



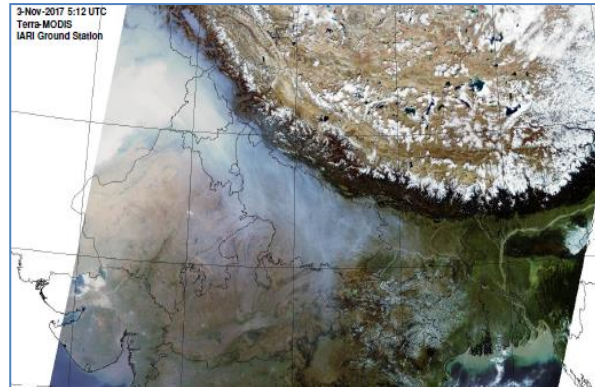
**Bulletin
No. 56**

**Events Date:
25-Nov-2020**

**Issued on:
26-Nov-2020**



MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2020



Prepared by:

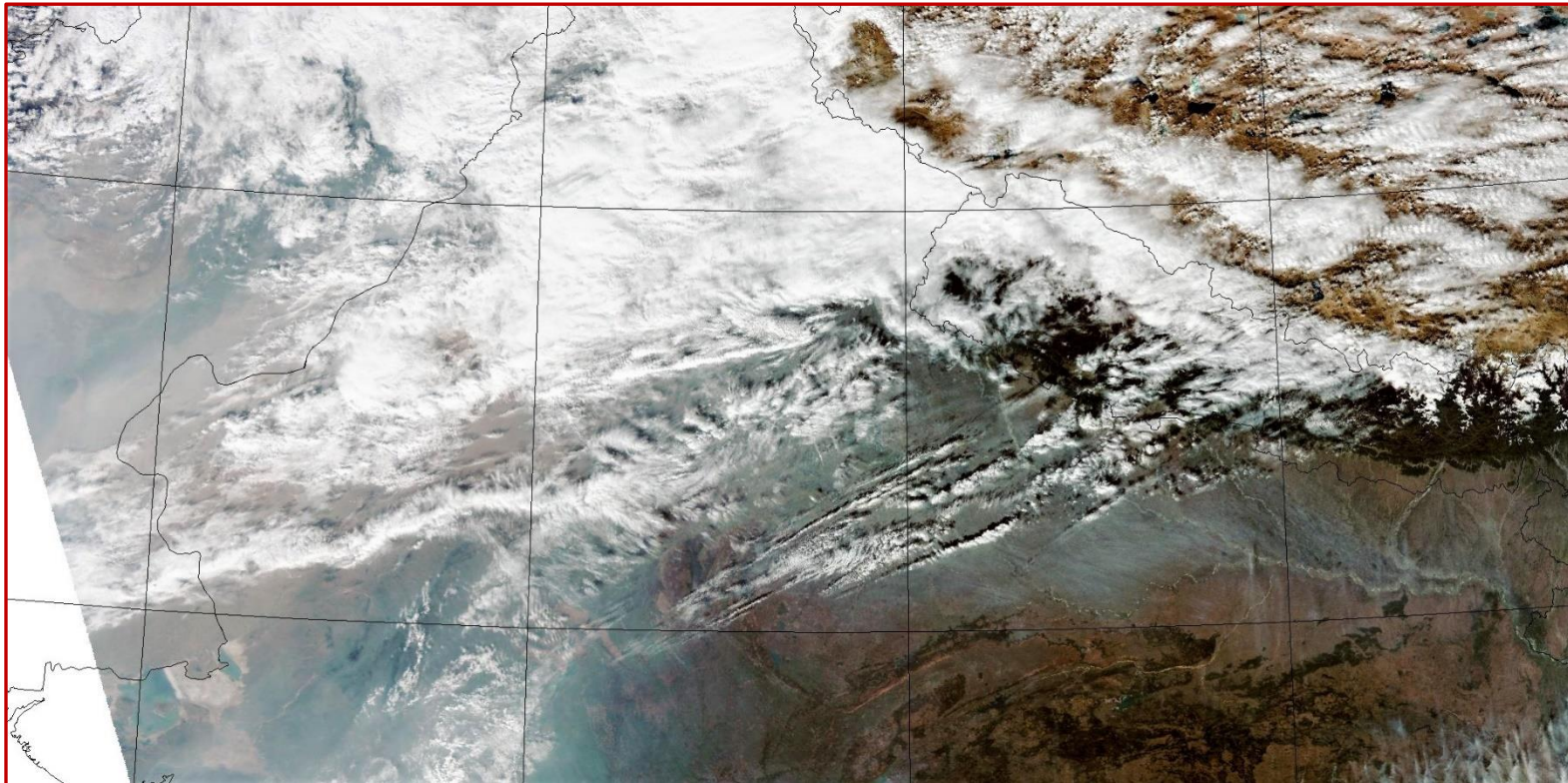
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

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

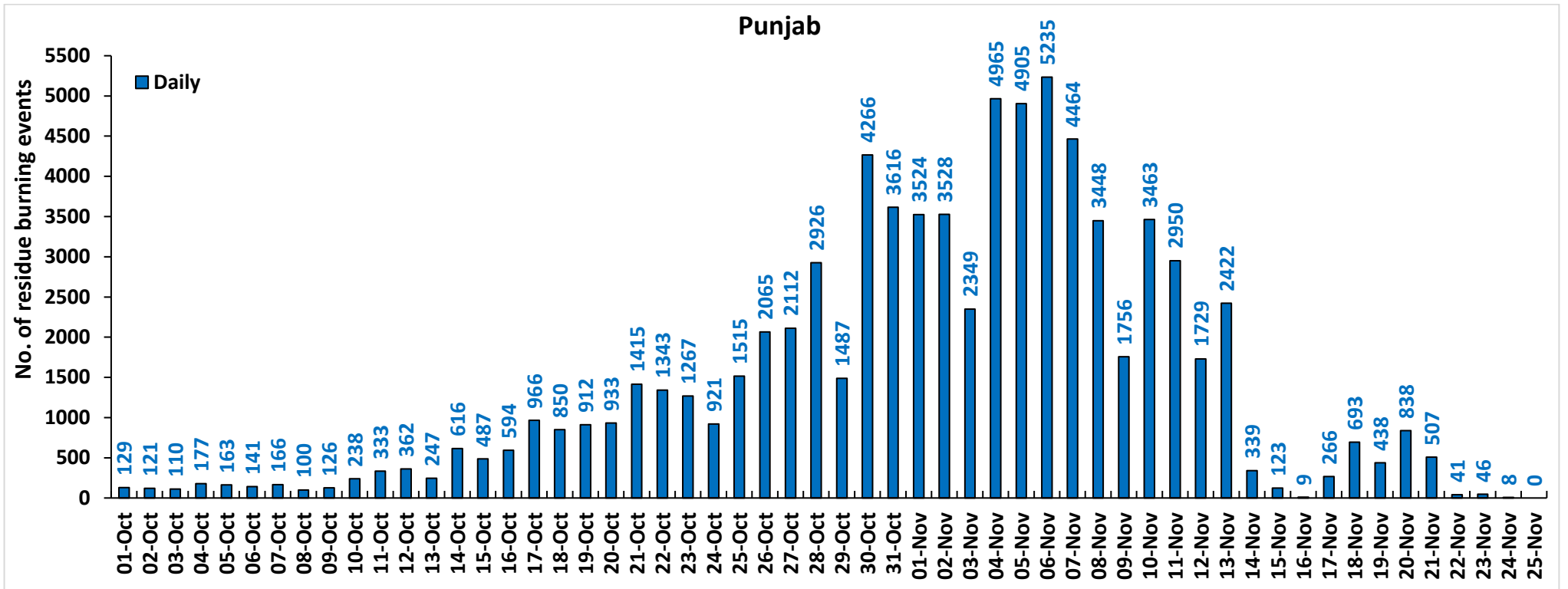
Highlights for 25-November-2020

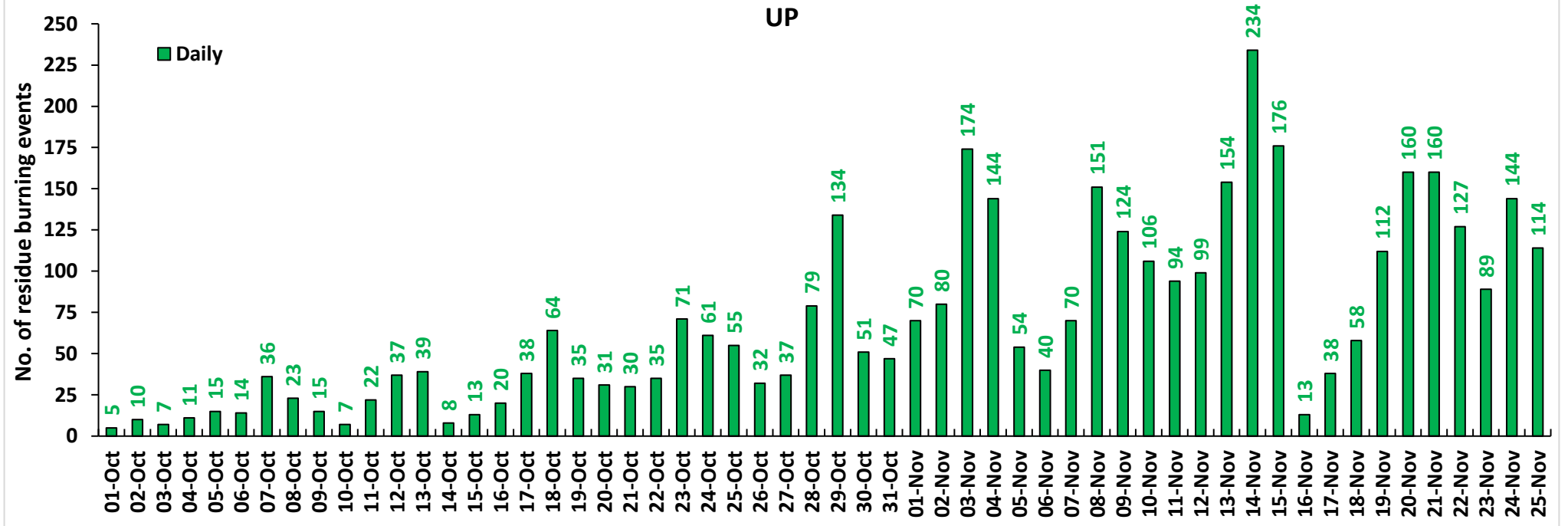
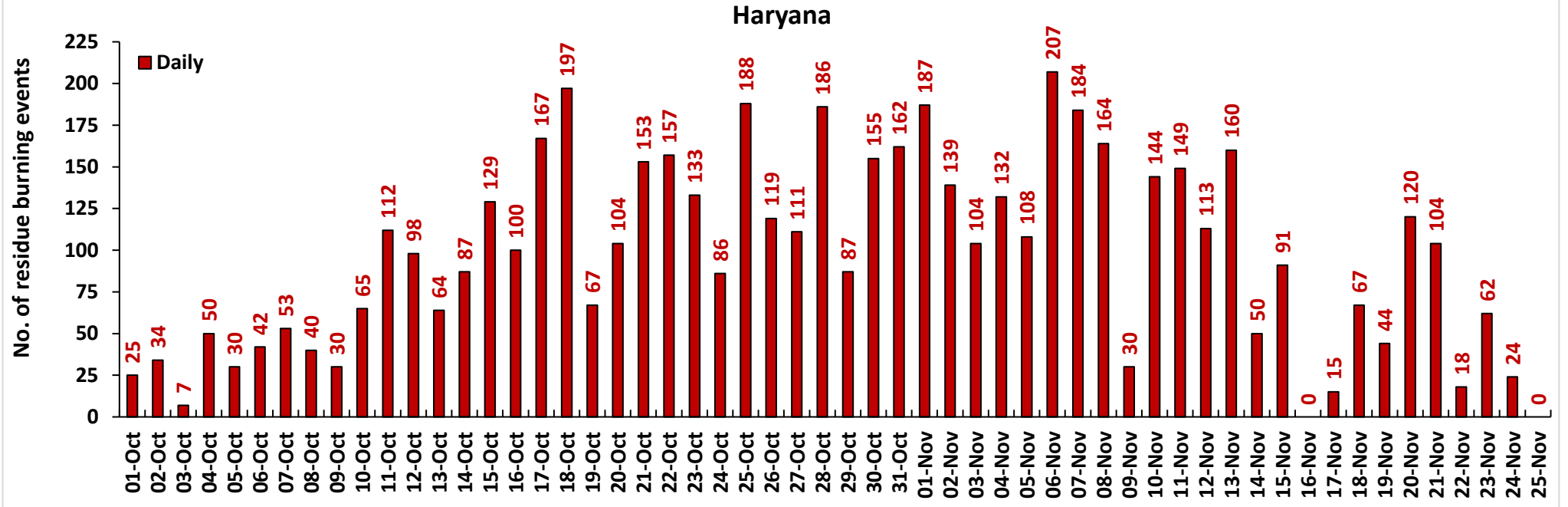
- Satellites detected **114** residue burning events in the three study States on **25-Nov-2020**.
- The state wise events detected on **25-Nov-2020** were **00** in Punjab, **00** in Haryana and **114** in UP.
- The number of events has decreased from **176** on **24-Nov-2020** to **114** on **25-Nov-2020** in the three states.
- The states of Punjab and Haryana were covered with clouds which prevented fire event detection by satellites.
- Ballia in UP reported the highest number of events on **25-Nov-2020**.
- Total **88071** burning events were detected in the three States between **01-Oct-2020** and **25-Nov-2020**, which are distributed as **78750**, **5454** and **3867** in Punjab, Haryana and UP, respectively.
- In Haryana the cumulative number of burning events between **01-Oct** and **25-Nov 2020** were lower than in **2019**, while in Punjab and UP the cumulative number of events were more than in **2019**.

