



Bulletin No. 37

Events Date:
21-Oct-2022

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21-Oct-2022



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



Prepared by:

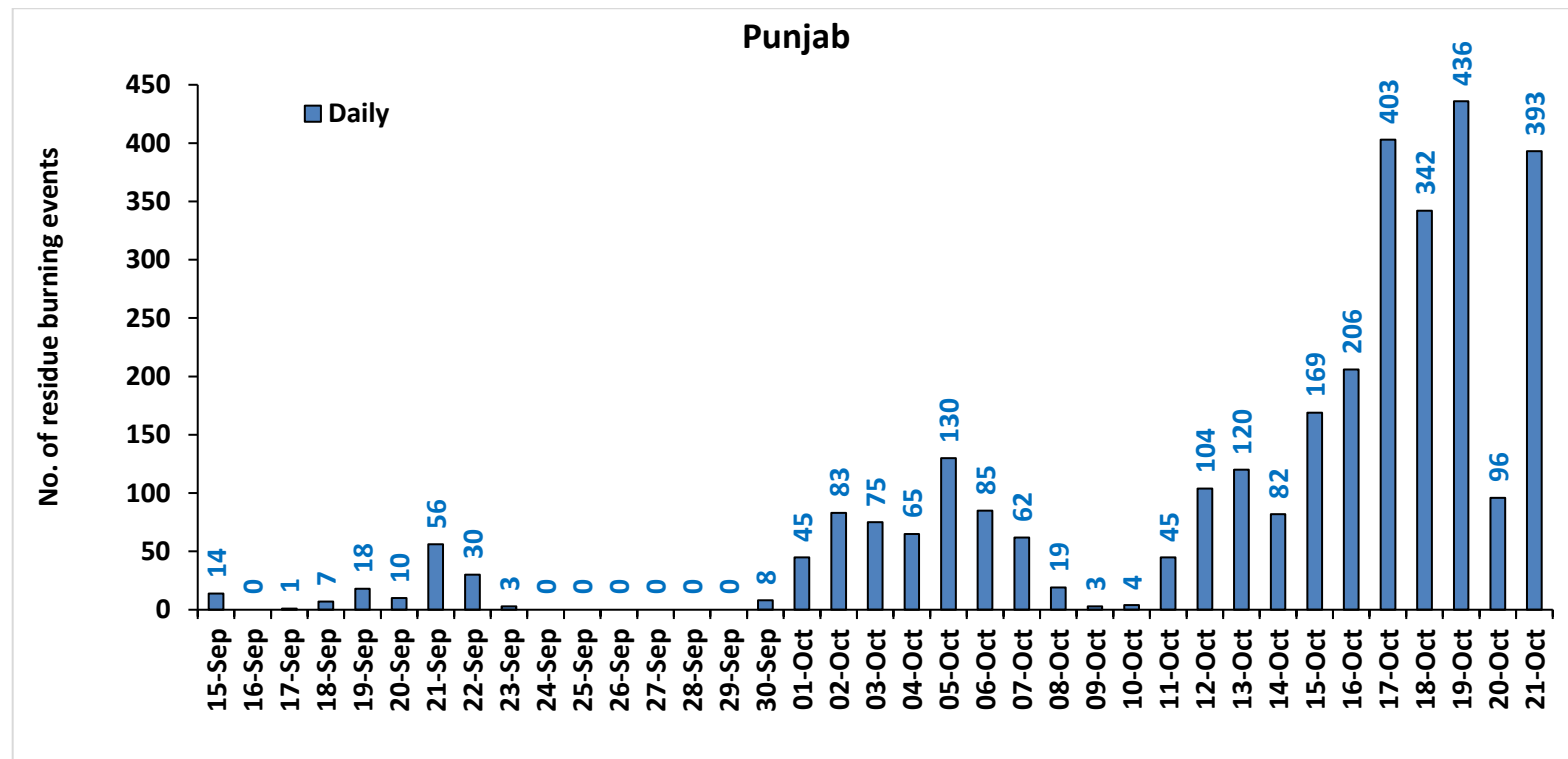
Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

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

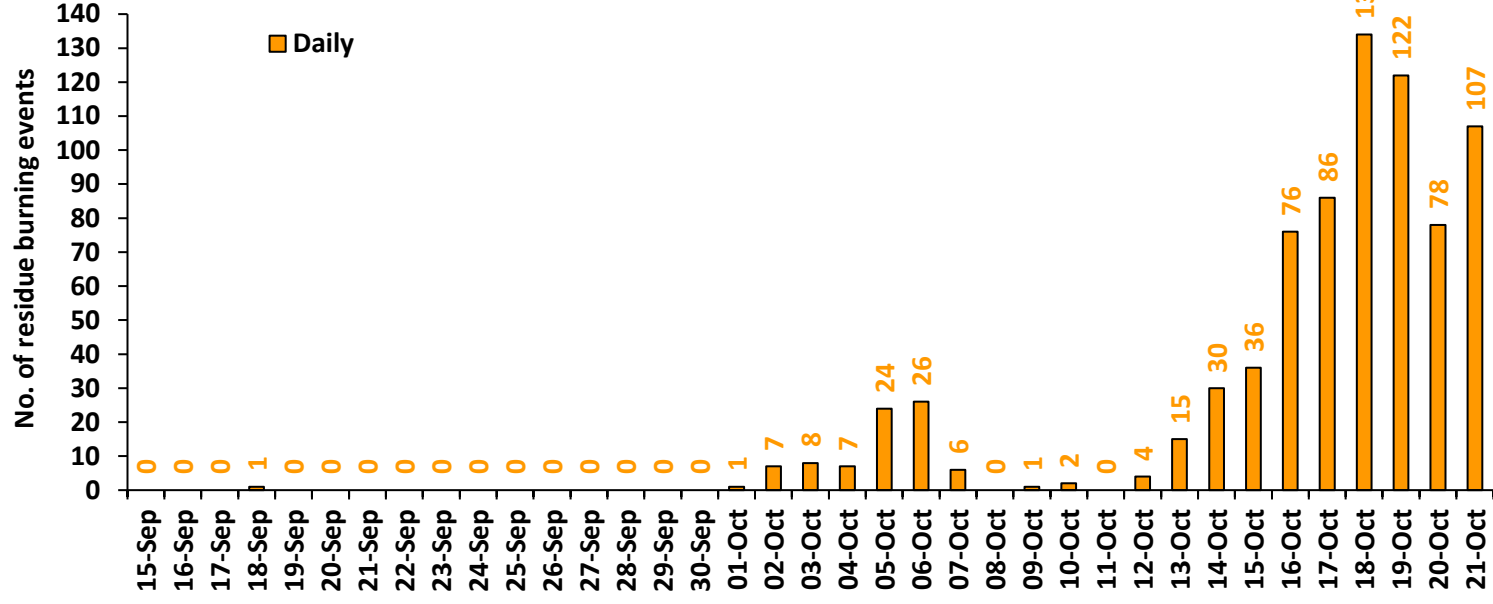
Highlights for 21-Oct-2022

- 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 **547** residue burning events in the six study States on 21-Oct-2022.
- The state wise events detected on 21-Oct-2022 were **393** in Punjab, **107** in Haryana, **23** in UP, **0** in Delhi, **6** in Rajasthan and **18** in MP.
- Total **4240** burning events were detected in the six states between 15-Sept-2022 and 21-Oct-2022, which are distributed as **3114**, **771**, **210**, **3**, **59** and **83** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.

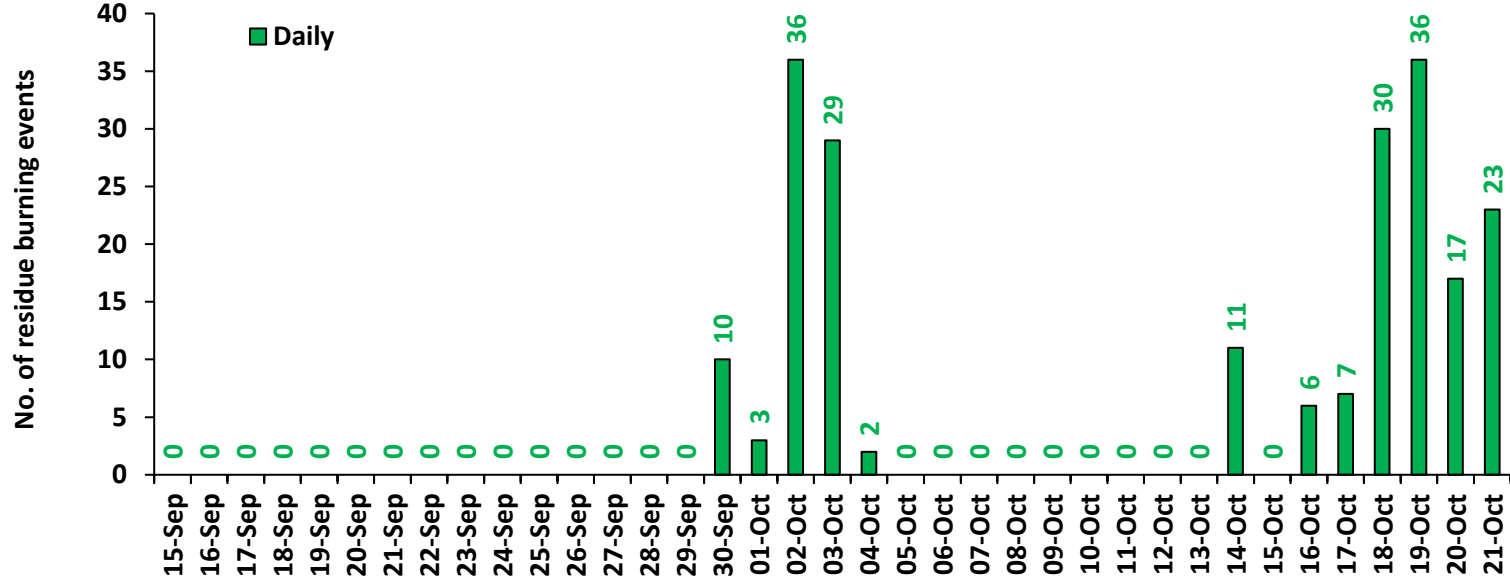
Temporal distribution of rice residue burning events for the study States in 2022

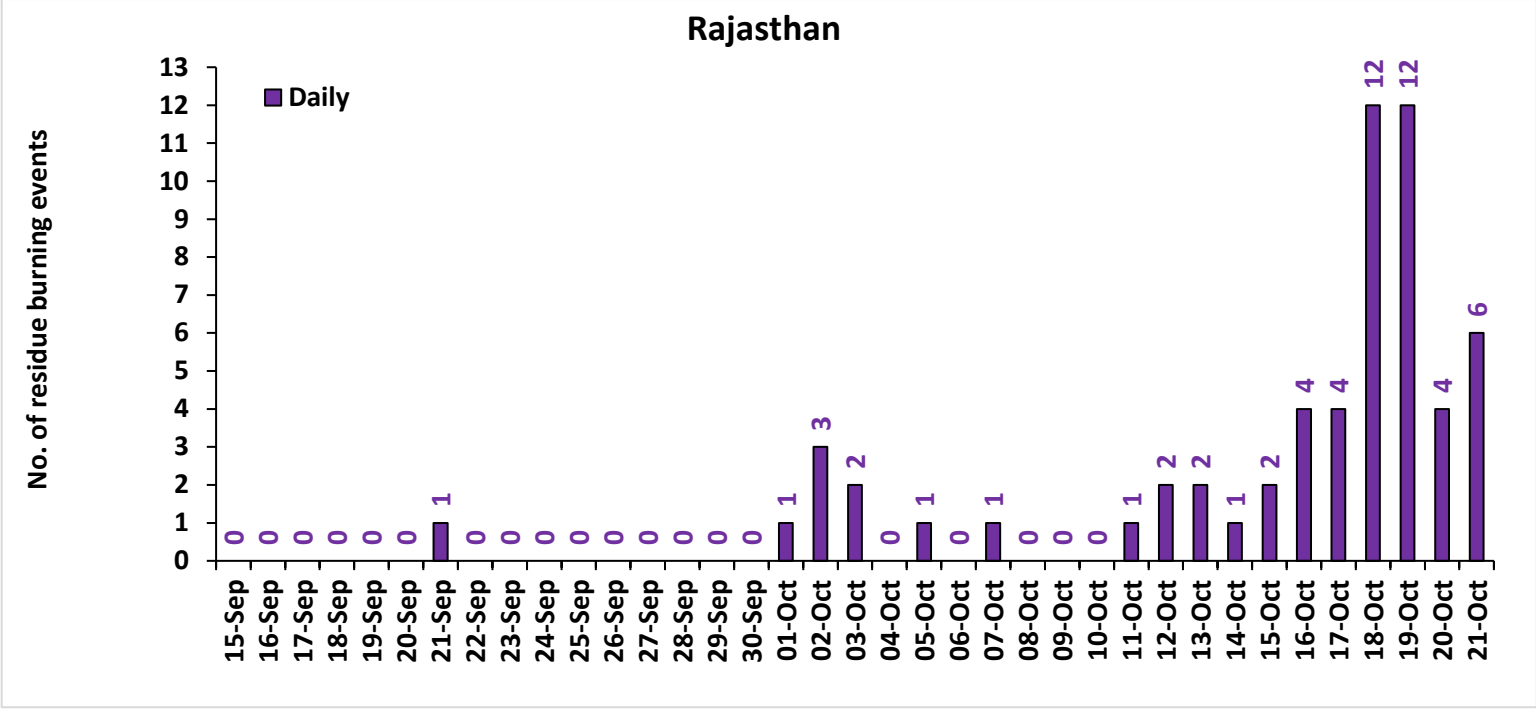
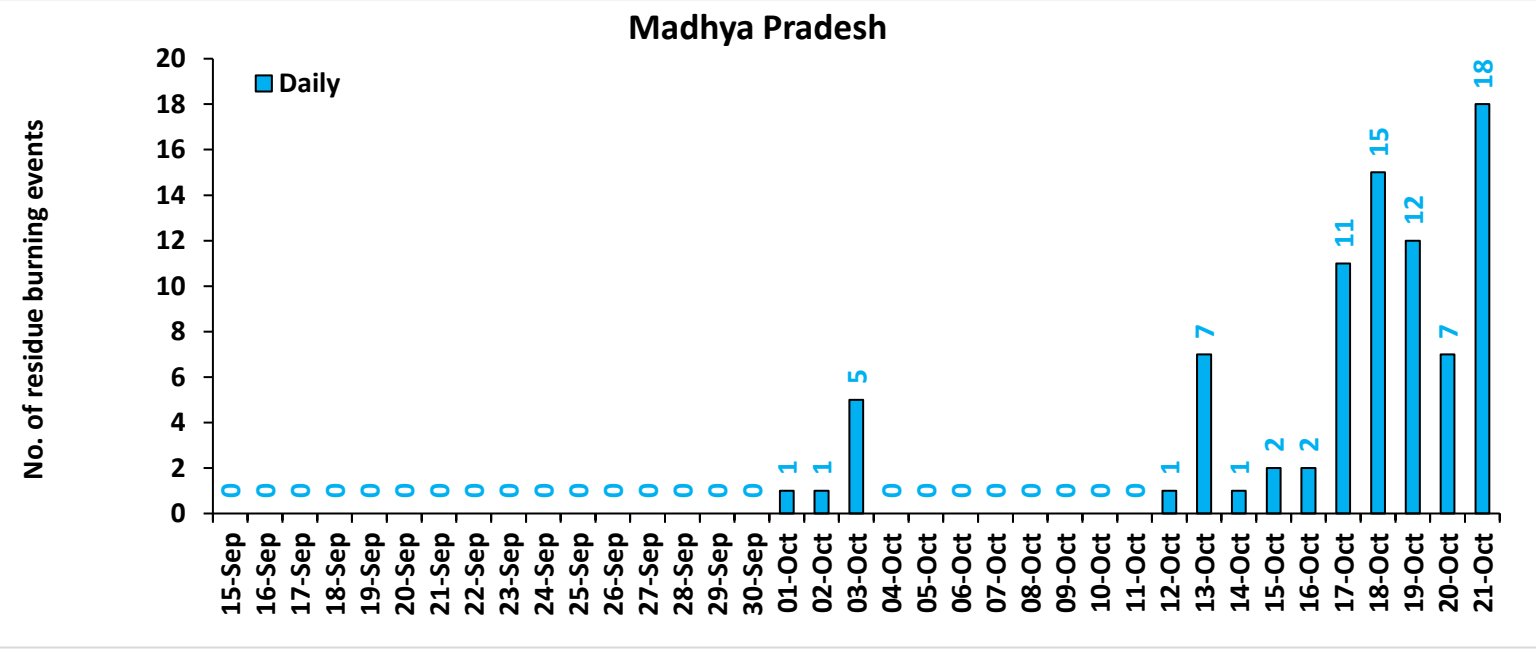


