



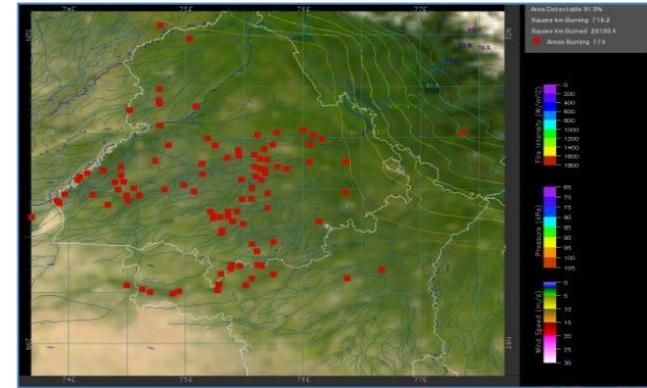
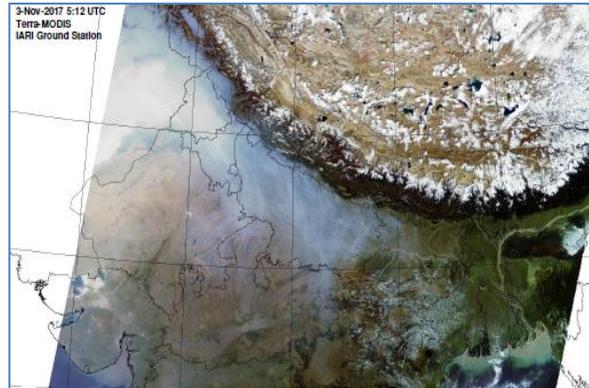
**Bulletin
No. 35**

**Events Date:
19-Oct-2021**

**Issued on:
19-Oct-2021**



MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2021



Prepared by:

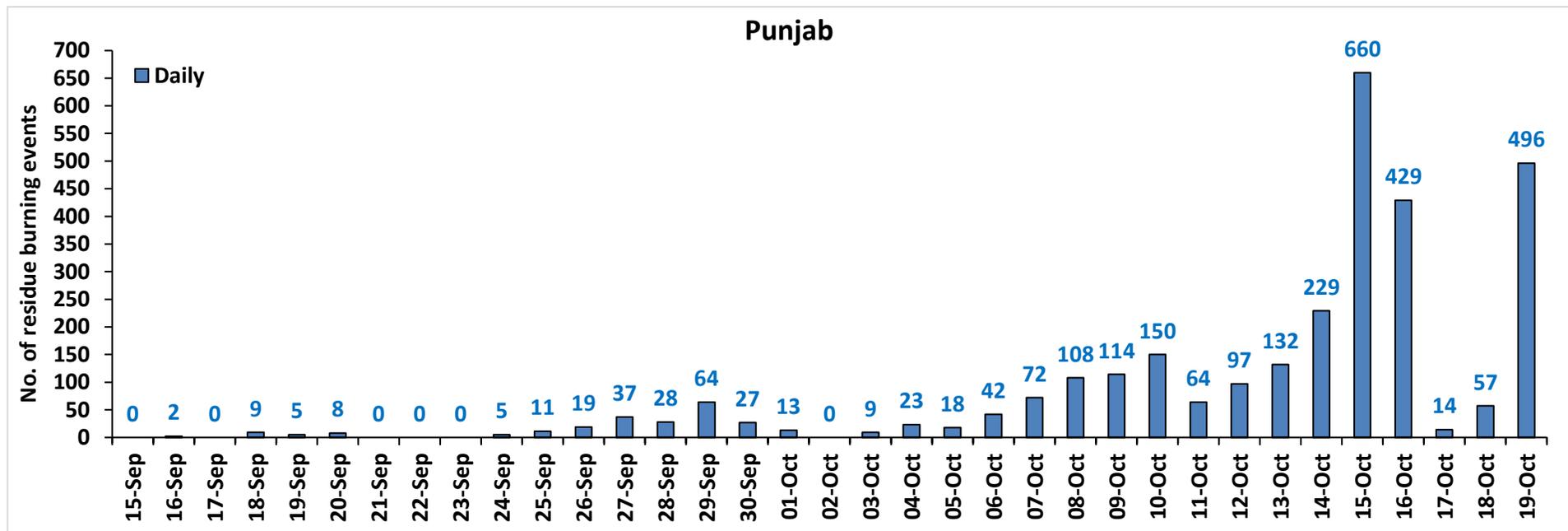
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

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

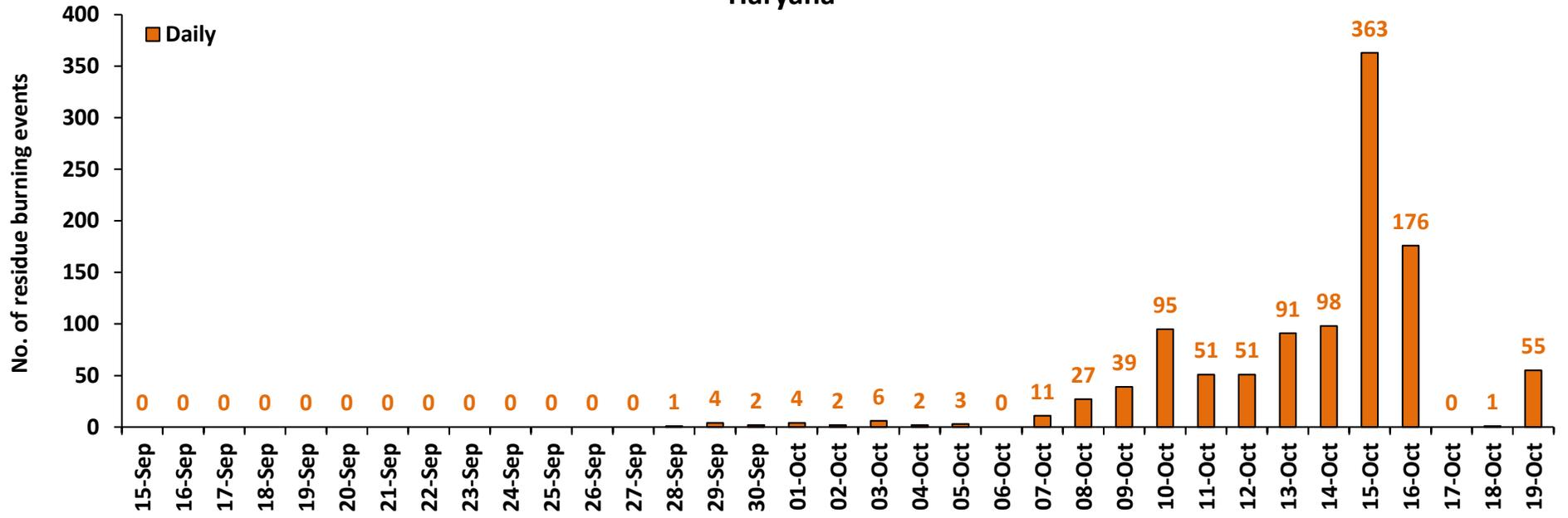
Highlights for 19-October-2021

- The active fire events due to rice residue burning were monitored using satellite remote sensing, following the new "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data".
- Satellites detected **562** residue burning events in the six study States on 19-Oct-2021.
- The state wise events detected on 19-Oct-2021 were **496** in Punjab, **55** in Haryana, **5** in UP, **0** in Delhi, **5** in Rajasthan and **1** in MP.
- The number of events has increased from **60** on 18-Oct-2021 to **562** on 19-Oct-2021 in the six study states.
- Detection of burning events by satellites was hampered due to clouds over eastern Uttar Pradesh and eastern Madhya Pradesh.
- Total **4768** burning events were detected in the six states between 15-Sept-2021 and 19-Oct-2021, which are distributed as **2942**, **1082**, **625**, **0**, **34** and **85** in Punjab, Haryana, UP, Delhi, Rajasthan and MP, respectively.
- Overall, the total burning events recorded in the six states are **56.7%** less than in 2020 till date. Punjab recorded **65.4%** reduction, Haryana recorded **6.9%** reduction, UP recorded **25.5%** increase, Delhi recorded **100%** reduction, Rajasthan recorded **88.8%** reduction and MP recorded **83.7%** reduction, in the current season than in 2020.

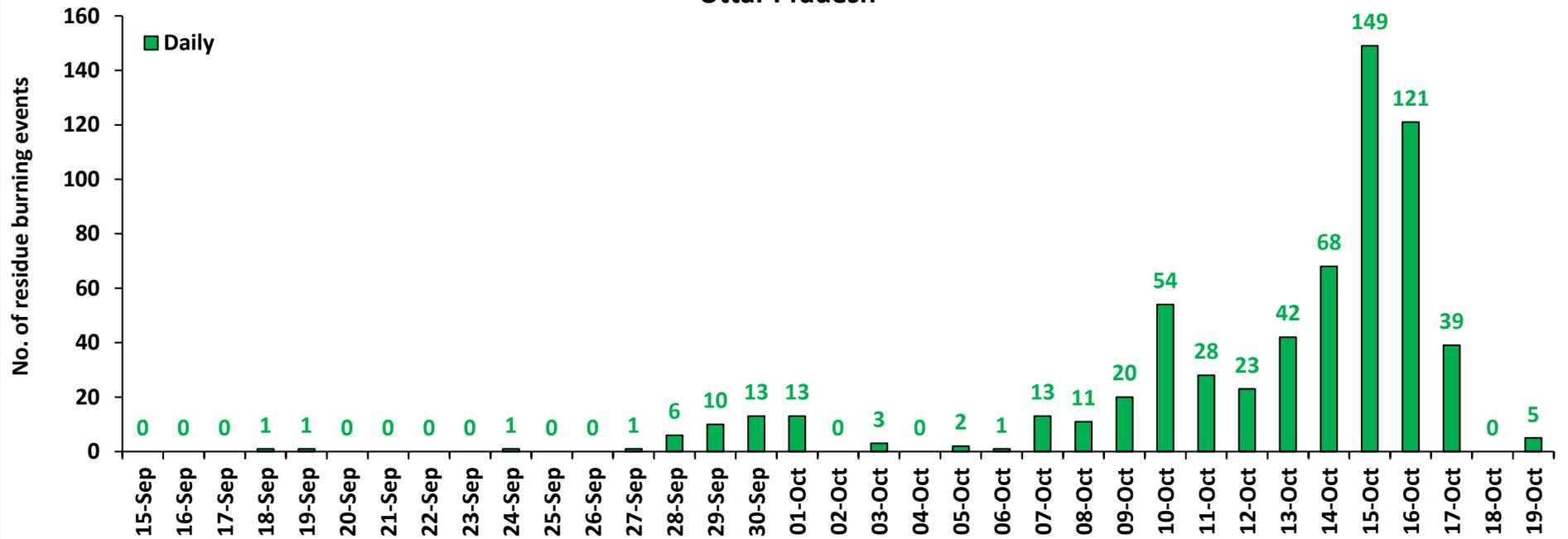
Temporal distribution of rice residue burning events for the study States in 2021



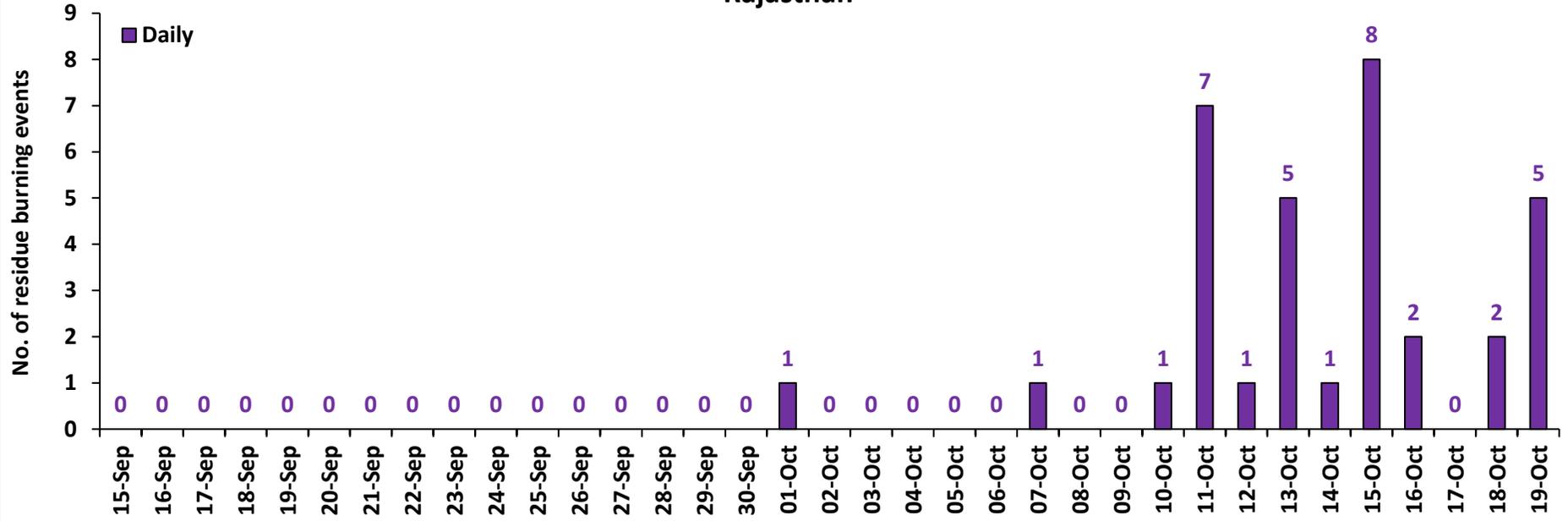
Haryana



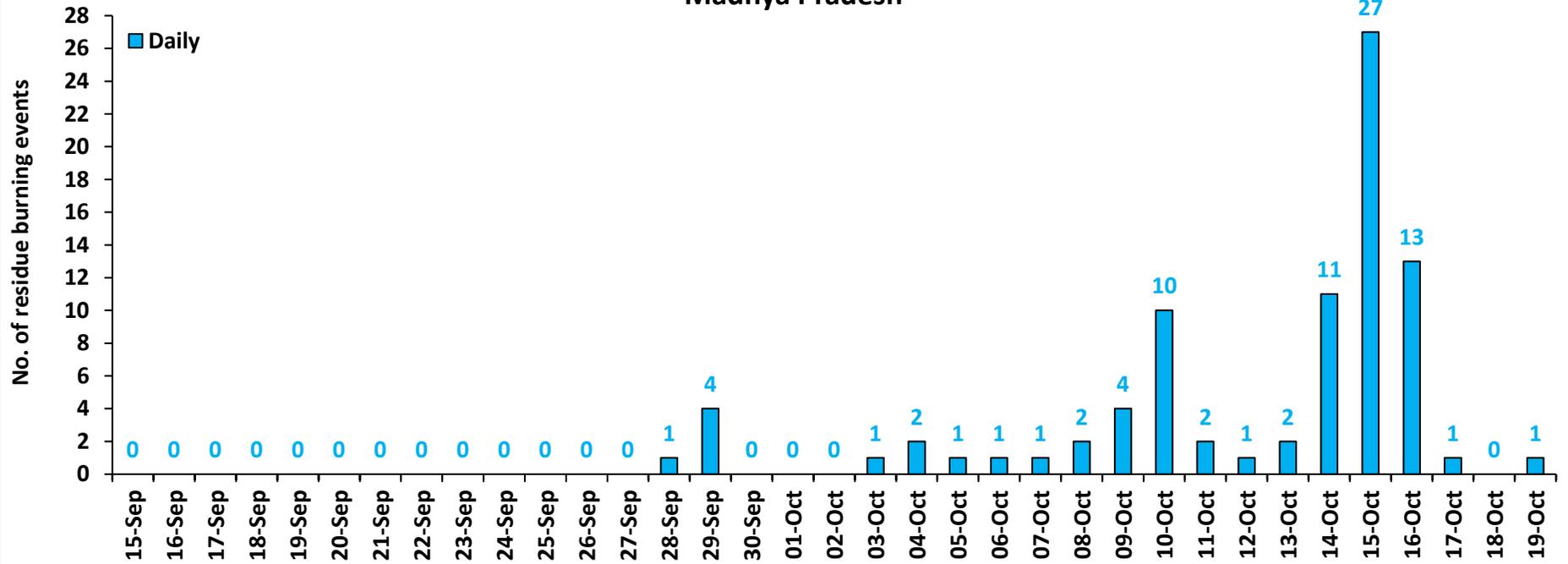
Uttar Pradesh



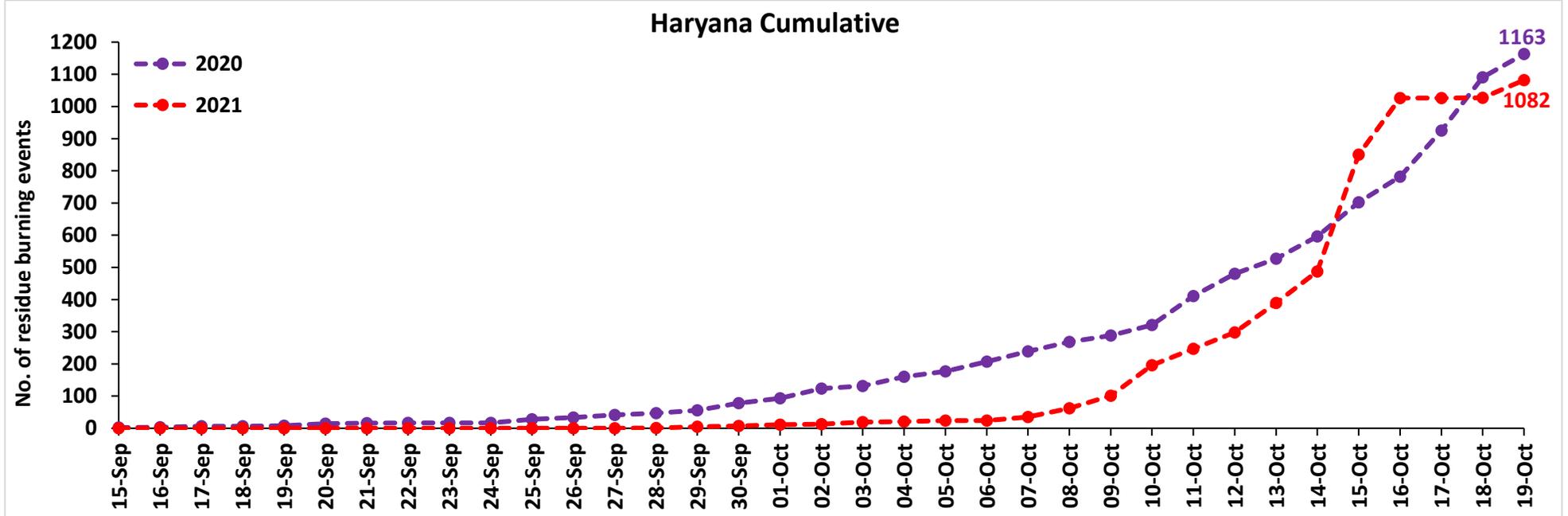
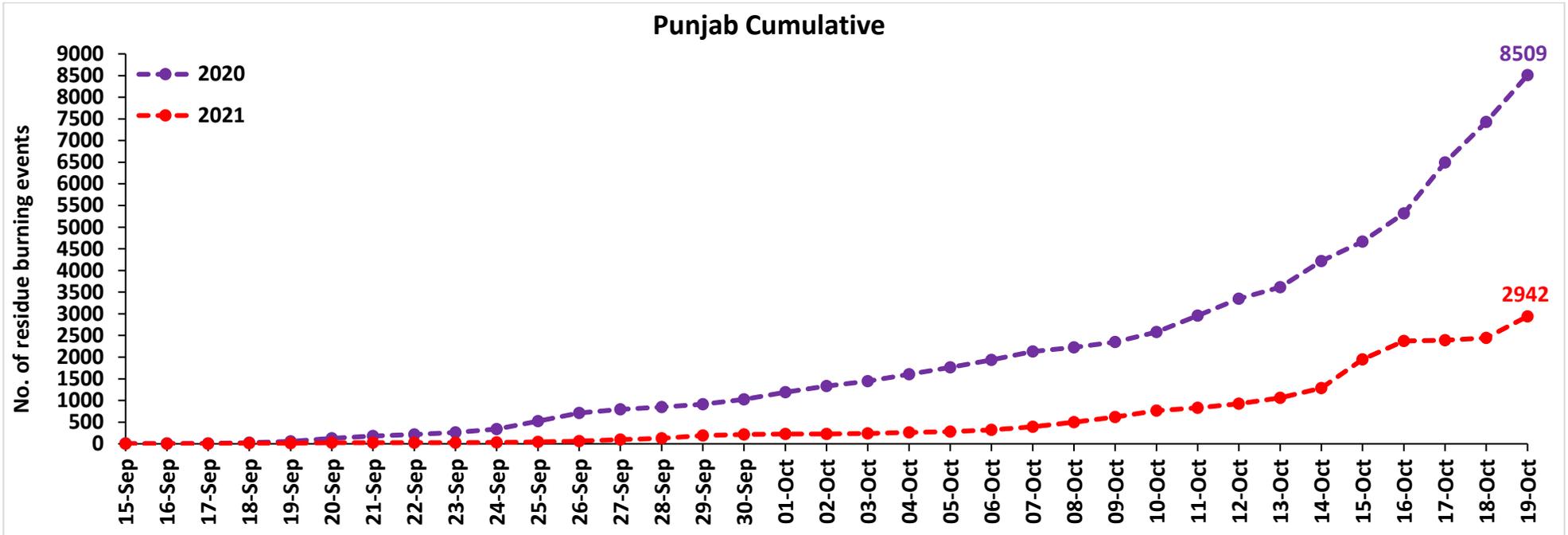
Rajasthan



