	3	24	24	14	2	0	14
06-Oct	171	42	85	91	30	0	26	19	12	1	0	18
07-Oct	197	72	62	32	32	11	6	13	41	13	0	5
08-Oct	95	108	19	92	29	27	0	55	25	11	0	27
09-Oct	121	114	3	58	20	39	1	14	15	20	0	13
10-Oct	232	150	4	10	33	95	2	28	9	54	0	34
11-Oct	377	64	45	26	90	51	0	21	23	28	0	50

12-Oct	388	97	104	13	69	51	4	5	46	23	0	5
13-Oct	266	132	120	154	47	91	15	29	36	42	0	19
14-Oct	605	229	82	89	69	98	30	41	9	68	5	18
15-Oct	449	660	169	69	106	363	36	127	15	149	0	35
Total	4665	1946	1238	1388	702	850	168	542	320	460	85	312

Number of Paddy Residue Burning Events Detected

Date	Delhi				Rajasthan				Madhya Pradesh			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
15-Sep	0	0	0	0	1	0	0	0	2	0	0	0
16-Sep	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
18-Sep	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	1
20-Sep	0	0	0	0	0	0	0	0	0	0	0	1
21-Sep	0	0	0	0	1	0	1	0	2	0	0	0
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	0	0	0	0	1	0	0	0	0	0	0	0
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	0	0	0	0	1	0	0	0	0	0	0	1
26-Sep	0	0	0	1	1	0	0	0	2	0	0	0
27-Sep	0	0	0	0	0	0	0	0	1	0	0	0
28-Sep	0	0	0	0	0	0	0	0	1	1	0	2
29-Sep	0	0	0	0	3	0	0	6	0	4	0	5
30-Sep	1	0	0	0	1	0	0	4	5	0	0	11
01-Oct	0	0	0	0	4	1	1	4	13	0	1	8
02-Oct	1	0	0	0	7	0	3	4	12	0	1	1
03-Oct	0	0	0	0	9	0	2	5	5	1	5	5
04-Oct	0	0	0	0	15	0	0	22	4	2	0	12
05-Oct	0	0	2	0	14	0	1	11	13	1	0	18
06-Oct	1	0	0	0	16	0	0	9	37	1	0	7
07-Oct	0	0	0	0	14	1	1	7	31	1	0	9
08-Oct	0	0	0	0	11	0	0	9	17	2	0	18

09-Oct	0	0	0	0	12	0	0	17	15	4	0	24
10-Oct	0	0	0	0	14	1	0	26	18	10	0	52
11-Oct	0	0	0	1	21	7	1	21	32	2	0	24
12-Oct	0	0	0	0	24	1	2	1	44	1	1	1
13-Oct	0	0	0	0	7	5	2	28	21	2	7	32
14-Oct	0	0	0	0	16	1	1	15	15	11	1	26
15-Oct	0	0	0	0	9	8	2	34	8	27	2	66
Total	3	0	2	2	202	25	17	223	298	70	18	324

Details of residue burning events in Punjab on 15-Oct-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	FAZILKA	KHUIAN SARWAR	S-NPP	30.30656	74.11768	02:25:44	N	0.90
2	LUDHIANA	LUDHIANA-1	S-NPP	30.88211	75.99420	02:25:44	N	0.40
3	MANSA	BUDHLADA	S-NPP	29.79590	75.55106	13:35:01	D	2.20
4	MANSA	BUDHLADA	S-NPP	29.85555	75.75456	13:35:01	D	3.00
5	MANSA	BUDHLADA	S-NPP	29.88634	75.72778	13:35:01	D	2.40
6	MANSA	JHUNIR	S-NPP	29.86615	75.33444	13:35:01	D	2.80
7	MANSA	JHUNIR	AQUA	29.84300	75.24900	13:50:54	D	13.80
8	MANSA	SARDULGARH	S-NPP	29.61991	75.27967	13:35:01	D	1.70
9	MANSA	SARDULGARH	S-NPP	29.62163	75.27967	13:35:01	D	2.20
10	MANSA	SARDULGARH	S-NPP	29.64900	75.30344	13:35:01	D	3.70
11	MANSA	SARDULGARH	S-NPP	29.77874	75.23807	13:35:01	D	3.70
12	MANSA	SARDULGARH	S-NPP	29.81758	75.22244	13:35:01	D	2.90
13	MANSA	SARDULGARH	AQUA	29.64200	75.29900	13:50:54	D	7.20
14	MUKTSAR	KOT BHAI AT GIDDERBAHA	S-NPP	30.32033	74.57207	13:35:01	D	3.30
15	PATIALA	BHUNARHERI	S-NPP	30.20781	76.44093	13:35:01	D	10.70
16	PATIALA	BHUNARHERI	S-NPP	30.20949	76.42732	13:35:01	D	2.50
17	PATIALA	BHUNARHERI	S-NPP	30.21126	76.44031	13:35:01	D	4.20
18	PATIALA	BHUNARHERI	S-NPP	30.23032	76.49106	13:35:01	D	3.00
19	PATIALA	BHUNARHERI	S-NPP	30.23664	76.51221	13:35:01	D	4.60
20	PATIALA	NABHA	S-NPP	30.31921	76.21565	13:35:01	D	2.80
21	PATIALA	PATIALA	S-NPP	30.23181	76.21288	13:35:01	D	3.60
22	PATIALA	PATIALA	S-NPP	30.23523	76.21227	13:35:01	D	3.60
23	PATIALA	PATIALA	S-NPP	30.27461	76.21833	13:35:01	D	2.20
24	PATIALA	PATIALA	AQUA	30.24700	76.19100	13:50:54	D	19.60
25	PATIALA	PATRAN	S-NPP	29.86384	76.16749	13:35:01	D	4.00
26	PATIALA	PATRAN	S-NPP	29.88074	76.08683	13:35:01	D	12.00
27	PATIALA	PATRAN	S-NPP	29.90556	76.03938	13:35:01	D	2.40
28	PATIALA	PATRAN	S-NPP	29.90895	76.03876	13:35:01	D	2.40
29	PATIALA	PATRAN	S-NPP	29.92991	76.03926	13:35:01	D	3.70
30	PATIALA	PATRAN	S-NPP	29.93241	76.10767	13:35:01	D	11.10

