

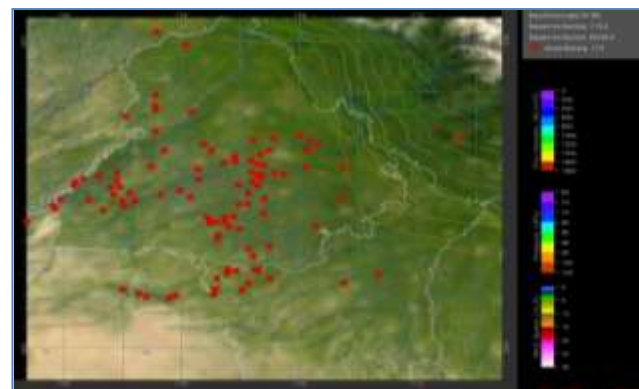
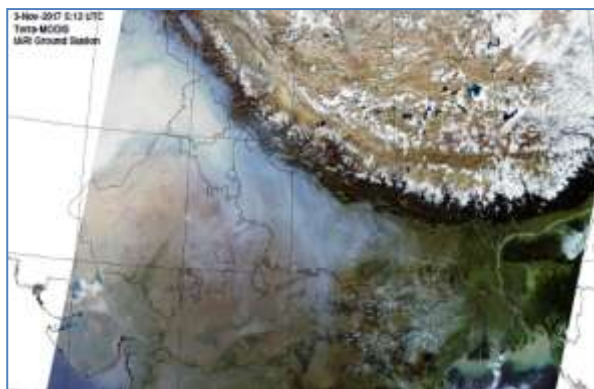


# MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2020

**Bulletin  
No. 7**

**Events Date:  
07-Oct-2020**

**Issued on:  
08-Oct-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**

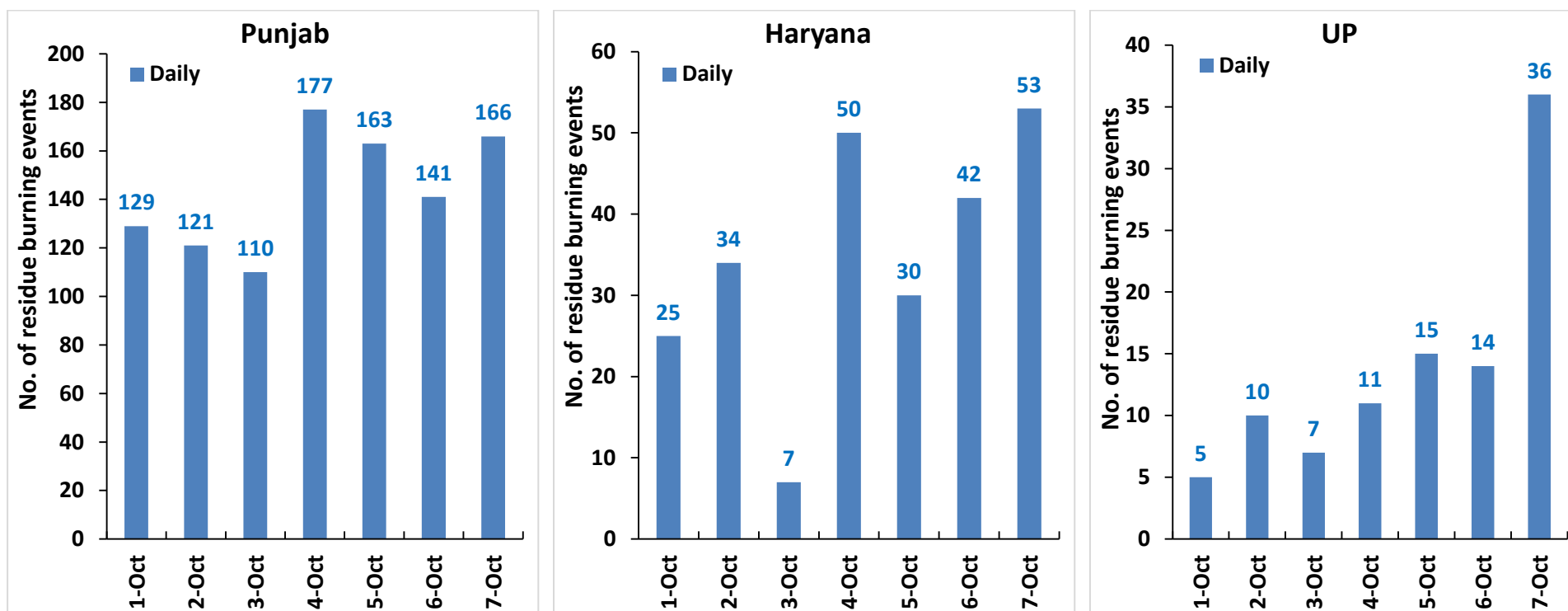
<http://creams.iari.res.in>



## Highlights for 07-October-2020

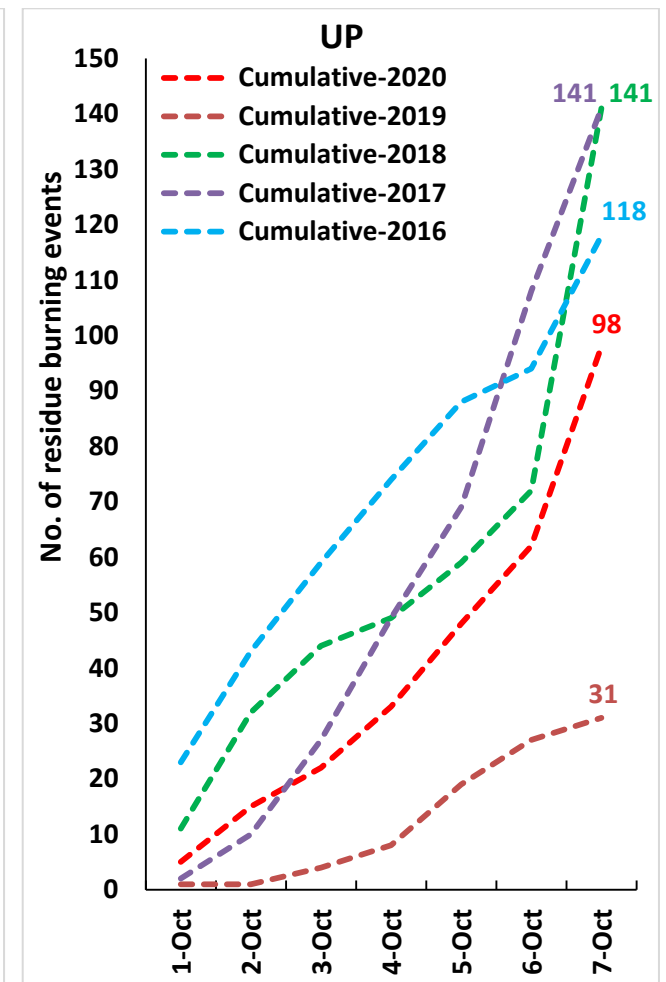
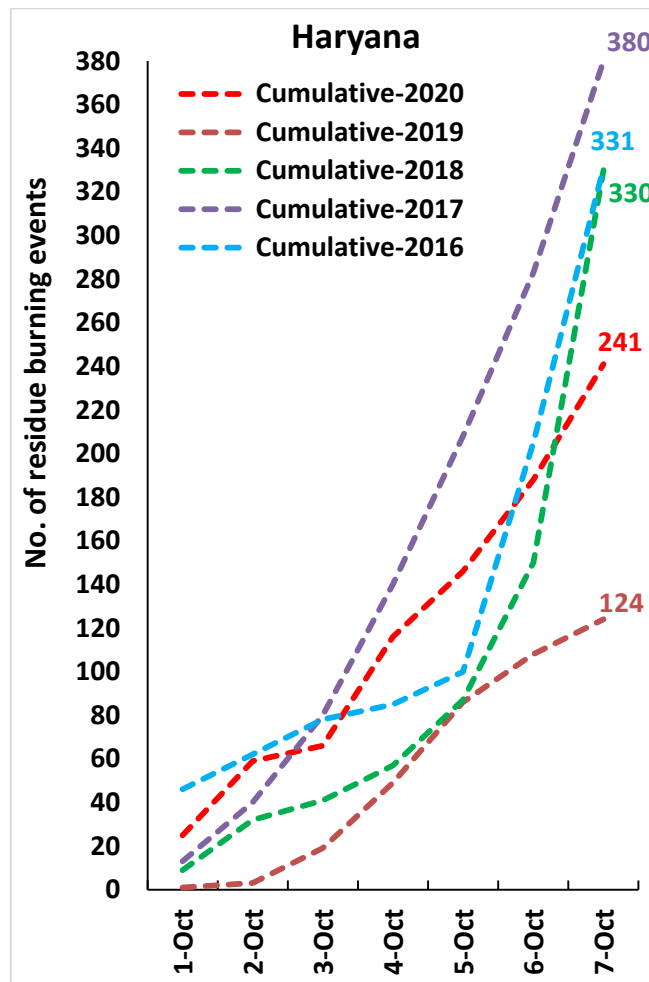
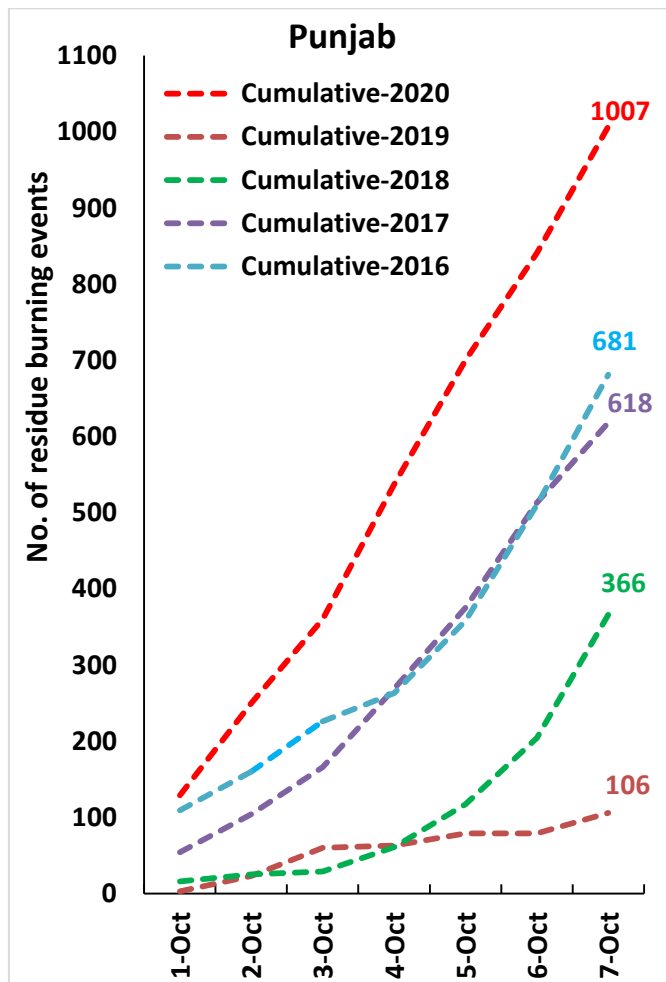
- Satellites detected **255** residue burning events in the three study States on **07-Oct-2020**.
- The state wise events detected on 07-Oct-2020 were **166** in Punjab, **53** in Haryana and **36** in UP.
- In Punjab, burning/fire events were concentrated in Amritsar and Tarn Taran districts.
- In Haryana, burning/fire events were concentrated in Kurukshetra district.
- In Uttar Pradesh, the burning events were scattered.
- Total **1346** burning events were detected in the three States between **01-Oct-2020** and **07-Oct-2020**, which are distributed as **1007**, **241** and **98** in Punjab, Haryana and UP, respectively.

