



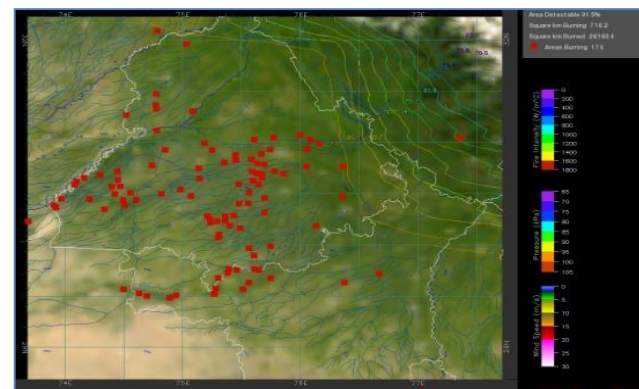
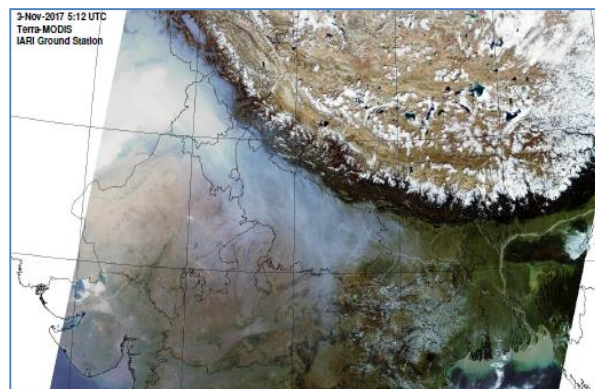
**Bulletin
No. 55**

**Events Date:
24-Nov-2019**

**Issued on:
25-Nov-2019**



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



Prepared by:

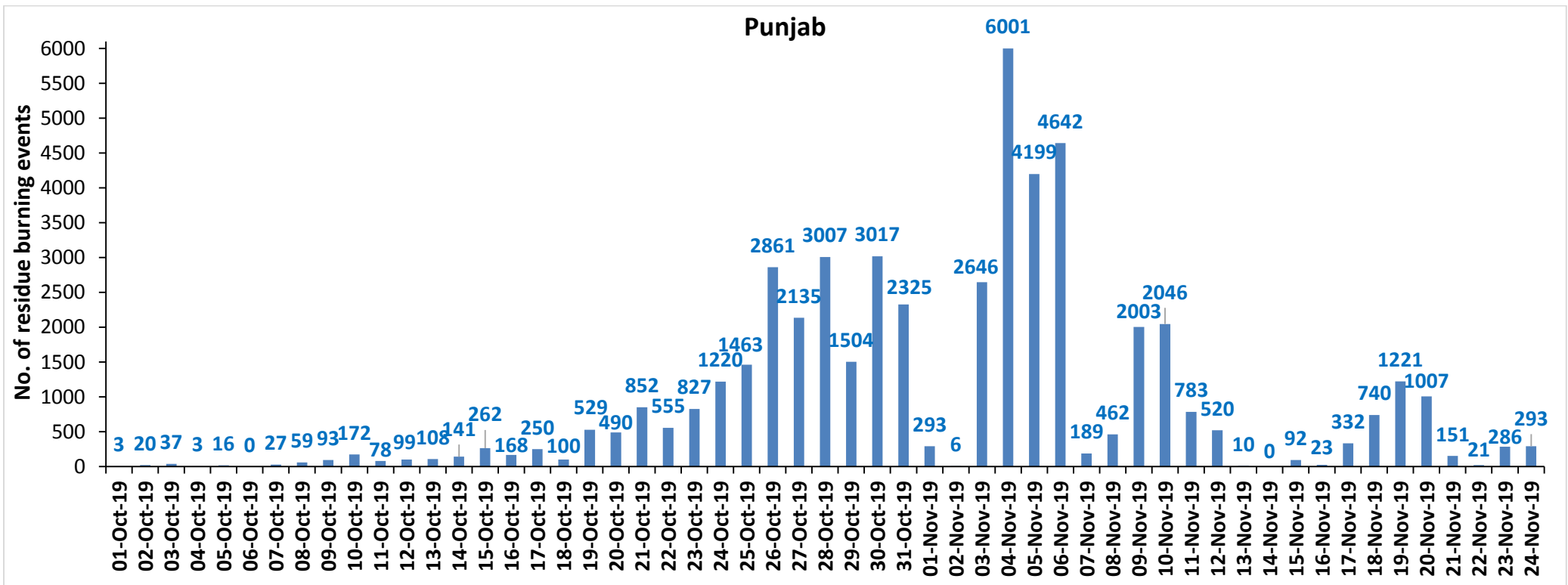
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

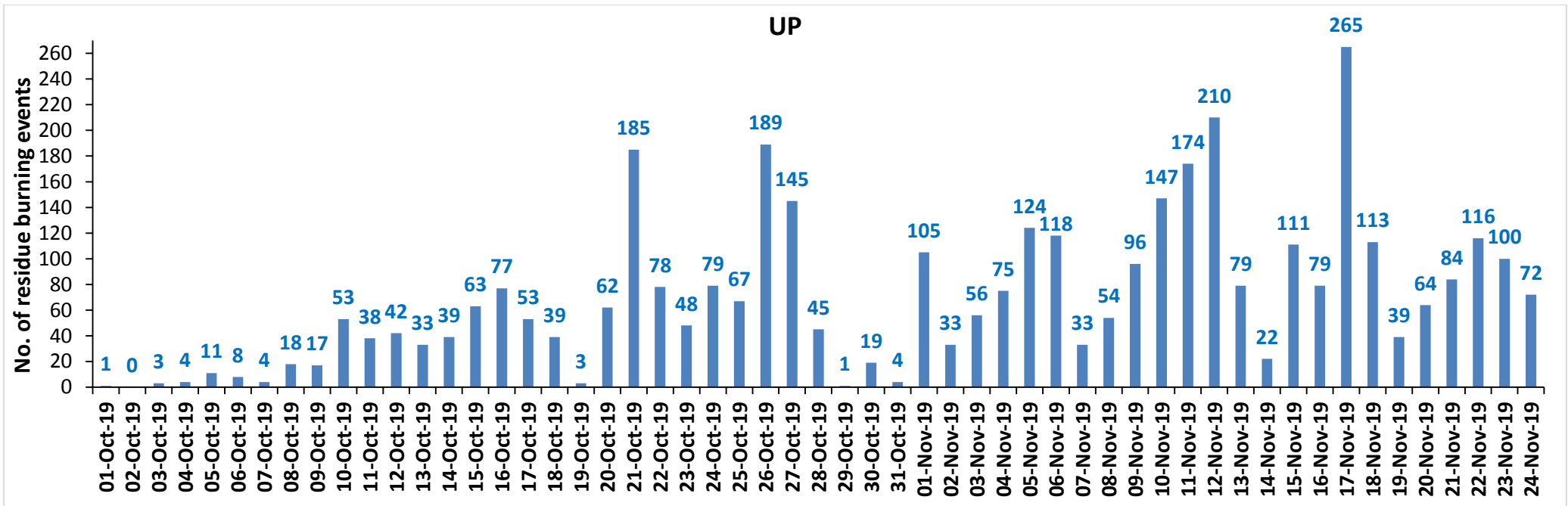
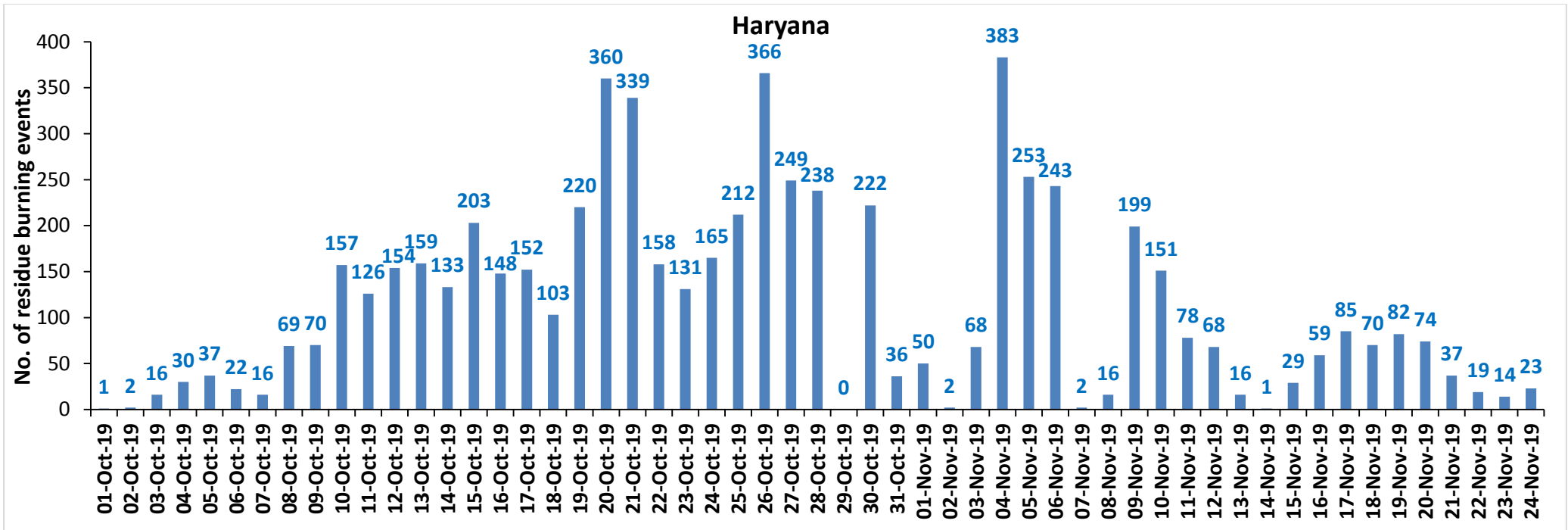
<http://creams.iari.res.in>

Highlights for 24-November-2019

- Satellites detected **388** residue burning events in the three study States on **24-Nov-2019**.
- The burning events detected on **24-Nov-2019** are **293**, **23** and **72** in Punjab, Haryana and UP, respectively.
- The number of events has decreased from **400** on **23-Nov-2019** to **388** on **24-Nov-2019** in the three states.
- The state of Haryana and UP were partially covered with clouds which prevented fire event detection by satellites.
- Total **60500** burning events were detected in the three States between **01-Oct-2019** and **24-Nov-2019**, which are distributed as **50387**, **6316** and **3797** in Punjab, Haryana and UP, respectively.
- Overall, the total burning events recorded in the three states are **18.6%** less than in 2018 till date. UP recorded **36.4%** reduction, Haryana recorded **29.5%** reduction, and Punjab recorded **15.2%** reduction, respectively, in the current season than in 2018.

