

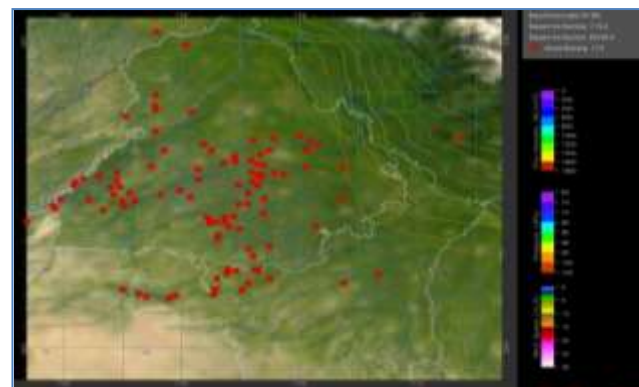
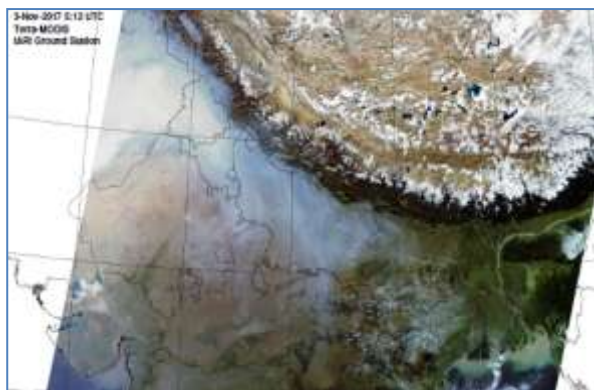


MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2020

**Bulletin
No. 4**

**Events Date:
04-Oct-2020**

**Issued on:
05-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**

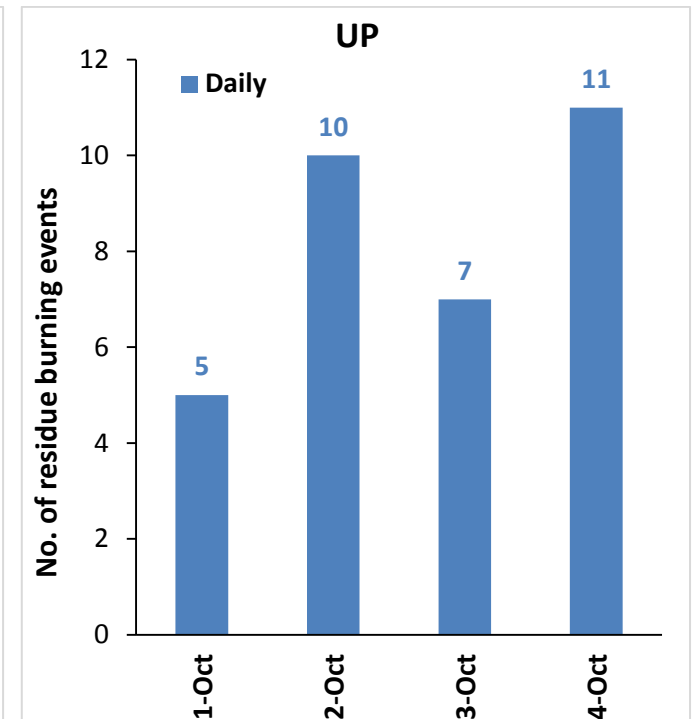
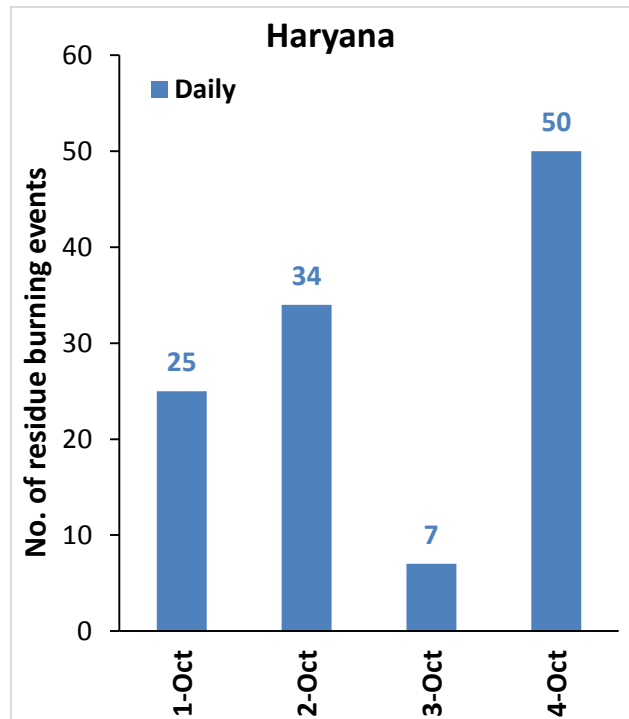
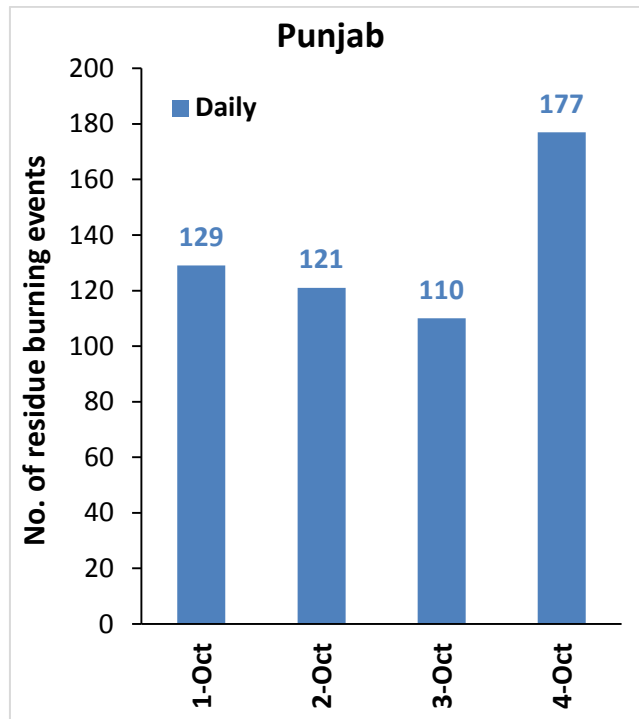
<http://creams.iari.res.in>



Highlights for 04-October-2020

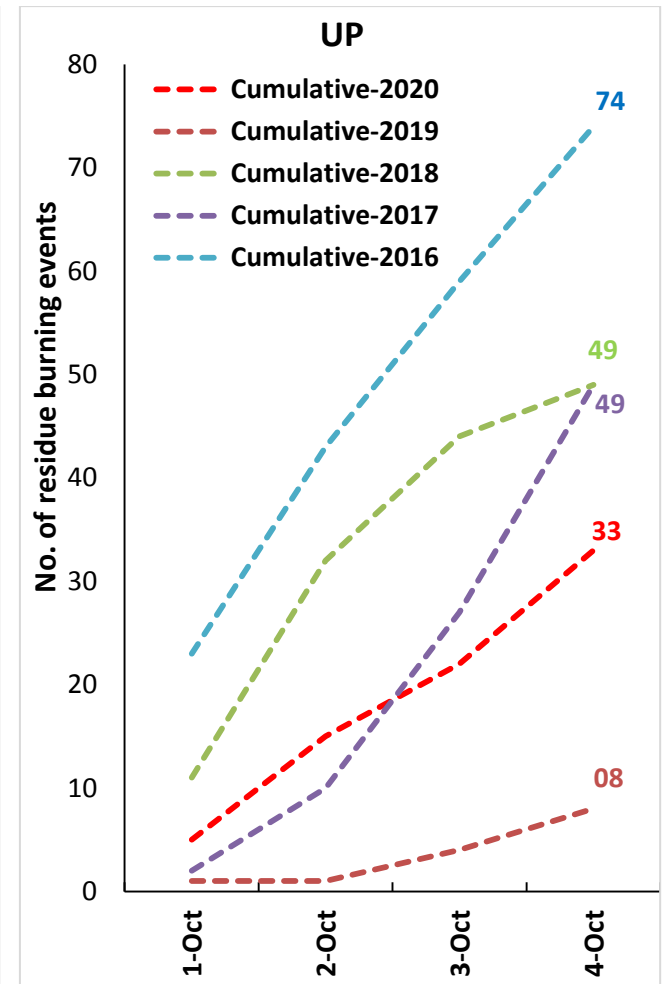
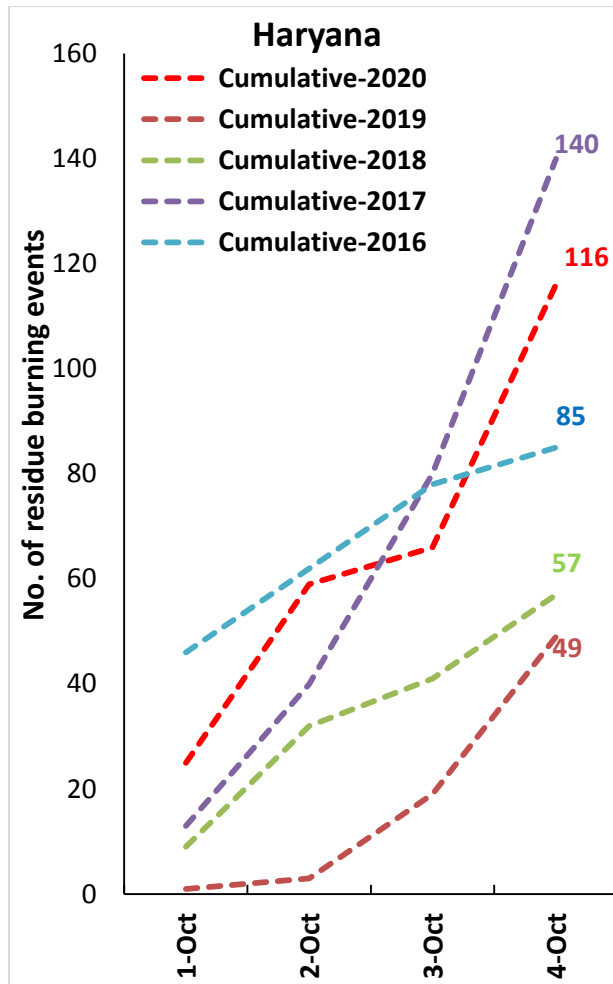
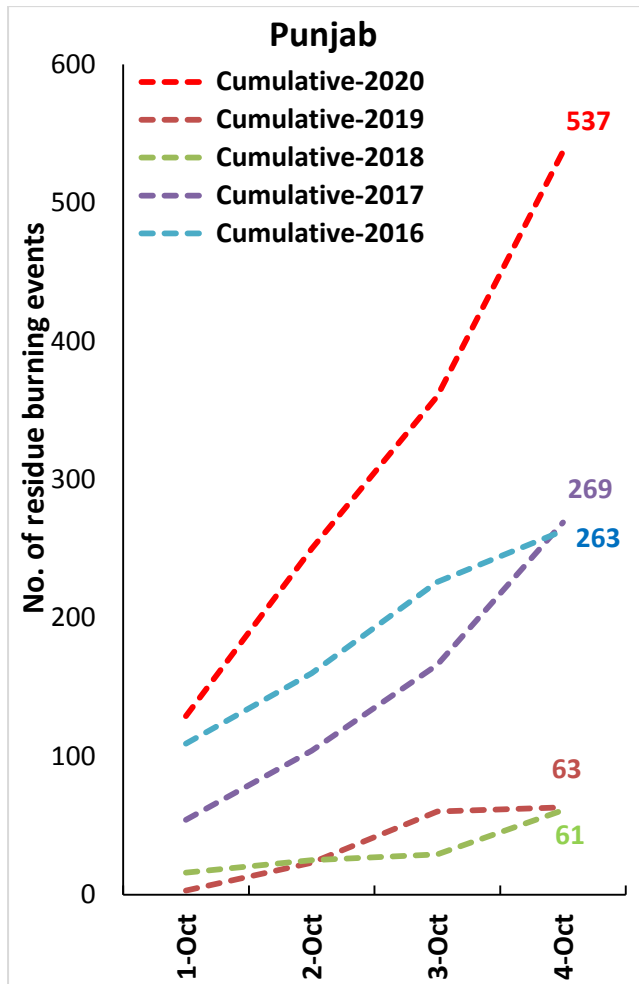
- Satellites detected **238** residue burning events in the three study States on **04-Oct-2020**.
- The state wise events detected on 04-Oct-2020 were **177** in Punjab, **50** in Haryana and **11** in UP.
- In Punjab, burning/fire events were concentrated in Amritsar and Tarn Taran districts.
- In Haryana and Uttar Pradesh, the burning events were scattered.
- The number of burning events was highest on 4-Oct in Punjab in the last four years.
- Total **686** burning events were detected in the three States between 01-Oct-2020 and 04-Oct-2020, which are distributed as **537**, **116** and **33** in Punjab, Haryana and UP, respectively.

