



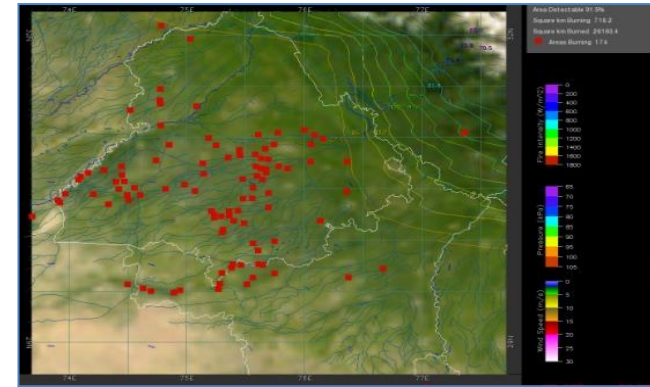
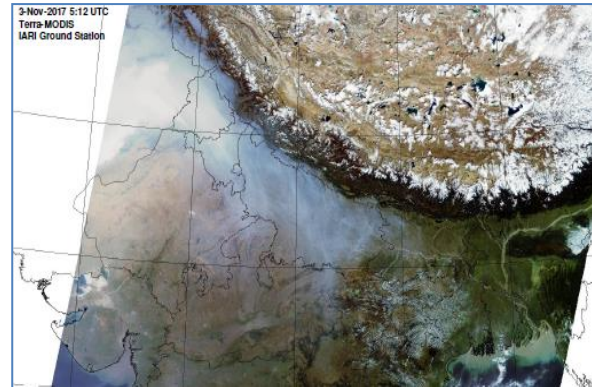
## Bulletin No. 35

Events Date:  
19-Oct-2022

Issued on:  
19-Oct-2022



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



Prepared by:

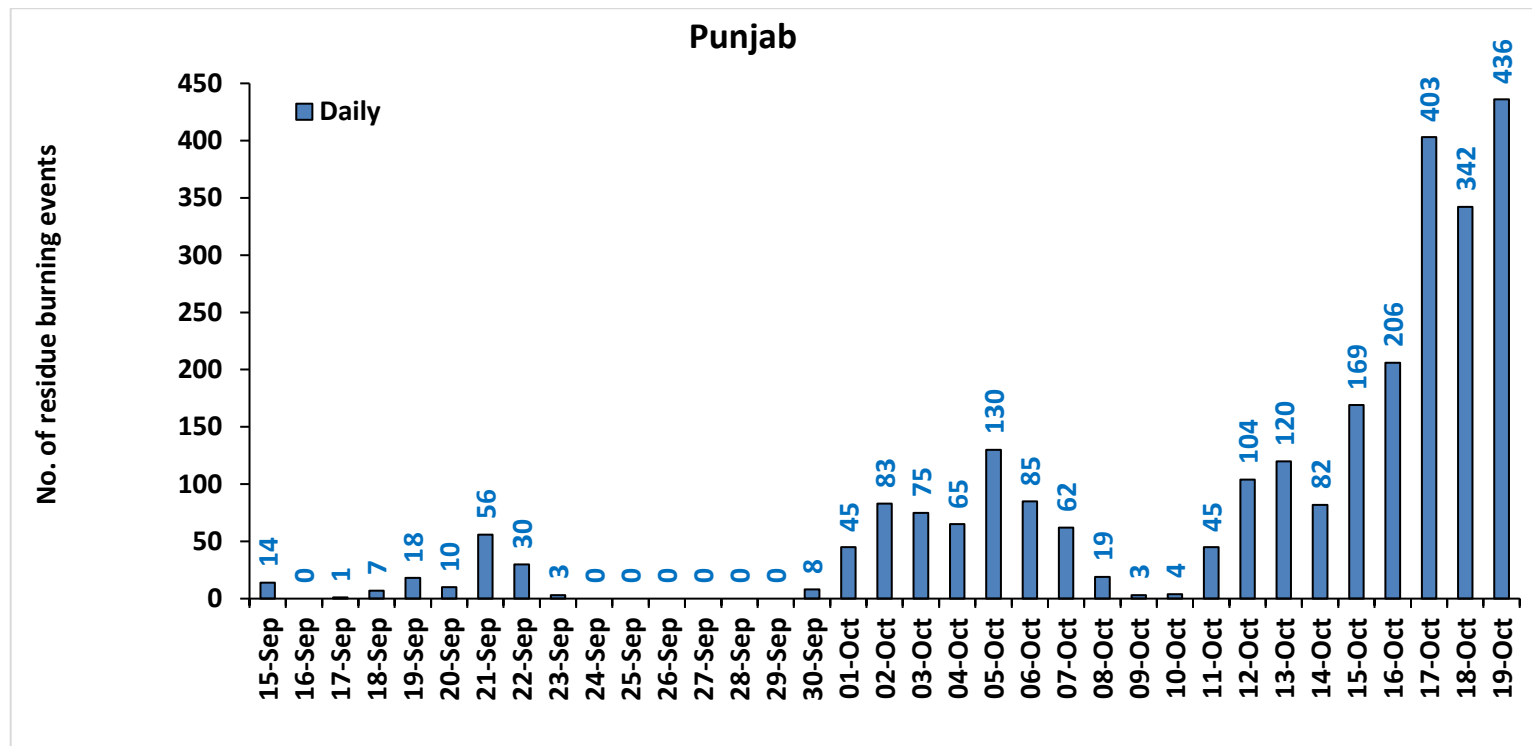
Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,  
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

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

## Highlights for 19-Oct-2022

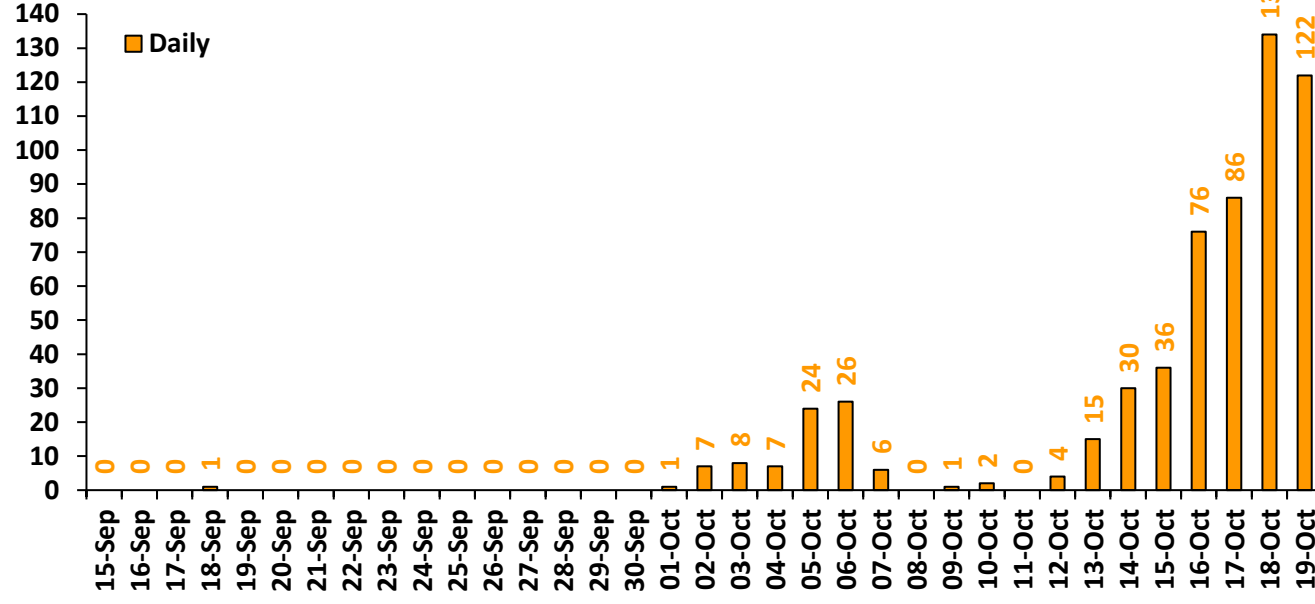
- The active fire events due to rice residue burning were monitored using satellite remote sensing, following the "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data".
- Satellites detected **618** residue burning events in the six study States on 19-Oct-2022.
- The state wise events detected on 19-Oct-2022 were **436** in Punjab, **122** in Haryana, **36** in UP, **0** in Delhi, **12** in Rajasthan and **12** in MP.
- Total **3491** burning events were detected in the six states between 15-Sept-2022 and 19-Oct-2022, which are distributed as **2625**, **586**, **170**, **3**, **49** and **58** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.

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



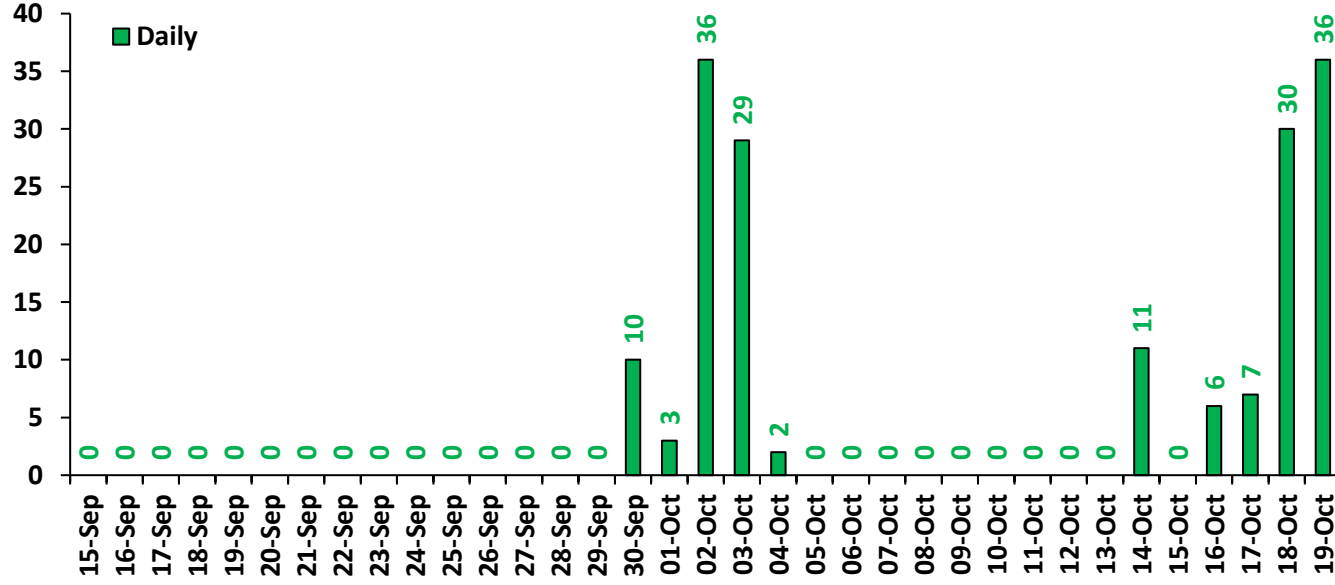
### Haryana

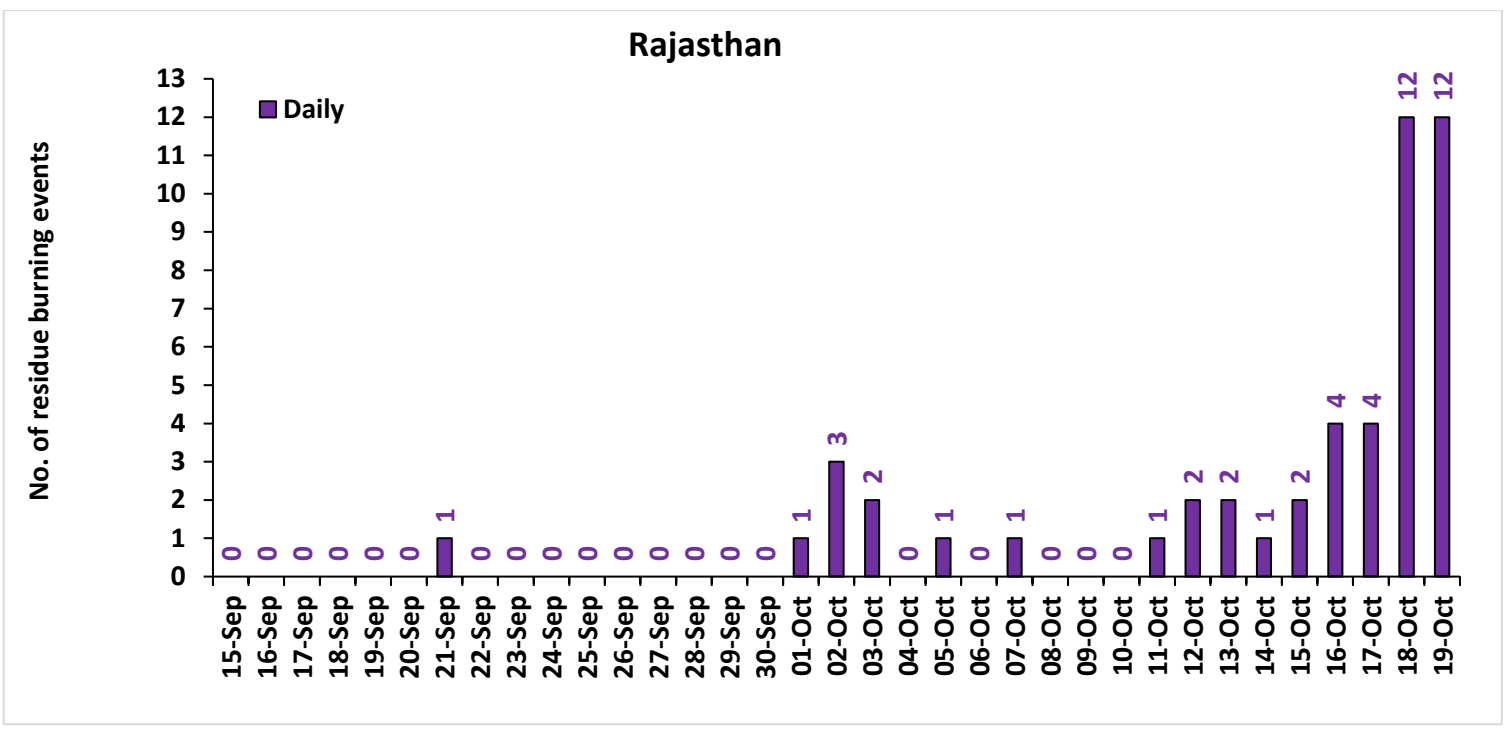
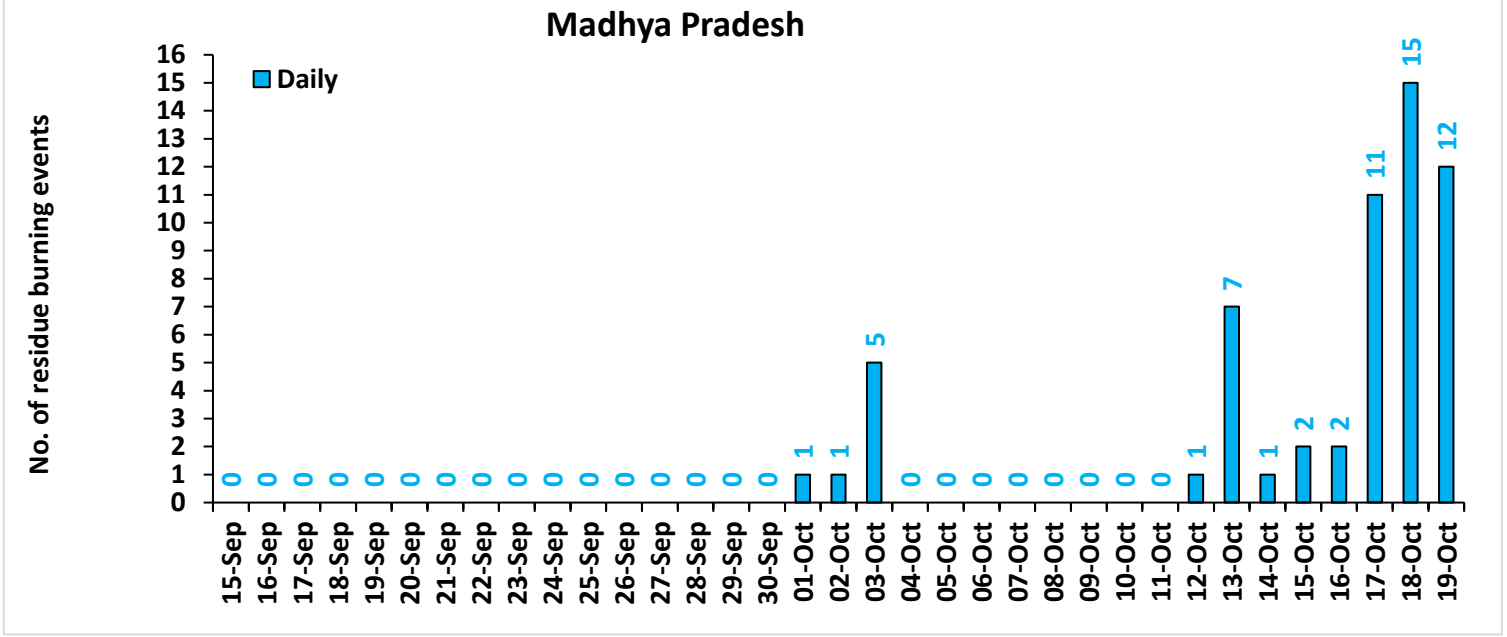
No. of residue burning events

