



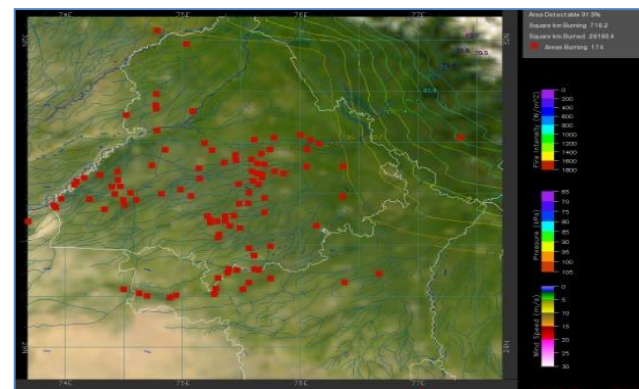
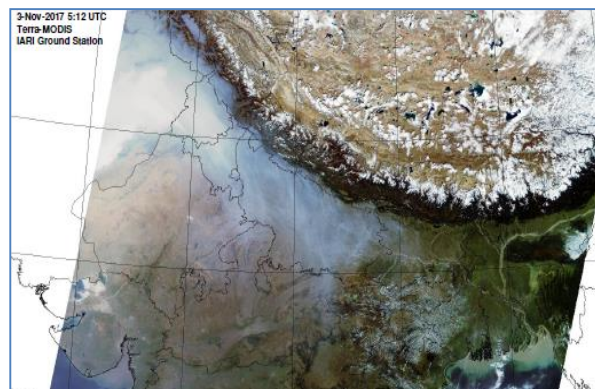
**Bulletin
No. 32**

**Events Date:
01-Nov-2019**

**Issued on:
02-Nov-2019**



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



Prepared by:

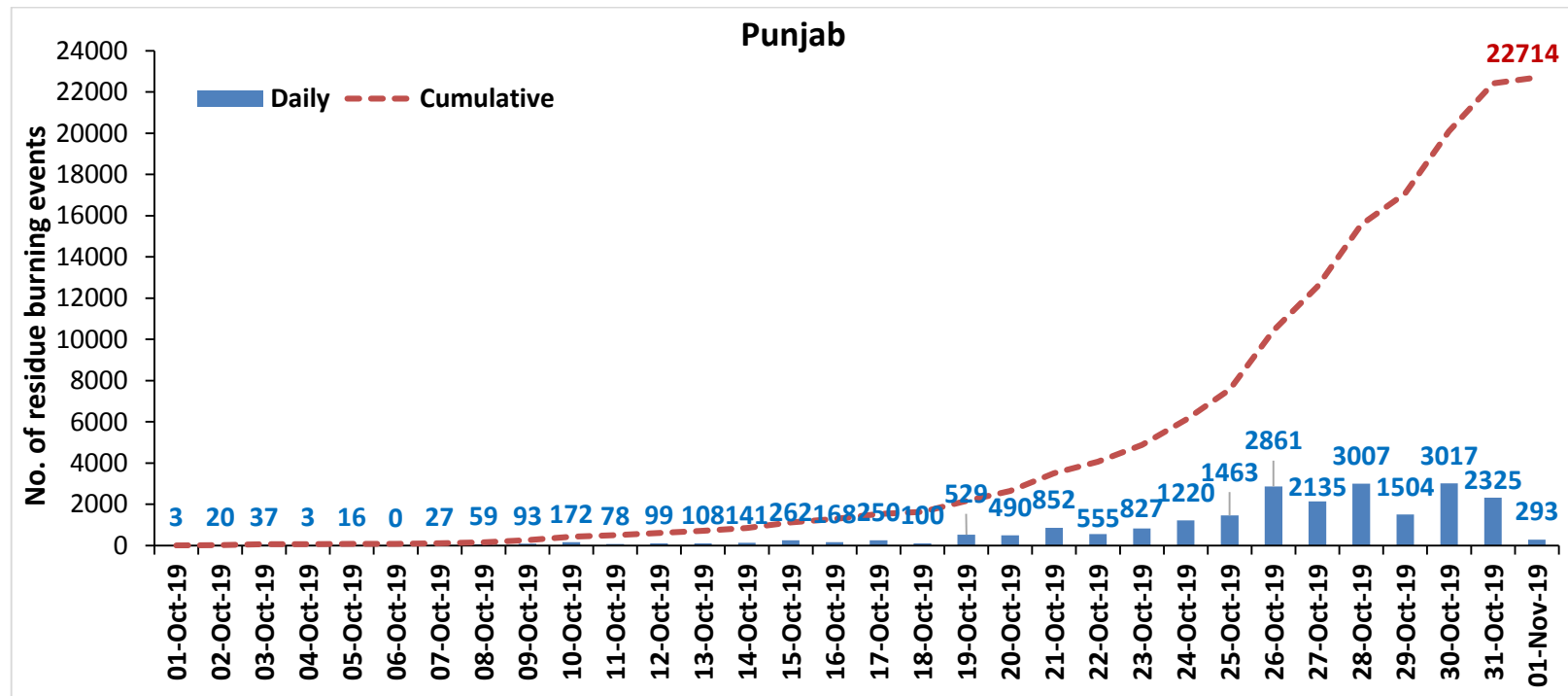
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

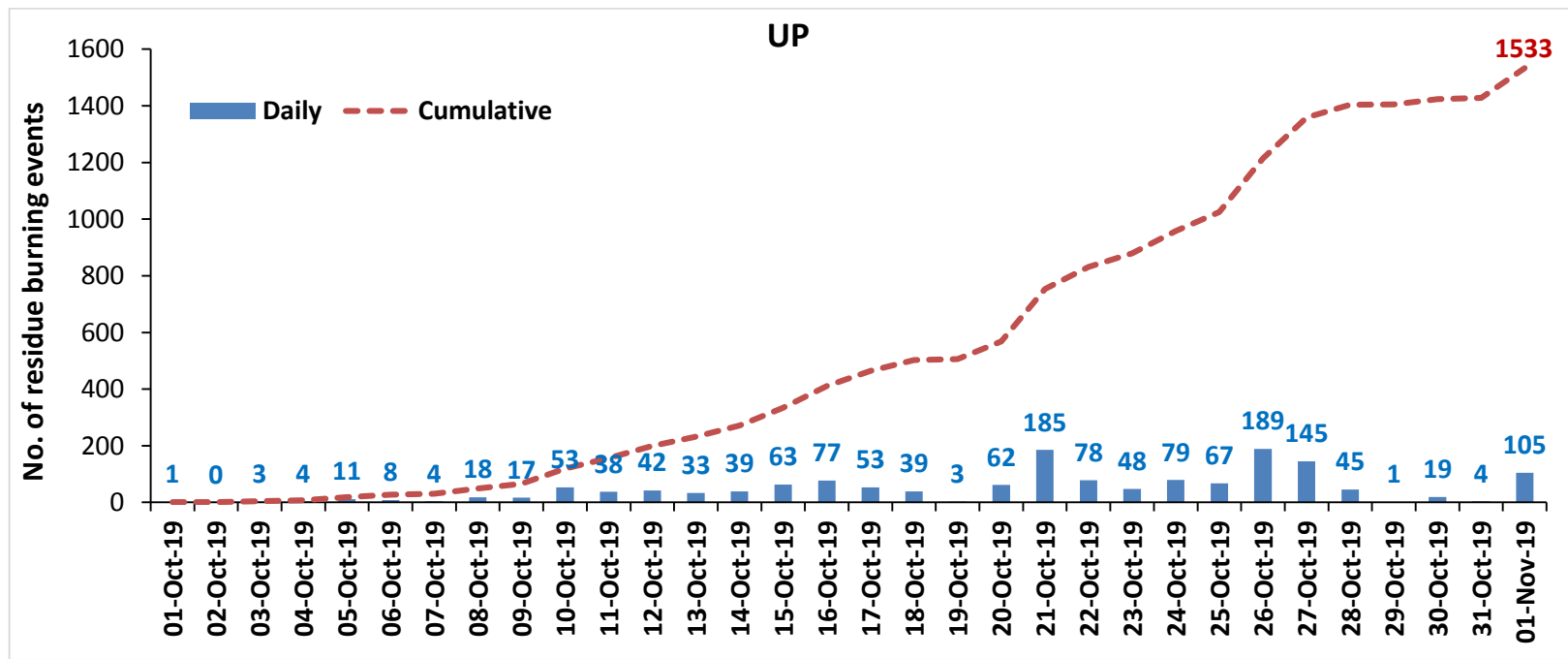
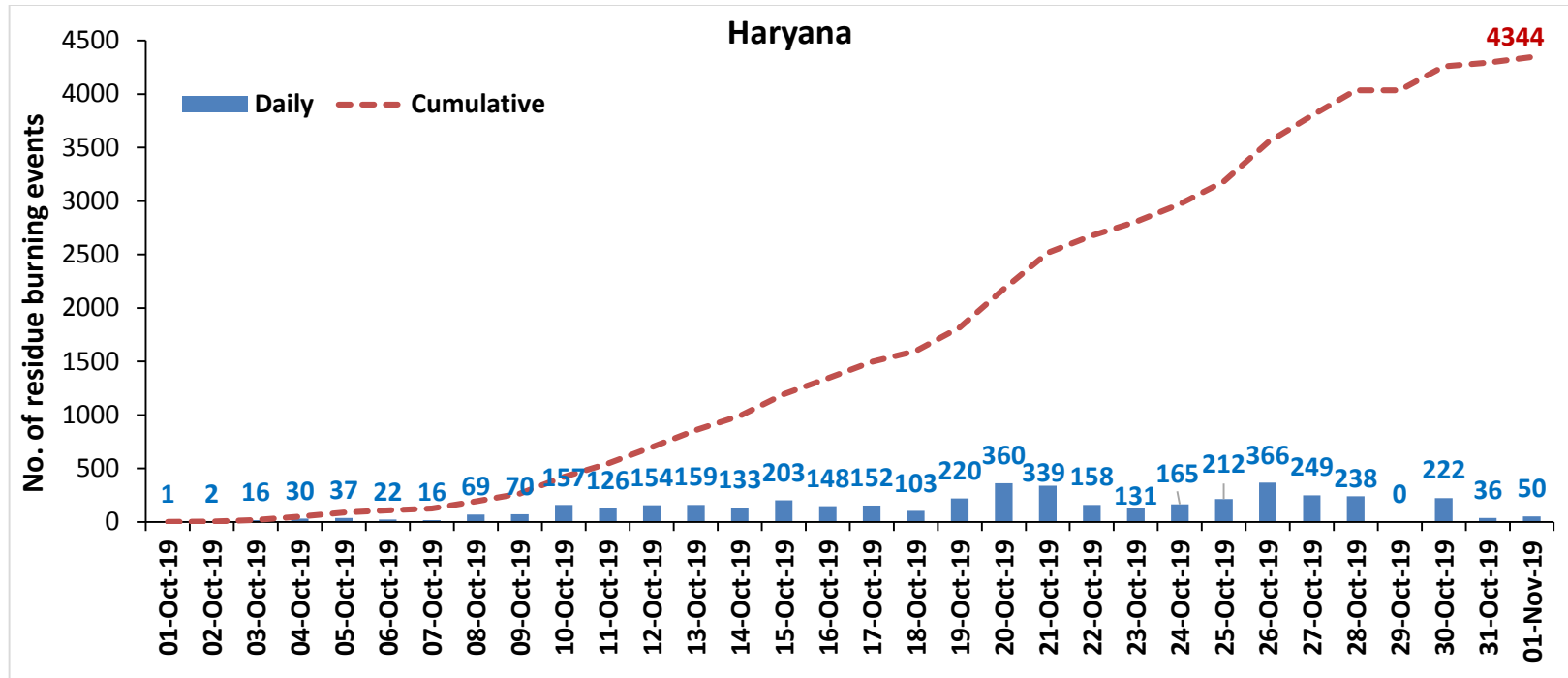
<http://creams.iari.res.in>

