



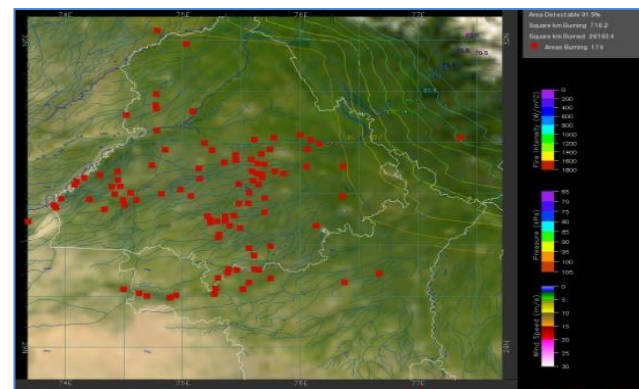
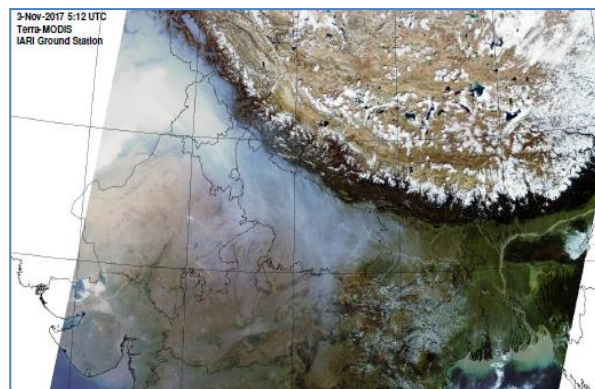
**Bulletin  
No. 73**

**Events Date:  
26-Nov-2022**

**Issued on:  
26-Nov-2022**



# **MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2022**



**Prepared by:**

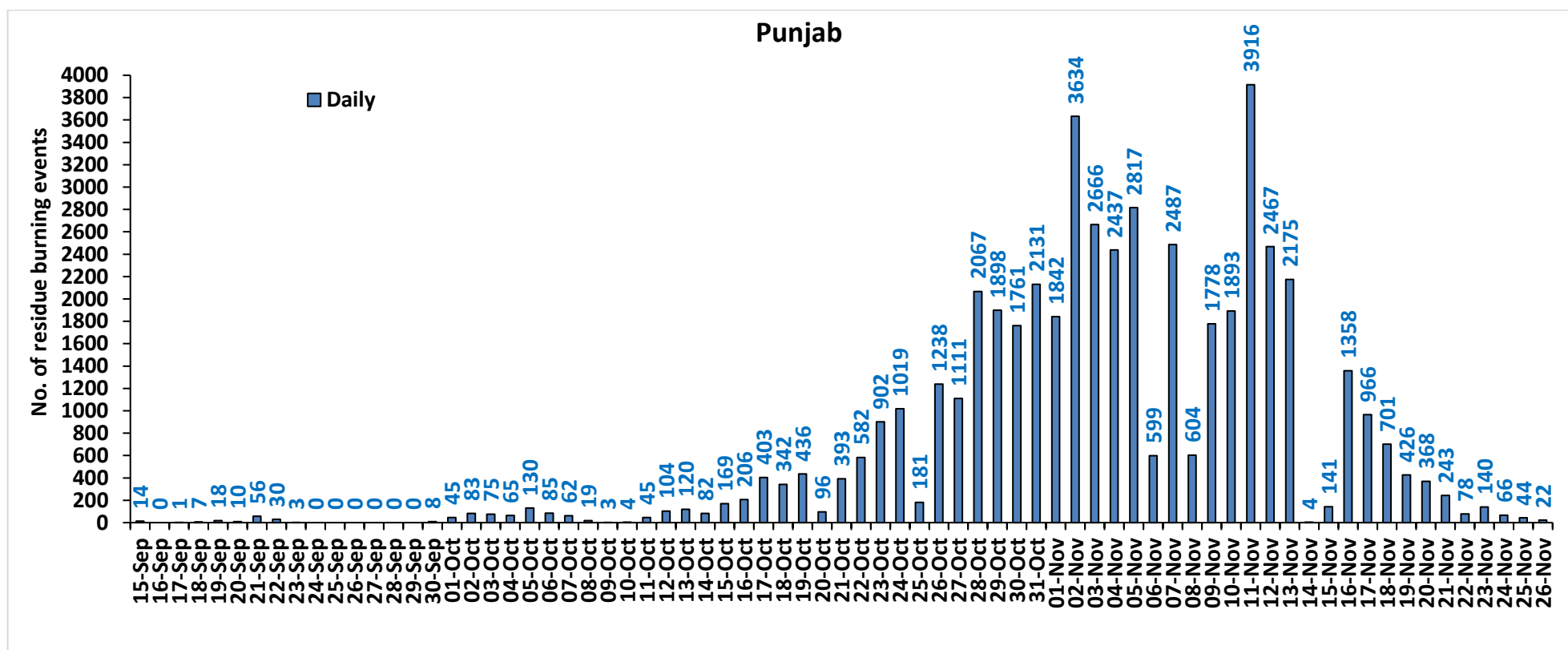
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,  
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

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

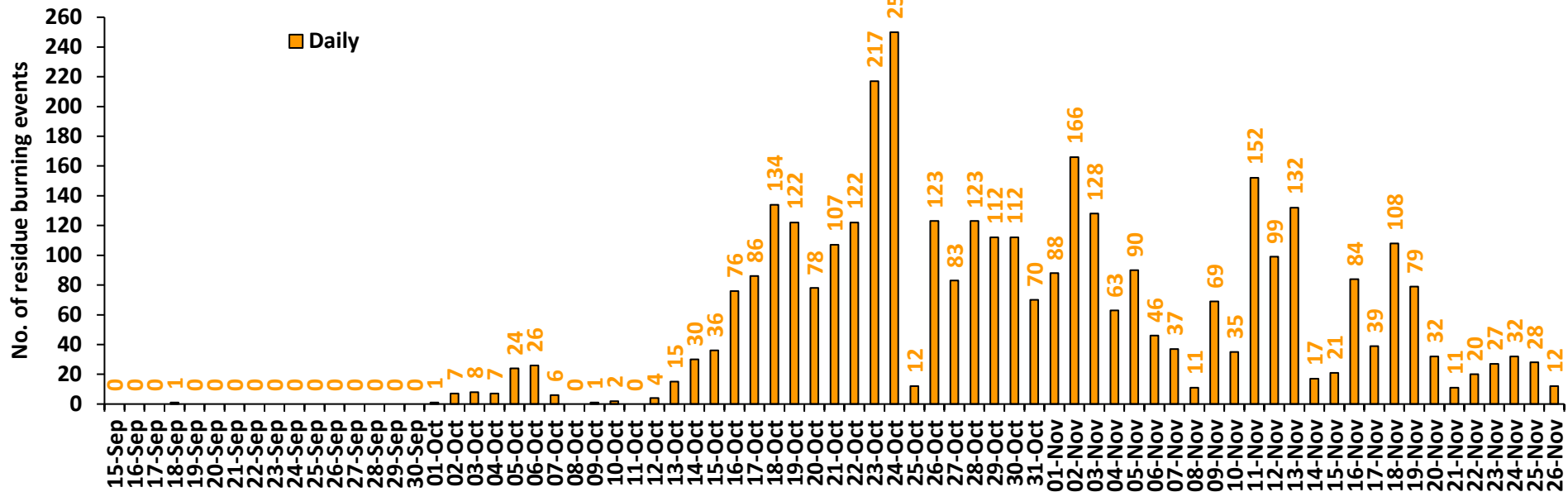
## Highlights for 26-Nov-2022

- 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 **361** residue burning events in the six study States on 26-Nov-2022.
- The state wise events detected on 26-Nov-2022 were **22** in Punjab, **12** in Haryana, **127** in UP, **0** in Delhi, **2** in Rajasthan and **198** in MP.
- Total **68780** burning events were detected in the six states between 15-Sept-2022 and 26-Nov-2022, which are distributed as **49876**, **3621**, **2663**, **10,1264** and **11346** in Punjab, Haryana, UP, Delhi, Rajasthan and MP respectively.

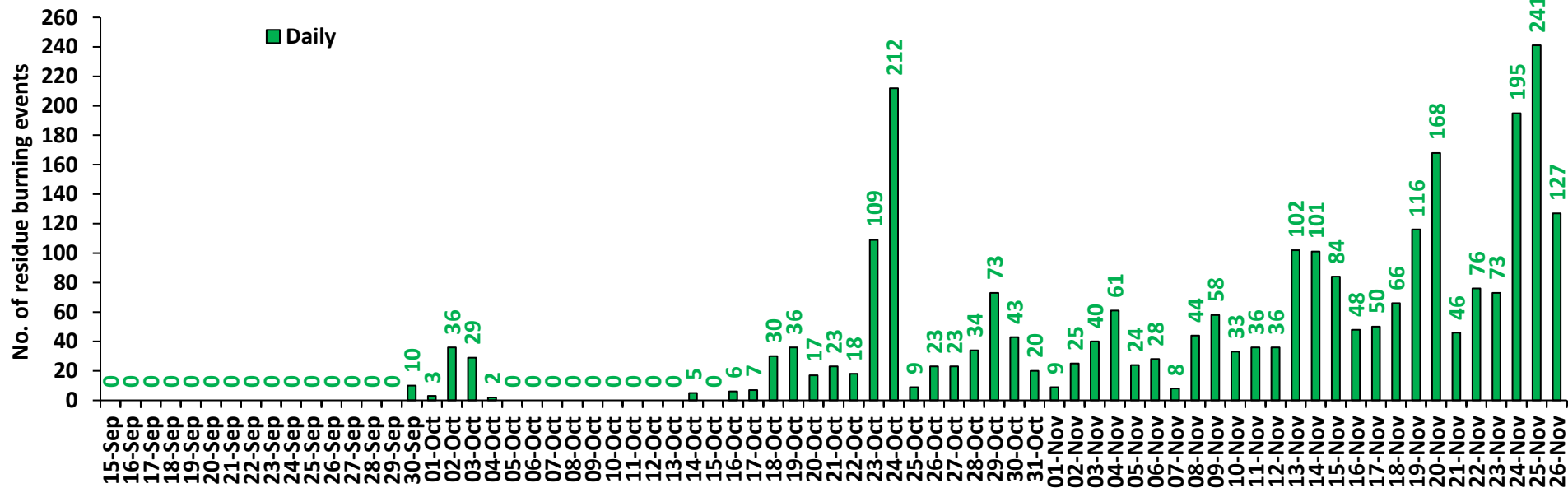
### Temporal distribution of rice residue burning events for the study States in 2022