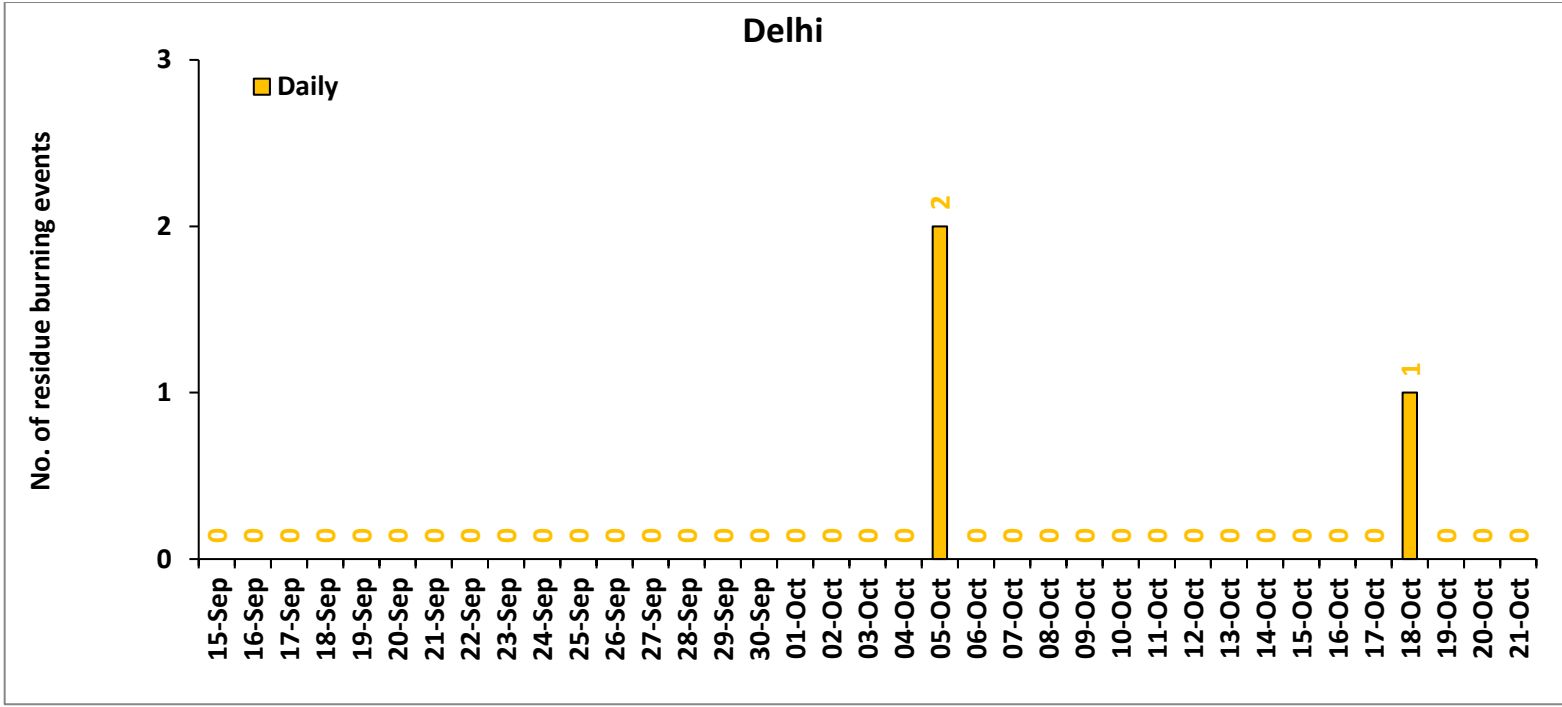
Haryana



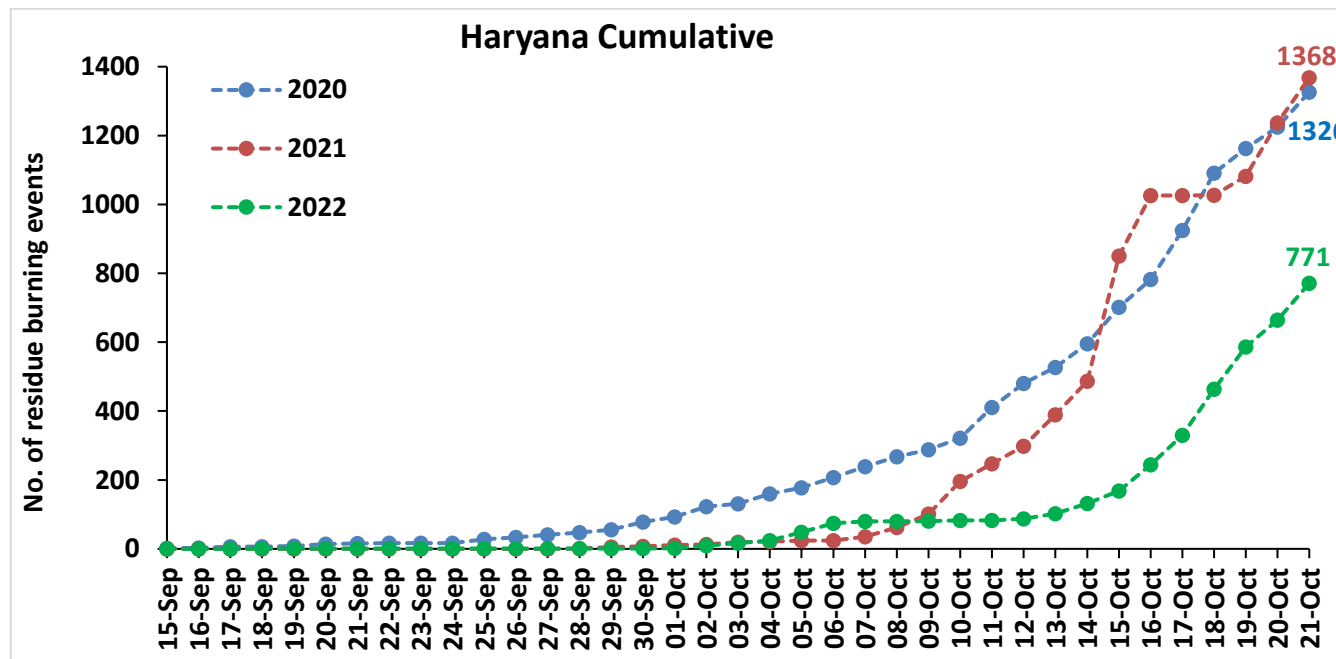
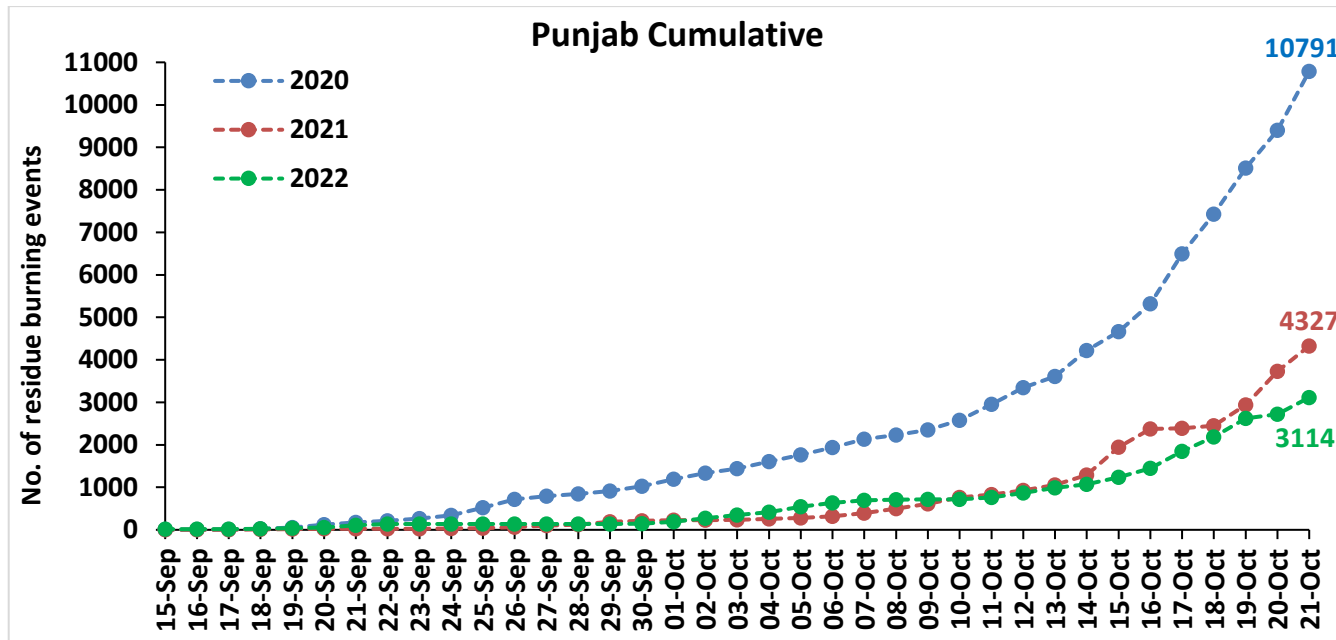
Uttar Pradesh

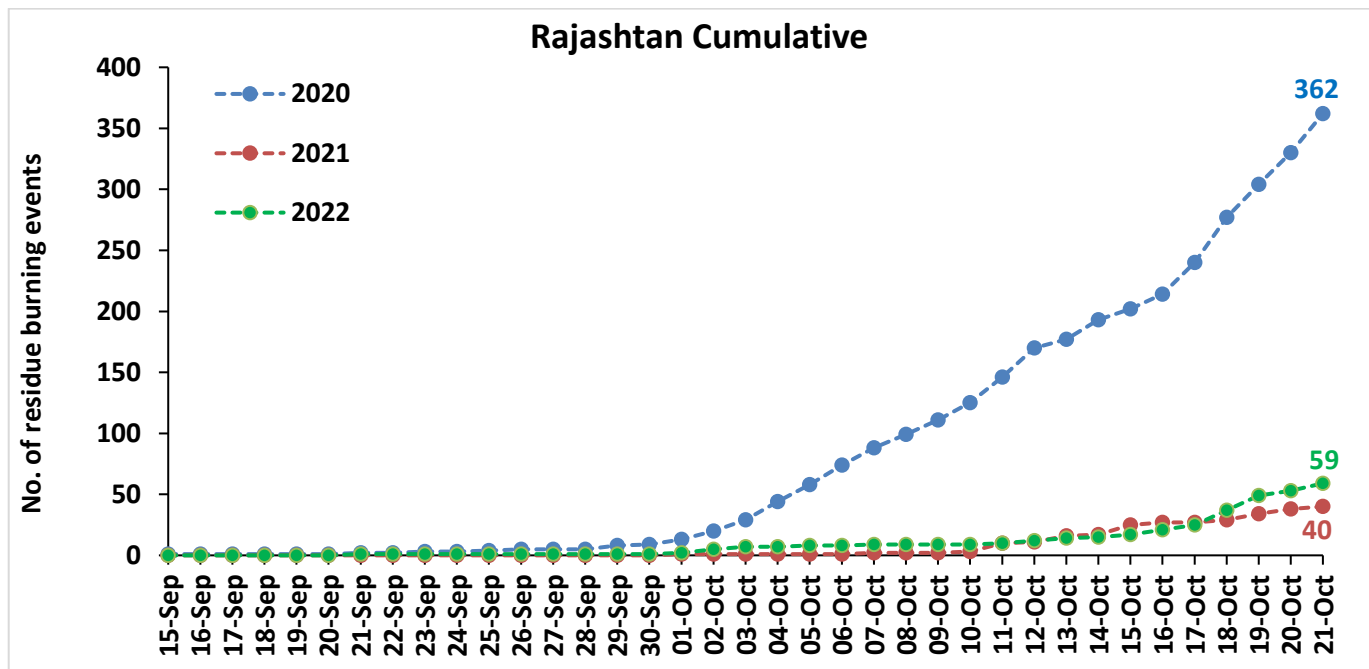
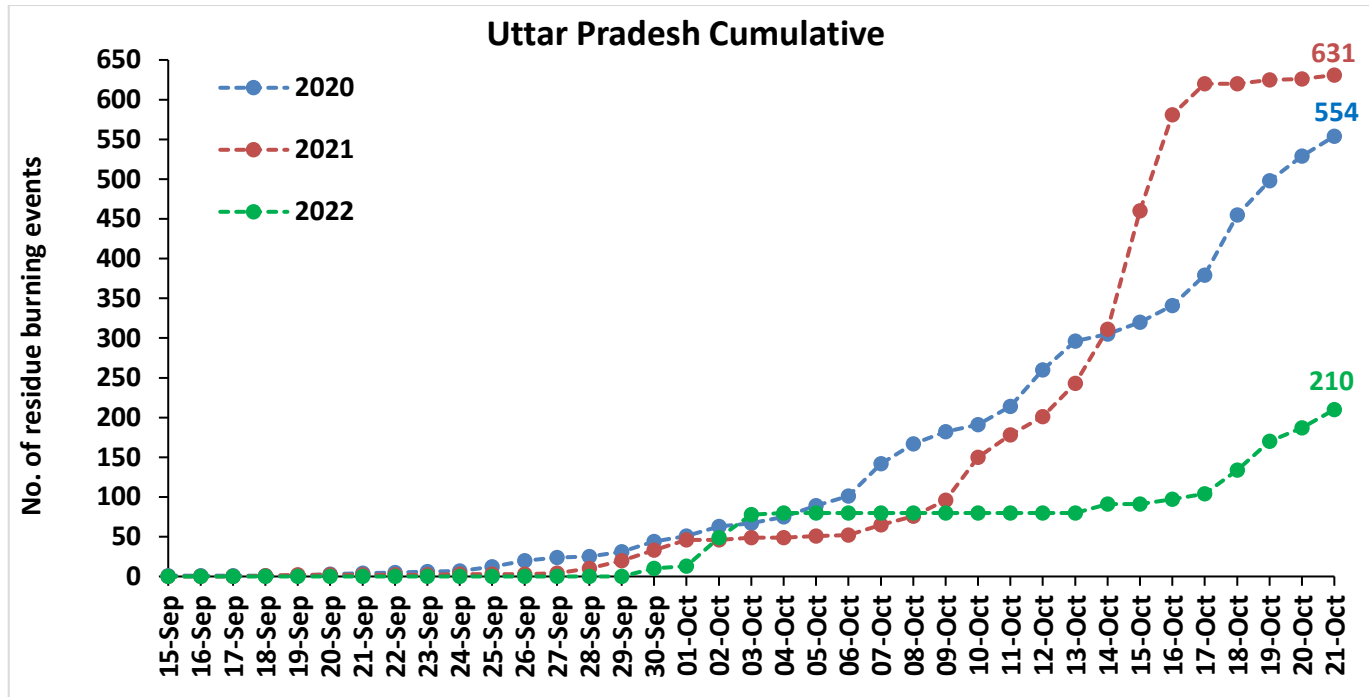


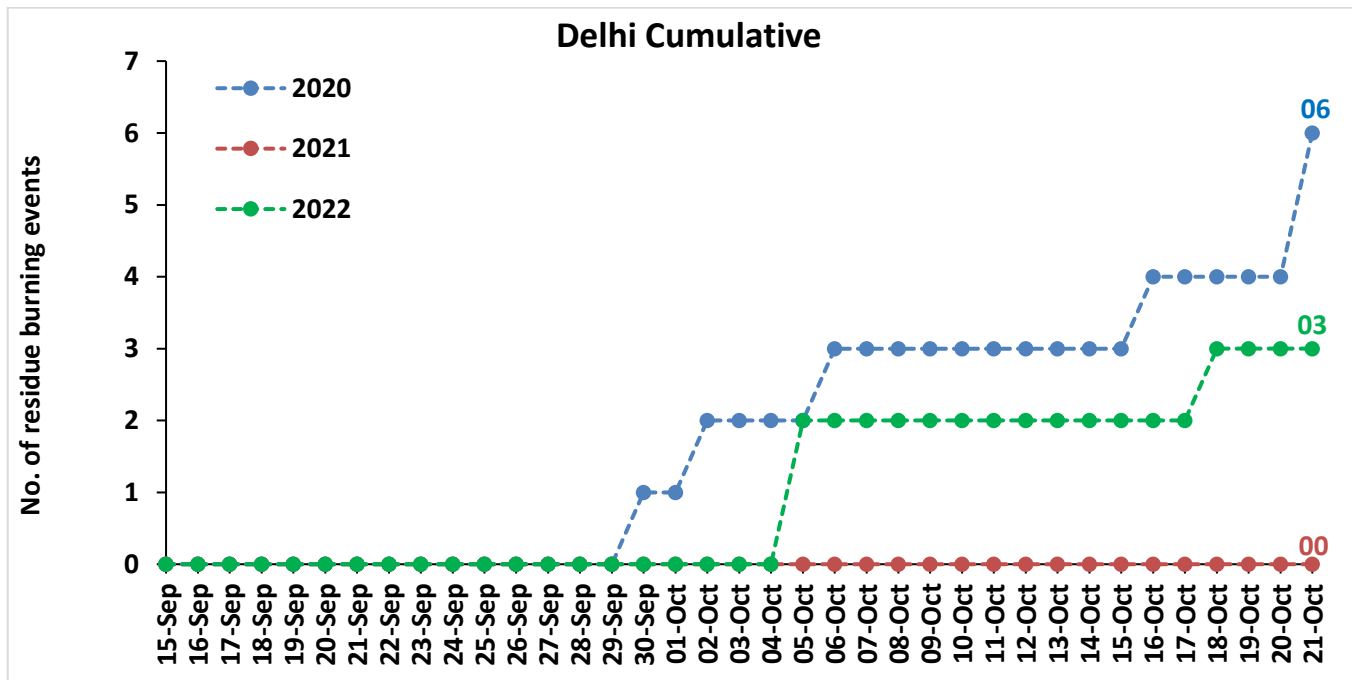
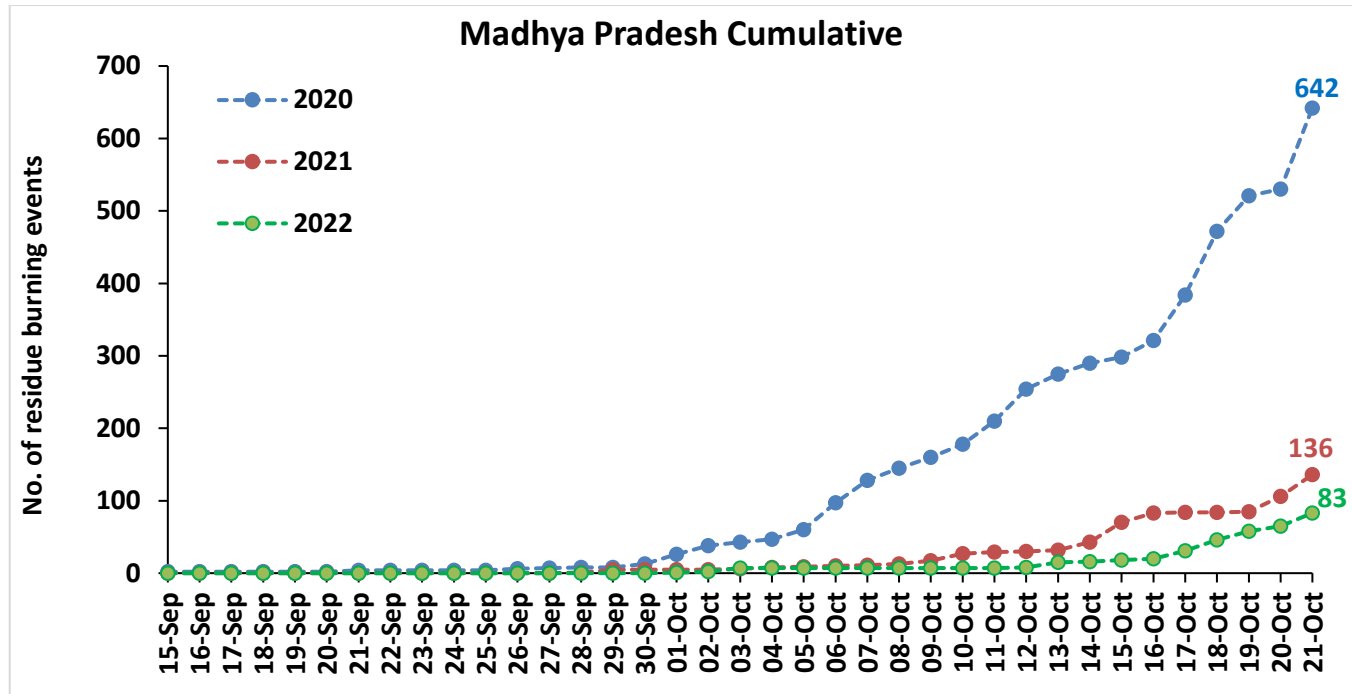




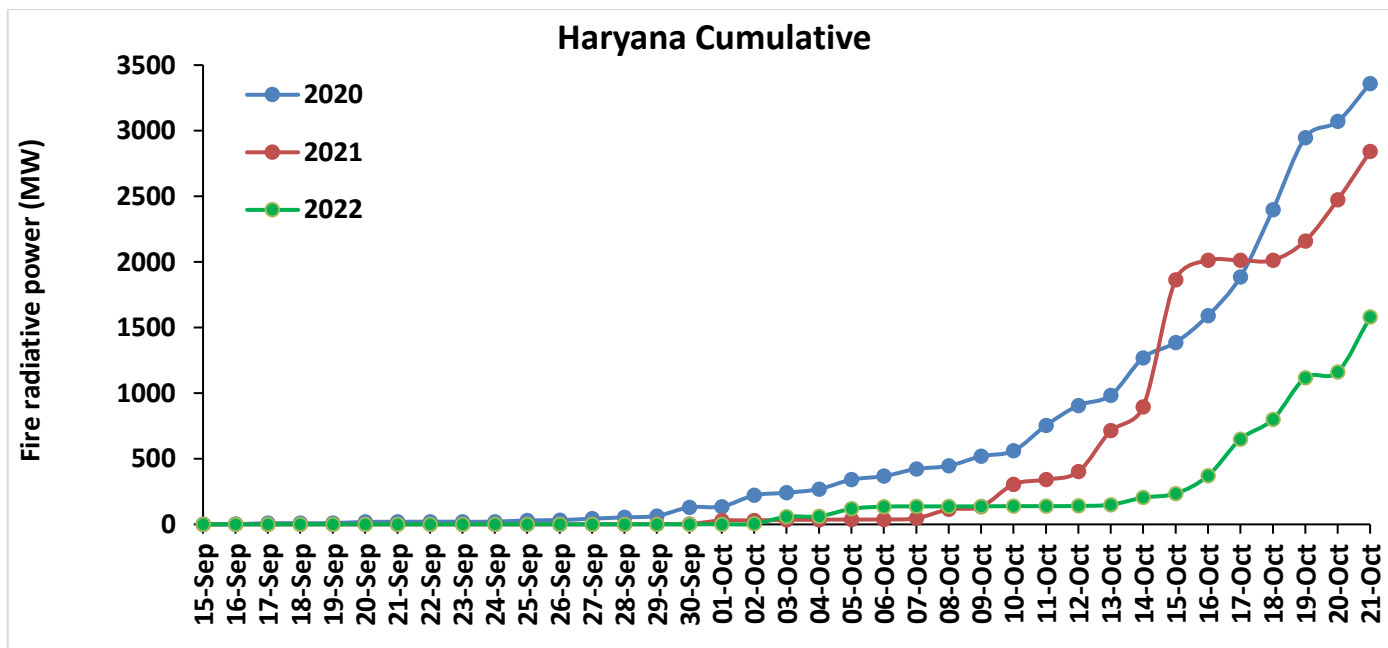
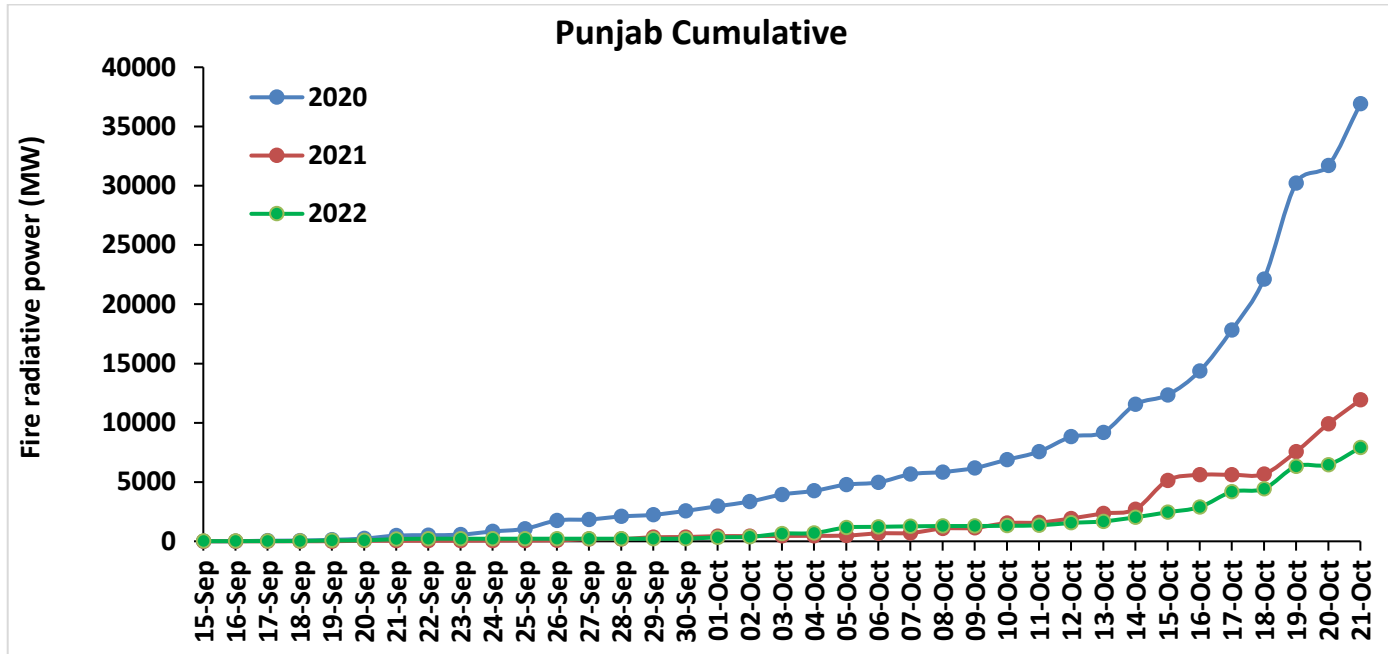
Comparison of residue burning events in current year (2022) with previous years (2020 and 2021) for the study States