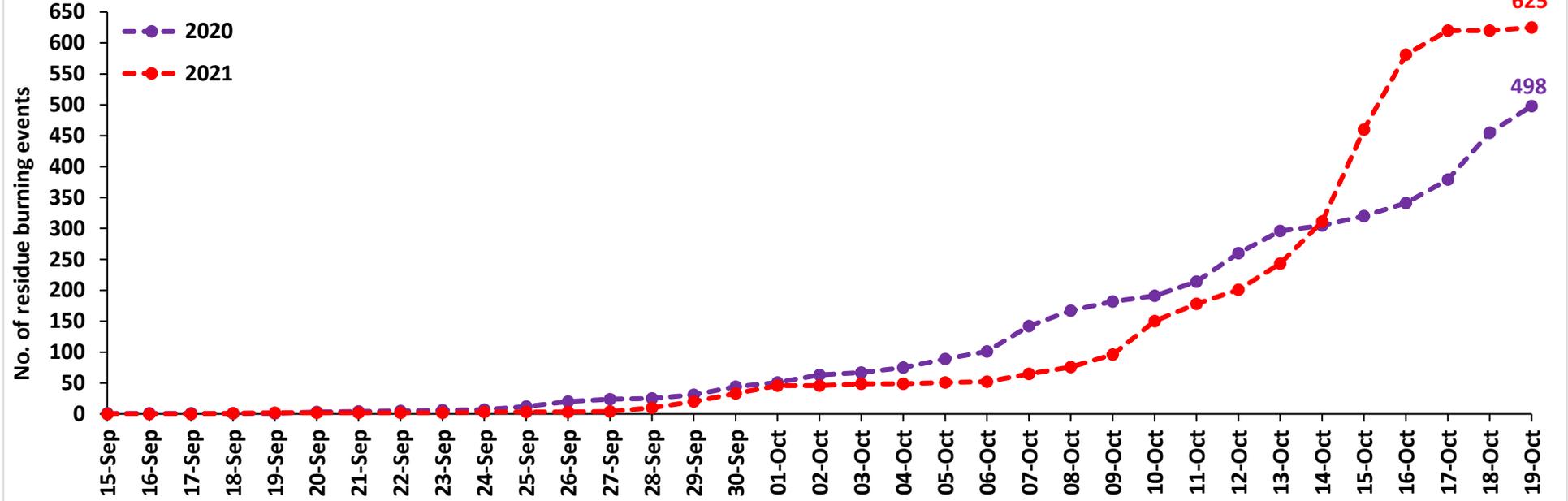
Madhya Pradesh



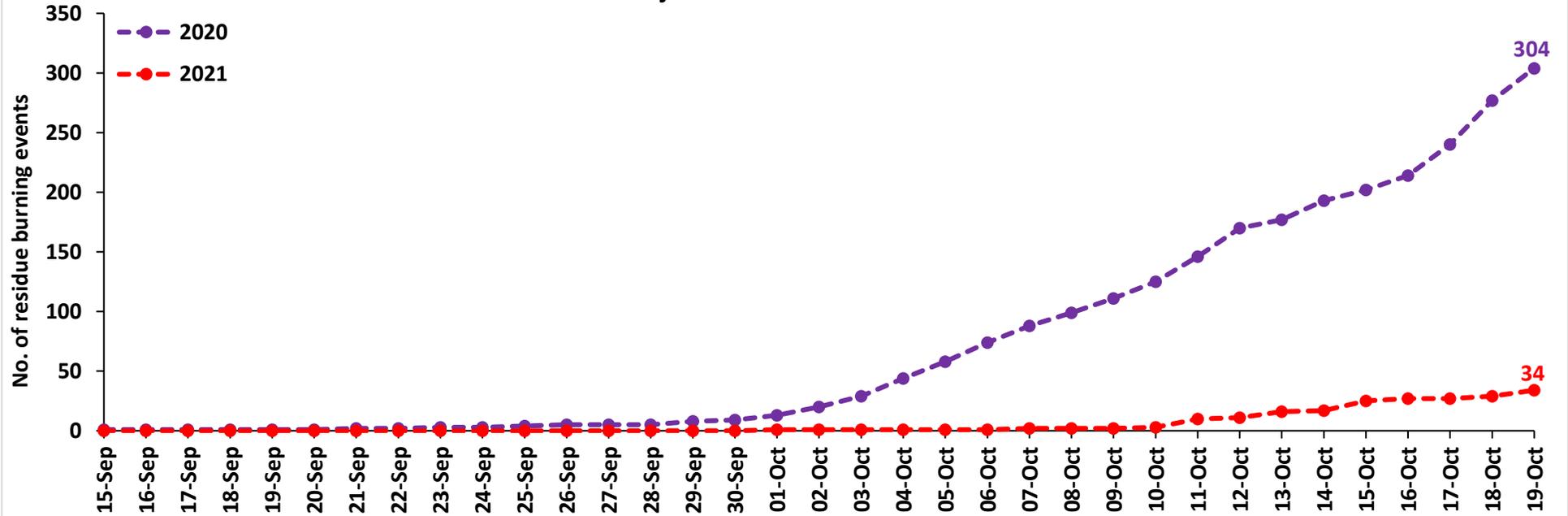
Comparison of residue burning events in current year (2021) with previous year (2020) for the study States



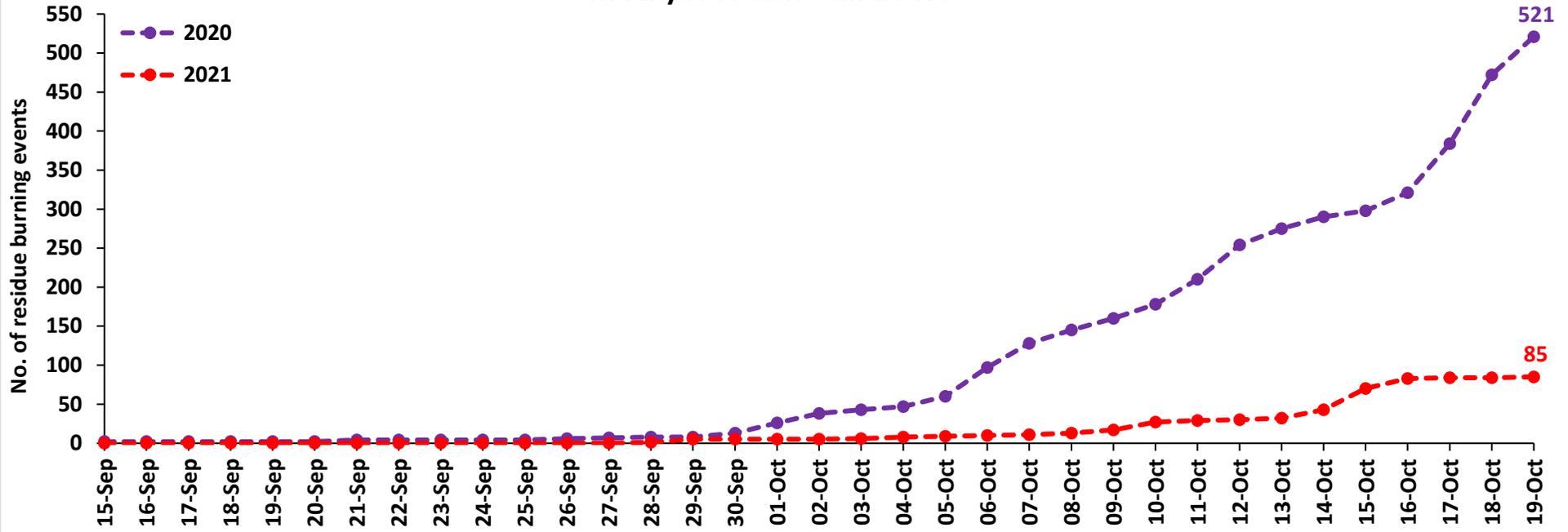
Uttar Pradesh Cumulative



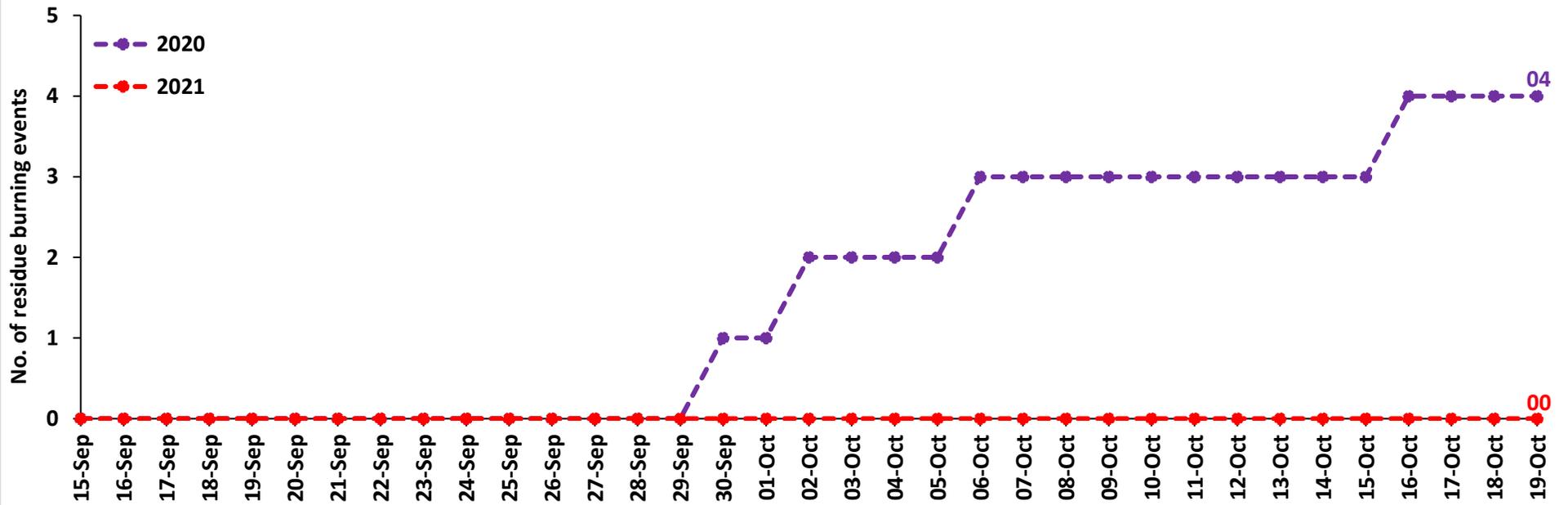
Rajasthan Cumulative



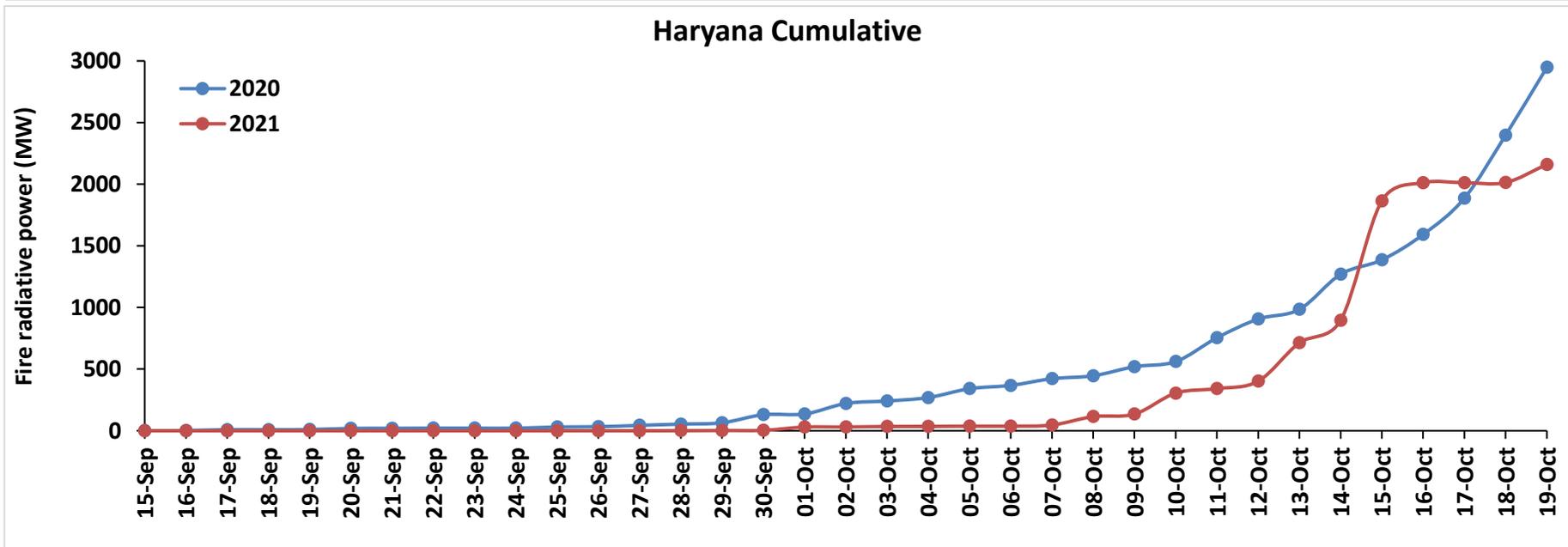
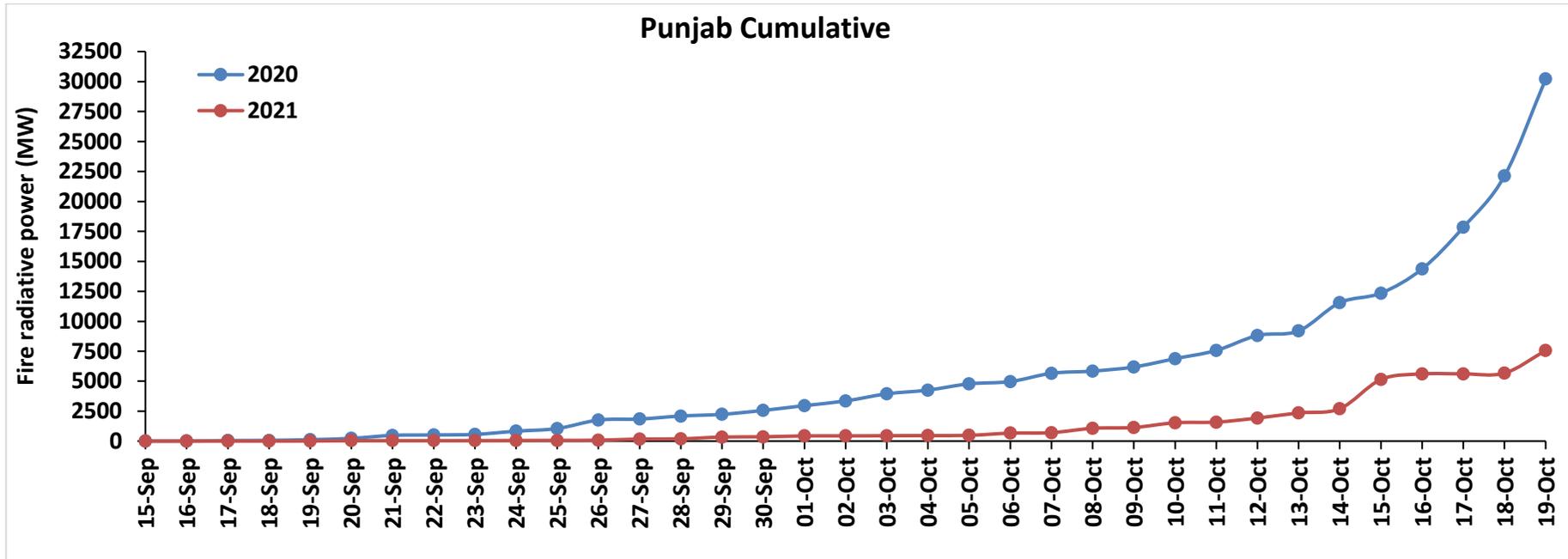
Madhya Pradesh Cumulative



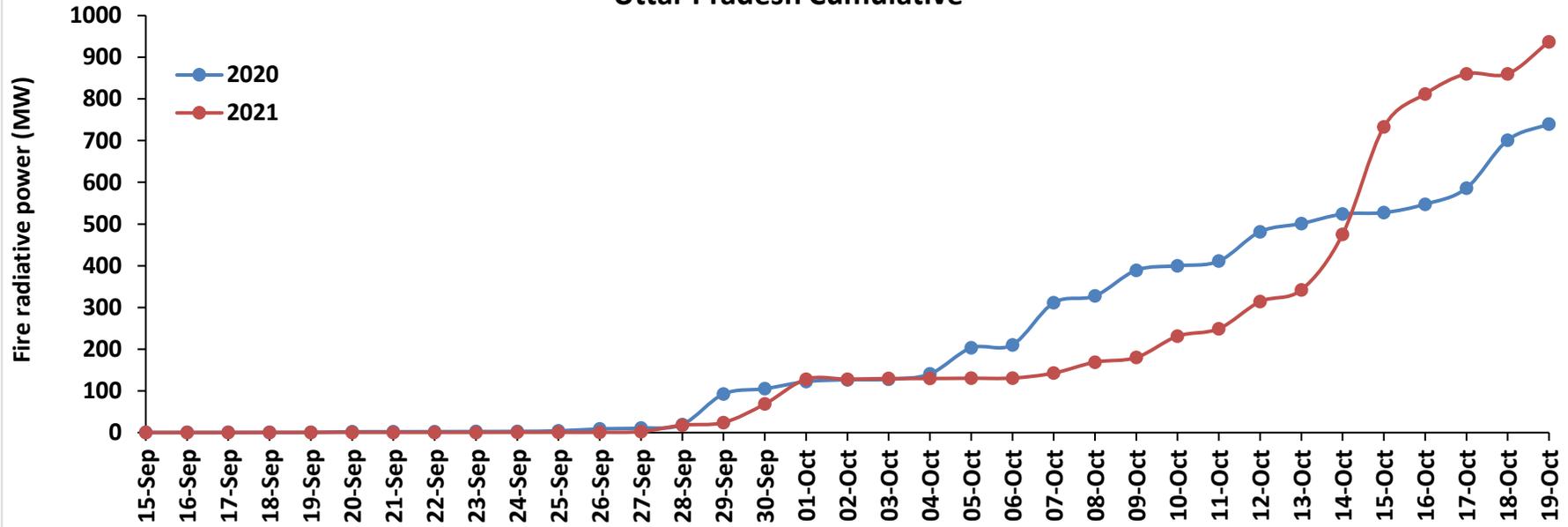
Delhi Cumulative



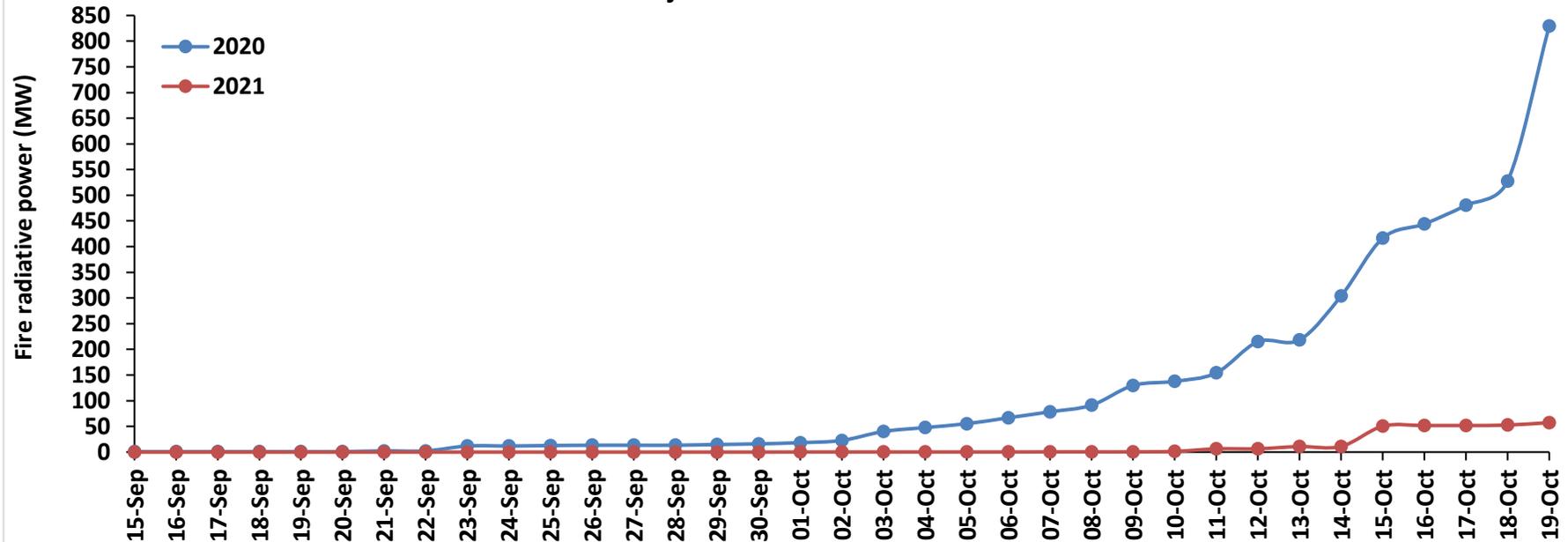
Comparison of residue burning fire power in current year (2021) with previous year (2020) for the study States



