



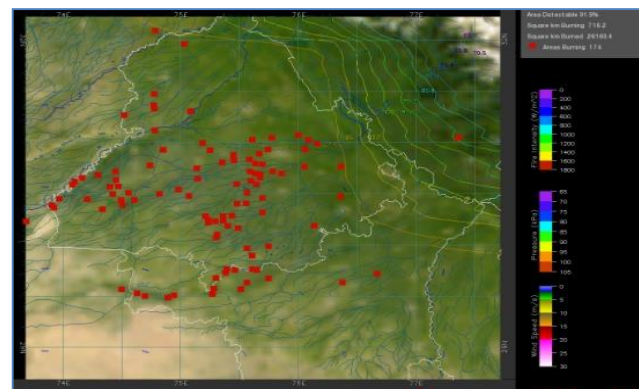
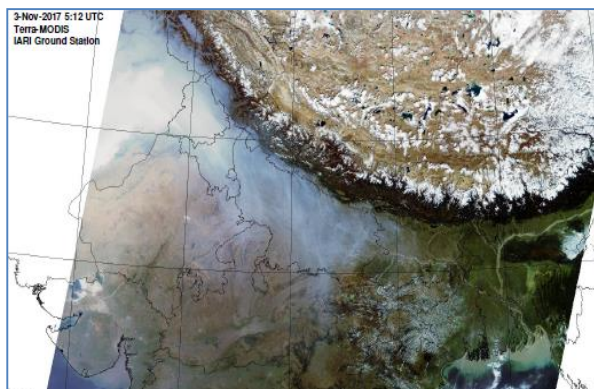
**Bulletin
No. 49**

**Events Date:
18-Nov-2019**

**Issued on:
19-Nov-2019**



MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2019



Prepared by:

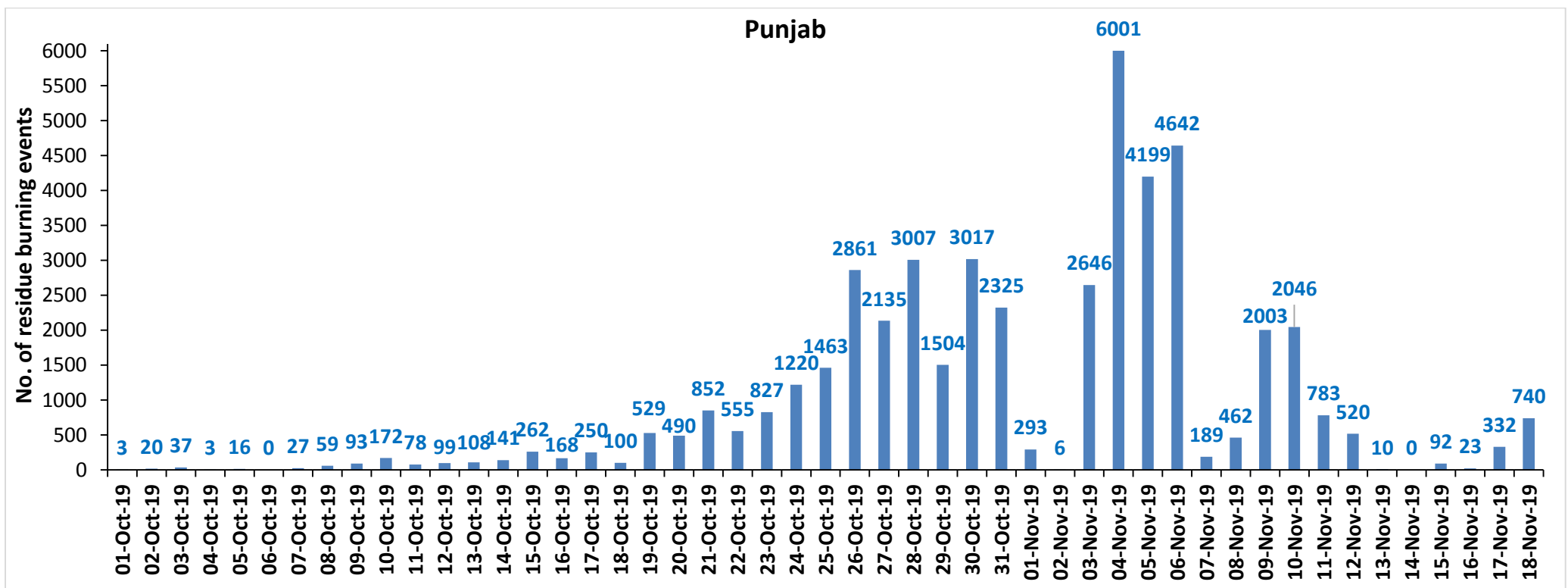
**Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012**

