

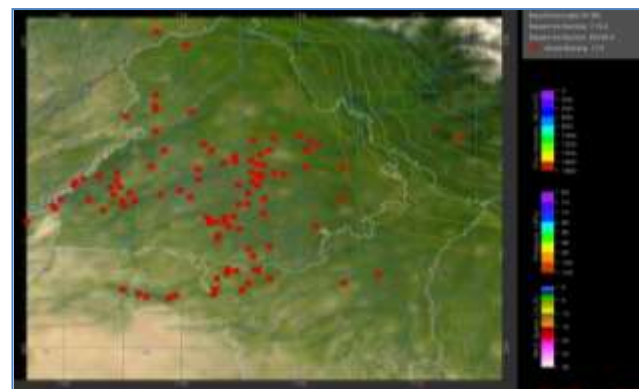


# MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2020

**Bulletin  
No. 5**

**Events Date:  
05-Oct-2020**

**Issued on:  
06-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**

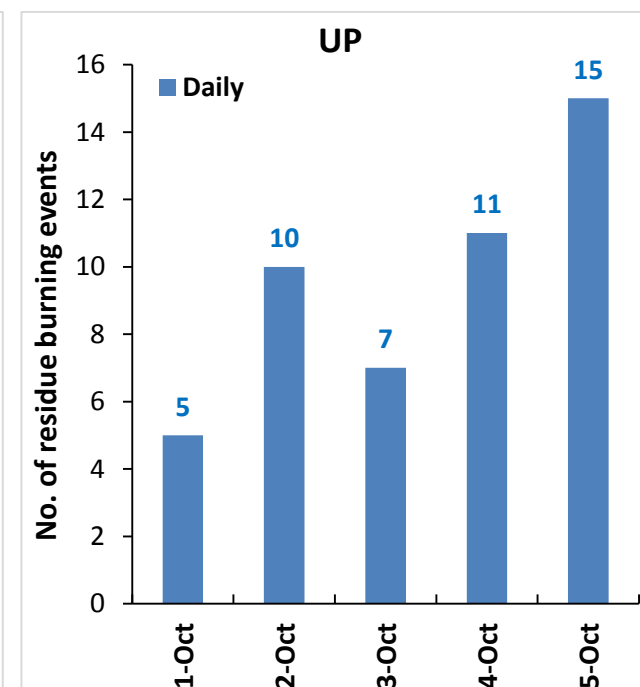
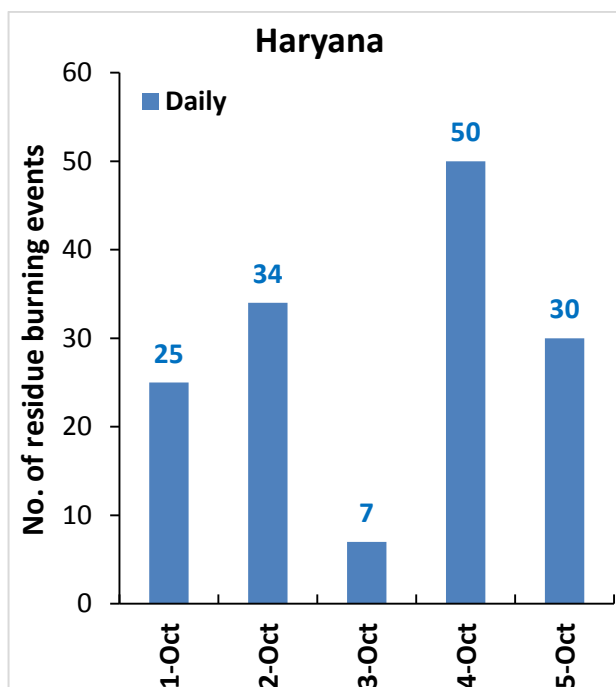
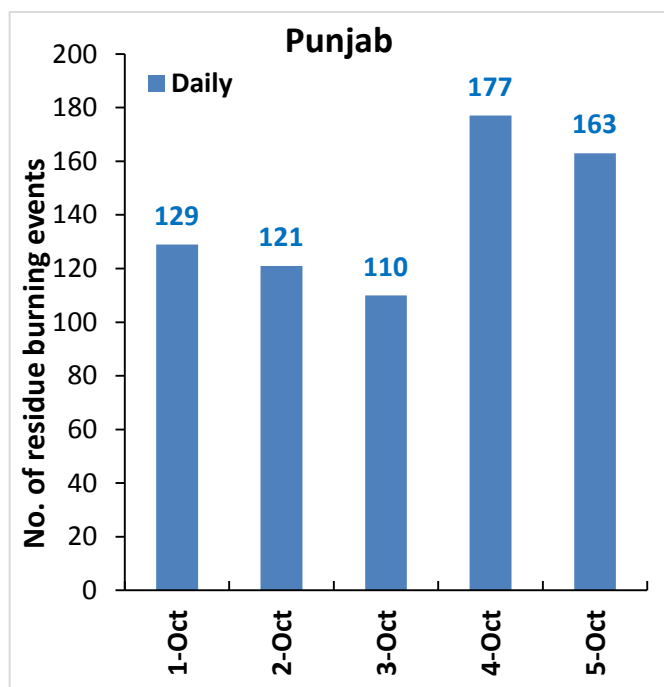
<http://creams.iari.res.in>



## Highlights for 05-October-2020

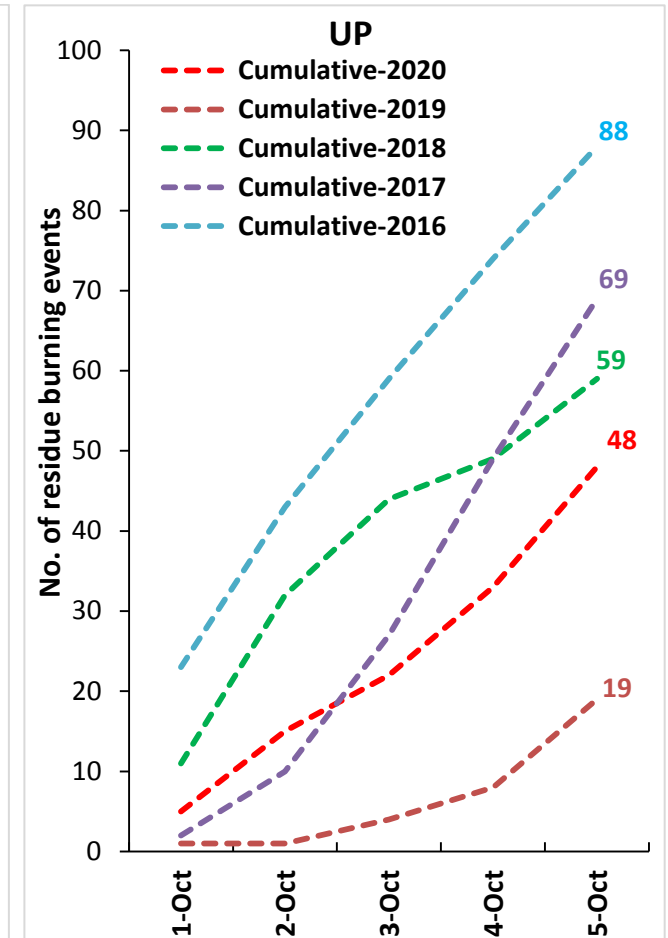
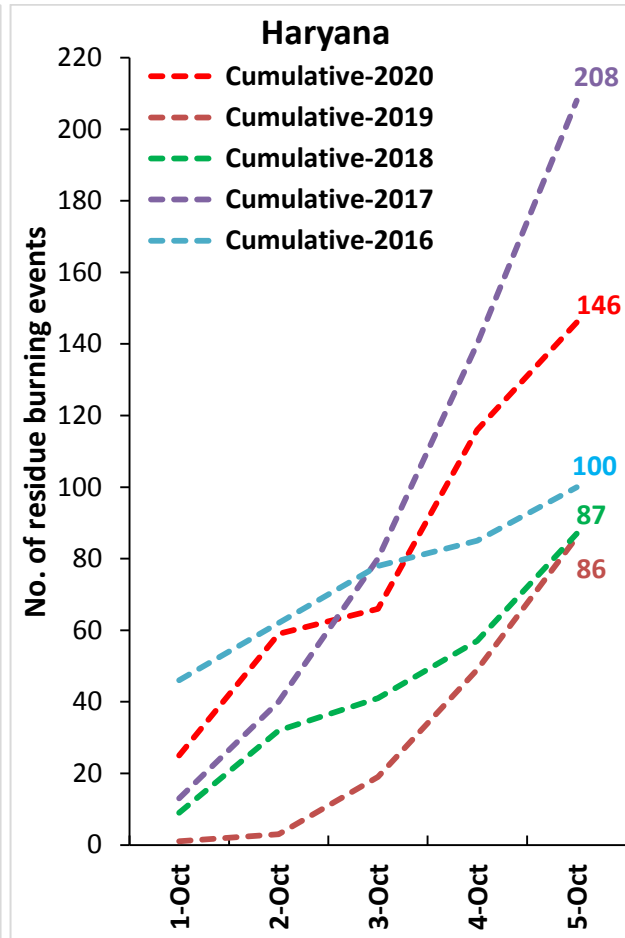
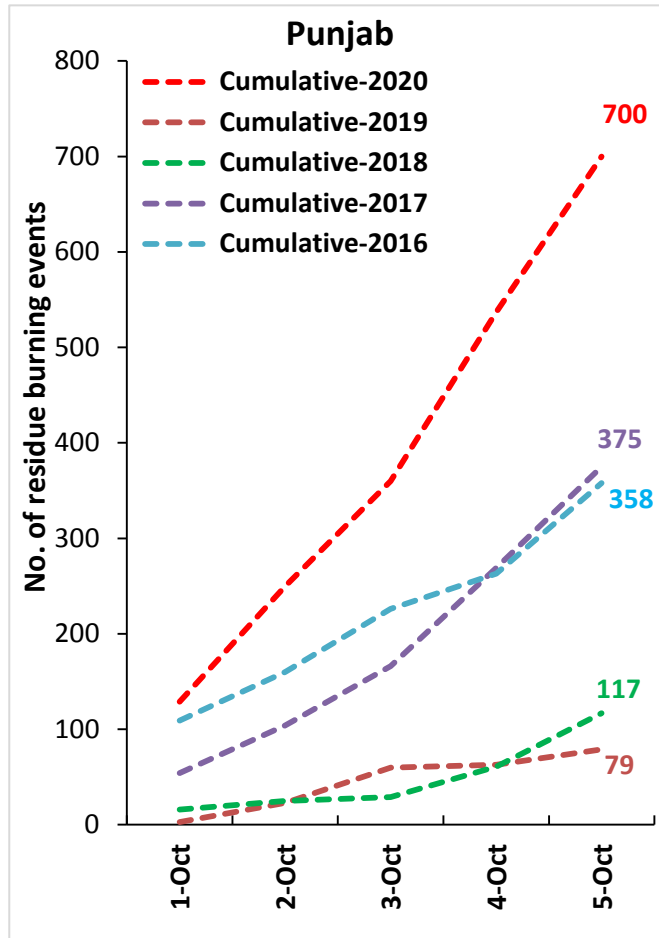
- Satellites detected **208** residue burning events in the three study States on **05-Oct-2020**.
- The state wise events detected on 05-Oct-2020 were **163** in Punjab, **30** in Haryana and **15** in UP.
- In Punjab, burning/fire events were concentrated in Amritsar and Tarn Taran districts.
- In Haryana and Uttar Pradesh, the burning events were scattered.
- The number of burning events was highest on 5-Oct in Punjab in the last four years.
- Total **894** burning events were detected in the three States between **01-Oct-2020** and **05-Oct-2020**, which are distributed as **700**, **146** and **48** in Punjab, Haryana and UP, respectively.