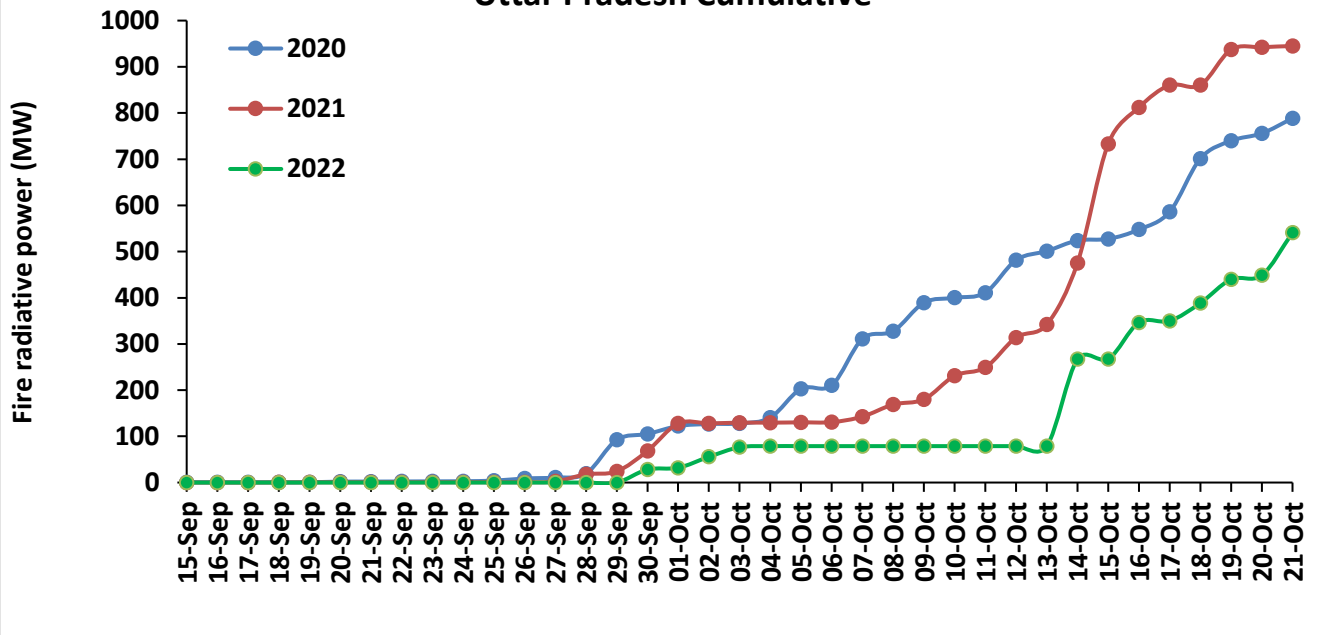




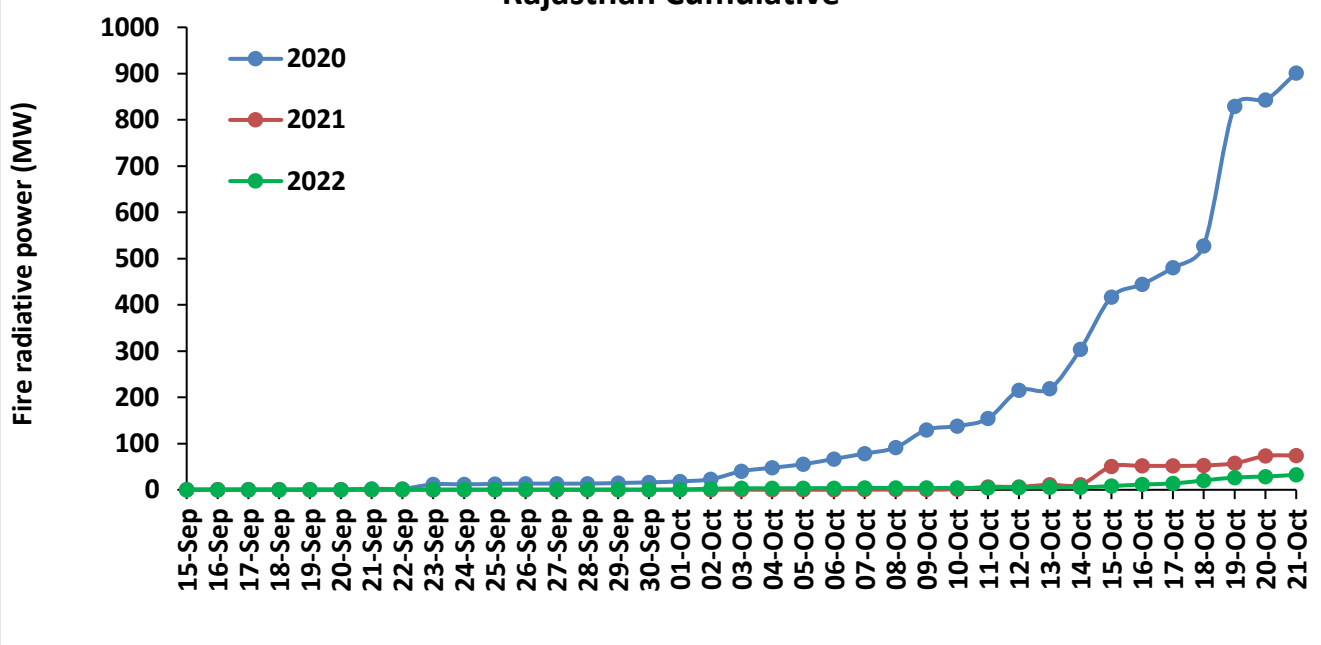
Comparison of residue burning fire power in current year (2022) with previous years (2021 and 2020) for the study States

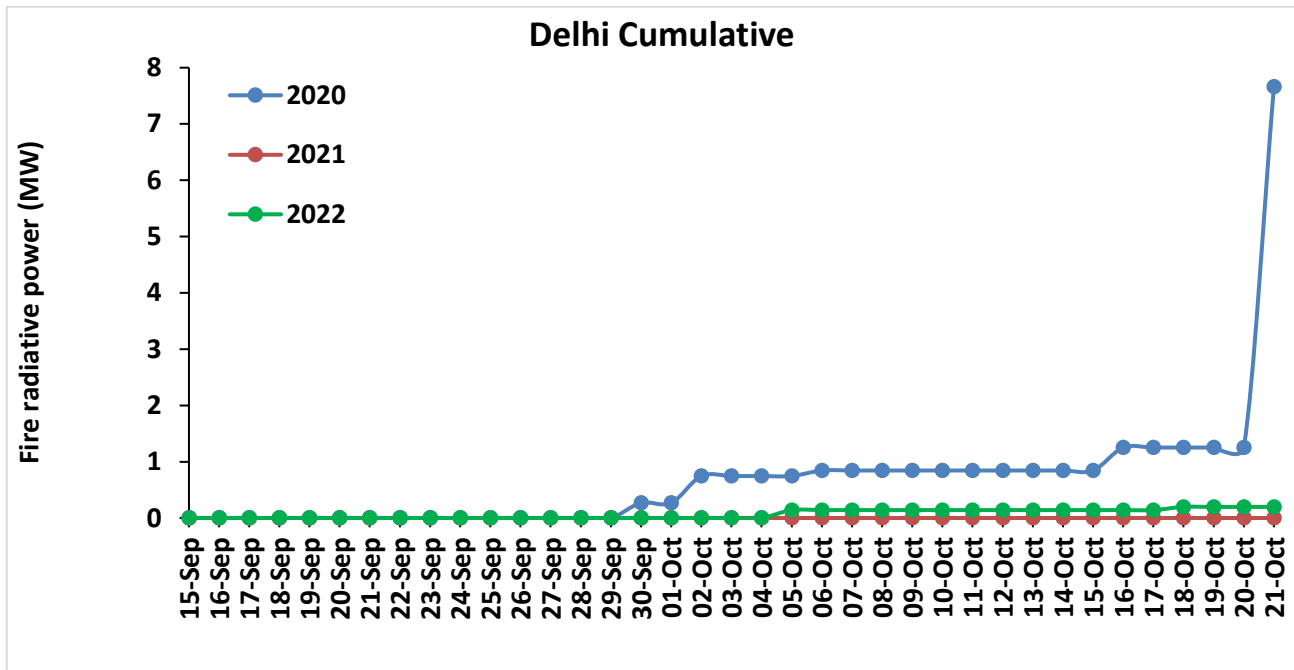
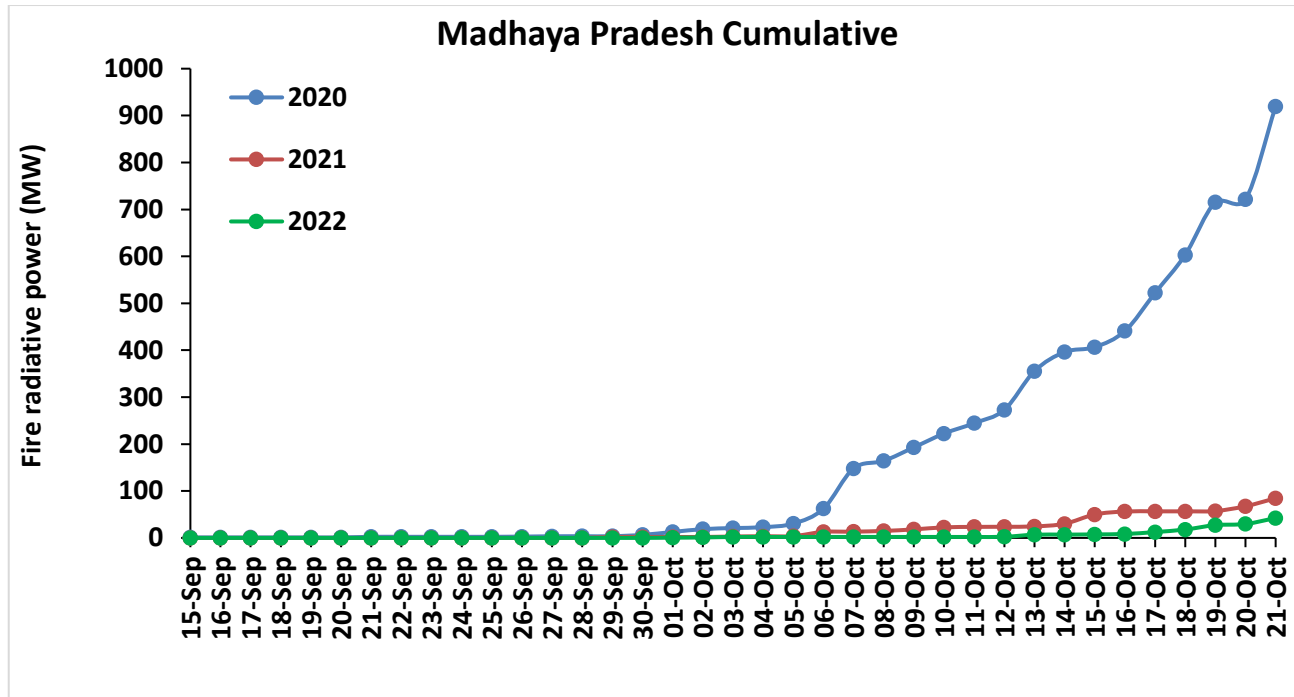


Uttar Pradesh Cumulative



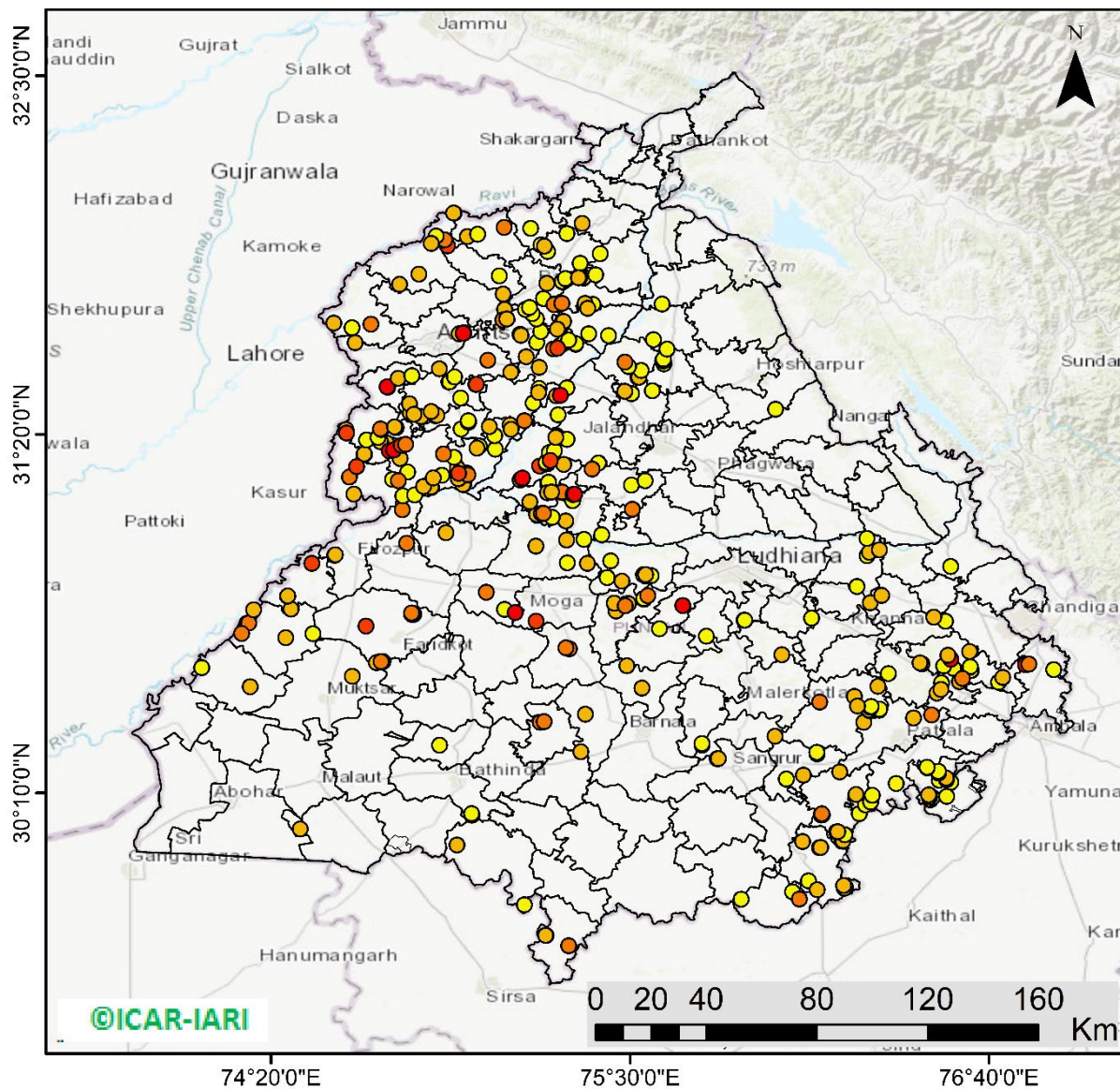
Rajasthan Cumulative





Punjab

RICE RESIDUE BURNING IN PUNJAB



393 burning events detected in Punjab during (21st Oct 2022)

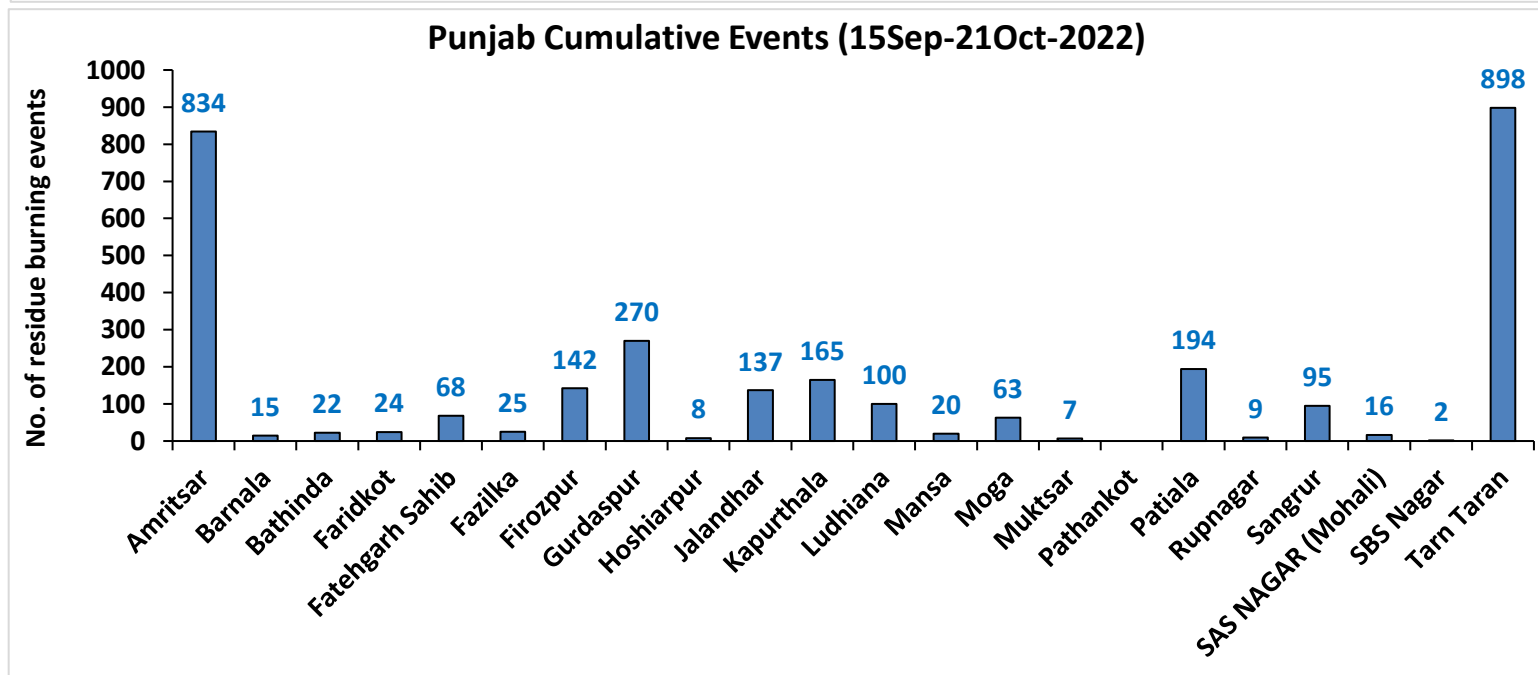
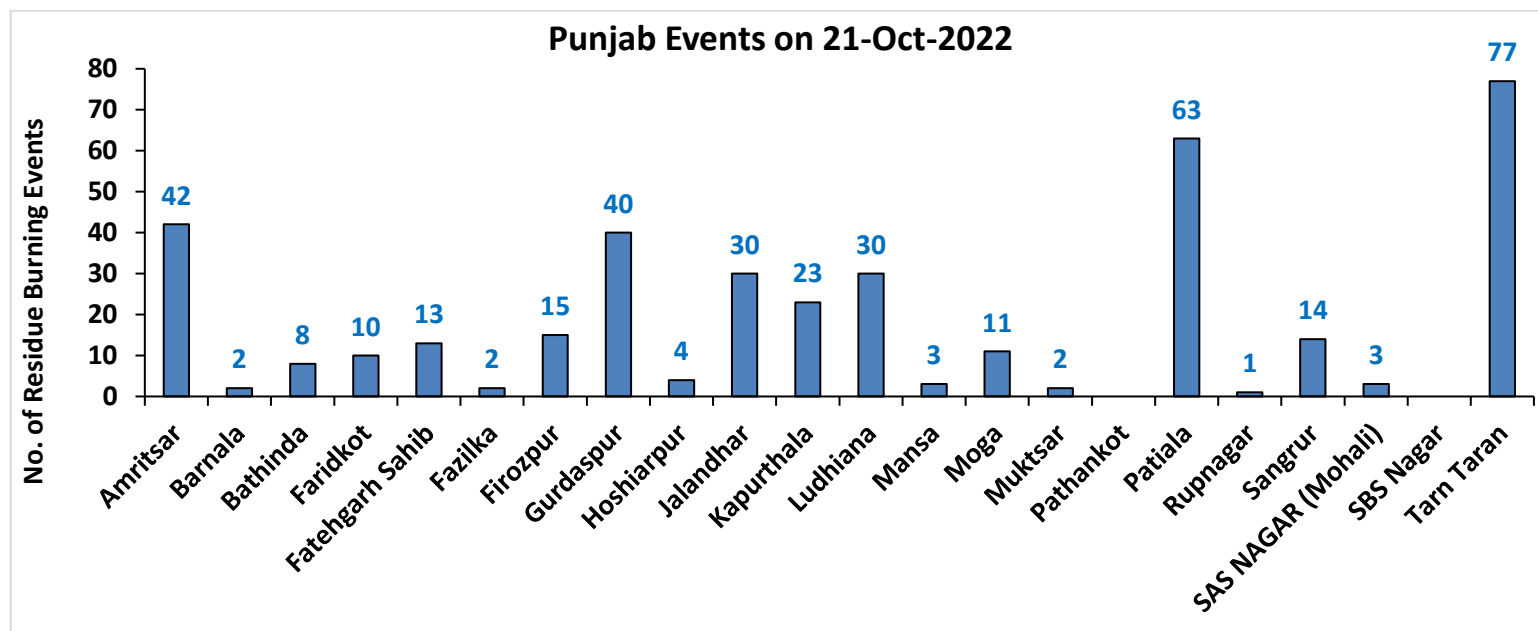
Fire Intensity (W/m²)

