

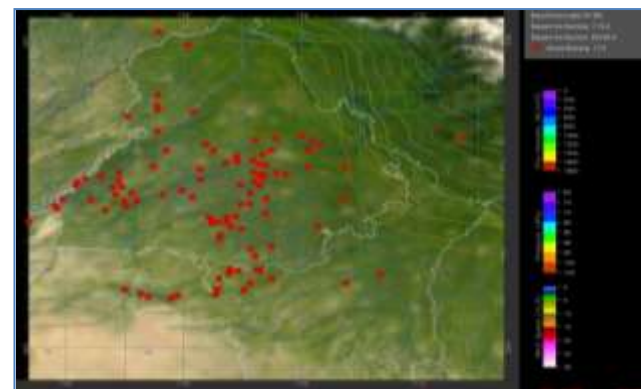


MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2020

**Bulletin
No. 16**

**Events Date:
16-Oct-2020**

**Issued on:
17-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**

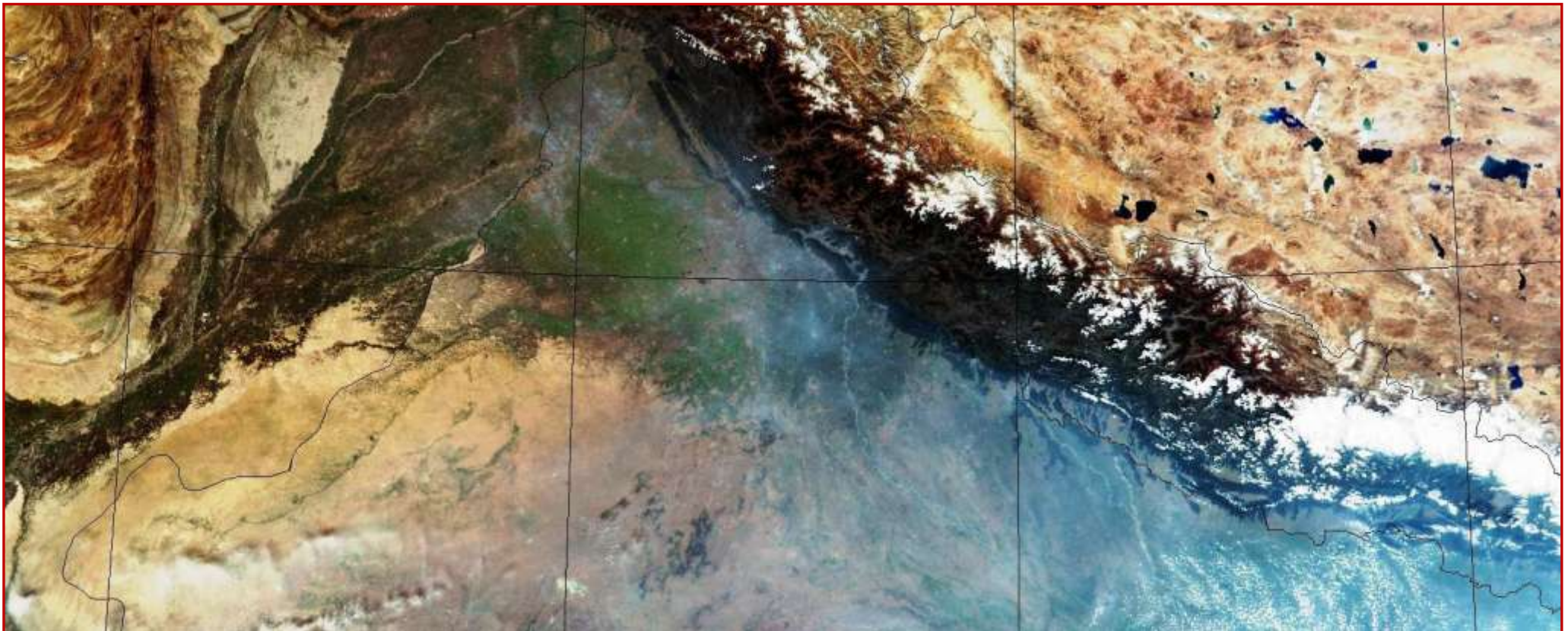
<http://creams.iari.res.in>



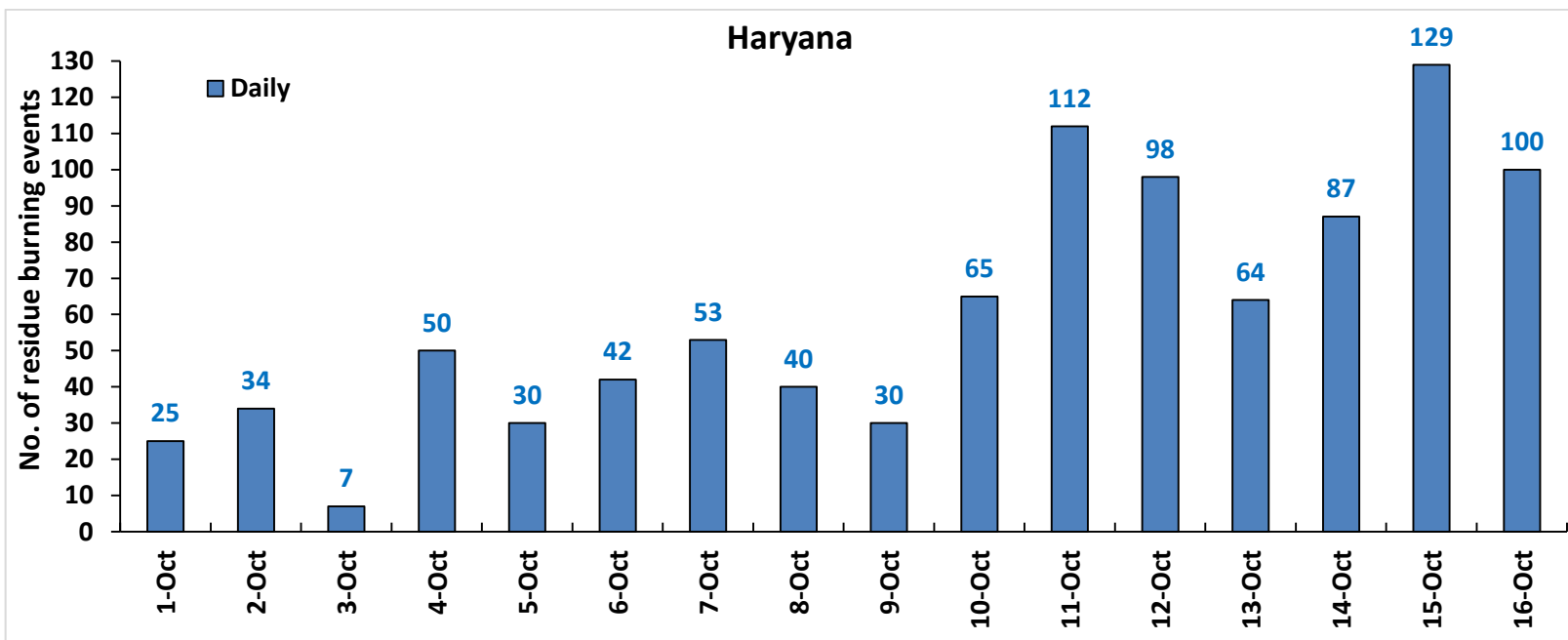
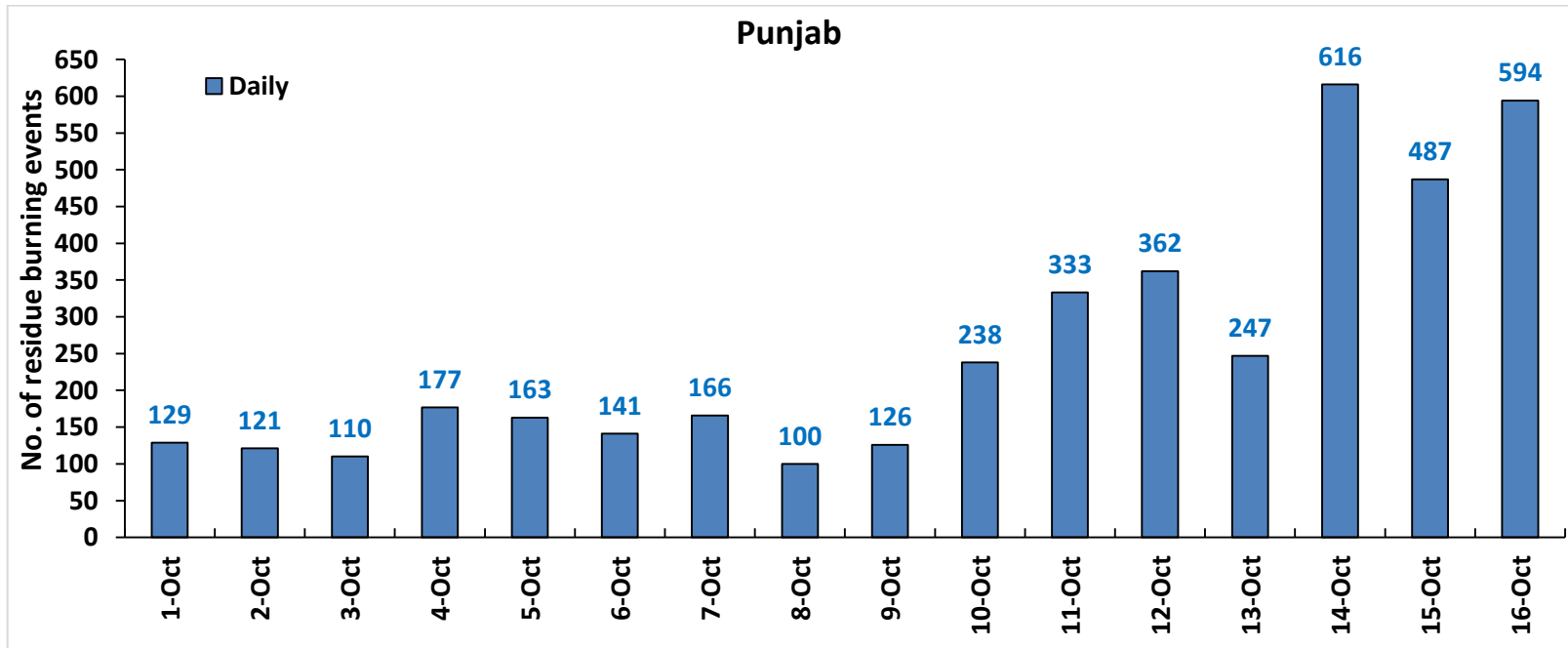
Highlights for 16-October-2020

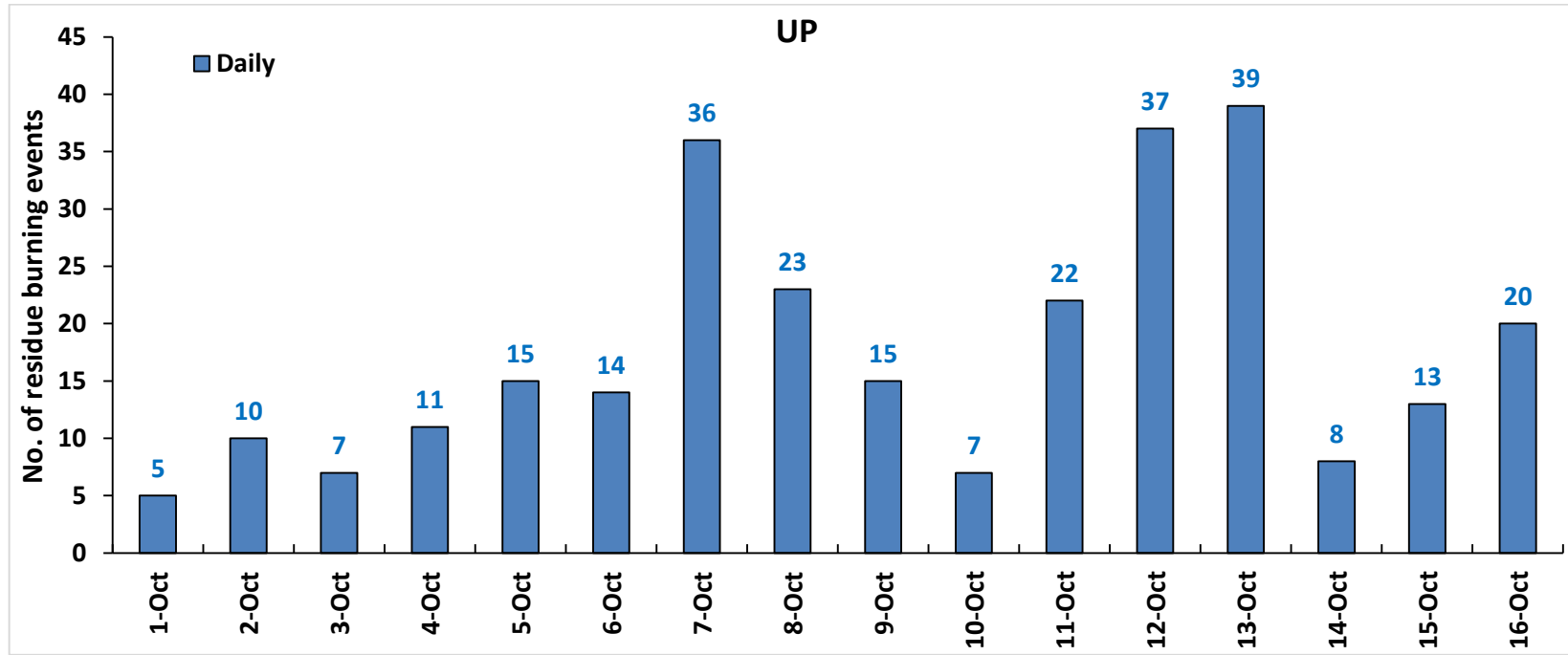
- Satellites detected **714** residue burning events in the three study States on 16-Oct-2020.
- The state wise events detected on **16-Oct-2020** were **594** in Punjab, **100** in Haryana and **20** in UP.
- The number of events has increased from **629** on **15-Oct-2020** to **714** on **16-Oct-2020** in the three states.
- Tarn Taran in Punjab, Karnal in Haryana and Pilibhit in UP reported the highest number of events on **16-Oct-2020**.
- Total **5358** burning events were detected in the three States between **01-Oct-2020** and **16-Oct-2020**, which are distributed as **4110**, **966** and **282** in Punjab, Haryana and UP, respectively.
- In Haryana and UP, the cumulative number of burning events between **1-Oct** and **16-Oct 2020** were lower than in **2019**, while in Punjab the cumulative number of events were more than in **2019**.

[S-NPP \(VIIRS\) Satellite image of North India Acquired on 16-Oct-2020 at 14:51 by IARI Ground Station](#)



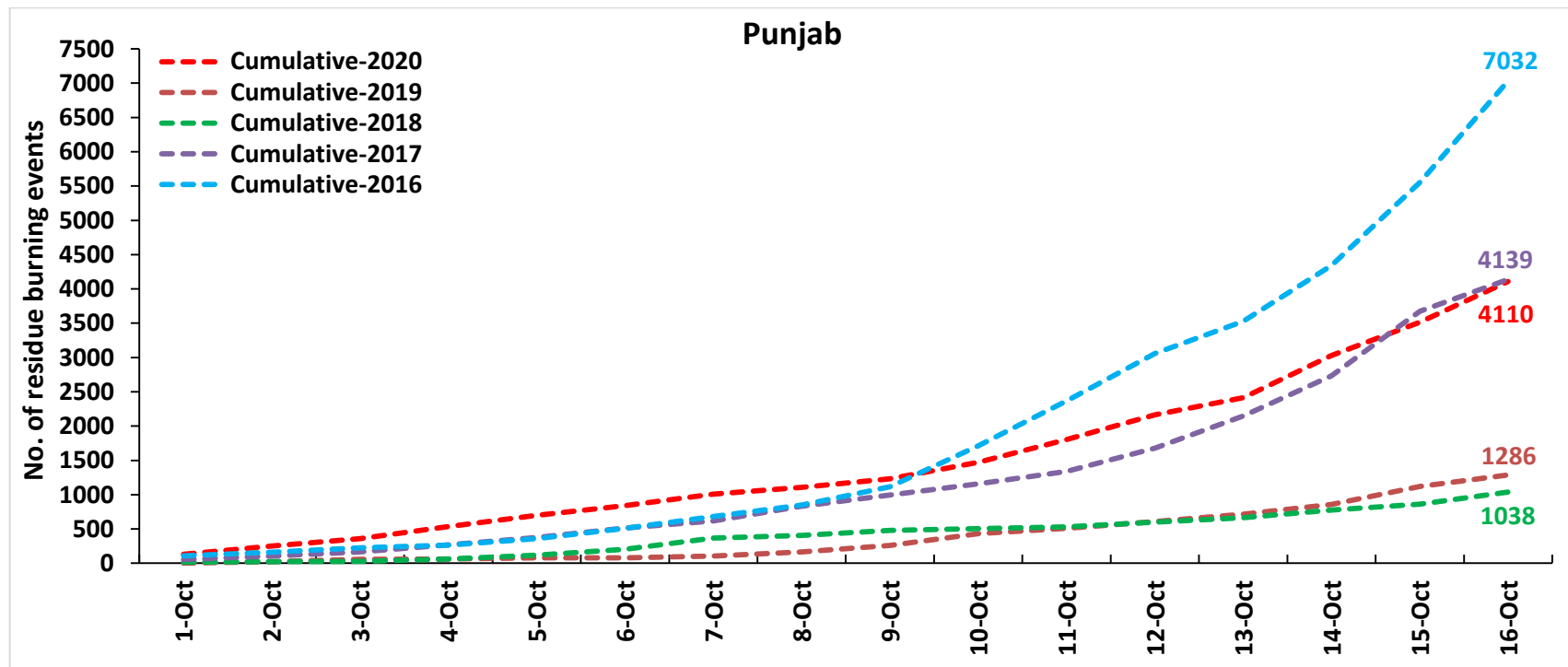
Temporal distribution of residue burning events for the three study States in 2020