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

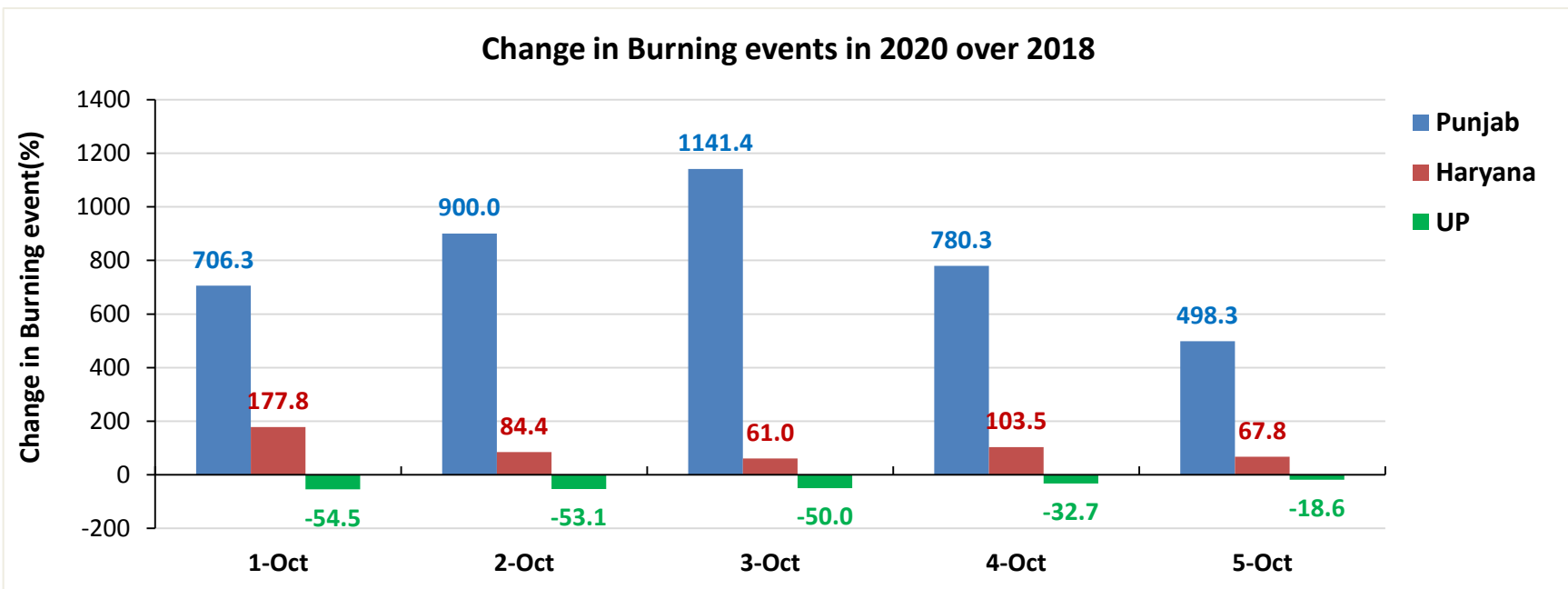
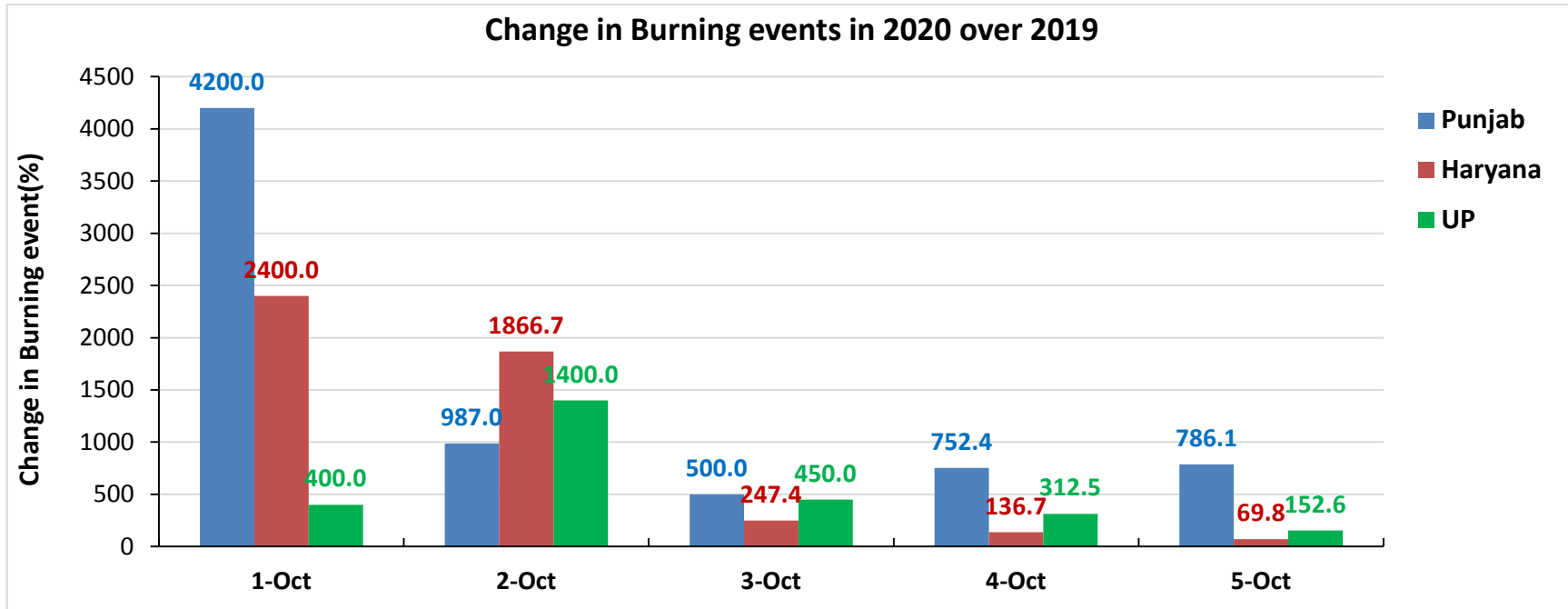


**Comparison of residue burning events in current year (2020) with previous years (2019, 2018, 2017 & 2016) for the three study States**