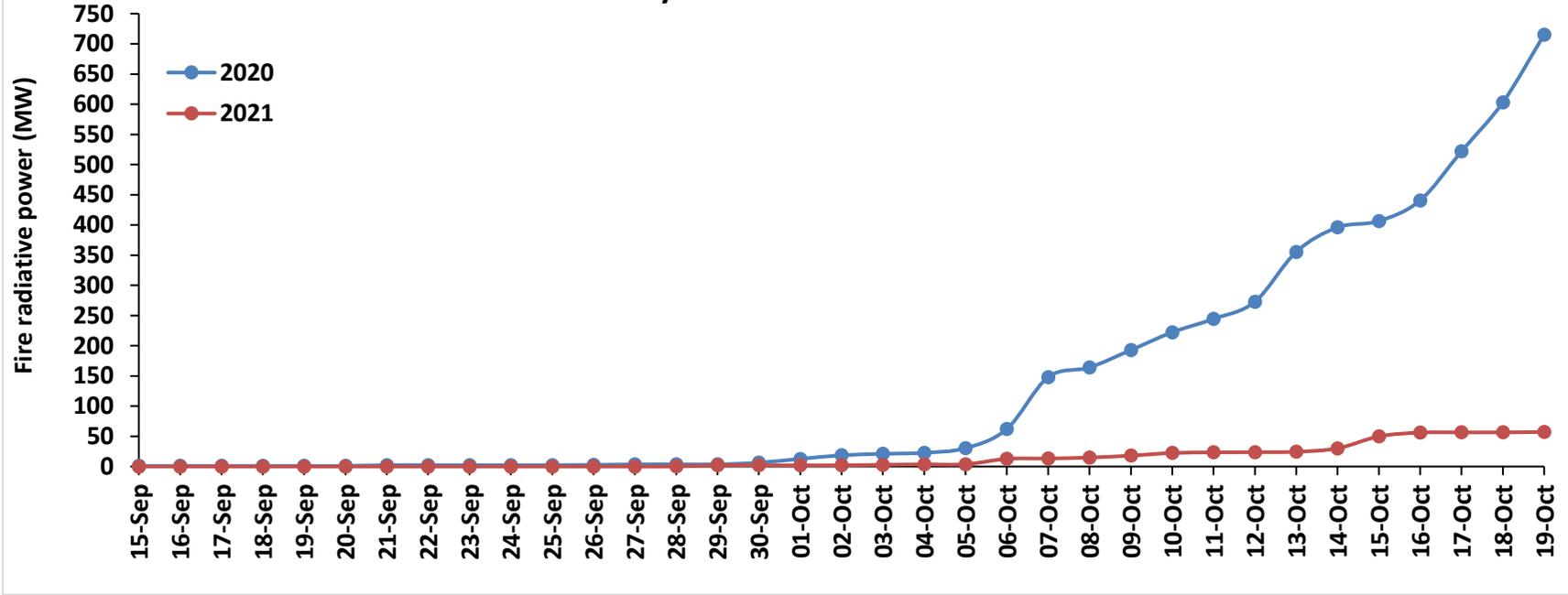
Uttar Pradesh Cumulative



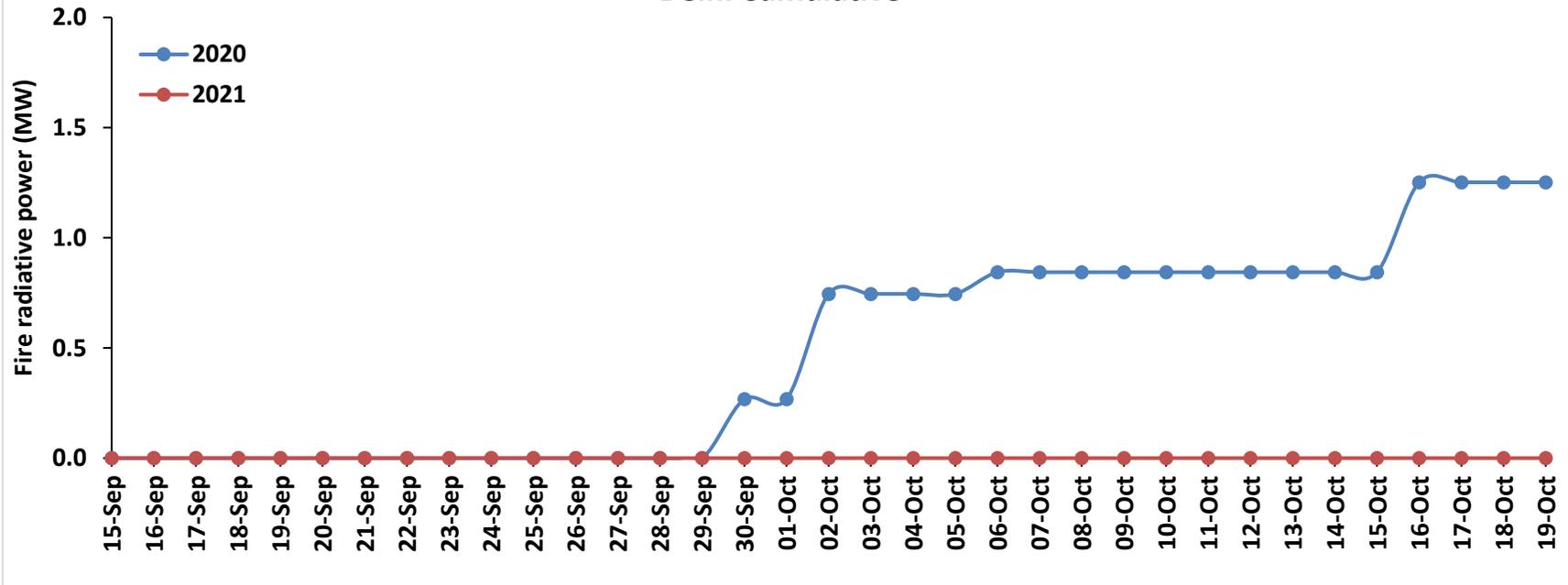
Rajasthan Cumulative



Madhya Pradesh Cumulative

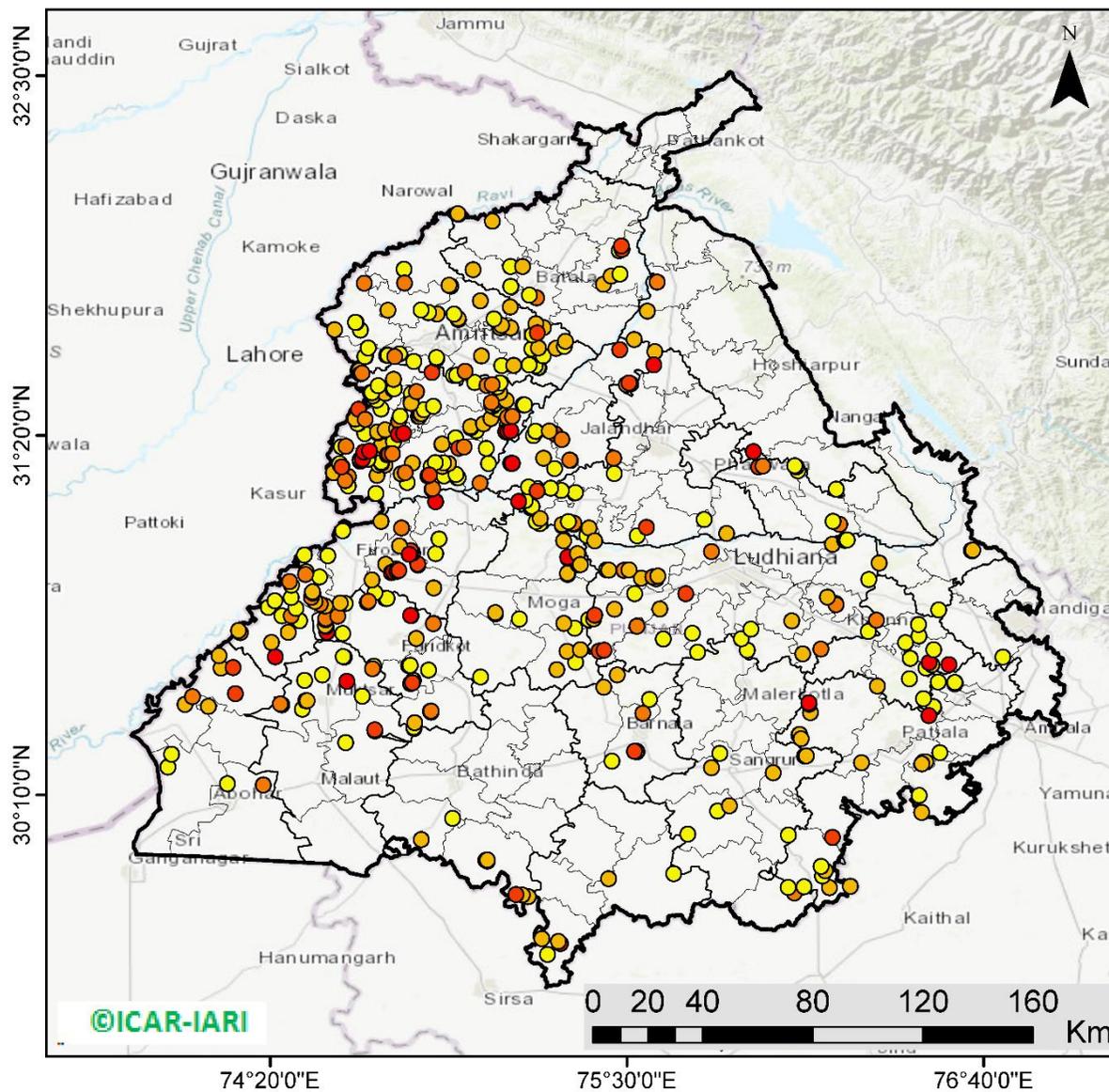


Delhi Cumulative



Punjab

RICE RESIDUE BURNING IN PUNJAB



496 burning events detected in Punjab on 19th October 2021

Fire Intensity (W/m²)

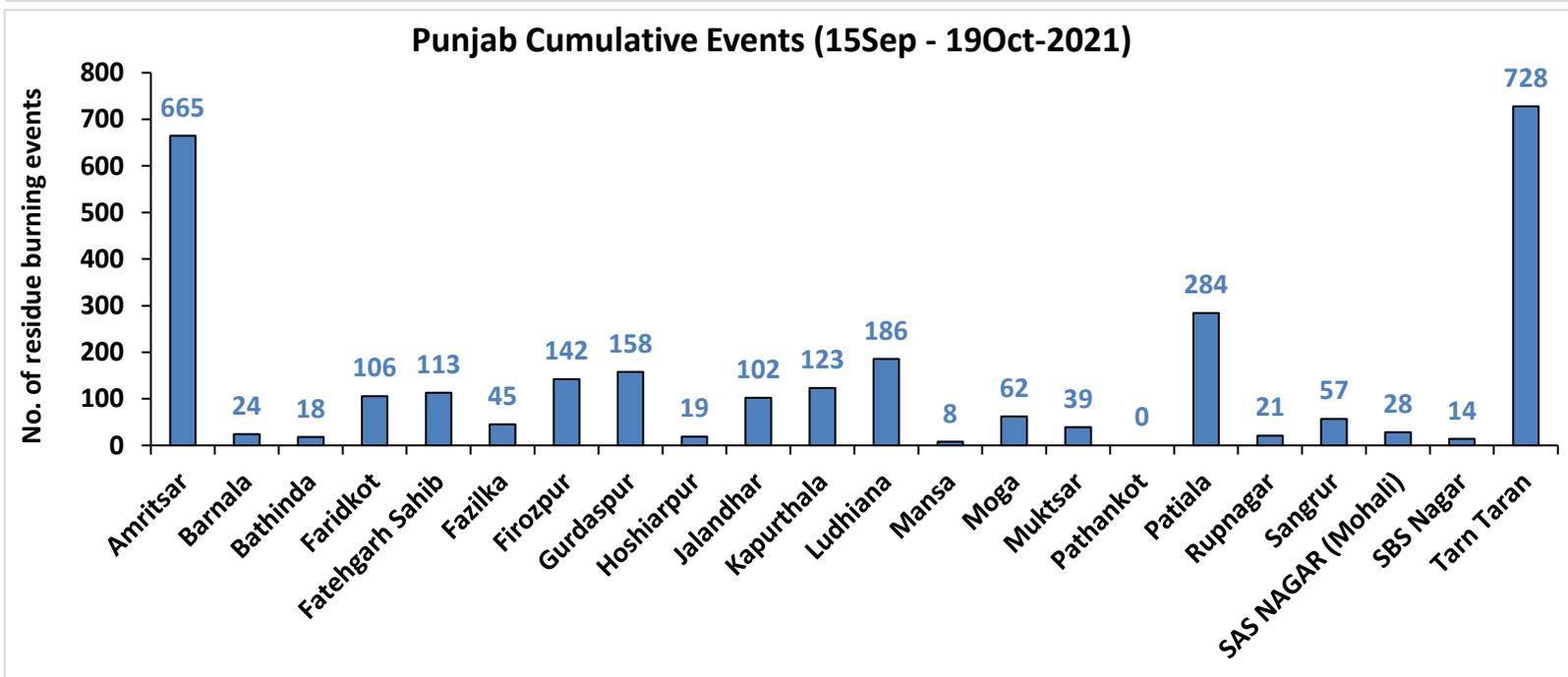
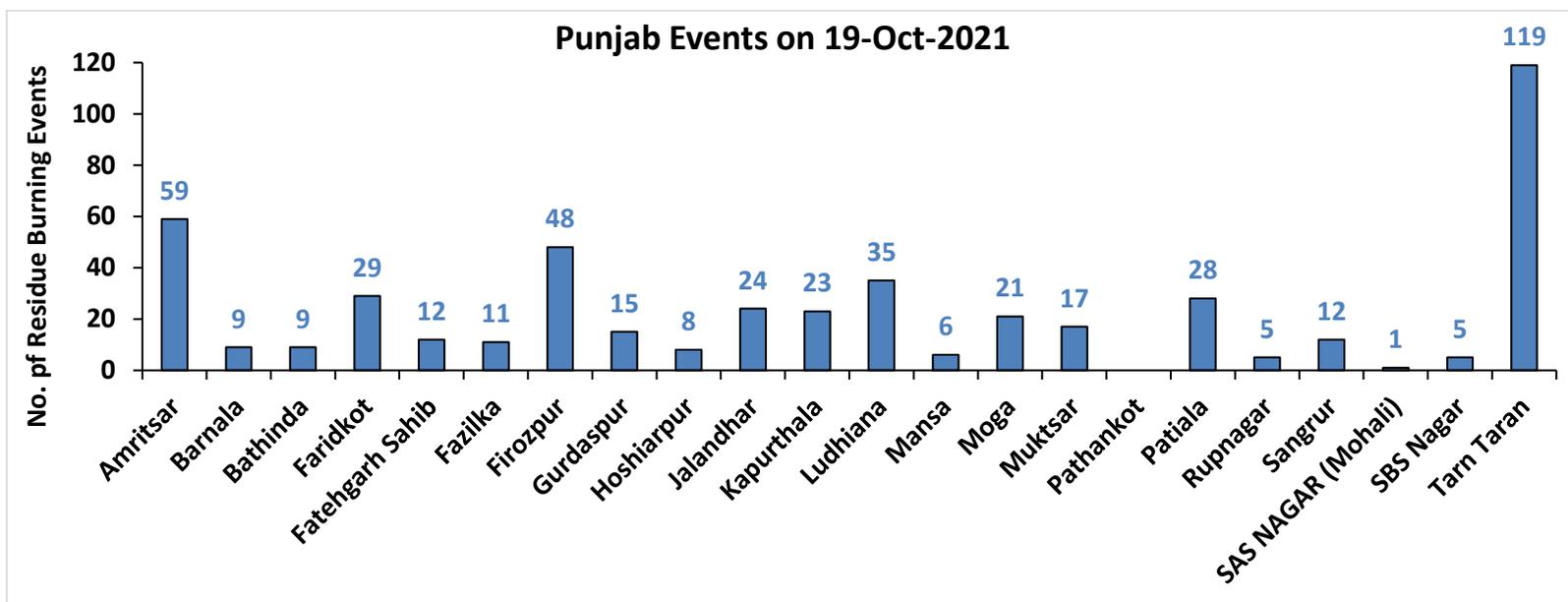
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



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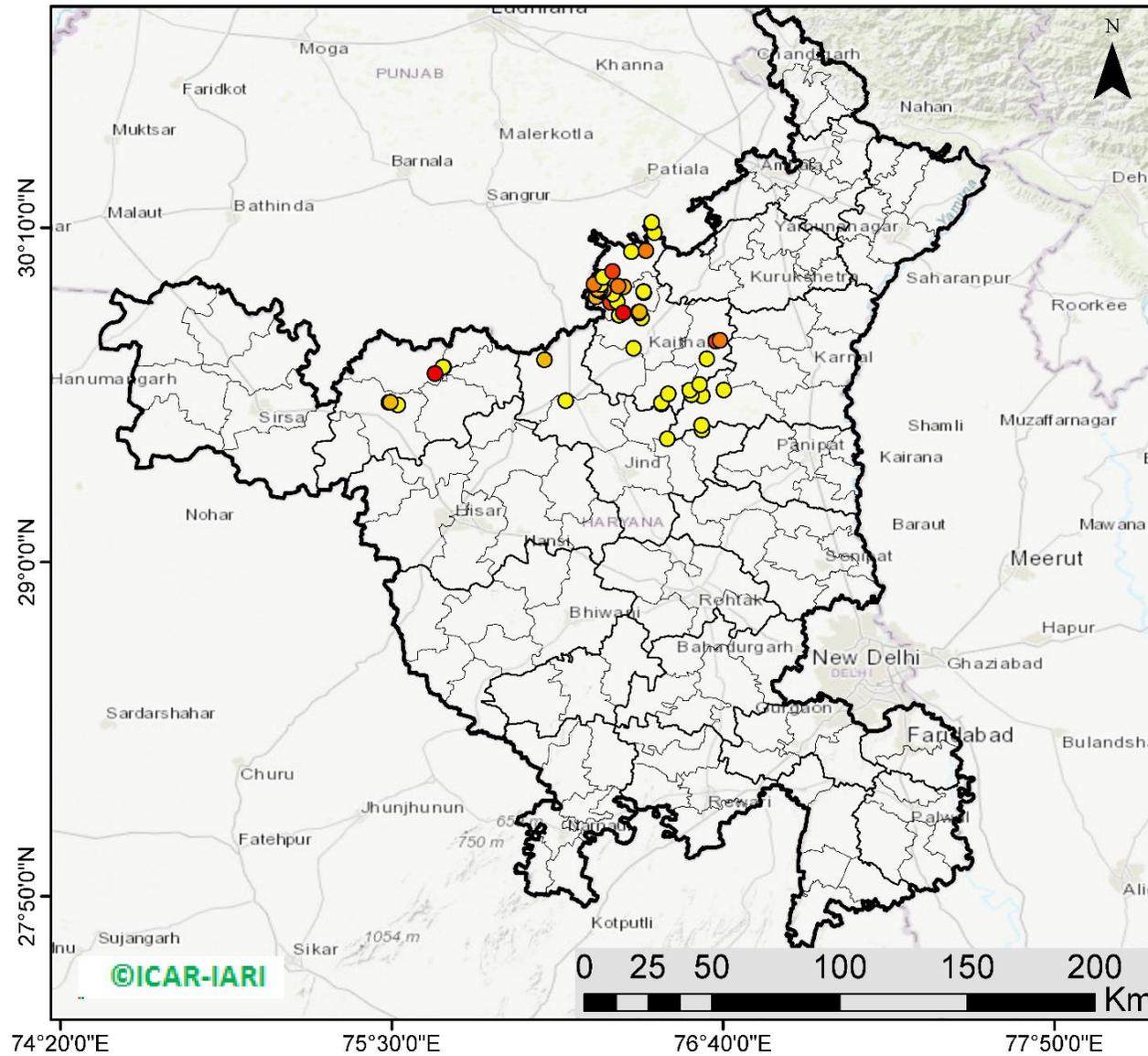
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (15Sep - 19Oct-2021)