Temporal distribution of residue burning events for the three study States

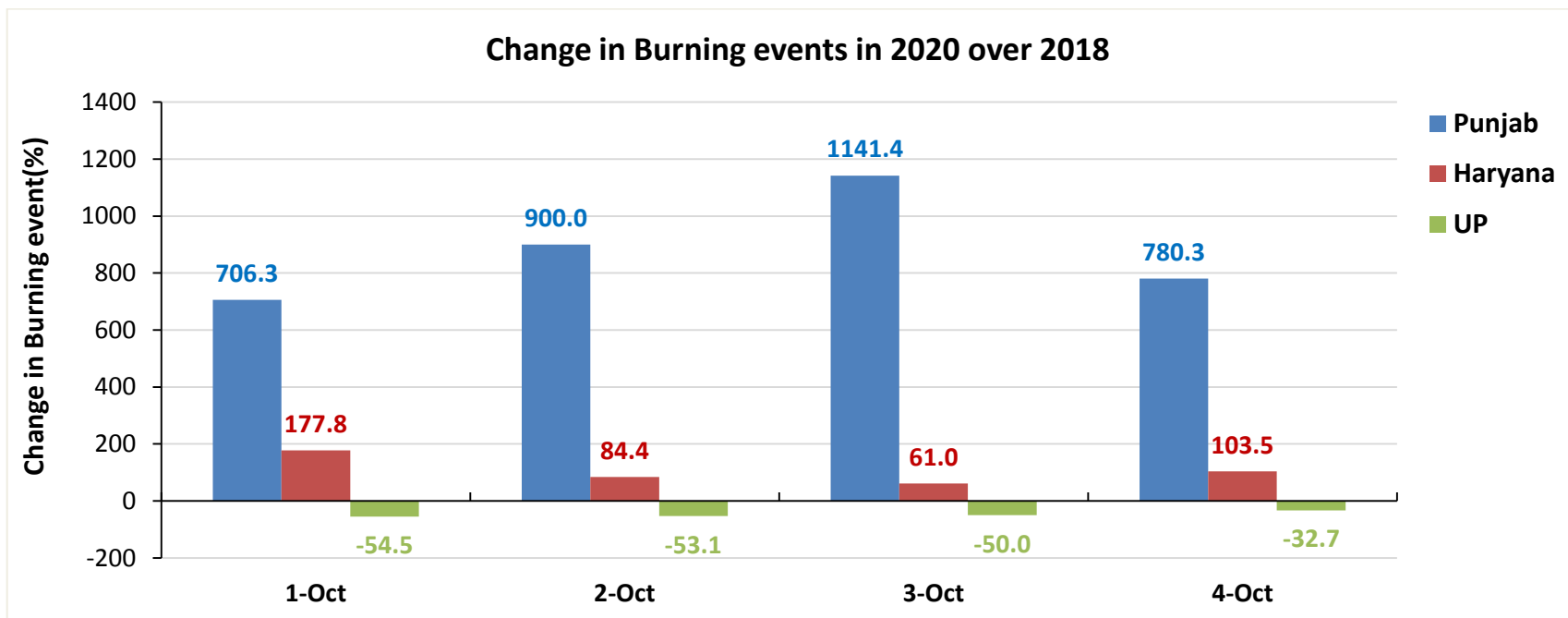
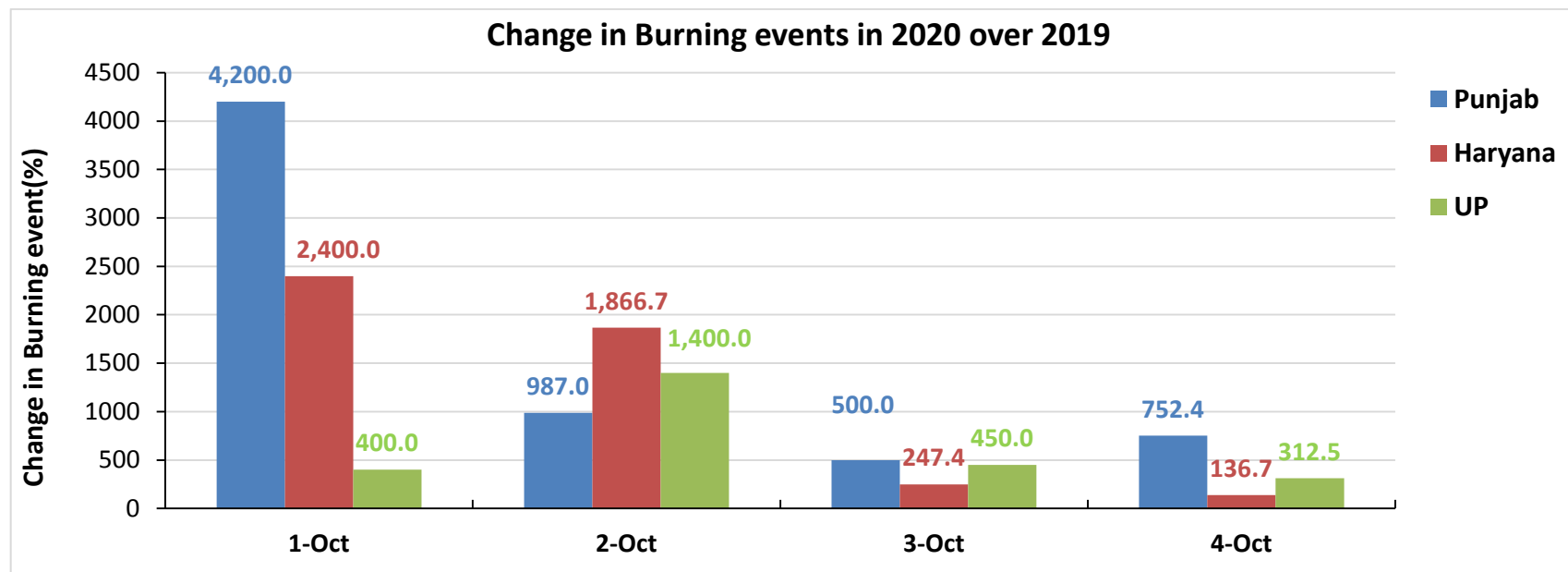