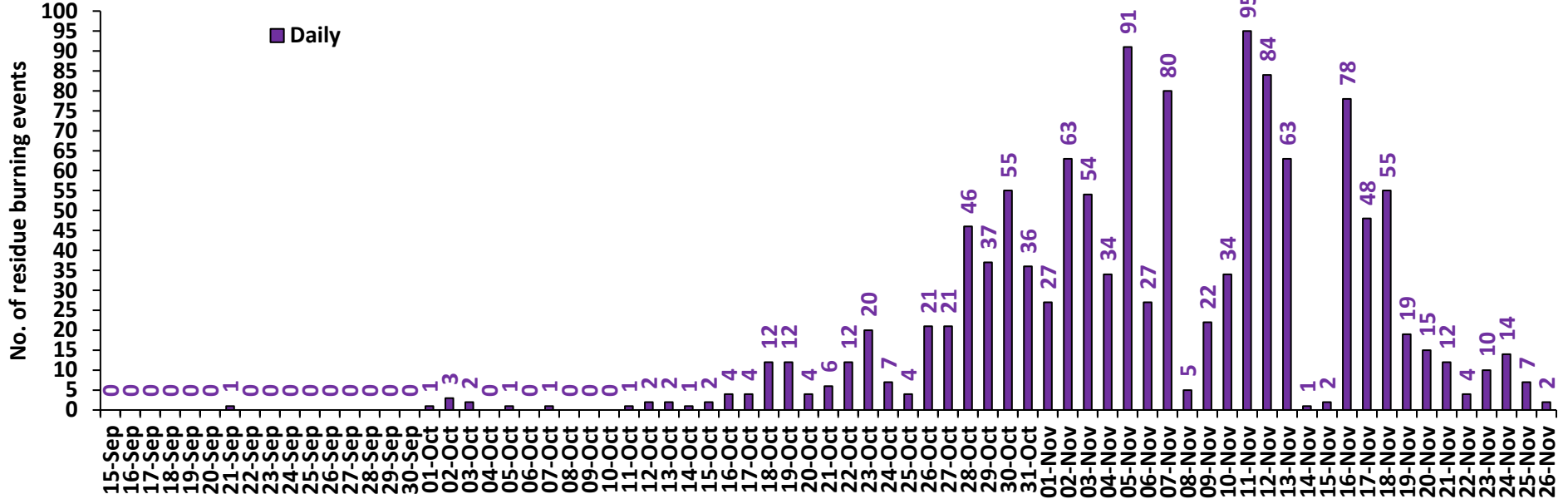
### Haryana



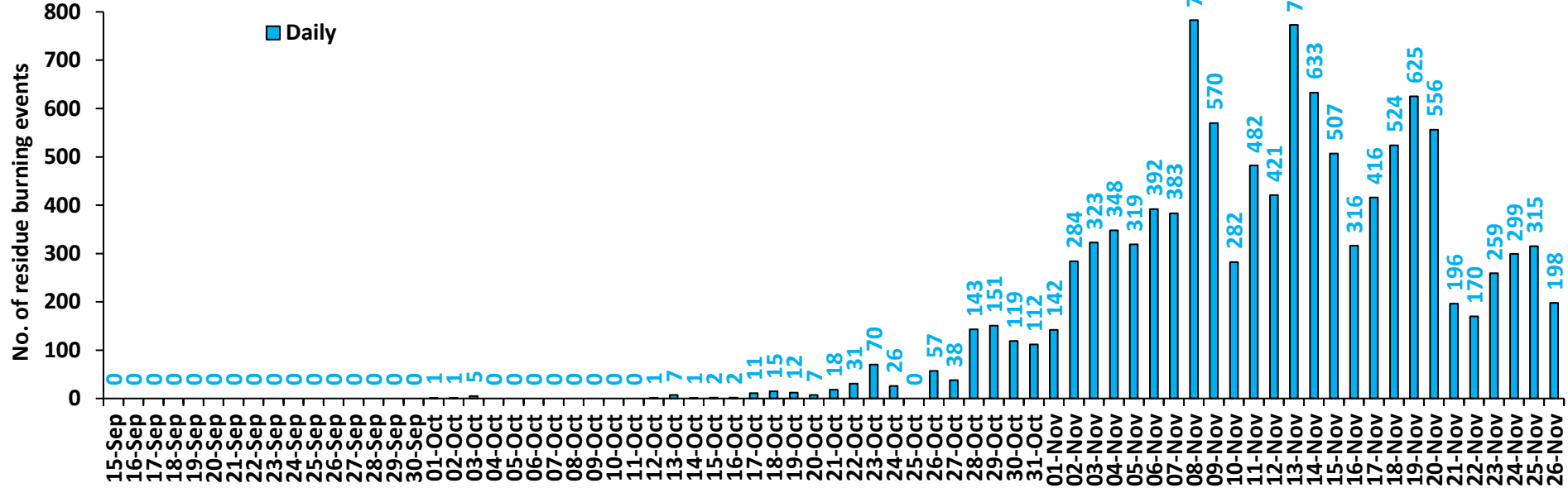
### Uttar Pradesh



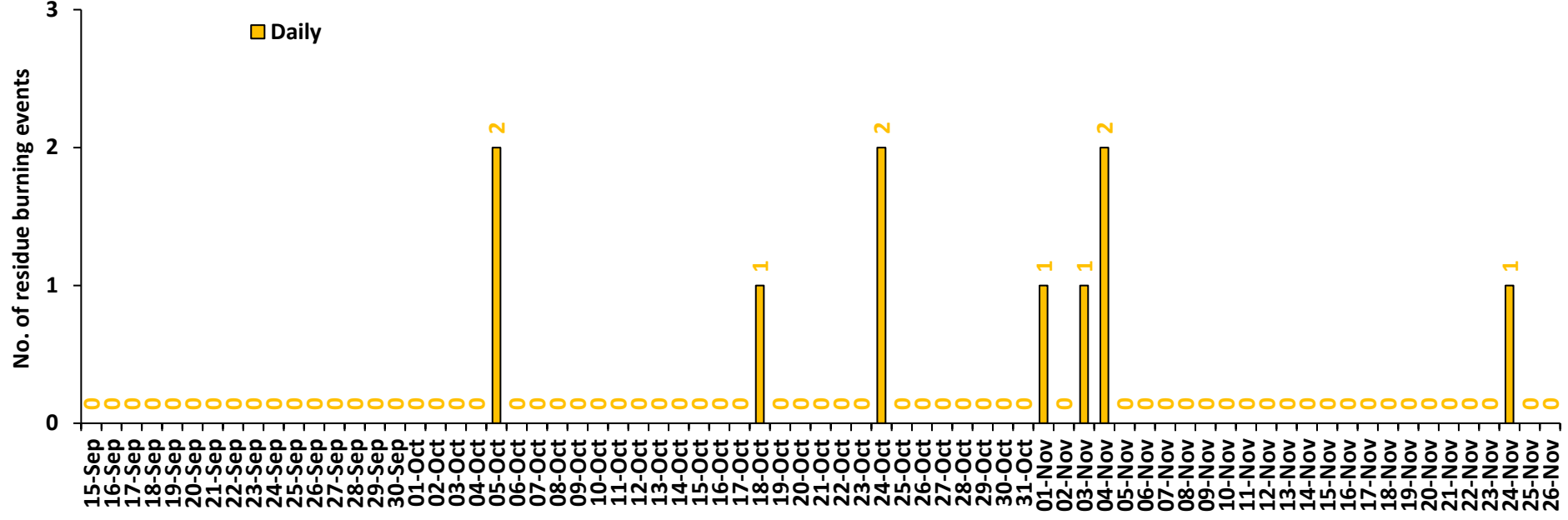
### Rajasthan



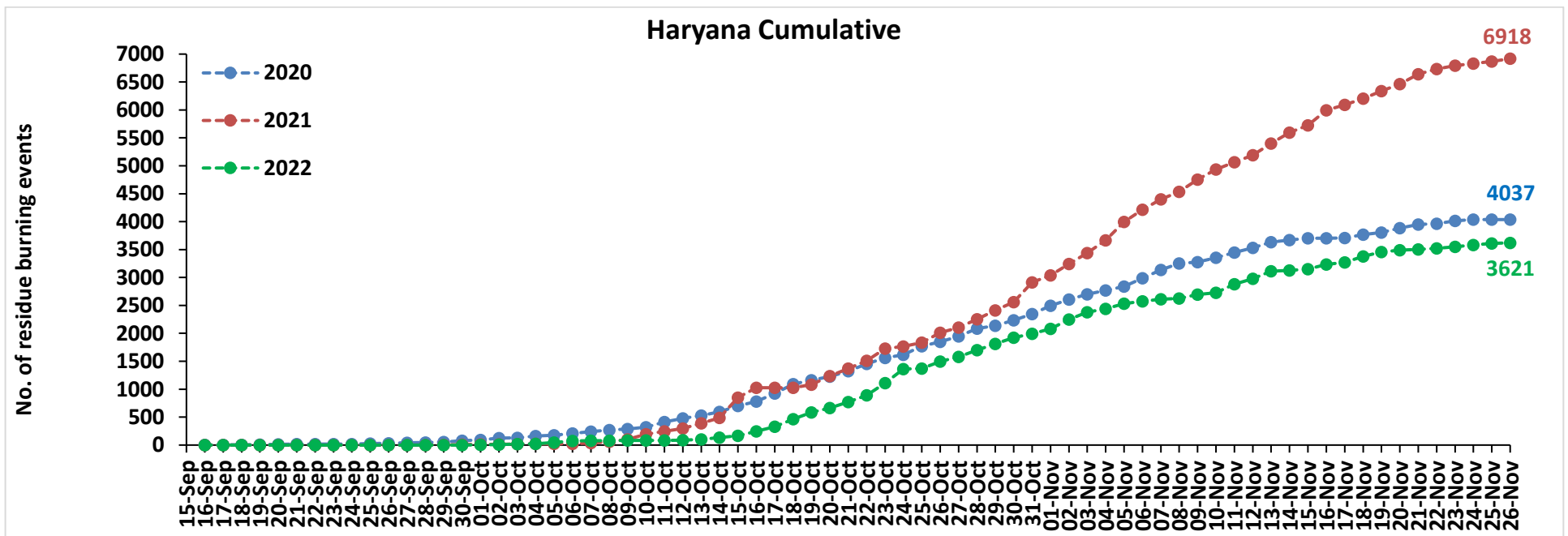
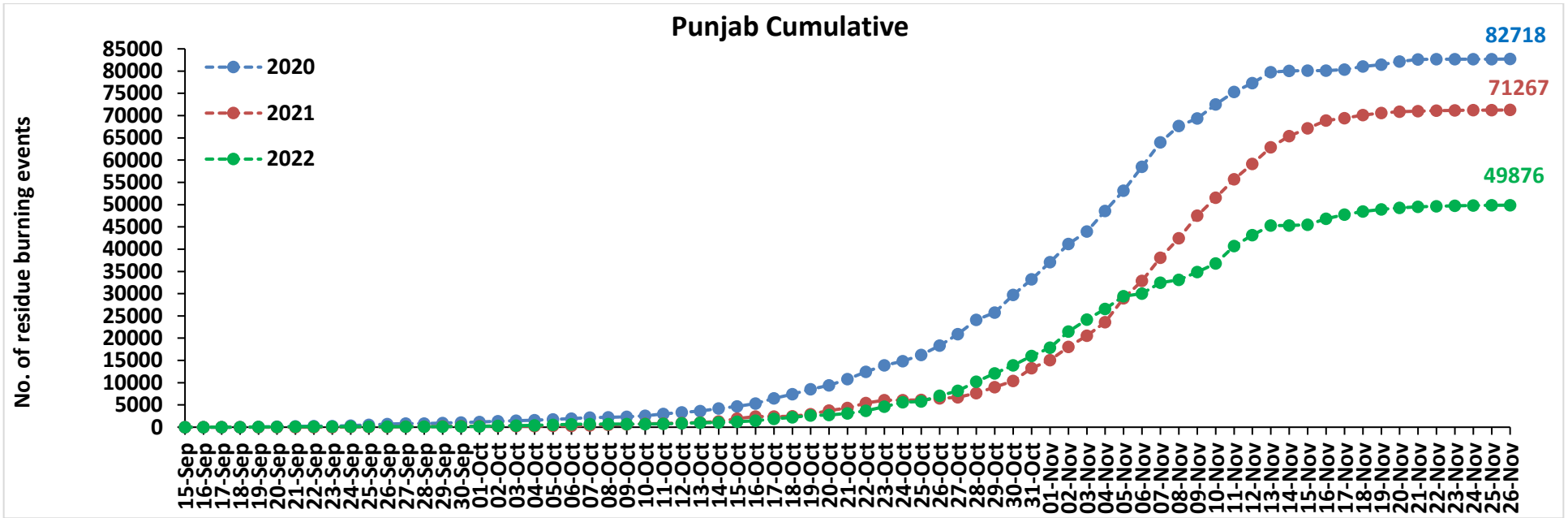
### Madhya Pradesh



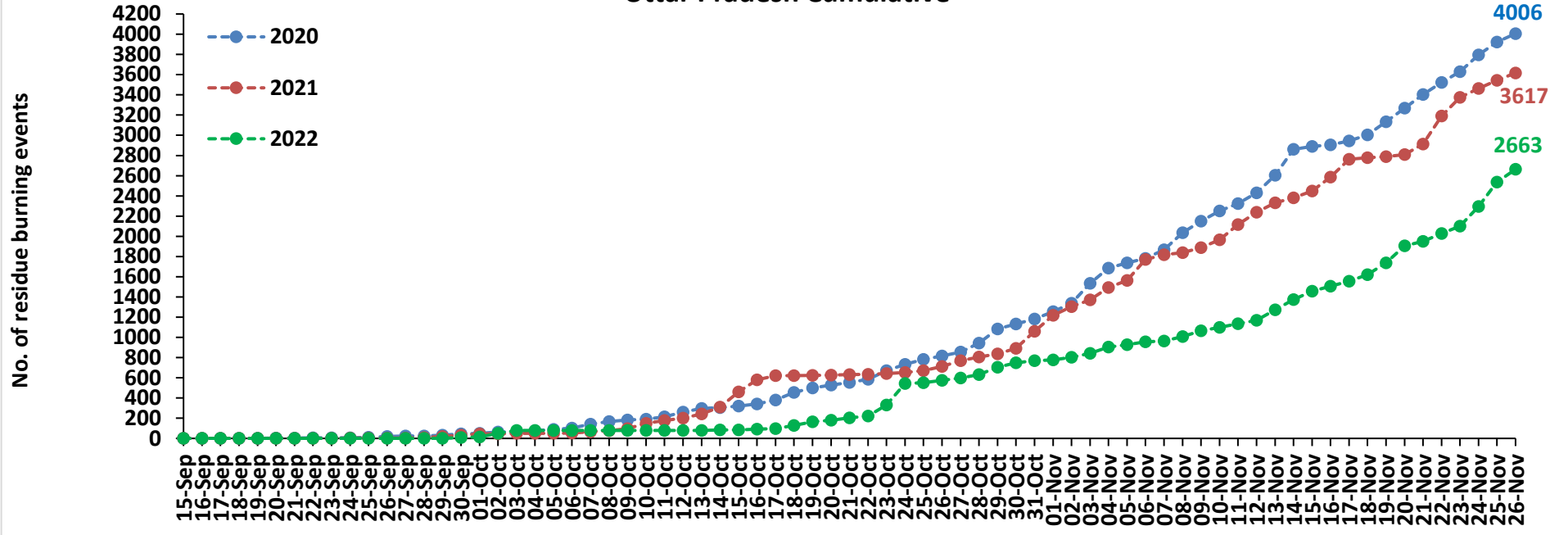
# Delhi



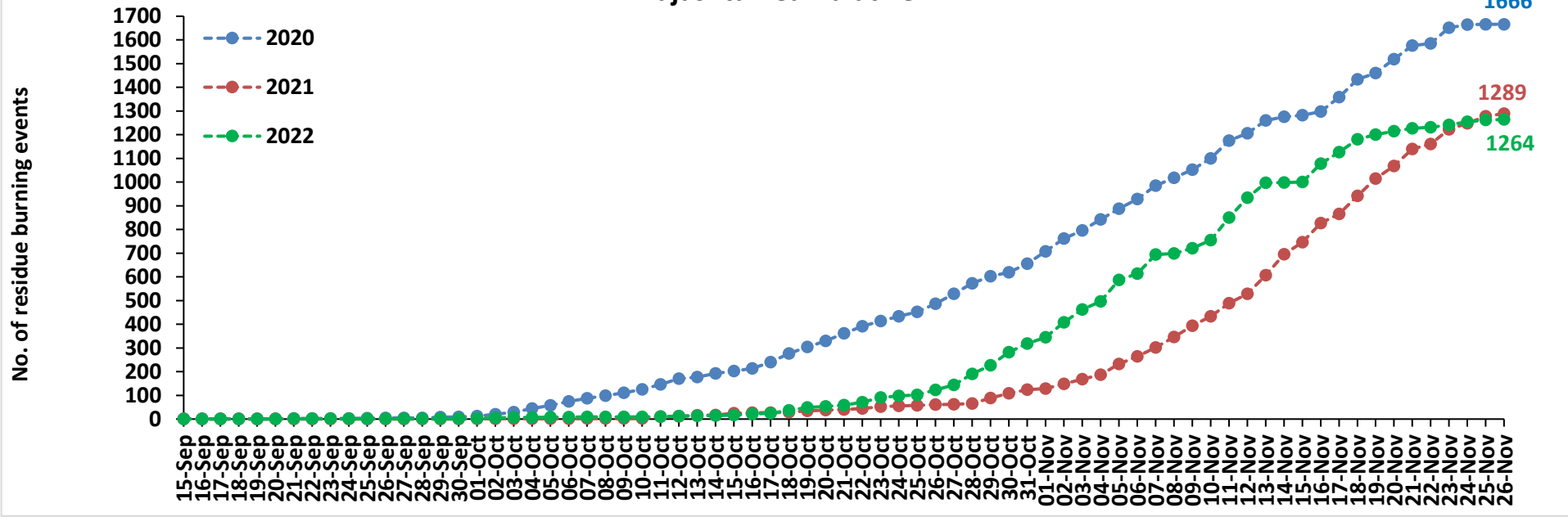
**Comparison of residue burning events in current year (2022) with previous years (2020 and 2021) for the study States**



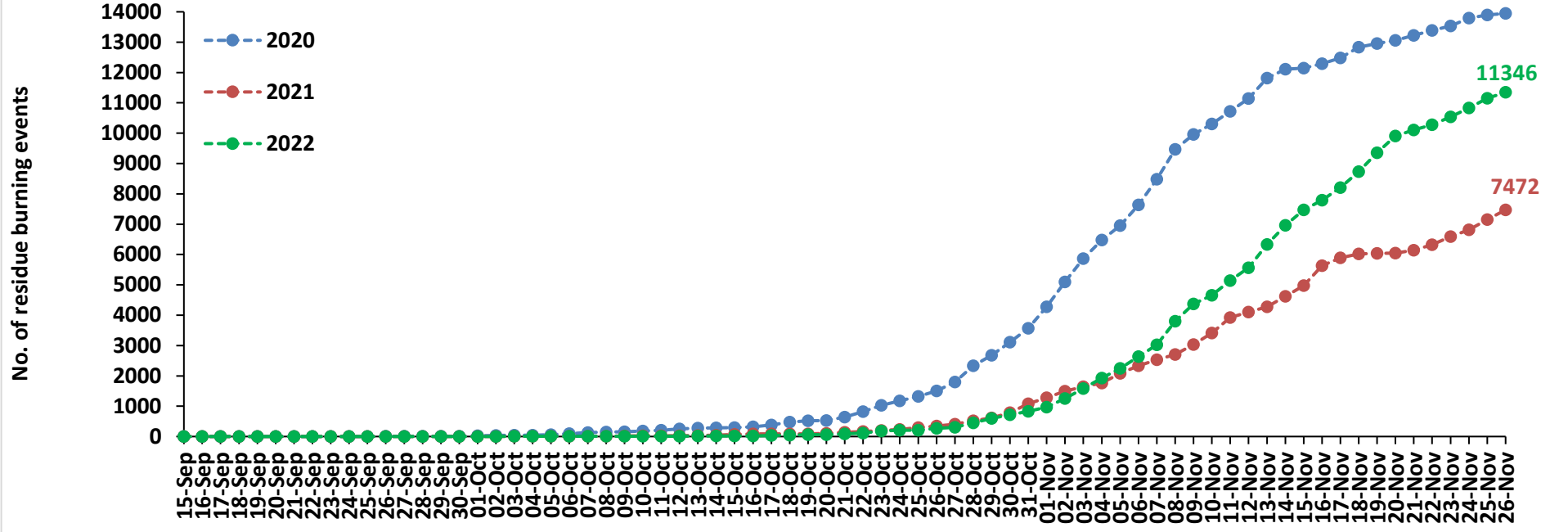
### Uttar Pradesh Cumulative



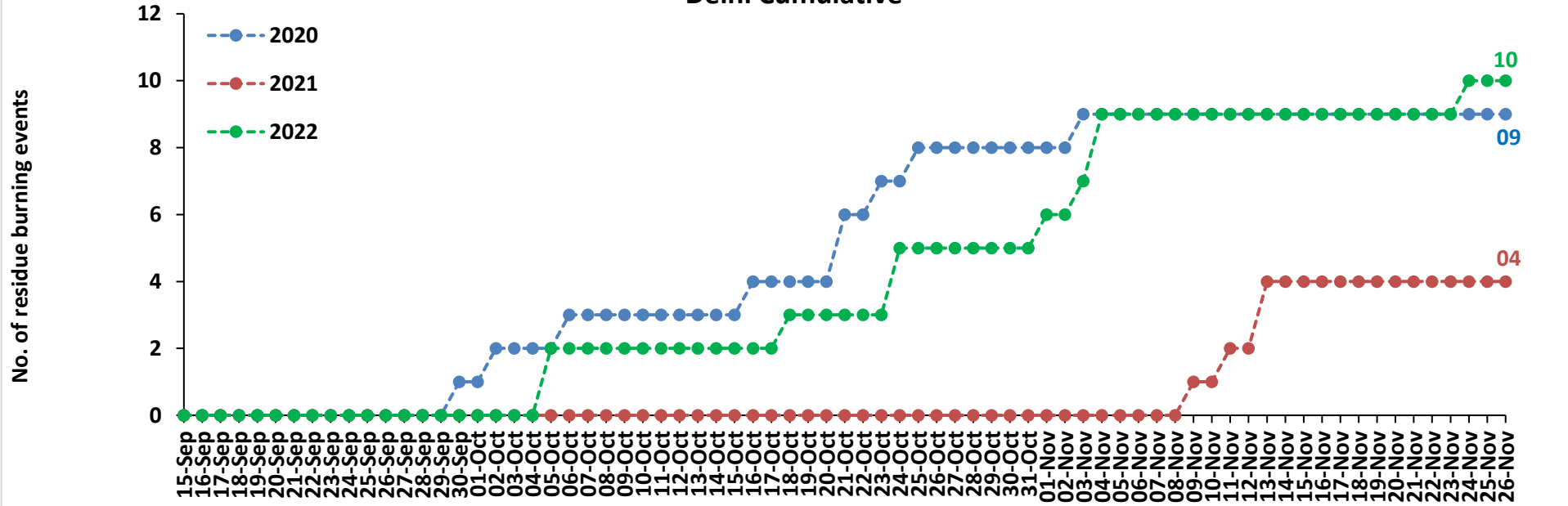
### Rajasthan Cumulative



### Madhya Pradesh Cumulative

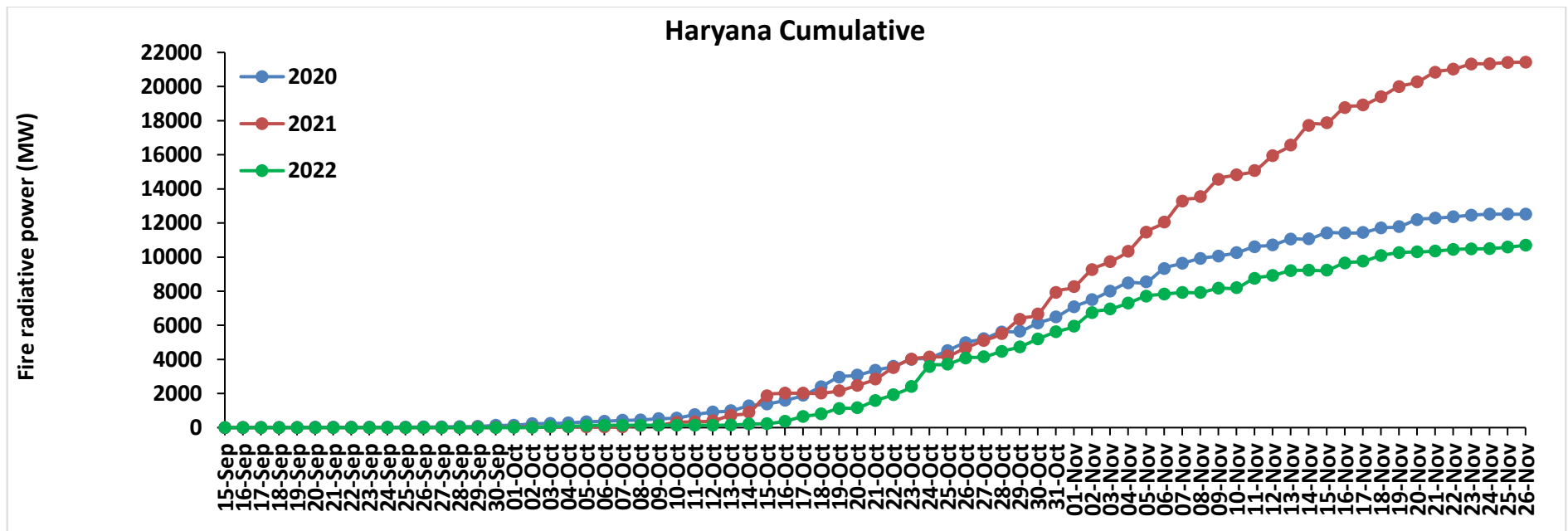
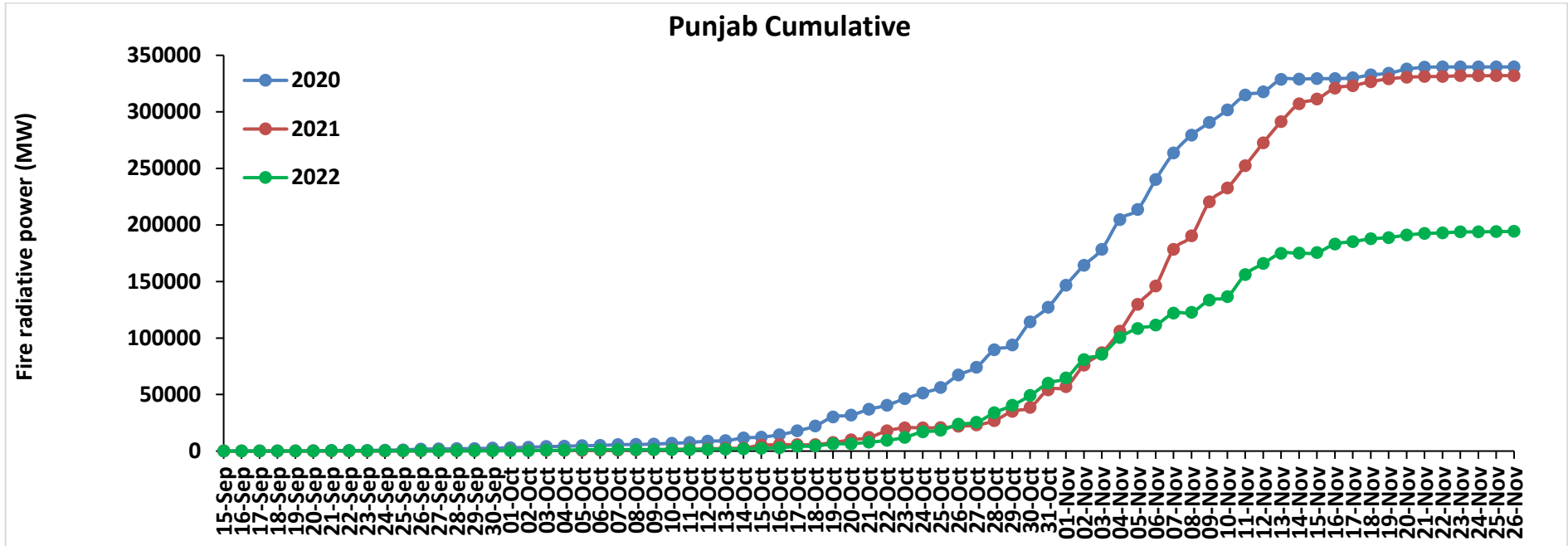