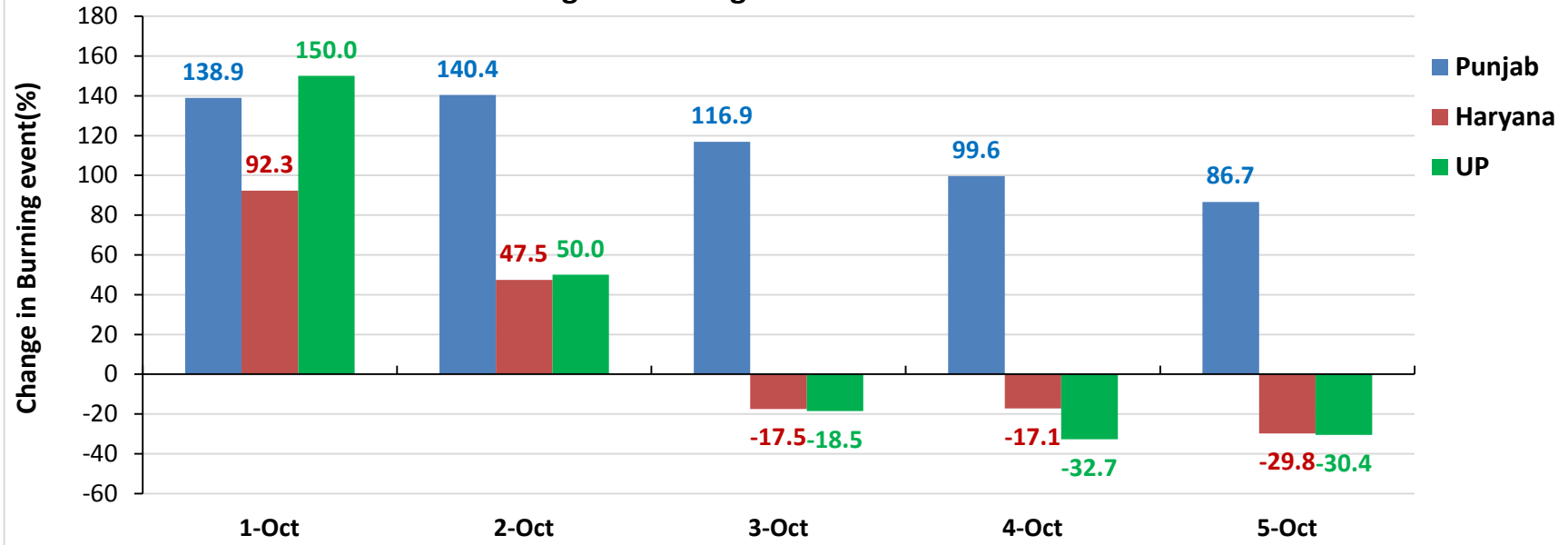
**(01-Oct to 05-Oct)**



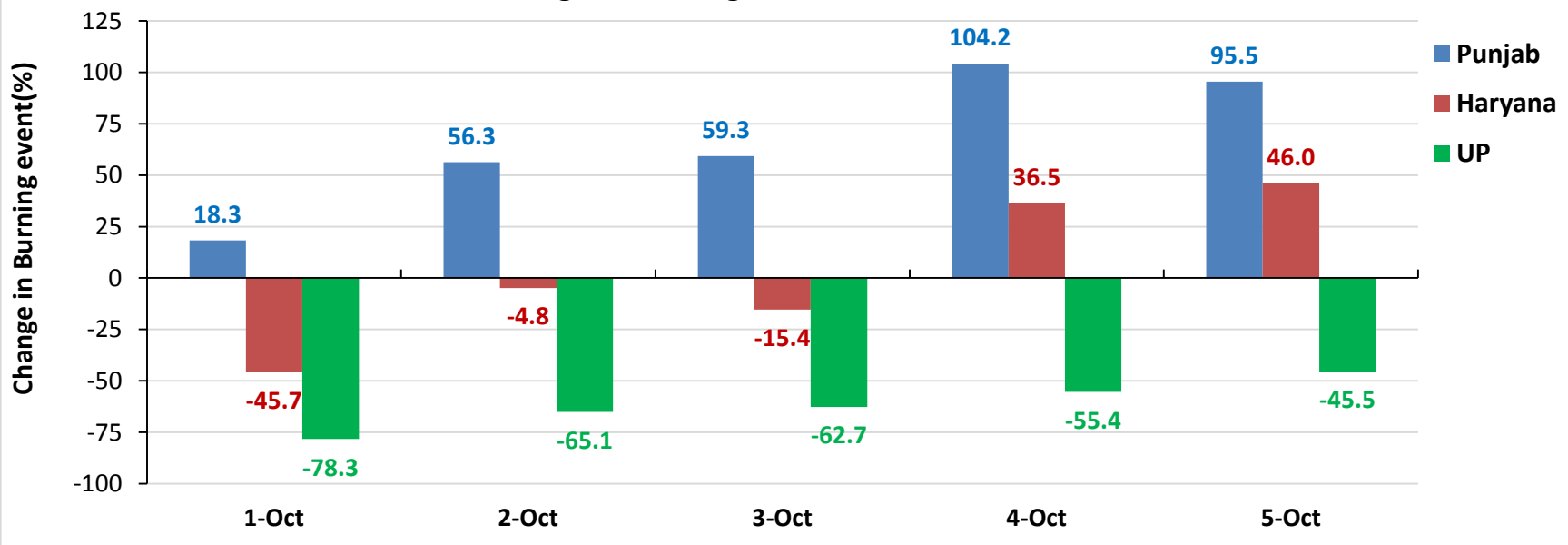
**Percent Change in Burning events in 2020 over 2019, 2018, 2017 and 2016 (Daily Cumulative)**



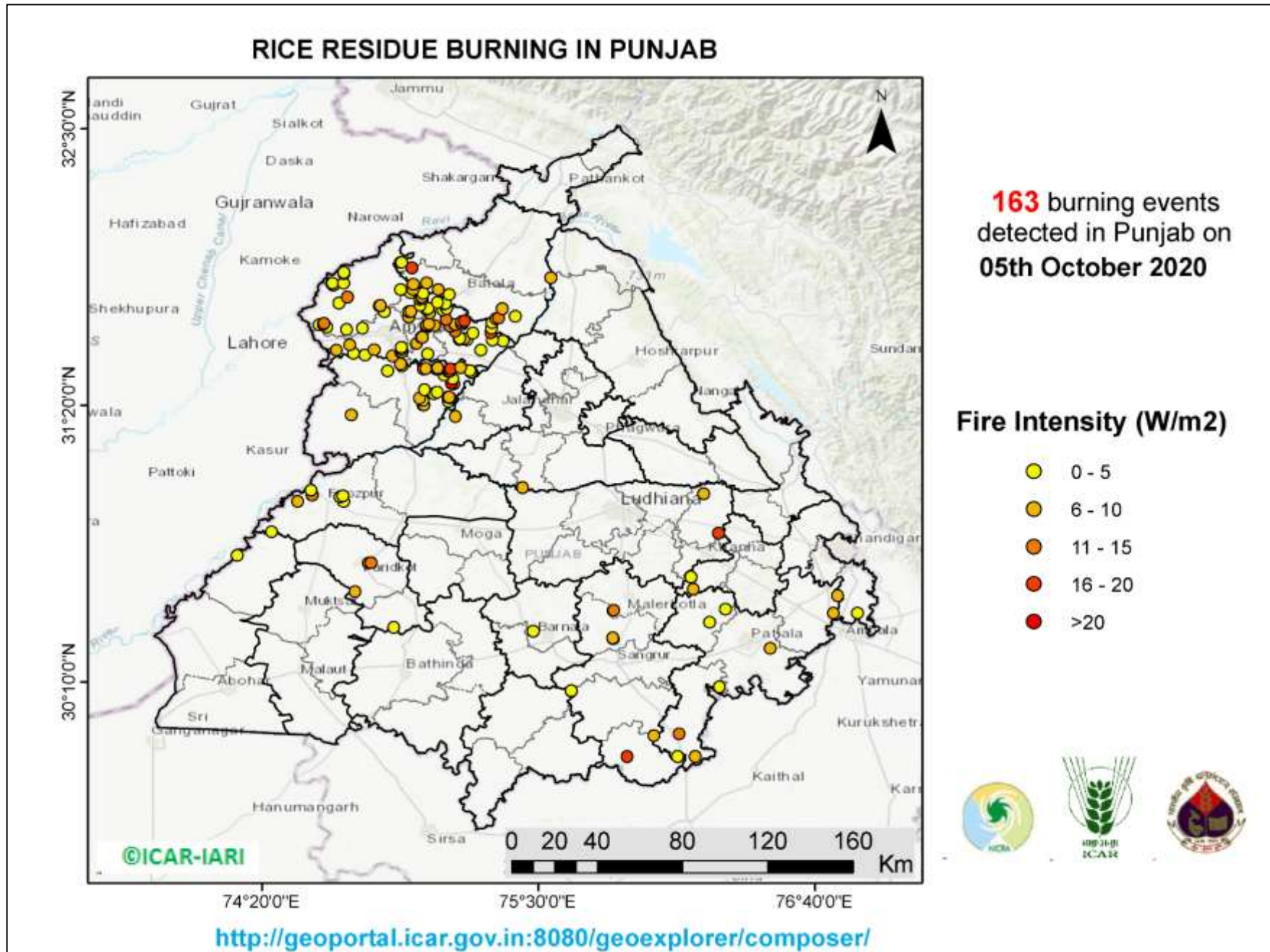
**Change in Burning events in 2020 over 2017**