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

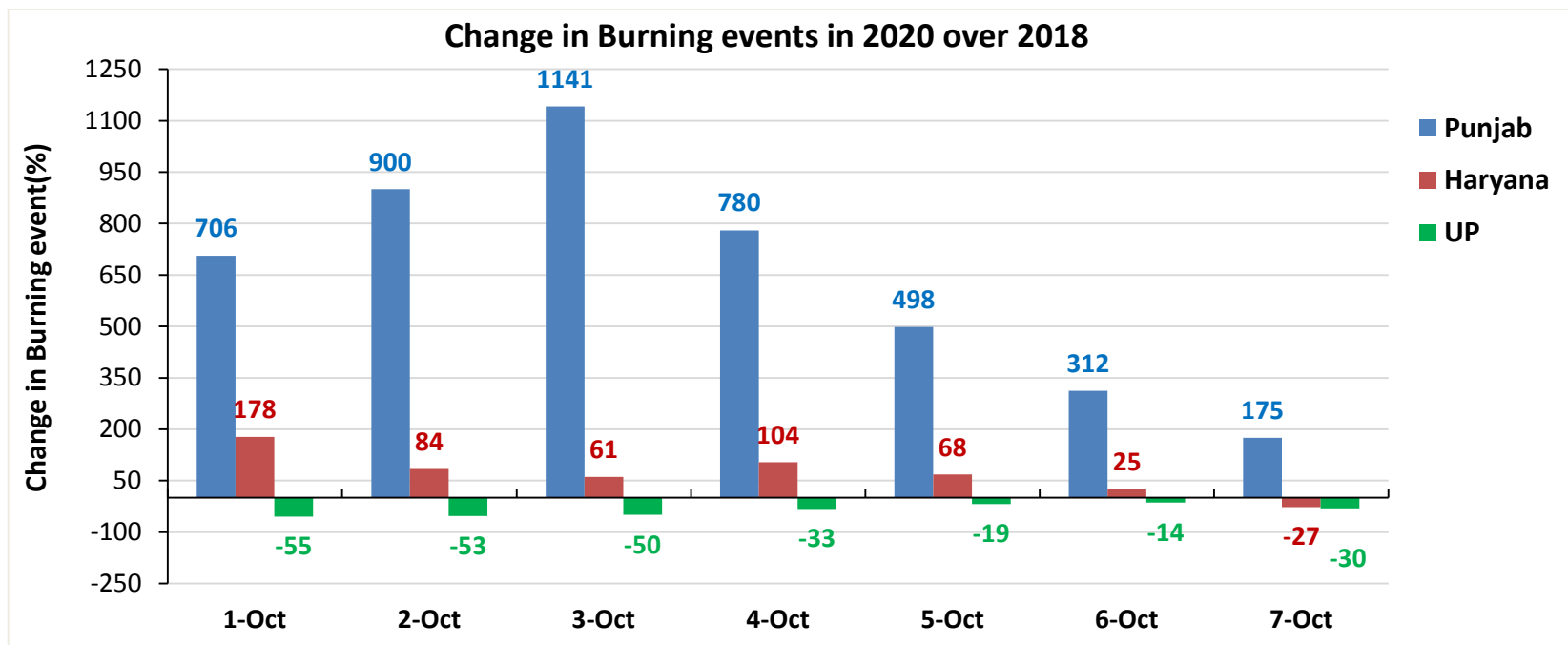
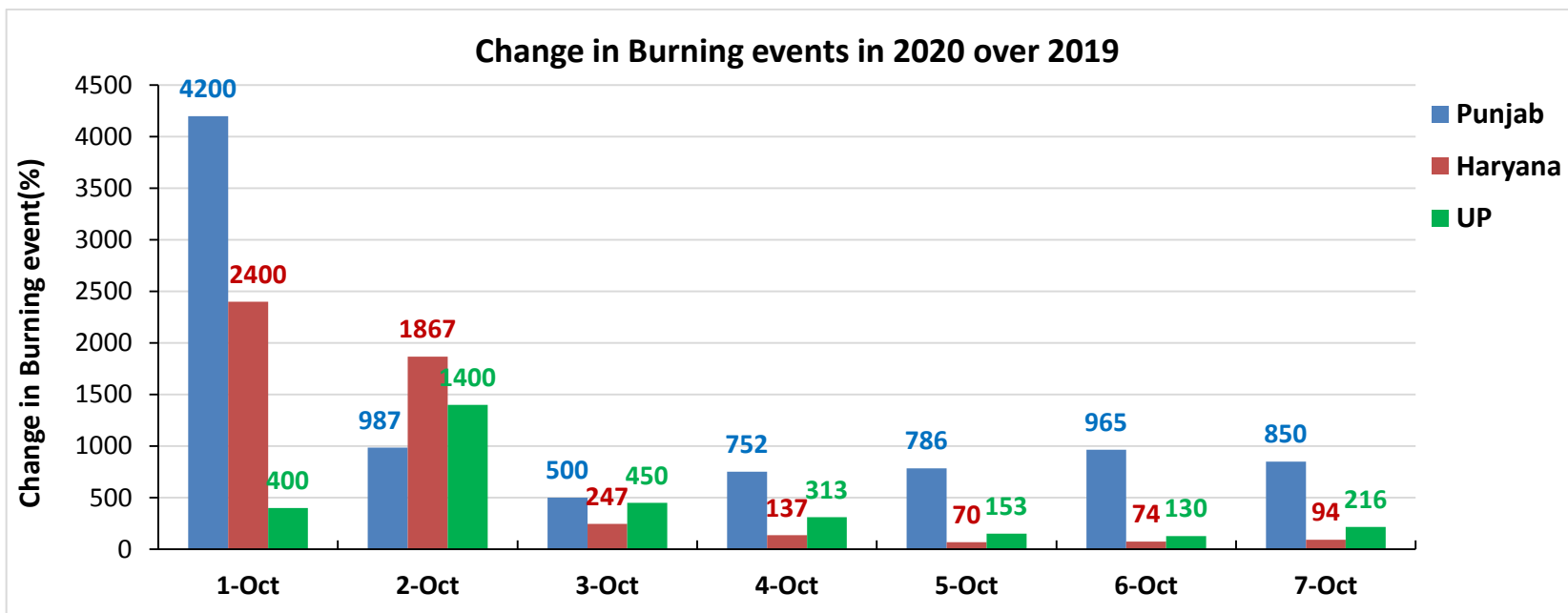


**Comparison of residue burning events in current year (2020) with previous years (2019, 2018, 2017 & 2016) for the three study States**