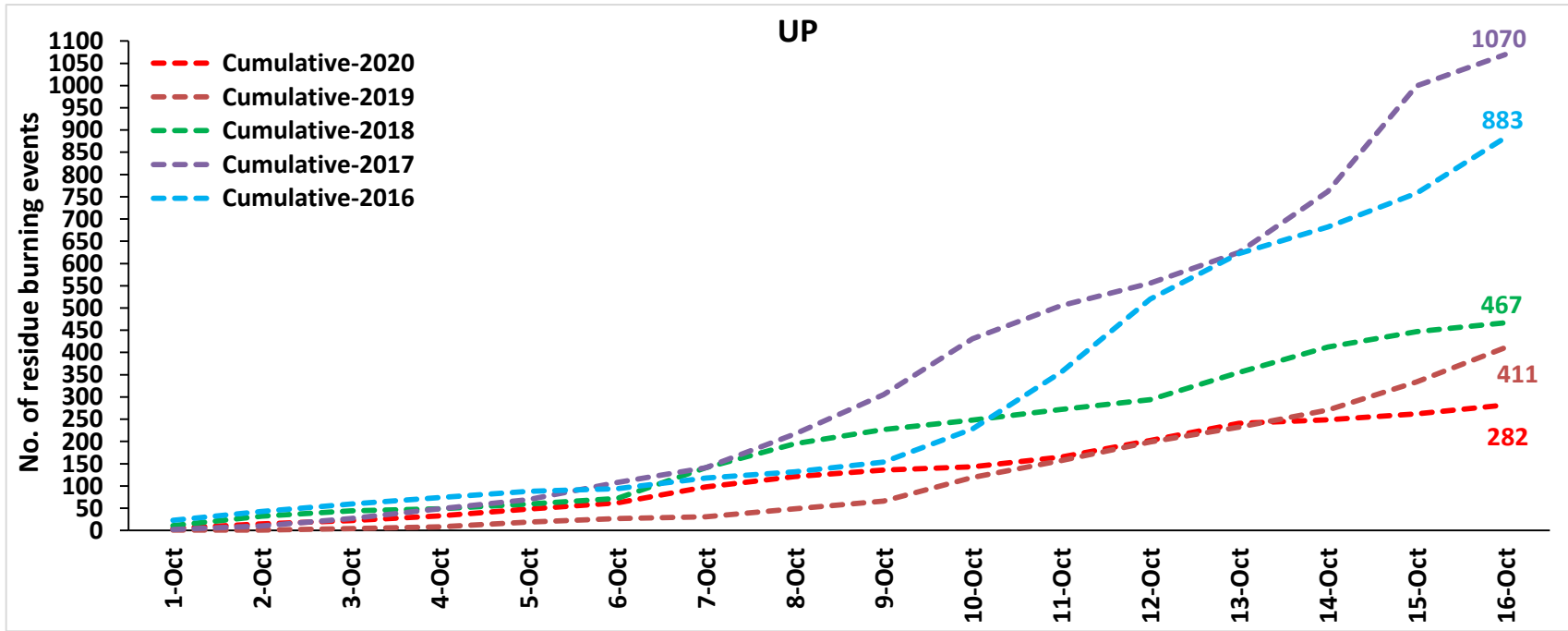
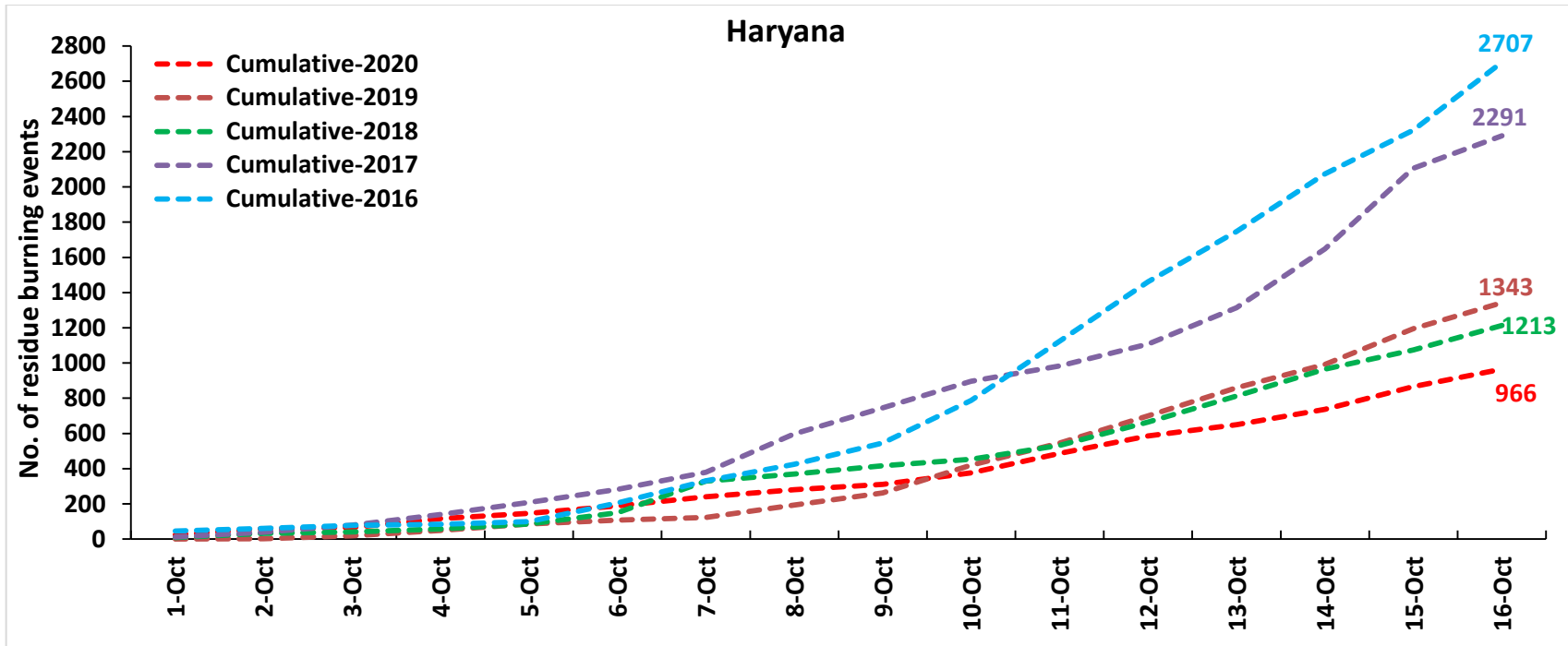




Comparison of residue burning events in current year (2020) with previous years (2019, 2018, 2017 & 2016) for the three study States

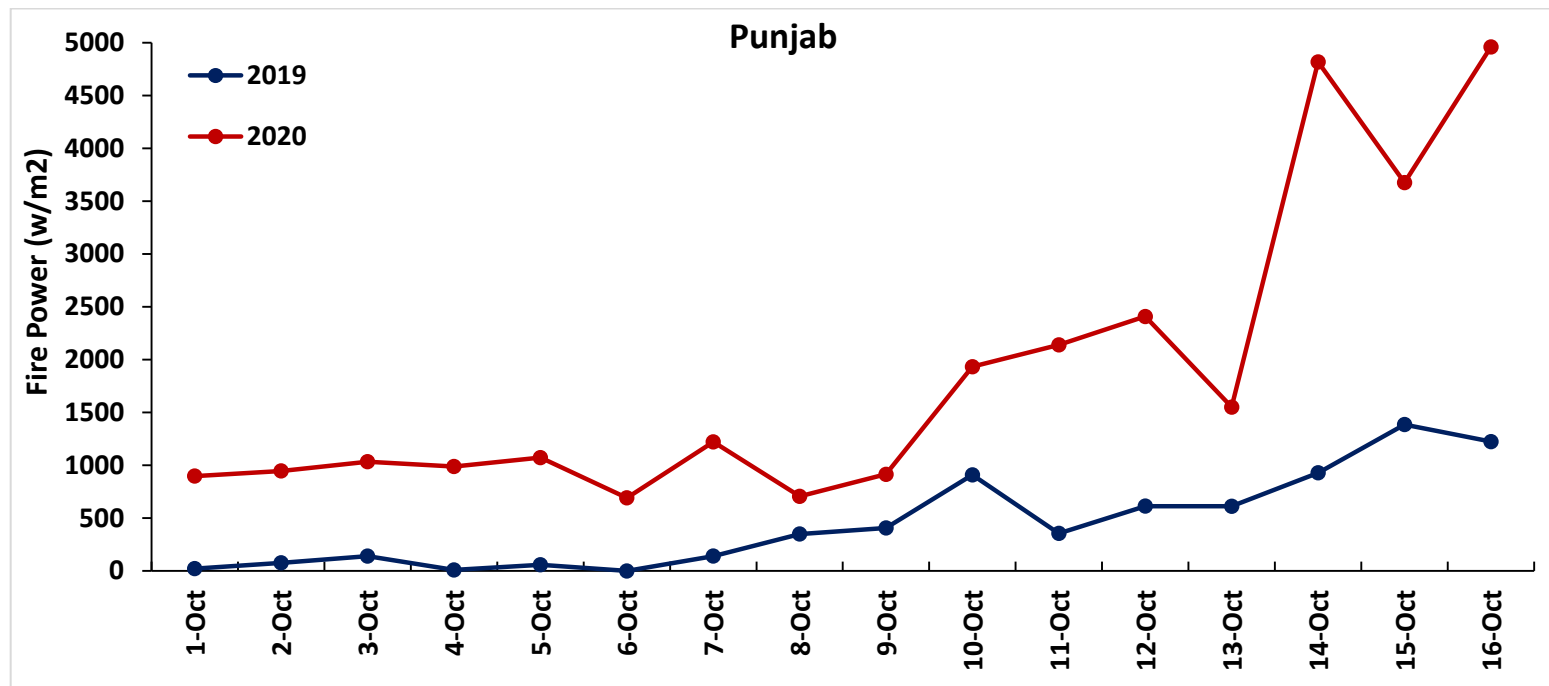
(01-Oct to 16-Oct)

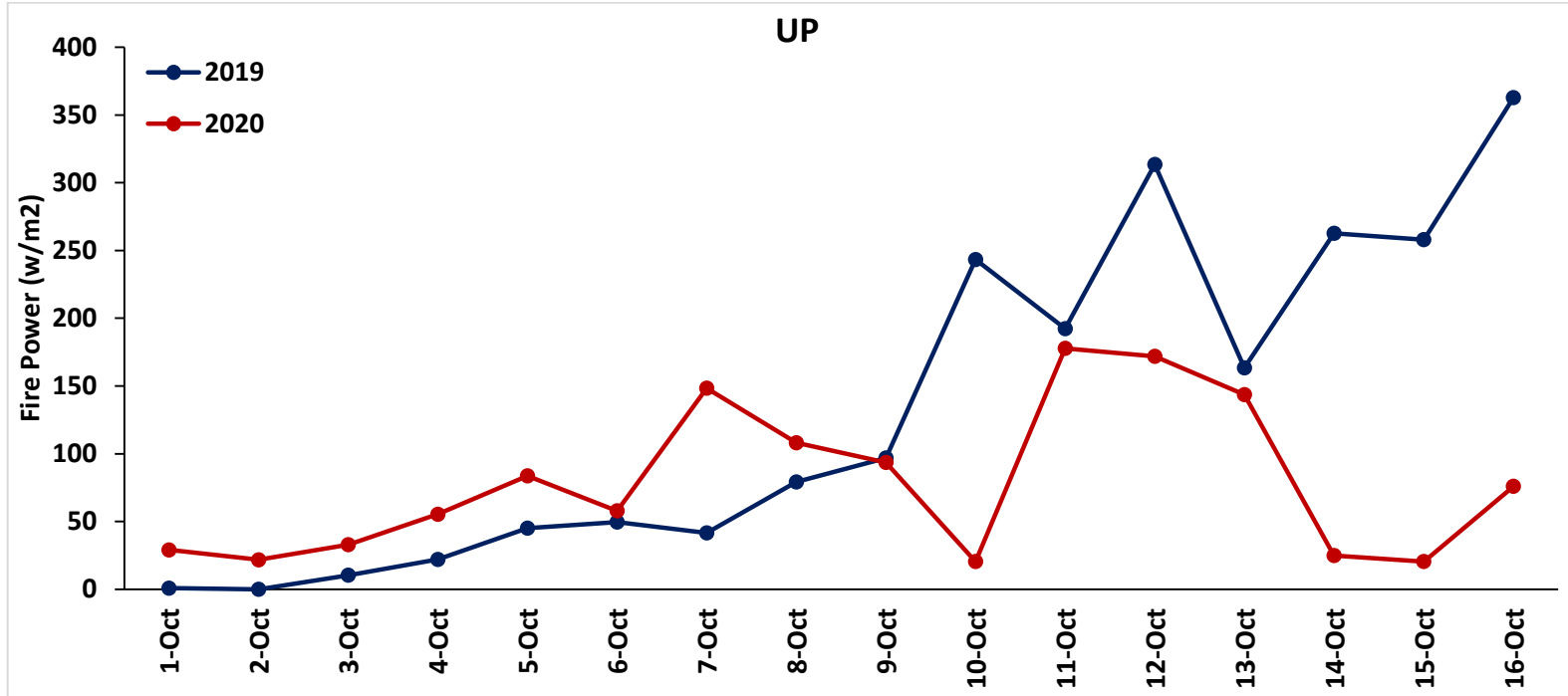
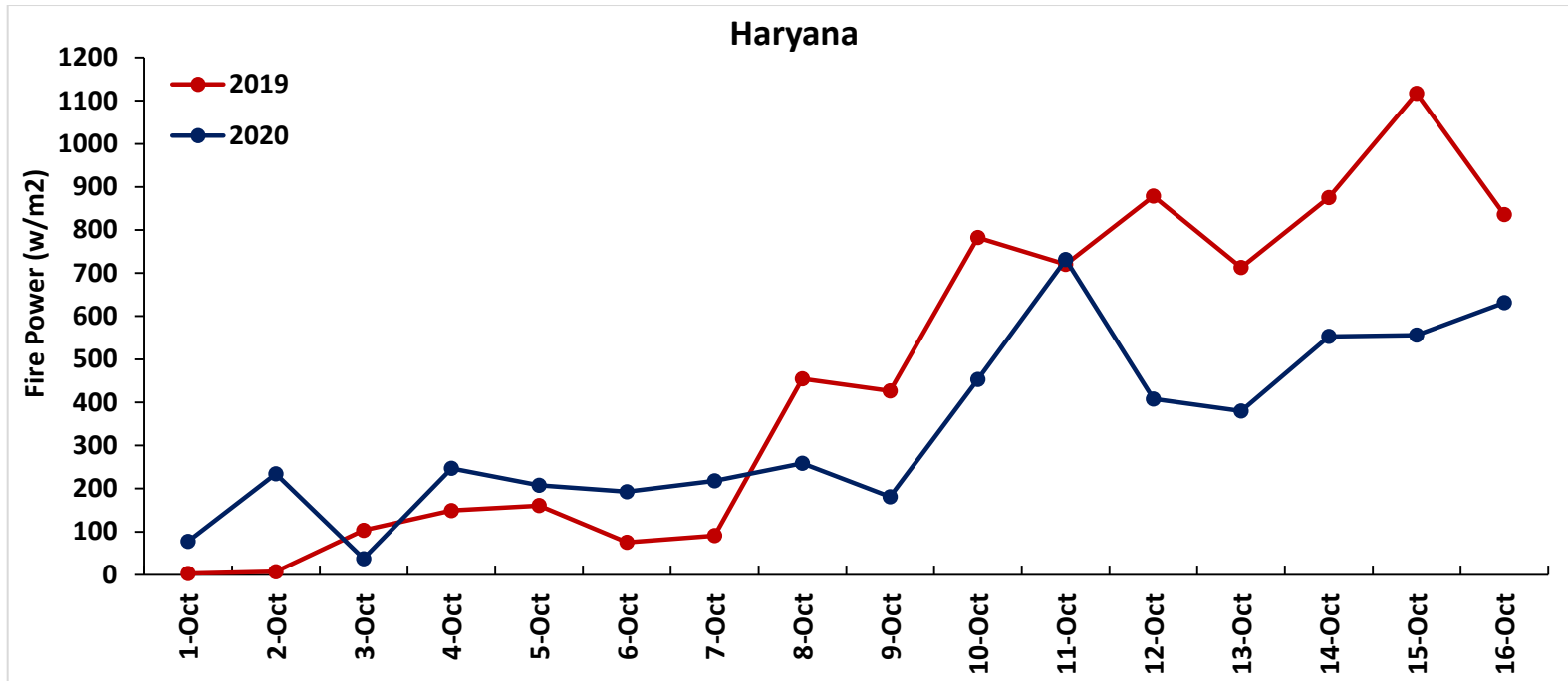




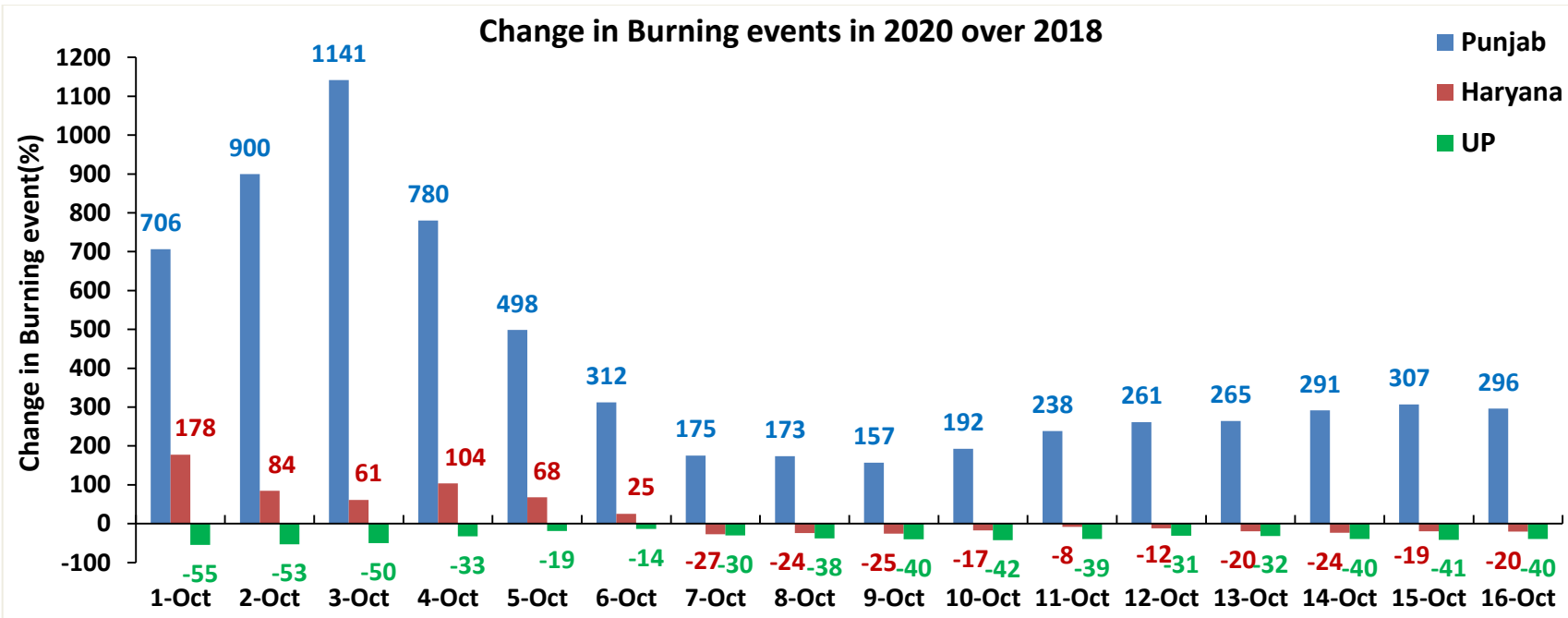
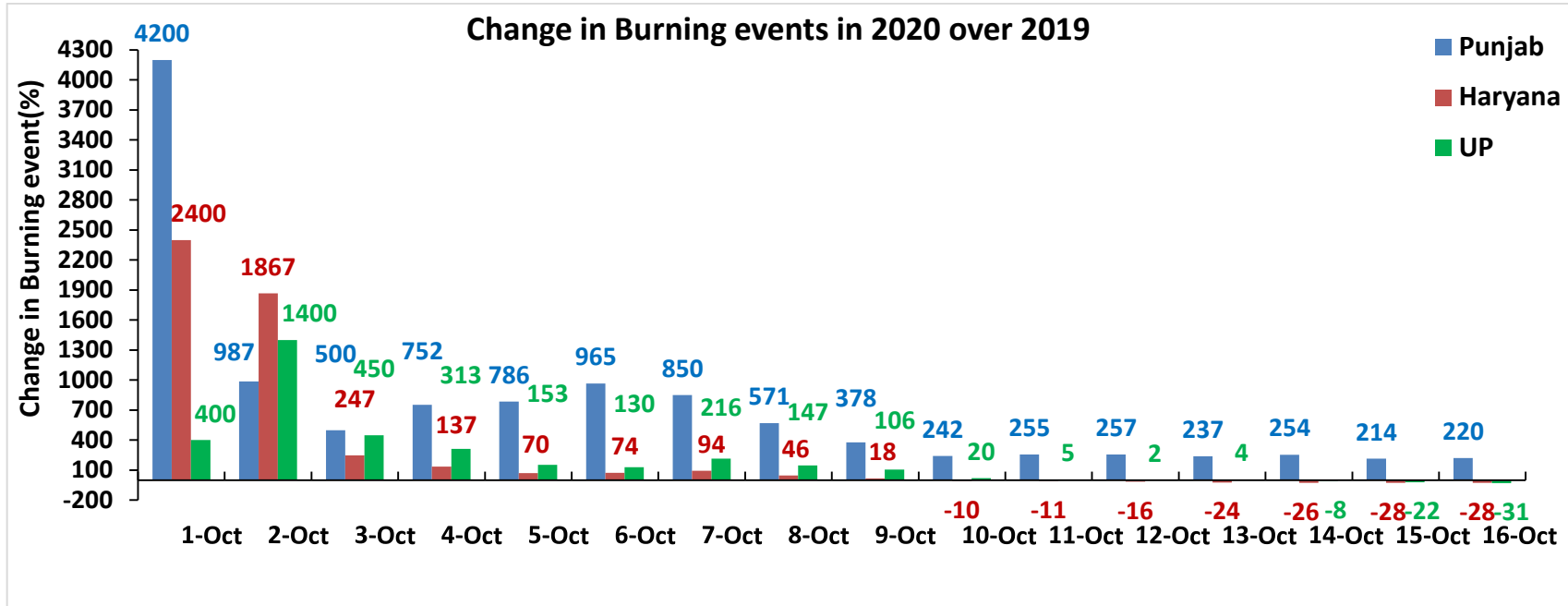
Comparison of Fire Intensity of residue burning events in current year (2020) with previous year (2019)
For the three study States