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

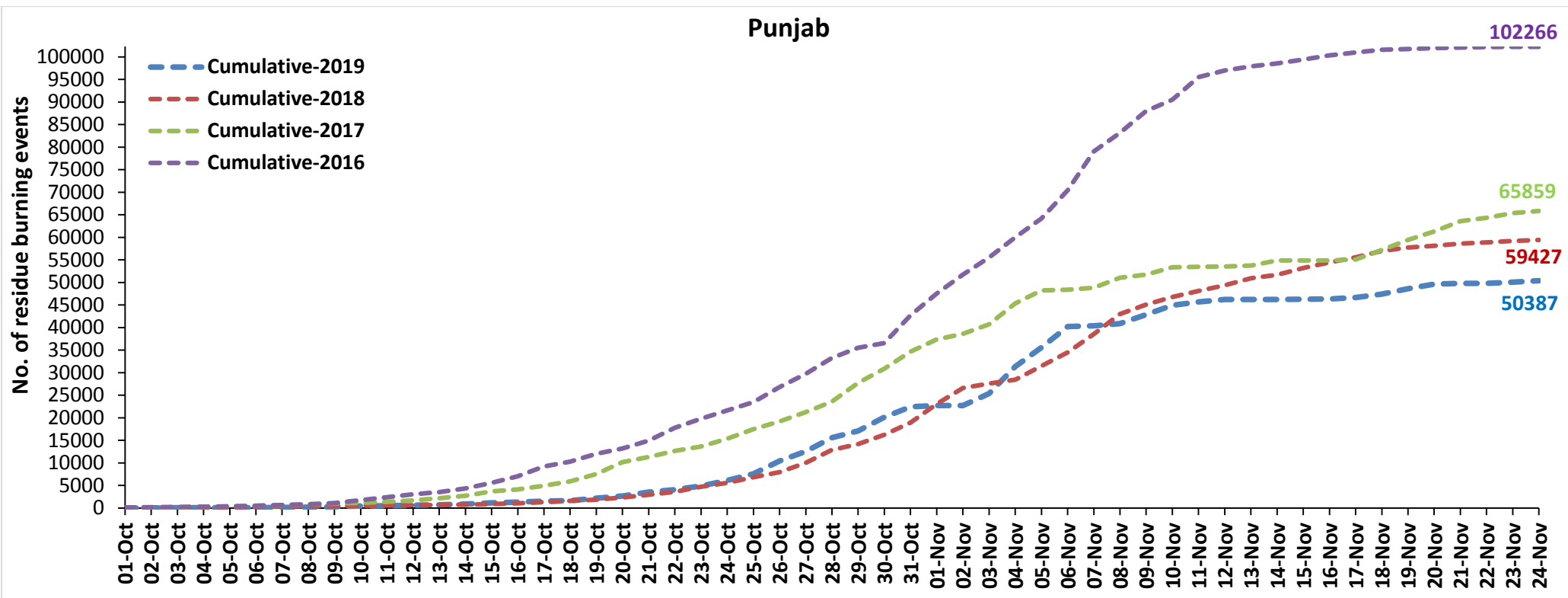




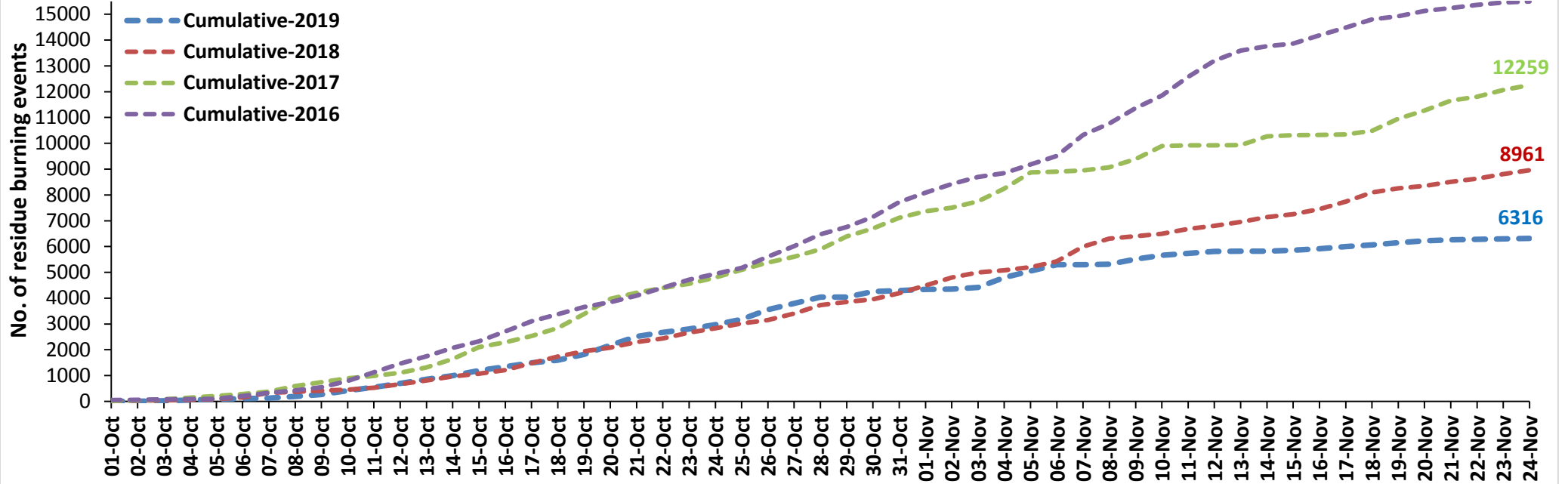
Comparison of residue burning events in current year (2019) with previous years (2018, 2017 & 2016) for the three study States

(01-Oct to 24-Nov)

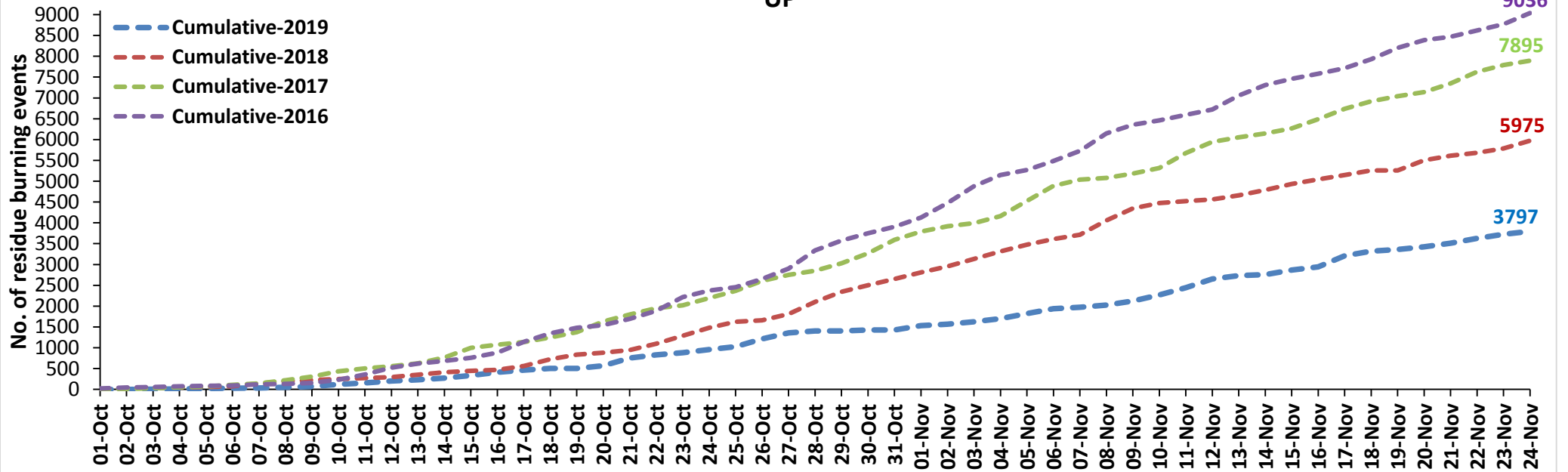
Punjab



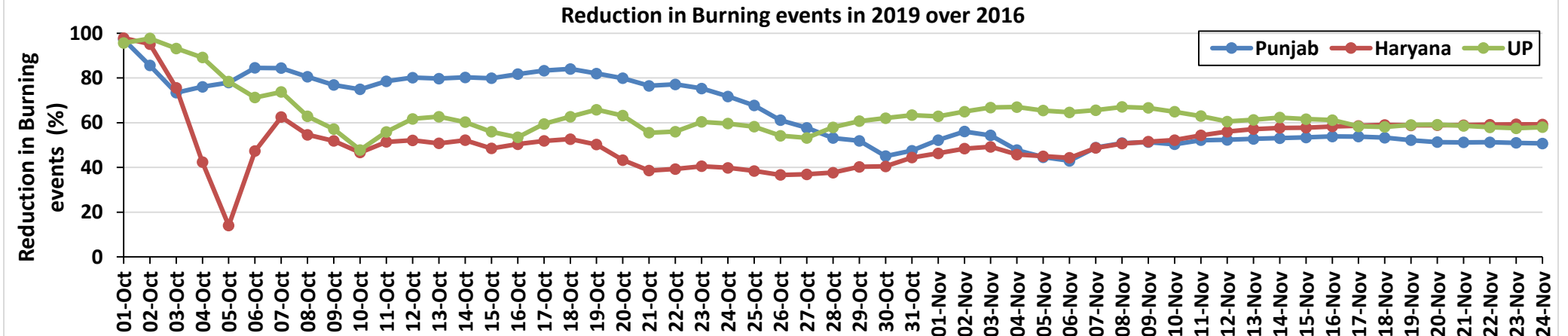
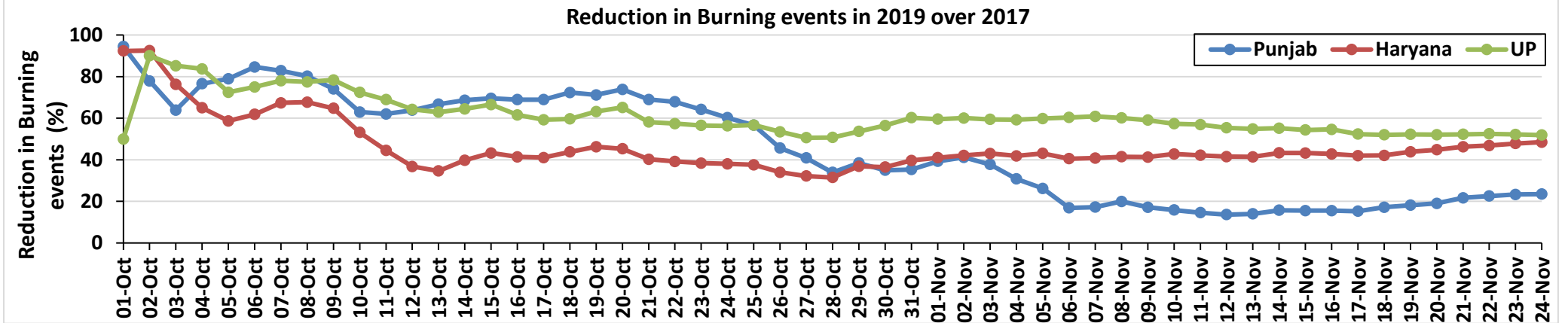
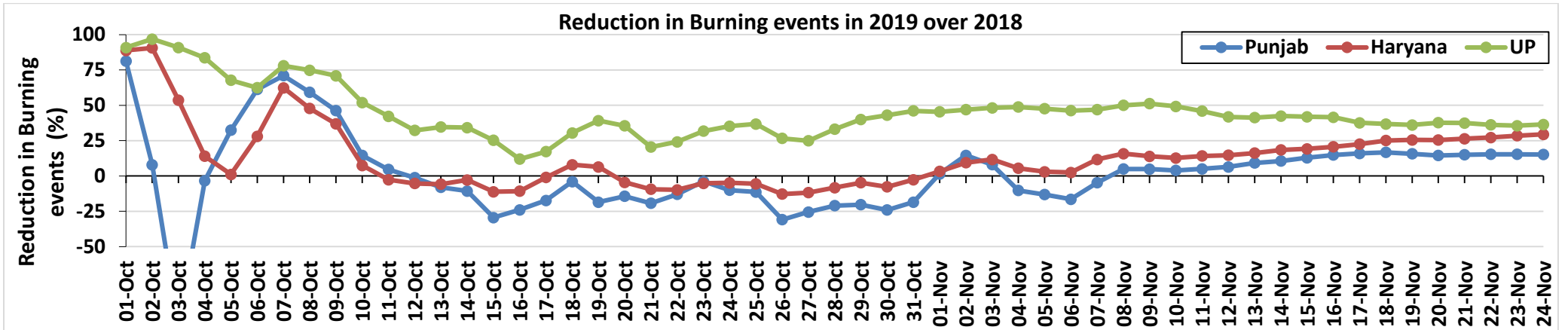
Haryana