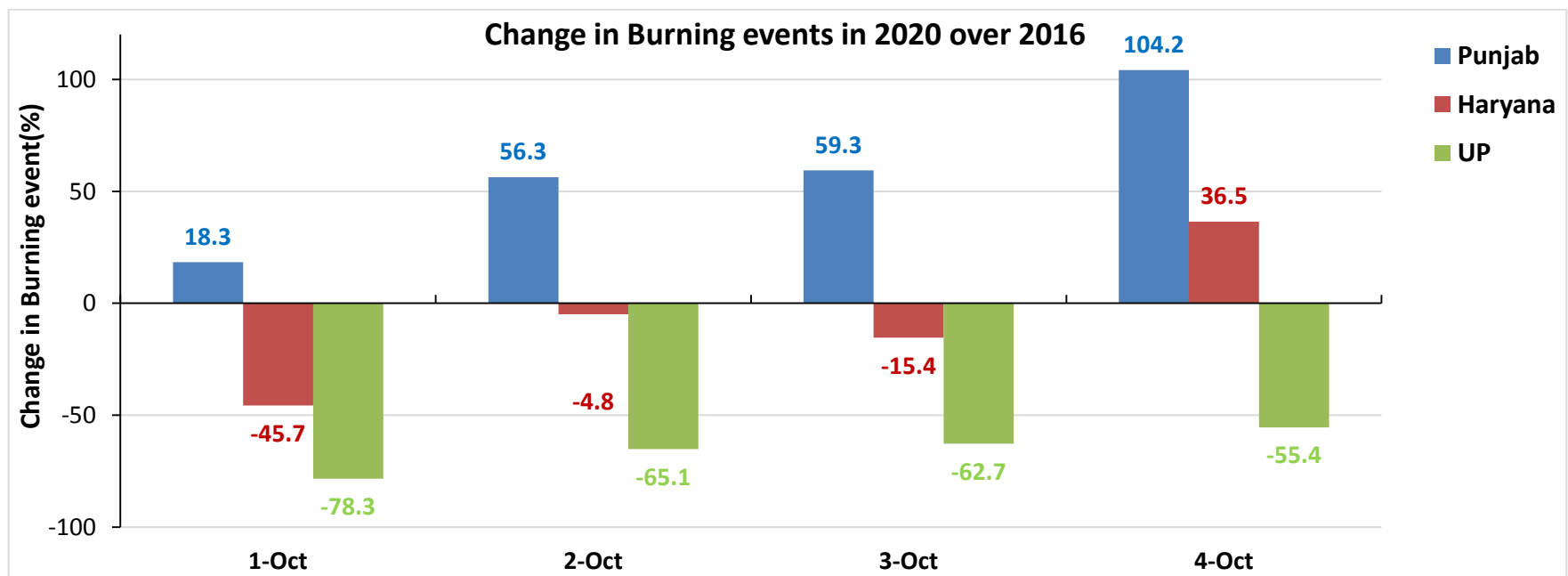
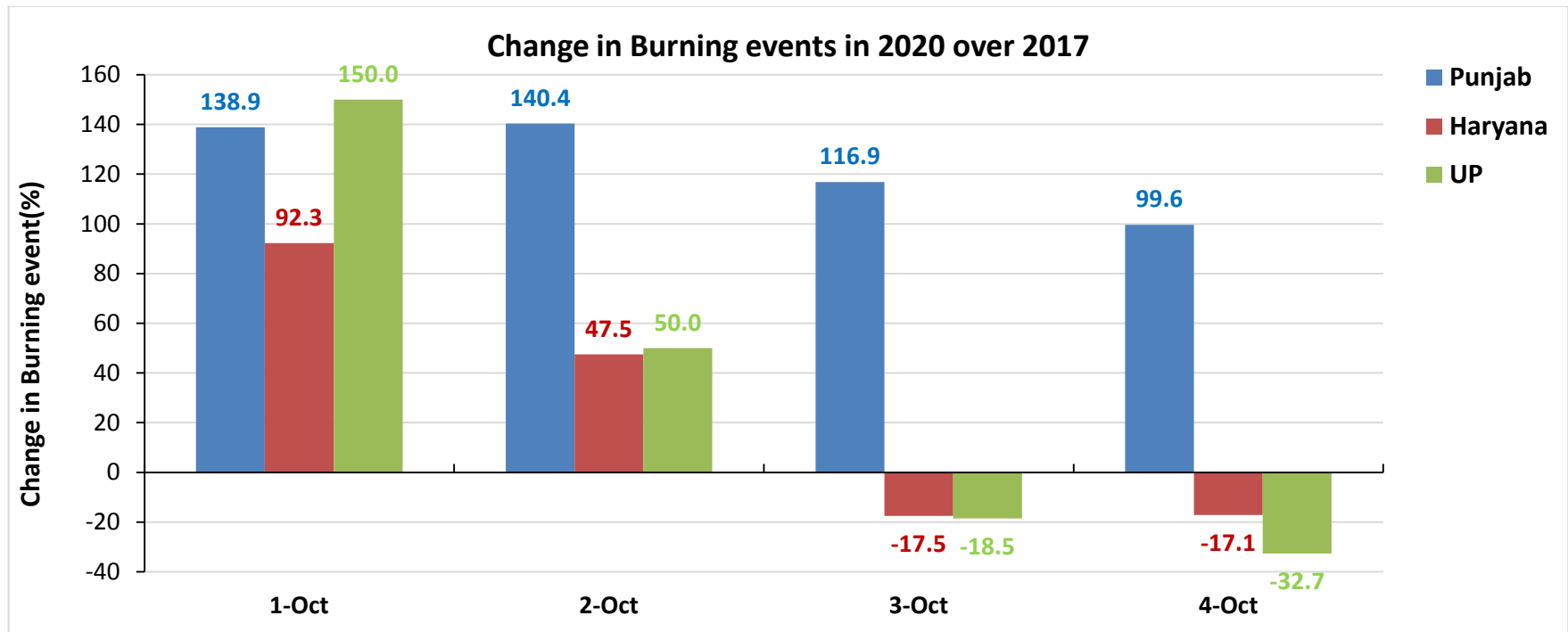
Comparison of residue burning events in current year (2020) with previous years (2019, 2018, 2017 & 2016) for the three study States

(01-Oct to 04-Oct)



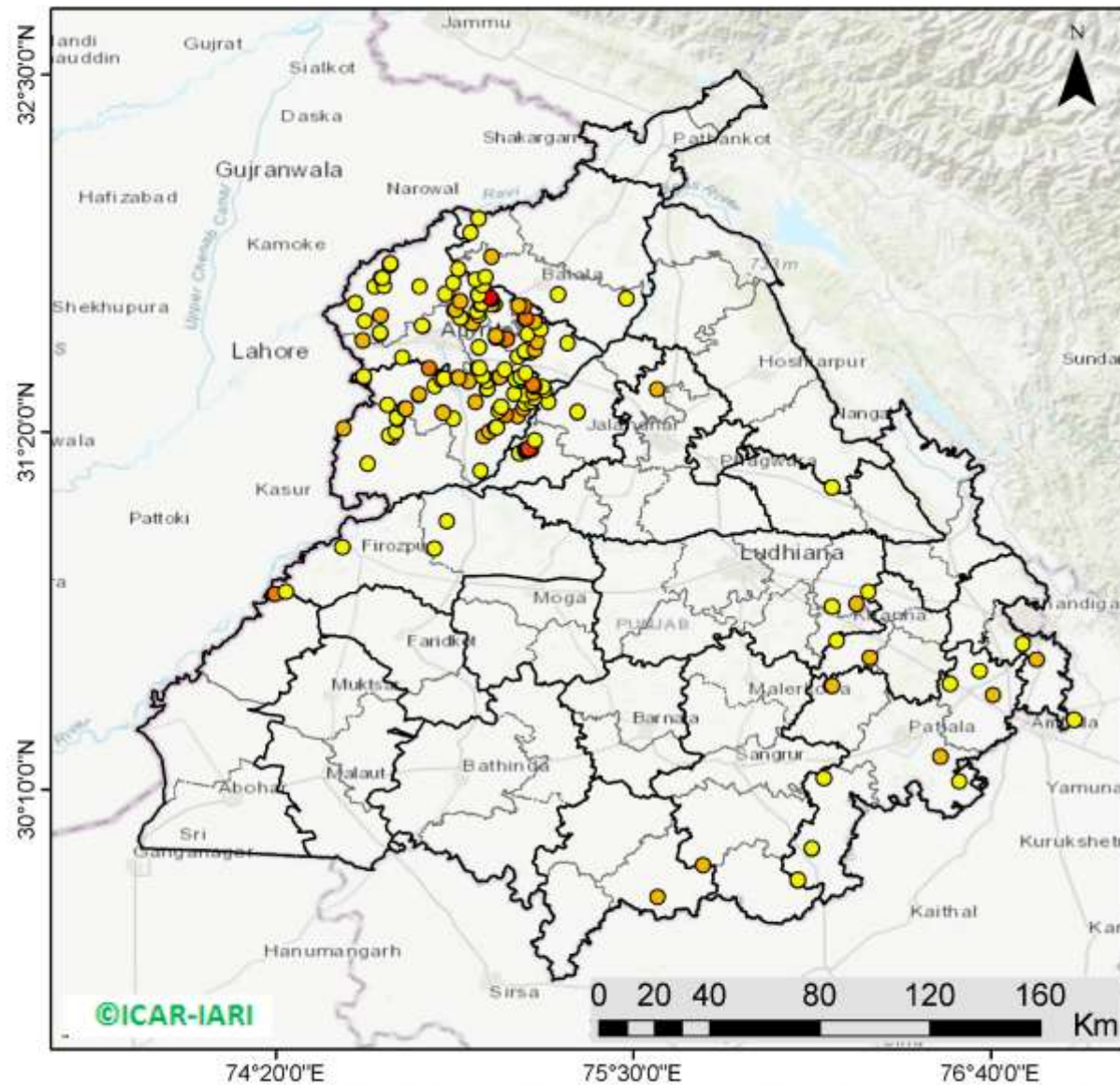
Percent Change in Burning events in 2020 over 2019, 2018, 2017 and 2016 (Daily Cumulative)





Punjab

RICE RESIDUE BURNING IN PUNJAB



177 burning events detected in Punjab on 04th October 2020

Fire Intensity (W/m²)

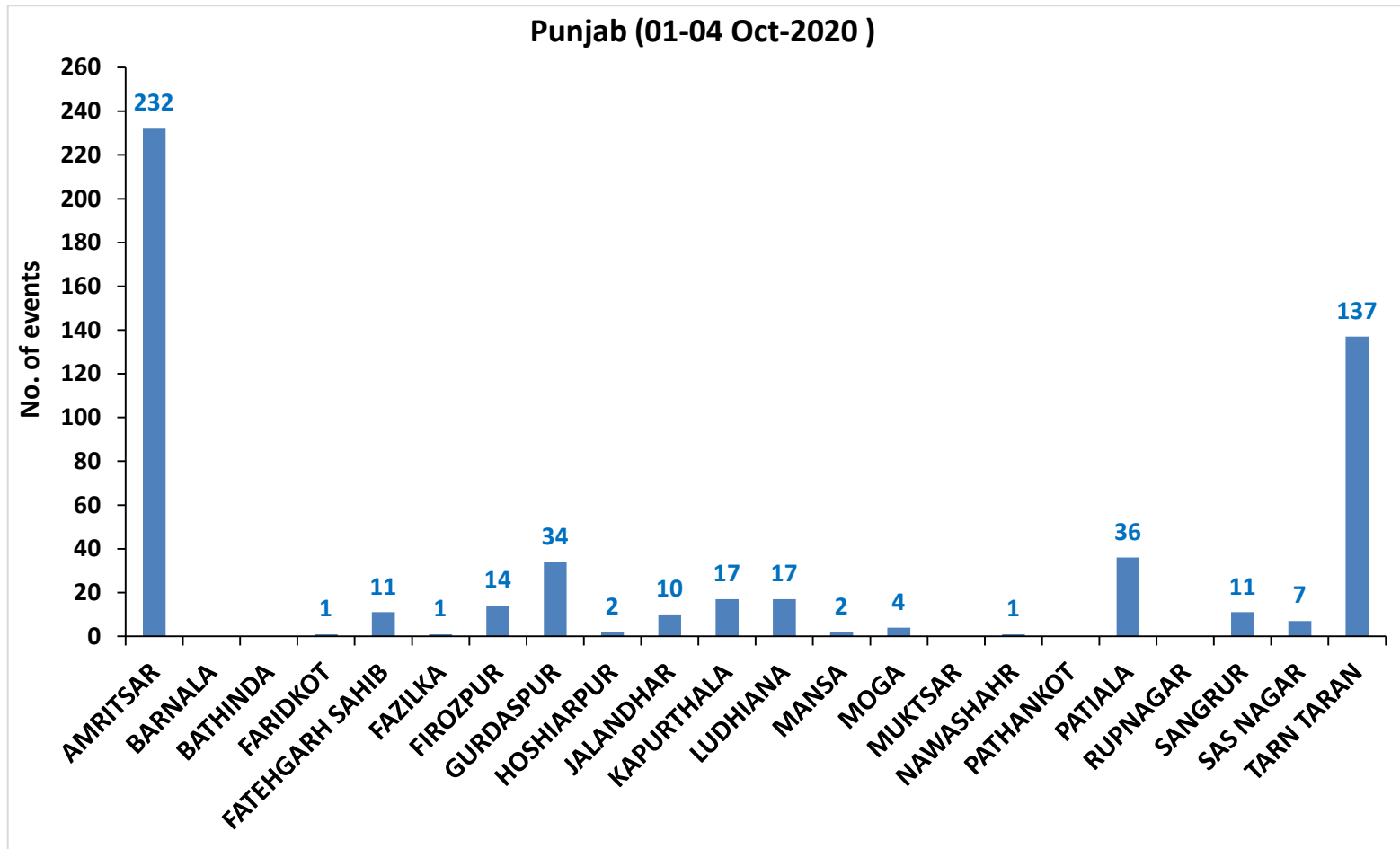
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20