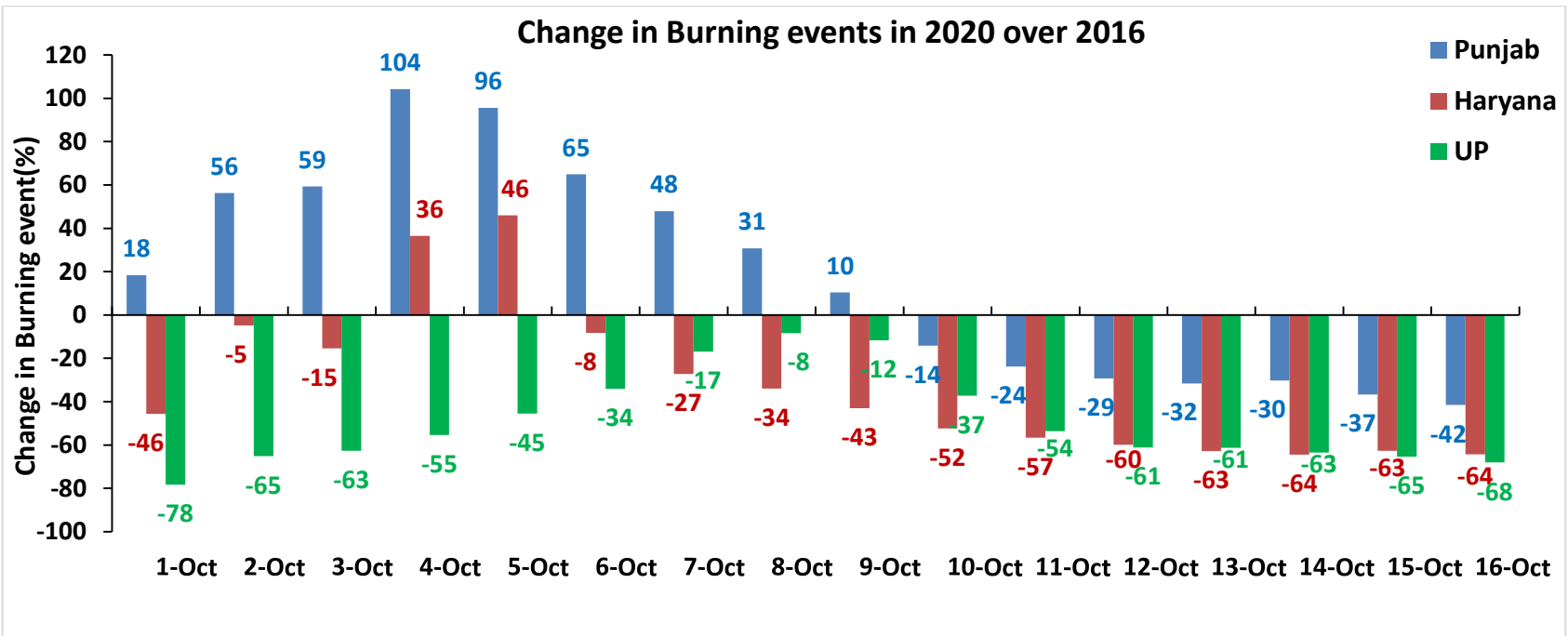
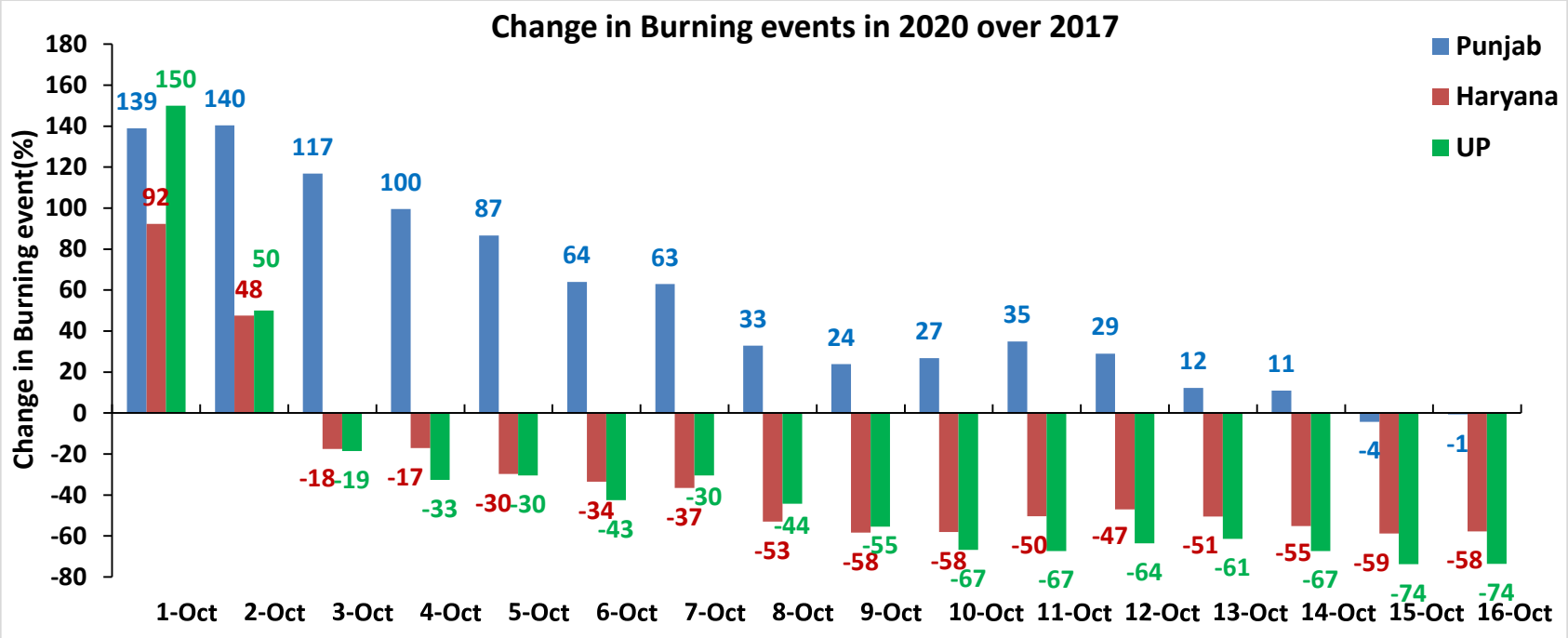
(01-Oct to 16-Oct)



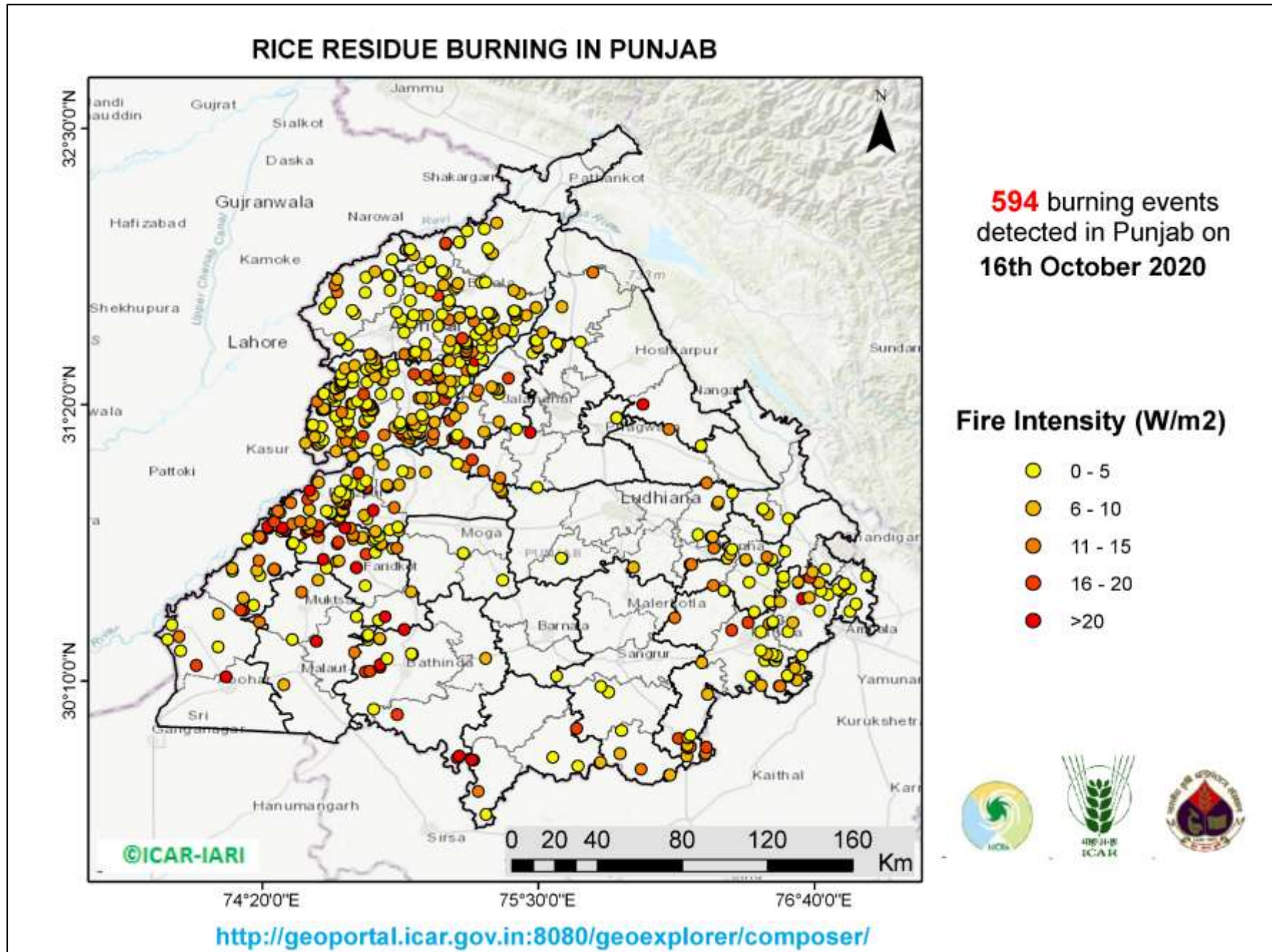


Percent Change in Burning events in 2020 over 2019, 2018, 2017 and 2016 (Daily Cumulative)

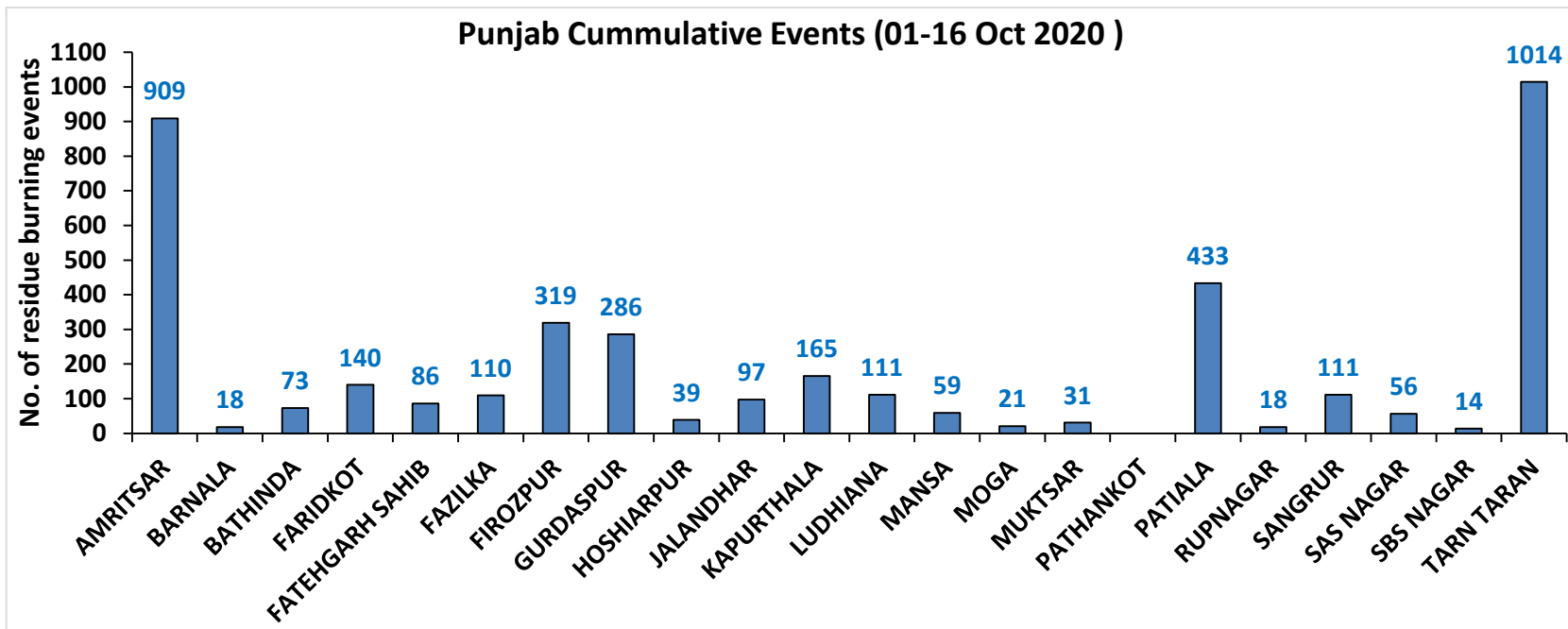
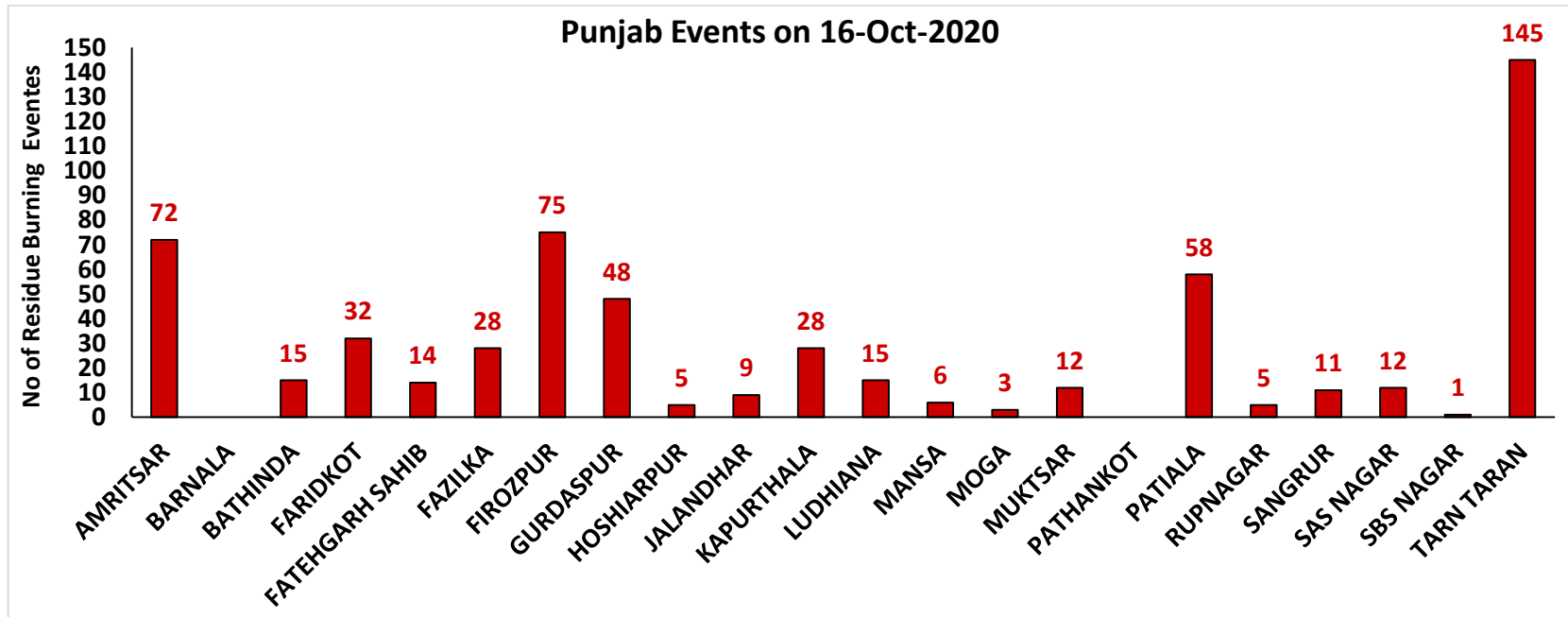




(a) Punjab

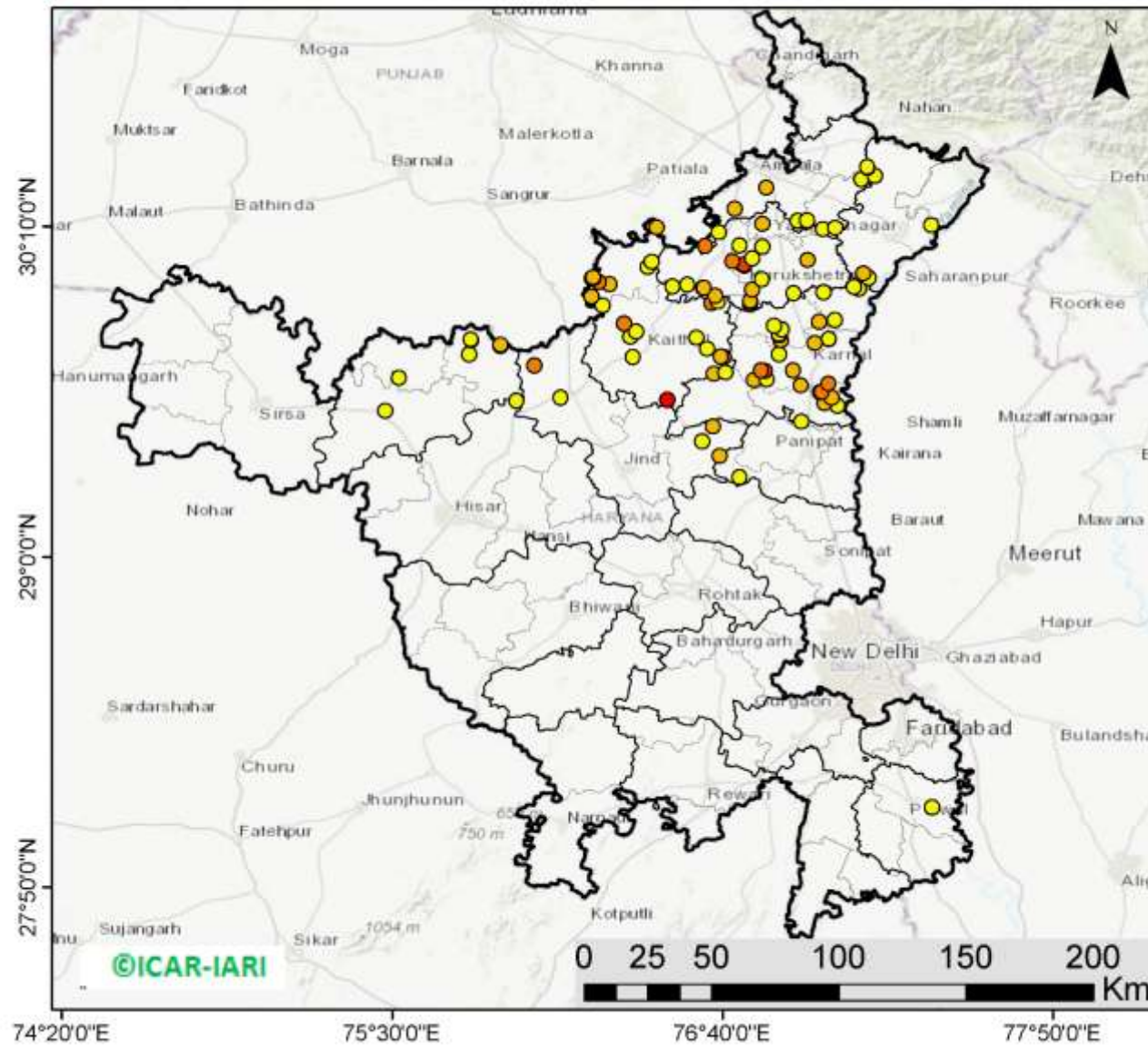


District-wise number of residue burning events in Punjab (01-16 Oct 2020)