Haryana

RICE RESIDUE BURNING IN HARYANA



55 burning events detected in Haryana on 19th October 2021

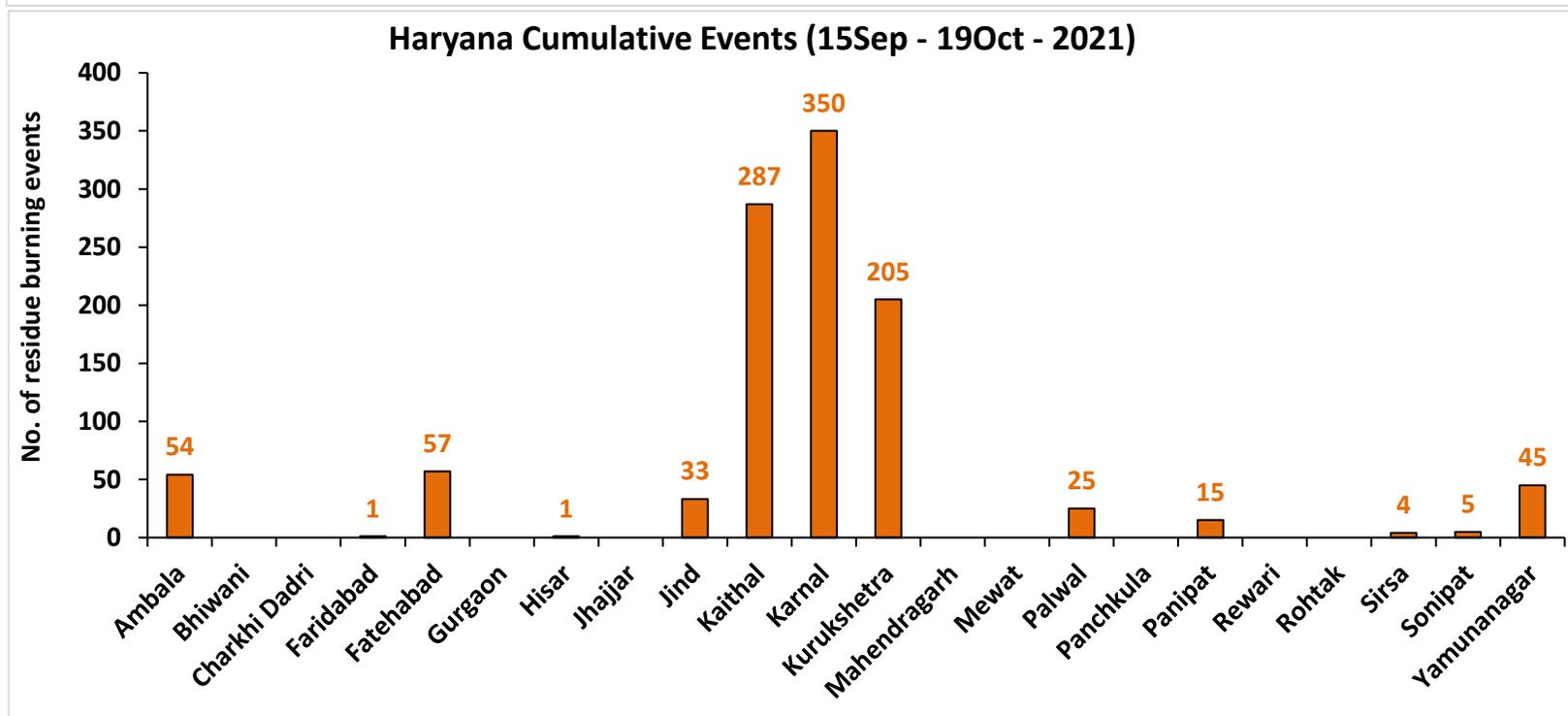
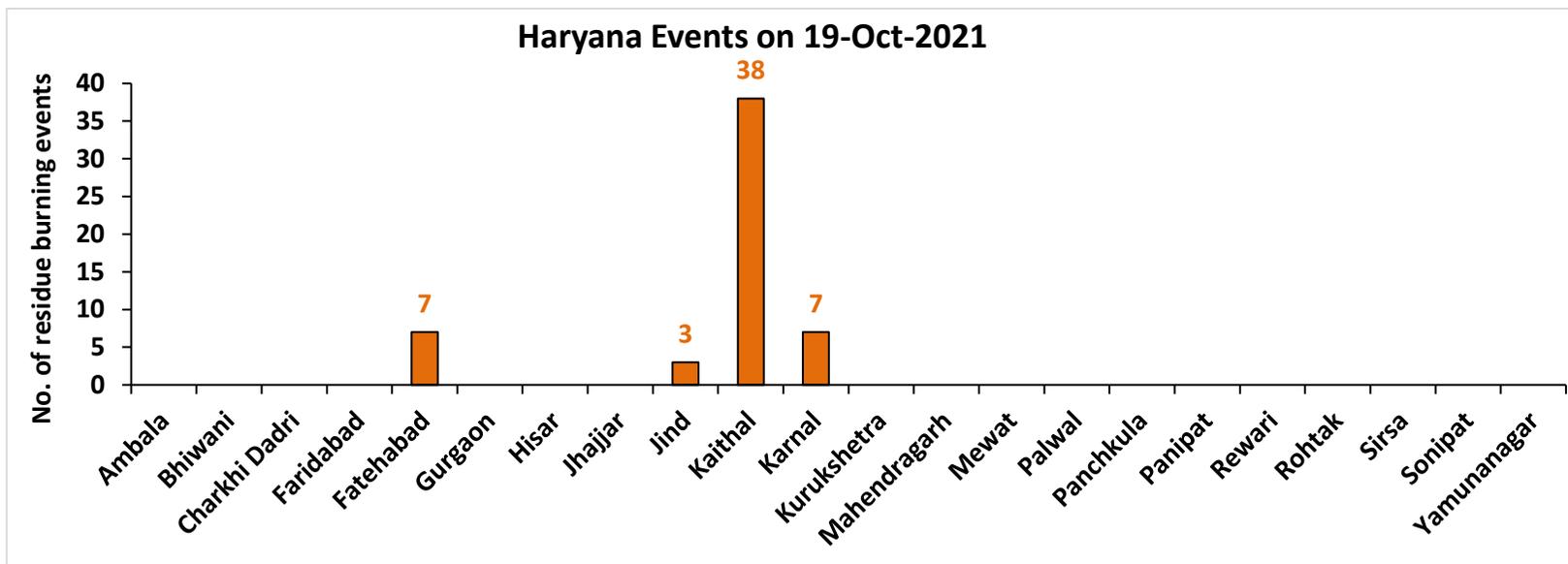
Fire Intensity (W/m²)

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



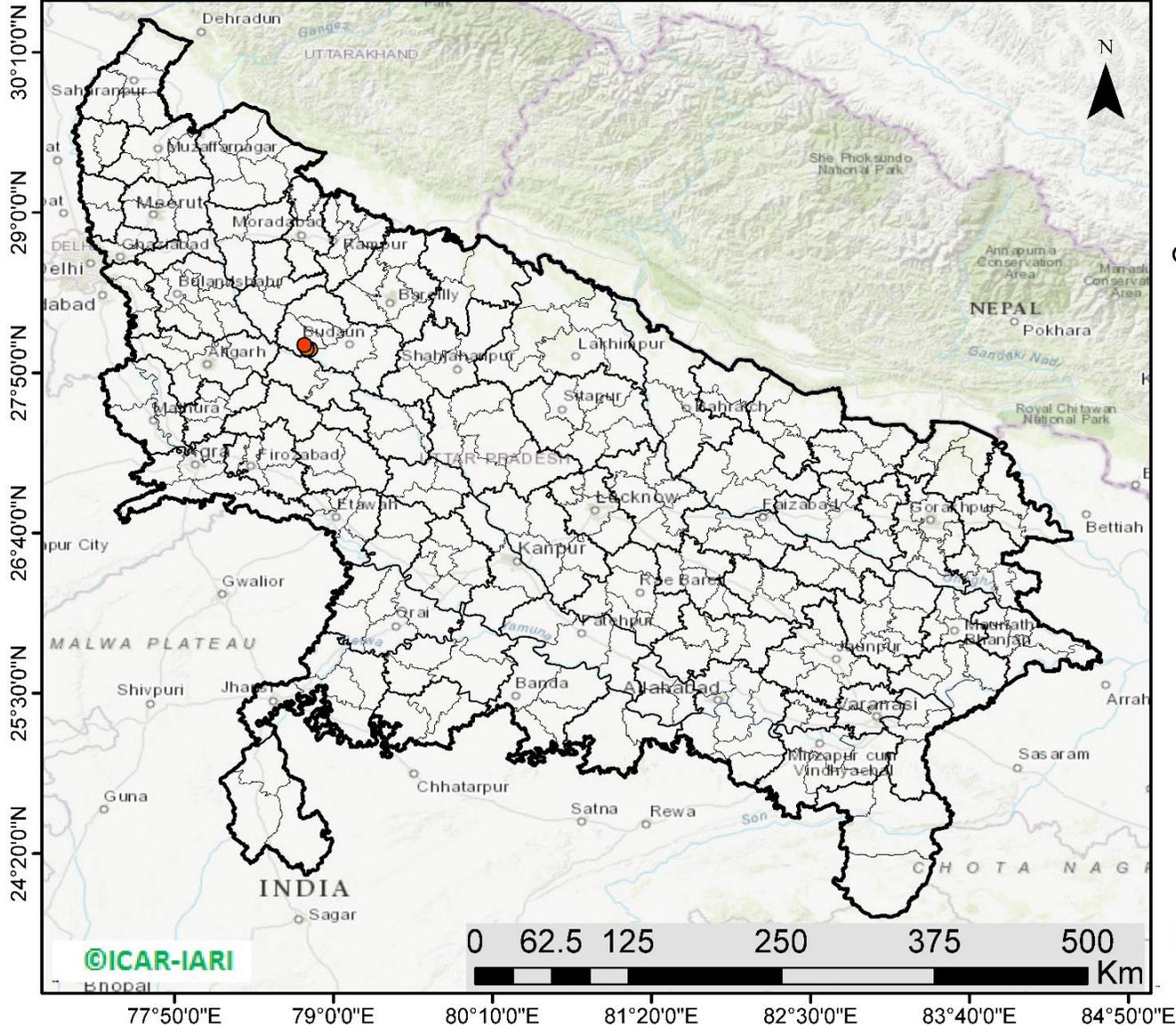
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (15 Sep - 19 Oct-2021)



Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



05 burning events detected in Uttar Pradesh on 19th October 2021

Fire Intensity (W/m2)

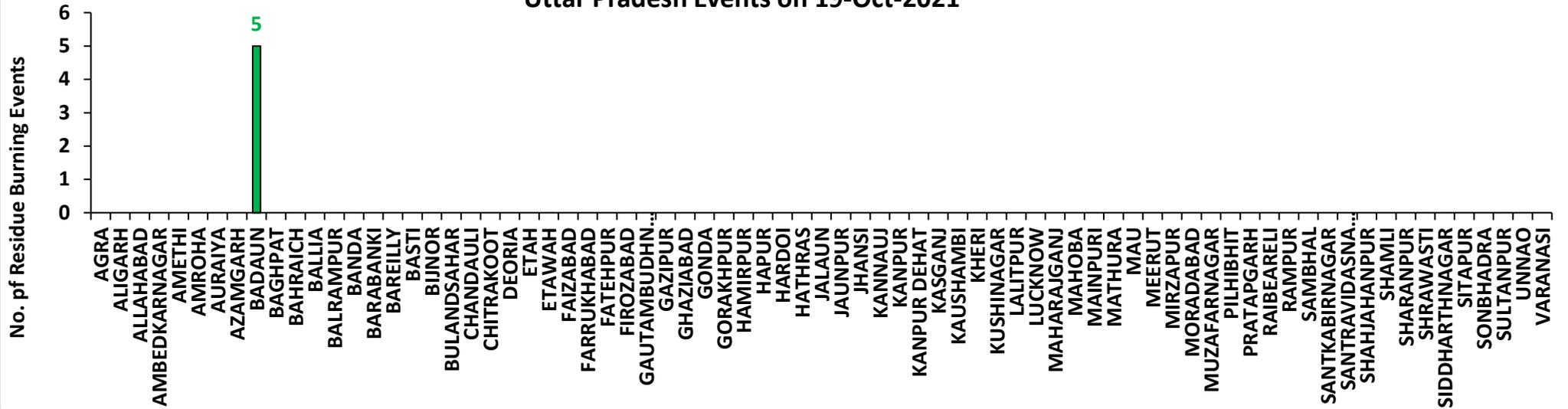
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



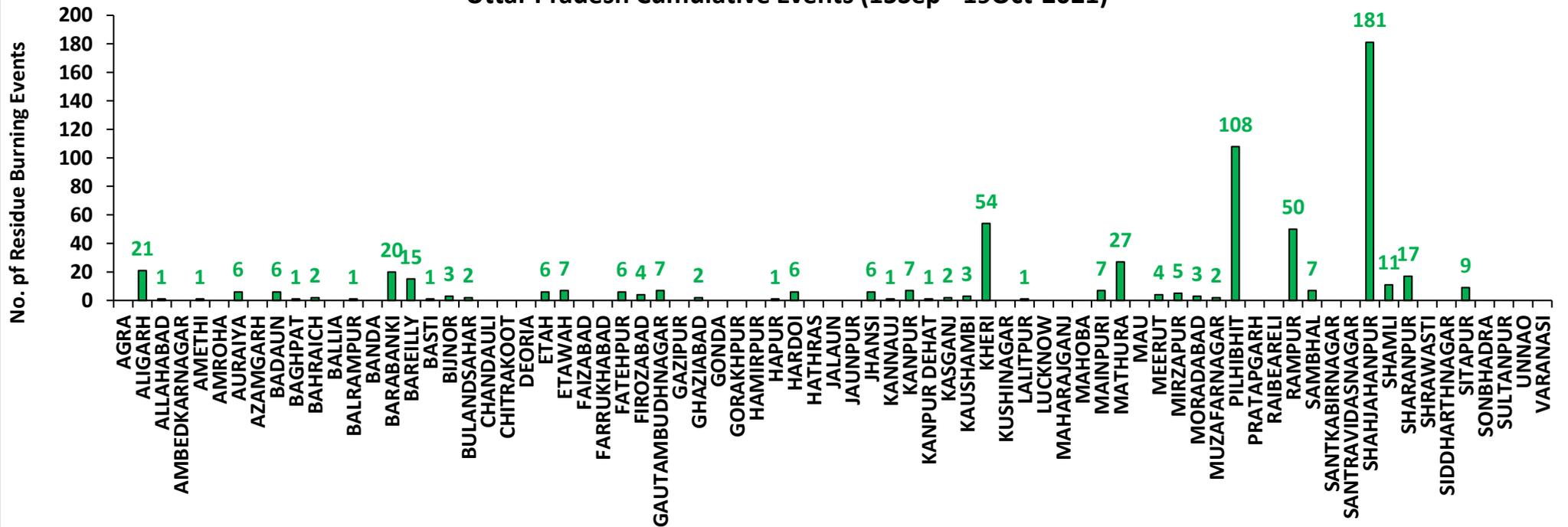
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Uttar Pradesh (15 Sep - 19 Oct-2021)

Uttar Pradesh Events on 19-Oct-2021

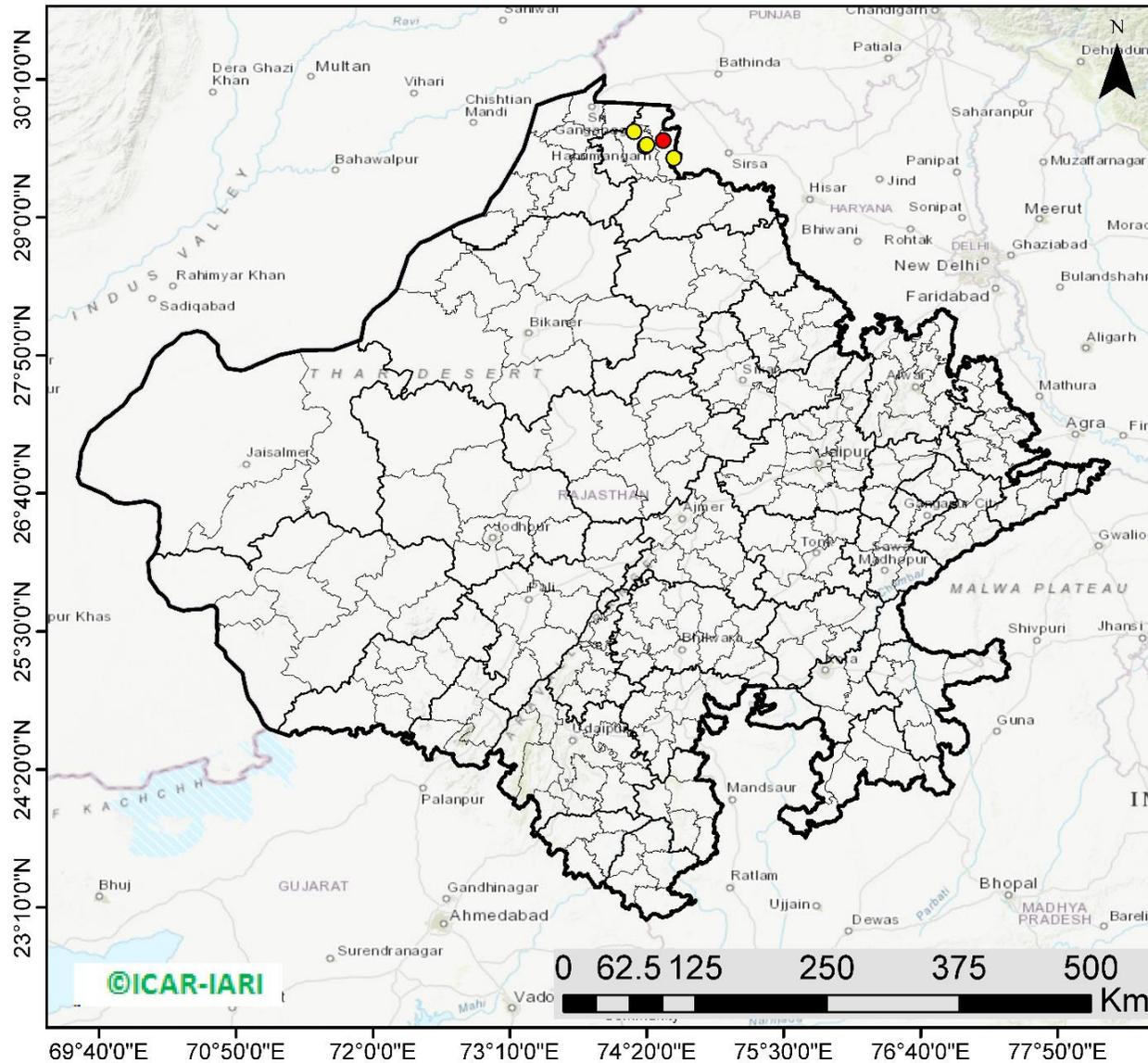


Uttar Pradesh Cumulative Events (15Sep - 19Oct-2021)



Rajasthan

RICE RESIDUE BURNING IN RAJASTHAN



05 burning events detected in Rajasthan on 19th October 2021

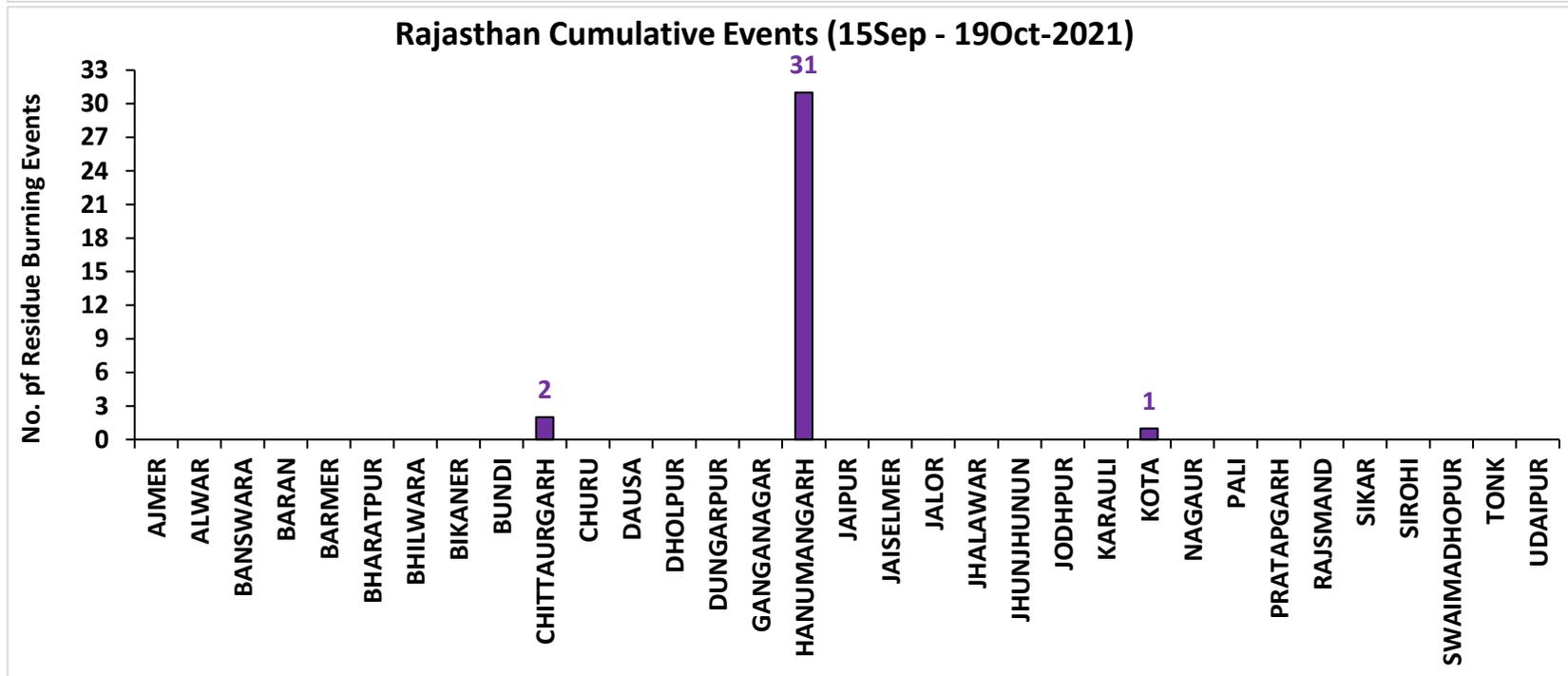
Fire Intensity (W/m²)

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



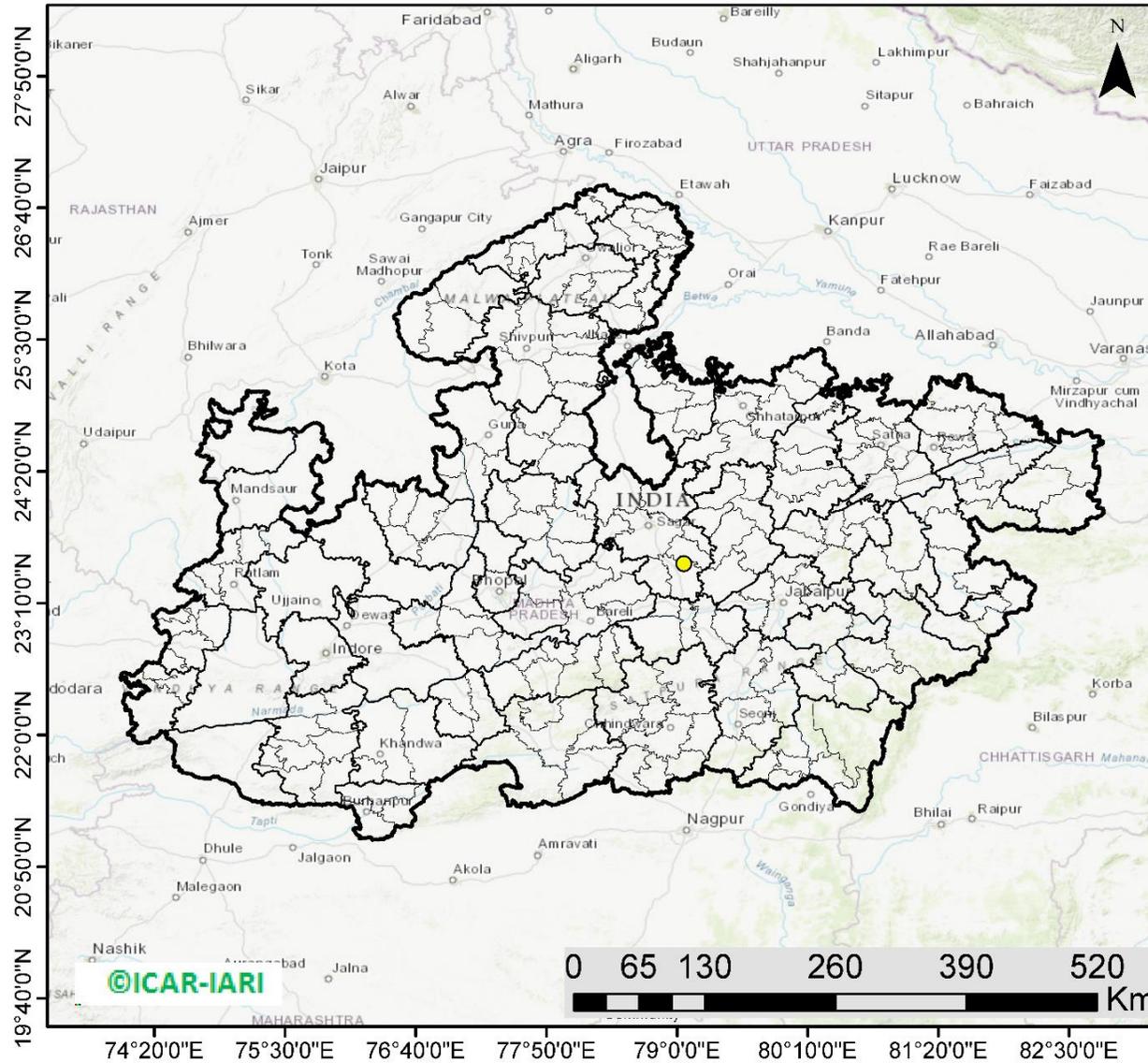
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Rajasthan (15 Sep - 19 Oct-2021)