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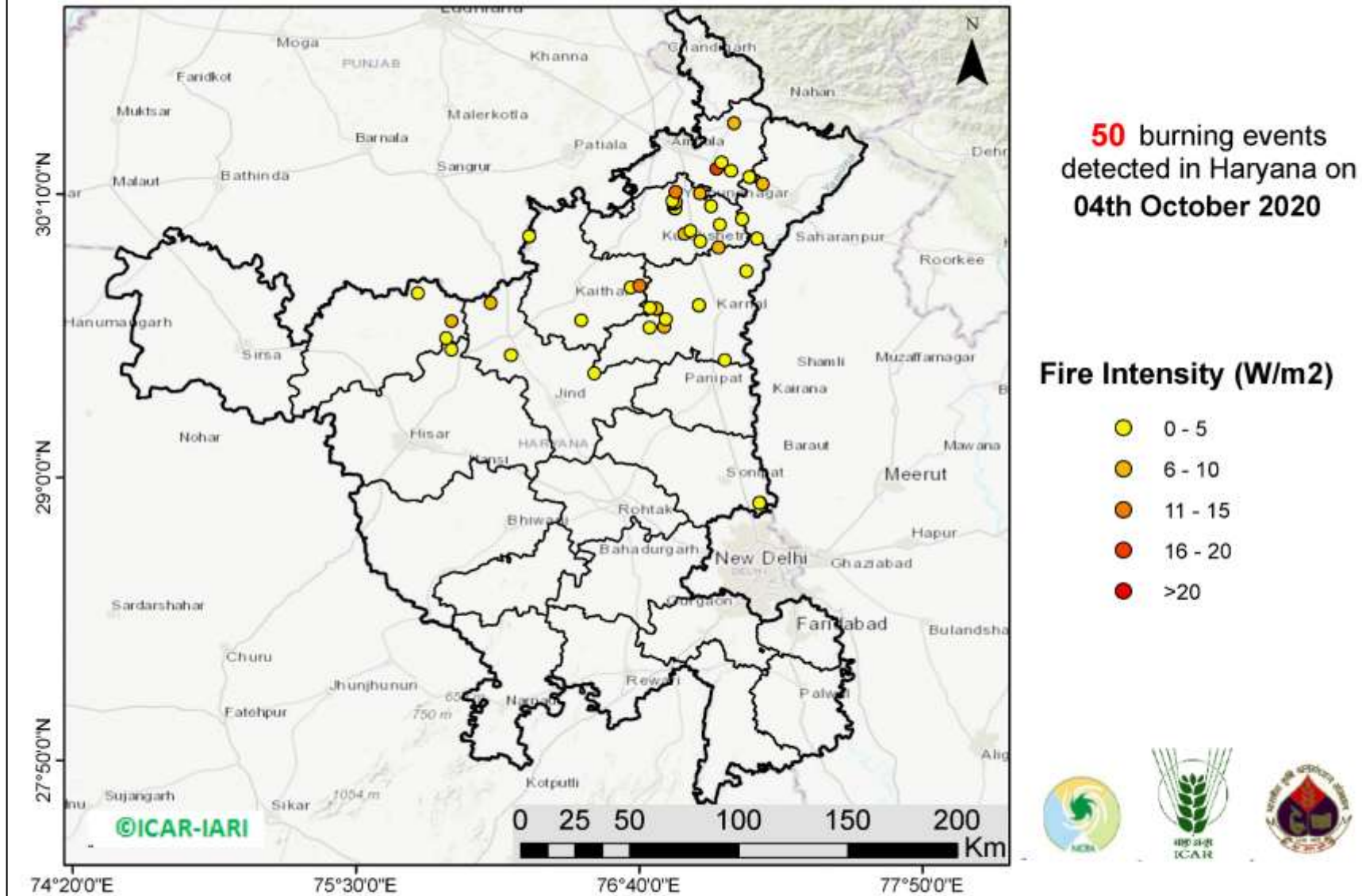
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residue burning events in Punjab (01-04 Oct-2020)