31	PATIALA	PATRAN	S-NPP	29.93921	76.10645	13:35:01	D	2.20
32	PATIALA	PATRAN	S-NPP	29.94476	76.07097	13:35:01	D	3.00
33	PATIALA	PATRAN	S-NPP	29.98265	76.09551	13:35:01	D	10.20
34	PATIALA	SAMANA	S-NPP	30.04023	76.18472	13:35:01	D	21.30
35	PATIALA	SAMANA	S-NPP	30.07305	76.19707	13:35:01	D	4.00
36	PATIALA	SAMANA	S-NPP	30.18097	76.09573	13:35:01	D	3.70
37	PATIALA	SAMANA	S-NPP	30.19477	76.25014	13:35:01	D	2.90
38	PATIALA	SAMANA	S-NPP	30.20733	76.26542	13:35:01	D	8.20
39	PATIALA	SAMANA	S-NPP	30.20791	76.26971	13:35:01	D	6.80
40	PATIALA	SAMANA	S-NPP	30.22250	76.11864	13:35:01	D	7.60
41	PATIALA	SAMANA	S-NPP	30.22670	76.22691	13:35:01	D	3.10
42	PATIALA	SAMANA	S-NPP	30.24478	76.15379	13:35:01	D	4.50
43	PATIALA	SANAUR	S-NPP	30.29993	76.48320	13:35:01	D	4.70
44	PATIALA	SANAUR	S-NPP	30.30163	76.46954	13:35:01	D	5.40
45	PATIALA	SANAUR	AQUA	30.26300	76.47400	13:50:54	D	11.80
46	PATIALA	SHAMBU KALAN	S-NPP	30.48731	76.70004	13:35:01	D	1.50
47	SANGRUR	ANDANA	S-NPP	29.76257	76.03872	13:35:01	D	4.40
48	SANGRUR	ANDANA	S-NPP	29.80393	76.06123	13:35:01	D	3.70
49	SANGRUR	ANDANA	S-NPP	29.80741	76.08636	13:35:01	D	2.00
50	SANGRUR	ANDANA	S-NPP	29.81080	76.08575	13:35:01	D	7.00
51	SANGRUR	ANDANA	S-NPP	29.86299	75.98282	13:35:01	D	5.30
52	SANGRUR	ANDANA	AQUA	29.77200	76.00200	13:50:54	D	5.00
53	SANGRUR	BHAWANIGARH	S-NPP	30.26276	76.08096	13:35:01	D	2.50
54	SANGRUR	BHAWANIGARH	AQUA	30.25700	76.08200	13:50:54	D	4.80
55	SANGRUR	DIRBA	S-NPP	30.00213	75.95867	13:35:01	D	9.30
56	SANGRUR	LEHRA GAGA	S-NPP	29.87517	75.89523	13:35:01	D	10.50
57	SANGRUR	LEHRA GAGA	S-NPP	29.90808	75.80846	13:35:01	D	16.90
58	SANGRUR	LEHRA GAGA	S-NPP	29.91146	75.80784	13:35:01	D	16.90
59	SANGRUR	LEHRA GAGA	S-NPP	29.98099	75.73254	13:35:01	D	5.10
60	SANGRUR	SANGRUR	S-NPP	30.19224	75.57603	13:35:01	D	3.20
61	SANGRUR	SANGRUR	S-NPP	30.19560	75.57541	13:35:01	D	3.20
62	SANGRUR	SUNAM	S-NPP	30.03411	75.85948	13:35:01	D	3.20
63	SANGRUR	SUNAM	S-NPP	30.05986	75.79509	13:35:01	D	3.40
64	SANGRUR	SUNAM	S-NPP	30.09499	75.84834	13:35:01	D	4.20