Highlights for 01-November-2019

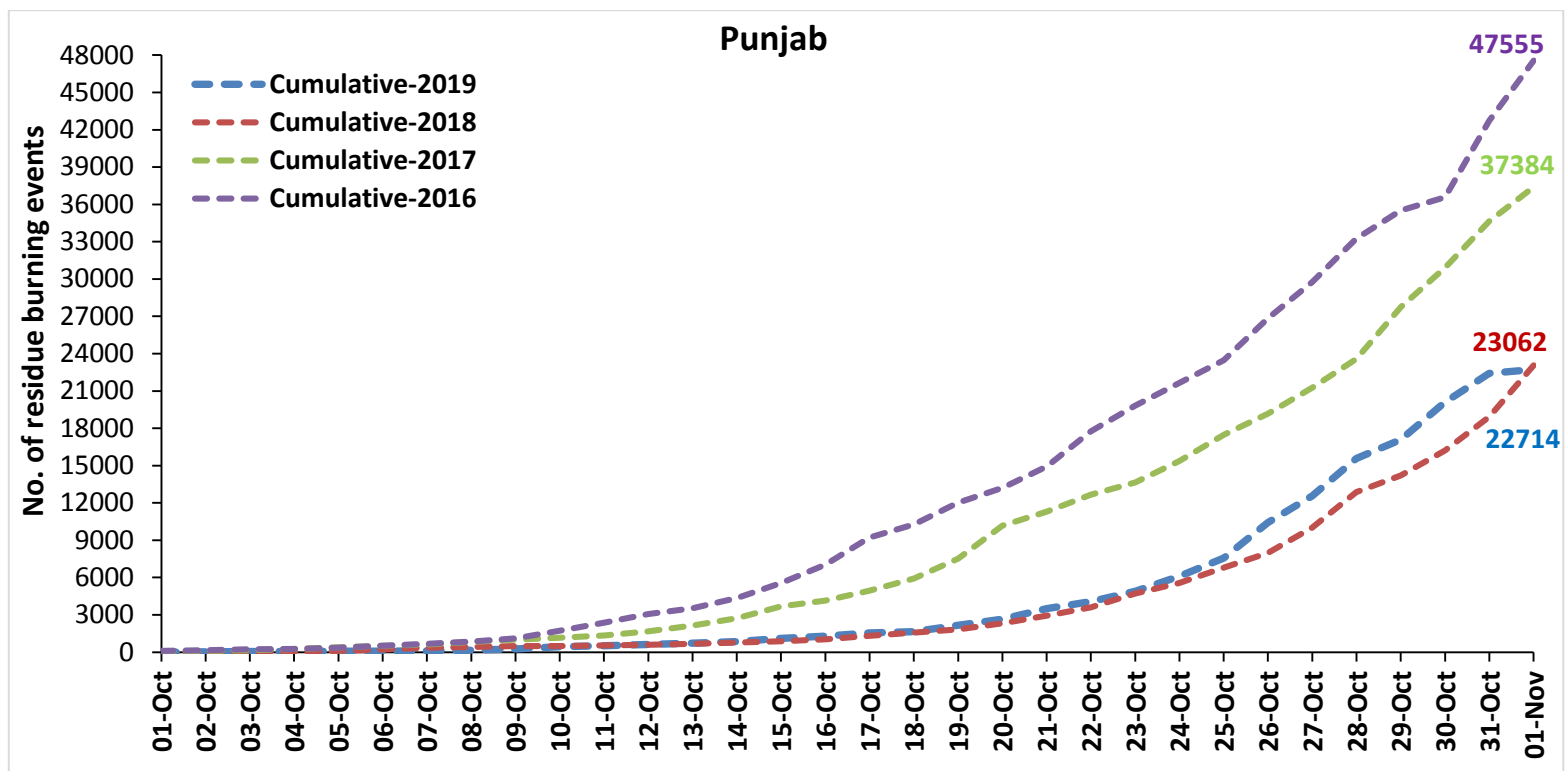
- Satellites detected **448** residue burning events in the three study States on 01-Nov-2019.
- The burning events detected on **01-Nov-2019** are **293**, **50** and **105** in Punjab, Haryana and UP, respectively.
- The state of Punjab and Haryana were mostly covered with clouds which prevented fire event detection by satellites.
- The number of events has decreased from **2365** on **31-Oct-2019** to **448** on **01-Nov-2019** in the three states.
- Total **28591** burning events were detected in the three States between **01-Oct-2019** and **01-Nov-2019**, which are distributed as **22714**, **4344** and **1533** in Punjab, Haryana and UP, respectively.
- Overall, the total burning events recorded in the three states are **5.8%** less than in 2018 till date. UP recorded **45.4%** reduction, Haryana recorded **3.3%** reduction, and Punjab recorded **1.5%** reduction, in the current season than in 2018.

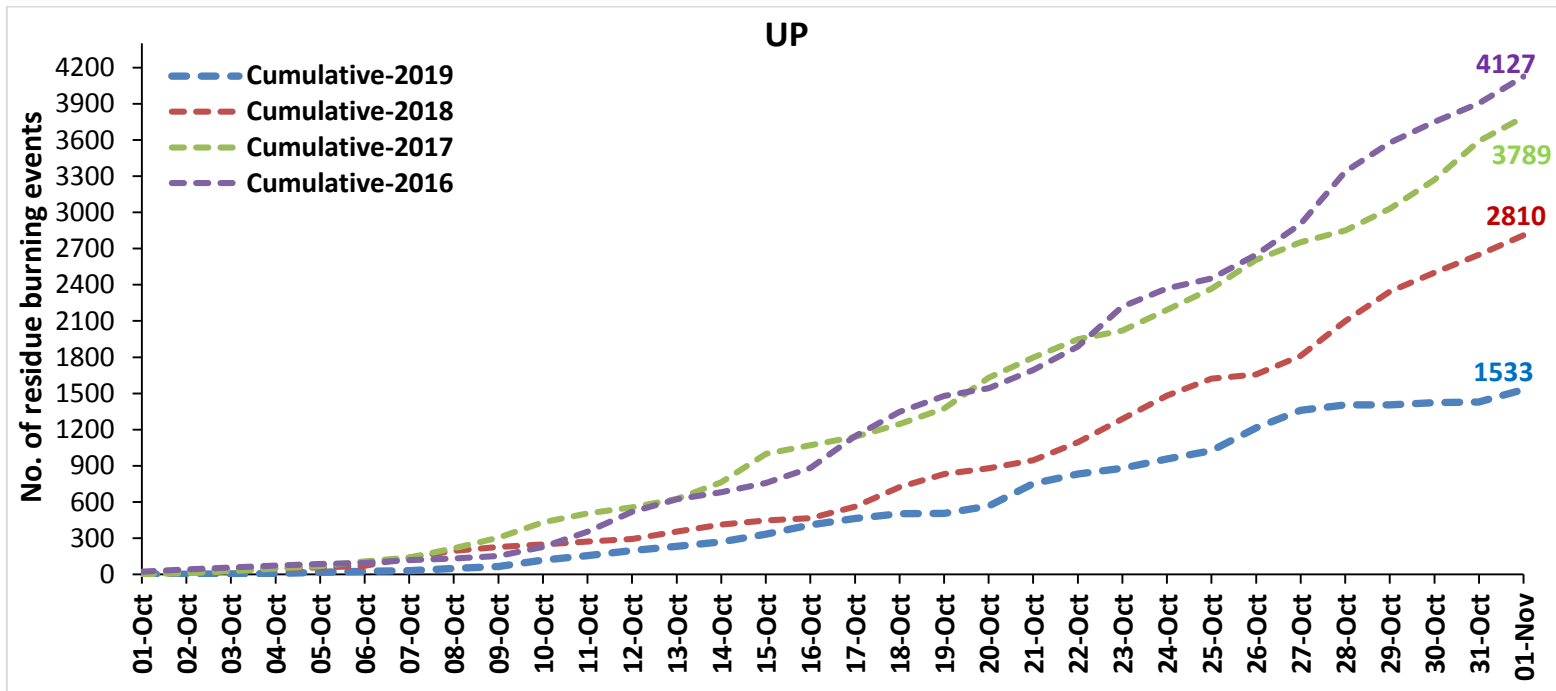
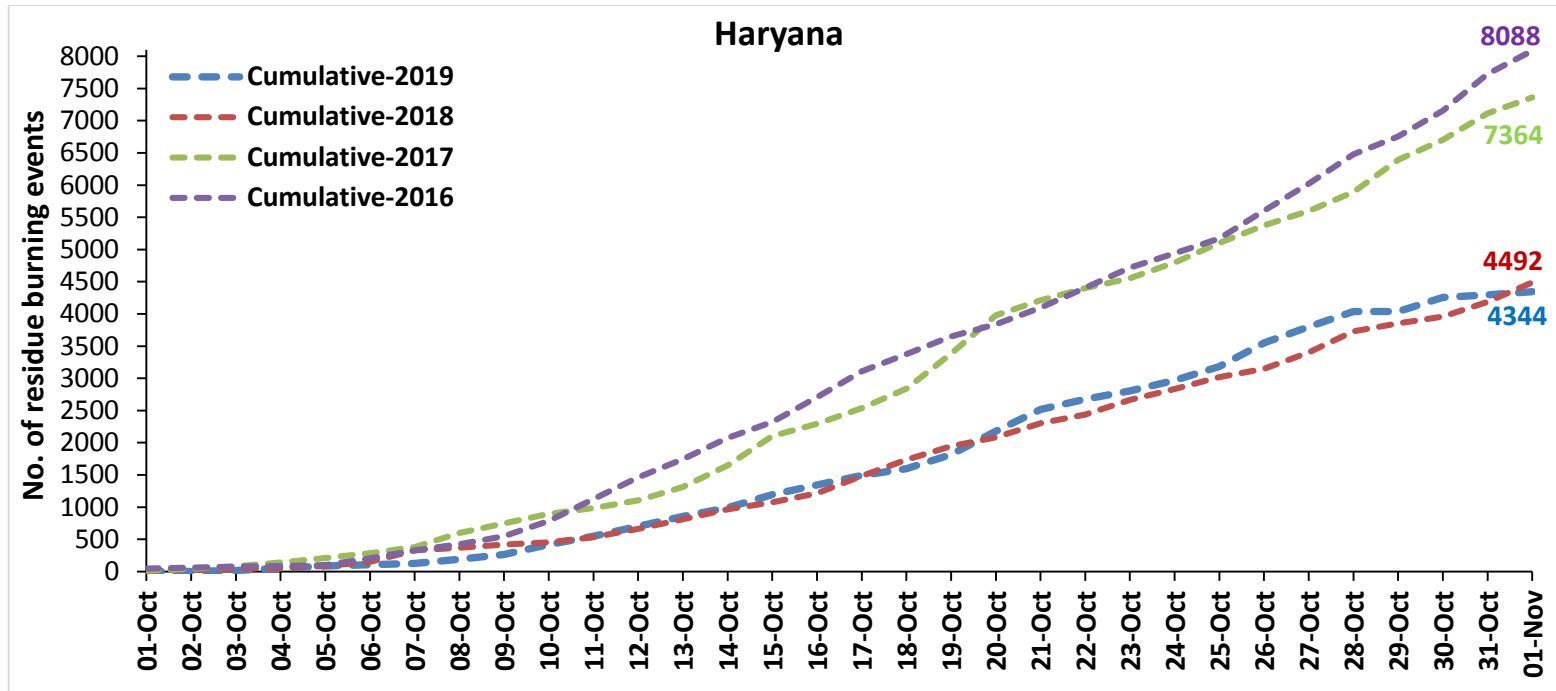
Temporal distribution of residue burning events for the three study States in 2019



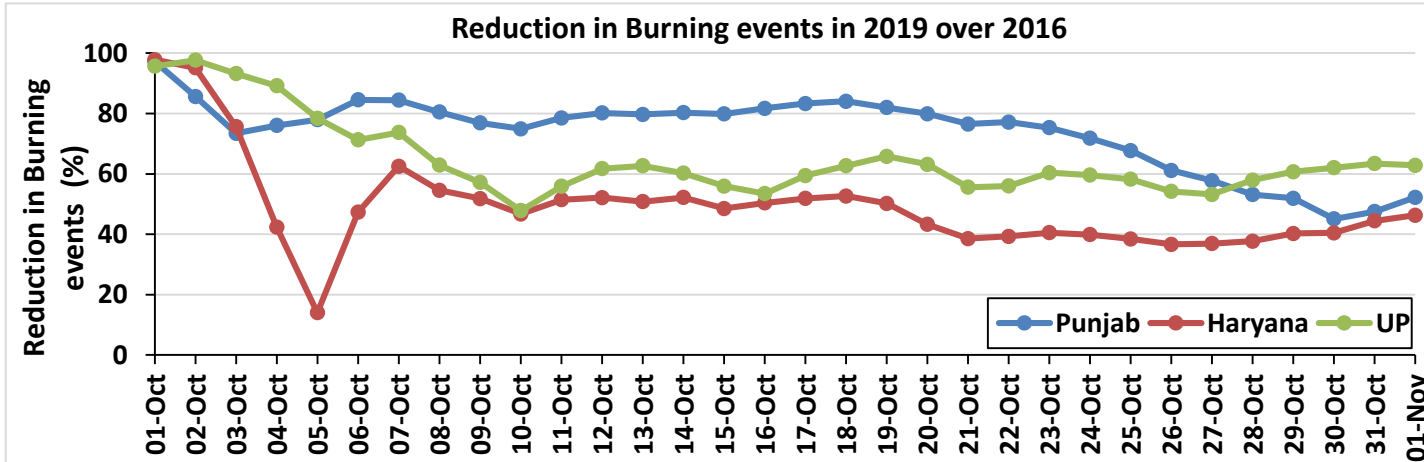
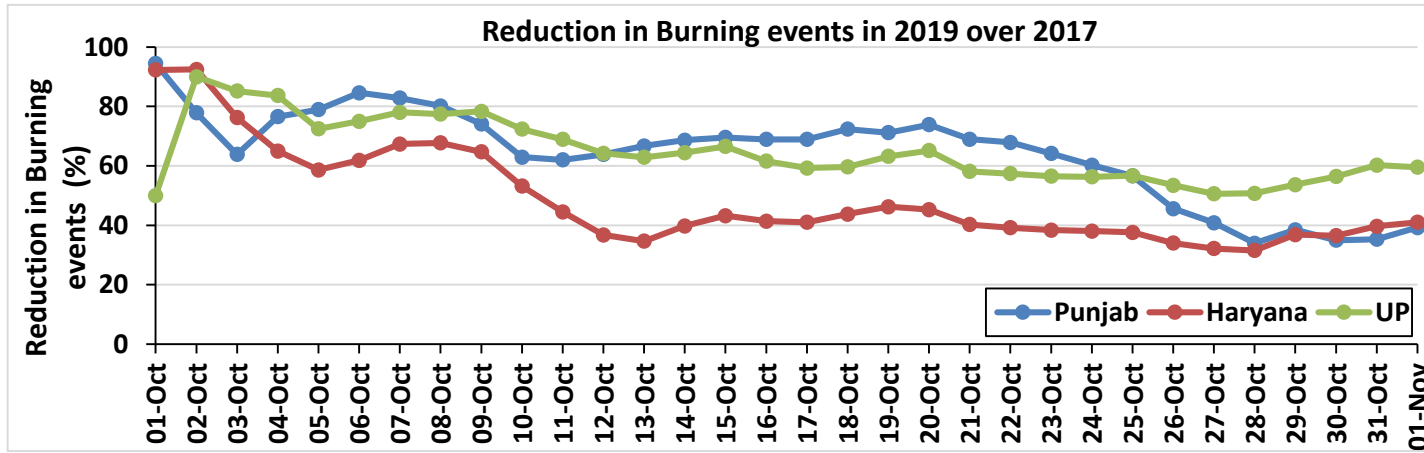
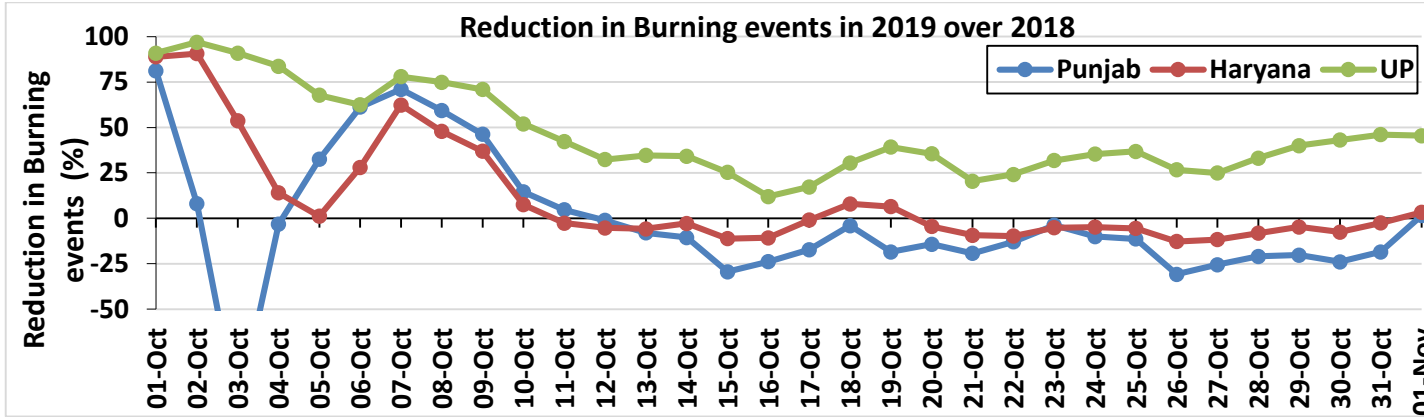