**Change in Burning events in 2020 over 2016**

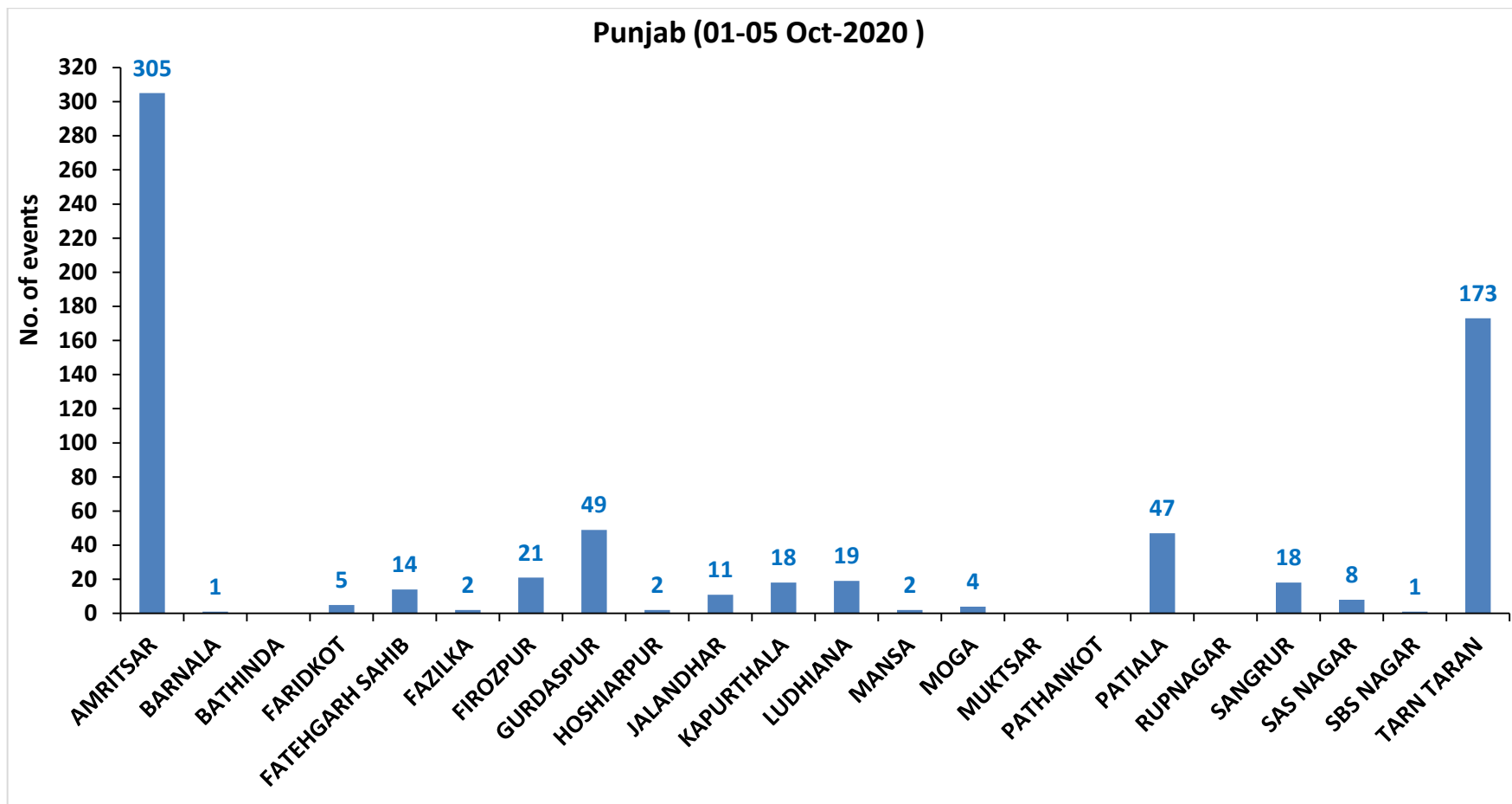


(a) Punjab



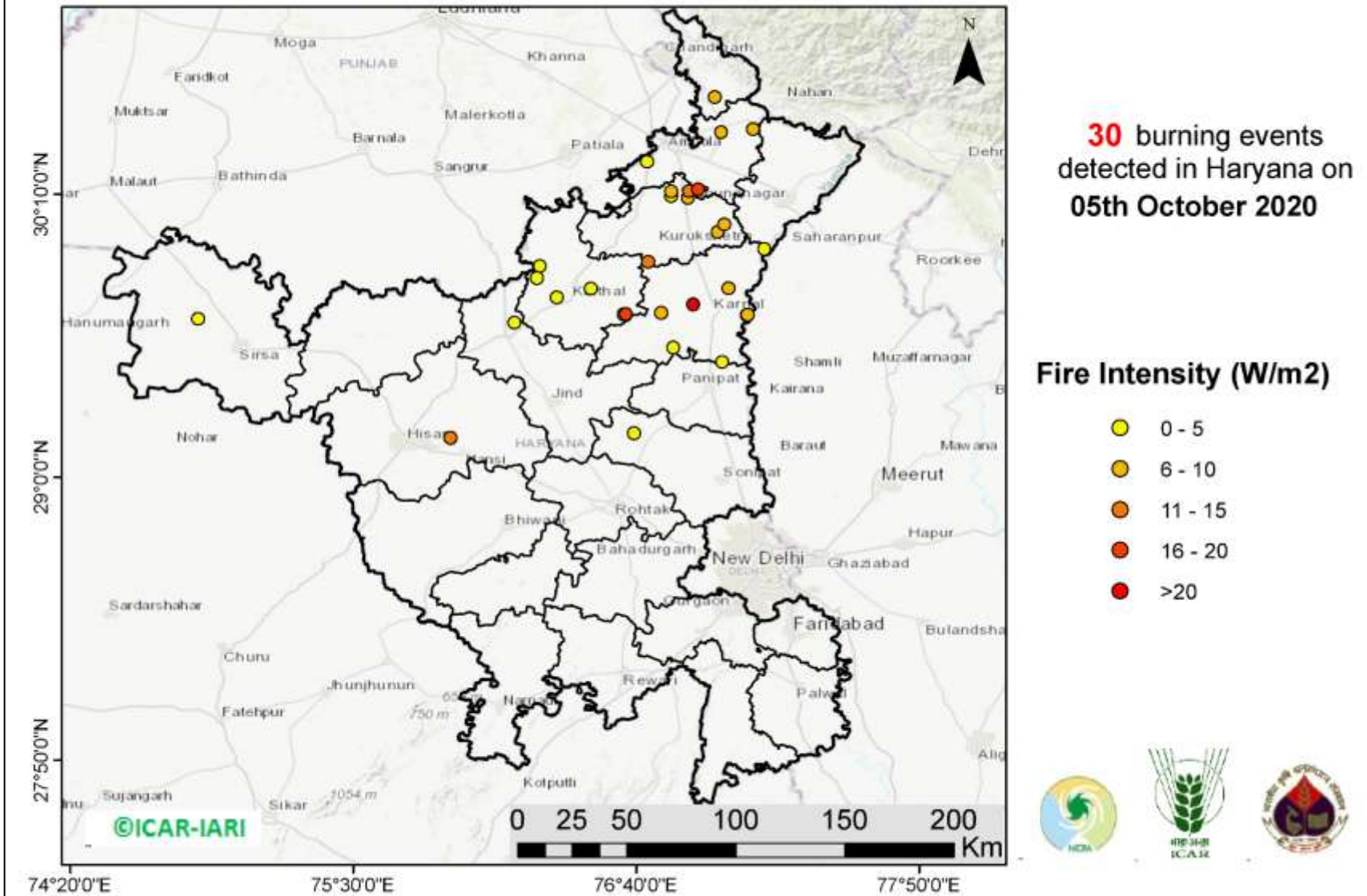


**District-wise cumulative number of residue burning events in Punjab (01-05 Oct-2020)**



(b) Haryana

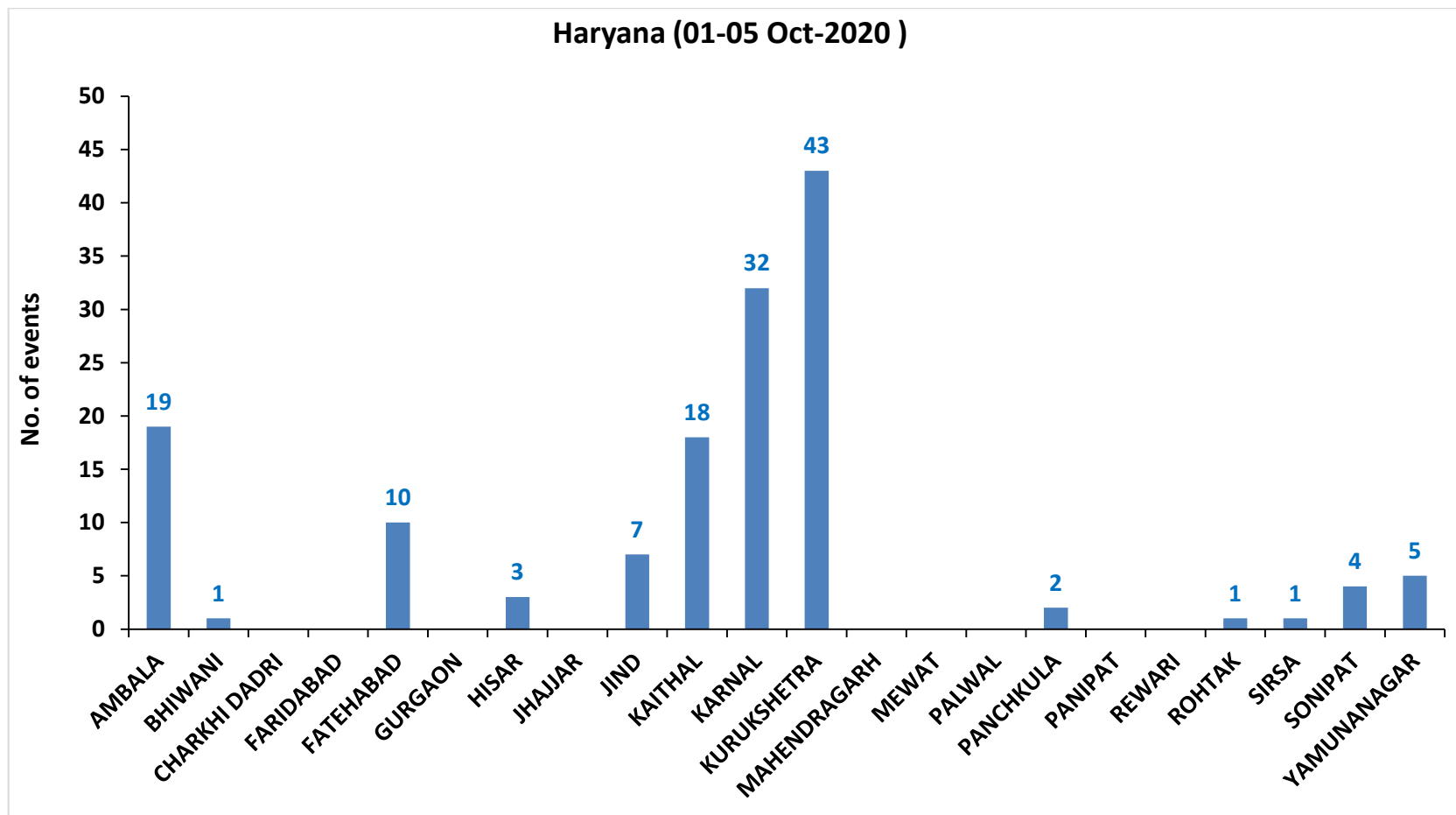
RICE RESIDUE BURNING IN HARYANA



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

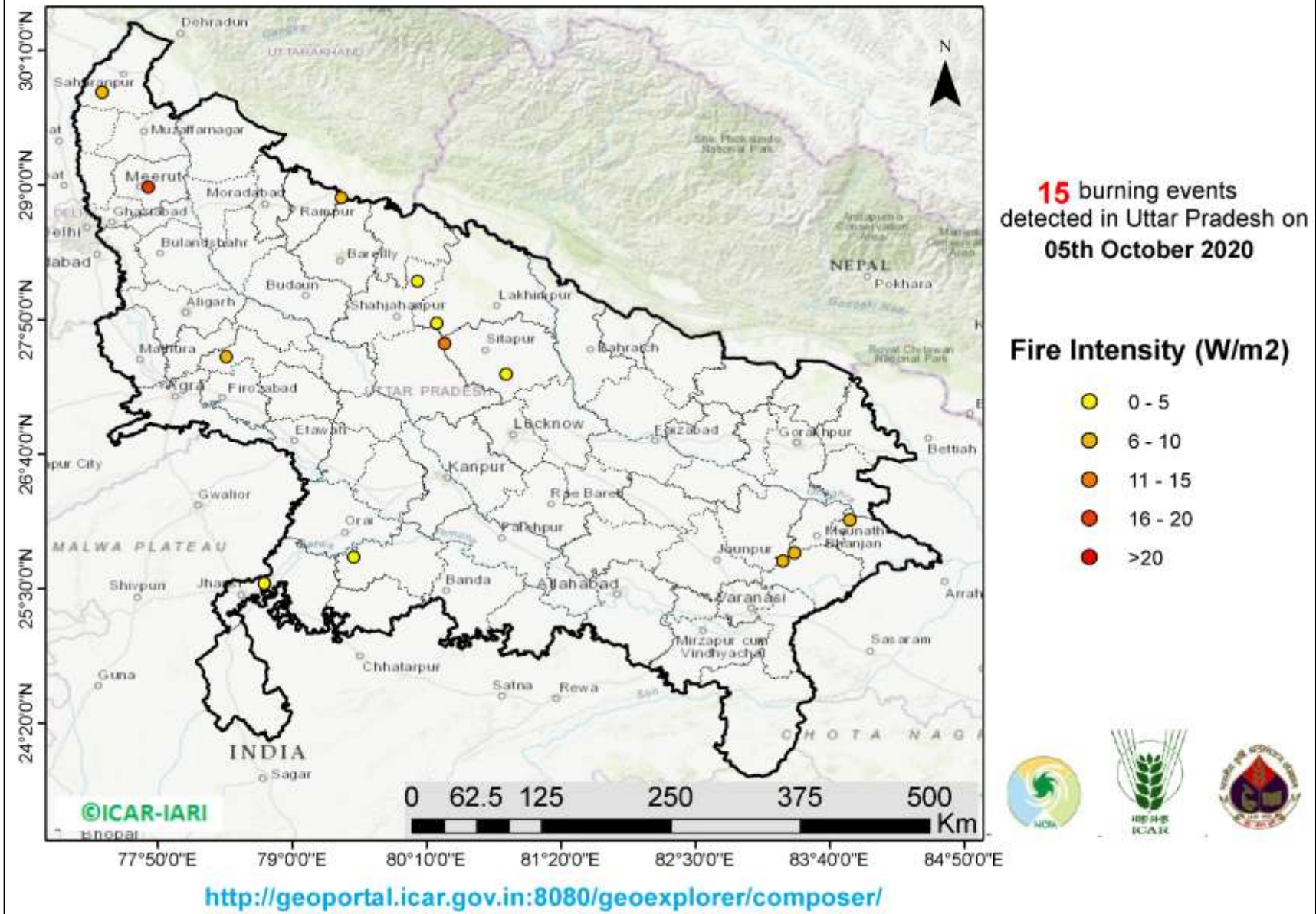


**District-wise cumulative number of residue burning events in Haryana (01-05 Oct-2020)**

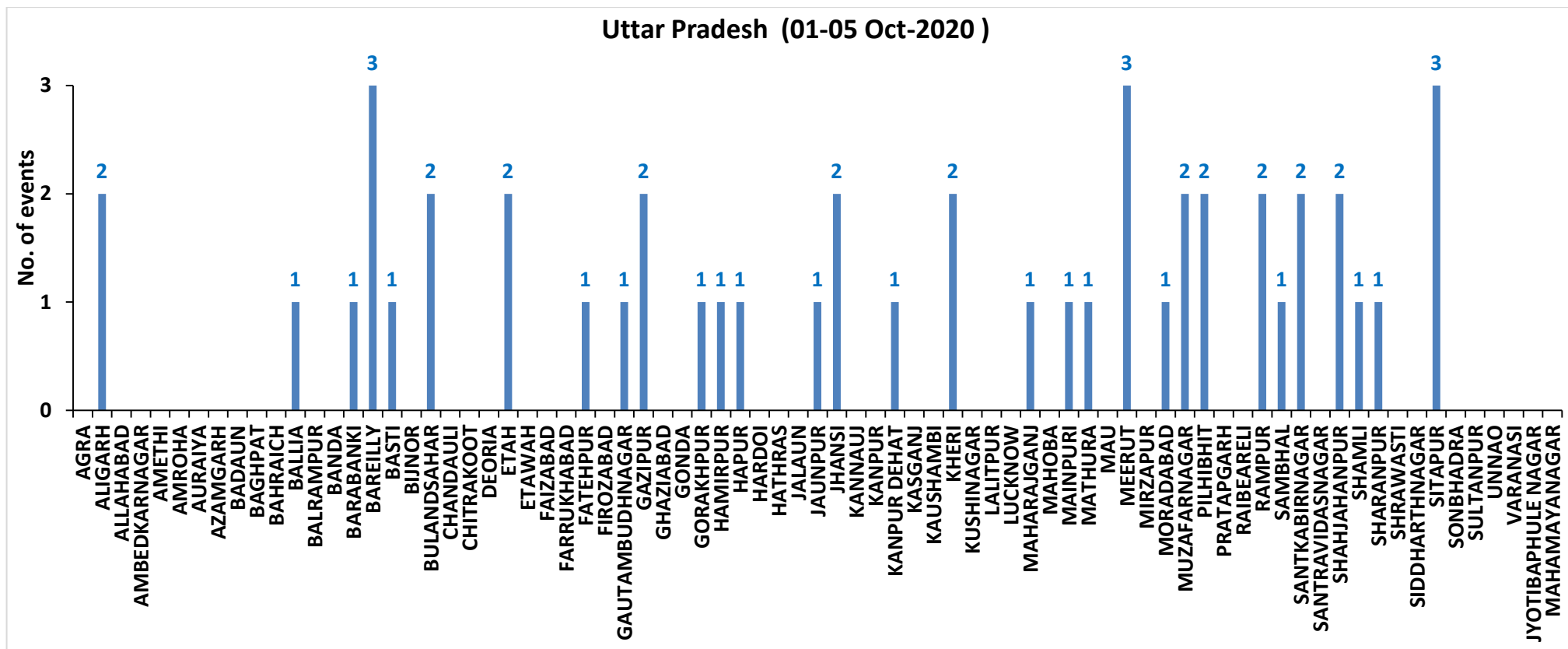


(c) Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



## District-wise cumulative number of residue burning events in Uttar Pradesh (01-05 Oct-2020)



**State-wise and date-wise number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020**  
**(Period: 01-05 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>Total</b>	<b>700</b>	<b>79</b>	