UP

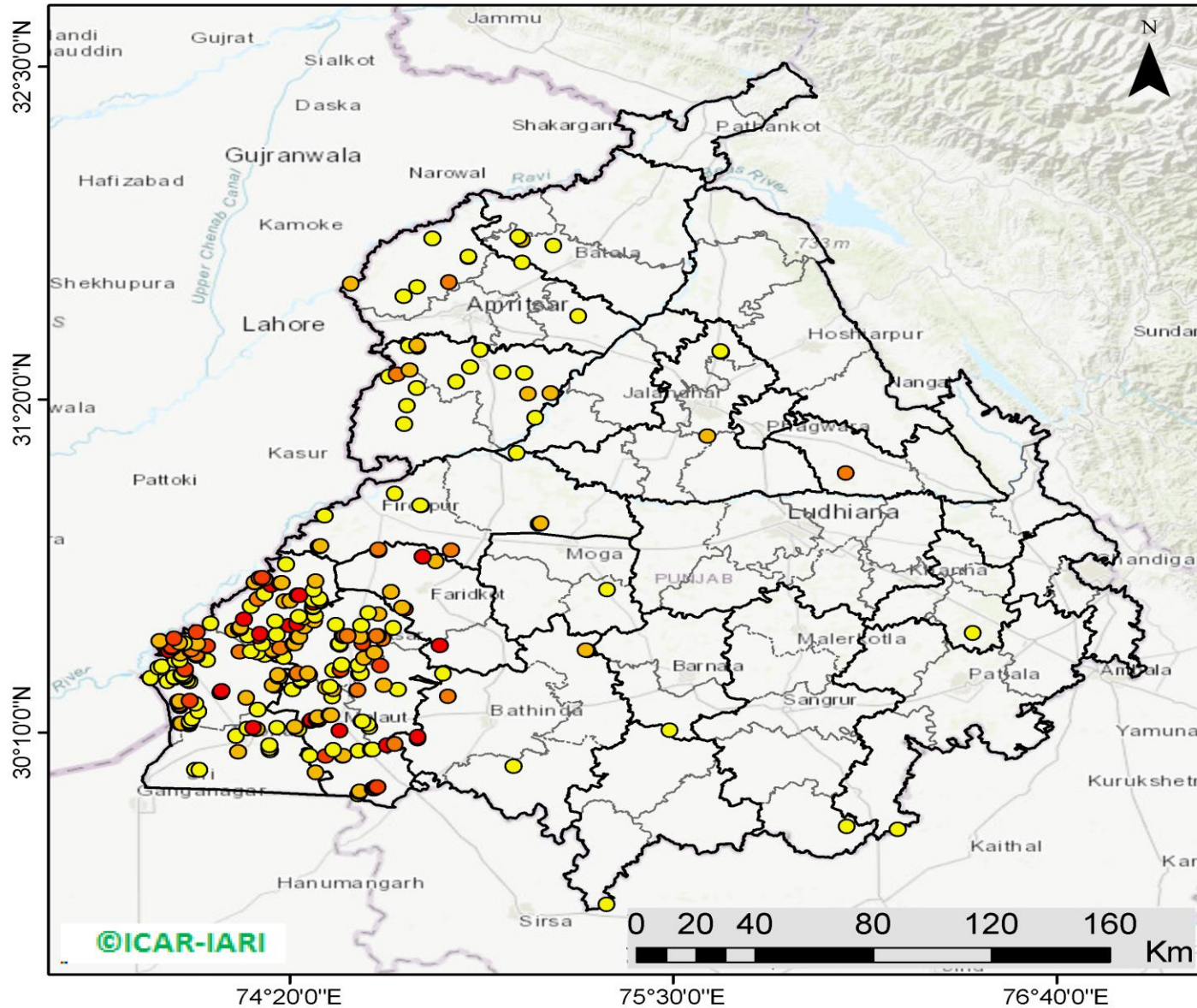


Percent Reduction in Burning events in 2019 over 2018, 2017 and 2016 (Daily Cumulative)



(a) Punjab

RICE RESIDUE BURNING IN PUNJAB



293 burning events detected in Punjab on 24th November 2019

Fire Intensity (W/m²)

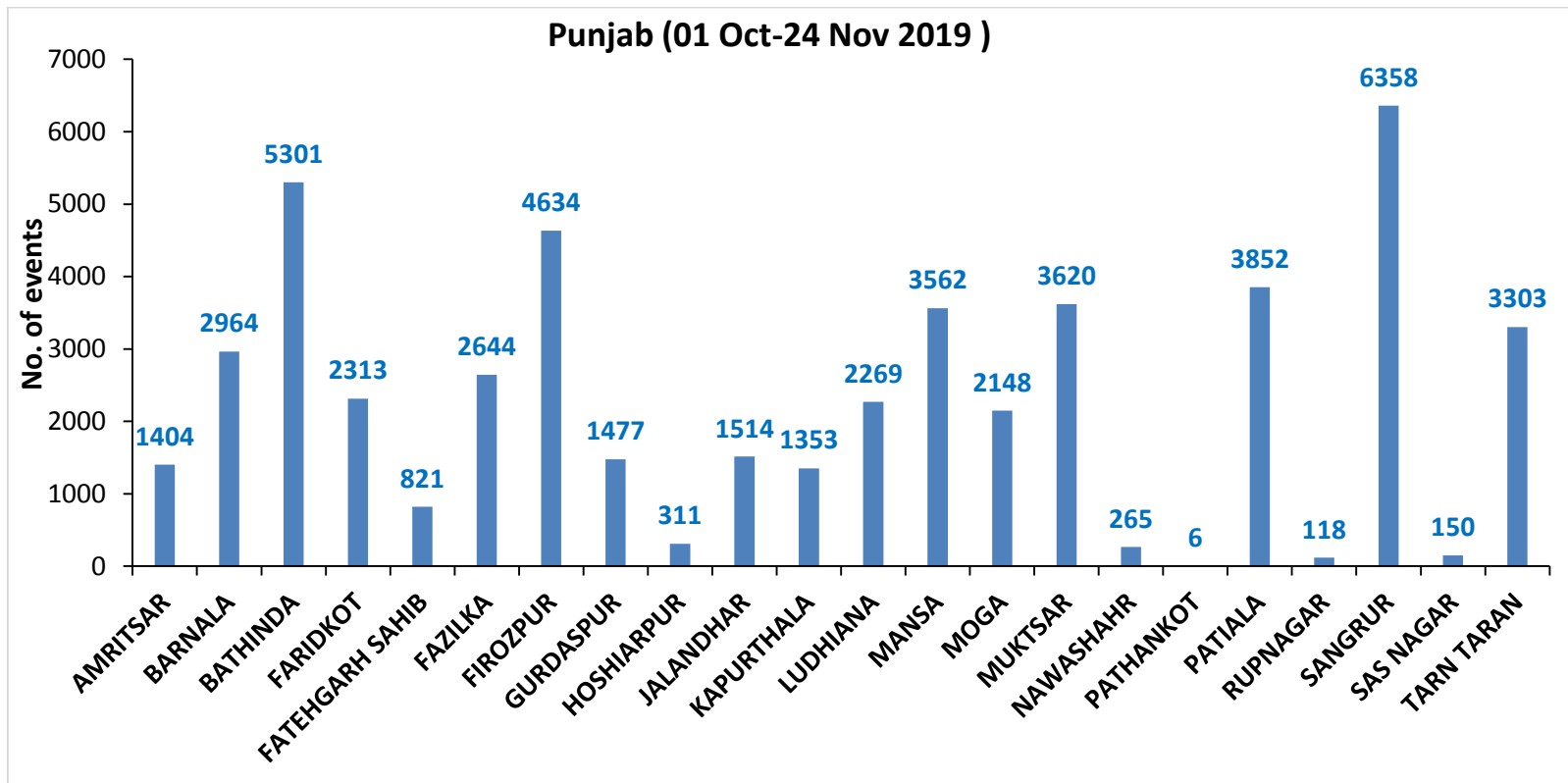
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



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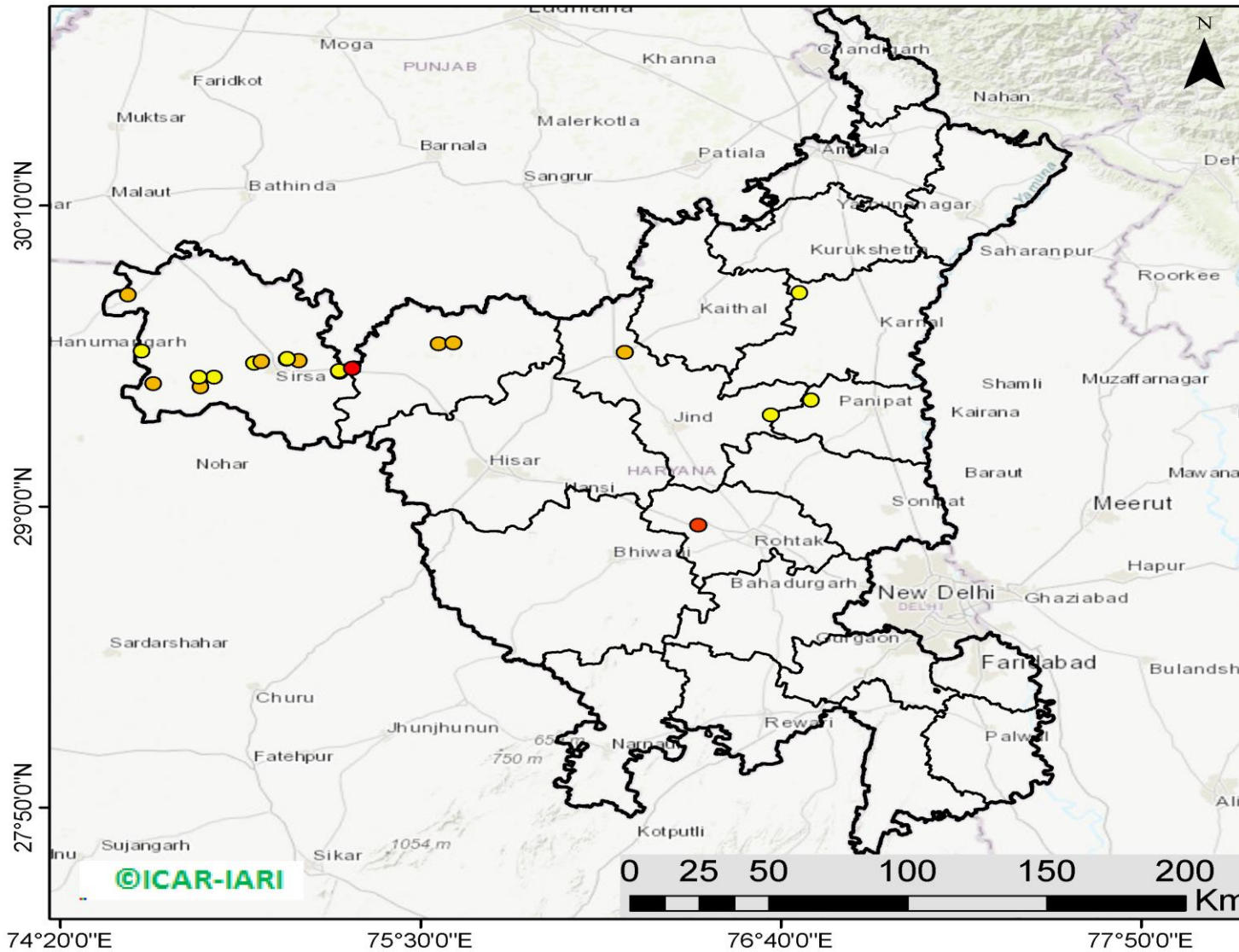
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (01 Oct to 24-Nov 2019)