Comparison of residue burning events in current year (2019) with previous years (2018, 2017 & 2016) for the three study States
(01-Oct to 01-Nov)



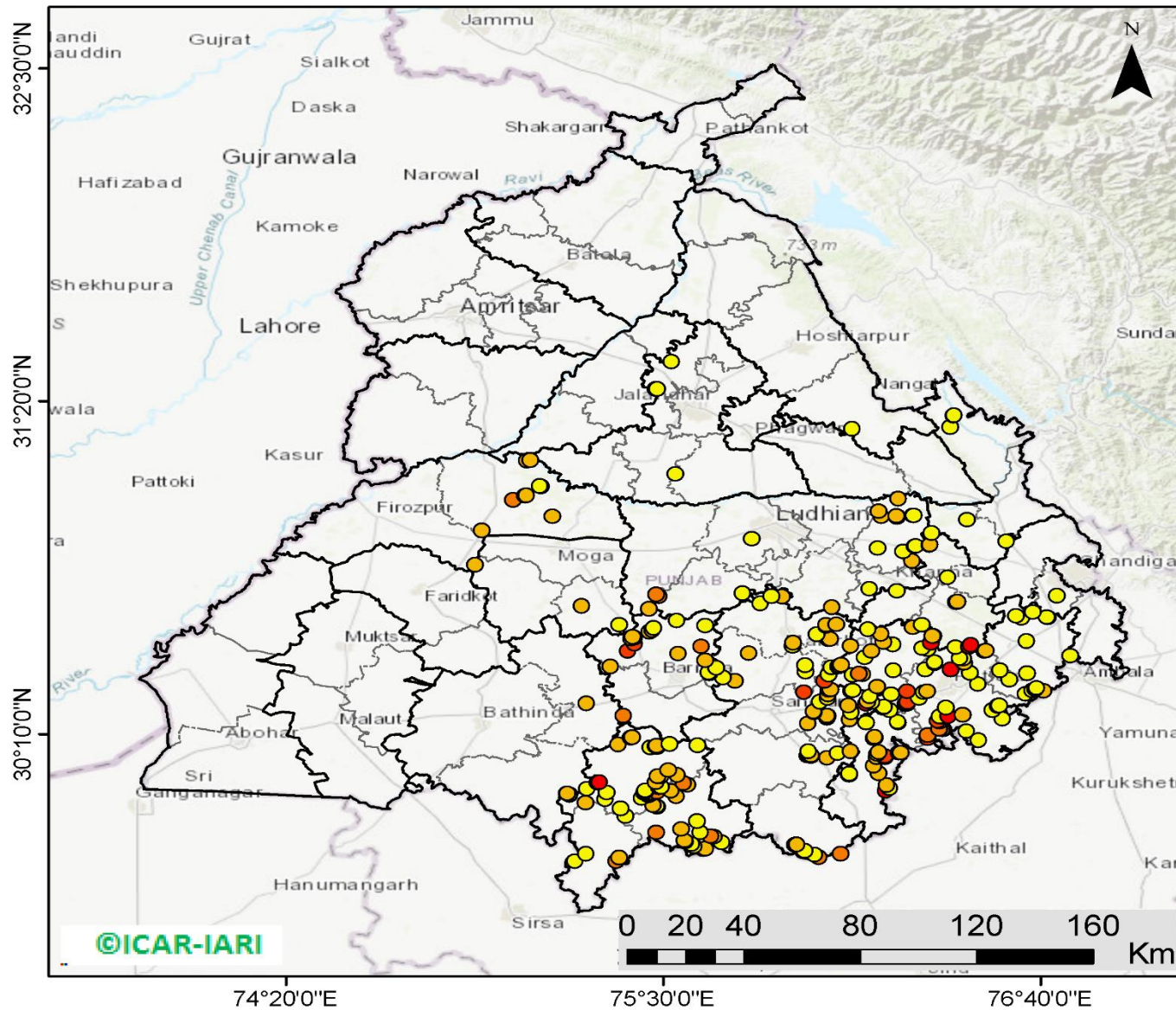


Percent Reduction in Burning events in 2019 over 2018, 2017 and 2016 (Daily Cumulative)



(a) Punjab

RICE RESIDUE BURNING IN PUNJAB



293 burning events detected in Punjab on 01st November 2019

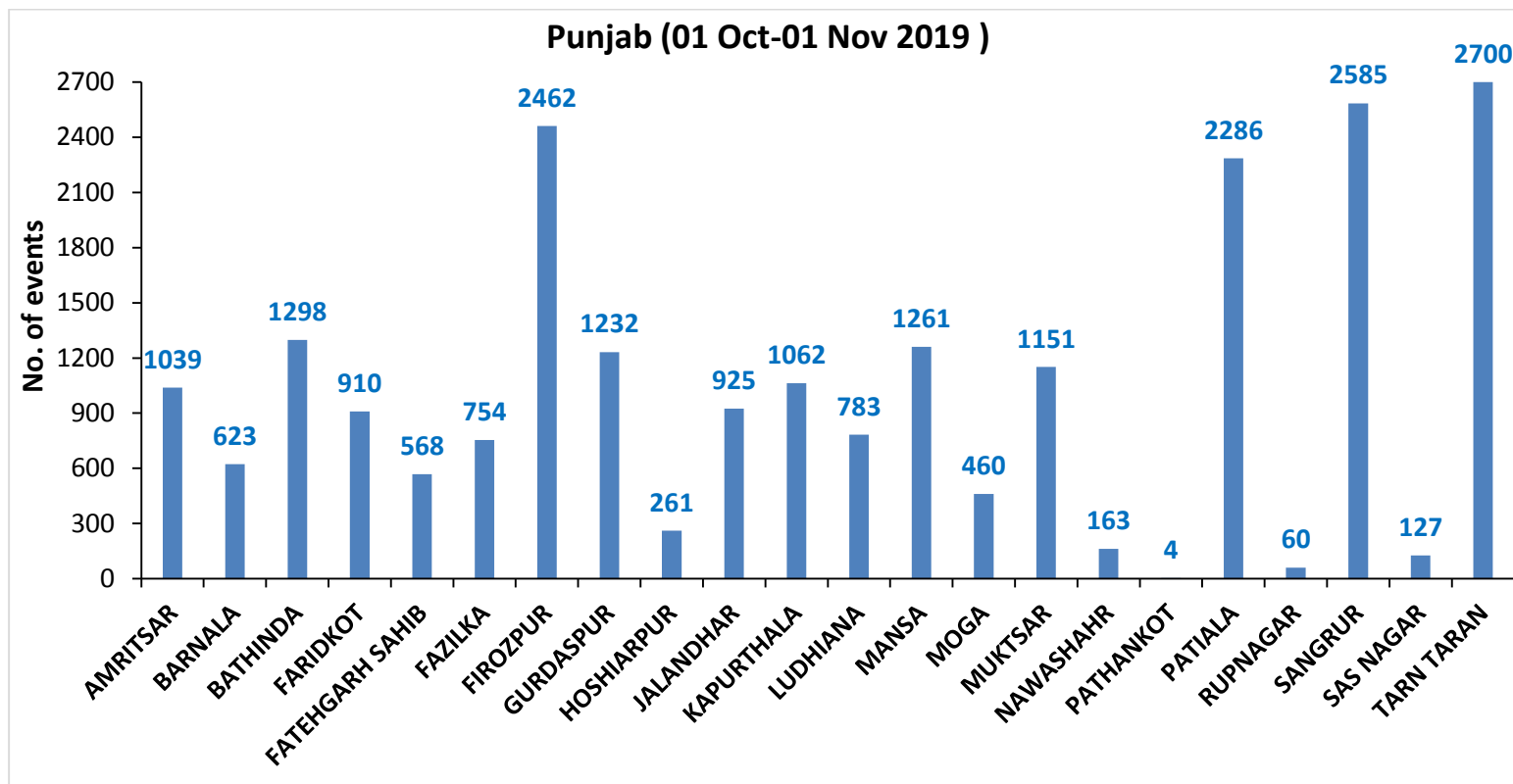
Fire Intensity (W/m²)

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



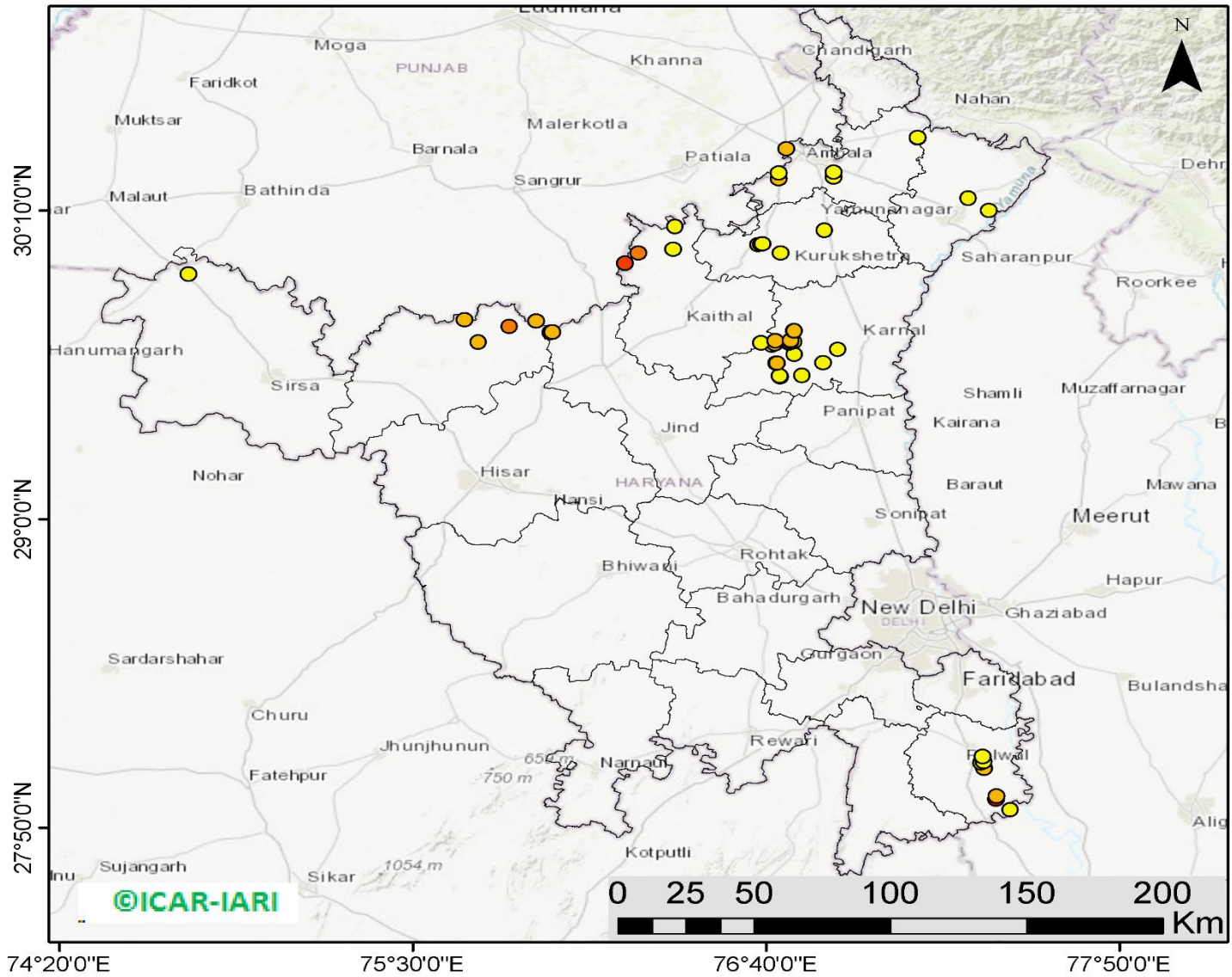
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

