



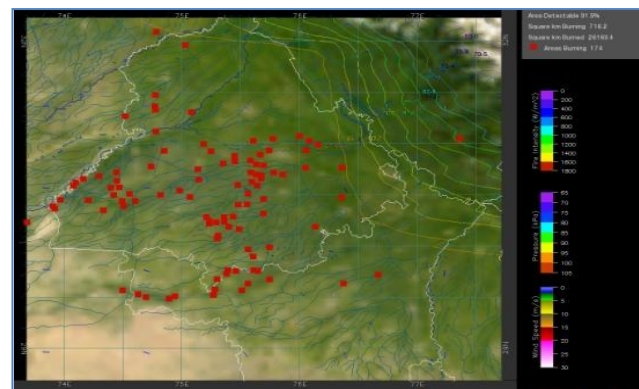
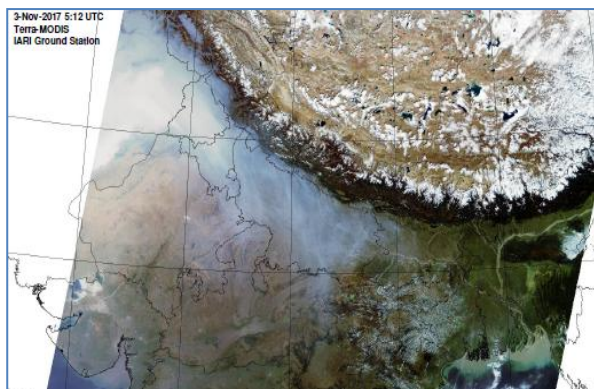
**Bulletin
No. 48**

**Events Date:
17-Nov-2019**

**Issued on:
18-Nov-2019**



MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2019



Prepared by:

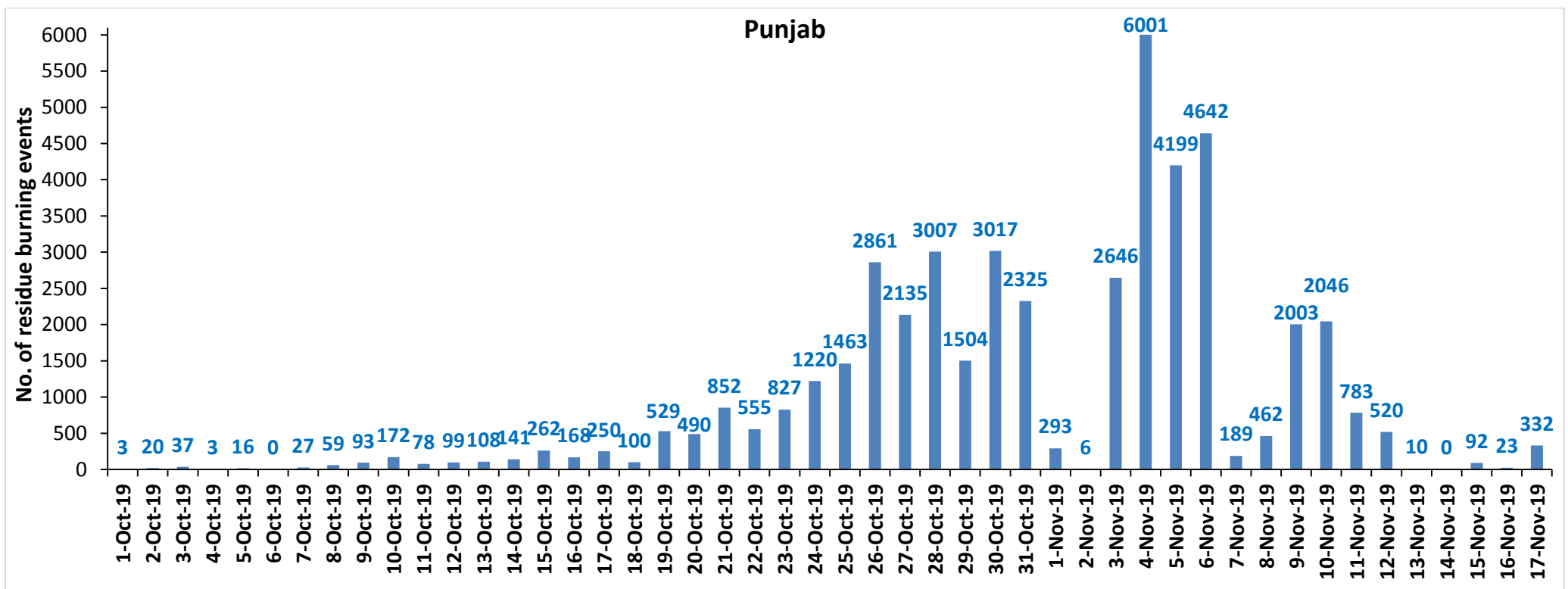
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

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

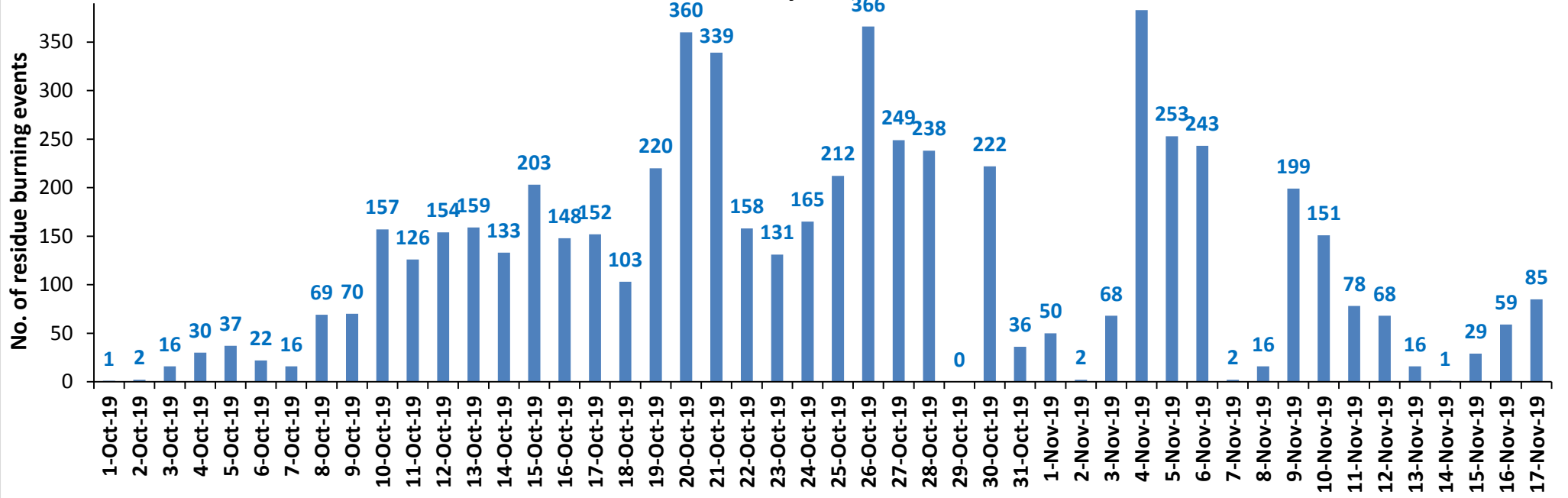
Highlights for 17-November-2019

- Satellites detected **682** residue burning events in the three study States on **17-Nov-2019**.
- The burning events detected on **17-Nov-2019** are **332**, **85** and **265** in Punjab, Haryana and UP, respectively.
- The number of events has increased from **161** on **16-Nov-2019** to **682** on **17-Nov-2019** in the three states.
- Total **55874** burning events were detected in the three States between **01-Oct-2019** and **17-Nov-2019**, which are distributed as **46668**, **5997** and **3209** in Punjab, Haryana and UP, respectively.
- Overall, the total burning events recorded in the three states are **18.4%** less than in 2018 till date. UP recorded **37.6%** reduction, Haryana recorded **22.6%** reduction, and Punjab recorded **16.0%** reduction, respectively, in the current season than in 2018.

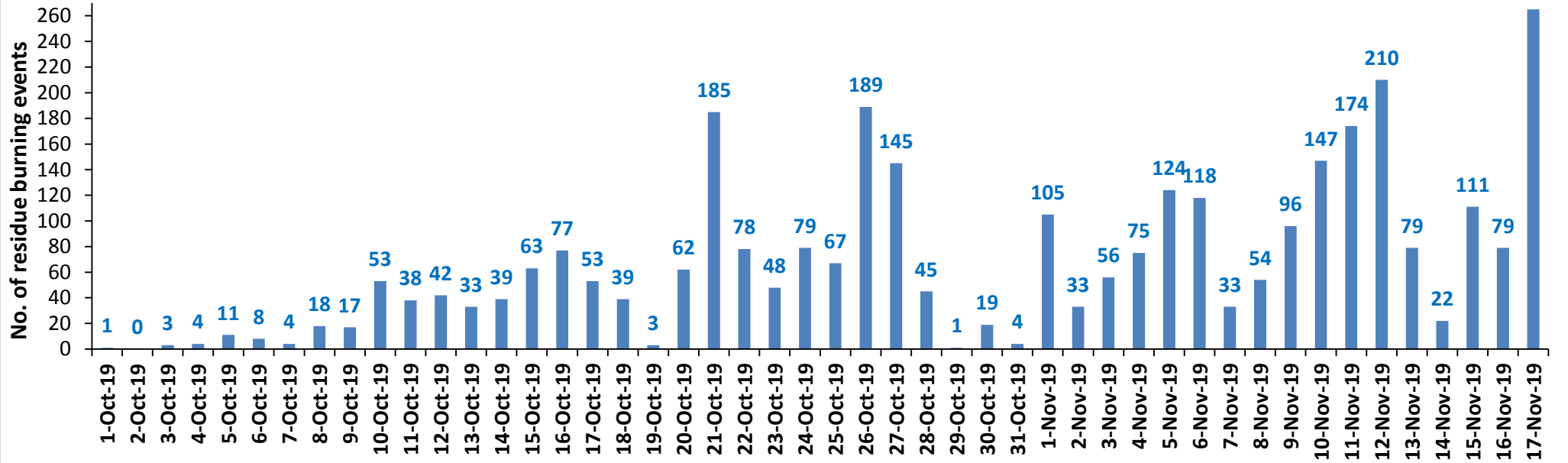
Temporal distribution of residue burning events for the three study States in 2019



Haryana

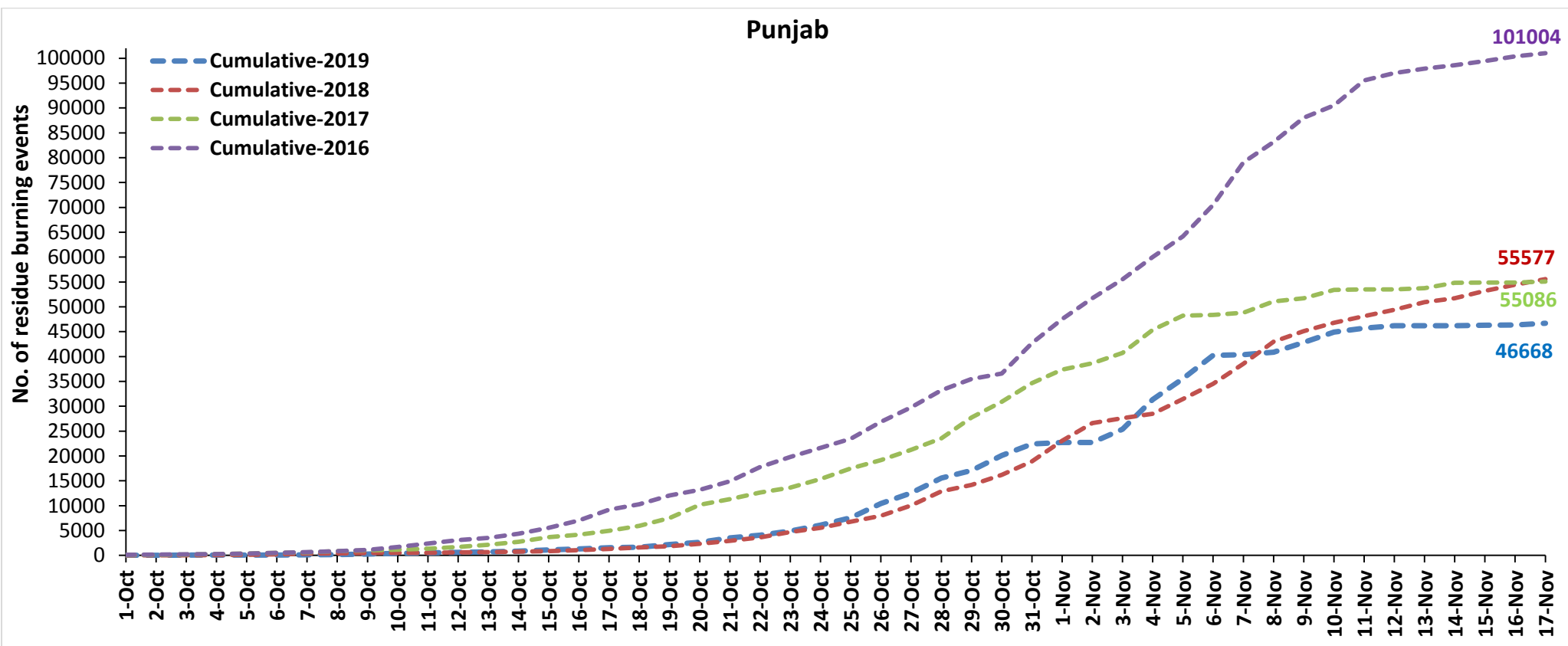


UP

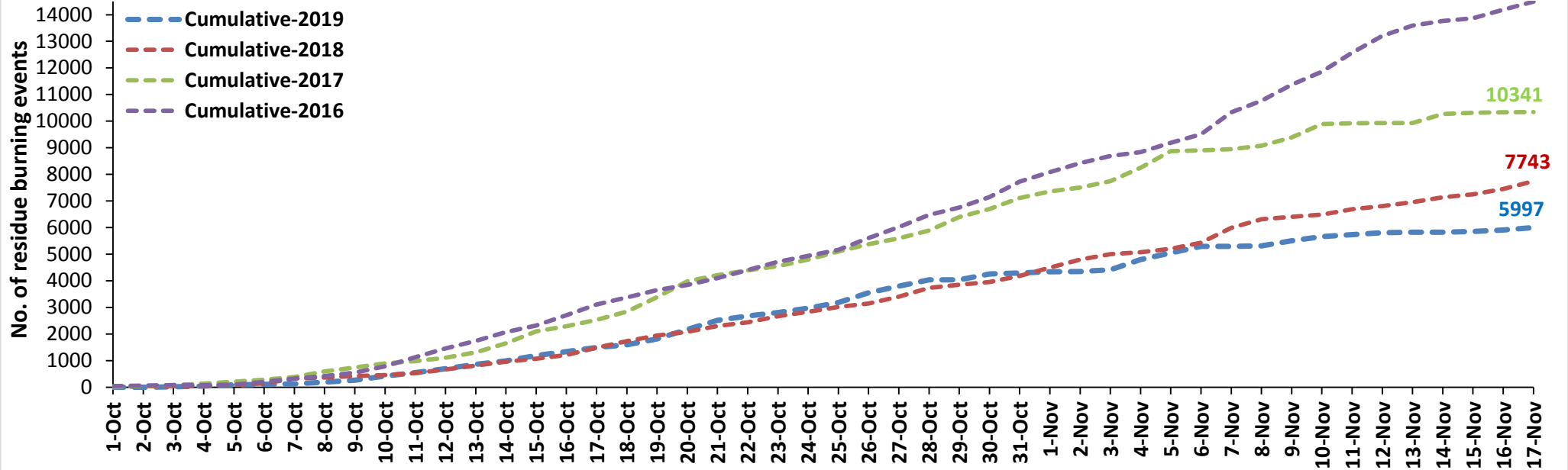


Comparison of residue burning events in current year (2019) with previous years (2018, 2017 & 2016) for the three study States
(01-Oct to 17-Nov)