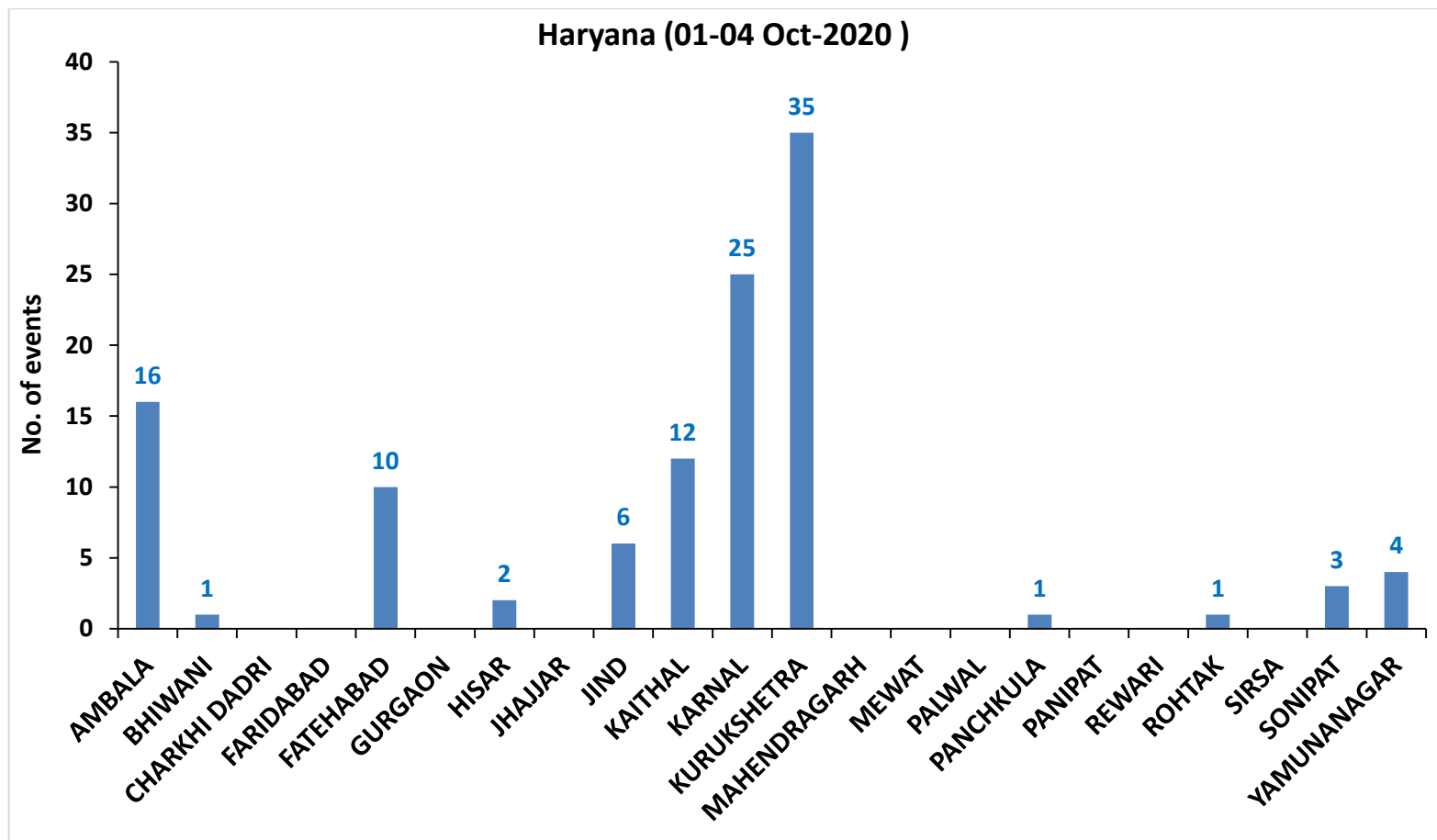
(b) Haryana

RICE RESIDUE BURNING IN HARYANA



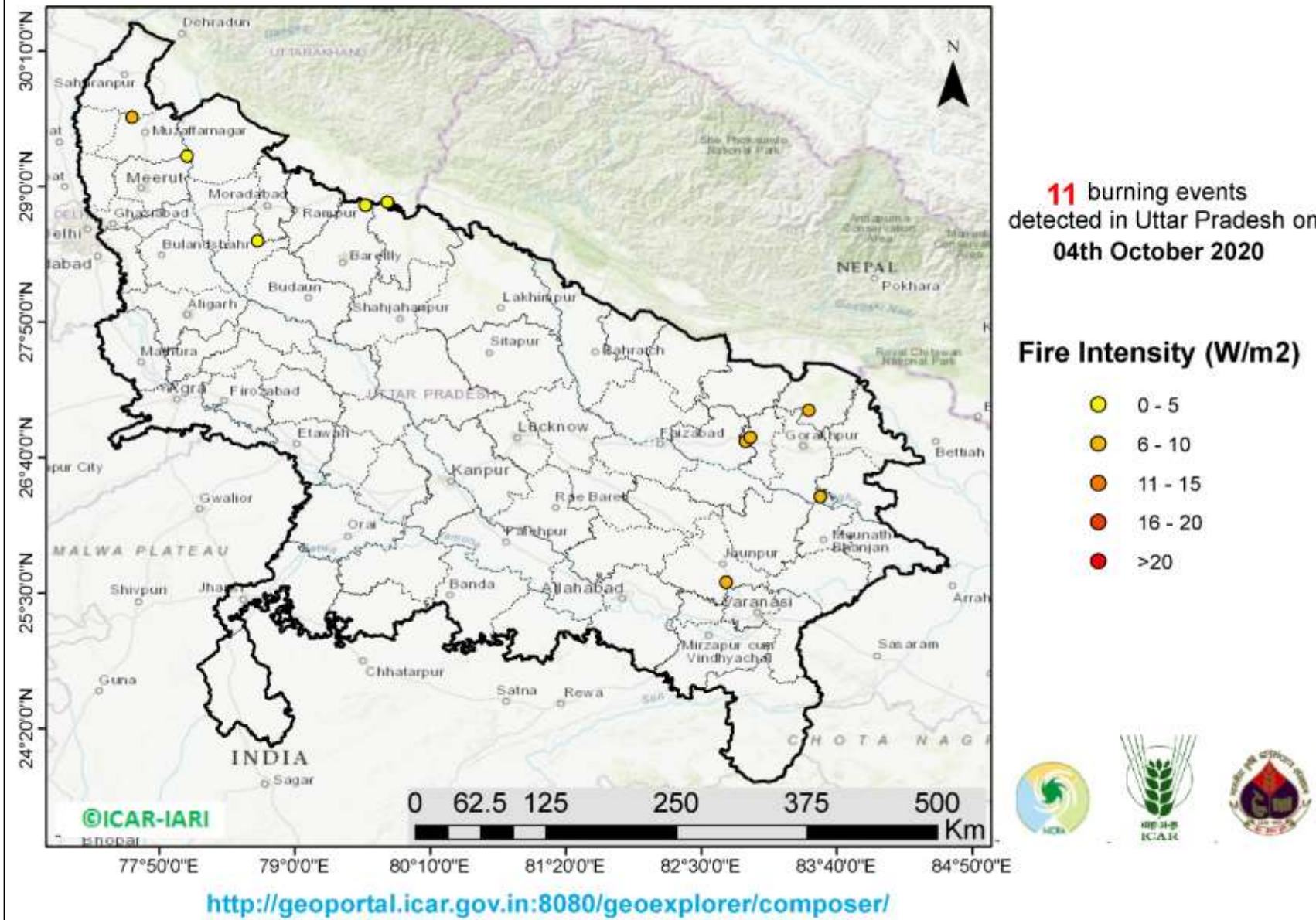
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residue burning events in Haryana (01-04 Oct-2020)

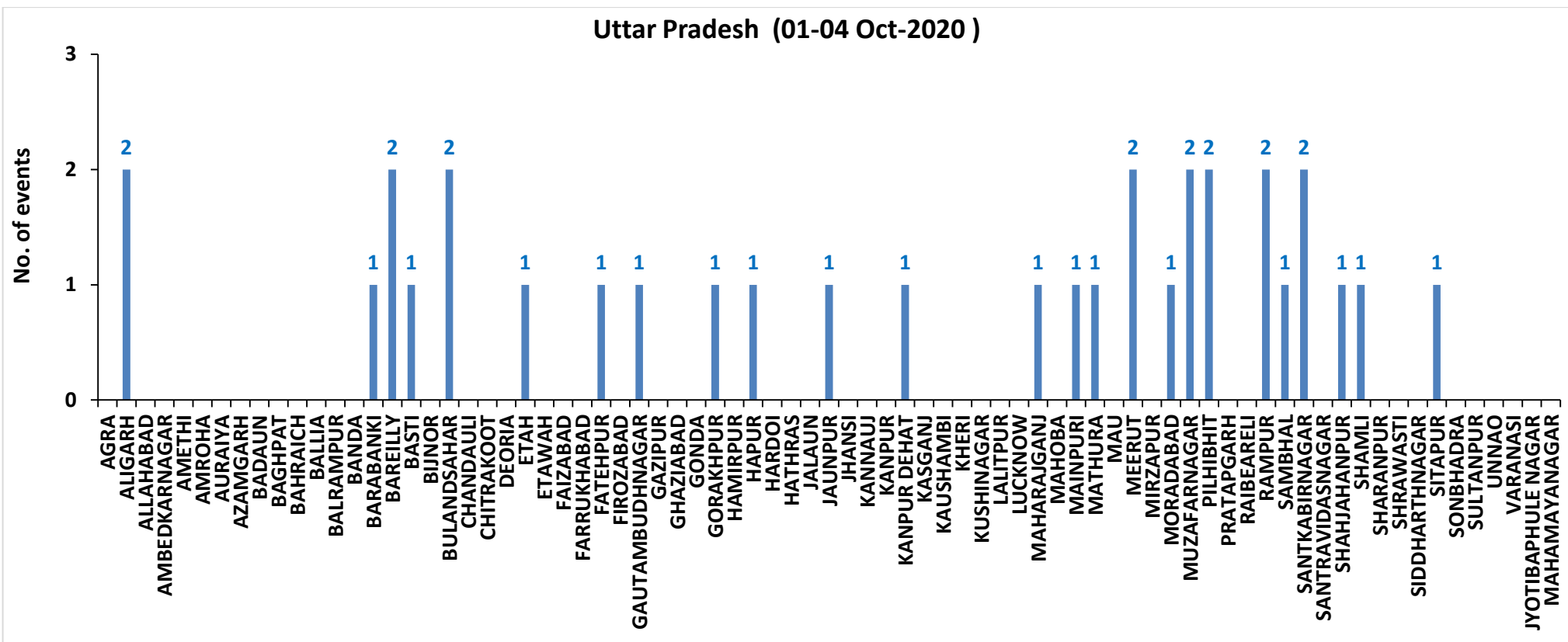


(c) Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



District-wise cumulative number of residue burning events in Uttar Pradesh (01-04 Oct-2020)



State-wise and date-wise cumulative number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020
(Period: 01-04 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
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
Total	537	63	61	269	263	116	49	57	140	85	33	8	49	49	74	686	120	167	458	422

District-wise and date wise cumulative number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020
(Period: 01-04 October)

(a) Punjab

Districts	01-04 Oct				
	2016	2017	2018	2019	2020
AMRITSAR	107	144	34	32	232
BARNALA	1	0	0	0	0
BATHINDA	4	4	9	0	0
FARIDKOT	5	5	0	0	1
FATEHGARH SAHIB	6	0	2	0	11
FAZILKA	0	0	0	1	1
FIROZPUR	15	7	3	0	14
GURDASPUR	3	5	2	0	34
HOSHIARPUR	1	0	3	0	2
JALANDHAR	12	3	0	0	10
KAPURTHALA	16	0	0	0	17
LUDHIANA	9	7	1	1	17
MANSA	4	3	0	0	2
MOGA	0	1	0	2	4
MUKTSAR	0	2	2	1	0
NAWASHAHR	2	1	1	1	1
PATHANKOT	0	0	0	0	0
PATIALA	8	8	1	4	36
RUPNAGAR	0	0	0	0	0
SANGRUR	7	8	0	0	11
SAS NAGAR	0	4	1	0	7
TARN TARAN	63	67	2	21	137
Total	263	269	61	63	537

(b) Haryana

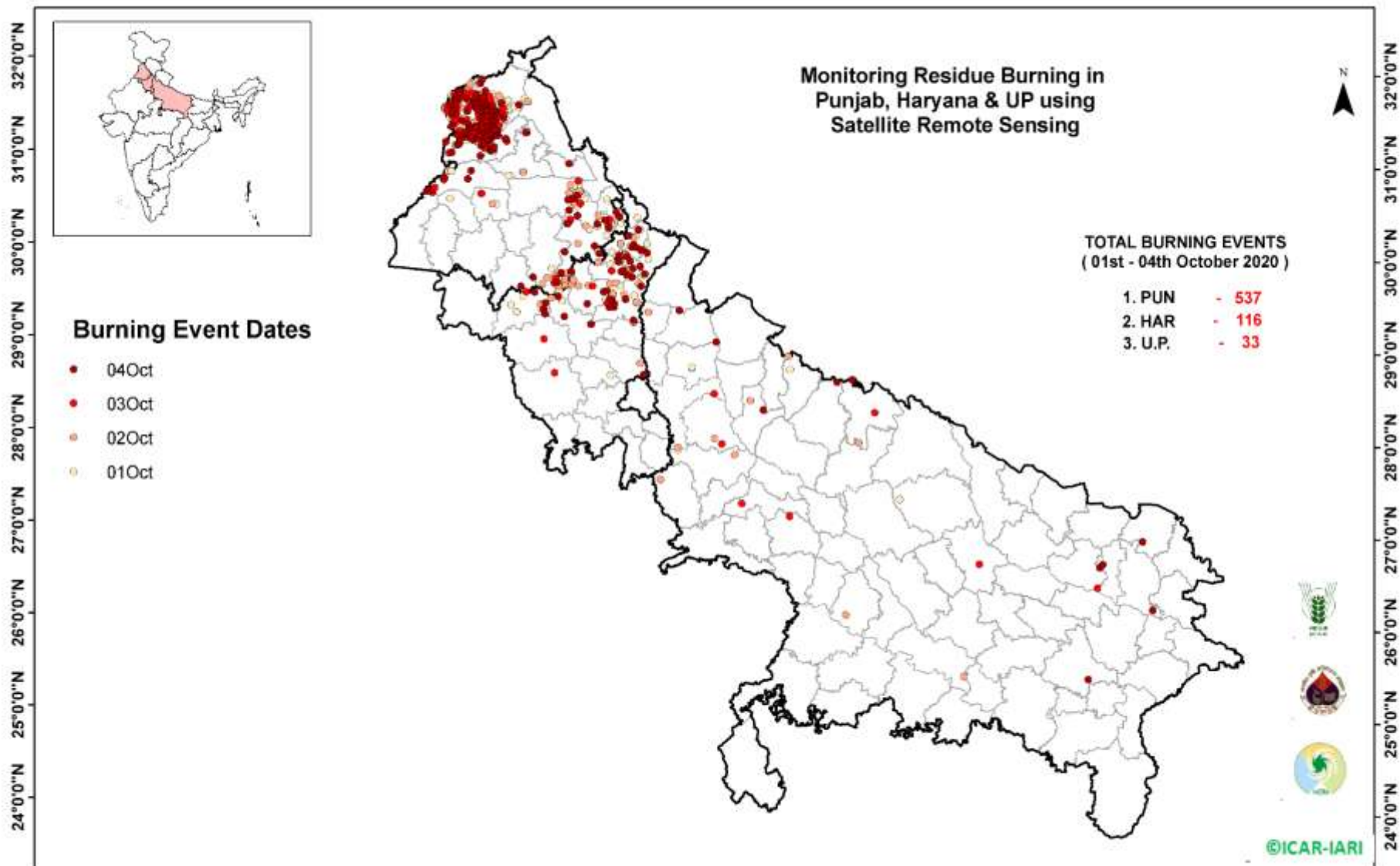
Districts	01-04 Oct				
	2016	2017	2018	2019	2020
AMBALA	6	8	10	1	16
BHIWANI	0	0	0	0	1
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	1	0	1	0	0
FATEHABAD	1	10	0	3	10
GURGAON	0	0	0	0	0
HISAR	2	2	2	0	2
JHAJJAR	0	0	1	0	0
JIND	2	13	0	3	6
KAITHAL	16	12	1	5	12
KARNAL	39	46	17	23	25
KURUKSHETRA	15	38	13	13	35
MAHENDRAGARH	0	0	0	0	0
MEWAT	0	0	0	0	0
PALWAL	0	0	0	0	0
PANCHKULA	0	0	1	0	1
PANIPAT	1	7	5	1	0
REWARI	0	0	0	0	0
ROHTAK	0	0	0	0	1
SIRSA	0	0	3	0	0
SONIPAT	0	0	1	0	3
YAMUNANAGAR	2	4	2	0	4
Total	85	140	57	49	116