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



(b) Haryana

RICE RESIDUE BURNING IN HARYANA



50 burning events
detected in Haryana on
01st November 2019

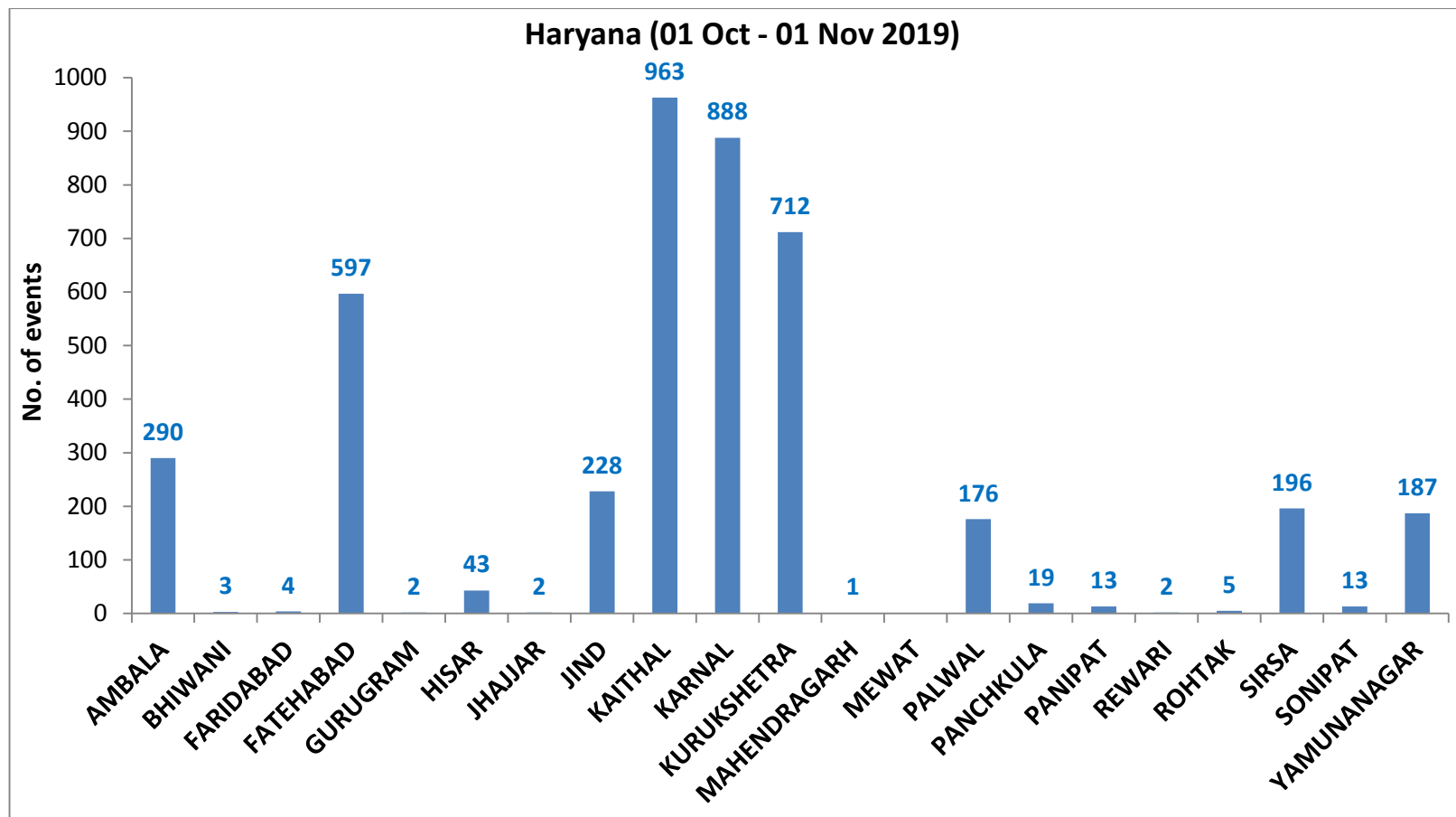
Fire Intensity (W/m²)

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



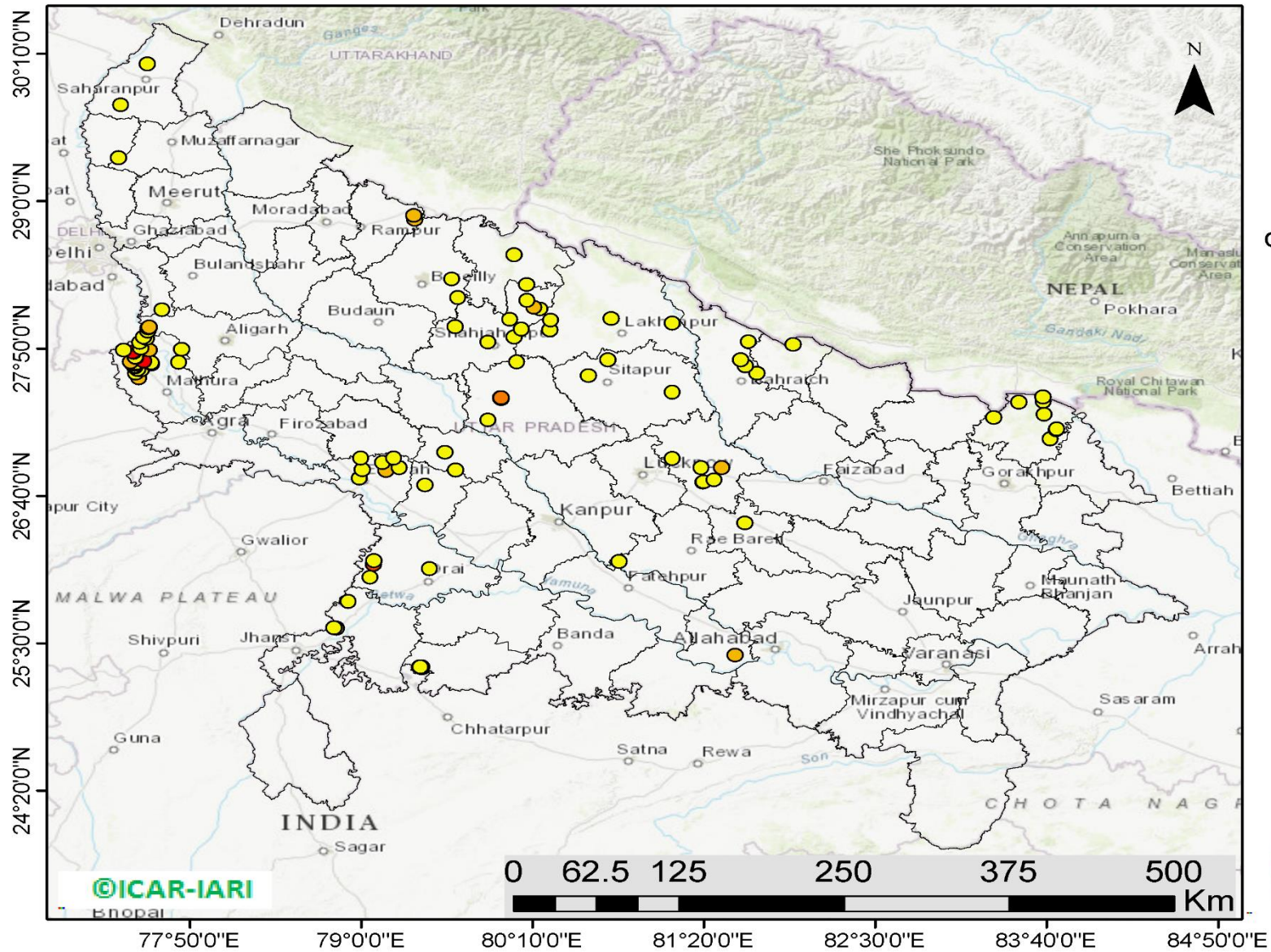
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

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



(c) UP

RICE RESIDUE BURNING IN UTTAR PRADESH



105 burning events detected in Uttar Pradesh on 01st November 2019

Fire Intensity (W/m²)

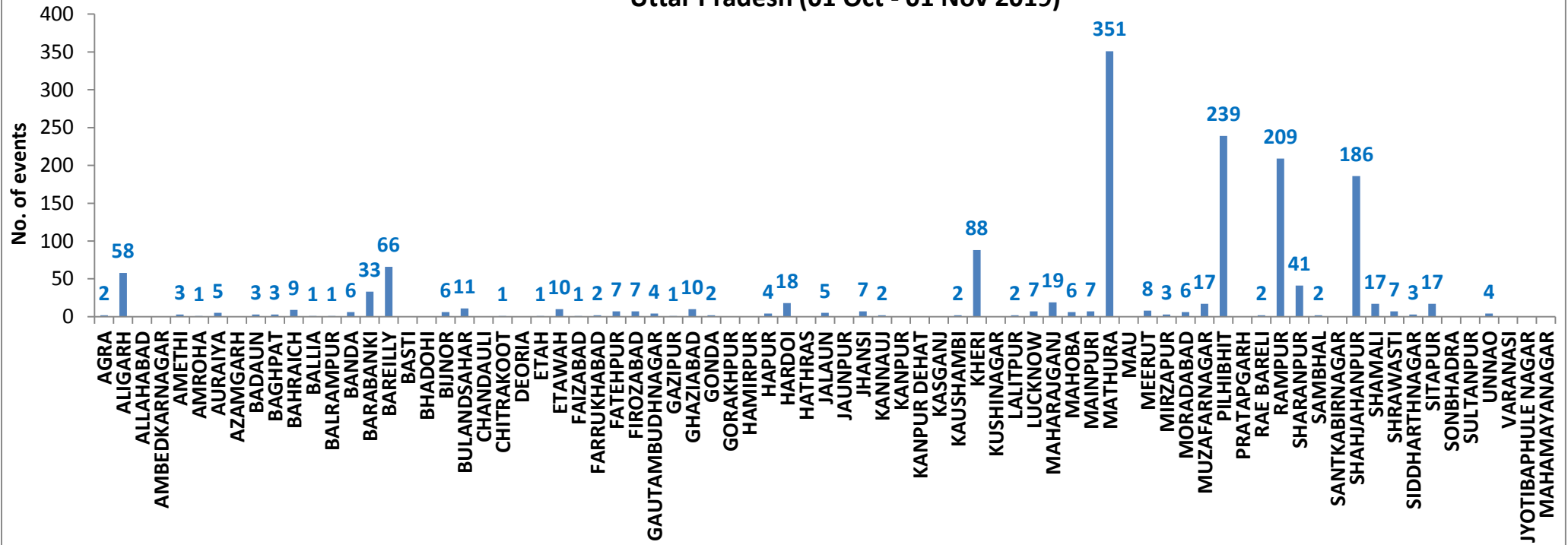
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20



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

District-wise cumulative number of residue burning events in Uttar Pradesh (01 Oct to 01-Nov 2019)

Uttar Pradesh (01 Oct - 01 Nov 2019)



State-wise, date-wise and district-wise number of residue burning events detected in 2016, 2017, 2018 and 2019
(Period: 01-Oct to 01-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
Total	22714	23062	37384	47555	4344	4492	7364	8088	1533	2810	3789	4127	28591	30364	48537	59770

(a) Punjab

Districts	01Oct-01 Nov			
	2016	2017	2018	2019
AMRITSAR	1447	1071	985	1039
BARNALA	1318	1129	544	623
BATHINDA	3821	3221	2019	1298
FARIDKOT	2566	2378	1178	910
FATEHGARH SAHIB	2062	1311	489	568
FAZILKA	0	0	0	754
FIROZPUR	4856	4376	4120	2462
GURDASPUR	1625	1134	820	1232
HOSHIARPUR	636	386	92	261
JALANDHAR	2781	1418	620	925
KAPURTHALA	2403	1179	450	1062
LUDHIANA	3092	2203	536	783
MANSA	1818	2138	1525	1261
MOGA	1829	1092	632	460
MUKTSAR	3694	2690	2185	1151
NAWASHAHR (SBS Nagar)	989	571	171	163
PATHANKOT	0	0	0	4
PATIALA	4372	3868	2177	2286
RUPNAGAR	548	216	30	60
SANGRUR	4668	4415	2333	2585
SAS NAGAR	113	104	95	127
TARN TARAN	2917	2484	2061	2700
Total	47555	37384	23062	22714

(b) Haryana

Districts	01Oct-01 Nov			
	2016	2017	2018	2019
AMBALA	488	467	242	290
BHIWANI	14	11	6	3
FARIDABAD	163	266	158	4
FATEHABAD	1567	1383	839	597
GURUGRAM	0	0	0	2
HISAR	111	87	59	43
JHAJJAR	6	5	7	2
JIND	454	464	298	228
KAITHAL	1582	1354	995	963
KARNAL	1450	1391	697	888
KURUKSHETRA	1040	1124	660	712
MAHENDRAGARH	0	0	0	1
MEWAT	0	0	0	0
PALWAL	0	0	0	176
PANCHKULA	0	0	3	19
PANIPAT	51	49	38	13
REWARI	0	0	0	2
ROHTAK	19	12	1	5
SIRSA	909	449	334	196
SONIPAT	27	31	18	13
YAMUNANAGAR	207	271	137	187
Total	8088	7364	4492	4344