### Delhi Cumulative

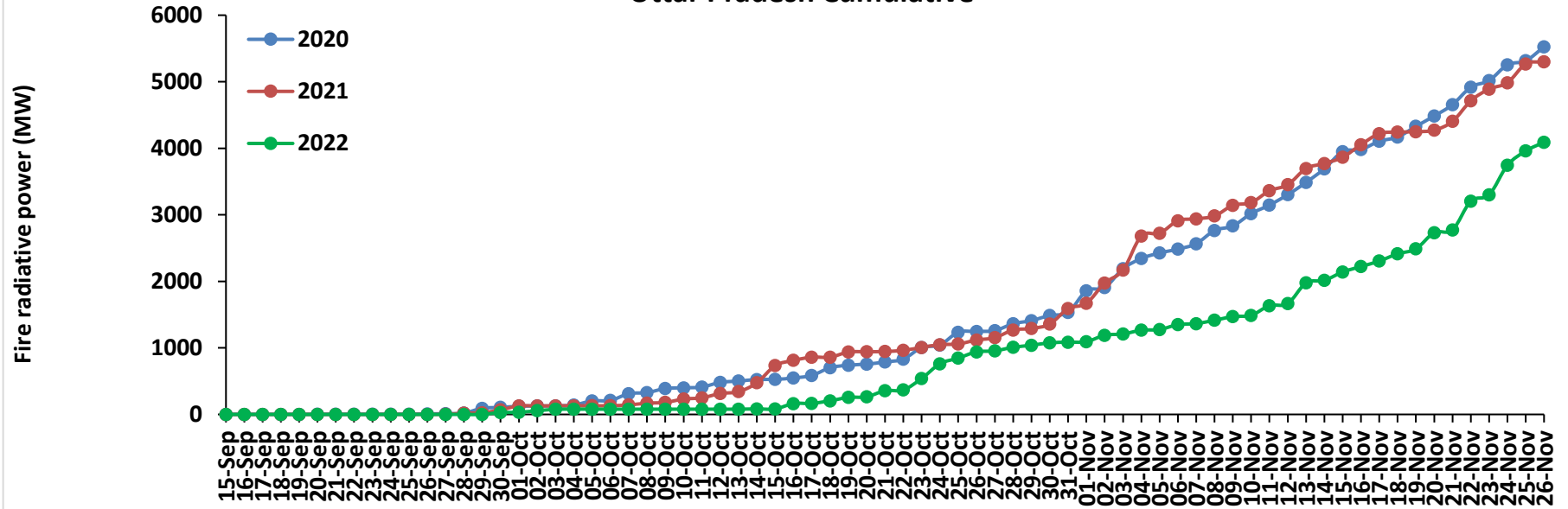




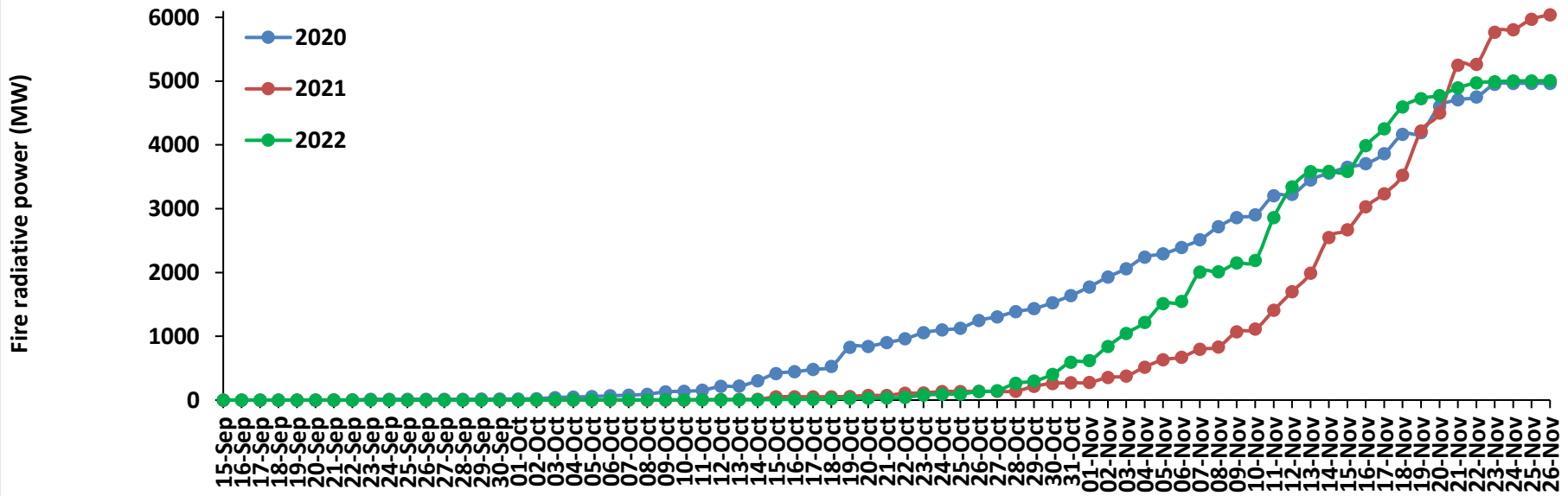
**Comparison of residue burning fire power in current year (2022) with previous years (2021 and 2020) for the study States**



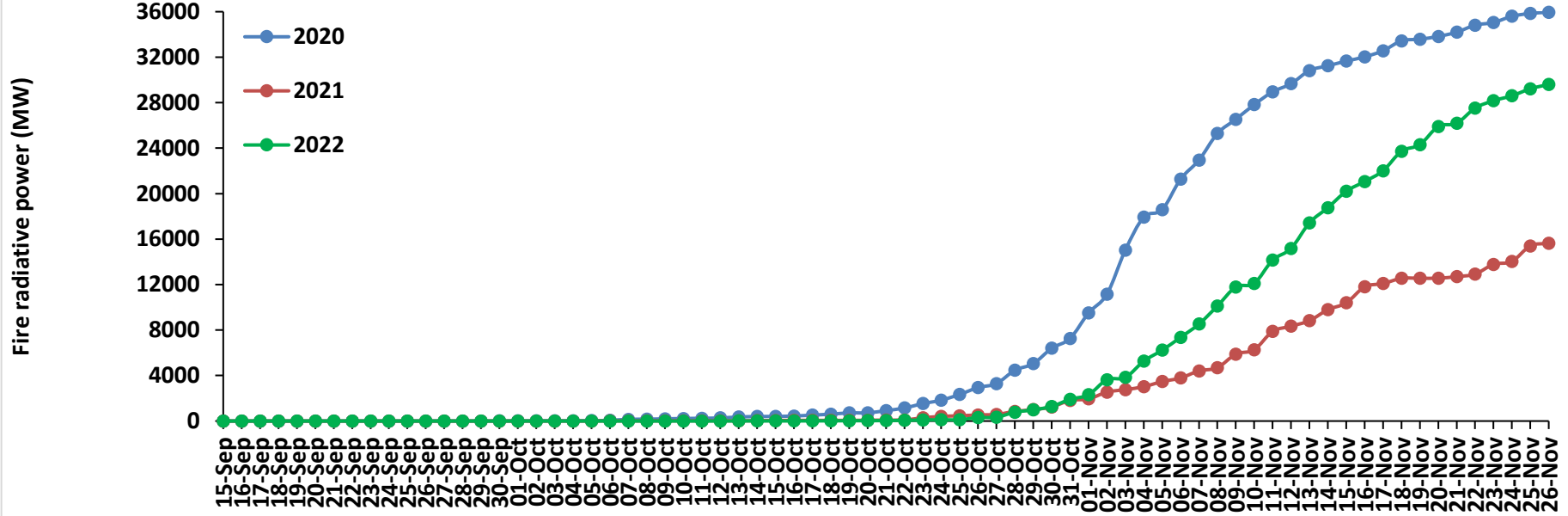
### Uttar Pradesh Cumulative



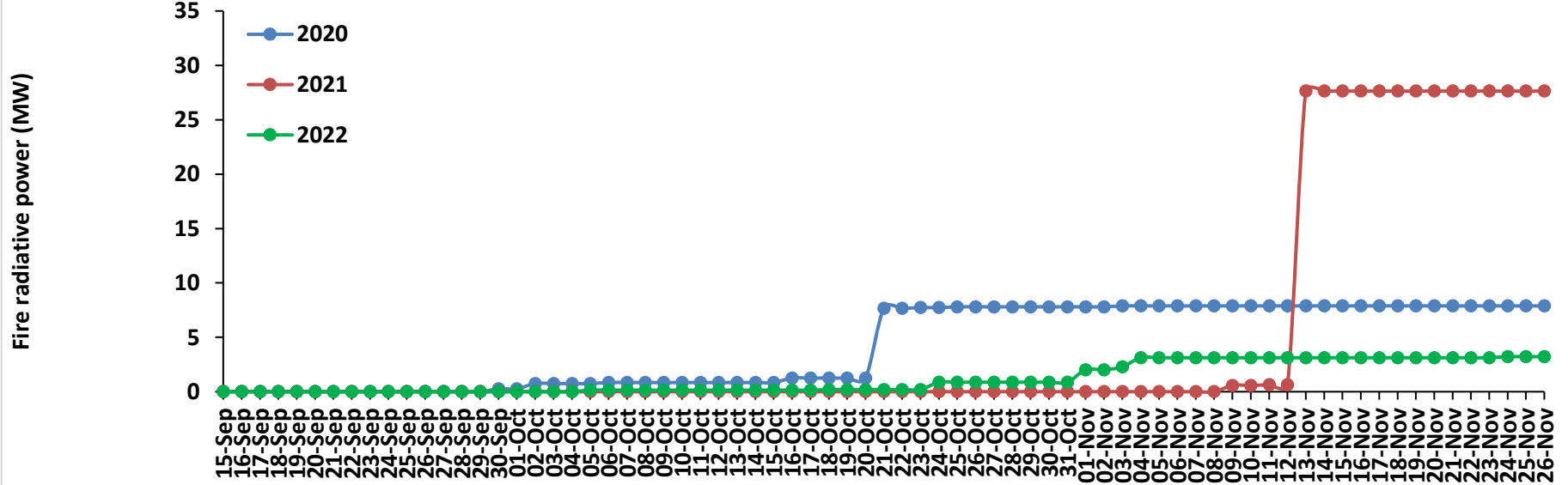
### Rajasthan Cumulative



### Madhya Pradesh Cumulative

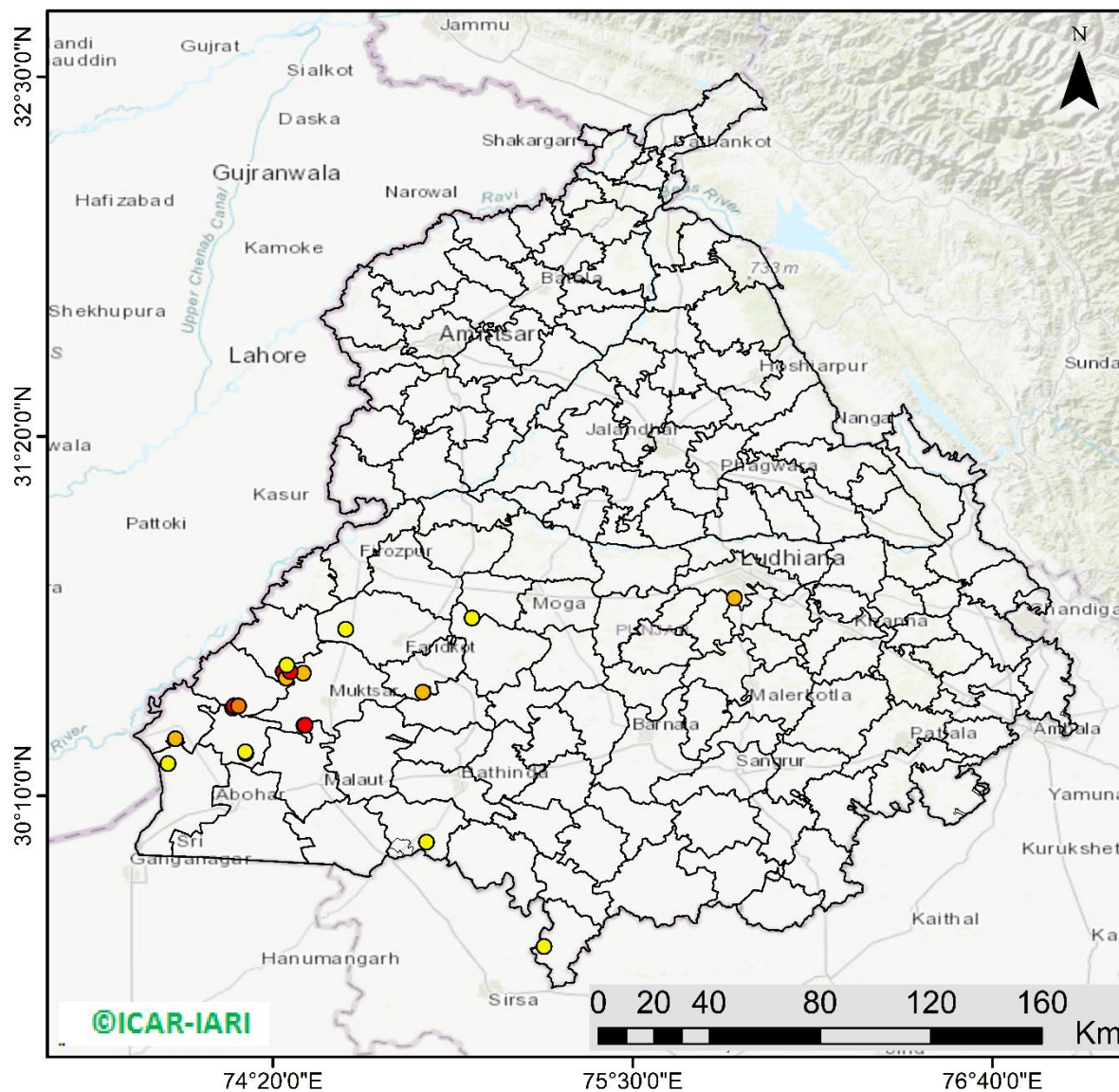


### Delhi Cumulative



# Punjab

## RICE RESIDUE BURNING IN PUNJAB



**22** burning events detected in Punjab during (26th Nov 2022)

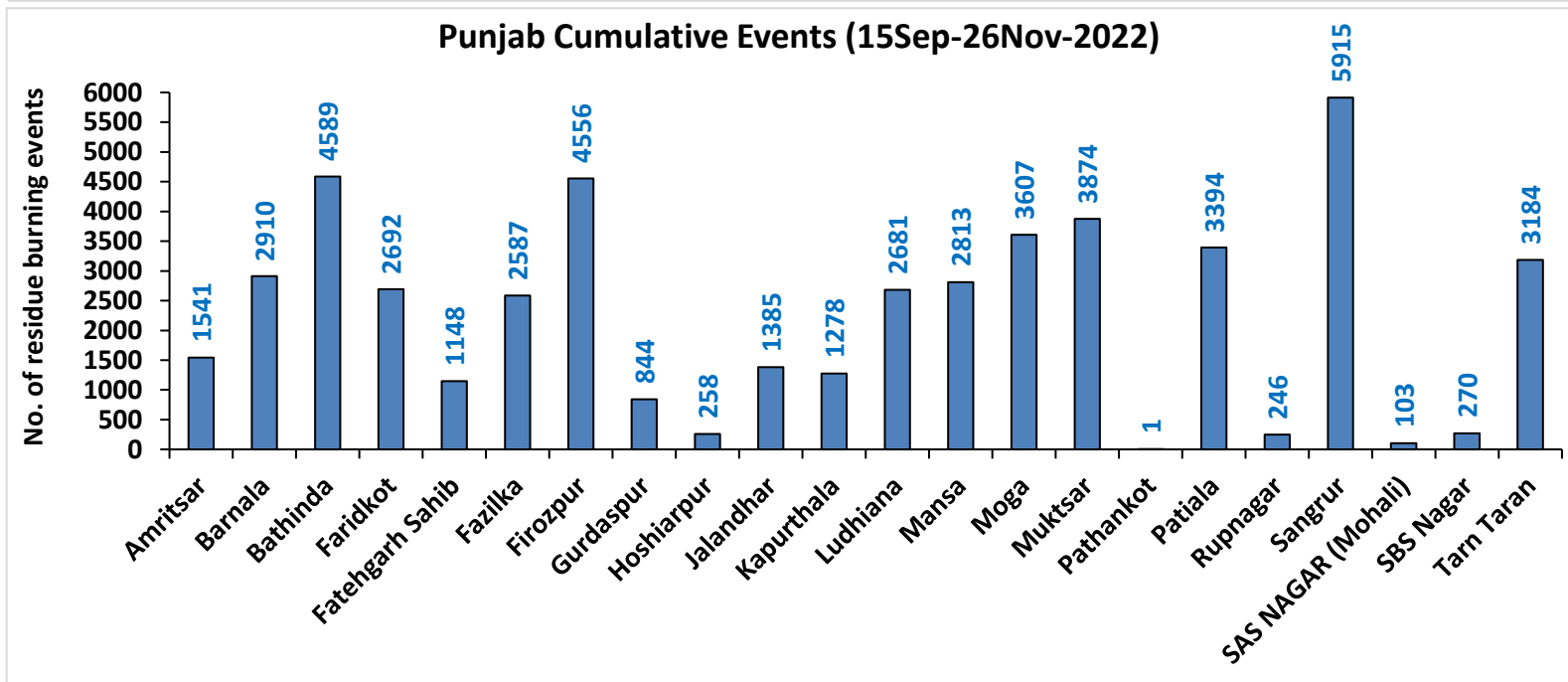
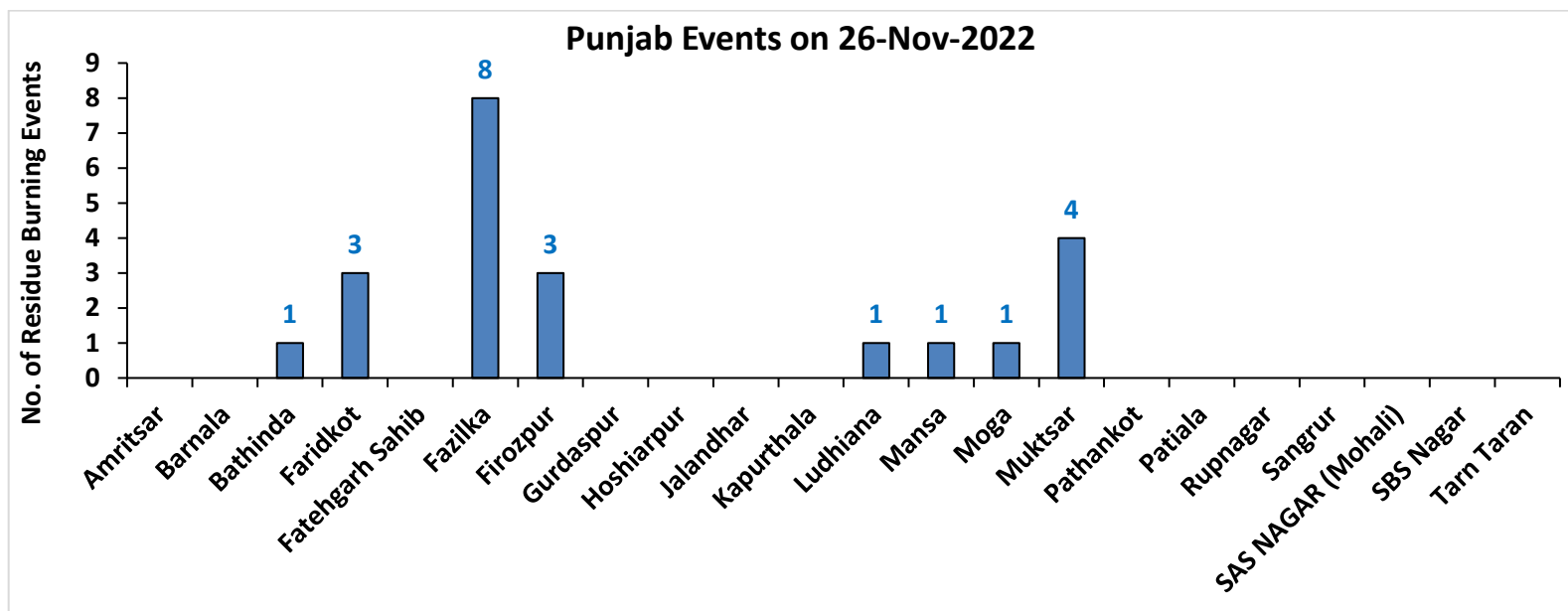
### Fire Intensity (W/m<sup>2</sup>)