SNPP (VIIRS) Satellite image of North India Acquired on 25-Nov-2020 at 12:54 IST by IARI Ground Station



Temporal distribution of residue burning events for the three study States in 2020.

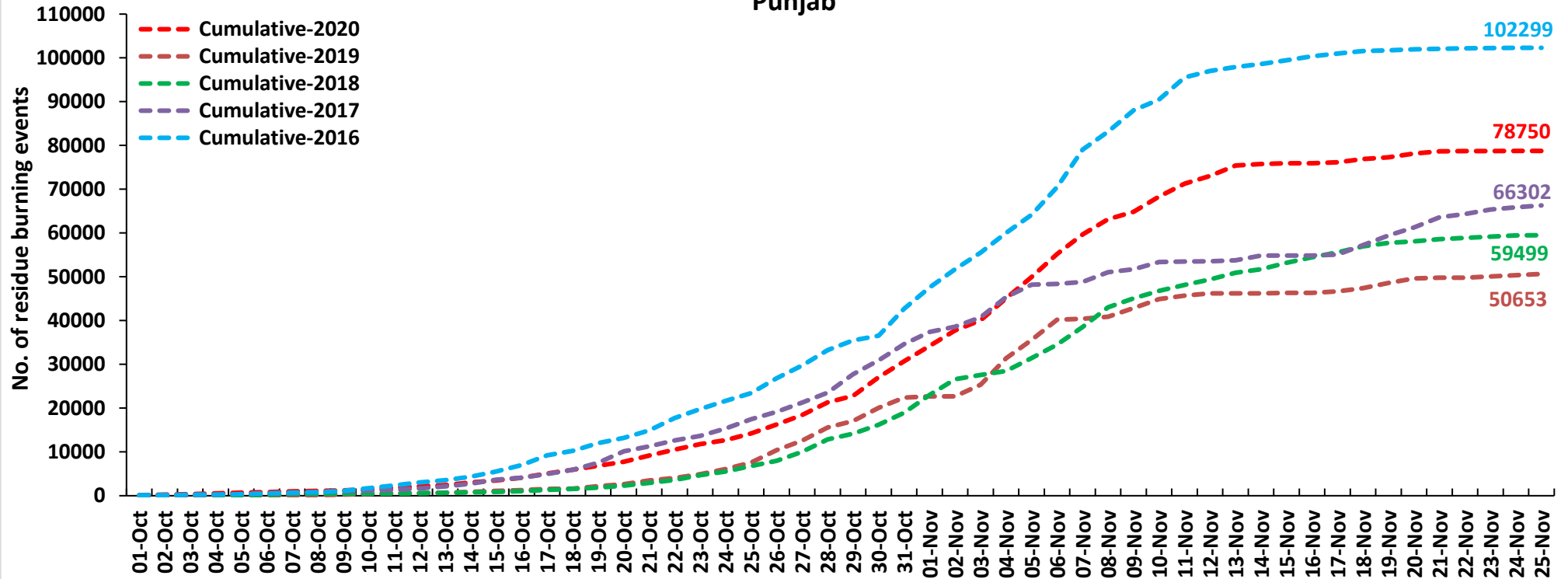




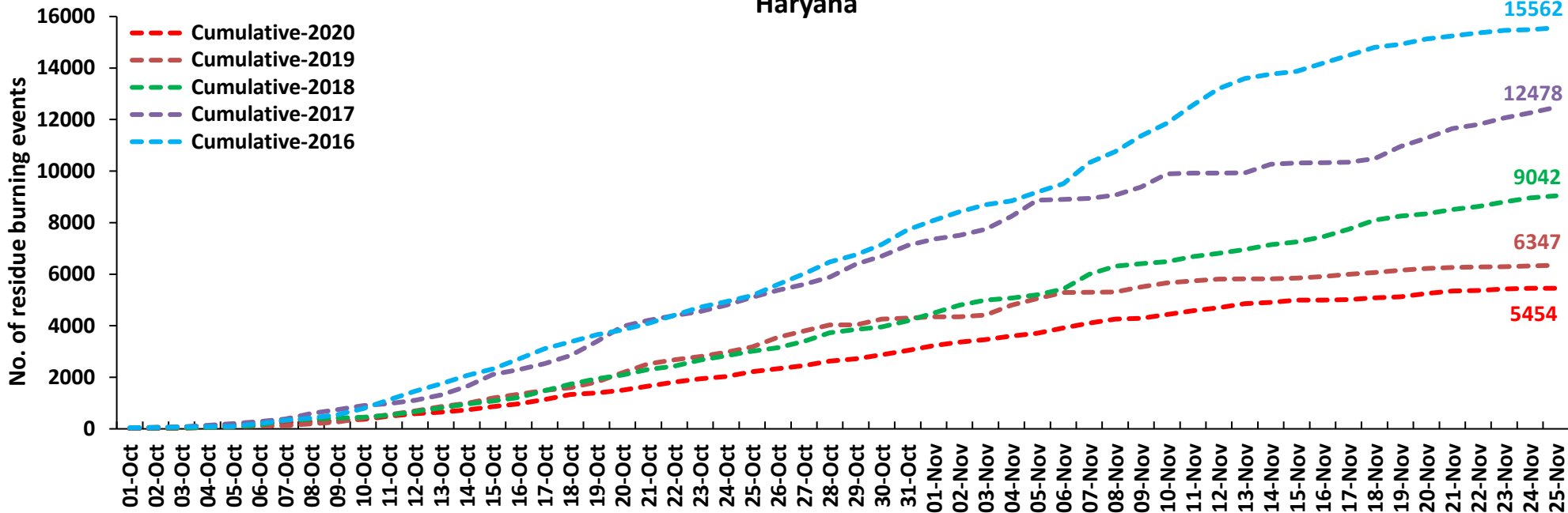
Comparison of residue burning events in current year (2020) with previous years (2019, 2018, 2017 & 2016) for the three study States

(01-Oct to 25-Nov)