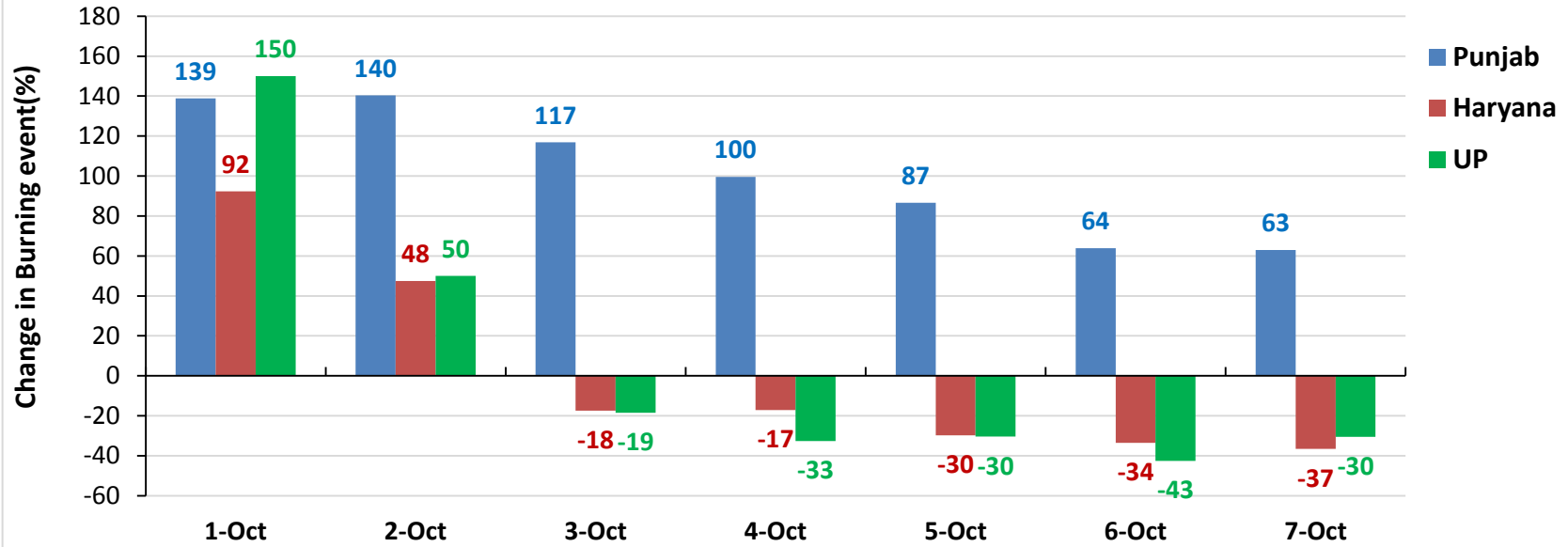
**(01-Oct to 07-Oct)**



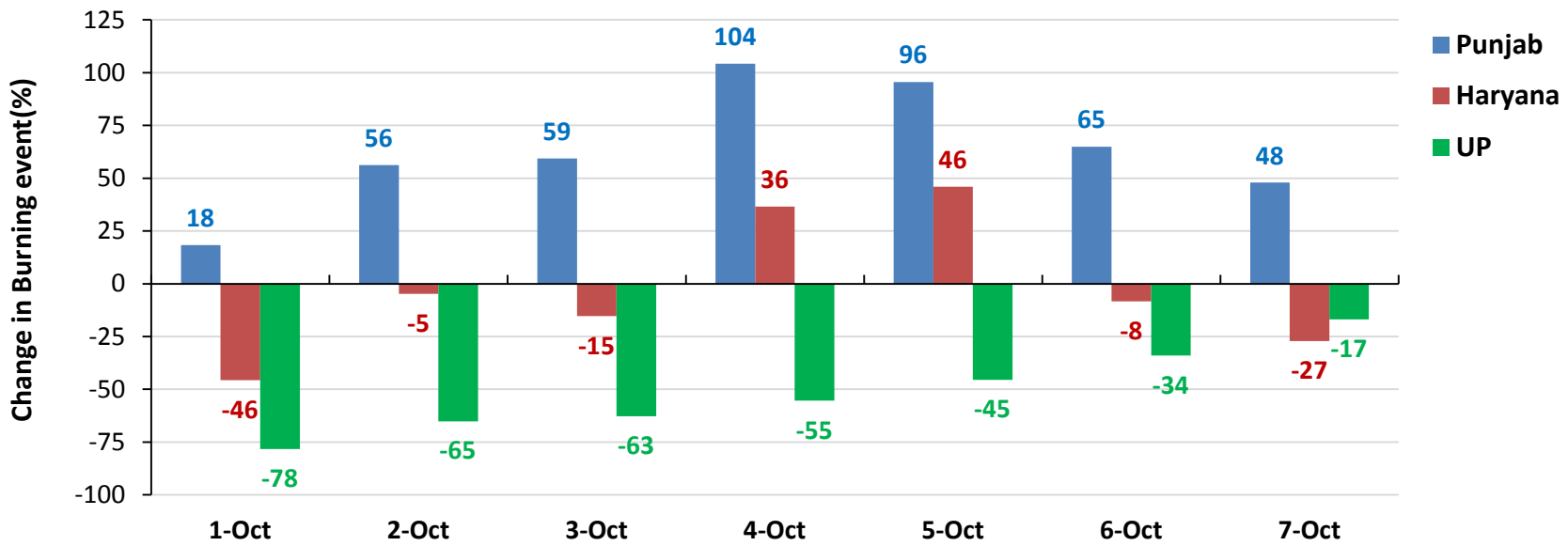
**Percent Change in Burning events in 2020 over 2019, 2018, 2017 and 2016 (Daily Cumulative)**



Change in Burning events in 2020 over 2017

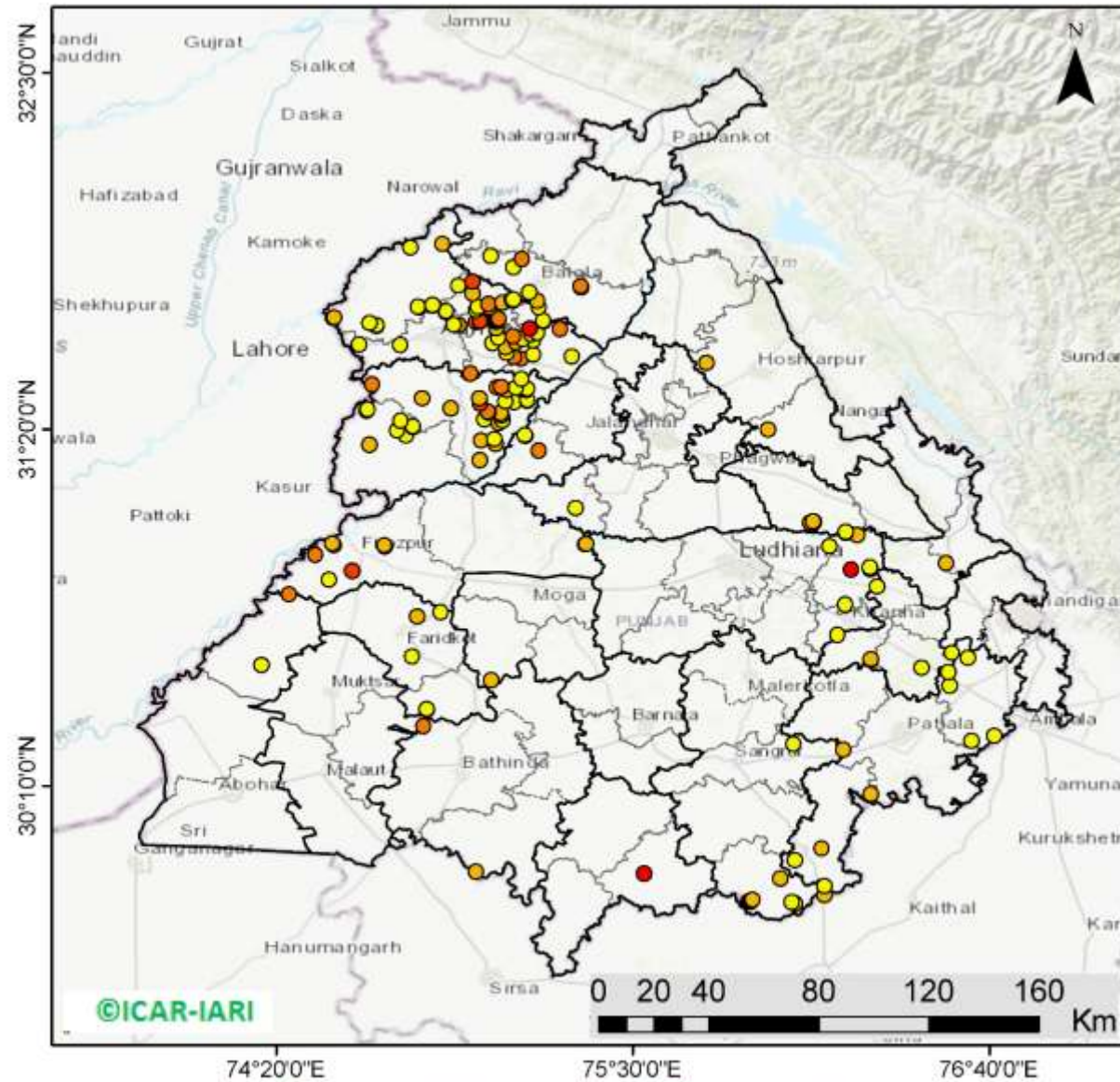


Change in Burning events in 2020 over 2016



(a) Punjab

### RICE RESIDUE BURNING IN PUNJAB



**166** burning events detected in Punjab on 07th October 2020

#### Fire Intensity (W/m<sup>2</sup>)

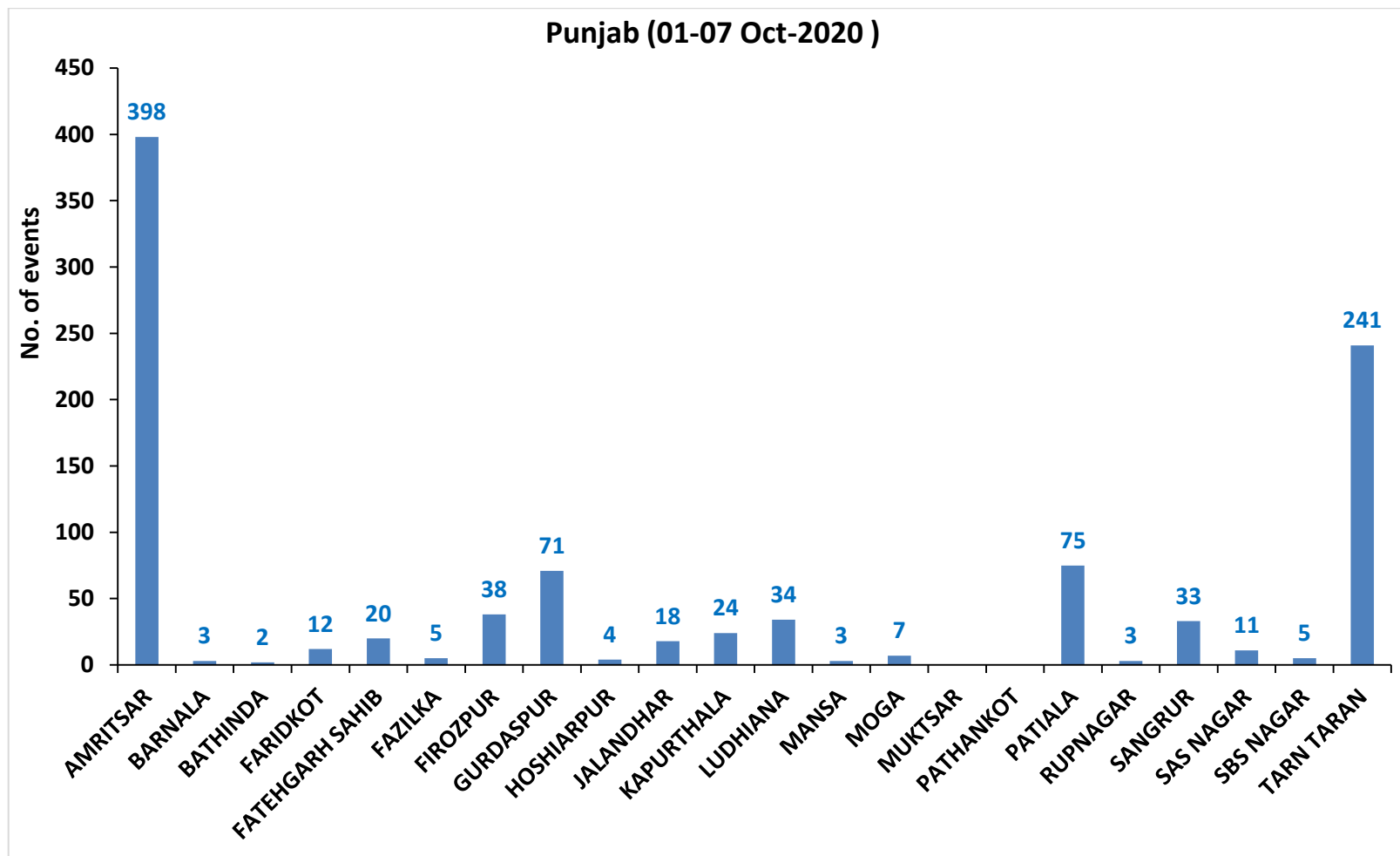
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20