<b>117</b>	<b>375</b>	<b>358</b>	<b>146</b>	<b>86</b>	<b>87</b>	<b>208</b>	<b>100</b>	<b>48</b>	<b>19</b>	<b>59</b>	<b>69</b>	<b>88</b>	<b>894</b>	<b>184</b>	<b>263</b>	<b>652</b>	<b>546</b>

**District-wise and date wise cumulative number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020**  
**(Period: 01-05 October)**

**(a) Punjab**

Districts	01-05 Oct				
	2016	2017	2018	2019	2020
AMRITSAR	123	182	78	43	305
BARNALA	1	0	0	0	1
BATHINDA	5	4	10	0	0
FARIDKOT	9	7	0	0	5
FATEHGARH SAHIB	9	2	2	0	14
FAZILKA	0	0	0	1	2
FIROZPUR	23	14	6	0	21
GURDASPUR	8	11	3	0	49
HOSHIARPUR	1	2	3	0	2
JALANDHAR	14	6	0	0	11
KAPURTHALA	19	0	0	0	18
LUDHIANA	11	20	1	2	19
MANSA	4	3	0	0	2
MOGA	1	1	0	2	4
MUKTSAR	7	2	2	1	0
PATHANKOT	0	0	0	0	0
PATIALA	13	15	3	7	47
RUPNAGAR	0	0	0	0	0
SANGRUR	7	20	2	0	18
SAS NAGAR	0	7	2	0	8
SBS NAGAR	4	2	1	2	1
TARN TARAN	99	77	4	21	173
<b>Total</b>	<b>358</b>	<b>375</b>	<b>117</b>	<b>79</b>	<b>700</b>