65	SANGRUR	SUNAM	S-NPP	30.11808	75.71258	13:35:01	D	4.50
66	SANGRUR	SUNAM	S-NPP	30.15197	75.75735	13:35:01	D	2.80
67	SANGRUR	SUNAM	AQUA	30.14500	75.78300	13:50:54	D	7.50
68	SAS NAGAR (MOHALI)	DERABASSI	S-NPP	30.48950	76.85529	13:35:01	D	2.70
69	SAS NAGAR (MOHALI)	DERABASSI	S-NPP	30.51225	76.89285	13:35:01	D	7.00

Details of residue burning events in Haryana on 15-Oct-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMBALA	AMBALA-II	S-NPP	30.09899	76.59251	13:35:01	D	3.20
2	AMBALA	AMBALA-II	S-NPP	30.09958	76.59688	13:35:01	D	3.40
3	AMBALA	AMBALA-II	S-NPP	30.21656	76.79846	13:35:01	D	1.90
4	AMBALA	AMBALA-II	S-NPP	30.27171	76.83551	13:35:01	D	3.20
5	AMBALA	AMBALA-II	AQUA	30.28600	76.74000	13:50:54	D	5.30
6	AMBALA	SAHA	S-NPP	30.23409	76.87753	13:35:01	D	3.40
7	AMBALA	SAHA	S-NPP	30.38099	76.95917	13:35:01	D	3.30
8	AMBALA	SHAHZADPUR	S-NPP	30.46499	76.91376	13:35:01	D	3.40
9	AMBALA	SHAHZADPUR	AQUA	30.46500	76.93800	13:50:54	D	6.30
10	AMBALA	SHAHZADPUR	AQUA	30.46600	76.94900	13:50:54	D	12.80
11	FATEHABAD	BHATTU KALAN	S-NPP	29.47034	75.37337	13:35:01	D	1.60
12	FATEHABAD	BHUNA	S-NPP	29.43035	75.72894	13:35:01	D	2.00
13	FATEHABAD	BHUNA	S-NPP	29.46831	75.69791	13:35:01	D	2.90
14	FATEHABAD	BHUNA	S-NPP	29.54346	75.71758	13:35:01	D	2.70
15	FATEHABAD	BHUNA	S-NPP	29.62843	75.74880	13:35:01	D	1.70
16	FATEHABAD	BHUNA	AQUA	29.54200	75.73100	13:50:54	D	8.70
17	FATEHABAD	FATEHABAD	S-NPP	29.41635	75.48591	13:35:01	D	1.10
18	FATEHABAD	FATEHABAD	S-NPP	29.44943	75.56378	13:35:01	D	2.80
19	FATEHABAD	FATEHABAD	AQUA	29.45400	75.46100	13:50:54	D	15.80
20	FATEHABAD	JAKHAL	AQUA	29.73700	75.85000	13:50:54	D	14.10
21	FATEHABAD	TOHANA	S-NPP	29.61856	75.82645	13:35:01	D	2.50
22	FATEHABAD	TOHANA	S-NPP	29.62859	75.79929	13:35:01	D	5.20
23	FATEHABAD	TOHANA	S-NPP	29.62898	75.95155	13:35:01	D	1.00
24	FATEHABAD	TOHANA	S-NPP	29.63861	75.77218	13:35:01	D	2.80
25	FATEHABAD	TOHANA	S-NPP	29.64468	75.91473	13:35:01	D	3.10
26	FATEHABAD	TOHANA	S-NPP	29.64708	75.78326	13:35:01	D	6.40
27	FATEHABAD	TOHANA	S-NPP	29.64806	75.91412	13:35:01	D	3.10
28	FATEHABAD	TOHANA	S-NPP	29.66388	75.92822	13:35:01	D	2.00
29	FATEHABAD	TOHANA	S-NPP	29.66522	75.69162	13:35:01	D	3.80
30	FATEHABAD	TOHANA	S-NPP	29.66580	75.69572	13:35:01	D	11.40