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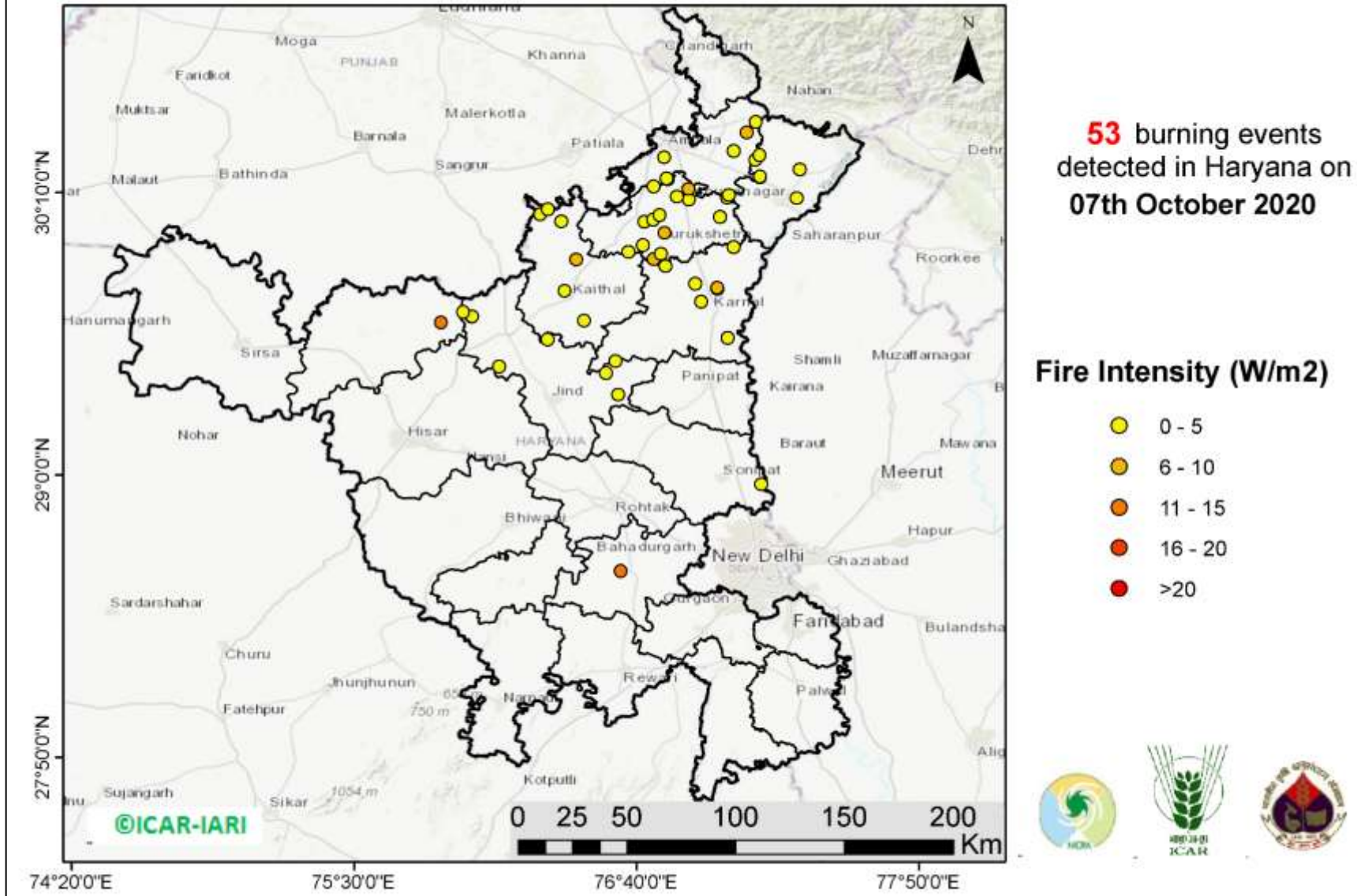
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