(b) Haryana

RICE RESIDUE BURNING IN HARYANA



23 burning events detected in Haryana on 24th November 2019

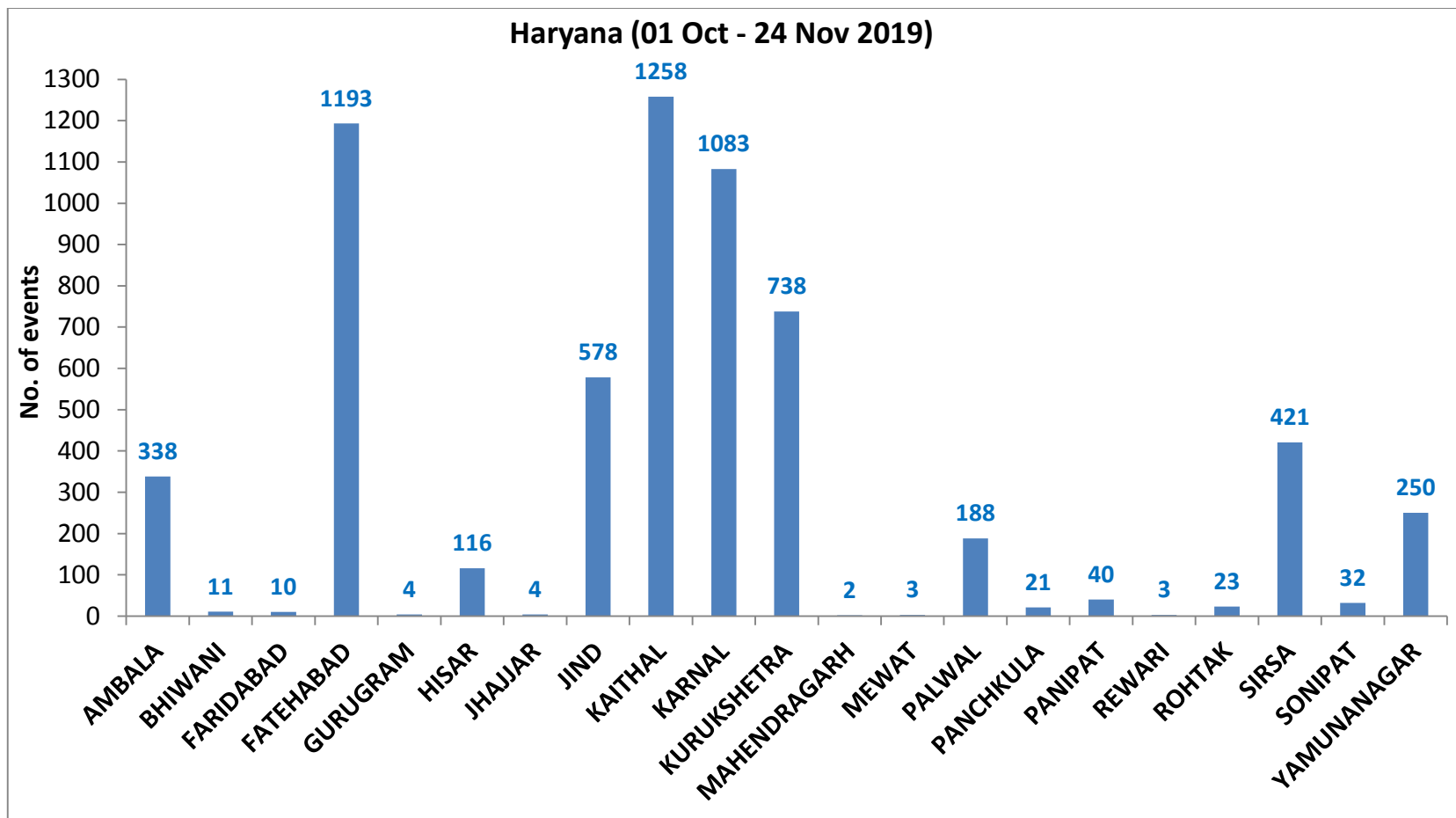
Fire Intensity (W/m²)

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



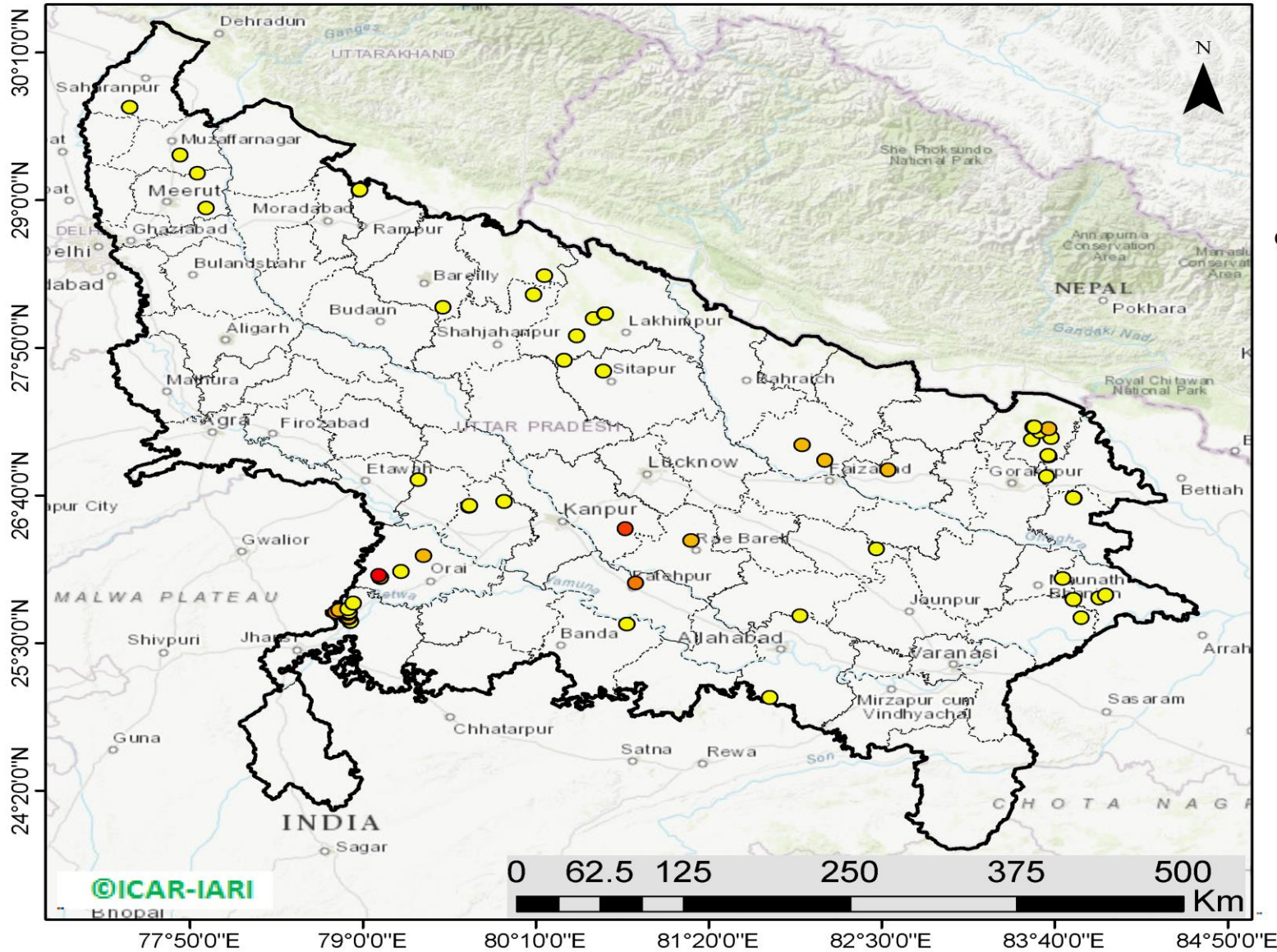
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (01 Oct to 24-Nov 2019)



(c) UP

RICE RESIDUE BURNING IN UTTAR PRADESH



72 burning events detected in Uttar Pradesh on 24th November 2019

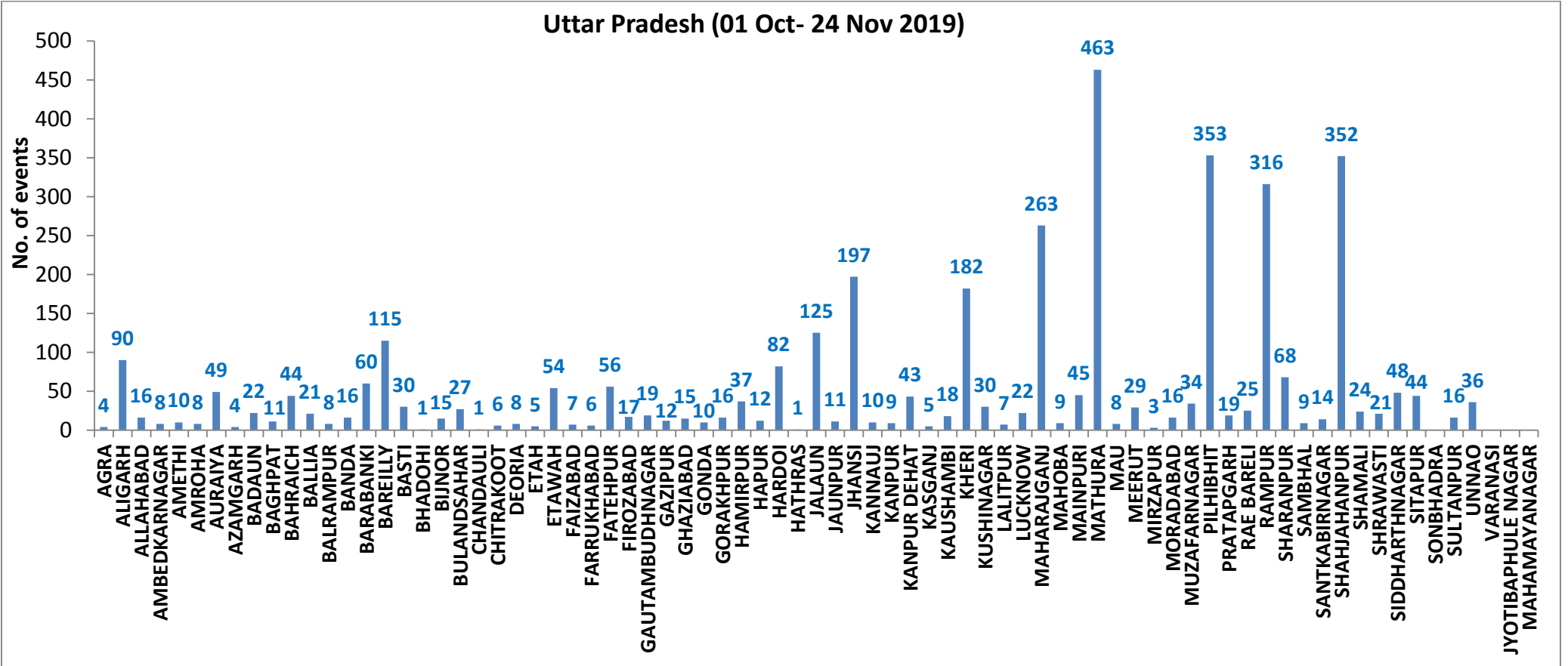
Fire Intensity (W/m²)

- 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 24-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 24-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
18-Nov	740	1400	2147	568	70	356	139	312	113	111	180	217	923	1867	2466	1097
19-Nov	1221	752	2200	168	82	159	471	125	39	3	122	273	1342	914	2793	566
20-Nov	1007	385	1857	240	74	88	325	204	64	243	101	183	1145	716	2283	627
21-Nov	151	480	2310	112	37	161	378	115	84	107	205	86	272	748	2893	313
22-Nov	21	287	719	99	19	122	154	118	116	72	281	148	156	481	1154	365
23-Nov	283	317	1033	54	14	180	259	97	100	106	163	151	400	603	1455	302
24-Nov	293	229	507	21	23	152	192	36	72	186	105	265	388	567	804	322
Total	50387	59427	65859	102266	6316	8961	12259	15494	3797	5975	7895	9036	60500	74363	86013	126796

(a) Punjab

Districts	01Oct-24 Nov			
	2016	2017	2018	2019
AMRITSAR	2170	1340	1364	1404
BARNALA	5698	3371	3273	2964
BATHINDA	8839	5623	6336	5301
FARIDKOT	4626	3447	3051	2313
FATEHGARH SAHIB	2461	1638	857	821
FAZILKA	0	0	0	2644
FIROZPUR	13612	9706	9955	4634
GURDASPUR	2215	1581	1165	1477
HOSHIARPUR	901	489	198	311
JALANDHAR	4660	2101	1382	1514
KAPURTHALA	3134	1616	750	1353
LUDHIANA	9537	4611	3007	2269
MANSA	5641	4459	4304	3562
MOGA	6393	2658	2727	2148
MUKTSAR	7026	5270	5759	3620
NAWASHAHR (SBS Nagar)	1610	815	386	265
PATHANKOT	0	0	0	6
PATIALA	6541	5029	4213	3852
RUPNAGAR	717	326	86	118
SANGRUR	11862	8412	7778	6358
SAS NAGAR	115	107	104	150
TARN TARAN	4508	3260	2732	3303
Total	102266	65859	59427	50387