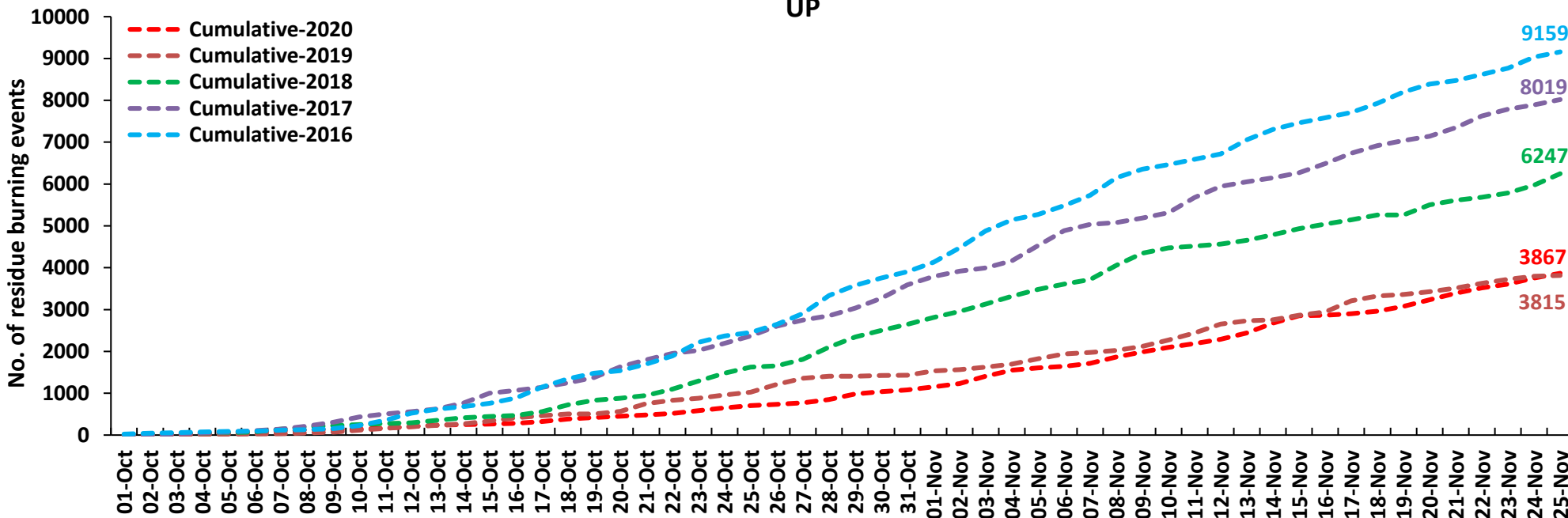
Punjab



Haryana

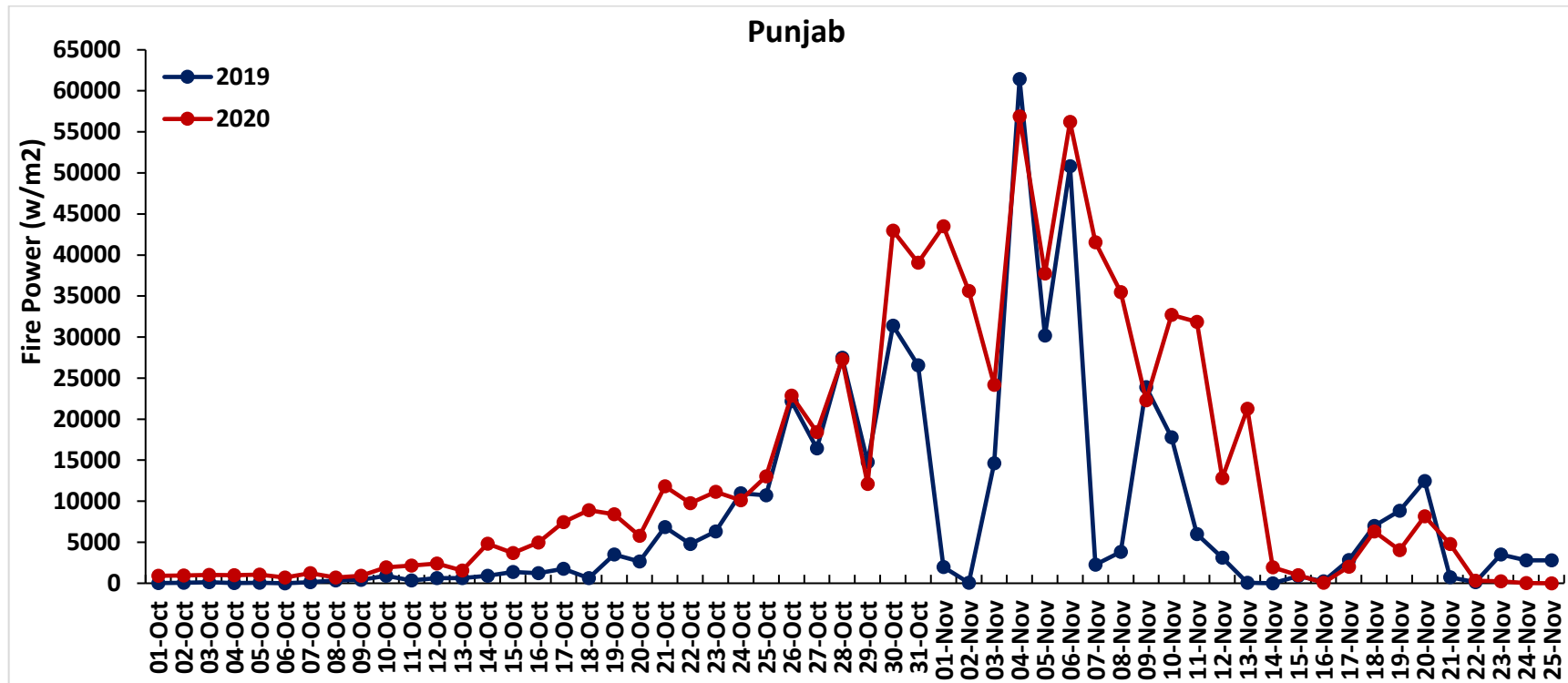


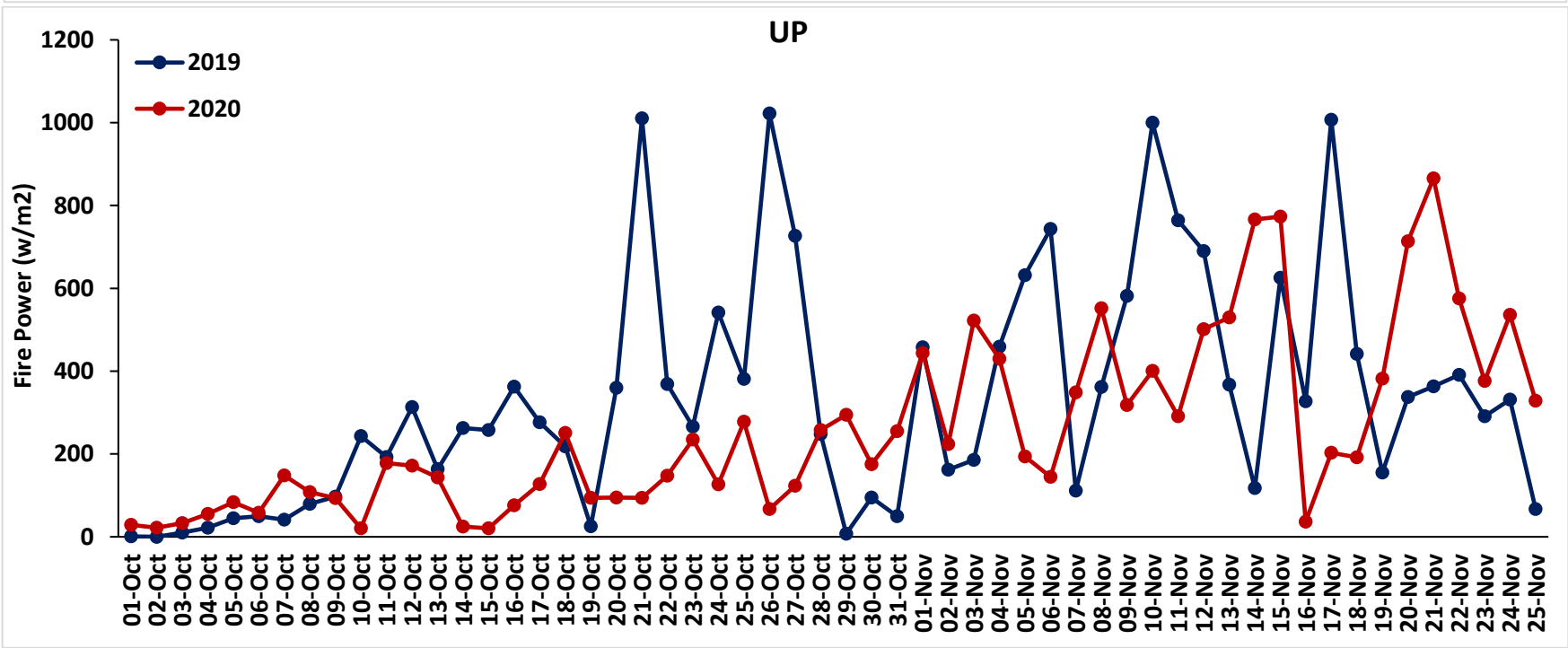
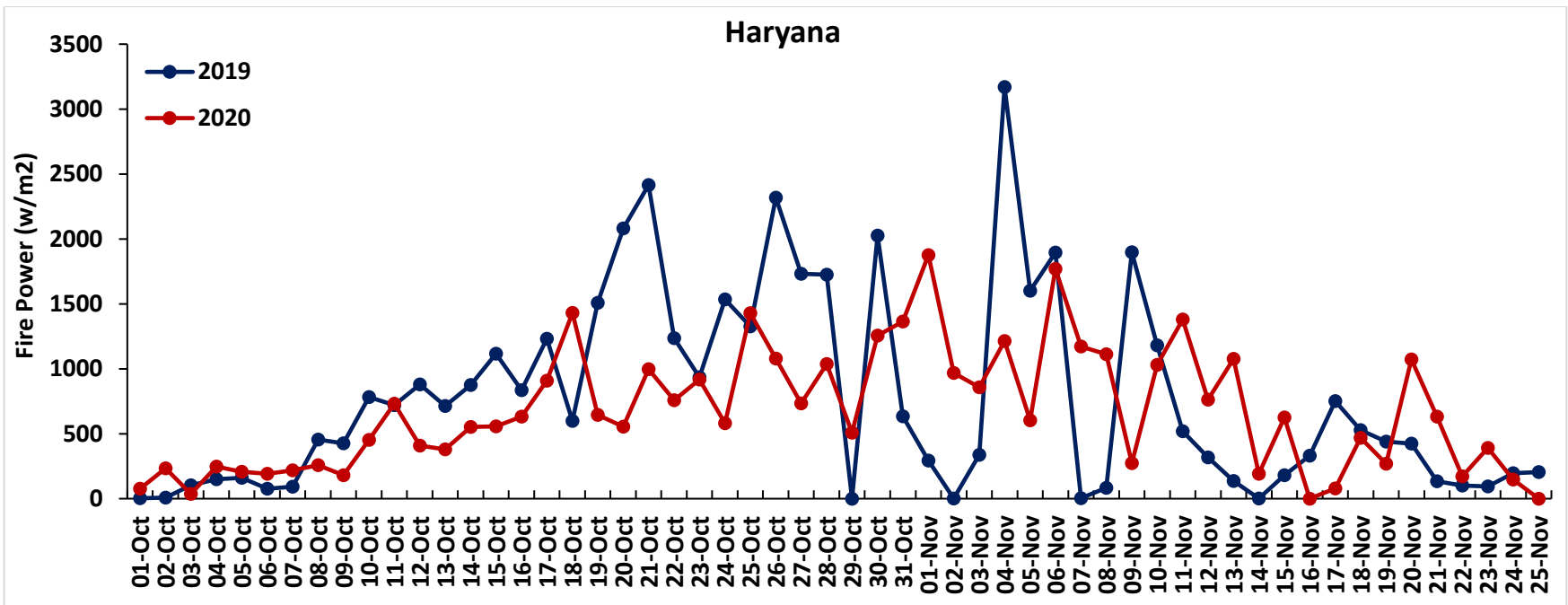
UP