**(b) Haryana**

Districts	01-05 Oct				
	2016	2017	2018	2019	2020
AMBALA	8	14	10	1	19
BHIWANI	0	1	0	0	1
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	1	0	2	1	0
FATEHABAD	2	16	0	3	10
GURGAON	0	0	0	0	0
HISAR	2	3	2	0	3
JHAJJAR	0	0	1	1	0
JIND	2	14	0	3	7
KAITHAL	21	22	6	10	18
KARNAL	43	68	20	49	32
KURUKSHETRA	17	52	24	16	43
MAHENDRAGARH	0	0	0	0	0
MEWAT	0	0	0	0	0
PALWAL	0	0	0	0	0
PANCHKULA	0	0	1	0	2
PANIPAT	2	8	14	1	0
REWARI	0	0	0	0	0
ROHTAK	0	0	0	0	1
SIRSA	0	0	3	0	1
SONIPAT	0	2	2	0	4
YAMUNANAGAR	2	8	2	1	5
<b>Total</b>	<b>100</b>	<b>208</b>	<b>87</b>	<b>86</b>	<b>146</b>

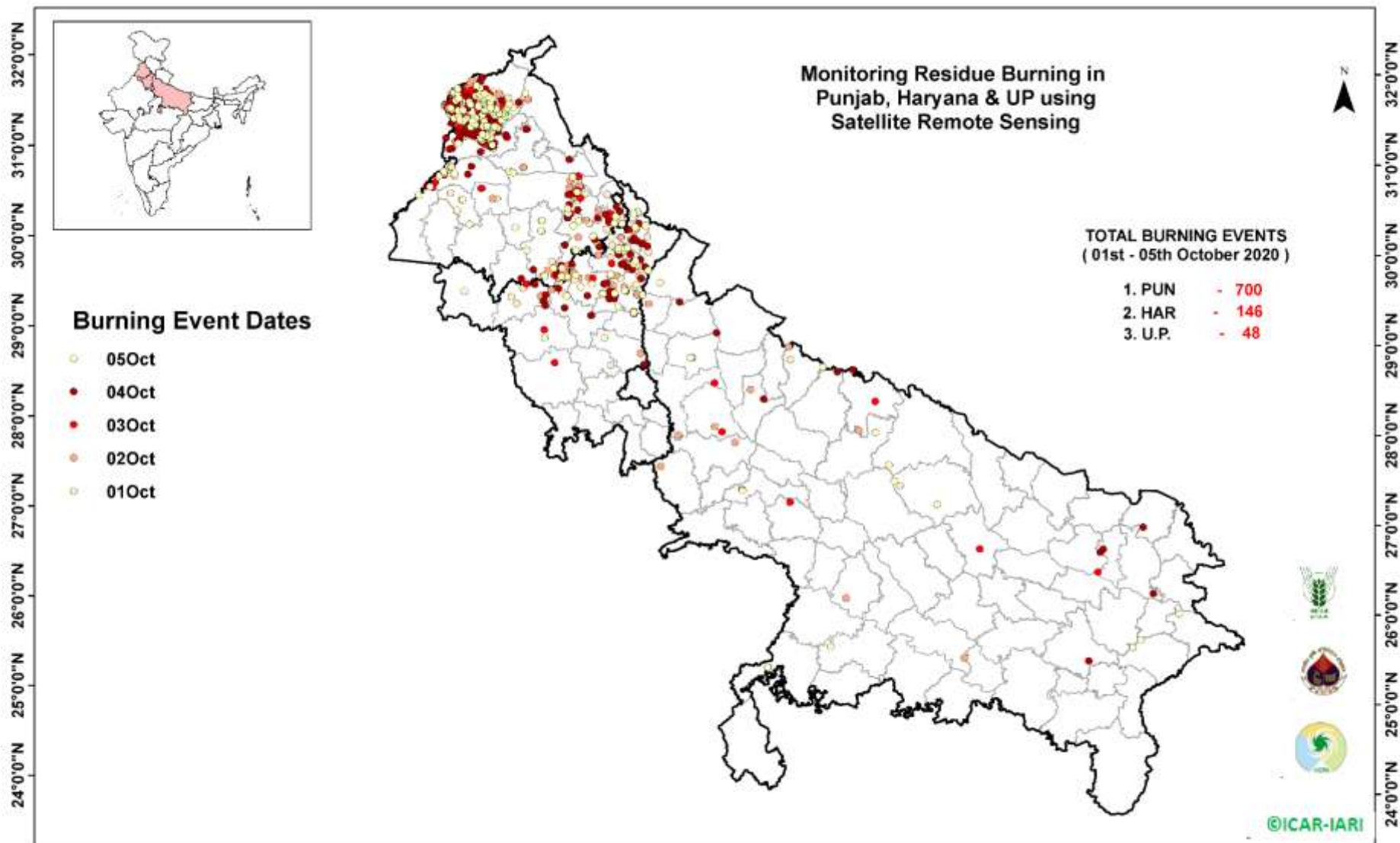
(C)

## Uttar Pradesh

Districts	01-05 Oct																
	2016	2017	2018	2019	2020	GAUTAMBUDHNAGAR	1	0	1	0	1	MUZAFARNAGAR	3	5	0	0	2
AGRA	0	0	0	0	0	GAZIPUR	0	0	0	0	2	PILHIBHIT	6	6	0	6	2
ALIGARH	0	2	1	0	2	GHAZIABAD	0	1	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	8	6	0	2
AMETHI	0	0	0	0	0	HAMIRPUR	0	0	1	0	1	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	19	8	8	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	21	20	19	3	2
BADAUN	0	0	0	0	0	JALAUN	0	0	0	0	0	SHAMLI	0	0	0	1	1
BAGHPAT	0	0	0	0	0	JAUNPUR	0	0	0	0	1	SHARANPUR	2	0	0	0	1
BAHRAICH	0	0	0	0	0	JHANSI	0	0	0	0	2	SHRAWASTI	0	0	0	0	0
BALLIA	0	0	0	0	1	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	2	0	0	0	3
BANDA	0	0	1	0	0	KANPUR DEHAT	0	0	0	0	1	SONBHADRA	3	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	1	3	3	KAUSHAMBI	0	1	3	0	0	UNNAO	0	0	0	0	0
BASTI	0	0	0	0	1	KHERI	3	13	3	3	2	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	2	0	0	1	0	<b>Total</b>	<b>88</b>	<b>69</b>	<b>59</b>	<b>19</b>	<b>48</b>
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	2	MAINPURI	0	0	1	0	1						
ETAWAH	0	0	0	0	0	MATHURA	1	0	5	0	1						
FAIZABAD	0	1	0	0	0	MAU	0	0	0	0	0						
FARRUKHABAD	0	0	0	0	0	MEERUT	0	0	0	1	3						
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 (01-05 Oct 2020)



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

**Details of residue burning events in Punjab on 05-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	74.69187	31.65225	13:54:00	D	2.80
2	AMRITSAR	AJNALA	S-NPP	74.60678	31.66368	13:54:00	D	0.70
3	AMRITSAR	AJNALA	S-NPP	74.57646	31.67266	13:54:00	D	2.60
4	AMRITSAR	AJNALA	AQUA	74.59400	31.67300	13:40:00	D	7.80
5	AMRITSAR	AJNALA	S-NPP	74.59628	31.67888	13:54:00	D	11.80
6	AMRITSAR	AJNALA	S-NPP	74.83020	31.75263	13:54:00	D	4.90
7	AMRITSAR	AJNALA	S-NPP	74.83442	31.75306	13:54:00	D	5.40
8	AMRITSAR	AJNALA	S-NPP	74.83413	31.75399	13:54:00	D	6.70
9	AMRITSAR	AJNALA	S-NPP	74.65914	31.76364	13:54:00	D	1.80
10	AMRITSAR	AJNALA	AQUA	74.69500	31.79000	13:40:00	D	11.90
11	AMRITSAR	AJNALA	S-NPP	74.91982	31.82002	13:54:00	D	1.40
12	AMRITSAR	AJNALA	S-NPP	74.63580	31.83899	13:54:00	D	3.90
13	AMRITSAR	AJNALA	S-NPP	74.63736	31.83969	13:54:00	D	2.70
14	AMRITSAR	AJNALA	S-NPP	74.62793	31.84690	13:54:00	D	2.90
15	AMRITSAR	AJNALA	S-NPP	74.63206	31.84733	13:54:00	D	2.90
16	AMRITSAR	AJNALA	S-NPP	74.67822	31.84804	13:54:00	D	2.10
17	AMRITSAR	AJNALA	S-NPP	74.68073	31.88938	13:54:00	D	2.90
18	AMRITSAR	AJNALA	S-NPP	74.68016	31.89343	13:54:00	D	2.90
19	AMRITSAR	AMRITSAR I	S-NPP	75.03426	31.54947	13:54:00	D	3.50
20	AMRITSAR	AMRITSAR I	AQUA	74.98700	31.59400	13:40:00	D	6.40
21	AMRITSAR	AMRITSAR I	S-NPP	75.00753	31.61983	13:54:00	D	8.60
22	AMRITSAR	AMRITSAR I	S-NPP	75.01183	31.62028	13:54:00	D	8.60
23	AMRITSAR	AMRITSAR I	AQUA	75.03200	31.66500	13:40:00	D	7.90
24	AMRITSAR	AMRITSAR I	S-NPP	75.12839	31.66611	13:54:00	D	14.80
25	AMRITSAR	AMRITSAR I	S-NPP	75.02815	31.66628	13:54:00	D	4.10
26	AMRITSAR	AMRITSAR I	S-NPP	75.02702	31.66783	13:54:00	D	14.30
27	AMRITSAR	AMRITSAR I	AQUA	75.06300	31.66900	13:40:00	D	9.30
28	AMRITSAR	AMRITSAR I	S-NPP	75.02758	31.67041	13:54:00	D	11.20
29	AMRITSAR	AMRITSAR I	S-NPP	75.03995	31.67584	13:54:00	D	5.30
30	AMRITSAR	AMRITSAR I	AQUA	75.04200	31.72100	13:40:00	D	6.30
31	AMRITSAR	AMRITSAR I	AQUA	74.95400	31.72700	13:40:00	D	9.80