(b) Haryana

Districts	01Oct-24 Nov			
	2016	2017	2018	2019
AMBALA	532	498	329	338
BHIWANI	85	37	20	11
FARIDABAD	288	341	185	10
FATEHABAD	4814	3615	2492	1193
GURUGRAM	0	0	0	4
HISAR	400	178	202	116
JHAJJAR	34	18	27	4
JIND	858	939	875	578
KAITHAL	1748	1512	1291	1258
KARNAL	1628	1506	851	1083
KURUKSHETRA	1078	1147	680	738
MAHENDRAGARH	0	0	0	2
MEWAT	0	0	0	3
PALWAL	0	0	0	188
PANCHKULA	0	0	3	21
PANIPAT	92	94	60	40
REWARI	0	0	0	3
ROHTAK	96	74	35	23
SIRSA	3510	1921	1677	421
SONIPAT	87	69	41	32
YAMUNANAGAR	244	310	193	250
Total	15494	12259	8961	6316

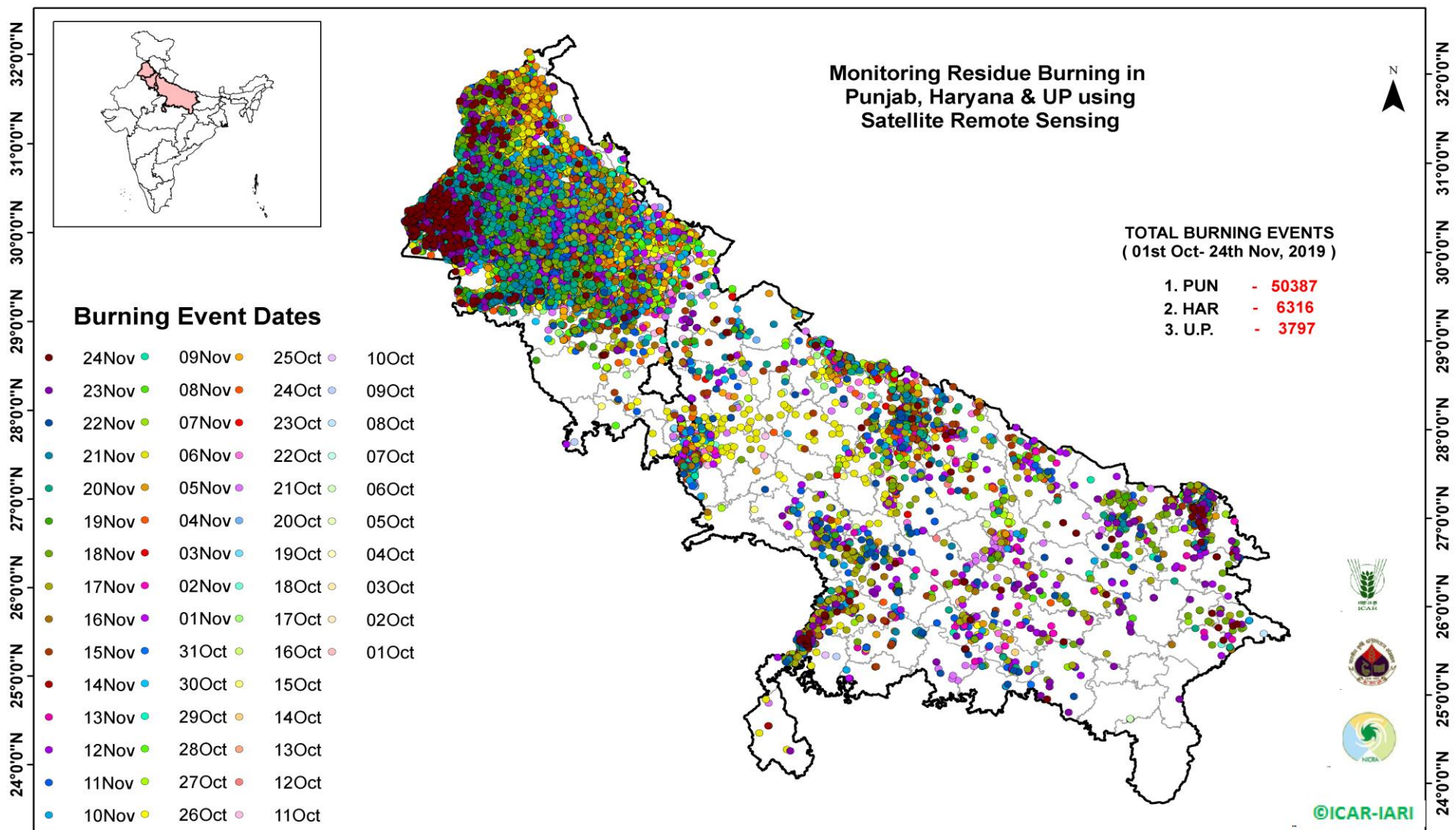
(c) Uttar Pradesh

Districts	01Oct-24 Nov			
	2016	2017	2018	2019
AGRA	0	0	0	4
ALIGARH	55	80	93	90
ALLAHABAD	5	15	17	16
AMBEDKARNAGAR	71	54	18	8
AMETHI	0	0	0	10
AMROHA	0	0	0	8
AURAIYA	255	213	64	49
AZAMGARH	37	43	29	4
BADAUN	12	7	11	22
BAGHPAT	0	0	0	11
BAHRAICH	78	40	59	44
BALLIA	19	40	20	21
BALRAMPUR	36	27	42	8
BANDA	2	17	9	16
BARABANKI	219	166	171	60
BAREILLY	255	224	117	115
BASTI	144	186	120	30
BHADOHI	0	0	0	1
BIJNOR	62	56	16	15
BULANDSAHAR	31	31	17	27
CHANDAULI	12	10	1	1
CHITRAKOOT	0	0	0	6
DEORIA	61	75	58	8
ETAH	21	31	28	5
ETAWAH	169	120	60	54
FAIZABAD	14	14	9	7
FARRUKHABAD	0	0	0	6
FATEHPUR	70	55	84	56
FIROZABAD	23	18	11	17

GAUTAMBUDHNAGAR	27	42	12	19
GAZIPUR	15	14	17	12
GHAZIABAD	85	51	37	15
GONDA	47	34	19	10
GORAKHPUR	66	112	128	16
HAMIRPUR	0	0	1	37
HAPUR	0	0	0	12
HARDOI	250	200	110	82
HATHRAS	0	0	0	1
JALAUN	0	0	0	125
JAUNPUR	21	29	21	11
JHANSI	0	0	2	197
KANNAUJ	34	18	8	10
KANPUR	17	9	13	9
KANPUR DEHAT	67	66	26	43
KASGANJ	0	0	0	5
KAUSHAMBI	32	46	46	18
KHERI	452	293	208	182
KUSHINAGAR	60	142	143	30
LALITPUR	0	0	0	7
LUCKNOW	62	30	26	22
MAHARAJGANJ	682	1000	1001	263
MAHOBA	0	0	0	9
MAINPURI	91	90	54	45
MATHURA	1455	1083	1049	463
MAU	13	18	13	8
MEERUT	88	88	21	29
MIRZAPUR	5	13	6	3
MORADABAD	53	36	14	16
MUZAFARNAGAR	140	149	49	34
PILHIBHIT	945	729	433	353
PRATAPGARH	43	52	34	19

RAE BARELI	111	97	53	25
RAMPUR	622	632	223	316
SHARANPUR	111	131	66	68
SAMBHAL	0	0	0	9
SANTKABIRNAGAR	55	63	53	14
SHAHJAHANPUR	1145	685	384	352
SHAMALI	0	0	0	24
SHRAWASTI	37	31	36	21
SIDDHARTHANAGAR	255	184	467	48
SITAPUR	131	74	42	44
SONBHADRA	15	14	11	0
SULTANPUR	73	48	42	16
UNNAO	64	54	40	36
VARANASI	2	0	0	0
JYOTIBAPHULE NAGAR	12	14	5	0
MAHAMAYANAGAR	2	2	8	0
Total	9036	7895	5975	3797

Map of Cumulative Burning Events (01 Oct – 24 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 24-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	74.68000	31.69518	14:18:00	D	3.80
2	AMRITSAR	AJNALA	S-NPP	74.72229	31.72727	14:18:00	D	1.90
3	AMRITSAR	AJNALA	S-NPP	74.52032	31.73889	14:18:00	D	6.40
4	AMRITSAR	AJNALA	AQUA	74.81900	31.74500	13:15:00	D	10.70
5	AMRITSAR	AJNALA	S-NPP	74.87816	31.83060	12:42:00	D	4.90
6	AMRITSAR	AJNALA	S-NPP	74.87771	31.83345	12:42:00	D	3.80
7	AMRITSAR	AJNALA	S-NPP	74.76812	31.89829	12:42:00	D	2.90
8	AMRITSAR	BABA BAKALA	S-NPP	75.21162	31.62615	14:18:00	D	2.20
9	BARNALA	TAPPA	S-NPP	75.48920	30.17316	14:18:00	D	3.30
10	BATHINDA	BATHINDA	AQUA	74.65300	30.12600	13:15:00	D	13.40
11	BATHINDA	BATHINDA	S-NPP	74.72350	30.14584	14:18:00	D	8.10
12	BATHINDA	BATHINDA	S-NPP	74.72307	30.15167	14:18:00	D	28.60
13	BATHINDA	BATHINDA	AQUA	74.81600	30.29300	13:15:00	D	14.80
14	BATHINDA	RAMPURA PHUL	S-NPP	75.23812	30.45326	14:18:00	D	7.20
15	BATHINDA	RAMPURA PHUL	S-NPP	75.23410	30.45486	14:18:00	D	7.20
16	BATHINDA	TALWANDI SABO	S-NPP	75.01449	30.04720	14:18:00	D	3.50
17	FARIDKOT	FARIDKOT	AQUA	74.68300	30.59900	13:15:00	D	15.20
18	FARIDKOT	FARIDKOT	S-NPP	74.67583	30.60377	14:18:00	D	5.40
19	FARIDKOT	FARIDKOT	S-NPP	74.64096	30.65927	14:18:00	D	7.30
20	FARIDKOT	FARIDKOT	S-NPP	74.77888	30.76667	14:18:00	D	7.50
21	FARIDKOT	FARIDKOT	AQUA	74.73800	30.78300	13:15:00	D	23.40
22	FARIDKOT	FARIDKOT	S-NPP	74.60296	30.80282	14:18:00	D	8.80
23	FARIDKOT	FARIDKOT	S-NPP	74.60252	30.80865	14:18:00	D	12.30
24	FARIDKOT	JAITO	S-NPP	74.78954	30.47037	14:18:00	D	25.50
25	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.41237	30.51584	14:18:00	D	4.60
26	FAZILKA	ABOHAR	S-NPP	74.41290	30.02642	14:18:00	D	5.10
27	FAZILKA	ABOHAR	S-NPP	74.04675	30.03535	14:18:00	D	3.00
28	FAZILKA	ABOHAR	S-NPP	74.05953	30.03626	14:18:00	D	3.40
29	FAZILKA	ABOHAR	S-NPP	74.17625	30.09863	14:18:00	D	6.20
30	FAZILKA	ABOHAR	S-NPP	74.27347	30.10357	12:42:00	D	3.40