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

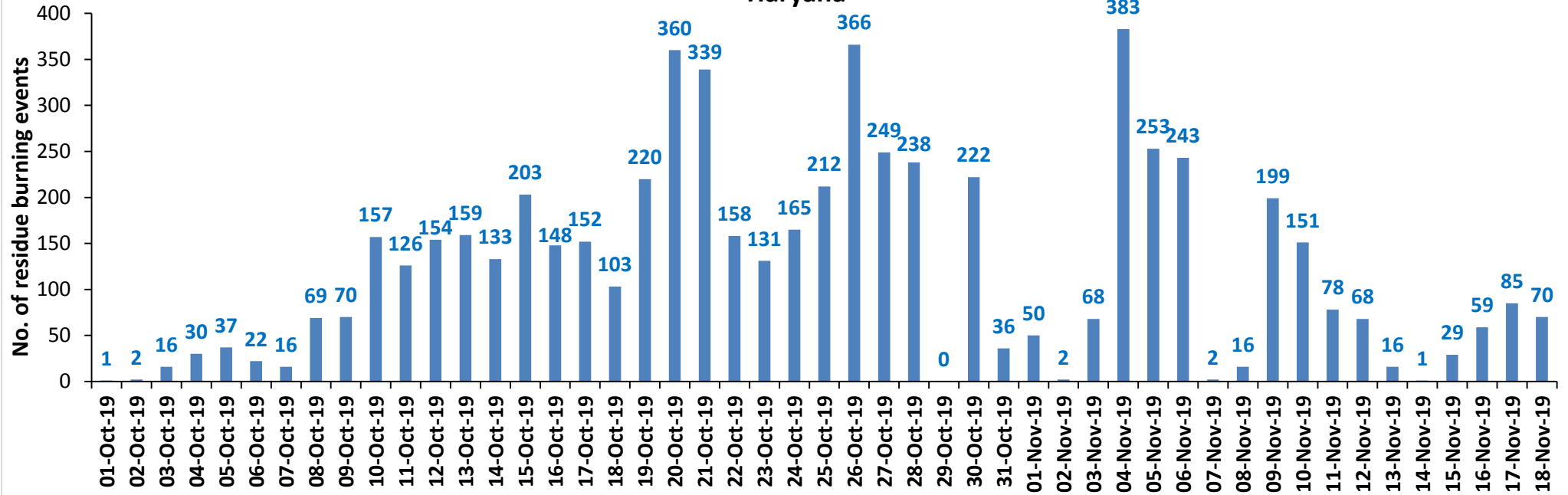
Highlights for 18-November-2019

- Satellites detected **923** residue burning events in the three study States on **18-Nov-2019**.
- The burning events detected on **18-Nov-2019** are **740**, **70** and **113** in Punjab, Haryana and UP, respectively.
- The number of events has increased from **682** on **17-Nov-2019** to **923** on **18-Nov-2019** in the three states.
- Total **56797** burning events were detected in the three States between **01-Oct-2019** and **18-Nov-2019**, which are distributed as **47408**, **6067** and **3322** in Punjab, Haryana and UP, respectively.
- Overall, the total burning events recorded in the three states are **19.2%** less than in 2018 till date. UP recorded **36.8%** reduction, Haryana recorded **25.1%** reduction, and Punjab recorded **16.8%** reduction, respectively, in the current season than in 2018.