32	AMRITSAR	AMRITSAR I	AQUA	74.96400	31.72800	13:40:00	D	6.90
33	AMRITSAR	AMRITSAR I	S-NPP	75.09759	31.73624	13:54:00	D	4.10
34	AMRITSAR	AMRITSAR I	AQUA	75.02700	31.73800	13:40:00	D	8.40
35	AMRITSAR	AMRITSAR I	S-NPP	75.11446	31.74220	13:54:00	D	2.90
36	AMRITSAR	AMRITSAR I	S-NPP	75.03507	31.74225	13:54:00	D	1.50
37	AMRITSAR	AMRITSAR I	S-NPP	75.00257	31.75553	13:54:00	D	3.90
38	AMRITSAR	AMRITSAR I	S-NPP	75.07559	31.76750	13:54:00	D	2.20
39	AMRITSAR	AMRITSAR I	AQUA	75.00100	31.78100	13:40:00	D	6.10
40	AMRITSAR	AMRITSAR I	AQUA	75.01200	31.78200	13:40:00	D	14.40
41	AMRITSAR	AMRITSAR I	AQUA	75.01000	31.79100	13:40:00	D	9.00
42	AMRITSAR	AMRITSAR I	S-NPP	75.01358	31.80475	13:54:00	D	1.70
43	AMRITSAR	AMRITSAR I	S-NPP	74.96069	31.80763	13:54:00	D	2.70
44	AMRITSAR	AMRITSAR I	S-NPP	74.97187	31.82130	13:54:00	D	6.70
45	AMRITSAR	AMRITSAR II	S-NPP	74.92126	31.55677	13:54:00	D	8.30
46	AMRITSAR	AMRITSAR II	S-NPP	74.92548	31.55721	13:54:00	D	8.30
47	AMRITSAR	AMRITSAR II	S-NPP	74.64954	31.56527	13:54:00	D	5.60
48	AMRITSAR	AMRITSAR II	AQUA	74.80800	31.56700	13:40:00	D	6.90
49	AMRITSAR	AMRITSAR II	S-NPP	74.92375	31.56947	13:54:00	D	2.70
50	AMRITSAR	AMRITSAR II	S-NPP	74.92260	31.57765	13:54:00	D	1.10
51	AMRITSAR	AMRITSAR II	S-NPP	74.70477	31.58758	13:54:00	D	5.20
52	AMRITSAR	AMRITSAR II	S-NPP	74.75825	31.65922	13:54:00	D	1.60
53	AMRITSAR	AMRITSAR II	S-NPP	74.95310	31.70443	13:54:00	D	9.50
54	AMRITSAR	AMRITSAR II	S-NPP	74.85081	31.72682	13:54:00	D	4.40
55	AMRITSAR	BABA BAKALA	S-NPP	75.25743	31.56478	13:54:00	D	4.10
56	AMRITSAR	BABA BAKALA	S-NPP	75.35209	31.60461	13:54:00	D	4.80
57	AMRITSAR	BABA BAKALA	S-NPP	75.30621	31.60852	13:54:00	D	3.70
58	AMRITSAR	BABA BAKALA	S-NPP	75.19827	31.61026	13:54:00	D	1.30
59	AMRITSAR	BABA BAKALA	AQUA	75.16700	31.61100	13:40:00	D	18.80
60	AMRITSAR	BABA BAKALA	AQUA	75.17800	31.61300	13:40:00	D	6.50
61	AMRITSAR	BABA BAKALA	AQUA	75.18800	31.61500	13:40:00	D	5.60
62	AMRITSAR	BABA BAKALA	S-NPP	75.17078	31.61587	13:54:00	D	3.20
63	AMRITSAR	BABA BAKALA	S-NPP	75.22566	31.63839	13:54:00	D	3.20
64	AMRITSAR	BABA BAKALA	AQUA	75.30100	31.64000	13:40:00	D	19.00

65	AMRITSAR	BABA BAKALA	AQUA	75.14900	31.64500	13:40:00	D	11.30
66	AMRITSAR	BABA BAKALA	S-NPP	75.30380	31.65918	13:54:00	D	3.90
67	AMRITSAR	BABA BAKALA	S-NPP	75.14964	31.67258	13:54:00	D	7.30
68	AMRITSAR	BABA BAKALA	S-NPP	75.15045	31.67440	13:54:00	D	6.00
69	AMRITSAR	BABA BAKALA	S-NPP	75.18033	31.67584	13:54:00	D	4.60
70	AMRITSAR	BABA BAKALA	S-NPP	75.17681	31.67703	13:54:00	D	5.80
71	AMRITSAR	BABA BAKALA	AQUA	75.17800	31.68600	13:40:00	D	8.20
72	AMRITSAR	BABA BAKALA	AQUA	75.18900	31.68800	13:40:00	D	18.80
73	AMRITSAR	BABA BAKALA	AQUA	75.11200	31.69500	13:40:00	D	13.00
74	BARNALA	BARNALA	S-NPP	75.47855	30.38041	13:54:00	D	3.30
75	FARIDKOT	FARIDKOT	AQUA	74.72800	30.54700	13:40:00	D	7.40
76	FARIDKOT	FARIDKOT	AQUA	74.78400	30.66700	13:40:00	D	10.90
77	FARIDKOT	FARIDKOT	AQUA	74.79500	30.66900	13:40:00	D	10.20
78	FARIDKOT	JAITO	S-NPP	74.89153	30.39596	13:54:00	D	2.20
79	FATEHGARH SAHIB	ALMOH	S-NPP	76.15524	30.55645	13:54:00	D	5.80
80	FATEHGARH SAHIB	ALMOH	S-NPP	76.14378	30.60808	13:54:00	D	3.40
81	FATEHGARH SAHIB	ALMOH	S-NPP	76.14491	30.60889	13:54:00	D	3.80
82	FAZILKA	JALALABAD	S-NPP	74.22992	30.69928	13:54:00	D	4.20
83	FIROZPUR	FIROZPUR	S-NPP	74.37548	30.79913	13:54:00	D	4.30
84	FIROZPUR	FIROZPUR	S-NPP	74.48566	30.92609	13:54:00	D	6.00
85	FIROZPUR	FIROZPUR	S-NPP	74.67876	30.92716	13:54:00	D	3.30
86	FIROZPUR	FIROZPUR	S-NPP	74.66385	30.94583	13:54:00	D	2.50
87	FIROZPUR	FIROZPUR	S-NPP	74.67530	30.95115	13:54:00	D	3.40
88	FIROZPUR	FIROZPUR	AQUA	74.54600	30.95400	13:40:00	D	14.00
89	FIROZPUR	FIROZPUR	S-NPP	74.54263	30.97492	13:54:00	D	3.60
90	GURDASPUR	BATALA	S-NPP	75.30543	31.68057	13:54:00	D	3.80
91	GURDASPUR	BATALA	AQUA	75.32100	31.69800	13:40:00	D	5.90
92	GURDASPUR	BATALA	AQUA	75.33200	31.70000	13:40:00	D	11.00
93	GURDASPUR	BATALA	S-NPP	75.40330	31.70797	13:54:00	D	2.90
94	GURDASPUR	BATALA	S-NPP	75.34848	31.74087	13:54:00	D	5.30
95	GURDASPUR	BATALA	S-NPP	75.10287	31.76199	13:54:00	D	4.10
96	GURDASPUR	BATALA	S-NPP	75.10723	31.76245	13:54:00	D	4.10
97	GURDASPUR	BATALA	S-NPP	75.12477	31.79932	13:54:00	D	1.40

98	GURDASPUR	BATALA	AQUA	75.08000	31.82000	13:40:00	D	9.10
99	GURDASPUR	BATALA	S-NPP	74.97330	31.84233	13:54:00	D	5.20
100	GURDASPUR	BATALA	S-NPP	75.02948	31.84825	13:54:00	D	9.60
101	GURDASPUR	BATALA	AQUA	74.96800	31.91300	13:40:00	D	17.70
102	GURDASPUR	DERA BABA NANAK	S-NPP	74.91875	31.93523	13:54:00	D	2.70
103	GURDASPUR	DERA BABA NANAK	S-NPP	74.92304	31.93568	13:54:00	D	3.90
104	GURDASPUR	GURDASPUR	AQUA	75.55300	31.87100	13:40:00	D	6.40
105	JALANDHAR	NAKODAR	AQUA	75.43400	30.98600	13:40:00	D	6.50
106	KAPURTHALA	SULTANPUR LODHI	AQUA	75.15100	31.28600	13:40:00	D	5.90
107	LUDHIANA	SAMRALA	S-NPP	76.26058	30.79307	13:54:00	D	15.40
108	LUDHIANA	SAMRALA	S-NPP	76.19820	30.95977	13:54:00	D	7.50
109	PATIALA	NABHA	S-NPP	76.22372	30.41686	13:54:00	D	2.30
110	PATIALA	NABHA	S-NPP	76.29005	30.47197	13:54:00	D	4.60
111	PATIALA	PATIALA	AQUA	76.47800	30.30700	13:40:00	D	6.70
112	PATIALA	RAJPURA	S-NPP	76.74648	30.45580	13:54:00	D	5.80
113	PATIALA	RAJPURA	AQUA	76.76300	30.53000	13:40:00	D	9.30
114	PATIALA	SAMANA	S-NPP	76.08913	29.84997	13:54:00	D	3.70
115	PATIALA	SAMANA	S-NPP	76.16290	29.85090	13:54:00	D	8.60
116	PATIALA	SAMANA	S-NPP	76.08762	29.85173	13:54:00	D	3.30
117	PATIALA	SAMANA	S-NPP	75.98887	29.93944	13:54:00	D	8.00
118	PATIALA	SAMANA	S-NPP	76.09529	29.94624	13:54:00	D	12.20
119	PATIALA	SAMANA	S-NPP	76.26410	30.14569	13:54:00	D	2.60
120	SANGRUR	DHURI	S-NPP	75.81556	30.34759	13:54:00	D	5.30
121	SANGRUR	DHURI	S-NPP	75.81499	30.35183	13:54:00	D	8.60
122	SANGRUR	MALERKOTLA	S-NPP	75.81679	30.46631	13:54:00	D	11.20
123	SANGRUR	MALERKOTLA	S-NPP	75.81886	30.46740	13:54:00	D	10.50
124	SANGRUR	MOONAK	AQUA	75.87500	29.85200	13:40:00	D	16.90
125	SANGRUR	SUNAM	S-NPP	75.63952	30.12828	13:54:00	D	2.90
126	SANGRUR	SUNAM	S-NPP	75.63992	30.12859	13:54:00	D	2.40
127	SAS NAGAR	DERABASSI	S-NPP	76.84622	30.45648	13:54:00	D	1.80
128	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01467	31.33356	13:54:00	D	6.50
129	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01891	31.33402	13:54:00	D	6.30
130	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12096	31.34920	13:54:00	D	3.20