(b) Haryana

RICE RESIDUE BURNING IN HARYANA



100 burning events detected in Haryana on 16th October 2020

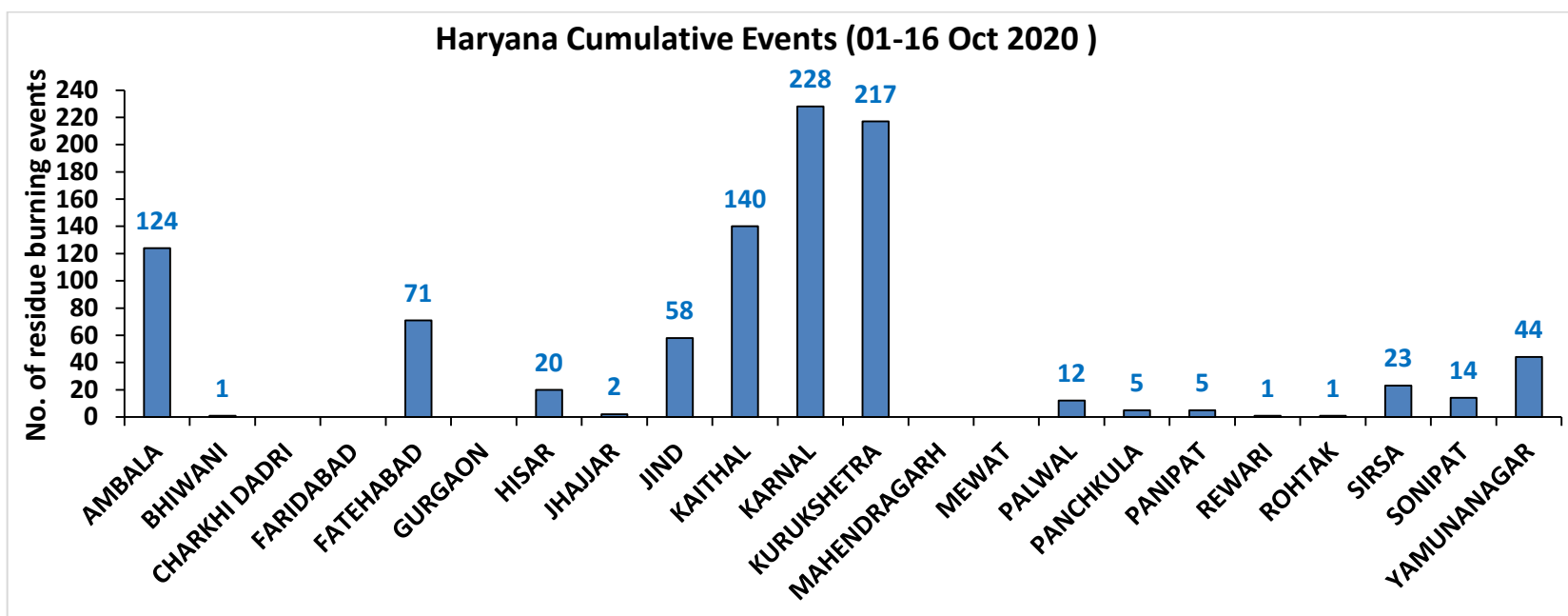
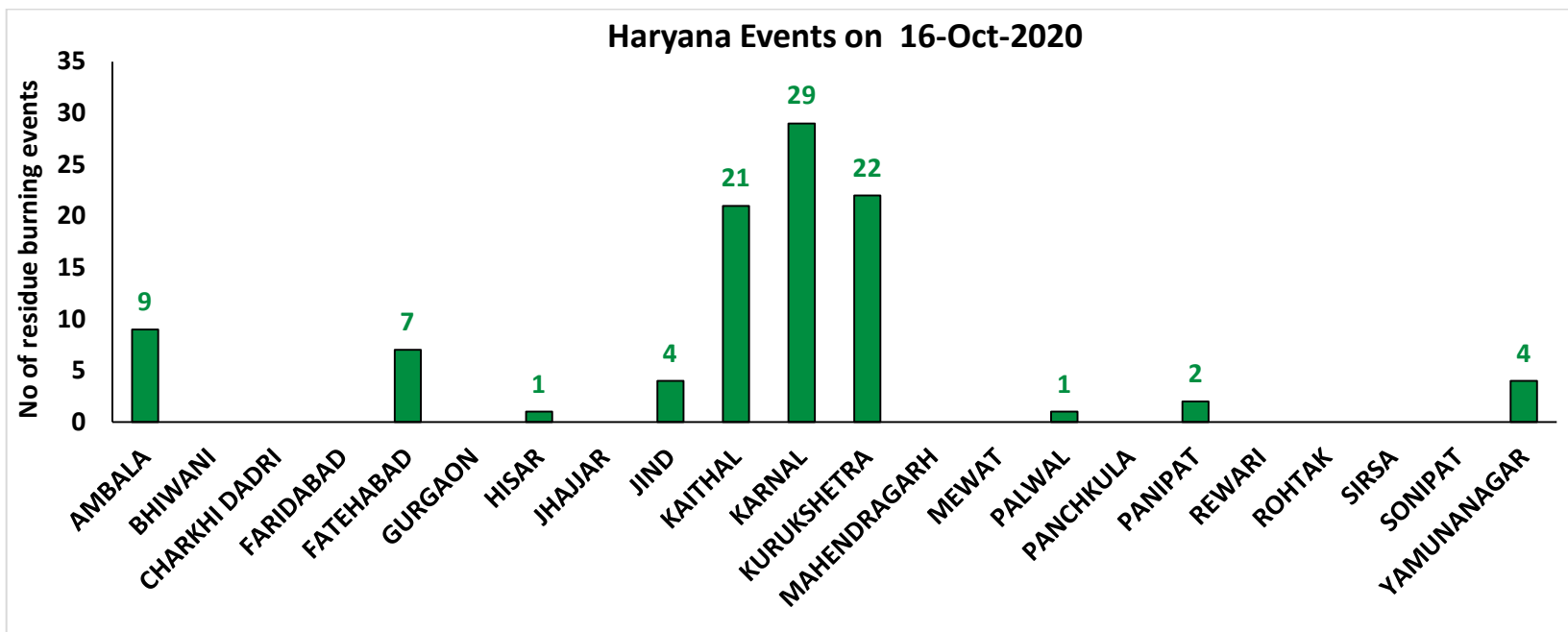
Fire Intensity (W/m²)

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



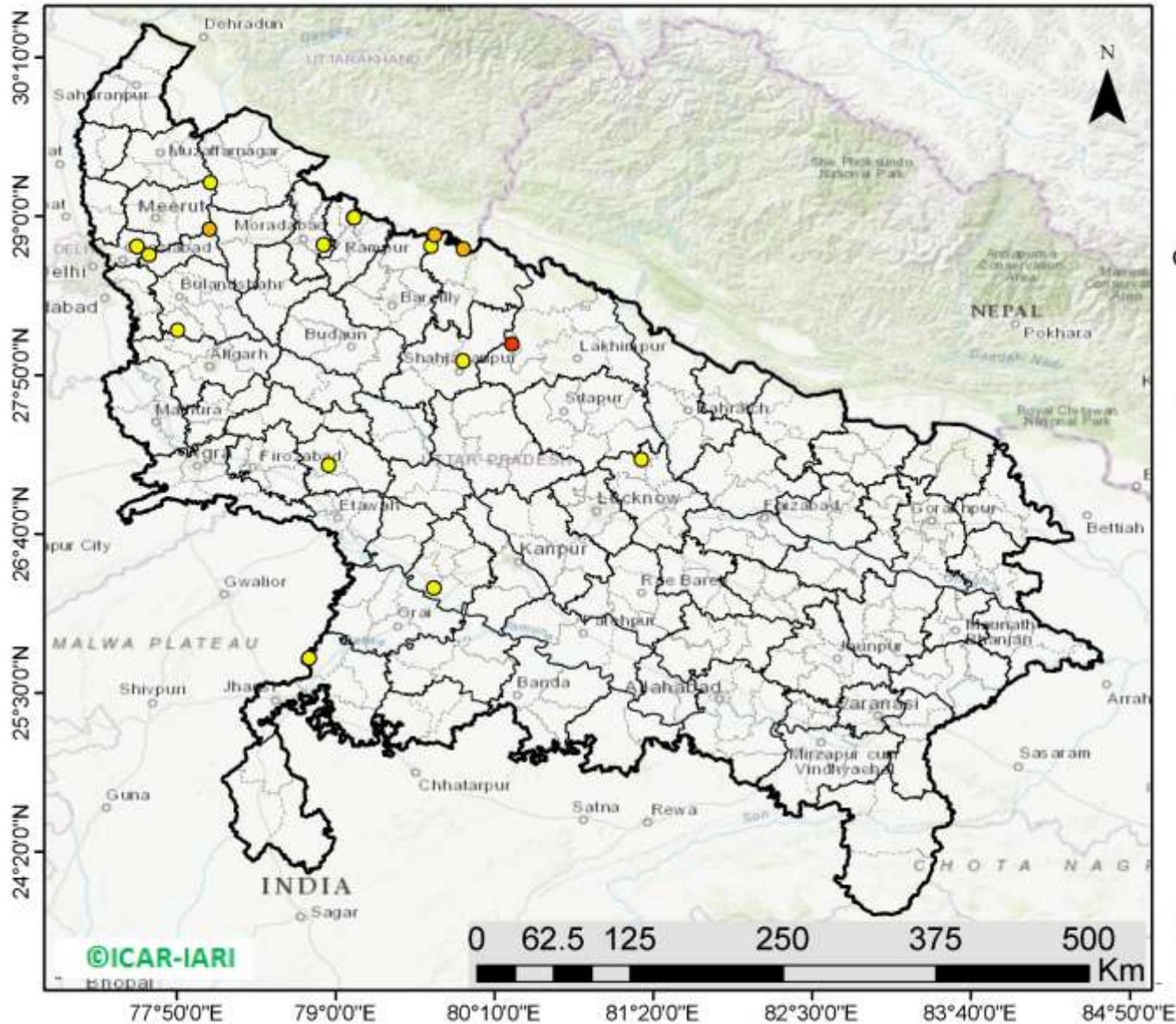
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise number of residue burning events in Haryana (01-16 Oct 2020)



(c) Uttar Pradesh

RICE RESIDUE BURNING IN UTTAR PRADESH



20 burning events detected in Uttar Pradesh on 16th October 2020

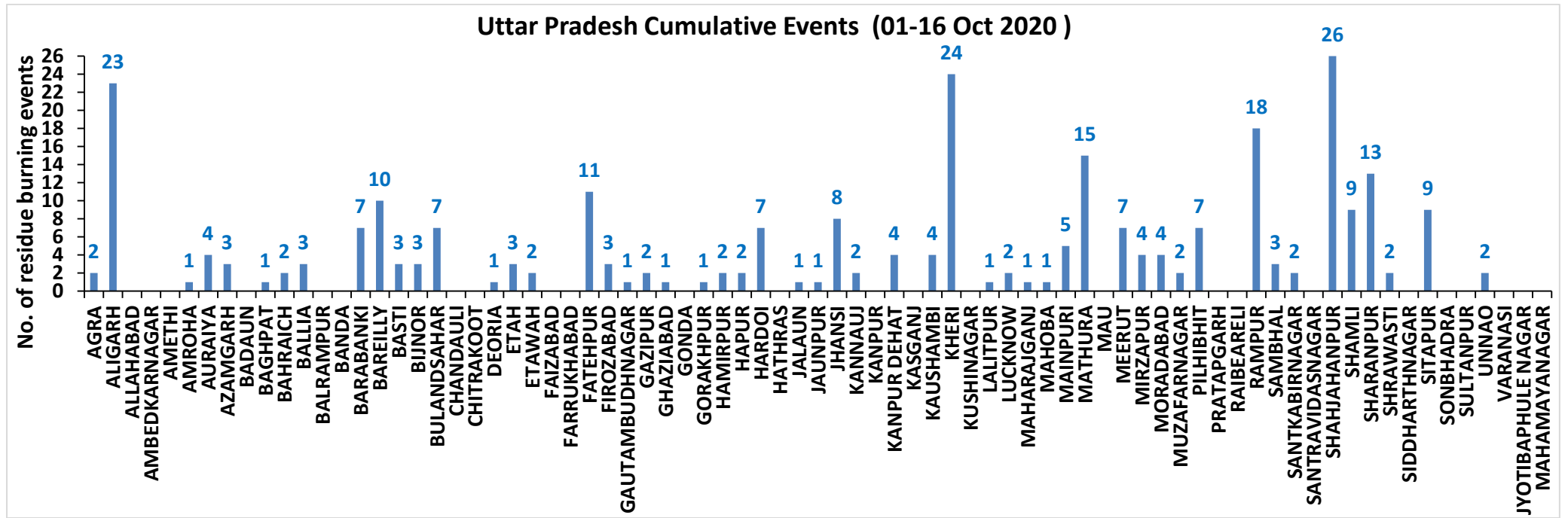
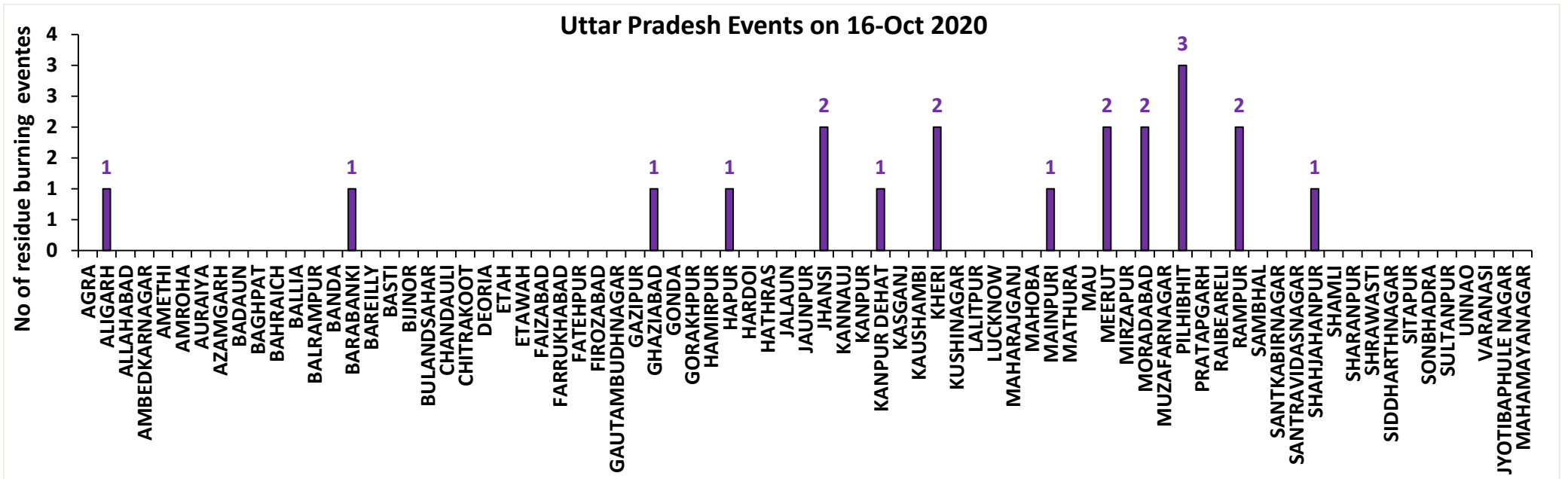
Fire Intensity (W/m²)

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



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

District-wise number of residue burning events in Uttar Pradesh (01-16 Oct 2020)



State-wise and date-wise number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020
(Period: 01-16 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
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
Total	4110	1286	1038	4139	7032	966	1343	1213	2291	2707	282	411	467	1070	883	5358	3040	2718	7500	10622

District-wise and date wise cumulative number of residue burning events detected in 2016, 2017, 2018, 2019 and 2020
(Period: 01-16 October)

(a) Punjab

Districts	01-16 Oct				
	2016	2017	2018	2019	2020
AMRITSAR	761	501	400	353	909
BARNALA	21	13	3	6	18
BATHINDA	372	276	20	11	73
FARIDKOT	534	577	30	46	140
FATEHGARH SAHIB	387	146	14	15	86
FAZILKA	0	0	0	32	110
FIROZPUR	719	480	73	79	319
GURDASPUR	310	113	46	56	286
HOSHIARPUR	53	18	3	9	39
JALANDHAR	463	161	5	62	97
KAPURTHALA	375	56	6	37	165
LUDHIANA	343	272	23	16	111
MANSA	52	66	12	28	59
MOGA	99	56	2	20	21
MUKTSAR	564	154	14	13	31
PATHANKOT	0	0	0	0	0
PATIALA	577	506	113	153	433
RUPNAGAR	83	5	0	1	18
SANGRUR	129	155	52	46	111
SAS NAGAR	43	45	26	16	56
SBS NAGAR	107	44	13	15	14
TARN TARAN	1040	495	183	272	1014
Total	7032	4139	1038	1286	4110

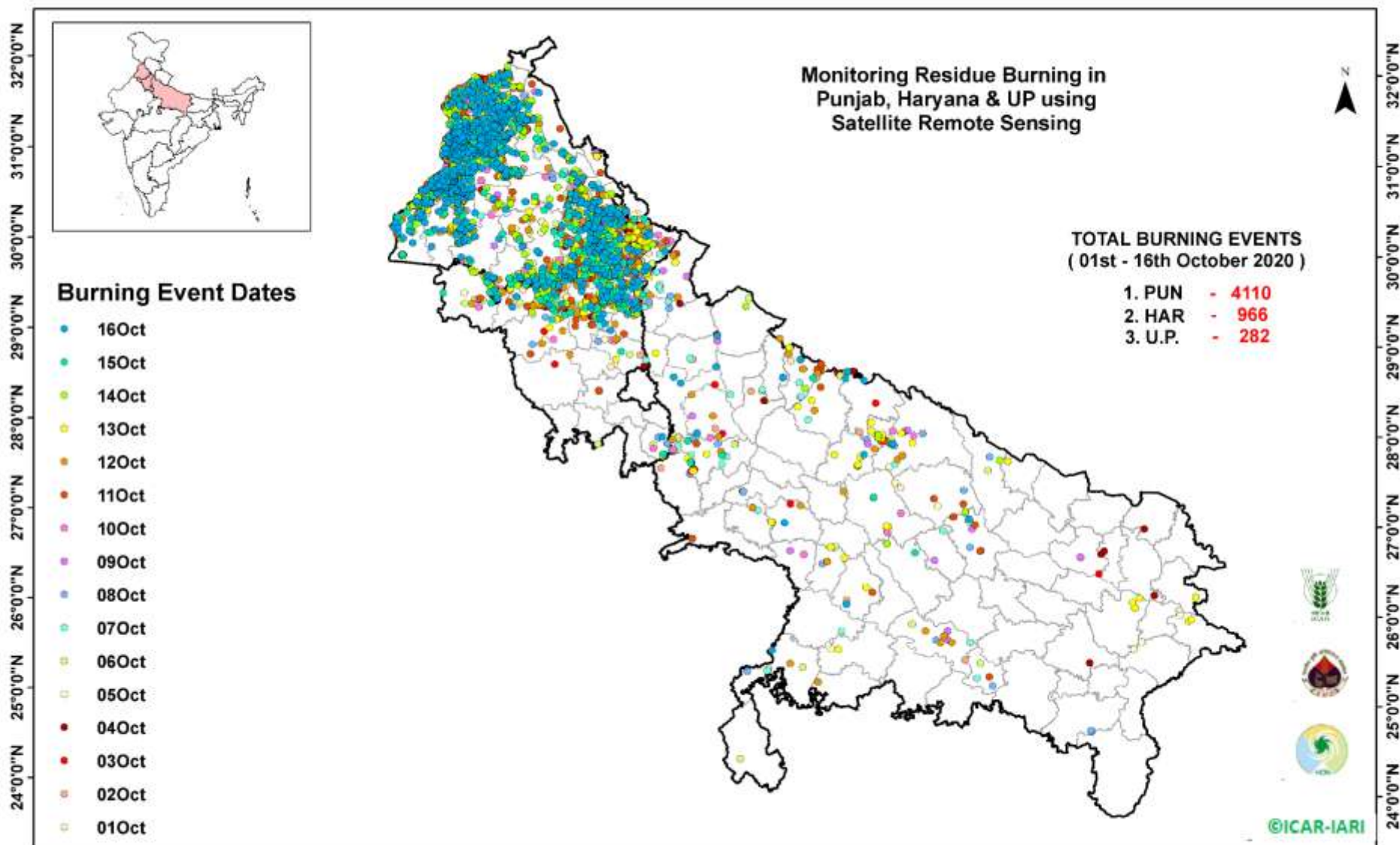
(b) Haryana

Districts	01-16 Oct				
	2016	2017	2018	2019	2020
AMBALA	163	158	42	52	124
BHIWANI	1	2	2	0	1
CHARKHI DADRI	0	0	0	0	0
FARIDABAD	14	34	33	1	0
FATEHABAD	109	99	54	91	71
GURGAON	0	0	0	0	0
HISAR	17	17	9	15	20
JHAJJAR	4	0	3	1	2
JIND	72	105	49	55	58
KAITHAL	732	502	319	328	140
KARNAL	897	727	375	396	228
KURUKSHETRA	562	511	249	296	217
MAHENDRAGARH	0	0	0	1	0
MEWAT	0	0	0	0	0
PALWAL	0	0	0	30	12
PANCHKULA	0	0	3	12	5
PANIPAT	24	31	32	6	5
REWARI	0	0	0	1	1
ROHTAK	1	1	0	0	1
SIRSA	57	18	8	13	23
SONIPAT	6	12	8	1	14
YAMUNANAGAR	48	74	27	44	44
Total	2707	2291	1213	1343	966