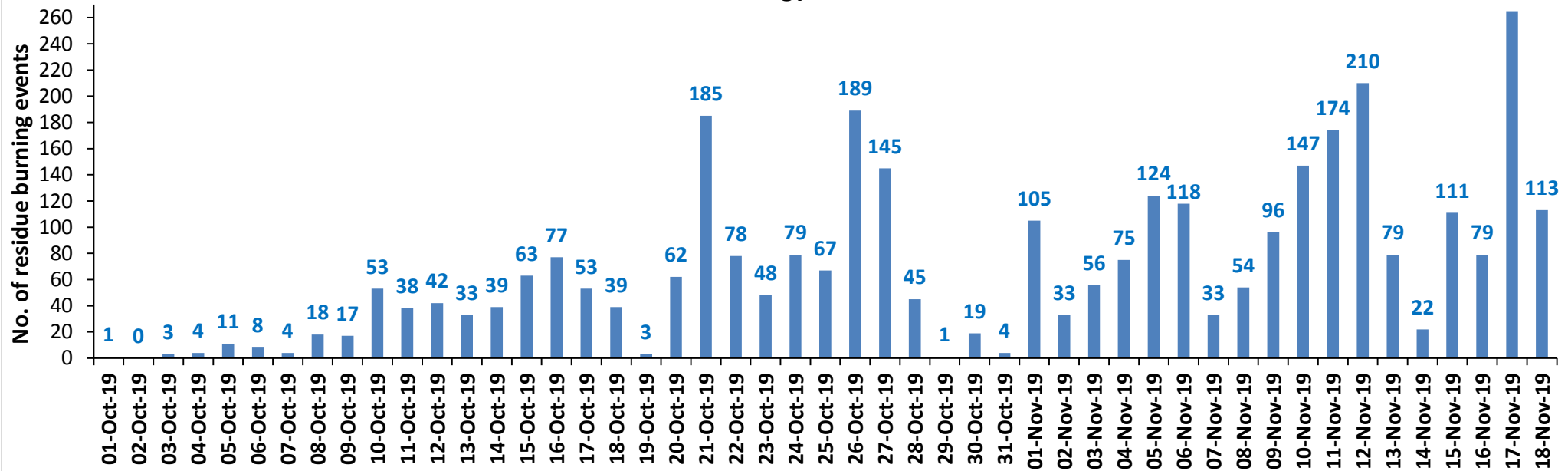
Temporal distribution of residue burning events for the three study States in 2019