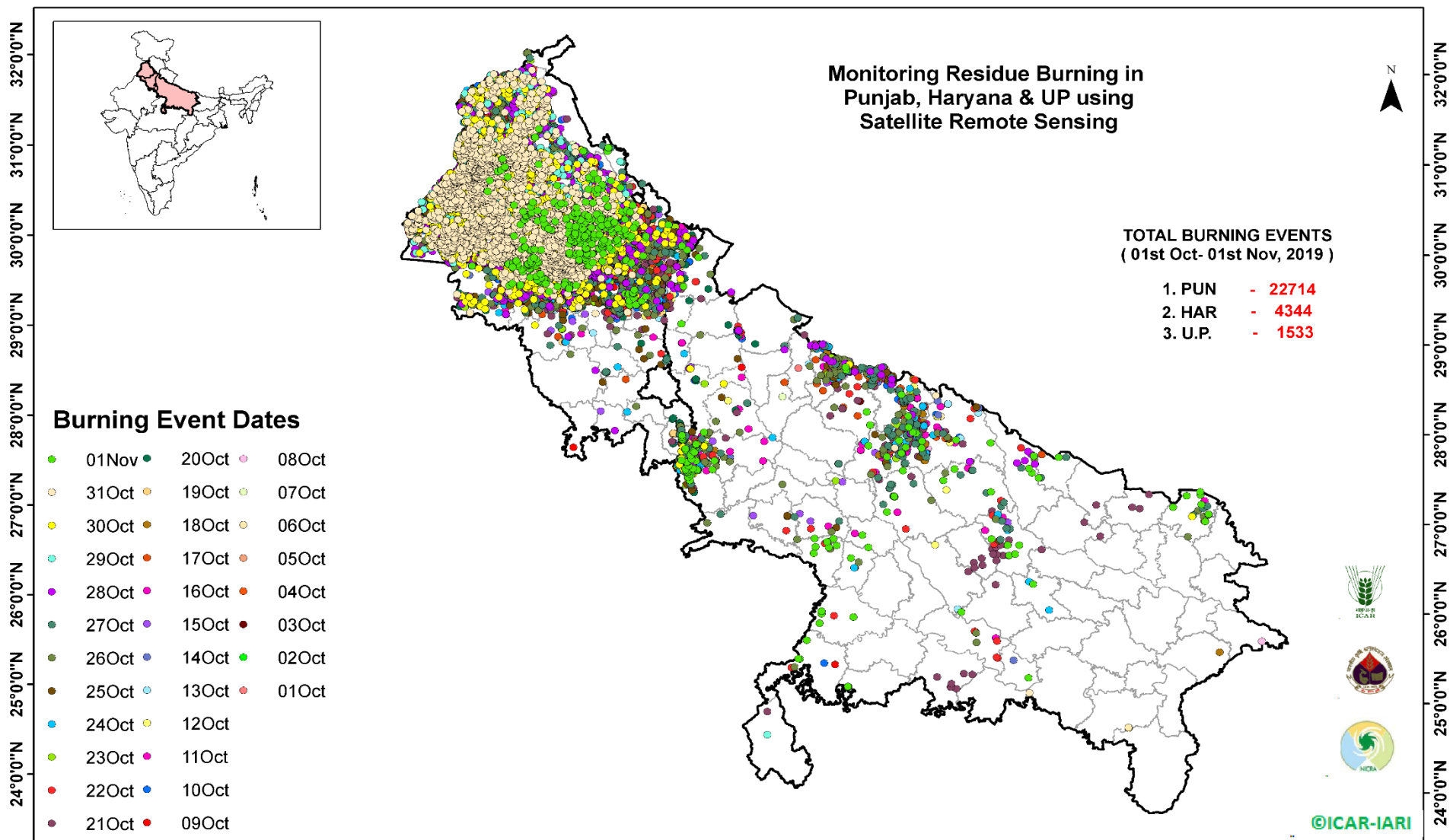
(c) Uttar Pradesh

Districts	01Oct-01 Nov			
	2016	2017	2018	2019
AGRA	0	0	0	2
ALIGARH	33	64	52	58
ALLAHABAD	0	1	4	0
AMBEDKARNAGAR	9	6	2	0
AMETHI	0	0	0	3
AMROHA	0	0	0	1
AURAIYA	93	82	21	5
AZAMGARH	3	1	2	0
BADAUN	0	4	3	3
BAGHPAT	0	0	0	3
BAHRAICH	18	12	32	9
BALLIA	1	1	2	1
BALRAMPUR	2	5	11	1
BANDA	1	1	4	6
BARABANKI	127	85	124	33
BAREILLY	183	144	101	66
BASTI	12	14	9	0
BHADOHI	0	0	0	0
BIJNOR	26	11	5	6
BULANDSAHAR	8	12	10	11
CHANDAULI	2	0	0	0
CHITRAKOOT	0	0	0	1
DEORIA	7	4	8	0
ETAH	5	18	14	1
ETAWAH	12	29	9	10
FAIZABAD	2	2	3	1
FARRUKHABAD	0	0	0	2
FATEHPUR	19	16	28	7
FIROZABAD	8	12	5	7

GAUTAMBUDHNAGAR	9	21	7	4
GAZIPUR	5	0	1	1
GHAZIABAD	25	13	7	10
GONDA	5	9	6	2
GORAKHPUR	10	8	17	0
HAMIRPUR	0	0	1	0
HAPUR	0	0	0	4
HARDOI	117	89	65	18
HATHRAS	0	0	0	0
JALAUN	0	0	0	5
JAUNPUR	2	1	4	0
JHANSI	0	0	2	7
KANNAUJ	1	6	3	2
KANPUR	2	3	3	0
KANPUR DEHAT	1	11	3	0
KASGANJ	0	0	0	0
KAUSHAMBI	5	14	16	2
KHERI	268	176	135	88
KUSHINAGAR	3	1	4	0
LALITPUR	0	0	0	2
LUCKNOW	23	15	14	7
MAHARAJGANJ	37	114	216	19
MAHOBA	0	0	0	6
MAINPURI	10	38	19	7
MATHURA	654	773	851	351
MAU	2	1	2	0
MEERUT	29	21	6	8
MIRZAPUR	0	8	4	3
MORADABAD	23	18	9	6
MUZAFARNAGAR	79	73	22	17
PILHIBHIT	673	560	324	239
PRATAPGARH	2	1	4	0

RAE BARELI	10	5	8	2
RAMPUR	560	532	191	209
SHARANPUR	51	69	39	41
SAMBHAL	0	0	0	2
SANTKABIRNAGAR	10	3	7	0
SHAHJAHANPUR	825	611	249	186
SHAMALI	0	0	0	17
SHRAWASTI	6	9	18	7
SIDDHARTHANAGAR	11	9	57	3
SITAPUR	65	33	18	17
SONBHADRA	7	1	7	0
SULTANPUR	5	3	3	0
UNNAO	16	11	15	4
VARANASI	0	0	0	0
JYOTIBAPHULE NAGAR	5	3	2	0
MAHAMAYANAGAR	0	2	2	0
Total	4127	3789	2810	1533

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



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

Details of residue burning events in Punjab on 01-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	BARNALA	BARNALA	S-NPP	75.64030	30.37984	13:12:00	D	2.80
2	BARNALA	BARNALA	S-NPP	75.64176	30.38093	13:12:00	D	7.30
3	BARNALA	BARNALA	S-NPP	75.63936	30.38358	13:12:00	D	2.80
4	BARNALA	BARNALA	S-NPP	75.66283	30.39984	13:12:00	D	4.30
5	BARNALA	BARNALA	TERRA	75.33600	30.40400	11:35:00	D	9.20
6	BARNALA	BARNALA	S-NPP	75.62907	30.42474	13:12:00	D	8.60
7	BARNALA	BARNALA	S-NPP	75.54559	30.44823	13:12:00	D	5.20
8	BARNALA	BARNALA	S-NPP	75.38931	30.45694	13:12:00	D	17.30
9	BARNALA	BARNALA	S-NPP	75.61687	30.47337	13:12:00	D	10.30
10	BARNALA	BARNALA	S-NPP	75.41054	30.48481	13:12:00	D	19.70
11	BARNALA	BARNALA	S-NPP	75.40037	30.50267	13:12:00	D	2.60
12	BARNALA	BARNALA	S-NPP	75.41114	30.50472	13:12:00	D	5.00
13	BARNALA	BARNALA	S-NPP	75.40480	30.50748	13:12:00	D	5.20
14	BARNALA	BARNALA	S-NPP	75.45660	30.52523	13:12:00	D	7.70
15	BARNALA	BARNALA	S-NPP	75.46635	30.53102	13:12:00	D	5.10
16	BARNALA	BARNALA	S-NPP	75.46979	30.53956	13:12:00	D	5.00
17	BARNALA	BARNALA	S-NPP	75.62912	30.54610	13:12:00	D	3.70
18	BARNALA	BARNALA	S-NPP	75.54148	30.56487	13:12:00	D	2.50
19	BATHINDA	RAMPURA PHUL	TERRA	75.37600	30.23200	11:35:00	D	11.60
20	BATHINDA	RAMPURA PHUL	TERRA	75.26200	30.27500	11:35:00	D	9.40
21	FATEHGARH SAHIB	ALMOH	S-NPP	76.13258	30.53444	13:12:00	D	4.00
22	FATEHGARH SAHIB	ALMOH	S-NPP	76.29932	30.54997	13:12:00	D	2.00
23	FATEHGARH SAHIB	ALMOH	S-NPP	76.22135	30.66784	13:12:00	D	4.50
24	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	76.37839	30.71531	13:12:00	D	2.30
25	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.40225	30.47135	13:12:00	D	4.00
26	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.44500	30.47300	13:10:00	D	39.20
27	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.45079	30.48020	13:12:00	D	39.40
28	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.33436	30.51108	13:12:00	D	5.40
29	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.33138	30.51129	13:12:00	D	5.80
30	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.40422	30.62981	13:12:00	D	3.70

31	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.40718	30.62992	13:12:00	D	8.10
32	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.40906	30.63071	13:12:00	D	5.40
33	FATEHGARH SAHIB	KHAMANOH	S-NPP	76.32207	30.82900	13:12:00	D	5.80
34	FATEHGARH SAHIB	KHAMANOH	S-NPP	76.32399	30.82969	13:12:00	D	5.10
35	FATEHGARH SAHIB	KHAMANOH	S-NPP	76.32890	30.87198	13:12:00	D	1.60
36	FIROZPUR	ZIRA	TERRA	74.93900	30.88100	11:35:00	D	7.40
37	FIROZPUR	ZIRA	S-NPP	75.15669	30.92946	13:12:00	D	6.30
38	FIROZPUR	ZIRA	S-NPP	75.03516	30.98728	13:12:00	D	10.30
39	FIROZPUR	ZIRA	S-NPP	75.07187	31.00234	13:12:00	D	5.20
40	FIROZPUR	ZIRA	S-NPP	75.07738	31.00340	13:12:00	D	8.40
41	FIROZPUR	ZIRA	S-NPP	75.12093	31.03565	13:12:00	D	4.30
42	FIROZPUR	ZIRA	S-NPP	75.11819	31.03716	13:12:00	D	4.60
43	FIROZPUR	ZIRA	S-NPP	75.07818	31.12510	13:12:00	D	7.30
44	FIROZPUR	ZIRA	S-NPP	75.08916	31.12720	13:12:00	D	8.70
45	HOSHIARPUR	GARHSHANKAR	S-NPP	76.08408	31.23734	13:12:00	D	4.40
46	JALANDHAR	JALANDHAR II	S-NPP	75.52490	31.47128	13:12:00	D	4.40
47	JALANDHAR	PHILLAUR	S-NPP	75.53659	31.07891	13:12:00	D	2.70
48	KAPURTHALA	KAPURTHALA	S-NPP	75.47587	31.37612	13:12:00	D	4.00
49	KAPURTHALA	KAPURTHALA	S-NPP	75.48109	31.37711	13:12:00	D	4.00
50	LUDHIANA	JAGRAON	S-NPP	75.45574	30.60651	13:12:00	D	5.10
51	LUDHIANA	KHANNA	S-NPP	76.13678	30.67513	13:12:00	D	3.40
52	LUDHIANA	LUDHIANA WEST	S-NPP	75.77338	30.85071	13:12:00	D	3.30
53	LUDHIANA	RAIKOT	TERRA	75.48700	30.65000	11:35:00	D	12.30
54	LUDHIANA	RAIKOT	TERRA	75.47800	30.65600	11:35:00	D	10.80
55	LUDHIANA	RAIKOT	S-NPP	75.74473	30.66136	13:12:00	D	3.00
56	LUDHIANA	SAMRALA	S-NPP	76.26920	30.77416	13:12:00	D	5.30
57	LUDHIANA	SAMRALA	S-NPP	76.24072	30.80673	13:12:00	D	2.20
58	LUDHIANA	SAMRALA	S-NPP	76.16281	30.81861	13:12:00	D	4.00
59	LUDHIANA	SAMRALA	S-NPP	76.27727	30.82467	13:12:00	D	2.20
60	LUDHIANA	SAMRALA	S-NPP	76.27927	30.82515	13:12:00	D	2.60
61	LUDHIANA	SAMRALA	S-NPP	76.22107	30.92721	13:12:00	D	5.50
62	LUDHIANA	SAMRALA	S-NPP	76.22324	30.92806	13:12:00	D	10.30
63	LUDHIANA	SAMRALA	S-NPP	76.17422	30.92984	13:12:00	D	6.70