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



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

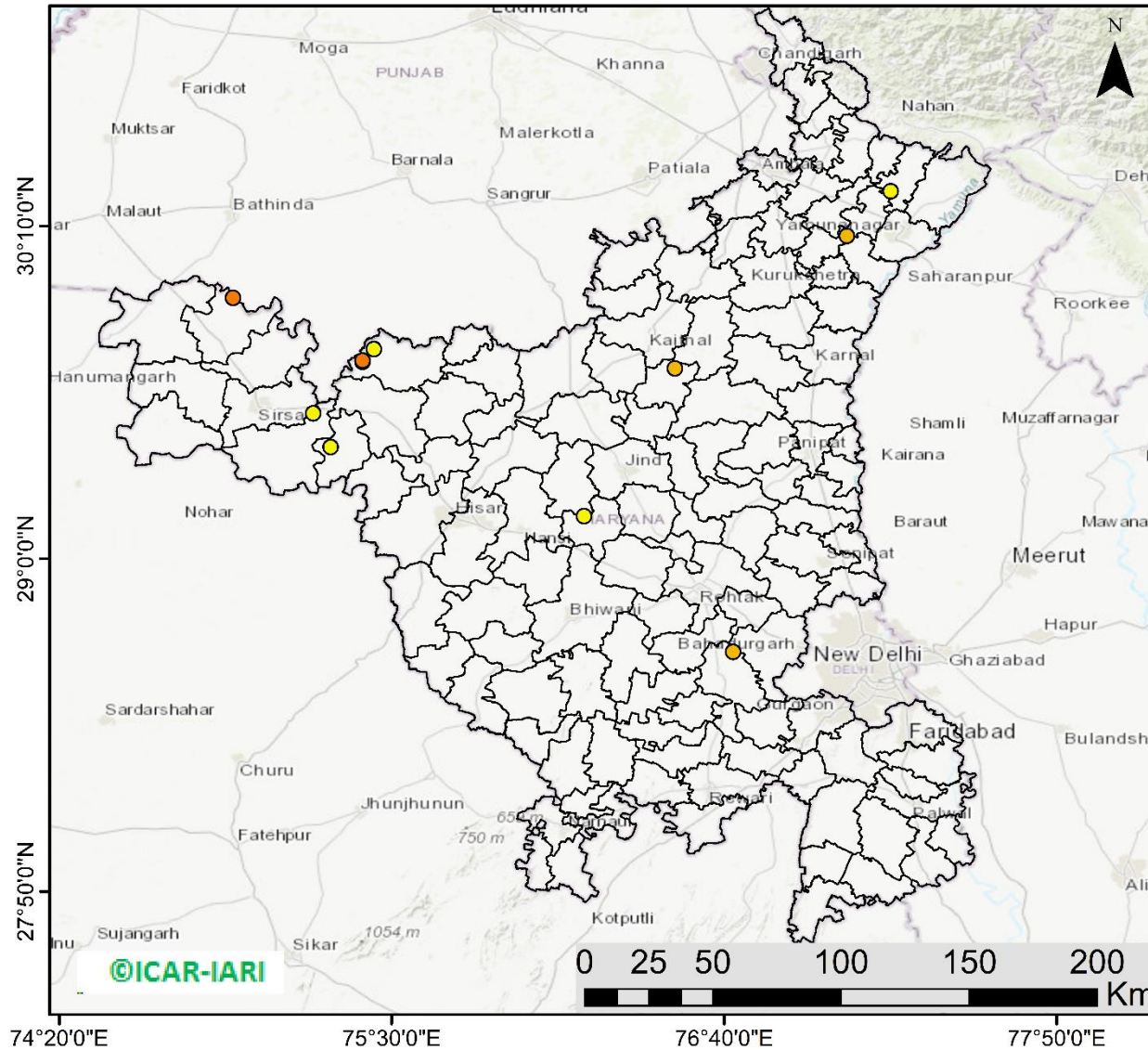
## District-wise cumulative number of residues burning events in Punjab (15Sep- 26Nov-2022)





# Haryana

## RICE RESIDUE BURNING IN HARYANA



**12** burning events detected in Haryana on (26th Nov 2022)

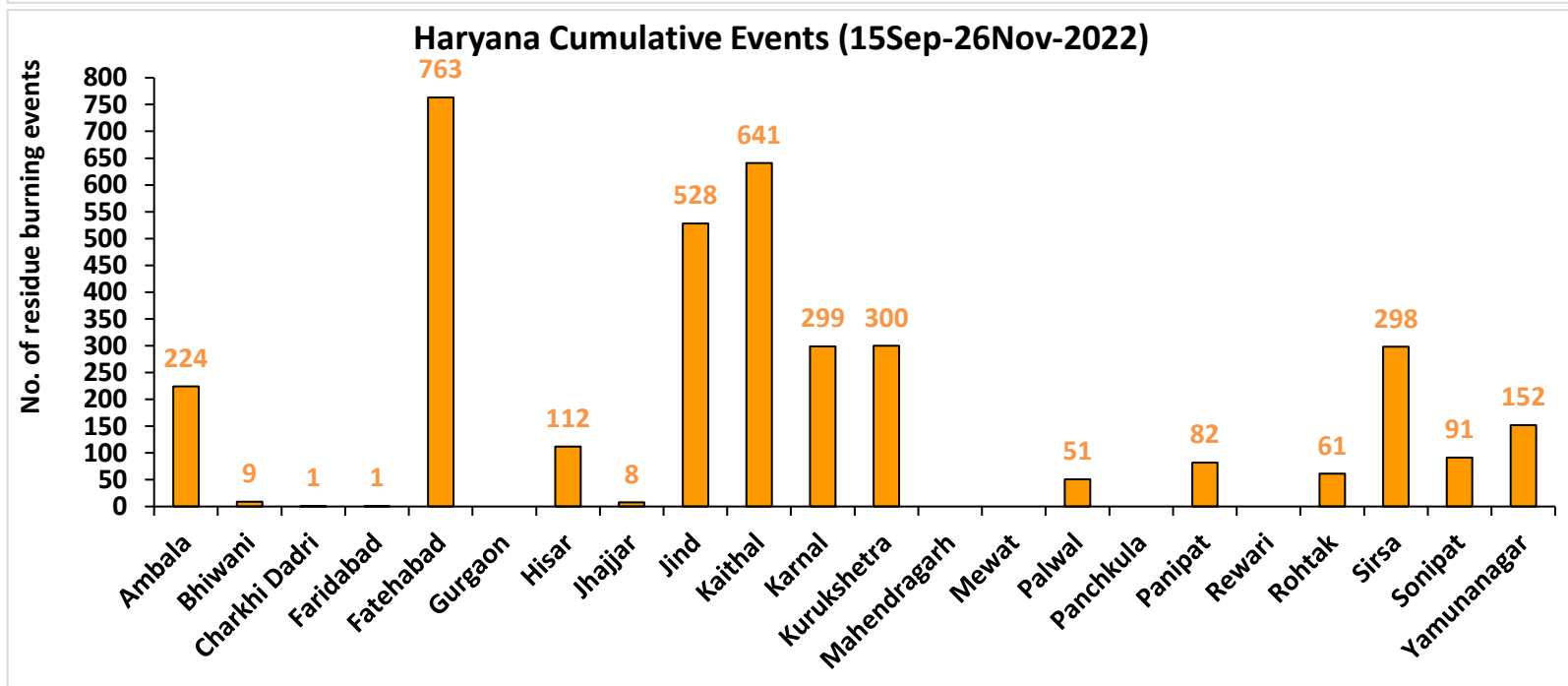
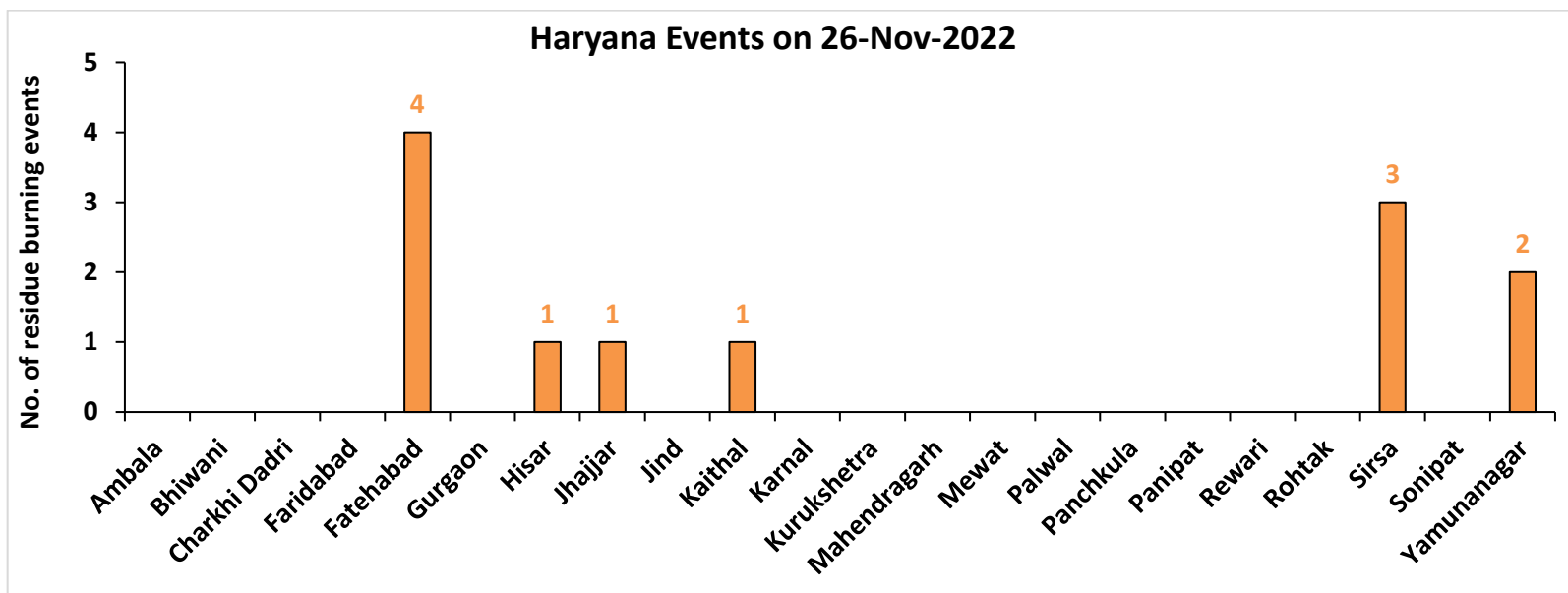
### Fire Intensity (W/m<sup>2</sup>)

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



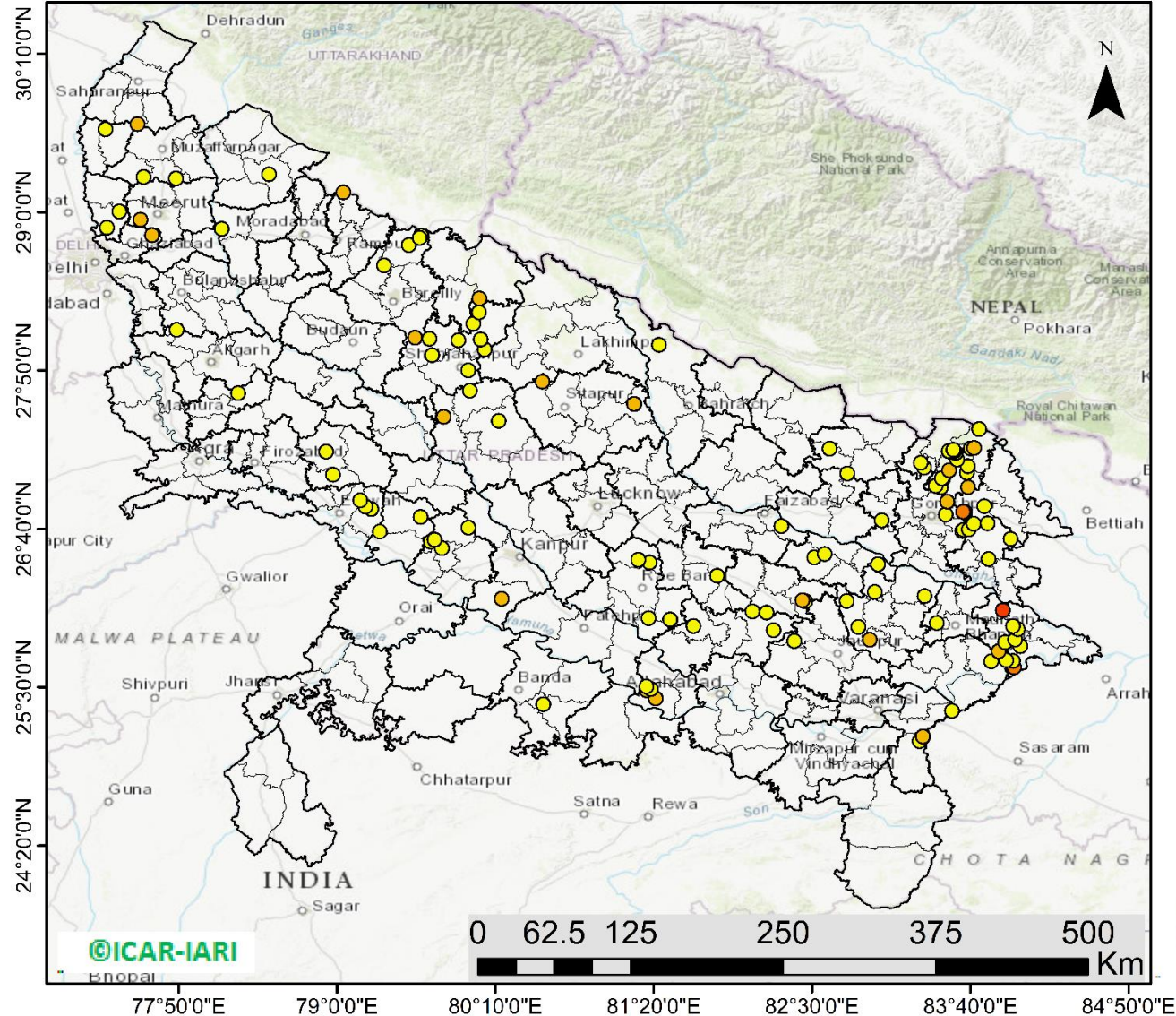
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

## District-wise cumulative number of residues burning events in Haryana (15Sep- 26Nov-2022)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



127 burning events detected in Uttar Pradesh on (26th Nov 2022)

Fire Intensity (W/m2)

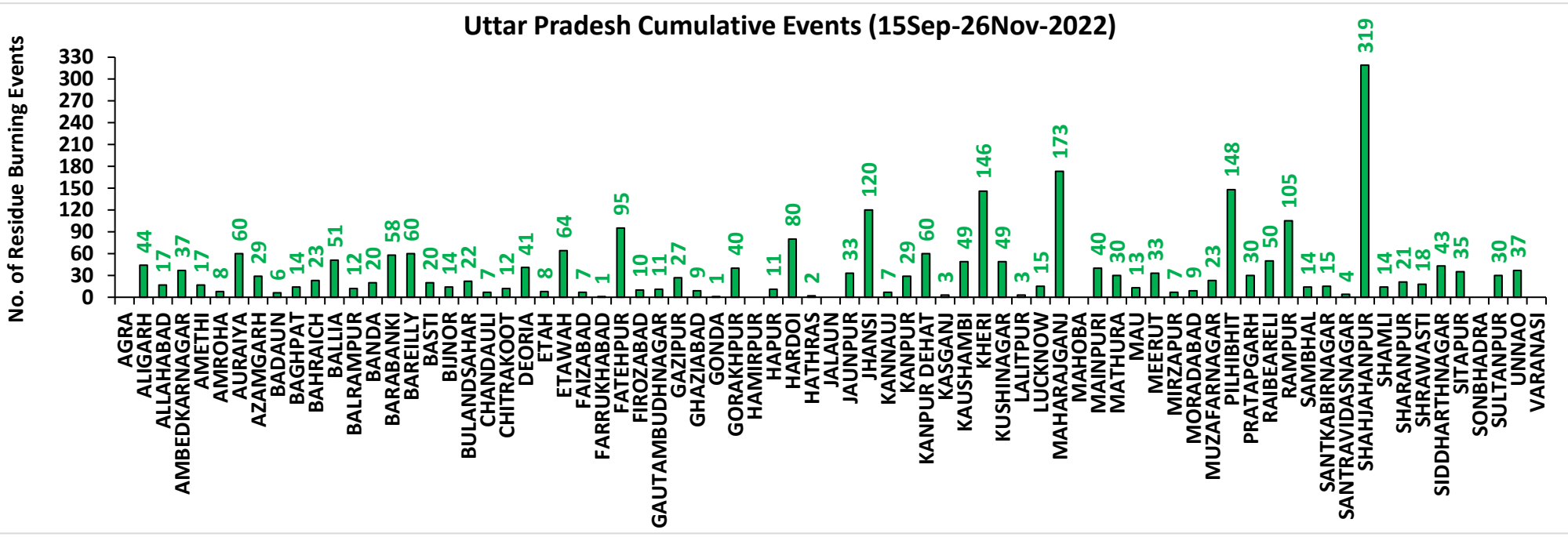
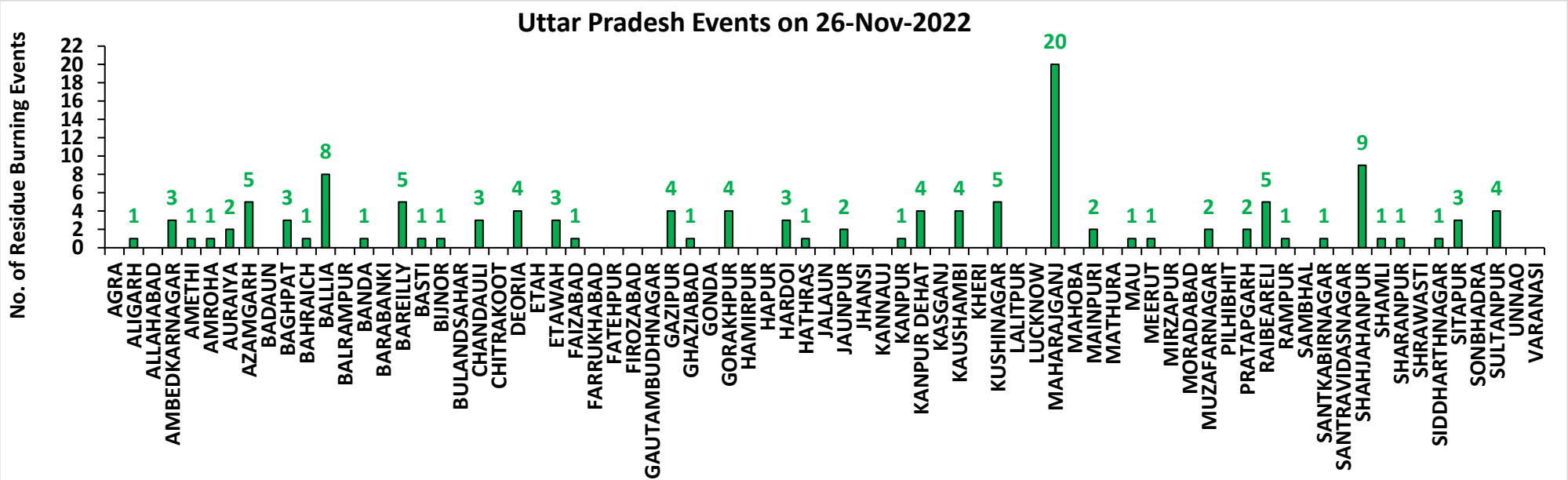
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