Haryana



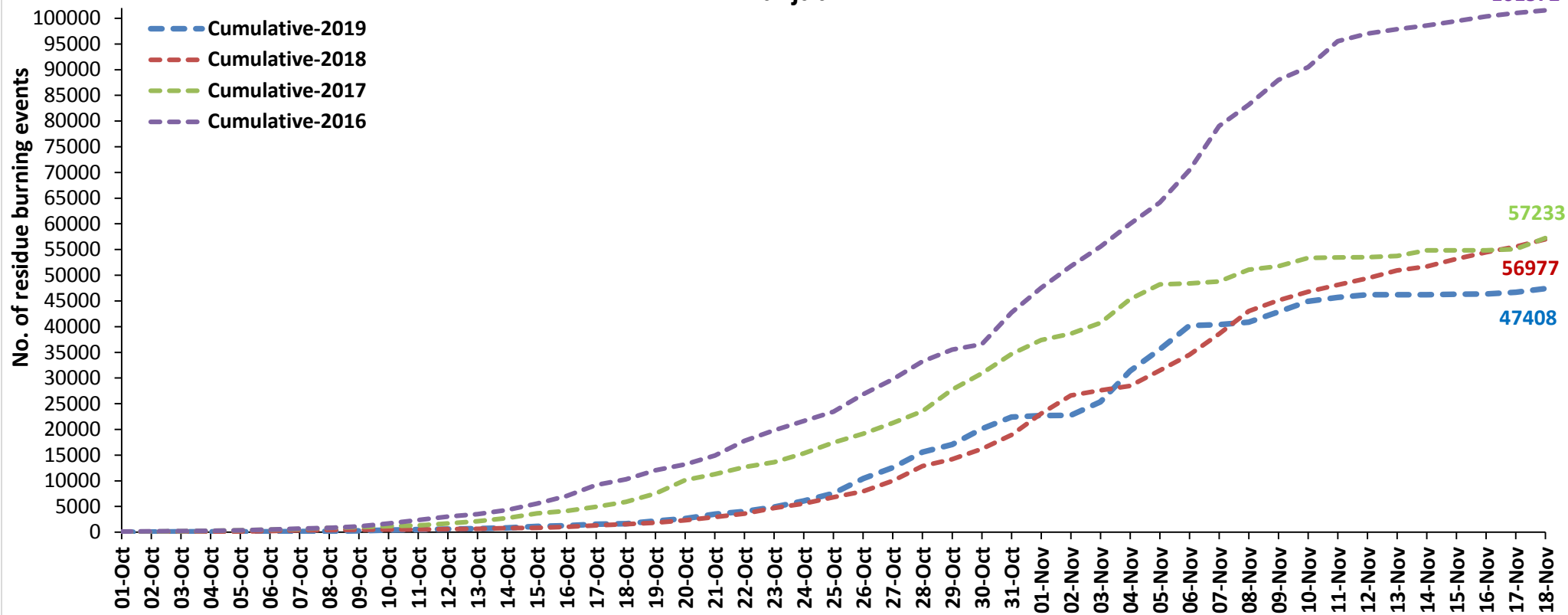
UP



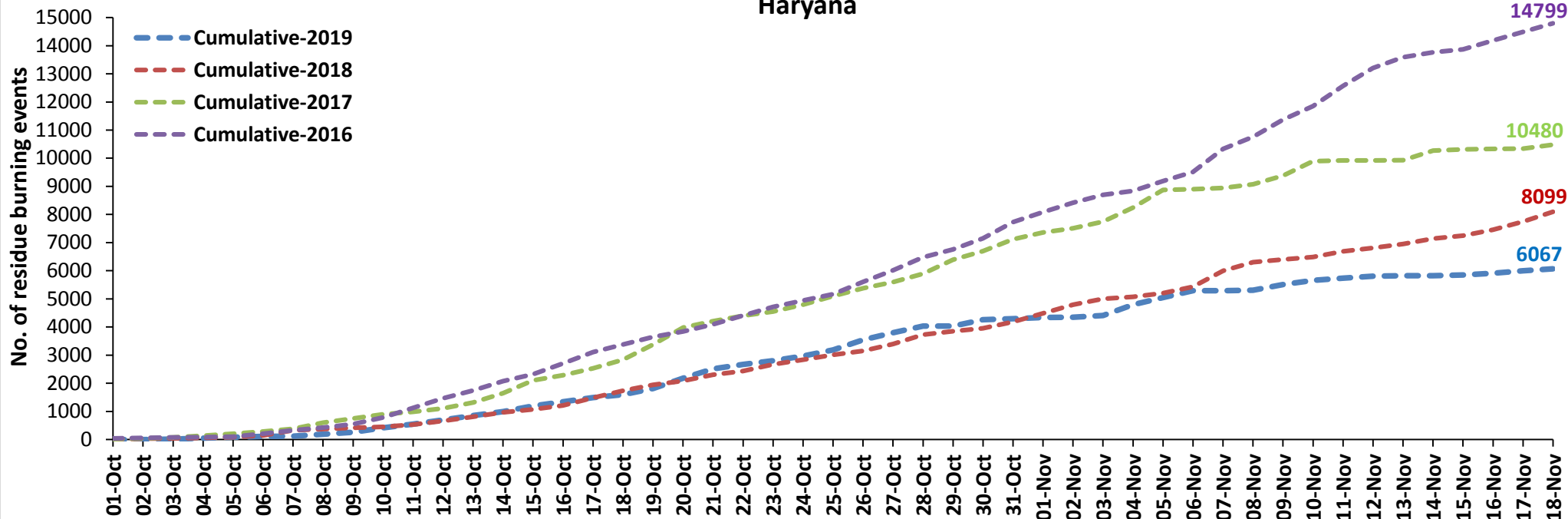
Comparison of residue burning events in current year (2019) with previous years (2018, 2017 & 2016) for the three study States

(01-Oct to 18-Nov)