64	LUDHIANA	SAMRALA	S-NPP	76.22018	30.93082	13:12:00	D	5.50
65	LUDHIANA	SAMRALA	S-NPP	76.27081	30.93269	13:12:00	D	2.70
66	LUDHIANA	SAMRALA	S-NPP	76.27309	30.93330	13:12:00	D	3.30
67	LUDHIANA	SAMRALA	S-NPP	76.16484	30.94702	13:12:00	D	7.10
68	LUDHIANA	SAMRALA	S-NPP	76.22556	30.99220	13:12:00	D	5.90
69	MANSA	BUDHLADA	S-NPP	75.62347	29.76461	13:12:00	D	5.90
70	MANSA	BUDHLADA	S-NPP	75.62883	29.76563	13:12:00	D	5.90
71	MANSA	BUDHLADA	S-NPP	75.59287	29.77464	13:12:00	D	4.10
72	MANSA	BUDHLADA	S-NPP	75.58560	29.78120	13:12:00	D	4.40
73	MANSA	BUDHLADA	S-NPP	75.67943	29.78713	13:12:00	D	2.60
74	MANSA	BUDHLADA	S-NPP	75.56659	29.78951	13:12:00	D	8.40
75	MANSA	BUDHLADA	S-NPP	75.56565	29.79331	13:12:00	D	8.40
76	MANSA	BUDHLADA	S-NPP	75.65781	29.80674	13:12:00	D	7.40
77	MANSA	BUDHLADA	S-NPP	75.64618	29.80851	13:12:00	D	10.80
78	MANSA	BUDHLADA	S-NPP	75.47756	29.82233	13:12:00	D	10.10
79	MANSA	BUDHLADA	S-NPP	75.61472	29.82237	13:12:00	D	1.90
80	MANSA	BUDHLADA	S-NPP	75.55426	29.83315	13:12:00	D	5.80
81	MANSA	BUDHLADA	S-NPP	75.60327	29.86241	13:12:00	D	3.80
82	MANSA	BUDHLADA	S-NPP	75.48098	29.91215	13:12:00	D	6.70
83	MANSA	BUDHLADA	S-NPP	75.47739	29.91399	13:12:00	D	4.60
84	MANSA	BUDHLADA	S-NPP	75.46824	29.91765	13:12:00	D	6.50
85	MANSA	BUDHLADA	S-NPP	75.54010	29.94745	13:12:00	D	5.60
86	MANSA	BUDHLADA	S-NPP	75.52364	29.96811	13:12:00	D	6.00
87	MANSA	BUDHLADA	S-NPP	75.57456	29.98971	13:12:00	D	5.40
88	MANSA	BUDHLADA	S-NPP	75.56194	29.99524	13:12:00	D	12.80
89	MANSA	MANSA	S-NPP	75.38284	29.88016	13:12:00	D	3.10
90	MANSA	MANSA	S-NPP	75.36803	29.90619	13:12:00	D	4.70
91	MANSA	MANSA	S-NPP	75.31985	29.93701	13:12:00	D	5.00
92	MANSA	MANSA	S-NPP	75.43341	29.94284	13:12:00	D	4.40
93	MANSA	MANSA	S-NPP	75.45422	29.95084	13:12:00	D	2.40
94	MANSA	MANSA	S-NPP	75.21108	29.95239	13:12:00	D	4.60
95	MANSA	MANSA	S-NPP	75.45327	29.95464	13:12:00	D	2.90
96	MANSA	MANSA	S-NPP	75.21011	29.95624	13:12:00	D	6.20

97	MANSA	MANSA	S-NPP	75.46415	29.95672	13:12:00	D	7.40
98	MANSA	MANSA	S-NPP	75.20152	29.95892	13:12:00	D	5.70
99	MANSA	MANSA	S-NPP	75.20354	29.95903	13:12:00	D	6.20
100	MANSA	MANSA	S-NPP	75.44048	29.96016	13:12:00	D	5.60
101	MANSA	MANSA	S-NPP	75.46319	29.96053	13:12:00	D	7.40
102	MANSA	MANSA	S-NPP	75.32512	29.96211	13:12:00	D	4.50
103	MANSA	MANSA	S-NPP	75.47947	29.96364	13:12:00	D	11.30
104	MANSA	MANSA	S-NPP	75.44497	29.96501	13:12:00	D	5.50
105	MANSA	MANSA	S-NPP	75.44402	29.96882	13:12:00	D	3.70
106	MANSA	MANSA	S-NPP	75.26392	29.97456	13:12:00	D	3.80
107	MANSA	MANSA	S-NPP	75.48649	29.98090	13:12:00	D	3.00
108	MANSA	MANSA	S-NPP	75.49191	29.98193	13:12:00	D	3.00
109	MANSA	MANSA	S-NPP	75.29665	29.99774	13:12:00	D	14.10
110	MANSA	MANSA	S-NPP	75.30217	29.99882	13:12:00	D	32.00
111	MANSA	MANSA	S-NPP	75.47630	29.99885	13:12:00	D	6.70
112	MANSA	MANSA	S-NPP	75.49151	30.01968	13:12:00	D	3.80
113	MANSA	MANSA	S-NPP	75.48236	30.01987	13:12:00	D	9.10
114	MANSA	MANSA	S-NPP	75.54362	30.02346	13:12:00	D	5.70
115	MANSA	MANSA	S-NPP	75.51467	30.04007	13:12:00	D	5.20
116	MANSA	MANSA	S-NPP	75.46040	30.12103	13:12:00	D	4.20
117	MANSA	MANSA	S-NPP	75.48009	30.12244	13:12:00	D	6.90
118	MANSA	MANSA	S-NPP	75.47663	30.12409	13:12:00	D	6.80
119	MANSA	MANSA	S-NPP	75.48204	30.12511	13:12:00	D	6.80
120	MANSA	MANSA	S-NPP	75.47914	30.12623	13:12:00	D	6.90
121	MANSA	MANSA	S-NPP	75.60473	30.12844	13:12:00	D	2.90
122	MANSA	MANSA	TERRA	75.36000	30.13100	11:35:00	D	9.00
123	MANSA	MANSA	S-NPP	75.51975	30.13220	13:12:00	D	3.80
124	MANSA	MANSA	S-NPP	75.39828	30.15436	13:12:00	D	7.00
125	MANSA	MANSA	S-NPP	75.40372	30.15540	13:12:00	D	6.60
126	MANSA	SARDULGARH	S-NPP	75.22627	29.72055	13:12:00	D	3.10
127	MANSA	SARDULGARH	S-NPP	75.35477	29.72106	13:12:00	D	10.80
128	MANSA	SARDULGARH	S-NPP	75.36294	29.73470	13:12:00	D	5.70
129	MANSA	SARDULGARH	S-NPP	75.26066	29.74737	13:12:00	D	3.70

130	MANSA	SARDULGARH	S-NPP	75.25890	29.92526	13:12:00	D	8.40
131	MOGA	BAGHA PURANA	TERRA	74.91800	30.76000	11:35:00	D	6.40
132	MOGA	NIHAL SINGH WALA	S-NPP	75.36327	30.54914	13:12:00	D	5.00
133	MOGA	NIHAL SINGH WALA	TERRA	75.24800	30.61700	11:35:00	D	6.90
134	PATIALA	NABHA	S-NPP	76.20361	30.30655	13:12:00	D	3.90
135	PATIALA	NABHA	S-NPP	76.08040	30.31816	13:12:00	D	3.10
136	PATIALA	NABHA	S-NPP	76.08544	30.31909	13:12:00	D	3.80
137	PATIALA	NABHA	S-NPP	76.16068	30.33297	13:12:00	D	5.30
138	PATIALA	NABHA	AQUA	75.99800	30.35400	13:10:00	D	16.40
139	PATIALA	NABHA	S-NPP	76.08482	30.37462	13:12:00	D	3.90
140	PATIALA	NABHA	S-NPP	76.11583	30.37660	13:12:00	D	5.30
141	PATIALA	NABHA	S-NPP	76.10491	30.37839	13:12:00	D	13.30
142	PATIALA	NABHA	S-NPP	76.21145	30.39066	13:12:00	D	3.10
143	PATIALA	NABHA	S-NPP	76.04056	30.40472	13:12:00	D	5.10
144	PATIALA	NABHA	S-NPP	76.04560	30.40566	13:12:00	D	8.00
145	PATIALA	NABHA	S-NPP	76.04974	30.41027	13:12:00	D	5.20
146	PATIALA	NABHA	S-NPP	76.12241	30.43518	13:12:00	D	5.00
147	PATIALA	NABHA	S-NPP	76.14293	30.45804	13:12:00	D	5.90
148	PATIALA	NABHA	S-NPP	76.31744	30.46339	13:12:00	D	1.80
149	PATIALA	NABHA	S-NPP	76.30096	30.46795	13:12:00	D	2.60
150	PATIALA	NABHA	S-NPP	76.07919	30.47483	13:12:00	D	8.10
151	PATIALA	NABHA	S-NPP	76.20993	30.48169	13:12:00	D	2.80
152	PATIALA	NABHA	S-NPP	76.17991	30.48987	13:12:00	D	7.10
153	PATIALA	NABHA	S-NPP	76.17278	30.51901	13:12:00	D	6.80
154	PATIALA	NABHA	S-NPP	76.27073	30.54092	13:12:00	D	9.60
155	PATIALA	PATIALA	S-NPP	76.47437	30.14603	13:12:00	D	2.90
156	PATIALA	PATIALA	AQUA	76.31700	30.15300	13:10:00	D	16.00
157	PATIALA	PATIALA	S-NPP	76.31683	30.16270	13:12:00	D	12.60
158	PATIALA	PATIALA	S-NPP	76.43642	30.17686	13:12:00	D	2.60
159	PATIALA	PATIALA	S-NPP	76.36593	30.18231	13:12:00	D	5.70
160	PATIALA	PATIALA	S-NPP	76.36345	30.18255	13:12:00	D	6.50
161	PATIALA	PATIALA	S-NPP	76.35523	30.18411	13:12:00	D	8.20
162	PATIALA	PATIALA	S-NPP	76.35274	30.18440	13:12:00	D	10.60

163	PATIALA	PATIALA	TERRA	76.35400	30.20900	11:35:00	D	14.50
164	PATIALA	PATIALA	TERRA	76.34800	30.21200	11:35:00	D	18.30
165	PATIALA	PATIALA	S-NPP	76.54773	30.21955	13:12:00	D	3.70
166	PATIALA	PATIALA	S-NPP	76.36523	30.22766	13:12:00	D	2.60
167	PATIALA	PATIALA	S-NPP	76.35453	30.22948	13:12:00	D	3.70
168	PATIALA	PATIALA	S-NPP	76.37993	30.23037	13:12:00	D	24.80
169	PATIALA	PATIALA	S-NPP	76.42480	30.23484	13:12:00	D	7.80
170	PATIALA	PATIALA	S-NPP	76.19948	30.25046	13:12:00	D	4.00
171	PATIALA	PATIALA	S-NPP	76.51704	30.25177	13:12:00	D	2.50
172	PATIALA	PATIALA	S-NPP	76.37292	30.25936	13:12:00	D	4.40
173	PATIALA	PATIALA	S-NPP	76.17854	30.25987	13:12:00	D	2.20
174	PATIALA	PATIALA	S-NPP	76.18093	30.26235	13:12:00	D	3.20
175	PATIALA	PATIALA	S-NPP	76.53374	30.26610	13:12:00	D	3.20
176	PATIALA	PATIALA	S-NPP	76.53857	30.26698	13:12:00	D	4.50
177	PATIALA	PATIALA	AQUA	76.24800	30.27200	13:10:00	D	25.80
178	PATIALA	PATIALA	AQUA	76.25300	30.27400	13:10:00	D	30.10
179	PATIALA	PATIALA	S-NPP	76.25471	30.27958	13:12:00	D	17.10
180	PATIALA	PATIALA	S-NPP	76.28996	30.29215	13:12:00	D	3.80
181	PATIALA	PATIALA	S-NPP	76.30526	30.31398	13:12:00	D	1.60
182	PATIALA	PATIALA	S-NPP	76.25324	30.31575	13:12:00	D	17.50
183	PATIALA	PATIALA	S-NPP	76.31509	30.31580	13:12:00	D	8.50
184	PATIALA	PATIALA	S-NPP	76.47218	30.34101	13:12:00	D	2.20
185	PATIALA	PATIALA	S-NPP	76.44717	30.38160	13:12:00	D	4.50
186	PATIALA	PATIALA	S-NPP	76.38839	30.39354	13:12:00	D	20.70
187	PATIALA	PATIALA	S-NPP	76.30875	30.39362	13:12:00	D	1.20
188	PATIALA	PATIALA	S-NPP	76.33957	30.41450	13:12:00	D	11.50
189	PATIALA	PATIALA	S-NPP	76.42871	30.41590	13:12:00	D	2.50
190	PATIALA	PATIALA	S-NPP	76.43078	30.41632	13:12:00	D	5.70
191	PATIALA	PATIALA	S-NPP	76.33869	30.41813	13:12:00	D	2.10
192	PATIALA	PATIALA	S-NPP	76.42729	30.43074	13:12:00	D	3.40
193	PATIALA	PATIALA	S-NPP	76.41671	30.43255	13:12:00	D	3.00
194	PATIALA	PATIALA	S-NPP	76.49157	30.45761	13:12:00	D	4.30
195	PATIALA	PATIALA	S-NPP	76.49638	30.45849	13:12:00	D	5.20