**District-wise cumulative number of residue burning events in Punjab (01-07 Oct-2020)**



(b) Haryana

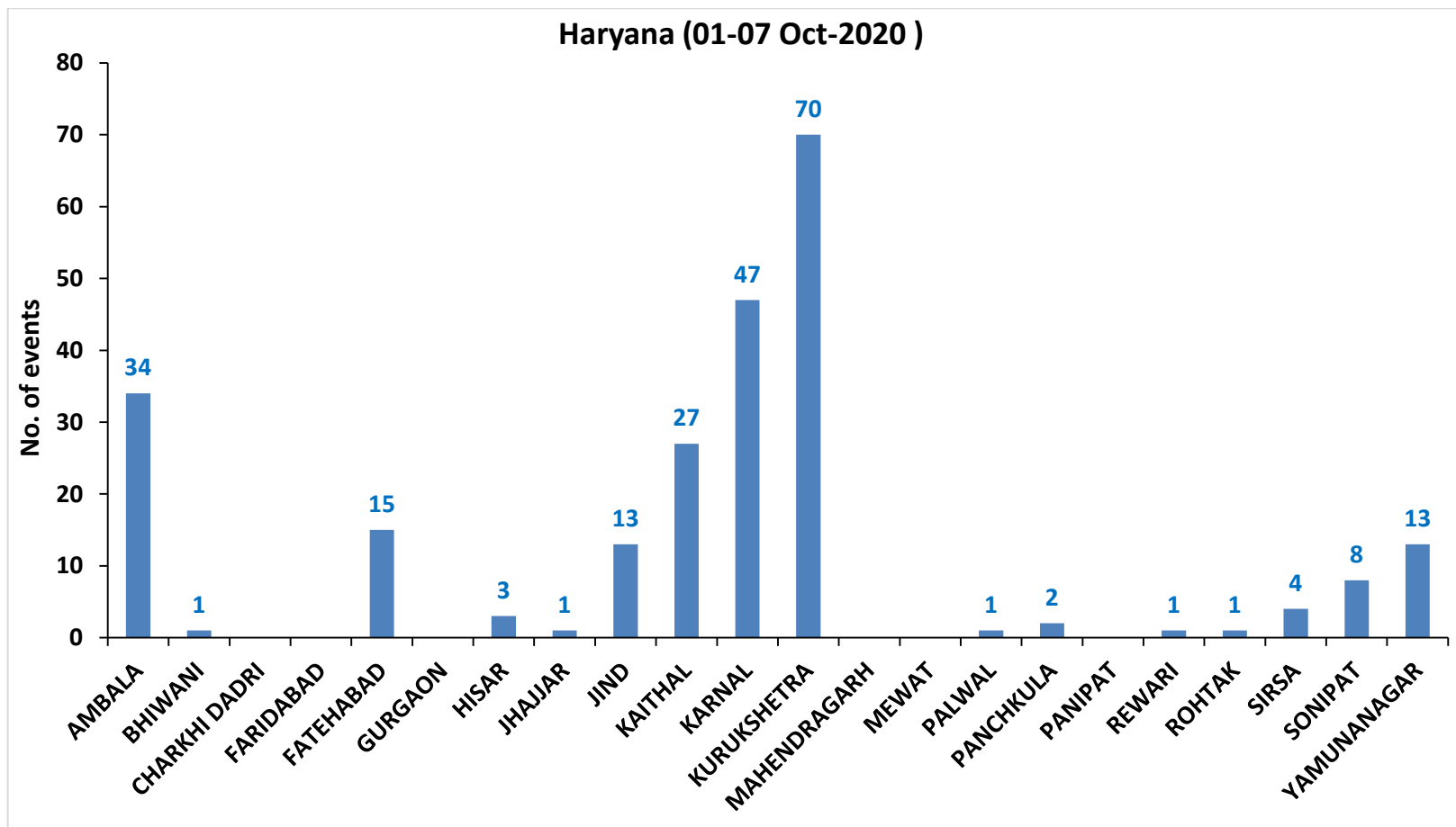
RICE RESIDUE BURNING IN HARYANA



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

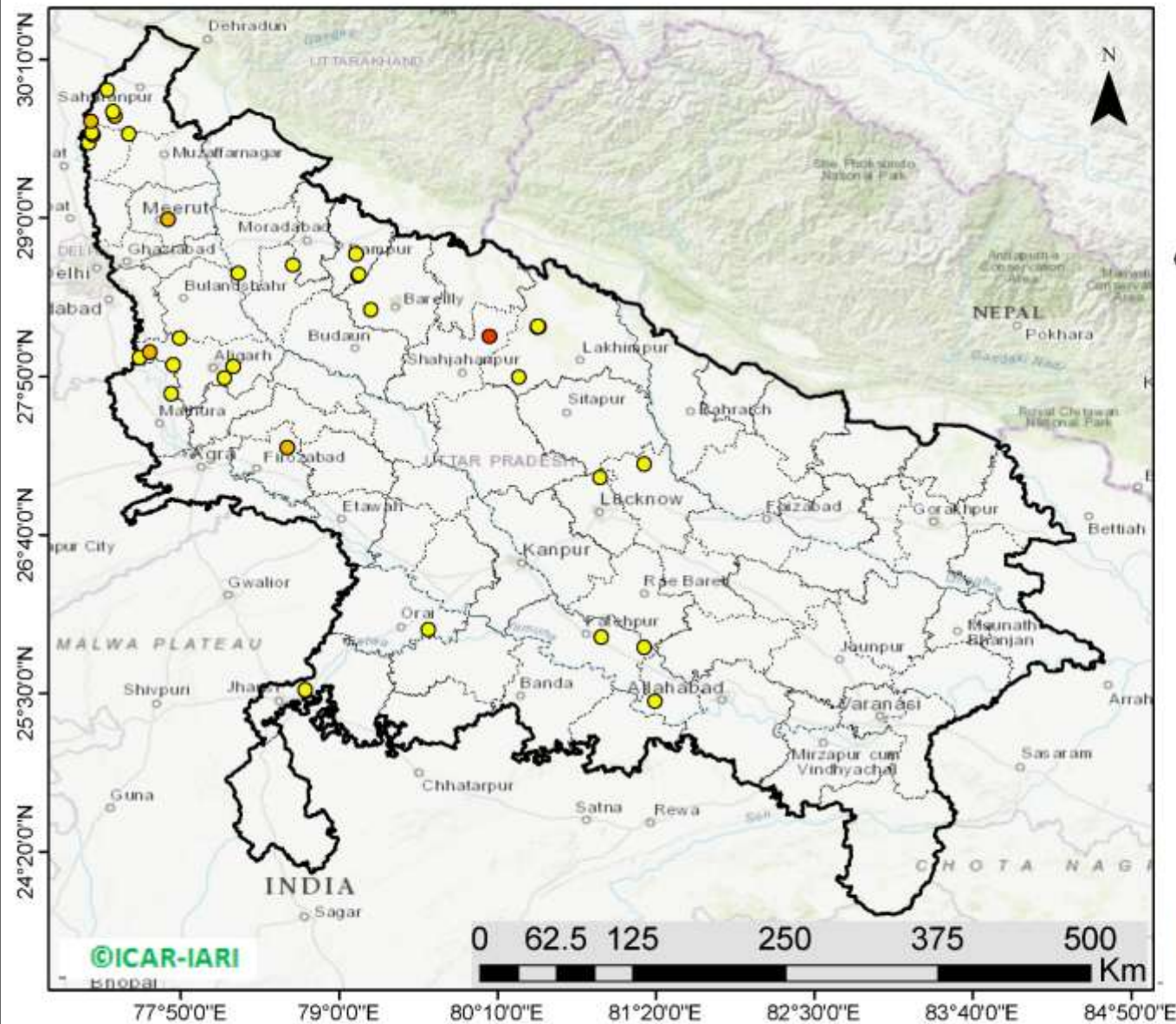


**District-wise cumulative number of residue burning events in Haryana (01-07 Oct-2020)**



(c) Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



**36** burning events detected in Uttar Pradesh on 07th October 2020

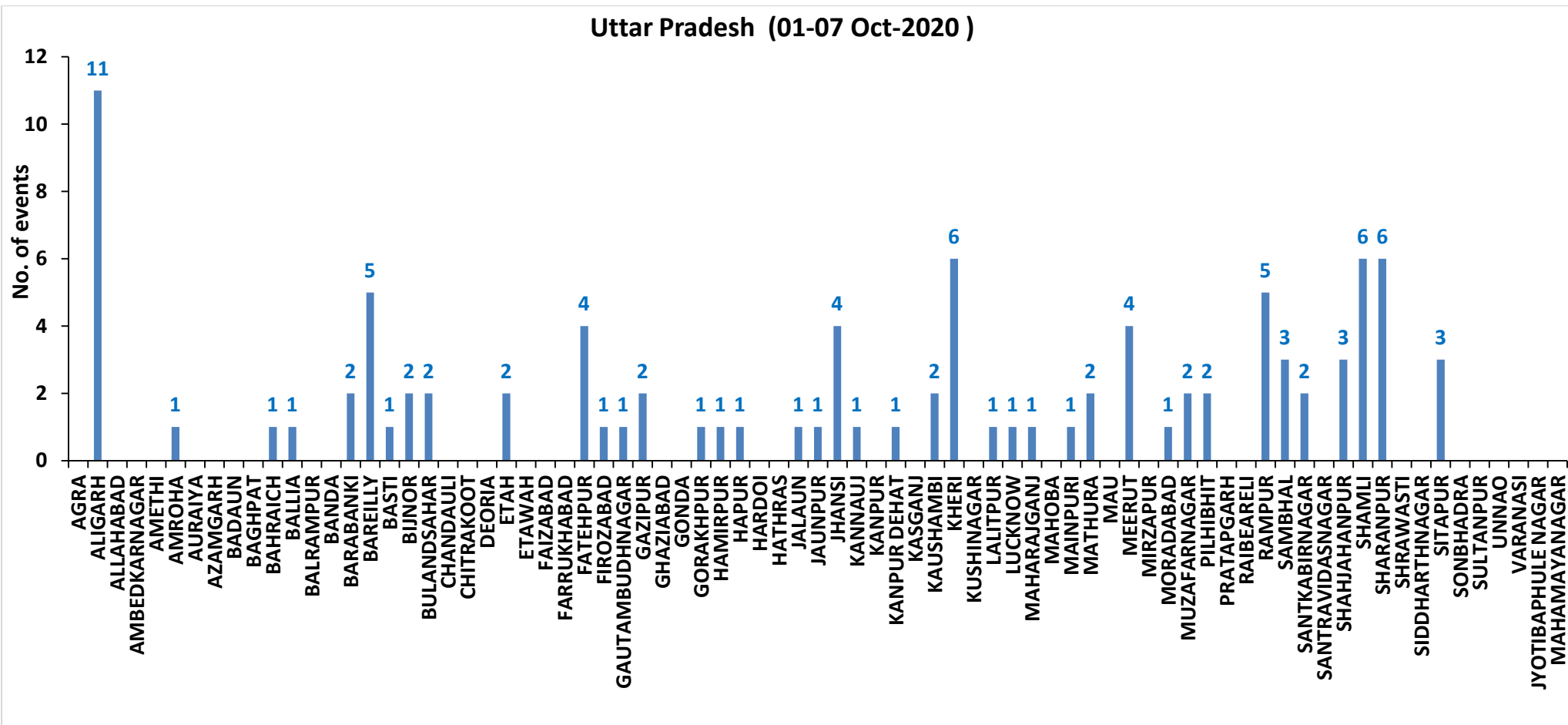
Fire Intensity (W/m<sup>2</sup>)

- 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 (01-07 Oct-2020)



**State-wise and date-wise number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020**  
**(Period: 01-07 October)**

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
<b>01-Oct</b>	129	3	16	54	109	25	1	9	13	46	5	1	11	2	23	159	5	36	69	178
<b>02-Oct</b>	121	20	9	50	51	34	2	23	27	16	10	0	21	8	20	165	22	53	85	87
<b>03-Oct</b>	110	37	4	62	66	07	16	9	40	16	07	3	12	17	16	124	56	25	119	98
<b>04-Oct</b>	177	3	32	103	37	50	30	16	60	7	11	4	5	22	15	238	37	53	185	59
<b>05-Oct</b>	163	16	56	106	95	30	37	30	68	15	15	11	10	20	14	208	64	96	194	124
<b>06-Oct</b>	141	0	87	138	152	42	22	63	75	105	14	8	13	39	6	197	30	163	252	263
<b>07-Oct</b>	166	27	162	105	171	53	16	180	97	126	36	4	69	33	24	255	47	411	235	321
<b>Total</b>	<b>1007</b>	<b>106</b>	<b>366</b>	<b>618</b>	<b>681</b>	<b>241</b>	<b>124</b>	<b>330</b>	<b>380</b>	<b>331</b>	<b>98</b>	<b>31</b>	<b>141</b>	<b>141</b>	<b>118</b>	<b>1346</b>	<b>261</b>	<b>837</b>	<b>1139</b>	<b>1130</b>

**District-wise and date wise cumulative number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020**  
**(Period: 01-07 October)**

**(a) Punjab**

Districts	01-07 Oct				
	2016	2017	2018	2019	2020
AMRITSAR	222	246	213	50	398
BARNALA	1	1	0	0	3
BATHINDA	12	9	12	0	2
FARIDKOT	18	20	0	0	12
FATEHGARH SAHIB	43	11	5	0	20
FAZILKA	0	0	0	1	5
FIROZPUR	37	38	13	1	38
GURDASPUR	17	14	17	4	71
HOSHIARPUR	5	3	3	1	4
JALANDHAR	37	11	0	2	18
KAPURTHALA	30	4	1	0	24
LUDHIANA	24	46	13	2	34
MANSA	5	6	1	2	3
MOGA	4	2	0	2	7
MUKTSAR	22	4	2	1	0
PATHANKOT	0	0	0	0	0
PATIALA	50	46	24	9	75
RUPNAGAR	1	2	0	0	3
SANGRUR	13	32	17	1	33
SAS NAGAR	9	12	8	0	11
SBS NAGAR	11	3	2	2	5
TARN TARAN	120	108	35	28	241
<b>Total</b>	<b>681</b>	<b>618</b>	<b>366</b>	<b>106</b>	<b>1007</b>

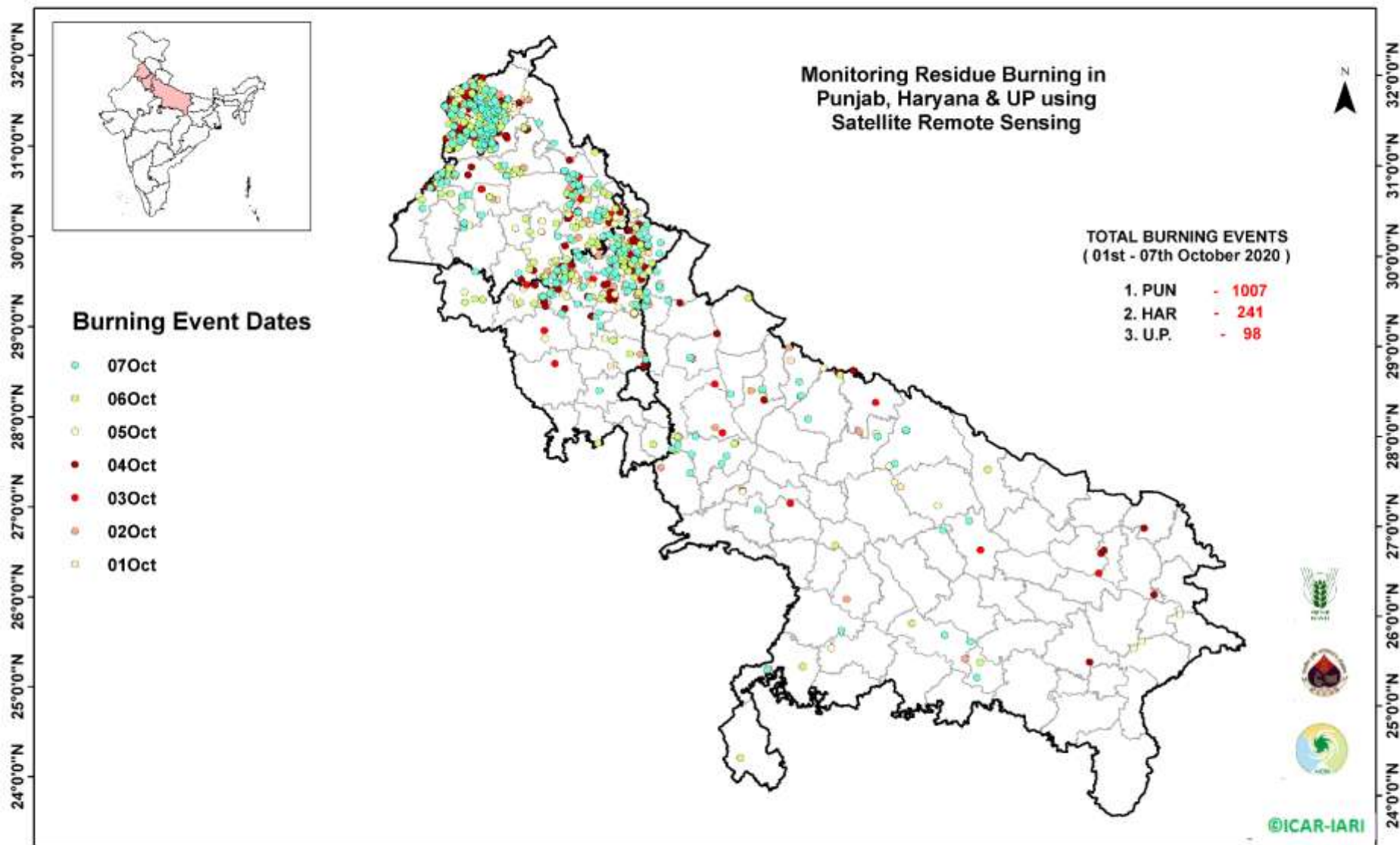
**(b) Haryana**

Districts	01-07 Oct				
	2016	2017	2018	2019	2020
AMBALA	21	31	25	1	34
BHIWANI	0	1	0	0	1
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	1	0	11	1	0
FATEHABAD	4	21	5	3	15
GURGAON	0	0	0	0	0
HISAR	3	3	3	0	3
JHAJJAR	0	0	1	1	1
JIND	10	20	14	3	13
KAITHAL	80	57	40	25	27
KARNAL	127	122	90	60	47
KURUKSHETRA	70	100	95	24	70
MAHENDRAGARH	0	0	0	0	0
MEWAT	0	0	0	0	0
PALWAL	0	0	0	1	1
PANCHKULA	0	0	3	1	2
PANIPAT	4	9	20	1	0
REWARI	0	0	0	0	1
ROHTAK	0	0	0	0	1
SIRSA	7	1	4	0	4
SONIPAT	0	3	3	0	8
YAMUNANAGAR	4	12	16	3	13
<b>Total</b>	<b>331</b>	<b>380</b>	<b>330</b>	<b>124</b>	<b>241</b>