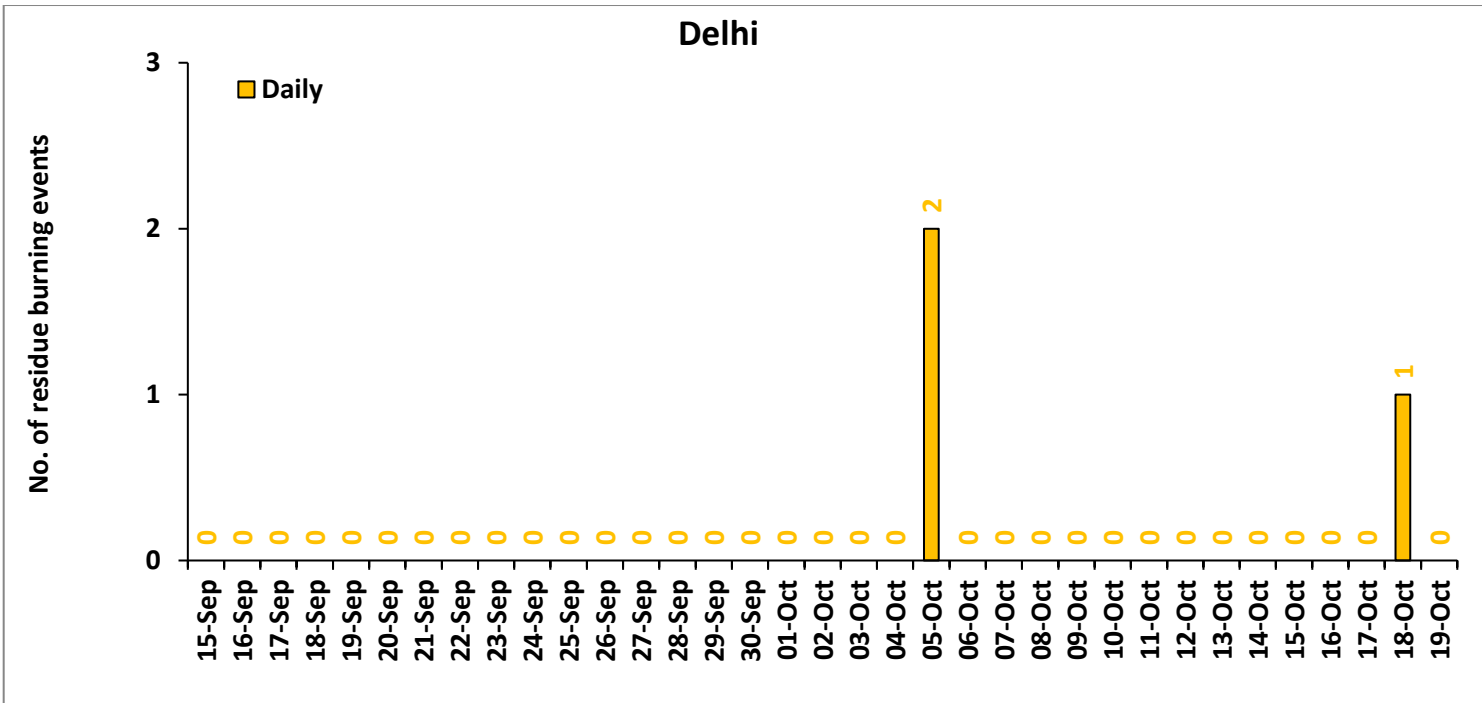


### Uttar Pradesh

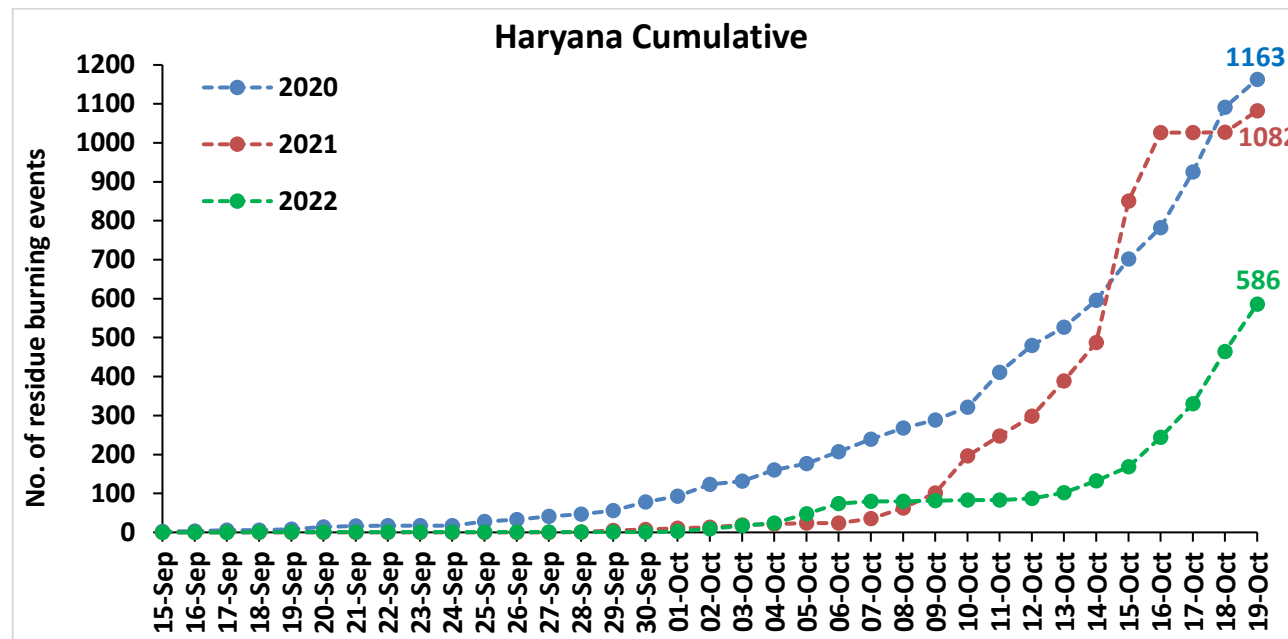
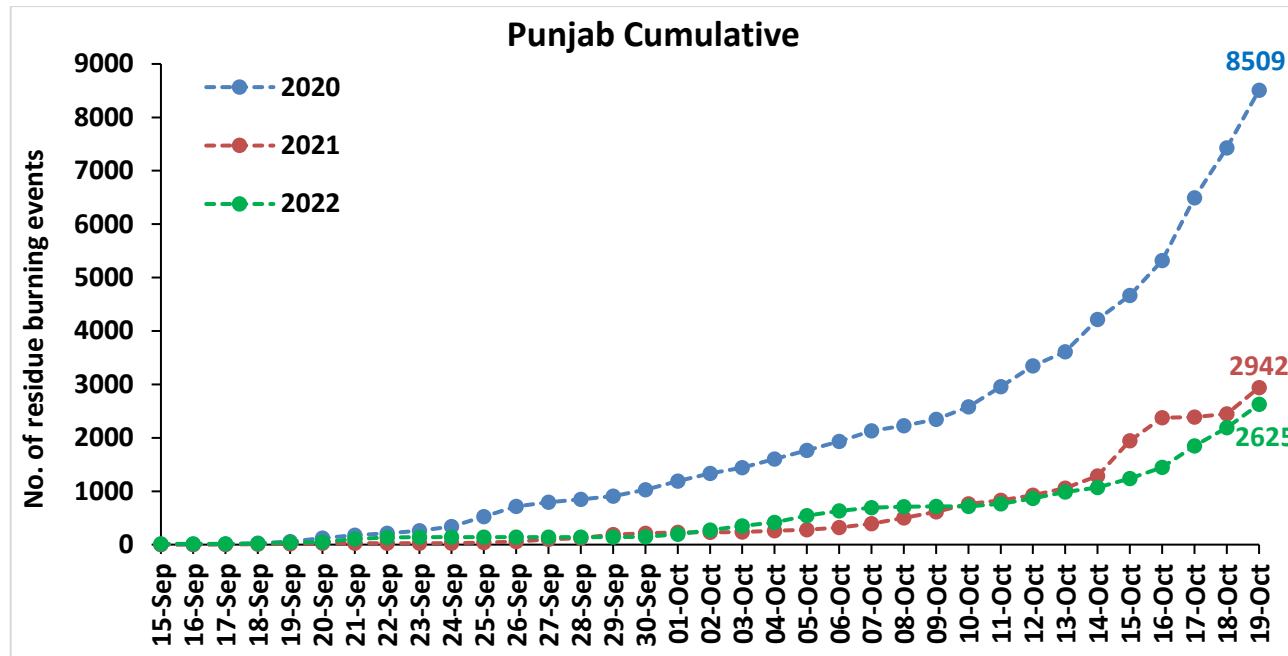
No. of residue burning events

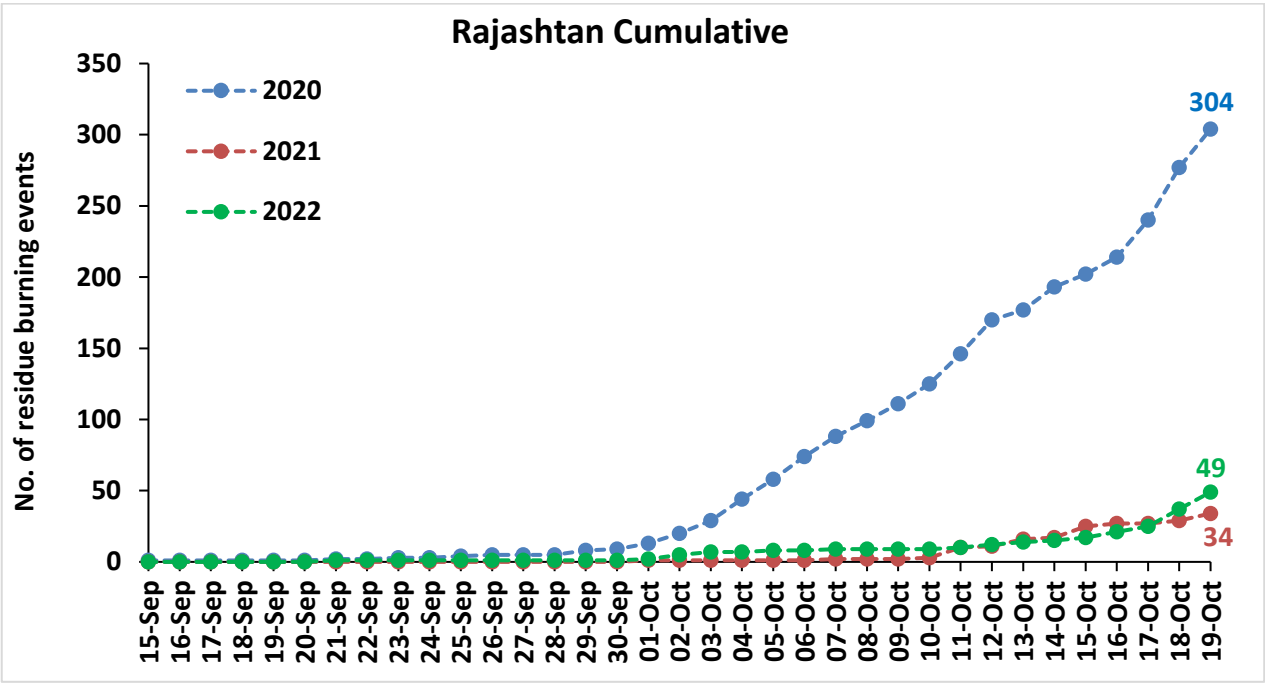
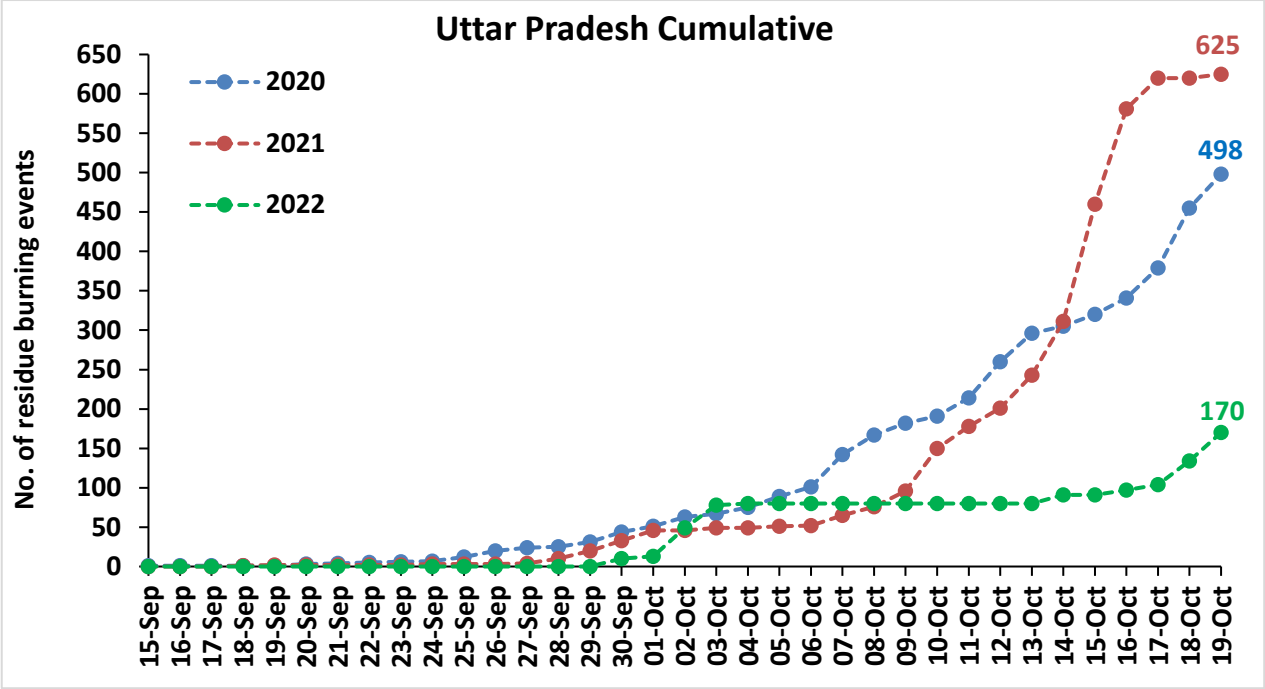


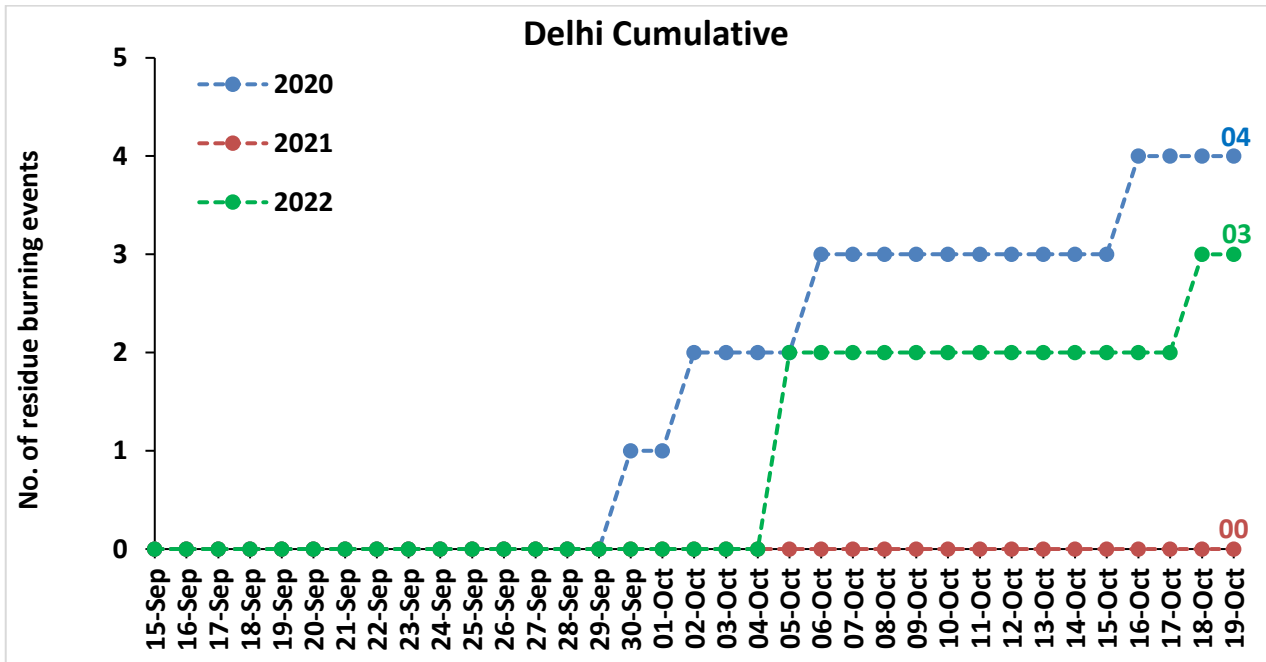
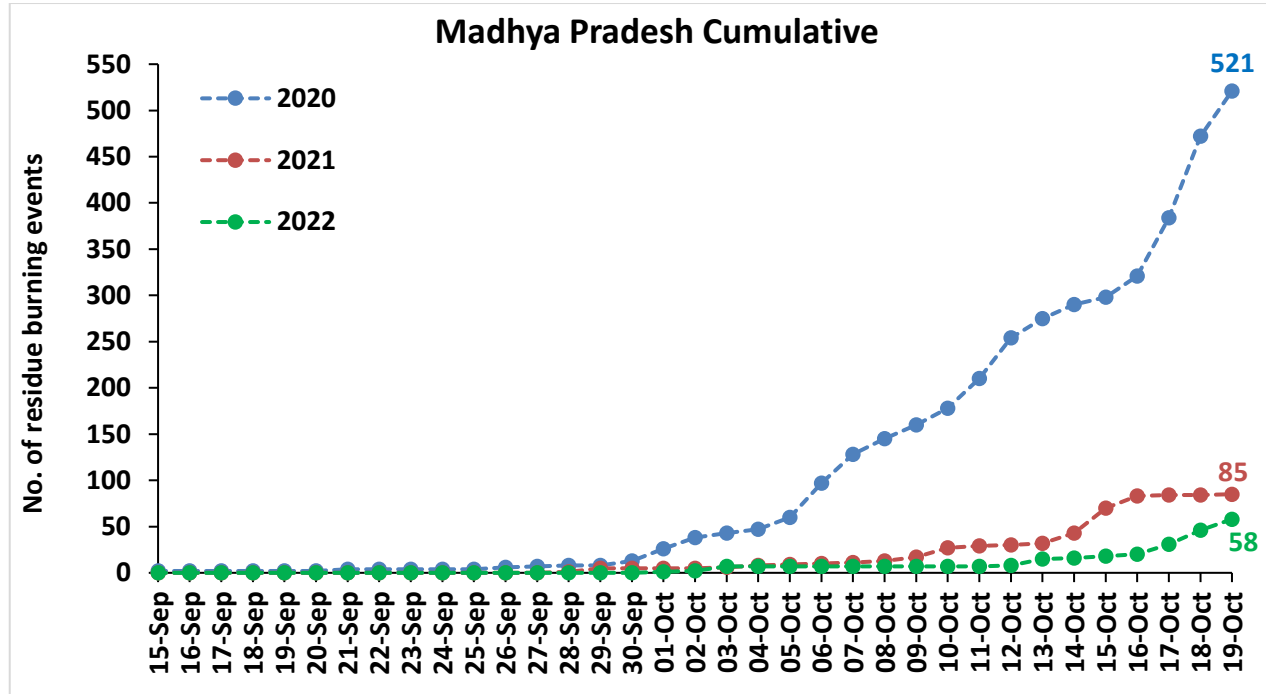




**Comparison of residue burning events in current year (2022) with previous years (2020 and 2021) for the study States**

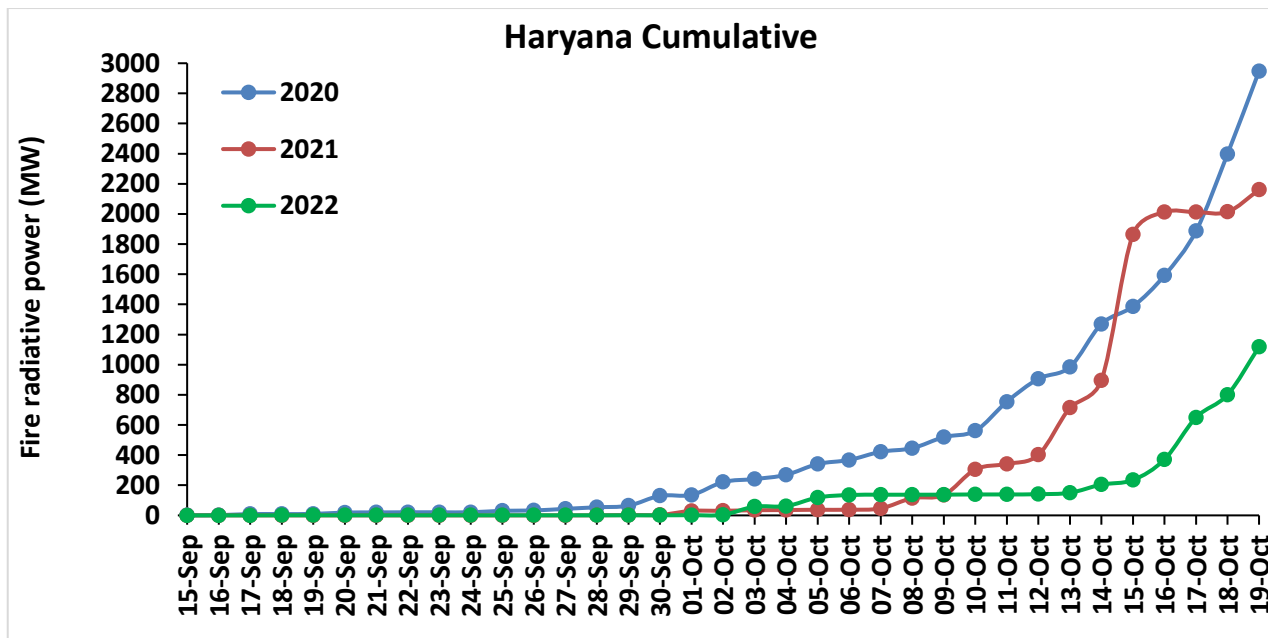
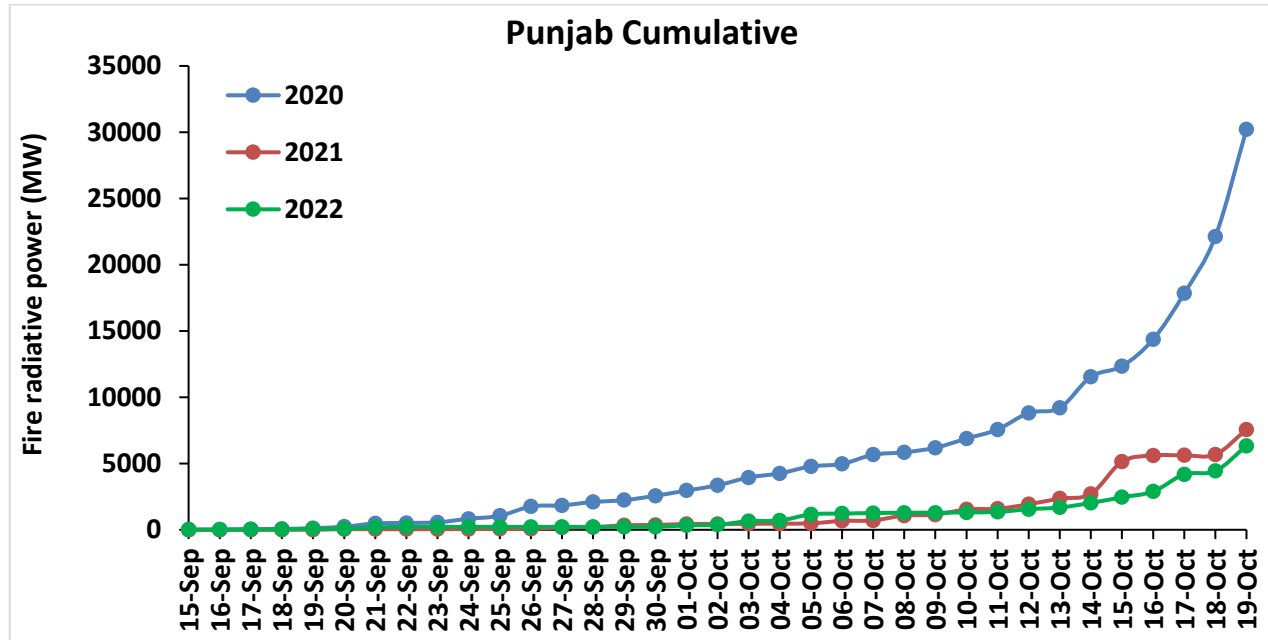