31	FAZILKA	ABOHAR	S-NPP	74.27229	30.11073	14:18:00	D	4.20
32	FAZILKA	ABOHAR	S-NPP	74.27135	30.12209	14:18:00	D	2.90
33	FAZILKA	ABOHAR	S-NPP	74.17152	30.15510	14:18:00	D	4.20
34	FAZILKA	ABOHAR	S-NPP	74.23138	30.17640	14:18:00	D	11.30
35	FAZILKA	ABOHAR	S-NPP	74.22871	30.17830	14:18:00	D	8.90
36	FAZILKA	ABOHAR	S-NPP	74.23311	30.17858	14:18:00	D	8.00
37	FAZILKA	ABOHAR	S-NPP	74.20461	30.18020	14:18:00	D	3.10
38	FAZILKA	ABOHAR	AQUA	74.22300	30.18200	13:15:00	D	21.40
39	FAZILKA	ABOHAR	S-NPP	74.29507	30.18256	14:18:00	D	3.60
40	FAZILKA	ABOHAR	S-NPP	74.23627	30.24725	14:18:00	D	2.90
41	FAZILKA	FAZILKA	S-NPP	74.02667	30.19328	14:18:00	D	2.90
42	FAZILKA	FAZILKA	S-NPP	74.00057	30.19714	14:18:00	D	8.70
43	FAZILKA	FAZILKA	S-NPP	74.00484	30.19743	14:18:00	D	9.80
44	FAZILKA	FAZILKA	S-NPP	74.03047	30.19918	14:18:00	D	3.70
45	FAZILKA	FAZILKA	S-NPP	74.02998	30.20478	14:18:00	D	3.70
46	FAZILKA	FAZILKA	S-NPP	74.03737	30.21377	12:42:00	D	4.10
47	FAZILKA	FAZILKA	S-NPP	74.05719	30.24053	14:18:00	D	3.50
48	FAZILKA	FAZILKA	S-NPP	73.99969	30.25900	14:18:00	D	6.10
49	FAZILKA	FAZILKA	S-NPP	73.99997	30.26313	14:18:00	D	17.30
50	FAZILKA	FAZILKA	S-NPP	73.99922	30.26460	14:18:00	D	12.50
51	FAZILKA	FAZILKA	S-NPP	74.04630	30.26799	14:18:00	D	4.60
52	FAZILKA	FAZILKA	S-NPP	73.99473	30.27405	14:18:00	D	4.40
53	FAZILKA	FAZILKA	S-NPP	73.99402	30.27548	14:18:00	D	3.50
54	FAZILKA	FAZILKA	S-NPP	73.99829	30.27579	14:18:00	D	5.80
55	FAZILKA	FAZILKA	AQUA	74.03000	30.27800	13:15:00	D	16.80
56	FAZILKA	FAZILKA	S-NPP	74.20240	30.28838	12:42:00	D	5.50
57	FAZILKA	FAZILKA	AQUA	74.12300	30.30600	13:15:00	D	23.50
58	FAZILKA	FAZILKA	AQUA	74.12600	30.31200	13:15:00	D	28.10
59	FAZILKA	FAZILKA	S-NPP	74.28625	30.32835	12:42:00	D	6.20
60	FAZILKA	FAZILKA	S-NPP	74.28270	30.33069	12:42:00	D	6.90
61	FAZILKA	FAZILKA	S-NPP	74.02760	30.34393	14:18:00	D	3.30
62	FAZILKA	FAZILKA	S-NPP	73.96296	30.34502	14:18:00	D	2.90
63	FAZILKA	FAZILKA	S-NPP	74.02284	30.34924	14:18:00	D	2.90

64	FAZILKA	FAZILKA	S-NPP	73.91048	30.35676	14:18:00	D	2.30
65	FAZILKA	FAZILKA	S-NPP	73.98333	30.35772	14:18:00	D	8.10
66	FAZILKA	FAZILKA	S-NPP	73.91068	30.35812	14:18:00	D	2.30
67	FAZILKA	FAZILKA	S-NPP	74.01333	30.35985	14:18:00	D	8.50
68	FAZILKA	FAZILKA	S-NPP	73.98283	30.36148	14:18:00	D	2.90
69	FAZILKA	FAZILKA	S-NPP	74.29922	30.36265	14:18:00	D	6.30
70	FAZILKA	FAZILKA	S-NPP	74.30370	30.36295	14:18:00	D	6.30
71	FAZILKA	FAZILKA	S-NPP	74.00857	30.36315	14:18:00	D	14.50
72	FAZILKA	FAZILKA	S-NPP	74.01286	30.36342	14:18:00	D	14.50
73	FAZILKA	FAZILKA	S-NPP	74.00856	30.36515	14:18:00	D	8.50
74	FAZILKA	FAZILKA	S-NPP	74.01286	30.36546	14:18:00	D	8.50
75	FAZILKA	FAZILKA	S-NPP	74.29877	30.36835	14:18:00	D	5.70
76	FAZILKA	FAZILKA	S-NPP	74.00379	30.36847	14:18:00	D	4.60
77	FAZILKA	FAZILKA	S-NPP	74.00381	30.37045	14:18:00	D	4.50
78	FAZILKA	FAZILKA	S-NPP	74.00810	30.37076	14:18:00	D	4.80
79	FAZILKA	FAZILKA	S-NPP	74.01521	30.38614	14:18:00	D	17.30
80	FAZILKA	FAZILKA	S-NPP	74.01528	30.38820	14:18:00	D	17.10
81	FAZILKA	FAZILKA	S-NPP	73.93489	30.39333	12:42:00	D	3.00
82	FAZILKA	FAZILKA	S-NPP	73.94527	30.39836	14:18:00	D	2.30
83	FAZILKA	FAZILKA	S-NPP	73.98658	30.41805	14:18:00	D	4.50
84	FAZILKA	FAZILKA	S-NPP	74.08199	30.41886	14:18:00	D	4.40
85	FAZILKA	FAZILKA	S-NPP	73.99947	30.41893	14:18:00	D	4.10
86	FAZILKA	FAZILKA	S-NPP	74.05023	30.43369	14:18:00	D	10.90
87	FAZILKA	FAZILKA	S-NPP	74.25741	30.43624	14:18:00	D	3.80
88	FAZILKA	FAZILKA	S-NPP	74.04976	30.43931	14:18:00	D	10.90
89	FAZILKA	FAZILKA	S-NPP	74.00188	30.44165	14:18:00	D	9.50
90	FAZILKA	FAZILKA	S-NPP	74.23432	30.44615	14:18:00	D	4.20
91	FAZILKA	FAZILKA	S-NPP	74.18076	30.44825	14:18:00	D	11.00
92	FAZILKA	FAZILKA	S-NPP	74.21610	30.45064	14:18:00	D	4.10
93	FAZILKA	FAZILKA	AQUA	73.96800	30.45100	13:15:00	D	23.40
94	FAZILKA	FAZILKA	S-NPP	74.03110	30.45498	14:18:00	D	10.00
95	FAZILKA	FAZILKA	S-NPP	74.03541	30.45528	14:18:00	D	11.70
96	FAZILKA	FAZILKA	S-NPP	73.97428	30.46226	14:18:00	D	6.50

97	FAZILKA	FAZILKA	S-NPP	73.97856	30.46256	14:18:00	D	6.50
98	FAZILKA	FAZILKA	S-NPP	73.97485	30.46645	14:18:00	D	19.20
99	FAZILKA	FAZILKA	S-NPP	74.07778	30.46957	14:18:00	D	15.90
100	FAZILKA	FAZILKA	S-NPP	74.08212	30.46987	14:18:00	D	15.90
101	FAZILKA	FAZILKA	S-NPP	74.01199	30.47622	14:18:00	D	3.10
102	FAZILKA	FAZILKA	S-NPP	74.05201	30.47708	14:18:00	D	7.80
103	FAZILKA	FAZILKA	S-NPP	74.00210	30.47994	12:42:00	D	4.60
104	FAZILKA	FAZILKA	S-NPP	74.01261	30.48017	14:18:00	D	3.40
105	FAZILKA	FAZILKA	S-NPP	73.99928	30.48061	12:42:00	D	5.30
106	FAZILKA	FAZILKA	S-NPP	73.93865	30.48658	14:18:00	D	4.10
107	FAZILKA	FAZILKA	S-NPP	73.93774	30.48777	14:18:00	D	5.60
108	FAZILKA	FAZILKA	AQUA	73.98200	30.49600	13:15:00	D	18.70
109	FAZILKA	FAZILKA	AQUA	74.05000	30.51900	13:15:00	D	15.70
110	FAZILKA	JALALABAD	S-NPP	74.28325	30.44942	14:18:00	D	5.30
111	FAZILKA	JALALABAD	S-NPP	74.28283	30.45512	14:18:00	D	5.30
112	FAZILKA	JALALABAD	S-NPP	74.30476	30.46233	14:18:00	D	12.30
113	FAZILKA	JALALABAD	S-NPP	74.24977	30.47580	14:18:00	D	4.40
114	FAZILKA	JALALABAD	S-NPP	74.34428	30.47648	14:18:00	D	6.00
115	FAZILKA	JALALABAD	S-NPP	74.36063	30.50063	14:18:00	D	12.00
116	FAZILKA	JALALABAD	S-NPP	74.35744	30.50215	14:18:00	D	7.30
117	FAZILKA	JALALABAD	S-NPP	74.36197	30.50243	14:18:00	D	9.50
118	FAZILKA	JALALABAD	S-NPP	74.23418	30.50332	14:18:00	D	48.60
119	FAZILKA	JALALABAD	S-NPP	74.23863	30.50364	14:18:00	D	48.60
120	FAZILKA	JALALABAD	S-NPP	74.23521	30.50591	14:18:00	D	60.80
121	FAZILKA	JALALABAD	S-NPP	74.23968	30.50619	14:18:00	D	60.80
122	FAZILKA	JALALABAD	S-NPP	74.20712	30.50713	14:18:00	D	3.40
123	FAZILKA	JALALABAD	S-NPP	74.29336	30.50961	14:18:00	D	1.70
124	FAZILKA	JALALABAD	S-NPP	74.24262	30.50964	14:18:00	D	56.60
125	FAZILKA	JALALABAD	S-NPP	74.24367	30.51217	14:18:00	D	46.30
126	FAZILKA	JALALABAD	S-NPP	74.16247	30.52401	14:18:00	D	8.90
127	FAZILKA	JALALABAD	S-NPP	74.17964	30.53084	14:18:00	D	18.00
128	FAZILKA	JALALABAD	S-NPP	74.18406	30.53114	14:18:00	D	18.00
129	FAZILKA	JALALABAD	S-NPP	74.18359	30.53681	14:18:00	D	9.10

130	FAZILKA	JALALABAD	S-NPP	74.37740	30.53799	14:18:00	D	5.40
131	FAZILKA	JALALABAD	AQUA	74.33200	30.54100	13:15:00	D	33.60
132	FAZILKA	JALALABAD	AQUA	74.35300	30.54100	13:15:00	D	55.50
133	FAZILKA	JALALABAD	AQUA	74.35600	30.54600	13:15:00	D	42.10
134	FAZILKA	JALALABAD	S-NPP	74.09423	30.54788	14:18:00	D	1.60
135	FAZILKA	JALALABAD	S-NPP	74.28965	30.55528	14:18:00	D	3.50
136	FAZILKA	JALALABAD	AQUA	74.19400	30.56300	13:15:00	D	26.30
137	FAZILKA	JALALABAD	S-NPP	74.36103	30.57152	14:18:00	D	3.10
138	FAZILKA	JALALABAD	S-NPP	74.40342	30.60449	12:42:00	D	4.20
139	FAZILKA	JALALABAD	S-NPP	74.40520	30.60755	12:42:00	D	4.40
140	FAZILKA	JALALABAD	S-NPP	74.21548	30.60941	14:18:00	D	2.70
141	FAZILKA	JALALABAD	AQUA	74.40500	30.62100	13:15:00	D	21.20
142	FAZILKA	JALALABAD	AQUA	74.42800	30.62600	13:15:00	D	19.50
143	FAZILKA	JALALABAD	S-NPP	74.31786	30.62740	14:18:00	D	6.60
144	FAZILKA	JALALABAD	S-NPP	74.42539	30.62786	14:18:00	D	4.20
145	FAZILKA	JALALABAD	S-NPP	74.42314	30.62827	14:18:00	D	3.90
146	FAZILKA	JALALABAD	S-NPP	74.33597	30.62855	14:18:00	D	5.80
147	FAZILKA	JALALABAD	S-NPP	74.40605	30.63183	12:42:00	D	2.30
148	FAZILKA	JALALABAD	S-NPP	74.23592	30.63361	14:18:00	D	10.50
149	FAZILKA	JALALABAD	S-NPP	74.42279	30.63634	12:42:00	D	3.10
150	FAZILKA	JALALABAD	S-NPP	74.35728	30.64720	14:18:00	D	28.00
151	FAZILKA	JALALABAD	S-NPP	74.36182	30.64749	14:18:00	D	32.60
152	FAZILKA	JALALABAD	S-NPP	74.25695	30.65218	14:18:00	D	2.80
153	FAZILKA	JALALABAD	S-NPP	74.40651	30.66520	12:42:00	D	2.60
154	FAZILKA	JALALABAD	S-NPP	74.27712	30.68221	14:18:00	D	30.40
155	FAZILKA	JALALABAD	S-NPP	74.30376	30.68975	14:18:00	D	6.30
156	FAZILKA	JALALABAD	S-NPP	74.30827	30.69006	14:18:00	D	6.30
157	FAZILKA	JALALABAD	S-NPP	74.22686	30.69028	14:18:00	D	7.90
158	FAZILKA	JALALABAD	S-NPP	74.23133	30.69058	14:18:00	D	9.90
159	FAZILKA	JALALABAD	S-NPP	74.22775	30.69233	14:18:00	D	8.00
160	FAZILKA	JALALABAD	S-NPP	74.41306	30.69707	14:18:00	D	8.20
161	FAZILKA	JALALABAD	TERRA	74.25700	30.70400	11:40:00	D	10.00
162	FAZILKA	JALALABAD	TERRA	74.24200	30.70700	11:40:00	D	8.70