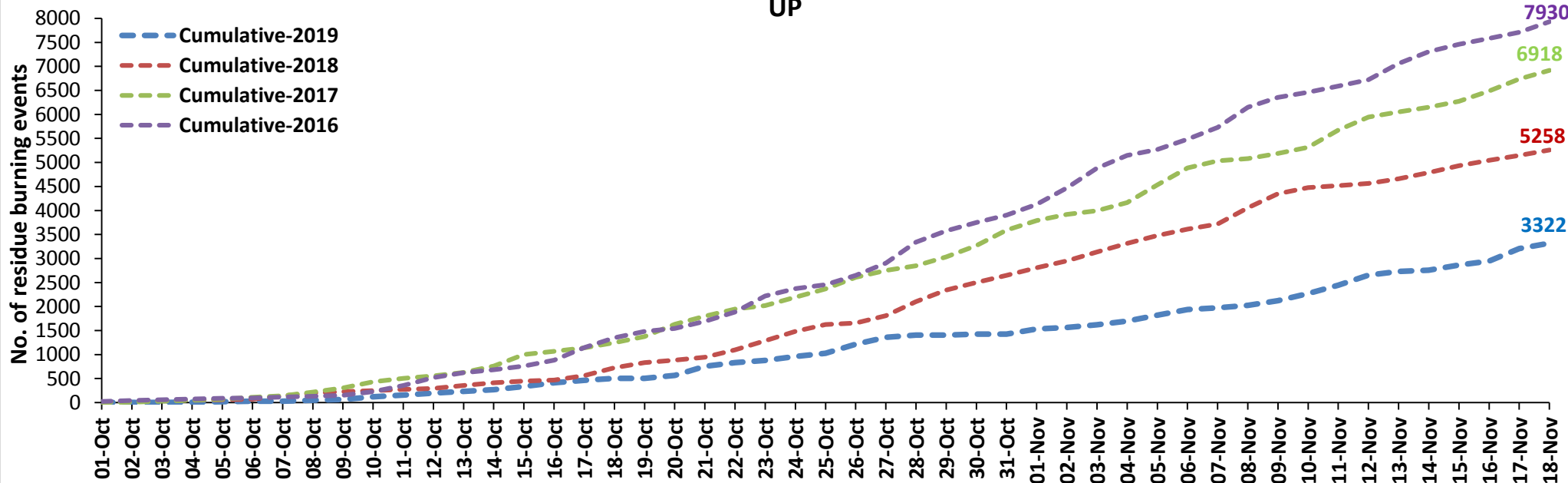
Punjab



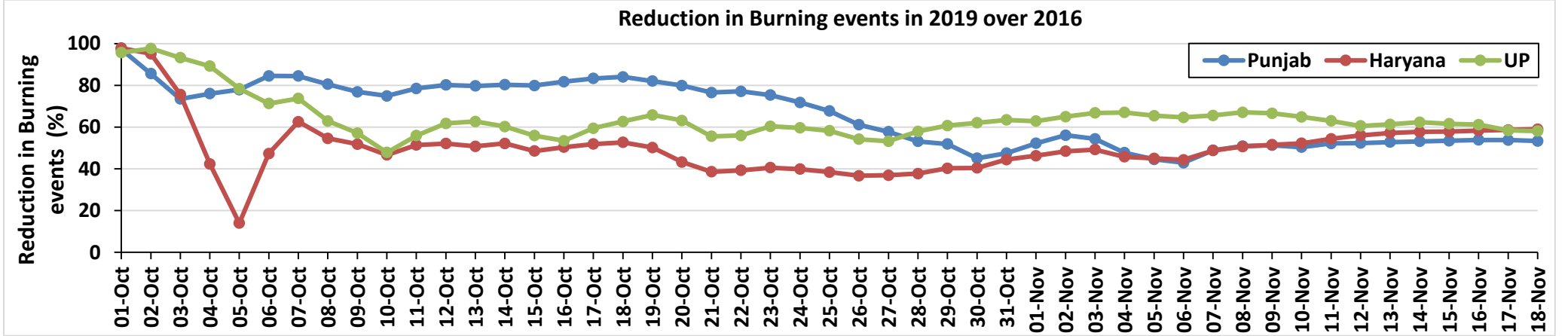
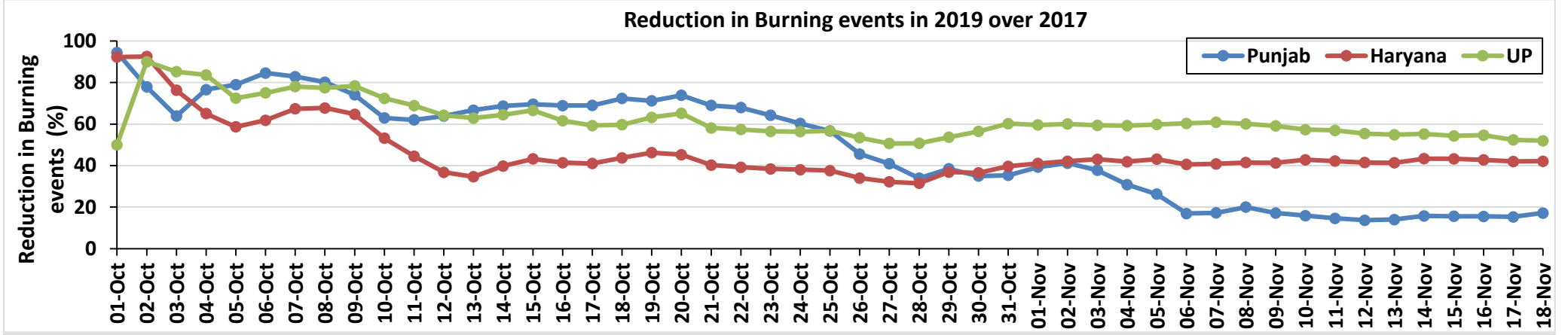
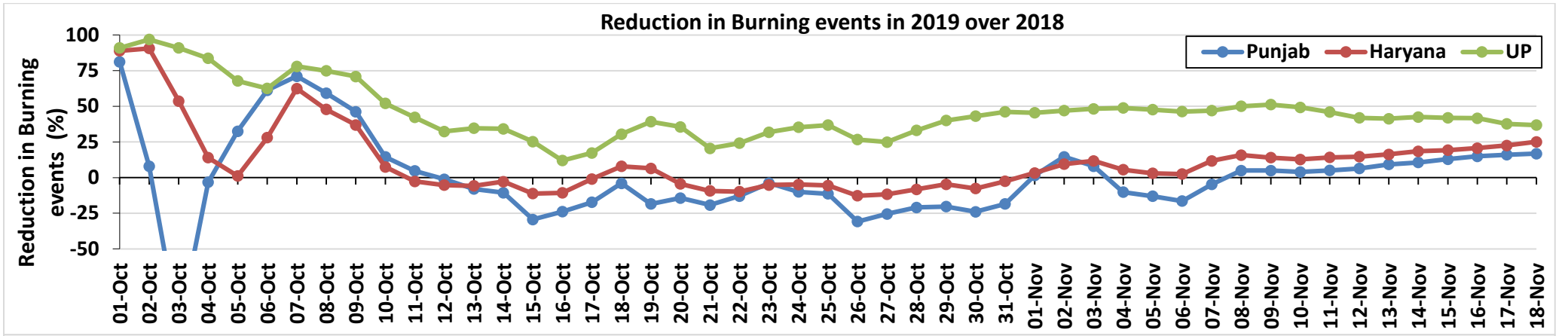
Haryana