**(C)**  
**Uttar Pradesh**

Districts	01-07 Oct																
	2016	2017	2018	2019	2020	GAUTAMBUDHNAGAR	1	0	1	0	1	MUZAFARNAGAR	3	8	2	0	2
AGRA	0	0	0	0	0	GAZIPUR	0	0	0	0	2	PILHIBHIT	7	11	8	6	2
ALIGARH	0	2	4	0	11	GHAZIABAD	0	1	2	0	0	PRATAPGARH	0	0	0	0	0
ALLAHABAD	0	0	3	0	0	GONDA	0	0	0	0	0	RAIBEARELI	0	0	0	0	0
AMBEDKARNAGAR	0	0	0	0	0	GORAKHPUR	0	0	3	0	1	RAMPUR	40	13	15	1	5
AMETHI	0	0	0	0	0	HAMIRPUR	0	0	1	0	1	SAMBHAL	0	0	0	1	3
AMROHA	0	0	0	0	1	HAPUR	0	0	0	0	1	SANTKABIRNAGAR	0	0	0	0	2
AURAIYA	19	12	11	0	0	HARDOI	0	0	1	0	0	SANTRAVIDASNAGAR	0	0	0	0	0
AZAMGARH	0	0	0	0	0	HATHRAS	0	0	0	0	0	SHAHJAHANPUR	25	63	40	4	3
BADAUN	0	0	0	0	0	JALAUN	0	0	0	0	1	SHAMLI	0	0	0	2	6
BAGHPAT	0	0	0	0	0	JAUNPUR	0	0	0	0	1	SHARANPUR	2	1	4	0	6
BAHRAICH	0	0	0	0	1	JHANSI	0	0	0	0	4	SHRAWASTI	0	0	0	0	0
BALLIA	0	0	0	0	1	KANNAUJ	0	0	0	0	1	SIDDHARTHANAGAR	0	0	0	0	0
BALRAMPUR	0	0	0	0	0	KANPUR	0	0	0	0	0	SITAPUR	3	0	1	0	3
BANDA	0	0	1	0	0	KANPUR DEHAT	0	0	0	0	1	SONBHADRA	3	1	2	0	0
BARABANKI	2	0	6	0	2	KAGANJ	0	0	0	0	0	SULTANPUR	0	0	0	0	0
BAREILLY	6	0	3	3	5	KAUSHAMBI	0	1	5	0	2	UNNAO	0	0	0	0	0
BASTI	0	0	0	0	1	KHERI	4	19	8	6	6	VARANASI	0	0	0	0	0
BIJNOR	0	0	1	0	2	KUSHINAGAR	0	0	0	0	0	JYOTIBAPHULE NAGAR	0	0	0	0	0
BULANDSAHAR	0	1	2	0	2	LALITPUR	0	0	0	0	1	MAHAMAYANAGAR	0	0	0	0	0
CHANDAULI	0	0	0	0	0	LUCKNOW	2	2	0	1	1	<b>Total</b>	<b>118</b>	<b>141</b>	<b>141</b>	<b>31</b>	<b>98</b>
CHITRAKOOT	0	0	0	0	0	MAHARAJGANJ	0	0	0	0	1						
DEORIA	0	0	0	0	0	MAHOBA	0	0	0	0	0						
ETAH	0	1	1	0	2	MAINPURI	0	0	1	0	1						
ETAWAH	0	0	0	0	0	MATHURA	1	1	12	2	2						
FAIZABAD	0	1	0	0	0	MAU	0	0	0	0	0						
FARRUKHABAD	0	0	0	0	0	MEERUT	0	0	0	1	4						
FATEHPUR	0	0	1	0	4	MIRZAPUR	0	1	1	3	0						
FIROZABAD	0	0	0	0	1	MORADABAD	0	2	1	1	1						

### Map of Cumulative Burning Events (01-07 Oct 2020)



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

**Details of residue burning events in Punjab on 07-Oct-2020**

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m <sup>2</sup> )
1	AMRITSAR	AJNALA	S-NPP	74.66135	31.67074	13:18:00	D	4.00
2	AMRITSAR	AJNALA	S-NPP	74.66046	31.67431	13:18:00	D	4.00
3	AMRITSAR	AJNALA	S-NPP	74.63843	31.68153	13:18:00	D	3.80
4	AMRITSAR	AJNALA	S-NPP	74.51938	31.69786	13:18:00	D	6.70
5	AMRITSAR	AJNALA	S-NPP	74.52428	31.69877	13:18:00	D	6.70
6	AMRITSAR	AJNALA	S-NPP	74.80148	31.73322	13:18:00	D	2.40
7	AMRITSAR	AJNALA	S-NPP	74.79816	31.73436	13:18:00	D	2.00
8	AMRITSAR	AJNALA	S-NPP	74.84435	31.74088	13:18:00	D	3.20
9	AMRITSAR	AJNALA	S-NPP	74.92988	31.80273	13:18:00	D	2.20
10	AMRITSAR	AJNALA	S-NPP	74.77207	31.92758	13:18:00	D	4.50
11	AMRITSAR	AJNALA	S-NPP	74.87822	31.93921	13:18:00	D	5.20
12	AMRITSAR	AMRITSAR I	AQUA	74.97000	31.51600	13:30:00	D	13.20
13	AMRITSAR	AMRITSAR I	S-NPP	75.08775	31.58362	13:18:00	D	3.60
14	AMRITSAR	AMRITSAR I	S-NPP	75.04094	31.61564	13:18:00	D	2.80
15	AMRITSAR	AMRITSAR I	AQUA	75.05300	31.66500	13:30:00	D	9.10
16	AMRITSAR	AMRITSAR I	AQUA	75.04800	31.68500	13:30:00	D	14.40
17	AMRITSAR	AMRITSAR I	AQUA	75.05600	31.68600	13:30:00	D	23.00
18	AMRITSAR	AMRITSAR I	AQUA	75.06100	31.68800	13:30:00	D	44.30
19	AMRITSAR	AMRITSAR I	S-NPP	75.05739	31.69430	13:18:00	D	10.80
20	AMRITSAR	AMRITSAR I	S-NPP	75.06205	31.69514	13:18:00	D	10.80
21	AMRITSAR	AMRITSAR I	S-NPP	74.98708	31.72211	13:18:00	D	1.70
22	AMRITSAR	AMRITSAR I	S-NPP	75.02458	31.72883	13:18:00	D	8.40
23	AMRITSAR	AMRITSAR I	AQUA	75.03100	31.73300	13:30:00	D	6.80
24	AMRITSAR	AMRITSAR I	S-NPP	74.99388	31.73437	13:18:00	D	4.90
25	AMRITSAR	AMRITSAR I	AQUA	75.02800	31.74300	13:30:00	D	10.60
26	AMRITSAR	AMRITSAR I	S-NPP	75.07338	31.74855	13:18:00	D	5.10
27	AMRITSAR	AMRITSAR I	S-NPP	75.10596	31.75435	13:18:00	D	1.70
28	AMRITSAR	AMRITSAR I	S-NPP	74.97527	31.77778	13:18:00	D	7.10
29	AMRITSAR	AMRITSAR I	AQUA	74.97600	31.81700	13:30:00	D	16.00
30	AMRITSAR	AMRITSAR II	S-NPP	74.74015	31.60977	13:18:00	D	2.20
31	AMRITSAR	AMRITSAR II	S-NPP	74.60502	31.61175	13:18:00	D	2.80



32	AMRITSAR	AMRITSAR II	AQUA	74.93300	31.67400	13:30:00	D	10.40
33	AMRITSAR	AMRITSAR II	S-NPP	74.91479	31.67587	13:18:00	D	3.00
34	AMRITSAR	AMRITSAR II	AQUA	74.98700	31.68400	13:30:00	D	13.20
35	AMRITSAR	AMRITSAR II	AQUA	75.00000	31.68600	13:30:00	D	43.20
36	AMRITSAR	AMRITSAR II	S-NPP	75.00041	31.68769	13:18:00	D	15.60
37	AMRITSAR	AMRITSAR II	S-NPP	74.89017	31.71579	13:18:00	D	4.90
38	AMRITSAR	AMRITSAR II	S-NPP	74.88931	31.71933	13:18:00	D	4.10
39	AMRITSAR	AMRITSAR II	S-NPP	74.84660	31.73954	13:18:00	D	4.00
40	AMRITSAR	BABA BAKALA	S-NPP	75.13452	31.56351	13:18:00	D	10.20
41	AMRITSAR	BABA BAKALA	S-NPP	75.11065	31.56940	13:18:00	D	11.80
42	AMRITSAR	BABA BAKALA	S-NPP	75.30128	31.57106	13:18:00	D	1.40
43	AMRITSAR	BABA BAKALA	S-NPP	75.17460	31.57792	13:18:00	D	4.70
44	AMRITSAR	BABA BAKALA	S-NPP	75.08347	31.60122	13:18:00	D	8.30
45	AMRITSAR	BABA BAKALA	S-NPP	75.11816	31.61846	13:18:00	D	8.80
46	AMRITSAR	BABA BAKALA	S-NPP	75.17470	31.62491	13:18:00	D	2.10
47	AMRITSAR	BABA BAKALA	S-NPP	75.13969	31.62964	13:18:00	D	2.60
48	AMRITSAR	BABA BAKALA	S-NPP	75.06090	31.63391	13:18:00	D	5.00
49	AMRITSAR	BABA BAKALA	S-NPP	75.10839	31.63871	13:18:00	D	10.60
50	AMRITSAR	BABA BAKALA	AQUA	75.16800	31.64400	13:30:00	D	6.60
51	AMRITSAR	BABA BAKALA	S-NPP	75.18810	31.64924	13:18:00	D	1.70
52	AMRITSAR	BABA BAKALA	S-NPP	75.26184	31.66232	13:18:00	D	10.90
53	AMRITSAR	BABA BAKALA	AQUA	75.16300	31.66400	13:30:00	D	21.20
54	AMRITSAR	BABA BAKALA	S-NPP	75.20818	31.68566	13:18:00	D	2.70
55	AMRITSAR	BABA BAKALA	S-NPP	75.20733	31.68915	13:18:00	D	4.90
56	AMRITSAR	BABA BAKALA	S-NPP	75.19319	31.73333	13:18:00	D	2.20
57	BATHINDA	BATHINDA	AQUA	74.81500	30.36300	13:25:00	D	10.10
58	BATHINDA	TALWANDI SABO	METOP-2	74.98768	29.88568	20:29:00	N	7.00
59	FARIDKOT	FARIDKOT	S-NPP	74.77833	30.58937	13:18:00	D	4.60
60	FARIDKOT	FARIDKOT	AQUA	74.79400	30.72000	13:25:00	D	8.40
61	FARIDKOT	FARIDKOT	S-NPP	74.87201	30.73462	13:18:00	D	3.10
62	FARIDKOT	JAITO	S-NPP	74.82605	30.41389	13:18:00	D	2.70
63	FARIDKOT	JAITO	S-NPP	74.82516	30.41751	13:18:00	D	2.70
64	FATEHGARH SAHIB	ALMOH	S-NPP	76.16979	30.66100	13:18:00	D	2.80