163	FAZILKA	JALALABAD	TERRA	74.24900	30.70900	11:40:00	D	17.30
164	FAZILKA	JALALABAD	S-NPP	74.32233	30.75575	14:18:00	D	4.10
165	FIROZPUR	FIROZPUR	S-NPP	74.82493	30.80499	14:18:00	D	10.90
166	FIROZPUR	FIROZPUR	S-NPP	74.42273	30.81701	12:42:00	D	12.20
167	FIROZPUR	FIROZPUR	S-NPP	74.42178	30.81862	12:42:00	D	7.80
168	FIROZPUR	FIROZPUR	S-NPP	74.42732	30.82008	12:42:00	D	9.20
169	FIROZPUR	FIROZPUR	S-NPP	74.43930	30.92579	14:18:00	D	2.00
170	FIROZPUR	FIROZPUR	S-NPP	74.73227	30.96079	14:18:00	D	3.80
171	FIROZPUR	FIROZPUR	S-NPP	74.73068	30.96237	14:18:00	D	3.00
172	FIROZPUR	FIROZPUR	S-NPP	74.65355	31.00327	12:42:00	D	2.00
173	FIROZPUR	ZIRA	S-NPP	75.09149	30.89702	12:42:00	D	7.70
174	FIROZPUR	ZIRA	S-NPP	75.09657	30.89833	12:42:00	D	7.70
175	FIROZPUR	ZIRA	S-NPP	75.09264	30.89870	12:42:00	D	8.60
176	FIROZPUR	ZIRA	S-NPP	75.09768	30.90003	12:42:00	D	8.60
177	FIROZPUR	ZIRA	S-NPP	75.02428	31.14585	12:42:00	D	4.00
178	GURDASPUR	BATALA	S-NPP	75.04111	31.81319	12:42:00	D	3.70
179	GURDASPUR	BATALA	S-NPP	75.13546	31.87343	14:18:00	D	4.50
180	GURDASPUR	BATALA	S-NPP	75.03962	31.89229	14:18:00	D	6.00
181	GURDASPUR	BATALA	S-NPP	75.04062	31.89326	14:18:00	D	5.40
182	GURDASPUR	BATALA	S-NPP	75.02843	31.90376	14:18:00	D	4.40
183	JALANDHAR	JALANDHAR II	S-NPP	75.64595	31.50034	14:18:00	D	4.60
184	JALANDHAR	JALANDHAR II	S-NPP	75.64406	31.50229	14:18:00	D	3.50
185	JALANDHAR	NAKODAR	S-NPP	75.60462	31.20509	12:42:00	D	6.00
186	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.08120	31.26935	14:18:00	D	3.30
187	MANSA	SARDULGARH	S-NPP	75.29787	29.56290	12:42:00	D	3.90
188	MOGA	NIHAL SINGH WALA	S-NPP	75.29877	30.66686	12:42:00	D	3.20
189	MUKTSAR	GIDDARBAHA	AQUA	74.63000	30.12200	13:15:00	D	29.90
190	MUKTSAR	GIDDARBAHA	S-NPP	74.57639	30.18404	12:42:00	D	4.60
191	MUKTSAR	GIDDARBAHA	S-NPP	74.56976	30.19412	14:18:00	D	4.30
192	MUKTSAR	GIDDARBAHA	S-NPP	74.55280	30.20460	14:18:00	D	2.20
193	MUKTSAR	GIDDARBAHA	S-NPP	74.55505	30.20474	14:18:00	D	3.60
194	MUKTSAR	GIDDARBAHA	S-NPP	74.53950	30.31410	14:18:00	D	11.60
195	MUKTSAR	GIDDARBAHA	S-NPP	74.54063	30.31488	14:18:00	D	11.30

196	MUKTSAR	GIDDARBAHA	S-NPP	74.66227	30.31656	14:18:00	D	2.80
197	MUKTSAR	GIDDARBAHA	S-NPP	74.61872	30.33139	14:18:00	D	5.30
198	MUKTSAR	GIDDARBAHA	S-NPP	74.80116	30.37215	14:18:00	D	3.70
199	MUKTSAR	GIDDARBAHA	S-NPP	74.60908	30.40065	14:18:00	D	16.70
200	MUKTSAR	GIDDARBAHA	S-NPP	74.60859	30.40079	14:18:00	D	15.50
201	MUKTSAR	MALAUT	S-NPP	74.54217	29.94782	14:18:00	D	4.00
202	MUKTSAR	MALAUT	S-NPP	74.54476	29.95517	12:42:00	D	7.30
203	MUKTSAR	MALAUT	S-NPP	74.54701	29.95933	12:42:00	D	6.00
204	MUKTSAR	MALAUT	S-NPP	74.58658	29.96821	14:18:00	D	9.20
205	MUKTSAR	MALAUT	S-NPP	74.59119	29.96852	14:18:00	D	13.40
206	MUKTSAR	MALAUT	S-NPP	74.59532	29.97461	14:18:00	D	13.40
207	MUKTSAR	MALAUT	S-NPP	74.59992	29.97492	14:18:00	D	19.30
208	MUKTSAR	MALAUT	AQUA	74.44200	30.08300	13:15:00	D	19.50
209	MUKTSAR	MALAUT	S-NPP	74.49468	30.08388	14:18:00	D	5.20
210	MUKTSAR	MALAUT	S-NPP	74.39544	30.08436	14:18:00	D	2.10
211	MUKTSAR	MALAUT	S-NPP	74.49548	30.08490	14:18:00	D	7.90
212	MUKTSAR	MALAUT	S-NPP	74.54362	30.10198	12:42:00	D	3.50
213	MUKTSAR	MALAUT	S-NPP	74.46629	30.10617	14:18:00	D	2.50
214	MUKTSAR	MALAUT	S-NPP	74.58031	30.10719	14:18:00	D	3.40
215	MUKTSAR	MALAUT	S-NPP	74.58492	30.10751	14:18:00	D	3.40
216	MUKTSAR	MALAUT	AQUA	74.48500	30.17200	13:15:00	D	37.30
217	MUKTSAR	MALAUT	S-NPP	74.35872	30.17686	12:42:00	D	4.30
218	MUKTSAR	MALAUT	S-NPP	74.35118	30.18483	14:18:00	D	7.70
219	MUKTSAR	MALAUT	S-NPP	74.34869	30.18598	14:18:00	D	8.60
220	MUKTSAR	MALAUT	AQUA	74.39600	30.20500	13:15:00	D	22.60
221	MUKTSAR	MALAUT	AQUA	74.39900	30.20900	13:15:00	D	31.50
222	MUKTSAR	MALAUT	AQUA	74.42000	30.21000	13:15:00	D	40.50
223	MUKTSAR	MALAUT	S-NPP	74.41521	30.21222	12:42:00	D	4.70
224	MUKTSAR	MALAUT	S-NPP	74.42089	30.21375	12:42:00	D	4.70
225	MUKTSAR	MALAUT	AQUA	74.42300	30.21400	13:15:00	D	25.70
226	MUKTSAR	MALAUT	S-NPP	74.41877	30.21989	12:42:00	D	5.80
227	MUKTSAR	MALAUT	S-NPP	74.45424	30.22730	14:18:00	D	8.10
228	MUKTSAR	MALAUT	S-NPP	74.45879	30.22760	14:18:00	D	8.10

229	MUKTSAR	MALAUT	S-NPP	74.46283	30.29146	14:18:00	D	1.90
230	MUKTSAR	MALAUT	S-NPP	74.46660	30.31602	14:18:00	D	7.20
231	MUKTSAR	MALAUT	S-NPP	74.34094	30.31606	12:42:00	D	5.00
232	MUKTSAR	MALAUT	S-NPP	74.44401	30.32358	12:42:00	D	9.90
233	MUKTSAR	MALAUT	S-NPP	74.45529	30.32661	12:42:00	D	4.50
234	MUKTSAR	MALAUT	S-NPP	74.36840	30.34430	14:18:00	D	2.60
235	MUKTSAR	MALAUT	S-NPP	74.36794	30.35002	14:18:00	D	3.70
236	MUKTSAR	MALAUT	S-NPP	74.35633	30.37094	12:42:00	D	12.20
237	MUKTSAR	MALAUT	S-NPP	74.35789	30.37425	12:42:00	D	13.00
238	MUKTSAR	MUKTSAR	S-NPP	74.39371	30.36902	14:18:00	D	3.80
239	MUKTSAR	MUKTSAR	S-NPP	74.54527	30.37329	14:18:00	D	4.70
240	MUKTSAR	MUKTSAR	S-NPP	74.54991	30.37360	14:18:00	D	4.70
241	MUKTSAR	MUKTSAR	S-NPP	74.38873	30.37445	14:18:00	D	7.10
242	MUKTSAR	MUKTSAR	AQUA	74.48400	30.38300	13:15:00	D	18.60
243	MUKTSAR	MUKTSAR	S-NPP	74.46566	30.38541	14:18:00	D	4.50
244	MUKTSAR	MUKTSAR	AQUA	74.48800	30.38600	13:15:00	D	18.10
245	MUKTSAR	MUKTSAR	S-NPP	74.54304	30.40223	14:18:00	D	2.80
246	MUKTSAR	MUKTSAR	S-NPP	74.54340	30.40250	14:18:00	D	3.10
247	MUKTSAR	MUKTSAR	S-NPP	74.49183	30.40457	14:18:00	D	2.30
248	MUKTSAR	MUKTSAR	S-NPP	74.55980	30.42665	14:18:00	D	8.90
249	MUKTSAR	MUKTSAR	S-NPP	74.56012	30.42681	14:18:00	D	9.10
250	MUKTSAR	MUKTSAR	S-NPP	74.31644	30.42865	14:18:00	D	3.40
251	MUKTSAR	MUKTSAR	S-NPP	74.59136	30.44625	14:18:00	D	7.00
252	MUKTSAR	MUKTSAR	S-NPP	74.48704	30.47284	12:42:00	D	3.90
253	MUKTSAR	MUKTSAR	S-NPP	74.48254	30.47530	12:42:00	D	9.60
254	MUKTSAR	MUKTSAR	S-NPP	74.34882	30.47679	14:18:00	D	6.00
255	MUKTSAR	MUKTSAR	S-NPP	74.48492	30.47891	12:42:00	D	3.90
256	MUKTSAR	MUKTSAR	AQUA	74.55500	30.47900	13:15:00	D	16.50
257	MUKTSAR	MUKTSAR	S-NPP	74.61584	30.49453	14:18:00	D	10.40
258	MUKTSAR	MUKTSAR	S-NPP	74.54957	30.50183	14:18:00	D	8.00
259	MUKTSAR	MUKTSAR	S-NPP	74.54661	30.50217	14:18:00	D	8.90
260	MUKTSAR	MUKTSAR	S-NPP	74.49815	30.50419	14:18:00	D	9.10
261	MUKTSAR	MUKTSAR	S-NPP	74.50736	30.50482	14:18:00	D	6.50