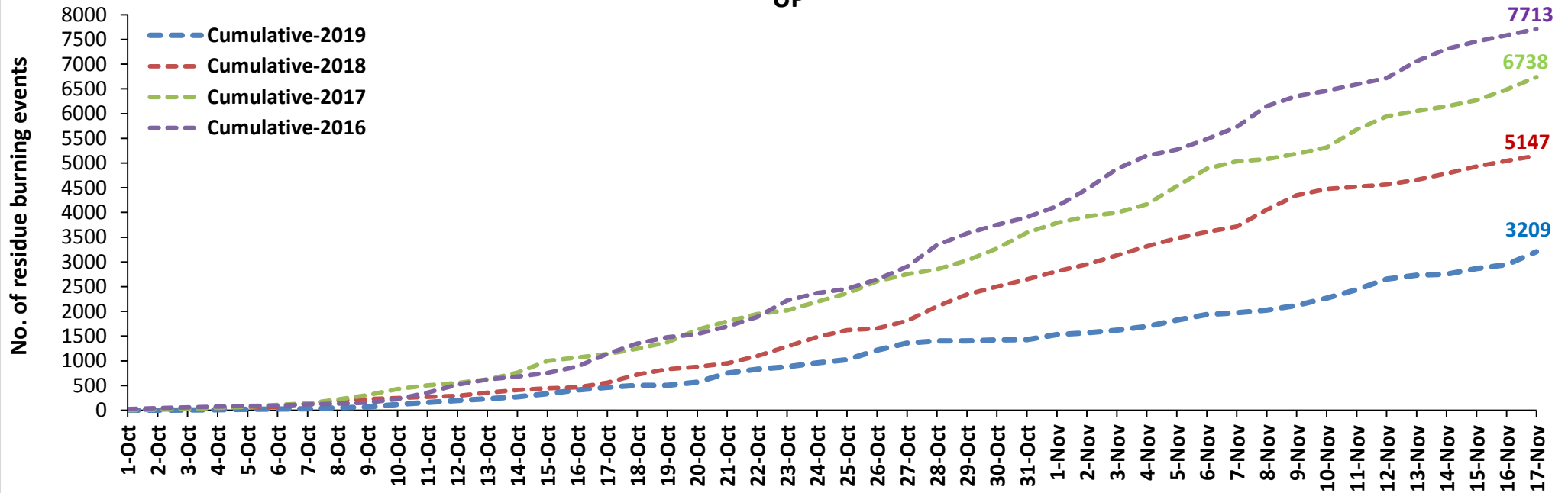
Punjab



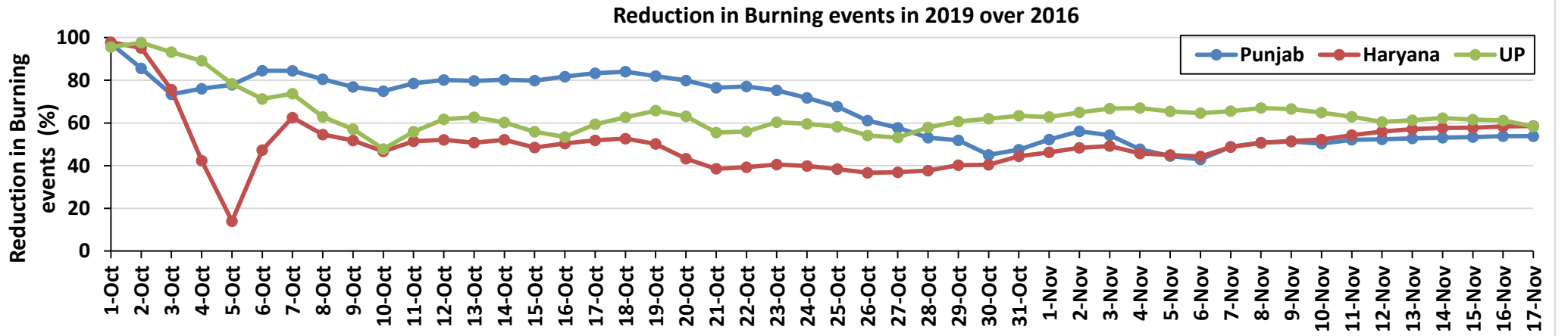
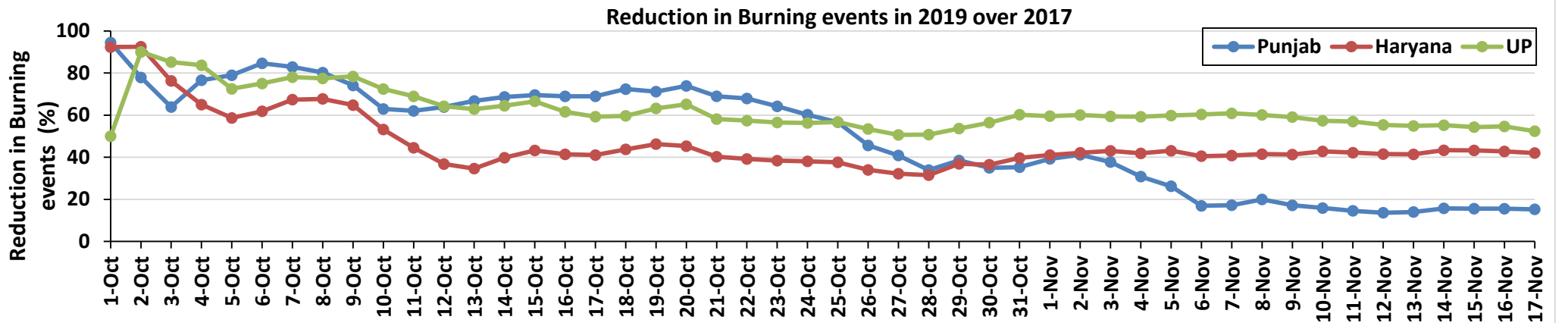
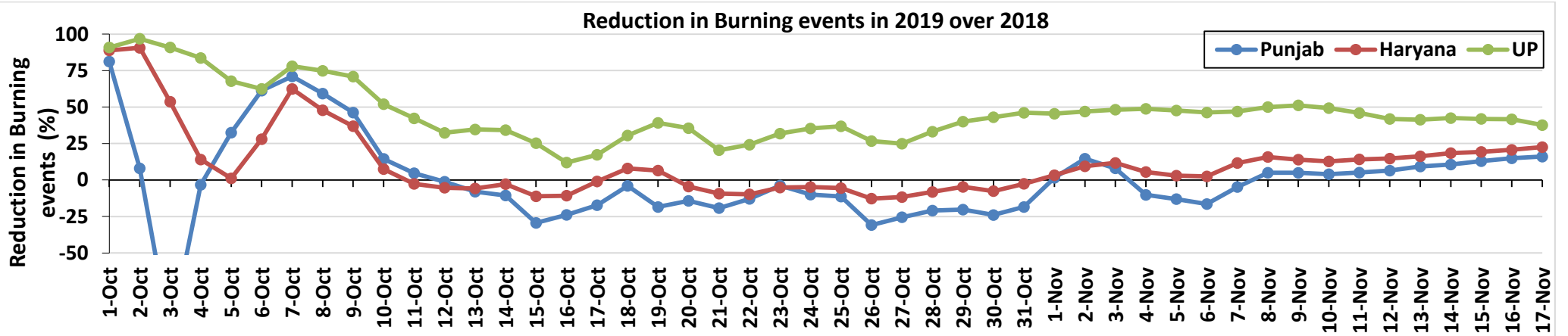
Haryana



UP

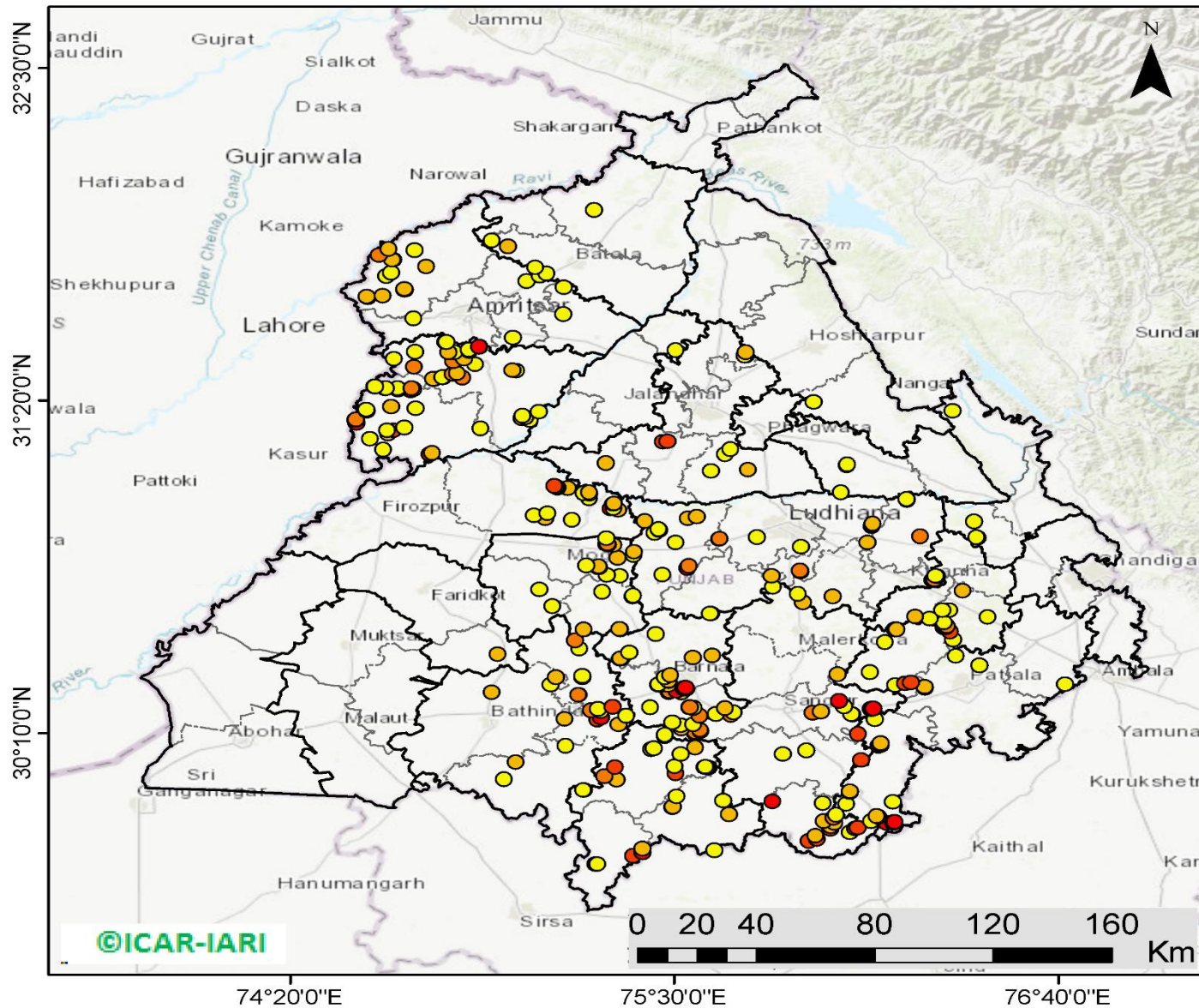


Percent Reduction in Burning events in 2019 over 2018, 2017 and 2016 (Daily Cumulative)



(a) Punjab

RICE RESIDUE BURNING IN PUNJAB



332 burning events detected in Punjab on 17th November 2019

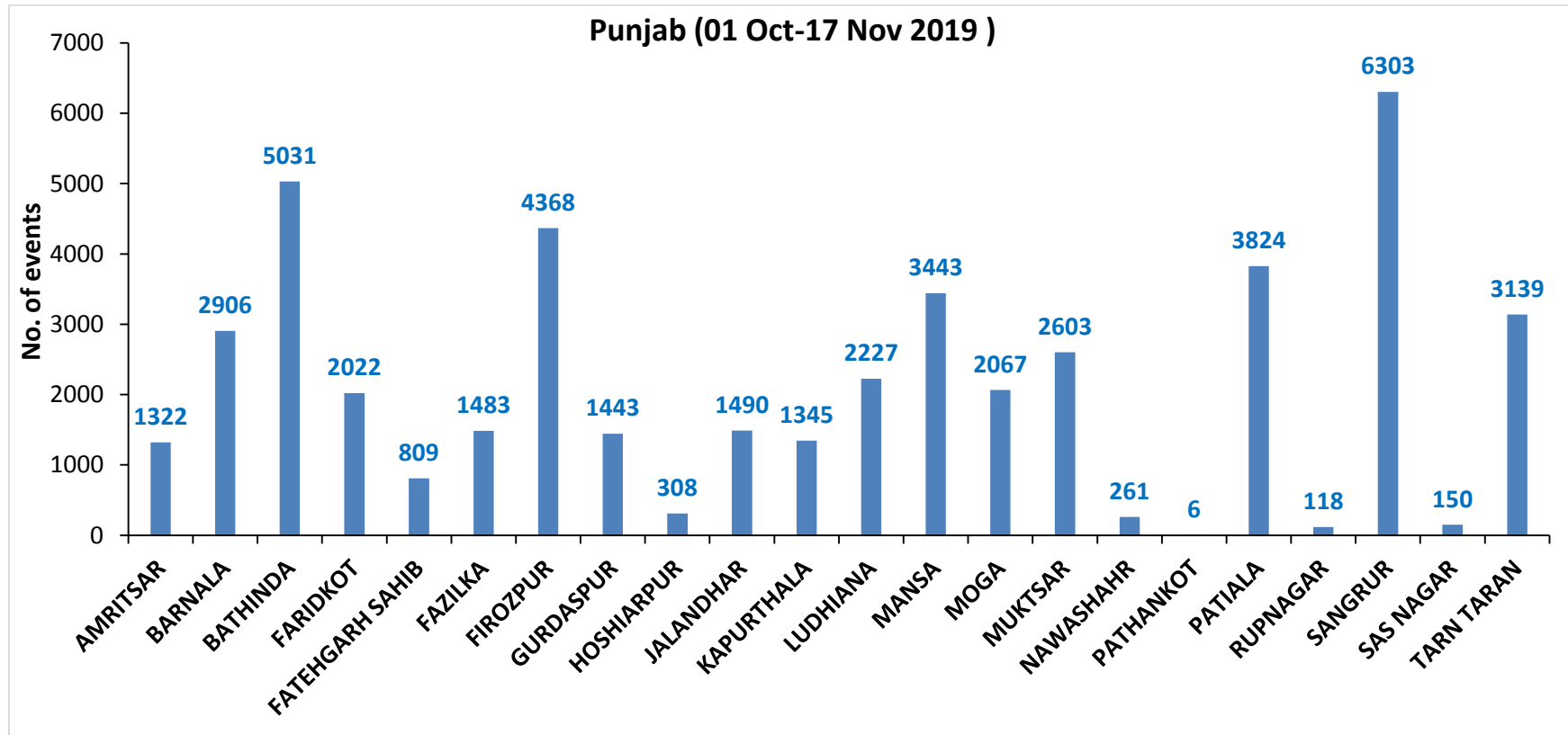
Fire Intensity (W/m²)

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



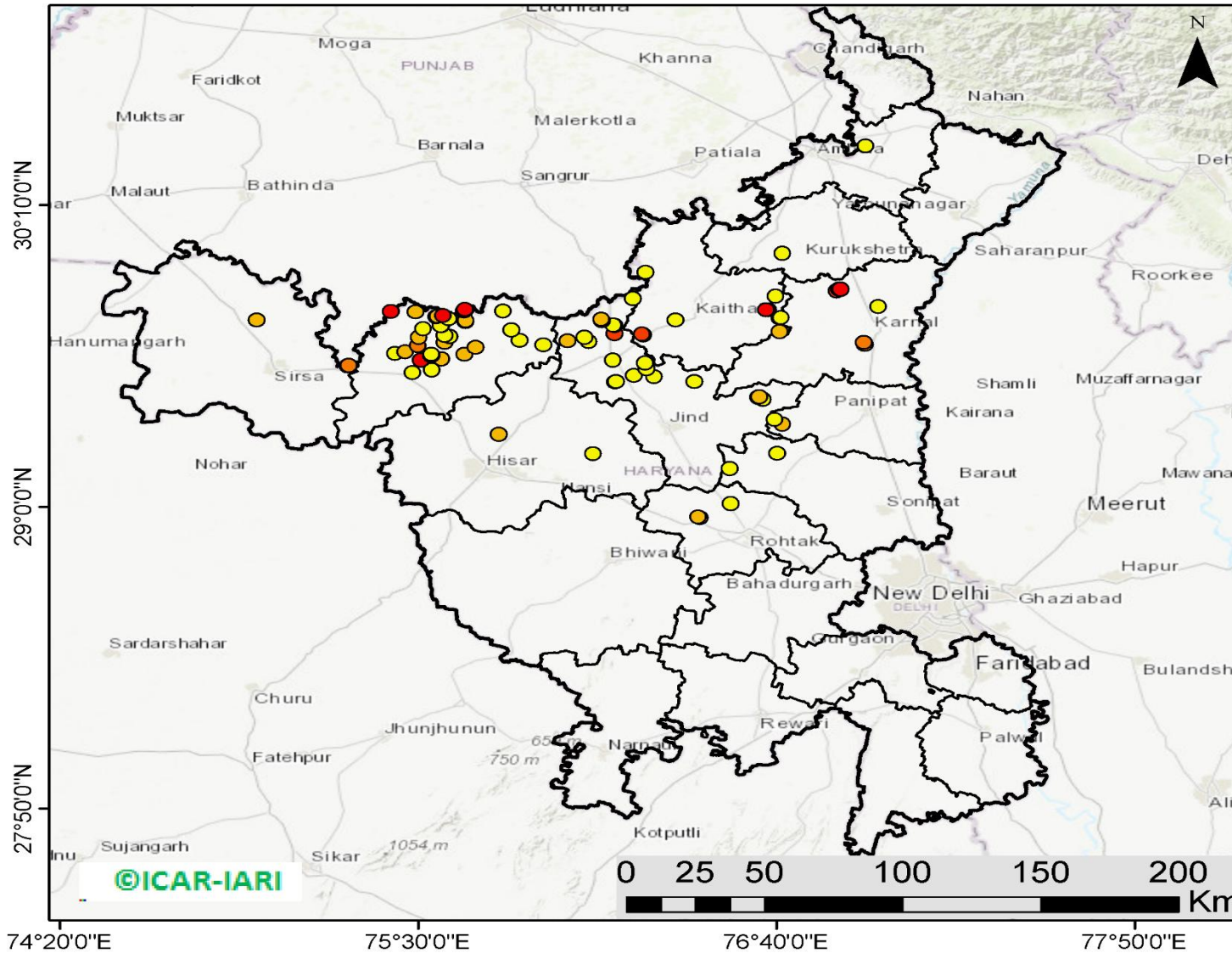
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (01 Oct to 17-Nov 2019)