65	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.44444	30.55305	13:18:00	D	2.70
66	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.27801	30.57794	13:18:00	D	3.00
67	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.27838	30.58006	13:18:00	D	5.10
68	FATEHGARH SAHIB	KHAMANOH	S-NPP	76.29837	30.81898	13:18:00	D	5.00
69	FAZILKA	JALALABAD	S-NPP	74.28491	30.56107	13:18:00	D	3.80
70	FAZILKA	JALALABAD	AQUA	74.37600	30.79300	13:25:00	D	10.90
71	FIROZPUR	FIROZPUR	S-NPP	74.50622	30.84067	13:18:00	D	3.60
72	FIROZPUR	FIROZPUR	S-NPP	74.58217	30.86997	13:18:00	D	17.10
73	FIROZPUR	FIROZPUR	AQUA	74.46200	30.92200	13:25:00	D	14.70
74	FIROZPUR	FIROZPUR	S-NPP	74.68887	30.94965	13:18:00	D	5.60
75	FIROZPUR	FIROZPUR	S-NPP	74.69102	30.95037	13:18:00	D	12.10
76	FIROZPUR	FIROZPUR	S-NPP	74.52310	30.95291	13:18:00	D	4.00
77	FIROZPUR	FIROZPUR	S-NPP	74.68797	30.95325	13:18:00	D	6.10
78	FIROZPUR	FIROZPUR	S-NPP	74.51634	30.95926	13:18:00	D	5.50
79	FIROZPUR	ZIRA	S-NPP	75.34357	30.95683	13:18:00	D	4.70
80	FIROZPUR	ZIRA	S-NPP	75.34657	30.95784	13:18:00	D	5.50
81	GURDASPUR	BATALA	S-NPP	75.18810	31.75432	13:18:00	D	6.80
82	GURDASPUR	BATALA	S-NPP	75.10511	31.75786	13:18:00	D	3.90
83	GURDASPUR	BATALA	S-NPP	75.10976	31.75868	13:18:00	D	4.00
84	GURDASPUR	BATALA	S-NPP	75.16196	31.78255	13:18:00	D	2.40
85	GURDASPUR	BATALA	S-NPP	75.33070	31.79771	13:18:00	D	10.10
86	GURDASPUR	BATALA	S-NPP	75.32986	31.80119	13:18:00	D	10.10
87	GURDASPUR	BATALA	S-NPP	75.10994	31.86433	13:18:00	D	4.90
88	GURDASPUR	BATALA	S-NPP	75.13725	31.89108	13:18:00	D	10.20
89	GURDASPUR	BATALA	S-NPP	75.03456	31.90112	13:18:00	D	1.70
90	HOSHIARPUR	GARHSHANKAR	AQUA	75.94300	31.33200	13:30:00	D	8.10
91	HOSHIARPUR	HOSHIARPUR	S-NPP	75.74121	31.54999	13:18:00	D	7.20
92	JALANDHAR	SHAHKOT	S-NPP	75.31271	31.07490	13:18:00	D	2.80
93	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.19299	31.26420	13:18:00	D	10.60
94	KAPURTHALA	SULTANPUR LODHI	AQUA	75.14800	31.31100	13:30:00	D	10.60
95	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.14681	31.31470	13:18:00	D	3.80
96	LUDHIANA	SAMRALA	S-NPP	76.19421	30.76000	13:18:00	D	2.10
97	LUDHIANA	SAMRALA	AQUA	76.21400	30.87500	13:25:00	D	34.20

98	LUDHIANA	SAMRALA	AQUA	76.27600	30.87600	13:25:00	D	21.40
99	LUDHIANA	SAMRALA	S-NPP	76.27495	30.88226	13:18:00	D	2.50
100	LUDHIANA	SAMRALA	S-NPP	76.14322	30.95118	13:18:00	D	2.80
101	LUDHIANA	SAMRALA	S-NPP	76.23380	30.98789	13:18:00	D	7.10
102	LUDHIANA	SAMRALA	S-NPP	76.19608	30.99567	13:18:00	D	7.20
103	LUDHIANA	SAMRALA	S-NPP	76.19627	30.99804	13:18:00	D	2.90
104	MANSA	BUDHLADA	S-NPP	75.53637	29.87939	13:18:00	D	25.00
105	MOGA	BAGHA PURANA	S-NPP	75.03717	30.51276	13:18:00	D	5.80
106	PATIALA	RAJPURA	S-NPP	76.60715	30.31368	13:18:00	D	3.20
107	PATIALA	RAJPURA	S-NPP	76.68258	30.33002	13:18:00	D	2.40
108	PATIALA	RAJPURA	S-NPP	76.53634	30.49485	13:18:00	D	1.70
109	PATIALA	RAJPURA	S-NPP	76.53162	30.53963	13:18:00	D	5.00
110	PATIALA	RAJPURA	S-NPP	76.59620	30.58574	13:18:00	D	2.70
111	PATIALA	RAJPURA	S-NPP	76.54417	30.60162	13:18:00	D	3.20
112	PATIALA	SAMANA	AQUA	76.12600	29.80800	13:25:00	D	8.30
113	PATIALA	SAMANA	S-NPP	76.12697	29.83783	13:18:00	D	2.90
114	PATIALA	SAMANA	S-NPP	76.03036	29.92259	13:18:00	D	2.90
115	PATIALA	SAMANA	AQUA	76.11700	29.96200	13:25:00	D	9.50
116	PATIALA	SAMANA	S-NPP	76.27863	30.13916	13:18:00	D	5.20
117	RUPNAGAR	RUPNAGAR	S-NPP	76.52498	30.89629	13:18:00	D	5.20
118	SANGRUR	MOONAK	S-NPP	76.02948	29.78109	13:18:00	D	3.10
119	SANGRUR	MOONAK	S-NPP	76.01900	29.78648	13:18:00	D	4.80
120	SANGRUR	MOONAK	AQUA	75.87800	29.78700	13:25:00	D	8.40
121	SANGRUR	MOONAK	AQUA	75.88400	29.78800	13:25:00	D	13.10
122	SANGRUR	MOONAK	S-NPP	75.88750	29.79230	13:18:00	D	9.20
123	SANGRUR	MOONAK	S-NPP	75.89199	29.79310	13:18:00	D	9.20
124	SANGRUR	MOONAK	S-NPP	75.98289	29.86332	13:18:00	D	10.00
125	SANGRUR	SANGRUR	S-NPP	76.18943	30.28459	13:18:00	D	5.40
126	SANGRUR	SANGRUR	S-NPP	76.02555	30.30291	13:18:00	D	3.50
127	SBS NAGAR	SBS NAGAR	AQUA	76.08800	31.02500	13:25:00	D	14.80
128	SBS NAGAR	SBS NAGAR	AQUA	76.08000	31.02800	13:25:00	D	6.70
129	SBS NAGAR	SBS NAGAR	AQUA	76.09200	31.03000	13:25:00	D	9.00
130	SBS NAGAR	SBS NAGAR	S-NPP	76.08897	31.03284	13:18:00	D	6.70

131	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00008	31.23286	13:18:00	D	14.40
132	TARN TARAN	KHADOOR SAHIB	AQUA	74.99900	31.23300	13:30:00	D	8.20
133	TARN TARAN	KHADOOR SAHIB	S-NPP	75.05107	31.28648	13:18:00	D	9.20
134	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00435	31.29657	13:18:00	D	5.30
135	TARN TARAN	KHADOOR SAHIB	S-NPP	75.04764	31.30064	13:18:00	D	2.10
136	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06122	31.35334	13:18:00	D	6.30
137	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07357	31.36295	13:18:00	D	3.30
138	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01376	31.36688	13:18:00	D	2.10
139	TARN TARAN	KHADOOR SAHIB	AQUA	75.07100	31.37900	13:30:00	D	8.60
140	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06757	31.38767	13:18:00	D	9.80
141	TARN TARAN	KHADOOR SAHIB	S-NPP	75.02829	31.38797	13:18:00	D	2.50
142	TARN TARAN	KHADOOR SAHIB	AQUA	75.02600	31.39200	13:30:00	D	11.30
143	TARN TARAN	KHADOOR SAHIB	AQUA	74.90400	31.40200	13:30:00	D	7.80
144	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00168	31.41643	13:18:00	D	18.80
145	TARN TARAN	KHADOOR SAHIB	S-NPP	75.11306	31.42159	13:18:00	D	2.80
146	TARN TARAN	KHADOOR SAHIB	S-NPP	75.08329	31.42364	13:18:00	D	2.50
147	TARN TARAN	KHADOOR SAHIB	S-NPP	75.15587	31.42556	13:18:00	D	3.60
148	TARN TARAN	KHADOOR SAHIB	S-NPP	75.15501	31.42908	13:18:00	D	3.60
149	TARN TARAN	KHADOOR SAHIB	S-NPP	74.99737	31.43413	13:18:00	D	5.80
150	TARN TARAN	KHADOOR SAHIB	S-NPP	74.81113	31.43515	13:18:00	D	8.20
151	TARN TARAN	KHADOOR SAHIB	S-NPP	75.08876	31.46140	13:18:00	D	5.80
152	TARN TARAN	KHADOOR SAHIB	S-NPP	75.15199	31.46156	13:18:00	D	3.40
153	TARN TARAN	KHADOOR SAHIB	S-NPP	75.15579	31.46590	13:18:00	D	4.80
154	TARN TARAN	KHADOOR SAHIB	S-NPP	75.11859	31.46891	13:18:00	D	3.70
155	TARN TARAN	KHADOOR SAHIB	AQUA	75.05600	31.47000	13:30:00	D	12.10
156	TARN TARAN	KHADOOR SAHIB	AQUA	75.07000	31.47200	13:30:00	D	12.20
157	TARN TARAN	KHADOOR SAHIB	AQUA	74.64800	31.48000	13:30:00	D	11.00
158	TARN TARAN	KHADOOR SAHIB	S-NPP	75.13590	31.49774	13:18:00	D	3.40
159	TARN TARAN	PATTI	S-NPP	74.63860	31.28328	13:18:00	D	6.10
160	TARN TARAN	PATTI	S-NPP	74.75812	31.31282	13:18:00	D	1.60
161	TARN TARAN	PATTI	S-NPP	74.72868	31.32988	13:18:00	D	3.40
162	TARN TARAN	PATTI	S-NPP	74.78175	31.33957	13:18:00	D	7.90
163	TARN TARAN	PATTI	S-NPP	74.78088	31.34315	13:18:00	D	4.00