262	MUKTSAR	MUKTSAR	S-NPP	74.49514	30.50486	14:18:00	D	4.80
263	MUKTSAR	MUKTSAR	S-NPP	74.49975	30.50514	14:18:00	D	10.30
264	MUKTSAR	MUKTSAR	S-NPP	74.60090	30.50523	14:18:00	D	18.30
265	MUKTSAR	MUKTSAR	S-NPP	74.59801	30.50525	14:18:00	D	13.80
266	MUKTSAR	MUKTSAR	S-NPP	74.50900	30.50570	14:18:00	D	13.90
267	MUKTSAR	MUKTSAR	S-NPP	74.64870	30.53363	12:42:00	D	3.80
268	MUKTSAR	MUKTSAR	S-NPP	74.55064	30.54020	12:42:00	D	4.10
269	MUKTSAR	MUKTSAR	S-NPP	74.47348	30.54413	14:18:00	D	2.60
270	MUKTSAR	MUKTSAR	S-NPP	74.40791	30.55728	14:18:00	D	8.10
271	MUKTSAR	MUKTSAR	S-NPP	74.37511	30.56669	14:18:00	D	9.10
272	MUKTSAR	MUKTSAR	S-NPP	74.41112	30.57483	14:18:00	D	4.50
273	MUKTSAR	MUKTSAR	S-NPP	74.60249	30.58051	12:42:00	D	6.10
274	MUKTSAR	MUKTSAR	S-NPP	74.57294	30.58541	14:18:00	D	2.90
275	NAWASHAHR	NAWASHAHR	AQUA	76.02600	31.07500	13:15:00	D	10.20
276	PATIALA	SAMANA	S-NPP	76.18340	29.82655	14:18:00	D	3.30
277	SANGRUR	MOONAK	S-NPP	76.02917	29.83688	14:18:00	D	2.80
278	TARN TARAN	KHADOOR SAHIB	S-NPP	75.05958	31.35263	14:18:00	D	7.80
279	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12669	31.35653	14:18:00	D	7.60
280	TARN TARAN	KHADOOR SAHIB	S-NPP	74.84023	31.39665	14:18:00	D	4.00
281	TARN TARAN	KHADOOR SAHIB	S-NPP	75.04654	31.42634	14:18:00	D	4.30
282	TARN TARAN	KHADOOR SAHIB	S-NPP	74.97965	31.42857	14:18:00	D	3.70
283	TARN TARAN	KHADOOR SAHIB	S-NPP	74.69838	31.43583	14:18:00	D	5.60
284	TARN TARAN	KHADOOR SAHIB	S-NPP	74.88189	31.44685	14:18:00	D	3.00
285	TARN TARAN	KHADOOR SAHIB	S-NPP	74.91337	31.50776	12:42:00	D	4.00
286	TARN TARAN	KHADOOR SAHIB	S-NPP	74.72252	31.51797	14:18:00	D	4.80
287	TARN TARAN	KHADOOR SAHIB	S-NPP	74.69720	31.52071	12:42:00	D	2.10
288	TARN TARAN	KHADOOR SAHIB	S-NPP	74.72209	31.52387	14:18:00	D	9.10
289	TARN TARAN	PATTI	S-NPP	74.68107	31.24731	14:18:00	D	4.30
290	TARN TARAN	PATTI	S-NPP	74.69052	31.31084	12:42:00	D	3.80
291	TARN TARAN	PATTI	S-NPP	74.72070	31.37386	14:18:00	D	2.70
292	TARN TARAN	PATTI	S-NPP	74.63634	31.41435	14:18:00	D	1.80
293	TARN TARAN	PATTI	TERRA	74.66000	31.42100	11:40:00	D	11.30

Details of residue burning events in Haryana on 24-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	FATEHABAD	RATIA	TERRA	75.55900	29.63000	22:40:00	N	7.70
2	FATEHABAD	RATIA	S-NPP	75.60546	29.63349	14:18:00	D	5.60
3	JIND	NARWANA	S-NPP	76.16131	29.59758	14:18:00	D	8.40
4	JIND	SAFIDON	S-NPP	76.63303	29.35460	01:24:00	N	0.60
5	KARNAL	NILOKHERI	S-NPP	76.72595	29.82904	14:18:00	D	4.20
6	KARNAL	NILOKHERI	S-NPP	76.72705	29.82905	14:18:00	D	4.20
7	PANIPAT	PANIPAT	S-NPP	76.76460	29.41363	12:36:00	D	4.10
8	ROHTAK	MAHAM	AQUA	76.39900	28.92800	13:15:00	D	19.50
9	ROHTAK	MAHAM	AQUA	76.41200	28.93600	13:15:00	D	54.80
10	SIRSA	DABWALI	S-NPP	74.55385	29.82113	12:42:00	D	5.80
11	SIRSA	ELLENABAD	S-NPP	74.78761	29.46278	14:18:00	D	6.90
12	SIRSA	ELLENABAD	S-NPP	74.63525	29.47640	14:18:00	D	5.80
13	SIRSA	RANIA	S-NPP	74.83160	29.50097	14:18:00	D	3.00
14	SIRSA	RANIA	S-NPP	74.78203	29.50197	01:24:00	N	1.10
15	SIRSA	RANIA	S-NPP	74.59769	29.60188	14:18:00	D	3.20
16	SIRSA	SIRSA	S-NPP	75.23750	29.52114	12:42:00	D	7.20
17	SIRSA	SIRSA	S-NPP	75.23552	29.52713	12:42:00	D	3.50
18	SIRSA	SIRSA	AQUA	75.27800	29.53600	13:15:00	D	32.90
19	SIRSA	SIRSA	S-NPP	74.96201	29.55617	14:18:00	D	2.40
20	SIRSA	SIRSA	S-NPP	74.98553	29.56362	14:18:00	D	6.80
21	SIRSA	SIRSA	S-NPP	75.10700	29.56557	14:18:00	D	7.50
22	SIRSA	SIRSA	S-NPP	75.06635	29.57298	03:00:00	N	0.90
23	SIRSA	SIRSA	S-NPP	75.06798	29.57442	03:00:00	N	1.00

Details of residue burning events in Uttar Pradesh on 24-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	ALLAHABAD	BARA	S-NPP	81.74305	25.06990	01:24:00	N	0.90
2	ALLAHABAD	SORAWN	S-NPP	81.95029	25.71476	12:36:00	D	3.70
3	AURAIYA	BIDHUNA	S-NPP	79.37312	26.79014	01:24:00	N	0.50
4	BALLIA	RASRA	S-NPP	83.79173	25.84496	12:36:00	D	3.30
5	BALLIA	RASRA	S-NPP	83.96580	25.85810	12:36:00	D	4.30
6	BALLIA	RASRA	S-NPP	84.01238	25.87958	12:36:00	D	2.70
7	BANDA	BABERU	S-NPP	80.78087	25.64946	12:36:00	D	2.90
8	BAREILLY	FARIDPUR	S-NPP	79.54131	28.15109	01:24:00	N	0.50
9	BASTI	HARRAIYA	NOAA-19	82.54368	26.86959	06:35:00	N	6.00
10	DEORIA	DEORIA	S-NPP	83.79478	26.64628	01:24:00	N	0.50
11	DEORIA	DEORIA	S-NPP	83.79250	26.64684	01:24:00	N	0.60
12	FATEHPUR	FATEHPUR	AQUA	80.84100	25.97400	13:15:00	D	12.70
13	GAZIPUR	MUHAMMADBAD	S-NPP	83.84600	25.69999	12:36:00	D	2.10
14	GONDA	TARABGANJ	NOAA-19	82.11844	26.94426	06:35:00	N	6.75
15	GONDA	TARABGANJ	NOAA-19	81.96133	27.06497	06:35:00	N	7.00
16	JALAUN	JALAUN	AQUA	79.40800	26.18800	13:15:00	D	8.70
17	JALAUN	KONCH	S-NPP	79.11903	26.01357	12:36:00	D	6.80
18	JALAUN	KONCH	S-NPP	79.11391	26.01799	12:36:00	D	9.10
19	JALAUN	KONCH	S-NPP	79.11758	26.01882	12:36:00	D	6.80
20	JALAUN	KONCH	AQUA	79.10900	26.03400	13:15:00	D	20.90
21	JALAUN	KONCH	S-NPP	79.25581	26.06586	12:36:00	D	2.00
22	JHANSI	MOTH	S-NPP	78.91486	25.66820	12:36:00	D	2.20
23	JHANSI	MOTH	S-NPP	78.91408	25.66866	12:36:00	D	2.40
24	JHANSI	MOTH	S-NPP	78.91869	25.66907	12:36:00	D	2.20
25	JHANSI	MOTH	S-NPP	78.91788	25.66956	12:36:00	D	2.40
26	JHANSI	MOTH	S-NPP	78.90582	25.69407	14:18:00	D	8.90
27	JHANSI	MOTH	S-NPP	78.88999	25.69726	12:36:00	D	7.00
28	JHANSI	MOTH	S-NPP	78.90841	25.69777	14:18:00	D	7.40
29	JHANSI	MOTH	S-NPP	78.90142	25.69991	12:36:00	D	7.90
30	JHANSI	MOTH	S-NPP	78.90523	25.70080	12:36:00	D	5.40
31	JHANSI	MOTH	AQUA	78.90100	25.73000	13:15:00	D	19.60

32	JHANSI	MOTH	S-NPP	78.90778	25.73554	12:36:00	D	2.50
33	JHANSI	MOTH	AQUA	78.82400	25.73900	13:15:00	D	10.30
34	JHANSI	MOTH	S-NPP	78.90630	25.74089	12:36:00	D	2.50
35	JHANSI	MOTH	S-NPP	78.83284	25.74118	12:36:00	D	2.60
36	JHANSI	MOTH	S-NPP	78.91010	25.74177	12:36:00	D	4.90
37	JHANSI	MOTH	AQUA	78.81600	25.74200	13:15:00	D	14.30
38	JHANSI	MOTH	S-NPP	78.83988	25.75991	12:36:00	D	5.80
39	JHANSI	MOTH	S-NPP	78.89886	25.76764	12:36:00	D	3.80
40	JHANSI	MOTH	S-NPP	78.89804	25.76896	12:36:00	D	3.70
41	JHANSI	MOTH	S-NPP	78.93314	25.81693	12:36:00	D	2.00
42	KANPUR DEHAT	DERAPUR	AQUA	79.71500	26.57900	13:15:00	D	11.10
43	KANPUR DEHAT	DERAPUR	S-NPP	79.71730	26.58560	12:36:00	D	4.40
44	KANPUR DEHAT	RASULABAD	S-NPP	79.95358	26.61778	01:24:00	N	0.40
45	KHERI	GOLA	S-NPP	80.55645	28.06374	01:24:00	N	1.00
46	KHERI	LAKHIMPUR	S-NPP	80.63332	28.10176	01:24:00	N	0.70
47	KHERI	LAKHIMPUR	S-NPP	80.63488	28.10274	01:24:00	N	0.80
48	KHERI	MOHMADI	S-NPP	80.35706	27.73483	01:24:00	N	0.50
49	KHERI	MOHMADI	S-NPP	80.44323	27.92594	01:24:00	N	0.60
50	KUSHINAGAR	HATA	S-NPP	83.61323	26.81396	12:36:00	D	3.80
51	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.62598	26.97919	12:36:00	D	1.90
52	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.62300	26.98100	13:15:00	D	4.30
53	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.58958	27.04342	01:24:00	N	0.30
54	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.51183	27.10488	12:36:00	D	4.50
55	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.64071	27.12593	12:36:00	D	4.60
56	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.56422	27.17317	12:36:00	D	2.10
57	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.62500	27.19300	13:15:00	D	8.80
58	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.52000	27.20600	13:15:00	D	2.60
59	MAHARAJGANJ	MAHARAJGANJ	AQUA	83.53000	27.20700	13:15:00	D	2.50
60	MAU	MAU	S-NPP	83.72086	26.00786	12:36:00	D	2.00
61	MEERUT	MAWANA	S-NPP	77.94146	28.93497	12:36:00	D	2.40
62	MEERUT	MAWANA	S-NPP	77.88577	29.21146	12:36:00	D	2.10
63	MUZAFARNAGAR	KHATOLI	S-NPP	77.76799	29.35578	12:36:00	D	2.60
64	PILHIBHIT	PURANPUR	S-NPP	80.22322	28.40121	01:24:00	N	0.50
65	RAIBEARELI	RAEBARELI	AQUA	81.21200	26.30900	13:15:00	D	5.30

66	RAMPUR	TANDA	S-NPP	78.97647	29.07896	12:36:00	D	4.20
67	RAMPUR	TANDA	S-NPP	78.97753	29.08005	12:36:00	D	4.00
68	SHAHJAHANPUR	PUWANYA	S-NPP	80.15123	28.25368	01:24:00	N	1.70
69	SHARANPUR	RAMPUR MANIHARRAN	S-NPP	77.42745	29.73159	12:36:00	D	1.70
70	SITAPUR	SITAPUR	S-NPP	80.62091	27.64865	12:36:00	D	3.00
71	SULTANPUR	KADIRPUR	S-NPP	82.46479	26.24412	12:36:00	D	3.30
72	UNNAO	BIGHAPUR	AQUA	80.77100	26.40400	13:15:00	D	17.00

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)