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

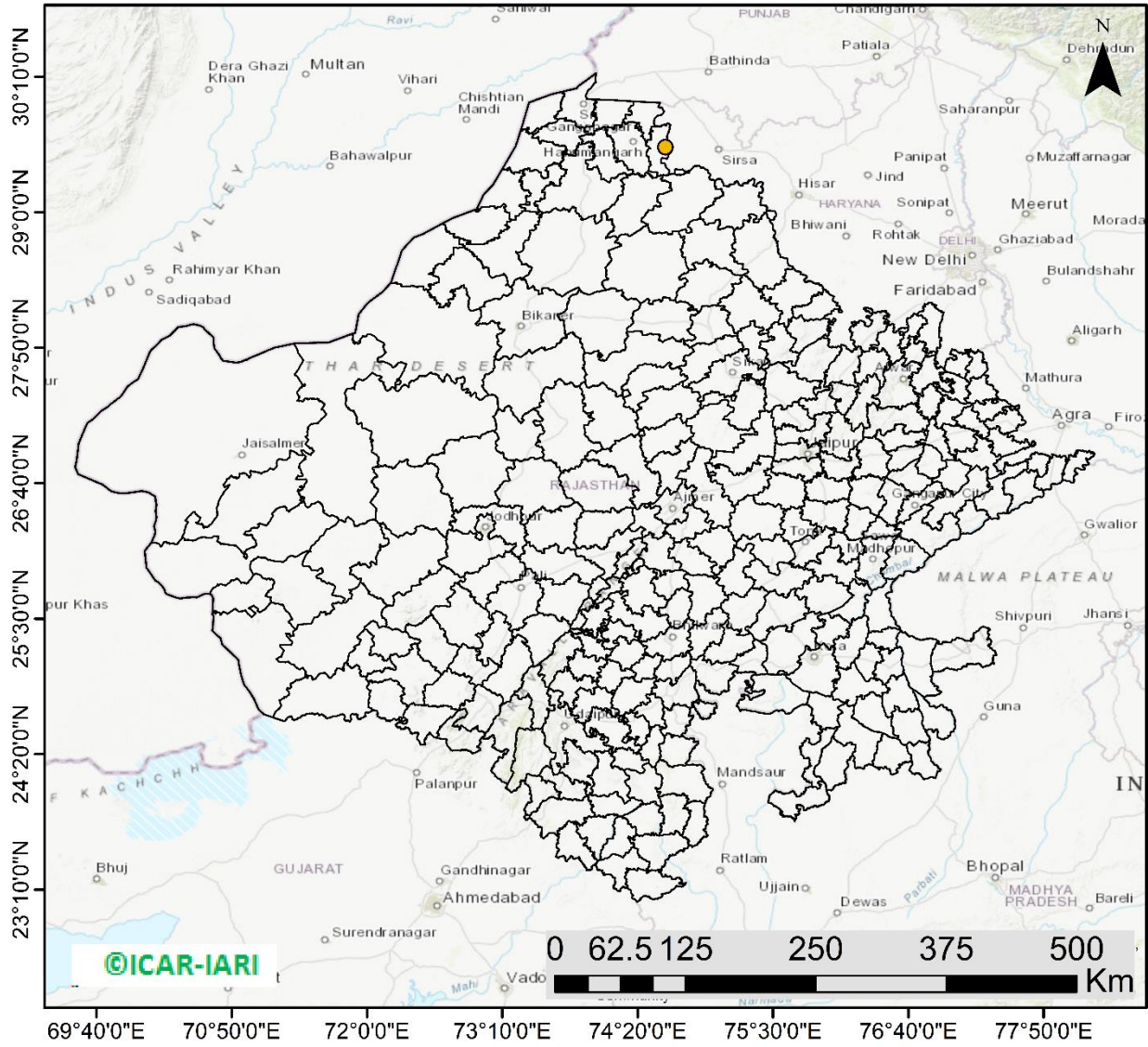


## District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep- 26Nov-2022)



# Rajasthan

## RICE RESIDUE BURNING IN RAJASTHAN



**02** burning events  
detected in Rajasthan on  
(26th Nov 2022)

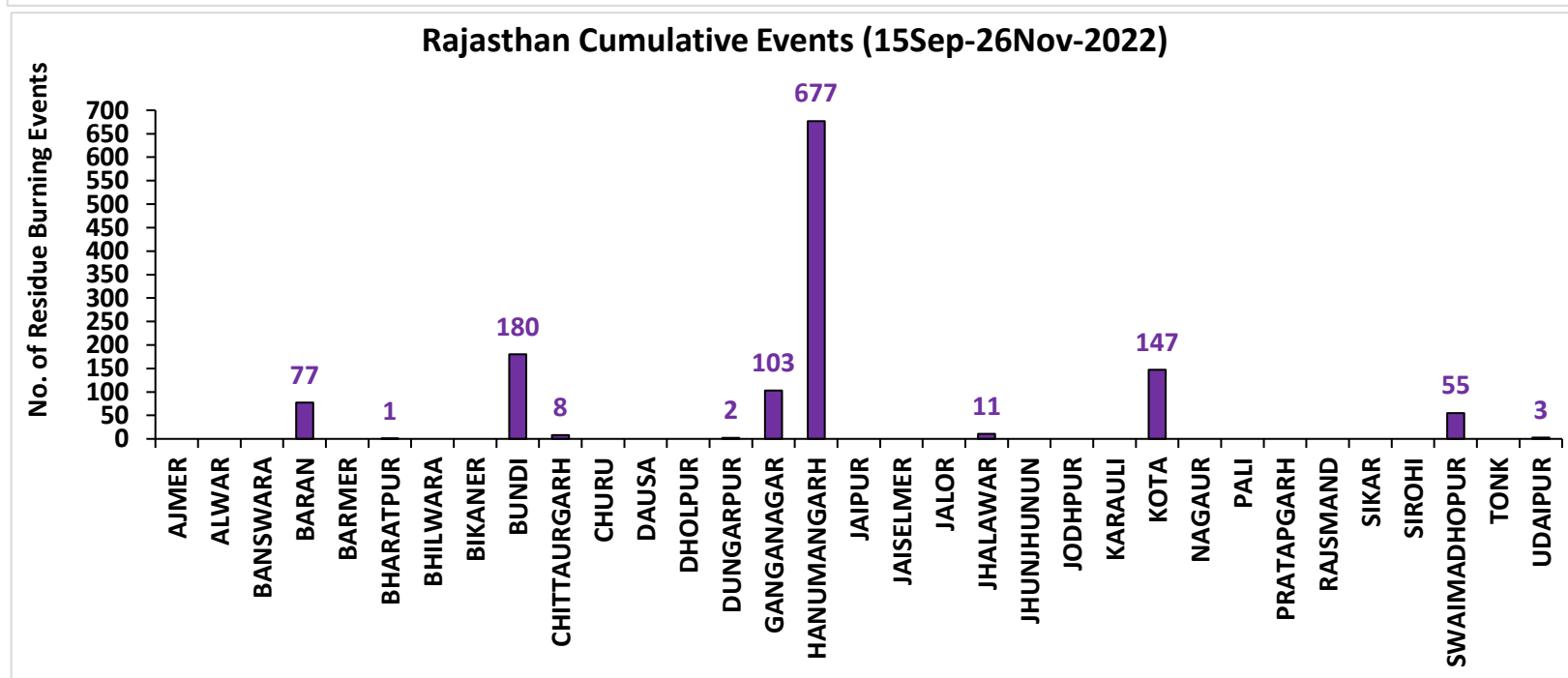
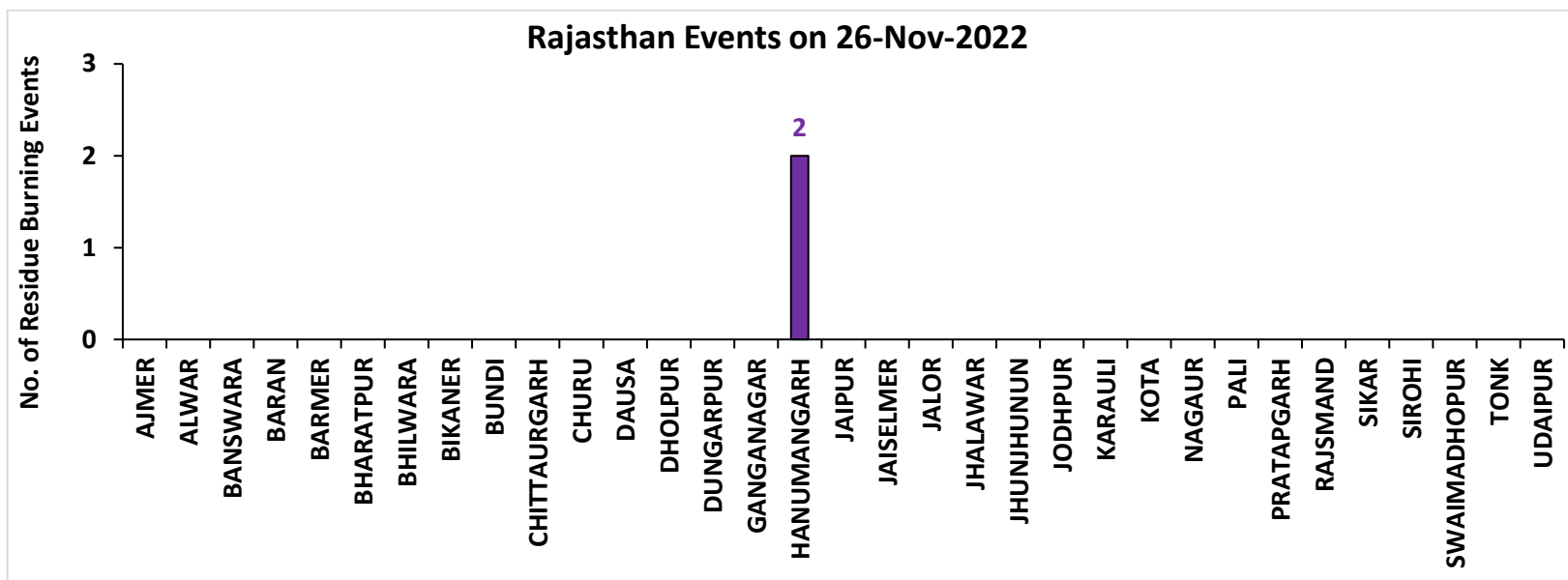
### Fire Intensity (W/m<sup>2</sup>)

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



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

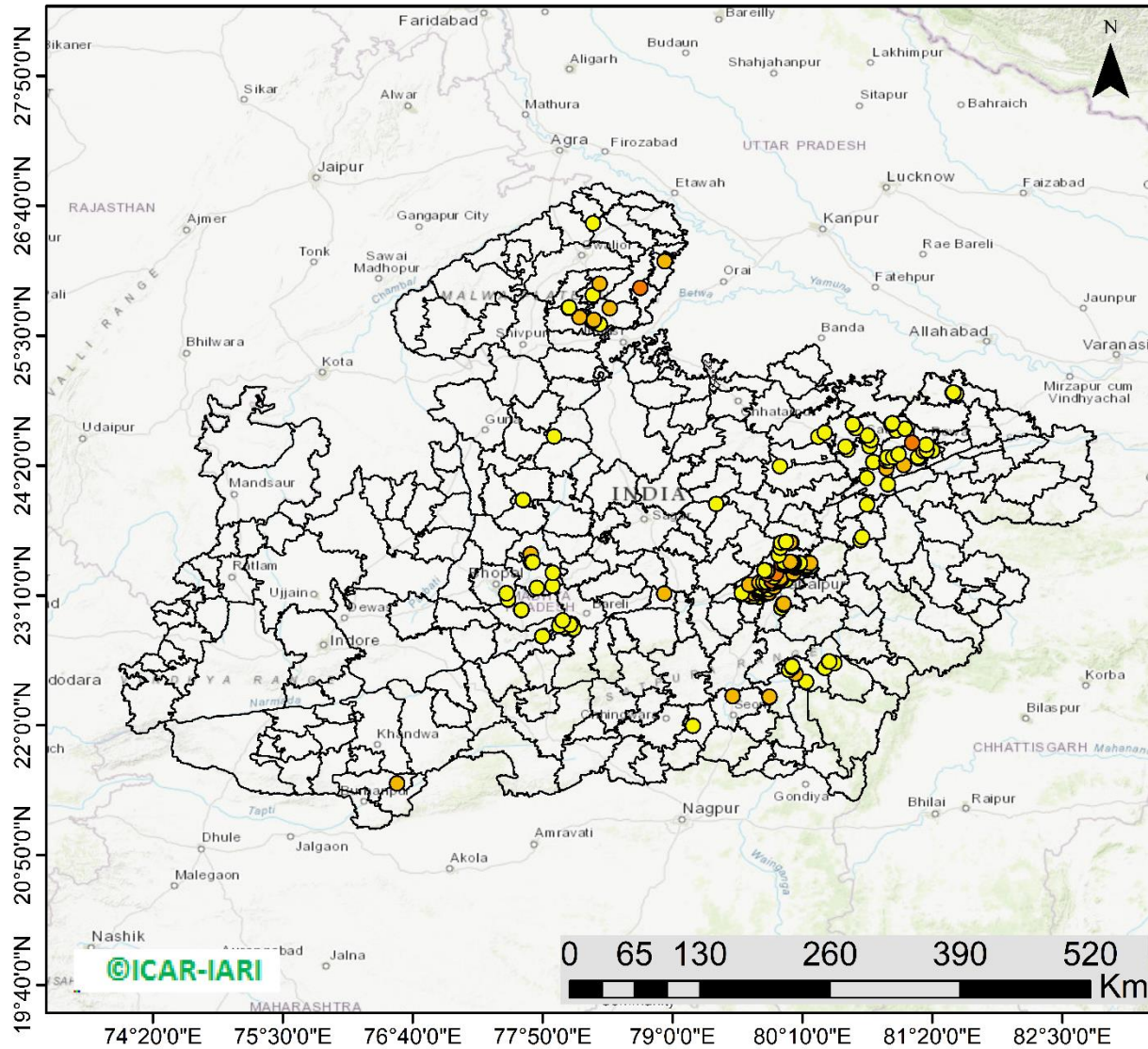
## District-wise cumulative number of residues burning events in Rajasthan (15Sep- 26Nov-2022)





# Madhya Pradesh

## RICE RESIDUE BURNING IN MADHYA PRADESH



**198** burning events detected in MP on (26th Nov 2022)

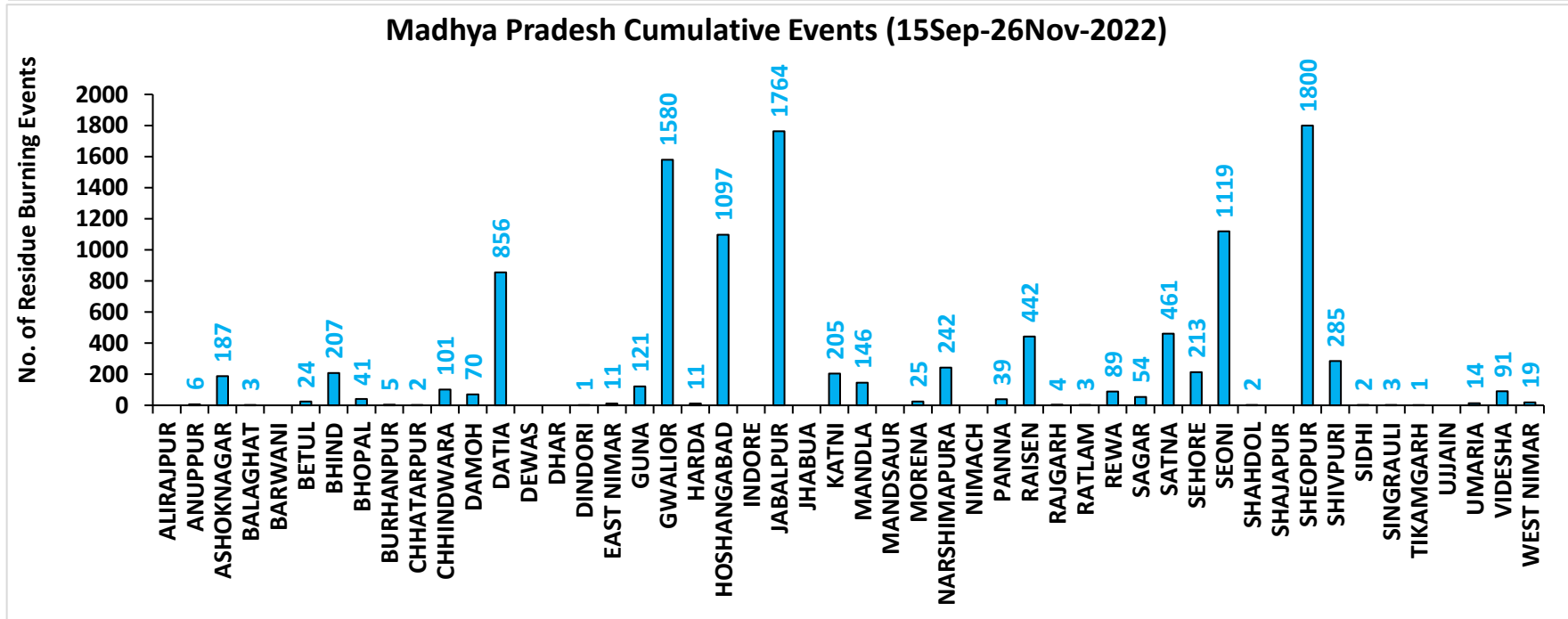
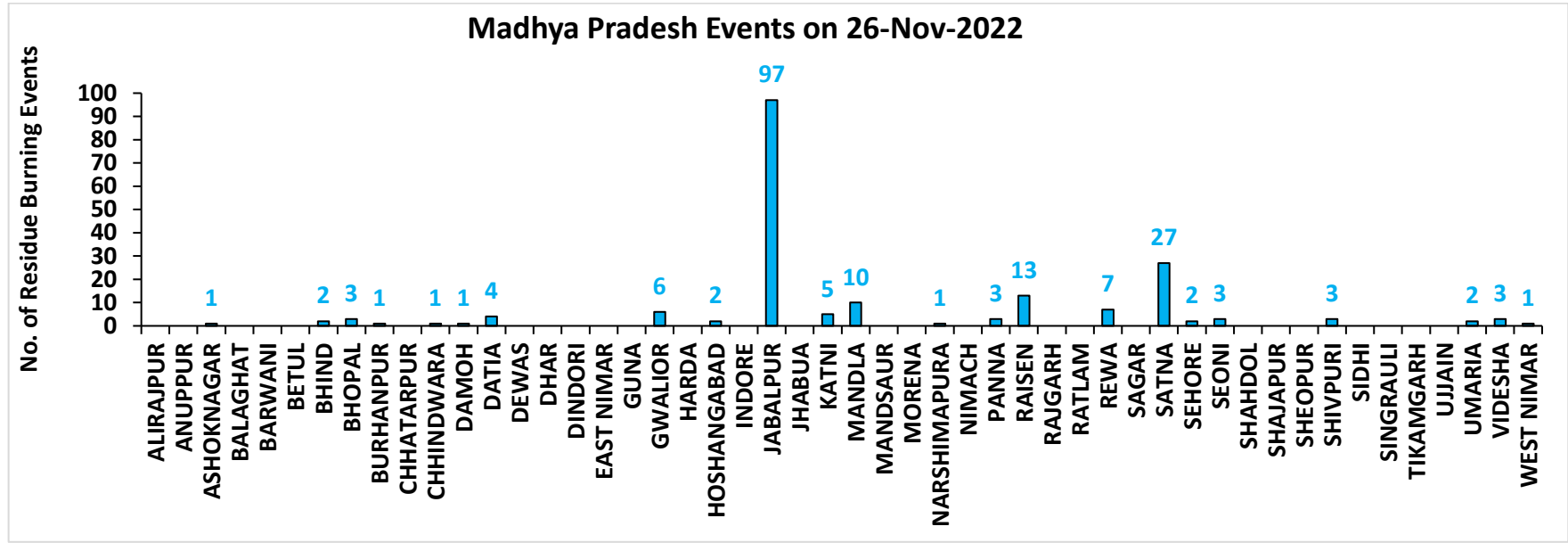
### Fire Intensity (W/m<sup>2</sup>)