(C)
Uttar Pradesh

Districts	01-16 Oct																
	2016	2017	2018	2019	2020	GAUTAMBUDHNAGAR	1	3	2	0	1	MUZAFARNAGAR	22	43	11	5	2
AGRA	0	0	0	0	2	GAZIPUR	0	0	0	0	2	PILHIBHIT	165	194	66	102	7
ALIGARH	2	12	10	17	23	GHAZIABAD	6	2	2	2	1	PRATAPGARH	0	0	2	0	0
ALLAHABAD	0	0	3	0	0	GONDA	0	0	0	0	0	RAIBEARELI	0	0	0	0	0
AMBEDKARNAGAR	0	1	0	0	0	GORAKHPUR	0	2	4	0	1	RAMPUR	191	164	33	64	18
AMETHI	0	0	0	0	0	HAMIRPUR	0	0	1	0	2	SAMBHAL	0	0	0	1	3
AMROHA	0	0	0	0	1	HAPUR	0	0	0	2	2	SANTKABIRNAGAR	0	0	0	0	2
AURAIYA	41	39	15	0	4	HARDOI	6	8	2	1	7	SANTRAVIDASNAGAR	0	0	0	0	0
AZAMGARH	0	0	0	0	3	HATHRAS	0	0	0	0	0	SHAHJAHANPUR	242	327	82	55	26
BADAUN	0	1	0	0	0	JALAUN	0	0	0	0	1	SHAMLI	0	0	0	8	9
BAGHPAT	0	0	0	2	1	JAUNPUR	0	0	2	0	1	SHARANPUR	11	19	9	6	13
BAHRAICH	0	2	2	0	2	JHANSI	0	0	0	2	8	SHRAWASTI	0	3	0	0	2
BALLIA	0	0	0	1	3	KANNAUJ	0	0	1	1	2	SIDDHARTHANAGAR	1	0	0	0	0
BALRAMPUR	0	0	0	0	0	KANPUR	0	3	0	0	0	SITAPUR	12	8	6	3	9
BANDA	0	0	1	0	0	KANPUR DEHAT	0	1	0	0	4	SONBHADRA	3	1	4	0	0
BARABANKI	15	23	42	5	7	KASGANJ	0	0	0	0	0	SULTANPUR	0	0	0	0	0
BAREILLY	47	31	7	19	10	KAUSHAMBI	0	4	9	1	4	UNNAO	3	1	3	3	2
BASTI	0	0	0	0	3	KHERI	80	91	35	45	24	VARANASI	0	0	0	0	0
BIJNOR	1	0	1	0	3	KUSHINAGAR	0	1	0	0	0	JYOTIBAPHULE NAGAR	0	0	1	0	0
BULANDSAHAR	0	6	5	4	7	LALITPUR	0	0	0	0	1	MAHAMAYANAGAR	0	0	1	0	0
CHANDAULI	0	0	0	0	0	LUCKNOW	2	5	0	1	2	Total	883	1070	467	411	282
CHITRAKOOT	0	0	0	0	0	MAHARAJGANJ	0	9	6	1	1						
DEORIA	0	0	0	0	1	MAHOBA	0	0	0	0	1						
ETAH	0	4	8	0	3	MAINPURI	0	3	4	3	5						
ETAWAH	1	4	1	0	2	MATHURA	12	32	75	45	15						
FAIZABAD	0	1	0	0	0	MAU	1	0	0	0	0						
FARRUKHABAD	0	0	0	1	0	MEERUT	10	8	0	4	7						
FATEHPUR	2	4	5	1	11	MIRZAPUR	0	2	3	3	4						
FIROZABAD	3	0	0	1	3	MORADABAD	3	8	3	2	4						

Map of Cumulative Burning Events (01-16 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 16-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m2)
1	AMRITSAR	AJNALA	S-NPP	74.72670	31.71672	13:48:00	D	3.50
2	AMRITSAR	AJNALA	S-NPP	74.71394	31.73036	13:48:00	D	2.40
3	AMRITSAR	AJNALA	S-NPP	74.60207	31.73948	13:48:00	D	3.70
4	AMRITSAR	AJNALA	S-NPP	74.59975	31.74075	13:48:00	D	2.50
5	AMRITSAR	AJNALA	S-NPP	74.62249	31.76228	13:48:00	D	2.70
6	AMRITSAR	AJNALA	S-NPP	74.76887	31.80603	13:48:00	D	4.30
7	AMRITSAR	AJNALA	S-NPP	74.65203	31.80734	13:48:00	D	10.50
8	AMRITSAR	AJNALA	S-NPP	74.87476	31.81463	13:48:00	D	3.50
9	AMRITSAR	AJNALA	S-NPP	74.64210	31.83641	13:48:00	D	14.60
10	AMRITSAR	AJNALA	S-NPP	74.95518	31.85470	13:48:00	D	1.90
11	AMRITSAR	AJNALA	S-NPP	74.65124	31.86177	13:48:00	D	8.00
12	AMRITSAR	AJNALA	S-NPP	74.77450	31.87140	13:48:00	D	2.80
13	AMRITSAR	AJNALA	S-NPP	74.77187	31.87197	13:48:00	D	3.80
14	AMRITSAR	AJNALA	S-NPP	74.87402	31.87225	13:48:00	D	7.00
15	AMRITSAR	AJNALA	S-NPP	74.86469	31.87844	13:48:00	D	2.80
16	AMRITSAR	AJNALA	S-NPP	74.86751	31.87915	13:48:00	D	3.80
17	AMRITSAR	AJNALA	S-NPP	74.81100	31.89555	13:48:00	D	5.60
18	AMRITSAR	AJNALA	S-NPP	74.88399	31.94612	13:48:00	D	2.60
19	AMRITSAR	AMRITSAR I	AQUA	74.96700	31.54000	13:20:00	D	12.70
20	AMRITSAR	AMRITSAR I	S-NPP	75.02259	31.54124	13:48:00	D	7.70
21	AMRITSAR	AMRITSAR I	S-NPP	74.96242	31.54561	13:48:00	D	3.00
22	AMRITSAR	AMRITSAR I	S-NPP	74.97713	31.55502	13:48:00	D	4.50
23	AMRITSAR	AMRITSAR I	S-NPP	74.98243	31.55565	13:48:00	D	4.50
24	AMRITSAR	AMRITSAR I	S-NPP	75.02288	31.59061	13:48:00	D	2.90
25	AMRITSAR	AMRITSAR I	S-NPP	75.00740	31.70768	13:48:00	D	3.70
26	AMRITSAR	AMRITSAR I	S-NPP	75.03422	31.71077	13:48:00	D	6.20
27	AMRITSAR	AMRITSAR I	S-NPP	74.97414	31.71152	13:48:00	D	2.30
28	AMRITSAR	AMRITSAR I	S-NPP	75.09411	31.71378	13:48:00	D	1.30
29	AMRITSAR	AMRITSAR I	S-NPP	74.95934	31.77117	13:48:00	D	4.90
30	AMRITSAR	AMRITSAR I	AQUA	75.07700	31.79300	13:20:00	D	15.40

31	AMRITSAR	AMRITSAR I	S-NPP	75.00341	31.82574	13:48:00	D	7.20
32	AMRITSAR	AMRITSAR II	S-NPP	74.93541	31.54621	13:48:00	D	12.20
33	AMRITSAR	AMRITSAR II	S-NPP	74.69289	31.58251	13:48:00	D	2.80
34	AMRITSAR	AMRITSAR II	S-NPP	74.66239	31.60909	13:48:00	D	3.60
35	AMRITSAR	AMRITSAR II	S-NPP	74.66180	31.61279	13:48:00	D	3.60
36	AMRITSAR	AMRITSAR II	S-NPP	74.93420	31.63777	13:48:00	D	4.40
37	AMRITSAR	AMRITSAR II	S-NPP	74.96291	31.67955	13:48:00	D	2.50
38	AMRITSAR	AMRITSAR II	S-NPP	74.92275	31.69407	13:48:00	D	3.30
39	AMRITSAR	AMRITSAR II	S-NPP	74.90209	31.72227	13:48:00	D	5.00
40	AMRITSAR	BABA BAKALA	S-NPP	75.11897	31.51787	13:48:00	D	11.20
41	AMRITSAR	BABA BAKALA	S-NPP	75.12435	31.51849	13:48:00	D	5.40
42	AMRITSAR	BABA BAKALA	AQUA	75.23300	31.52100	13:20:00	D	21.20
43	AMRITSAR	BABA BAKALA	S-NPP	75.26729	31.52326	13:48:00	D	3.90
44	AMRITSAR	BABA BAKALA	S-NPP	75.19772	31.54243	13:48:00	D	3.00
45	AMRITSAR	BABA BAKALA	S-NPP	75.24675	31.54808	13:48:00	D	3.60
46	AMRITSAR	BABA BAKALA	S-NPP	75.19595	31.55383	13:48:00	D	3.40
47	AMRITSAR	BABA BAKALA	S-NPP	75.22315	31.55699	13:48:00	D	10.80
48	AMRITSAR	BABA BAKALA	S-NPP	75.19536	31.55764	13:48:00	D	10.40
49	AMRITSAR	BABA BAKALA	S-NPP	75.14964	31.56776	13:48:00	D	3.30
50	AMRITSAR	BABA BAKALA	S-NPP	75.12146	31.57216	13:48:00	D	2.30
51	AMRITSAR	BABA BAKALA	S-NPP	75.19843	31.57349	13:48:00	D	8.10
52	AMRITSAR	BABA BAKALA	S-NPP	75.26511	31.57351	13:48:00	D	2.40
53	AMRITSAR	BABA BAKALA	S-NPP	75.30412	31.57415	13:48:00	D	3.10
54	AMRITSAR	BABA BAKALA	S-NPP	75.19908	31.58747	13:48:00	D	3.80
55	AMRITSAR	BABA BAKALA	S-NPP	75.19608	31.58871	13:48:00	D	4.30
56	AMRITSAR	BABA BAKALA	S-NPP	75.19849	31.59128	13:48:00	D	3.80
57	AMRITSAR	BABA BAKALA	S-NPP	75.19730	31.59889	13:48:00	D	3.10
58	AMRITSAR	BABA BAKALA	S-NPP	75.19431	31.60012	13:48:00	D	1.50
59	AMRITSAR	BABA BAKALA	S-NPP	75.13037	31.60291	13:48:00	D	5.40
60	AMRITSAR	BABA BAKALA	S-NPP	75.30202	31.60676	13:48:00	D	3.70
61	AMRITSAR	BABA BAKALA	S-NPP	75.26233	31.61009	13:48:00	D	3.00
62	AMRITSAR	BABA BAKALA	S-NPP	75.17861	31.61226	13:48:00	D	15.50
63	AMRITSAR	BABA BAKALA	S-NPP	75.28252	31.62403	13:48:00	D	7.30

64	AMRITSAR	BABA BAKALA	S-NPP	75.23684	31.63052	13:48:00	D	2.50
65	AMRITSAR	BABA BAKALA	S-NPP	75.25999	31.65164	02:30:00	N	2.40
66	AMRITSAR	BABA BAKALA	S-NPP	75.25475	31.65264	02:30:00	N	2.40
67	AMRITSAR	BABA BAKALA	S-NPP	75.25716	31.65277	02:30:00	N	4.50
68	AMRITSAR	BABA BAKALA	S-NPP	75.07657	31.66611	13:48:00	D	4.60
69	AMRITSAR	BABA BAKALA	AQUA	75.22900	31.68400	13:20:00	D	14.10
70	AMRITSAR	BABA BAKALA	S-NPP	75.12220	31.69080	13:48:00	D	15.00
71	AMRITSAR	BABA BAKALA	S-NPP	75.16824	31.69900	13:48:00	D	6.80
72	AMRITSAR	BABA BAKALA	S-NPP	75.17046	31.70039	13:48:00	D	6.30
73	BATHINDA	BATHINDA	S-NPP	74.80521	30.04589	13:48:00	D	2.50
74	BATHINDA	BATHINDA	AQUA	74.77100	30.20300	13:20:00	D	15.80
75	BATHINDA	BATHINDA	AQUA	74.78900	30.20600	13:20:00	D	19.80
76	BATHINDA	BATHINDA	S-NPP	74.83167	30.22291	13:48:00	D	21.90
77	BATHINDA	BATHINDA	AQUA	74.83300	30.23500	13:20:00	D	21.10
78	BATHINDA	BATHINDA	S-NPP	74.86134	30.26034	13:48:00	D	2.90
79	BATHINDA	BATHINDA	S-NPP	74.96920	30.27884	13:48:00	D	3.70
80	BATHINDA	BATHINDA	S-NPP	74.96583	30.28080	13:48:00	D	4.10
81	BATHINDA	BATHINDA	S-NPP	74.78048	30.33878	13:48:00	D	2.90
82	BATHINDA	BATHINDA	S-NPP	74.83096	30.34124	13:48:00	D	7.40
83	BATHINDA	BATHINDA	S-NPP	74.83038	30.34492	13:48:00	D	7.40
84	BATHINDA	RAMPURA PHUL	S-NPP	75.27822	30.26154	13:48:00	D	5.30
85	BATHINDA	TALWANDI SABO	TERRA	75.15800	29.83900	11:45:00	D	45.80
86	BATHINDA	TALWANDI SABO	TERRA	75.16800	29.84900	11:45:00	D	33.50
87	BATHINDA	TALWANDI SABO	S-NPP	74.90475	30.02452	13:48:00	D	19.30
88	FARIDKOT	FARIDKOT	S-NPP	74.76868	30.56715	13:48:00	D	4.20
89	FARIDKOT	FARIDKOT	AQUA	74.74100	30.63700	13:20:00	D	56.10
90	FARIDKOT	FARIDKOT	AQUA	74.73200	30.64500	13:20:00	D	30.80
91	FARIDKOT	FARIDKOT	S-NPP	74.64959	30.67005	13:48:00	D	3.10
92	FARIDKOT	FARIDKOT	S-NPP	74.65748	30.67219	13:48:00	D	5.50
93	FARIDKOT	FARIDKOT	AQUA	74.59200	30.67800	13:20:00	D	23.70
94	FARIDKOT	FARIDKOT	AQUA	74.77300	30.70100	13:20:00	D	17.60
95	FARIDKOT	FARIDKOT	S-NPP	74.81216	30.70817	13:48:00	D	2.90
96	FARIDKOT	FARIDKOT	S-NPP	74.88722	30.72463	13:48:00	D	4.70

97	FARIDKOT	FARIDKOT	S-NPP	74.90254	30.72645	13:48:00	D	11.90
98	FARIDKOT	FARIDKOT	S-NPP	74.49402	30.72929	13:48:00	D	2.90
99	FARIDKOT	FARIDKOT	S-NPP	74.83282	30.74078	13:48:00	D	6.10
100	FARIDKOT	FARIDKOT	S-NPP	74.83730	30.74508	13:48:00	D	6.10
101	FARIDKOT	FARIDKOT	S-NPP	74.65269	30.74517	13:48:00	D	14.40
102	FARIDKOT	FARIDKOT	S-NPP	74.65649	30.75311	13:48:00	D	18.90
103	FARIDKOT	FARIDKOT	S-NPP	74.80394	30.75989	13:48:00	D	2.50
104	FARIDKOT	FARIDKOT	S-NPP	74.72094	30.76479	13:48:00	D	3.10
105	FARIDKOT	FARIDKOT	S-NPP	74.81289	30.76852	13:48:00	D	3.20
106	FARIDKOT	FARIDKOT	S-NPP	74.75613	30.76911	13:48:00	D	8.10
107	FARIDKOT	FARIDKOT	S-NPP	74.57057	30.77197	13:48:00	D	9.30
108	FARIDKOT	FARIDKOT	S-NPP	74.57236	30.77255	13:48:00	D	10.90
109	FARIDKOT	FARIDKOT	S-NPP	74.75554	30.77280	13:48:00	D	8.10
110	FARIDKOT	FARIDKOT	S-NPP	74.71858	30.77951	13:48:00	D	12.30
111	FARIDKOT	FARIDKOT	S-NPP	74.71639	30.78188	13:48:00	D	21.30
112	FARIDKOT	FARIDKOT	S-NPP	74.71799	30.78319	13:48:00	D	12.30
113	FARIDKOT	FARIDKOT	TERRA	74.56800	30.79900	11:45:00	D	21.40
114	FARIDKOT	FARIDKOT	S-NPP	74.70664	30.81071	13:48:00	D	13.30
115	FARIDKOT	FARIDKOT	AQUA	74.68300	30.81200	13:20:00	D	21.90
116	FARIDKOT	JAITO	AQUA	74.93400	30.38300	13:20:00	D	46.30
117	FARIDKOT	JAITO	S-NPP	74.82564	30.42192	13:48:00	D	3.70
118	FARIDKOT	JAITO	S-NPP	74.85401	30.43664	13:48:00	D	24.10
119	FARIDKOT	JAITO	S-NPP	74.96349	30.54186	13:48:00	D	7.00
120	FATEHGARH SAHIB	ALMOH	AQUA	76.24000	30.56900	13:20:00	D	11.30
121	FATEHGARH SAHIB	ALMOH	S-NPP	76.31932	30.72140	13:48:00	D	4.40
122	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	76.48946	30.67443	13:48:00	D	2.90
123	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	76.48888	30.67847	13:48:00	D	2.90
124	FATEHGARH SAHIB	BASSI PATHANAN	S-NPP	76.46674	30.68842	13:48:00	D	13.60
125	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.41317	30.45680	13:48:00	D	3.10
126	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.47662	30.50038	13:48:00	D	2.30
127	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.48067	30.50081	13:48:00	D	3.30
128	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.53189	30.58058	13:48:00	D	2.20
129	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.53600	30.58101	13:48:00	D	2.30