(C)

Uttar Pradesh

Districts	01-04 Oct																
	2016	2017	2018	2019	2020	GAUTAMBUDHNAGAR	1	0	1	0	1	MUZAFARNAGAR	3	3	0	0	2
AGRA	0	0	0	0	0	GAZIPUR	0	0	0	0	0	PILHIBHIT	6	5	0	3	2
ALIGARH	0	2	1	0	2	GHAZIABAD	0	0	1	0	0	PRATAPGARH	0	0	0	0	0
ALLAHABAD	0	0	0	0	0	GONDA	0	0	0	0	0	RAIBEARELI	0	0	0	0	0
AMBEDKARNAGAR	0	0	0	0	0	GORAKHPUR	0	0	2	0	1	RAMPUR	19	7	4	0	2
AMETHI	0	0	0	0	0	HAMIRPUR	0	0	1	0	0	SAMBHAL	0	0	0	0	1
AMROHA	0	0	0	0	0	HAPUR	0	0	0	0	1	SANTKABIRNAGAR	0	0	0	0	2
AURAIYA	13	5	5	0	0	HARDOI	0	0	0	0	0	SANTRAVIDASNAGAR	0	0	0	0	0
AZAMGARH	0	0	0	0	0	HATHRAS	0	0	0	0	0	SHAHJAHANPUR	17	15	15	0	1
BADAUN	0	0	0	0	0	JALAUN	0	0	0	0	0	SHAMLI	0	0	0	0	1
BAGHPAT	0	0	0	0	0	JAUNPUR	0	0	0	0	1	SHARANPUR	2	0	0	0	0
BAHRAICH	0	0	0	0	0	JHANSI	0	0	0	0	0	SHRAWASTI	0	0	0	0	0
BALLIA	0	0	0	0	0	KANNAUJ	0	0	0	0	0	SIDDHARTHANAGAR	0	0	0	0	0
BALRAMPUR	0	0	0	0	0	KANPUR	0	0	0	0	0	SITAPUR	1	0	0	0	1
BANDA	0	0	1	0	0	KANPUR DEHAT	0	0	0	0	1	SONBHADRA	2	1	2	0	0
BARABANKI	2	0	2	0	1	KASGANJ	0	0	0	0	0	SULTANPUR	0	0	0	0	0
BAREILLY	4	0	0	3	2	KAUSHAMBI	0	0	3	0	0	UNNAO	0	0	0	0	0
BASTI	0	0	0	0	1	KHERI	3	8	3	1	0	VARANASI	0	0	0	0	0
BIJNOR	0	0	1	0	0	KUSHINAGAR	0	0	0	0	0	JYOTIBAPHULE NAGAR	0	0	0	0	0
BULANDSAHAR	0	1	0	0	2	LALITPUR	0	0	0	0	0	MAHAMAYANAGAR	0	0	0	0	0
CHANDAULI	0	0	0	0	0	LUCKNOW	0	0	0	0	0	Total	74	49	49	8	33
CHITRAKOOT	0	0	0	0	0	MAHARAJGANJ	0	0	0	0	1						
DEORIA	0	0	0	0	0	MAHOPA	0	0	0	0	0						
ETAH	0	1	0	0	1	MAINPURI	0	0	1	0	1						
ETAWAH	0	0	0	0	0	MATHURA	1	0	5	0	1						
FAIZABAD	0	0	0	0	0	MAU	0	0	0	0	0						
FARRUKHABAD	0	0	0	0	0	MEERUT	0	0	0	0	2						
FATEHPUR	0	0	0	0	1	MIRZAPUR	0	1	0	0	0						
FIROZABAD	0	0	0	0	0	MORADABAD	0	0	1	1	1						

Map of Cumulative Burning Events (01-04 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 04-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	74.61790	31.63154	14:12:00	D	6.80
2	AMRITSAR	AJNALA	S-NPP	74.67394	31.65445	14:12:00	D	5.50
3	AMRITSAR	AJNALA	S-NPP	74.67448	31.65729	14:12:00	D	5.00
4	AMRITSAR	AJNALA	S-NPP	74.62306	31.69407	14:12:00	D	2.30
5	AMRITSAR	AJNALA	TERRA	74.67600	31.71300	11:20:00	D	7.10
6	AMRITSAR	AJNALA	S-NPP	74.59441	31.75121	14:12:00	D	2.40
7	AMRITSAR	AJNALA	S-NPP	74.59420	31.75456	14:12:00	D	2.50
8	AMRITSAR	AJNALA	S-NPP	74.88694	31.78356	14:12:00	D	2.10
9	AMRITSAR	AJNALA	S-NPP	74.80408	31.80678	14:12:00	D	3.40
10	AMRITSAR	AJNALA	S-NPP	74.65629	31.80737	14:12:00	D	3.00
11	AMRITSAR	AJNALA	S-NPP	74.68781	31.80958	14:12:00	D	1.50
12	AMRITSAR	AJNALA	S-NPP	74.91278	31.81966	14:12:00	D	2.20
13	AMRITSAR	AJNALA	S-NPP	74.67747	31.83591	14:12:00	D	3.00
14	AMRITSAR	AJNALA	S-NPP	74.68143	31.83619	14:12:00	D	3.00
15	AMRITSAR	AJNALA	S-NPP	74.92941	31.86471	14:12:00	D	2.20
16	AMRITSAR	AJNALA	S-NPP	74.70475	31.87762	14:12:00	D	5.50
17	AMRITSAR	AJNALA	S-NPP	74.70525	31.88126	14:12:00	D	4.10
18	AMRITSAR	AJNALA	S-NPP	74.70921	31.88155	14:12:00	D	4.10
19	AMRITSAR	AJNALA	S-NPP	74.70824	31.88328	14:12:00	D	3.00
20	AMRITSAR	AMRITSAR I	S-NPP	74.99418	31.54196	14:12:00	D	4.00
21	AMRITSAR	AMRITSAR I	S-NPP	74.99826	31.54225	14:12:00	D	4.00
22	AMRITSAR	AMRITSAR I	S-NPP	74.99701	31.60936	14:12:00	D	2.90
23	AMRITSAR	AMRITSAR I	S-NPP	75.05219	31.64067	14:12:00	D	4.10
24	AMRITSAR	AMRITSAR I	TERRA	75.05200	31.64700	11:20:00	D	6.80
25	AMRITSAR	AMRITSAR I	S-NPP	74.93562	31.70542	12:36:00	D	2.30
26	AMRITSAR	AMRITSAR I	S-NPP	74.99559	31.71433	14:12:00	D	3.40
27	AMRITSAR	AMRITSAR I	S-NPP	74.99052	31.72499	14:12:00	D	3.20
28	AMRITSAR	AMRITSAR I	S-NPP	74.91604	31.73086	14:12:00	D	4.90
29	AMRITSAR	AMRITSAR I	S-NPP	74.92010	31.73114	14:12:00	D	8.80
30	AMRITSAR	AMRITSAR I	S-NPP	75.12641	31.74526	14:12:00	D	7.30