Madhya Pradesh

RICE RESIDUE BURNING IN MADHYA PRADESH



01 burning events detected in MP on 19th October 2021

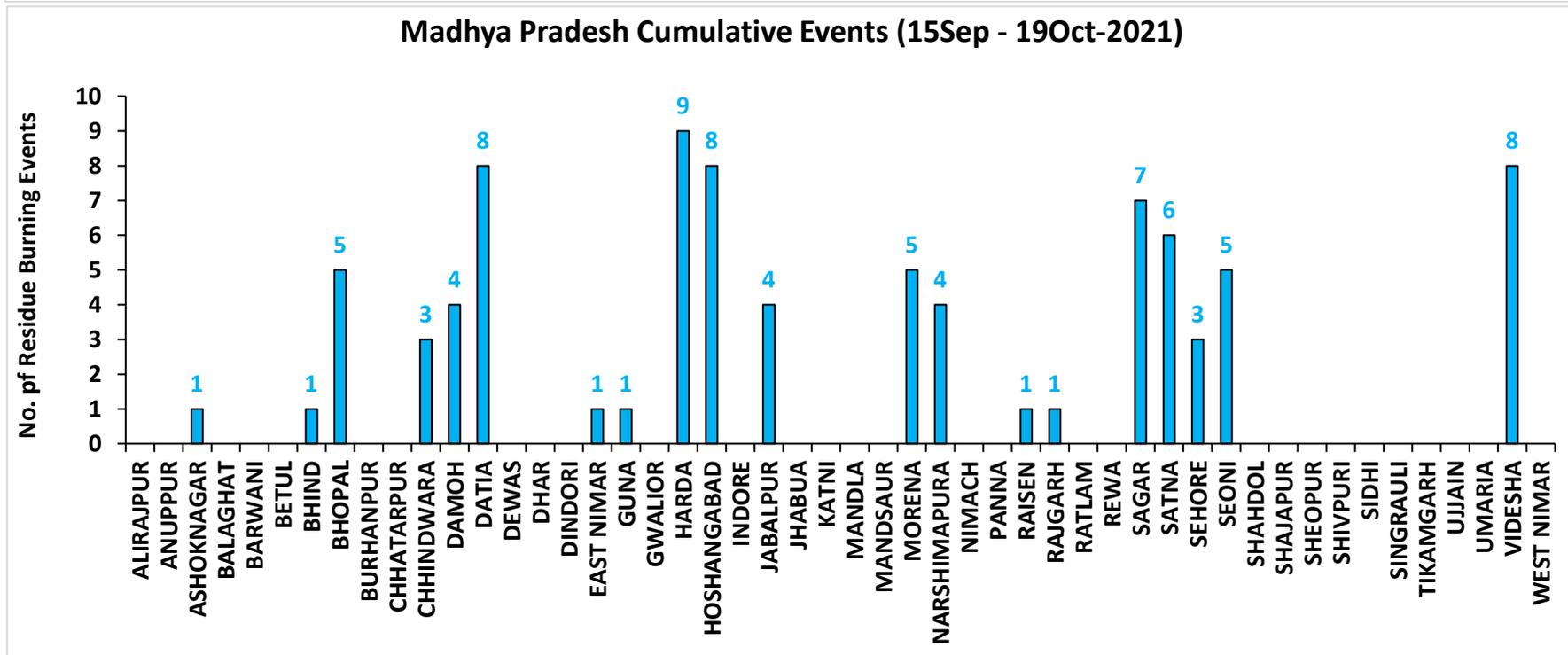
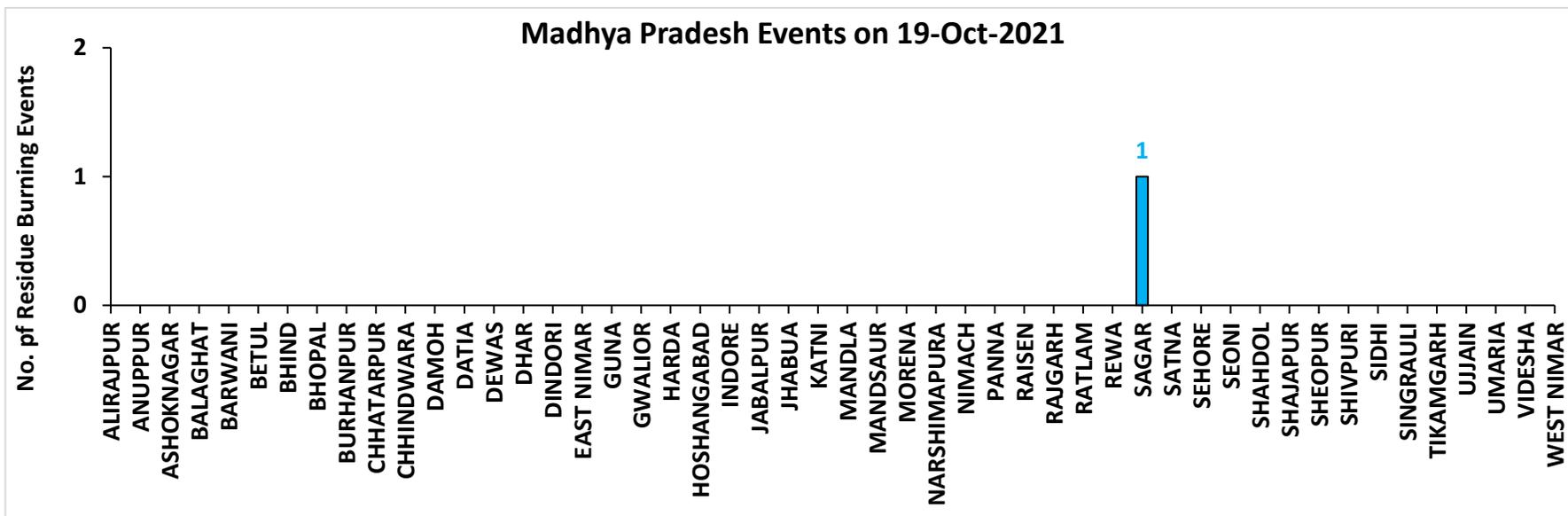
Fire Intensity (W/m²)

- 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 (15 Sep - 19 Oct-2021)



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

(a) Punjab

District	15 Sep – 19 Oct	
	2020	2021
AMRITSAR	2055	665
BARNALA	27	24
BATHINDA	107	18
FARIDKOT	397	106
FATEHGARH SAHIB	217	113
FAZILKA	95	45
FIROZPUR	843	142
GURDASPUR	588	158
HOSHIARPUR	72	19
JALANDHAR	154	102
KAPURTHALA	360	123
LUDHIANA	197	186
MANSA	71	8
MOGA	109	62
MUKTSAR	70	39
PATHANKOT	3	0
PATIALA	704	284
RUPNAGAR	46	21
SANGRUR	179	57
SAS NAGAR (MOHALI)	52	28
SBS NAGAR	17	14
TARN TARAN	2146	728
Total	8509	2942

(b) Haryana

District	15 Sep – 19 Oct	
	2020	2021
AMBALA	130	54
BHIWANI	0	0
CHARKHI DADRI	0	0
FARIDABAD	0	1
FATEHABAD	67	57
GURGAON	0	0
HISAR	9	1
JHAJJAR	1	0
JIND	33	33
KAITHAL	215	287
KARNAL	326	350
KURUKSHETRA	254	205
MAHENDRAGARH	0	0
MEWAT	0	0
PALWAL	19	25
PANCHKULA	0	0
PANIPAT	9	15
REWARI	0	0
ROHTAK	1	0
SIRSA	18	4
SONIPAT	11	5
YAMUNANAGAR	70	45
Total	1163	1082

(c) Uttar Pradesh

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

(d) Delhi

District	15 Sep – 19 Oct	
	2020	2021
CENTRAL	0	0
EAST	0	0
NEW DELHI	0	0
NORTH	2	0
NORTH EAST	0	0
NORTH WEST DELHI		
SHAHADRA	1	0
SOUTH	0	0
SOUTH EAST	1	0
SOUTH WEST DELHI	0	0
WEST DELHI	0	0
Total	4	0

(e) Rajasthan

District	15 Sep – 19 Oct	
	2020	2021
AJMER	0	0
ALWAR	1	0
BANSWARA	0	0
BARAN	88	0
BARMER	2	0
BHARATPUR	1	0
BHILWARA	2	0
BIKANER	1	0
BUNDI	10	0
CHITTAURGARH	0	2
CHURU	0	0
DAUSA	0	0
DHOLPUR	0	0
DUNGARPUR	0	0
GANGANAGAR	3	0
HANUMANGARH	148	31
JAIPUR	1	0
JAISELMER	2	0
JALOR	0	0
JHALAWAR	1	0
JHUNJHUNUN	1	0
JODHPUR	1	0
KARALI	1	0
KOTA	27	1
NAGPUR	0	0
PALI	1	0
PRATAPGARH	4	0
RAJSMAND	0	0
SIKAR	0	0
SIROHI	1	0
SWAIMADHOPUR	7	0
TONK	1	0
UDAIPUR	0	0
Total	304	34

(f) Madhya Pradesh

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

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

Number of Paddy Residue Burning Events Detected

	Punjab		Haryana		Uttar Pradesh		Delhi		Rajasthan		Madhya Pradesh	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
15-Sep	5	0	2	0	1	0	0	0	1	0	2	0
16-Sep	0	2	1	0	0	0	0	0	0	0	0	0
17-Sep	5	0	3	0	0	0	0	0	0	0	0	0
18-Sep	17	9	0	0	0	1	0	0	0	0	0	0
19-Sep	30	5	2	0	0	1	0	0	0	0	0	0
20-Sep	67	8	6	0	2	0	0	0	0	0	0	0
21-Sep	54	0	2	0	1	0	0	0	1	0	2	0
22-Sep	34	0	1	0	1	0	0	0	0	0	0	0
23-Sep	49	0	0	0	1	0	0	0	1	0	0	0
24-Sep	78	5	0	0	1	1	0	0	0	0	0	0
25-Sep	184	11	11	0	5	0	0	0	1	0	0	0
26-Sep	190	19	5	0	8	0	0	0	1	0	2	0
27-Sep	78	37	8	0	4	1	0	0	0	0	1	0
28-Sep	55	28	6	1	1	6	0	0	0	0	1	1
29-Sep	63	64	9	4	6	10	0	0	3	0	0	4
30-Sep	116	27	22	2	13	13	1	0	1	0	5	0
01-Oct	165	13	15	4	7	13	0	0	4	1	13	0
02-Oct	141	0	30	2	12	0	1	0	7	0	12	0
03-Oct	110	9	8	6	4	3	0	0	9	0	5	1
04-Oct	162	23	29	2	8	0	0	0	15	0	4	2
05-Oct	161	18	17	3	14	2	0	0	14	0	13	1
06-Oct	171	42	30	0	12	1	1	0	16	0	37	1
07-Oct	197	72	32	11	41	13	0	0	14	1	31	1
08-Oct	95	108	29	27	25	11	0	0	11	0	17	2
09-Oct	121	114	20	39	15	20	0	0	12	0	15	4
10-Oct	232	150	33	95	9	54	0	0	14	1	18	10
11-Oct	377	64	90	51	23	28	0	0	21	7	32	2
12-Oct	388	97	69	51	46	23	0	0	24	1	44	1

13-Oct	266	132	47	91	36	42	0	0	7	5	21	2
14-Oct	605	229	69	98	9	68	0	0	16	1	15	11
15-Oct	449	660	106	363	15	149	0	0	9	8	8	27
16-Oct	654	429	80	176	21	121	1	0	12	2	23	13
17-Oct	1172	14	143	0	38	39	0	0	26	0	63	1
18-Oct	938	57	166	1	76	0	0	0	37	2	88	0
19-Oct	1080	496	72	55	43	5	0	0	27	5	49	1
Total	8509	2942	1163	1082	498	625	4	0	304	34	521	85

Details of residue burning events in Punjab on 19-Oct-2021

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	31.81700	74.92450	10/19/2021	13:48:29	D	4.70
2	AMRITSAR	AJNALA	S-NPP	31.82020	74.91840	10/19/2021	13:48:29	D	9.30
3	AMRITSAR	AJNALA	S-NPP	31.87190	74.77090	10/19/2021	13:48:29	D	2.40
4	AMRITSAR	AJNALA	AQUA	31.82800	74.77300	10/19/2021	13:19:59	D	10.40
5	AMRITSAR	ATTARI	S-NPP	31.53760	74.86290	10/19/2021	13:48:29	D	15.60
6	AMRITSAR	ATTARI	S-NPP	31.54350	74.62050	10/19/2021	13:48:29	D	5.70
7	AMRITSAR	ATTARI	S-NPP	31.54410	74.62580	10/19/2021	13:48:29	D	5.70
8	AMRITSAR	ATTARI	S-NPP	31.57280	74.80320	10/19/2021	13:48:29	D	3.70
9	AMRITSAR	ATTARI	S-NPP	31.58160	74.87780	10/19/2021	13:48:29	D	35.90
10	AMRITSAR	ATTARI	S-NPP	31.58540	74.87720	10/19/2021	13:48:29	D	3.50
11	AMRITSAR	ATTARI	S-NPP	31.58830	74.64520	10/19/2021	13:48:29	D	6.40
12	AMRITSAR	ATTARI	S-NPP	31.58890	74.64260	10/19/2021	13:48:29	D	4.40
13	AMRITSAR	ATTARI	S-NPP	31.59280	74.71390	10/19/2021	13:48:29	D	5.00
14	AMRITSAR	ATTARI	S-NPP	31.59340	74.71920	10/19/2021	13:48:29	D	2.80
15	AMRITSAR	ATTARI	S-NPP	31.59780	74.75610	10/19/2021	13:48:29	D	4.90
16	AMRITSAR	ATTARI	S-NPP	31.61690	74.65420	10/19/2021	13:48:29	D	4.10
17	AMRITSAR	ATTARI	AQUA	31.53200	74.62900	10/19/2021	13:19:59	D	11.00
18	AMRITSAR	ATTARI	AQUA	31.53500	74.63400	10/19/2021	13:19:59	D	12.90
19	AMRITSAR	ATTARI	AQUA	31.58900	74.74100	10/19/2021	13:19:59	D	10.70
20	AMRITSAR	CHOGAWAN	S-NPP	31.67480	74.62890	10/19/2021	13:48:29	D	1.30
21	AMRITSAR	CHOGAWAN	S-NPP	31.67590	74.54390	10/19/2021	13:48:29	D	5.60
22	AMRITSAR	CHOGAWAN	S-NPP	31.69960	74.61430	10/19/2021	13:48:29	D	3.40
23	AMRITSAR	CHOGAWAN	S-NPP	31.70000	74.61220	10/19/2021	13:48:29	D	3.20
24	AMRITSAR	CHOGAWAN	AQUA	31.82700	74.64100	10/19/2021	13:19:59	D	10.20
25	AMRITSAR	HARSHA CHHINA	S-NPP	31.73130	74.85000	10/19/2021	13:48:29	D	5.10
26	AMRITSAR	HARSHA CHHINA	S-NPP	31.73910	74.71850	10/19/2021	13:48:29	D	5.40
27	AMRITSAR	HARSHA CHHINA	S-NPP	31.74010	74.82680	10/19/2021	13:48:29	D	3.30
28	AMRITSAR	JANDIALA GURU	S-NPP	31.52740	74.93280	10/19/2021	13:48:29	D	2.30
29	AMRITSAR	JANDIALA GURU	S-NPP	31.52870	74.94360	10/19/2021	13:48:29	D	3.60

30	AMRITSAR	JANDIALA GURU	S-NPP	31.55990	75.09070	10/19/2021	13:48:29	D	1.30
31	AMRITSAR	JANDIALA GURU	S-NPP	31.56050	75.12970	10/19/2021	13:48:29	D	5.30
32	AMRITSAR	JANDIALA GURU	S-NPP	31.59110	75.02470	10/19/2021	13:48:29	D	8.60
33	AMRITSAR	JANDIALA GURU	AQUA	31.54100	74.97100	10/19/2021	13:19:59	D	13.20
34	AMRITSAR	MAJITHA	S-NPP	31.68220	75.08620	10/19/2021	13:48:29	D	5.90
35	AMRITSAR	MAJITHA	S-NPP	31.71090	75.06500	10/19/2021	13:48:29	D	3.60
36	AMRITSAR	MAJITHA	S-NPP	31.72660	74.93490	10/19/2021	13:48:29	D	5.00
37	AMRITSAR	MAJITHA	S-NPP	31.75000	75.11890	10/19/2021	13:48:29	D	5.20
38	AMRITSAR	MAJITHA	S-NPP	31.77000	75.02060	10/19/2021	13:48:29	D	6.20
39	AMRITSAR	RAYYA	S-NPP	31.55290	75.21220	10/19/2021	13:48:29	D	3.80
40	AMRITSAR	RAYYA	S-NPP	31.55380	75.20940	10/19/2021	13:48:29	D	3.00
41	AMRITSAR	RAYYA	S-NPP	31.55920	75.20000	10/19/2021	13:48:29	D	2.60
42	AMRITSAR	RAYYA	S-NPP	31.56220	75.18000	10/19/2021	13:48:29	D	1.90
43	AMRITSAR	RAYYA	S-NPP	31.59090	75.22640	10/19/2021	13:48:29	D	4.20
44	AMRITSAR	RAYYA	S-NPP	31.61530	75.26810	10/19/2021	13:48:29	D	6.50
45	AMRITSAR	RAYYA	S-NPP	31.61660	75.21110	10/19/2021	13:48:29	D	6.60
46	AMRITSAR	RAYYA	S-NPP	31.62230	75.29550	10/19/2021	13:48:29	D	4.40
47	AMRITSAR	RAYYA	S-NPP	31.63840	75.29880	10/19/2021	13:48:29	D	9.70
48	AMRITSAR	RAYYA	AQUA	31.66600	75.20700	10/19/2021	13:19:59	D	16.20
49	AMRITSAR	TARSIKKA	S-NPP	31.61400	75.18890	10/19/2021	13:48:29	D	4.10
50	AMRITSAR	TARSIKKA	S-NPP	31.65900	75.19110	10/19/2021	13:48:29	D	2.20
51	AMRITSAR	TARSIKKA	S-NPP	31.68220	75.11980	10/19/2021	13:48:29	D	6.90
52	AMRITSAR	TARSIKKA	S-NPP	31.68260	75.22720	10/19/2021	13:48:29	D	8.10
53	AMRITSAR	TARSIKKA	S-NPP	31.69050	75.09050	10/19/2021	13:48:29	D	6.40
54	AMRITSAR	TARSIKKA	S-NPP	31.69550	75.20250	10/19/2021	13:48:29	D	6.40
55	AMRITSAR	VERKA	S-NPP	31.70900	74.94870	10/19/2021	13:48:29	D	5.50
56	AMRITSAR	VERKA	S-NPP	31.71270	74.94810	10/19/2021	13:48:29	D	5.50
57	AMRITSAR	VERKA	S-NPP	31.72680	74.87810	10/19/2021	13:48:29	D	5.60
58	AMRITSAR	VERKA	S-NPP	31.72780	74.87980	10/19/2021	13:48:29	D	5.50
59	AMRITSAR	VERKA	S-NPP	31.73210	74.85170	10/19/2021	13:48:29	D	4.20
60	BARNALA	BARNALA	S-NPP	30.27570	75.45160	10/19/2021	13:48:29	D	3.40
61	BARNALA	BARNALA	S-NPP	30.30610	75.53320	10/19/2021	13:48:29	D	6.40
62	BARNALA	BARNALA	S-NPP	30.30850	75.53010	10/19/2021	13:48:29	D	3.40