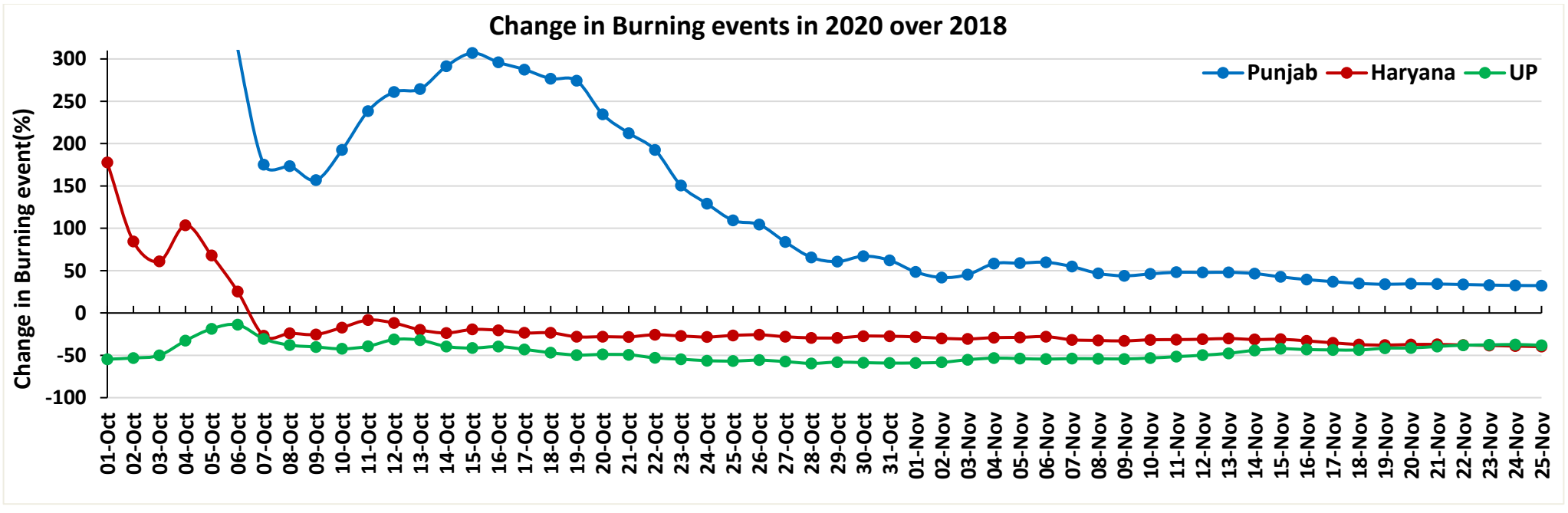
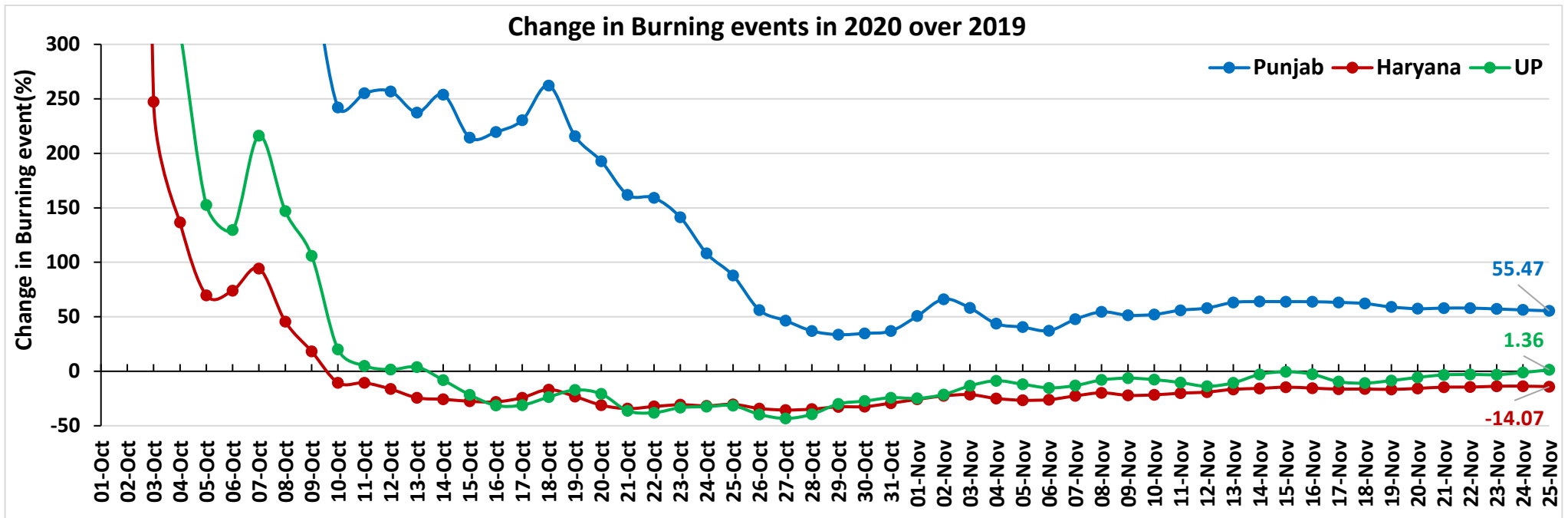
Comparison of Fire Intensity of residue burning events in current year (2020) with previous year (2019)
For the three study States

(01-Oct to 25-Nov)

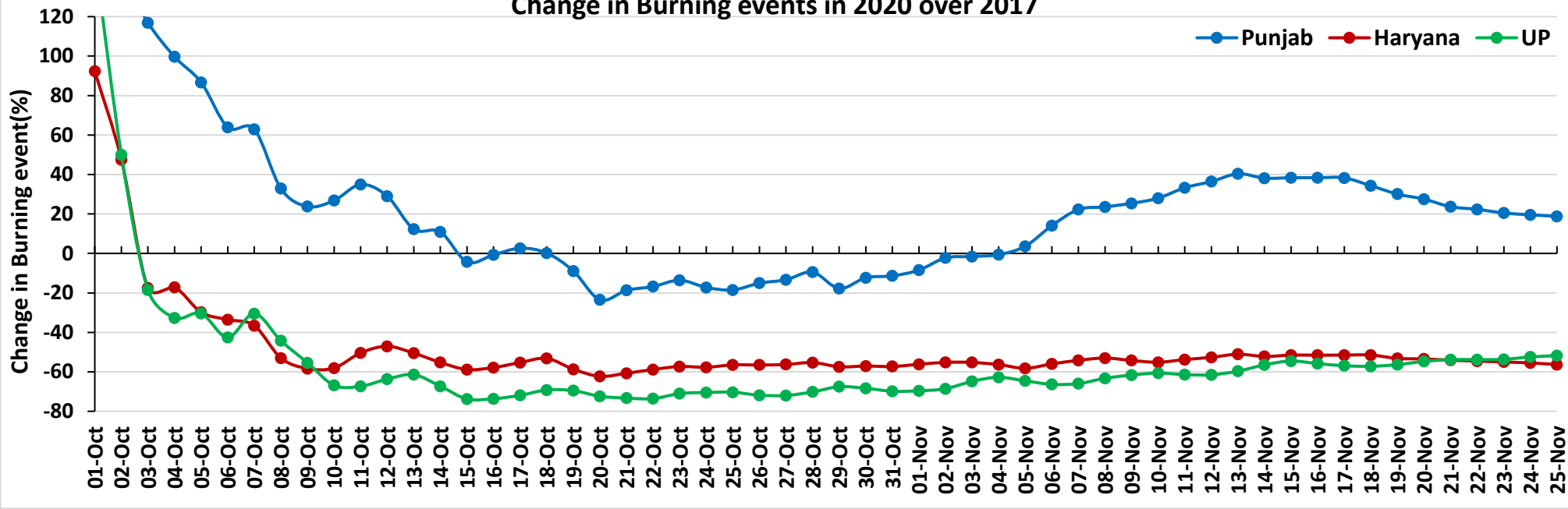




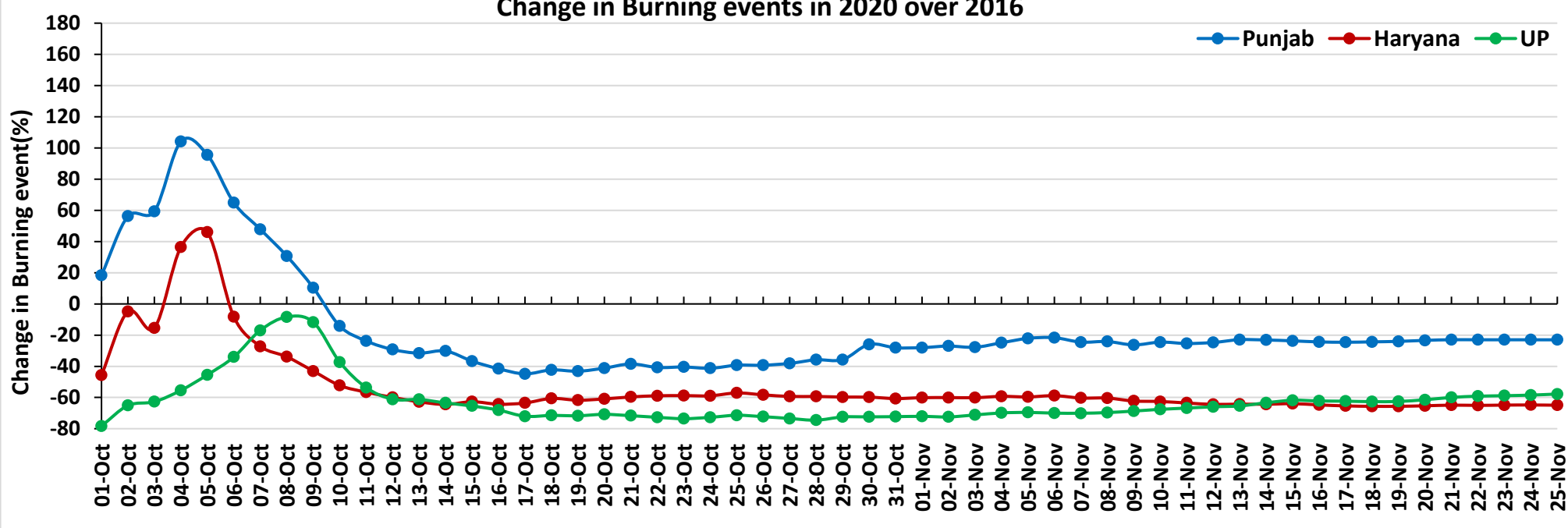
Percent Change in Burning events in 2020 over 2019, 2018, 2017 and 2016 (Daily Cumulative)