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



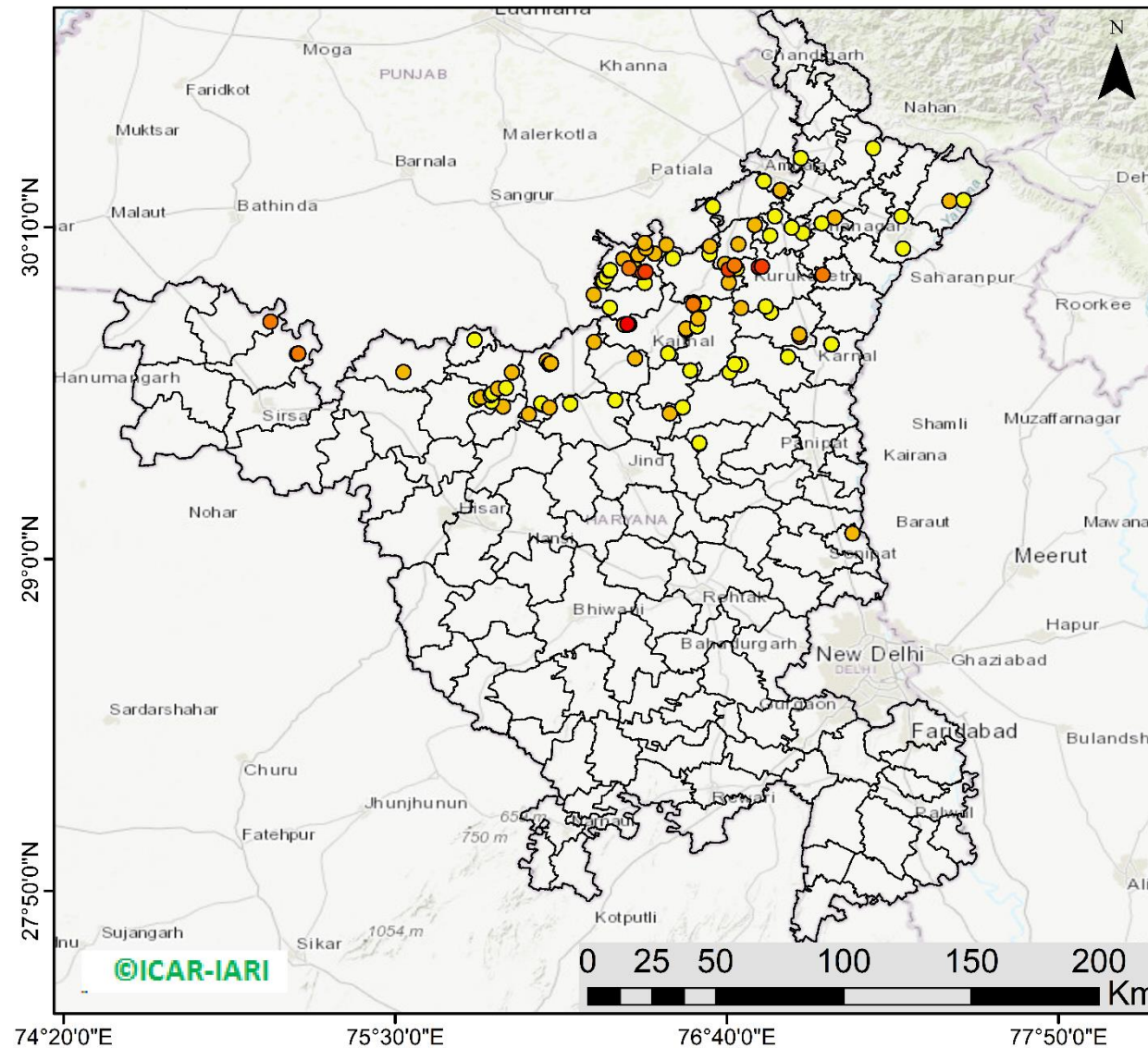
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (15Sep- 21Oct-2022)



Haryana

RICE RESIDUE BURNING IN HARYANA



107 burning events
detected in Haryana on
(21st Oct 2022)

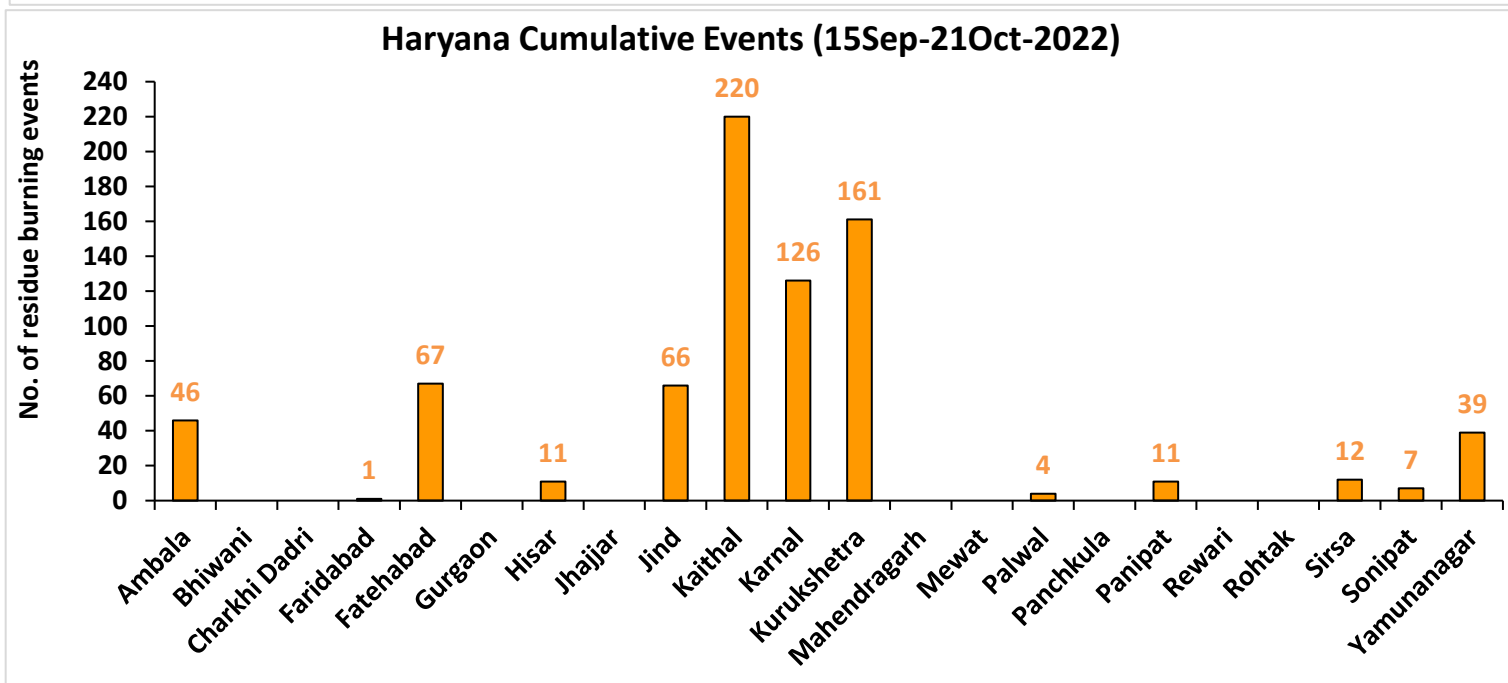
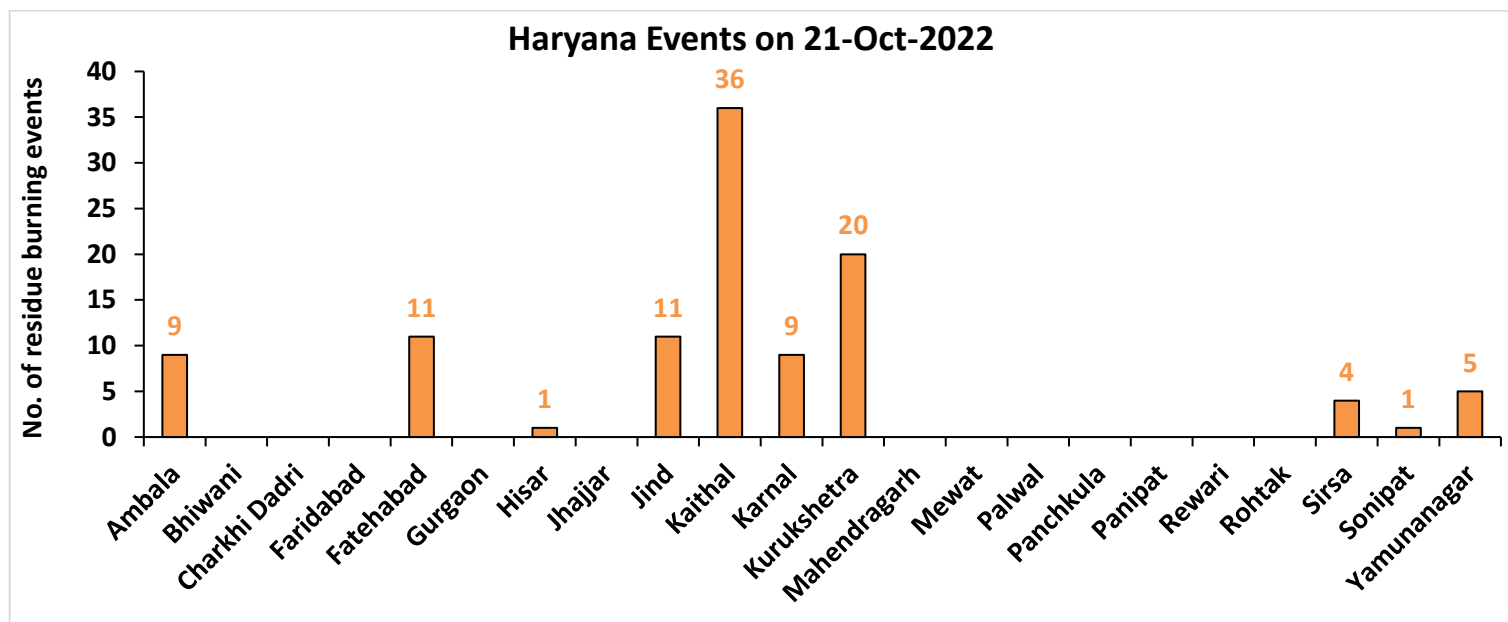
Fire Intensity (W/m²)

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



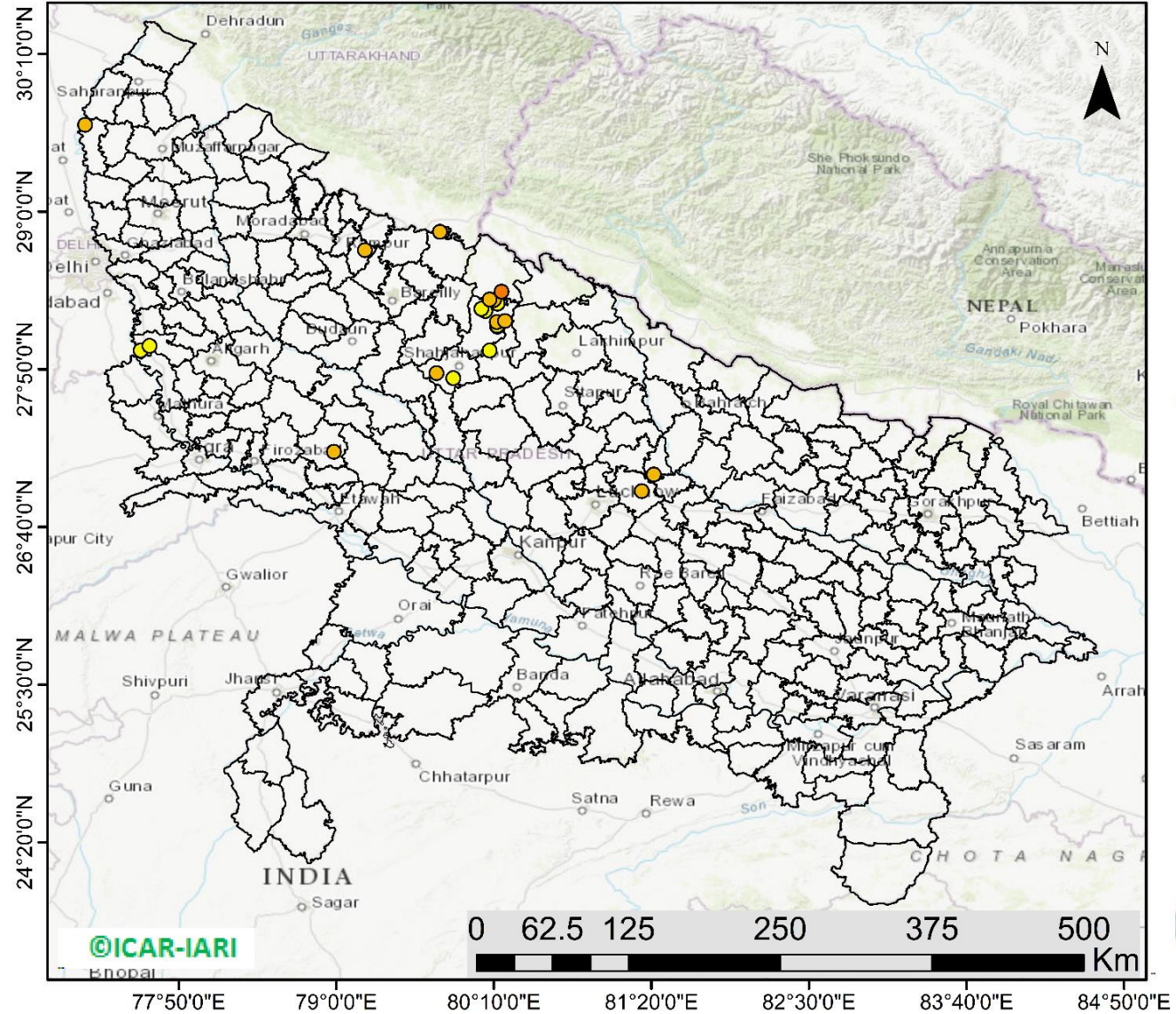
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (15Sep- 21Oct-2022)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



23 burning events detected in Uttar Pradesh on (21st Oct 2022)

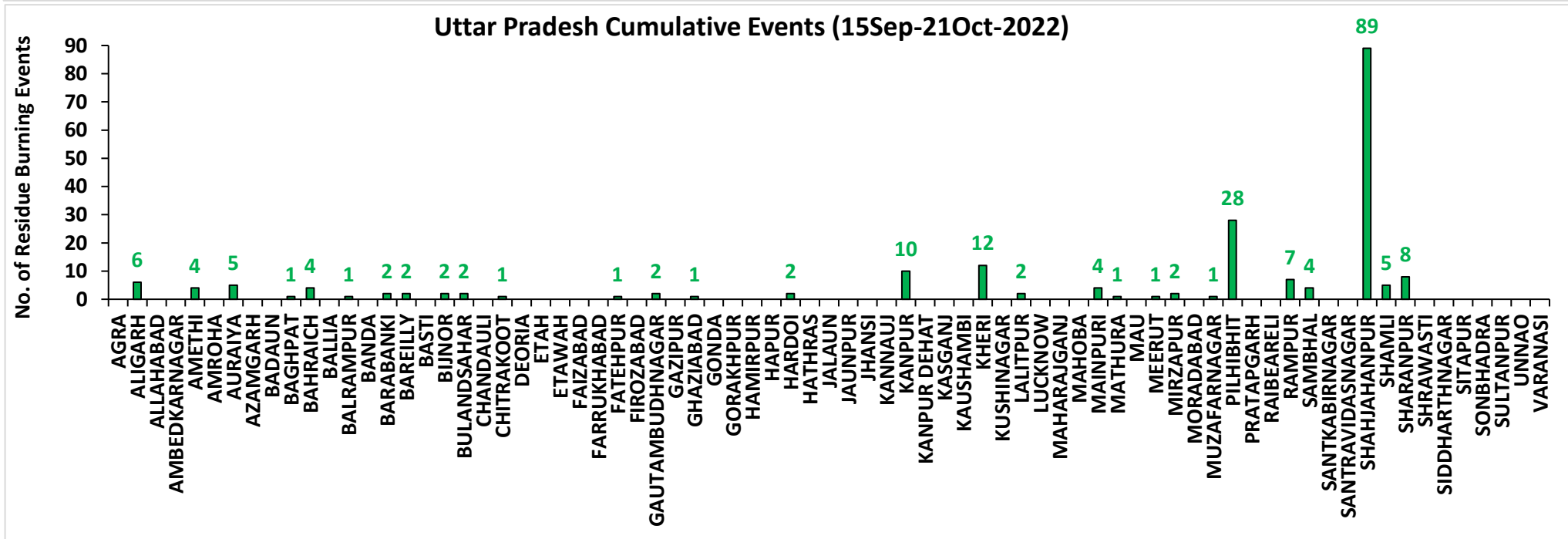
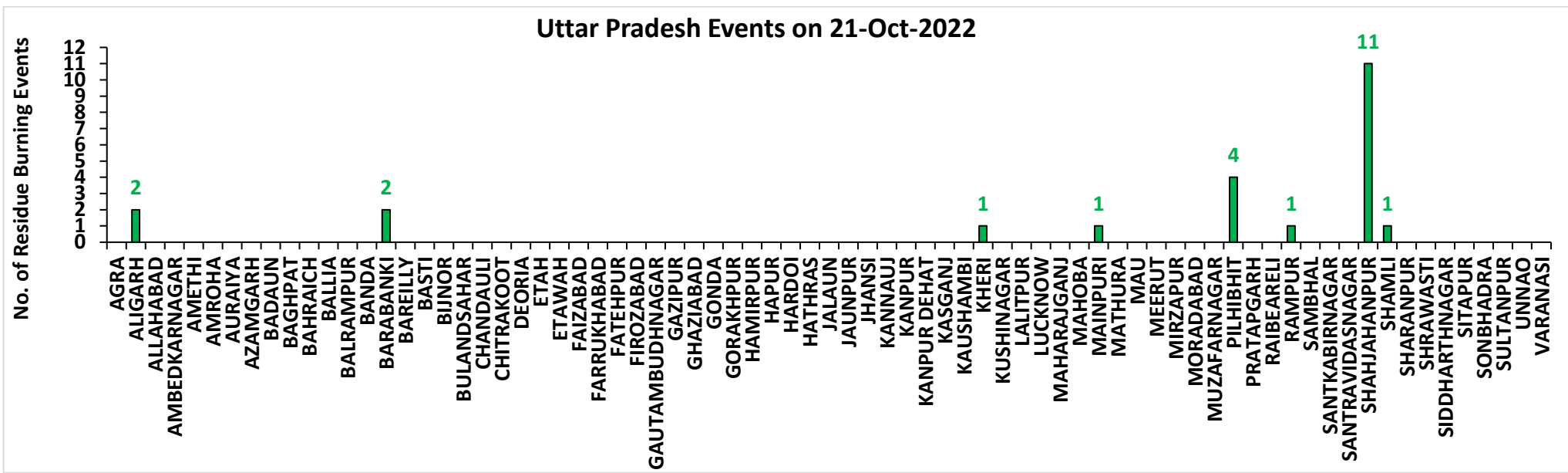
Fire Intensity (W/m2)