63	BARNALA	BARNALA	AQUA	30.30700	75.53200	10/19/2021	13:19:59	D	12.50
64	BARNALA	BARNALA	AQUA	30.30800	75.52500	10/19/2021	13:19:59	D	18.70
65	BARNALA	MAHAL KALAN	S-NPP	30.43120	75.55220	10/19/2021	13:48:29	D	12.40
66	BARNALA	MAHAL KALAN	S-NPP	30.47680	75.57350	10/19/2021	13:48:29	D	2.50
67	BARNALA	MAHAL KALAN	S-NPP	30.51560	75.42460	10/19/2021	13:48:29	D	9.70
68	BARNALA	MAHAL KALAN	S-NPP	30.55590	75.46870	10/19/2021	13:48:29	D	6.50
69	BATHINDA	SANGAT	S-NPP	30.02120	74.82770	10/19/2021	13:48:29	D	8.40
70	BATHINDA	SANGAT	S-NPP	30.09030	74.93040	10/19/2021	13:48:29	D	4.80
71	BATHINDA	TALWANDI SABO	S-NPP	29.83630	75.17510	10/19/2021	13:48:29	D	6.80
72	BATHINDA	TALWANDI SABO	S-NPP	29.83650	75.17700	10/19/2021	13:48:29	D	7.30
73	BATHINDA	TALWANDI SABO	S-NPP	29.84200	75.15830	10/19/2021	13:48:29	D	6.70
74	BATHINDA	TALWANDI SABO	S-NPP	29.84330	75.13700	10/19/2021	13:48:29	D	18.50
75	BATHINDA	TALWANDI SABO	S-NPP	29.95130	75.04400	10/19/2021	13:48:29	D	8.70
76	BATHINDA	TALWANDI SABO	S-NPP	29.95440	75.03830	10/19/2021	13:48:29	D	6.10
77	BATHINDA	TALWANDI SABO	S-NPP	29.95500	75.04340	10/19/2021	13:48:29	D	8.70
78	FARIDKOT	FARIDKOT	S-NPP	30.58430	74.67270	10/19/2021	13:48:29	D	5.00
79	FARIDKOT	FARIDKOT	S-NPP	30.67400	74.81130	10/19/2021	13:48:29	D	5.30
80	FARIDKOT	FARIDKOT	S-NPP	30.69020	74.57050	10/19/2021	13:48:29	D	3.40
81	FARIDKOT	FARIDKOT	S-NPP	30.69510	74.51870	10/19/2021	13:48:29	D	28.20
82	FARIDKOT	FARIDKOT	S-NPP	30.71340	74.51570	10/19/2021	13:48:29	D	8.40
83	FARIDKOT	FARIDKOT	S-NPP	30.71590	74.51340	10/19/2021	13:48:29	D	9.60
84	FARIDKOT	FARIDKOT	S-NPP	30.72250	74.86680	10/19/2021	13:48:29	D	13.20
85	FARIDKOT	FARIDKOT	S-NPP	30.73490	74.51540	10/19/2021	13:48:29	D	3.60
86	FARIDKOT	FARIDKOT	S-NPP	30.73850	74.51480	10/19/2021	13:48:29	D	11.90
87	FARIDKOT	FARIDKOT	S-NPP	30.74700	74.55430	10/19/2021	13:48:29	D	11.60
88	FARIDKOT	FARIDKOT	S-NPP	30.74790	74.79440	10/19/2021	13:48:29	D	30.80
89	FARIDKOT	FARIDKOT	S-NPP	30.74890	74.79250	10/19/2021	13:48:29	D	20.40
90	FARIDKOT	FARIDKOT	S-NPP	30.78750	74.57860	10/19/2021	13:48:29	D	2.20
91	FARIDKOT	FARIDKOT	S-NPP	30.78940	74.56290	10/19/2021	13:48:29	D	7.80
92	FARIDKOT	FARIDKOT	S-NPP	30.80360	74.71060	10/19/2021	13:48:29	D	4.40
93	FARIDKOT	FARIDKOT	S-NPP	30.80420	74.71570	10/19/2021	13:48:29	D	4.40
94	FARIDKOT	FARIDKOT	S-NPP	30.82210	74.67640	10/19/2021	13:48:29	D	4.10
95	FARIDKOT	FARIDKOT	AQUA	30.79100	74.65100	10/19/2021	13:19:59	D	10.30

96	FARIDKOT	FARIDKOT	AQUA	30.79500	74.65500	10/19/2021	13:19:59	D	14.00
97	FARIDKOT	JAITON	S-NPP	30.40110	74.80590	10/19/2021	13:48:29	D	5.40
98	FARIDKOT	JAITON	S-NPP	30.43500	74.85990	10/19/2021	13:48:29	D	14.50
99	FARIDKOT	JAITON	S-NPP	30.43770	74.85740	10/19/2021	13:48:29	D	25.80
100	FARIDKOT	JAITON	S-NPP	30.43880	74.85930	10/19/2021	13:48:29	D	14.50
101	FARIDKOT	KOT KAPURA	S-NPP	30.53800	74.80190	10/19/2021	13:48:29	D	2.60
102	FARIDKOT	KOT KAPURA	S-NPP	30.57180	74.85140	10/19/2021	13:48:29	D	3.00
103	FARIDKOT	KOT KAPURA	S-NPP	30.58670	74.78630	10/19/2021	13:48:29	D	3.20
104	FARIDKOT	KOT KAPURA	S-NPP	30.58740	74.79140	10/19/2021	13:48:29	D	3.60
105	FARIDKOT	KOT KAPURA	AQUA	30.52800	74.79300	10/19/2021	13:19:59	D	11.80
106	FARIDKOT	KOT KAPURA	AQUA	30.53100	74.79900	10/19/2021	13:19:59	D	17.90
107	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.66090	76.41150	10/19/2021	13:48:29	D	2.00
108	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.68210	76.45480	10/19/2021	13:48:29	D	1.70
109	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	30.71920	76.45380	10/19/2021	13:48:29	D	4.70
110	FATEHGARH SAHIB	KHAMANON	AQUA	30.73300	76.31600	10/19/2021	13:19:59	D	12.00
111	FATEHGARH SAHIB	KHERA	S-NPP	30.57800	76.47790	10/19/2021	13:48:29	D	2.80
112	FATEHGARH SAHIB	KHERA	S-NPP	30.58840	76.49760	10/19/2021	13:48:29	D	6.20
113	FATEHGARH SAHIB	KHERA	S-NPP	30.59570	76.48810	10/19/2021	13:48:29	D	23.40
114	FATEHGARH SAHIB	KHERA	S-NPP	30.60960	76.42720	10/19/2021	13:48:29	D	1.70
115	FATEHGARH SAHIB	KHERA	S-NPP	30.63760	76.50340	10/19/2021	13:48:29	D	1.60
116	FATEHGARH SAHIB	KHERA	AQUA	30.58900	76.55300	10/19/2021	13:19:59	D	21.40
117	FATEHGARH SAHIB	SIRHIND	S-NPP	30.47840	76.46960	10/19/2021	13:48:29	D	4.50
118	FATEHGARH SAHIB	SIRHIND	S-NPP	30.54330	76.42400	10/19/2021	13:48:29	D	2.80
119	FAZILKA	ABOHAR	S-NPP	30.19880	74.31100	10/19/2021	13:48:29	D	10.10
120	FAZILKA	ABOHAR	S-NPP	30.20240	74.19330	10/19/2021	13:48:29	D	4.10
121	FAZILKA	FAZILKA	S-NPP	30.45370	74.13150	10/19/2021	13:48:29	D	5.40
122	FAZILKA	FAZILKA	S-NPP	30.46000	74.05470	10/19/2021	13:48:29	D	7.80
123	FAZILKA	FAZILKA	S-NPP	30.48510	74.07960	10/19/2021	13:48:29	D	11.60
124	FAZILKA	JALALABAD	S-NPP	30.49510	74.21950	10/19/2021	13:48:29	D	16.50
125	FAZILKA	JALALABAD	S-NPP	30.57820	74.17310	10/19/2021	13:48:29	D	5.70
126	FAZILKA	JALALABAD	S-NPP	30.61790	74.16650	10/19/2021	13:48:29	D	5.40
127	FAZILKA	JALALABAD	AQUA	30.58000	74.21200	10/19/2021	13:19:59	D	15.50
128	FAZILKA	KHUIAN SARWAR	S-NPP	30.25640	73.99900	10/19/2021	13:48:29	D	1.90

129	FAZILKA	KHUIAN SARWAR	S-NPP	30.29800	74.01110	10/19/2021	13:48:29	D	2.50
130	FIROZPUR	FIROZPUR	S-NPP	30.94290	74.52210	10/19/2021	13:48:29	D	5.00
131	FIROZPUR	FIROZPUR	S-NPP	31.02400	74.57090	10/19/2021	13:48:29	D	3.30
132	FIROZPUR	FIROZPUR	S-NPP	31.03220	74.76300	10/19/2021	13:48:29	D	11.50
133	FIROZPUR	FIROZPUR	S-NPP	31.05440	74.69630	10/19/2021	13:48:29	D	6.10
134	FIROZPUR	GHALL KHURD	S-NPP	30.83770	74.86810	10/19/2021	13:48:29	D	7.80
135	FIROZPUR	GHALL KHURD	S-NPP	30.86390	74.66670	10/19/2021	13:48:29	D	7.80
136	FIROZPUR	GHALL KHURD	S-NPP	30.89710	74.75550	10/19/2021	13:48:29	D	53.80
137	FIROZPUR	GHALL KHURD	S-NPP	30.89960	74.74460	10/19/2021	13:48:29	D	14.70
138	FIROZPUR	GHALL KHURD	S-NPP	30.91200	74.81640	10/19/2021	13:48:29	D	19.70
139	FIROZPUR	GHALL KHURD	S-NPP	30.91450	74.71080	10/19/2021	13:48:29	D	5.40
140	FIROZPUR	GHALL KHURD	S-NPP	30.91570	74.81580	10/19/2021	13:48:29	D	19.70
141	FIROZPUR	GHALL KHURD	S-NPP	30.95180	74.79950	10/19/2021	13:48:29	D	6.60
142	FIROZPUR	GHALL KHURD	S-NPP	30.95490	74.79370	10/19/2021	13:48:29	D	16.70
143	FIROZPUR	GHALL KHURD	S-NPP	30.95870	74.79310	10/19/2021	13:48:29	D	16.70
144	FIROZPUR	GHALL KHURD	S-NPP	30.97440	74.75640	10/19/2021	13:48:29	D	5.60
145	FIROZPUR	GHALL KHURD	AQUA	30.88800	74.73000	10/19/2021	13:19:59	D	15.30
146	FIROZPUR	GHALL KHURD	AQUA	30.89100	74.73600	10/19/2021	13:19:59	D	40.50
147	FIROZPUR	GHALL KHURD	AQUA	30.89200	74.74800	10/19/2021	13:19:59	D	38.20
148	FIROZPUR	GHALL KHURD	AQUA	30.89500	74.75400	10/19/2021	13:19:59	D	18.70
149	FIROZPUR	GHALL KHURD	AQUA	30.94700	74.78800	10/19/2021	13:19:59	D	30.50
150	FIROZPUR	GURUHAR SAHAI	S-NPP	30.61470	74.35020	10/19/2021	13:48:29	D	35.20
151	FIROZPUR	GURUHAR SAHAI	S-NPP	30.66140	74.33760	10/19/2021	13:48:29	D	8.80
152	FIROZPUR	GURUHAR SAHAI	S-NPP	30.69350	74.23580	10/19/2021	13:48:29	D	10.30
153	FIROZPUR	GURUHAR SAHAI	S-NPP	30.69430	74.39240	10/19/2021	13:48:29	D	5.40
154	FIROZPUR	GURUHAR SAHAI	S-NPP	30.70020	74.22970	10/19/2021	13:48:29	D	5.40
155	FIROZPUR	GURUHAR SAHAI	S-NPP	30.73200	74.42960	10/19/2021	13:48:29	D	4.10
156	FIROZPUR	GURUHAR SAHAI	S-NPP	30.74720	74.37170	10/19/2021	13:48:29	D	2.80
157	FIROZPUR	GURUHAR SAHAI	S-NPP	30.74720	74.40190	10/19/2021	13:48:29	D	12.20
158	FIROZPUR	GURUHAR SAHAI	S-NPP	30.77160	74.41810	10/19/2021	13:48:29	D	3.80
159	FIROZPUR	GURUHAR SAHAI	S-NPP	30.77520	74.32700	10/19/2021	13:48:29	D	4.50
160	FIROZPUR	MAKHU	S-NPP	31.11820	74.87430	10/19/2021	13:48:29	D	24.20
161	FIROZPUR	MAMDOT	S-NPP	30.77960	74.51330	10/19/2021	13:48:29	D	8.40

162	FIROZPUR	MAMDOT	S-NPP	30.78510	74.49710	10/19/2021	13:48:29	D	10.80
163	FIROZPUR	MAMDOT	S-NPP	30.79420	74.48040	10/19/2021	13:48:29	D	6.40
164	FIROZPUR	MAMDOT	S-NPP	30.79650	74.34860	10/19/2021	13:48:29	D	3.40
165	FIROZPUR	MAMDOT	S-NPP	30.80690	74.40230	10/19/2021	13:48:29	D	3.90
166	FIROZPUR	MAMDOT	S-NPP	30.80770	74.46800	10/19/2021	13:48:29	D	13.30
167	FIROZPUR	MAMDOT	S-NPP	30.82190	74.47280	10/19/2021	13:48:29	D	5.10
168	FIROZPUR	MAMDOT	S-NPP	30.82300	74.47060	10/19/2021	13:48:29	D	13.50
169	FIROZPUR	MAMDOT	S-NPP	30.82560	74.47220	10/19/2021	13:48:29	D	8.10
170	FIROZPUR	MAMDOT	S-NPP	30.84710	74.40270	10/19/2021	13:48:29	D	4.40
171	FIROZPUR	MAMDOT	S-NPP	30.87330	74.49510	10/19/2021	13:48:29	D	4.60
172	FIROZPUR	MAMDOT	S-NPP	30.89040	74.45150	10/19/2021	13:48:29	D	4.10
173	FIROZPUR	MAMDOT	S-NPP	30.94490	74.44500	10/19/2021	13:48:29	D	2.90
174	FIROZPUR	MAMDOT	AQUA	30.85900	74.39700	10/19/2021	13:19:59	D	12.00
175	FIROZPUR	MAMDOT	AQUA	30.88200	74.44900	10/19/2021	13:19:59	D	11.10
176	FIROZPUR	ZIRA	S-NPP	30.94940	74.87410	10/19/2021	13:48:29	D	1.30
177	FIROZPUR	ZIRA	S-NPP	30.99710	74.88550	10/19/2021	13:48:29	D	5.00
178	GURDASPUR	BATALA	S-NPP	31.77920	75.20500	10/19/2021	13:48:29	D	14.70
179	GURDASPUR	BATALA	S-NPP	31.78820	75.18090	10/19/2021	13:48:29	D	3.40
180	GURDASPUR	BATALA	S-NPP	31.88080	75.11910	10/19/2021	13:48:29	D	4.50
181	GURDASPUR	BATALA	S-NPP	31.88140	75.15870	10/19/2021	13:48:29	D	6.80
182	GURDASPUR	DERA BABA NANAK	S-NPP	32.02790	75.05990	10/19/2021	13:48:29	D	6.30
183	GURDASPUR	DERA BABA NANAK	S-NPP	32.05010	74.94970	10/19/2021	13:48:29	D	5.00
184	GURDASPUR	DERA BABA NANAK	S-NPP	32.05240	74.94710	10/19/2021	13:48:29	D	6.50
185	GURDASPUR	FATEHGARH CHURIAN	S-NPP	31.81640	75.11990	10/19/2021	13:48:29	D	3.50
186	GURDASPUR	FATEHGARH CHURIAN	S-NPP	31.87090	74.99700	10/19/2021	13:48:29	D	8.80
187	GURDASPUR	KAHNUWAN	S-NPP	31.82320	75.42320	10/19/2021	13:48:29	D	5.40
188	GURDASPUR	KAHNUWAN	S-NPP	31.84980	75.44840	10/19/2021	13:48:29	D	5.90
189	GURDASPUR	KAHNUWAN	S-NPP	31.85700	75.47690	10/19/2021	13:48:29	D	1.20
190	GURDASPUR	KAHNUWAN	S-NPP	31.93230	75.47540	10/19/2021	13:48:29	D	3.90
191	GURDASPUR	KAHNUWAN	AQUA	31.93700	75.48400	10/19/2021	13:19:59	D	17.90
192	GURDASPUR	KAHNUWAN	AQUA	31.94800	75.48200	10/19/2021	13:19:59	D	17.40
193	HOSHIARPUR	DASUYA	S-NPP	31.83060	75.59930	10/19/2021	13:48:29	D	10.60
194	HOSHIARPUR	GARH SHANKAR	S-NPP	31.15840	76.18450	10/19/2021	13:48:29	D	2.00

195	HOSHIARPUR	GARH SHANKAR	S-NPP	31.21820	76.05930	10/19/2021	13:48:29	D	4.00
196	HOSHIARPUR	GARH SHANKAR	S-NPP	31.23080	76.05430	10/19/2021	13:48:29	D	2.80
197	HOSHIARPUR	GARH SHANKAR	S-NPP	31.23420	76.04870	10/19/2021	13:48:29	D	2.60
198	HOSHIARPUR	TANDA	S-NPP	31.60490	75.59130	10/19/2021	13:48:29	D	6.70
199	HOSHIARPUR	TANDA	S-NPP	31.64420	75.52400	10/19/2021	13:48:29	D	6.40
200	HOSHIARPUR	TANDA	S-NPP	31.73630	75.56720	10/19/2021	13:48:29	D	7.90
201	JALANDHAR	LOHIAN	S-NPP	31.04690	75.21530	10/19/2021	13:48:29	D	4.90
202	JALANDHAR	LOHIAN	S-NPP	31.09780	75.18530	10/19/2021	13:48:29	D	5.00
203	JALANDHAR	LOHIAN	S-NPP	31.10160	75.18470	10/19/2021	13:48:29	D	4.80
204	JALANDHAR	LOHIAN	S-NPP	31.10220	75.19010	10/19/2021	13:48:29	D	4.80
205	JALANDHAR	LOHIAN	S-NPP	31.12130	75.16800	10/19/2021	13:48:29	D	2.80
206	JALANDHAR	LOHIAN	S-NPP	31.14590	75.32870	10/19/2021	13:48:29	D	2.60
207	JALANDHAR	LOHIAN	S-NPP	31.14750	75.33160	10/19/2021	13:48:29	D	3.90
208	JALANDHAR	LOHIAN	S-NPP	31.15410	75.28550	10/19/2021	13:48:29	D	2.30
209	JALANDHAR	LOHIAN	AQUA	31.11900	75.14600	10/19/2021	13:19:59	D	27.00
210	JALANDHAR	LOHIAN	AQUA	31.15300	75.20600	10/19/2021	13:19:59	D	16.50
211	JALANDHAR	MEHATPUR	S-NPP	31.00740	75.53390	10/19/2021	13:48:29	D	4.20
212	JALANDHAR	MEHATPUR	AQUA	30.99100	75.39500	10/19/2021	13:19:59	D	10.00
213	JALANDHAR	NAKODAR	S-NPP	31.20910	75.45870	10/19/2021	13:48:29	D	2.20
214	JALANDHAR	NUR MAHAL	S-NPP	31.03450	75.56430	10/19/2021	13:48:29	D	18.90
215	JALANDHAR	PHILLAUR	S-NPP	31.06010	75.75290	10/19/2021	13:48:29	D	3.10
216	JALANDHAR	PHILLAUR	AQUA	31.01500	75.82600	10/19/2021	13:19:59	D	9.00
217	JALANDHAR	SHAHKOT	S-NPP	31.00800	75.36880	10/19/2021	13:48:29	D	3.10
218	JALANDHAR	SHAHKOT	S-NPP	31.03240	75.37640	10/19/2021	13:48:29	D	5.90
219	JALANDHAR	SHAHKOT	S-NPP	31.03970	75.28880	10/19/2021	13:48:29	D	3.90
220	JALANDHAR	SHAHKOT	S-NPP	31.04360	75.28820	10/19/2021	13:48:29	D	8.30
221	JALANDHAR	SHAHKOT	S-NPP	31.04410	75.32740	10/19/2021	13:48:29	D	3.70
222	JALANDHAR	SHAHKOT	S-NPP	31.04790	75.32680	10/19/2021	13:48:29	D	13.50
223	JALANDHAR	SHAHKOT	S-NPP	31.05370	75.30910	10/19/2021	13:48:29	D	2.80
224	JALANDHAR	SHAHKOT	AQUA	31.06300	75.21700	10/19/2021	13:19:59	D	9.20
225	KAPURTHALA	KAPURTHALA	S-NPP	31.25140	75.31570	10/19/2021	13:48:29	D	12.40
226	KAPURTHALA	KAPURTHALA	S-NPP	31.25270	75.31330	10/19/2021	13:48:29	D	14.40
227	KAPURTHALA	KAPURTHALA	AQUA	31.25900	75.45700	10/19/2021	13:19:59	D	11.50