- 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- 26Nov-2022)



**District-wise cumulative number of residues burning events detected in 2020 ,2021 and 2022**  
**(Period: 15 September-26 November)**

**(a) Punjab**

District	15 Sep-26 Nov 2022		
	2020	2021	2022
Amritsar	3059	2174	1541
Barnala	5336	4326	2910
Bathinda	5226	4480	4589
Faridkot	4730	3953	2692
Fatehgarh Sahib	1536	1722	1148
Fazilka	2527	2385	2587
Firozpur	8511	6286	4556
Gurdaspur	2128	1393	844
Hoshiarpur	386	330	258
Jalandhar	1940	2547	1385
Kapurthala	1883	1796	1278
Ludhiana	5054	5814	2681
Mansa	3780	3217	2813
Moga	7397	6515	3607
Muktsar	4990	4585	3874
Pathankot	13	6	1
Patiala	6431	5423	3394
Rupnagar	205	307	246
Sangrur	11724	9389	5915
SAS NAGAR (Mohali)	127	147	103
SBS Nagar	131	355	270
Tarn Taran	5604	4117	3184
<b>Total</b>	<b>82718</b>	<b>71267</b>	<b>49876</b>

**(b) Haryana**

District	15 Sep-26 Nov 2022		
	2020	2021	2022
AMBALA	346	304	224
BHIWANI	4	10	9
CHARKHI DADRI	0	0	1
FARIDABAD	1	3	1
FATEHABAD	843	1476	763
GURGAON	0	0	0
HISAR	52	235	112
JHAJJAR	6	7	8
JIND	343	908	528
KAITHAL	838	1154	641
KARNAL	581	953	299
KURUKSHETRA	406	538	300
MAHENDRAGARH	0	0	0
MEWAT	0	0	0
PALWAL	46	115	51
PANCHKULA	0	0	0
PANIPAT	50	247	82
REWARI	0	0	0
ROHTAK	48	73	61
SIRSA	261	538	298
SONIPAT	70	210	91
YAMUNANAGAR	142	147	152
<b>Total</b>	<b>4037</b>	<b>6918</b>	<b>3621</b>

(c) Uttar Pradesh

District	15 Sep-26 Nov 2022										
	2020	2021	2022	GAUTAMBUDHNAGAR	15	19	11	MUZAFARNAGAR	49	24	23
AGRA	7	0	0	GAZIPUR	24	24	27	PILHIBHIT	21	219	148
ALIGARH	113	39	44	GHAZIABAD	26	14	9	PRATAPGARH	41	36	30
ALLAHABAD	39	21	17	GONDA	12	11	1	RAIBEARELI	41	81	50
AMBEDKARNAGAR	36	27	37	GORAKHPUR	46	28	40	RAMPUR	163	188	105
AMETHI	9	21	17	HAMIRPUR	6	0	0	SAMBHAL	19	17	14
AMROHA	12	8	8	HAPUR	31	14	11	SANTKABIRNAGAR	29	20	15
AURAIYA	86	69	60	HARDOI	101	107	80	SANTRAVIDASNAGAR	4	5	4
AZAMGARH	62	29	29	HATHRAS	0	0	2	SHAHJAHANPUR	143	411	319
BADAUN	14	17	6	JALAUN	43	0	0	SHAMLI	47	41	14
BAGHPAT	19	14	14	JAUNPUR	49	33	33	SAHARANPUR	98	75	21
BAHRAICH	107	59	23	JHANSI	352	136	120	SHRAWASTI	47	45	18
BALLIA	143	64	51	KANNAUJ	33	6	7	SIDDHARTHANAGAR	76	128	43
BALRAMPUR	68	21	12	KANPUR	32	33	29	SITAPUR	68	48	35
BANDA	40	11	20	KANPUR DEHAT	86	47	60	SONBHADRA	0	2	0
BARABANKI	36	69	58	KASGANJ	3	2	3	SULTANPUR	7	25	30
BAREILLY	79	65	60	KAUSHAMBI	92	86	49	UNNAO	45	30	37
BASTI	58	50	20	KHERI	171	169	146	VARANASI	2	5	0
BIJNOR	41	38	14	KUSHINAGAR	80	36	49	<b>Total</b>	<b>4006</b>	<b>3617</b>	<b>2663</b>
BULANDSAHAR	61	12	22	LALITPUR	3	6	3				
CHANDAULI	21	6	7	LUCKNOW	35	33	15				
CHITRAKOOT	12	9	12	MAHARAJGANJ	55	140	173				
DEORIA	83	28	41	MAHOBA	27	0	0				
ETAH	17	10	8	MAINPURI	63	49	40				
ETAWAH	75	91	64	MATHURA	160	240	30				
FAIZABAD	14	11	7	MAU	34	17	13				
FARRUKHABAD	6	4	1	MEERUT	79	34	33				
FATEHPUR	123	99	95	MIRZAPUR	11	10	7				
FIROZABAD	27	17	10	MORADABAD	29	14	9				

**(d) Delhi**

District	15 Sep-26 Nov 2022		
	2020	2021	2022
CENTRAL	0	0	0
EAST	0	0	0
NEW DELHI	0	0	0
NORTH	3	3	9
NORTH EAST	0	0	0
NORTH WEST DELHI	3	1	0
SHAHADRA	0	0	0
SOUTH	1	0	0
SOUTH EAST	0	0	0
SOUTH WEST DELHI	0	0	0
WEST DELHI	2	0	1
<b>Total</b>	<b>9</b>	<b>4</b>	<b>10</b>

**(e) Rajasthan**

District	15 Sep-26 Nov 2022		
	2020	2021	2022
AJMER	3	0	0
ALWAR	10	0	0
BANSWARA	0	0	0
BARAN	167	11	77
BARMER	4	0	0
BHARATPUR	2	3	1
BHILWARA	11	0	0
BIKANER	1	0	0
BUNDI	128	84	180
CHITTAURGARH	2	13	8
CHURU	0	0	0
DAUSA	1	0	0
DHOLPUR	0	0	0
DUNGARPUR	0	0	2
GANGANAGAR	202	139	103
HANUMANGARH	894	946	677
JAIPUR	4	0	0
JAISELMER	5	0	0
JALOR	2	0	0
JHALAWAR	10	1	11
JHUNJHUNUN	1	0	0
JODHPUR	5	0	0
KARAULI	1	0	0
KOTA	116	57	147
NAGAUR	3	0	0
PALI	11	0	0
PRATAPGARH	8	0	0
RAJSMAND	1	0	0
SIKAR	0	0	0
SIROHI	2	0	0
SWAIMADHOPUR	65	34	55
TONK	5	0	0
UDAIPUR	2	1	3
<b>Total</b>	<b>1666</b>	<b>1289</b>	<b>1264</b>



(f) Madhya Pradesh

District	15 Sep-26 Nov 2022						
	2020	2021	2022	PANNA	50	21	39
ALIRAJPUR	0	0	0	RAISEN	602	344	442
ANUPPUR	3	2	6	RAJGARH	11	3	5
ASHOKNAGAR	156	90	187	RATLAM	10	7	3
BALAGHAT	8	4	3	REWA	136	103	89
BARWANI	4	0	0	SAGAR	28	31	54
BETUL	36	15	24	SATNA	570	483	461
BHIND	259	152	207	SEHORE	162	148	213
BHOPAL	52	39	41	SEONI	1231	887	1119
BURHANPUR	16	1	5	SHAHDOL	3	1	2
CHHATARPUR	9	0	2	SHAJAPUR	20	0	0
CHHINDWARA	135	57	101	SHEOPUR	1858	1006	1800
DAMOH	75	53	70	SHIVPURI	382	86	285
DATIA	1185	482	856	SIDHI	4	5	2
DEWAS	8	0	0	SINGRAULI	0	7	3
DHAR	46	0	0	TIKAMGARH	4	0	1
DINDORI	0	0	1	UJJAIN	14	0	0
EAST NIMAR	23	7	11	UMARIA	8	8	14
GUNA	69	11	121	VIDESHA	144	105	91
GWALIOR	2047	675	1580	WEST NIMAR	66	10	19
HARDA	14	21	11	<b>Total</b>	<b>13947</b>	<b>7472</b>	<b>11346</b>
HOSHANGABAD	1059	1066	1097				
INDORE	4	0	0				
JABALPUR	2603	1140	1763				
JHABUA	0	0	0				
KATNI	325	104	205				
MANDLA	147	103	146				
MANDSAUR	14	0	0				
MORENA	62	37	25				
NARSHIMAPURA	283	158	242				
NIMACH	2	0	0				

**State-wise and date-wise number of paddy residue burning events detected in 2020, 2021 and 2022**  
**(Period: 15 September - 26 November 2022)**

**Number of Paddy Residue Burning Events Detected**

	Punjab			Haryana			Uttar Pradesh			Delhi			Rajasthan			Madhya Pradesh		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
15-Sep	5	0	14	2	0	0	1	0	0	0	0	0	1	0	0	2	0	0
16-Sep	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	5	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	17	9	7	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
19-Sep	30	5	18	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
20-Sep	67	8	10	6	0	0	2	0	0	0	0	0	0	0	0	0	0	0
21-Sep	54	0	56	2	0	0	1	0	0	0	0	0	1	0	1	2	0	0
22-Sep	34	0	30	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
23-Sep	49	0	3	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
24-Sep	78	5	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
25-Sep	184	11	0	11	0	0	5	0	0	0	0	0	1	0	0	0	0	0
26-Sep	190	19	0	5	0	0	8	0	0	0	0	0	1	0	0	2	0	0
27-Sep	78	37	0	8	0	0	4	1	0	0	0	0	0	0	0	1	0	0
28-Sep	55	28	0	6	1	0	1	6	0	0	0	0	0	0	0	1	1	0
29-Sep	63	64	0	9	4	0	6	10	0	0	0	0	3	0	0	0	4	0
30-Sep	116	27	8	22	2	0	13	13	10	1	0	0	1	0	0	5	0	0
01-Oct	165	13	45	15	4	1	7	13	3	0	0	0	4	1	1	13	0	1
02-Oct	141	0	83	30	2	7	12	0	36	1	0	0	7	0	3	12	0	1
03-Oct	110	9	75	8	6	8	4	3	29	0	0	0	9	0	2	5	1	5
04-Oct	162	23	65	29	2	7	8	0	2	0	0	0	15	0	0	4	2	0
05-Oct	161	18	130	17	3	24	14	2	0	0	0	2	14	0	1	13	1	0
06-Oct	171	42	85	30	0	26	12	1	0	1	0	0	16	0	0	37	1	0
07-Oct	197	72	62	32	11	6	41	13	0	0	0	0	14	1	1	31	1	0
08-Oct	95	108	19	29	27	0	25	11	0	0	0	0	11	0	0	17	2	0

09-Oct	121	114	3	20	39	1	15	20	0	0	0	0	12	0	0	15	4	0
10-Oct	232	150	4	33	95	2	9	54	0	0	0	0	14	1	0	18	10	0
11-Oct	377	64	45	90	51	0	23	28	0	0	0	0	21	7	1	32	2	0
12-Oct	388	97	104	69	51	4	46	23	0	0	0	0	24	1	2	44	1	1
13-Oct	266	132	120	47	91	15	36	42	0	0	0	0	7	5	2	21	2	7
14-Oct	605	229	82	69	98	30	9	68	5	0	0	0	16	1	1	15	11	1
15-Oct	449	660	169	106	363	36	15	149	0	0	0	0	9	8	2	8	27	2
16-Oct	654	429	206	80	176	76	21	121	6	1	0	0	12	2	4	23	13	2
17-Oct	1172	14	403	143	0	86	38	39	7	0	0	0	26	0	4	63	1	11
18-Oct	938	57	342	166	1	134	76	0	30	0	0	1	37	2	12	88	0	15
19-Oct	1080	496	436	72	55	122	43	5	36	0	0	0	27	5	12	49	1	12
20-Oct	890	788	96	62	155	78	31	1	17	0	0	0	26	4	4	9	21	7
21-Oct	1392	597	393	101	131	107	25	5	23	2	0	0	32	2	6	112	30	18
22-Oct	1665	1111	582	128	140	122	32	3	18	0	0	0	29	5	12	183	29	31
23-Oct	1438	620	902	106	218	217	84	8	109	1	0	0	23	7	20	204	32	70
24-Oct	911	0	1019	57	38	250	63	11	212	0	0	2	20	4	7	150	34	26
25-Oct	1416	76	181	155	71	12	50	18	9	1	0	0	18	2	4	144	60	0
26-Oct	2126	329	1238	77	175	123	33	41	23	0	0	0	34	3	21	178	55	57
27-Oct	2563	279	1111	96	93	83	40	58	23	0	0	0	42	1	21	294	62	38
28-Oct	3232	906	2067	139	149	123	87	35	34	0	0	0	45	4	46	537	110	143
29-Oct	1624	1353	1898	52	161	112	139	32	73	0	0	0	29	23	37	349	97	151
30-Oct	3946	1373	1761	100	148	112	50	53	43	0	0	0	17	20	55	428	168	119
31-Oct	3531	2895	2131	108	353	70	49	170	20	0	0	0	37	15	36	455	299	112
01-Nov	3835	1796	1842	151	124	88	74	157	9	0	0	1	51	5	27	709	198	142
02-Nov	4098	3001	3634	111	203	166	82	87	25	0	0	0	55	19	63	820	214	284
03-Nov	2818	2512	2666	93	197	128	197	66	40	1	0	1	34	20	54	771	148	323
04-Nov	4584	3032	2437	72	228	63	152	123	61	0	0	2	46	19	34	618	123	348
05-Nov	4529	5327	2817	66	331	90	52	70	24	0	0	0	46	45	91	474	320	319
06-Nov	5382	3942	599	151	219	46	43	208	28	0	0	0	40	32	27	678	248	392
07-Nov	5491	5199	2487	150	182	37	86	46	8	0	0	0	57	38	80	848	199	383
08-Nov	3674	4397	604	115	138	11	169	21	44	0	0	0	33	44	5	981	170	783

<b>09-Nov</b>	1718	5079	1778	21	217	69	115	51	58	0	1	0	34	48	22	495	330	570
<b>10-Nov</b>	3127	4008	1893	80	184	35	101	77	33	0	0	0	48	40	34	346	380	282
<b>11-Nov</b>	2822	4156	3916	93	126	152	71	151	36	0	1	0	75	55	95	418	506	482
<b>12-Nov</b>	1989	3403	2467	83	127	99	108	120	36	0	0	0	31	40	84	422	185	421
<b>13-Nov</b>	2441	3742	2175	105	210	132	172	95	102	0	2	0	54	78	63	670	171	773
<b>14-Nov</b>	307	2541	4	35	195	17	258	49	101	0	0	0	16	88	1	294	346	633
<b>15-Nov</b>	32	1761	141	31	129	21	29	67	84	0	0	0	6	51	2	35	353	507
<b>16-Nov</b>	8	1757	1358	0	269	84	15	138	48	0	0	0	16	81	78	145	660	316
<b>17-Nov</b>	248	523	966	9	101	39	38	177	50	0	0	0	60	38	48	191	261	416
<b>18-Nov</b>	670	680	701	60	111	108	62	14	66	0	0	0	75	77	55	352	126	524
<b>19-Nov</b>	454	448	426	37	132	79	129	11	116	0	0	0	27	73	19	124	16	625
<b>20-Nov</b>	677	283	368	77	127	32	134	20	168	0	0	0	59	53	15	106	6	556
<b>21-Nov</b>	457	168	243	65	178	11	135	106	46	0	0	0	57	72	12	159	95	196
<b>22-Nov</b>	46	66	78	15	91	20	120	276	76	0	0	0	9	21	4	165	188	170
<b>23-Nov</b>	43	91	140	52	59	27	106	186	73	0	0	0	66	61	10	150	262	259
<b>24-Nov</b>	9	34	66	20	37	32	167	87	195	0	0	1	13	26	14	258	224	299
<b>25-Nov</b>	0	31	44	1	41	28	127	80	241	0	0	0	2	30	7	106	343	315
<b>26-Nov</b>	16	21	22	0	48	12	83	74	127	0	0	0	0	11	2	48	318	198
<b>Total</b>	<b>82718</b>	<b>71267</b>	<b>49876</b>	<b>4037</b>	<b>6918</b>	<b>3621</b>	<b>4006</b>	<b>3617</b>	<b>2663</b>	<b>9</b>	<b>4</b>	<b>10</b>	<b>1666</b>	<b>1289</b>	<b>1264</b>	<b>13947</b>	<b>7472</b>	<b>11346</b>