31	FATEHABAD	TOHANA	S-NPP	29.66619	75.94478	13:35:01	D	3.10
32	FATEHABAD	TOHANA	S-NPP	29.67310	75.69857	13:35:01	D	3.10
33	FATEHABAD	TOHANA	S-NPP	29.68108	75.85303	13:35:01	D	10.00
34	FATEHABAD	TOHANA	S-NPP	29.68561	75.86066	13:35:01	D	10.40
35	FATEHABAD	TOHANA	AQUA	29.68300	75.78700	13:50:54	D	6.60
36	HISAR	BARWALA	S-NPP	29.44000	75.92049	13:35:01	D	2.20
37	HISAR	BARWALA	AQUA	29.42700	76.04400	13:50:54	D	5.70
38	HISAR	HISAR-I	S-NPP	29.23482	75.75135	13:35:01	D	4.00
39	HISAR	NARNAUND	S-NPP	29.24206	76.07358	13:35:01	D	3.70
40	HISAR	NARNAUND	S-NPP	29.24727	76.13625	13:35:01	D	3.70
41	HISAR	NARNAUND	S-NPP	29.24998	76.08062	13:35:01	D	3.40
42	HISAR	NARNAUND	S-NPP	29.36148	76.15889	13:35:01	D	6.40
43	JHAJJAR	BAHADURGARH	S-NPP	28.77025	76.85435	13:35:01	D	2.20
44	JIND	ALEWA	S-NPP	29.52441	76.40614	13:35:01	D	2.50
45	JIND	ALEWA	S-NPP	29.52499	76.41038	13:35:01	D	3.40
46	JIND	ALEWA	AQUA	29.55600	76.32400	13:50:54	D	7.70
47	JIND	JULANA	S-NPP	29.23649	76.43722	13:35:01	D	3.70
48	JIND	NARWANA	S-NPP	29.50117	76.01100	13:35:01	D	4.60
49	JIND	NARWANA	S-NPP	29.50650	75.94761	13:35:01	D	2.00
50	JIND	NARWANA	S-NPP	29.54505	76.05106	13:35:01	D	1.90
51	JIND	NARWANA	S-NPP	29.64200	75.97043	13:35:01	D	1.80
52	JIND	NARWANA	AQUA	29.51900	76.04000	13:50:54	D	8.60
53	JIND	NARWANA	AQUA	29.57100	76.06300	13:50:54	D	7.90
54	JIND	SAFIDON	S-NPP	29.30239	76.59171	13:35:01	D	2.90
55	JIND	SAFIDON	S-NPP	29.46945	76.58952	13:35:01	D	3.10
56	JIND	UCHANA	S-NPP	29.50765	76.28360	13:35:01	D	6.60
57	KAITHAL	GUHLA	S-NPP	30.02443	76.24847	13:35:01	D	2.60
58	KAITHAL	GUHLA	S-NPP	30.07454	76.43696	13:35:01	D	3.90
59	KAITHAL	KAITHAL	S-NPP	29.76581	76.46629	13:35:01	D	2.60
60	KAITHAL	KAITHAL	S-NPP	29.78429	76.52458	13:35:01	D	3.40
61	KAITHAL	KAITHAL	S-NPP	29.79195	76.35743	13:35:01	D	1.70
62	KAITHAL	KAITHAL	S-NPP	29.79352	76.54060	13:35:01	D	4.00
63	KAITHAL	KAITHAL	S-NPP	29.82396	76.38668	13:35:01	D	1.90
64	KAITHAL	KALAYAT	S-NPP	29.70163	76.38143	13:35:01	D	3.60

65	KAITHAL	KALAYAT	S-NPP	29.74603	76.32133	13:35:01	D	2.50
66	KAITHAL	KALAYAT	AQUA	29.75100	76.27100	13:50:54	D	5.80
67	KAITHAL	PUNDRI	S-NPP	29.73608	76.50666	13:35:01	D	2.00
68	KAITHAL	SIWAN	S-NPP	29.87765	76.36842	13:35:01	D	3.50
69	KAITHAL	SIWAN	S-NPP	29.90839	76.31584	13:35:01	D	3.20
70	KAITHAL	SIWAN	S-NPP	29.91062	76.28056	13:35:01	D	4.60
71	KARNAL	ASSANDH	S-NPP	29.46887	76.58523	13:35:01	D	3.10
72	KARNAL	ASSANDH	S-NPP	29.57780	76.82875	13:35:01	D	6.00
73	KARNAL	ASSANDH	S-NPP	29.58309	76.55302	13:35:01	D	7.20
74	KARNAL	ASSANDH	S-NPP	29.58462	76.54982	13:35:01	D	7.80
75	KARNAL	ASSANDH	AQUA	29.58200	76.54900	13:50:54	D	7.20
76	KARNAL	CHIRAO	S-NPP	29.71200	76.76241	13:35:01	D	1.60
77	KARNAL	CHIRAO	S-NPP	29.71258	76.76678	13:35:01	D	7.70
78	KARNAL	CHIRAO	S-NPP	29.72974	76.77847	13:35:01	D	8.70
79	KARNAL	CHIRAO	AQUA	29.70800	76.76700	13:50:54	D	7.10
80	KARNAL	GHARAUNDA	S-NPP	29.48903	77.10926	13:35:01	D	8.30
81	KARNAL	GHARAUNDA	S-NPP	29.56793	76.99707	13:35:01	D	3.80
82	KARNAL	INDRI	S-NPP	29.83968	77.07251	13:35:01	D	8.40
83	KARNAL	NILOKHERI	S-NPP	29.77837	76.87801	13:35:01	D	0.50
84	KURUKSHETRA	BABAIN	S-NPP	30.09099	76.99261	13:35:01	D	4.90
85	KURUKSHETRA	PEHOWA	S-NPP	29.92454	76.51505	13:35:01	D	1.90
86	KURUKSHETRA	PEHOWA	S-NPP	29.98341	76.71864	13:35:01	D	6.70
87	KURUKSHETRA	PEHOWA	S-NPP	30.00224	76.56790	13:35:01	D	2.20
88	KURUKSHETRA	PEHOWA	S-NPP	30.00573	76.44914	13:35:01	D	2.40
89	KURUKSHETRA	PEHOWA	S-NPP	30.04419	76.49984	13:35:01	D	6.30
90	KURUKSHETRA	PEHOWA	AQUA	30.00100	76.44800	13:50:54	D	5.00
91	KURUKSHETRA	SHAHBAD	S-NPP	30.22297	76.82011	13:35:01	D	2.90
92	KURUKSHETRA	THANESAR	S-NPP	29.90740	76.85227	13:35:01	D	1.80
93	KURUKSHETRA	THANESAR	S-NPP	29.91782	76.82334	13:35:01	D	4.00
94	KURUKSHETRA	THANESAR	S-NPP	29.92673	76.71953	13:35:01	D	2.30
95	KURUKSHETRA	THANESAR	S-NPP	30.03585	76.89957	13:35:01	D	3.40
96	KURUKSHETRA	THANESAR	AQUA	29.94700	76.94200	13:50:54	D	6.60
97	PALWAL	HASSANPUR	S-NPP	27.95075	77.50263	13:35:01	D	2.50
98	PALWAL	HODAL	S-NPP	27.85553	77.40984	13:35:01	D	2.40