(b) Haryana

RICE RESIDUE BURNING IN HARYANA



85 burning events detected in Haryana on 17th November 2019

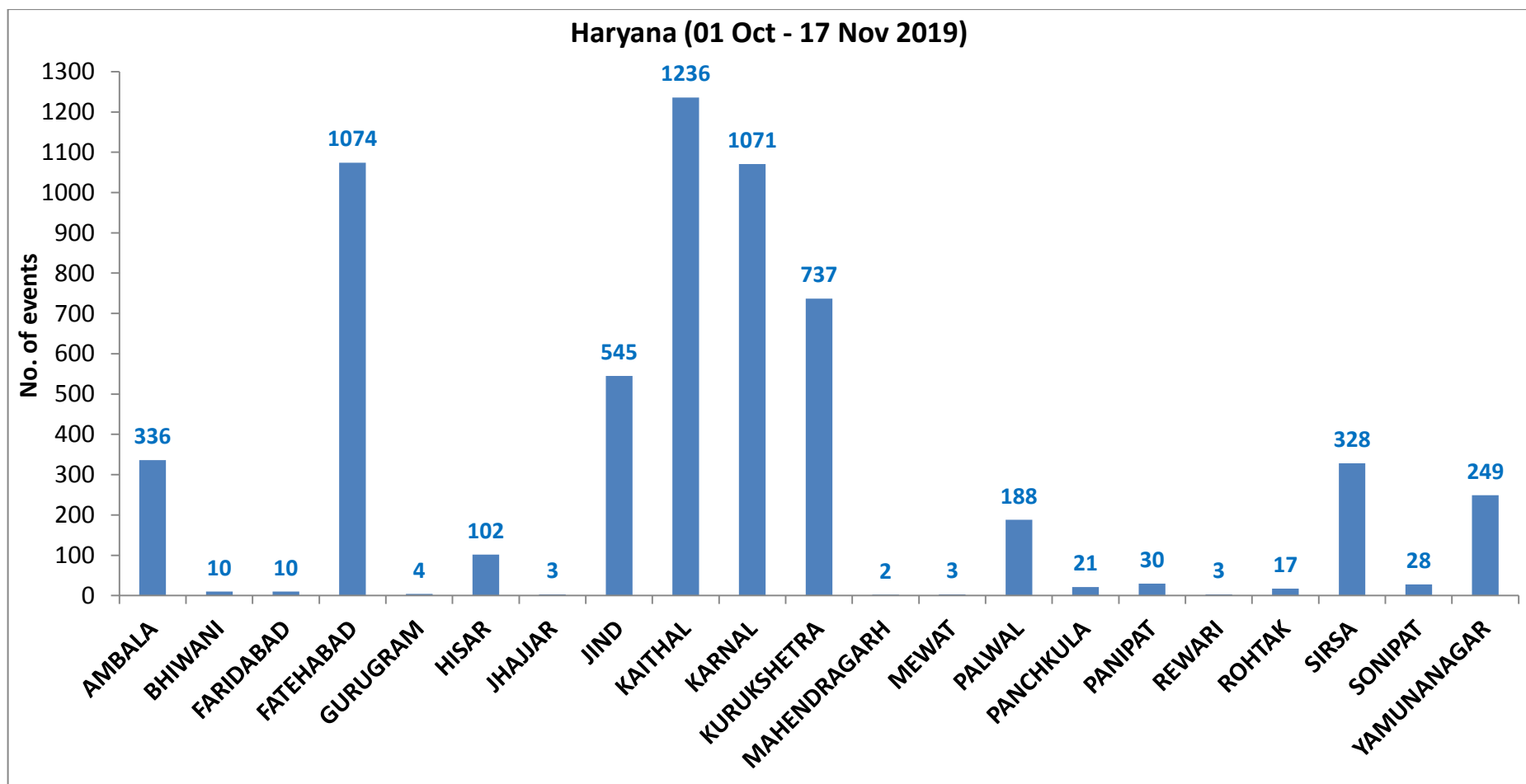
Fire Intensity (W/m²)

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



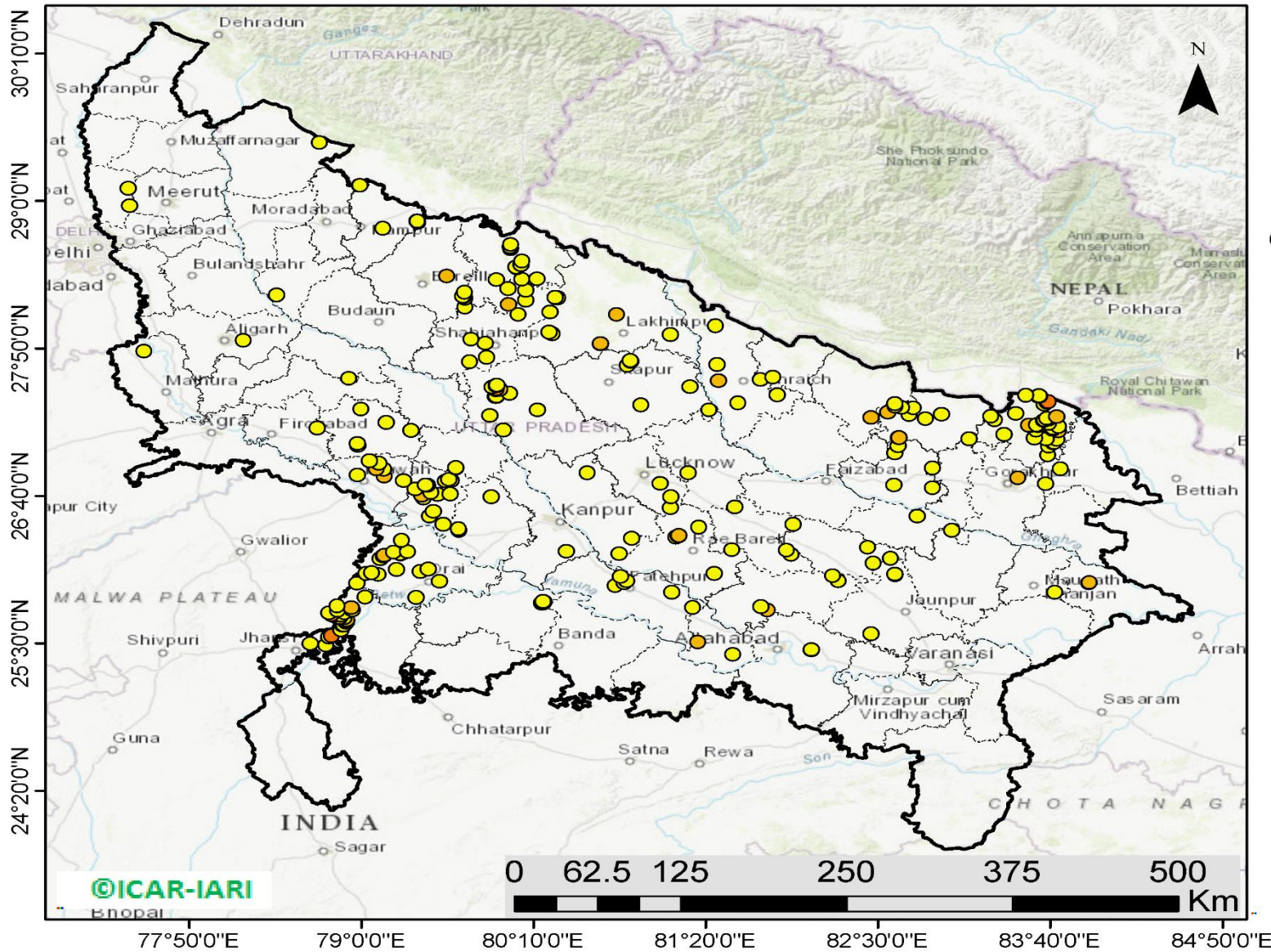
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (01 Oct to 17-Nov 2019)



(c) UP

RICE RESIDUE BURNING IN UTTAR PRADESH



265 burning events detected in Uttar Pradesh on 17th November 2019

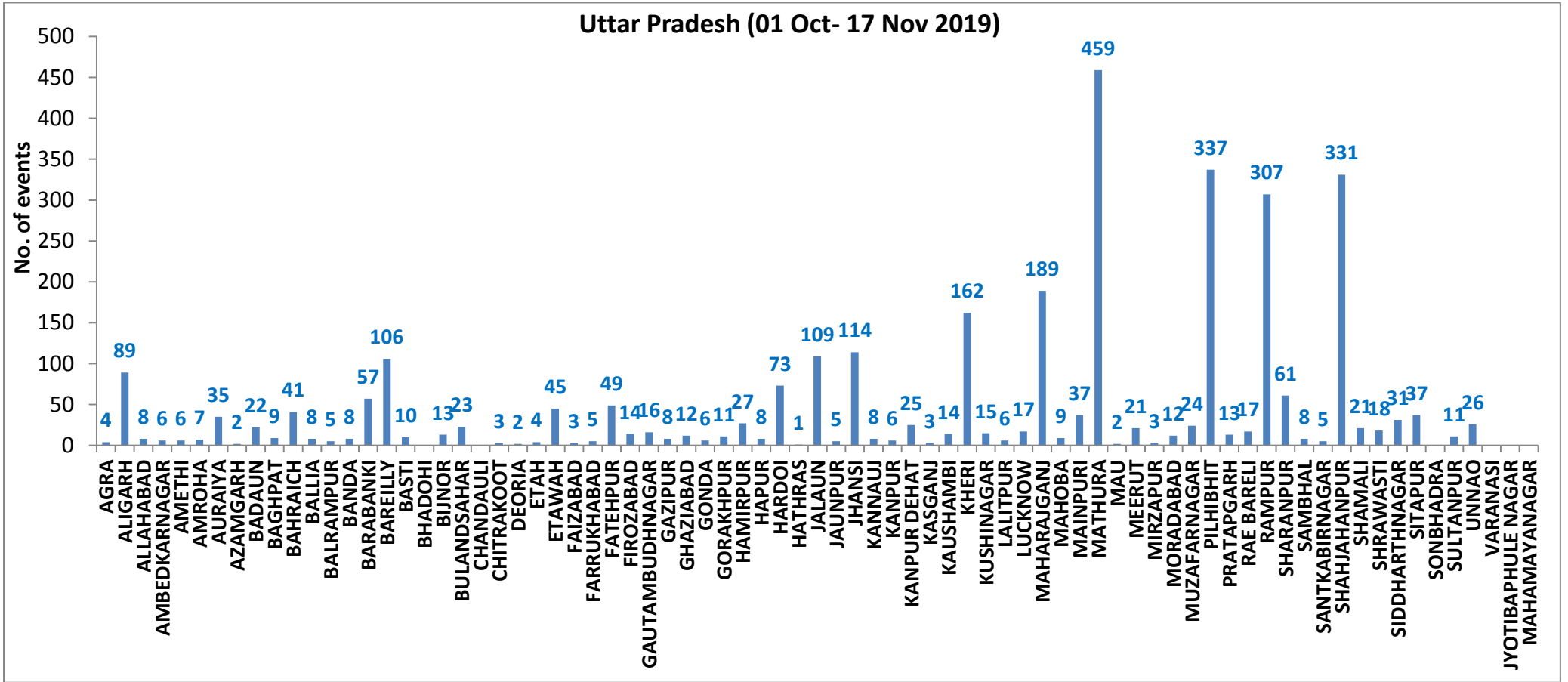
Fire Intensity (W/m²)

- 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 (01 Oct to 17-Nov 2019)



State-wise, date-wise and district-wise number of residues burning events detected in 2016, 2017, 2018 and 2019
(Period: 01-Oct to 17-Nov)

Date	Punjab				Haryana				UP				Total			
	2019	2018	2017	2016	2019	2018	2017	2016	2019	2018	2017	2016	2019	2018	2017	2016
01-Oct	3	16	54	109	1	9	13	46	1	11	2	23	5	36	69	178
02-Oct	20	9	50	51	2	23	27	16	0	21	8	20	23	53	85	87
03-Oct	37	4	62	66	16	9	40	16	3	12	17	16	56	25	119	98
04-Oct	3	32	103	37	30	16	60	7	4	5	22	15	37	53	185	59
05-Oct	16	56	106	95	37	30	68	15	11	10	20	14	64	96	194	124
06-Oct	0	87	138	152	22	63	75	105	8	13	39	6	30	163	252	263
07-Oct	27	162	105	171	16	180	97	126	4	69	33	24	47	411	235	321
08-Oct	59	39	215	166	69	40	218	94	18	54	76	14	146	133	509	274
09-Oct	93	75	163	270	70	47	148	121	17	32	88	22	180	154	399	413
10-Oct	172	23	164	597	157	37	151	242	53	21	126	74	382	81	441	913
11-Oct	78	30	177	652	126	78	87	336	38	24	74	128	242	131	338	1116
12-Oct	99	67	342	694	154	133	123	338	42	22	51	164	295	222	516	1196
13-Oct	108	62	470	467	159	147	207	284	33	61	69	102	300	270	746	853
14-Oct	141	112	582	812	133	153	333	328	39	57	137	60	313	322	1052	1200
15-Oct	262	90	943	1215	203	110	458	248	63	35	237	76	528	235	1638	1539
16-Oct	168	174	465	1478	148	138	186	385	77	20	71	125	393	332	722	1988
17-Oct	250	272	807	2173	152	268	244	399	53	94	69	261	455	634	1120	2833
18-Oct	100	263	970	1065	103	255	306	270	39	163	108	204	242	681	1384	1539
19-Oct	529	254	1591	1762	220	208	541	276	3	108	128	132	752	570	2260	2170
20-Oct	490	496	2653	1175	360	141	597	188	62	49	255	62	912	686	3505	1425
21-Oct	852	618	1139	1726	339	217	233	257	185	66	168	152	1376	901	1540	2135
22-Oct	555	656	1356	2837	158	134	186	309	78	149	151	194	791	939	1693	3340
23-Oct	827	1113	994	2040	131	232	155	313	48	193	72	331	1006	1538	1221	2684
24-Oct	1220	844	1714	1836	165	166	244	221	79	192	171	152	1464	1202	2129	2209
25-Oct	1463	1247	2104	1813	212	182	303	229	67	142	175	83	1742	1571	2582	2125
26-Oct	2861	1173	1715	3390	366	132	276	434	189	33	240	195	3416	1338	2231	4019
27-Oct	2135	2040	2069	2904	249	252	224	417	145	154	145	255	2529	2446	2438	3576
28-Oct	3007	2864	2318	3493	238	330	292	458	45	290	99	435	3290	3484	2709	4386
29-Oct	1504	1321	4184	2258	0	124	502	278	1	243	180	237	1505	1688	4866	2773
30-Oct	3017	2008	3152	1076	222	103	307	395	19	158	238	175	3258	2269	3697	1646
31-Oct	2325	2715	3743	6132	36	229	413	575	4	148	321	153	2365	3092	4477	6860
01-Nov	293	4140	2736	4843	50	306	250	362	105	161	199	223	448	4607	3185	5428
02-Nov	6	3550	1246	4183	2	306	145	332	33	142	131	345	41	3998	1522	4860