UP

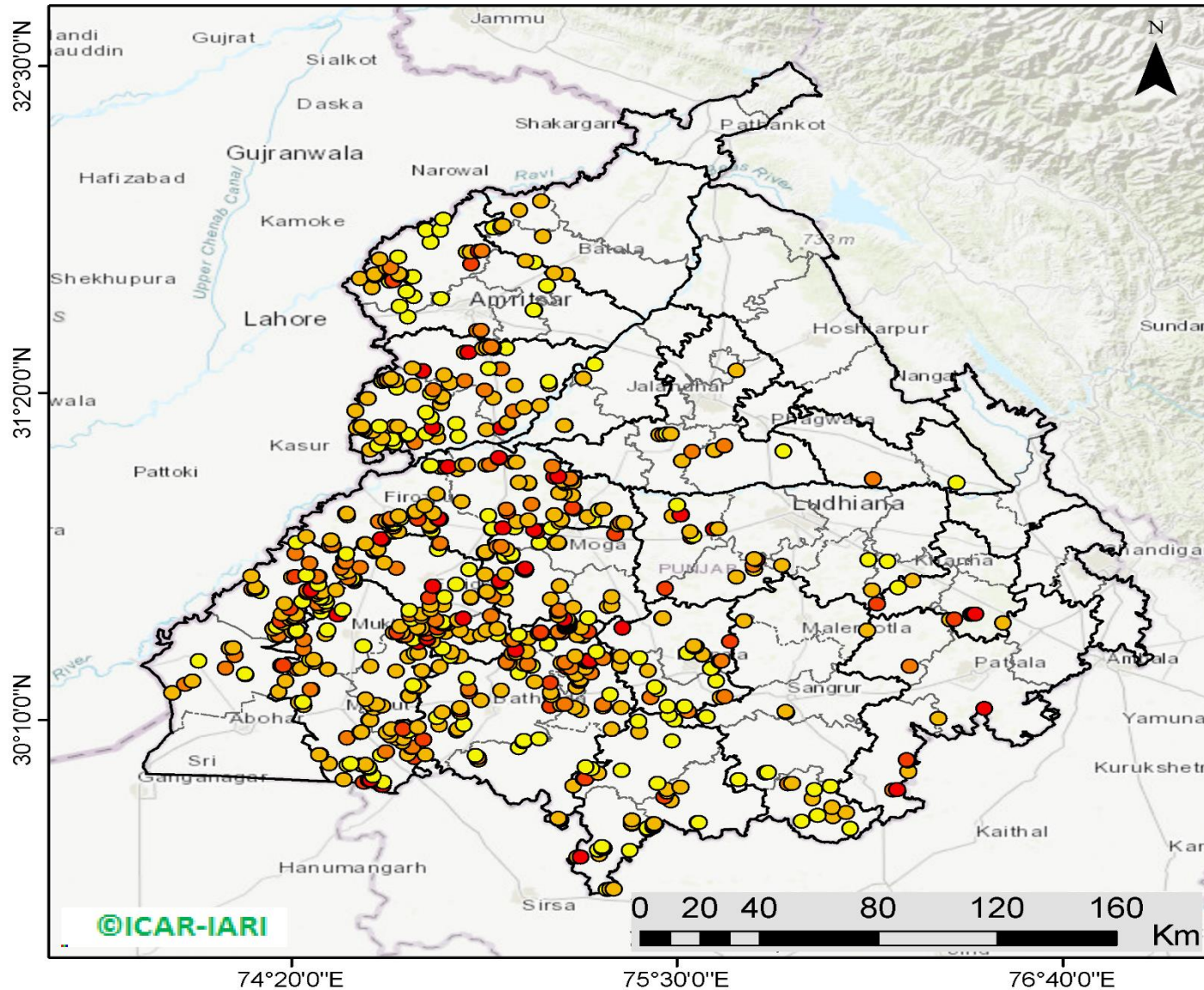


Percent Reduction in Burning events in 2019 over 2018, 2017 and 2016 (Daily Cumulative)



(a) Punjab

RICE RESIDUE BURNING IN PUNJAB