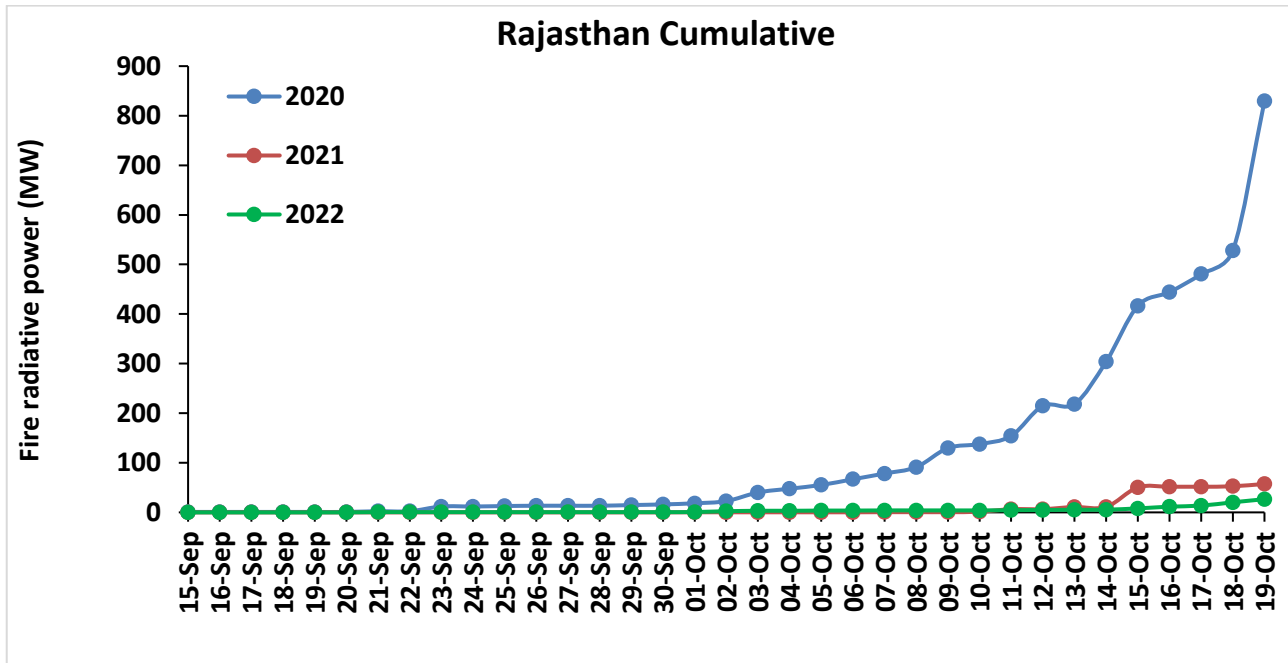
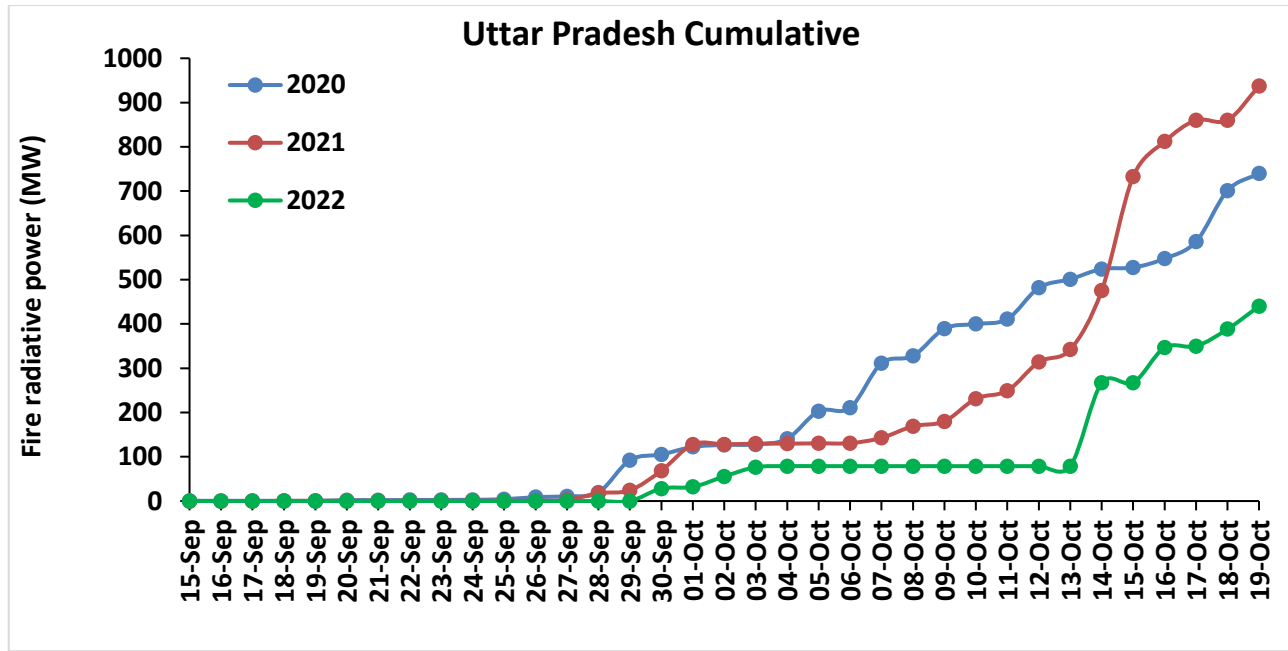


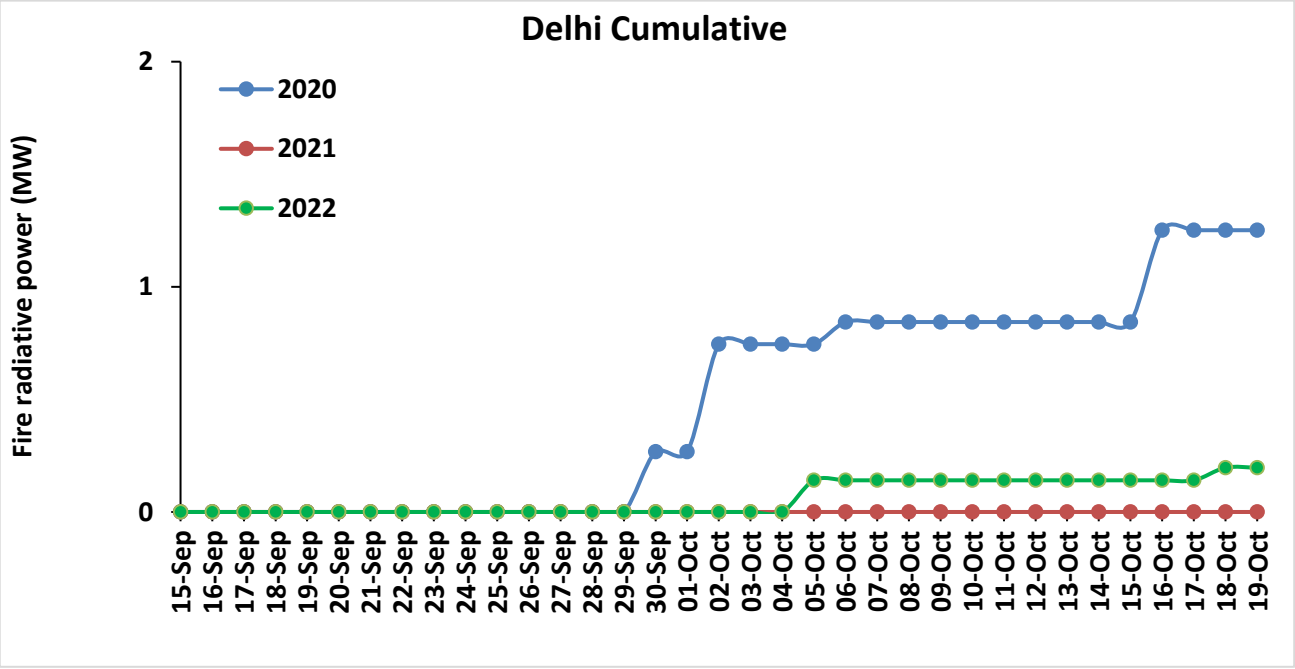
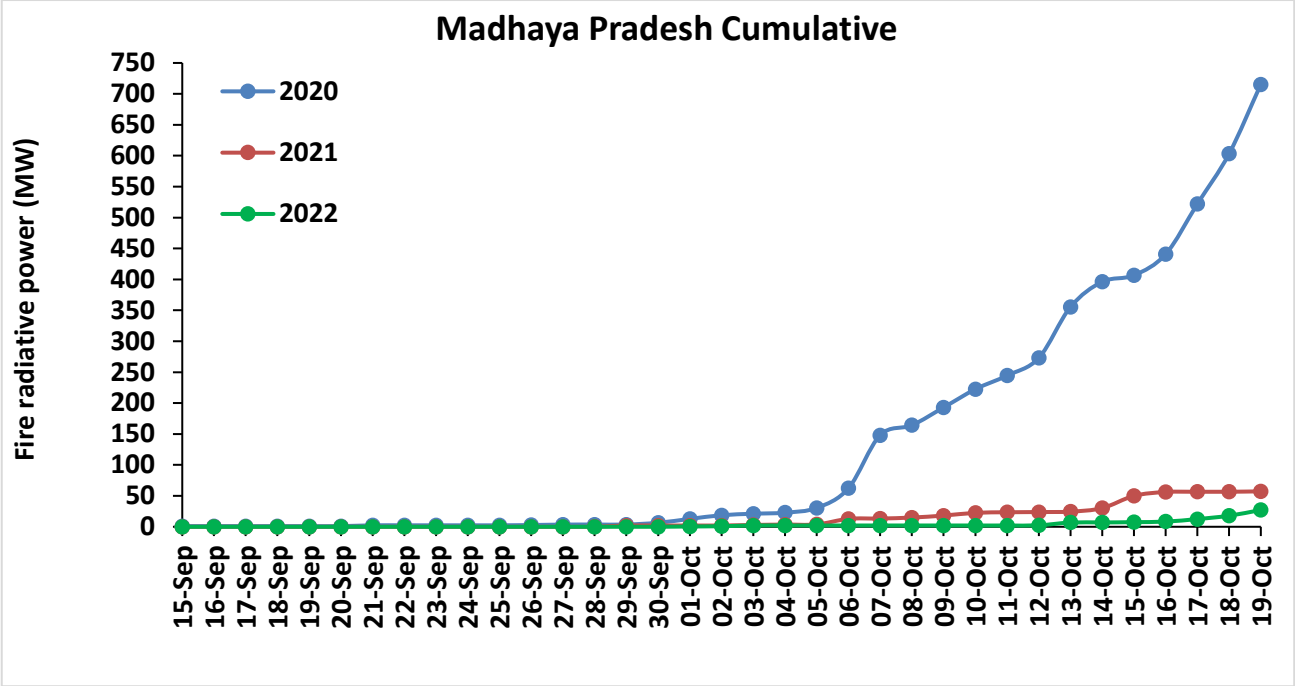




**Comparison of residue burning fire power in current year (2022) with previous years (2021 and 2020) for the study States**

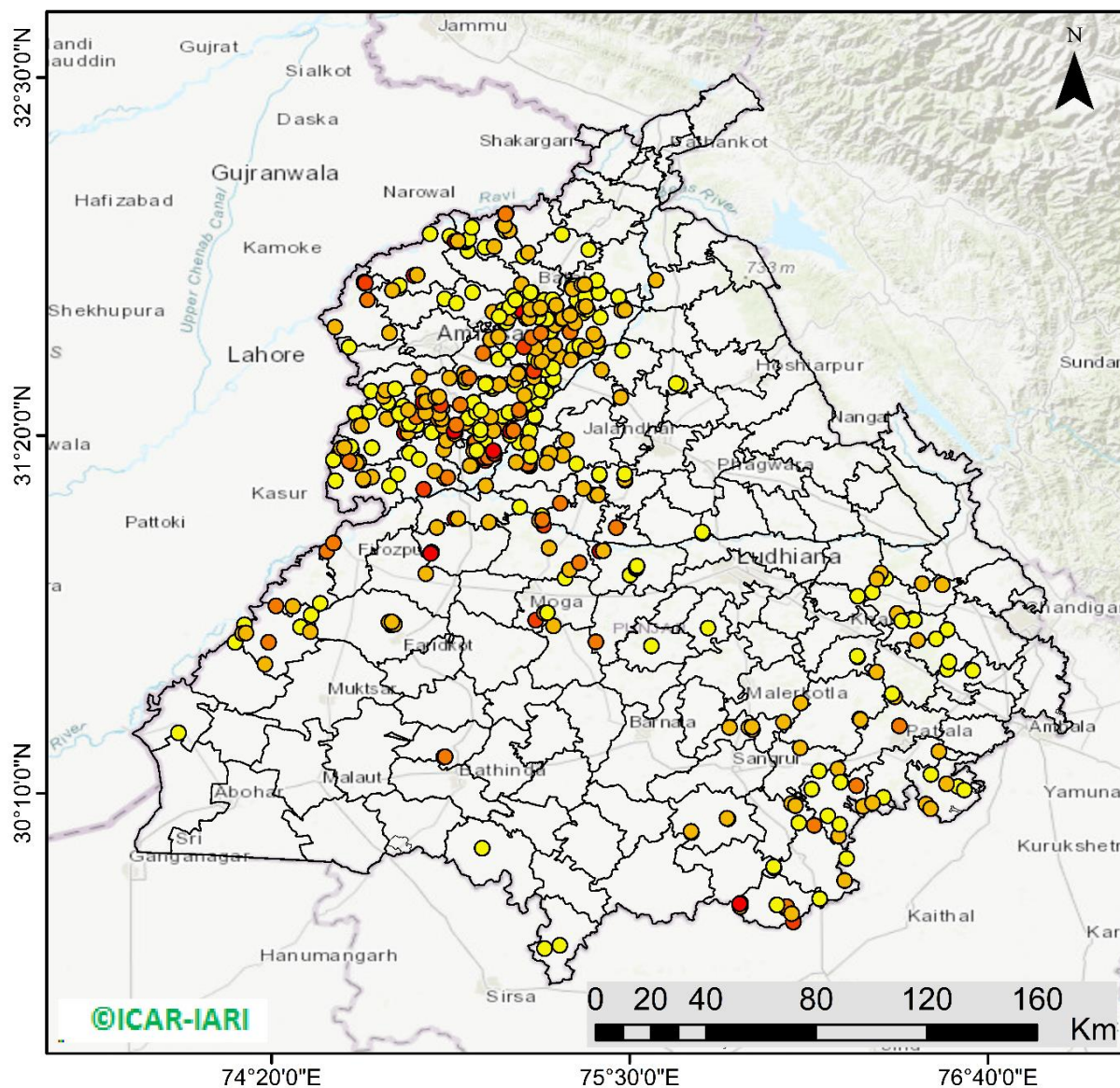






## Punjab

### RICE RESIDUE BURNING IN PUNJAB



**436** burning events  
detected in Punjab during  
(19th Oct 2022)

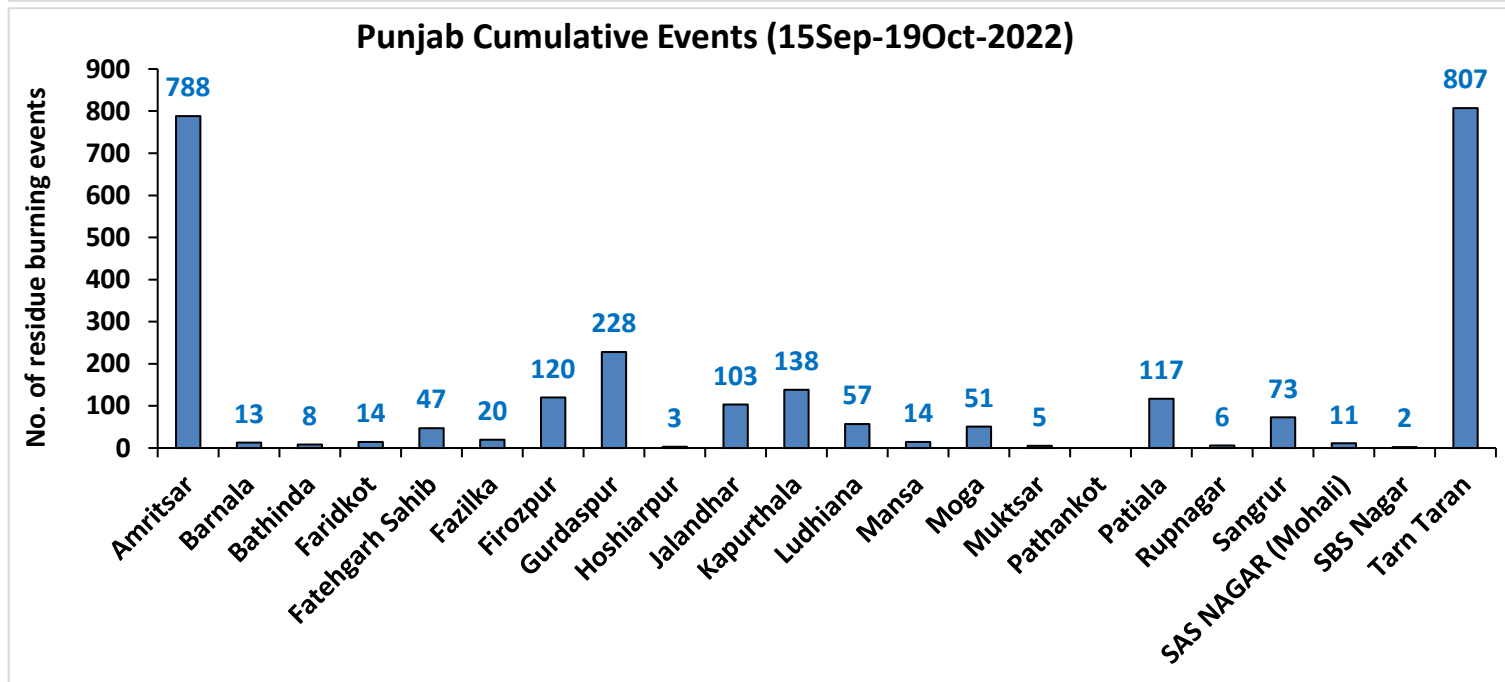
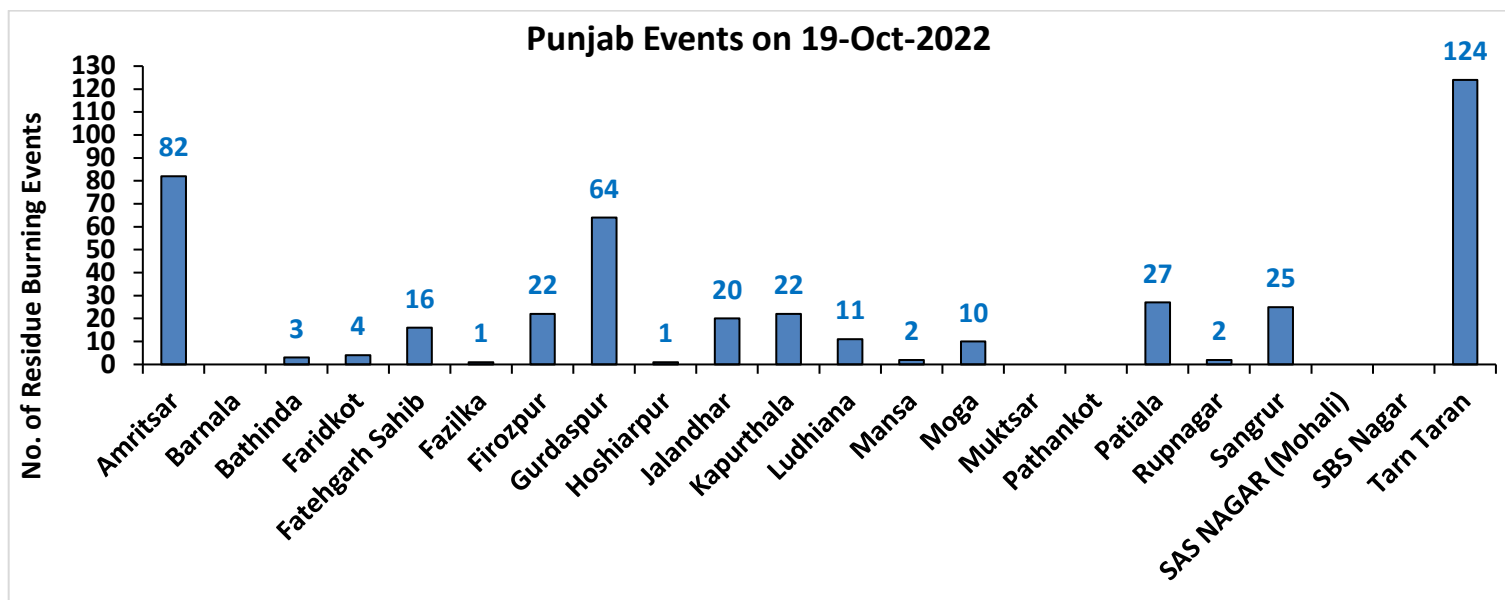
#### Fire Intensity (W/m<sup>2</sup>)

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



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

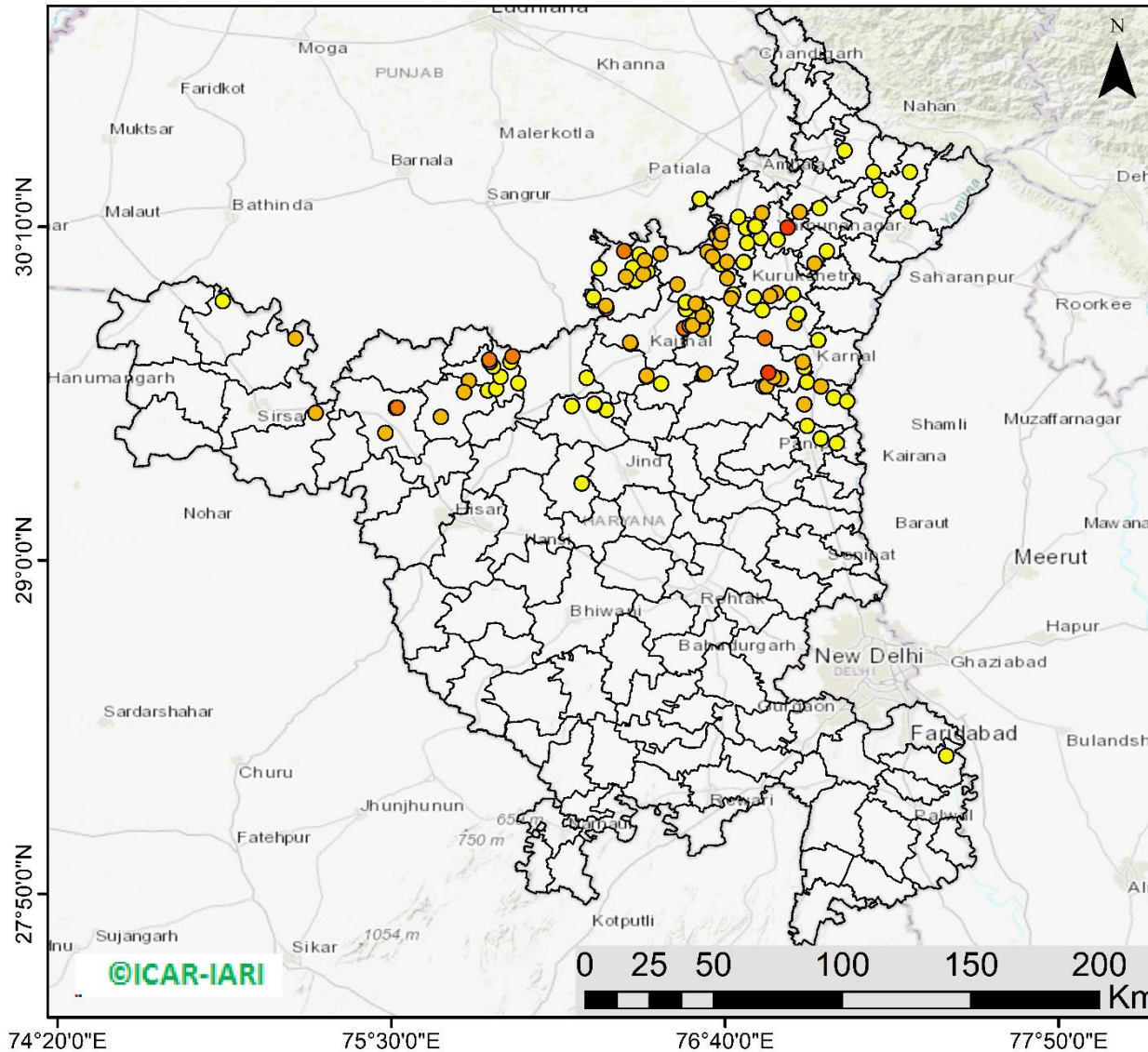
## District-wise cumulative number of residues burning events in Punjab (15Sep- 19Oct-2022)