03-Nov	2646	972	2109	3806	68	202	240	275	56	181	75	409	2770	1355	2424	4490
04-Nov	6001	882	4603	4477	383	77	499	146	75	183	168	265	6459	1142	5270	4888
05-Nov	4199	2989	2876	4137	253	129	625	345	124	163	367	125	4576	3281	3868	4607
06-Nov	4642	3071	171	6303	243	222	26	322	118	130	357	215	5003	3423	554	6840
07-Nov	189	4033	420	8575	2	568	46	821	33	108	149	244	224	4709	615	9640
08-Nov	462	4450	2256	4129	16	313	128	432	54	338	43	419	532	5101	2427	4980
09-Nov	2003	2083	675	4857	199	199	311	608	96	294	107	205	2298	2473	1093	5670
10-Nov	2046	1675	1642	2468	151	85	509	484	147	125	131	109	2344	1885	2282	3061
11-Nov	783	1364	103	5040	78	196	29	716	174	45	358	129	1035	1605	490	5885
12-Nov	520	1256	33	1477	68	122	3	634	210	45	269	129	798	1423	305	2240
13-Nov	10	1563	237	885	16	146	7	389	79	94	109	338	105	1803	353	1612
14-Nov	0	765	1101	692	1	189	340	171	22	128	95	247	23	1082	1536	1110
15-Nov	92	1480	5	871	29	107	40	107	111	146	123	154	232	1733	168	1132
16-Nov	23	1250	8	911	59	204	17	318	79	112	218	123	161	1566	243	1352
17-Nov	332	1132	217	638	85	289	12	299	265	103	249	130	682	1524	478	1067
Total	46668	55577	55086	101004	5997	7743	10341	14487	3209	5147	6738	7713	55874	68467	72165	123204

(a) Punjab

Districts	01Oct-17 Nov			
	2016	2017	2018	2019
AMRITSAR	2118	1206	1157	1322
BARNALA	5674	2790	3076	2906
BATHINDA	8775	4750	6043	5031
FARIDKOT	4598	2865	2858	2022
FATEHGARH SAHIB	2453	1607	841	809
FAZILKA	0	0	0	1483
FIROZPUR	13202	5801	9009	4368
GURDASPUR	2180	1507	1096	1443
HOSHIARPUR	898	477	187	308
JALANDHAR	4638	1987	1321	1490
KAPURTHALA	3126	1526	719	1345
LUDHIANA	9396	3978	2537	2227
MANSA	5569	4082	4139	3443
MOGA	6380	1986	2534	2067
MUKTSAR	6805	3444	5197	2603
NAWASHAHR (SBS Nagar)	1593	792	355	261
PATHANKOT	0	0	0	6
PATIALA	6530	5006	4175	3824
RUPNAGAR	711	326	76	118
SANGRUR	11832	8223	7668	6303
SAS NAGAR	114	107	104	150
TARN TARAN	4412	2626	2485	3139
Total	101004	55086	55577	46668

(b) Haryana

Districts	01Oct-17 Nov			
	2016	2017	2018	2019
AMBALA	529	490	323	336
BHIWANI	68	27	13	10
FARIDABAD	283	341	185	10
FATEHABAD	4617	2955	2077	1074
GURUGRAM	0	0	0	4
HISAR	343	161	151	102
JHAJJAR	27	15	15	3
JIND	829	898	773	545
KAITHAL	1742	1491	1272	1236
KARNAL	1624	1484	834	1071
KURUKSHETRA	1076	1141	679	737
MAHENDRAGARH	0	0	0	2
MEWAT	0	0	0	3
PALWAL	0	0	0	188
PANCHKULA	0	0	3	21
PANIPAT	77	75	53	30
REWARI	0	0	0	3
ROHTAK	75	53	18	17
SIRSA	2886	848	1140	328
SONIPAT	72	55	28	28
YAMUNANAGAR	239	307	179	249
Total	14487	10341	7743	5997

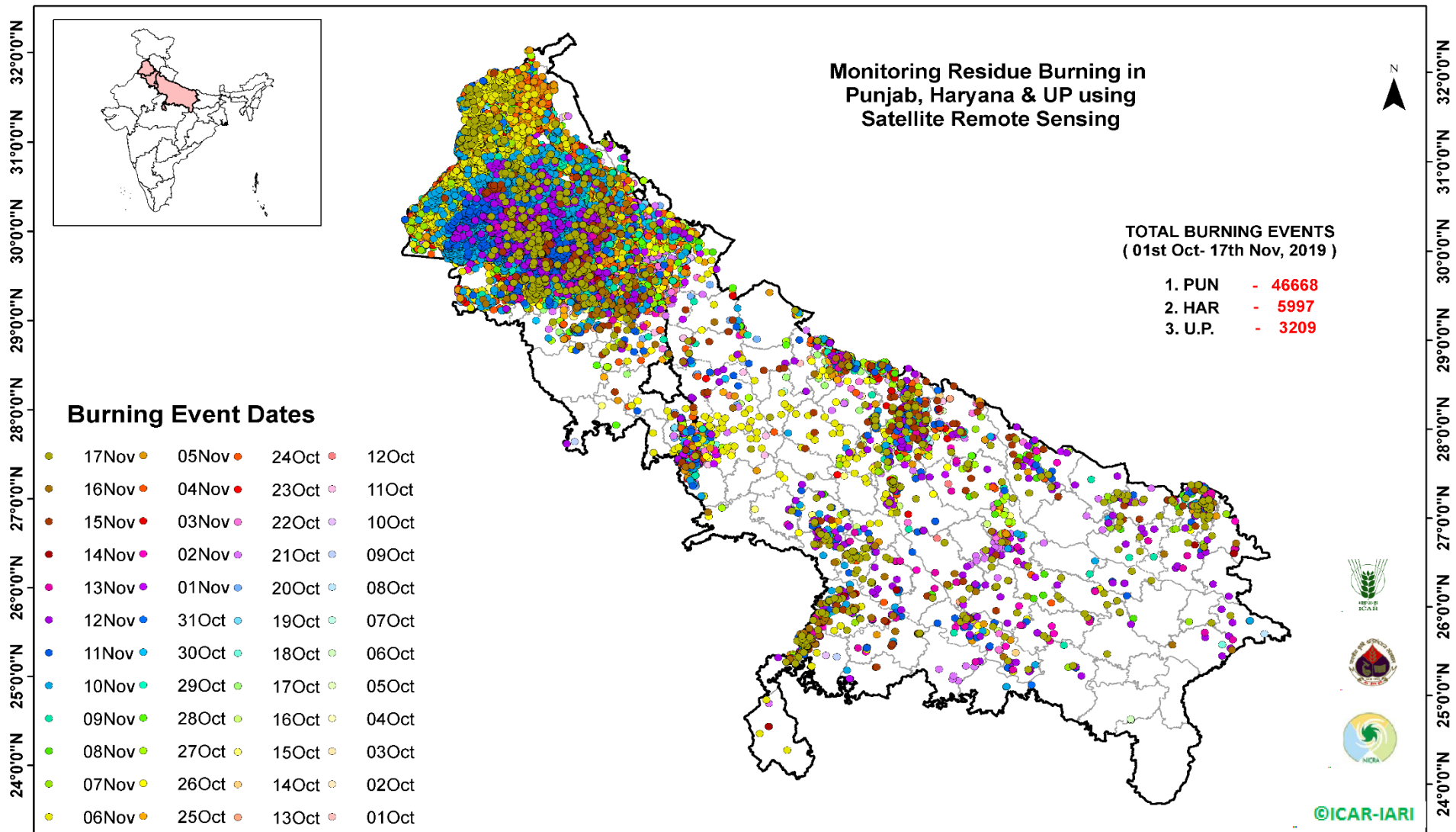
(c) Uttar Pradesh

Districts	01Oct-17 Nov			
	2016	2017	2018	2019
AGRA	0	0	0	4
ALIGARH	50	75	90	89
ALLAHABAD	3	8	11	8
AMBEDKARNAGAR	61	26	14	6
AMETHI	0	0	0	6
AMROHA	0	0	0	7
AURAIYA	188	155	50	35
AZAMGARH	26	24	20	2
BADAUN	6	6	9	22
BAGHPAT	0	0	0	9
BAHRAICH	60	37	57	41
BALLIA	10	16	12	8
BALRAMPUR	29	27	39	5
BANDA	1	11	8	8
BARABANKI	206	149	169	57
BAREILLY	236	197	114	106
BASTI	125	177	102	10
BHADOHI	0	0	0	0
BIJNOR	42	37	7	13
BULANDSAHAR	18	28	12	23
CHANDAULI	3	2	0	0
CHITRAKOOT	0	0	0	3
DEORIA	38	44	43	2
ETAH	16	28	24	4
ETAWAH	89	94	37	45
FAIZABAD	12	9	7	3
FARRUKHABAD	0	0	0	5
FATEHPUR	44	36	67	49
FIROZABAD	23	18	9	14

GAUTAMBUDHNAGAR	20	34	11	16
GAZIPUR	13	7	10	8
GHAZIABAD	60	40	25	12
GONDA	43	33	18	6
GORAKHPUR	48	83	74	11
HAMIRPUR	0	0	1	27
HAPUR	0	0	0	8
HARDOI	228	188	107	73
HATHRAS	0	0	0	1
JALAUN	0	0	0	109
JAUNPUR	12	10	14	5
JHANSI	0	0	2	114
KANNAUJ	21	14	6	8
KANPUR	9	7	8	6
KANPUR DEHAT	30	44	17	25
KASGANJ	0	0	0	3
KAUSHAMBI	15	35	32	14
KHERI	388	250	175	162
KUSHINAGAR	29	62	69	15
LALITPUR	0	0	0	6
LUCKNOW	57	30	26	17
MAHARAJGANJ	411	729	768	189
MAHOBA	0	0	0	9
MAINPURI	65	81	41	37
MATHURA	1437	1082	1046	459
MAU	10	7	9	2
MEERUT	56	63	12	21
MIRZAPUR	3	11	5	3
MORADABAD	40	31	11	12
MUZAFARNAGAR	105	113	31	24
PILHIBHIT	913	706	419	337
PRATAPGARH	25	33	22	13

RAE BARELI	52	52	30	17
RAMPUR	612	610	219	307
SHARANPUR	79	104	49	61
SAMBHAL	0	0	0	8
SANTKABIRNAGAR	51	58	48	5
SHAHJAHANPUR	1119	675	366	331
SHAMALI	0	0	0	21
SHRAWASTI	32	29	35	18
SIDDHARTHANAGAR	221	160	432	31
SITAPUR	106	65	35	37
SONBHADRA	14	10	10	0
SULTANPUR	41	22	19	11
UNNAO	50	43	33	26
VARANASI	1	0	0	0
JYOTIBAPHULE NAGAR	9	11	4	0
MAHAMAYANAGAR	2	2	7	0
Total	7713	6738	5147	3209

Map of Cumulative Burning Events (01 Oct – 17 Nov 2019)



[\(http://geoportal.icar.gov.in:8080/geoexplorer/composer/\)](http://geoportal.icar.gov.in:8080/geoexplorer/composer/)

Details of residue burning events in Punjab on 17-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	74.70794	31.62100	13:12:00	D	3.80
2	AMRITSAR	AJNALA	S-NPP	74.56882	31.69486	13:12:00	D	2.20
3	AMRITSAR	AJNALA	S-NPP	74.56655	31.69811	13:12:00	D	5.80
4	AMRITSAR	AJNALA	S-NPP	74.61552	31.69985	13:12:00	D	5.10
5	AMRITSAR	AJNALA	S-NPP	74.68153	31.72066	13:12:00	D	5.40
6	AMRITSAR	AJNALA	S-NPP	74.68002	31.72071	13:12:00	D	4.20
7	AMRITSAR	AJNALA	S-NPP	74.68052	31.72449	13:12:00	D	5.40
8	AMRITSAR	AJNALA	S-NPP	74.62515	31.77044	13:12:00	D	1.90
9	AMRITSAR	AJNALA	S-NPP	74.64009	31.78143	13:12:00	D	3.20
10	AMRITSAR	AJNALA	S-NPP	74.74697	31.80223	13:12:00	D	6.80
11	AMRITSAR	AJNALA	S-NPP	74.64581	31.82689	13:12:00	D	2.90
12	AMRITSAR	AJNALA	S-NPP	74.64350	31.82729	13:12:00	D	5.30
13	AMRITSAR	AJNALA	S-NPP	74.60345	31.84359	13:12:00	D	14.40
14	AMRITSAR	AJNALA	S-NPP	74.71150	31.86086	13:12:00	D	3.00
15	AMRITSAR	AJNALA	S-NPP	74.63332	31.86561	13:12:00	D	5.40
16	AMRITSAR	AMRITSAR I	S-NPP	75.01053	31.55321	13:12:00	D	3.40
17	AMRITSAR	AMRITSAR I	S-NPP	75.05090	31.75170	13:12:00	D	4.90
18	AMRITSAR	AMRITSAR I	S-NPP	75.09117	31.77122	13:12:00	D	2.50
19	AMRITSAR	AMRITSAR I	S-NPP	75.11173	31.77907	13:12:00	D	2.60
20	AMRITSAR	AMRITSAR I	S-NPP	75.07793	31.80023	13:12:00	D	1.50
21	AMRITSAR	BABA BAKALA	S-NPP	75.16265	31.63598	13:12:00	D	3.10
22	AMRITSAR	BABA BAKALA	S-NPP	75.16391	31.73008	13:12:00	D	4.00
23	BARNALA	BARNALA	S-NPP	75.52178	30.30695	13:12:00	D	5.20
24	BARNALA	BARNALA	S-NPP	75.48679	30.31216	13:12:00	D	14.10
25	BARNALA	BARNALA	AQUA	75.50800	30.31400	13:10:00	D	22.50
26	BARNALA	BARNALA	AQUA	75.53400	30.32000	13:10:00	D	74.70
27	BARNALA	BARNALA	S-NPP	75.52962	30.32027	13:12:00	D	13.70
28	BARNALA	BARNALA	S-NPP	75.53497	30.32129	13:12:00	D	26.70
29	BARNALA	BARNALA	S-NPP	75.52868	30.32404	13:12:00	D	13.70
30	BARNALA	BARNALA	S-NPP	75.53402	30.32505	13:12:00	D	26.70

31	BARNALA	BARNALA	S-NPP	75.45863	30.33453	13:12:00	D	6.20
32	BARNALA	BARNALA	S-NPP	75.48109	30.33480	13:12:00	D	9.30
33	BARNALA	BARNALA	S-NPP	75.48360	30.34713	13:12:00	D	3.80
34	BARNALA	BARNALA	S-NPP	75.48145	30.34907	13:12:00	D	5.40
35	BARNALA	BARNALA	S-NPP	75.47229	30.36312	13:12:00	D	4.90
36	BARNALA	BARNALA	S-NPP	75.48742	30.36999	13:12:00	D	7.10
37	BARNALA	BARNALA	S-NPP	75.33503	30.42634	13:12:00	D	4.70
38	BARNALA	BARNALA	S-NPP	75.34045	30.42740	13:12:00	D	4.70
39	BARNALA	BARNALA	S-NPP	75.33685	30.42850	13:12:00	D	8.70
40	BARNALA	BARNALA	S-NPP	75.55602	30.43039	13:12:00	D	5.30
41	BARNALA	BARNALA	S-NPP	75.61517	30.43764	13:12:00	D	5.60
42	BARNALA	BARNALA	S-NPP	75.36372	30.44783	13:12:00	D	2.70
43	BARNALA	BARNALA	S-NPP	75.44288	30.51454	13:12:00	D	4.10
44	BARNALA	BARNALA	S-NPP	75.61143	30.58507	13:12:00	D	1.70
45	BARNALA	BARNALA	S-NPP	75.60869	30.58508	13:12:00	D	2.40
46	BARNALA	TAPPA	AQUA	75.56200	30.16700	13:10:00	D	18.50
47	BARNALA	TAPPA	S-NPP	75.52207	30.18159	13:12:00	D	9.60
48	BARNALA	TAPPA	S-NPP	75.51923	30.19292	13:12:00	D	5.00
49	BARNALA	TAPPA	S-NPP	75.49395	30.20394	13:12:00	D	4.30
50	BARNALA	TAPPA	S-NPP	75.57768	30.22769	13:12:00	D	13.00
51	BARNALA	TAPPA	S-NPP	75.62642	30.23295	13:12:00	D	3.70
52	BARNALA	TAPPA	S-NPP	75.65439	30.25391	13:12:00	D	8.70
53	BARNALA	TAPPA	S-NPP	75.55729	30.25455	13:12:00	D	9.60
54	BARNALA	TAPPA	S-NPP	75.55945	30.25579	13:12:00	D	4.00
55	BARNALA	TAPPA	S-NPP	75.54568	30.25626	13:12:00	D	4.40
56	BARNALA	TAPPA	S-NPP	75.42725	30.25718	13:12:00	D	3.60
57	BARNALA	TAPPA	S-NPP	75.54783	30.25756	13:12:00	D	10.30
58	BARNALA	TAPPA	AQUA	75.48300	30.30900	13:10:00	D	17.50
59	BARNALA	TAPPA	S-NPP	75.45325	30.33351	13:12:00	D	6.20
60	BARNALA	TAPPA	S-NPP	75.45116	30.33527	13:12:00	D	13.20
61	BARNALA	TAPPA	S-NPP	75.45229	30.33729	13:12:00	D	3.80
62	BATHINDA	BATHINDA	S-NPP	75.16749	30.21488	13:12:00	D	8.60
63	BATHINDA	BATHINDA	S-NPP	74.94664	30.30944	13:12:00	D	5.10