131	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01328	31.35269	13:54:00	D	2.10
132	TARN TARAN	KHADOOR SAHIB	S-NPP	74.99880	31.36366	13:54:00	D	5.10
133	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12902	31.36453	13:54:00	D	3.50
134	TARN TARAN	KHADOOR SAHIB	S-NPP	75.11980	31.36777	13:54:00	D	8.60
135	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12411	31.36821	13:54:00	D	8.60
136	TARN TARAN	KHADOOR SAHIB	AQUA	75.06000	31.38200	13:40:00	D	6.30
137	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06104	31.38261	13:54:00	D	3.60
138	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07334	31.38806	13:54:00	D	3.80
139	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01974	31.39913	13:54:00	D	4.20
140	TARN TARAN	KHADOOR SAHIB	AQUA	75.14300	31.42300	13:40:00	D	8.10
141	TARN TARAN	KHADOOR SAHIB	S-NPP	75.13393	31.42368	13:54:00	D	34.00
142	TARN TARAN	KHADOOR SAHIB	S-NPP	75.13975	31.44526	13:54:00	D	4.80
143	TARN TARAN	KHADOOR SAHIB	S-NPP	75.10343	31.46055	13:54:00	D	2.30
144	TARN TARAN	KHADOOR SAHIB	S-NPP	75.22022	31.47065	13:54:00	D	3.00
145	TARN TARAN	KHADOOR SAHIB	S-NPP	75.21664	31.47196	13:54:00	D	3.70
146	TARN TARAN	KHADOOR SAHIB	AQUA	75.12100	31.47500	13:40:00	D	34.80
147	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12769	31.47558	13:54:00	D	7.00
148	TARN TARAN	KHADOOR SAHIB	S-NPP	74.86367	31.47732	13:54:00	D	2.90
149	TARN TARAN	KHADOOR SAHIB	S-NPP	75.21110	31.47983	13:54:00	D	2.40
150	TARN TARAN	KHADOOR SAHIB	AQUA	75.07000	31.48600	13:40:00	D	10.50
151	TARN TARAN	KHADOOR SAHIB	AQUA	75.13000	31.48600	13:40:00	D	17.70
152	TARN TARAN	KHADOOR SAHIB	AQUA	75.01600	31.48700	13:40:00	D	14.00
153	TARN TARAN	KHADOOR SAHIB	AQUA	75.08100	31.48700	13:40:00	D	7.70
154	TARN TARAN	KHADOOR SAHIB	AQUA	75.02600	31.48800	13:40:00	D	6.80
155	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07298	31.49089	13:54:00	D	6.10
156	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07729	31.49133	13:54:00	D	5.60
157	TARN TARAN	KHADOOR SAHIB	S-NPP	75.17382	31.49287	13:54:00	D	5.60
158	TARN TARAN	KHADOOR SAHIB	S-NPP	74.92448	31.50031	13:54:00	D	3.90
159	TARN TARAN	KHADOOR SAHIB	S-NPP	74.91911	31.50803	13:54:00	D	7.10
160	TARN TARAN	KHADOOR SAHIB	AQUA	74.88500	31.54100	13:40:00	D	7.00
161	TARN TARAN	KHADOOR SAHIB	S-NPP	74.76964	31.54518	13:54:00	D	3.80
162	TARN TARAN	KHADOOR SAHIB	S-NPP	74.72232	31.55254	13:54:00	D	0.80
163	TARN TARAN	PATTI	S-NPP	74.71204	31.29233	13:54:00	D	6.60



**Details of residue burning events in Haryana on 05-Oct-2020**

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m <sup>2</sup> )
1	AMBALA	AMBALA	S-NPP	76.71120	30.30036	13:54:00	D	2.50
2	AMBALA	NARAYANGARH	S-NPP	77.01613	30.42211	13:54:00	D	5.80
3	AMBALA	NARAYANGARH	AQUA	77.14700	30.43500	13:40:00	D	8.00
4	HISAR	HANSI	AQUA	75.90000	29.16300	13:40:00	D	10.80
5	JIND	NARWANA	S-NPP	76.16447	29.63764	13:54:00	D	3.20
6	KAITHAL	KAITHAL	AQUA	76.61500	29.67100	13:40:00	D	8.30
7	KAITHAL	KAITHAL	AQUA	76.62500	29.67300	13:40:00	D	16.50
8	KAITHAL	KAITHAL	S-NPP	76.33820	29.74068	13:54:00	D	2.70
9	KAITHAL	KAITHAL	S-NPP	76.47952	29.77721	13:54:00	D	3.40
10	KAITHAL	KAITHAL	S-NPP	76.25705	29.82119	13:54:00	D	2.80
11	KAITHAL	KAITHAL	S-NPP	76.26982	29.87079	13:54:00	D	4.30
12	KARNAL	GHARAUNDA	S-NPP	77.02112	29.47509	13:54:00	D	3.70
13	KARNAL	GHARAUNDA	S-NPP	76.82016	29.53509	13:54:00	D	3.00
14	KARNAL	KARNAL	AQUA	77.12200	29.66800	13:40:00	D	4.80
15	KARNAL	KARNAL	S-NPP	77.12552	29.67038	13:54:00	D	9.40
16	KARNAL	KARNAL	S-NPP	76.76990	29.67717	13:54:00	D	5.40
17	KARNAL	KARNAL	AQUA	76.90200	29.71200	13:40:00	D	22.60
18	KARNAL	KARNAL	S-NPP	77.04601	29.77875	13:54:00	D	6.80
19	KURUKSHETRA	SHAHABAD	S-NPP	76.87901	30.15108	13:54:00	D	5.50
20	KURUKSHETRA	SHAHABAD	S-NPP	76.81001	30.15834	13:54:00	D	4.50
21	KURUKSHETRA	SHAHABAD	AQUA	76.81100	30.17800	13:40:00	D	6.50
22	KURUKSHETRA	SHAHABAD	AQUA	76.88500	30.17900	13:40:00	D	11.00
23	KURUKSHETRA	SHAHABAD	S-NPP	76.92207	30.18711	13:54:00	D	17.20
24	KURUKSHETRA	THANESAR	AQUA	76.71500	29.88800	13:40:00	D	11.60
25	KURUKSHETRA	THANESAR	AQUA	77.00300	30.01100	13:40:00	D	6.00
26	KURUKSHETRA	THANESAR	AQUA	77.02900	30.04200	13:40:00	D	6.60
27	PANCHKULA	PANCHKULA	S-NPP	76.98985	30.56733	13:54:00	D	6.70
28	SIRSA	RANIA	S-NPP	74.85989	29.65231	13:54:00	D	3.40
29	SONIPAT	GOHANA	S-NPP	76.65776	29.18180	13:54:00	D	3.20
30	YAMUNANAGAR	JAGADHRI	S-NPP	77.19553	29.94061	13:54:00	D	1.60

**Details of residue burning events in Uttar Pradesh on 05-Oct-2020**

<b>S. No.</b>	<b>District</b>	<b>Tehsil / Block</b>	<b>Satellite</b>	<b>Longitude</b>	<b>Latitude</b>	<b>Time (IST)</b>	<b>Day / Night</b>	<b>Fire Power (W/m<sup>2</sup>)</b>
1	BALLIA	BELTHARA ROAD	METOP-1	83.83941	26.09479	20:45:00	N	6.00
2	BAREILLY	BAHERI	AQUA	79.42600	28.89000	13:40:00	D	7.90
3	ETAH	JALESAR	S-NPP	78.42755	27.50962	13:54:00	D	5.60
4	GAZIPUR	JAKHANIA	METOP-1	83.26191	25.73546	20:45:00	N	6.50
5	GAZIPUR	JAKHANIA	METOP-1	83.36059	25.81032	20:45:00	N	6.00
6	HAMIRPUR	SARILA	S-NPP	79.53555	25.77075	13:54:00	D	1.50
7	JHANSI	TAHRAULI	S-NPP	78.76161	25.54330	13:54:00	D	2.80
8	JHANSI	TAHRAULI	S-NPP	78.75848	25.54376	13:54:00	D	3.80
9	KHERI	MOHMADI	S-NPP	80.25571	27.79886	13:54:00	D	2.70
10	KHERI	MOHMADI	S-NPP	80.25456	27.80010	13:54:00	D	2.50
11	MEERUT	MEERUT	AQUA	77.74900	28.98000	13:40:00	D	18.30
12	SHAHJAHANPUR	PUWANYA	S-NPP	80.08918	28.16520	01:00:00	N	0.70
13	SHARANPUR	NAKUR	S-NPP	77.34620	29.80682	13:54:00	D	6.30
14	SITAPUR	MISRIK	AQUA	80.32300	27.62300	13:40:00	D	10.10
15	SITAPUR	SIDHAULI	S-NPP	80.85690	27.35930	13:54:00	D	3.00

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

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