740 burning events detected in Punjab on 18th November 2019

Fire Intensity (W/m²)

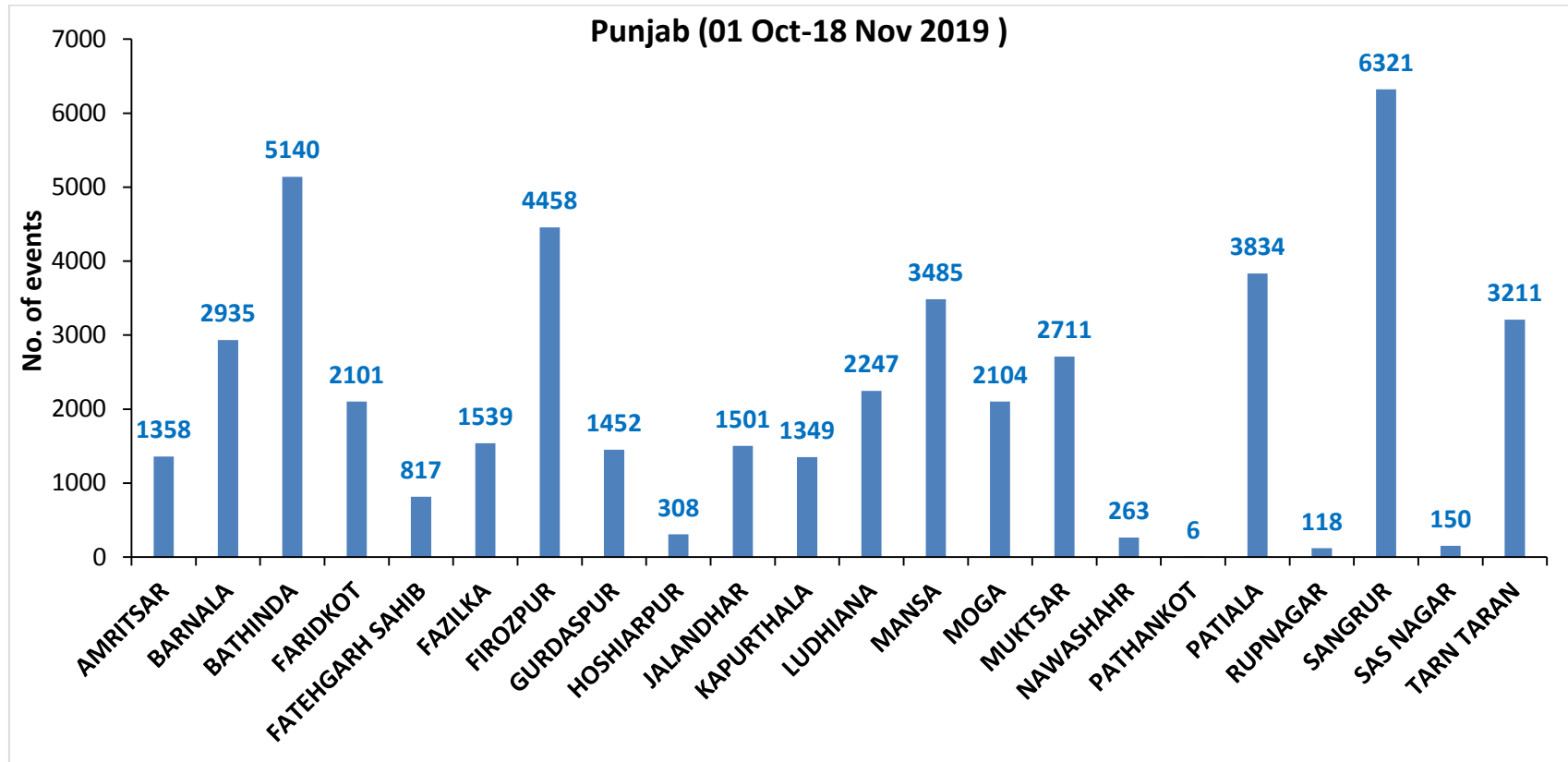
- 0 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- >20