64	BATHINDA	BATHINDA	S-NPP	75.13994	30.36300	13:12:00	D	5.60
65	BATHINDA	RAMPURA PHUL	S-NPP	75.33079	30.19683	13:12:00	D	5.30
66	BATHINDA	RAMPURA PHUL	AQUA	75.26700	30.21300	13:10:00	D	19.20
67	BATHINDA	RAMPURA PHUL	S-NPP	75.27654	30.22002	13:12:00	D	26.80
68	BATHINDA	RAMPURA PHUL	S-NPP	75.35511	30.22729	13:12:00	D	4.70
69	BATHINDA	RAMPURA PHUL	S-NPP	75.27622	30.24400	13:12:00	D	2.20
70	BATHINDA	RAMPURA PHUL	S-NPP	75.24675	30.24632	13:12:00	D	13.10
71	BATHINDA	RAMPURA PHUL	S-NPP	75.26879	30.25057	13:12:00	D	2.80
72	BATHINDA	RAMPURA PHUL	S-NPP	75.31271	30.25903	13:12:00	D	17.80
73	BATHINDA	RAMPURA PHUL	S-NPP	75.21001	30.29948	13:12:00	D	11.00
74	BATHINDA	RAMPURA PHUL	S-NPP	75.20844	30.29988	13:12:00	D	15.00
75	BATHINDA	RAMPURA PHUL	S-NPP	75.12351	30.33567	13:12:00	D	4.60
76	BATHINDA	RAMPURA PHUL	S-NPP	75.22147	30.36261	13:12:00	D	3.60
77	BATHINDA	RAMPURA PHUL	S-NPP	75.22050	30.36643	13:12:00	D	3.60
78	BATHINDA	RAMPURA PHUL	S-NPP	75.21111	30.46222	13:12:00	D	2.50
79	BATHINDA	RAMPURA PHUL	S-NPP	75.19780	30.49169	13:12:00	D	14.60
80	BATHINDA	TALWANDI SABO	S-NPP	74.98257	30.00476	13:12:00	D	4.40
81	BATHINDA	TALWANDI SABO	S-NPP	75.28703	30.01517	13:12:00	D	12.70
82	BATHINDA	TALWANDI SABO	S-NPP	75.01902	30.06395	13:12:00	D	7.60
83	BATHINDA	TALWANDI SABO	S-NPP	75.16998	30.12182	13:12:00	D	4.60
84	FARIDKOT	JAITO	S-NPP	74.96390	30.44275	13:12:00	D	7.20
85	FATEHGARH SAHIB	ALMOH	S-NPP	76.23167	30.57527	13:12:00	D	5.40
86	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.34586	30.49472	13:12:00	D	2.20
87	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.33686	30.52271	13:12:00	D	17.00
88	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.31918	30.55345	13:12:00	D	3.00
89	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.27463	30.56797	13:12:00	D	3.10
90	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.45132	30.57390	13:12:00	D	3.90
91	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.33394	30.59767	13:12:00	D	2.40
92	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.31350	30.59773	13:12:00	D	2.90
93	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.37547	30.66568	13:12:00	D	7.10
94	FATEHGARH SAHIB	KHAMANOH	S-NPP	76.29345	30.71800	13:12:00	D	3.20
95	FIROZPUR	ZIRA	S-NPP	75.18968	30.91536	13:12:00	D	2.80
96	FIROZPUR	ZIRA	S-NPP	75.10803	30.91970	13:12:00	D	6.60

97	FIROZPUR	ZIRA	S-NPP	75.07368	30.93039	13:12:00	D	4.90
98	FIROZPUR	ZIRA	S-NPP	75.11510	30.93701	13:12:00	D	3.80
99	FIROZPUR	ZIRA	S-NPP	75.32842	30.94967	13:12:00	D	7.50
100	FIROZPUR	ZIRA	AQUA	75.30700	30.95400	13:10:00	D	20.70
101	FIROZPUR	ZIRA	S-NPP	75.31575	30.95517	13:12:00	D	3.10
102	FIROZPUR	ZIRA	S-NPP	75.31493	30.96951	13:12:00	D	3.90
103	FIROZPUR	ZIRA	S-NPP	75.31727	30.97124	13:12:00	D	7.00
104	FIROZPUR	ZIRA	S-NPP	75.24161	30.99092	13:12:00	D	5.00
105	FIROZPUR	ZIRA	S-NPP	75.24315	31.00706	13:12:00	D	9.70
106	FIROZPUR	ZIRA	S-NPP	75.22593	31.00772	13:12:00	D	2.90
107	FIROZPUR	ZIRA	S-NPP	75.24218	31.01083	13:12:00	D	9.70
108	FIROZPUR	ZIRA	S-NPP	75.17564	31.02587	13:12:00	D	9.70
109	FIROZPUR	ZIRA	AQUA	75.14500	31.02700	13:10:00	D	16.50
110	FIROZPUR	ZIRA	S-NPP	75.13995	31.03099	13:12:00	D	10.90
111	FIROZPUR	ZIRA	AQUA	75.13600	31.03300	13:10:00	D	16.90
112	GURDASPUR	BATALA	S-NPP	74.99446	31.87371	13:12:00	D	7.30
113	GURDASPUR	BATALA	S-NPP	74.94643	31.89492	13:12:00	D	4.40
114	GURDASPUR	GURDASPUR	S-NPP	75.25602	32.00165	13:12:00	D	3.30
115	HOSHIARPUR	GARHSHANKAR	S-NPP	75.92374	31.32772	13:12:00	D	1.70
116	JALANDHAR	JALANDHAR II	S-NPP	75.71719	31.49055	13:12:00	D	1.80
117	JALANDHAR	JALANDHAR II	S-NPP	75.71404	31.49154	13:12:00	D	2.00
118	JALANDHAR	JALANDHAR II	S-NPP	75.71634	31.50348	13:12:00	D	5.60
119	JALANDHAR	NAKODAR	AQUA	75.46600	31.18800	13:10:00	D	18.40
120	JALANDHAR	NAKODAR	S-NPP	75.47893	31.18906	13:12:00	D	15.80
121	JALANDHAR	PHILLAUR	S-NPP	75.61199	31.08504	13:12:00	D	1.30
122	JALANDHAR	PHILLAUR	S-NPP	75.72407	31.09066	13:12:00	D	5.10
123	JALANDHAR	PHILLAUR	S-NPP	75.65381	31.14452	13:12:00	D	4.50
124	JALANDHAR	PHILLAUR	S-NPP	75.67068	31.16320	13:12:00	D	1.90
125	JALANDHAR	SHAHKOT	S-NPP	75.29214	31.11435	13:12:00	D	7.70
126	KAPURTHALA	BHOLATH	S-NPP	75.50470	31.50987	13:12:00	D	2.30
127	LUDHIANA	JAGRAON	S-NPP	75.37313	30.64587	13:12:00	D	3.30
128	LUDHIANA	JAGRAON	S-NPP	75.37547	30.64905	13:12:00	D	3.50
129	LUDHIANA	JAGRAON	S-NPP	75.46373	30.72128	13:12:00	D	4.30

130	LUDHIANA	JAGRAON	AQUA	75.54000	30.74600	13:10:00	D	28.60
131	LUDHIANA	JAGRAON	S-NPP	75.54465	30.75233	13:12:00	D	14.90
132	LUDHIANA	JAGRAON	S-NPP	75.50456	30.83423	13:12:00	D	3.30
133	LUDHIANA	JAGRAON	S-NPP	75.44016	30.86910	13:12:00	D	3.40
134	LUDHIANA	JAGRAON	S-NPP	75.45419	30.87959	13:12:00	D	4.40
135	LUDHIANA	JAGRAON	S-NPP	75.45177	30.88276	13:12:00	D	2.20
136	LUDHIANA	JAGRAON	S-NPP	75.41136	30.91034	13:12:00	D	5.30
137	LUDHIANA	JAGRAON	S-NPP	75.54192	30.91969	13:12:00	D	6.10
138	LUDHIANA	JAGRAON	S-NPP	75.56810	30.92469	13:12:00	D	6.60
139	LUDHIANA	KHANNA	AQUA	76.28400	30.70300	13:10:00	D	14.20
140	LUDHIANA	KHANNA	AQUA	76.29000	30.70400	13:10:00	D	14.10
141	LUDHIANA	KHANNA	S-NPP	76.29716	30.71544	13:12:00	D	10.80
142	LUDHIANA	LUDHIANA EAST	S-NPP	75.79595	30.71718	13:12:00	D	8.50
143	LUDHIANA	LUDHIANA EAST	S-NPP	75.88294	30.73330	13:12:00	D	11.10
144	LUDHIANA	LUDHIANA EAST	S-NPP	75.88203	30.73697	13:12:00	D	10.30
145	LUDHIANA	LUDHIANA EAST	AQUA	76.10000	30.89200	13:10:00	D	20.30
146	LUDHIANA	LUDHIANA EAST	S-NPP	76.10207	30.89816	13:12:00	D	3.70
147	LUDHIANA	LUDHIANA EAST	S-NPP	76.10344	30.90107	13:12:00	D	5.20
148	LUDHIANA	LUDHIANA WEST	S-NPP	75.88521	30.82006	13:12:00	D	1.80
149	LUDHIANA	LUDHIANA WEST	AQUA	75.63600	30.84600	13:10:00	D	20.80
150	LUDHIANA	LUDHIANA WEST	S-NPP	75.63842	30.84796	13:12:00	D	10.50
151	LUDHIANA	LUDHIANA WEST	S-NPP	75.75075	30.85375	13:12:00	D	3.70
152	LUDHIANA	PAYAL	S-NPP	75.89123	30.62594	13:12:00	D	5.40
153	LUDHIANA	PAYAL	S-NPP	75.98173	30.64648	13:12:00	D	8.50
154	LUDHIANA	RAIKOT	S-NPP	75.80003	30.67928	13:12:00	D	3.30
155	LUDHIANA	SAMRALA	S-NPP	76.08667	30.83452	13:12:00	D	5.70
156	LUDHIANA	SAMRALA	S-NPP	76.24635	30.85647	13:12:00	D	11.80
157	LUDHIANA	SAMRALA	S-NPP	76.20654	30.98454	13:12:00	D	5.00
158	LUDHIANA	SAMRALA	S-NPP	76.20566	30.98815	13:12:00	D	5.00
159	MANSA	BUDHLADA	S-NPP	75.62122	29.75508	13:12:00	D	3.40
160	MANSA	BUDHLADA	S-NPP	75.66570	29.88108	13:12:00	D	6.70
161	MANSA	BUDHLADA	S-NPP	75.49470	29.90577	13:12:00	D	11.20
162	MANSA	BUDHLADA	S-NPP	75.49582	29.90831	13:12:00	D	6.70

163	MANSA	BUDHLADA	S-NPP	75.64819	29.92906	13:12:00	D	4.20
164	MANSA	BUDHLADA	S-NPP	75.50777	29.94412	13:12:00	D	2.50
165	MANSA	MANSA	S-NPP	75.22598	29.96621	13:12:00	D	3.10
166	MANSA	MANSA	S-NPP	75.22362	29.96653	13:12:00	D	2.90
167	MANSA	MANSA	S-NPP	75.32494	30.00247	13:12:00	D	6.70
168	MANSA	MANSA	TERRA	75.50500	30.02500	11:35:00	D	18.60
169	MANSA	MANSA	S-NPP	75.60382	30.04463	13:12:00	D	4.80
170	MANSA	MANSA	S-NPP	75.60067	30.04494	13:12:00	D	3.10
171	MANSA	MANSA	S-NPP	75.31984	30.04560	13:12:00	D	15.70
172	MANSA	MANSA	S-NPP	75.59223	30.04635	13:12:00	D	4.20
173	MANSA	MANSA	S-NPP	75.59440	30.04771	13:12:00	D	3.10
174	MANSA	MANSA	S-NPP	75.50175	30.04871	13:12:00	D	2.40
175	MANSA	MANSA	S-NPP	75.51917	30.09171	13:12:00	D	3.30
176	MANSA	MANSA	S-NPP	75.42954	30.11045	13:12:00	D	3.70
177	MANSA	MANSA	S-NPP	75.43746	30.11366	13:12:00	D	3.40
178	MANSA	MANSA	S-NPP	75.56364	30.11597	13:12:00	D	7.80
179	MANSA	MANSA	S-NPP	75.47210	30.15615	13:12:00	D	3.80
180	MANSA	MANSA	S-NPP	75.47115	30.15994	13:12:00	D	3.20
181	MANSA	SARDULGARH	S-NPP	75.26051	29.70568	13:12:00	D	4.80
182	MANSA	SARDULGARH	S-NPP	75.26610	29.70676	13:12:00	D	4.80
183	MANSA	SARDULGARH	S-NPP	75.37527	29.73586	13:12:00	D	20.00
184	MANSA	SARDULGARH	AQUA	75.40300	29.74700	13:10:00	D	36.20
185	MANSA	SARDULGARH	S-NPP	75.40350	29.76132	13:12:00	D	9.40
186	MOGA	BAGHA PURANA	S-NPP	75.12978	30.61175	13:12:00	D	3.50
187	MOGA	BAGHA PURANA	S-NPP	75.08939	30.66940	13:12:00	D	2.80
188	MOGA	MOGA	S-NPP	75.33571	30.71661	13:12:00	D	3.10
189	MOGA	MOGA	S-NPP	75.29496	30.72074	13:12:00	D	4.30
190	MOGA	MOGA	S-NPP	75.27092	30.74793	13:12:00	D	7.50
191	MOGA	MOGA	S-NPP	75.26796	30.74924	13:12:00	D	13.30
192	MOGA	MOGA	S-NPP	75.26995	30.75172	13:12:00	D	7.50
193	MOGA	MOGA	S-NPP	75.23245	30.75426	13:12:00	D	4.70
194	MOGA	MOGA	S-NPP	75.32802	30.78071	13:12:00	D	8.90
195	MOGA	MOGA	S-NPP	75.37637	30.79003	13:12:00	D	2.90

196	MOGA	MOGA	S-NPP	75.37883	30.80234	13:12:00	D	6.90
197	MOGA	MOGA	S-NPP	75.31644	30.82598	13:12:00	D	6.20
198	MOGA	MOGA	S-NPP	75.29929	30.82667	13:12:00	D	7.50
199	MOGA	MOGA	AQUA	75.29700	30.82900	13:10:00	D	28.30
200	MOGA	MOGA	S-NPP	75.29292	30.82942	13:12:00	D	6.60
201	MOGA	MOGA	S-NPP	75.29832	30.83045	13:12:00	D	12.80
202	MOGA	MOGA	S-NPP	75.29349	30.84932	13:12:00	D	2.50
203	MOGA	NIHAL SINGH WALA	S-NPP	75.33715	30.53013	13:12:00	D	4.30
204	MOGA	NIHAL SINGH WALA	S-NPP	75.22586	30.53015	13:12:00	D	5.90
205	MOGA	NIHAL SINGH WALA	S-NPP	75.33424	30.53136	13:12:00	D	6.20
206	MOGA	NIHAL SINGH WALA	S-NPP	75.28134	30.66252	13:12:00	D	3.00
207	NAWASHAHR	NAWASHAHR	S-NPP	76.00641	31.01146	13:12:00	D	2.90
208	NAWASHAHR	NAWASHAHR	S-NPP	76.02464	31.10613	13:12:00	D	6.70
209	NAWASHAHR	NAWASHAHR	S-NPP	76.02598	31.10908	13:12:00	D	3.20
210	PATIALA	NABHA	S-NPP	76.17108	30.33440	13:12:00	D	1.90
211	PATIALA	NABHA	AQUA	76.20100	30.34000	13:10:00	D	17.40
212	PATIALA	NABHA	AQUA	76.21800	30.34300	13:10:00	D	19.30
213	PATIALA	NABHA	S-NPP	76.09433	30.37995	13:12:00	D	3.50
214	PATIALA	NABHA	S-NPP	76.13948	30.48597	13:12:00	D	1.80
215	PATIALA	NABHA	S-NPP	76.17037	30.52982	13:12:00	D	6.40
216	PATIALA	NABHA	S-NPP	76.17534	30.53074	13:12:00	D	5.60
217	PATIALA	NABHA	AQUA	76.31800	30.53700	13:10:00	D	28.80
218	PATIALA	NABHA	AQUA	76.32500	30.53800	13:10:00	D	26.80
219	PATIALA	NABHA	S-NPP	76.32758	30.53989	13:12:00	D	11.00
220	PATIALA	PATIALA	S-NPP	76.26176	30.32445	13:12:00	D	6.80
221	PATIALA	PATIALA	S-NPP	76.26087	30.32808	13:12:00	D	6.80
222	PATIALA	PATIALA	S-NPP	76.42684	30.40378	13:12:00	D	3.70
223	PATIALA	PATIALA	S-NPP	76.35505	30.43597	13:12:00	D	2.00
224	PATIALA	RAJPURA	S-NPP	76.68665	30.33790	13:12:00	D	3.60
225	PATIALA	SAMANA	AQUA	76.14500	29.85000	13:10:00	D	25.60
226	PATIALA	SAMANA	AQUA	76.16500	29.85100	13:10:00	D	50.00
227	PATIALA	SAMANA	S-NPP	76.16783	29.85463	13:12:00	D	28.00
228	PATIALA	SAMANA	AQUA	76.16900	29.85500	13:10:00	D	36.70