# Haryana

## RICE RESIDUE BURNING IN HARYANA



**122** burning events  
detected in Haryana on  
(19th Oct 2022)

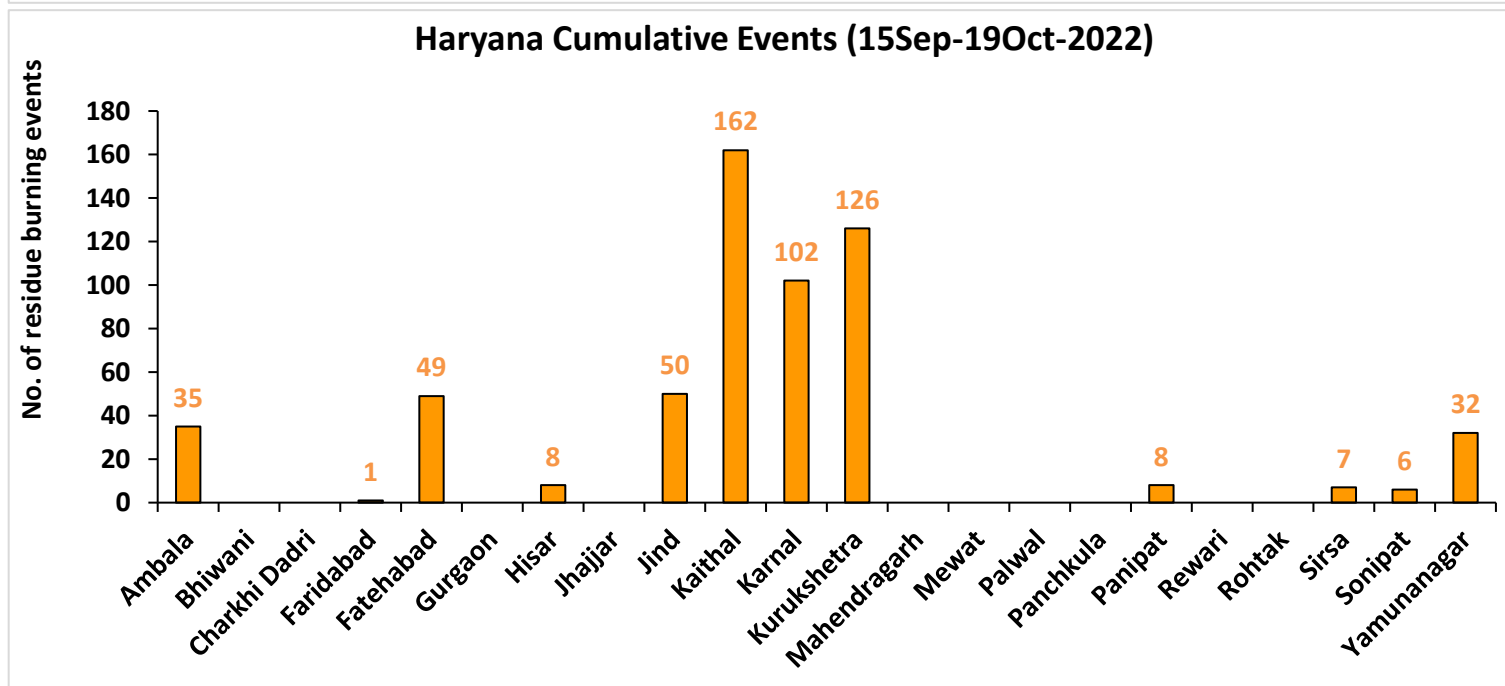
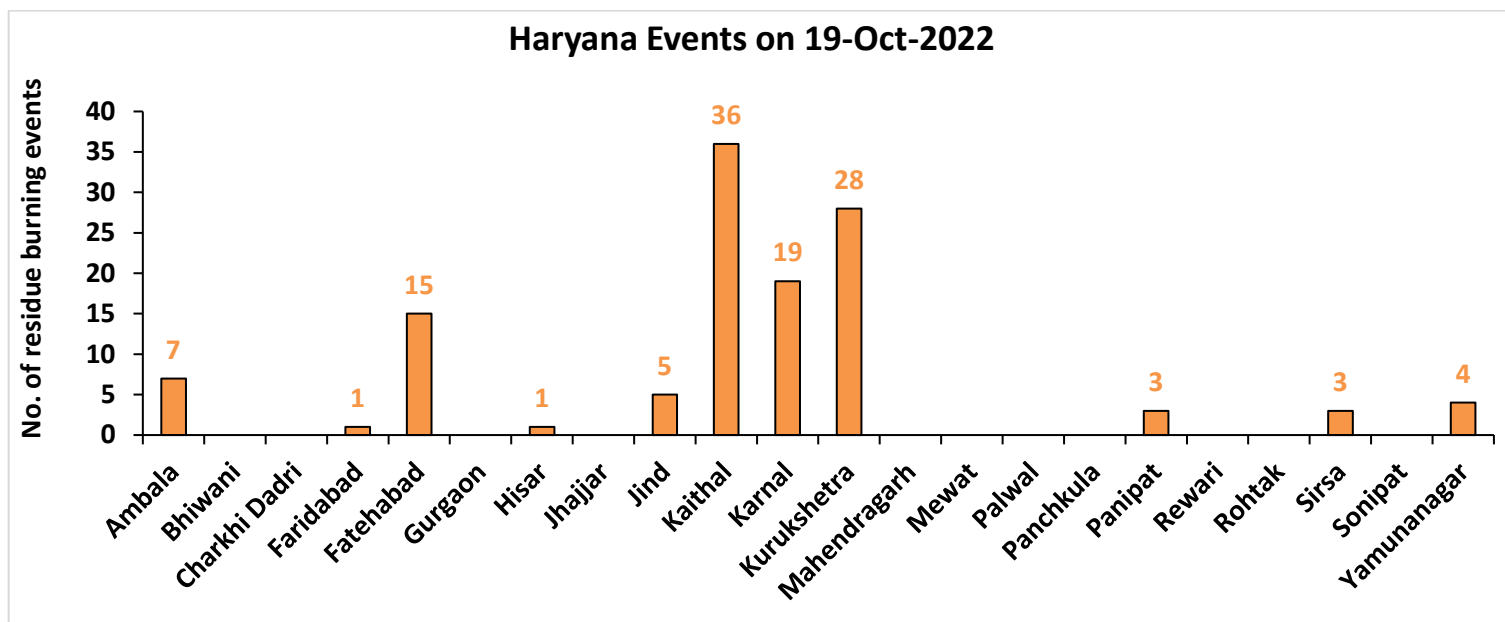
### Fire Intensity (W/m<sup>2</sup>)

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



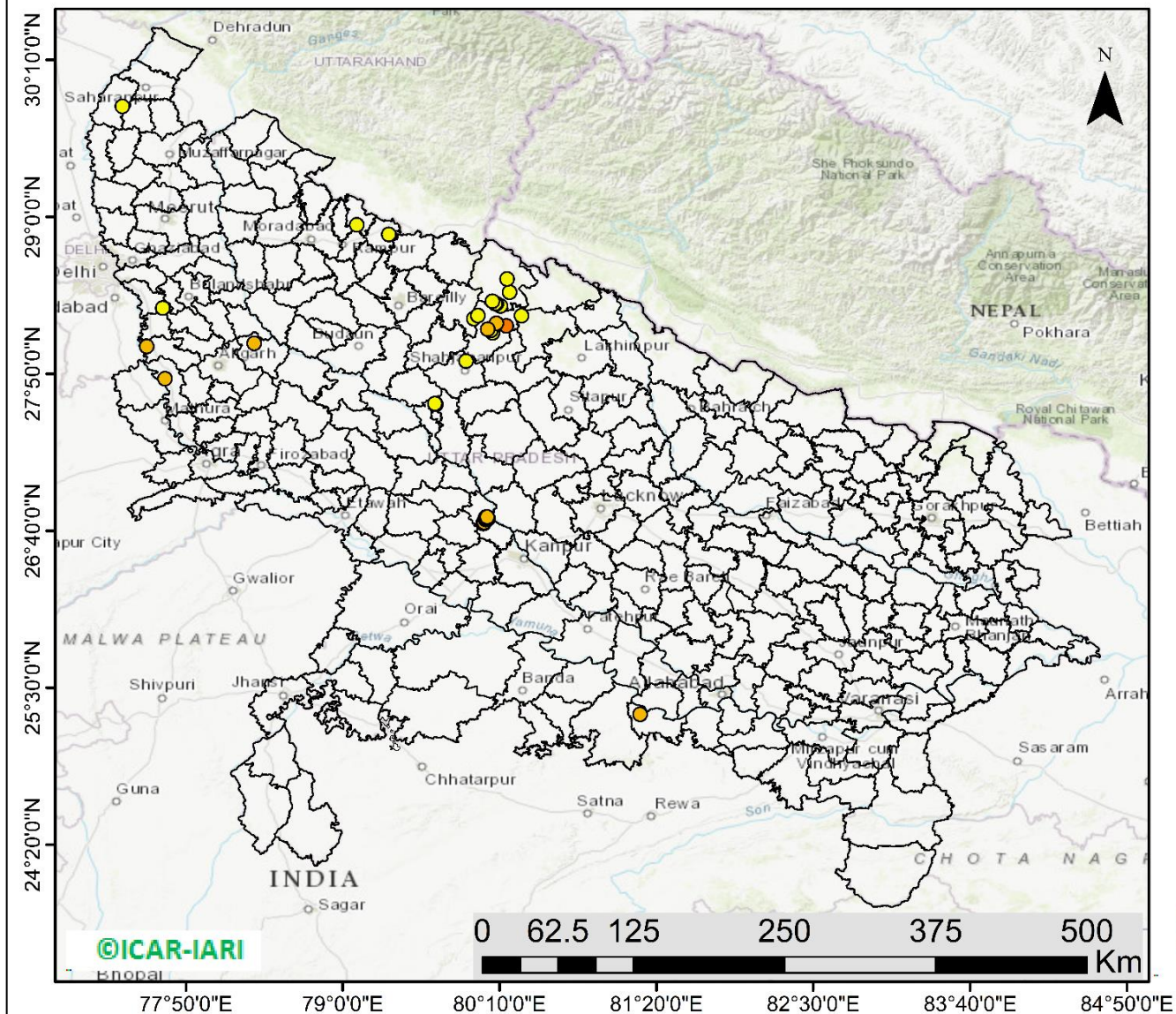
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

## District-wise cumulative number of residues burning events in Haryana (15Sep- 19Oct-2022)



## Uttar Pradesh

### RICE RESIDUE BURNING IN UTTAR PRADESH



**36** burning events  
detected in Uttar Pradesh on  
**(19th Oct 2022)**

#### Fire Intensity (W/m2)

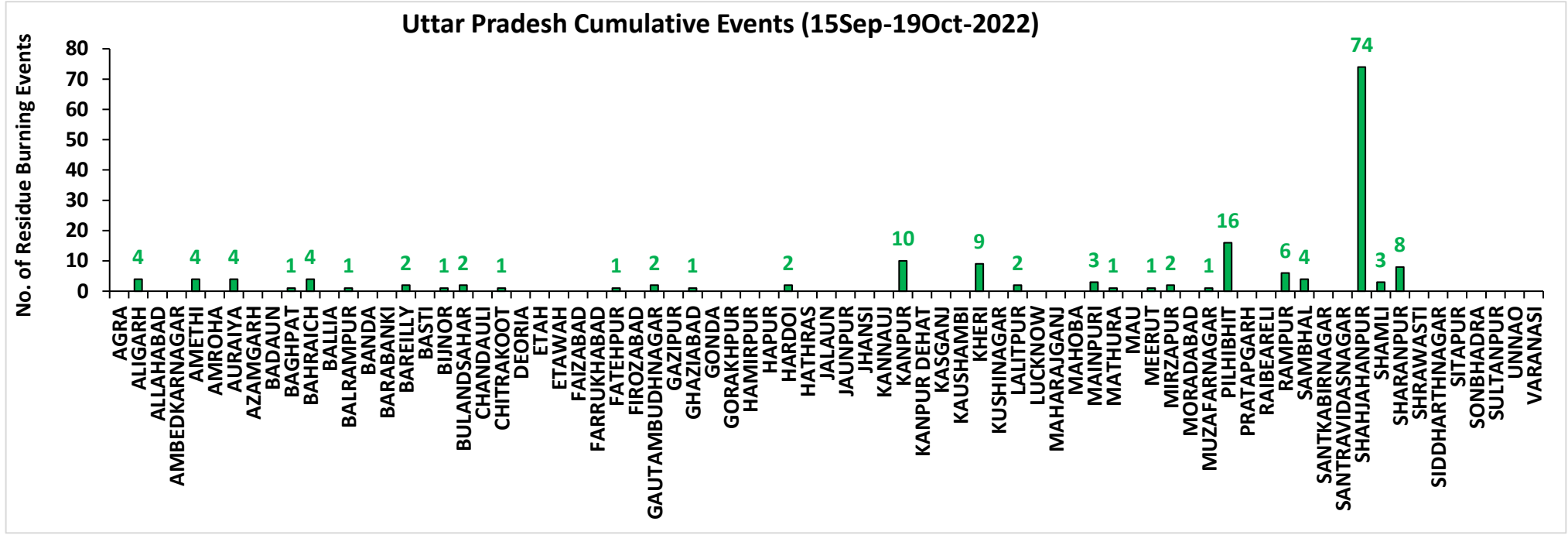
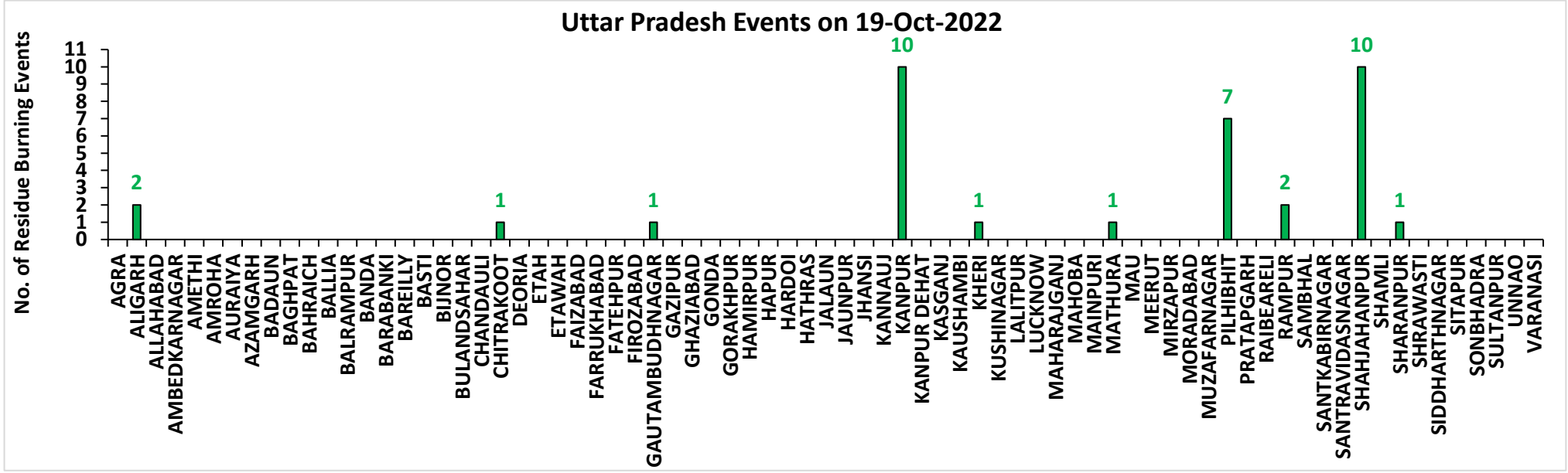
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