99	PALWAL	HODAL	S-NPP	28.04267	77.38508	13:35:01	D	3.40
100	PALWAL	PALWAL	S-NPP	28.12854	77.38087	13:35:01	D	6.80
101	PALWAL	PRITHLA	S-NPP	28.20069	77.35700	13:35:01	D	13.40
102	PALWAL	PRITHLA	S-NPP	28.20419	77.35641	13:35:01	D	13.40
103	PALWAL	PRITHLA	AQUA	28.19800	77.35200	13:50:54	D	8.30
104	PALWAL	PRITHLA	AQUA	28.22700	77.35100	13:50:54	D	11.60
105	PALWAL	PRITHLA	AQUA	28.22800	77.36100	13:50:54	D	7.70
106	PANIPAT	ISRANA	S-NPP	29.28387	76.88955	13:35:01	D	4.60
107	ROHTAK	ROHTAK	S-NPP	28.81313	76.57298	13:35:01	D	3.40
108	ROHTAK	ROHTAK	S-NPP	28.96065	76.63953	13:35:01	D	2.50
109	ROHTAK	ROHTAK	S-NPP	29.02985	76.60572	13:35:01	D	2.50
110	SIRSA	ODHAN	S-NPP	29.83070	75.06387	13:35:01	D	3.20
111	SIRSA	RANIA	S-NPP	29.54039	74.60720	13:35:01	D	1.70
112	SIRSA	SIRSA	S-NPP	29.45816	74.96083	13:35:01	D	4.90
113	SONIPAT	KATHURA	S-NPP	29.16529	76.55810	13:35:01	D	2.20
114	SONIPAT	MUNDLANA	S-NPP	29.15799	76.62403	13:35:01	D	2.70
115	SONIPAT	MUNDLANA	S-NPP	29.17266	76.66587	13:35:01	D	5.60
116	SONIPAT	MUNDLANA	S-NPP	29.17496	76.65671	13:35:01	D	4.30
117	SONIPAT	MURTHAL	S-NPP	29.05839	77.16335	13:35:01	D	3.80
118	SONIPAT	MURTHAL	S-NPP	29.08054	77.08741	13:35:01	D	3.50
119	SONIPAT	MURTHAL	AQUA	29.04300	77.07000	13:50:54	D	5.60
120	SONIPAT	RAI	S-NPP	28.93060	77.19152	02:25:44	N	0.80
121	YAMUNANAGAR	BILASPUR	S-NPP	30.32365	77.30173	13:35:01	D	2.20
122	YAMUNANAGAR	BILASPUR	AQUA	30.35000	77.34500	13:50:54	D	14.40
123	YAMUNANAGAR	MUSTAFABAD	S-NPP	30.27007	77.18191	13:35:01	D	3.00
124	YAMUNANAGAR	MUSTAFABAD	AQUA	30.27000	77.17700	13:50:54	D	6.70
125	YAMUNANAGAR	RADAUR	S-NPP	30.07422	77.13697	13:35:01	D	2.70
126	YAMUNANAGAR	SADHAURA	S-NPP	30.37237	77.22712	13:35:01	D	2.30
127	YAMUNANAGAR	SADHAURA	S-NPP	30.39367	77.19519	13:35:01	D	4.20