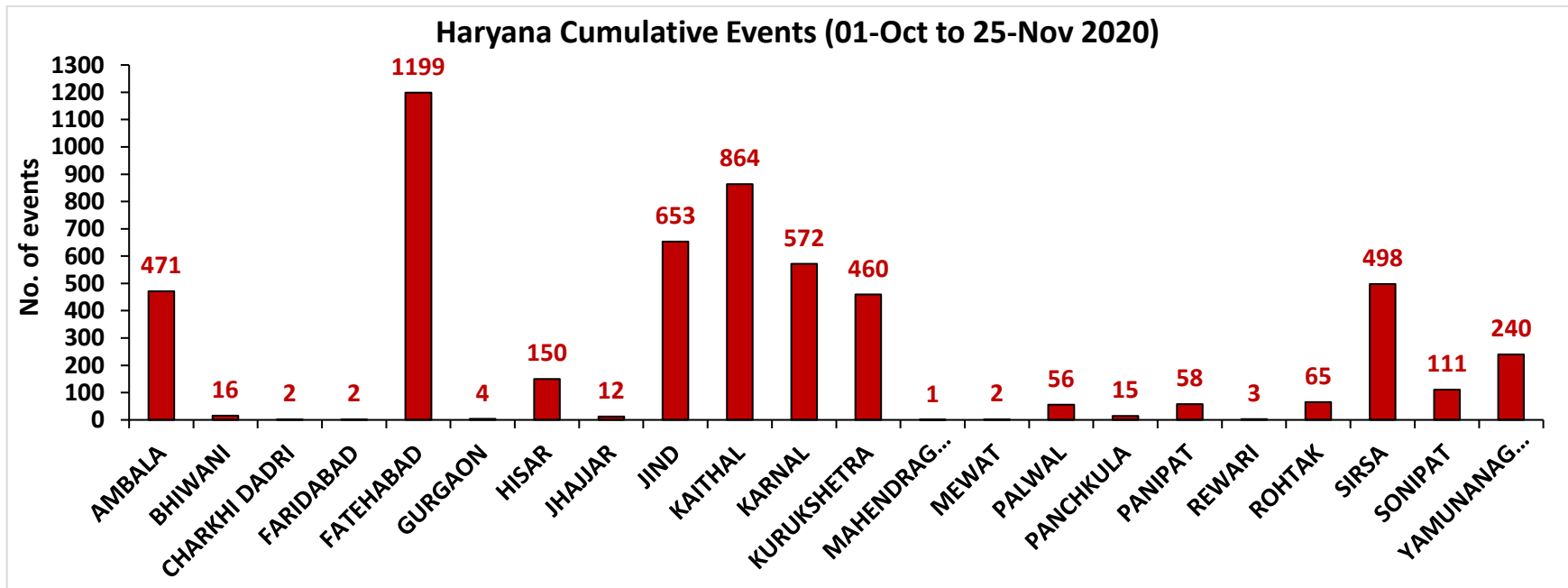
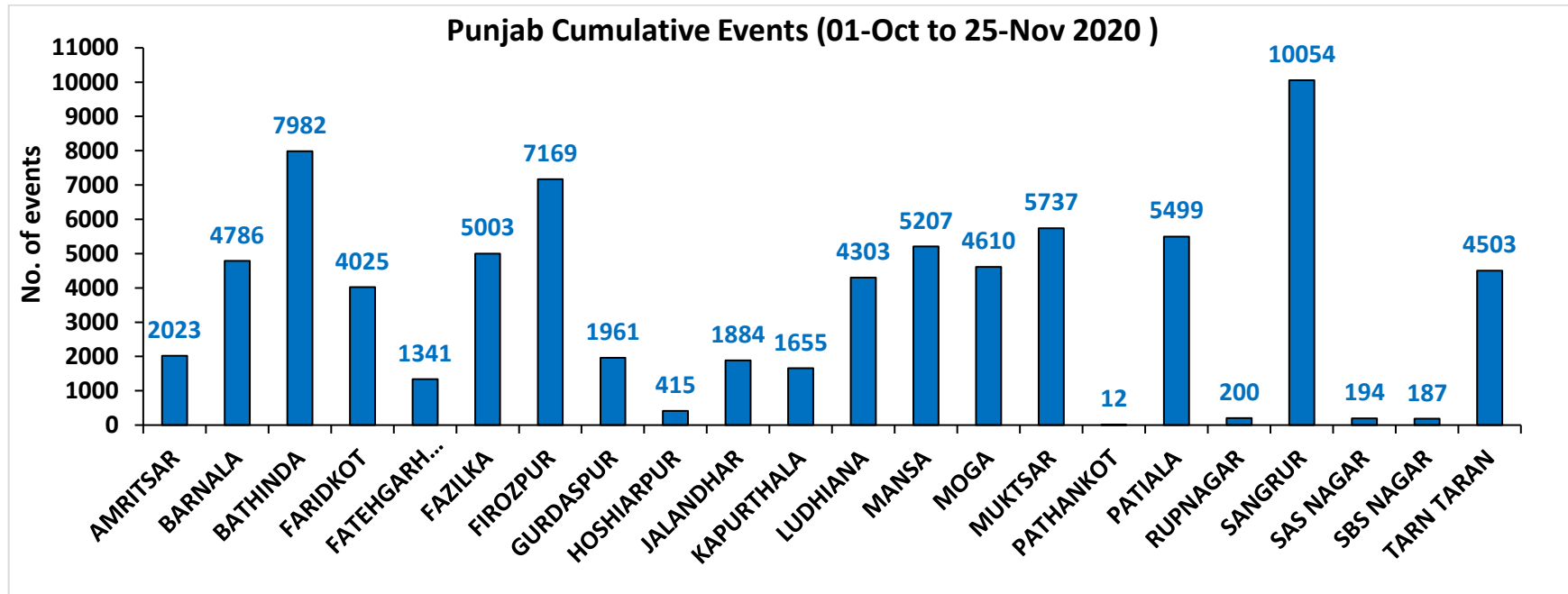
Change in Burning events in 2020 over 2017



Change in Burning events in 2020 over 2016

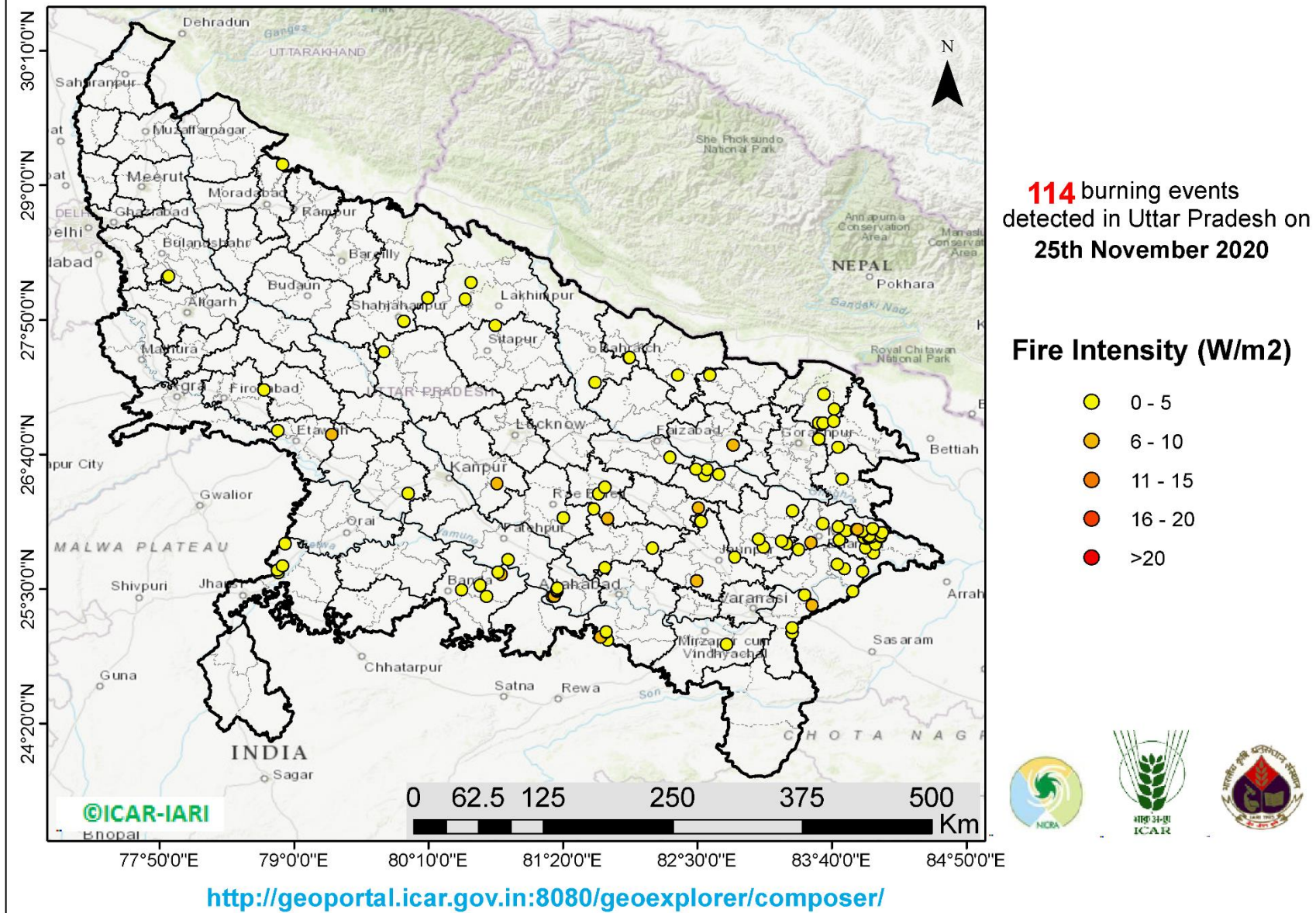


District-wise number of residue burning events in Punjab and Haryana (01-Oct to 25-Nov 2020)

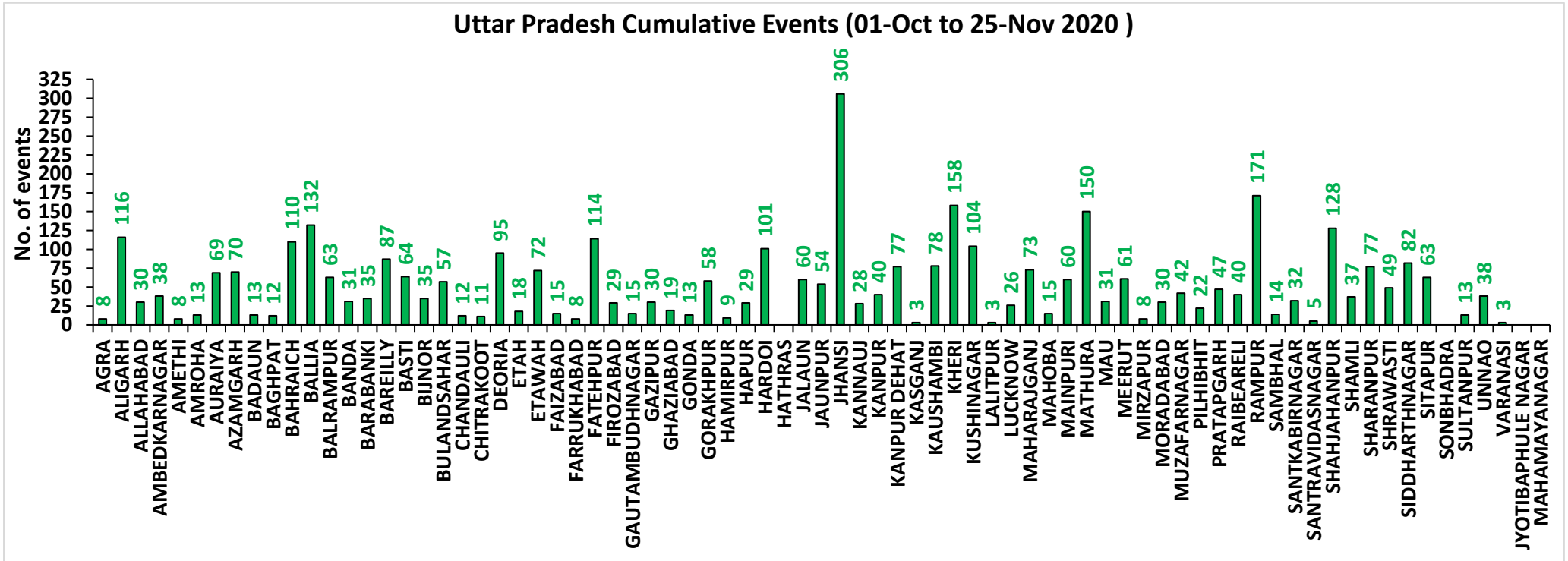
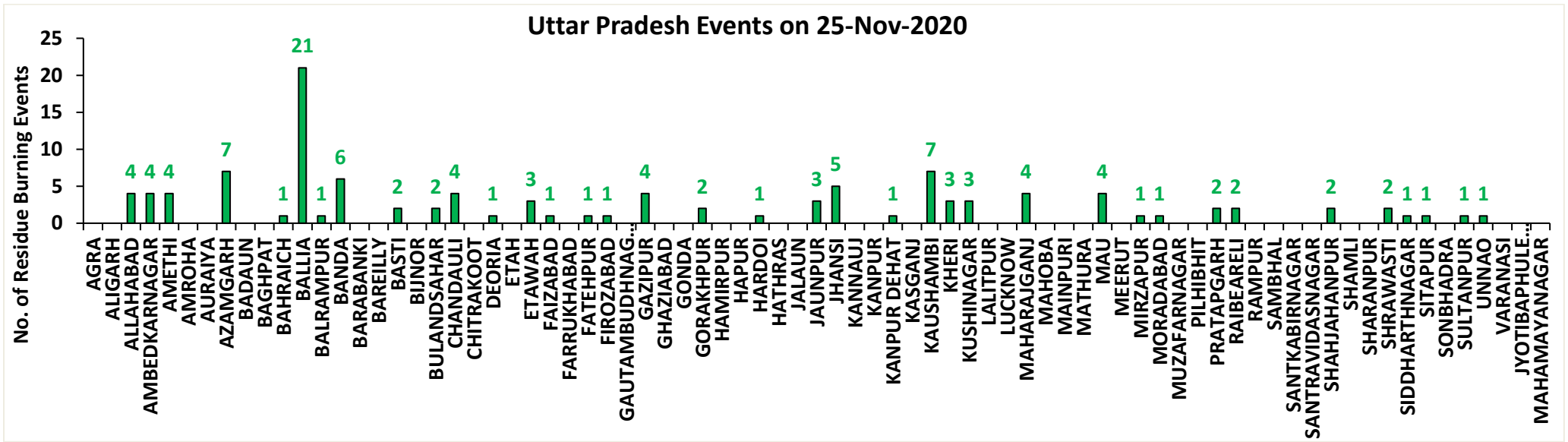