229	PATIALA	SAMANA	S-NPP	76.09842	29.85707	13:12:00	D	2.80
230	PATIALA	SAMANA	TERRA	76.12100	29.87300	11:35:00	D	14.80
231	PATIALA	SAMANA	TERRA	76.11500	29.87500	11:35:00	D	9.40
232	PATIALA	SAMANA	S-NPP	76.02227	29.91749	13:12:00	D	3.00
233	PATIALA	SAMANA	S-NPP	76.16371	29.92493	13:12:00	D	4.60
234	PATIALA	SAMANA	S-NPP	76.03365	29.95832	13:12:00	D	12.80
235	PATIALA	SAMANA	S-NPP	76.03275	29.96202	13:12:00	D	6.00
236	PATIALA	SAMANA	AQUA	76.12000	30.12200	13:10:00	D	16.40
237	PATIALA	SAMANA	AQUA	76.12700	30.12500	13:10:00	D	16.20
238	PATIALA	SAMANA	S-NPP	76.12714	30.13083	13:12:00	D	8.10
239	PATIALA	SAMANA	AQUA	76.05900	30.16400	13:10:00	D	19.70
240	PATIALA	SAMANA	S-NPP	76.10927	30.21401	13:12:00	D	4.60
241	RUPNAGAR	ANANDPUR SAHIB	S-NPP	76.34494	31.29663	13:12:00	D	2.10
242	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.42020	30.85095	13:12:00	D	3.70
243	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.41759	30.85345	13:12:00	D	4.20
244	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.41099	30.90916	13:12:00	D	3.70
245	SANGRUR	DHURI	S-NPP	75.99577	30.37302	13:12:00	D	7.60
246	SANGRUR	MALERKOTLA	S-NPP	75.87579	30.65492	13:12:00	D	2.20
247	SANGRUR	MOONAK	AQUA	75.90900	29.78800	13:10:00	D	16.90
248	SANGRUR	MOONAK	AQUA	75.93300	29.79300	13:10:00	D	19.20
249	SANGRUR	MOONAK	S-NPP	75.92857	29.80575	13:12:00	D	8.40
250	SANGRUR	MOONAK	S-NPP	76.03334	29.81778	13:12:00	D	1.60
251	SANGRUR	MOONAK	AQUA	75.97400	29.82900	13:10:00	D	17.50
252	SANGRUR	MOONAK	AQUA	76.05000	29.83100	13:10:00	D	16.30
253	SANGRUR	MOONAK	S-NPP	76.05617	29.83370	13:12:00	D	18.20
254	SANGRUR	MOONAK	S-NPP	75.97472	29.83779	13:12:00	D	7.10
255	SANGRUR	MOONAK	TERRA	75.98700	29.85200	11:35:00	D	9.50
256	SANGRUR	MOONAK	S-NPP	75.95380	29.85719	13:12:00	D	7.60
257	SANGRUR	MOONAK	AQUA	75.98400	29.86900	13:10:00	D	14.00
258	SANGRUR	MOONAK	S-NPP	75.99136	29.87970	13:12:00	D	4.80
259	SANGRUR	MOONAK	S-NPP	75.95197	29.91972	13:12:00	D	2.10
260	SANGRUR	MOONAK	S-NPP	75.79829	29.92584	13:12:00	D	20.80
261	SANGRUR	SANGRUR	S-NPP	75.56422	30.16990	13:12:00	D	10.50

262	SANGRUR	SANGRUR	S-NPP	75.58020	30.17297	13:12:00	D	14.50
263	SANGRUR	SANGRUR	S-NPP	75.57927	30.17673	13:12:00	D	14.50
264	SANGRUR	SANGRUR	S-NPP	75.55763	30.19628	13:12:00	D	2.20
265	SANGRUR	SANGRUR	S-NPP	75.67149	30.22967	13:12:00	D	11.50
266	SANGRUR	SANGRUR	S-NPP	76.04140	30.23224	13:12:00	D	2.60
267	SANGRUR	SANGRUR	S-NPP	76.03825	30.23295	13:12:00	D	3.40
268	SANGRUR	SANGRUR	TERRA	75.92000	30.23700	11:35:00	D	11.70
269	SANGRUR	SANGRUR	S-NPP	75.68015	30.23915	13:12:00	D	3.00
270	SANGRUR	SANGRUR	S-NPP	75.94540	30.24242	13:12:00	D	6.10
271	SANGRUR	SANGRUR	S-NPP	76.10027	30.25071	13:12:00	D	11.30
272	SANGRUR	SANGRUR	S-NPP	76.09702	30.25173	13:12:00	D	7.10
273	SANGRUR	SANGRUR	S-NPP	76.10204	30.25267	13:12:00	D	11.00
274	SANGRUR	SANGRUR	AQUA	76.10400	30.25300	13:10:00	D	24.90
275	SANGRUR	SANGRUR	S-NPP	76.01581	30.25953	13:12:00	D	3.00
276	SANGRUR	SANGRUR	S-NPP	76.00021	30.27972	13:12:00	D	27.20
277	SANGRUR	SUNAM	AQUA	76.06700	30.07200	13:10:00	D	17.70
278	SANGRUR	SUNAM	S-NPP	75.82903	30.09179	13:12:00	D	2.80
279	SANGRUR	SUNAM	S-NPP	75.90145	30.10559	13:12:00	D	2.80
280	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06160	31.26489	13:12:00	D	3.10
281	TARN TARAN	KHADOOR SAHIB	S-NPP	75.03673	31.27200	13:12:00	D	5.60
282	TARN TARAN	KHADOOR SAHIB	S-NPP	75.04769	31.27414	13:12:00	D	7.40
283	TARN TARAN	KHADOOR SAHIB	S-NPP	75.04025	31.28066	13:12:00	D	2.90
284	TARN TARAN	KHADOOR SAHIB	S-NPP	75.08841	31.29397	13:12:00	D	2.40
285	TARN TARAN	KHADOOR SAHIB	S-NPP	74.77029	31.40973	13:12:00	D	4.10
286	TARN TARAN	KHADOOR SAHIB	S-NPP	74.76814	31.41001	13:12:00	D	5.20
287	TARN TARAN	KHADOOR SAHIB	S-NPP	74.85749	31.41442	13:12:00	D	12.20
288	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79844	31.41514	13:12:00	D	2.20
289	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79623	31.41558	13:12:00	D	3.50
290	TARN TARAN	KHADOOR SAHIB	AQUA	74.82700	31.42600	13:10:00	D	13.10
291	TARN TARAN	KHADOOR SAHIB	S-NPP	74.83999	31.42825	13:12:00	D	9.70
292	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01993	31.43755	13:12:00	D	2.30
293	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00797	31.43925	13:12:00	D	5.80
294	TARN TARAN	KHADOOR SAHIB	S-NPP	74.70980	31.45104	13:12:00	D	11.00

295	TARN TARAN	KHADOOR SAHIB	S-NPP	74.89621	31.45936	13:12:00	D	2.00
296	TARN TARAN	KHADOOR SAHIB	S-NPP	74.82897	31.47029	13:12:00	D	12.60
297	TARN TARAN	KHADOOR SAHIB	S-NPP	74.64845	31.47957	13:12:00	D	4.60
298	TARN TARAN	KHADOOR SAHIB	S-NPP	74.86144	31.48062	13:12:00	D	5.10
299	TARN TARAN	KHADOOR SAHIB	S-NPP	74.83212	31.50302	13:12:00	D	3.70
300	TARN TARAN	KHADOOR SAHIB	S-NPP	74.81432	31.50360	13:12:00	D	7.20
301	TARN TARAN	KHADOOR SAHIB	S-NPP	74.71358	31.50430	13:12:00	D	3.00
302	TARN TARAN	KHADOOR SAHIB	S-NPP	74.87769	31.50781	13:12:00	D	2.90
303	TARN TARAN	KHADOOR SAHIB	S-NPP	74.87669	31.51162	13:12:00	D	2.90
304	TARN TARAN	KHADOOR SAHIB	S-NPP	74.90897	31.52182	13:12:00	D	9.00
305	TARN TARAN	KHADOOR SAHIB	AQUA	74.90700	31.52200	13:10:00	D	21.20
306	TARN TARAN	KHADOOR SAHIB	S-NPP	74.80526	31.53800	13:12:00	D	5.20
307	TARN TARAN	KHADOOR SAHIB	S-NPP	74.80841	31.53920	13:12:00	D	4.10
308	TARN TARAN	PATTI	AQUA	74.75700	31.14500	13:10:00	D	17.40
309	TARN TARAN	PATTI	S-NPP	74.76473	31.14957	13:12:00	D	7.60
310	TARN TARAN	PATTI	S-NPP	74.61623	31.16079	13:12:00	D	3.90
311	TARN TARAN	PATTI	S-NPP	74.57603	31.19779	13:12:00	D	4.40
312	TARN TARAN	PATTI	S-NPP	74.63174	31.21695	13:12:00	D	5.10
313	TARN TARAN	PATTI	S-NPP	74.64696	31.22810	13:12:00	D	19.60
314	TARN TARAN	PATTI	S-NPP	74.62868	31.22859	13:12:00	D	3.20
315	TARN TARAN	PATTI	S-NPP	74.91253	31.23572	13:12:00	D	3.20
316	TARN TARAN	PATTI	S-NPP	74.68034	31.23870	13:12:00	D	4.60
317	TARN TARAN	PATTI	AQUA	74.53400	31.25500	13:10:00	D	30.20
318	TARN TARAN	PATTI	S-NPP	74.53152	31.26537	13:12:00	D	28.60
319	TARN TARAN	PATTI	S-NPP	74.53319	31.26719	13:12:00	D	14.10
320	TARN TARAN	PATTI	S-NPP	74.56592	31.29678	13:12:00	D	4.10
321	TARN TARAN	PATTI	S-NPP	74.56488	31.30066	13:12:00	D	4.10
322	TARN TARAN	PATTI	S-NPP	74.71430	31.30581	13:12:00	D	5.00
323	TARN TARAN	PATTI	S-NPP	74.64077	31.31158	13:12:00	D	5.20
324	TARN TARAN	PATTI	AQUA	74.69900	31.37000	13:10:00	D	42.60
325	TARN TARAN	PATTI	S-NPP	74.66079	31.37241	13:12:00	D	3.50
326	TARN TARAN	PATTI	S-NPP	74.70842	31.37354	13:12:00	D	12.70
327	TARN TARAN	PATTI	S-NPP	74.65977	31.37627	13:12:00	D	3.50

328	TARN TARAN	PATTI	S-NPP	74.70172	31.37630	13:12:00	D	12.70
329	TARN TARAN	PATTI	S-NPP	74.62151	31.37676	13:12:00	D	4.40
330	TARN TARAN	PATTI	S-NPP	74.62334	31.37734	13:12:00	D	4.60
331	TARN TARAN	PATTI	S-NPP	74.58974	31.38265	13:12:00	D	4.70
332	TARN TARAN	PATTI	S-NPP	74.59151	31.38339	13:12:00	D	3.30

Details of residue burning events in Haryana on 17-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	AMBALA	NARAYANGARH	S-NPP	76.95616	30.39495	01:54:00	N	1.70
2	FATEHABAD	FATEHABAD	S-NPP	75.48105	29.51930	01:54:00	N	0.60
3	FATEHABAD	FATEHABAD	S-NPP	75.54424	29.53027	01:54:00	N	1.40
4	FATEHABAD	FATEHABAD	S-NPP	75.50851	29.56710	13:12:00	D	20.40
5	FATEHABAD	FATEHABAD	S-NPP	75.57573	29.57186	13:12:00	D	7.80
6	FATEHABAD	FATEHABAD	S-NPP	75.54382	29.58576	13:12:00	D	2.40
7	FATEHABAD	FATEHABAD	S-NPP	75.54124	29.58685	13:12:00	D	5.90
8	FATEHABAD	FATEHABAD	S-NPP	75.54288	29.58957	13:12:00	D	3.60
9	FATEHABAD	FATEHABAD	S-NPP	75.65034	29.58996	13:12:00	D	6.50
10	FATEHABAD	FATEHABAD	S-NPP	75.42525	29.59233	13:12:00	D	3.60
11	FATEHABAD	FATEHABAD	S-NPP	75.45822	29.59873	13:12:00	D	8.10
12	FATEHABAD	FATEHABAD	METOP-2	75.68650	29.61619	20:53:00	N	7.00
13	FATEHABAD	FATEHABAD	S-NPP	75.49817	29.62247	13:12:00	D	13.70
14	FATEHABAD	FATEHABAD	S-NPP	75.50146	29.65509	13:12:00	D	5.60
15	FATEHABAD	RATIA	S-NPP	75.58594	29.63537	13:12:00	D	7.40
16	FATEHABAD	RATIA	S-NPP	75.60281	29.65849	13:12:00	D	5.00
17	FATEHABAD	RATIA	S-NPP	75.58474	29.66300	13:12:00	D	1.90
18	FATEHABAD	RATIA	S-NPP	75.51563	29.68971	13:12:00	D	2.30
19	FATEHABAD	RATIA	S-NPP	75.57527	29.70096	13:12:00	D	3.00
20	FATEHABAD	RATIA	S-NPP	75.57243	29.70197	13:12:00	D	4.20
21	FATEHABAD	RATIA	S-NPP	75.65294	29.71760	13:12:00	D	8.20
22	FATEHABAD	RATIA	S-NPP	75.65501	29.71991	13:12:00	D	9.90
23	FATEHABAD	RATIA	S-NPP	75.60002	29.72720	13:12:00	D	3.40
24	FATEHABAD	RATIA	S-NPP	75.55853	29.73511	13:12:00	D	5.80
25	FATEHABAD	RATIA	S-NPP	75.56393	29.73614	13:12:00	D	7.90
26	FATEHABAD	RATIA	S-NPP	75.58011	29.73926	13:12:00	D	21.70
27	FATEHABAD	RATIA	S-NPP	75.49129	29.75409	13:12:00	D	9.10
28	FATEHABAD	RATIA	S-NPP	75.41092	29.75472	13:12:00	D	49.90
29	FATEHABAD	RATIA	AQUA	75.64900	29.75600	13:10:00	D	29.10
30	FATEHABAD	RATIA	S-NPP	75.65334	29.76123	13:12:00	D	10.90