Details of residue burning events in Uttar Pradesh on 15-Oct-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ALIGARH	KHAIR	S-NPP	28.08771	77.67169	13:35:01	D	2.80
2	ALIGARH	KHAIR	S-NPP	28.11403	77.60022	13:35:01	D	4.30
3	BADAUN	DATAGANJ	AQUA	27.97500	79.42900	13:50:54	D	5.40
4	BARABANKI	NAWABGANJ	S-NPP	26.98794	81.29248	13:35:01	D	4.20
5	BAREILLY	AONLA	S-NPP	28.25985	79.22715	13:35:01	D	1.90
6	BAREILLY	AONLA	AQUA	28.25900	79.22500	13:50:54	D	5.20
7	BULANDSAHAR	KHURJA	S-NPP	28.09568	77.98632	13:35:01	D	5.00
8	ETAWAH	ETAWAH	S-NPP	26.78526	79.07919	13:35:01	D	1.90
9	ETAWAH	ETAWAH	S-NPP	26.78619	79.07628	13:35:01	D	2.80
10	FATEHPUR	FATEHPUR	S-NPP	25.87078	80.92544	13:35:01	D	1.50
11	FATEHPUR	FATEHPUR	AQUA	25.97100	80.87500	13:50:54	D	7.30
12	FIROZABAD	SIKOHABAD	AQUA	27.05600	78.66500	13:50:54	D	8.20
13	GAUTAMBUDHNAGAR	JEVAR	S-NPP	28.11714	77.54061	13:35:01	D	2.80
14	MAINPURI	MAINPURI	S-NPP	27.17011	79.05552	13:35:01	D	6.20
15	MATHURA	CHHATA	S-NPP	27.55815	77.49232	13:35:01	D	9.60
16	MATHURA	CHHATA	S-NPP	27.56742	77.50860	13:35:01	D	3.80
17	MATHURA	CHHATA	S-NPP	27.62341	77.47258	13:35:01	D	3.00
18	MATHURA	CHHATA	S-NPP	27.64439	77.49581	13:35:01	D	2.20
19	MATHURA	CHHATA	S-NPP	27.64554	77.45111	13:35:01	D	4.20
20	MATHURA	CHHATA	S-NPP	27.75712	77.45138	13:35:01	D	2.50
21	MATHURA	CHHATA	S-NPP	27.76062	77.45081	13:35:01	D	3.50
22	MATHURA	CHHATA	S-NPP	27.76111	77.45232	13:35:01	D	2.00
23	MATHURA	CHHATA	S-NPP	27.83979	77.47946	13:35:01	D	14.50
24	MATHURA	CHHATA	AQUA	27.63100	77.51100	13:50:54	D	5.80
25	MATHURA	CHHATA	AQUA	27.83700	77.46900	13:50:54	D	8.00
26	MATHURA	CHHATA	AQUA	27.83900	77.47900	13:50:54	D	12.60
27	MATHURA	MATHURA	S-NPP	27.54083	77.57911	13:35:01	D	4.40
28	PILHIBHIT	PILHIBHIT	S-NPP	28.82578	79.70399	02:25:44	N	0.90
29	PILHIBHIT	PURANPUR	S-NPP	28.43152	80.14046	13:35:01	D	2.60
30	PILHIBHIT	PURANPUR	S-NPP	28.48889	80.10420	13:35:01	D	3.60
31	PILHIBHIT	PURANPUR	S-NPP	28.63667	80.00951	02:25:44	N	1.10

32	PILHIBHIT	PURANPUR	S-NPP	28.63742	80.01183	02:25:44	N	0.80
33	PILHIBHIT	PURANPUR	AQUA	28.47100	80.11000	13:50:54	D	20.40
34	PILHIBHIT	PURANPUR	AQUA	28.47300	80.12100	13:50:54	D	9.50
35	RAMPUR	SUAR	AQUA	28.97000	79.23700	13:50:54	D	7.60