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

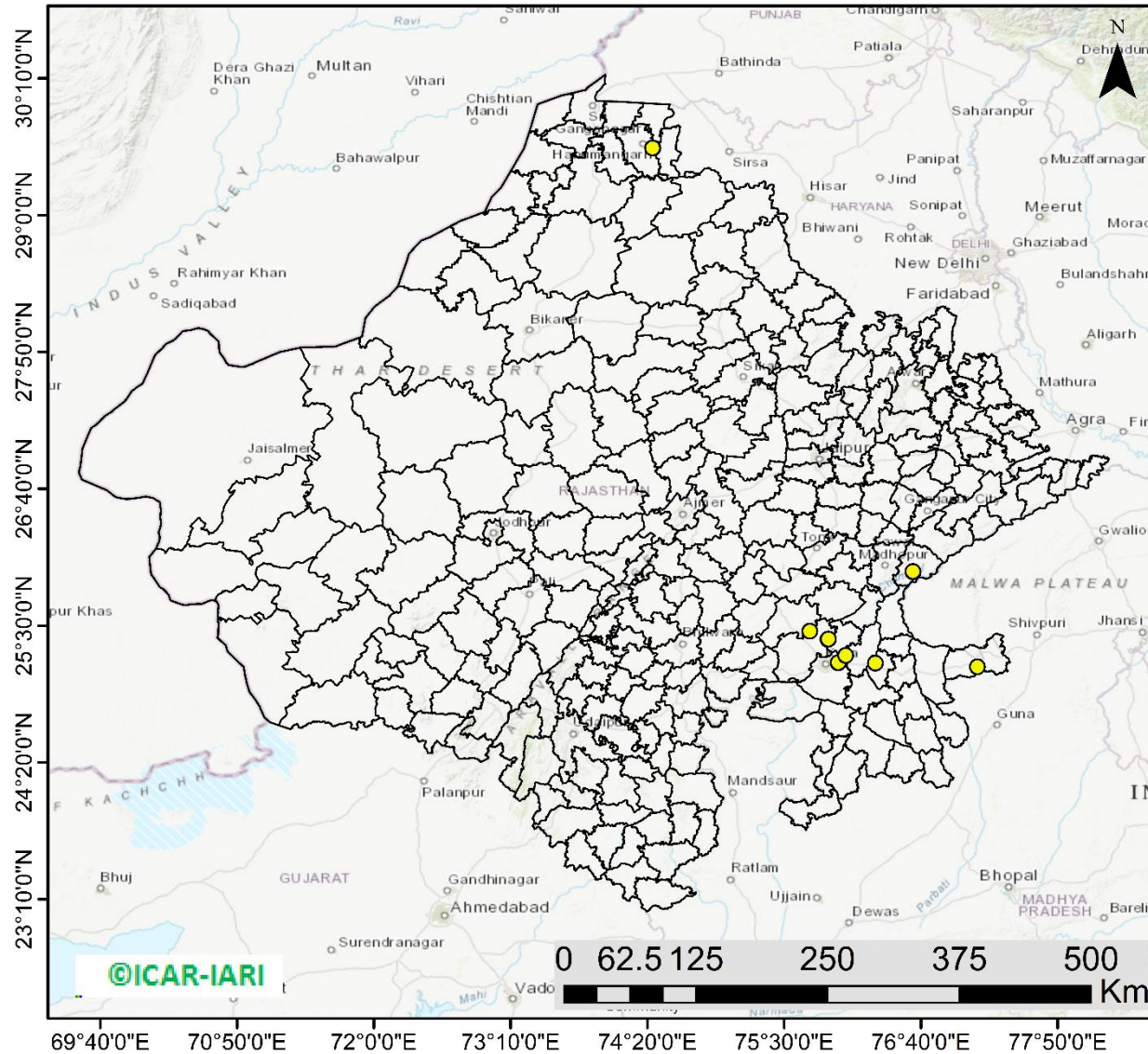


## District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep- 19Oct -2022)



# Rajasthan

## RICE RESIDUE BURNING IN RAJASTHAN



**12** burning events  
detected in Rajasthan on  
(19th Oct 2022)

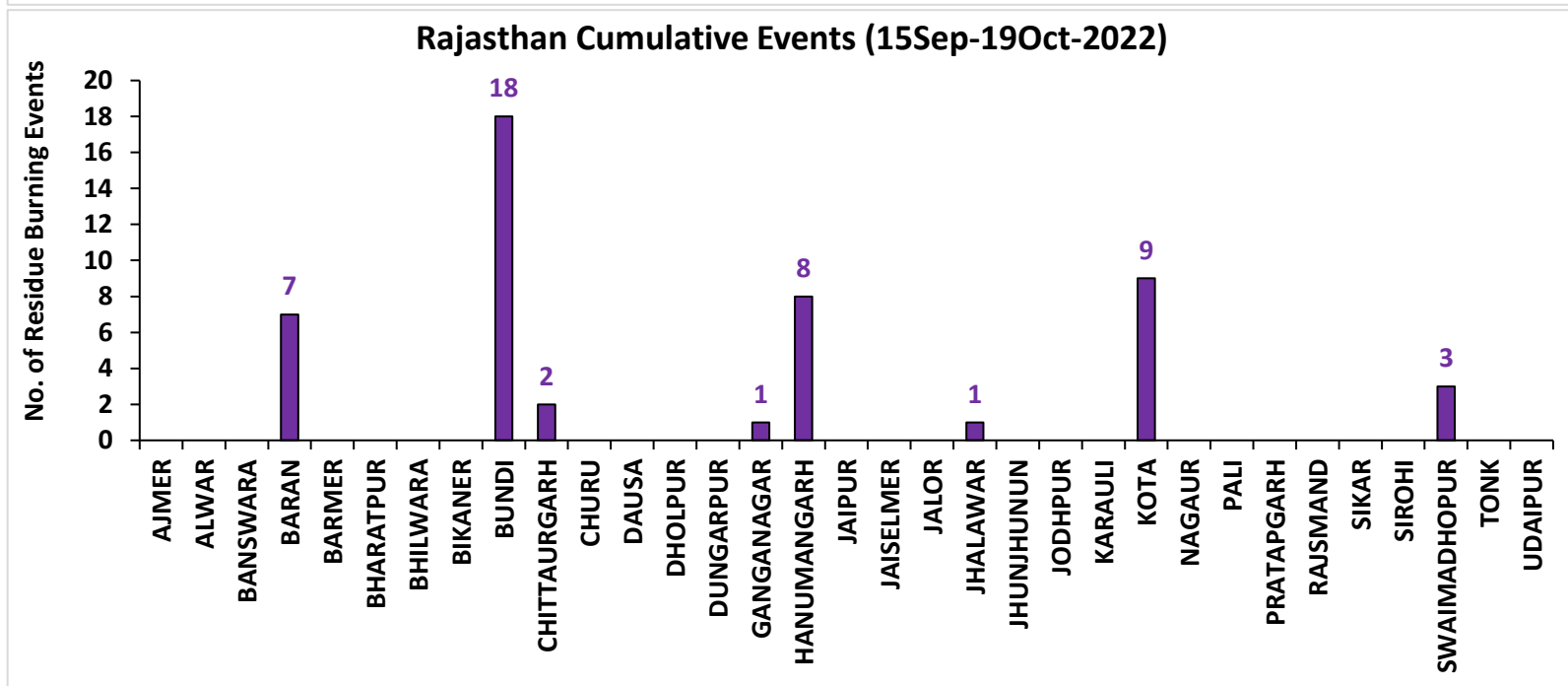
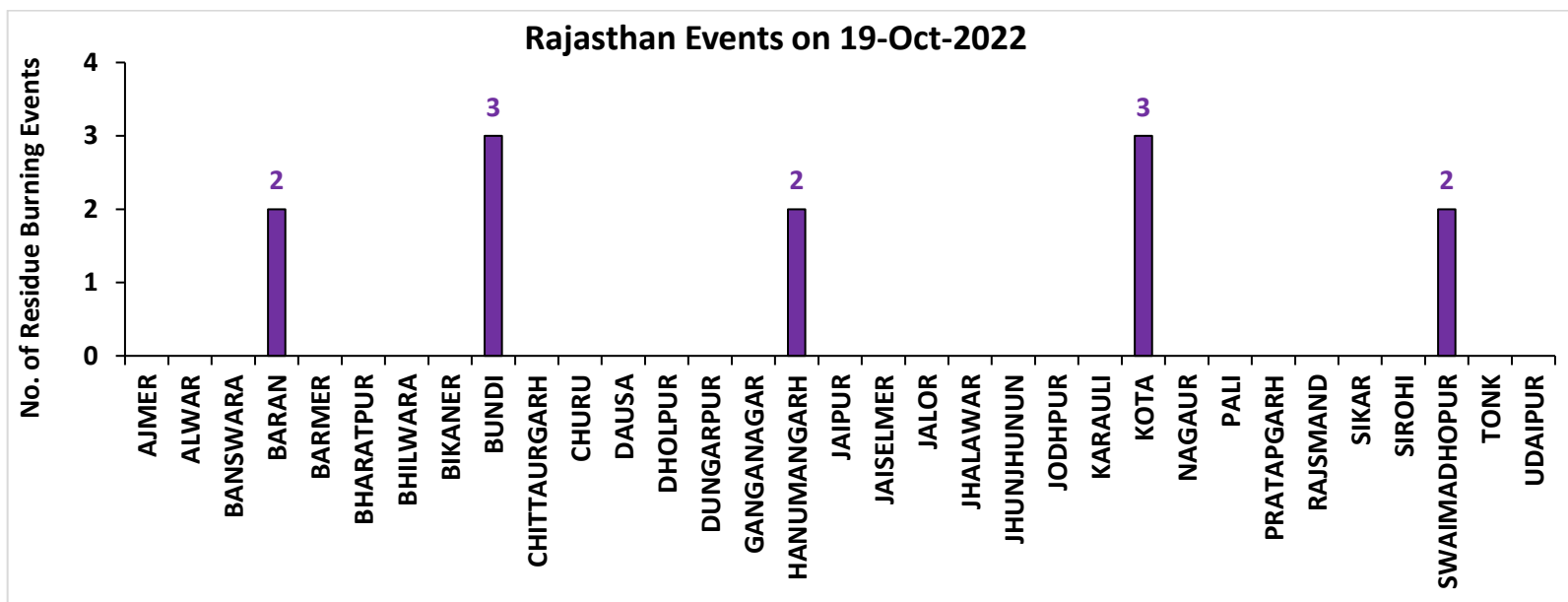
### Fire Intensity (W/m<sup>2</sup>)

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



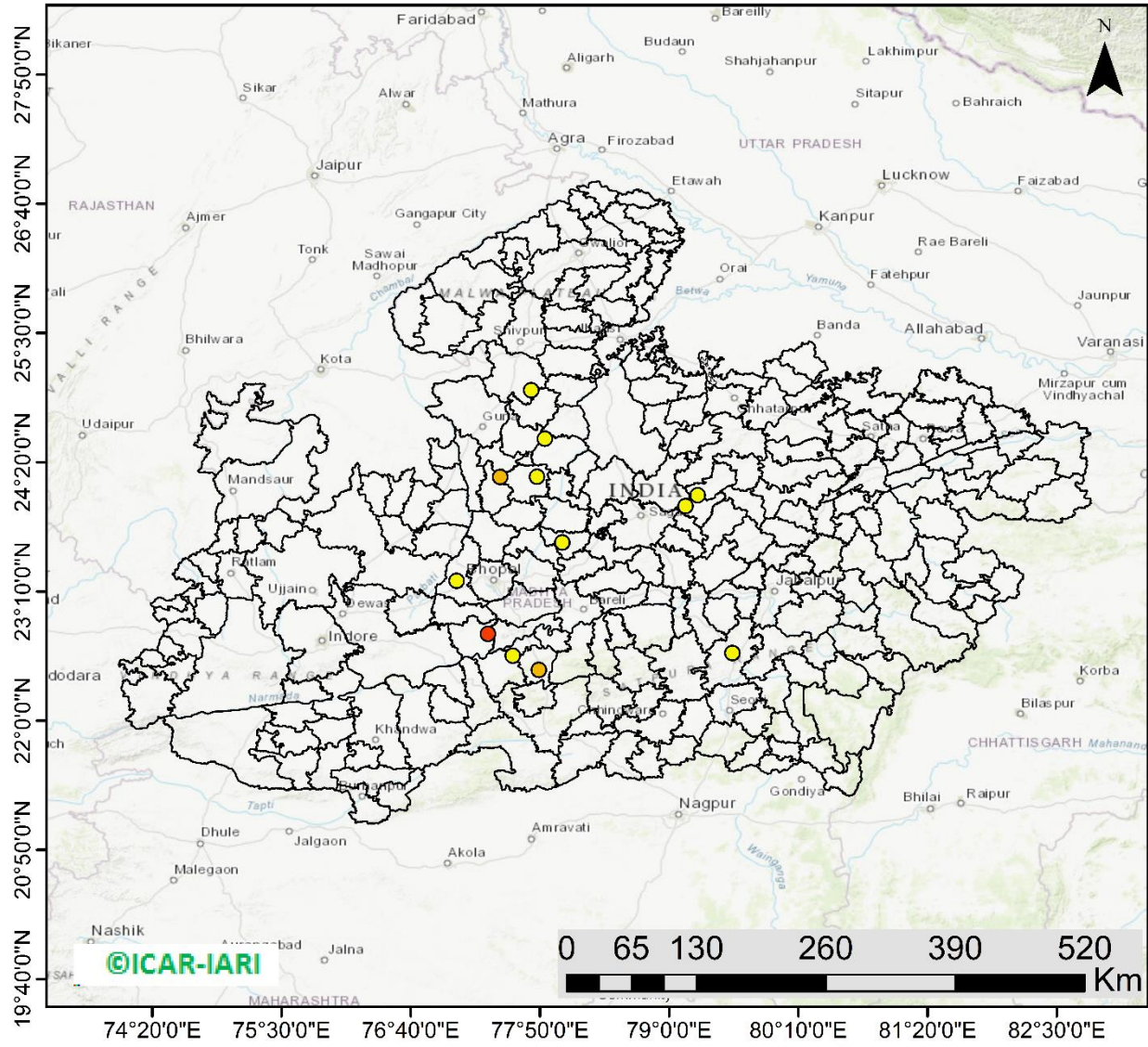
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

## District-wise cumulative number of residues burning events in Rajasthan (15Sep- 19Oct -2022)



# Madhya Pradesh

## RICE RESIDUE BURNING IN MADHYA PRADESH



**12** burning events detected in MP on (19th Oct 2022)

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

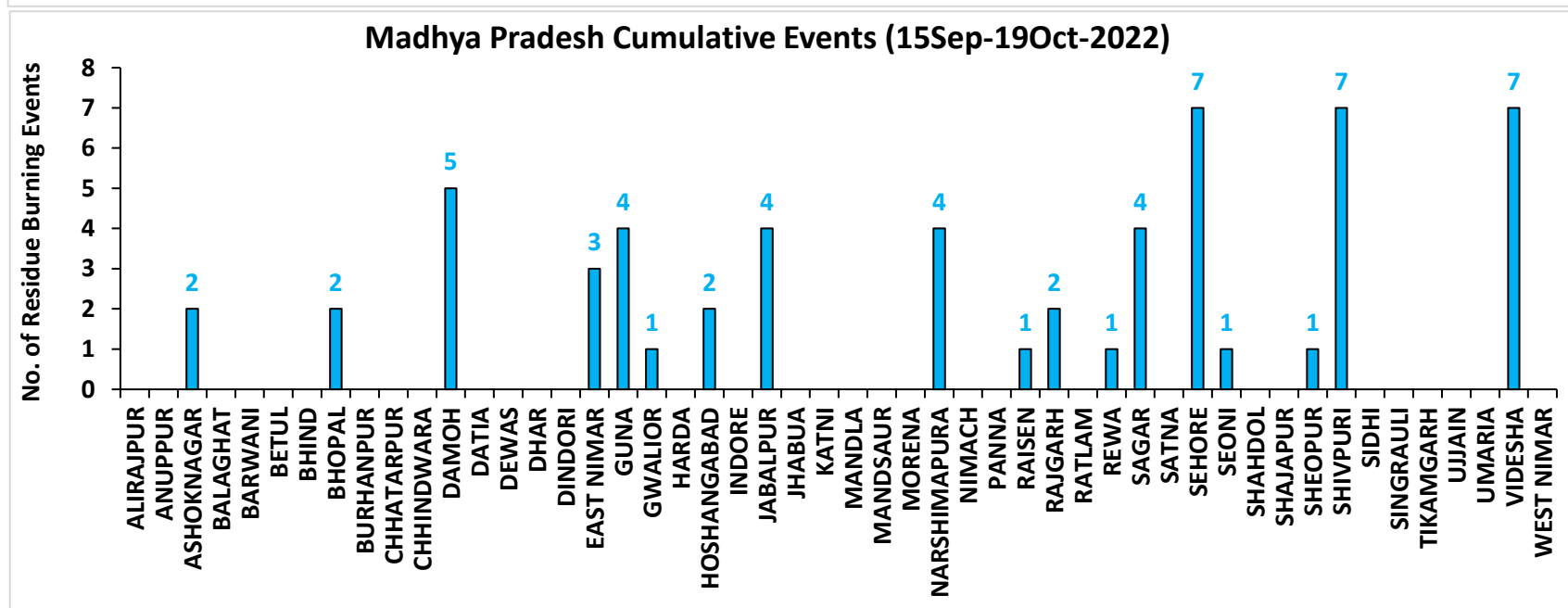
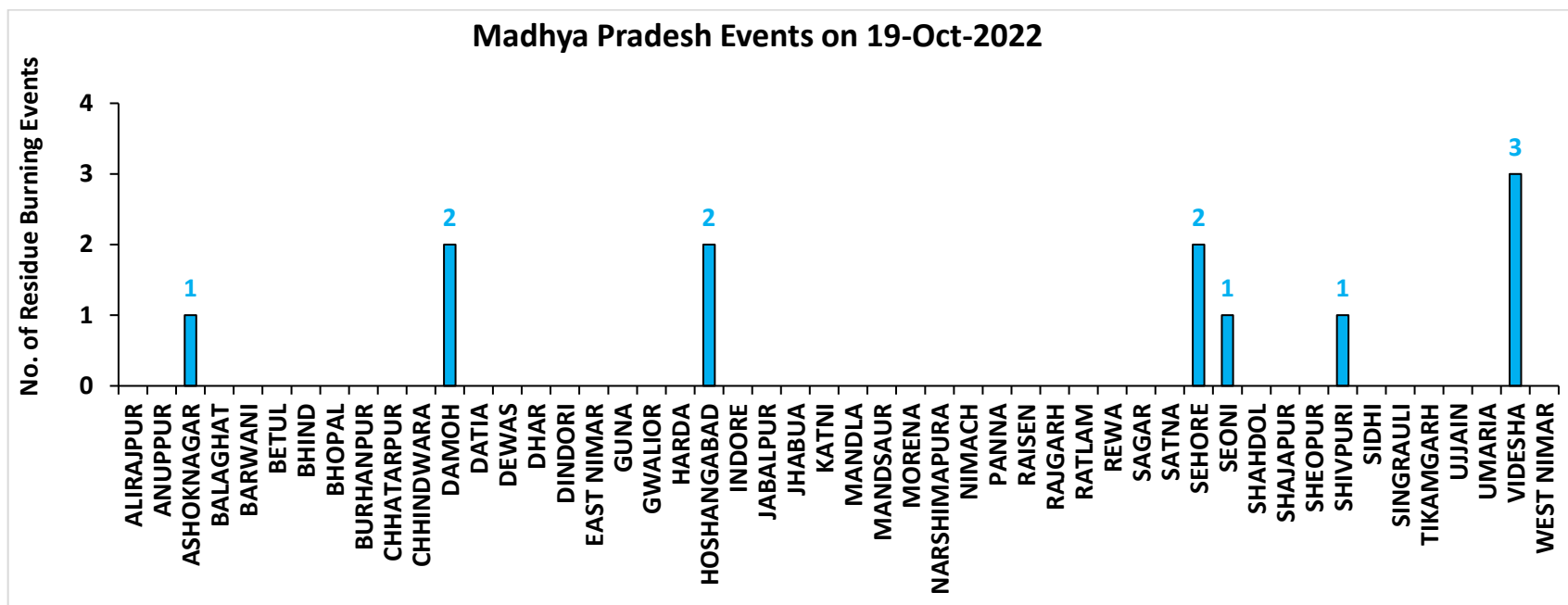
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



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



## District-wise cumulative number of residues burning events in Madhya Pradesh (15Sep- 19Oct -2022)



**District-wise cumulative number of residues burning events detected in 2020 ,2021 and 2022**  
**(Period: 15 September-19 October)**

**(a) Punjab**

District	15 Sep-19 Oct 2022		
	2020	2021	2022
Amritsar	2055	665	788
Barnala	27	24	13
Bathinda	107	18	8
Faridkot	397	106	14
Fatehgarh Sahib	217	113	47
Fazilka	95	45	20
Firozpur	843	142	120
Gurdaspur	588	158	228
Hoshiarpur	72	19	3
Jalandhar	154	102	103
Kapurthala	360	123	138
Ludhiana	197	186	57
Mansa	71	8	14
Moga	109	62	51
Muktsar	70	39	5
Pathankot	3	0	0
Patiala	704	284	117
Rupnagar	46	21	6
Sangrur	179	57	73
SAS NAGAR (Mohali)	52	28	11
SBS Nagar	17	14	2
Tarn Taran	2146	728	807
<b>Total</b>	<b>8509</b>	<b>2942</b>	<b>2625</b>

**(b) Haryana**

District	15 Sep-19 Oct 2022		
	2020	2021	2022
AMBALA	130	54	35
BHIWANI	0	0	0
CHARKHI DADRI	0	0	0
FARIDABAD	0	1	1
FATEHABAD	67	57	49
GURGAON	0	0	0
HISAR	9	1	8
JHAJJAR	1	0	0
JIND	33	33	50
KAITHAL	215	287	162
KARNAL	326	350	102
KURUKSHETRA	254	205	126
MAHENDRAGARH	0	0	0
MEWAT	0	0	0
PALWAL	19	25	0
PANCHKULA	0	0	0
PANIPAT	9	15	8
REWARI	0	0	0
ROHTAK	1	0	0
SIRSA	18	4	7
SONIPAT	11	5	6
YAMUNANAGAR	70	45	32
<b>Total</b>	<b>1163</b>	<b>1082</b>	<b>586</b>

(c) Uttar Pradesh

District	15 Sep-19 Oct 2022										
	2020	2021	2022	GAUTAMBUDHNAGAR	2	7	2	MUZAFARNAGAR	3	2	1
AGRA	2	0	0	GAZIPUR	0	0	0	PILHIBHIT	8	108	16
ALIGARH	35	21	4	GHAZIABAD	3	2	1	PRATAPGARH	1	0	0
ALLAHABAD	0	1	0	GONDA	0	0	0	RAIBEARELI	1	0	0
AMBEDKARNAGAR	0	0	0	GORAKHPUR	1	0	0	RAMPUR	35	50	6
AMETHI	0	1	4	HAMIRPUR	1	0	0	SAMBHAL	7	7	4
AMROHA	1	0	0	HAPUR	3	1	0	SANTKABIRNAGAR	0	0	0
AURAIYA	17	6	4	HARDOI	12	6	2	SANTRAVIDASNAGAR	0	0	0
AZAMGARH	0	0	0	HATHRAS	0	0	0	SHAHJAHANPUR	44	181	74
BADAUN	1	6	0	JALAUN	0	0	0	SHAMLI	20	11	3
BAGHPAT	3	1	1	JAUNPUR	0	0	0	SHARANPUR	32	17	8
BAHRAICH	8	2	4	JHANSI	10	6	0	SHRAWASTI	7	0	0
BALLIA	0	0	0	KANNAUJ	3	1	0	SIDDHARTHANAGAR	0	0	0
BALRAMPUR	1	1	1	KANPUR	3	7	10	SITAPUR	14	9	0
BANDA	0	0	0	KANPUR DEHAT	11	1	0	SONBHADRA	0	0	0
BARABANKI	14	20	0	KASGANJ	1	2	0	SULTANPUR	0	0	0
BAREILLY	18	15	2	KAUSHAMBI	9	3	0	UNNAO	5	0	0
BASTI	3	1	0	KHERI	41	54	9	VARANASI	1	0	0
BIJNOR	6	3	1	KUSHINAGAR	0	0	0	<b>Total</b>	<b>498</b>	<b>625</b>	<b>170</b>
BULANDSAHAR	14	2	2	LALITPUR	0	1	2				
CHANDAULI	0	0	0	LUCKNOW	2	0	0				
CHITRAKOOT	0	0	1	MAHARAJGANJ	0	0	0				
DEORIA	0	0	0	MAHOBA	3	0	0				
ETAH	6	6	0	MAINPURI	10	7	3				
ETAWAH	4	7	0	MATHURA	26	27	1				
FAIZABAD	1	0	0	MAU	0	0	0				
FARRUKHABAD	0	0	0	MEERUT	12	4	1				
FATEHPUR	18	6	1	MIRZAPUR	6	5	2				
FIROZABAD	4	4	0	MORADABAD	5	3	0				

**(d) Delhi**

District	15 Sep-19 Oct 2022		
	2020	2021	2022
CENTRAL	0	0	0
EAST	0	0	0
NEW DELHI	0	0	0
NORTH	2	0	3
NORTH EAST	0	0	0
NORTH WEST DELHI	1	0	0
SHAHADRA	0	0	0
SOUTH	1	0	0
SOUTH EAST	0	0	0
SOUTH WEST DELHI	0	0	0
WEST DELHI	0	0	0
<b>Total</b>	<b>4</b>	<b>0</b>	<b>3</b>

**(e) Rajasthan**

District	15 Sep-19 Oct 2022		
	2020	2021	2022
AJMER	0	0	0
ALWAR	1	0	0
BANSWARA	0	0	0
BARAN	88	0	7
BARMER	2	0	0
BHARATPUR	1	0	0
BHILWARA	2	0	0
BIKANER	1	0	0
BUNDI	10	0	18
CHITTAURGARH	0	2	2
CHURU	0	0	0
DAUSA	0	0	0
DHOLPUR	0	0	0
DUNGARPUR	0	0	0
GANGANAGAR	3	0	1
HANUMANGARH	148	31	8
JAIPUR	1	0	0
JAISELMER	2	0	0
JALOR	0	0	0
JHALAWAR	1	0	1
JHUNJHUNUN	1	0	0
JODHPUR	1	0	0
KARAULI	1	0	0
KOTA	27	1	9
NAGAUR	0	0	0
PALI	1	0	0
PRATAPGARH	4	0	0
RAJSMAND	0	0	0
SIKAR	0	0	0
SIROHI	1	0	0
SWAIMADHOPUR	7	0	3
TONK	1	0	0
UDAIPUR	0	0	0
<b>Total</b>	<b>304</b>	<b>34</b>	<b>49</b>



(f) Madhya Pradesh

District	15 Sep-19 Oct 2022						
	2020	2021	2022	PANNA			
ALIRAJPUR	0	0	0	RAISEN	18	1	1
ANUPPUR	0	0	0	RAJGARH	7	1	3
ASHOKNAGAR	19	1	2	RATLAM	0	0	0
BALAGHAT	0	0	0	REWA	4	0	1
BARWANI	0	0	0	SAGAR	15	7	4
BETUL	1	0	0	SATNA	11	6	0
BHIND	9	1	0	SEHORE	9	3	7
BHOPAL	6	5	2	SEONI	35	5	1
BURHANPUR	0	0	0	SHAHDOL	0	0	0
CHHATARPUR	4	0	0	SHAJAPUR	5	0	0
CHHINDWARA	4	3	0	SHEOPUR	15	0	1
DAMOH	20	4	5	SHIVPURI	9	0	7
DATIA	76	8	0	SIDHI	0	0	0
DEWAS	3	0	0	SINGRAULI	0	0	0
DHAR	20	0	0	TIKAMGARH	1	0	0
DINDORI	0	0	0	UJJAIN	5	0	0
EAST NIMAR	2	1	3	UMARIA	0	0	0
GUNA	16	1	4	VIDESHA	60	8	7
GWALIOR	46	0	1	WEST NIMAR	6	0	0
HARDA	8	9	0	<b>Total</b>	<b>521</b>	<b>85</b>	<b>58</b>
HOSHANGABAD	38	8	2				
INDORE	2	0	0				
JABALPUR	12	4	3				
JHABUA	0	0	0				
KATNI	3	0	0				
MANDLA	1	0	0				
MANDSAUR	3	0	0				
MORENA	17	5	0				
NARSHIMAPURA	8	4	4				
NIMACH	0	0	0				

**State-wise and date-wise number of paddy residue burning events detected in 2020, 2021 and 2022**  
**(Period: 15 September - 19 October 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