31	AMRITSAR	AMRITSAR I	TERRA	75.04700	31.74900	11:20:00	D	6.30
32	AMRITSAR	AMRITSAR I	S-NPP	75.03806	31.75029	14:12:00	D	2.60
33	AMRITSAR	AMRITSAR I	S-NPP	75.00150	31.75030	12:36:00	D	5.80
34	AMRITSAR	AMRITSAR I	S-NPP	75.00513	31.75245	12:36:00	D	4.80
35	AMRITSAR	AMRITSAR I	S-NPP	74.93528	31.76045	12:36:00	D	5.30
36	AMRITSAR	AMRITSAR I	AQUA	75.03800	31.76700	12:55:00	D	45.80
37	AMRITSAR	AMRITSAR I	AQUA	75.03200	31.77200	12:55:00	D	48.70
38	AMRITSAR	AMRITSAR I	S-NPP	74.99399	31.78028	14:12:00	D	3.80
39	AMRITSAR	AMRITSAR I	S-NPP	74.99444	31.78113	14:12:00	D	3.80
40	AMRITSAR	AMRITSAR I	S-NPP	75.00855	31.80960	14:12:00	D	1.70
41	AMRITSAR	AMRITSAR I	S-NPP	74.98604	31.83013	14:12:00	D	2.60
42	AMRITSAR	AMRITSAR II	S-NPP	74.62069	31.51516	14:12:00	D	3.40
43	AMRITSAR	AMRITSAR II	TERRA	74.83400	31.54200	11:20:00	D	14.00
44	AMRITSAR	AMRITSAR II	S-NPP	74.74710	31.57596	12:36:00	D	3.10
45	AMRITSAR	AMRITSAR II	S-NPP	74.81195	31.67833	14:12:00	D	2.40
46	AMRITSAR	AMRITSAR II	S-NPP	74.81110	31.67999	14:12:00	D	3.20
47	AMRITSAR	AMRITSAR II	TERRA	74.97400	31.68700	11:20:00	D	6.40
48	AMRITSAR	AMRITSAR II	S-NPP	74.93790	31.70538	12:36:00	D	3.20
49	AMRITSAR	BABA BAKALA	S-NPP	75.12617	31.50136	14:12:00	D	4.60
50	AMRITSAR	BABA BAKALA	S-NPP	75.11739	31.50631	14:12:00	D	2.30
51	AMRITSAR	BABA BAKALA	S-NPP	75.13351	31.51292	14:12:00	D	4.60
52	AMRITSAR	BABA BAKALA	S-NPP	75.14921	31.52505	14:12:00	D	2.30
53	AMRITSAR	BABA BAKALA	S-NPP	75.08138	31.53702	14:12:00	D	2.30
54	AMRITSAR	BABA BAKALA	S-NPP	75.12364	31.57869	14:12:00	D	3.90
55	AMRITSAR	BABA BAKALA	S-NPP	75.12430	31.57915	14:12:00	D	3.10
56	AMRITSAR	BABA BAKALA	S-NPP	75.14769	31.59148	14:12:00	D	3.70
57	AMRITSAR	BABA BAKALA	S-NPP	75.14835	31.59179	14:12:00	D	3.60
58	AMRITSAR	BABA BAKALA	S-NPP	75.16441	31.59267	14:12:00	D	4.60
59	AMRITSAR	BABA BAKALA	S-NPP	75.16512	31.59287	14:12:00	D	7.70
60	AMRITSAR	BABA BAKALA	S-NPP	75.16862	31.59298	14:12:00	D	4.60
61	AMRITSAR	BABA BAKALA	S-NPP	75.14722	31.59700	14:12:00	D	3.70
62	AMRITSAR	BABA BAKALA	S-NPP	75.17928	31.60046	12:36:00	D	6.30
63	AMRITSAR	BABA BAKALA	S-NPP	75.28579	31.62300	14:12:00	D	1.50

64	AMRITSAR	BABA BAKALA	S-NPP	75.18743	31.62767	14:12:00	D	6.70
65	AMRITSAR	BABA BAKALA	S-NPP	75.08399	31.63606	12:36:00	D	7.60
66	AMRITSAR	BABA BAKALA	S-NPP	75.08687	31.63649	12:36:00	D	12.80
67	AMRITSAR	BABA BAKALA	S-NPP	75.15572	31.65331	14:12:00	D	3.40
68	AMRITSAR	BABA BAKALA	S-NPP	75.19700	31.66770	12:36:00	D	4.00
69	AMRITSAR	BABA BAKALA	TERRA	75.17700	31.69200	11:20:00	D	9.30
70	AMRITSAR	BABA BAKALA	S-NPP	75.14699	31.70223	14:12:00	D	15.00
71	AMRITSAR	BABA BAKALA	S-NPP	75.15118	31.70250	14:12:00	D	15.00
72	AMRITSAR	BABA BAKALA	S-NPP	75.14732	31.70269	14:12:00	D	13.80
73	AMRITSAR	BABA BAKALA	S-NPP	75.15151	31.70299	14:12:00	D	13.80
74	AMRITSAR	BABA BAKALA	TERRA	75.14400	31.74400	11:20:00	D	13.80
75	FATEHGARH SAHIB	ALMOH	S-NPP	76.27270	30.59493	14:12:00	D	5.20
76	FATEHGARH SAHIB	ALMOH	S-NPP	76.16417	30.65256	14:12:00	D	4.20
77	FIROZPUR	FIROZPUR	S-NPP	74.32771	30.80285	14:12:00	D	11.90
78	FIROZPUR	FIROZPUR	S-NPP	74.33134	30.80312	14:12:00	D	11.90
79	FIROZPUR	FIROZPUR	S-NPP	74.36721	30.81103	14:12:00	D	3.70
80	FIROZPUR	FIROZPUR	S-NPP	74.55034	30.95676	14:12:00	D	2.40
81	FIROZPUR	ZIRA	S-NPP	74.85234	30.95168	14:12:00	D	1.90
82	FIROZPUR	ZIRA	S-NPP	74.89188	31.04140	14:12:00	D	2.30
83	GURDASPUR	BATALA	S-NPP	75.47822	31.76856	14:12:00	D	3.50
84	GURDASPUR	BATALA	S-NPP	75.25504	31.78184	14:12:00	D	3.10
85	GURDASPUR	BATALA	S-NPP	75.01857	31.83784	14:12:00	D	4.00
86	GURDASPUR	BATALA	S-NPP	75.03738	31.90510	14:12:00	D	6.30
87	GURDASPUR	BATALA	S-NPP	75.03783	31.90545	14:12:00	D	5.50
88	GURDASPUR	DERA BABA NANAK	S-NPP	74.97029	31.98381	14:12:00	D	1.80
89	GURDASPUR	DERA BABA NANAK	S-NPP	74.99545	32.02956	14:12:00	D	2.50
90	JALANDHAR	JALANDHAR II	S-NPP	75.57906	31.47123	14:12:00	D	8.10
91	KAPURTHALA	KAPURTHALA	S-NPP	75.31946	31.39795	14:12:00	D	3.70
92	KAPURTHALA	KAPURTHALA	S-NPP	75.31882	31.39888	14:12:00	D	3.60
93	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.12837	31.26362	14:12:00	D	3.80
94	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.12890	31.26374	14:12:00	D	2.90
95	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.14906	31.27072	14:12:00	D	3.50
96	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.15319	31.27101	14:12:00	D	3.50

97	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.14805	31.27596	14:12:00	D	8.80
98	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.14859	31.27621	14:12:00	D	6.20
99	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.15219	31.27624	14:12:00	D	8.80
100	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.15273	31.27652	14:12:00	D	6.20
101	KAPURTHALA	SULTANPUR LODHI	TERRA	75.16900	31.27700	11:20:00	D	17.60
102	KAPURTHALA	SULTANPUR LODHI	TERRA	75.15800	31.27900	11:20:00	D	18.60
103	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.17880	31.30569	14:12:00	D	3.00
104	LUDHIANA	SAMRALA	S-NPP	76.14834	30.76370	12:36:00	D	3.90
105	LUDHIANA	SAMRALA	S-NPP	76.22883	30.77210	12:36:00	D	5.80
106	LUDHIANA	SAMRALA	S-NPP	76.26834	30.81079	14:12:00	D	2.30
107	MANSA	BUDHLADA	TERRA	75.58000	29.81500	11:20:00	D	6.00
108	MANSA	BUDHLADA	S-NPP	75.72867	29.91770	12:36:00	D	7.00
109	NAWASHAHR	NAWASHAHR	S-NPP	76.14850	31.15218	14:12:00	D	1.60
110	PATIALA	NABHA	S-NPP	76.14608	30.50533	14:12:00	D	5.60
111	PATIALA	NABHA	S-NPP	76.14646	30.50547	14:12:00	D	12.00
112	PATIALA	NABHA	S-NPP	76.15070	30.50565	14:12:00	D	5.60
113	PATIALA	PATIALA	S-NPP	76.56485	30.19144	12:36:00	D	4.10
114	PATIALA	PATIALA	S-NPP	76.50188	30.27280	12:36:00	D	7.20
115	PATIALA	RAJPURA	S-NPP	76.67453	30.47436	14:12:00	D	7.10
116	PATIALA	RAJPURA	S-NPP	76.53394	30.51095	14:12:00	D	4.10
117	PATIALA	RAJPURA	S-NPP	76.62986	30.55229	14:12:00	D	2.00
118	PATIALA	SAMANA	S-NPP	76.08289	29.97148	14:12:00	D	5.40
119	PATIALA	SAMANA	S-NPP	76.08366	29.97288	14:12:00	D	4.30
120	PATIALA	SAMANA	S-NPP	76.12270	30.20160	14:12:00	D	2.30
121	SANGRUR	MOONAK	S-NPP	76.03705	29.86919	14:12:00	D	4.20
122	SANGRUR	MOONAK	S-NPP	76.03690	29.87053	14:12:00	D	4.10
123	SAS NAGAR	DERABASSI	S-NPP	76.93829	30.39342	12:36:00	D	2.50
124	SAS NAGAR	DERABASSI	TERRA	76.81500	30.59000	11:20:00	D	9.60
125	SAS NAGAR	MOHALI	S-NPP	76.77134	30.64145	14:12:00	D	2.80
126	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00249	31.20524	14:12:00	D	2.70
127	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01188	31.31839	12:36:00	D	7.90
128	TARN TARAN	KHADOOR SAHIB	S-NPP	75.03123	31.33412	14:12:00	D	5.30
129	TARN TARAN	KHADOOR SAHIB	S-NPP	75.05068	31.34650	14:12:00	D	2.40