228	KAPURTHALA	KAPURTHALA	AQUA	31.32000	75.28700	10/19/2021	13:19:59	D	11.00
229	KAPURTHALA	NADALA	S-NPP	31.61110	75.47630	10/19/2021	13:48:29	D	17.50
230	KAPURTHALA	NADALA	AQUA	31.49800	75.49800	10/19/2021	13:19:59	D	11.10
231	KAPURTHALA	NADALA	AQUA	31.50000	75.51300	10/19/2021	13:19:59	D	11.00
232	KAPURTHALA	NADALA	AQUA	31.50300	75.50700	10/19/2021	13:19:59	D	17.20
233	KAPURTHALA	NADALA	AQUA	31.56200	75.58800	10/19/2021	13:19:59	D	24.10
234	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.16180	75.25070	10/19/2021	13:48:29	D	3.50
235	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.16510	75.17780	10/19/2021	13:48:29	D	3.10
236	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.22570	75.26330	10/19/2021	13:48:29	D	3.30
237	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.24300	75.12460	10/19/2021	13:48:29	D	6.60
238	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.25870	75.22800	10/19/2021	13:48:29	D	6.90
239	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.33270	75.19420	10/19/2021	13:48:29	D	2.90
240	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.33730	75.26650	10/19/2021	13:48:29	D	6.40
241	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.33830	75.26450	10/19/2021	13:48:29	D	15.60
242	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.34550	75.20340	10/19/2021	13:48:29	D	3.50
243	KAPURTHALA	SULTANPUR LODHI	S-NPP	31.34680	75.20140	10/19/2021	13:48:29	D	4.40
244	KAPURTHALA	SULTANPUR LODHI	AQUA	31.17800	75.02000	10/19/2021	13:19:59	D	11.30
245	KAPURTHALA	SULTANPUR LODHI	AQUA	31.24300	75.12000	10/19/2021	13:19:59	D	18.30
246	KAPURTHALA	SULTANPUR LODHI	AQUA	31.24300	75.12500	10/19/2021	13:19:59	D	23.60
247	KAPURTHALA	SULTANPUR LODHI	AQUA	31.34700	75.24600	10/19/2021	13:19:59	D	9.80
248	LUDHIANA	DORAHA	S-NPP	30.73140	76.03930	10/19/2021	13:48:29	D	5.90
249	LUDHIANA	JAGRAON	S-NPP	30.73760	75.39150	10/19/2021	13:48:29	D	5.40
250	LUDHIANA	JAGRAON	S-NPP	30.74980	75.39520	10/19/2021	13:48:29	D	16.40
251	LUDHIANA	JAGRAON	S-NPP	30.76890	75.45980	10/19/2021	13:48:29	D	8.60
252	LUDHIANA	JAGRAON	AQUA	30.63300	75.40900	10/19/2021	13:19:59	D	17.40
253	LUDHIANA	JAGRAON	AQUA	30.63600	75.42500	10/19/2021	13:19:59	D	16.90
254	LUDHIANA	KHANNA	S-NPP	30.62420	76.07480	10/19/2021	13:48:29	D	7.20
255	LUDHIANA	KHANNA	S-NPP	30.69690	76.28970	10/19/2021	13:48:29	D	4.00
256	LUDHIANA	KHANNA	AQUA	30.64000	76.13400	10/19/2021	13:19:59	D	11.70
257	LUDHIANA	LUDHIANA-2	S-NPP	30.95600	75.77670	10/19/2021	13:48:29	D	13.20
258	LUDHIANA	MACHHIWARA	S-NPP	30.86550	76.29100	10/19/2021	13:48:29	D	2.90
259	LUDHIANA	MACHHIWARA	S-NPP	30.98020	76.17250	10/19/2021	13:48:29	D	6.50
260	LUDHIANA	MACHHIWARA	S-NPP	30.99270	76.21210	10/19/2021	13:48:29	D	8.10

261	LUDHIANA	MACHHIWARA	S-NPP	30.99310	76.21610	10/19/2021	13:48:29	D	8.10
262	LUDHIANA	MACHHIWARA	S-NPP	30.99360	76.22020	10/19/2021	13:48:29	D	3.40
263	LUDHIANA	MALoud	S-NPP	30.63620	75.89390	10/19/2021	13:48:29	D	3.90
264	LUDHIANA	MALoud	S-NPP	30.70450	75.90570	10/19/2021	13:48:29	D	5.00
265	LUDHIANA	PAKHOWAL	S-NPP	30.62950	75.73120	10/19/2021	13:48:29	D	3.20
266	LUDHIANA	PAKHOWAL	S-NPP	30.69100	75.71420	10/19/2021	13:48:29	D	4.60
267	LUDHIANA	RAIKOT	S-NPP	30.67240	75.61910	10/19/2021	13:48:29	D	2.80
268	LUDHIANA	RAIKOT	S-NPP	30.71370	75.53300	10/19/2021	13:48:29	D	14.50
269	LUDHIANA	SAMRALA	S-NPP	30.78780	76.18230	10/19/2021	13:48:29	D	5.20
270	LUDHIANA	SAMRALA	AQUA	30.78400	76.18400	10/19/2021	13:19:59	D	13.00
271	LUDHIANA	SAMRALA	AQUA	30.80800	76.15600	10/19/2021	13:19:59	D	7.10
272	LUDHIANA	SIDHWAN BET	S-NPP	30.81980	75.52580	10/19/2021	13:48:29	D	2.30
273	LUDHIANA	SIDHWAN BET	S-NPP	30.89550	75.49040	10/19/2021	13:48:29	D	11.90
274	LUDHIANA	SIDHWAN BET	S-NPP	30.89680	75.43350	10/19/2021	13:48:29	D	4.00
275	LUDHIANA	SIDHWAN BET	AQUA	30.86800	75.59600	10/19/2021	13:19:59	D	12.00
276	LUDHIANA	SIDHWAN BET	AQUA	30.87000	75.54700	10/19/2021	13:19:59	D	9.00
277	LUDHIANA	SIDHWAN BET	AQUA	30.87400	75.58500	10/19/2021	13:19:59	D	12.90
278	LUDHIANA	SIDHWAN BET	AQUA	30.87700	75.60100	10/19/2021	13:19:59	D	9.50
279	LUDHIANA	SIDHWAN BET	AQUA	30.89600	75.44100	10/19/2021	13:19:59	D	8.30
280	LUDHIANA	SIDHWAN BET	AQUA	30.89700	75.50700	10/19/2021	13:19:59	D	6.80
281	LUDHIANA	SUDHAR	S-NPP	30.77000	75.60760	10/19/2021	13:48:29	D	6.00
282	LUDHIANA	SUDHAR	S-NPP	30.81920	75.69260	10/19/2021	13:48:29	D	16.40
283	MANSA	BUDHLADA	S-NPP	29.89420	75.44030	10/19/2021	13:48:29	D	5.40
284	MANSA	BUDHLADA	S-NPP	29.91100	75.65330	10/19/2021	13:48:29	D	3.20
285	MANSA	SARDULGARH	S-NPP	29.64850	75.24040	10/19/2021	13:48:29	D	3.70
286	MANSA	SARDULGARH	S-NPP	29.68420	75.28270	10/19/2021	13:48:29	D	44.80
287	MANSA	SARDULGARH	S-NPP	29.69110	75.27630	10/19/2021	13:48:29	D	6.00
288	MANSA	SARDULGARH	S-NPP	29.69990	75.22180	10/19/2021	13:48:29	D	9.80
289	MOGA	BAGHA PURANA	S-NPP	30.54950	75.02140	10/19/2021	13:48:29	D	2.80
290	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.88200	75.30670	10/19/2021	13:48:29	D	31.70
291	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.88590	75.30610	10/19/2021	13:48:29	D	6.30

292	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.91340	75.34100	10/19/2021	13:48:29	D	10.80
293	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.91400	75.34650	10/19/2021	13:48:29	D	10.80
294	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.93450	75.30720	10/19/2021	13:48:29	D	8.20
295	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.93830	75.30660	10/19/2021	13:48:29	D	20.80
296	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.94970	75.33840	10/19/2021	13:48:29	D	5.20
297	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	30.99130	75.29290	10/19/2021	13:48:29	D	5.70
298	MOGA	KOT ISE KHAN AT DHARAMKOT	S-NPP	31.05330	75.20320	10/19/2021	13:48:29	D	4.50
299	MOGA	KOT ISE KHAN AT DHARAMKOT	AQUA	30.91400	75.34800	10/19/2021	13:19:59	D	8.00
300	MOGA	MOGA-1	S-NPP	30.70720	75.32920	10/19/2021	13:48:29	D	3.00
301	MOGA	MOGA-1	S-NPP	30.72260	75.29360	10/19/2021	13:48:29	D	10.00
302	MOGA	MOGA-1	S-NPP	30.73580	75.37500	10/19/2021	13:48:29	D	3.00
303	MOGA	MOGA-1	S-NPP	30.73680	75.14870	10/19/2021	13:48:29	D	3.30
304	MOGA	MOGA-2	S-NPP	30.75450	75.07010	10/19/2021	13:48:29	D	5.10
305	MOGA	MOGA-2	S-NPP	30.75820	75.06950	10/19/2021	13:48:29	D	6.70
306	MOGA	NIHAL SINGH	S-NPP	30.59680	75.33220	10/19/2021	13:48:29	D	4.90
307	MOGA	NIHAL SINGH	S-NPP	30.63250	75.30460	10/19/2021	13:48:29	D	8.20
308	MOGA	NIHAL SINGH	S-NPP	30.63750	75.34810	10/19/2021	13:48:29	D	8.40
309	MOGA	NIHAL SINGH	AQUA	30.57300	75.27100	10/19/2021	13:19:59	D	9.90
310	MUKTSAR	KOT BHAI AT GIDDERBAHA	S-NPP	30.33600	74.58060	10/19/2021	13:48:29	D	4.90
311	MUKTSAR	KOT BHAI AT GIDDERBAHA	S-NPP	30.37390	74.67630	10/19/2021	13:48:29	D	17.60
312	MUKTSAR	KOT BHAI AT GIDDERBAHA	S-NPP	30.37760	74.67570	10/19/2021	13:48:29	D	17.60
313	MUKTSAR	KOT BHAI AT GIDDERBAHA	S-NPP	30.38190	74.80370	10/19/2021	13:48:29	D	4.30
314	MUKTSAR	KOT BHAI AT GIDDERBAHA	S-NPP	30.38560	74.80320	10/19/2021	13:48:29	D	4.30
315	MUKTSAR	MUKTSAR	S-NPP	30.44440	74.43890	10/19/2021	13:48:29	D	4.80
316	MUKTSAR	MUKTSAR	S-NPP	30.45830	74.37180	10/19/2021	13:48:29	D	5.40
317	MUKTSAR	MUKTSAR	S-NPP	30.46130	74.36630	10/19/2021	13:48:29	D	14.50
318	MUKTSAR	MUKTSAR	S-NPP	30.47170	74.44950	10/19/2021	13:48:29	D	8.20
319	MUKTSAR	MUKTSAR	S-NPP	30.47230	74.45450	10/19/2021	13:48:29	D	8.20

320	MUKTSAR	MUKTSAR	S-NPP	30.48720	74.63450	10/19/2021	13:48:29	D	3.00
321	MUKTSAR	MUKTSAR	S-NPP	30.53790	74.44610	10/19/2021	13:48:29	D	2.90
322	MUKTSAR	MUKTSAR	S-NPP	30.55610	74.50370	10/19/2021	13:48:29	D	3.20
323	MUKTSAR	MUKTSAR	S-NPP	30.61370	74.57570	10/19/2021	13:48:29	D	4.50
324	MUKTSAR	MUKTSAR	S-NPP	30.61540	74.57230	10/19/2021	13:48:29	D	4.50
325	MUKTSAR	MUKTSAR	AQUA	30.53500	74.58400	10/19/2021	13:19:59	D	40.90
326	MUKTSAR	MUKTSAR	AQUA	30.57600	74.66800	10/19/2021	13:19:59	D	10.90
327	PATIALA	BHUNARHERI	S-NPP	30.16470	76.45550	10/19/2021	13:48:29	D	3.50
328	PATIALA	BHUNARHERI	AQUA	30.11000	76.46400	10/19/2021	13:19:59	D	10.00
329	PATIALA	NABHA	S-NPP	30.36070	76.06260	10/19/2021	13:48:29	D	6.30
330	PATIALA	NABHA	S-NPP	30.36300	76.06470	10/19/2021	13:48:29	D	7.80
331	PATIALA	NABHA	S-NPP	30.43340	76.09990	10/19/2021	13:48:29	D	7.40
332	PATIALA	NABHA	S-NPP	30.46120	76.09580	10/19/2021	13:48:29	D	3.30
333	PATIALA	NABHA	S-NPP	30.46520	76.09530	10/19/2021	13:48:29	D	42.10
334	PATIALA	NABHA	S-NPP	30.51980	76.31930	10/19/2021	13:48:29	D	5.40
335	PATIALA	NABHA	AQUA	30.34900	76.07000	10/19/2021	13:19:59	D	8.40
336	PATIALA	PATIALA	S-NPP	30.27080	76.26690	10/19/2021	13:48:29	D	5.60
337	PATIALA	PATIALA	AQUA	30.42400	76.48800	10/19/2021	13:19:59	D	21.20
338	PATIALA	PATRAN	S-NPP	29.86530	76.16250	10/19/2021	13:48:29	D	5.50
339	PATIALA	PATRAN	S-NPP	29.86810	76.07950	10/19/2021	13:48:29	D	3.00
340	PATIALA	PATRAN	S-NPP	29.90300	76.13930	10/19/2021	13:48:29	D	4.10
341	PATIALA	PATRAN	S-NPP	29.92010	76.14860	10/19/2021	13:48:29	D	8.40
342	PATIALA	PATRAN	S-NPP	29.93460	76.13470	10/19/2021	13:48:29	D	4.00
343	PATIALA	PATRAN	AQUA	29.87000	76.23100	10/19/2021	13:19:59	D	9.20
344	PATIALA	RAJPURA	S-NPP	30.52700	76.57260	10/19/2021	13:48:29	D	1.50
345	PATIALA	RAJPURA	S-NPP	30.53020	76.57370	10/19/2021	13:48:29	D	5.00
346	PATIALA	RAJPURA	S-NPP	30.53110	76.57210	10/19/2021	13:48:29	D	1.50
347	PATIALA	RAJPURA	S-NPP	30.53270	76.51810	10/19/2021	13:48:29	D	2.90
348	PATIALA	SAMANA	AQUA	30.02900	76.17200	10/19/2021	13:19:59	D	19.60
349	PATIALA	SANAUR	S-NPP	30.27290	76.46920	10/19/2021	13:48:29	D	3.70
350	PATIALA	SANAUR	S-NPP	30.27380	76.47740	10/19/2021	13:48:29	D	5.50
351	PATIALA	SANAUR	S-NPP	30.30370	76.52340	10/19/2021	13:48:29	D	2.40
352	PATIALA	SANAUR	AQUA	30.26700	76.46500	10/19/2021	13:19:59	D	8.60

353	PATIALA	SHAMBU KALAN	S-NPP	30.44900	76.50320	10/19/2021	13:48:29	D	2.10
354	PATIALA	SHAMBU KALAN	S-NPP	30.45300	76.50260	10/19/2021	13:48:29	D	4.00
355	RUPNAGAR	CHAMKAUR SAHIB	S-NPP	30.91860	76.32540	10/19/2021	13:48:29	D	5.90
356	RUPNAGAR	MORINDA	S-NPP	30.76700	76.51990	10/19/2021	13:48:29	D	3.20
357	RUPNAGAR	RUPNAGAR	S-NPP	30.95830	76.62890	10/19/2021	13:48:29	D	4.70
358	RUPNAGAR	RUPNAGAR	S-NPP	30.96000	76.62670	10/19/2021	13:48:29	D	5.30
359	RUPNAGAR	RUPNAGAR	S-NPP	30.96050	76.63100	10/19/2021	13:48:29	D	5.30
360	SANGRUR	ANDANA	S-NPP	29.84850	76.04720	10/19/2021	13:48:29	D	13.30
361	SANGRUR	ANDANA	S-NPP	29.86620	76.02710	10/19/2021	13:48:29	D	4.30
362	SANGRUR	BHAWANIGARH	S-NPP	30.23780	75.97840	10/19/2021	13:48:29	D	7.50
363	SANGRUR	BHAWANIGARH	S-NPP	30.29230	76.08100	10/19/2021	13:48:29	D	8.00
364	SANGRUR	BHAWANIGARH	S-NPP	30.29290	76.08690	10/19/2021	13:48:29	D	8.00
365	SANGRUR	DIRBA	S-NPP	30.03650	76.02810	10/19/2021	13:48:29	D	4.60
366	SANGRUR	MALERKOTLA-2	S-NPP	30.67300	75.87480	10/19/2021	13:48:29	D	2.30
367	SANGRUR	SANGRUR	S-NPP	30.25430	75.77630	10/19/2021	13:48:29	D	9.70
368	SANGRUR	SANGRUR	S-NPP	30.30110	75.80390	10/19/2021	13:48:29	D	2.50
369	SANGRUR	SUNAM	S-NPP	30.03930	75.69930	10/19/2021	13:48:29	D	3.60
370	SANGRUR	SUNAM	S-NPP	30.11380	75.79630	10/19/2021	13:48:29	D	4.20
371	SANGRUR	SUNAM	AQUA	30.13100	75.83500	10/19/2021	13:19:59	D	9.90
372	SAS NAGAR (MOHALI)	KHARAR	S-NPP	30.61350	76.73010	10/19/2021	13:48:29	D	3.60
373	SBS NAGAR	BANGA	S-NPP	31.28030	75.91370	10/19/2021	13:48:29	D	20.30
374	SBS NAGAR	BANGA	AQUA	31.23100	75.93100	10/19/2021	13:19:59	D	16.90
375	SBS NAGAR	BANGA	AQUA	31.23400	75.94500	10/19/2021	13:19:59	D	10.50
376	SBS NAGAR	NAWAN SHAHR	S-NPP	31.04440	76.19630	10/19/2021	13:48:29	D	10.10
377	SBS NAGAR	NAWAN SHAHR	S-NPP	31.05430	76.17420	10/19/2021	13:48:29	D	2.10
378	TARN TARAN	BHIKHIWIND	S-NPP	31.24640	74.69700	10/19/2021	13:48:29	D	4.50
379	TARN TARAN	BHIKHIWIND	S-NPP	31.25630	74.65320	10/19/2021	13:48:29	D	3.70
380	TARN TARAN	BHIKHIWIND	S-NPP	31.26190	74.63660	10/19/2021	13:48:29	D	5.00
381	TARN TARAN	BHIKHIWIND	S-NPP	31.26560	74.63600	10/19/2021	13:48:29	D	9.60
382	TARN TARAN	BHIKHIWIND	S-NPP	31.26680	74.63880	10/19/2021	13:48:29	D	3.00
383	TARN TARAN	BHIKHIWIND	S-NPP	31.27630	74.72400	10/19/2021	13:48:29	D	3.60
384	TARN TARAN	BHIKHIWIND	S-NPP	31.29080	74.71420	10/19/2021	13:48:29	D	5.10
385	TARN TARAN	BHIKHIWIND	S-NPP	31.30020	74.69680	10/19/2021	13:48:29	D	5.10

386	TARN TARAN	BHIKHIWIND	S-NPP	31.31260	74.73730	10/19/2021	13:48:29	D	5.00
387	TARN TARAN	BHIKHIWIND	S-NPP	31.33930	74.64300	10/19/2021	13:48:29	D	4.00
388	TARN TARAN	BHIKHIWIND	S-NPP	31.34060	74.68510	10/19/2021	13:48:29	D	6.00
389	TARN TARAN	BHIKHIWIND	S-NPP	31.34430	74.68450	10/19/2021	13:48:29	D	6.00
390	TARN TARAN	BHIKHIWIND	S-NPP	31.35120	74.70990	10/19/2021	13:48:29	D	7.60
391	TARN TARAN	BHIKHIWIND	S-NPP	31.35560	74.74650	10/19/2021	13:48:29	D	8.10
392	TARN TARAN	BHIKHIWIND	S-NPP	31.37090	74.62210	10/19/2021	13:48:29	D	3.40
393	TARN TARAN	BHIKHIWIND	S-NPP	31.37190	74.61930	10/19/2021	13:48:29	D	4.20
394	TARN TARAN	BHIKHIWIND	S-NPP	31.38620	74.61180	10/19/2021	13:48:29	D	9.30
395	TARN TARAN	BHIKHIWIND	S-NPP	31.41770	74.62250	10/19/2021	13:48:29	D	15.90
396	TARN TARAN	BHIKHIWIND	S-NPP	31.41890	74.69650	10/19/2021	13:48:29	D	4.00
397	TARN TARAN	BHIKHIWIND	AQUA	31.25600	74.63500	10/19/2021	13:19:59	D	27.70
398	TARN TARAN	BHIKHIWIND	AQUA	31.27000	74.71600	10/19/2021	13:19:59	D	17.90
399	TARN TARAN	BHIKHIWIND	AQUA	31.27200	74.72200	10/19/2021	13:19:59	D	19.30
400	TARN TARAN	BHIKHIWIND	AQUA	31.27400	74.73300	10/19/2021	13:19:59	D	12.20
401	TARN TARAN	BHIKHIWIND	AQUA	31.27900	74.64000	10/19/2021	13:19:59	D	41.90
402	TARN TARAN	BHIKHIWIND	AQUA	31.28300	74.65800	10/19/2021	13:19:59	D	34.40
403	TARN TARAN	BHIKHIWIND	AQUA	31.33600	74.75300	10/19/2021	13:19:59	D	21.00
404	TARN TARAN	BHIKHIWIND	AQUA	31.34000	74.77000	10/19/2021	13:19:59	D	46.10
405	TARN TARAN	BHIKHIWIND	AQUA	31.38500	74.64400	10/19/2021	13:19:59	D	12.80
406	TARN TARAN	CHOHLA SAHIB	S-NPP	31.19550	74.94580	10/19/2021	13:48:29	D	5.20
407	TARN TARAN	CHOHLA SAHIB	S-NPP	31.19590	74.94820	10/19/2021	13:48:29	D	4.80
408	TARN TARAN	CHOHLA SAHIB	S-NPP	31.24190	75.04760	10/19/2021	13:48:29	D	3.30
409	TARN TARAN	CHOHLA SAHIB	S-NPP	31.29120	75.03990	10/19/2021	13:48:29	D	4.40
410	TARN TARAN	CHOHLA SAHIB	S-NPP	31.36740	75.10890	10/19/2021	13:48:29	D	4.30
411	TARN TARAN	CHOHLA SAHIB	AQUA	31.29200	74.95000	10/19/2021	13:19:59	D	19.10
412	TARN TARAN	CHOHLA SAHIB	AQUA	31.29500	74.96700	10/19/2021	13:19:59	D	13.00
413	TARN TARAN	CHOHLA SAHIB	AQUA	31.34500	75.10400	10/19/2021	13:19:59	D	21.00
414	TARN TARAN	CHOHLA SAHIB	AQUA	31.34500	75.11100	10/19/2021	13:19:59	D	40.20
415	TARN TARAN	CHOHLA SAHIB	AQUA	31.34800	75.12000	10/19/2021	13:19:59	D	26.00
416	TARN TARAN	GANDIWIND TATLA	S-NPP	31.44750	74.68130	10/19/2021	13:48:29	D	2.20
417	TARN TARAN	GANDIWIND TATLA	S-NPP	31.46120	74.66850	10/19/2021	13:48:29	D	5.20
418	TARN TARAN	GANDIWIND TATLA	S-NPP	31.47000	74.70970	10/19/2021	13:48:29	D	7.80