<b>09-Oct</b>	121	114	3	20	39	1	15	20	0	0	0	0	12	0	0	15	4	0
<b>10-Oct</b>	232	150	4	33	95	2	9	54	0	0	0	0	14	1	0	18	10	0
<b>11-Oct</b>	377	64	45	90	51	0	23	28	0	0	0	0	21	7	1	32	2	0
<b>12-Oct</b>	388	97	104	69	51	4	46	23	0	0	0	0	24	1	2	44	1	1
<b>13-Oct</b>	266	132	120	47	91	15	36	42	0	0	0	0	7	5	2	21	2	7
<b>14-Oct</b>	605	229	82	69	98	30	9	68	11	0	0	0	16	1	1	15	11	1
<b>15-Oct</b>	449	660	169	106	363	36	15	149	0	0	0	0	9	8	2	8	27	2
<b>16-Oct</b>	654	429	206	80	176	76	21	121	6	1	0	0	12	2	4	23	13	2
<b>17-Oct</b>	1172	14	403	143	0	86	38	39	7	0	0	0	26	0	4	63	1	11
<b>18-Oct</b>	938	57	342	166	1	134	76	0	30	0	0	1	37	2	12	88	0	15
<b>19-Oct</b>	1080	496	436	72	55	122	43	5	36	0	0	0	27	5	12	49	1	12
<b>Total</b>	<b>8509</b>	<b>2942</b>	<b>2625</b>	<b>1163</b>	<b>1082</b>	<b>586</b>	<b>498</b>	<b>625</b>	<b>170</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>304</b>	<b>34</b>	<b>49</b>	<b>521</b>	<b>85</b>	<b>58</b>

### Details of residue burning events in Punjab on 19-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	31.81240	74.74810	13:04:37	D	1.20
2	AMRITSAR	AJNALA	S-NPP	31.82160	74.75020	13:04:37	D	2.90
3	AMRITSAR	AJNALA	S-NPP	31.96270	74.96550	13:04:37	D	3.40
4	AMRITSAR	AJNALA	S-NPP	31.96680	74.96440	13:04:37	D	3.40
5	AMRITSAR	AJNALA	S-NPP	31.98000	74.91590	13:04:37	D	4.40
6	AMRITSAR	AJNALA	S-NPP	31.98250	74.91430	13:04:37	D	1.60
7	AMRITSAR	AJNALA	AQUA	31.80600	74.72700	13:44:38	D	8.40
8	AMRITSAR	AJNALA	AQUA	31.85400	74.79700	13:44:38	D	20.80
9	AMRITSAR	AJNALA	AQUA	31.85600	74.80800	13:44:38	D	6.40
10	AMRITSAR	AJNALA	AQUA	31.96600	74.93100	13:44:38	D	30.10
11	AMRITSAR	AJNALA	AQUA	31.99000	74.85000	13:44:38	D	4.90
12	AMRITSAR	ATTARI	S-NPP	31.62060	74.58610	13:04:37	D	4.50
13	AMRITSAR	CHOGAWAN	S-NPP	31.82910	74.63580	13:04:37	D	5.30
14	AMRITSAR	CHOGAWAN	S-NPP	31.83320	74.63460	13:04:37	D	4.50
15	AMRITSAR	CHOGAWAN	AQUA	31.66700	74.71800	13:44:38	D	6.50
16	AMRITSAR	CHOGAWAN	AQUA	31.68600	74.54000	13:44:38	D	5.80
17	AMRITSAR	CHOGAWAN	AQUA	31.77500	74.64600	13:44:38	D	11.50
18	AMRITSAR	CHOGAWAN	AQUA	31.83000	74.63900	13:44:38	D	16.70
19	AMRITSAR	HARSHA CHHINA	S-NPP	31.77810	74.89750	13:04:37	D	2.20
20	AMRITSAR	JANDIALA GURU	S-NPP	31.53580	74.96170	13:04:37	D	9.20
21	AMRITSAR	JANDIALA GURU	S-NPP	31.53760	75.13920	13:04:37	D	5.40
22	AMRITSAR	JANDIALA GURU	S-NPP	31.58180	75.07330	13:04:37	D	3.00
23	AMRITSAR	JANDIALA GURU	S-NPP	31.60140	75.02230	13:04:37	D	10.30
24	AMRITSAR	JANDIALA GURU	AQUA	31.51900	74.96700	13:44:38	D	5.50
25	AMRITSAR	JANDIALA GURU	AQUA	31.52100	74.97700	13:44:38	D	11.10
26	AMRITSAR	JANDIALA GURU	AQUA	31.53500	75.13600	13:44:38	D	5.30
27	AMRITSAR	MAJITHA	S-NPP	31.73310	75.06370	13:04:37	D	2.80
28	AMRITSAR	MAJITHA	S-NPP	31.73540	75.05390	13:04:37	D	8.50
29	AMRITSAR	MAJITHA	S-NPP	31.74240	75.08820	13:04:37	D	1.80
30	AMRITSAR	MAJITHA	S-NPP	31.75080	75.10840	13:04:37	D	3.00

31	AMRITSAR	MAJITHA	AQUA	31.72000	75.07500	13:44:38	D	4.60
32	AMRITSAR	MAJITHA	AQUA	31.76400	74.93600	13:44:38	D	4.20
33	AMRITSAR	MAJITHA	AQUA	31.79900	74.98800	13:44:38	D	4.00
34	AMRITSAR	RAYYA	S-NPP	31.51310	75.24910	13:04:37	D	4.30
35	AMRITSAR	RAYYA	S-NPP	31.51800	75.25220	13:04:37	D	3.80
36	AMRITSAR	RAYYA	S-NPP	31.54680	75.22640	13:04:37	D	4.20
37	AMRITSAR	RAYYA	S-NPP	31.57810	75.19090	13:04:37	D	3.20
38	AMRITSAR	RAYYA	S-NPP	31.58410	75.22050	13:04:37	D	2.10
39	AMRITSAR	RAYYA	S-NPP	31.58890	75.30790	13:04:37	D	3.00
40	AMRITSAR	RAYYA	S-NPP	31.59020	75.27220	13:04:37	D	5.40
41	AMRITSAR	RAYYA	S-NPP	31.59210	75.21830	13:04:37	D	7.10
42	AMRITSAR	RAYYA	S-NPP	31.60230	75.23390	13:04:37	D	5.00
43	AMRITSAR	RAYYA	S-NPP	31.60320	75.23810	13:04:37	D	5.70
44	AMRITSAR	RAYYA	S-NPP	31.60450	75.23710	13:04:37	D	7.00
45	AMRITSAR	RAYYA	S-NPP	31.60690	75.33380	13:04:37	D	3.30
46	AMRITSAR	RAYYA	S-NPP	31.60770	75.33790	13:04:37	D	3.30
47	AMRITSAR	RAYYA	S-NPP	31.61490	75.33150	13:04:37	D	3.60
48	AMRITSAR	RAYYA	S-NPP	31.61640	75.31790	13:04:37	D	1.40
49	AMRITSAR	RAYYA	S-NPP	31.62390	75.33830	13:04:37	D	3.10
50	AMRITSAR	RAYYA	S-NPP	31.62460	75.33760	13:04:37	D	3.20
51	AMRITSAR	RAYYA	S-NPP	31.66800	75.24240	13:04:37	D	2.10
52	AMRITSAR	RAYYA	S-NPP	31.67200	75.24120	13:04:37	D	1.90
53	AMRITSAR	RAYYA	S-NPP	31.67270	75.30730	13:04:37	D	6.00
54	AMRITSAR	RAYYA	S-NPP	31.69240	75.25770	13:04:37	D	8.30
55	AMRITSAR	RAYYA	AQUA	31.51400	75.12500	13:44:38	D	8.50
56	AMRITSAR	RAYYA	AQUA	31.54300	75.18800	13:44:38	D	15.20
57	AMRITSAR	RAYYA	AQUA	31.55200	75.25000	13:44:38	D	5.00
58	AMRITSAR	RAYYA	AQUA	31.57300	75.20300	13:44:38	D	7.90
59	AMRITSAR	RAYYA	AQUA	31.57400	75.21400	13:44:38	D	9.50
60	AMRITSAR	RAYYA	AQUA	31.57900	75.30900	13:44:38	D	9.30
61	AMRITSAR	RAYYA	AQUA	31.61300	75.35600	13:44:38	D	7.10
62	AMRITSAR	RAYYA	AQUA	31.62600	75.25600	13:44:38	D	8.70
63	AMRITSAR	RAYYA	AQUA	31.67000	75.30600	13:44:38	D	10.20

64	AMRITSAR	TARSIKKA	S-NPP	31.58210	75.18980	13:04:37	D	3.20
65	AMRITSAR	TARSIKKA	S-NPP	31.61010	75.10620	13:04:37	D	3.80
66	AMRITSAR	TARSIKKA	S-NPP	31.64380	75.18670	13:04:37	D	2.30
67	AMRITSAR	TARSIKKA	S-NPP	31.64520	75.04650	13:04:37	D	5.70
68	AMRITSAR	TARSIKKA	S-NPP	31.70090	75.09520	13:04:37	D	4.10
69	AMRITSAR	TARSIKKA	S-NPP	31.70180	75.09950	13:04:37	D	4.10
70	AMRITSAR	TARSIKKA	S-NPP	31.71500	75.16320	13:04:37	D	6.30
71	AMRITSAR	TARSIKKA	S-NPP	31.71580	75.10460	13:04:37	D	6.10
72	AMRITSAR	TARSIKKA	S-NPP	31.71910	75.16200	13:04:37	D	6.30
73	AMRITSAR	TARSIKKA	S-NPP	31.73670	75.14370	13:04:37	D	10.30
74	AMRITSAR	TARSIKKA	S-NPP	31.73900	75.13410	13:04:37	D	4.90
75	AMRITSAR	TARSIKKA	S-NPP	31.74160	75.14680	13:04:37	D	22.60
76	AMRITSAR	TARSIKKA	AQUA	31.61700	75.19400	13:44:38	D	6.60
77	AMRITSAR	TARSIKKA	AQUA	31.62100	75.15500	13:44:38	D	16.90
78	AMRITSAR	TARSIKKA	AQUA	31.65200	75.18100	13:44:38	D	11.10
79	AMRITSAR	TARSIKKA	AQUA	31.65400	75.07300	13:44:38	D	5.90
80	AMRITSAR	TARSIKKA	AQUA	31.66600	75.21100	13:44:38	D	10.10
81	AMRITSAR	TARSIKKA	AQUA	31.71600	75.17200	13:44:38	D	5.80
82	AMRITSAR	TARSIKKA	AQUA	31.74400	75.17700	13:44:38	D	8.10
83	BATHINDA	GONIANA MANDI	S-NPP	30.28470	74.89470	13:04:37	D	12.60
84	BATHINDA	GONIANA MANDI	S-NPP	30.28560	74.89930	13:04:37	D	12.70
85	BATHINDA	TALWANDI SABO	S-NPP	29.98730	75.02000	13:04:37	D	4.40
86	FARIDKOT	FARIDKOT	AQUA	30.71500	74.72400	13:44:38	D	32.60
87	FARIDKOT	FARIDKOT	AQUA	30.71700	74.73400	13:44:38	D	5.50
88	FARIDKOT	FARIDKOT	AQUA	30.72400	74.71600	13:44:38	D	6.50
89	FARIDKOT	FARIDKOT	AQUA	30.72500	74.72600	13:44:38	D	9.80
90	FATEHGARH SAHIB	AMLOH	S-NPP	30.61080	76.24290	13:04:37	D	4.00
91	FATEHGARH SAHIB	AMLOH	S-NPP	30.61350	76.24130	13:04:37	D	4.40
92	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.66480	76.43820	13:04:37	D	6.20
93	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.70000	76.53520	13:04:37	D	3.40
94	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.73150	76.42680	13:04:37	D	3.30
95	FATEHGARH SAHIB	KHAMANON	S-NPP	30.75280	76.37130	13:04:37	D	5.80
96	FATEHGARH SAHIB	KHAMANON	S-NPP	30.82230	76.29110	13:04:37	D	4.20

97	FATEHGARH SAHIB	KHAMANON	S-NPP	30.86730	76.33330	13:04:37	D	4.10
98	FATEHGARH SAHIB	KHAMANON	AQUA	30.72800	76.38600	13:44:38	D	5.00
99	FATEHGARH SAHIB	KHAMANON	AQUA	30.86400	76.30500	13:44:38	D	8.00
100	FATEHGARH SAHIB	KHERA	S-NPP	30.57010	76.53470	13:04:37	D	3.80
101	FATEHGARH SAHIB	KHERA	S-NPP	30.59540	76.53990	13:04:37	D	2.90
102	FATEHGARH SAHIB	KHERA	AQUA	30.67000	76.49800	13:44:38	D	5.00
103	FATEHGARH SAHIB	SIRHIND	S-NPP	30.48040	76.36370	13:04:37	D	7.20
104	FATEHGARH SAHIB	SIRHIND	S-NPP	30.49090	76.35500	13:04:37	D	3.70
105	FATEHGARH SAHIB	SIRHIND	S-NPP	30.56140	76.30440	13:04:37	D	5.20
106	FAZILKA	FAZILKA	S-NPP	30.36330	74.03070	13:04:37	D	4.60
107	FIROZPUR	FIROZPUR	S-NPP	30.95550	74.51400	13:04:37	D	11.10
108	FIROZPUR	FIROZPUR	S-NPP	30.98270	74.53620	13:04:37	D	3.30
109	FIROZPUR	FIROZPUR	AQUA	30.98200	74.53500	13:44:38	D	11.60
110	FIROZPUR	GHALL KHURD	S-NPP	30.88210	74.83620	13:04:37	D	5.60
111	FIROZPUR	GURUHAR SAHAI	S-NPP	30.65820	74.21510	13:04:37	D	3.60
112	FIROZPUR	GURUHAR SAHAI	S-NPP	30.65870	74.32420	13:04:37	D	10.50
113	FIROZPUR	GURUHAR SAHAI	S-NPP	30.70840	74.42800	13:04:37	D	4.30
114	FIROZPUR	GURUHAR SAHAI	S-NPP	30.71550	74.24580	13:04:37	D	1.80
115	FIROZPUR	GURUHAR SAHAI	S-NPP	30.74760	74.46260	13:04:37	D	3.60
116	FIROZPUR	GURUHAR SAHAI	AQUA	30.58700	74.31200	13:44:38	D	9.50
117	FIROZPUR	GURUHAR SAHAI	AQUA	30.68700	74.23900	13:44:38	D	5.30
118	FIROZPUR	GURUHAR SAHAI	AQUA	30.68900	74.25000	13:44:38	D	5.30
119	FIROZPUR	GURUHAR SAHAI	AQUA	30.69300	74.46000	13:44:38	D	6.00
120	FIROZPUR	MAKHU	AQUA	31.05000	75.04100	13:44:38	D	5.80
121	FIROZPUR	MAKHU	AQUA	31.06100	74.93100	13:44:38	D	27.30
122	FIROZPUR	MAKHU	AQUA	31.06200	74.94100	13:44:38	D	6.90
123	FIROZPUR	MAMDOT	S-NPP	30.78560	74.49220	13:04:37	D	3.60
124	FIROZPUR	MAMDOT	AQUA	30.77600	74.40300	13:44:38	D	5.20
125	FIROZPUR	MAMDOT	AQUA	30.77700	74.34800	13:44:38	D	14.10
126	FIROZPUR	ZIRA	S-NPP	30.95240	74.85490	13:04:37	D	2.30
127	FIROZPUR	ZIRA	AQUA	30.94800	74.85200	13:44:38	D	46.00
128	FIROZPUR	ZIRA	AQUA	31.03300	74.87200	13:44:38	D	10.00
129	GURDASPUR	BATALA	S-NPP	31.71200	75.23080	13:04:37	D	4.30

130	GURDASPUR	BATALA	S-NPP	31.71230	75.23000	13:04:37	D	3.20
131	GURDASPUR	BATALA	S-NPP	31.71880	75.20230	13:04:37	D	3.70
132	GURDASPUR	BATALA	S-NPP	31.74560	75.20820	13:04:37	D	5.00
133	GURDASPUR	BATALA	S-NPP	31.76380	75.17190	13:04:37	D	2.60
134	GURDASPUR	BATALA	S-NPP	31.77070	75.20560	13:04:37	D	1.80
135	GURDASPUR	BATALA	S-NPP	31.77410	75.22240	13:04:37	D	2.50
136	GURDASPUR	BATALA	S-NPP	31.77520	75.24870	13:04:37	D	2.00
137	GURDASPUR	BATALA	S-NPP	31.78750	75.12060	13:04:37	D	1.90
138	GURDASPUR	BATALA	S-NPP	31.79950	75.17980	13:04:37	D	4.30
139	GURDASPUR	BATALA	S-NPP	31.82570	75.14740	13:04:37	D	5.40
140	GURDASPUR	BATALA	AQUA	31.74900	75.20900	13:44:38	D	6.70
141	GURDASPUR	BATALA	AQUA	31.75700	75.26100	13:44:38	D	5.10
142	GURDASPUR	BATALA	AQUA	31.77400	75.12800	13:44:38	D	4.90
143	GURDASPUR	BATALA	AQUA	31.79900	75.17700	13:44:38	D	4.90
144	GURDASPUR	DERA BABA NANAK	S-NPP	31.91600	75.15410	13:04:37	D	2.70
145	GURDASPUR	DERA BABA NANAK	S-NPP	31.91640	75.15330	13:04:37	D	3.10
146	GURDASPUR	DERA BABA NANAK	S-NPP	31.94570	75.02930	13:04:37	D	2.90
147	GURDASPUR	DERA BABA NANAK	S-NPP	31.96880	74.93190	13:04:37	D	3.60
148	GURDASPUR	DERA BABA NANAK	S-NPP	31.97290	74.93080	13:04:37	D	4.00
149	GURDASPUR	DERA BABA NANAK	S-NPP	31.97350	74.97620	13:04:37	D	2.90
150	GURDASPUR	DERA BABA NANAK	S-NPP	32.01570	75.08670	13:04:37	D	1.40
151	GURDASPUR	DERA BABA NANAK	S-NPP	32.05630	75.09770	13:04:37	D	5.20
152	GURDASPUR	DERA BABA NANAK	AQUA	31.94800	75.05900	13:44:38	D	6.60
153	GURDASPUR	DERA BABA NANAK	AQUA	31.96700	74.94100	13:44:38	D	5.30
154	GURDASPUR	DERA BABA NANAK	AQUA	31.99900	75.09600	13:44:38	D	4.30
155	GURDASPUR	DERA BABA NANAK	AQUA	32.00100	75.10700	13:44:38	D	8.00
156	GURDASPUR	DERA BABA NANAK	AQUA	32.01100	74.98600	13:44:38	D	4.40
157	GURDASPUR	DERA BABA NANAK	AQUA	32.01700	75.09300	13:44:38	D	5.90
158	GURDASPUR	DERA BABA NANAK	AQUA	32.05400	75.09600	13:44:38	D	13.30
159	GURDASPUR	DHARIWAL	S-NPP	31.93820	75.36680	13:04:37	D	2.50
160	GURDASPUR	DHARIWAL	S-NPP	31.98840	75.27950	13:04:37	D	3.10
161	GURDASPUR	FATEHGARH CHURIAN	S-NPP	31.93430	74.97360	13:04:37	D	2.80
162	GURDASPUR	KAHNUWAN	S-NPP	31.83820	75.39320	13:04:37	D	2.70



163	GURDASPUR	KALANAUR	AQUA	31.92800	75.17000	13:44:38	D	6.20
164	GURDASPUR	QADIAN	S-NPP	31.73410	75.31730	13:04:37	D	4.00
165	GURDASPUR	QADIAN	S-NPP	31.77440	75.32810	13:04:37	D	3.80
166	GURDASPUR	QADIAN	S-NPP	31.78130	75.46500	13:04:37	D	3.10
167	GURDASPUR	QADIAN	S-NPP	31.78430	75.35590	13:04:37	D	3.80
168	GURDASPUR	QADIAN	S-NPP	31.78520	75.46390	13:04:37	D	3.10
169	GURDASPUR	QADIAN	S-NPP	31.79750	75.40010	13:04:37	D	3.40
170	GURDASPUR	QADIAN	S-NPP	31.81760	75.31170	13:04:37	D	3.30
171	GURDASPUR	QADIAN	S-NPP	31.81930	75.32000	13:04:37	D	1.30
172	GURDASPUR	QADIAN	AQUA	31.81000	75.31400	13:44:38	D	6.20
173	GURDASPUR	QADIAN	AQUA	31.82400	75.34400	13:44:38	D	7.10
174	GURDASPUR	QADIAN	AQUA	31.82500	75.35400	13:44:38	D	7.00
175	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.62340	75.39490	13:04:37	D	2.50
176	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.63990	75.39510	13:04:37	D	6.50
177	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.64020	75.39460	13:04:37	D	7.10
178	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.71350	75.27840	13:04:37	D	9.30
179	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.71440	75.28250	13:04:37	D	9.30
180	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.71770	75.40420	13:04:37	D	5.00
181	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.73170	75.34800	13:04:37	D	2.10
182	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.74300	75.36240	13:04:37	D	2.20
183	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.74350	75.36280	13:04:37	D	3.10
184	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.74920	75.47760	13:04:37	D	4.60
185	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.75000	75.48170	13:04:37	D	4.60
186	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.66300	75.38300	13:44:38	D	5.40
187	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.70000	75.32200	13:44:38	D	5.20
188	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.72500	75.30600	13:44:38	D	5.30
189	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.74100	75.47400	13:44:38	D	5.40
190	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.74200	75.48500	13:44:38	D	5.20
191	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.75100	75.34800	13:44:38	D	5.30
192	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.75300	75.35800	13:44:38	D	6.40
193	HOSHIARPUR	DASUYA	S-NPP	31.83910	75.58540	13:04:37	D	7.70
194	JALANDHAR	BHOGPUR	S-NPP	31.49670	75.66530	13:04:37	D	2.00
195	JALANDHAR	BHOGPUR	S-NPP	31.50210	75.65120	13:04:37	D	4.80