130	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.39153	30.58193	13:48:00	D	3.40
131	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.44930	30.63723	13:48:00	D	2.40
132	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.37807	30.67486	13:48:00	D	8.00
133	FATEHGARH SAHIB	FATEHGARH SAHIB	S-NPP	76.37748	30.67887	13:48:00	D	7.20
134	FAZILKA	ABOHAR	S-NPP	74.18130	30.18336	13:48:00	D	24.30
135	FAZILKA	FAZILKA	TERRA	74.05600	30.23100	11:45:00	D	16.30
136	FAZILKA	FAZILKA	S-NPP	73.98936	30.29242	13:48:00	D	4.10
137	FAZILKA	FAZILKA	S-NPP	74.14787	30.30878	13:48:00	D	2.30
138	FAZILKA	FAZILKA	S-NPP	73.93442	30.33962	13:48:00	D	2.80
139	FAZILKA	FAZILKA	S-NPP	73.98384	30.35325	13:48:00	D	10.90
140	FAZILKA	FAZILKA	S-NPP	73.95325	30.40242	13:48:00	D	4.90
141	FAZILKA	FAZILKA	S-NPP	74.14986	30.44914	13:48:00	D	5.30
142	FAZILKA	JALALABAD	S-NPP	74.25376	30.46223	13:48:00	D	24.50
143	FAZILKA	JALALABAD	S-NPP	74.24368	30.46462	13:48:00	D	16.20
144	FAZILKA	JALALABAD	S-NPP	74.29837	30.48618	13:48:00	D	3.00
145	FAZILKA	JALALABAD	S-NPP	74.25436	30.51730	13:48:00	D	5.70
146	FAZILKA	JALALABAD	S-NPP	74.32354	30.61176	13:48:00	D	4.00
147	FAZILKA	JALALABAD	S-NPP	74.20966	30.63137	13:48:00	D	3.50
148	FAZILKA	JALALABAD	S-NPP	74.31184	30.63293	13:48:00	D	9.70
149	FAZILKA	JALALABAD	S-NPP	74.38535	30.63453	13:48:00	D	12.70
150	FAZILKA	JALALABAD	S-NPP	74.38859	30.63473	13:48:00	D	29.00
151	FAZILKA	JALALABAD	S-NPP	74.39019	30.63511	13:48:00	D	12.70
152	FAZILKA	JALALABAD	S-NPP	74.38316	30.63773	13:48:00	D	6.00
153	FAZILKA	JALALABAD	S-NPP	74.38476	30.63814	13:48:00	D	12.70
154	FAZILKA	JALALABAD	S-NPP	74.20788	30.64213	13:48:00	D	7.30
155	FAZILKA	JALALABAD	AQUA	74.32100	30.67500	13:20:00	D	13.90
156	FAZILKA	JALALABAD	S-NPP	74.46170	30.74382	13:48:00	D	32.70
157	FAZILKA	JALALABAD	S-NPP	74.46111	30.74745	13:48:00	D	12.30
158	FAZILKA	JALALABAD	S-NPP	74.46600	30.74806	13:48:00	D	3.30
159	FAZILKA	JALALABAD	S-NPP	74.27322	30.76535	13:48:00	D	2.90
160	FAZILKA	JALALABAD	AQUA	74.33100	30.76900	13:20:00	D	21.40
161	FAZILKA	JALALABAD	AQUA	74.32200	30.77600	13:20:00	D	12.70
162	FIROZPUR	FIROZPUR	S-NPP	74.82693	30.77777	13:48:00	D	3.80

163	FIROZPUR	FIROZPUR	S-NPP	74.81384	30.79501	13:48:00	D	5.30
164	FIROZPUR	FIROZPUR	S-NPP	74.52139	30.79581	13:48:00	D	22.10
165	FIROZPUR	FIROZPUR	S-NPP	74.81181	30.79690	13:48:00	D	5.90
166	FIROZPUR	FIROZPUR	AQUA	74.43400	30.79700	13:20:00	D	20.20
167	FIROZPUR	FIROZPUR	S-NPP	74.41607	30.79775	13:48:00	D	3.70
168	FIROZPUR	FIROZPUR	S-NPP	74.91187	30.79947	13:48:00	D	2.10
169	FIROZPUR	FIROZPUR	S-NPP	74.43011	30.80318	13:48:00	D	18.80
170	FIROZPUR	FIROZPUR	S-NPP	74.87296	30.80409	13:48:00	D	4.30
171	FIROZPUR	FIROZPUR	TERRA	74.52800	30.80700	11:45:00	D	16.70
172	FIROZPUR	FIROZPUR	AQUA	74.53400	30.80800	13:20:00	D	12.20
173	FIROZPUR	FIROZPUR	S-NPP	74.41917	30.80924	13:48:00	D	7.90
174	FIROZPUR	FIROZPUR	S-NPP	74.41857	30.81287	13:48:00	D	32.30
175	FIROZPUR	FIROZPUR	S-NPP	74.90952	30.81433	13:48:00	D	3.60
176	FIROZPUR	FIROZPUR	S-NPP	74.90762	30.81572	13:48:00	D	3.70
177	FIROZPUR	FIROZPUR	S-NPP	74.35841	30.81648	13:48:00	D	26.90
178	FIROZPUR	FIROZPUR	S-NPP	74.57336	30.81704	13:48:00	D	15.50
179	FIROZPUR	FIROZPUR	S-NPP	74.57278	30.82069	13:48:00	D	15.50
180	FIROZPUR	FIROZPUR	S-NPP	74.52157	30.82559	13:48:00	D	5.70
181	FIROZPUR	FIROZPUR	AQUA	74.46400	30.82800	13:20:00	D	13.70
182	FIROZPUR	FIROZPUR	S-NPP	74.54012	30.83532	13:48:00	D	6.90
183	FIROZPUR	FIROZPUR	AQUA	74.38400	30.83700	13:20:00	D	18.40
184	FIROZPUR	FIROZPUR	TERRA	74.49400	30.83900	11:45:00	D	13.80
185	FIROZPUR	FIROZPUR	S-NPP	74.77760	30.84931	13:48:00	D	3.40
186	FIROZPUR	FIROZPUR	S-NPP	74.65943	30.84997	13:48:00	D	15.80
187	FIROZPUR	FIROZPUR	S-NPP	74.66267	30.86160	13:48:00	D	4.00
188	FIROZPUR	FIROZPUR	S-NPP	74.76451	30.86655	13:48:00	D	6.30
189	FIROZPUR	FIROZPUR	AQUA	74.62400	30.87100	13:20:00	D	18.80
190	FIROZPUR	FIROZPUR	S-NPP	74.40968	30.87837	13:48:00	D	5.70
191	FIROZPUR	FIROZPUR	S-NPP	74.62636	30.87840	13:48:00	D	10.00
192	FIROZPUR	FIROZPUR	S-NPP	74.62415	30.87931	13:48:00	D	2.00
193	FIROZPUR	FIROZPUR	AQUA	74.67700	30.88100	13:20:00	D	11.60
194	FIROZPUR	FIROZPUR	TERRA	74.40100	30.88300	11:45:00	D	13.20
195	FIROZPUR	FIROZPUR	S-NPP	74.60521	30.88336	13:48:00	D	3.30

196	FIROZPUR	FIROZPUR	S-NPP	74.67144	30.88375	13:48:00	D	6.40
197	FIROZPUR	FIROZPUR	S-NPP	74.80273	30.88628	13:48:00	D	21.60
198	FIROZPUR	FIROZPUR	S-NPP	74.67357	30.88918	13:48:00	D	5.40
199	FIROZPUR	FIROZPUR	S-NPP	74.53325	30.88964	13:48:00	D	10.00
200	FIROZPUR	FIROZPUR	AQUA	74.68200	30.91500	13:20:00	D	17.40
201	FIROZPUR	FIROZPUR	AQUA	74.45400	30.91800	13:20:00	D	12.00
202	FIROZPUR	FIROZPUR	AQUA	74.68600	30.91800	13:20:00	D	40.10
203	FIROZPUR	FIROZPUR	AQUA	74.67900	30.92600	13:20:00	D	17.50
204	FIROZPUR	FIROZPUR	S-NPP	74.65930	30.92727	13:48:00	D	3.40
205	FIROZPUR	FIROZPUR	AQUA	74.52700	30.93200	13:20:00	D	16.90
206	FIROZPUR	FIROZPUR	S-NPP	74.65250	30.93769	13:48:00	D	5.60
207	FIROZPUR	FIROZPUR	S-NPP	74.65191	30.94136	13:48:00	D	8.00
208	FIROZPUR	FIROZPUR	S-NPP	74.69656	30.95053	13:48:00	D	3.80
209	FIROZPUR	FIROZPUR	S-NPP	74.54855	30.95114	13:48:00	D	8.30
210	FIROZPUR	FIROZPUR	S-NPP	74.68589	30.95299	13:48:00	D	4.70
211	FIROZPUR	FIROZPUR	S-NPP	74.66341	30.96526	13:48:00	D	4.20
212	FIROZPUR	FIROZPUR	AQUA	74.53600	30.97000	13:20:00	D	25.40
213	FIROZPUR	FIROZPUR	S-NPP	74.77461	30.97882	13:48:00	D	17.60
214	FIROZPUR	FIROZPUR	S-NPP	74.77402	30.98252	13:48:00	D	17.60
215	FIROZPUR	FIROZPUR	S-NPP	74.75192	30.99113	13:48:00	D	2.70
216	FIROZPUR	FIROZPUR	S-NPP	74.75134	30.99483	13:48:00	D	2.70
217	FIROZPUR	FIROZPUR	S-NPP	74.71168	30.99980	13:48:00	D	2.10
218	FIROZPUR	FIROZPUR	S-NPP	74.57241	31.00569	13:48:00	D	6.20
219	FIROZPUR	FIROZPUR	S-NPP	74.77204	31.01068	13:48:00	D	2.80
220	FIROZPUR	FIROZPUR	S-NPP	74.68907	31.01215	13:48:00	D	3.40
221	FIROZPUR	FIROZPUR	S-NPP	74.74065	31.04464	13:48:00	D	19.30
222	FIROZPUR	ZIRA	AQUA	74.89200	30.89800	13:20:00	D	12.00
223	FIROZPUR	ZIRA	S-NPP	75.34634	30.95933	13:48:00	D	7.90
224	FIROZPUR	ZIRA	S-NPP	75.34875	30.96209	13:48:00	D	7.70
225	FIROZPUR	ZIRA	S-NPP	75.34216	30.96909	13:48:00	D	6.50
226	FIROZPUR	ZIRA	AQUA	74.86400	30.98500	13:20:00	D	16.60
227	FIROZPUR	ZIRA	S-NPP	75.32841	30.98689	13:48:00	D	7.00
228	FIROZPUR	ZIRA	S-NPP	74.86145	30.98935	13:48:00	D	8.20

229	FIROZPUR	ZIRA	S-NPP	74.86086	30.99307	13:48:00	D	8.20
230	FIROZPUR	ZIRA	S-NPP	74.91294	30.99557	13:48:00	D	6.70
231	FIROZPUR	ZIRA	S-NPP	74.95555	31.04356	13:48:00	D	7.30
232	FIROZPUR	ZIRA	S-NPP	75.02400	31.04772	13:48:00	D	5.30
233	FIROZPUR	ZIRA	S-NPP	74.92781	31.05172	13:48:00	D	4.80
234	FIROZPUR	ZIRA	S-NPP	74.84446	31.07974	13:48:00	D	5.60
235	FIROZPUR	ZIRA	S-NPP	75.15836	31.08244	13:48:00	D	3.90
236	FIROZPUR	ZIRA	S-NPP	74.82397	31.12380	13:48:00	D	3.40
237	GURDASPUR	BATALA	S-NPP	75.33106	31.63731	13:48:00	D	8.30
238	GURDASPUR	BATALA	S-NPP	75.39217	31.64419	13:48:00	D	3.60
239	GURDASPUR	BATALA	S-NPP	75.35700	31.65195	13:48:00	D	5.10
240	GURDASPUR	BATALA	S-NPP	75.40742	31.69292	13:48:00	D	4.10
241	GURDASPUR	BATALA	S-NPP	75.30996	31.70121	13:48:00	D	3.00
242	GURDASPUR	BATALA	S-NPP	75.45051	31.70964	13:48:00	D	8.60
243	GURDASPUR	BATALA	S-NPP	75.40447	31.71218	13:48:00	D	12.40
244	GURDASPUR	BATALA	S-NPP	75.30208	31.71589	13:48:00	D	9.20
245	GURDASPUR	BATALA	S-NPP	75.29948	31.71758	13:48:00	D	5.30
246	GURDASPUR	BATALA	S-NPP	75.21506	31.71978	13:48:00	D	3.30
247	GURDASPUR	BATALA	S-NPP	75.28782	31.72018	13:48:00	D	4.70
248	GURDASPUR	BATALA	S-NPP	75.21448	31.72360	13:48:00	D	3.30
249	GURDASPUR	BATALA	S-NPP	75.40271	31.72374	13:48:00	D	5.00
250	GURDASPUR	BATALA	S-NPP	75.40587	31.72549	13:48:00	D	4.80
251	GURDASPUR	BATALA	S-NPP	75.39654	31.72694	13:48:00	D	4.70
252	GURDASPUR	BATALA	S-NPP	75.39968	31.72873	13:48:00	D	4.80
253	GURDASPUR	BATALA	AQUA	75.49100	31.74400	13:20:00	D	9.90
254	GURDASPUR	BATALA	AQUA	75.12100	31.75600	13:20:00	D	8.60
255	GURDASPUR	BATALA	S-NPP	75.12376	31.77129	13:48:00	D	3.20
256	GURDASPUR	BATALA	S-NPP	75.42276	31.80194	13:48:00	D	9.50
257	GURDASPUR	BATALA	S-NPP	75.04406	31.81116	13:48:00	D	2.50
258	GURDASPUR	BATALA	S-NPP	75.14722	31.82289	13:48:00	D	5.50
259	GURDASPUR	BATALA	S-NPP	75.15697	31.83175	13:48:00	D	4.30
260	GURDASPUR	BATALA	S-NPP	75.10068	31.83693	13:48:00	D	5.90
261	GURDASPUR	BATALA	S-NPP	75.16068	31.84380	13:48:00	D	8.30

262	GURDASPUR	BATALA	S-NPP	75.26092	31.84741	13:48:00	D	4.50
263	GURDASPUR	BATALA	S-NPP	75.27754	31.84929	13:48:00	D	1.60
264	GURDASPUR	BATALA	S-NPP	75.10931	31.88822	13:48:00	D	5.50
265	GURDASPUR	BATALA	S-NPP	75.09449	31.89717	13:48:00	D	2.10
266	GURDASPUR	BATALA	S-NPP	75.09666	31.89834	13:48:00	D	3.70
267	GURDASPUR	BATALA	S-NPP	75.00962	31.91073	13:48:00	D	4.60
268	GURDASPUR	DERA BABA NANAK	S-NPP	75.04450	31.93399	13:48:00	D	4.60
269	GURDASPUR	DERA BABA NANAK	S-NPP	75.04390	31.93779	13:48:00	D	4.20
270	GURDASPUR	DERA BABA NANAK	S-NPP	74.97379	31.96434	13:48:00	D	8.90
271	GURDASPUR	DERA BABA NANAK	S-NPP	74.95623	31.98856	13:48:00	D	2.50
272	GURDASPUR	DERA BABA NANAK	S-NPP	74.95888	31.98951	13:48:00	D	2.70
273	GURDASPUR	DERA BABA NANAK	S-NPP	75.11008	32.01124	13:48:00	D	2.90
274	GURDASPUR	DERA BABA NANAK	S-NPP	75.11255	32.01386	13:48:00	D	33.10
275	GURDASPUR	DERA BABA NANAK	S-NPP	75.10950	32.01505	13:48:00	D	18.30
276	GURDASPUR	GURDASPUR	S-NPP	75.39794	31.81480	13:48:00	D	7.60
277	GURDASPUR	GURDASPUR	S-NPP	75.30244	31.96721	13:48:00	D	5.80
278	GURDASPUR	GURDASPUR	S-NPP	75.30745	31.97169	13:48:00	D	5.80
279	GURDASPUR	GURDASPUR	S-NPP	75.28717	31.99285	13:48:00	D	3.20
280	GURDASPUR	GURDASPUR	S-NPP	75.17044	32.01833	13:48:00	D	2.70
281	GURDASPUR	GURDASPUR	S-NPP	75.16751	32.02000	13:48:00	D	4.00
282	GURDASPUR	GURDASPUR	S-NPP	75.19967	32.06642	13:48:00	D	4.30
283	GURDASPUR	GURDASPUR	S-NPP	75.27201	32.07462	13:48:00	D	4.90
284	GURDASPUR	GURDASPUR	S-NPP	75.32511	32.10020	13:48:00	D	5.20
285	HOSHIARPUR	DASUYA	S-NPP	75.67832	31.59709	13:48:00	D	3.70
286	HOSHIARPUR	DASUYA	S-NPP	75.60094	31.74667	13:48:00	D	9.60
287	HOSHIARPUR	DASUYA	AQUA	75.73100	31.89200	13:20:00	D	10.10
288	HOSHIARPUR	GARHSHANKAR	S-NPP	76.18842	31.15933	13:48:00	D	3.00
289	HOSHIARPUR	GARHSHANKAR	AQUA	75.94300	31.33400	13:20:00	D	29.90
290	JALANDHAR	NAKODAR	S-NPP	75.49567	30.98248	13:48:00	D	3.50
291	JALANDHAR	NAKODAR	AQUA	75.46700	31.21500	13:20:00	D	21.10
292	JALANDHAR	NAKODAR	S-NPP	75.40816	31.22969	13:48:00	D	3.60
293	JALANDHAR	SHAHKOT	S-NPP	75.33937	31.02301	13:48:00	D	11.10
294	JALANDHAR	SHAHKOT	S-NPP	75.26877	31.05343	13:48:00	D	10.90

295	JALANDHAR	SHAHKOT	AQUA	75.19300	31.07100	13:20:00	D	14.60
296	JALANDHAR	SHAHKOT	AQUA	75.22000	31.09900	13:20:00	D	18.10
297	JALANDHAR	SHAHKOT	S-NPP	75.19086	31.17002	13:48:00	D	12.70
298	JALANDHAR	SHAHKOT	S-NPP	75.18813	31.17063	13:48:00	D	17.20
299	KAPURTHALA	BHOLATH	S-NPP	75.47741	31.55090	13:48:00	D	3.50
300	KAPURTHALA	BHOLATH	AQUA	75.49900	31.57100	13:20:00	D	11.90
301	KAPURTHALA	BHOLATH	S-NPP	75.49637	31.57661	13:48:00	D	6.20
302	KAPURTHALA	BHOLATH	AQUA	75.59000	31.58800	13:20:00	D	14.40
303	KAPURTHALA	BHOLATH	S-NPP	75.58060	31.59008	13:48:00	D	4.30
304	KAPURTHALA	BHOLATH	S-NPP	75.48663	31.60303	13:48:00	D	4.00
305	KAPURTHALA	BHOLATH	S-NPP	75.49226	31.60367	13:48:00	D	4.50
306	KAPURTHALA	BHOLATH	S-NPP	75.52142	31.63854	13:48:00	D	5.60
307	KAPURTHALA	KAPURTHALA	AQUA	75.33500	31.26100	13:20:00	D	9.90
308	KAPURTHALA	KAPURTHALA	S-NPP	75.23495	31.37125	13:48:00	D	6.20
309	KAPURTHALA	KAPURTHALA	S-NPP	75.33363	31.37897	13:48:00	D	4.90
310	KAPURTHALA	KAPURTHALA	S-NPP	75.24528	31.39414	13:48:00	D	10.80
311	KAPURTHALA	KAPURTHALA	S-NPP	75.33070	31.39808	13:48:00	D	9.10
312	KAPURTHALA	KAPURTHALA	S-NPP	75.32782	31.39956	13:48:00	D	9.10
313	KAPURTHALA	KAPURTHALA	S-NPP	75.31078	31.40154	13:48:00	D	2.20
314	KAPURTHALA	KAPURTHALA	S-NPP	75.30414	31.40856	13:48:00	D	9.10
315	KAPURTHALA	KAPURTHALA	AQUA	75.37500	31.44300	13:20:00	D	16.50
316	KAPURTHALA	PHAGWARA	S-NPP	75.83130	31.27728	13:48:00	D	2.80
317	KAPURTHALA	SULTANPUR LODHI	AQUA	75.05300	31.18400	13:20:00	D	12.40
318	KAPURTHALA	SULTANPUR LODHI	AQUA	75.13900	31.18900	13:20:00	D	15.90
319	KAPURTHALA	SULTANPUR LODHI	AQUA	75.15000	31.19100	13:20:00	D	18.80
320	KAPURTHALA	SULTANPUR LODHI	AQUA	75.15500	31.19200	13:20:00	D	12.00
321	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.15822	31.20476	13:48:00	D	4.00
322	KAPURTHALA	SULTANPUR LODHI	AQUA	75.05900	31.20900	13:20:00	D	12.00
323	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.27118	31.21785	13:48:00	D	8.90
324	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.12686	31.26648	13:48:00	D	17.50
325	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.14973	31.28412	13:48:00	D	8.60
326	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.17722	31.31812	13:48:00	D	9.30
327	LUDHIANA	KHANNA	S-NPP	76.14144	30.65735	13:48:00	D	9.50