31	FATEHABAD	RATIA	AQUA	75.65100	29.76300	13:10:00	D	21.60
32	FATEHABAD	TOHANA	S-NPP	75.90724	29.62646	13:12:00	D	3.60
33	FATEHABAD	TOHANA	S-NPP	75.82953	29.64266	13:12:00	D	4.00
34	FATEHABAD	TOHANA	S-NPP	75.80267	29.68468	13:12:00	D	3.00
35	FATEHABAD	TOHANA	S-NPP	75.77654	29.75722	13:12:00	D	4.80
36	HISAR	HANSI	S-NPP	76.06868	29.20474	13:12:00	D	3.40
37	HISAR	HISAR	S-NPP	75.76147	29.27999	13:12:00	D	5.60
38	JIND	JIND	S-NPP	76.39850	29.48431	13:12:00	D	4.20
39	JIND	NARWANA	S-NPP	76.14092	29.48302	13:12:00	D	7.70
40	JIND	NARWANA	S-NPP	76.14333	29.48437	13:12:00	D	4.10
41	JIND	NARWANA	S-NPP	76.26866	29.50262	13:12:00	D	4.90
42	JIND	NARWANA	S-NPP	76.20161	29.50700	13:12:00	D	3.70
43	JIND	NARWANA	S-NPP	76.24265	29.53399	13:12:00	D	2.70
44	JIND	NARWANA	S-NPP	76.23731	29.55610	13:12:00	D	4.00
45	JIND	NARWANA	S-NPP	76.13378	29.56776	13:12:00	D	4.60
46	JIND	NARWANA	S-NPP	76.05575	29.63868	13:12:00	D	2.70
47	JIND	NARWANA	S-NPP	75.98516	29.64104	13:12:00	D	7.00
48	JIND	NARWANA	S-NPP	76.04095	29.65533	13:12:00	D	2.80
49	JIND	NARWANA	S-NPP	76.13898	29.66967	13:12:00	D	17.80
50	JIND	NARWANA	S-NPP	76.13914	29.70175	13:12:00	D	5.00
51	JIND	NARWANA	S-NPP	76.13597	29.70386	13:12:00	D	4.90
52	JIND	NARWANA	S-NPP	76.09726	29.72090	13:12:00	D	2.90
53	JIND	NARWANA	S-NPP	76.09637	29.72460	13:12:00	D	5.20
54	JIND	NARWANA	S-NPP	76.19857	29.80530	13:12:00	D	4.50
55	JIND	SAFIDON	S-NPP	76.62305	29.41667	13:12:00	D	3.50
56	JIND	SAFIDON	AQUA	76.60700	29.42400	13:10:00	D	18.40
57	JIND	SAFIDON	S-NPP	76.61073	29.42578	13:12:00	D	7.70
58	KAITHAL	GUHLA	S-NPP	76.23932	29.90628	13:12:00	D	3.50
59	KAITHAL	KAITHAL	TERRA	76.23400	29.66500	11:35:00	D	17.00
60	KAITHAL	KAITHAL	TERRA	76.22900	29.66800	11:35:00	D	18.30
61	KAITHAL	KAITHAL	S-NPP	76.67623	29.67830	13:12:00	D	10.00
62	KAITHAL	KAITHAL	S-NPP	76.33665	29.72145	13:12:00	D	2.70
63	KAITHAL	KAITHAL	S-NPP	76.67657	29.73062	13:12:00	D	4.50
64	KAITHAL	KAITHAL	S-NPP	76.68139	29.73149	13:12:00	D	4.50

65	KAITHAL	KAITHAL	S-NPP	76.63910	29.76139	13:12:00	D	17.90
66	KAITHAL	KAITHAL	AQUA	76.63200	29.76200	13:10:00	D	20.20
67	KAITHAL	KAITHAL	S-NPP	76.66363	29.81492	13:12:00	D	2.70
68	KARNAL	KARNAL	TERRA	76.95400	29.62800	11:35:00	D	12.90
69	KARNAL	KARNAL	TERRA	76.95100	29.63500	11:35:00	D	11.40
70	KARNAL	KARNAL	S-NPP	76.99718	29.77401	13:12:00	D	2.80
71	KARNAL	NILOKHERI	AQUA	76.86200	29.83500	13:10:00	D	19.90
72	KARNAL	NILOKHERI	S-NPP	76.87390	29.84094	13:12:00	D	49.10
73	KARNAL	NILOKHERI	S-NPP	76.87070	29.84166	13:12:00	D	22.60
74	KARNAL	NILOKHERI	S-NPP	76.87541	29.84252	13:12:00	D	22.60
75	KURUKSHETRA	PEHOWA	S-NPP	76.68611	29.98034	13:12:00	D	2.70
76	PANIPAT	ISRANA	METOP-2	76.68620	29.31974	20:53:00	N	9.00
77	PANIPAT	ISRANA	S-NPP	76.66013	29.33685	13:12:00	D	2.10
78	ROHTAK	MAHAM	TERRA	76.41600	28.95700	11:35:00	D	8.90
79	ROHTAK	MAHAM	S-NPP	76.41210	28.96075	13:12:00	D	9.60
80	ROHTAK	MAHAM	S-NPP	76.51640	29.01314	01:54:00	N	0.40
81	SIRSA	SIRSA	S-NPP	75.26994	29.54593	13:12:00	D	15.20
82	SIRSA	SIRSA	S-NPP	75.27357	29.54654	13:12:00	D	12.20
83	SIRSA	SIRSA	S-NPP	74.97360	29.72252	13:12:00	D	8.00
84	SONIPAT	GOHANA	S-NPP	76.51360	29.14790	13:12:00	D	4.30
85	SONIPAT	GOHANA	S-NPP	76.66865	29.20688	13:12:00	D	4.70

Details of residue burning events in Uttar Pradesh on 17-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	ALIGARH	KOL	S-NPP	78.20199	27.89624	13:12:00	D	2.10
2	ALLAHABAD	PHULPUR	S-NPP	82.04745	25.44702	13:06:00	D	2.50
3	ALLAHABAD	PHULPUR	S-NPP	82.04686	25.45033	13:06:00	D	3.00
4	AMBEDKARNAGAR	ALAPUR	S-NPP	82.99805	26.39410	13:12:00	D	1.40
5	AMBEDKARNAGAR	TANDA	S-NPP	82.76659	26.50429	13:12:00	D	2.00
6	AMETHI	MUSAFIRKHANA	S-NPP	81.92321	26.44257	13:12:00	D	1.40
7	AURAIYA	AURAIYA	S-NPP	79.55459	26.44248	13:12:00	D	1.80
8	AURAIYA	AURAIYA	S-NPP	79.46291	26.50431	13:12:00	D	3.50
9	AURAIYA	AURAIYA	S-NPP	79.48840	26.54346	13:12:00	D	4.30
10	AURAIYA	BIDHUNA	S-NPP	79.42082	26.65164	13:12:00	D	2.50
11	AURAIYA	BIDHUNA	S-NPP	79.40787	26.67397	13:12:00	D	5.80
12	AURAIYA	BIDHUNA	S-NPP	79.51582	26.67773	13:12:00	D	2.60
13	AURAIYA	BIDHUNA	S-NPP	79.59993	26.68228	01:54:00	N	0.50
14	AURAIYA	BIDHUNA	S-NPP	79.47063	26.69474	13:12:00	D	3.00
15	AURAIYA	BIDHUNA	S-NPP	79.36527	26.71937	13:12:00	D	2.10
16	AURAIYA	BIDHUNA	S-NPP	79.44766	26.74699	13:12:00	D	2.10
17	AURAIYA	BIDHUNA	S-NPP	79.44697	26.75037	13:12:00	D	7.20
18	AURAIYA	BIDHUNA	S-NPP	79.43414	26.75174	13:12:00	D	1.80
19	AURAIYA	BIDHUNA	S-NPP	79.56922	26.78439	13:12:00	D	2.50
20	AURAIYA	BIDHUNA	METOP-2	79.60766	26.78649	20:53:00	N	8.00
21	AURAIYA	BIDHUNA	S-NPP	79.59196	26.79506	13:12:00	D	1.90
22	AURAIYA	BIDHUNA	S-NPP	79.63960	26.88610	01:54:00	N	0.70
23	AURAIYA	BIDHUNA	S-NPP	79.64027	26.88941	01:54:00	N	0.70
24	BAGHPAT	BAGHPAT	S-NPP	77.43013	28.96147	13:12:00	D	3.60
25	BAGHPAT	BAGHPAT	S-NPP	77.42859	28.96269	13:12:00	D	2.80
26	BAGHPAT	BARAUT	S-NPP	77.41858	29.10159	13:12:00	D	4.80
27	BAHRAICH	BAHRAICH	S-NPP	81.81781	27.46538	13:12:00	D	4.50
28	BAHRAICH	KAISARGANJ	S-NPP	81.55326	27.40250	13:12:00	D	1.80
29	BAHRAICH	MAHASI	AQUA	81.41900	27.57800	13:10:00	D	5.70
30	BAHRAICH	MAHASI	S-NPP	81.40947	27.70553	13:12:00	D	2.70

31	BAHRAICH	NANPARA	S-NPP	81.40086	28.01221	13:12:00	D	2.60
32	BALLIA	RASRA	AQUA	83.93000	25.97700	13:05:00	D	4.60
33	BALLIA	RASRA	S-NPP	83.93135	25.97920	13:12:00	D	5.20
34	BALRAMPUR	UTRAULA	S-NPP	82.45242	27.28607	13:12:00	D	5.30
35	BARABANKI	Haidargarh	S-NPP	81.53049	26.57749	13:12:00	D	2.50
36	BARABANKI	NAWABGANJ	S-NPP	81.21460	26.85098	13:12:00	D	4.60
37	BAREILLY	BAREILY	METOP-2	79.57854	28.40346	20:53:00	N	9.00
38	BAREILLY	FARIDPUR	S-NPP	79.69026	28.24306	13:12:00	D	3.30
39	BAREILLY	FARIDPUR	S-NPP	79.68560	28.24575	13:12:00	D	3.30
40	BAREILLY	FARIDPUR	S-NPP	79.70047	28.27735	13:12:00	D	3.50
41	BASTI	BASTI	S-NPP	82.87136	26.72827	13:12:00	D	2.30
42	BASTI	BHANPUR	S-NPP	82.61498	27.00557	13:12:00	D	2.00
43	BASTI	BHANPUR	S-NPP	82.63734	27.06127	01:54:00	N	0.60
44	BASTI	HARRAIYA	S-NPP	82.60900	26.75055	01:54:00	N	0.60
45	BIJNOR	AFZALGARH	S-NPP	78.71587	29.46152	13:12:00	D	2.60
46	ETAWAH	BHARTHNA	S-NPP	79.28525	26.78687	13:12:00	D	0.90
47	ETAWAH	ETAWAH	S-NPP	79.15524	26.82134	13:12:00	D	6.40
48	ETAWAH	ETAWAH	S-NPP	78.99317	26.83043	01:54:00	N	0.30
49	ETAWAH	ETAWAH	S-NPP	79.15274	26.87651	13:12:00	D	4.60
50	ETAWAH	ETAWAH	S-NPP	79.10051	26.88180	13:12:00	D	5.20
51	ETAWAH	ETAWAH	S-NPP	79.11678	26.92678	13:12:00	D	2.00
52	ETAWAH	JASWANTNAGAR	S-NPP	78.97359	26.82987	13:12:00	D	3.70
53	ETAWAH	SAIFAI	S-NPP	79.05331	26.94440	13:12:00	D	2.00
54	FATEHPUR	BINKI	S-NPP	80.75644	26.02892	13:12:00	D	4.10
55	FATEHPUR	FATEHPUR	S-NPP	80.71903	25.95481	13:12:00	D	2.80
56	FATEHPUR	FATEHPUR	S-NPP	80.78197	25.97834	13:12:00	D	3.00
57	FATEHPUR	FATEHPUR	S-NPP	80.79483	25.99399	13:12:00	D	2.10
58	FATEHPUR	KHAGA	S-NPP	81.24509	25.78260	13:12:00	D	2.30
59	FATEHPUR	KHAGA	S-NPP	81.10428	25.90287	13:12:00	D	2.70
60	FIROZABAD	JASRANA	S-NPP	78.70157	27.20436	01:54:00	N	0.40
61	GORAKHPUR	GORAKHPUR	AQUA	83.45000	26.80800	13:05:00	D	6.10
62	HAMIRPUR	HAMIRPUR	S-NPP	80.22118	25.81850	13:12:00	D	1.80
63	HAMIRPUR	HAMIRPUR	AQUA	80.23100	25.81900	13:05:00	D	12.60

64	HAMIRPUR	HAMIRPUR	S-NPP	80.23553	25.82769	13:12:00	D	5.20
65	HAMIRPUR	HAMIRPUR	S-NPP	80.23096	25.83040	13:12:00	D	3.60
66	HARDOI	BILGRAM	S-NPP	79.96200	27.18747	13:12:00	D	1.90
67	HARDOI	HARDOI	S-NPP	80.19398	27.34627	13:12:00	D	1.50
68	HARDOI	HARDOI	S-NPP	80.00253	27.47799	13:12:00	D	1.90
69	HARDOI	SHAHABAD	AQUA	79.90900	27.45200	13:10:00	D	7.40
70	HARDOI	SHAHABAD	S-NPP	79.91383	27.45346	13:12:00	D	2.50
71	HARDOI	SHAHABAD	S-NPP	79.91316	27.45679	13:12:00	D	1.40
72	HARDOI	SHAHABAD	AQUA	79.91200	27.50800	13:10:00	D	7.10
73	HARDOI	SHAHABAD	S-NPP	79.93933	27.50908	13:12:00	D	7.70
74	HARDOI	SHAHABAD	S-NPP	79.91035	27.51132	13:12:00	D	10.60
75	HARDOI	SHAHABAD	S-NPP	79.90968	27.51465	13:12:00	D	10.60
76	HARDOI	SHAHABAD	S-NPP	79.88702	27.52702	13:12:00	D	1.80
77	HARDOI	SHAHABAD	AQUA	79.91400	27.53500	13:10:00	D	12.80
78	HARDOI	SHAHABAD	S-NPP	79.91265	27.54146	13:12:00	D	2.80
79	HARDOI	SHAHABAD	S-NPP	79.91660	27.54210	13:12:00	D	4.50
80	HARDOI	SIWAIJPUR	S-NPP	79.86991	27.30159	13:12:00	D	1.40
81	JALAUN	JALAUN	S-NPP	79.39799	26.06943	13:12:00	D	3.20
82	JALAUN	JALAUN	S-NPP	79.23795	26.08499	13:12:00	D	2.70
83	JALAUN	JALAUN	S-NPP	79.31213	26.22379	13:12:00	D	1.40
84	JALAUN	KONCH	S-NPP	78.96970	25.97296	01:54:00	N	0.90
85	JALAUN	KONCH	S-NPP	79.11382	26.04295	13:12:00	D	3.90
86	JALAUN	KONCH	S-NPP	79.03379	26.05435	13:12:00	D	2.30
87	JALAUN	KONCH	S-NPP	79.07139	26.06067	13:12:00	D	1.40
88	JALAUN	MADHOGARH	S-NPP	79.12737	26.16830	13:12:00	D	2.90
89	JALAUN	MADHOGARH	AQUA	79.15000	26.18800	13:05:00	D	11.00
90	JALAUN	MADHOGARH	S-NPP	79.15701	26.19095	13:12:00	D	3.40
91	JALAUN	MADHOGARH	S-NPP	79.15630	26.19437	13:12:00	D	6.00
92	JALAUN	MADHOGARH	S-NPP	79.26498	26.20540	13:12:00	D	3.50
93	JALAUN	MADHOGARH	S-NPP	79.26427	26.20881	13:12:00	D	3.50
94	JALAUN	MADHOGARH	S-NPP	79.22009	26.22165	13:12:00	D	2.40
95	JALAUN	MADHOGARH	S-NPP	79.27322	26.31516	13:12:00	D	2.60
96	JALAUN	URAI	S-NPP	79.37169	25.86185	13:12:00	D	3.30