(c) Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



District-wise number of residue burning events in Uttar Pradesh (01-Oct to 25-Nov 2020)



State-wise and date-wise number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020
(Period: 01-October to 25-November)

Date	Punjab					Haryana					UP					Total				
	2020	2019	2018	2017	2016	2020	2019	2018	2017	2016	2020	2019	2018	2017	2016	2020	2019	2018	2017	2016
01-Oct	129	3	16	54	109	25	1	9	13	46	5	1	11	2	23	159	5	36	69	178
02-Oct	121	20	9	50	51	34	2	23	27	16	10	0	21	8	20	165	22	53	85	87
03-Oct	110	37	4	62	66	07	16	9	40	16	07	3	12	17	16	124	56	25	119	98
04-Oct	177	3	32	103	37	50	30	16	60	7	11	4	5	22	15	238	37	53	185	59
05-Oct	163	16	56	106	95	30	37	30	68	15	15	11	10	20	14	208	64	96	194	124
06-Oct	141	0	87	138	152	42	22	63	75	105	14	8	13	39	6	197	30	163	252	263
07-Oct	166	27	162	105	171	53	16	180	97	126	36	4	69	33	24	255	47	411	235	321
08-Oct	100	59	39	215	166	40	69	40	218	94	23	18	54	76	14	163	146	133	509	274
09-Oct	126	93	75	163	270	30	70	47	148	121	15	17	32	88	22	171	180	154	399	413
10-Oct	238	172	23	164	597	65	157	37	151	242	07	53	21	126	74	310	382	81	441	913
11-Oct	333	78	30	177	652	112	126	78	87	336	22	38	24	74	128	467	242	132	338	1116
12-Oct	362	99	67	342	694	98	154	133	123	338	37	42	22	51	164	497	295	222	516	1196
13-Oct	247	108	62	470	467	64	159	147	207	284	39	33	61	69	102	350	300	270	746	853
14-Oct	616	141	112	582	812	87	133	153	333	328	08	39	57	137	60	711	313	322	1052	1200
15-Oct	487	262	90	943	1215	129	203	110	458	248	13	63	35	237	76	629	528	235	1638	1539
16-Oct	594	168	174	465	1478	100	148	138	186	385	20	77	20	71	125	714	393	332	722	1988
17-Oct	966	250	272	807	2173	167	152	268	244	399	38	53	94	69	261	1171	455	634	1120	2833
18-Oct	850	100	263	970	1065	197	103	255	306	270	64	39	163	108	204	1111	242	681	1384	1539
19-Oct	912	529	254	1591	1762	67	220	208	541	276	35	3	108	128	132	1014	752	570	2260	2170
20-Oct	933	490	496	2653	1175	104	360	141	597	188	31	62	49	255	62	1068	912	686	3505	1425
21-Oct	1415	852	618	1139	1726	153	339	217	233	257	30	185	66	168	152	1598	1376	901	1540	2135
22-Oct	1343	555	656	1356	2837	157	158	134	186	309	35	78	149	151	194	1535	791	939	1693	3340
23-Oct	1267	827	1113	994	2040	133	131	232	155	313	71	48	193	72	331	1471	1006	1538	1221	2684
24-Oct	921	1220	844	1714	1836	86	165	166	244	221	61	79	192	171	152	1068	1464	1202	2129	2209
25-Oct	1515	1463	1247	2104	1813	188	212	182	303	229	55	67	142	175	83	1758	1742	1571	2582	2125
26-Oct	2065	2861	1173	1715	3390	119	366	132	276	434	32	189	33	240	195	2216	3416	1338	2231	4019
27-Oct	2112	2135	2040	2069	2904	111	249	252	224	417	37	145	154	145	255	2260	2529	2446	2438	3576
28-Oct	2926	3007	2864	2318	3493	186	238	330	292	458	79	45	290	99	435	3191	3290	3484	2709	4386
29-Oct	1487	1504	1321	4184	2258	87	0	124	502	278	134	1	243	180	237	1708	1505	1688	4866	2773
30-Oct	4266	3017	2008	3152	1076	155	222	103	307	395	51	19	158	238	175	4472	3258	2269	3697	1646
31-Oct	3616	2325	2715	3743	6132	162	36	229	413	575	47	4	148	321	153	3825	2365	3092	4477	6860
01-Nov	3524	293	4140	2736	4843	187	50	306	250	362	70	105	161	199	223	3781	448	4607	3185	5428
02-Nov	3528	6	3550	1246	4183	139	2	306	145	332	80	33	142	131	345	3747	41	3998	1522	4860

03-Nov	2349	2646	972	2109	3806	104	68	202	240	375	174	56	181	75	409	2627	2770	1355	2424	4490
04-Nov	4965	6001	882	4603	4477	132	383	77	499	146	144	75	183	168	265	5241	6459	1142	5270	4888
05-Nov	4905	4199	2989	2876	4137	108	253	129	625	345	54	124	163	367	125	5067	4576	3281	3868	4607
06-Nov	5235	4642	3071	171	6303	207	243	222	26	322	40	118	130	357	215	5482	5003	3423	554	6840
07-Nov	4464	189	4033	420	8575	184	2	568	46	821	70	33	108	149	244	4718	224	4709	615	9640
08-Nov	3448	462	4450	2256	4129	164	16	313	128	432	151	54	338	43	419	3763	532	5101	2427	4980
09-Nov	1756	2003	2083	675	4857	30	199	96	311	608	124	96	294	107	205	1910	2298	2473	1093	5670
10-Nov	3463	2046	1675	1642	2468	144	151	85	509	484	106	147	125	131	109	3713	2344	1885	2282	3061
11-Nov	2950	783	1364	103	5040	149	78	196	29	716	94	174	45	358	129	3193	1035	1605	490	5885
12-Nov	1729	520	1256	33	1477	113	68	122	3	634	99	210	45	269	129	1941	798	1423	305	2240
13-Nov	2422	10	1563	237	885	160	16	146	7	389	154	79	94	109	338	2736	105	1803	353	1612
14-Nov	339	0	765	1101	692	50	1	189	340	171	234	22	128	95	247	623	23	1082	1536	1110
15-Nov	123	92	1480	5	871	91	29	107	40	107	176	111	146	123	154	390	232	1733	168	1132
16-Nov	9	23	1250	8	911	0	59	204	17	318	13	79	112	218	123	22	161	1566	243	1352
17-Nov	266	332	1132	217	638	15	85	289	12	299	38	265	103	249	130	319	682	1524	478	1067
18-Nov	693	740	1400	2147	568	67	70	356	139	312	58	113	111	180	217	818	923	1867	2466	1097
19-Nov	438	1221	752	2200	168	44	82	159	471	125	112	39	3	122	273	594	1342	914	2793	566
20-Nov	838	1007	385	1857	240	120	74	88	325	204	160	64	243	101	183	1118	1145	716	2283	627
21-Nov	507	151	480	2310	112	104	37	161	378	115	160	84	107	205	86	771	272	748	2893	313
22-Nov	41	21	287	719	99	18	19	122	154	118	127	116	72	281	148	186	156	481	1154	365
23-Nov	46	286	317	1033	54	62	14	180	259	97	89	100	106	163	151	197	400	603	1455	302
24-Nov	8	293	229	507	21	24	23	152	192	36	144	72	186	105	265	176	388	567	804	322
25-Nov	0	266	72	443	33	0	31	81	219	68	114	18	272	124	123	114	315	425	786	224
Total	78750	50653	59499	66302	102299	5454	6347	9042	12478	15562	3867	3815	6247	8019	9159	88071	60815	74788	86799	127020

**District-wise and date-wise cumulative number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020
(Period: 01-Oct to 25-Nov)**

(a) Punjab

Districts	01-Oct to 25-Nov				
	2016	2017	2018	2019	2020
AMRITSAR	2170	1345	1372	1407	2023
BARNALA	5698	3396	3275	2964	4786
BATHINDA	8841	5698	6339	5309	7982
FARIDKOT	4628	3454	3055	2315	4025
FATEHGARH SAHIB	2461	1640	858	827	1341
FAZILKA	0	0	0	2762	5003
FIROZPUR	13627	9798	9967	4635	7169
GURDASPUR	2215	1583	1167	1478	1961
HOSHIARPUR	901	490	198	311	415
JALANDHAR	4660	2107	1385	1515	1884
KAPURTHALA	3136	1622	750	1353	1655
LUDHIANA	9539	4676	3019	2273	4303
MANSA	5644	4475	4307	3567	5207
MOGA	6393	2709	2728	2150	4610
MUKTSAR	7029	5325	5769	3708	5737
PATHANKOT	0	0	0	6	12
PATIALA	6543	5029	4213	3853	5499
RUPNAGAR	717	326	86	119	200
SANGRUR	11862	8423	7780	6363	10054
SAS NAGAR	115	107	104	150	194
SBS NAGAR	1611	819	387	265	187
TARN TARAN	4509	3280	2740	3323	4503
Total	102299	66302	59499	50653	78750