### Details of residue burning events in Punjab on 26-Nov-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	BATHINDA	SANGAT	S-NPP	30.01583	74.83134	12:51:07	D	1.80
2	FARIDKOT	FARIDKOT	S-NPP	30.70667	74.56930	12:51:07	D	4.60
3	FARIDKOT	JAITON	S-NPP	30.50250	74.82037	12:51:07	D	7.00
4	FARIDKOT	JAITON	S-NPP	30.50262	74.81921	12:51:07	D	7.30
5	FAZILKA	ARNIWALA SHEIKH SUBANPUR	S-NPP	30.30383	74.24538	12:51:07	D	3.70
6	FAZILKA	ARNIWALA SHEIKH SUBANPUR	S-NPP	30.30910	74.24373	12:51:07	D	3.70
7	FAZILKA	JALALABAD	AQUA	30.45100	74.20300	14:32:20	D	32.40
8	FAZILKA	JALALABAD	AQUA	30.45800	74.20700	14:32:20	D	28.00
9	FAZILKA	JALALABAD	S-NPP	30.45783	74.22177	14:31:24	D	13.10
10	FAZILKA	JALALABAD	S-NPP	30.54813	74.37623	14:31:24	D	8.80
11	FAZILKA	KHUIAN SARWAR	S-NPP	30.27091	73.99297	12:51:07	D	1.90
12	FAZILKA	KHUIAN SARWAR	S-NPP	30.35151	74.01696	14:31:24	D	6.00
13	FIROZPUR	GURUHAR SAHAI	AQUA	30.55800	74.37600	14:32:20	D	50.30
14	FIROZPUR	GURUHAR SAHAI	AQUA	30.56900	74.36700	14:32:20	D	34.50
15	FIROZPUR	GURUHAR SAHAI	S-NPP	30.58998	74.37859	12:51:07	D	2.60
16	LUDHIANA	PAKHOWAL	S-NPP	30.80854	75.82992	12:51:07	D	5.80
17	MANSA	SARDULGARH	S-NPP	29.67689	75.21255	12:51:07	D	2.60
18	MOGA	BAGHA PURANA	S-NPP	30.74336	74.97944	12:51:07	D	2.00
19	MUKTSAR	MALOUT	S-NPP	30.39536	74.43779	12:51:07	D	29.00
20	MUKTSAR	MUKTSAR	S-NPP	30.39446	74.43404	12:51:07	D	17.80
21	MUKTSAR	MUKTSAR	S-NPP	30.56421	74.43198	14:31:24	D	5.80
22	MUKTSAR	MUKTSAR	S-NPP	30.56921	74.38931	14:31:24	D	23.20

### Details of residue burning events in Haryana on 26-Nov-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m <sup>2</sup> )
1	FATEHABAD	BHATTU KALAN	S-NPP	29.39115	75.28580	12:51:07	D	3.20
2	FATEHABAD	RATIA	S-NPP	29.69020	75.39786	14:31:24	D	8.40
3	FATEHABAD	RATIA	S-NPP	29.69460	75.39782	14:31:24	D	10.10
4	FATEHABAD	RATIA	S-NPP	29.73479	75.43797	12:51:07	D	2.40
5	HISAR	NARNAUND	TERRA	29.14900	76.17500	10:53:23	D	3.70
6	JHAJJAR	BAHADURGARH	S-NPP	28.67305	76.69833	12:51:07	D	7.10
7	KAITHAL	RAJOUND	TERRA	29.66700	76.49400	10:53:23	D	8.80
8	SIRSA	NATHUSARI CHOPTA	S-NPP	29.50958	75.22498	14:31:24	D	4.20
9	SIRSA	ODHAN	AQUA	29.89700	74.94100	14:32:20	D	91.00
10	SIRSA	ODHAN	S-NPP	29.91460	74.94369	03:21:24	N	13.30
11	YAMUNANAGAR	BILASPUR	S-NPP	30.28811	77.25140	12:51:07	D	2.50
12	YAMUNANAGAR	MUSTAFABAD	S-NPP	30.13148	77.09731	12:51:07	D	5.40

### Details of residue burning events in Rajasthan on 26-Nov-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m <sup>2</sup> )
1	HANUMANGARH	TIBI	S-NPP	29.55958	74.57400	12:51:07	D	7.10
2	HANUMANGARH	TIBI	S-NPP	29.56126	74.57272	12:51:07	D	7.10

### Details of residue burning events in Uttar Pradesh on 26-Nov-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m <sup>2</sup> )
1	ALIGARH	GABHANA	S-NPP	28.13183	77.81805	12:51:07	D	3.20
2	AMBEDKARNAGAR	AKBARPUR	S-NPP	26.45486	82.51794	12:51:07	D	2.60
3	AMBEDKARNAGAR	AKBARPUR	S-NPP	26.47982	82.59457	12:51:07	D	2.00
4	AMBEDKARNAGAR	ALAPUR	S-NPP	26.40392	82.98743	12:51:07	D	3.20
5	AMETHI	GAURIGANJ	S-NPP	26.32025	81.80135	12:51:07	D	3.60
6	AMROHA	DHANAURA	S-NPP	28.87484	78.15132	12:51:07	D	3.30
7	AURAIYA	AURAIYA	S-NPP	26.64531	79.31590	12:51:07	D	2.10
8	AURAIYA	BIDHUNA	S-NPP	26.75286	79.61633	12:51:07	D	3.10
9	AZAMGARH	BURHANPUR	S-NPP	26.20046	82.96374	12:51:07	D	3.00
10	AZAMGARH	LALGANJ	S-NPP	25.84853	82.92674	12:51:07	D	6.30
11	AZAMGARH	PHULPUR	S-NPP	25.94247	82.84184	12:51:07	D	3.30
12	AZAMGARH	PHULPUR	S-NPP	26.13383	82.75659	12:51:07	D	3.80
13	AZAMGARH	SAGRI	S-NPP	26.17030	83.33051	12:51:07	D	3.90
14	BAGHPAT	BAGHPAT	TERRA	29.00300	77.39700	10:53:23	D	4.50
15	BAGHPAT	BAGHPAT	S-NPP	28.88250	77.30443	12:51:07	D	3.00
16	BAGHPAT	BAGHPAT	S-NPP	28.88518	77.30503	12:51:07	D	2.80
17	BAHRAICH	NANPARA	S-NPP	28.02058	81.37286	12:51:07	D	3.60
18	BALLIA	BALLIA	S-NPP	25.64526	83.99014	12:51:07	D	10.40
19	BALLIA	BALLIA	S-NPP	25.69216	83.98118	12:51:07	D	2.10
20	BALLIA	BALLIA	S-NPP	25.80099	84.03615	12:51:07	D	1.90
21	BALLIA	BELTHARA ROAD	S-NPP	26.06582	83.90651	12:51:07	D	18.60
22	BALLIA	RASRA	S-NPP	25.83004	83.92380	12:51:07	D	3.30
23	BALLIA	RASRA	S-NPP	25.84962	83.99734	12:51:07	D	2.60
24	BALLIA	SIKANDARPUR	S-NPP	25.92629	84.01653	12:51:07	D	3.60
25	BALLIA	SIKANDARPUR	S-NPP	25.94881	83.98183	12:51:07	D	1.90
26	BANDA	ATARRA	S-NPP	25.37255	80.52099	12:51:07	D	2.50
27	BAREILLY	BAHERI	TERRA	28.75600	79.53000	10:53:23	D	4.90
28	BAREILLY	BAHERI	TERRA	28.82400	79.62100	10:53:23	D	5.00
29	BAREILLY	BAHERI	S-NPP	28.80885	79.60950	12:51:07	D	2.70

30	BAREILLY	FARIDPUR	S-NPP	28.07409	79.57522	12:51:07	D	8.00
31	BAREILLY	MIRGANJ	S-NPP	28.60560	79.34712	12:51:07	D	2.90
32	BASTI	BHANPUR	S-NPP	27.07262	82.76180	12:51:07	D	3.10
33	BIJNOR	DHAMPUR	S-NPP	29.27722	78.49957	12:51:07	D	1.80
34	CHANDAULI	CHAKIA	S-NPP	25.10153	83.29313	12:51:07	D	3.90
35	CHANDAULI	CHAKIA	S-NPP	25.13429	83.31984	12:51:07	D	8.60
36	CHANDAULI	CHAKIA	S-NPP	25.13534	83.31826	12:51:07	D	7.80
37	DEORIA	DEORIA	S-NPP	26.44361	83.80107	12:51:07	D	4.70
38	DEORIA	DEORIA	S-NPP	26.59089	83.96461	12:51:07	D	3.80
39	DEORIA	DEORIA	S-NPP	26.66145	83.65685	12:51:07	D	2.60
40	DEORIA	DEORIA	S-NPP	26.70622	83.79503	12:51:07	D	4.70
41	ETAWAH	BHARTHNA	S-NPP	26.81072	79.25317	12:51:07	D	3.10
42	ETAWAH	BHARTHNA	S-NPP	26.82897	79.21024	12:51:07	D	2.30
43	ETAWAH	ETAWAH	S-NPP	26.87607	79.17199	12:51:07	D	4.60
44	FAIZABAD	FAIZSBAD	S-NPP	26.68577	82.27506	12:51:07	D	4.80
45	GAZIPUR	MUHAMMADBAD	S-NPP	25.68977	83.82121	12:51:07	D	2.10
46	GAZIPUR	MUHAMMADBAD	S-NPP	25.69808	83.93246	12:51:07	D	2.30
47	GAZIPUR	MUHAMMADBAD	S-NPP	25.76338	83.87560	12:51:07	D	5.90
48	GAZIPUR	ZAMANIA	S-NPP	25.32406	83.53177	12:51:07	D	3.00
49	GHAZIABAD	MODINAGAR	TERRA	28.82900	77.63700	10:53:23	D	7.60
50	GORAKHPUR	CHAURI CHAURA	S-NPP	26.64936	83.60690	12:51:07	D	2.30
51	GORAKHPUR	CHAURI CHAURA	S-NPP	26.65842	83.61813	12:51:07	D	4.50
52	GORAKHPUR	GORAKHPUR	S-NPP	26.77000	83.48618	12:51:07	D	2.30
53	GORAKHPUR	GORAKHPUR	S-NPP	26.86608	83.49739	12:51:07	D	6.80
54	HARDOI	HARDOI	S-NPP	27.46110	80.19140	12:51:07	D	2.10
55	HARDOI	SHAHABAD	S-NPP	27.68360	79.97960	12:51:07	D	1.80
56	HARDOI	SIWAIJPUR	S-NPP	27.49054	79.78695	12:51:07	D	5.30
57	HATHRAS	SIKANDRA RAO	S-NPP	27.66434	78.27171	01:41:50	N	0.40
58	JAUNPUR	BADLAPUR	S-NPP	25.83971	82.37108	12:51:07	D	4.30
59	JAUNPUR	SHHGANJ	S-NPP	26.13166	82.45220	12:51:07	D	2.10
60	KANPUR	GHATAMPUR	TERRA	26.15000	80.21400	10:53:23	D	6.20
61	KANPUR DEHAT	DERAPUR	S-NPP	26.52276	79.77370	12:51:07	D	4.70
62	KANPUR DEHAT	DERAPUR	S-NPP	26.57141	79.69130	12:51:07	D	1.70
63	KANPUR DEHAT	DERAPUR	S-NPP	26.58585	79.71948	12:51:07	D	2.90



64	KANPUR DEHAT	RASULABAD	S-NPP	26.67438	79.96870	12:51:07	D	2.70
65	KAUSHAMBI	MANJHANPUR	S-NPP	25.41595	81.34875	12:51:07	D	6.90
66	KAUSHAMBI	MANJHANPUR	S-NPP	25.47593	81.28131	12:51:07	D	5.40
67	KAUSHAMBI	MANJHANPUR	S-NPP	25.48604	81.31330	12:51:07	D	3.10
68	KAUSHAMBI	MANJHANPUR	S-NPP	25.50428	81.28054	12:51:07	D	4.20
69	KUSHINAGAR	HATA	S-NPP	26.70301	83.69168	12:51:07	D	2.80
70	KUSHINAGAR	HATA	S-NPP	26.78689	83.62759	12:51:07	D	2.90
71	KUSHINAGAR	HATA	S-NPP	26.79033	83.62686	12:51:07	D	2.70
72	KUSHINAGAR	HATA	S-NPP	26.79163	83.61348	12:51:07	D	10.20
73	KUSHINAGAR	HATA	S-NPP	26.83227	83.77004	12:51:07	D	1.30
74	MAHARAJGANJ	MAHARAJGANJ	AQUA	27.03200	83.46000	12:54:54	D	18.60
75	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.97047	83.44959	12:51:07	D	4.30
76	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.97268	83.65082	12:51:07	D	5.60
77	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.98195	83.41174	12:51:07	D	2.50
78	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.03552	83.46736	12:51:07	D	5.50
79	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.03751	83.45812	12:51:07	D	4.80
80	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.07969	83.64185	12:51:07	D	3.10
81	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.09670	83.51150	12:51:07	D	7.10
82	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.12714	83.64920	12:51:07	D	3.60
83	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.17642	83.56989	12:51:07	D	2.90
84	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.22453	83.55965	12:51:07	D	2.10
85	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.23685	83.54828	12:51:07	D	3.50
86	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.23732	83.50877	12:51:07	D	2.30
87	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.23904	83.50984	12:51:07	D	4.10
88	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.24830	83.54287	12:51:07	D	1.70
89	MAHARAJGANJ	NICHLAUL	S-NPP	27.25734	83.67014	12:51:07	D	4.00
90	MAHARAJGANJ	NICHLAUL	S-NPP	27.26155	83.69524	12:51:07	D	8.70
91	MAHARAJGANJ	NICHLAUL	S-NPP	27.40038	83.73260	12:51:07	D	2.20
92	MAHARAJGANJ	PHARENDA	S-NPP	27.11671	83.32693	12:51:07	D	2.40
93	MAHARAJGANJ	PHARENDA	S-NPP	27.15189	83.30155	12:51:07	D	3.90
94	MAINPURI	KARHAL	S-NPP	27.06392	78.97027	01:41:50	N	1.20
95	MAINPURI	MAINPURI	S-NPP	27.23408	78.91985	12:51:07	D	2.60
96	MAU	MUHAMMADABAD	S-NPP	25.97189	83.42001	12:51:07	D	5.00
97	MEERUT	MEERUT	TERRA	28.94300	77.55200	10:53:23	D	6.40

98	MUZAFARNAGAR	BUDHANA	S-NPP	29.25732	77.57533	12:51:07	D	2.70
99	MUZAFARNAGAR	KHATOLI	S-NPP	29.24615	77.81392	12:51:07	D	4.80
100	PRATAPGARH	LALGANJ	S-NPP	25.94905	81.62688	12:51:07	D	3.10
101	PRATAPGARH	PATTI	S-NPP	25.91855	82.21690	12:51:07	D	4.50
102	RAIBEARELI	MAHARAJGANG	S-NPP	26.41729	81.30435	12:51:07	D	4.00
103	RAIBEARELI	MAHARAJGANG	S-NPP	26.43752	81.22071	01:41:50	N	1.10
104	RAIBEARELI	SALON	S-NPP	25.99707	81.45724	12:51:07	D	4.10
105	RAIBEARELI	SALON	S-NPP	25.99736	81.45455	12:51:07	D	1.60
106	RAIBEARELI	UNCHA HAR	S-NPP	26.00738	81.29604	12:51:07	D	2.30
107	RAMPUR	SUAR	S-NPP	29.14501	79.04697	12:51:07	D	6.20
108	SANTKABIRNAGAR	KHALILABAD	S-NPP	26.72781	83.01403	12:51:07	D	3.10
109	SHAHJAHANPUR	PUWANYA	TERRA	28.36200	80.05000	10:53:23	D	5.80
110	SHAHJAHANPUR	PUWANYA	S-NPP	27.98679	80.08833	12:51:07	D	2.70
111	SHAHJAHANPUR	PUWANYA	S-NPP	28.06129	80.05875	12:51:07	D	2.50
112	SHAHJAHANPUR	PUWANYA	S-NPP	28.17654	80.00529	12:51:07	D	4.80
113	SHAHJAHANPUR	PUWANYA	S-NPP	28.26085	80.04632	12:51:07	D	2.00
114	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.83319	79.96822	12:51:07	D	3.20
115	SHAHJAHANPUR	TILHAR	S-NPP	27.94490	79.70158	12:51:07	D	4.70
116	SHAHJAHANPUR	TILHAR	S-NPP	28.05399	79.89381	12:51:07	D	2.60
117	SHAHJAHANPUR	TILHAR	S-NPP	28.06558	79.68191	12:51:07	D	1.60
118	SHAMLI	KAIRANA	TERRA	29.60900	77.29400	10:53:23	D	4.70
119	SHARANPUR	RAMPUR MANIHARRAN	TERRA	29.64700	77.53000	10:53:23	D	5.20
120	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	27.25623	82.63083	12:51:07	D	2.30
121	SITAPUR	BISWAN	S-NPP	27.58512	81.19238	12:51:07	D	4.60
122	SITAPUR	BISWAN	S-NPP	27.58587	81.18930	12:51:07	D	5.70
123	SITAPUR	MISRIK	S-NPP	27.75009	80.51390	12:51:07	D	8.60
124	SULTANPUR	KADIRPUR	S-NPP	26.13918	82.43083	12:51:07	D	9.40
125	SULTANPUR	LAMBHUA	S-NPP	26.04910	82.16560	12:51:07	D	2.50
126	SULTANPUR	LAMBHUA	S-NPP	26.05702	82.06161	12:51:07	D	3.80
127	SULTANPUR	LAMBHUA	S-NPP	26.11796	82.08465	01:41:50	N	0.30

### Details of residue burning events in Madhya Pradesh on 26-Nov-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m <sup>2</sup> )
1	ASHOKNAGAR	CHANDERI	S-NPP	24.59258	77.93755	12:51:07	D	3.20
2	BHIND	GOHAD	S-NPP	26.50912	78.28632	12:51:07	D	2.50
3	BHIND	LAHAR	TERRA	26.16800	78.93000	10:53:23	D	5.20
4	BHOPAL	HUZUR	S-NPP	23.12786	77.52300	12:51:07	D	1.70
5	BHOPAL	HUZUR	S-NPP	23.12931	77.52306	12:51:07	D	1.70
6	BHOPAL	HUZUR	S-NPP	23.18563	77.50912	12:51:07	D	2.50
7	BURHANPUR	NEPANAGAR	TERRA	21.47800	76.52700	10:53:23	D	5.90
8	CHHINDWARA	CHAURAI	S-NPP	21.99376	79.18382	12:51:07	D	2.80
9	DAMOH	PATHARIA	S-NPP	23.98719	79.39337	01:41:50	N	0.50
10	DATIA	DATIA	TERRA	25.74600	78.43600	10:53:23	D	9.90
11	DATIA	DATIA	S-NPP	25.60161	78.34669	12:51:07	D	4.50
12	DATIA	DATIA	S-NPP	25.64096	78.29398	12:51:07	D	5.50
13	DATIA	SEONDHA	S-NPP	25.92831	78.71146	12:51:07	D	12.30
14	GWALIOR	BHITARWAR	S-NPP	25.74734	78.06901	12:51:07	D	2.10
15	GWALIOR	BHITARWAR	S-NPP	25.74814	78.07200	12:51:07	D	4.10
16	GWALIOR	BHITARWAR	S-NPP	25.75203	78.06779	12:51:07	D	2.90
17	GWALIOR	BHITARWAR	S-NPP	25.75282	78.07078	12:51:07	D	4.40
18	GWALIOR	DABRA	S-NPP	25.86238	78.28424	12:51:07	D	2.80
19	GWALIOR	DABRA	S-NPP	25.96549	78.34525	12:51:07	D	5.90
20	HOSHANGABAD	BABAI	S-NPP	22.79759	77.82990	12:51:07	D	2.30
21	HOSHANGABAD	BABAI	S-NPP	22.79829	77.83314	12:51:07	D	2.30
22	JABALPUR	JABALPUR	AQUA	23.28200	79.93100	12:54:54	D	68.90
23	JABALPUR	JABALPUR	AQUA	23.28700	79.92600	12:54:54	D	69.70
24	JABALPUR	JABALPUR	S-NPP	23.05523	79.97807	12:51:07	D	4.60
25	JABALPUR	JABALPUR	S-NPP	23.08193	79.99650	12:51:07	D	5.30
26	JABALPUR	JABALPUR	S-NPP	23.09074	79.99446	12:51:07	D	3.80
27	JABALPUR	JABALPUR	S-NPP	23.09167	79.99918	12:51:07	D	7.60
28	JABALPUR	JABALPUR	S-NPP	23.18196	79.83563	12:51:07	D	3.00
29	JABALPUR	JABALPUR	S-NPP	23.19076	79.86662	12:51:07	D	6.30