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



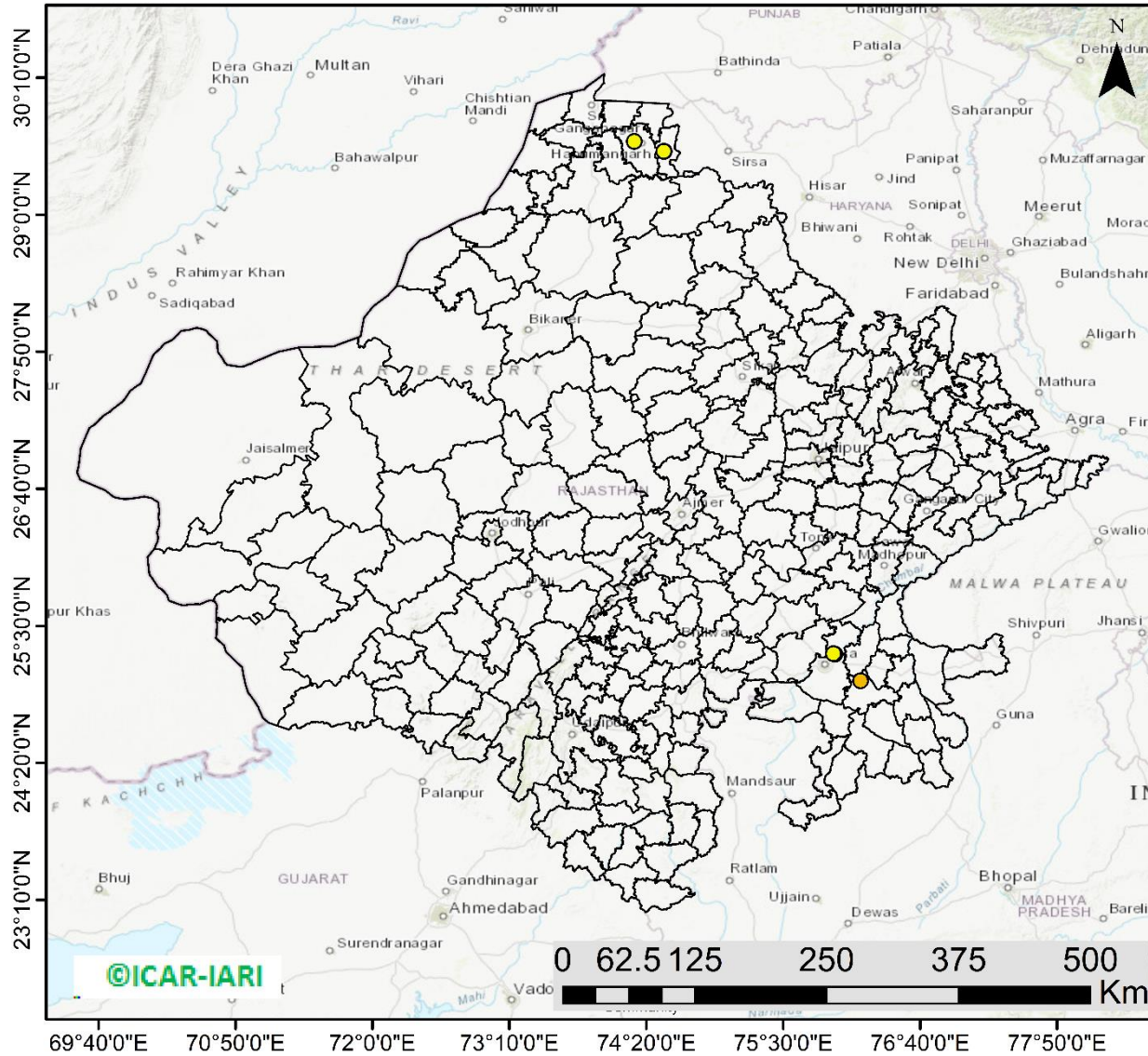
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Uttar Pradesh (15Sep- 21Oct -2022)



Rajasthan

RICE RESIDUE BURNING IN RAJASTHAN



06 burning events
detected in Rajasthan on
(21st Oct 2022)

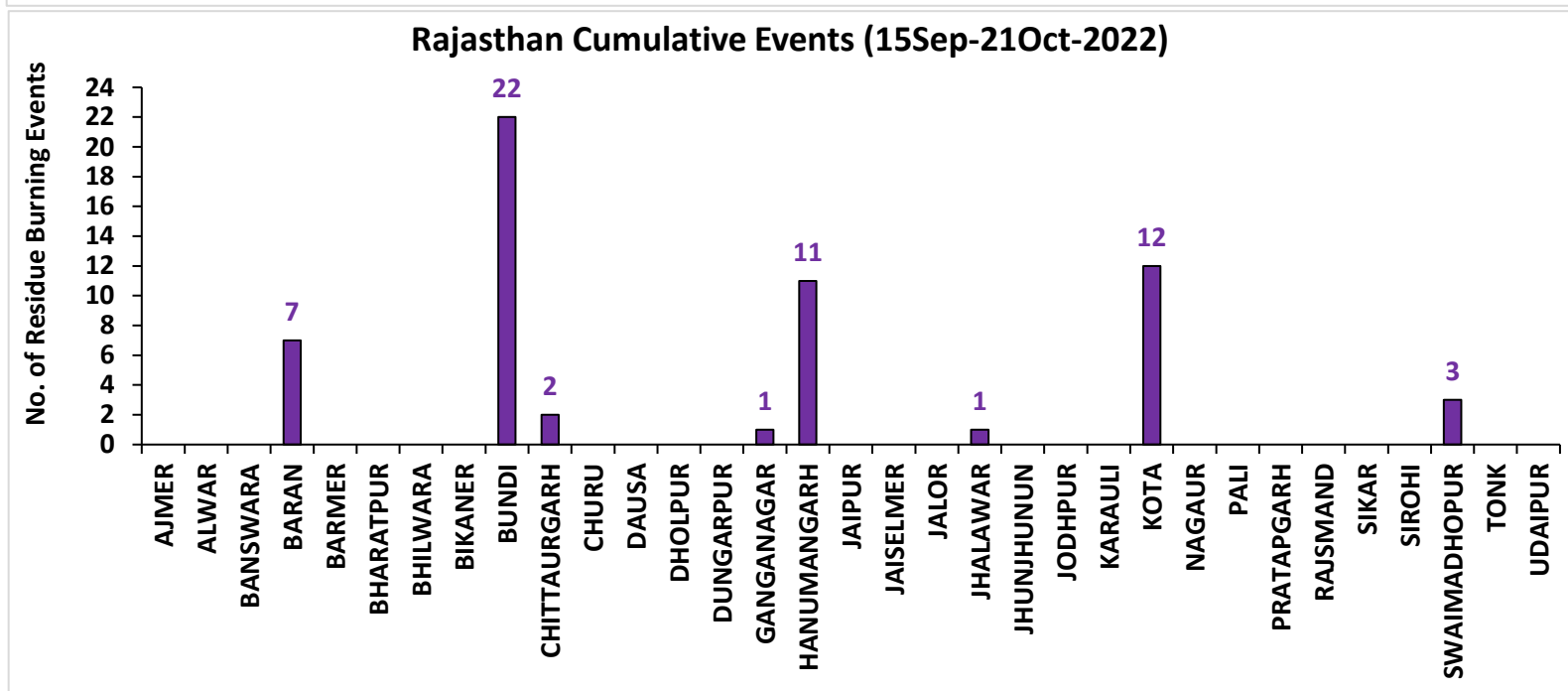
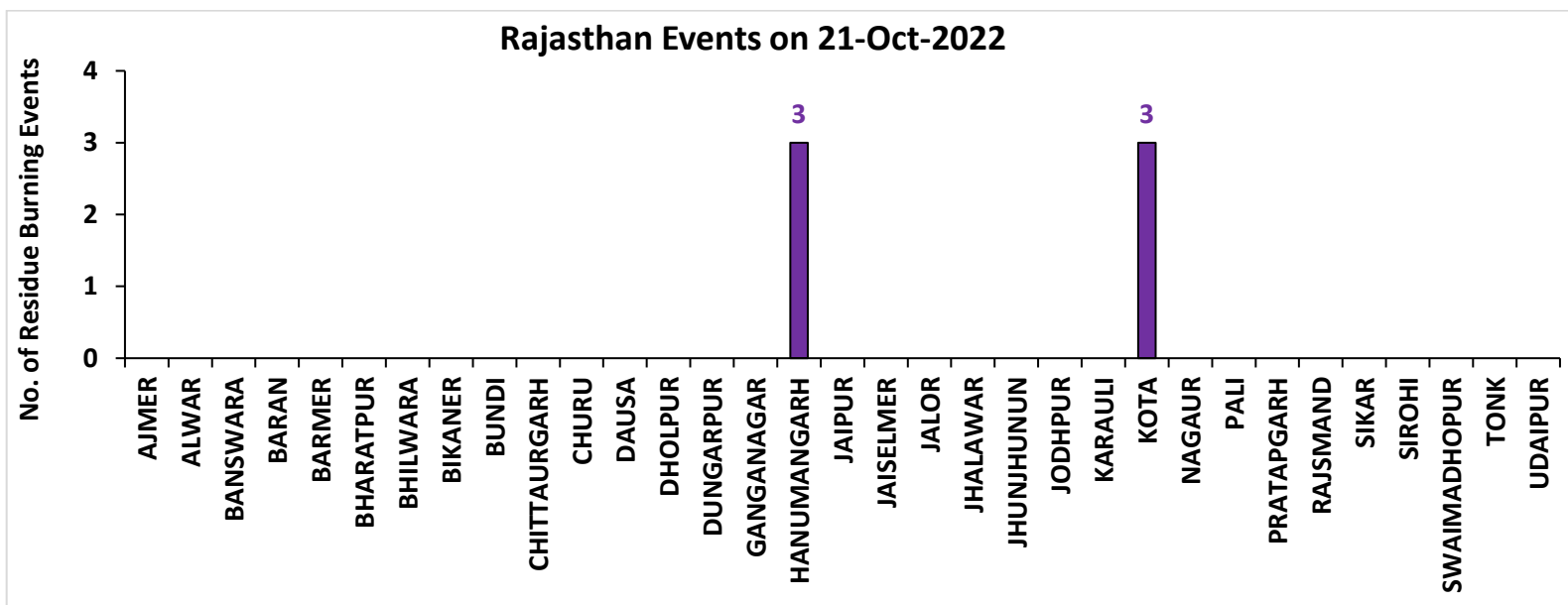
Fire Intensity (W/m²)

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



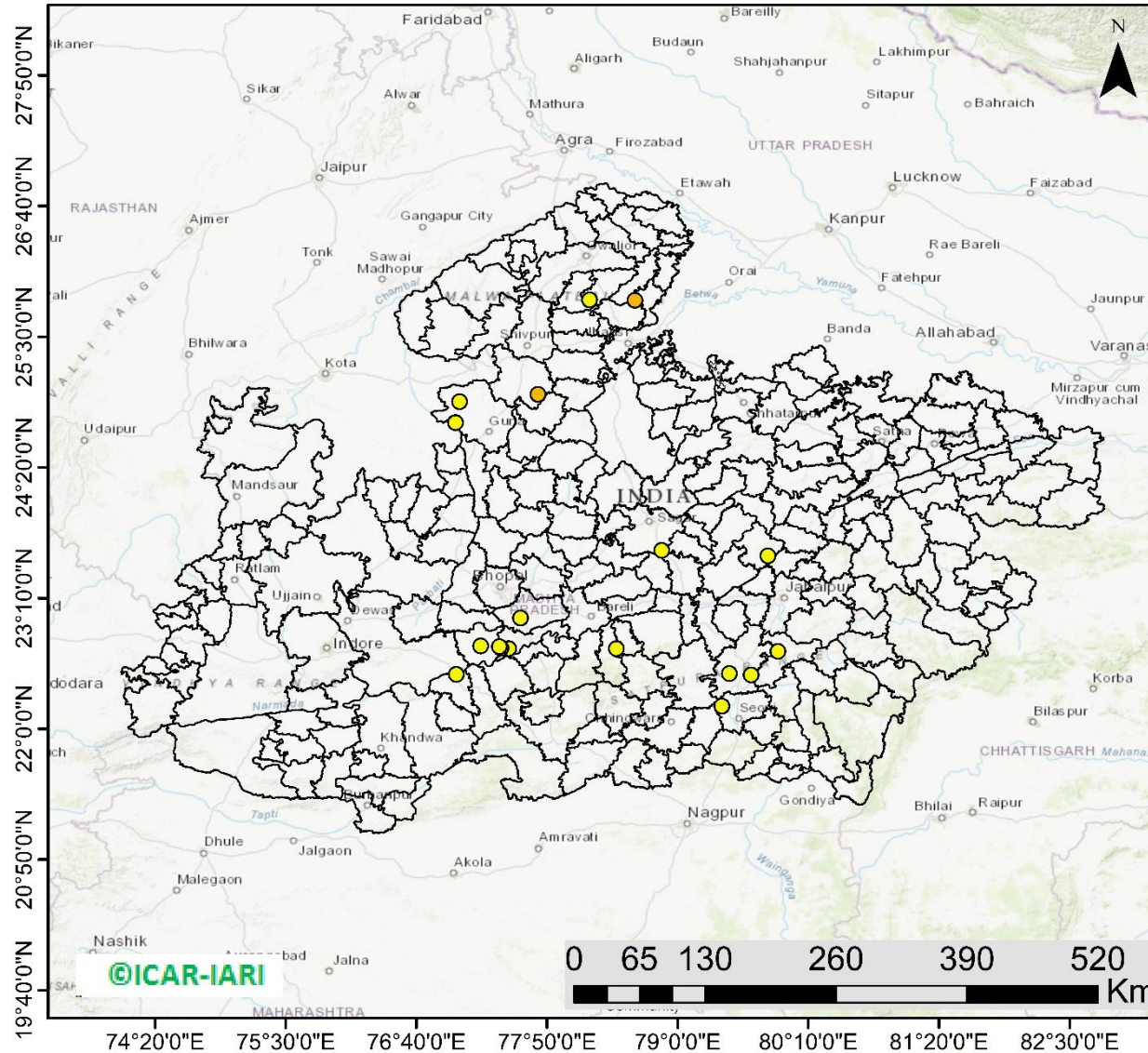
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Rajasthan (15Sep- 21Oct -2022)



Madhya Pradesh

RICE RESIDUE BURNING IN MADHYA PRADESH



18 burning events detected in MP on (21st Oct 2022)

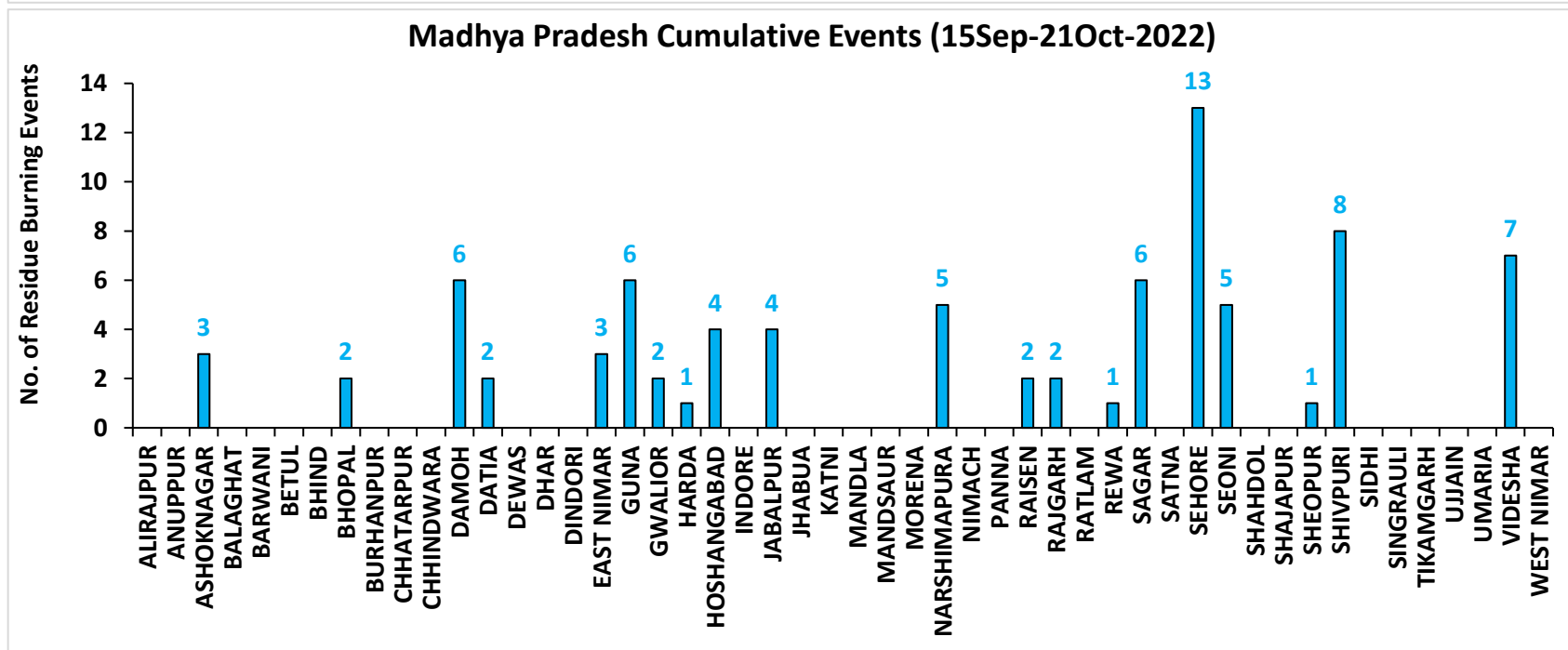
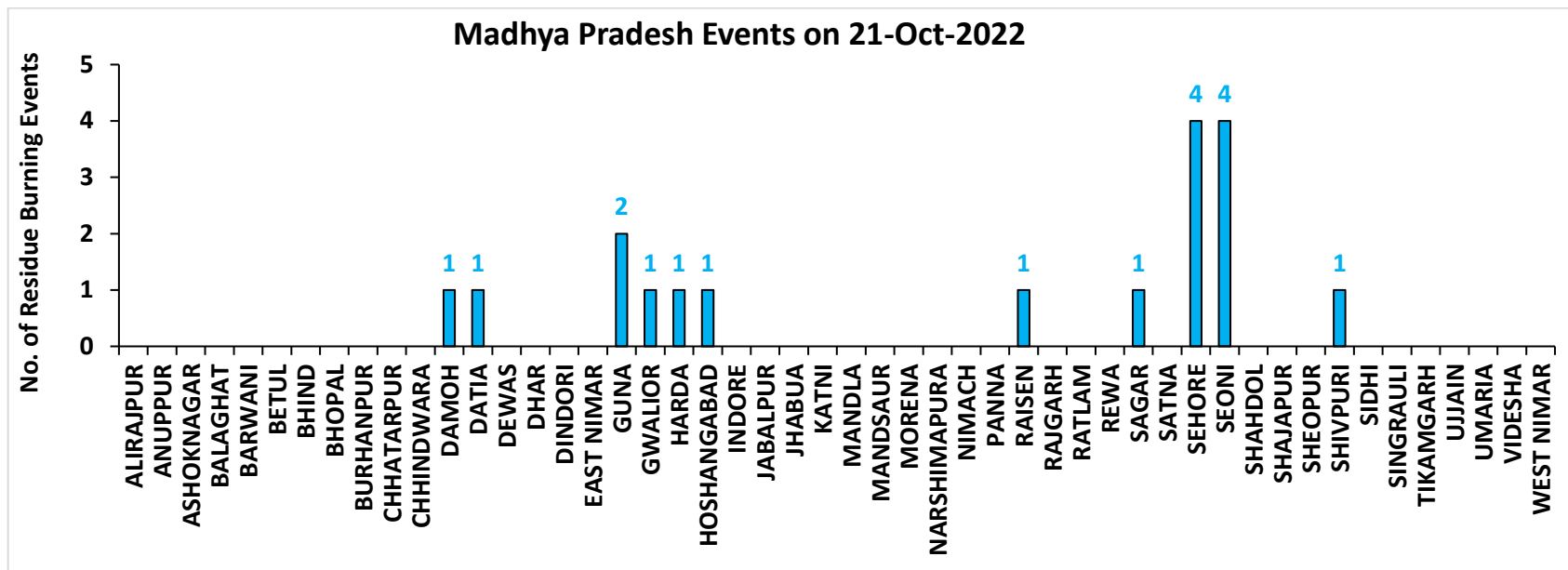
Fire Intensity (W/m²)

- 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 Madhya Pradesh (15Sep- 21Oct -2022)



District-wise cumulative number of residues burning events detected in 2020 ,2021 and 2022
(Period: 15 September-21 October)

(a) Punjab

District	15 Sep-21 Oct 2022		
	2020	2021	2022
Amritsar	2185	804	834
Barnala	36	38	15
Bathinda	131	36	22
Faridkot	549	182	24
Fatehgarh Sahib	291	182	68
Fazilka	164	69	25
Firozpur	1278	253	142
Gurdaspur	816	287	270
Hoshiarpur	124	38	8
Jalandhar	234	174	137
Kapurthala	513	211	165
Ludhiana	257	266	100
Mansa	96	13	20
Moga	167	91	63
Muktsar	135	56	7
Pathankot	4	0	0
Patiala	889	375	194
Rupnagar	48	29	9
Sangrur	239	86	95
SAS NAGAR (Mohali)	58	40	16
SBS Nagar	18	21	2
Tarn Taran	2559	1076	898
Total	10791	4327	3114

(b) Haryana

District	15 Sep-21 Oct 2022		
	2020	2021	2022
AMBALA	153	60	46
BHIWANI	0	0	0
CHARKHI DADRI	0	0	0
FARIDABAD	1	1	1
FATEHABAD	73	77	67
GURGAON	0	0	0
HISAR	9	2	11
JHAJJAR	1	0	0
JIND	38	55	66
KAITHAL	263	382	220
KARNAL	363	451	126
KURUKSHETRA	283	226	161
MAHENDRAGARH	0	0	0
MEWAT	0	0	0
PALWAL	21	25	4
PANCHKULA	0	0	0
PANIPAT	11	19	11
REWARI	0	0	0
ROHTAK	1	0	0
SIRSA	23	13	12
SONIPAT	13	6	7
YAMUNANAGAR	73	51	39
Total	1326	1368	771