196	JALANDHAR	JALANDHAR WEST	S-NPP	31.45700	75.47040	13:04:37	D	6.30
197	JALANDHAR	LOHIAN	AQUA	31.04000	75.22000	13:44:38	D	17.50
198	JALANDHAR	LOHIAN	AQUA	31.05600	75.20600	13:44:38	D	6.90
199	JALANDHAR	LOHIAN	AQUA	31.16000	75.35000	13:44:38	D	6.50
200	JALANDHAR	NAKODAR	S-NPP	31.03250	75.45630	13:04:37	D	13.90
201	JALANDHAR	NAKODAR	S-NPP	31.18640	75.48520	13:04:37	D	3.30
202	JALANDHAR	NAKODAR	S-NPP	31.19050	75.48410	13:04:37	D	7.70
203	JALANDHAR	NAKODAR	S-NPP	31.20360	75.40140	13:04:37	D	1.90
204	JALANDHAR	NAKODAR	S-NPP	31.20650	75.40110	13:04:37	D	3.50
205	JALANDHAR	NAKODAR	S-NPP	31.20730	75.48380	13:04:37	D	2.40
206	JALANDHAR	PHILLAUR	S-NPP	31.01360	75.73730	13:04:37	D	3.40
207	JALANDHAR	PHILLAUR	S-NPP	31.01760	75.73630	13:04:37	D	3.40
208	JALANDHAR	SHAHKOT	S-NPP	31.06710	75.21500	13:04:37	D	2.60
209	JALANDHAR	SHAHKOT	S-NPP	31.07120	75.21390	13:04:37	D	2.60
210	JALANDHAR	SHAHKOT	AQUA	31.05800	75.21600	13:44:38	D	14.40
211	JALANDHAR	SHAHKOT	AQUA	31.11200	75.27400	13:44:38	D	11.50
212	JALANDHAR	SHAHKOT	AQUA	31.13800	75.38600	13:44:38	D	6.90
213	JALANDHAR	SHAHKOT	AQUA	31.13900	75.39700	13:44:38	D	6.70
214	KAPURTHALA	DHILWAN	S-NPP	31.39130	75.19220	13:04:37	D	2.90
215	KAPURTHALA	DHILWAN	S-NPP	31.39530	75.19110	13:04:37	D	2.90
216	KAPURTHALA	KAPURTHALA	S-NPP	31.26750	75.28210	13:04:37	D	6.30
217	KAPURTHALA	KAPURTHALA	AQUA	31.31800	75.29500	13:44:38	D	6.20
218	KAPURTHALA	NADALA	S-NPP	31.61030	75.47650	13:04:37	D	2.20
219	KAPURTHALA	NADALA	AQUA	31.54600	75.40800	13:44:38	D	5.90
220	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.23280	75.17450	13:04:37	D	11.50
221	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.23690	75.17340	13:04:37	D	6.80
222	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.23930	75.16360	13:04:37	D	14.90
223	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.24010	75.16790	13:04:37	D	14.90
224	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.24540	75.13010	13:04:37	D	6.80
225	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27200	75.24050	13:04:37	D	8.70
226	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27380	75.23630	13:04:37	D	6.50
227	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27470	75.24060	13:04:37	D	6.50
228	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.31000	75.14050	13:04:37	D	2.80

229	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.32020	75.16940	13:04:37	D	7.70
230	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.34720	75.17550	13:04:37	D	4.90
231	KAPURTHALA	SULTANPUR LODHI	AQUA	31.16900	75.03100	13:44:38	D	6.10
232	KAPURTHALA	SULTANPUR LODHI	AQUA	31.24000	75.32700	13:44:38	D	4.90
233	KAPURTHALA	SULTANPUR LODHI	AQUA	31.24400	75.23000	13:44:38	D	9.50
234	KAPURTHALA	SULTANPUR LODHI	AQUA	31.26400	75.17800	13:44:38	D	4.80
235	KAPURTHALA	SULTANPUR LODHI	AQUA	31.30900	75.16900	13:44:38	D	8.10
236	LUDHIANA	JAGRAON	S-NPP	30.65990	75.39010	13:04:37	D	12.30
237	LUDHIANA	MACHHIWARA	S-NPP	30.88440	76.31680	13:04:37	D	5.80
238	LUDHIANA	PAKHOWAL	S-NPP	30.70490	75.75520	13:04:37	D	3.60
239	LUDHIANA	RAIKOT	S-NPP	30.64680	75.57090	13:04:37	D	3.40
240	LUDHIANA	SAMRALA	S-NPP	30.80900	76.24240	13:04:37	D	3.70
241	LUDHIANA	SIDHWAN BET	S-NPP	30.87750	75.50070	13:04:37	D	2.20
242	LUDHIANA	SIDHWAN BET	S-NPP	30.89860	75.52130	13:04:37	D	3.80
243	LUDHIANA	SIDHWAN BET	S-NPP	30.90220	75.52100	13:04:37	D	2.60
244	LUDHIANA	SIDHWAN BET	S-NPP	30.90710	75.52400	13:04:37	D	2.60
245	LUDHIANA	SIDHWAN BET	AQUA	30.95600	75.40300	13:44:38	D	21.60
246	LUDHIANA	SIDHWAN BET	AQUA	30.95700	75.41400	13:44:38	D	6.80
247	MANSA	SARDULGARH	S-NPP	29.66040	75.22300	13:04:37	D	3.10
248	MANSA	SARDULGARH	S-NPP	29.67070	75.27240	13:04:37	D	3.50
249	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.96600	75.23740	13:04:37	D	6.00
250	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	31.09960	75.14220	13:04:37	D	4.70
251	MOGA	KOT ISE KHAN AT DHARAMKOT	AQUA	30.89500	75.30400	13:44:38	D	7.60
252	MOGA	KOT ISE KHAN AT DHARAMKOT	AQUA	30.91800	75.33600	13:44:38	D	11.00
253	MOGA	KOT ISE KHAN AT DHARAMKOT	AQUA	30.92000	75.34700	13:44:38	D	58.20
254	MOGA	MOGA-1	S-NPP	30.86740	75.28980	13:04:37	D	2.70
255	MOGA	MOGA-1	AQUA	30.71200	75.25200	13:44:38	D	5.10
256	MOGA	MOGA-1	AQUA	30.73100	75.19400	13:44:38	D	15.50
257	MOGA	MOGA-1	AQUA	30.75400	75.22200	13:44:38	D	9.50
258	MOGA	MOGA-1	AQUA	30.75500	75.23200	13:44:38	D	4.90
259	PATIALA	BHUNARHERI	S-NPP	30.13130	76.46530	13:04:37	D	5.10
260	PATIALA	BHUNARHERI	S-NPP	30.18840	76.56980	13:04:37	D	3.90
261	PATIALA	BHUNARHERI	S-NPP	30.19730	76.53190	13:04:37	D	7.90

262	PATIALA	BHUNARHERI	S-NPP	30.22790	76.48120	13:04:37	D	4.30
263	PATIALA	BHUNARHERI	AQUA	30.11600	76.48000	13:44:38	D	8.20
264	PATIALA	BHUNARHERI	AQUA	30.17700	76.59000	13:44:38	D	4.70
265	PATIALA	NABHA	S-NPP	30.40860	76.24900	13:04:37	D	6.90
266	PATIALA	NABHA	AQUA	30.40600	76.25200	13:44:38	D	5.80
267	PATIALA	PATIALA	S-NPP	30.24630	76.17830	13:04:37	D	5.90
268	PATIALA	PATIALA	S-NPP	30.38600	76.37820	13:04:37	D	11.60
269	PATIALA	PATRAN	S-NPP	29.82260	76.11900	13:04:37	D	2.20
270	PATIALA	PATRAN	S-NPP	29.92340	75.96990	13:04:37	D	4.10
271	PATIALA	PATRAN	S-NPP	29.92740	75.96890	13:04:37	D	4.10
272	PATIALA	PATRAN	S-NPP	29.95420	76.20640	13:04:37	D	3.50
273	PATIALA	PATRAN	AQUA	29.88200	76.20000	13:44:38	D	6.90
274	PATIALA	RAJPURA	S-NPP	30.56630	76.61770	13:04:37	D	3.20
275	PATIALA	SAMANA	S-NPP	30.09280	76.14550	13:04:37	D	3.70
276	PATIALA	SAMANA	AQUA	30.02700	76.18100	13:44:38	D	7.50
277	PATIALA	SAMANA	AQUA	30.06200	76.10100	13:44:38	D	14.10
278	PATIALA	SAMANA	AQUA	30.06500	76.18400	13:44:38	D	4.90
279	PATIALA	SAMANA	AQUA	30.18000	76.09300	13:44:38	D	4.90
280	PATIALA	SAMANA	AQUA	30.19100	76.23900	13:44:38	D	12.50
281	PATIALA	SAMANA	AQUA	30.20300	76.18700	13:44:38	D	3.70
282	PATIALA	SANAUR	S-NPP	30.12380	76.26040	13:04:37	D	6.60
283	PATIALA	SANAUR	S-NPP	30.15330	76.32640	13:04:37	D	4.90
284	PATIALA	SANAUR	AQUA	30.13500	76.29100	13:44:38	D	8.90
285	PATIALA	SANAUR	AQUA	30.30300	76.50700	13:44:38	D	5.10
286	RUPNAGAR	MORINDA	S-NPP	30.84620	76.51830	13:04:37	D	6.40
287	RUPNAGAR	MORINDA	S-NPP	30.84970	76.45270	13:04:37	D	6.30
288	SANGRUR	ANDANA	S-NPP	29.79220	76.00780	13:04:37	D	3.20
289	SANGRUR	ANDANA	S-NPP	29.79310	76.01190	13:04:37	D	3.20
290	SANGRUR	ANDANA	S-NPP	29.79570	76.00710	13:04:37	D	12.70
291	SANGRUR	ANDANA	S-NPP	29.79660	76.01120	13:04:37	D	12.70
292	SANGRUR	ANDANA	S-NPP	29.80280	75.97960	13:04:37	D	4.90
293	SANGRUR	ANDANA	S-NPP	29.80860	75.86130	13:04:37	D	2.10
294	SANGRUR	ANDANA	AQUA	29.74700	76.03300	13:44:38	D	16.20

295	SANGRUR	ANDANA	AQUA	29.77400	76.02800	13:44:38	D	6.60
296	SANGRUR	ANDANA	AQUA	29.79700	75.86000	13:44:38	D	7.00
297	SANGRUR	ANDANA	AQUA	29.80600	75.85800	13:44:38	D	20.50
298	SANGRUR	BHAWANIGARH	S-NPP	30.31450	76.05550	13:04:37	D	5.90
299	SANGRUR	BHAWANIGARH	AQUA	30.23900	76.11700	13:44:38	D	4.10
300	SANGRUR	DHURI	AQUA	30.37400	75.90000	13:44:38	D	5.40
301	SANGRUR	DHURI	AQUA	30.38100	75.82500	13:44:38	D	9.10
302	SANGRUR	DHURI	AQUA	30.38100	75.88800	13:44:38	D	7.40
303	SANGRUR	DHURI	AQUA	30.38300	75.89800	13:44:38	D	6.30
304	SANGRUR	DIRBA	S-NPP	30.06980	76.05080	13:04:37	D	3.60
305	SANGRUR	DIRBA	S-NPP	30.13300	76.02730	13:04:37	D	6.90
306	SANGRUR	DIRBA	AQUA	30.12600	76.04000	13:44:38	D	9.00
307	SANGRUR	MALERKOTLA-1	AQUA	30.39800	76.00100	13:44:38	D	5.40
308	SANGRUR	MALERKOTLA-1	AQUA	30.46100	76.05700	13:44:38	D	6.40
309	SANGRUR	SUNAM	S-NPP	30.03800	75.70100	13:04:37	D	7.80
310	SANGRUR	SUNAM	S-NPP	30.04210	75.69990	13:04:37	D	7.80
311	SANGRUR	SUNAM	S-NPP	30.08310	75.82040	13:04:37	D	3.70
312	SANGRUR	SUNAM	AQUA	30.08500	75.81700	13:44:38	D	5.20
313	TARN TARAN	BHIKHIWIND	S-NPP	31.29300	74.66020	13:04:37	D	2.90
314	TARN TARAN	BHIKHIWIND	S-NPP	31.34700	74.76970	13:04:37	D	9.10
315	TARN TARAN	BHIKHIWIND	S-NPP	31.38750	74.71190	13:04:37	D	3.00
316	TARN TARAN	BHIKHIWIND	S-NPP	31.38760	74.71050	13:04:37	D	2.20
317	TARN TARAN	BHIKHIWIND	S-NPP	31.40490	74.60590	13:04:37	D	4.50
318	TARN TARAN	BHIKHIWIND	S-NPP	31.41040	74.65270	13:04:37	D	3.90
319	TARN TARAN	BHIKHIWIND	AQUA	31.34100	74.76700	13:44:38	D	21.60
320	TARN TARAN	BHIKHIWIND	AQUA	31.34300	74.77800	13:44:38	D	6.50
321	TARN TARAN	BHIKHIWIND	AQUA	31.36400	74.61600	13:44:38	D	9.00
322	TARN TARAN	BHIKHIWIND	AQUA	31.36600	74.62600	13:44:38	D	6.20
323	TARN TARAN	BHIKHIWIND	AQUA	31.37000	74.77200	13:44:38	D	8.60
324	TARN TARAN	BHIKHIWIND	AQUA	31.37100	74.78300	13:44:38	D	4.80
325	TARN TARAN	BHIKHIWIND	AQUA	31.38700	74.70900	13:44:38	D	6.90
326	TARN TARAN	BHIKHIWIND	AQUA	31.40300	74.74900	13:44:38	D	5.00
327	TARN TARAN	CHOHLA SAHIB	S-NPP	31.23470	74.98690	13:04:37	D	2.90

328	TARN TARAN	CHOHLA SAHIB	S-NPP	31.27080	75.05550	13:04:37	D	7.70
329	TARN TARAN	CHOHLA SAHIB	S-NPP	31.27170	75.05980	13:04:37	D	7.70
330	TARN TARAN	CHOHLA SAHIB	S-NPP	31.27490	75.05430	13:04:37	D	7.70
331	TARN TARAN	CHOHLA SAHIB	S-NPP	31.27580	75.05870	13:04:37	D	7.70
332	TARN TARAN	CHOHLA SAHIB	S-NPP	31.27990	75.05750	13:04:37	D	5.60
333	TARN TARAN	CHOHLA SAHIB	S-NPP	31.28550	75.00060	13:04:37	D	3.90
334	TARN TARAN	CHOHLA SAHIB	S-NPP	31.31020	74.99370	13:04:37	D	15.30
335	TARN TARAN	CHOHLA SAHIB	S-NPP	31.31110	74.99810	13:04:37	D	11.50
336	TARN TARAN	CHOHLA SAHIB	S-NPP	31.31730	75.02870	13:04:37	D	2.50
337	TARN TARAN	CHOHLA SAHIB	S-NPP	31.33410	75.11110	13:04:37	D	3.90
338	TARN TARAN	CHOHLA SAHIB	S-NPP	31.37400	75.08830	13:04:37	D	9.30
339	TARN TARAN	CHOHLA SAHIB	AQUA	31.23400	74.98000	13:44:38	D	5.90
340	TARN TARAN	CHOHLA SAHIB	AQUA	31.25100	75.03000	13:44:38	D	15.40
341	TARN TARAN	CHOHLA SAHIB	AQUA	31.26000	75.02800	13:44:38	D	19.10
342	TARN TARAN	CHOHLA SAHIB	AQUA	31.26200	75.03900	13:44:38	D	11.30
343	TARN TARAN	CHOHLA SAHIB	AQUA	31.27400	75.05800	13:44:38	D	17.50
344	TARN TARAN	CHOHLA SAHIB	AQUA	31.28200	74.99200	13:44:38	D	5.20
345	TARN TARAN	CHOHLA SAHIB	AQUA	31.28300	75.05600	13:44:38	D	22.80
346	TARN TARAN	CHOHLA SAHIB	AQUA	31.28400	75.00200	13:44:38	D	5.00
347	TARN TARAN	CHOHLA SAHIB	AQUA	31.34700	75.11100	13:44:38	D	21.80
348	TARN TARAN	CHOHLA SAHIB	AQUA	31.34800	75.05700	13:44:38	D	7.80
349	TARN TARAN	GANDIWIND TATLA	S-NPP	31.44040	74.71140	13:04:37	D	5.00
350	TARN TARAN	GANDIWIND TATLA	S-NPP	31.47780	74.65770	13:04:37	D	3.10
351	TARN TARAN	GANDIWIND TATLA	AQUA	31.46000	74.69800	13:44:38	D	7.00
352	TARN TARAN	GANDIWIND TATLA	AQUA	31.48000	74.70500	13:44:38	D	5.80
353	TARN TARAN	GANDIWIND TATLA	AQUA	31.48500	74.73600	13:44:38	D	4.40
354	TARN TARAN	GANDIWIND TATLA	AQUA	31.52400	74.81500	13:44:38	D	6.30
355	TARN TARAN	KHADUR SAHIB	S-NPP	31.39530	75.08700	13:04:37	D	2.00
356	TARN TARAN	KHADUR SAHIB	S-NPP	31.40250	75.12140	13:04:37	D	4.30
357	TARN TARAN	KHADUR SAHIB	S-NPP	31.40330	75.12570	13:04:37	D	4.30
358	TARN TARAN	KHADUR SAHIB	S-NPP	31.40790	75.10630	13:04:37	D	1.60
359	TARN TARAN	KHADUR SAHIB	S-NPP	31.43250	75.16290	13:04:37	D	6.30
360	TARN TARAN	KHADUR SAHIB	S-NPP	31.43600	75.17990	13:04:37	D	2.00

361	TARN TARAN	KHADUR SAHIB	S-NPP	31.43660	75.16180	13:04:37	D	3.30
362	TARN TARAN	KHADUR SAHIB	S-NPP	31.44930	75.20320	13:04:37	D	3.40
363	TARN TARAN	KHADUR SAHIB	S-NPP	31.47430	75.17840	13:04:37	D	3.00
364	TARN TARAN	KHADUR SAHIB	S-NPP	31.47560	75.22740	13:04:37	D	2.90
365	TARN TARAN	KHADUR SAHIB	S-NPP	31.48110	75.21240	13:04:37	D	1.70
366	TARN TARAN	KHADUR SAHIB	S-NPP	31.48550	75.05380	13:04:37	D	8.10
367	TARN TARAN	KHADUR SAHIB	S-NPP	31.49370	75.05150	13:04:37	D	3.30
368	TARN TARAN	KHADUR SAHIB	S-NPP	31.49660	75.12800	13:04:37	D	3.10
369	TARN TARAN	KHADUR SAHIB	AQUA	31.34900	75.12200	13:44:38	D	11.60
370	TARN TARAN	KHADUR SAHIB	AQUA	31.39300	75.04800	13:44:38	D	6.30
371	TARN TARAN	KHADUR SAHIB	AQUA	31.40700	75.14200	13:44:38	D	9.30
372	TARN TARAN	KHADUR SAHIB	AQUA	31.41600	75.14000	13:44:38	D	10.30
373	TARN TARAN	KHADUR SAHIB	AQUA	31.46400	75.15700	13:44:38	D	6.60
374	TARN TARAN	KHADUR SAHIB	AQUA	31.49800	75.07500	13:44:38	D	9.70
375	TARN TARAN	KHADUR SAHIB	AQUA	31.50000	75.03100	13:44:38	D	4.70
376	TARN TARAN	KHADUR SAHIB	AQUA	31.52300	75.18800	13:44:38	D	8.30
377	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.33610	75.01420	13:04:37	D	5.00
378	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.34130	74.93140	13:04:37	D	6.20
379	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.34580	74.91150	13:04:37	D	5.80
380	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.35000	74.91030	13:04:37	D	6.80
381	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.36230	74.99050	13:04:37	D	2.00
382	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.36370	74.89250	13:04:37	D	7.60
383	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.37420	74.96410	13:04:37	D	5.30
384	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.38930	74.97380	13:04:37	D	2.80
385	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.40790	75.00090	13:04:37	D	3.70
386	TARN TARAN	NAUSHERA PANNUAN	AQUA	31.33800	74.93000	13:44:38	D	5.70
387	TARN TARAN	NAUSHERA PANNUAN	AQUA	31.34700	74.92800	13:44:38	D	20.10
388	TARN TARAN	NAUSHERA PANNUAN	AQUA	31.35100	75.01400	13:44:38	D	4.80
389	TARN TARAN	NAUSHERA PANNUAN	AQUA	31.36700	74.93500	13:44:38	D	11.10
390	TARN TARAN	NAUSHERA PANNUAN	AQUA	31.38600	74.87700	13:44:38	D	14.40
391	TARN TARAN	NAUSHERA PANNUAN	AQUA	31.38700	74.88800	13:44:38	D	6.40
392	TARN TARAN	PATTI	S-NPP	31.19390	74.89890	13:04:37	D	4.90
393	TARN TARAN	PATTI	S-NPP	31.19480	74.90330	13:04:37	D	4.90

394	TARN TARAN	PATTI	S-NPP	31.20590	74.74490	13:04:37	D	3.40
395	TARN TARAN	PATTI	S-NPP	31.27550	74.78270	13:04:37	D	3.20
396	TARN TARAN	PATTI	S-NPP	31.34300	74.85600	13:04:37	D	2.40
397	TARN TARAN	PATTI	AQUA	31.15700	74.82900	13:44:38	D	19.90
398	TARN TARAN	PATTI	AQUA	31.19500	74.89700	13:44:38	D	11.60
399	TARN TARAN	PATTI	AQUA	31.19600	74.90700	13:44:38	D	14.20
400	TARN TARAN	PATTI	AQUA	31.21700	74.86500	13:44:38	D	6.90
401	TARN TARAN	PATTI	AQUA	31.25500	74.81400	13:44:38	D	4.70
402	TARN TARAN	PATTI	AQUA	31.28600	74.89400	13:44:38	D	7.20
403	TARN TARAN	PATTI	AQUA	31.31600	74.90300	13:44:38	D	6.90
404	TARN TARAN	TARN TARAN	S-NPP	31.40030	74.75130	13:04:37	D	6.80
405	TARN TARAN	TARN TARAN	S-NPP	31.40100	74.75450	13:04:37	D	6.60
406	TARN TARAN	TARN TARAN	S-NPP	31.42900	74.76220	13:04:37	D	4.30
407	TARN TARAN	TARN TARAN	S-NPP	31.43470	74.83150	13:04:37	D	4.20
408	TARN TARAN	TARN TARAN	S-NPP	31.44070	74.99170	13:04:37	D	2.40
409	TARN TARAN	TARN TARAN	S-NPP	31.46880	74.82670	13:04:37	D	9.30
410	TARN TARAN	TARN TARAN	S-NPP	31.50620	74.96540	13:04:37	D	2.90
411	TARN TARAN	TARN TARAN	AQUA	31.36600	74.80600	13:44:38	D	4.20
412	TARN TARAN	TARN TARAN	AQUA	31.39300	74.80500	13:44:38	D	14.50
413	TARN TARAN	TARN TARAN	AQUA	31.40400	74.87900	13:44:38	D	6.10
414	TARN TARAN	TARN TARAN	AQUA	31.40600	74.83500	13:44:38	D	8.80
415	TARN TARAN	TARN TARAN	AQUA	31.41500	75.01600	13:44:38	D	4.70
416	TARN TARAN	TARN TARAN	AQUA	31.41600	74.77900	13:44:38	D	7.60
417	TARN TARAN	TARN TARAN	AQUA	31.43200	74.88400	13:44:38	D	17.70
418	TARN TARAN	TARN TARAN	AQUA	31.43300	74.94800	13:44:38	D	12.50
419	TARN TARAN	TARN TARAN	AQUA	31.44200	74.82700	13:44:38	D	31.70
420	TARN TARAN	TARN TARAN	AQUA	31.44400	74.83800	13:44:38	D	9.80
421	TARN TARAN	TARN TARAN	AQUA	31.45700	74.86800	13:44:38	D	7.50
422	TARN TARAN	TARN TARAN	AQUA	31.45900	74.87800	13:44:38	D	6.20
423	TARN TARAN	TARN TARAN	AQUA	31.52000	74.91300	13:44:38	D	7.30
424	TARN TARAN	VALTOHA	S-NPP	31.18530	74.54160	13:04:37	D	4.20
425	TARN TARAN	VALTOHA	S-NPP	31.18700	74.63420	13:04:37	D	5.00
426	TARN TARAN	VALTOHA	S-NPP	31.19700	74.66050	13:04:37	D	6.60