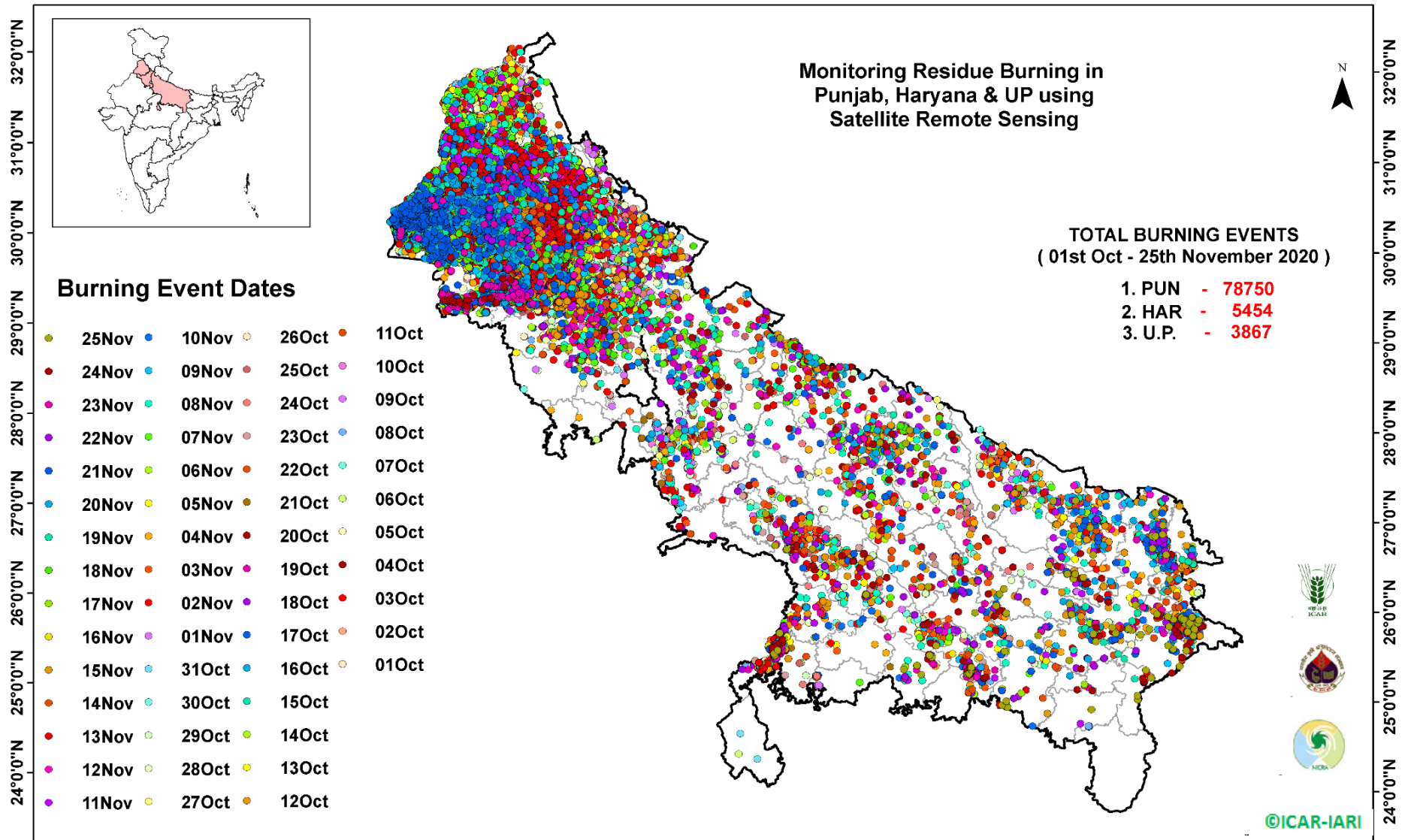
(b) Haryana

Districts	01-Oct to 25-Nov				
	2016	2017	2018	2019	2020
AMBALA	534	498	329	339	471
BHIWANI	85	39	20	11	16
CHARKHI DADRI	0	0	0	0	2
FARIDABAD	288	341	185	10	2
FATEHABAD	4825	3657	2508	1201	1199
GURGAON	0	0	0	4	4
HISAR	404	182	207	116	150
JHAJJAR	36	19	29	4	12
JIND	858	940	880	579	653
KAITHAL	1748	1512	1291	1258	864
KARNAL	1635	1506	851	1083	572
KURUKSHETRA	1078	1147	680	738	460
MAHENDRAGARH	0	0	0	2	1
MEWAT	0	0	0	3	2
PALWAL	0	0	0	188	56
PANCHKULA	0	0	3	21	15
PANIPAT	93	99	60	40	58
REWARI	0	0	0	3	3
ROHTAK	97	83	39	23	65
SIRSA	3545	2073	1722	442	498
SONIPAT	92	71	41	32	111
YAMUNANAGAR	244	311	197	250	240
Total	15562	12478	9042	6347	5454

(C)
Uttar Pradesh

Districts	01-Oct to 25-Nov																
	2016	2017	2018	2019	2020	GAUTAMBUDHNAGAR	28	42	12	19	15	MUZAFARNAGAR	142	154	58	37	42
AGRA	0	0	0	4	8	GAZIPUR	16	14	23	12	30	PILHIBHIT	949	730	434	355	22
ALIGARH	55	80	93	90	116	GHAZIABAD	88	55	37	15	19	PRATAPGARH	44	52	43	19	47
ALLAHABAD	6	15	19	16	30	GONDA	48	34	21	10	13	RAIBEARELI	113	109	68	25	40
AMBEDKARNAGAR	74	55	28	8	38	GORAKHPUR	66	112	139	16	58	RAMPUR	623	638	224	316	171
AMETHI	0	0	0	10	8	HAMIRPUR	0	0	1	37	9	SAMBHAL	0	0	0	9	14
AMROHA	0	0	0	8	13	HAPUR	0	0	0	13	29	SANTKABIRNAGAR	56	63	53	14	32
AURAIYA	266	220	70	49	69	HARDOI	254	202	112	82	101	SANTRAVIDASNAGAR	0	0	0	1	5
AZAMGARH	38	45	35	4	70	HATHRAS	0	0	0	1	0	SHAHJAHANPUR	1147	690	384	352	128
BADAUN	12	8	13	22	13	JALAUN	0	0	0	125	60	SHAMLI	0	0	0	24	37
BAGHPAT	0	0	0	14	12	JAUNPUR	24	33	26	11	54	SHARANPUR	114	139	71	68	77
BAHRAICH	81	40	60	45	110	JHANSI	0	0	2	198	306	SHRAWASTI	37	31	36	21	49
BALLIA	19	40	26	21	132	KANNAUJ	35	18	8	10	28	SIDDHARTHANAGAR	257	185	471	48	82
BALRAMPUR	37	27	44	8	63	KANPUR	20	10	13	9	40	SITAPUR	136	78	44	44	63
BANDA	2	18	11	16	31	KANPUR DEHAT	68	68	29	43	77	SONBHADRA	16	14	12	0	0
BARABANKI	220	167	175	60	35	KASGANJ	0	0	0	5	3	SULTANPUR	75	52	58	16	13
BAREILLY	257	224	117	115	87	KAUSHAMBI	33	48	51	19	78	UNNAO	65	55	41	36	38
BASTI	145	186	125	30	64	KHERI	458	302	217	183	158	VARANASI	2	0	0	0	3
BIJNOR	62	59	18	16	35	KUSHINAGAR	63	145	165	30	104	JYOTIBAPHULE NAGAR	12	16	6	0	0
BULANDSAHAR	32	34	20	27	57	LALITPUR	0	0	0	7	3	MAHAMAYANAGAR	2	2	8	0	0
CHANDAULI	15	10	2	1	12	LUCKNOW	62	30	26	22	26	Total	9159	8019	6247	3815	3867
CHITRAKOOT	0	0	0	6	11	MAHARAJGANJ	707	1011	1047	263	73						
DEORIA	62	77	71	8	95	MAHOBA	0	0	0	9	15						
ETAH	22	31	28	5	18	MAINPURI	92	92	60	46	60						
ETAWAH	175	124	69	54	72	MATHURA	1458	1083	1049	463	150						
FAIZABAD	15	15	10	7	15	MAU	13	18	19	8	31						
FARRUKHABAD	0	0	0	6	8	MEERUT	90	92	22	32	61						
FATEHPUR	70	56	88	56	114	MIRZAPUR	5	14	9	3	8						
FIROZABAD	23	18	11	17	29	MORADABAD	53	39	15	16	30						

Map of Cumulative Burning Events (01-Oct to 25-Nov 2020)



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

Details of residue burning events in Uttar Pradesh on 25-Nov-2020

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	ALLAHABAD	BARA	S-NPP	25.05777	81.72156	12:54:00	D	3.60
2	ALLAHABAD	BARA	S-NPP	25.08188	81.65788	12:54:00	D	6.40
3	ALLAHABAD	BARA	S-NPP	25.12188	81.70985	01:42:00	N	0.40
4	ALLAHABAD	BARA	S-NPP	25.12517	81.71048	01:42:00	N	0.40
5	AMBEDKARNAGAR	AKBARPUR	S-NPP	26.47982	82.56274	12:54:00	D	3.70
6	AMBEDKARNAGAR	AKBARPUR	S-NPP	26.53769	82.48863	12:54:00	D	2.40
7	AMBEDKARNAGAR	TANDA	S-NPP	26.49328	82.68616	12:54:00	D	2.00
8	AMBEDKARNAGAR	TANDA	S-NPP	26.53272	82.58566	12:54:00	D	2.20
9	AMETHI	AMETHI	S-NPP	26.10562	81.72354	12:54:00	D	2.50
10	AMETHI	AMETHI	S-NPP	26.10912	81.72280	12:54:00	D	6.00
11	AMETHI	GAURIGANJ	S-NPP	26.32379	81.64308	12:54:00	D	1.80
12	AMETHI	GAURIGANJ	S-NPP	26.38038	81.69624	12:54:00	D	4.40
13	AZAMGARH	AZAMGARH	S-NPP	25.89253	83.27103	12:54:00	D	5.00
14	AZAMGARH	AZAMGARH	S-NPP	25.91355	83.23019	12:54:00	D	4.10
15	AZAMGARH	LALGANJ	S-NPP	25.77460	82.82449	01:42:00	N	0.60
16	AZAMGARH	MEHNAGAR	S-NPP	25.86339	83.07215	12:54:00	D	3.30
17	AZAMGARH	MEHNAGAR	S-NPP	25.92951	83.03013	12:54:00	D	3.00
18	AZAMGARH	PHULPUR	S-NPP	25.86341	82.79723	01:42:00	N	0.30
19	AZAMGARH	SAGRI	S-NPP	26.17718	83.32548	12:54:00	D	2.90
20	BAHRAICH	KAISARGANJ	S-NPP	27.28839	81.61153	01:42:00	N	0.60
21	BALLIA	BALLIA	S-NPP	25.81395	84.02826	12:54:00	D	2.10
22	BALLIA	BALLIA	S-NPP	25.88833	84.04575	12:54:00	D	1.60
23	BALLIA	BELTHARA ROAD	S-NPP	25.99881	83.93321	12:54:00	D	3.50
24	BALLIA	BELTHARA ROAD	S-NPP	26.00335	83.78905	12:54:00	D	2.10
25	BALLIA	BELTHARA ROAD	S-NPP	26.01471	83.88246	12:54:00	D	10.20
26	BALLIA	BELTHARA ROAD	S-NPP	26.01593	83.89018	12:54:00	D	7.90
27	BALLIA	BELTHARA ROAD	S-NPP	26.03732	83.72257	12:54:00	D	1.70
28	BALLIA	RASRA	S-NPP	25.85789	83.96039	12:54:00	D	1.40
29	BALLIA	RASRA	S-NPP	25.93870	83.95684	12:54:00	D	2.70
30	BALLIA	RASRA	S-NPP	25.94351	83.94401	12:54:00	D	4.50