Details of residue burning events in Rajasthan on 15-Oct-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	BARAN	ANTA	S-NPP	25.26088	76.32936	13:35:01	D	4.40
2	BARAN	CHHABRA	S-NPP	24.62680	76.81869	13:35:01	D	7.00
3	BARAN	CHHABRA	S-NPP	24.67934	76.93752	13:35:01	D	5.50
4	BARAN	KISHANGUNJ	S-NPP	25.08839	76.77657	13:35:01	D	2.60
5	BARAN	MANGROL	S-NPP	25.38049	76.57518	13:35:01	D	1.90
6	BARAN	SHAHBAD	S-NPP	25.12802	76.91055	13:35:01	D	13.70
7	BARAN	SHAHBAD	S-NPP	25.13183	76.98669	13:35:01	D	4.30
8	BARAN	SHAHBAD	S-NPP	25.13521	76.98612	13:35:01	D	4.30
9	BARAN	SHAHBAD	S-NPP	25.14701	76.99627	13:35:01	D	4.70
10	BARAN	SHAHBAD	S-NPP	25.23118	77.02290	13:35:01	D	4.80
11	BARAN	SHAHBAD	S-NPP	25.27932	77.24444	13:35:01	D	4.00
12	BARAN	SHAHBAD	AQUA	25.12400	76.91400	13:50:54	D	10.80
13	BARAN	SHAHBAD	AQUA	25.16800	77.12700	13:50:54	D	6.90
14	BARAN	SHAHBAD	AQUA	25.22500	77.02100	13:50:54	D	11.80
15	BUNDI	BUNDI	S-NPP	25.29127	75.86753	13:35:01	D	3.40
16	BUNDI	KESHORAIPATAN	S-NPP	25.35839	75.93000	13:35:01	D	7.00
17	BUNDI	KESHORAIPATAN	S-NPP	25.44511	76.04020	13:35:01	D	3.20
18	GANGANAGAR	GANGANAGAR	S-NPP	29.83883	73.65602	13:35:01	D	3.50
19	GANGANAGAR	SADULSHAR	S-NPP	29.86547	74.08788	13:35:01	D	7.60
20	HANUMANGARH	HANUMANGARH	S-NPP	29.58949	74.39005	13:35:01	D	2.90
21	HANUMANGARH	SANGHRIYA	S-NPP	29.76715	74.42526	13:35:01	D	6.30
22	KOTA	DIGOD	S-NPP	25.09009	76.14990	13:35:01	D	3.80
23	KOTA	DIGOD	S-NPP	25.38203	76.30027	13:35:01	D	4.80
24	KOTA	LADPURA	S-NPP	25.16859	75.97121	13:35:01	D	2.30
25	KOTA	LADPURA	S-NPP	25.19586	75.95507	13:35:01	D	1.80
26	KOTA	LADPURA	S-NPP	25.25822	75.91648	13:35:01	D	2.30
27	KOTA	LADPURA	AQUA	25.14200	76.01900	13:50:54	D	13.90
28	KOTA	PIPALDA	S-NPP	25.47255	76.52318	13:35:01	D	9.40
29	KOTA	SANGOD	S-NPP	25.09354	76.19646	13:35:01	D	2.90
30	SWAIMADHOPUR	KHANDAR	S-NPP	25.92809	76.60609	13:35:01	D	1.90

31	SWAIMADHOPUR	KHANDAR	S-NPP	25.95554	76.58109	13:35:01	D	2.60
32	SWAIMADHOPUR	KHANDAR	S-NPP	25.96170	76.60025	13:35:01	D	11.80
33	SWAIMADHOPUR	KHANDAR	S-NPP	25.96506	76.59966	13:35:01	D	11.80
34	SWAIMADHOPUR	KHANDAR	S-NPP	25.97011	76.61093	13:35:01	D	2.20

Details of residue burning events in Madhya Pradesh on 15-Oct-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.56267	77.59967	13:35:01	D	3.10
2	ASHOKNAGAR	MUNGAOLI	S-NPP	24.44149	78.00825	13:35:01	D	2.50
3	DAMOH	DAMOH	S-NPP	23.68905	79.56308	13:35:01	D	2.70
4	DAMOH	DAMOH	S-NPP	23.86847	79.55006	13:35:01	D	2.60
5	DATIA	BHANDER	S-NPP	25.94127	78.76897	13:35:01	D	4.10
6	DATIA	DATIA	S-NPP	25.72234	78.29194	13:35:01	D	2.80
7	DATIA	DATIA	S-NPP	25.72479	78.29250	13:35:01	D	2.90
8	DATIA	DATIA	S-NPP	25.76830	78.37626	13:35:01	D	1.90
9	DATIA	DATIA	S-NPP	25.79020	78.40470	13:35:01	D	2.60
10	DATIA	DATIA	AQUA	25.74800	78.37400	13:50:54	D	6.10
11	DATIA	SEONDHA	S-NPP	25.80666	78.50306	13:35:01	D	3.60
12	DATIA	SEONDHA	S-NPP	25.81854	78.53814	13:35:01	D	2.80
13	DATIA	SEONDHA	S-NPP	25.82390	78.55118	13:35:01	D	2.30
14	DATIA	SEONDHA	S-NPP	25.87776	78.50253	13:35:01	D	6.60
15	DEWAS	DEWAS	S-NPP	22.83903	76.08558	02:25:44	N	1.10
16	EAST NIMAR	HARSUD	S-NPP	22.09633	76.84351	13:35:01	D	5.20
17	GUNA	GUNA	S-NPP	24.66598	77.06832	13:35:01	D	3.50
18	GUNA	GUNA	S-NPP	24.78685	77.25874	13:35:01	D	5.50
19	GUNA	GUNA	S-NPP	24.80180	77.49054	13:35:01	D	4.80
20	GUNA	GUNA	S-NPP	24.90175	77.15900	13:35:01	D	10.10
21	GUNA	GUNA	S-NPP	24.90627	77.09327	13:35:01	D	5.30
22	GUNA	GUNA	S-NPP	24.90717	77.09060	02:25:44	N	0.60
23	GUNA	GUNA	S-NPP	24.91513	77.10404	13:35:01	D	28.40
24	GUNA	GUNA	S-NPP	24.92022	77.09099	13:35:01	D	5.40
25	GUNA	GUNA	S-NPP	24.92078	77.09495	13:35:01	D	7.30
26	GUNA	GUNA	S-NPP	25.00593	76.93124	13:35:01	D	2.90
27	GUNA	GUNA	S-NPP	25.00930	76.93066	13:35:01	D	9.90
28	GUNA	GUNA	S-NPP	25.04331	77.09899	13:35:01	D	2.90
29	GUNA	KUMBHRAJ	S-NPP	24.41742	77.08192	13:35:01	D	3.40
30	GWALIOR	DABRA	S-NPP	25.83855	78.19905	13:35:01	D	3.60
31	GWALIOR	GWALIOR	S-NPP	26.18681	78.22871	13:35:01	D	2.80