30	JABALPUR	JABALPUR	S-NPP	23.22272	79.86414	12:51:07	D	2.40
31	JABALPUR	JABALPUR	S-NPP	23.24205	79.91426	12:51:07	D	8.10
32	JABALPUR	JABALPUR	S-NPP	23.27547	79.89654	12:51:07	D	3.10
33	JABALPUR	JABALPUR	S-NPP	23.28608	79.84592	12:51:07	D	2.20
34	JABALPUR	JABALPUR	S-NPP	23.28736	79.93330	12:51:07	D	26.00
35	JABALPUR	JABALPUR	S-NPP	23.29015	79.94743	12:51:07	D	8.20
36	JABALPUR	JABALPUR	S-NPP	23.29108	79.95213	12:51:07	D	8.20
37	JABALPUR	JABALPUR	S-NPP	23.29176	79.93227	12:51:07	D	26.00
38	JABALPUR	JABALPUR	S-NPP	23.29455	79.94639	12:51:07	D	8.20
39	JABALPUR	JABALPUR	S-NPP	23.29481	79.88861	12:51:07	D	11.30
40	JABALPUR	JABALPUR	S-NPP	23.29548	79.95110	12:51:07	D	8.20
41	JABALPUR	JABALPUR	S-NPP	23.29571	79.97556	12:51:07	D	6.20
42	JABALPUR	JABALPUR	S-NPP	23.29753	79.89136	12:51:07	D	10.70
43	JABALPUR	JABALPUR	S-NPP	23.30401	80.01762	12:51:07	D	2.90
44	JABALPUR	JABALPUR	S-NPP	23.30921	79.95919	12:51:07	D	8.90
45	JABALPUR	JABALPUR	S-NPP	23.31016	79.96387	12:51:07	D	6.80
46	JABALPUR	JABALPUR	S-NPP	23.31051	79.95738	12:51:07	D	6.40
47	JABALPUR	JABALPUR	S-NPP	23.31143	79.96207	12:51:07	D	9.20
48	JABALPUR	JABALPUR	S-NPP	23.31301	79.97787	12:51:07	D	2.80
49	JABALPUR	JABALPUR	S-NPP	23.31510	79.98080	12:51:07	D	1.80
50	JABALPUR	JABALPUR	S-NPP	23.32203	79.93164	12:51:07	D	4.50
51	JABALPUR	JABALPUR	S-NPP	23.32523	79.97014	12:51:07	D	5.10
52	JABALPUR	JABALPUR	S-NPP	23.33142	79.90974	12:51:07	D	2.20
53	JABALPUR	JABALPUR	S-NPP	23.36350	79.93179	12:51:07	D	13.40
54	JABALPUR	MAJHOULI	TERRA	23.45500	80.01200	10:53:23	D	6.70
55	JABALPUR	MAJHOULI	S-NPP	23.43634	80.02366	12:51:07	D	9.50
56	JABALPUR	MAJHOULI	S-NPP	23.43636	80.02210	12:51:07	D	11.60
57	JABALPUR	MAJHOULI	S-NPP	23.44631	79.98251	12:51:07	D	16.20
58	JABALPUR	MAJHOULI	S-NPP	23.44663	80.00674	12:51:07	D	4.30
59	JABALPUR	MAJHOULI	S-NPP	23.45566	80.02885	12:51:07	D	4.20
60	JABALPUR	MAJHOULI	S-NPP	23.45659	80.03346	12:51:07	D	4.20
61	JABALPUR	MAJHOULI	S-NPP	23.46281	80.04167	12:51:07	D	11.30
62	JABALPUR	MAJHOULI	S-NPP	23.46410	80.00267	12:51:07	D	2.30

63	JABALPUR	MAJHOULI	S-NPP	23.52761	79.95381	12:51:07	D	3.20
64	JABALPUR	MAJHOULI	S-NPP	23.59356	79.96914	12:51:07	D	4.20
65	JABALPUR	PATAN	S-NPP	23.18761	79.86434	12:51:07	D	1.40
66	JABALPUR	PATAN	S-NPP	23.21072	79.78166	12:51:07	D	8.70
67	JABALPUR	PATAN	S-NPP	23.22310	79.77372	12:51:07	D	7.00
68	JABALPUR	PATAN	S-NPP	23.23490	79.78609	12:51:07	D	8.90
69	JABALPUR	PATAN	S-NPP	23.23935	79.78504	12:51:07	D	2.70
70	JABALPUR	PATAN	S-NPP	23.25685	79.82614	12:51:07	D	11.20
71	JABALPUR	PATAN	S-NPP	23.25780	79.83093	12:51:07	D	11.20
72	JABALPUR	PATAN	S-NPP	23.26128	79.82510	12:51:07	D	11.20
73	JABALPUR	PATAN	S-NPP	23.26150	79.70883	12:51:07	D	6.30
74	JABALPUR	PATAN	S-NPP	23.26194	79.70546	12:51:07	D	5.40
75	JABALPUR	PATAN	S-NPP	23.26211	79.68827	12:51:07	D	8.00
76	JABALPUR	PATAN	S-NPP	23.28032	79.78044	12:51:07	D	10.40
77	JABALPUR	PATAN	S-NPP	23.28223	79.78172	12:51:07	D	7.70
78	JABALPUR	PATAN	S-NPP	23.28465	79.81628	12:51:07	D	4.20
79	JABALPUR	PATAN	S-NPP	23.35721	79.85418	12:51:07	D	10.90
80	JABALPUR	PATAN	S-NPP	23.38465	79.85269	12:51:07	D	8.10
81	JABALPUR	PATAN	S-NPP	23.38689	79.84896	12:51:07	D	7.40
82	JABALPUR	PATAN	S-NPP	23.39184	79.82793	12:51:07	D	4.20
83	JABALPUR	SAHPURA	S-NPP	23.15178	79.77715	12:51:07	D	5.40
84	JABALPUR	SAHPURA	S-NPP	23.15335	79.77486	12:51:07	D	4.00
85	JABALPUR	SAHPURA	S-NPP	23.15615	79.70480	12:51:07	D	8.50
86	JABALPUR	SAHPURA	S-NPP	23.15712	79.70969	12:51:07	D	8.50
87	JABALPUR	SAHPURA	S-NPP	23.15825	79.70760	12:51:07	D	12.00
88	JABALPUR	SAHPURA	S-NPP	23.16001	79.72435	12:51:07	D	3.10
89	JABALPUR	SAHPURA	S-NPP	23.17763	79.64146	12:51:07	D	8.10
90	JABALPUR	SAHPURA	S-NPP	23.17813	79.66708	12:51:07	D	6.30
91	JABALPUR	SAHPURA	S-NPP	23.17912	79.82123	12:51:07	D	2.10
92	JABALPUR	SAHPURA	S-NPP	23.17913	79.67197	12:51:07	D	8.20
93	JABALPUR	SAHPURA	S-NPP	23.18656	79.73156	12:51:07	D	5.70
94	JABALPUR	SAHPURA	S-NPP	23.18811	79.62350	12:51:07	D	2.50
95	JABALPUR	SAHPURA	S-NPP	23.19096	79.77619	12:51:07	D	7.40

96	JABALPUR	SIHORA	AQUA	23.35300	80.07000	12:54:54	D	35.70
97	JABALPUR	SIHORA	TERRA	23.44700	80.18000	10:53:23	D	10.00
98	JABALPUR	SIHORA	S-NPP	23.36269	80.08765	12:51:07	D	6.90
99	JABALPUR	SIHORA	S-NPP	23.36704	80.08665	12:51:07	D	6.90
100	JABALPUR	SIHORA	S-NPP	23.40713	80.19649	12:51:07	D	3.70
101	JABALPUR	SIHORA	S-NPP	23.41218	80.17637	12:51:07	D	5.70
102	JABALPUR	SIHORA	S-NPP	23.41308	80.18089	12:51:07	D	8.60
103	JABALPUR	SIHORA	S-NPP	23.41600	80.10394	12:51:07	D	4.20
104	JABALPUR	SIHORA	S-NPP	23.42378	80.09731	12:51:07	D	6.40
105	JABALPUR	SIHORA	S-NPP	23.42470	80.23958	12:51:07	D	4.70
106	JABALPUR	SIHORA	S-NPP	23.42633	80.08713	12:51:07	D	7.10
107	JABALPUR	SIHORA	S-NPP	23.42873	80.19144	12:51:07	D	5.00
108	JABALPUR	SIHORA	S-NPP	23.43318	80.21401	12:51:07	D	3.20
109	JABALPUR	SIHORA	S-NPP	23.44504	80.08904	12:51:07	D	3.30
110	JABALPUR	SIHORA	S-NPP	23.45096	80.07328	12:51:07	D	7.00
111	JABALPUR	SIHORA	S-NPP	23.45367	80.15719	12:51:07	D	3.60
112	JABALPUR	SIHORA	S-NPP	23.45534	80.14253	12:51:07	D	5.20
113	JABALPUR	SIHORA	S-NPP	23.45573	80.23702	12:51:07	D	7.10
114	JABALPUR	SIHORA	S-NPP	23.45612	80.14372	12:51:07	D	4.90
115	JABALPUR	SIHORA	S-NPP	23.45901	80.09061	12:51:07	D	5.60
116	JABALPUR	SIHORA	S-NPP	23.45966	80.07127	12:51:07	D	3.60
117	JABALPUR	SIHORA	S-NPP	23.46058	80.07584	12:51:07	D	5.60
118	JABALPUR	SIHORA	S-NPP	23.46651	80.06007	12:51:07	D	8.80
119	KATNI	BAHURIBAND	S-NPP	23.64032	79.97582	12:51:07	D	4.50
120	KATNI	BAHURIBAND	S-NPP	23.64063	80.06891	12:51:07	D	2.70
121	KATNI	BAHURIBAND	S-NPP	23.64318	80.05876	12:51:07	D	7.20
122	KATNI	BAHURIBAND	S-NPP	23.64907	80.01936	12:51:07	D	4.30
123	KATNI	BIJERAGHOGARH	S-NPP	23.98184	80.74785	12:51:07	D	2.90
124	MANDLA	MANDLA	S-NPP	22.51495	80.36986	12:51:07	D	4.20
125	MANDLA	MANDLA	S-NPP	22.51521	80.36865	12:51:07	D	2.80
126	MANDLA	MANDLA	S-NPP	22.55908	80.45438	12:51:07	D	4.30
127	MANDLA	MANDLA	S-NPP	22.57178	80.40437	12:51:07	D	7.30
128	MANDLA	MANDLA	S-NPP	22.57268	80.40887	12:51:07	D	3.00

129	MANDLA	NAINPUR	S-NPP	22.39020	80.19929	12:51:07	D	4.90
130	MANDLA	NAINPUR	S-NPP	22.46149	80.10564	12:51:07	D	5.20
131	MANDLA	NAINPUR	S-NPP	22.49622	80.04794	12:51:07	D	3.10
132	MANDLA	NAINPUR	S-NPP	22.52065	80.07734	12:51:07	D	2.40
133	MANDLA	NAINPUR	S-NPP	22.52950	80.07527	12:51:07	D	3.80
134	NARSHIMAPURA	TENDUKHERA	S-NPP	23.18342	78.92591	12:51:07	D	5.90
135	PANNA	PANNA	S-NPP	24.59007	80.31042	12:51:07	D	2.80
136	PANNA	PANNA	S-NPP	24.62786	80.36832	12:51:07	D	4.50
137	PANNA	PAWAI	S-NPP	24.32552	79.96465	01:41:50	N	0.50
138	RAISEN	BARELI	TERRA	22.90700	78.10000	10:53:23	D	5.20
139	RAISEN	BARELI	TERRA	22.90900	78.08900	10:53:23	D	7.80
140	RAISEN	BARELI	S-NPP	22.86883	78.11227	12:51:07	D	2.40
141	RAISEN	BARELI	S-NPP	22.88278	78.03014	12:51:07	D	1.70
142	RAISEN	BARELI	S-NPP	22.90397	78.08079	12:51:07	D	1.60
143	RAISEN	BARELI	S-NPP	22.94072	78.01392	12:51:07	D	3.50
144	RAISEN	GOHARGANJ	S-NPP	23.03406	77.64244	12:51:07	D	2.80
145	RAISEN	GOHARGANJ	S-NPP	23.03573	77.64387	12:51:07	D	2.90
146	RAISEN	RAISEN	S-NPP	23.23416	77.78252	12:51:07	D	3.20
147	RAISEN	RAISEN	S-NPP	23.25162	77.92406	01:41:50	N	0.60
148	RAISEN	RAISEN	S-NPP	23.36867	77.92654	12:51:07	D	1.30
149	RAISEN	RAISEN	S-NPP	23.46362	77.73026	01:41:50	N	0.50
150	RAISEN	RAISEN	S-NPP	23.46517	77.74447	12:51:07	D	2.70
151	REWA	HUZUR	S-NPP	24.46408	81.25290	12:51:07	D	7.10
152	REWA	HUZUR	S-NPP	24.46735	81.33466	12:51:07	D	2.90
153	REWA	HUZUR	S-NPP	24.46988	81.28310	12:51:07	D	2.10
154	REWA	HUZUR	S-NPP	24.51896	81.27985	12:51:07	D	1.90
155	REWA	TEONTHAR	S-NPP	24.97679	81.54788	12:51:07	D	3.70
156	REWA	TEONTHAR	S-NPP	24.98725	81.51734	12:51:07	D	5.40
157	REWA	TEONTHAR	S-NPP	24.98827	81.52276	12:51:07	D	4.50
158	SATNA	AMARPATAN	S-NPP	24.33838	81.07744	12:51:07	D	6.00
159	SATNA	AMARPATAN	S-NPP	24.39762	81.21264	12:51:07	D	4.40
160	SATNA	AMARPATAN	S-NPP	24.39835	81.21646	12:51:07	D	5.70
161	SATNA	AMARPATAN	S-NPP	24.40489	81.20699	12:51:07	D	3.70

162	SATNA	AMARPATAN	S-NPP	24.40888	81.20609	12:51:07	D	3.70
163	SATNA	MAIHAR	S-NPP	24.16340	80.93544	12:51:07	D	2.90
164	SATNA	MAIHAR	S-NPP	24.22075	80.74535	12:51:07	D	3.80
165	SATNA	MAIHAR	S-NPP	24.30807	80.92021	12:51:07	D	6.10
166	SATNA	NAGOD	S-NPP	24.47594	80.57308	12:51:07	D	2.80
167	SATNA	NAGOD	S-NPP	24.50250	80.55380	12:51:07	D	3.80
168	SATNA	RAGURAJNAGAR	S-NPP	24.56144	80.78314	12:51:07	D	2.80
169	SATNA	RAGURAJNAGAR	S-NPP	24.60244	80.75275	12:51:07	D	2.10
170	SATNA	RAGURAJNAGAR	S-NPP	24.66935	80.64475	12:51:07	D	1.80
171	SATNA	RAGURAJNAGAR	S-NPP	24.70317	80.61996	12:51:07	D	3.20
172	SATNA	RAMPURBAGHLEAN	S-NPP	24.37464	80.92154	12:51:07	D	1.80
173	SATNA	RAMPURBAGHLEAN	S-NPP	24.37524	80.94624	12:51:07	D	1.60
174	SATNA	RAMPURBAGHLEAN	S-NPP	24.40616	80.93092	12:51:07	D	2.00
175	SATNA	RAMPURBAGHLEAN	S-NPP	24.40801	80.98406	12:51:07	D	2.40
176	SATNA	RAMPURBAGHLEAN	S-NPP	24.43401	81.03123	12:51:07	D	5.00
177	SATNA	RAMPURBAGHLEAN	S-NPP	24.53747	81.15272	12:51:07	D	13.70
178	SATNA	RAMPURBAGHLEAN	S-NPP	24.64810	81.01052	12:51:07	D	4.10
179	SATNA	RAMPURBAGHLEAN	S-NPP	24.66297	81.08778	12:51:07	D	5.00
180	SATNA	RAMPURBAGHLEAN	S-NPP	24.70255	80.96554	12:51:07	D	5.50
181	SATNA	RAMPURBAGHLEAN	S-NPP	24.70257	80.96570	12:51:07	D	5.40
182	SATNA	RAMPURBAGHLEAN	S-NPP	24.71291	80.97556	12:51:07	D	2.20
183	SATNA	UCHAHAR	S-NPP	24.36417	80.80292	12:51:07	D	3.30
184	SATNA	UCHAHAR	S-NPP	24.50572	80.77074	12:51:07	D	1.70
185	SEHORE	BUDHNI	TERRA	22.91500	77.99000	10:53:23	D	5.70
186	SEHORE	BUDHNI	S-NPP	22.89380	77.98312	01:41:50	N	0.80
187	SEONI	KEWLARI	S-NPP	22.25242	79.87248	12:51:07	D	5.30
188	SEONI	KEWLARI	S-NPP	22.25693	79.87142	12:51:07	D	6.10
189	SEONI	SEONI	S-NPP	22.26092	79.54106	12:51:07	D	5.70
190	SHIVPURI	NARWAR	TERRA	25.63500	78.27100	10:53:23	D	9.60
191	SHIVPURI	NARWAR	S-NPP	25.62938	78.28551	12:51:07	D	4.00
192	SHIVPURI	NARWAR	S-NPP	25.66441	78.16602	12:51:07	D	5.20
193	UMARIA	BANDHOGARH	S-NPP	23.66140	80.68911	12:51:07	D	4.20
194	UMARIA	BANDHOGARH	S-NPP	23.69036	80.70476	12:51:07	D	1.60



195	VIDESHA	SIRANJ	S-NPP	24.02265	77.65972	12:51:07	D	4.20
196	VIDESHA	SIRANJ	S-NPP	24.02305	77.65787	12:51:07	D	4.40
197	VIDESHA	VIDESHA	TERRA	23.53700	77.72600	10:53:23	D	6.40
198	WEST NIMAR	BARWAH	S-NPP	22.08584	76.17626	01:41:50	N	0.20

**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**

**Study Team**

ICAR - IARI	<b>Dr V.K. Sehgal</b>	Principal & Nodal Scientist	<a href="mailto:iaricreams@gmail.com">iaricreams@gmail.com</a>
	Dr Rajkumar Dhakar	Scientist	<a href="mailto:rajdhakar.iari@gmail.com">rajdhakar.iari@gmail.com</a>
	Mr Mohd Jahangir	Lab Assistant (KRISHI)	<a href="mailto:mjahangir198@gmail.com">mjahangir198@gmail.com</a>
ICAR - ATARI	Dr Rajbir Singh	Director ATARI (Zone-I) Ludhiana	<a href="mailto:rajbirsingh.zpd@gmail.com">rajbirsingh.zpd@gmail.com</a>
	Dr S.K. Singh	Director ATARI (Zone-II) Jodhpur	<a href="mailto:sushilsinghiipr@yahoo.co.in">sushilsinghiipr@yahoo.co.in</a>
	Dr Atar Singh	Director ATARI (Zone-III) Kanpur	<a href="mailto:zpdicarkanpur@gmail.com">zpdicarkanpur@gmail.com</a>
ICAR - IASRI	Dr Rajender Parsad	Director	<a href="mailto:rajender.parsad@icar.gov.in">rajender.parsad@icar.gov.in</a>

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)

and on IARI CREAMS website (<http://creams.iari.res.in/cms2/index.php>)

\*\*\*