(c) Uttar Pradesh

District	15 Sep-21 Oct 2022										
	2020	2021	2022	GAUTAMBUDHNAGAR	2	7	2	MUZAFARNAGAR	3	2	1
AGRA	2	0	0	GAZIPUR	0	0	0	PILHIBHIT	8	108	28
ALIGARH	41	21	6	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	37	50	7
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	19	6	5	HARDOI	13	6	2	SANTRAVIDASNAGAR	0	0	0
AZAMGARH	0	0	0	HATHRAS	0	0	0	SHAHJAHANPUR	47	181	89
BADAUN	1	6	0	JALAUN	0	0	0	SHAMLI	20	11	5
BAGHPAT	3	1	1	JAUNPUR	0	0	0	SHARANPUR	35	20	8
BAHRAICH	9	2	4	JHANSI	12	6	0	SHRAWASTI	7	0	0
BALLIA	0	0	0	KANNAUJ	3	1	0	SIDDHARTHANAGAR	0	0	0
BALRAMPUR	1	1	1	KANPUR	4	7	10	SITAPUR	14	9	0
BANDA	0	0	0	KANPUR DEHAT	11	1	0	SONBHADRA	0	0	0
BARABANKI	15	20	2	KASGANJ	2	2	0	SULTANPUR	0	0	0
BAREILLY	19	15	2	KAUSHAMBI	9	3	0	UNNAO	5	1	0
BASTI	3	1	0	KHERI	46	54	12	VARANASI	1	0	0
BIJNOR	6	4	2	KUSHINAGAR	0	0	0	Total	554	631	210
BULANDSAHAR	16	2	2	LALITPUR	0	1	2				
CHANDAULI	0	0	0	LUCKNOW	2	0	0				
CHITRAKOOT	0	1	1	MAHARAJGANJ	0	0	0				
DEORIA	0	0	0	MAHOBA	3	0	0				
ETAH	11	6	0	MAINPURI	11	7	4				
ETAWAH	5	7	0	MATHURA	36	27	1				
FAIZABAD	1	0	0	MAU	0	0	0				
FARRUKHABAD	0	0	0	MEERUT	12	4	1				
FATEHPUR	19	6	1	MIRZAPUR	6	5	2				
FIROZABAD	11	4	0	MORADABAD	5	3	0				

(d) Delhi

District	15 Sep-21 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	3	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
Total	6	0	3

(e) Rajasthan

District	15 Sep-21 Oct 2022		
	2020	2021	2022
AJMER	1	0	0
ALWAR	1	0	0
BANSWARA	0	0	0
BARAN	93	0	7
BARMER	2	0	0
BHARATPUR	2	0	0
BHILWARA	2	0	0
BIKANER	1	0	0
BUNDI	12	0	22
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	188	37	11
JAIPUR	2	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	32	1	12
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	9	0	3
TONK	2	0	0
UDAIPUR	0	0	0
Total	362	40	59

(f) Madhya Pradesh

District	15 Sep-21 Oct 2022						
	2020	2021	2022	PANNA			
ALIRAJPUR	0	0	0	RAISEN	23	2	2
ANUPPUR	0	0	0	RAJGARH	7	1	3
ASHOKNAGAR	24	1	3	RATLAM	0	0	0
BALAGHAT	0	0	0	REWA	4	0	1
BARWANI	0	0	0	SAGAR	16	11	6
BETUL	2	0	0	SATNA	15	8	0
BHIND	11	1	0	SEHORE	12	3	13
BHOPAL	7	5	2	SEONI	40	33	5
BURHANPUR	0	0	0	SHAHDOL	0	0	0
CHHATARPUR	4	0	0	SHAJAPUR	5	0	0
CHHINDWARA	5	7	0	SHEOPUR	23	0	1
DAMOH	21	7	6	SHIVPURI	10	0	8
DATIA	89	8	2	SIDHI	0	0	0
DEWAS	3	0	0	SINGRAULI	0	0	0
DHAR	22	0	0	TIKAMGARH	1	0	0
DINDORI	0	0	0	UJJAIN	5	0	0
EAST NIMAR	3	1	3	UMARIA	0	0	0
GUNA	17	2	6	VIDESHA	65	8	7
GWALIOR	54	0	2	WEST NIMAR	7	0	0
HARDA	8	10	1	Total	642	136	83
HOSHANGABAD	79	9	4				
INDORE	2	0	0				
JABALPUR	14	4	3				
JHABUA	0	0	0				
KATNI	8	0	0				
MANDLA	1	1	0				
MANDSAUR	3	0	0				
MORENA	18	5	0				
NARSHIMAPURA	10	8	5				
NIMACH	0	0	0				

State-wise and date-wise number of paddy residue burning events detected in 2020, 2021 and 2022
(Period: 15 September - 21 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

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	11	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
Total	10791	4327	3114	1326	1368	771	554	631	210	6	0	3	362	40	59	642	136	83

Details of residue burning events in Punjab on 21-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	31.94590	74.90720	14:07:03	D	17.60
2	AMRITSAR	AJNALA	S-NPP	31.96480	74.89180	14:07:03	D	14.10
3	AMRITSAR	AJNALA	S-NPP	31.96540	74.89840	14:07:03	D	14.30
4	AMRITSAR	AJNALA	S-NPP	31.97820	74.87020	14:07:03	D	4.90
5	AMRITSAR	AJNALA	AQUA	31.82100	74.75100	13:31:48	D	6.20
6	AMRITSAR	AJNALA	AQUA	31.85400	74.81400	13:31:48	D	6.60
7	AMRITSAR	AJNALA	AQUA	31.95400	74.85400	13:31:48	D	6.80
8	AMRITSAR	ATTARI	S-NPP	31.54610	74.88060	14:07:03	D	5.70
9	AMRITSAR	CHOGAWAN	S-NPP	31.67980	74.59650	14:07:03	D	4.10
10	AMRITSAR	CHOGAWAN	S-NPP	31.69480	74.53760	14:07:03	D	5.50
11	AMRITSAR	CHOGAWAN	AQUA	31.63100	74.60700	13:31:48	D	7.80
12	AMRITSAR	CHOGAWAN	AQUA	31.69100	74.65800	13:31:48	D	11.00
13	AMRITSAR	JANDIALA GURU	S-NPP	31.57410	75.03800	14:07:03	D	12.40
14	AMRITSAR	JANDIALA GURU	AQUA	31.53500	75.11300	13:31:48	D	7.60
15	AMRITSAR	MAJITHA	S-NPP	31.73910	75.09300	14:07:03	D	6.00
16	AMRITSAR	MAJITHA	AQUA	31.70500	75.08700	13:31:48	D	13.60
17	AMRITSAR	MAJITHA	AQUA	31.70800	75.10000	13:31:48	D	9.00
18	AMRITSAR	MAJITHA	AQUA	31.78900	75.08800	13:31:48	D	8.40
19	AMRITSAR	RAYYA	S-NPP	31.62200	75.27470	14:07:03	D	1.80
20	AMRITSAR	RAYYA	S-NPP	31.62570	75.32360	14:07:03	D	2.70
21	AMRITSAR	RAYYA	S-NPP	31.62810	75.32400	14:07:03	D	2.20
22	AMRITSAR	RAYYA	S-NPP	31.63040	75.28860	14:07:03	D	2.50
23	AMRITSAR	RAYYA	S-NPP	31.63330	75.28760	14:07:03	D	4.80
24	AMRITSAR	RAYYA	S-NPP	31.63940	75.30100	14:07:03	D	3.40
25	AMRITSAR	RAYYA	S-NPP	31.67840	75.27250	14:07:03	D	2.00
26	AMRITSAR	RAYYA	S-NPP	31.69460	75.28130	14:07:03	D	7.30
27	AMRITSAR	RAYYA	AQUA	31.55100	75.20500	13:31:48	D	7.20
28	AMRITSAR	RAYYA	AQUA	31.61100	75.25200	13:31:48	D	11.80
29	AMRITSAR	RAYYA	AQUA	31.61300	75.26500	13:31:48	D	17.00
30	AMRITSAR	RAYYA	AQUA	31.67500	75.26400	13:31:48	D	6.70

31	AMRITSAR	TARSIKKA	S-NPP	31.63150	75.19720	14:07:03	D	2.40
32	AMRITSAR	TARSIKKA	S-NPP	31.65800	75.14260	14:07:03	D	5.50
33	AMRITSAR	TARSIKKA	S-NPP	31.66720	75.21050	12:27:29	D	4.00
34	AMRITSAR	TARSIKKA	S-NPP	31.70830	75.19620	14:07:03	D	1.60
35	AMRITSAR	TARSIKKA	S-NPP	31.72550	75.18230	14:07:03	D	2.20
36	AMRITSAR	TARSIKKA	S-NPP	31.73910	75.16010	14:07:03	D	4.10
37	AMRITSAR	TARSIKKA	S-NPP	31.74530	75.17330	14:07:03	D	4.20
38	AMRITSAR	TARSIKKA	AQUA	31.58500	75.16300	13:31:48	D	6.80
39	AMRITSAR	TARSIKKA	AQUA	31.65500	75.14600	13:31:48	D	6.30
40	AMRITSAR	VERKA	S-NPP	31.66370	74.96030	14:07:03	D	6.40
41	AMRITSAR	VERKA	AQUA	31.66000	74.94500	13:31:48	D	7.70
42	AMRITSAR	VERKA	AQUA	31.66200	74.95800	13:31:48	D	22.60
43	BARNALA	MAHAL KALAN	S-NPP	30.50710	75.53900	14:07:03	D	6.50
44	BARNALA	SEHNA	AQUA	30.42200	75.35500	13:31:48	D	9.00
45	BATHINDA	BATHINDA	S-NPP	30.09410	74.98620	14:07:03	D	6.20
46	BATHINDA	BATHINDA	S-NPP	30.09900	74.98560	14:07:03	D	4.40
47	BATHINDA	GONIANA MANDI	S-NPP	30.32130	74.88150	14:07:03	D	4.80
48	BATHINDA	PHUL	AQUA	30.39600	75.20800	13:31:48	D	13.90
49	BATHINDA	PHUL	AQUA	30.39800	75.22100	13:31:48	D	11.50
50	BATHINDA	RAMPURA	S-NPP	30.30030	75.34050	14:07:03	D	6.30
51	BATHINDA	TALWANDI SABO	S-NPP	29.80220	75.15710	14:07:03	D	4.90
52	BATHINDA	TALWANDI SABO	AQUA	29.99700	74.93800	13:31:48	D	9.60
53	FARIDKOT	FARIDKOT	S-NPP	30.59240	74.68490	14:07:03	D	12.50
54	FARIDKOT	FARIDKOT	S-NPP	30.59350	74.69720	14:07:03	D	8.20
55	FARIDKOT	FARIDKOT	S-NPP	30.74700	74.79110	14:07:03	D	14.00
56	FARIDKOT	FARIDKOT	S-NPP	30.74750	74.79740	14:07:03	D	24.10
57	FARIDKOT	FARIDKOT	S-NPP	30.74880	74.78940	14:07:03	D	25.20
58	FARIDKOT	FARIDKOT	S-NPP	30.74930	74.79570	14:07:03	D	25.20
59	FARIDKOT	FARIDKOT	S-NPP	30.75190	74.79060	14:07:03	D	14.00
60	FARIDKOT	FARIDKOT	AQUA	30.59000	74.67600	13:31:48	D	9.10
61	FARIDKOT	FARIDKOT	AQUA	30.59300	74.69100	13:31:48	D	12.40
62	FARIDKOT	FARIDKOT	AQUA	30.70900	74.64200	13:31:48	D	15.10
63	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.72450	76.52580	14:07:03	D	3.50

64	FATEHGARH SAHIB	BASSI PATHANAN	AQUA	30.73800	76.48800	13:31:48	D	6.80
65	FATEHGARH SAHIB	KHAMANON	S-NPP	30.78460	76.28120	14:07:03	D	5.70
66	FATEHGARH SAHIB	KHAMANON	S-NPP	30.80900	76.31810	14:07:03	D	7.50
67	FATEHGARH SAHIB	KHERA	S-NPP	30.57080	76.55250	14:07:03	D	2.50
68	FATEHGARH SAHIB	KHERA	S-NPP	30.57160	76.55150	14:07:03	D	3.90
69	FATEHGARH SAHIB	KHERA	S-NPP	30.57930	76.52010	12:27:29	D	3.70
70	FATEHGARH SAHIB	KHERA	AQUA	30.60100	76.54300	13:31:48	D	26.50
71	FATEHGARH SAHIB	KHERA	AQUA	30.61400	76.53400	13:31:48	D	8.90
72	FATEHGARH SAHIB	KHERA	AQUA	30.62600	76.60400	13:31:48	D	6.20
73	FATEHGARH SAHIB	SIRHIND	S-NPP	30.55430	76.34000	14:07:03	D	2.10
74	FATEHGARH SAHIB	SIRHIND	AQUA	30.58600	76.44900	13:31:48	D	6.10
75	FATEHGARH SAHIB	SIRHIND	AQUA	30.58900	76.44300	13:31:48	D	7.20
76	FAZILKA	JALALABAD	S-NPP	30.51190	74.26590	14:07:03	D	5.50
77	FAZILKA	JALALABAD	S-NPP	30.57370	74.10810	14:07:03	D	2.70
78	FIROZPUR	FIROZPUR	S-NPP	30.93930	74.54030	14:07:03	D	6.20
79	FIROZPUR	FIROZPUR	S-NPP	30.94100	74.54210	14:07:03	D	7.90
80	FIROZPUR	FIROZPUR	S-NPP	31.08770	74.76020	14:07:03	D	11.10
81	FIROZPUR	GHALL KHURD	S-NPP	30.97850	74.77450	14:07:03	D	15.00
82	FIROZPUR	GURUHAR SAHAI	S-NPP	30.67120	74.38100	14:07:03	D	9.40
83	FIROZPUR	GURUHAR SAHAI	S-NPP	30.68400	74.46970	14:07:03	D	3.60
84	FIROZPUR	GURUHAR SAHAI	S-NPP	30.71810	74.25510	14:07:03	D	11.50
85	FIROZPUR	GURUHAR SAHAI	S-NPP	30.71860	74.26090	14:07:03	D	11.50
86	FIROZPUR	GURUHAR SAHAI	AQUA	30.68500	74.23800	13:31:48	D	12.30
87	FIROZPUR	GURUHAR SAHAI	AQUA	30.76200	74.27700	13:31:48	D	8.60
88	FIROZPUR	MAMDOT	S-NPP	30.76440	74.39850	14:07:03	D	6.10
89	FIROZPUR	MAMDOT	S-NPP	30.80590	74.38670	14:07:03	D	2.90
90	FIROZPUR	MAMDOT	S-NPP	30.80690	74.38770	14:07:03	D	5.20
91	FIROZPUR	MAMDOT	AQUA	30.91300	74.46600	13:31:48	D	15.90
92	FIROZPUR	ZIRA	AQUA	31.01300	74.90200	13:31:48	D	8.70
93	GURDASPUR	BATALA	S-NPP	31.75670	75.25580	14:07:03	D	3.20
94	GURDASPUR	BATALA	S-NPP	31.77440	75.21900	14:07:03	D	1.70
95	GURDASPUR	BATALA	AQUA	31.75500	75.25300	13:31:48	D	13.80
96	GURDASPUR	BATALA	AQUA	31.82400	75.23000	13:31:48	D	9.10

97	GURDASPUR	DERA BABA NANAK	S-NPP	31.97630	74.97170	14:07:03	D	8.50
98	GURDASPUR	DERA BABA NANAK	S-NPP	31.98400	75.00490	14:07:03	D	3.70
99	GURDASPUR	DERA BABA NANAK	S-NPP	32.05250	74.92850	12:27:29	D	4.40
100	GURDASPUR	DERA BABA NANAK	S-NPP	32.05270	74.92690	12:27:29	D	6.50
101	GURDASPUR	DERA BABA NANAK	AQUA	32.00600	75.09100	13:31:48	D	13.60
102	GURDASPUR	DHARIWAL	S-NPP	31.92040	75.40340	14:07:03	D	1.80
103	GURDASPUR	DHARIWAL	S-NPP	31.92760	75.23210	14:07:03	D	4.00
104	GURDASPUR	DHARIWAL	S-NPP	31.98620	75.29530	14:07:03	D	4.10
105	GURDASPUR	DHARIWAL	AQUA	31.94500	75.22200	13:31:48	D	6.60
106	GURDASPUR	FATEHGARH CHURIAN	S-NPP	31.84860	75.07530	14:07:03	D	4.90
107	GURDASPUR	GURDASPUR	AQUA	32.01900	75.34500	13:31:48	D	6.20
108	GURDASPUR	KAHNUWAN	S-NPP	31.84150	75.34960	14:07:03	D	6.60
109	GURDASPUR	KAHNUWAN	S-NPP	31.84350	75.34670	14:07:03	D	3.10
110	GURDASPUR	KAHNUWAN	S-NPP	31.84380	75.35030	14:07:03	D	3.10
111	GURDASPUR	KAHNUWAN	S-NPP	31.84550	75.33500	14:07:03	D	4.80
112	GURDASPUR	KAHNUWAN	S-NPP	31.84580	75.33850	14:07:03	D	6.00
113	GURDASPUR	KAHNUWAN	S-NPP	31.84790	75.33560	14:07:03	D	5.40
114	GURDASPUR	KAHNUWAN	S-NPP	31.85180	75.38880	14:07:03	D	4.00
115	GURDASPUR	KAHNUWAN	S-NPP	31.88950	75.33850	14:07:03	D	3.00
116	GURDASPUR	KAHNUWAN	AQUA	31.84200	75.33300	13:31:48	D	6.90
117	GURDASPUR	KALANAUR	S-NPP	31.94890	75.21090	14:07:03	D	2.90
118	GURDASPUR	KALANAUR	S-NPP	32.00280	75.17730	14:07:03	D	2.60
119	GURDASPUR	QADIAN	S-NPP	31.75490	75.35370	12:27:29	D	4.80
120	GURDASPUR	QADIAN	S-NPP	31.75580	75.37960	14:07:03	D	1.40
121	GURDASPUR	QADIAN	S-NPP	31.75910	75.35440	14:07:03	D	5.70
122	GURDASPUR	QADIAN	S-NPP	31.82840	75.28100	14:07:03	D	3.60
123	GURDASPUR	QADIAN	S-NPP	31.83070	75.27990	14:07:03	D	3.00
124	GURDASPUR	QADIAN	S-NPP	31.83690	75.29340	14:07:03	D	2.30
125	GURDASPUR	QADIAN	S-NPP	31.83940	75.29040	14:07:03	D	2.40
126	GURDASPUR	QADIAN	AQUA	31.75900	75.27900	13:31:48	D	12.10
127	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.65440	75.43070	14:07:03	D	1.80
128	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.65990	75.36600	14:07:03	D	1.30
129	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.69970	75.28080	14:07:03	D	4.90

130	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.69990	75.28430	14:07:03	D	5.50
131	GURDASPUR	SRI HARGOBINDPUR	S-NPP	31.75320	75.35640	12:27:29	D	6.30
132	GURDASPUR	SRI HARGOBINDPUR	AQUA	31.74300	75.36300	13:31:48	D	8.70
133	HOSHIARPUR	DASUYA	S-NPP	31.75670	75.60450	14:07:03	D	2.20
134	HOSHIARPUR	HOSHIARPUR-2	S-NPP	31.41470	75.97360	14:07:03	D	1.50
135	HOSHIARPUR	TANDA	S-NPP	31.60990	75.62050	14:07:03	D	1.90
136	HOSHIARPUR	TANDA	S-NPP	31.64090	75.57650	12:27:29	D	2.70
137	JALANDHAR	BHOGPUR	S-NPP	31.54080	75.53630	14:07:03	D	2.20
138	JALANDHAR	BHOGPUR	S-NPP	31.56200	75.61060	14:07:03	D	2.90
139	JALANDHAR	BHOGPUR	S-NPP	31.57210	75.60590	14:07:03	D	4.30
140	JALANDHAR	BHOGPUR	S-NPP	31.57240	75.60950	14:07:03	D	4.30
141	JALANDHAR	BHOGPUR	S-NPP	31.57760	75.60900	14:07:03	D	4.40
142	JALANDHAR	JALANDHAR WEST	S-NPP	31.46540	75.50540	12:27:29	D	3.10
143	JALANDHAR	JALANDHAR WEST	S-NPP	31.47310	75.48330	14:07:03	D	7.30
144	JALANDHAR	JALANDHAR WEST	S-NPP	31.47480	75.57310	14:07:03	D	2.70
145	JALANDHAR	JALANDHAR WEST	S-NPP	31.51800	75.52560	14:07:03	D	5.30
146	JALANDHAR	LOHIAN	S-NPP	31.06890	75.19920	14:07:03	D	13.50
147	JALANDHAR	LOHIAN	S-NPP	31.07230	75.19680	14:07:03	D	7.60
148	JALANDHAR	LOHIAN	S-NPP	31.11700	75.31380	14:07:03	D	3.70
149	JALANDHAR	LOHIAN	S-NPP	31.14480	75.27640	14:07:03	D	10.70
150	JALANDHAR	LOHIAN	S-NPP	31.14510	75.27980	14:07:03	D	10.70
151	JALANDHAR	LOHIAN	AQUA	31.11300	75.17500	13:31:48	D	6.20
152	JALANDHAR	LOHIAN	AQUA	31.13700	75.31500	13:31:48	D	21.90
153	JALANDHAR	LOHIAN	AQUA	31.13800	75.32000	13:31:48	D	27.30
154	JALANDHAR	LOHIAN	AQUA	31.14300	75.23200	13:31:48	D	9.90
155	JALANDHAR	LOHIAN	AQUA	31.14500	75.24500	13:31:48	D	8.60
156	JALANDHAR	MEHATPUR	S-NPP	31.00620	75.40810	14:07:03	D	2.10
157	JALANDHAR	NAKODAR	S-NPP	31.16800	75.50480	14:07:03	D	4.20
158	JALANDHAR	NAKODAR	S-NPP	31.18190	75.54960	14:07:03	D	3.30
159	JALANDHAR	NAKODAR	S-NPP	31.23960	75.39770	14:07:03	D	3.00
160	JALANDHAR	NAKODAR	AQUA	31.08900	75.50800	13:31:48	D	14.40
161	JALANDHAR	NAKODAR	AQUA	31.22000	75.37700	13:31:48	D	10.10
162	JALANDHAR	SHAHKOT	S-NPP	31.05100	75.29150	14:07:03	D	7.70