97	JALAUN	URAI	S-NPP	79.52734	25.98957	13:12:00	D	2.30
98	JALAUN	URAI	S-NPP	79.45293	26.08912	13:12:00	D	0.90
99	JAUNPUR	MARIAHU	S-NPP	82.45424	25.57443	13:06:00	D	1.40
100	JAUNPUR	SHHGANJ	AQUA	82.61700	26.04000	13:05:00	D	6.70
101	JAUNPUR	SHHGANJ	S-NPP	82.61485	26.04707	13:12:00	D	3.50
102	JAUNPUR	SHHGANJ	S-NPP	82.58442	26.17453	13:12:00	D	2.80
103	JHANSI	JHANSI	S-NPP	78.65163	25.49679	13:12:00	D	4.10
104	JHANSI	MOTH	S-NPP	78.87141	25.64379	13:12:00	D	4.50
105	JHANSI	MOTH	S-NPP	78.87991	25.64525	13:12:00	D	2.20
106	JHANSI	MOTH	AQUA	78.89500	25.66500	13:05:00	D	13.70
107	JHANSI	MOTH	S-NPP	78.89261	25.66898	13:12:00	D	2.60
108	JHANSI	MOTH	S-NPP	78.90037	25.67390	13:12:00	D	7.50
109	JHANSI	MOTH	AQUA	78.89200	25.67600	13:05:00	D	18.50
110	JHANSI	MOTH	S-NPP	78.89966	25.67737	13:12:00	D	7.50
111	JHANSI	MOTH	S-NPP	78.89894	25.68083	13:12:00	D	8.20
112	JHANSI	MOTH	S-NPP	78.89822	25.68430	13:12:00	D	8.20
113	JHANSI	MOTH	S-NPP	78.88189	25.69947	13:12:00	D	4.50
114	JHANSI	MOTH	S-NPP	78.85065	25.70136	13:12:00	D	6.40
115	JHANSI	MOTH	S-NPP	78.81216	25.71642	13:12:00	D	2.90
116	JHANSI	MOTH	S-NPP	78.85983	25.72088	13:12:00	D	3.70
117	JHANSI	MOTH	S-NPP	78.79850	25.72526	13:12:00	D	10.90
118	JHANSI	MOTH	S-NPP	78.77778	25.73970	13:12:00	D	2.80
119	JHANSI	MOTH	S-NPP	78.88369	25.73997	13:12:00	D	2.60
120	JHANSI	MOTH	S-NPP	78.84038	25.75767	13:12:00	D	3.20
121	JHANSI	MOTH	S-NPP	78.93588	25.76328	13:12:00	D	2.60
122	JHANSI	MOTH	S-NPP	78.93230	25.78057	13:12:00	D	5.20
123	JHANSI	MOTH	S-NPP	78.83669	25.79657	13:12:00	D	2.70
124	JHANSI	MOTH	S-NPP	79.02445	25.86595	13:12:00	D	1.90
125	JHANSI	TAHRAULI	S-NPP	78.76116	25.48314	13:12:00	D	4.70
126	JHANSI	TAHRAULI	S-NPP	78.77896	25.55137	13:12:00	D	4.20
127	JHANSI	TAHRAULI	S-NPP	78.79969	25.55853	13:12:00	D	11.20
128	JHANSI	TAHRAULI	S-NPP	78.86016	25.60844	13:12:00	D	3.50
129	KANPUR	GHAATAMPUR	S-NPP	80.38773	26.22747	13:12:00	D	2.90

130	KANPUR DEHAT	RASULABAD	S-NPP	79.87831	26.66070	13:12:00	D	2.20
131	KANPUR DEHAT	RASULABAD	S-NPP	79.83324	26.68533	01:54:00	N	0.30
132	KANPUR DEHAT	SIKANDRA	S-NPP	79.65978	26.39272	13:12:00	D	6.30
133	KANPUR DEHAT	SIKANDRA	S-NPP	79.65723	26.40717	13:12:00	D	1.70
134	KASGANJ	PATIALI	S-NPP	78.91419	27.59408	13:12:00	D	3.70
135	KAUSHAMBI	MANJHANPUR	S-NPP	81.51780	25.41120	13:06:00	D	4.30
136	KAUSHAMBI	MANJHANPUR	S-NPP	81.27998	25.51008	13:06:00	D	6.50
137	KHERI	DHAURAHRA	S-NPP	81.09339	27.94247	13:12:00	D	3.00
138	KHERI	GOLA	S-NPP	80.29414	27.94807	13:12:00	D	3.00
139	KHERI	GOLA	S-NPP	80.27058	27.96102	01:54:00	N	0.50
140	KHERI	GOLA	S-NPP	80.31446	28.23289	13:12:00	D	3.10
141	KHERI	GOLA	S-NPP	80.33004	28.23532	13:12:00	D	3.50
142	KHERI	GOLA	S-NPP	80.31380	28.23620	13:12:00	D	3.10
143	KHERI	LAKHIMPUR	AQUA	80.62000	27.86600	13:10:00	D	7.30
144	KHERI	LAKHIMPUR	S-NPP	80.61903	27.87004	13:12:00	D	8.60
145	KHERI	LAKHIMPUR	S-NPP	80.73048	28.10055	13:12:00	D	5.10
146	KHERI	MOHMADI	S-NPP	80.27658	28.11877	13:12:00	D	2.00
147	KUSHINAGAR	HATA	S-NPP	83.63472	26.76060	13:12:00	D	2.20
148	KUSHINAGAR	HATA	S-NPP	83.73663	26.88253	13:12:00	D	2.40
149	LUCKNOW	LUCKNOW	S-NPP	81.02502	26.76426	13:12:00	D	3.10
150	LUCKNOW	MOHANLAL GANJ	S-NPP	81.09333	26.57167	13:12:00	D	2.50
151	LUCKNOW	MOHANLAL GANJ	S-NPP	81.09640	26.66028	13:12:00	D	3.20
152	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.65056	26.98912	13:12:00	D	3.10
153	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.65713	27.05906	13:12:00	D	4.30
154	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.68900	27.08500	13:10:00	D	8.30
155	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.69633	27.08561	13:12:00	D	3.00
156	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.63971	27.11473	13:12:00	D	3.00
157	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.55980	27.12529	13:12:00	D	2.80
158	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.57117	27.18688	13:12:00	D	3.20
159	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.68300	27.19400	13:10:00	D	7.40
160	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.68254	27.19844	13:12:00	D	2.50
161	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.68197	27.20191	13:12:00	D	1.90
162	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.58347	27.22227	13:12:00	D	5.80

163	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.53135	27.22238	13:12:00	D	2.40
164	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.52229	27.22470	13:12:00	D	7.50
165	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.57381	27.22805	13:12:00	D	3.50
166	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.62200	27.25900	13:10:00	D	6.20
167	MAHARAJGANJ	NAUTANWA	S-NPP	83.43386	27.31684	13:12:00	D	1.90
168	MAHARAJGANJ	NAUTANWA	S-NPP	83.62553	27.39208	13:12:00	D	3.30
169	MAHARAJGANJ	NAUTANWA	AQUA	83.64400	27.41000	13:10:00	D	8.80
170	MAHARAJGANJ	NAUTANWA	AQUA	83.65400	27.41200	13:10:00	D	15.00
171	MAHARAJGANJ	NAUTANWA	AQUA	83.58300	27.45600	13:10:00	D	8.80
172	MAHARAJGANJ	NAUTANWA	AQUA	83.59300	27.45800	13:10:00	D	6.30
173	MAHARAJGANJ	NAUTANWA	S-NPP	83.58961	27.45972	13:12:00	D	3.60
174	MAHARAJGANJ	NAUTANWA	S-NPP	83.50191	27.46214	13:12:00	D	2.40
175	MAHARAJGANJ	NICHLAUL	S-NPP	83.70940	27.11221	13:12:00	D	2.00
176	MAHARAJGANJ	NICHLAUL	S-NPP	83.72028	27.18221	13:12:00	D	5.20
177	MAHARAJGANJ	NICHLAUL	S-NPP	83.68625	27.20249	13:12:00	D	2.10
178	MAHARAJGANJ	NICHLAUL	S-NPP	83.72369	27.21465	13:12:00	D	2.50
179	MAHARAJGANJ	NICHLAUL	S-NPP	83.65854	27.24287	13:12:00	D	2.10
180	MAHARAJGANJ	NICHLAUL	S-NPP	83.62885	27.26372	13:12:00	D	3.80
181	MAHARAJGANJ	NICHLAUL	AQUA	83.65100	27.27300	13:10:00	D	12.20
182	MAHARAJGANJ	NICHLAUL	AQUA	83.66100	27.27400	13:10:00	D	4.40
183	MAHARAJGANJ	NICHLAUL	S-NPP	83.65763	27.27467	13:12:00	D	5.20
184	MAHARAJGANJ	NICHLAUL	S-NPP	83.64364	27.27989	13:12:00	D	2.60
185	MAHARAJGANJ	NICHLAUL	AQUA	83.71000	27.29100	13:10:00	D	6.80
186	MAHARAJGANJ	PHARENDA	S-NPP	83.35294	27.15353	13:12:00	D	1.90
187	MAHARAJGANJ	PHARENDA	S-NPP	83.29169	27.26720	13:12:00	D	4.40
188	MAHARAJGANJ	PHARENDA	S-NPP	83.26617	27.29422	13:12:00	D	2.20
189	MAINPURI	BHOGAON	S-NPP	79.33538	27.18360	13:12:00	D	3.30
190	MAINPURI	BHOGAON	S-NPP	79.16750	27.24714	13:12:00	D	4.90
191	MAINPURI	KARHAL	S-NPP	78.97398	27.06356	13:12:00	D	2.20
192	MAINPURI	KARHAL	S-NPP	78.97270	27.08103	01:54:00	N	1.00
193	MAINPURI	MAINPURI	S-NPP	78.99698	27.35182	13:12:00	D	1.90
194	MATHURA	CHHATA	S-NPP	77.52897	27.81001	13:12:00	D	2.80
195	MAU	MAU	S-NPP	83.69880	25.90314	13:06:00	D	3.30

196	PILHIBHIT	BISALPUR	S-NPP	79.91354	28.37654	13:12:00	D	2.00
197	PILHIBHIT	PURANPUR	S-NPP	80.08772	28.38010	13:12:00	D	1.20
198	PILHIBHIT	PURANPUR	S-NPP	80.18859	28.38230	13:12:00	D	3.40
199	PILHIBHIT	PURANPUR	S-NPP	80.05367	28.46979	13:12:00	D	2.90
200	PILHIBHIT	PURANPUR	S-NPP	80.04774	28.47910	13:12:00	D	3.40
201	PILHIBHIT	PURANPUR	S-NPP	80.12505	28.49499	01:54:00	N	0.30
202	PILHIBHIT	PURANPUR	S-NPP	80.08051	28.49791	13:12:00	D	2.90
203	PILHIBHIT	PURANPUR	S-NPP	80.08901	28.52380	01:54:00	N	0.60
204	PILHIBHIT	PURANPUR	S-NPP	80.01120	28.61839	01:54:00	N	0.50
205	PILHIBHIT	PURANPUR	S-NPP	80.01277	28.62798	01:54:00	N	1.20
206	PILHIBHIT	PURANPUR	S-NPP	80.01022	28.63522	01:54:00	N	1.70
207	PILHIBHIT	PURANPUR	S-NPP	80.01297	28.65304	13:12:00	D	4.60
208	PRATAPGARH	KUNDA	S-NPP	81.75135	25.76100	13:12:00	D	9.60
209	PRATAPGARH	KUNDA	S-NPP	81.70651	25.79161	13:12:00	D	1.70
210	PRATAPGARH	PATTI	S-NPP	82.23000	25.99126	13:12:00	D	2.30
211	RAIBEARELI	MAHARAJGANG	S-NPP	81.28757	26.41864	13:12:00	D	3.90
212	RAIBEARELI	RAEBARELI	S-NPP	81.13257	26.34060	13:12:00	D	2.40
213	RAIBEARELI	RAEBARELI	AQUA	81.14800	26.35000	13:05:00	D	25.60
214	RAIBEARELI	RAEBARELI	S-NPP	81.14988	26.35345	13:12:00	D	5.40
215	RAIBEARELI	SALON	S-NPP	81.39116	26.05198	13:12:00	D	4.80
216	RAIBEARELI	TILOI	S-NPP	81.51037	26.23918	13:12:00	D	1.30
217	RAMPUR	BILASPUR	AQUA	79.38400	28.83100	13:10:00	D	7.80
218	RAMPUR	BILASPUR	S-NPP	79.38033	28.83784	13:12:00	D	3.20
219	RAMPUR	BILASPUR	S-NPP	79.37561	28.84053	13:12:00	D	3.20
220	RAMPUR	BILASPUR	S-NPP	79.37963	28.84117	13:12:00	D	3.20
221	RAMPUR	MILAK	S-NPP	79.14462	28.78576	13:12:00	D	2.80
222	RAMPUR	TANDA	S-NPP	78.98743	29.12159	13:12:00	D	1.50
223	RAMPUR	TANDA	S-NPP	78.99152	29.12226	13:12:00	D	2.40
224	SAMBHAL	GUNNAUR	S-NPP	78.42509	28.25591	13:12:00	D	2.50
225	SANTKABIRNAGAR	KHALILABAD	AQUA	82.86900	26.88600	13:05:00	N	5.00
226	SHAHJAHANPUR	PUWANYA	S-NPP	80.06263	28.10028	01:54:00	N	0.70
227	SHAHJAHANPUR	PUWANYA	METOP-2	79.99589	28.17888	20:53:00	N	7.00
228	SHAHJAHANPUR	PUWANYA	S-NPP	80.11370	28.21449	01:54:00	N	0.40

229	SHAHJAHANPUR	PUWANYA	S-NPP	80.11263	28.29290	13:12:00	D	2.60
230	SHAHJAHANPUR	PUWANYA	S-NPP	79.99274	28.30699	13:12:00	D	2.50
231	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	79.73249	27.72960	13:12:00	D	1.70
232	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	79.84874	27.76214	13:12:00	D	2.80
233	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	79.83871	27.87231	13:12:00	D	4.80
234	SHAHJAHANPUR	TILHAR	S-NPP	79.74202	27.90491	13:12:00	D	1.10
235	SHAHJAHANPUR	TILHAR	S-NPP	79.70327	28.15919	13:12:00	D	2.80
236	SHAHJAHANPUR	TILHAR	S-NPP	79.70094	28.23102	13:12:00	D	2.90
237	SHRAWASTI	IKAUNA	S-NPP	81.70313	27.58709	13:12:00	D	1.50
238	SHRAWASTI	IKAUNA	S-NPP	81.78893	27.60583	13:12:00	D	2.60
239	SIDDHARTHANAGAR	BANSI	S-NPP	83.11758	27.11753	13:12:00	D	2.60
240	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	82.63895	27.12749	13:12:00	D	3.60
241	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	82.64295	27.12805	13:12:00	D	5.50
242	SIDDHARTHANAGAR	ITWA	S-NPP	82.82377	27.27503	13:12:00	D	2.00
243	SIDDHARTHANAGAR	ITWA	S-NPP	82.71127	27.30864	13:12:00	D	2.00
244	SIDDHARTHANAGAR	ITWA	AQUA	82.56700	27.32600	13:10:00	D	6.00
245	SIDDHARTHANAGAR	ITWA	S-NPP	82.56809	27.32650	13:12:00	D	5.20
246	SIDDHARTHANAGAR	ITWA	S-NPP	82.73936	27.36094	13:12:00	D	1.90
247	SIDDHARTHANAGAR	ITWA	S-NPP	82.66034	27.36365	13:12:00	D	1.90
248	SIDDHARTHANAGAR	ITWA	S-NPP	82.61716	27.37480	13:12:00	D	2.80
249	SIDDHARTHANAGAR	ITWA	S-NPP	82.61361	27.39498	13:12:00	D	2.50
250	SIDDHARTHANAGAR	SHOHRATGARH	AQUA	82.92900	27.31000	13:10:00	D	4.60
251	SIDDHARTHANAGAR	SHOHRATGARH	S-NPP	82.92999	27.31069	13:12:00	D	3.50
252	SITAPUR	BISWAN	S-NPP	81.22713	27.52936	13:12:00	D	2.40
253	SITAPUR	LAHARPUR	S-NPP	80.80111	27.69978	01:54:00	N	0.50
254	SITAPUR	LAHARPUR	S-NPP	80.82513	27.73254	13:12:00	D	2.20
255	SITAPUR	LAHARPUR	S-NPP	80.81998	27.73855	13:12:00	D	2.30
256	SITAPUR	MAHMUDABAD	S-NPP	81.35651	27.34595	13:12:00	D	2.30
257	SITAPUR	SIDHAULI	S-NPP	80.89482	27.38735	13:12:00	D	2.00
258	SULTANPUR	AMETHI	S-NPP	81.91118	26.20141	13:12:00	D	4.80
259	SULTANPUR	AMETHI	S-NPP	81.88146	26.23696	13:12:00	D	1.70
260	SULTANPUR	KADIRPUR	S-NPP	82.46734	26.13369	13:12:00	D	2.10
261	SULTANPUR	KADIRPUR	S-NPP	82.42971	26.25703	13:12:00	D	2.60

262	SULTANPUR	LAMBHUA	S-NPP	82.19467	26.03378	13:12:00	D	2.20
263	UNNAO	BIGHAPUR	S-NPP	80.74677	26.20665	13:12:00	D	2.60
264	UNNAO	BIGHAPUR	S-NPP	80.82986	26.33122	13:12:00	D	2.60
265	UNNAO	HASANGANJ	S-NPP	80.53127	26.85073	13:12:00	D	2.60

The study used images received from following Satellites at IARI Satellite Ground Station

S. No.	Satellite Name	Sensor	Resolution (meter)	Day / Night Passes
1.	Suomi NPP	VIIRS	375 / 1000	Both
2.	Terra	MODIS	1000	Both
3.	Aqua	MODIS	1000	Both
4.	NOAA – 18	AVHRR	1000	Night
5.	NOAA – 19	AVHRR	1000	Night
6.	Metop - 1	AVHRR	1000	Night
7.	Metop - 2	AVHRR	1000	Night

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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)