31	BALLIA	RASRA	S-NPP	25.99550	83.93385	12:54:00	D	2.30
32	BALLIA	RASRA	S-NPP	25.99638	83.91779	12:54:00	D	2.80
33	BALLIA	SIKANDARPUR	S-NPP	25.93450	83.97352	12:54:00	D	1.90
34	BALLIA	SIKANDARPUR	S-NPP	25.94717	84.01074	12:54:00	D	2.40
35	BALLIA	SIKANDARPUR	S-NPP	25.94957	83.98253	12:54:00	D	2.70
36	BALLIA	SIKANDARPUR	S-NPP	25.95319	84.09276	12:54:00	D	1.70
37	BALLIA	SIKANDARPUR	S-NPP	25.95650	84.09212	12:54:00	D	2.10
38	BALLIA	SIKANDARPUR	S-NPP	25.95800	83.99281	12:54:00	D	1.70
39	BALLIA	SIKANDARPUR	S-NPP	25.98537	84.10246	12:54:00	D	1.90
40	BALLIA	SIKANDARPUR	S-NPP	26.01939	84.02054	12:54:00	D	3.10
41	BALLIA	SIKANDARPUR	S-NPP	26.02270	84.01991	12:54:00	D	3.10
42	BALRAMPUR	UTRAULA	S-NPP	27.35231	82.32824	12:54:00	D	3.60
43	BANDA	BABERU	S-NPP	25.43429	80.66818	01:42:00	N	0.60
44	BANDA	BABERU	S-NPP	25.52945	80.61647	01:42:00	N	0.50
45	BANDA	BABERU	S-NPP	25.53278	80.61708	01:42:00	N	0.80
46	BANDA	BABERU	S-NPP	25.62718	80.80090	12:54:00	D	5.40
47	BANDA	BABERU	S-NPP	25.64489	80.77200	12:54:00	D	3.30
48	BANDA	BANDA	S-NPP	25.49030	80.45592	12:54:00	D	2.50
49	BASTI	BASTI	S-NPP	26.74514	82.81145	12:54:00	D	5.10
50	BASTI	RUDHAULI	S-NPP	27.04667	82.78232	01:42:00	N	0.30
51	BULANSAHAR	KHURJA	S-NPP	28.20099	77.89947	12:54:00	D	1.00
52	BULANSAHAR	KHURJA	S-NPP	28.21257	77.91418	12:54:00	D	4.50
53	CHANDAULI	CHAKIA	S-NPP	25.11588	83.32328	12:54:00	D	2.80
54	CHANDAULI	CHANDAULI	S-NPP	25.16217	83.32329	12:54:00	D	1.80
55	CHANDAULI	CHANDAULI	S-NPP	25.35727	83.49624	12:54:00	D	5.90
56	CHANDAULI	SHAKALDIHA	S-NPP	25.44508	83.43090	12:54:00	D	2.40
57	DEORIA	DEORIA	S-NPP	26.45227	83.75462	12:54:00	D	1.90
58	ETAWAH	BHARTHNA	S-NPP	26.83537	79.32475	12:54:00	D	9.20
59	ETAWAH	ETAWAH	S-NPP	26.82900	79.00495	01:42:00	N	0.30
60	ETAWAH	JASWANTNAGAR	S-NPP	26.87020	78.85903	12:54:00	D	2.00
61	FAIZABAD	FAIZSBAD	S-NPP	26.64003	82.26303	12:54:00	D	1.90
62	FATEHPUR	FATEHPUR	S-NPP	25.75333	80.85567	12:54:00	D	4.00
63	FIROZABAD	JASRANA	S-NPP	27.22436	78.73730	12:54:00	D	1.80

64	GAZIPUR	MUHAMMADBAD	S-NPP	25.65091	83.93593	12:54:00	D	2.60
65	GAZIPUR	MUHAMMADBAD	S-NPP	25.67272	83.77663	12:54:00	D	4.80
66	GAZIPUR	MUHAMMADBAD	S-NPP	25.71065	83.71337	12:54:00	D	1.40
67	GAZIPUR	ZAMANIA	S-NPP	25.47778	83.84998	12:54:00	D	2.00
68	GORAKHPUR	GORAKHPUR	S-NPP	26.79717	83.55185	12:54:00	D	5.30
69	GORAKHPUR	GORAKHPUR	S-NPP	26.79927	83.55137	12:54:00	D	3.30
70	HARDOI	SIWAIJPUR	S-NPP	27.55301	79.78236	01:42:00	N	0.40
71	JAUNPUR	MARIAHU	S-NPP	25.57041	82.49329	12:54:00	D	7.20
72	JAUNPUR	SHHGANJ	S-NPP	26.08512	82.52728	12:54:00	D	2.80
73	JAUNPUR	SHHGANJ	S-NPP	26.08580	82.53139	12:54:00	D	2.60
74	JHANSI	MOTH	S-NPP	25.64083	78.86526	12:54:00	D	1.90
75	JHANSI	MOTH	S-NPP	25.64204	78.86459	12:54:00	D	2.00
76	JHANSI	MOTH	S-NPP	25.66039	78.85645	12:54:00	D	4.00
77	JHANSI	MOTH	S-NPP	25.69833	78.89804	12:54:00	D	4.10
78	JHANSI	MOTH	S-NPP	25.89250	78.92064	01:42:00	N	0.80
79	KANPUR DEHAT	AKBARPUR	S-NPP	26.32717	79.99029	12:54:00	D	3.10
80	KAUSHAMBI	MANJHANPUR	S-NPP	25.43185	81.24450	12:54:00	D	2.10
81	KAUSHAMBI	MANJHANPUR	S-NPP	25.43190	81.24126	12:54:00	D	1.90
82	KAUSHAMBI	MANJHANPUR	S-NPP	25.43427	81.25835	12:54:00	D	5.50
83	KAUSHAMBI	MANJHANPUR	S-NPP	25.43788	81.25758	12:54:00	D	5.50
84	KAUSHAMBI	MANJHANPUR	S-NPP	25.47699	81.28424	12:54:00	D	7.40
85	KAUSHAMBI	MANJHANPUR	S-NPP	25.49138	81.28117	12:54:00	D	6.80
86	KAUSHAMBI	MANJHANPUR	S-NPP	25.50739	81.28726	12:54:00	D	3.80
87	KHERI	GOLA	S-NPP	28.01219	80.48735	12:54:00	D	3.90
88	KHERI	GOLA	S-NPP	28.15627	80.53677	01:42:00	N	0.70
89	KHERI	MOHMADI	S-NPP	28.02145	80.16114	01:42:00	N	0.60
90	KUSHINAGAR	HATA	S-NPP	26.72639	83.72082	01:42:00	N	0.80
91	KUSHINAGAR	HATA	S-NPP	26.92548	83.57497	12:54:00	D	6.30
92	KUSHINAGAR	HATA	S-NPP	26.95336	83.68372	01:42:00	N	0.50
93	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.93719	83.55262	01:42:00	N	0.70
94	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.93790	83.58976	01:42:00	N	1.00
95	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.05767	83.68774	01:42:00	N	0.40
96	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.18833	83.59856	01:42:00	N	0.40

97	MAU	GHOSI	S-NPP	26.06645	83.58877	12:54:00	D	2.20
98	MAU	MAU	S-NPP	25.90204	83.48804	12:54:00	D	5.60
99	MAU	MAU	S-NPP	25.92383	83.73272	12:54:00	D	3.00
100	MAU	MUHAMMADABAD	S-NPP	25.83971	83.37895	12:54:00	D	1.90
101	MIRZAPUR	MIRZAPUR	S-NPP	25.01894	82.75338	12:54:00	D	2.60
102	MORADABAD	THAKUR DWARA	S-NPP	29.18073	78.89887	01:42:00	N	0.60
103	PRATAPGARH	KUNDA	S-NPP	25.68425	81.69854	12:54:00	D	1.90
104	PRATAPGARH	PATTI	S-NPP	25.85352	82.11176	12:54:00	D	2.60
105	RAIBEARELI	RAEBARELI	S-NPP	26.11732	81.33569	12:54:00	D	2.50
106	RAIBEARELI	SALON	S-NPP	26.19289	81.60100	01:42:00	N	0.90
107	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.81560	79.95104	12:54:00	D	3.40
108	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.81870	79.95309	12:54:00	D	3.20
109	SHRAWASTI	IKAUNA	S-NPP	27.50342	81.91045	12:54:00	D	2.60
110	SHRAWASTI	IKAUNA	S-NPP	27.50583	81.91079	12:54:00	D	2.00
111	SIDDHARTHANAGAR	ITWA	S-NPP	27.35278	82.60654	12:54:00	D	2.70
112	SITAPUR	SITAPUR	S-NPP	27.78067	80.74515	12:54:00	D	2.00
113	SULTANPUR	KADIRPUR	S-NPP	26.20068	82.50884	12:54:00	D	6.60
114	UNNAO	BIGHAPUR	S-NPP	26.41269	80.76228	12:54:00	D	5.20

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 / 750	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

Study Team

ICAR – HQ	Dr K. Alagusundaram	DDG (AG. ENGG.)	ddgengg@icar.org.in
	Dr S. Bhasker	ADG (NRM)	adgagroandaf@gmail.com
	Dr K.K. Singh	ADG (AG. ENGG)	kanchansingh044@gmail.com
ICAR - IARI	Dr V.K. Sehgal	Professor & Nodal Scientist	iaricreams@gmail.com
	Dr Rajkumar Dhakar	Scientist	raidhakar.iari@gmail.com
	Mr Rakeswer Verma	Chief Technical Officer	rakeshwar.verma@icar.gov.in
	Mr Mohd Jahangir	Lab Assistant (KRISHI)	mjahangir198@gmail.com
ICAR - ATARI	Dr Rajbir Singh	Director ATARI (Zone-I) Ludhiana	rajbirsingh.zpd@gmail.com
	Dr S.K. Singh	Director ATARI (Zone-II) Jodhpur	sushilsinghiipr@yahoo.co.in
	Dr Atar Singh	Director ATARI (Zone-III) Kanpur	zpdicarkanpur@gmail.com
ICAR - IASRI	Dr Rajender Parsad	Director IASRI	rajender.parsad@icar.gov.in

Softcopy of this report and latest statistics can be seen on <http://creams.iari.res.in>

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)