163	JALANDHAR	SHAHKOT	S-NPP	31.06270	75.24750	14:07:03	D	5.00
164	JALANDHAR	SHAHKOT	S-NPP	31.07380	75.21710	14:07:03	D	16.60
165	JALANDHAR	SHAHKOT	S-NPP	31.07510	75.21220	14:07:03	D	11.20
166	JALANDHAR	SHAHKOT	S-NPP	31.07570	75.21890	14:07:03	D	11.20
167	KAPURTHALA	DHILWAN	S-NPP	31.48420	75.29490	14:07:03	D	3.00
168	KAPURTHALA	DHILWAN	AQUA	31.45800	75.26100	13:31:48	D	7.20
169	KAPURTHALA	DHILWAN	AQUA	31.46000	75.27400	13:31:48	D	29.20
170	KAPURTHALA	KAPURTHALA	S-NPP	31.31670	75.29570	14:07:03	D	2.00
171	KAPURTHALA	KAPURTHALA	S-NPP	31.39640	75.26670	14:07:03	D	4.10
172	KAPURTHALA	NADALA	S-NPP	31.51830	75.52920	14:07:03	D	5.30
173	KAPURTHALA	NADALA	S-NPP	31.55340	75.49540	14:07:03	D	2.20
174	KAPURTHALA	NADALA	AQUA	31.56800	75.48400	13:31:48	D	10.20
175	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.17190	75.23250	14:07:03	D	6.60
176	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.17220	75.23590	14:07:03	D	6.60
177	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.17730	75.23540	14:07:03	D	1.60
178	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.18420	75.14330	14:07:03	D	8.20
179	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.18970	75.14950	14:07:03	D	8.20
180	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.19060	75.15060	14:07:03	D	23.10
181	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.22980	75.20660	14:07:03	D	16.40
182	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.23660	75.22810	14:07:03	D	4.70
183	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.23690	75.23150	14:07:03	D	5.30
184	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.24170	75.22760	14:07:03	D	1.40
185	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27320	75.23810	14:07:03	D	2.10
186	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.27960	75.25460	14:07:03	D	4.00
187	KAPURTHALA	SULTANPUR LODHI	AQUA	31.23500	75.28500	13:31:48	D	9.50
188	KAPURTHALA	SULTANPUR LODHI	AQUA	31.24800	75.24100	13:31:48	D	16.80
189	KAPURTHALA	SULTANPUR LODHI	AQUA	31.32300	75.25900	13:31:48	D	7.20
190	LUDHIANA	DEHLON	S-NPP	30.72800	75.87100	14:07:03	D	4.80
191	LUDHIANA	DEHLON	S-NPP	30.72800	75.87330	14:07:03	D	4.20
192	LUDHIANA	DORAHA	S-NPP	30.73490	76.09080	14:07:03	D	1.80
193	LUDHIANA	JAGRAON	S-NPP	30.75800	75.45520	14:07:03	D	5.40
194	LUDHIANA	JAGRAON	S-NPP	30.77950	75.48820	12:27:29	D	8.10
195	LUDHIANA	JAGRAON	S-NPP	30.78080	75.49350	12:27:29	D	12.50

196	LUDHIANA	JAGRAON	S-NPP	30.78130	75.48770	14:07:03	D	1.70
197	LUDHIANA	JAGRAON	S-NPP	30.78150	75.49540	12:27:29	D	9.90
198	LUDHIANA	JAGRAON	S-NPP	30.78330	75.44920	14:07:03	D	9.10
199	LUDHIANA	JAGRAON	S-NPP	30.79640	75.54590	14:07:03	D	2.00
200	LUDHIANA	JAGRAON	S-NPP	30.79840	75.54490	14:07:03	D	2.10
201	LUDHIANA	JAGRAON	AQUA	30.77500	75.48500	13:31:48	D	14.50
202	LUDHIANA	JAGRAON	AQUA	30.80800	75.55800	13:31:48	D	11.10
203	LUDHIANA	MACHHIWARA	S-NPP	30.83760	76.23800	12:27:29	D	3.20
204	LUDHIANA	MACHHIWARA	S-NPP	30.93790	76.27120	14:07:03	D	1.40
205	LUDHIANA	MACHHIWARA	S-NPP	30.94920	76.27800	14:07:03	D	6.60
206	LUDHIANA	MACHHIWARA	S-NPP	30.99390	76.27060	14:07:03	D	3.90
207	LUDHIANA	MACHHIWARA	AQUA	30.95700	76.31100	13:31:48	D	7.50
208	LUDHIANA	MALoud	AQUA	30.61600	75.99400	13:31:48	D	10.00
209	LUDHIANA	PAKHOWAL	S-NPP	30.67620	75.74860	14:07:03	D	4.10
210	LUDHIANA	RAIKOT	S-NPP	30.70030	75.59610	14:07:03	D	1.20
211	LUDHIANA	RAIKOT	AQUA	30.58000	75.49000	13:31:48	D	7.90
212	LUDHIANA	SIDHWAN BET	S-NPP	30.86650	75.42590	14:07:03	D	3.30
213	LUDHIANA	SIDHWAN BET	S-NPP	30.87150	75.55160	14:07:03	D	3.90
214	LUDHIANA	SIDHWAN BET	S-NPP	30.87290	75.56920	14:07:03	D	4.10
215	LUDHIANA	SIDHWAN BET	S-NPP	30.87610	75.54410	14:07:03	D	4.90
216	LUDHIANA	SIDHWAN BET	S-NPP	30.87660	75.55110	14:07:03	D	5.50
217	LUDHIANA	SIDHWAN BET	S-NPP	30.92100	75.43760	14:07:03	D	2.10
218	LUDHIANA	SIDHWAN BET	AQUA	30.85500	75.47400	13:31:48	D	6.30
219	LUDHIANA	SUDHAR	AQUA	30.77600	75.67200	13:31:48	D	26.20
220	MANSA	SARDULGARH	S-NPP	29.70240	75.22770	14:07:03	D	5.30
221	MANSA	SARDULGARH	S-NPP	29.70270	75.22610	14:07:03	D	5.30
222	MANSA	SARDULGARH	AQUA	29.66900	75.30100	13:31:48	D	12.10
223	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.91320	75.36170	12:27:29	D	7.90
224	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.91500	75.29650	14:07:03	D	4.20
225	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.96900	75.19430	12:27:29	D	7.10
226	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.99110	75.35070	14:07:03	D	2.60
227	MOGA	KOT ISE KHAN AT DHARAMKOT	AQUA	30.98900	75.29400	13:31:48	D	6.70
228	MOGA	MOGA-1	AQUA	30.72500	75.19500	13:31:48	D	19.60

229	MOGA	MOGA-2	S-NPP	30.76330	75.09240	14:07:03	D	3.90
230	MOGA	MOGA-2	AQUA	30.75300	75.12700	13:31:48	D	25.10
231	MOGA	MOGA-2	AQUA	30.81900	75.03300	13:31:48	D	10.60
232	MOGA	NIHAL SINGH	S-NPP	30.63500	75.30320	14:07:03	D	12.20
233	MOGA	NIHAL SINGH	AQUA	30.63800	75.29200	13:31:48	D	11.60
234	MUKTSAR	LAMBI	S-NPP	30.04890	74.42850	14:07:03	D	6.60
235	MUKTSAR	MUKTSAR	S-NPP	30.54560	74.59750	14:07:03	D	7.00
236	PATIALA	BHUNARHERI	S-NPP	30.14390	76.47650	14:07:03	D	3.30
237	PATIALA	BHUNARHERI	S-NPP	30.14540	76.47550	14:07:03	D	5.40
238	PATIALA	BHUNARHERI	S-NPP	30.15140	76.48280	14:07:03	D	3.60
239	PATIALA	BHUNARHERI	S-NPP	30.15330	76.47460	12:27:29	D	4.00
240	PATIALA	BHUNARHERI	S-NPP	30.15480	76.52990	14:07:03	D	2.20
241	PATIALA	BHUNARHERI	S-NPP	30.15980	76.47230	12:27:29	D	4.80
242	PATIALA	BHUNARHERI	S-NPP	30.20060	76.54310	12:27:29	D	4.80
243	PATIALA	BHUNARHERI	S-NPP	30.20750	76.50510	14:07:03	D	3.50
244	PATIALA	BHUNARHERI	S-NPP	30.20920	76.52870	14:07:03	D	2.80
245	PATIALA	BHUNARHERI	S-NPP	30.21460	76.52820	14:07:03	D	5.20
246	PATIALA	BHUNARHERI	S-NPP	30.23090	76.50320	14:07:03	D	4.80
247	PATIALA	BHUNARHERI	S-NPP	30.23450	76.50260	14:07:03	D	7.90
248	PATIALA	BHUNARHERI	S-NPP	30.23630	76.50270	14:07:03	D	4.80
249	PATIALA	BHUNARHERI	S-NPP	30.24800	76.46590	14:07:03	D	3.20
250	PATIALA	BHUNARHERI	S-NPP	30.25000	76.46590	14:07:03	D	3.60
251	PATIALA	BHUNARHERI	AQUA	30.16000	76.47100	13:31:48	D	6.20
252	PATIALA	NABHA	S-NPP	30.39580	76.26040	12:27:29	D	6.00
253	PATIALA	NABHA	S-NPP	30.43310	76.27990	14:07:03	D	2.70
254	PATIALA	NABHA	S-NPP	30.43560	76.31060	14:07:03	D	7.40
255	PATIALA	NABHA	S-NPP	30.43620	76.27740	14:07:03	D	3.80
256	PATIALA	NABHA	S-NPP	30.43840	76.30810	14:07:03	D	3.50
257	PATIALA	NABHA	S-NPP	30.43870	76.31200	14:07:03	D	3.50
258	PATIALA	NABHA	S-NPP	30.44420	76.28270	14:07:03	D	2.80
259	PATIALA	NABHA	S-NPP	30.44750	76.28400	14:07:03	D	2.70
260	PATIALA	NABHA	S-NPP	30.48010	76.22940	12:27:29	D	5.50
261	PATIALA	NABHA	AQUA	30.44900	76.24000	13:31:48	D	6.70

262	PATIALA	NABHA	AQUA	30.46200	76.11700	13:31:48	D	14.30
263	PATIALA	NABHA	AQUA	30.51300	76.30600	13:31:48	D	5.60
264	PATIALA	PATIALA	AQUA	30.41000	76.42200	13:31:48	D	9.50
265	PATIALA	PATIALA	AQUA	30.42000	76.48100	13:31:48	D	15.00
266	PATIALA	PATRAN	S-NPP	29.85810	76.20110	14:07:03	D	2.20
267	PATIALA	PATRAN	S-NPP	29.88030	76.08030	14:07:03	D	2.50
268	PATIALA	PATRAN	S-NPP	29.98830	76.11610	14:07:03	D	6.00
269	PATIALA	PATRAN	S-NPP	29.98860	76.11980	14:07:03	D	6.00
270	PATIALA	PATRAN	AQUA	29.85600	76.19700	13:31:48	D	9.50
271	PATIALA	PATRAN	AQUA	29.86500	76.19500	13:31:48	D	7.10
272	PATIALA	PATRAN	AQUA	30.00800	76.06100	13:31:48	D	8.10
273	PATIALA	RAJPURA	S-NPP	30.52400	76.51270	14:07:03	D	4.20
274	PATIALA	RAJPURA	S-NPP	30.52660	76.69860	14:07:03	D	3.90
275	PATIALA	RAJPURA	S-NPP	30.56410	76.60960	14:07:03	D	1.90
276	PATIALA	RAJPURA	S-NPP	30.56460	76.60880	14:07:03	D	2.30
277	PATIALA	RAJPURA	S-NPP	30.57500	76.60510	12:27:29	D	2.90
278	PATIALA	RAJPURA	S-NPP	30.57670	76.60650	12:27:29	D	4.50
279	PATIALA	RAJPURA	AQUA	30.52800	76.57100	13:31:48	D	8.20
280	PATIALA	RAJPURA	AQUA	30.53900	76.58100	13:31:48	D	11.50
281	PATIALA	RAJPURA	AQUA	30.54200	76.71200	13:31:48	D	8.20
282	PATIALA	SAMANA	S-NPP	30.00890	76.18990	14:07:03	D	6.60
283	PATIALA	SAMANA	S-NPP	30.01040	76.19240	14:07:03	D	6.10
284	PATIALA	SAMANA	S-NPP	30.03030	76.19860	12:27:29	D	2.30
285	PATIALA	SAMANA	S-NPP	30.03960	76.17180	14:07:03	D	6.60
286	PATIALA	SAMANA	S-NPP	30.03990	76.17560	14:07:03	D	6.60
287	PATIALA	SAMANA	S-NPP	30.09430	76.12160	14:07:03	D	4.50
288	PATIALA	SAMANA	S-NPP	30.09460	76.12530	14:07:03	D	4.50
289	PATIALA	SAMANA	S-NPP	30.09830	76.12380	14:07:03	D	12.10
290	PATIALA	SAMANA	S-NPP	30.09870	76.24540	14:07:03	D	1.10
291	PATIALA	SAMANA	S-NPP	30.23470	76.18170	14:07:03	D	7.60
292	PATIALA	SAMANA	AQUA	30.16100	76.23500	13:31:48	D	7.20
293	PATIALA	SANAUR	S-NPP	30.12720	76.26550	14:07:03	D	1.80
294	PATIALA	SANAUR	S-NPP	30.13670	76.28250	14:07:03	D	3.40

295	PATIALA	SANAUR	S-NPP	30.15860	76.28810	14:07:03	D	3.90
296	PATIALA	SANAUR	S-NPP	30.19680	76.36530	14:07:03	D	1.20
297	PATIALA	SHAMBU KALAN	S-NPP	30.49070	76.49800	12:27:29	D	6.20
298	PATIALA	SHAMBU KALAN	AQUA	30.50300	76.51100	13:31:48	D	6.80
299	RUPNAGAR	RUPNAGAR	S-NPP	30.90300	76.54250	02:57:03	N	1.30
300	SANGRUR	ANDANA	S-NPP	29.82060	75.86160	14:07:03	D	3.20
301	SANGRUR	ANDANA	S-NPP	29.84450	76.02880	14:07:03	D	2.60
302	SANGRUR	ANDANA	AQUA	29.82100	76.05100	13:31:48	D	11.30
303	SANGRUR	ANDANA	AQUA	29.85100	76.10900	13:31:48	D	7.30
304	SANGRUR	BHAWANIGARH	S-NPP	30.21110	76.00840	14:07:03	D	3.00
305	SANGRUR	BHAWANIGARH	S-NPP	30.21140	76.00880	14:07:03	D	3.20
306	SANGRUR	BHAWANIGARH	S-NPP	30.29310	76.10830	14:07:03	D	1.70
307	SANGRUR	BHAWANIGARH	S-NPP	30.29840	76.10770	14:07:03	D	3.30
308	SANGRUR	BHAWANIGARH	S-NPP	30.35040	75.97180	12:27:29	D	5.50
309	SANGRUR	BHAWANIGARH	AQUA	30.22400	76.06400	13:31:48	D	8.90
310	SANGRUR	SANGRUR	S-NPP	30.27760	75.78390	14:07:03	D	5.00
311	SANGRUR	SANGRUR	S-NPP	30.27790	75.78740	14:07:03	D	8.40
312	SANGRUR	SHER PUR	S-NPP	30.32160	75.73490	14:07:03	D	2.60
313	SANGRUR	SHER PUR	S-NPP	30.32680	75.73440	14:07:03	D	2.60
314	SAS NAGAR (MOHALI)	DERABASSI	S-NPP	30.56730	76.87760	14:07:03	D	3.30
315	SAS NAGAR (MOHALI)	DERABASSI	AQUA	30.58300	76.78600	13:31:48	D	39.00
316	SAS NAGAR (MOHALI)	DERABASSI	AQUA	30.58500	76.79700	13:31:48	D	13.20
317	TARN TARAN	BHIKHIWIND	S-NPP	31.26740	74.63710	14:07:03	D	3.20
318	TARN TARAN	BHIKHIWIND	S-NPP	31.26940	74.63610	14:07:03	D	5.60
319	TARN TARAN	BHIKHIWIND	S-NPP	31.28110	74.71760	14:07:03	D	5.00
320	TARN TARAN	BHIKHIWIND	S-NPP	31.29720	74.72950	12:27:29	D	5.10
321	TARN TARAN	BHIKHIWIND	S-NPP	31.30510	74.70860	14:07:03	D	5.30
322	TARN TARAN	BHIKHIWIND	S-NPP	31.30840	74.68910	14:07:03	D	5.90
323	TARN TARAN	BHIKHIWIND	S-NPP	31.31450	74.64380	14:07:03	D	3.80
324	TARN TARAN	BHIKHIWIND	S-NPP	31.32260	74.68110	14:07:03	D	3.10
325	TARN TARAN	BHIKHIWIND	S-NPP	31.34820	74.57690	14:07:03	D	5.50
326	TARN TARAN	BHIKHIWIND	S-NPP	31.34820	74.69110	14:07:03	D	8.40
327	TARN TARAN	BHIKHIWIND	S-NPP	31.35030	74.68930	14:07:03	D	11.30

328	TARN TARAN	BHIKHIWIND	S-NPP	31.35430	74.74030	14:07:03	D	5.80
329	TARN TARAN	BHIKHIWIND	S-NPP	31.35700	74.73500	14:07:03	D	8.00
330	TARN TARAN	BHIKHIWIND	AQUA	31.27900	74.71800	13:31:48	D	27.90
331	TARN TARAN	BHIKHIWIND	AQUA	31.28200	74.73200	13:31:48	D	20.90
332	TARN TARAN	BHIKHIWIND	AQUA	31.29700	74.75700	13:31:48	D	16.40
333	TARN TARAN	BHIKHIWIND	AQUA	31.33700	74.57900	13:31:48	D	15.10
334	TARN TARAN	CHOHLA SAHIB	S-NPP	31.18810	74.94390	14:07:03	D	8.70
335	TARN TARAN	CHOHLA SAHIB	S-NPP	31.18860	74.94240	14:07:03	D	6.40
336	TARN TARAN	CHOHLA SAHIB	S-NPP	31.20500	74.96950	12:27:29	D	5.80
337	TARN TARAN	CHOHLA SAHIB	S-NPP	31.20650	74.97030	12:27:29	D	4.00
338	TARN TARAN	CHOHLA SAHIB	S-NPP	31.25770	74.92850	14:07:03	D	2.90
339	TARN TARAN	CHOHLA SAHIB	S-NPP	31.28470	75.06240	12:27:29	D	4.80
340	TARN TARAN	CHOHLA SAHIB	S-NPP	31.29450	75.01030	14:07:03	D	10.20
341	TARN TARAN	CHOHLA SAHIB	S-NPP	31.29490	75.01060	14:07:03	D	5.00
342	TARN TARAN	CHOHLA SAHIB	S-NPP	31.32880	75.06020	14:07:03	D	5.00
343	TARN TARAN	CHOHLA SAHIB	S-NPP	31.36330	75.11060	14:07:03	D	6.10
344	TARN TARAN	CHOHLA SAHIB	AQUA	31.20100	74.97300	13:31:48	D	12.70
345	TARN TARAN	CHOHLA SAHIB	AQUA	31.28800	75.00300	13:31:48	D	8.00
346	TARN TARAN	CHOHLA SAHIB	AQUA	31.34900	75.11400	13:31:48	D	8.40
347	TARN TARAN	CHOHLA SAHIB	AQUA	31.35800	75.04300	13:31:48	D	9.90
348	TARN TARAN	GANDIWIND TATLA	S-NPP	31.48620	74.71300	14:07:03	D	28.90
349	TARN TARAN	GANDIWIND TATLA	S-NPP	31.48740	74.71080	14:07:03	D	24.20
350	TARN TARAN	GANDIWIND TATLA	S-NPP	31.51510	74.74660	14:07:03	D	5.50
351	TARN TARAN	GANDIWIND TATLA	S-NPP	31.52380	74.79120	14:07:03	D	3.80
352	TARN TARAN	KHADUR SAHIB	S-NPP	31.37730	75.15690	14:07:03	D	13.20
353	TARN TARAN	KHADUR SAHIB	S-NPP	31.43460	75.18570	14:07:03	D	2.10
354	TARN TARAN	KHADUR SAHIB	S-NPP	31.48210	75.20470	14:07:03	D	3.30
355	TARN TARAN	KHADUR SAHIB	AQUA	31.46900	75.20300	13:31:48	D	9.10
356	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.35020	74.95110	14:07:03	D	4.30
357	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.37240	74.97530	14:07:03	D	3.60
358	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.37250	74.97400	14:07:03	D	10.60
359	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.37730	74.97480	14:07:03	D	3.20
360	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.39330	74.86750	14:07:03	D	4.00