130	TARN TARAN	KHADOOR SAHIB	S-NPP	75.05477	31.34679	14:12:00	D	2.40
131	TARN TARAN	KHADOOR SAHIB	S-NPP	74.91372	31.37654	14:12:00	D	3.50
132	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12207	31.38504	14:12:00	D	5.20
133	TARN TARAN	KHADOOR SAHIB	S-NPP	75.08447	31.38806	14:12:00	D	13.40
134	TARN TARAN	KHADOOR SAHIB	S-NPP	74.87972	31.39602	14:12:00	D	5.30
135	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06249	31.40312	14:12:00	D	4.90
136	TARN TARAN	KHADOOR SAHIB	S-NPP	74.75488	31.40891	14:12:00	D	6.10
137	TARN TARAN	KHADOOR SAHIB	S-NPP	74.75880	31.40919	14:12:00	D	6.10
138	TARN TARAN	KHADOOR SAHIB	S-NPP	75.14275	31.41055	12:36:00	D	6.60
139	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06975	31.41463	14:12:00	D	2.70
140	TARN TARAN	KHADOOR SAHIB	S-NPP	75.14773	31.42549	14:12:00	D	2.70
141	TARN TARAN	KHADOOR SAHIB	S-NPP	75.22313	31.43061	14:12:00	D	2.10
142	TARN TARAN	KHADOOR SAHIB	S-NPP	74.98611	31.43082	14:12:00	D	8.70
143	TARN TARAN	KHADOOR SAHIB	S-NPP	75.16821	31.43142	12:36:00	D	3.70
144	TARN TARAN	KHADOOR SAHIB	S-NPP	75.17548	31.44402	14:12:00	D	2.60
145	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79990	31.45213	14:12:00	D	5.20
146	TARN TARAN	KHADOOR SAHIB	S-NPP	75.14536	31.45302	14:12:00	D	2.80
147	TARN TARAN	KHADOOR SAHIB	S-NPP	74.80231	31.45574	14:12:00	D	6.00
148	TARN TARAN	KHADOOR SAHIB	S-NPP	75.11173	31.45619	14:12:00	D	1.80
149	TARN TARAN	KHADOOR SAHIB	S-NPP	75.17404	31.46056	14:12:00	D	8.70
150	TARN TARAN	KHADOOR SAHIB	S-NPP	75.21124	31.46872	14:12:00	D	1.80
151	TARN TARAN	KHADOOR SAHIB	S-NPP	75.02349	31.47194	14:12:00	D	6.00
152	TARN TARAN	KHADOOR SAHIB	S-NPP	75.02499	31.47260	14:12:00	D	4.50
153	TARN TARAN	KHADOOR SAHIB	S-NPP	75.20375	31.47870	14:12:00	D	3.90
154	TARN TARAN	KHADOOR SAHIB	S-NPP	75.20190	31.47918	14:12:00	D	3.70
155	TARN TARAN	KHADOOR SAHIB	S-NPP	75.20611	31.47948	14:12:00	D	4.80
156	TARN TARAN	KHADOOR SAHIB	S-NPP	75.17616	31.48158	12:36:00	D	4.80
157	TARN TARAN	KHADOOR SAHIB	S-NPP	74.85316	31.48293	14:12:00	D	2.50
158	TARN TARAN	KHADOOR SAHIB	S-NPP	75.17390	31.48779	12:36:00	D	10.60
159	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96281	31.49829	12:36:00	D	9.80
160	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96376	31.49912	12:36:00	D	8.50
161	TARN TARAN	KHADOOR SAHIB	S-NPP	75.02254	31.49994	14:12:00	D	1.80
162	TARN TARAN	KHADOOR SAHIB	S-NPP	74.87521	31.50626	14:12:00	D	2.40

163	TARN TARAN	KHADOOR SAHIB	S-NPP	74.88324	31.50682	14:12:00	D	3.90
164	TARN TARAN	KHADOOR SAHIB	S-NPP	74.62118	31.50981	14:12:00	D	3.40
165	TARN TARAN	KHADOOR SAHIB	S-NPP	74.92754	31.50990	14:12:00	D	4.60
166	TARN TARAN	KHADOOR SAHIB	S-NPP	74.93159	31.51018	14:12:00	D	6.30
167	TARN TARAN	KHADOOR SAHIB	S-NPP	75.05973	31.51231	12:36:00	D	9.10
168	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06516	31.51263	12:36:00	D	7.00
169	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00881	31.51550	14:12:00	D	2.10
170	TARN TARAN	PATTI	S-NPP	74.63446	31.23028	14:12:00	D	1.90
171	TARN TARAN	PATTI	S-NPP	74.71220	31.31654	14:12:00	D	7.70
172	TARN TARAN	PATTI	S-NPP	74.70395	31.32132	14:12:00	D	2.60
173	TARN TARAN	PATTI	S-NPP	74.72632	31.33377	14:12:00	D	2.00
174	TARN TARAN	PATTI	TERRA	74.55500	31.34400	11:20:00	D	6.00
175	TARN TARAN	PATTI	S-NPP	74.73037	31.37472	14:12:00	D	2.40
176	TARN TARAN	PATTI	S-NPP	74.72987	31.38009	14:12:00	D	2.50
177	TARN TARAN	PATTI	S-NPP	74.69859	31.42104	14:12:00	D	4.20

Details of residue burning events in Haryana on 04-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	AMBALA	AMBALA	TERRA	76.98500	30.27000	11:20:00	D	15.10
2	AMBALA	AMBALA	S-NPP	77.00630	30.29754	14:12:00	D	2.70
3	AMBALA	BARARA	S-NPP	77.12159	30.23675	14:12:00	D	4.20
4	AMBALA	BARARA	S-NPP	77.12100	30.23690	14:12:00	D	2.80
5	AMBALA	BARARA	S-NPP	77.04538	30.26324	14:12:00	D	2.10
6	AMBALA	NARAYANGARH	S-NPP	77.05838	30.45961	14:12:00	D	7.80
7	FATEHABAD	TOHANA	S-NPP	75.87312	29.57335	14:12:00	D	3.50
8	FATEHABAD	TOHANA	TERRA	75.89400	29.64300	11:20:00	D	6.50
9	FATEHABAD	TOHANA	S-NPP	75.75593	29.75845	14:12:00	D	4.90
10	HISAR	HISAR	S-NPP	75.89394	29.52638	14:12:00	D	1.60
11	JIND	JIND	S-NPP	76.48186	29.42814	14:12:00	D	3.60
12	JIND	NARWANA	S-NPP	76.13946	29.50366	14:12:00	D	2.40
13	JIND	NARWANA	S-NPP	76.05505	29.71918	14:12:00	D	9.20
14	KAITHAL	GUHLA	S-NPP	76.21403	29.99225	14:12:00	D	2.80
15	KAITHAL	GUHLA	S-NPP	76.21500	29.99282	14:12:00	D	3.40
16	KAITHAL	KAITHAL	S-NPP	76.42876	29.64574	14:12:00	D	2.30
17	KAITHAL	KAITHAL	S-NPP	76.63226	29.78247	12:30:00	D	3.10
18	KAITHAL	KAITHAL	TERRA	76.66800	29.79000	11:20:00	D	11.40
19	KARNAL	ASSANDH	S-NPP	76.70976	29.61658	14:12:00	D	3.20
20	KARNAL	ASSANDH	S-NPP	76.76862	29.62022	14:12:00	D	6.50
21	KARNAL	GHARAUNDA	S-NPP	77.02021	29.48210	12:30:00	D	4.50
22	KARNAL	INDRI	S-NPP	77.10780	29.84976	14:12:00	D	3.60
23	KARNAL	INDRI	S-NPP	76.99298	29.94736	14:12:00	D	6.60
24	KARNAL	KARNAL	S-NPP	76.77620	29.65058	14:12:00	D	2.40
25	KARNAL	KARNAL	S-NPP	76.73911	29.69294	14:12:00	D	7.20
26	KARNAL	KARNAL	S-NPP	76.73822	29.69592	14:12:00	D	6.00
27	KARNAL	KARNAL	S-NPP	76.71033	29.69890	12:30:00	D	2.10
28	KARNAL	KARNAL	S-NPP	76.91206	29.70733	14:12:00	D	3.40
29	KARNAL	KARNAL	S-NPP	76.91277	29.70923	14:12:00	D	3.40
30	KURUKSHETRA	SHAHABAD	S-NPP	76.80874	30.12540	14:12:00	D	6.50

31	KURUKSHETRA	SHAHABAD	S-NPP	76.80915	30.12708	14:12:00	D	5.90
32	KURUKSHETRA	SHAHABAD	S-NPP	76.81837	30.13204	14:12:00	D	5.10
33	KURUKSHETRA	SHAHABAD	S-NPP	76.81878	30.13366	14:12:00	D	5.50
34	KURUKSHETRA	SHAHABAD	S-NPP	76.80383	30.13771	12:36:00	D	3.80
35	KURUKSHETRA	SHAHABAD	TERRA	76.91700	30.16900	11:20:00	D	6.20
36	KURUKSHETRA	SHAHABAD	TERRA	76.81700	30.17600	11:20:00	D	10.80
37	KURUKSHETRA	THANESAR	S-NPP	76.91931	29.97323	14:12:00	D	3.40
38	KURUKSHETRA	THANESAR	S-NPP	76.85321	30.00263	12:30:00	D	5.70
39	KURUKSHETRA	THANESAR	S-NPP	76.87762	30.01515	14:12:00	D	2.60
40	KURUKSHETRA	THANESAR	S-NPP	76.99881	30.04028	14:12:00	D	2.60
41	KURUKSHETRA	THANESAR	S-NPP	76.81506	30.10776	14:12:00	D	8.30
42	KURUKSHETRA	THANESAR	S-NPP	76.81052	30.10912	14:12:00	D	5.00
43	KURUKSHETRA	THANESAR	S-NPP	76.81557	30.10941	14:12:00	D	5.00
44	KURUKSHETRA	THANESAR	S-NPP	76.96234	30.11701	14:12:00	D	3.60
45	KURUKSHETRA	THANESAR	S-NPP	76.96304	30.11775	14:12:00	D	3.80
46	SONIPAT	SONIPAT	S-NPP	77.16411	28.89410	14:12:00	D	3.10
47	SONIPAT	SONIPAT	S-NPP	77.16250	28.89527	14:12:00	D	4.40
48	YAMUNANAGAR	JAGADHRI	S-NPP	77.15238	29.98391	12:30:00	D	3.30
49	YAMUNANAGAR	JAGADHRI	S-NPP	77.09084	30.06387	14:12:00	D	4.30
50	YAMUNANAGAR	JAGADHRI	S-NPP	77.17658	30.20937	14:12:00	D	10.00

Details of residue burning events in Uttar Pradesh on 04-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m²)
1	BAREILLY	BAHERI	S-NPP	79.61034	28.83661	12:30:00	D	2.70
2	BAREILLY	BAHERI	S-NPP	79.60869	28.83849	12:30:00	D	2.10
3	BASTI	BASTI	METOP-1	82.88176	26.80146	21:05:00	N	6.33
4	GORAKHPUR	GOLA	METOP-1	83.52882	26.32835	21:05:00	N	7.00
5	JAUNPUR	KIRAKAT	METOP-1	82.71353	25.59173	21:05:00	N	6.00
6	MAHARAJGANJ	MAHARAJGANJ	METOP-1	83.42529	27.07096	21:05:00	N	6.00
7	MORADABAD	BILARI	S-NPP	78.68024	28.53164	12:30:00	D	2.70
8	MUZAFARNAGAR	JANSATH	S-NPP	78.07335	29.26111	12:30:00	D	3.30
9	MUZAFARNAGAR	MUZAFFARNAGAR	TERRA	77.60000	29.59700	11:20:00	D	8.60
10	PILHIBHIT	PILHIBHIT	S-NPP	79.79850	28.86376	12:30:00	D	4.10
11	SANTKABIRNAGAR	KHALILABAD	METOP-1	82.92220	26.83590	21:05:00	N	6.50

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)