32	GWALIOR	GWALIOR	S-NPP	26.27732	78.17922	13:35:01	D	8.50
33	HARDA	HARDA	S-NPP	22.26003	77.03484	13:35:01	D	2.40
34	HARDA	HARDA	S-NPP	22.45155	77.00676	13:35:01	D	2.20
35	HARDA	TIMURNI	S-NPP	22.37928	77.27839	13:35:01	D	1.60
36	HOSHANGABAD	HOSHANGABAD	S-NPP	22.72124	77.70039	13:35:01	D	2.30
37	HOSHANGABAD	SEONI MALWA	S-NPP	22.34822	77.33447	13:35:01	D	4.20
38	HOSHANGABAD	SEONI MALWA	S-NPP	22.38952	77.42142	13:35:01	D	3.60
39	HOSHANGABAD	SEONI MALWA	S-NPP	22.54754	77.57755	13:35:01	D	1.20
40	HOSHANGABAD	SEONI MALWA	S-NPP	22.55153	77.55708	13:35:01	D	5.30
41	INDORE	INDORE	S-NPP	22.74597	75.94219	13:35:01	D	5.50
42	JABALPUR	KUNDAM	S-NPP	23.17307	80.12428	13:35:01	D	4.40
43	JABALPUR	PATAN	S-NPP	23.21830	79.65446	13:35:01	D	2.60
44	NARSHIMAPURA	NARSIMHAPUR	S-NPP	23.06390	79.28832	13:35:01	D	1.60
45	RAJGARH	RAJGARH	S-NPP	24.03101	76.93524	13:35:01	D	2.80
46	SAGAR	BINA	S-NPP	24.23690	78.16817	13:35:01	D	4.50
47	SAGAR	RAHAT GARH	S-NPP	23.71315	78.25244	13:35:01	D	2.00
48	SHAJAPUR	NALKHERA	S-NPP	23.76613	76.27316	13:35:01	D	2.50
49	SHEOPUR	SHEOPUR	S-NPP	25.56339	76.66790	13:35:01	D	4.00
50	SHEOPUR	SHEOPUR	S-NPP	25.72506	76.67326	13:35:01	D	4.20
51	SHEOPUR	SHEOPUR	S-NPP	25.81367	76.71469	13:35:01	D	1.70
52	SHEOPUR	SHEOPUR	S-NPP	25.84358	76.69765	13:35:01	D	8.00
53	SHEOPUR	SHEOPUR	S-NPP	25.92448	76.80582	13:35:01	D	16.20
54	SHEOPUR	SHEOPUR	AQUA	25.92000	76.80100	13:50:54	D	8.00
55	SHIVPURI	KOLARAS	S-NPP	24.91306	77.77047	13:35:01	D	11.00
56	SHIVPURI	NARWAR	S-NPP	25.69699	78.21063	13:35:01	D	2.80
57	TIKAMGARH	JATARA	S-NPP	25.00246	79.11105	13:35:01	D	4.40
58	UJJAIN	MEHIDPUR	S-NPP	23.45124	75.86665	13:35:01	D	1.70
59	UJJAIN	UJJAIN	S-NPP	23.04678	75.72005	13:35:01	D	2.00
60	VIDESHA	KORWAI	S-NPP	24.01643	78.02770	13:35:01	D	2.90
61	VIDESHA	KORWAI	S-NPP	24.04253	77.91016	13:35:01	D	5.30
62	VIDESHA	KORWAI	S-NPP	24.05622	77.98341	13:35:01	D	6.90
63	VIDESHA	KORWAI	S-NPP	24.06575	77.90766	13:35:01	D	6.20
64	VIDESHA	NATERAN	S-NPP	23.87948	77.56531	13:35:01	D	3.60
65	VIDESHA	VIDESHA	S-NPP	23.39480	77.95802	13:35:01	D	4.30
66	WEST NIMAR	MAHESHWAR	S-NPP	22.19403	75.54752	13:35:01	D	2.10

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 (ISRO)**

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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)