196	PATIALA	PATIALA	S-NPP	76.32686	30.48780	13:12:00	D	22.50
197	PATIALA	RAJPURA	S-NPP	76.61900	30.30779	13:12:00	D	2.40
198	PATIALA	RAJPURA	S-NPP	76.67625	30.31811	13:12:00	D	8.20
199	PATIALA	RAJPURA	S-NPP	76.64117	30.31926	13:12:00	D	4.10
200	PATIALA	RAJPURA	S-NPP	76.64985	30.32455	13:12:00	D	7.30
201	PATIALA	RAJPURA	S-NPP	76.65377	30.32899	13:12:00	D	2.40
202	PATIALA	RAJPURA	S-NPP	76.56857	30.35870	13:12:00	D	4.50
203	PATIALA	RAJPURA	S-NPP	76.62341	30.37993	13:12:00	D	1.80
204	PATIALA	RAJPURA	S-NPP	76.54073	30.39109	13:12:00	D	2.60
205	PATIALA	RAJPURA	S-NPP	76.62319	30.49286	13:12:00	D	1.90
206	PATIALA	RAJPURA	S-NPP	76.60667	30.57256	13:12:00	D	3.10
207	PATIALA	RAJPURA	S-NPP	76.58980	30.58067	13:12:00	D	1.60
208	PATIALA	RAJPURA	S-NPP	76.64128	30.59377	13:12:00	D	4.00
209	PATIALA	SAMANA	AQUA	76.18700	29.96700	13:10:00	D	22.90
210	PATIALA	SAMANA	S-NPP	76.19809	29.97853	13:12:00	D	2.40
211	PATIALA	SAMANA	S-NPP	76.19041	29.98860	13:12:00	D	7.50
212	PATIALA	SAMANA	S-NPP	76.07594	30.02514	13:12:00	D	4.30
213	PATIALA	SAMANA	S-NPP	76.07294	30.02560	13:12:00	D	7.00
214	PATIALA	SAMANA	S-NPP	76.07505	30.02883	13:12:00	D	4.30
215	PATIALA	SAMANA	S-NPP	76.16460	30.02986	13:12:00	D	6.20
216	PATIALA	SAMANA	S-NPP	76.15017	30.05553	13:12:00	D	9.10
217	PATIALA	SAMANA	S-NPP	76.15900	30.08403	13:12:00	D	6.00
218	PATIALA	SAMANA	S-NPP	76.18497	30.08503	13:12:00	D	16.10
219	PATIALA	SAMANA	S-NPP	76.18409	30.08870	13:12:00	D	16.10
220	PATIALA	SAMANA	S-NPP	76.16134	30.09597	13:12:00	D	3.90
221	PATIALA	SAMANA	S-NPP	76.22817	30.10070	13:12:00	D	9.90
222	PATIALA	SAMANA	S-NPP	76.23315	30.10162	13:12:00	D	9.90
223	PATIALA	SAMANA	S-NPP	76.16457	30.10424	13:12:00	D	8.00
224	PATIALA	SAMANA	S-NPP	76.14996	30.15331	13:12:00	D	2.30
225	PATIALA	SAMANA	S-NPP	76.15498	30.15425	13:12:00	D	4.80
226	PATIALA	SAMANA	S-NPP	76.15408	30.15792	13:12:00	D	6.00
227	PATIALA	SAMANA	S-NPP	76.22601	30.20575	13:12:00	D	5.20
228	PATIALA	SAMANA	S-NPP	76.12651	30.20644	13:12:00	D	4.10

229	PATIALA	SAMANA	S-NPP	76.22511	30.20940	13:12:00	D	2.50
230	PATIALA	SAMANA	S-NPP	76.07664	30.21642	13:12:00	D	6.90
231	RUPNAGAR	ANANDPUR SAHIB	S-NPP	76.38579	31.24341	13:12:00	D	2.60
232	RUPNAGAR	ANANDPUR SAHIB	S-NPP	76.39624	31.28256	13:12:00	D	1.90
233	RUPNAGAR	ANANDPUR SAHIB	S-NPP	76.39781	31.28416	13:12:00	D	3.60
234	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.56019	30.84202	13:12:00	D	3.90
235	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.43864	30.91825	13:12:00	D	3.80
236	SANGRUR	DHURI	AQUA	75.93500	30.31300	13:10:00	D	16.90
237	SANGRUR	DHURI	TERRA	75.72100	30.35400	11:35:00	D	9.10
238	SANGRUR	DHURI	S-NPP	75.68421	30.36538	13:12:00	D	4.60
239	SANGRUR	DHURI	S-NPP	76.01060	30.37608	13:12:00	D	5.00
240	SANGRUR	DHURI	S-NPP	75.93905	30.38582	13:12:00	D	4.50
241	SANGRUR	DHURI	S-NPP	75.93867	30.40890	13:12:00	D	4.40
242	SANGRUR	DHURI	S-NPP	75.76498	30.45045	13:12:00	D	8.10
243	SANGRUR	MALERKOTLA	S-NPP	76.02034	30.40097	13:12:00	D	4.50
244	SANGRUR	MALERKOTLA	S-NPP	75.89886	30.47561	13:12:00	D	3.60
245	SANGRUR	MALERKOTLA	S-NPP	75.90122	30.48764	13:12:00	D	5.80
246	SANGRUR	MALERKOTLA	S-NPP	76.00977	30.50019	13:12:00	D	6.00
247	SANGRUR	MALERKOTLA	S-NPP	76.01482	30.50113	13:12:00	D	5.60
248	SANGRUR	MALERKOTLA	S-NPP	75.97395	30.51658	13:12:00	D	3.80
249	SANGRUR	MALERKOTLA	S-NPP	76.00394	30.54516	13:12:00	D	9.00
250	SANGRUR	MALERKOTLA	S-NPP	76.00304	30.54882	13:12:00	D	9.90
251	SANGRUR	MALERKOTLA	S-NPP	76.03424	30.55072	13:12:00	D	5.30
252	SANGRUR	MALERKOTLA	S-NPP	76.02159	30.61191	13:12:00	D	5.90
253	SANGRUR	MALERKOTLA	S-NPP	75.80000	30.62471	13:12:00	D	2.30
254	SANGRUR	MALERKOTLA	S-NPP	75.86604	30.64946	13:12:00	D	6.80
255	SANGRUR	MALERKOTLA	S-NPP	75.83353	30.65103	13:12:00	D	2.30
256	SANGRUR	MOONAK	TERRA	75.97900	29.73500	11:35:00	D	14.50
257	SANGRUR	MOONAK	S-NPP	75.96735	29.74413	13:12:00	D	3.60
258	SANGRUR	MOONAK	S-NPP	76.04724	29.74740	13:12:00	D	11.60
259	SANGRUR	MOONAK	S-NPP	75.93170	29.75696	13:12:00	D	3.80
260	SANGRUR	MOONAK	S-NPP	75.93689	29.75792	13:12:00	D	3.80
261	SANGRUR	MOONAK	S-NPP	75.90701	29.77937	13:12:00	D	9.00

262	SANGRUR	MOONAK	S-NPP	75.90969	29.78017	13:12:00	D	14.60
263	SANGRUR	MOONAK	S-NPP	75.91220	29.78036	13:12:00	D	9.00
264	SANGRUR	SANGRUR	S-NPP	75.94668	30.20397	13:12:00	D	5.30
265	SANGRUR	SANGRUR	S-NPP	76.00616	30.22267	13:12:00	D	4.50
266	SANGRUR	SANGRUR	S-NPP	76.00434	30.23005	13:12:00	D	2.90
267	SANGRUR	SANGRUR	S-NPP	76.00945	30.23098	13:12:00	D	3.60
268	SANGRUR	SANGRUR	S-NPP	76.00646	30.23126	13:12:00	D	5.30
269	SANGRUR	SANGRUR	S-NPP	75.96628	30.24297	13:12:00	D	19.50
270	SANGRUR	SANGRUR	S-NPP	76.08043	30.24399	13:12:00	D	2.80
271	SANGRUR	SANGRUR	S-NPP	75.96537	30.24666	13:12:00	D	6.00
272	SANGRUR	SANGRUR	S-NPP	76.07195	30.26669	13:12:00	D	6.80
273	SANGRUR	SANGRUR	AQUA	76.12700	30.27300	13:10:00	D	28.30
274	SANGRUR	SANGRUR	S-NPP	76.14230	30.27986	13:12:00	D	3.90
275	SANGRUR	SANGRUR	S-NPP	75.98360	30.28096	13:12:00	D	4.40
276	SANGRUR	SANGRUR	S-NPP	76.13138	30.28164	13:12:00	D	6.30
277	SANGRUR	SANGRUR	S-NPP	76.00721	30.29306	13:12:00	D	4.50
278	SANGRUR	SANGRUR	S-NPP	76.13783	30.29815	13:12:00	D	2.80
279	SANGRUR	SANGRUR	S-NPP	76.00957	30.30505	13:12:00	D	7.20
280	SANGRUR	SANGRUR	S-NPP	76.01102	30.32072	13:12:00	D	9.60
281	SANGRUR	SANGRUR	S-NPP	76.01609	30.32166	13:12:00	D	9.60
282	SANGRUR	SUNAM	S-NPP	76.00580	30.08250	13:12:00	D	5.60
283	SANGRUR	SUNAM	S-NPP	75.95608	30.08874	13:12:00	D	8.10
284	SANGRUR	SUNAM	S-NPP	75.94489	30.09055	13:12:00	D	4.80
285	SANGRUR	SUNAM	S-NPP	75.95003	30.09150	13:12:00	D	4.80
286	SANGRUR	SUNAM	S-NPP	75.95517	30.09245	13:12:00	D	8.10
287	SANGRUR	SUNAM	S-NPP	76.03877	30.10019	13:12:00	D	3.60
288	SANGRUR	SUNAM	S-NPP	75.94894	30.10761	13:12:00	D	3.70
289	SANGRUR	SUNAM	S-NPP	76.07938	30.10770	13:12:00	D	8.70
290	SAS NAGAR	DERABASSI	S-NPP	76.75713	30.44129	13:12:00	D	5.00
291	SAS NAGAR	MOHALI	S-NPP	76.68764	30.57514	13:12:00	D	2.30
292	SAS NAGAR	MOHALI	S-NPP	76.68513	30.57574	13:12:00	D	1.60
293	SAS NAGAR	MOHALI	S-NPP	76.71619	30.65185	13:12:00	D	3.40

Details of residue burning events in Haryana on 01-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	AMBALA	AMBALA	S-NPP	76.70852	30.28668	13:12:00	D	5.50
2	AMBALA	AMBALA	S-NPP	76.88850	30.29333	13:12:00	D	2.90
3	AMBALA	AMBALA	S-NPP	76.70817	30.30896	13:12:00	D	4.60
4	AMBALA	AMBALA	S-NPP	76.88898	30.31190	13:12:00	D	3.00
5	AMBALA	AMBALA	S-NPP	76.73260	30.39976	13:12:00	D	5.10
6	AMBALA	NARAYANGARH	S-NPP	77.16711	30.44119	13:12:00	D	2.50
7	AMBALA	NARAYANGARH	S-NPP	77.16569	30.44165	13:12:00	D	1.70
8	FATEHABAD	RATIA	S-NPP	75.67093	29.75389	13:12:00	D	9.20
9	FATEHABAD	TOHANA	S-NPP	75.71690	29.66944	13:12:00	D	5.20
10	FATEHABAD	TOHANA	S-NPP	75.81863	29.72802	13:12:00	D	11.70
11	FATEHABAD	TOHANA	S-NPP	75.90665	29.74839	13:12:00	D	5.40
12	JIND	NARWANA	S-NPP	75.95486	29.70672	13:12:00	D	6.50
13	JIND	NARWANA	S-NPP	75.96004	29.70770	13:12:00	D	6.50
14	KAITHAL	GUHLA	S-NPP	76.20077	29.96752	13:12:00	D	16.60
15	KAITHAL	GUHLA	S-NPP	76.24369	30.00611	13:12:00	D	12.20
16	KAITHAL	GUHLA	S-NPP	76.35957	30.01985	13:12:00	D	4.50
17	KAITHAL	GUHLA	S-NPP	76.36628	30.10722	13:12:00	D	3.90
18	KAITHAL	KAITHAL	S-NPP	76.64907	29.66657	13:12:00	D	5.00
19	KAITHAL	KAITHAL	S-NPP	76.69730	29.67528	13:12:00	D	6.10
20	KARNAL	ASSANDH	S-NPP	76.71172	29.53855	13:12:00	D	2.70
21	KARNAL	ASSANDH	S-NPP	76.71087	29.54215	13:12:00	D	3.20
22	KARNAL	ASSANDH	S-NPP	76.69977	29.58906	13:12:00	D	4.20
23	KARNAL	ASSANDH	S-NPP	76.70250	29.58973	13:12:00	D	7.30
24	KARNAL	ASSANDH	S-NPP	76.68628	29.65825	13:12:00	D	2.40
25	KARNAL	ASSANDH	S-NPP	76.69505	29.66360	13:12:00	D	5.10
26	KARNAL	GHARAUNDA	S-NPP	76.78539	29.54442	13:12:00	D	4.60
27	KARNAL	KARNAL	S-NPP	76.85398	29.59049	13:12:00	D	1.40
28	KARNAL	KARNAL	S-NPP	76.75974	29.62280	13:12:00	D	2.40
29	KARNAL	KARNAL	S-NPP	76.90388	29.64163	13:12:00	D	2.80
30	KARNAL	KARNAL	AQUA	76.74200	29.66700	13:10:00	D	26.80