419	TARN TARAN	GANDIWIND TATLA	S-NPP	31.47180	74.66150	10/19/2021	13:48:29	D	2.90
420	TARN TARAN	GANDIWIND TATLA	S-NPP	31.47240	74.66670	10/19/2021	13:48:29	D	2.90
421	TARN TARAN	GANDIWIND TATLA	S-NPP	31.48430	74.73410	10/19/2021	13:48:29	D	4.00
422	TARN TARAN	GANDIWIND TATLA	S-NPP	31.48500	74.73930	10/19/2021	13:48:29	D	4.00
423	TARN TARAN	GANDIWIND TATLA	S-NPP	31.49430	74.68690	10/19/2021	13:48:29	D	2.30
424	TARN TARAN	GANDIWIND TATLA	S-NPP	31.51530	74.73690	10/19/2021	13:48:29	D	8.60
425	TARN TARAN	KHADUR SAHIB	S-NPP	31.38830	75.05590	10/19/2021	13:48:29	D	5.90
426	TARN TARAN	KHADUR SAHIB	S-NPP	31.41820	75.07890	10/19/2021	13:48:29	D	3.90
427	TARN TARAN	KHADUR SAHIB	S-NPP	31.42770	75.06080	10/19/2021	13:48:29	D	5.30
428	TARN TARAN	KHADUR SAHIB	S-NPP	31.43000	75.05800	10/19/2021	13:48:29	D	8.20
429	TARN TARAN	KHADUR SAHIB	S-NPP	31.43170	75.16020	10/19/2021	13:48:29	D	3.20
430	TARN TARAN	KHADUR SAHIB	S-NPP	31.43230	75.16570	10/19/2021	13:48:29	D	2.90
431	TARN TARAN	KHADUR SAHIB	S-NPP	31.43500	75.06830	10/19/2021	13:48:29	D	6.10
432	TARN TARAN	KHADUR SAHIB	S-NPP	31.43660	75.07050	10/19/2021	13:48:29	D	4.70
433	TARN TARAN	KHADUR SAHIB	S-NPP	31.44580	75.09440	10/19/2021	13:48:29	D	4.50
434	TARN TARAN	KHADUR SAHIB	S-NPP	31.44700	75.10530	10/19/2021	13:48:29	D	6.50
435	TARN TARAN	KHADUR SAHIB	S-NPP	31.47180	75.08480	10/19/2021	13:48:29	D	5.40
436	TARN TARAN	KHADUR SAHIB	S-NPP	31.49030	75.07640	10/19/2021	13:48:29	D	2.50
437	TARN TARAN	KHADUR SAHIB	S-NPP	31.50300	75.08550	10/19/2021	13:48:29	D	4.30
438	TARN TARAN	KHADUR SAHIB	AQUA	31.39200	75.10900	10/19/2021	13:19:59	D	12.60
439	TARN TARAN	KHADUR SAHIB	AQUA	31.39500	75.12500	10/19/2021	13:19:59	D	11.90
440	TARN TARAN	KHADUR SAHIB	AQUA	31.44000	75.05700	10/19/2021	13:19:59	D	11.90
441	TARN TARAN	KHADUR SAHIB	AQUA	31.49500	75.04200	10/19/2021	13:19:59	D	13.00
442	TARN TARAN	KHADUR SAHIB	AQUA	31.49800	75.05900	10/19/2021	13:19:59	D	10.50
443	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.32470	74.93980	10/19/2021	13:48:29	D	4.50
444	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.34790	75.00720	10/19/2021	13:48:29	D	4.20
445	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.35740	74.98930	10/19/2021	13:48:29	D	22.60
446	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.36120	74.98870	10/19/2021	13:48:29	D	7.50
447	TARN TARAN	NAUSHERA PANNUAN	S-NPP	31.37000	75.03120	10/19/2021	13:48:29	D	6.60
448	TARN TARAN	PATTI	S-NPP	31.15880	74.86250	10/19/2021	13:48:29	D	2.70
449	TARN TARAN	PATTI	S-NPP	31.18040	74.78180	10/19/2021	13:48:29	D	2.60
450	TARN TARAN	PATTI	S-NPP	31.20190	74.90160	10/19/2021	13:48:29	D	3.70
451	TARN TARAN	PATTI	S-NPP	31.20660	74.94110	10/19/2021	13:48:29	D	3.40

452	TARN TARAN	PATTI	S-NPP	31.20850	74.76130	10/19/2021	13:48:29	D	5.10
453	TARN TARAN	PATTI	S-NPP	31.22770	74.85980	10/19/2021	13:48:29	D	5.40
454	TARN TARAN	PATTI	S-NPP	31.23140	74.85920	10/19/2021	13:48:29	D	2.00
455	TARN TARAN	PATTI	S-NPP	31.23200	74.89680	10/19/2021	13:48:29	D	9.80
456	TARN TARAN	PATTI	S-NPP	31.24200	74.91680	10/19/2021	13:48:29	D	8.20
457	TARN TARAN	PATTI	S-NPP	31.24330	74.79840	10/19/2021	13:48:29	D	5.90
458	TARN TARAN	PATTI	S-NPP	31.24390	74.90030	10/19/2021	13:48:29	D	2.40
459	TARN TARAN	PATTI	S-NPP	31.24460	74.87330	10/19/2021	13:48:29	D	3.90
460	TARN TARAN	PATTI	S-NPP	31.30410	74.89430	10/19/2021	13:48:29	D	8.00
461	TARN TARAN	PATTI	S-NPP	31.30480	74.89620	10/19/2021	13:48:29	D	8.40
462	TARN TARAN	PATTI	AQUA	31.16000	74.86500	10/19/2021	13:19:59	D	13.90
463	TARN TARAN	PATTI	AQUA	31.20200	74.84900	10/19/2021	13:19:59	D	21.00
464	TARN TARAN	PATTI	AQUA	31.20500	74.85400	10/19/2021	13:19:59	D	19.10
465	TARN TARAN	PATTI	AQUA	31.21200	74.77500	10/19/2021	13:19:59	D	12.00
466	TARN TARAN	TARN TARAN	S-NPP	31.37930	74.75340	10/19/2021	13:48:29	D	11.30
467	TARN TARAN	TARN TARAN	S-NPP	31.39490	74.81800	10/19/2021	13:48:29	D	6.40
468	TARN TARAN	TARN TARAN	S-NPP	31.39500	74.82060	10/19/2021	13:48:29	D	8.20
469	TARN TARAN	TARN TARAN	S-NPP	31.39570	74.75890	10/19/2021	13:48:29	D	2.40
470	TARN TARAN	TARN TARAN	S-NPP	31.40320	74.82470	10/19/2021	13:48:29	D	4.30
471	TARN TARAN	TARN TARAN	S-NPP	31.40370	74.82740	10/19/2021	13:48:29	D	5.60
472	TARN TARAN	TARN TARAN	S-NPP	31.41610	74.83620	10/19/2021	13:48:29	D	4.30
473	TARN TARAN	TARN TARAN	S-NPP	31.42740	74.86690	10/19/2021	13:48:29	D	4.30
474	TARN TARAN	TARN TARAN	S-NPP	31.44560	74.79390	10/19/2021	13:48:29	D	1.70
475	TARN TARAN	TARN TARAN	S-NPP	31.46880	74.79560	10/19/2021	13:48:29	D	2.40
476	TARN TARAN	TARN TARAN	S-NPP	31.50480	75.00220	10/19/2021	13:48:29	D	5.00
477	TARN TARAN	TARN TARAN	AQUA	31.43700	74.79400	10/19/2021	13:19:59	D	9.30
478	TARN TARAN	TARN TARAN	AQUA	31.47500	74.81200	10/19/2021	13:19:59	D	10.10
479	TARN TARAN	VALTOHA	S-NPP	31.14440	74.67900	10/19/2021	13:48:29	D	2.60
480	TARN TARAN	VALTOHA	S-NPP	31.16910	74.58860	10/19/2021	13:48:29	D	3.10
481	TARN TARAN	VALTOHA	S-NPP	31.19940	74.58900	10/19/2021	13:48:29	D	10.60
482	TARN TARAN	VALTOHA	S-NPP	31.20300	74.68280	10/19/2021	13:48:29	D	5.20
483	TARN TARAN	VALTOHA	S-NPP	31.21230	74.54000	10/19/2021	13:48:29	D	7.50
484	TARN TARAN	VALTOHA	S-NPP	31.23090	74.56830	10/19/2021	13:48:29	D	2.40

485	TARN TARAN	VALTOHA	S-NPP	31.23650	74.70910	10/19/2021	13:48:29	D	9.80
486	TARN TARAN	VALTOHA	S-NPP	31.23760	74.56200	10/19/2021	13:48:29	D	4.00
487	TARN TARAN	VALTOHA	S-NPP	31.23770	74.68780	10/19/2021	13:48:29	D	2.50
488	TARN TARAN	VALTOHA	S-NPP	31.24130	74.56140	10/19/2021	13:48:29	D	4.80
489	TARN TARAN	VALTOHA	S-NPP	31.24270	74.69760	10/19/2021	13:48:29	D	4.50
490	TARN TARAN	VALTOHA	S-NPP	31.24950	74.62800	10/19/2021	13:48:29	D	7.20
491	TARN TARAN	VALTOHA	S-NPP	31.25320	74.62740	10/19/2021	13:48:29	D	7.20
492	TARN TARAN	VALTOHA	S-NPP	31.29600	74.56600	10/19/2021	13:48:29	D	2.30
493	TARN TARAN	VALTOHA	S-NPP	31.29790	74.58140	10/19/2021	13:48:29	D	11.20
494	TARN TARAN	VALTOHA	AQUA	31.18600	74.57900	10/19/2021	13:19:59	D	10.20
495	TARN TARAN	VALTOHA	AQUA	31.23100	74.56700	10/19/2021	13:19:59	D	15.20
496	TARN TARAN	VALTOHA	AQUA	31.25300	74.62900	10/19/2021	13:19:59	D	18.30

Details of residue burning events in Haryana on 19-Oct-2021

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	FATEHABAD	FATEHABAD	S-NPP	29.54720	75.52170	10/19/2021	13:48:29	D	3.60
2	FATEHABAD	FATEHABAD	S-NPP	29.55560	75.49320	10/19/2021	13:48:29	D	19.20
3	FATEHABAD	FATEHABAD	S-NPP	29.55630	75.49010	10/19/2021	13:48:29	D	12.50
4	FATEHABAD	FATEHABAD	S-NPP	29.55690	75.49540	10/19/2021	13:48:29	D	7.30
5	FATEHABAD	RATIA	S-NPP	29.67920	75.68340	10/19/2021	13:48:29	D	4.90
6	FATEHABAD	RATIA	S-NPP	29.68010	75.68070	10/19/2021	13:48:29	D	5.00
7	FATEHABAD	RATIA	AQUA	29.65700	75.65200	10/19/2021	13:19:59	D	21.50
8	JIND	NARWANA	S-NPP	29.70500	76.03750	10/19/2021	13:48:29	D	5.80
9	JIND	SAFIDON	S-NPP	29.46010	76.59310	10/19/2021	13:48:29	D	1.80
10	JIND	UCHANA	S-NPP	29.56250	76.11270	10/19/2021	13:48:29	D	4.60
11	KAITHAL	GUHLA	S-NPP	29.94740	76.24610	10/19/2021	13:48:29	D	6.70
12	KAITHAL	GUHLA	S-NPP	29.94880	76.24480	10/19/2021	13:48:29	D	8.80
13	KAITHAL	GUHLA	S-NPP	29.95950	76.31680	10/19/2021	13:48:29	D	6.30
14	KAITHAL	GUHLA	S-NPP	29.96260	76.29710	10/19/2021	13:48:29	D	15.00
15	KAITHAL	GUHLA	S-NPP	29.99330	76.24430	10/19/2021	13:48:29	D	3.00
16	KAITHAL	GUHLA	S-NPP	30.01320	76.27770	10/19/2021	13:48:29	D	19.90
17	KAITHAL	GUHLA	S-NPP	30.08290	76.34390	10/19/2021	13:48:29	D	2.20
18	KAITHAL	GUHLA	S-NPP	30.14900	76.42470	10/19/2021	13:48:29	D	1.70
19	KAITHAL	GUHLA	S-NPP	30.18490	76.41550	10/19/2021	13:48:29	D	3.10
20	KAITHAL	GUHLA	AQUA	30.08600	76.39500	10/19/2021	13:19:59	D	11.20
21	KAITHAL	KAITHAL	S-NPP	29.74520	76.35140	10/19/2021	13:48:29	D	4.30
22	KAITHAL	PUNDRI	S-NPP	29.70830	76.60900	10/19/2021	13:48:29	D	1.60
23	KAITHAL	PUNDRI	AQUA	29.77000	76.64200	10/19/2021	13:19:59	D	15.10
24	KAITHAL	PUNDRI	AQUA	29.77300	76.65600	10/19/2021	13:19:59	D	12.70
25	KAITHAL	RAJOUND	S-NPP	29.55060	76.44990	10/19/2021	13:48:29	D	3.20
26	KAITHAL	RAJOUND	S-NPP	29.55140	76.45050	10/19/2021	13:48:29	D	3.30
27	KAITHAL	RAJOUND	S-NPP	29.55460	76.44930	10/19/2021	13:48:29	D	3.20
28	KAITHAL	RAJOUND	S-NPP	29.58660	76.47390	10/19/2021	13:48:29	D	3.40
29	KAITHAL	SIWAN	S-NPP	29.85120	76.37960	10/19/2021	13:48:29	D	2.20
30	KAITHAL	SIWAN	S-NPP	29.86020	76.30080	10/19/2021	13:48:29	D	4.80

31	KAITHAL	SIWAN	S-NPP	29.86770	76.36940	10/19/2021	13:48:29	D	4.30
32	KAITHAL	SIWAN	S-NPP	29.87170	76.36880	10/19/2021	13:48:29	D	5.90
33	KAITHAL	SIWAN	S-NPP	29.87210	76.37280	10/19/2021	13:48:29	D	5.90
34	KAITHAL	SIWAN	S-NPP	29.90560	76.27020	10/19/2021	13:48:29	D	15.30
35	KAITHAL	SIWAN	S-NPP	29.90820	76.29390	10/19/2021	13:48:29	D	2.60
36	KAITHAL	SIWAN	S-NPP	29.92410	76.21950	10/19/2021	13:48:29	D	9.60
37	KAITHAL	SIWAN	S-NPP	29.93480	76.27810	10/19/2021	13:48:29	D	4.70
38	KAITHAL	SIWAN	S-NPP	29.93900	76.38770	10/19/2021	13:48:29	D	3.70
39	KAITHAL	SIWAN	S-NPP	29.94280	76.24080	10/19/2021	13:48:29	D	8.20
40	KAITHAL	SIWAN	S-NPP	29.94300	76.38710	10/19/2021	13:48:29	D	3.70
41	KAITHAL	SIWAN	S-NPP	29.94690	76.22700	10/19/2021	13:48:29	D	9.40
42	KAITHAL	SIWAN	S-NPP	29.94750	76.23290	10/19/2021	13:48:29	D	9.40
43	KAITHAL	SIWAN	S-NPP	29.94940	76.22790	10/19/2021	13:48:29	D	19.30
44	KAITHAL	SIWAN	S-NPP	29.95000	76.23380	10/19/2021	13:48:29	D	9.20
45	KAITHAL	SIWAN	S-NPP	29.95090	76.22640	10/19/2021	13:48:29	D	9.40
46	KAITHAL	SIWAN	S-NPP	29.96810	76.23590	10/19/2021	13:48:29	D	3.00
47	KAITHAL	SIWAN	S-NPP	29.96950	76.21180	10/19/2021	13:48:29	D	11.20
48	KAITHAL	SIWAN	AQUA	29.86900	76.31500	10/19/2021	13:19:59	D	41.20
49	KARNAL	ASSANDH	S-NPP	29.42950	76.47100	10/19/2021	13:48:29	D	4.30
50	KARNAL	ASSANDH	S-NPP	29.47630	76.59090	10/19/2021	13:48:29	D	3.20
51	KARNAL	ASSANDH	S-NPP	29.57910	76.59370	10/19/2021	13:48:29	D	3.80
52	KARNAL	ASSANDH	S-NPP	29.58320	76.55610	10/19/2021	13:48:29	D	4.10
53	KARNAL	ASSANDH	S-NPP	29.59890	76.54970	10/19/2021	13:48:29	D	4.10
54	KARNAL	ASSANDH	S-NPP	29.59960	76.66960	10/19/2021	13:48:29	D	2.60
55	KARNAL	ASSANDH	S-NPP	29.61910	76.58390	10/19/2021	13:48:29	D	4.80

Details of residue burning events in Uttar Pradesh on 19-Oct-2021

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	BADAUN	SAHASWAN	AQUA	27.99900	78.82400	10/19/2021	13:19:59	D	10.30
2	BADAUN	SAHASWAN	AQUA	28.00200	78.81700	10/19/2021	13:19:59	D	27.00
3	BADAUN	SAHASWAN	AQUA	28.00400	78.82900	10/19/2021	13:19:59	D	12.20
4	BADAUN	SAHASWAN	AQUA	28.01000	78.80400	10/19/2021	13:19:59	D	12.30
5	BADAUN	SAHASWAN	AQUA	28.03600	78.78700	10/19/2021	13:19:59	D	15.10

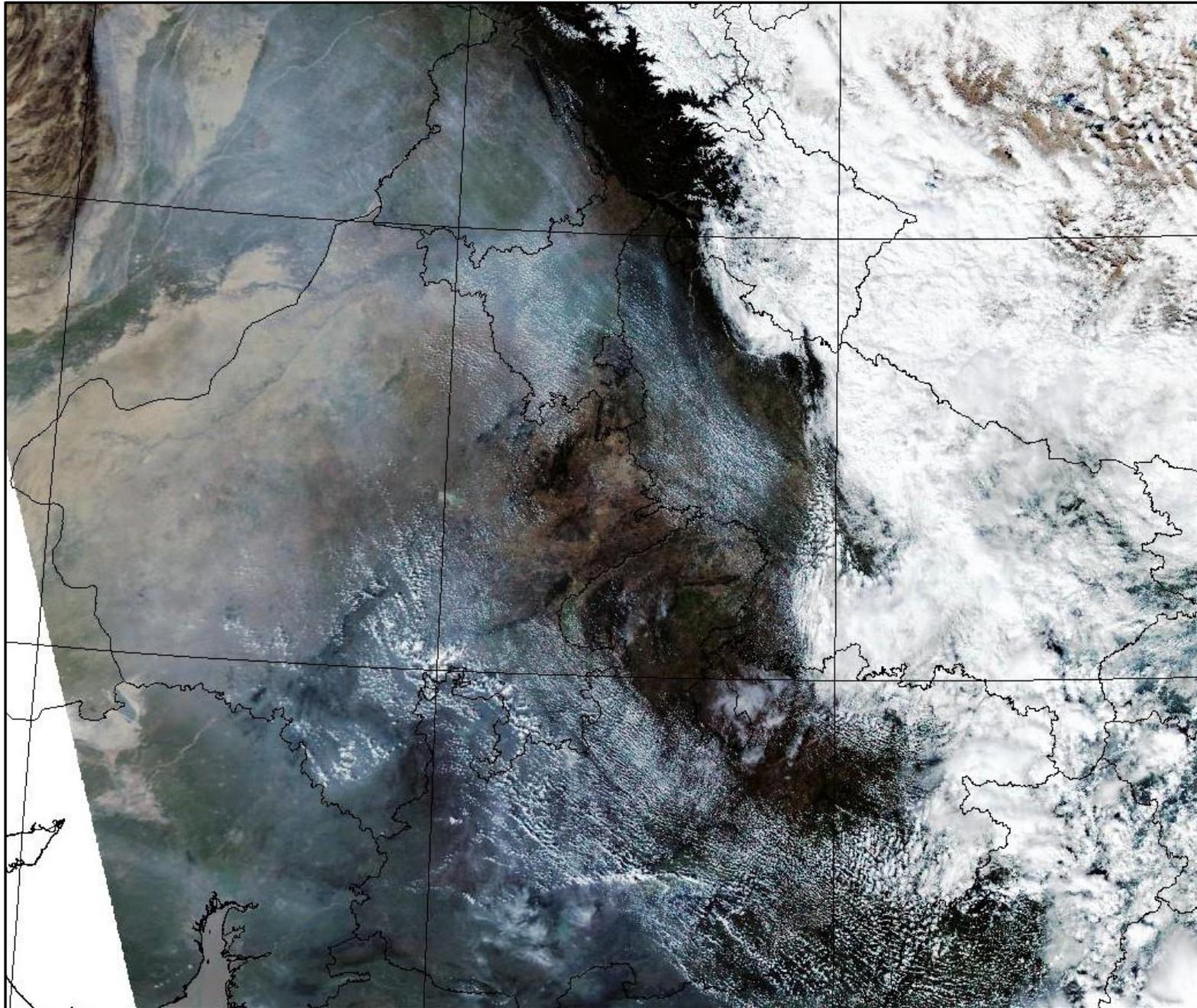
Details of residue burning events in Rajasthan on 19-Oct-2021

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	HANUMANGARH	HANUMANGARH	S-NPP	29.59890	74.32070	10/19/2021	13:48:29	D	2.90
2	HANUMANGARH	HANUMANGARH	S-NPP	29.61150	74.33310	10/19/2021	13:48:29	D	4.50
3	HANUMANGARH	HANUMANGARH	S-NPP	29.72260	74.22500	10/19/2021	02:37:46	N	1.10
4	HANUMANGARH	TIBI	S-NPP	29.50020	74.56360	10/19/2021	13:48:29	D	4.20
5	HANUMANGARH	TIBI	S-NPP	29.64870	74.47470	10/19/2021	13:48:29	D	20.70

Details of residue burning events in Madhya Pradesh on 19-Oct-2021

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	SAGAR	DEVRI	S-NPP	23.51480	79.06120	10/19/2021	13:48:29	D	4.90

AQUA (MODIS) Satellite image (TCC) of North and Central India Acquired on 19-Oct-2021 at 13:17:22 IST by IARI Ground Station



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)