361	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.39470	74.87250	14:07:03	D	9.30
362	TARN TARAN	PATTI	S-NPP	31.13250	74.76180	14:07:03	D	4.20
363	TARN TARAN	PATTI	S-NPP	31.13580	74.80000	14:07:03	D	5.00
364	TARN TARAN	PATTI	S-NPP	31.16040	74.85550	14:07:03	D	4.40
365	TARN TARAN	PATTI	S-NPP	31.16150	74.85390	14:07:03	D	5.10
366	TARN TARAN	PATTI	S-NPP	31.16320	74.82920	14:07:03	D	5.10
367	TARN TARAN	PATTI	S-NPP	31.16930	74.95910	14:07:03	D	8.80
368	TARN TARAN	PATTI	S-NPP	31.16970	74.95760	14:07:03	D	9.50
369	TARN TARAN	PATTI	S-NPP	31.18620	74.72870	14:07:03	D	3.60
370	TARN TARAN	PATTI	S-NPP	31.19930	74.88880	14:07:03	D	3.30
371	TARN TARAN	PATTI	S-NPP	31.21010	74.77730	14:07:03	D	4.60
372	TARN TARAN	PATTI	S-NPP	31.21840	74.93920	14:07:03	D	5.10
373	TARN TARAN	PATTI	S-NPP	31.22340	74.93870	14:07:03	D	5.10
374	TARN TARAN	PATTI	AQUA	31.18200	74.74700	13:31:48	D	12.20
375	TARN TARAN	PATTI	AQUA	31.19100	74.86100	13:31:48	D	7.00
376	TARN TARAN	PATTI	AQUA	31.20600	74.94300	13:31:48	D	16.60
377	TARN TARAN	PATTI	AQUA	31.25400	74.75300	13:31:48	D	8.00
378	TARN TARAN	PATTI	AQUA	31.26900	74.89400	13:31:48	D	14.50
379	TARN TARAN	PATTI	AQUA	31.30000	74.77100	13:31:48	D	10.10
380	TARN TARAN	TARN TARAN	S-NPP	31.39060	74.82050	14:07:03	D	7.20
381	TARN TARAN	TARN TARAN	S-NPP	31.40240	74.78530	12:27:29	D	5.90
382	TARN TARAN	TARN TARAN	S-NPP	31.43240	74.78350	14:07:03	D	7.20
383	TARN TARAN	TARN TARAN	S-NPP	31.45100	74.94980	12:27:29	D	4.20
384	TARN TARAN	TARN TARAN	S-NPP	31.49510	74.99930	14:07:03	D	10.60
385	TARN TARAN	TARN TARAN	S-NPP	31.49580	75.00110	14:07:03	D	17.90
386	TARN TARAN	TARN TARAN	S-NPP	31.50340	74.91170	14:07:03	D	5.30
387	TARN TARAN	TARN TARAN	S-NPP	31.50350	74.91370	14:07:03	D	4.90
388	TARN TARAN	TARN TARAN	S-NPP	31.51990	74.92980	14:07:03	D	4.50
389	TARN TARAN	TARN TARAN	AQUA	31.39800	74.79800	13:31:48	D	7.10
390	TARN TARAN	TARN TARAN	AQUA	31.40700	74.85400	13:31:48	D	10.00
391	TARN TARAN	VALTOHA	S-NPP	31.13850	74.60260	14:07:03	D	5.90
392	TARN TARAN	VALTOHA	S-NPP	31.19420	74.58840	14:07:03	D	12.40
393	TARN TARAN	VALTOHA	AQUA	31.22800	74.61200	13:31:48	D	18.60

Details of residue burning events in Haryana on 21-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMBALA	AMBALA-I	S-NPP	30.32890	76.79730	14:07:03	D	3.60
2	AMBALA	AMBALA-II	S-NPP	30.09940	76.60740	14:07:03	D	7.30
3	AMBALA	AMBALA-II	S-NPP	30.23790	76.61790	14:07:03	D	2.00
4	AMBALA	AMBALA-II	S-NPP	30.23890	76.61810	14:07:03	D	3.30
5	AMBALA	AMBALA-II	S-NPP	30.29400	76.85430	14:07:03	D	1.90
6	AMBALA	AMBALA-II	AQUA	30.29700	76.85600	13:31:48	D	6.90
7	AMBALA	BARARA	S-NPP	30.18040	77.00030	12:27:29	D	4.10
8	AMBALA	BARARA	S-NPP	30.20000	77.04660	12:27:29	D	5.10
9	AMBALA	SHAHZADPUR	S-NPP	30.40950	76.92720	14:07:03	D	2.10
10	FATEHABAD	BHUNA	S-NPP	29.55360	75.83900	14:07:03	D	3.90
11	FATEHABAD	BHUNA	S-NPP	29.55950	75.78580	14:07:03	D	2.70
12	FATEHABAD	BHUNA	S-NPP	29.56170	75.78460	14:07:03	D	2.40
13	FATEHABAD	BHUNA	S-NPP	29.56820	75.80140	14:07:03	D	8.20
14	FATEHABAD	BHUNA	S-NPP	29.57610	75.83570	14:07:03	D	2.40
15	FATEHABAD	JAKHAL	S-NPP	29.77050	75.77930	14:07:03	D	4.10
16	FATEHABAD	RATIA	S-NPP	29.65690	75.52900	14:07:03	D	5.70
17	FATEHABAD	TOHANA	S-NPP	29.58180	75.84220	14:07:03	D	3.00
18	FATEHABAD	TOHANA	S-NPP	29.59900	75.86170	14:07:03	D	7.70
19	FATEHABAD	TOHANA	S-NPP	29.60130	75.88980	14:07:03	D	1.70
20	FATEHABAD	TOHANA	S-NPP	29.65620	75.91090	12:27:29	D	6.80
21	HISAR	UKLANA	S-NPP	29.53620	75.87950	14:07:03	D	7.20
22	JIND	ALEWA	S-NPP	29.51160	76.46620	12:27:29	D	6.50
23	JIND	NARWANA	S-NPP	29.54240	76.01810	14:07:03	D	4.10
24	JIND	NARWANA	S-NPP	29.54730	76.01410	14:07:03	D	4.90
25	JIND	NARWANA	S-NPP	29.69700	76.03320	14:07:03	D	8.60
26	JIND	NARWANA	AQUA	29.50900	75.97000	13:31:48	D	6.80
27	JIND	NARWANA	AQUA	29.53200	76.04300	13:31:48	D	7.70
28	JIND	NARWANA	AQUA	29.68500	76.04200	13:31:48	D	7.60
29	JIND	NARWANA	AQUA	29.68800	76.04800	13:31:48	D	7.40
30	JIND	SAFIDON	S-NPP	29.40500	76.56960	14:07:03	D	3.90

31	JIND	SAFIDON	S-NPP	29.40760	76.56940	14:07:03	D	3.60
32	JIND	UCHANA	S-NPP	29.54510	76.11600	14:07:03	D	1.80
33	KAITHAL	GUHLA	S-NPP	29.97630	76.23330	14:07:03	D	2.40
34	KAITHAL	GUHLA	S-NPP	29.99310	76.24300	14:07:03	D	1.80
35	KAITHAL	GUHLA	S-NPP	30.01360	76.25360	14:07:03	D	2.40
36	KAITHAL	GUHLA	S-NPP	30.01560	76.25600	14:07:03	D	3.70
37	KAITHAL	GUHLA	S-NPP	30.01750	76.34740	14:07:03	D	5.30
38	KAITHAL	GUHLA	S-NPP	30.02030	76.34450	14:07:03	D	2.20
39	KAITHAL	GUHLA	S-NPP	30.05490	76.30290	14:07:03	D	9.00
40	KAITHAL	GUHLA	S-NPP	30.06960	76.35520	14:07:03	D	7.00
41	KAITHAL	GUHLA	S-NPP	30.07390	76.41280	14:07:03	D	5.60
42	KAITHAL	GUHLA	AQUA	30.00800	76.37000	13:31:48	D	15.20
43	KAITHAL	GUHLA	AQUA	30.01000	76.38100	13:31:48	D	15.20
44	KAITHAL	GUHLA	AQUA	30.02200	76.32300	13:31:48	D	12.80
45	KAITHAL	GUHLA	AQUA	30.09200	76.38200	13:31:48	D	7.90
46	KAITHAL	GUHLA	AQUA	30.10400	76.45400	13:31:48	D	8.60
47	KAITHAL	GUHLA	AQUA	30.11100	76.37800	13:31:48	D	5.80
48	KAITHAL	KAITHAL	S-NPP	29.72260	76.46050	12:27:29	D	3.70
49	KAITHAL	KAITHAL	S-NPP	29.80460	76.52400	14:07:03	D	5.40
50	KAITHAL	KAITHAL	S-NPP	29.81000	76.52350	14:07:03	D	5.40
51	KAITHAL	KAITHAL	S-NPP	29.90130	76.55000	14:07:03	D	4.20
52	KAITHAL	KAITHAL	AQUA	29.82300	76.31100	13:31:48	D	20.20
53	KAITHAL	KAITHAL	AQUA	29.82400	76.30500	13:31:48	D	7.30
54	KAITHAL	KAITHAL	AQUA	29.82500	76.32300	13:31:48	D	10.50
55	KAITHAL	KAITHAL	AQUA	29.82600	76.31700	13:31:48	D	23.30
56	KAITHAL	KALAYAT	S-NPP	29.55770	76.27380	14:07:03	D	3.70
57	KAITHAL	KALAYAT	S-NPP	29.76300	76.19980	14:07:03	D	5.90
58	KAITHAL	KALAYAT	AQUA	29.70500	76.34400	13:31:48	D	5.70
59	KAITHAL	PUNDRI	S-NPP	29.68520	76.69390	14:07:03	D	4.00
60	KAITHAL	PUNDRI	S-NPP	29.81770	76.56230	12:27:29	D	4.50
61	KAITHAL	PUNDRI	S-NPP	29.89860	76.58570	14:07:03	D	1.80
62	KAITHAL	PUNDRI	AQUA	29.84500	76.56600	13:31:48	D	8.00
63	KAITHAL	PUNDRI	AQUA	29.89500	76.54900	13:31:48	D	12.50
64	KAITHAL	RAJOUND	S-NPP	29.53310	76.51200	14:07:03	D	4.60

65	KAITHAL	RAJOUND	S-NPP	29.66250	76.53840	14:07:03	D	3.20
66	KAITHAL	SIWAN	S-NPP	29.88370	76.25500	14:07:03	D	2.00
67	KAITHAL	SIWAN	S-NPP	29.97020	76.37830	12:27:29	D	3.70
68	KAITHAL	SIWAN	AQUA	29.92900	76.19900	13:31:48	D	6.80
69	KARNAL	ASSANDH	S-NPP	29.65650	76.67670	14:07:03	D	3.50
70	KARNAL	CHIRAO	S-NPP	29.68250	76.71510	12:27:29	D	2.80
71	KARNAL	KARNAL	S-NPP	29.71030	76.88160	14:07:03	D	1.90
72	KARNAL	KARNAL	S-NPP	29.75390	77.03470	14:07:03	D	2.40
73	KARNAL	KARNAL	S-NPP	29.75520	77.03510	14:07:03	D	2.40
74	KARNAL	NILOKHERI	S-NPP	29.86650	76.82180	14:07:03	D	3.00
75	KARNAL	NILOKHERI	S-NPP	29.88200	76.71740	12:27:29	D	5.10
76	KARNAL	NILOKHERI	AQUA	29.78100	76.92300	13:31:48	D	11.80
77	KARNAL	NILOKHERI	AQUA	29.79000	76.92100	13:31:48	D	6.90
78	KURUKSHETRA	ISMAILABAD	S-NPP	30.03750	76.66060	12:27:29	D	7.60
79	KURUKSHETRA	ISMAILABAD	S-NPP	30.10680	76.70720	14:07:03	D	8.50
80	KURUKSHETRA	ISMAILABAD	AQUA	30.17400	76.76500	13:31:48	D	5.50
81	KURUKSHETRA	LADWA	AQUA	29.99900	77.00400	13:31:48	D	11.40
82	KURUKSHETRA	PEHOWA	S-NPP	29.97160	76.67350	14:07:03	D	6.60
83	KURUKSHETRA	PEHOWA	S-NPP	30.02980	76.67290	12:27:29	D	3.50
84	KURUKSHETRA	PEHOWA	S-NPP	30.03290	76.66920	12:27:29	D	11.60
85	KURUKSHETRA	PEHOWA	S-NPP	30.03440	76.66420	12:27:29	D	10.70
86	KURUKSHETRA	PEHOWA	S-NPP	30.05700	76.47680	14:07:03	D	2.40
87	KURUKSHETRA	PEHOWA	S-NPP	30.07180	76.60590	12:27:29	D	2.80
88	KURUKSHETRA	PEHOWA	AQUA	30.01800	76.67300	13:31:48	D	19.30
89	KURUKSHETRA	SHAHBAD	S-NPP	30.13710	76.81880	14:07:03	D	2.90
90	KURUKSHETRA	SHAHBAD	S-NPP	30.14570	76.93430	14:07:03	D	1.60
91	KURUKSHETRA	SHAHBAD	S-NPP	30.16510	76.89500	14:07:03	D	3.40
92	KURUKSHETRA	SHAHBAD	S-NPP	30.20500	76.83600	12:27:29	D	2.70
93	KURUKSHETRA	THANESAR	S-NPP	29.88730	76.80360	14:07:03	D	3.20
94	KURUKSHETRA	THANESAR	S-NPP	30.02080	76.70160	12:27:29	D	4.90
95	KURUKSHETRA	THANESAR	AQUA	30.02600	76.77900	13:31:48	D	21.40
96	KURUKSHETRA	THANESAR	AQUA	30.02800	76.79000	13:31:48	D	15.80
97	KURUKSHETRA	THANESAR	AQUA	30.03200	76.69400	13:31:48	D	13.30
98	SIRSA	BARAGUNDA	S-NPP	29.72100	75.15460	14:07:03	D	16.00

99	SIRSA	BARAGUNDA	S-NPP	29.72230	75.15930	14:07:03	D	10.40
100	SIRSA	ODHAN	S-NPP	29.83450	75.06140	14:07:03	D	10.60
101	SIRSA	ODHAN	AQUA	29.85200	74.98400	13:31:48	D	57.00
102	SONIPAT	MURTHAL	AQUA	29.09000	77.10900	13:31:48	D	9.00
103	YAMUNANAGAR	CHHACHHRAULI	S-NPP	30.25810	77.45050	14:07:03	D	6.60
104	YAMUNANAGAR	CHHACHHRAULI	S-NPP	30.26140	77.49990	14:07:03	D	3.50
105	YAMUNANAGAR	JAGADHRI	S-NPP	30.09120	77.28650	14:07:03	D	2.50
106	YAMUNANAGAR	JAGADHRI	S-NPP	30.20480	77.28110	14:07:03	D	2.00
107	YAMUNANAGAR	SADHAURA	S-NPP	30.44390	77.18190	14:07:03	D	3.20

Details of residue burning events in Uttar Pradesh on 21-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	ALIGARH	KHAIR	S-NPP	27.97200	77.55240	14:07:03	D	2.70
2	ALIGARH	KHAIR	S-NPP	28.00540	77.61780	14:07:03	D	2.20
3	BARABANKI	NAWABGANJ	AQUA	26.93100	81.26200	13:31:48	D	5.20
4	BARABANKI	RAMNAGAR	AQUA	27.05400	81.35100	13:31:48	D	6.10
5	KHERI	MOHMADI	AQUA	27.97200	80.13600	13:31:48	D	4.60
6	MAINPURI	MAINPURI	AQUA	27.22200	78.98300	13:31:48	D	6.80
7	PILHIBHIT	PILHIBHIT	AQUA	28.85000	79.76800	13:31:48	D	5.40
8	PILHIBHIT	PURANPUR	AQUA	28.34500	80.16800	13:31:48	D	5.90
9	PILHIBHIT	PURANPUR	AQUA	28.34900	80.13600	13:31:48	D	6.00
10	PILHIBHIT	PURANPUR	AQUA	28.40700	80.22400	13:31:48	D	10.40
11	RAMPUR	MILAK	AQUA	28.71400	79.21200	13:31:48	D	5.70
12	SHAHJAHANPUR	PUWANYA	S-NPP	28.14820	80.19230	14:07:03	D	7.20
13	SHAHJAHANPUR	PUWANYA	S-NPP	28.15310	80.19000	14:07:03	D	9.50
14	SHAHJAHANPUR	PUWANYA	S-NPP	28.15480	80.19190	14:07:03	D	4.20
15	SHAHJAHANPUR	PUWANYA	S-NPP	28.26390	80.10370	02:57:03	N	0.40
16	SHAHJAHANPUR	PUWANYA	S-NPP	28.27970	80.07490	01:16:46	N	0.40
17	SHAHJAHANPUR	PUWANYA	S-NPP	28.31760	80.19400	12:27:29	D	3.60
18	SHAHJAHANPUR	PUWANYA	S-NPP	28.31850	80.19440	12:27:29	D	4.70
19	SHAHJAHANPUR	PUWANYA	AQUA	28.18200	80.18900	13:31:48	D	6.30
20	SHAHJAHANPUR	PUWANYA	AQUA	28.19000	80.25000	13:31:48	D	8.90
21	SHAHJAHANPUR	SHAHJAHANPUR	AQUA	27.76700	79.86700	13:31:48	D	4.60
22	SHAHJAHANPUR	SHAHJAHANPUR	AQUA	27.80400	79.74200	13:31:48	D	5.50
23	SHAMLI	KAIRANA	AQUA	29.64100	77.14100	13:31:48	D	5.70

Details of residue burning events in Rajasthan on 21-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	HANUMANGARH	HANUMANGARH	S-NPP	29.62290	74.23120	14:07:03	D	3.20
2	HANUMANGARH	TIBI	S-NPP	29.53890	74.48660	14:07:03	D	2.40
3	HANUMANGARH	TIBI	S-NPP	29.53900	74.48390	14:07:03	D	3.50
4	KOTA	LADPURA	S-NPP	25.25780	75.94180	14:07:03	D	5.00
5	KOTA	LADPURA	S-NPP	25.26160	75.92910	14:07:03	D	4.70
6	KOTA	SANGOD	S-NPP	25.03100	76.15960	14:07:03	D	7.30

Details of residue burning events in Madhya Pradesh on 21-Oct-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	DAMOH	JABERA	AQUA	23.54300	79.80700	13:31:48	D	4.80
2	DATIA	SEONDHA	S-NPP	25.82440	78.61860	14:07:03	D	5.40
3	GUNA	GUNA	S-NPP	24.73230	77.01710	14:07:03	D	1.90
4	GUNA	GUNA	S-NPP	24.91970	77.05260	14:07:03	D	2.70
5	GWALIOR	DABRA	S-NPP	25.82770	78.21350	14:07:03	D	3.10
6	HARDA	HARDA	S-NPP	22.48480	77.02420	14:07:03	D	4.70
7	HOSHANGABAD	BANKHERI	S-NPP	22.71490	78.45390	14:07:03	D	2.60
8	RAISEN	GOHARGANJ	S-NPP	22.98860	77.59680	14:07:03	D	2.50
9	SAGAR	SAGAR	S-NPP	23.59220	78.85910	12:27:29	D	3.50
10	SEHORE	BUDHNI	S-NPP	22.71470	77.49160	14:07:03	D	1.40
11	SEHORE	NASRULLAHGANJ	S-NPP	22.71830	77.42360	14:07:03	D	1.00
12	SEHORE	NASRULLAHGANJ	S-NPP	22.73280	77.40800	14:07:03	D	2.30
13	SEHORE	NASRULLAHGANJ	S-NPP	22.73840	77.24170	14:07:03	D	2.80
14	SEONI	GHANSAUR	S-NPP	22.69050	79.89640	14:07:03	D	4.30
15	SEONI	LAKHNADOU	S-NPP	22.48050	79.65710	14:07:03	D	4.10
16	SEONI	LAKHNADOU	S-NPP	22.49200	79.46190	14:07:03	D	2.00
17	SEONI	SEONI	S-NPP	22.20200	79.39590	12:27:29	D	2.60
18	SHIVPURI	KOLARAS	S-NPP	24.98460	77.75330	14:07:03	D	8.50

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

S. No.	Satellite Name	Sensor	Resolution (meter)	Day / Night Passes
1.	Suomi NPP	VIIRS	375 / 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>)