31	KARNAL	KARNAL	S-NPP	76.75827	29.67127	13:12:00	D	2.90
32	KARNAL	KARNAL	S-NPP	76.74785	29.67314	13:12:00	D	8.00
33	KARNAL	KARNAL	S-NPP	76.74699	29.67673	13:12:00	D	8.00
34	KARNAL	KARNAL	S-NPP	76.75847	29.71251	13:12:00	D	6.60
35	KARNAL	KARNAL	S-NPP	76.76009	29.71298	13:12:00	D	5.30
36	KURUKSHETRA	PEHOWA	S-NPP	76.63968	30.03732	13:12:00	D	6.90
37	KURUKSHETRA	PEHOWA	S-NPP	76.64928	30.03909	13:12:00	D	4.90
38	KURUKSHETRA	PEHOWA	S-NPP	76.65408	30.03996	13:12:00	D	4.90
39	KURUKSHETRA	THANESAR	S-NPP	76.71438	30.00517	13:12:00	D	3.30
40	KURUKSHETRA	THANESAR	S-NPP	76.85934	30.09221	13:12:00	D	3.00
41	PALWAL	HODAL	S-NPP	77.47183	27.90160	13:12:00	D	4.10
42	PALWAL	HODAL	AQUA	77.42500	27.94200	13:10:00	D	20.70
43	PALWAL	HODAL	S-NPP	77.42651	27.95299	13:12:00	D	7.10
44	PALWAL	PALWAL	S-NPP	77.38496	28.05853	13:12:00	D	6.90
45	PALWAL	PALWAL	S-NPP	77.37669	28.08021	13:12:00	D	3.00
46	PALWAL	PALWAL	S-NPP	77.38396	28.08439	13:12:00	D	4.40
47	PALWAL	PALWAL	S-NPP	77.38114	28.10335	13:12:00	D	5.00
48	SIRSA	DABWALI	S-NPP	74.75971	29.92674	01:54:00	N	0.60
49	YAMUNANAGAR	CHHACHHRAULII	S-NPP	77.40054	30.16699	13:12:00	D	2.90
50	YAMUNANAGAR	CHHACHHRAULII	S-NPP	77.33379	30.21327	13:12:00	D	4.00

Details of residue burning events in Uttar Pradesh on 01-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	ALIGARH	KHAIR	S-NPP	77.54737	27.97066	13:12:00	D	3.70
2	ALIGARH	KHAIR	S-NPP	77.55096	27.99717	13:12:00	D	3.20
3	ALIGARH	KHAIR	S-NPP	77.55476	28.00153	13:12:00	D	7.90
4	ALIGARH	KHAIR	S-NPP	77.55575	28.00372	13:12:00	D	9.90
5	AMETHI	MUSAFIRKHANA	S-NPP	81.61294	26.45150	13:12:00	D	1.70
6	AURAIYA	BIDHUNA	S-NPP	79.43437	26.75253	13:12:00	D	1.70
7	AURAIYA	BIDHUNA	S-NPP	79.64358	26.87132	13:12:00	D	2.10
8	BAHRAICH	BAHRAICH	S-NPP	81.61562	27.69589	13:12:00	D	2.40
9	BAHRAICH	NANPARA	S-NPP	81.58235	27.74545	13:12:00	D	3.10
10	BAHRAICH	NANPARA	S-NPP	81.63856	27.88502	01:54:00	N	1.90
11	BARABANKI	H AidARGARH	S-NPP	81.32812	26.77431	13:12:00	D	4.00
12	BARABANKI	H AidARGARH	S-NPP	81.33128	26.77757	13:12:00	D	3.50
13	BARABANKI	H AidARGARH	S-NPP	81.40382	26.79190	13:12:00	D	2.20
14	BARABANKI	NAWABGANJ	S-NPP	81.31424	26.89027	13:12:00	D	2.50
15	BARABANKI	NAWABGANJ	S-NPP	81.11892	26.96193	13:12:00	D	2.10
16	BARABANKI	SIRAULI GAUSPUR	S-NPP	81.45274	26.89096	13:12:00	D	6.50
17	BAREILLY	BAREILY	S-NPP	79.61732	28.38361	13:12:00	D	4.40
18	BAREILLY	FARIDPUR	S-NPP	79.65905	28.23858	13:12:00	D	2.40
19	ETA WAH	BHARTHNA	S-NPP	79.25951	26.89164	13:12:00	D	2.40
20	ETA WAH	BHARTHNA	S-NPP	79.22298	26.96622	13:12:00	D	1.10
21	ETA WAH	ETA WAH	S-NPP	78.98712	26.80455	13:12:00	D	1.80
22	ETA WAH	ETA WAH	S-NPP	79.16669	26.86903	13:12:00	D	6.00
23	ETA WAH	ETA WAH	S-NPP	79.14513	26.93224	13:12:00	D	2.90
24	ETA WAH	SAIFAI	S-NPP	79.00756	26.87393	13:12:00	D	2.30
25	ETA WAH	SAIFAI	S-NPP	78.99748	26.96707	13:12:00	D	2.30
26	GAUTAMBUDHNAGAR	JEVAR	S-NPP	77.64514	28.13959	13:12:00	D	2.50
27	HARDOI	HARDOI	S-NPP	79.95359	27.43666	13:12:00	D	10.20
28	HARDOI	HARDOI	S-NPP	79.94832	27.44269	13:12:00	D	1.40
29	HARDOI	HARDOI	S-NPP	79.95227	27.44332	13:12:00	D	14.40
30	HARDOI	SHAHABAD	S-NPP	80.05808	27.72860	13:12:00	D	1.70

31	HARDOI	SIWAJIPUR	S-NPP	79.86439	27.26715	13:12:00	D	1.40
32	JALAUN	KONCH	S-NPP	79.06181	26.02082	13:12:00	D	3.40
33	JALAUN	KONCH	S-NPP	79.08385	26.12645	13:12:00	D	19.00
34	JALAUN	MADHOGARH	S-NPP	79.08652	26.15529	13:12:00	D	1.40
35	JALAUN	URAI	S-NPP	79.46450	26.09188	13:12:00	D	3.80
36	JHANSI	MOTH	S-NPP	78.83258	25.61961	13:12:00	D	4.00
37	JHANSI	MOTH	S-NPP	78.81404	25.62361	13:12:00	D	1.80
38	JHANSI	MOTH	S-NPP	78.91257	25.83156	13:12:00	D	3.00
39	KANNAUJ	CHHIBRAMAU	S-NPP	79.57022	27.00927	13:12:00	D	1.60
40	KAUSHAMBI	CHAIL	S-NPP	81.54601	25.40605	13:12:00	D	6.60
41	KHERI	DHAURAHRA	S-NPP	81.12002	28.03533	13:12:00	D	2.70
42	KHERI	LAKHIMPUR	S-NPP	80.70053	28.06948	13:12:00	D	1.90
43	KHERI	MOHMADI	S-NPP	80.28373	27.98104	13:12:00	D	2.80
44	KHERI	MOHMADI	S-NPP	80.28916	28.05642	13:12:00	D	3.90
45	MAHARAJGANJ	NAUTANWA	S-NPP	83.47642	27.40979	13:12:00	D	1.70
46	MAHARAJGANJ	NAUTANWA	AQUA	83.64300	27.41400	13:10:00	D	3.70
47	MAHARAJGANJ	NAUTANWA	S-NPP	83.64010	27.44919	13:12:00	D	4.80
48	MAHARAJGANJ	NICHLAUL	S-NPP	83.69183	27.11839	13:12:00	D	3.60
49	MAHARAJGANJ	NICHLAUL	S-NPP	83.73234	27.19125	13:12:00	D	2.70
50	MAHARAJGANJ	NICHLAUL	S-NPP	83.73549	27.19878	13:12:00	D	1.80
51	MAHARAJGANJ	NICHLAUL	S-NPP	83.65223	27.30980	13:12:00	D	2.20
52	MAHARAJGANJ	PHARENDA	S-NPP	83.30708	27.28620	13:12:00	D	1.80
53	MAHOBA	KULPAHAR	S-NPP	79.40865	25.30796	13:12:00	D	1.80
54	MAHOBA	KULPAHAR	S-NPP	79.40385	25.31069	13:12:00	D	2.90
55	MAHOBA	KULPAHAR	S-NPP	79.40795	25.31138	13:12:00	D	2.90
56	MAHOBA	KULPAHAR	S-NPP	79.41206	25.31207	13:12:00	D	5.80
57	MAHOBA	KULPAHAR	S-NPP	79.39904	25.31342	13:12:00	D	1.70
58	MAHOBA	KULPAHAR	S-NPP	79.40314	25.31411	13:12:00	D	2.90
59	MATHURA	CHHATA	S-NPP	77.48598	27.59963	13:12:00	D	5.60
60	MATHURA	CHHATA	S-NPP	77.46318	27.63657	13:12:00	D	3.70
61	MATHURA	CHHATA	S-NPP	77.50021	27.66546	13:12:00	D	1.80
62	MATHURA	CHHATA	S-NPP	77.50144	27.66650	13:12:00	D	3.20
63	MATHURA	CHHATA	S-NPP	77.47664	27.66947	13:12:00	D	2.90

64	MATHURA	CHHATA	S-NPP	77.45789	27.68845	13:12:00	D	7.00
65	MATHURA	CHHATA	S-NPP	77.45708	27.69203	13:12:00	D	5.80
66	MATHURA	CHHATA	AQUA	77.45700	27.70900	13:10:00	D	17.50
67	MATHURA	CHHATA	TERRA	77.57500	27.71400	11:35:00	D	17.80
68	MATHURA	CHHATA	S-NPP	77.43748	27.71462	13:12:00	D	4.00
69	MATHURA	CHHATA	S-NPP	77.47007	27.72044	13:12:00	D	2.10
70	MATHURA	CHHATA	S-NPP	77.57037	27.72346	13:12:00	D	4.10
71	MATHURA	CHHATA	S-NPP	77.42960	27.72814	13:12:00	D	8.40
72	MATHURA	CHHATA	S-NPP	77.52023	27.73309	13:12:00	D	24.90
73	MATHURA	CHHATA	S-NPP	77.46507	27.76422	13:12:00	D	3.80
74	MATHURA	CHHATA	S-NPP	77.46252	27.76506	13:12:00	D	1.90
75	MATHURA	CHHATA	AQUA	77.45100	27.80000	13:10:00	D	18.30
76	MATHURA	CHHATA	S-NPP	77.44440	27.80277	13:12:00	D	23.90
77	MATHURA	CHHATA	S-NPP	77.55617	27.81907	13:12:00	D	5.30
78	MATHURA	CHHATA	S-NPP	77.38200	27.82144	13:12:00	D	5.00
79	MATHURA	CHHATA	S-NPP	77.49986	27.83499	13:12:00	D	4.10
80	MATHURA	CHHATA	S-NPP	77.49129	27.87911	13:12:00	D	3.30
81	MATHURA	CHHATA	S-NPP	77.51933	27.92496	13:12:00	D	3.60
82	MATHURA	MAT	S-NPP	77.75674	27.72591	01:54:00	N	0.80
83	MATHURA	MAT	S-NPP	77.77717	27.82534	13:12:00	D	1.90
84	MATHURA	MAT	S-NPP	77.53634	27.91318	13:12:00	D	3.80
85	PILHIBHIT	PURANPUR	S-NPP	80.12449	28.33867	13:12:00	D	2.70
86	PILHIBHIT	PURANPUR	S-NPP	80.04038	28.57652	13:12:00	D	4.10
87	RAIBEARELI	LALGANJ	S-NPP	80.75405	26.14710	13:12:00	D	1.60
88	RAMPUR	BILASPUR	S-NPP	79.36470	28.85303	13:12:00	D	5.30
89	RAMPUR	BILASPUR	S-NPP	79.35835	28.88448	13:12:00	D	6.10
90	SHAHJAHANPUR	PUWANYA	S-NPP	80.03988	27.92550	13:12:00	D	2.40
91	SHAHJAHANPUR	PUWANYA	S-NPP	80.09217	27.98851	13:12:00	D	1.90
92	SHAHJAHANPUR	PUWANYA	S-NPP	80.01234	28.06405	13:12:00	D	4.70
93	SHAHJAHANPUR	PUWANYA	S-NPP	80.21868	28.14678	13:12:00	D	2.20
94	SHAHJAHANPUR	PUWANYA	S-NPP	80.17616	28.15716	13:12:00	D	6.30
95	SHAHJAHANPUR	PUWANYA	S-NPP	80.12826	28.21451	13:12:00	D	2.70
96	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	79.86501	27.88388	13:12:00	D	2.20

97	SHAHJAHANPUR	TILHAR	S-NPP	79.63921	28.00793	13:12:00	D	1.50
98	SHAMLI	SHAMLI	S-NPP	77.34727	29.34444	13:12:00	D	2.70
99	SHARANPUR	NAKUR	S-NPP	77.36187	29.76058	13:12:00	D	3.00
100	SHARANPUR	SHARANPUR	S-NPP	77.54227	30.08634	13:12:00	D	1.20
101	SHRAWASTI	BHINGA	S-NPP	81.94173	27.86525	01:54:00	N	0.60
102	SHRAWASTI	IKAUNA	S-NPP	81.69489	27.63701	13:12:00	D	3.20
103	SITAPUR	MAHMUDABAD	S-NPP	81.11887	27.48679	13:12:00	D	1.70
104	SITAPUR	MISRIK	S-NPP	80.54687	27.61920	13:12:00	D	2.80
105	SITAPUR	SITAPUR	S-NPP	80.67872	27.74475	13:12:00	D	2.20

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)