164	TARN TARAN	PATTI	S-NPP	74.74096	31.36205	13:18:00	D	3.70
165	TARN TARAN	PATTI	AQUA	74.63000	31.39500	13:30:00	D	27.40
166	TARN TARAN	PATTI	S-NPP	74.63331	31.39873	13:18:00	D	1.90

### Details of residue burning events in Haryana on 07-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m <sup>2</sup> )
1	AMBALA	AMBALA	AQUA	76.79600	30.22100	13:25:00	D	8.00
2	AMBALA	AMBALA	S-NPP	76.79119	30.22536	13:18:00	D	4.20
3	AMBALA	AMBALA	S-NPP	76.78140	30.31128	13:18:00	D	2.80
4	AMBALA	BARARA	S-NPP	77.04217	30.14393	13:18:00	D	3.30
5	AMBALA	BARARA	S-NPP	77.04826	30.15538	13:18:00	D	2.90
6	AMBALA	BARARA	S-NPP	77.15883	30.30081	13:18:00	D	2.30
7	AMBALA	BARARA	S-NPP	77.17579	30.32096	13:18:00	D	2.50
8	AMBALA	BARARA	S-NPP	77.06940	30.33812	13:18:00	D	1.70
9	AMBALA	NARAYANGARH	AQUA	77.12200	30.41400	13:25:00	D	6.60
10	AMBALA	NARAYANGARH	S-NPP	77.15992	30.45849	13:18:00	D	4.30
11	FATEHABAD	TOHANA	AQUA	75.86000	29.62900	13:25:00	D	11.90
12	JHAJJAR	JHAJJAR	S-NPP	76.60151	28.60311	13:18:00	D	12.00
13	JIND	NARWANA	S-NPP	76.09953	29.44827	13:18:00	D	1.90
14	JIND	NARWANA	S-NPP	75.98589	29.65335	13:18:00	D	1.20
15	JIND	NARWANA	S-NPP	75.98784	29.65360	13:18:00	D	3.10
16	JIND	NARWANA	S-NPP	75.95097	29.67246	13:18:00	D	1.70
17	JIND	SAFIDON	S-NPP	76.59139	29.33090	13:18:00	D	2.00
18	JIND	SAFIDON	S-NPP	76.54003	29.42173	13:18:00	D	2.80
19	KAITHAL	GUHLA	S-NPP	76.35703	30.04690	13:18:00	D	1.90
20	KAITHAL	GUHLA	S-NPP	76.27013	30.07706	13:18:00	D	4.30
21	KAITHAL	GUHLA	S-NPP	76.30177	30.09677	13:18:00	D	2.90
22	KAITHAL	KAITHAL	S-NPP	76.29983	29.55894	13:18:00	D	1.20
23	KAITHAL	KAITHAL	S-NPP	76.45033	29.63676	13:18:00	D	2.10
24	KAITHAL	KAITHAL	S-NPP	76.37047	29.76009	13:18:00	D	5.00
25	KAITHAL	KAITHAL	AQUA	76.41700	29.88900	13:25:00	D	5.80
26	KARNAL	ASSANDH	S-NPP	76.57935	29.46990	13:18:00	D	3.70
27	KARNAL	GHARAUNDA	S-NPP	77.04402	29.56605	13:18:00	D	2.10
28	KARNAL	INDRI	S-NPP	77.06824	29.94115	13:18:00	D	4.20
29	KARNAL	KARNAL	S-NPP	76.93488	29.71606	13:18:00	D	4.40
30	KARNAL	KARNAL	AQUA	77.00200	29.76700	13:25:00	D	8.60

31	KARNAL	KARNAL	S-NPP	77.00111	29.76921	13:18:00	D	6.80
32	KARNAL	KARNAL	S-NPP	77.00037	29.77258	13:18:00	D	6.80
33	KARNAL	NILOKHERI	S-NPP	76.91020	29.78904	13:18:00	D	4.30
34	KARNAL	NILOKHERI	S-NPP	76.78648	29.86277	13:18:00	D	2.80
35	KURUKSHETRA	PEHOWA	S-NPP	76.63382	29.92138	13:18:00	D	4.60
36	KURUKSHETRA	PEHOWA	S-NPP	76.69369	29.94915	13:18:00	D	3.30
37	KURUKSHETRA	SHAHABAD	S-NPP	76.88482	30.13598	13:18:00	D	2.90
38	KURUKSHETRA	SHAHABAD	S-NPP	76.83431	30.14848	13:18:00	D	1.70
39	KURUKSHETRA	SHAHABAD	AQUA	76.88300	30.18000	13:25:00	D	7.80
40	KURUKSHETRA	SHAHABAD	S-NPP	76.73750	30.19185	13:18:00	D	2.60
41	KURUKSHETRA	THANESAR	AQUA	76.73800	29.89000	13:25:00	D	7.40
42	KURUKSHETRA	THANESAR	S-NPP	76.76759	29.91237	13:18:00	D	3.90
43	KURUKSHETRA	THANESAR	S-NPP	76.78331	29.99936	13:18:00	D	5.10
44	KURUKSHETRA	THANESAR	S-NPP	76.69932	30.04469	13:18:00	D	1.70
45	KURUKSHETRA	THANESAR	S-NPP	76.73660	30.05450	13:18:00	D	4.60
46	KURUKSHETRA	THANESAR	AQUA	77.01400	30.06500	13:25:00	D	8.20
47	KURUKSHETRA	THANESAR	S-NPP	77.01194	30.06570	13:18:00	D	4.00
48	KURUKSHETRA	THANESAR	S-NPP	76.76310	30.07302	13:18:00	D	3.00
49	SONIPAT	SONIPAT	S-NPP	77.18271	28.96135	13:18:00	D	2.10
50	YAMUNANAGAR	CHHACHHRAULII	S-NPP	77.34154	30.26043	13:18:00	D	3.10
51	YAMUNANAGAR	JAGADHRI	S-NPP	77.32838	30.14239	13:18:00	D	4.10
52	YAMUNANAGAR	JAGADHRI	S-NPP	77.17811	30.23015	13:18:00	D	1.80
53	YAMUNANAGAR	JAGADHRI	S-NPP	77.17738	30.23350	13:18:00	D	4.10

**Details of residue burning events in Uttar Pradesh on 07-Oct-2020**

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m <sup>2</sup> )
1	ALIGARH	GABHANA	S-NPP	77.82565	28.11455	02:00:00	N	0.70
2	ALIGARH	KHAIR	S-NPP	77.77650	27.91898	02:00:00	N	0.80
3	ALIGARH	KHAIR	S-NPP	77.53165	27.97099	13:18:00	D	2.80
4	ALIGARH	KHAIR	AQUA	77.60800	28.01400	13:25:00	D	7.60
5	ALIGARH	KOL	S-NPP	78.15800	27.82065	02:00:00	N	0.60
6	ALIGARH	KOL	S-NPP	78.21851	27.90556	02:00:00	N	0.70
7	AMROHA	HASANPUR	S-NPP	78.25681	28.59275	13:18:00	D	2.20
8	BARABANKI	FATEHPUR	S-NPP	81.24895	27.18639	13:18:00	D	2.30
9	BAREILLY	AONLA	S-NPP	79.23589	28.32142	13:18:00	D	1.30
10	FATEHPUR	FATEHPUR	S-NPP	80.93336	25.91516	13:18:00	D	3.20
11	FATEHPUR	KHAGA	S-NPP	81.24714	25.83854	13:18:00	D	2.30
12	FIROZABAD	JASRANA	NOAA-18	78.61766	27.30752	21:04:00	N	6.00
13	JALAUN	KALPI	S-NPP	79.65787	25.96865	13:18:00	D	2.70
14	JHANSI	JHANSI	S-NPP	78.75047	25.52517	13:18:00	D	2.30
15	KAUSHAMBI	MANJHANPUR	S-NPP	81.32762	25.43851	13:18:00	D	2.20
16	KHERI	GOLA	AQUA	80.46200	28.19700	13:25:00	D	16.70
17	KHERI	GOLA	AQUA	80.47200	28.19800	13:25:00	D	7.90
18	KHERI	GOLA	S-NPP	80.46471	28.20153	13:18:00	D	3.00
19	KHERI	MOHMADI	S-NPP	80.32461	27.82745	13:18:00	D	3.10
20	LUCKNOW	BAKSHIKA TALAB	S-NPP	80.92223	27.08520	13:18:00	D	1.30
21	MATHURA	MAT	S-NPP	77.76360	27.70750	02:00:00	N	0.50
22	MEERUT	MEERUT	S-NPP	77.73909	28.99043	13:18:00	D	5.40
23	RAMPUR	MILAK	S-NPP	79.13934	28.57428	13:18:00	D	2.60
24	RAMPUR	MILAK	S-NPP	79.14587	28.58208	13:18:00	D	1.50
25	RAMPUR	MILAK	S-NPP	79.12420	28.73444	13:18:00	D	3.00
26	SAMBHAL	SAMBHAL	S-NPP	78.65976	28.65270	13:18:00	D	2.50
27	SHAHJAHANPUR	PUWANYA	AQUA	80.10800	28.12800	13:25:00	D	18.20
28	SHAMLI	KAIRANA	S-NPP	77.15431	29.55301	13:18:00	D	3.20
29	SHAMLI	KAIRANA	AQUA	77.18700	29.61100	13:25:00	D	7.00
30	SHAMLI	KAIRANA	S-NPP	77.18108	29.62716	13:18:00	D	2.20
31	SHAMLI	SHAMLI	S-NPP	77.45038	29.61931	13:18:00	D	3.30



32	SHARANPUR	NAKUR	AQUA	77.17200	29.71000	13:25:00	D	7.60
33	SHARANPUR	NAKUR	AQUA	77.34700	29.74800	13:25:00	D	7.30
34	SHARANPUR	NAKUR	AQUA	77.33400	29.78100	13:25:00	D	7.90
35	SHARANPUR	NAKUR	S-NPP	77.33599	29.78308	13:18:00	D	3.90
36	SHARANPUR	NAKUR	S-NPP	77.29484	29.94019	13:18:00	D	2.60

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

S. No.	Satellite Name	Sensor	Resolution (meter)	Day / Night Passes
1.	Suomi NPP	VIIRS	375 / 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

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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)

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