328	LUDHIANA	KHANNA	S-NPP	76.14732	30.65799	13:48:00	D	13.70
329	LUDHIANA	KHANNA	AQUA	76.29700	30.68200	13:20:00	D	8.90
330	LUDHIANA	KHANNA	S-NPP	76.30048	30.68277	13:48:00	D	3.50
331	LUDHIANA	KHANNA	S-NPP	76.31018	30.70007	13:48:00	D	5.30
332	LUDHIANA	KHANNA	AQUA	76.24200	30.72600	13:20:00	D	10.20
333	LUDHIANA	PAYAL	S-NPP	75.90193	30.64680	13:48:00	D	6.30
334	LUDHIANA	RAIKOT	S-NPP	75.60022	30.68300	13:48:00	D	6.80
335	LUDHIANA	RAIKOT	S-NPP	75.59773	30.68439	13:48:00	D	5.00
336	LUDHIANA	SAMRALA	S-NPP	76.23083	30.77417	13:48:00	D	9.60
337	LUDHIANA	SAMRALA	S-NPP	76.23680	30.77481	13:48:00	D	9.60
338	LUDHIANA	SAMRALA	S-NPP	76.17505	30.78425	13:48:00	D	4.60
339	LUDHIANA	SAMRALA	S-NPP	76.25748	30.91216	13:48:00	D	9.20
340	LUDHIANA	SAMRALA	S-NPP	76.26234	30.92082	13:48:00	D	5.50
341	LUDHIANA	SAMRALA	S-NPP	76.21330	31.00243	13:48:00	D	12.10
342	MANSA	BUDHLADA	S-NPP	75.66786	29.80581	13:48:00	D	4.10
343	MANSA	BUDHLADA	S-NPP	75.56181	29.84270	13:48:00	D	3.20
344	MANSA	SARDULGARH	S-NPP	75.28004	29.60266	13:48:00	D	4.60
345	MANSA	SARDULGARH	AQUA	75.24700	29.69900	13:20:00	D	13.00
346	MANSA	SARDULGARH	S-NPP	75.22860	29.83019	13:48:00	D	13.10
347	MANSA	SARDULGARH	AQUA	75.21900	29.83200	13:20:00	D	27.00
348	MOGA	MOGA	S-NPP	75.18399	30.70230	13:48:00	D	3.70
349	MOGA	MOGA	S-NPP	75.18341	30.70606	13:48:00	D	4.80
350	MOGA	NIHAL SINGH WALA	S-NPP	75.34932	30.59133	13:48:00	D	3.70
351	MUKTSAR	GIDDARBAHA	AQUA	74.72500	30.28600	13:20:00	D	12.00
352	MUKTSAR	GIDDARBAHA	TERRA	74.56300	30.33300	11:45:00	D	29.80
353	MUKTSAR	GIDDARBAHA	AQUA	74.77600	30.35300	13:20:00	D	21.70
354	MUKTSAR	GIDDARBAHA	S-NPP	74.77946	30.36012	13:48:00	D	3.20
355	MUKTSAR	GIDDARBAHA	S-NPP	74.78194	30.36143	13:48:00	D	2.80
356	MUKTSAR	GIDDARBAHA	S-NPP	74.73167	30.43666	13:48:00	D	4.60
357	MUKTSAR	MALAUT	S-NPP	74.42551	30.15044	13:48:00	D	9.90
358	MUKTSAR	MUKTSAR	S-NPP	74.46262	30.34045	13:48:00	D	4.90
359	MUKTSAR	MUKTSAR	AQUA	74.32300	30.41500	13:20:00	D	14.20
360	MUKTSAR	MUKTSAR	S-NPP	74.50086	30.54120	13:48:00	D	13.30

361	MUKTSAR	MUKTSAR	S-NPP	74.56981	30.59054	13:48:00	D	9.40
362	MUKTSAR	MUKTSAR	S-NPP	74.60651	30.64346	13:48:00	D	2.20
363	PATIALA	NABHA	S-NPP	76.07798	30.43249	13:48:00	D	10.60
364	PATIALA	NABHA	S-NPP	76.28806	30.54456	13:48:00	D	6.00
365	PATIALA	NABHA	S-NPP	76.28605	30.54619	13:48:00	D	4.10
366	PATIALA	PATIALA	S-NPP	76.51802	30.14355	13:48:00	D	8.00
367	PATIALA	PATIALA	S-NPP	76.52204	30.14398	13:48:00	D	14.00
368	PATIALA	PATIALA	S-NPP	76.44120	30.14752	13:48:00	D	6.40
369	PATIALA	PATIALA	S-NPP	76.59259	30.16789	13:48:00	D	8.50
370	PATIALA	PATIALA	AQUA	76.55600	30.18200	13:20:00	D	8.90
371	PATIALA	PATIALA	S-NPP	76.39968	30.18359	13:48:00	D	3.40
372	PATIALA	PATIALA	S-NPP	76.55265	30.18816	13:48:00	D	4.00
373	PATIALA	PATIALA	S-NPP	76.60258	30.21411	13:48:00	D	2.00
374	PATIALA	PATIALA	S-NPP	76.58516	30.22040	13:48:00	D	7.50
375	PATIALA	PATIALA	S-NPP	76.19147	30.24311	13:48:00	D	5.60
376	PATIALA	PATIALA	S-NPP	76.45756	30.25191	13:48:00	D	3.30
377	PATIALA	PATIALA	S-NPP	76.49832	30.25220	13:48:00	D	3.40
378	PATIALA	PATIALA	S-NPP	76.50235	30.25263	13:48:00	D	3.40
379	PATIALA	PATIALA	S-NPP	76.50813	30.26960	13:48:00	D	5.80
380	PATIALA	PATIALA	S-NPP	76.61498	30.27284	13:48:00	D	4.30
381	PATIALA	PATIALA	S-NPP	76.50756	30.27361	13:48:00	D	3.60
382	PATIALA	PATIALA	S-NPP	76.46614	30.27729	13:48:00	D	5.90
383	PATIALA	PATIALA	S-NPP	76.49027	30.27991	13:48:00	D	2.10
384	PATIALA	PATIALA	S-NPP	76.46556	30.28131	13:48:00	D	5.90
385	PATIALA	PATIALA	S-NPP	76.43922	30.29472	13:48:00	D	4.90
386	PATIALA	PATIALA	S-NPP	76.44046	30.37349	13:48:00	D	2.10
387	PATIALA	PATIALA	S-NPP	76.31892	30.38052	13:48:00	D	17.20
388	PATIALA	PATIALA	AQUA	76.47600	30.40700	13:20:00	D	9.10
389	PATIALA	PATIALA	AQUA	76.49000	30.41000	13:20:00	D	10.50
390	PATIALA	PATIALA	S-NPP	76.38705	30.41241	13:48:00	D	19.90
391	PATIALA	PATIALA	S-NPP	76.49177	30.41583	13:48:00	D	4.90
392	PATIALA	PATIALA	S-NPP	76.41375	30.45279	13:48:00	D	3.10
393	PATIALA	RAJPURA	S-NPP	76.55550	30.37358	13:48:00	D	3.30

394	PATIALA	RAJPURA	S-NPP	76.57484	30.41261	13:48:00	D	9.30
395	PATIALA	RAJPURA	S-NPP	76.68927	30.46221	13:48:00	D	1.80
396	PATIALA	RAJPURA	S-NPP	76.52192	30.50118	13:48:00	D	5.80
397	PATIALA	RAJPURA	AQUA	76.61700	30.51400	13:20:00	D	43.40
398	PATIALA	RAJPURA	AQUA	76.64500	30.51900	13:20:00	D	6.50
399	PATIALA	RAJPURA	S-NPP	76.72321	30.53105	13:48:00	D	2.90
400	PATIALA	RAJPURA	S-NPP	76.69584	30.54469	13:48:00	D	1.60
401	PATIALA	RAJPURA	S-NPP	76.76714	30.55238	13:48:00	D	3.20
402	PATIALA	RAJPURA	S-NPP	76.59886	30.57941	13:48:00	D	7.00
403	PATIALA	RAJPURA	S-NPP	76.68309	30.57994	13:48:00	D	7.10
404	PATIALA	RAJPURA	S-NPP	76.68237	30.58051	13:48:00	D	5.50
405	PATIALA	RAJPURA	S-NPP	76.59829	30.58347	13:48:00	D	7.00
406	PATIALA	RAJPURA	AQUA	76.64800	30.60200	13:20:00	D	18.10
407	PATIALA	RAJPURA	S-NPP	76.53664	30.60573	13:48:00	D	2.00
408	PATIALA	SAMANA	S-NPP	76.12839	29.84768	13:48:00	D	9.20
409	PATIALA	SAMANA	AQUA	76.20400	29.85200	13:20:00	D	13.60
410	PATIALA	SAMANA	S-NPP	76.20779	29.86075	13:48:00	D	11.70
411	PATIALA	SAMANA	AQUA	76.13400	29.88300	13:20:00	D	30.20
412	PATIALA	SAMANA	AQUA	76.12800	29.88600	13:20:00	D	28.40
413	PATIALA	SAMANA	AQUA	76.21100	29.88600	13:20:00	D	17.90
414	PATIALA	SAMANA	AQUA	76.14300	29.88900	13:20:00	D	11.00
415	PATIALA	SAMANA	AQUA	76.13100	29.89400	13:20:00	D	9.50
416	PATIALA	SAMANA	S-NPP	76.09216	29.92303	13:48:00	D	18.40
417	PATIALA	SAMANA	S-NPP	76.13259	29.92361	13:48:00	D	9.10
418	PATIALA	SAMANA	S-NPP	76.13201	29.92753	13:48:00	D	9.10
419	PATIALA	SAMANA	S-NPP	76.14230	29.93667	13:48:00	D	4.50
420	PATIALA	SAMANA	AQUA	76.21600	30.11000	13:20:00	D	8.40
421	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.55696	30.85034	13:48:00	D	4.20
422	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.47050	30.86971	13:48:00	D	7.80
423	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.44665	30.89169	13:48:00	D	2.40
424	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.45074	30.89212	13:48:00	D	4.30
425	RUPNAGAR	CHAMKOR SAHIB	S-NPP	76.32117	30.95989	13:48:00	D	2.80
426	SANGRUR	MOONAK	S-NPP	76.05385	29.76777	13:48:00	D	6.80

427	SANGRUR	MOONAK	S-NPP	76.05640	29.76815	13:48:00	D	7.10
428	SANGRUR	MOONAK	AQUA	75.93500	29.79200	13:20:00	D	14.50
429	SANGRUR	MOONAK	AQUA	75.76000	29.81800	13:20:00	D	11.40
430	SANGRUR	MOONAK	S-NPP	75.76465	29.82116	13:48:00	D	5.10
431	SANGRUR	MOONAK	S-NPP	75.84569	29.85963	13:48:00	D	7.70
432	SANGRUR	MOONAK	S-NPP	75.85222	29.95549	13:48:00	D	4.20
433	SANGRUR	SANGRUR	S-NPP	75.57919	30.18552	13:48:00	D	5.00
434	SANGRUR	SUNAM	S-NPP	75.66163	29.96511	13:48:00	D	20.00
435	SANGRUR	SUNAM	S-NPP	75.79739	30.11944	13:48:00	D	3.40
436	SANGRUR	SUNAM	S-NPP	75.76578	30.14322	13:48:00	D	3.70
437	SAS NAGAR	DERABASSI	S-NPP	76.81723	30.45953	13:48:00	D	1.30
438	SAS NAGAR	DERABASSI	S-NPP	76.84453	30.48967	13:48:00	D	9.50
439	SAS NAGAR	DERABASSI	S-NPP	76.84283	30.49151	13:48:00	D	5.00
440	SAS NAGAR	DERABASSI	S-NPP	76.78514	30.54598	13:48:00	D	7.80
441	SAS NAGAR	DERABASSI	S-NPP	76.81834	30.55370	13:48:00	D	2.20
442	SAS NAGAR	DERABASSI	S-NPP	76.79436	30.57197	13:48:00	D	2.20
443	SAS NAGAR	DERABASSI	S-NPP	76.79381	30.57608	13:48:00	D	4.50
444	SAS NAGAR	DERABASSI	S-NPP	76.88869	30.60730	13:48:00	D	1.40
445	SAS NAGAR	KHARAR	S-NPP	76.54228	30.71291	13:48:00	D	2.30
446	SAS NAGAR	MOHALI	S-NPP	76.68654	30.58097	13:48:00	D	6.20
447	SAS NAGAR	MOHALI	S-NPP	76.65948	30.62713	13:48:00	D	7.20
448	SAS NAGAR	MOHALI	S-NPP	76.71325	30.63701	13:48:00	D	4.40
449	SBS NAGAR	SBS NAGAR	AQUA	76.05200	31.22800	13:20:00	D	11.40
450	TARN TARAN	KHADOOR SAHIB	AQUA	74.95900	31.19000	13:20:00	D	13.30
451	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96951	31.20555	13:48:00	D	4.50
452	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00098	31.20929	13:48:00	D	3.80
453	TARN TARAN	KHADOOR SAHIB	S-NPP	74.95263	31.21116	13:48:00	D	6.10
454	TARN TARAN	KHADOOR SAHIB	S-NPP	74.98929	31.21554	13:48:00	D	2.70
455	TARN TARAN	KHADOOR SAHIB	S-NPP	74.99979	31.21679	13:48:00	D	3.50
456	TARN TARAN	KHADOOR SAHIB	S-NPP	74.97297	31.21741	13:48:00	D	4.80
457	TARN TARAN	KHADOOR SAHIB	S-NPP	74.98870	31.21929	13:48:00	D	5.90
458	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00676	31.24056	13:48:00	D	2.50
459	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96825	31.24737	13:48:00	D	26.90

460	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96648	31.24769	13:48:00	D	23.70
461	TARN TARAN	KHADOOR SAHIB	S-NPP	74.91299	31.24912	13:48:00	D	2.70
462	TARN TARAN	KHADOOR SAHIB	AQUA	74.97200	31.25100	13:20:00	D	9.40
463	TARN TARAN	KHADOOR SAHIB	AQUA	74.97800	31.25100	13:20:00	D	9.20
464	TARN TARAN	KHADOOR SAHIB	S-NPP	74.91702	31.25720	13:48:00	D	4.40
465	TARN TARAN	KHADOOR SAHIB	TERRA	75.06000	31.25800	11:45:00	D	17.00
466	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06142	31.25862	13:48:00	D	4.90
467	TARN TARAN	KHADOOR SAHIB	S-NPP	75.06304	31.25881	13:48:00	D	9.00
468	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96815	31.27078	13:48:00	D	5.10
469	TARN TARAN	KHADOOR SAHIB	S-NPP	75.01613	31.27254	13:48:00	D	7.70
470	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00848	31.28695	13:48:00	D	2.50
471	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79143	31.33054	13:48:00	D	4.00
472	TARN TARAN	KHADOOR SAHIB	S-NPP	75.04371	31.33705	13:48:00	D	7.80
473	TARN TARAN	KHADOOR SAHIB	AQUA	75.06800	31.35000	13:20:00	D	13.20
474	TARN TARAN	KHADOOR SAHIB	S-NPP	75.10577	31.35595	13:48:00	D	15.70
475	TARN TARAN	KHADOOR SAHIB	AQUA	74.99600	31.36000	13:20:00	D	11.00
476	TARN TARAN	KHADOOR SAHIB	S-NPP	75.05874	31.36136	13:48:00	D	4.20
477	TARN TARAN	KHADOOR SAHIB	S-NPP	75.02628	31.36148	13:48:00	D	2.60
478	TARN TARAN	KHADOOR SAHIB	AQUA	75.00800	31.36200	13:20:00	D	10.00
479	TARN TARAN	KHADOOR SAHIB	S-NPP	74.83668	31.37755	13:48:00	D	3.40
480	TARN TARAN	KHADOOR SAHIB	S-NPP	74.90566	31.37806	13:48:00	D	2.80
481	TARN TARAN	KHADOOR SAHIB	S-NPP	75.12045	31.38379	13:48:00	D	12.90
482	TARN TARAN	KHADOOR SAHIB	S-NPP	75.13060	31.38880	13:48:00	D	4.80
483	TARN TARAN	KHADOOR SAHIB	S-NPP	75.09608	31.40022	13:48:00	D	5.20
484	TARN TARAN	KHADOOR SAHIB	S-NPP	74.67266	31.41838	13:48:00	D	9.20
485	TARN TARAN	KHADOOR SAHIB	S-NPP	74.77599	31.42719	13:48:00	D	4.60
486	TARN TARAN	KHADOOR SAHIB	S-NPP	74.67366	31.42793	13:48:00	D	2.50
487	TARN TARAN	KHADOOR SAHIB	S-NPP	75.15155	31.42976	13:48:00	D	2.90
488	TARN TARAN	KHADOOR SAHIB	S-NPP	74.67599	31.43011	13:48:00	D	5.70
489	TARN TARAN	KHADOOR SAHIB	AQUA	75.12800	31.43100	13:20:00	D	8.80
490	TARN TARAN	KHADOOR SAHIB	S-NPP	74.67307	31.43163	13:48:00	D	2.50
491	TARN TARAN	KHADOOR SAHIB	S-NPP	75.18940	31.43417	13:48:00	D	4.70
492	TARN TARAN	KHADOOR SAHIB	S-NPP	74.84340	31.43535	13:48:00	D	3.00

493	TARN TARAN	KHADOOR SAHIB	S-NPP	74.84280	31.43908	13:48:00	D	9.90
494	TARN TARAN	KHADOOR SAHIB	S-NPP	75.00328	31.43924	13:48:00	D	3.90
495	TARN TARAN	KHADOOR SAHIB	S-NPP	75.04099	31.43988	13:48:00	D	16.50
496	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07298	31.44366	13:48:00	D	4.20
497	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07238	31.44743	13:48:00	D	4.20
498	TARN TARAN	KHADOOR SAHIB	S-NPP	74.71743	31.44817	13:48:00	D	2.80
499	TARN TARAN	KHADOOR SAHIB	S-NPP	74.81171	31.45163	13:48:00	D	9.60
500	TARN TARAN	KHADOOR SAHIB	S-NPP	75.08247	31.45247	13:48:00	D	14.30
501	TARN TARAN	KHADOOR SAHIB	S-NPP	75.02743	31.45745	13:48:00	D	11.10
502	TARN TARAN	KHADOOR SAHIB	AQUA	74.97500	31.46100	13:20:00	D	16.00
503	TARN TARAN	KHADOOR SAHIB	S-NPP	74.66829	31.46122	13:48:00	D	4.70
504	TARN TARAN	KHADOOR SAHIB	S-NPP	74.86205	31.46890	13:48:00	D	3.10
505	TARN TARAN	KHADOOR SAHIB	S-NPP	75.22196	31.47279	13:48:00	D	2.70
506	TARN TARAN	KHADOOR SAHIB	S-NPP	74.88763	31.47569	13:48:00	D	3.30
507	TARN TARAN	KHADOOR SAHIB	AQUA	75.20000	31.47800	13:20:00	D	14.10
508	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07301	31.47827	13:48:00	D	3.20
509	TARN TARAN	KHADOOR SAHIB	S-NPP	74.77523	31.48148	13:48:00	D	4.90
510	TARN TARAN	KHADOOR SAHIB	S-NPP	75.07539	31.48206	13:48:00	D	4.50
511	TARN TARAN	KHADOOR SAHIB	S-NPP	75.22347	31.48341	13:48:00	D	3.80
512	TARN TARAN	KHADOOR SAHIB	S-NPP	75.22562	31.48485	13:48:00	D	2.90
513	TARN TARAN	KHADOOR SAHIB	S-NPP	74.68522	31.48589	13:48:00	D	9.00
514	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79478	31.49138	13:48:00	D	7.50
515	TARN TARAN	KHADOOR SAHIB	S-NPP	74.88406	31.49813	13:48:00	D	2.60
516	TARN TARAN	KHADOOR SAHIB	S-NPP	74.72516	31.49823	13:48:00	D	7.30
517	TARN TARAN	KHADOOR SAHIB	S-NPP	74.81960	31.50192	13:48:00	D	7.00
518	TARN TARAN	KHADOOR SAHIB	S-NPP	74.81380	31.50503	13:48:00	D	4.80
519	TARN TARAN	KHADOOR SAHIB	S-NPP	75.16931	31.51208	13:48:00	D	4.10
520	TARN TARAN	KHADOOR SAHIB	AQUA	74.81300	31.52300	13:20:00	D	11.40
521	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79404	31.52925	13:48:00	D	2.80
522	TARN TARAN	KHADOOR SAHIB	S-NPP	74.79167	31.54415	13:48:00	D	5.80
523	TARN TARAN	KHADOOR SAHIB	S-NPP	74.78864	31.54452	13:48:00	D	8.00
524	TARN TARAN	PATTI	S-NPP	74.71658	31.11119	13:48:00	D	6.00
525	TARN TARAN	PATTI	S-NPP	74.71925	31.11360	13:48:00	D	10.20