427	TARN TARAN	VALTOHA	S-NPP	31.24580	74.61760	13:04:37	D	5.20
428	TARN TARAN	VALTOHA	S-NPP	31.25300	74.53500	13:04:37	D	1.70
429	TARN TARAN	VALTOHA	S-NPP	31.29630	74.59130	13:04:37	D	1.80
430	TARN TARAN	VALTOHA	AQUA	31.16800	74.71800	13:44:38	D	4.90
431	TARN TARAN	VALTOHA	AQUA	31.19100	74.63200	13:44:38	D	6.10
432	TARN TARAN	VALTOHA	AQUA	31.24100	74.59900	13:44:38	D	10.90
433	TARN TARAN	VALTOHA	AQUA	31.24300	74.61000	13:44:38	D	5.90
434	TARN TARAN	VALTOHA	AQUA	31.24900	74.58700	13:44:38	D	10.50
435	TARN TARAN	VALTOHA	AQUA	31.29100	74.56000	13:44:38	D	8.00
436	TARN TARAN	VALTOHA	AQUA	31.29300	74.57100	13:44:38	D	10.00

### Details of residue burning events in Haryana on 19-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMBALA	AMBALA-II	S-NPP	30.07830	76.60620	13:04:37	D	5.20
2	AMBALA	AMBALA-II	S-NPP	30.13660	76.63620	13:04:37	D	4.50
3	AMBALA	AMBALA-II	S-NPP	30.20020	76.71360	13:04:37	D	3.50
4	AMBALA	AMBALA-II	S-NPP	30.26340	76.57900	13:04:37	D	2.70
5	AMBALA	BARARA	S-NPP	30.23110	76.99760	13:04:37	D	3.20
6	AMBALA	NARAINGARH	S-NPP	30.43220	77.08500	13:04:37	D	3.50
7	AMBALA	SAHA	S-NPP	30.21760	76.92760	13:04:37	D	5.30
8	FARIDABAD	BALLABGARH	S-NPP	28.31600	77.44100	13:04:37	D	3.80
9	FATEHABAD	BHUNA	AQUA	29.50100	75.67400	13:44:38	D	6.50
10	FATEHABAD	BHUNA	AQUA	29.58800	75.75500	13:44:38	D	6.50
11	FATEHABAD	FATEHABAD	S-NPP	29.53270	75.51670	13:04:37	D	11.10
12	FATEHABAD	FATEHABAD	S-NPP	29.53360	75.52110	13:04:37	D	11.10
13	FATEHABAD	FATEHABAD	AQUA	29.44500	75.48000	13:44:38	D	5.90
14	FATEHABAD	TOHANA	S-NPP	29.59360	75.83800	13:04:37	D	2.60
15	FATEHABAD	TOHANA	S-NPP	29.59950	75.86720	13:04:37	D	2.90
16	FATEHABAD	TOHANA	S-NPP	29.61930	75.94490	13:04:37	D	2.20
17	FATEHABAD	TOHANA	S-NPP	29.62740	75.77160	13:04:37	D	6.90
18	FATEHABAD	TOHANA	S-NPP	29.64090	75.88260	13:04:37	D	3.40
19	FATEHABAD	TOHANA	S-NPP	29.67710	75.85620	13:04:37	D	2.70
20	FATEHABAD	TOHANA	S-NPP	29.69370	75.91720	13:04:37	D	1.70
21	FATEHABAD	TOHANA	AQUA	29.69200	75.84500	13:44:38	D	10.90
22	FATEHABAD	TOHANA	AQUA	29.70100	75.84300	13:44:38	D	11.60
23	FATEHABAD	TOHANA	AQUA	29.71300	75.92400	13:44:38	D	11.40
24	HISAR	NARNAUND	S-NPP	29.26870	76.16630	13:04:37	D	2.00
25	JIND	NARWANA	S-NPP	29.63760	76.18350	13:04:37	D	2.20
26	JIND	UCHANA	S-NPP	29.52570	76.25320	13:04:37	D	1.40
27	JIND	UCHANA	S-NPP	29.53920	76.13170	13:04:37	D	3.00
28	JIND	UCHANA	S-NPP	29.54240	76.21120	13:04:37	D	3.50
29	JIND	UCHANA	S-NPP	29.54640	76.21010	13:04:37	D	3.50
30	KAITHAL	GUHLA	S-NPP	29.97660	76.35170	13:04:37	D	4.10

31	KAITHAL	GUHLA	S-NPP	29.97980	76.35510	13:04:37	D	3.70
32	KAITHAL	GUHLA	S-NPP	30.02050	76.22650	13:04:37	D	4.60
33	KAITHAL	GUHLA	S-NPP	30.02290	76.34390	13:04:37	D	4.20
34	KAITHAL	GUHLA	S-NPP	30.06890	76.36860	13:04:37	D	2.90
35	KAITHAL	GUHLA	S-NPP	30.07070	76.44090	13:04:37	D	7.70
36	KAITHAL	GUHLA	S-NPP	30.08090	76.31460	13:04:37	D	11.30
37	KAITHAL	GUHLA	AQUA	29.99100	76.32100	13:44:38	D	6.70
38	KAITHAL	GUHLA	AQUA	30.04800	76.38700	13:44:38	D	5.90
39	KAITHAL	KAITHAL	S-NPP	29.75710	76.33680	13:04:37	D	5.90
40	KAITHAL	KAITHAL	S-NPP	29.76110	76.33570	13:04:37	D	5.10
41	KAITHAL	KAITHAL	S-NPP	29.81080	76.52400	13:04:37	D	14.90
42	KAITHAL	KAITHAL	S-NPP	29.87770	76.53090	13:04:37	D	2.10
43	KAITHAL	KAITHAL	S-NPP	29.90050	76.52890	13:04:37	D	4.50
44	KAITHAL	KAITHAL	S-NPP	29.90210	76.53060	13:04:37	D	4.80
45	KAITHAL	KAITHAL	AQUA	29.82000	76.54400	13:44:38	D	5.20
46	KAITHAL	KALAYAT	S-NPP	29.64210	76.39290	13:04:37	D	2.90
47	KAITHAL	PUNDRI	S-NPP	29.65060	76.59230	13:04:37	D	4.60
48	KAITHAL	PUNDRI	S-NPP	29.65170	76.59800	13:04:37	D	6.60
49	KAITHAL	PUNDRI	S-NPP	29.81540	76.58880	13:04:37	D	5.50
50	KAITHAL	PUNDRI	S-NPP	29.84210	76.59990	13:04:37	D	2.90
51	KAITHAL	PUNDRI	S-NPP	29.85210	76.56750	13:04:37	D	4.70
52	KAITHAL	PUNDRI	S-NPP	29.86650	76.59960	13:04:37	D	3.00
53	KAITHAL	PUNDRI	S-NPP	29.88650	76.57660	13:04:37	D	4.30
54	KAITHAL	PUNDRI	AQUA	29.80800	76.58800	13:44:38	D	9.50
55	KAITHAL	PUNDRI	AQUA	29.82100	76.55400	13:44:38	D	5.20
56	KAITHAL	PUNDRI	AQUA	29.85400	76.59000	13:44:38	D	10.00
57	KAITHAL	PUNDRI	AQUA	29.89700	76.56500	13:44:38	D	5.70
58	KAITHAL	PUNDRI	AQUA	29.91500	76.68900	13:44:38	D	5.20
59	KAITHAL	RAJOUND	S-NPP	29.61740	76.44330	13:04:37	D	4.10
60	KAITHAL	RAJOUND	S-NPP	29.64490	76.39330	13:04:37	D	6.70
61	KAITHAL	SIWAN	S-NPP	29.91950	76.20690	13:04:37	D	2.70
62	KAITHAL	SIWAN	S-NPP	30.00860	76.39640	13:04:37	D	5.00
63	KAITHAL	SIWAN	AQUA	29.88100	76.25300	13:44:38	D	7.30
64	KAITHAL	SIWAN	AQUA	29.89000	76.25100	13:44:38	D	8.50

65	KAITHAL	SIWAN	AQUA	30.00000	76.38200	13:44:38	D	6.00
66	KARNAL	ASSANDH	AQUA	29.60800	76.80200	13:44:38	D	8.40
67	KARNAL	CHIRAO	S-NPP	29.62290	76.95380	13:04:37	D	3.40
68	KARNAL	CHIRAO	S-NPP	29.63300	76.85870	13:04:37	D	9.80
69	KARNAL	CHIRAO	S-NPP	29.63420	76.86210	13:04:37	D	9.10
70	KARNAL	CHIRAO	S-NPP	29.77690	76.80720	13:04:37	D	11.30
71	KARNAL	CHIRAO	AQUA	29.60900	76.81200	13:44:38	D	9.30
72	KARNAL	CHIRAO	AQUA	29.64100	76.83800	13:44:38	D	5.90
73	KARNAL	CHIRAO	AQUA	29.65600	76.81900	13:44:38	D	19.30
74	KARNAL	GHARAUNDA	S-NPP	29.54480	76.94460	13:04:37	D	6.30
75	KARNAL	GHARAUNDA	S-NPP	29.56880	77.04730	13:04:37	D	3.00
76	KARNAL	GHARAUNDA	AQUA	29.55600	77.09400	13:44:38	D	4.10
77	KARNAL	GHARAUNDA	AQUA	29.60800	77.00300	13:44:38	D	7.00
78	KARNAL	KARNAL	S-NPP	29.67440	76.94440	13:04:37	D	3.20
79	KARNAL	KARNAL	S-NPP	29.69360	76.93960	13:04:37	D	8.00
80	KARNAL	KARNAL	S-NPP	29.76900	76.99350	13:04:37	D	3.60
81	KARNAL	NILOKHERI	S-NPP	29.82880	76.90980	13:04:37	D	5.90
82	KARNAL	NILOKHERI	S-NPP	29.85980	76.92490	13:04:37	D	4.70
83	KARNAL	NILOKHERI	S-NPP	29.86070	76.92230	13:04:37	D	3.30
84	KARNAL	NILOKHERI	AQUA	29.87400	76.79800	13:44:38	D	4.60
85	KURUKSHETRA	BABAIN	S-NPP	30.08090	77.02340	13:04:37	D	3.80
86	KURUKSHETRA	BABAIN	AQUA	30.03700	76.98000	13:44:38	D	5.90
87	KURUKSHETRA	ISMAILABAD	S-NPP	30.03470	76.65280	13:04:37	D	4.20
88	KURUKSHETRA	ISMAILABAD	S-NPP	30.04300	76.67420	13:04:37	D	6.10
89	KURUKSHETRA	ISMAILABAD	S-NPP	30.10920	76.74500	13:04:37	D	5.00
90	KURUKSHETRA	ISMAILABAD	S-NPP	30.13720	76.63840	13:04:37	D	6.70
91	KURUKSHETRA	ISMAILABAD	S-NPP	30.15140	76.65010	13:04:37	D	6.70
92	KURUKSHETRA	ISMAILABAD	S-NPP	30.15250	76.65560	13:04:37	D	6.30
93	KURUKSHETRA	ISMAILABAD	S-NPP	30.16120	76.74100	13:04:37	D	3.00
94	KURUKSHETRA	ISMAILABAD	S-NPP	30.16650	76.77100	13:04:37	D	1.20
95	KURUKSHETRA	ISMAILABAD	S-NPP	30.16770	76.77410	13:04:37	D	3.40
96	KURUKSHETRA	ISMAILABAD	AQUA	30.06100	76.62400	13:44:38	D	5.20
97	KURUKSHETRA	ISMAILABAD	AQUA	30.11200	76.65000	13:44:38	D	9.40
98	KURUKSHETRA	ISMAILABAD	AQUA	30.14000	76.65600	13:44:38	D	6.80

99	KURUKSHETRA	PEHOWA	S-NPP	29.96440	76.50050	13:04:37	D	5.80
100	KURUKSHETRA	PEHOWA	AQUA	29.98600	76.67500	13:44:38	D	9.80
101	KURUKSHETRA	SHAHBAD	S-NPP	30.12650	76.79280	13:04:37	D	4.20
102	KURUKSHETRA	SHAHBAD	AQUA	30.12100	76.85100	13:44:38	D	4.80
103	KURUKSHETRA	SHAHBAD	AQUA	30.16300	76.88600	13:44:38	D	17.40
104	KURUKSHETRA	SHAHBAD	AQUA	30.21400	76.79600	13:44:38	D	5.60
105	KURUKSHETRA	THANESAR	S-NPP	29.91940	76.76880	13:04:37	D	4.20
106	KURUKSHETRA	THANESAR	S-NPP	29.92900	76.69370	13:04:37	D	3.50
107	KURUKSHETRA	THANESAR	S-NPP	29.92940	76.90500	13:04:37	D	4.80
108	KURUKSHETRA	THANESAR	S-NPP	29.92970	76.69590	13:04:37	D	4.20
109	KURUKSHETRA	THANESAR	S-NPP	29.93420	76.84620	13:04:37	D	5.50
110	KURUKSHETRA	THANESAR	S-NPP	30.04210	76.73520	13:04:37	D	3.60
111	KURUKSHETRA	THANESAR	S-NPP	30.04240	76.73290	13:04:37	D	1.80
112	KURUKSHETRA	THANESAR	AQUA	29.92400	76.82500	13:44:38	D	6.60
113	PANIPAT	PANIPAT	S-NPP	29.42600	77.00190	13:04:37	D	3.90
114	PANIPAT	PANIPAT	S-NPP	29.46990	76.95410	13:04:37	D	3.20
115	PANIPAT	SANAULI KHURD	S-NPP	29.40860	77.05790	13:04:37	D	2.90
116	SIRSA	BARAGUNDA	S-NPP	29.77590	75.16470	13:04:37	D	7.10
117	SIRSA	NATHUSARI CHOPTA	S-NPP	29.51510	75.23580	13:04:37	D	7.50
118	SIRSA	ODHAN	S-NPP	29.90620	74.91070	13:04:37	D	4.70
119	YAMUNANAGAR	BILASPUR	S-NPP	30.35770	77.31370	13:04:37	D	3.20
120	YAMUNANAGAR	CHHACHHRAULI	S-NPP	30.22030	77.30710	13:04:37	D	4.50
121	YAMUNANAGAR	MUSTAFABAD	S-NPP	30.29520	77.20930	13:04:37	D	2.90
122	YAMUNANAGAR	SADHAURA	S-NPP	30.35740	77.18660	13:04:37	D	3.80

### Details of residue burning events in Uttar Pradesh on 19-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ALIGARH	ATRAULI	AQUA	28.05900	78.34200	13:44:38	D	7.10
2	ALIGARH	KHAIR	AQUA	28.03600	77.54300	13:44:38	D	5.90
3	CHITRAKOOT	MAU	S-NPP	25.30200	81.21260	13:04:37	D	5.20
4	GAUTAMBUDHNAGAR	GAUTAMBUDHNAGAR	S-NPP	28.32170	77.66180	13:04:37	D	1.70
5	KANPUR	BILHAUR	S-NPP	26.72010	80.04830	13:04:37	D	10.40
6	KANPUR	BILHAUR	S-NPP	26.72040	80.04490	13:04:37	D	9.20
7	KANPUR	BILHAUR	S-NPP	26.72880	80.05200	13:04:37	D	6.30
8	KANPUR	BILHAUR	S-NPP	26.74920	80.06550	13:04:37	D	7.60
9	KANPUR	BILHAUR	S-NPP	26.75340	80.06910	13:04:37	D	13.50
10	KANPUR	BILHAUR	S-NPP	26.75540	80.05970	13:04:37	D	7.90
11	KANPUR	BILHAUR	S-NPP	26.75560	80.08190	13:04:37	D	10.00
12	KANPUR	BILHAUR	S-NPP	26.75610	80.06400	13:04:37	D	13.50
13	KANPUR	BILHAUR	S-NPP	26.76730	80.06610	13:04:37	D	3.20
14	KANPUR	BILHAUR	S-NPP	26.76870	80.07470	13:04:37	D	6.50
15	KHERI	GOLA	S-NPP	28.26430	80.33040	13:04:37	D	1.90
16	MATHURA	CHHATA	AQUA	27.79600	77.67800	13:44:38	D	5.80
17	PILHIBHIT	BISALPUR	S-NPP	28.24250	79.97540	13:04:37	D	2.90
18	PILHIBHIT	PURANPUR	S-NPP	28.33640	80.17330	13:04:37	D	2.50
19	PILHIBHIT	PURANPUR	S-NPP	28.35260	80.14370	13:04:37	D	2.80
20	PILHIBHIT	PURANPUR	S-NPP	28.35460	80.13460	13:04:37	D	3.80
21	PILHIBHIT	PURANPUR	S-NPP	28.37140	80.11420	13:04:37	D	2.80
22	PILHIBHIT	PURANPUR	S-NPP	28.43900	80.24250	13:04:37	D	4.20
23	PILHIBHIT	PURANPUR	S-NPP	28.53770	80.22260	13:04:37	D	1.50
24	RAMPUR	BILASPUR	S-NPP	28.86830	79.34310	01:54:37	N	1.50
25	RAMPUR	RAMPUR	S-NPP	28.94000	79.10500	13:04:37	D	2.50
26	SHAHJAHANPUR	JALALABAD	S-NPP	27.60540	79.69270	13:04:37	D	6.70
27	SHAHJAHANPUR	JALALABAD	S-NPP	27.60890	79.69190	13:04:37	D	3.60
28	SHAHJAHANPUR	JALALABAD	S-NPP	27.61160	79.68680	13:04:37	D	3.70
29	SHAHJAHANPUR	PUWANYA	S-NPP	28.13730	80.11470	13:04:37	D	3.70

30	SHAHJAHANPUR	PUWANYA	S-NPP	28.15520	80.10280	13:04:37	D	1.90
31	SHAHJAHANPUR	PUWANYA	S-NPP	28.18890	80.21720	13:04:37	D	14.90
32	SHAHJAHANPUR	PUWANYA	S-NPP	28.20820	80.14370	13:04:37	D	7.10
33	SHAHJAHANPUR	PUWANYA	S-NPP	28.26540	80.00550	13:04:37	D	2.70
34	SHAHJAHANPUR	PUWANYA	AQUA	28.16400	80.07900	13:44:38	D	8.60
35	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.92710	79.91760	13:04:37	D	2.30
36	SHARANPUR	NAKUR	S-NPP	29.82110	77.36130	13:04:37	D	3.00

**Details of residue burning events in Rajasthan on 19-Oct-2022**

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m <sup>2</sup> )
1	BARAN	ANTA	S-NPP	25.17850	76.27930	13:04:37	D	3.40
2	BARAN	SHAHBAD	S-NPP	25.14720	77.14950	13:04:37	D	3.50
3	BUNDI	BUNDI	S-NPP	25.45170	75.72010	13:04:37	D	4.00
4	BUNDI	KESHORAIPTAN	S-NPP	25.38140	75.87540	13:04:37	D	2.40
5	BUNDI	KESHORAIPTAN	S-NPP	25.38410	75.87800	13:04:37	D	3.30
6	HANUMANGARH	HANUMANGARH	S-NPP	29.57090	74.38170	13:04:37	D	6.20
7	HANUMANGARH	HANUMANGARH	S-NPP	29.57270	74.37840	13:04:37	D	3.30
8	KOTA	LADPURA	S-NPP	25.18070	75.96160	13:04:37	D	5.70
9	KOTA	LADPURA	S-NPP	25.18320	75.96290	13:04:37	D	4.10
10	KOTA	LADPURA	S-NPP	25.24470	76.02590	13:04:37	D	2.30
11	SWAIMADHOPUR	KHANDAR	S-NPP	25.95630	76.60150	13:04:37	D	3.20
12	SWAIMADHOPUR	KHANDAR	S-NPP	25.96050	76.60050	13:04:37	D	3.20

**Details of residue burning events in Madhya Pradesh on 19-Oct-2022**

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ASHOKNAGAR	MUNGAOLI	S-NPP	24.54460	77.87860	13:04:37	D	4.70
2	DAMOH	BATIAGARH	S-NPP	24.03470	79.25930	13:04:37	D	4.30
3	DAMOH	PATHARIA	S-NPP	23.93680	79.14910	13:04:37	D	3.90
4	HOSHANGABAD	HOSHANGABAD	S-NPP	22.58560	77.58900	13:04:37	D	2.70
5	HOSHANGABAD	ITARSI	S-NPP	22.45690	77.82500	13:04:37	D	9.30
6	SEHORE	NASRULLAHGANJ	S-NPP	22.78220	77.36530	13:04:37	D	17.20
7	SEHORE	SEHORE	S-NPP	23.26160	77.08200	13:04:37	D	3.80
8	SEONI	LAKHNADOU	S-NPP	22.60990	79.57160	13:04:37	D	3.30
9	SHIVPURI	KOLARAS	S-NPP	24.98250	77.75540	13:04:37	D	3.10
10	VIDESHA	GYARASPUR	S-NPP	23.60730	78.03660	13:04:37	D	3.00
11	VIDESHA	LETERI	S-NPP	24.19840	77.47470	13:04:37	D	5.90
12	VIDESHA	SIRANJ	S-NPP	24.20100	77.80810	13:04:37	D	5.00



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

S. No.	Satellite Name	Sensor	Resolution (meter)	Day / Night Passes
1.	Suomi NPP	VIIRS	375 / 750	Both
2.	Terra	MODIS	1000	Both
3.	Aqua	MODIS	1000	Both

**The rice mask for the Punjab and Haryana were provided by MNCFC, MoA&FW, Govt of India  
The kharif crop mask for Delhi, Uttar Pradesh, Rajasthan and Madhya Pradesh were provided by NRSC**

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GIS Maps of fire events can be visualized online on ICAR KRISHI Geoportal website: <http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

(Part of KRISHI Portal: <https://krishi.icar.gov.in> initiative)

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

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