526	TARN TARAN	PATTI	S-NPP	74.71599	31.11488	13:48:00	D	6.00
527	TARN TARAN	PATTI	S-NPP	74.64536	31.13655	13:48:00	D	6.40
528	TARN TARAN	PATTI	S-NPP	74.82101	31.14237	13:48:00	D	3.40
529	TARN TARAN	PATTI	S-NPP	74.56892	31.16476	13:48:00	D	5.40
530	TARN TARAN	PATTI	S-NPP	74.57394	31.16537	13:48:00	D	5.40
531	TARN TARAN	PATTI	S-NPP	74.72293	31.16845	13:48:00	D	5.30
532	TARN TARAN	PATTI	S-NPP	74.51718	31.16961	13:48:00	D	9.90
533	TARN TARAN	PATTI	S-NPP	74.73312	31.16967	13:48:00	D	8.50
534	TARN TARAN	PATTI	S-NPP	74.58279	31.17394	13:48:00	D	4.10
535	TARN TARAN	PATTI	S-NPP	74.67542	31.17399	13:48:00	D	7.40
536	TARN TARAN	PATTI	S-NPP	74.74784	31.17521	13:48:00	D	3.10
537	TARN TARAN	PATTI	S-NPP	74.95272	31.17688	13:48:00	D	4.20
538	TARN TARAN	PATTI	S-NPP	74.69005	31.17953	13:48:00	D	11.10
539	TARN TARAN	PATTI	S-NPP	74.59166	31.18252	13:48:00	D	1.30
540	TARN TARAN	PATTI	S-NPP	74.57421	31.19536	13:48:00	D	3.90
541	TARN TARAN	PATTI	S-NPP	74.55681	31.19594	13:48:00	D	6.70
542	TARN TARAN	PATTI	AQUA	74.76000	31.19900	13:20:00	D	17.30
543	TARN TARAN	PATTI	AQUA	74.84900	31.20400	13:20:00	D	10.80
544	TARN TARAN	PATTI	S-NPP	74.92713	31.20431	13:48:00	D	5.90
545	TARN TARAN	PATTI	S-NPP	74.92074	31.21116	13:48:00	D	17.70
546	TARN TARAN	PATTI	S-NPP	74.67171	31.21705	13:48:00	D	5.30
547	TARN TARAN	PATTI	S-NPP	74.70792	31.21756	13:48:00	D	3.30
548	TARN TARAN	PATTI	S-NPP	74.91721	31.23357	13:48:00	D	4.30
549	TARN TARAN	PATTI	S-NPP	74.89333	31.23922	13:48:00	D	6.50
550	TARN TARAN	PATTI	S-NPP	74.58543	31.24055	13:48:00	D	4.20
551	TARN TARAN	PATTI	AQUA	74.68700	31.24300	13:20:00	D	15.40
552	TARN TARAN	PATTI	S-NPP	74.54346	31.24671	13:48:00	D	3.80
553	TARN TARAN	PATTI	S-NPP	74.54848	31.24732	13:48:00	D	3.50
554	TARN TARAN	PATTI	S-NPP	74.67651	31.25148	13:48:00	D	5.70
555	TARN TARAN	PATTI	S-NPP	74.76910	31.25875	13:48:00	D	3.80
556	TARN TARAN	PATTI	AQUA	74.66400	31.26200	13:20:00	D	16.70
557	TARN TARAN	PATTI	S-NPP	74.65888	31.26442	13:48:00	D	4.50
558	TARN TARAN	PATTI	S-NPP	74.69508	31.26500	13:48:00	D	4.90

559	TARN TARAN	PATTI	S-NPP	74.76791	31.26617	13:48:00	D	6.10
560	TARN TARAN	PATTI	S-NPP	74.78670	31.27976	13:48:00	D	4.80
561	TARN TARAN	PATTI	S-NPP	74.64519	31.28532	13:48:00	D	2.40
562	TARN TARAN	PATTI	S-NPP	74.70055	31.29581	13:48:00	D	1.80
563	TARN TARAN	PATTI	AQUA	74.67200	31.29900	13:20:00	D	11.10
564	TARN TARAN	PATTI	S-NPP	74.79800	31.30762	13:48:00	D	7.60
565	TARN TARAN	PATTI	S-NPP	74.80317	31.30824	13:48:00	D	7.60
566	TARN TARAN	PATTI	S-NPP	74.77681	31.30884	13:48:00	D	2.90
567	TARN TARAN	PATTI	S-NPP	74.59489	31.30920	13:48:00	D	8.30
568	TARN TARAN	PATTI	S-NPP	74.58655	31.31025	13:48:00	D	9.10
569	TARN TARAN	PATTI	S-NPP	74.79742	31.31134	13:48:00	D	6.90
570	TARN TARAN	PATTI	S-NPP	74.59666	31.31145	13:48:00	D	7.90
571	TARN TARAN	PATTI	S-NPP	74.58925	31.31226	13:48:00	D	8.30
572	TARN TARAN	PATTI	S-NPP	74.59934	31.31351	13:48:00	D	9.30
573	TARN TARAN	PATTI	S-NPP	74.59605	31.31513	13:48:00	D	7.90
574	TARN TARAN	PATTI	S-NPP	74.76871	31.32678	13:48:00	D	2.20
575	TARN TARAN	PATTI	AQUA	74.76900	31.32800	13:20:00	D	27.20
576	TARN TARAN	PATTI	AQUA	74.78600	31.33100	13:20:00	D	14.70
577	TARN TARAN	PATTI	S-NPP	74.77782	31.33546	13:48:00	D	9.10
578	TARN TARAN	PATTI	S-NPP	74.77476	31.33616	13:48:00	D	4.90
579	TARN TARAN	PATTI	S-NPP	74.71191	31.33634	13:48:00	D	7.50
580	TARN TARAN	PATTI	S-NPP	74.71703	31.33695	13:48:00	D	7.50
581	TARN TARAN	PATTI	S-NPP	74.56543	31.34523	13:48:00	D	13.10
582	TARN TARAN	PATTI	S-NPP	74.73637	31.34678	13:48:00	D	2.10
583	TARN TARAN	PATTI	S-NPP	74.64259	31.34696	13:48:00	D	3.90
584	TARN TARAN	PATTI	S-NPP	74.63454	31.36480	13:48:00	D	3.20
585	TARN TARAN	PATTI	S-NPP	74.64351	31.37341	13:48:00	D	9.00
586	TARN TARAN	PATTI	S-NPP	74.65879	31.37525	13:48:00	D	5.80
587	TARN TARAN	PATTI	S-NPP	74.76307	31.37641	13:48:00	D	17.40
588	TARN TARAN	PATTI	S-NPP	74.59099	31.37833	13:48:00	D	4.80
589	TARN TARAN	PATTI	S-NPP	74.59605	31.37894	13:48:00	D	4.80
590	TARN TARAN	PATTI	S-NPP	74.64444	31.39987	13:48:00	D	3.40
591	TARN TARAN	PATTI	S-NPP	74.64384	31.40356	13:48:00	D	3.40

592	TARN TARAN	PATTI	S-NPP	74.66364	31.40974	13:48:00	D	13.70
593	TARN TARAN	PATTI	S-NPP	74.67326	31.41469	13:48:00	D	4.50
594	TARN TARAN	PATTI	S-NPP	74.71587	31.42532	13:48:00	D	4.00

Details of residue burning events in Haryana on 16-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	AMBALA	AMBALA	S-NPP	76.60603	30.09911	13:48:00	D	12.80
2	AMBALA	AMBALA	S-NPP	76.70865	30.22983	13:48:00	D	6.70
3	AMBALA	AMBALA	S-NPP	76.82124	30.30294	13:48:00	D	5.50
4	AMBALA	BARARA	S-NPP	77.02135	30.15650	13:48:00	D	1.50
5	AMBALA	BARARA	S-NPP	77.06435	30.16110	13:48:00	D	3.50
6	AMBALA	BARARA	S-NPP	76.96498	30.18816	13:48:00	D	3.20
7	AMBALA	BARARA	S-NPP	77.15712	30.33362	13:48:00	D	3.70
8	AMBALA	NARAYANGARH	S-NPP	77.17842	30.37403	13:48:00	D	1.70
9	AMBALA	NARAYANGARH	S-NPP	77.17785	30.37823	13:48:00	D	4.40
10	FATEHABAD	FATEHABAD	S-NPP	75.47593	29.51547	02:30:00	N	2.70
11	FATEHABAD	FATEHABAD	S-NPP	75.52390	29.63150	13:48:00	D	3.90
12	FATEHABAD	TOHANA	S-NPP	75.77228	29.71502	13:48:00	D	2.80
13	FATEHABAD	TOHANA	S-NPP	75.88188	29.74460	13:48:00	D	7.20
14	FATEHABAD	TOHANA	S-NPP	75.88130	29.74846	13:48:00	D	7.20
15	FATEHABAD	TOHANA	S-NPP	75.77871	29.76421	13:48:00	D	3.80
16	FATEHABAD	TOHANA	S-NPP	75.77814	29.76804	13:48:00	D	3.80
17	HISAR	HISAR	S-NPP	75.93791	29.55248	13:48:00	D	4.90
18	JIND	NARWANA	S-NPP	76.09467	29.56223	13:48:00	D	3.10
19	JIND	NARWANA	AQUA	76.00100	29.67700	13:20:00	D	10.20
20	JIND	SAFIDON	S-NPP	76.59502	29.40770	13:48:00	D	4.90
21	JIND	SAFIDON	S-NPP	76.63280	29.46068	13:48:00	D	9.80
22	KAITHAL	GUHLA	S-NPP	76.24289	29.88785	13:48:00	D	4.50
23	KAITHAL	GUHLA	S-NPP	76.20310	29.91951	13:48:00	D	5.40
24	KAITHAL	GUHLA	S-NPP	76.26732	29.96279	13:48:00	D	6.90
25	KAITHAL	GUHLA	S-NPP	76.23084	29.97071	13:48:00	D	12.50
26	KAITHAL	GUHLA	S-NPP	76.20547	29.98384	13:48:00	D	7.40
27	KAITHAL	GUHLA	S-NPP	76.21124	29.98451	13:48:00	D	7.40
28	KAITHAL	GUHLA	S-NPP	76.20952	29.98699	13:48:00	D	7.90
29	KAITHAL	GUHLA	S-NPP	76.40170	30.02243	13:48:00	D	1.90
30	KAITHAL	GUHLA	S-NPP	76.41576	30.04165	13:48:00	D	2.50

31	KAITHAL	GUHLA	S-NPP	76.43295	30.16288	13:48:00	D	7.70
32	KAITHAL	KAITHAL	TERRA	76.47200	29.55500	11:45:00	D	26.00
33	KAITHAL	KAITHAL	S-NPP	76.35019	29.70567	13:48:00	D	4.10
34	KAITHAL	KAITHAL	AQUA	76.67000	29.70700	13:20:00	D	12.60
35	KAITHAL	KAITHAL	AQUA	76.66100	29.70800	13:20:00	D	7.50
36	KAITHAL	KAITHAL	S-NPP	76.61140	29.73408	13:48:00	D	4.10
37	KAITHAL	KAITHAL	S-NPP	76.57312	29.77477	13:48:00	D	4.00
38	KAITHAL	KAITHAL	S-NPP	76.33992	29.77696	13:48:00	D	2.30
39	KAITHAL	KAITHAL	S-NPP	76.36093	29.79548	13:48:00	D	3.00
40	KAITHAL	KAITHAL	S-NPP	76.31868	29.82508	13:48:00	D	14.10
41	KAITHAL	KAITHAL	AQUA	76.62800	29.89600	13:20:00	D	10.30
42	KAITHAL	KAITHAL	S-NPP	76.64884	29.90217	13:48:00	D	3.40
43	KARNAL	ASSANDH	S-NPP	76.77756	29.62476	13:48:00	D	5.90
44	KARNAL	ASSANDH	S-NPP	76.63593	29.64601	13:48:00	D	6.10
45	KARNAL	ASSANDH	S-NPP	76.67611	29.65037	13:48:00	D	1.90
46	KARNAL	GHARAUNDA	S-NPP	76.94346	29.47823	13:48:00	D	2.30
47	KARNAL	GHARAUNDA	S-NPP	77.07155	29.53378	13:48:00	D	2.00
48	KARNAL	GHARAUNDA	AQUA	77.02600	29.54400	13:20:00	D	9.20
49	KARNAL	GHARAUNDA	S-NPP	77.05103	29.56317	13:48:00	D	5.70
50	KARNAL	GHARAUNDA	S-NPP	76.94313	29.60581	13:48:00	D	7.60
51	KARNAL	INDRI	S-NPP	77.00748	29.83045	13:48:00	D	6.20
52	KARNAL	INDRI	S-NPP	77.06270	29.83639	13:48:00	D	2.80
53	KARNAL	INDRI	S-NPP	77.02351	29.93463	13:48:00	D	2.30
54	KARNAL	INDRI	S-NPP	77.14796	29.94790	13:48:00	D	1.90
55	KARNAL	INDRI	S-NPP	77.12954	29.95437	13:48:00	D	4.70
56	KARNAL	KARNAL	AQUA	77.01000	29.58200	13:20:00	D	13.60
57	KARNAL	KARNAL	AQUA	77.01600	29.58400	13:20:00	D	13.80
58	KARNAL	KARNAL	S-NPP	77.04000	29.61213	13:48:00	D	13.90
59	KARNAL	KARNAL	S-NPP	76.82304	29.62572	13:48:00	D	4.70
60	KARNAL	KARNAL	S-NPP	76.81547	29.65716	13:48:00	D	16.10
61	KARNAL	KARNAL	AQUA	76.80300	29.65900	13:20:00	D	10.60
62	KARNAL	KARNAL	S-NPP	76.91572	29.65954	13:48:00	D	6.30
63	KARNAL	KARNAL	S-NPP	76.86575	29.71635	13:48:00	D	1.80

64	KARNAL	KARNAL	AQUA	76.99200	29.75500	13:20:00	D	8.80
65	KARNAL	KARNAL	S-NPP	77.04200	29.76718	13:48:00	D	3.10
66	KARNAL	KARNAL	S-NPP	77.04119	29.76895	13:48:00	D	4.80
67	KARNAL	NILOKHERI	AQUA	76.87100	29.76400	13:20:00	D	8.90
68	KARNAL	NILOKHERI	S-NPP	76.86544	29.78190	13:48:00	D	4.30
69	KARNAL	NILOKHERI	S-NPP	76.86487	29.78599	13:48:00	D	3.50
70	KARNAL	NILOKHERI	S-NPP	76.87506	29.80367	13:48:00	D	3.90
71	KARNAL	NILOKHERI	S-NPP	76.84791	29.81730	13:48:00	D	4.00
72	KURUKSHETRA	PEHOWA	S-NPP	76.64197	29.92192	13:48:00	D	9.60
73	KURUKSHETRA	PEHOWA	S-NPP	76.59727	29.95049	13:48:00	D	7.60
74	KURUKSHETRA	PEHOWA	S-NPP	76.60130	29.95092	13:48:00	D	7.60
75	KURUKSHETRA	PEHOWA	S-NPP	76.48978	29.95515	13:48:00	D	3.20
76	KURUKSHETRA	PEHOWA	S-NPP	76.54271	29.96092	13:48:00	D	4.40
77	KURUKSHETRA	PEHOWA	S-NPP	76.72632	30.09984	13:48:00	D	3.00
78	KURUKSHETRA	PEHOWA	S-NPP	76.65326	30.14540	13:48:00	D	1.80
79	KURUKSHETRA	SHAHABAD	AQUA	76.80700	30.17600	13:20:00	D	8.60
80	KURUKSHETRA	SHAHABAD	S-NPP	76.93139	30.18703	13:48:00	D	1.60
81	KURUKSHETRA	THANESAR	AQUA	76.76500	29.89100	13:20:00	D	8.80
82	KURUKSHETRA	THANESAR	S-NPP	76.76538	29.89847	13:48:00	D	9.70
83	KURUKSHETRA	THANESAR	S-NPP	76.76480	29.90254	13:48:00	D	9.70
84	KURUKSHETRA	THANESAR	S-NPP	76.91676	29.93148	13:48:00	D	3.50
85	KURUKSHETRA	THANESAR	S-NPP	76.77149	29.94457	13:48:00	D	5.20
86	KURUKSHETRA	THANESAR	S-NPP	76.80473	29.98089	13:48:00	D	3.40
87	KURUKSHETRA	THANESAR	S-NPP	76.74363	30.02803	13:48:00	D	15.90
88	KURUKSHETRA	THANESAR	S-NPP	76.73895	30.03165	13:48:00	D	13.40
89	KURUKSHETRA	THANESAR	S-NPP	76.74306	30.03210	13:48:00	D	15.90
90	KURUKSHETRA	THANESAR	AQUA	76.70200	30.04400	13:20:00	D	12.70
91	KURUKSHETRA	THANESAR	S-NPP	76.96563	30.04806	13:48:00	D	5.40
92	KURUKSHETRA	THANESAR	S-NPP	76.77039	30.05494	13:48:00	D	1.70
93	KURUKSHETRA	THANESAR	S-NPP	76.80676	30.09604	13:48:00	D	3.40
94	PALWAL	PALWAL	S-NPP	77.40632	28.11537	13:48:00	D	1.40
95	PANIPAT	ISRANA	S-NPP	76.72710	29.28193	13:48:00	D	4.40
96	PANIPAT	ISRANA	S-NPP	76.65595	29.35669	13:48:00	D	6.40

97	YAMUNANAGAR	CHHACHHRAULII	S-NPP	77.40304	30.17103	13:48:00	D	3.20
98	YAMUNANAGAR	JAGADHRI	S-NPP	77.18248	29.98540	13:48:00	D	4.20
99	YAMUNANAGAR	JAGADHRI	AQUA	77.16400	30.00100	13:20:00	D	8.80
100	YAMUNANAGAR	JAGADHRI	S-NPP	77.20449	30.34697	13:48:00	D	3.50

Details of residue burning events in Uttar Pradesh on 16-Oct-2020

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	ALIGARH	GABHANA	S-NPP	77.84068	28.16058	02:30:00	N	0.50
2	BARABANKI	FATEHPUR	S-NPP	81.24828	27.21371	13:48:00	D	3.50
3	GHAZIABAD	MODINAGAR	S-NPP	77.53888	28.77778	13:48:00	D	1.70
4	HAPUR	HAPUR	S-NPP	77.62970	28.71462	13:48:00	D	3.10
5	JHANSI	MOTH	S-NPP	78.80580	25.75144	02:30:00	N	0.80
6	JHANSI	MOTH	S-NPP	78.80531	25.75232	02:30:00	N	0.80
7	KANPUR DEHAT	SIKANDRA	S-NPP	79.72179	26.26918	02:30:00	N	0.80
8	KHERI	MOHMADI	S-NPP	80.29634	28.05883	13:48:00	D	6.00
9	KHERI	MOHMADI	S-NPP	80.29537	28.05967	13:48:00	D	15.40
10	MAINPURI	MAINPURI	S-NPP	78.94851	27.17321	13:48:00	D	3.50
11	MEERUT	MAWANA	S-NPP	78.07349	28.90294	13:48:00	D	8.60
12	MEERUT	MAWANA	S-NPP	78.07987	29.24588	13:48:00	D	2.80
13	MORADABAD	MORADABAD	S-NPP	78.91537	28.78959	13:48:00	D	2.60
14	MORADABAD	MORADABAD	S-NPP	78.91329	28.78981	13:48:00	D	4.10
15	PILHIBHIT	PILHIBHIT	AQUA	79.93800	28.76000	13:20:00	D	7.40
16	PILHIBHIT	PILHIBHIT	S-NPP	79.70345	28.78032	02:30:00	N	0.40
17	PILHIBHIT	PILHIBHIT	S-NPP	79.72789	28.85934	13:48:00	D	8.70
18	RAMPUR	SUAR	S-NPP	79.13475	28.98915	02:30:00	N	1.20
19	RAMPUR	SUAR	S-NPP	79.13510	28.99012	02:30:00	N	0.50
20	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	79.93614	27.93744	13:48:00	D	3.60

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)