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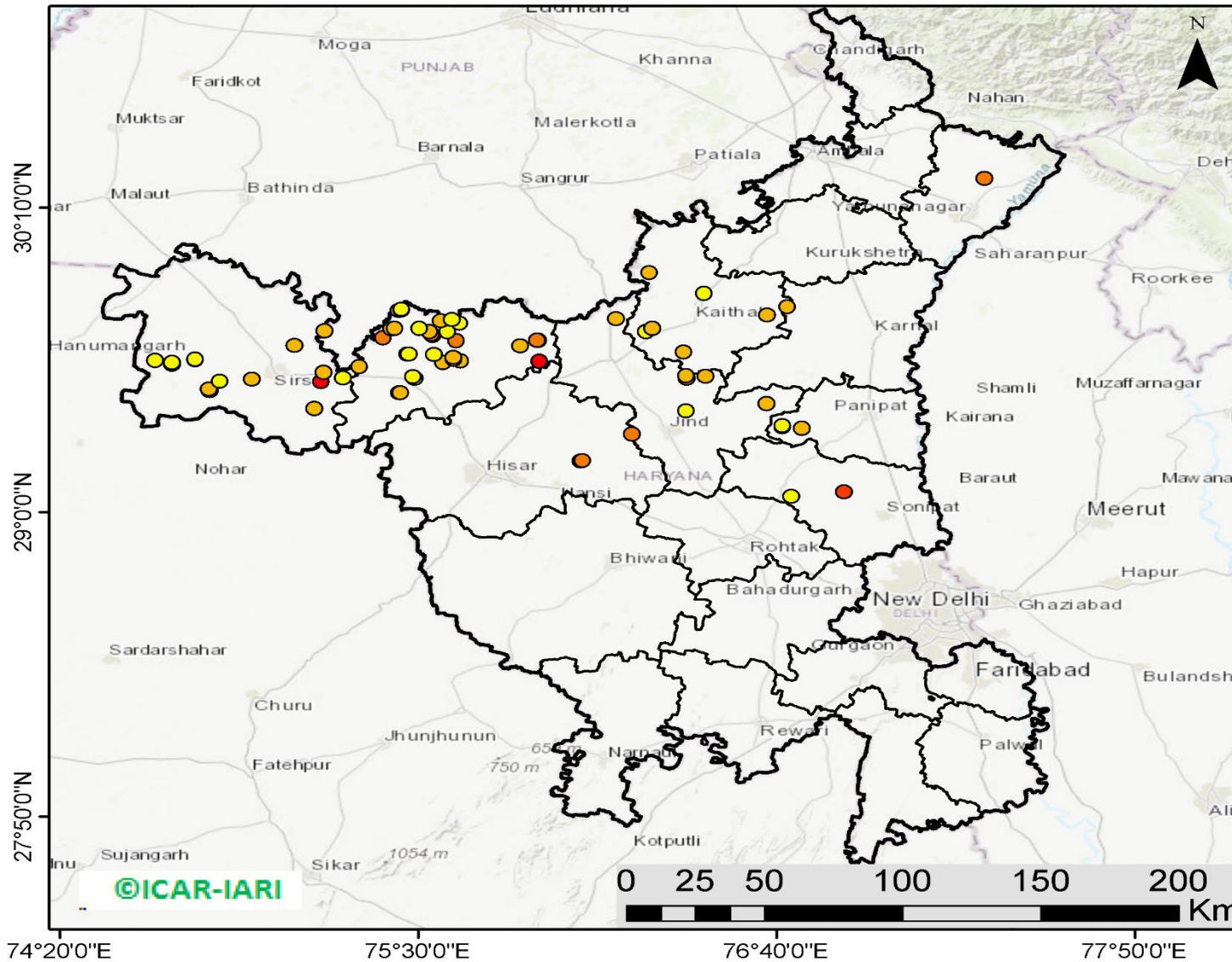
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Punjab (01 Oct to 18-Nov 2019)



(b) Haryana

RICE RESIDUE BURNING IN HARYANA



70 burning events
detected in Haryana on
18th November 2019

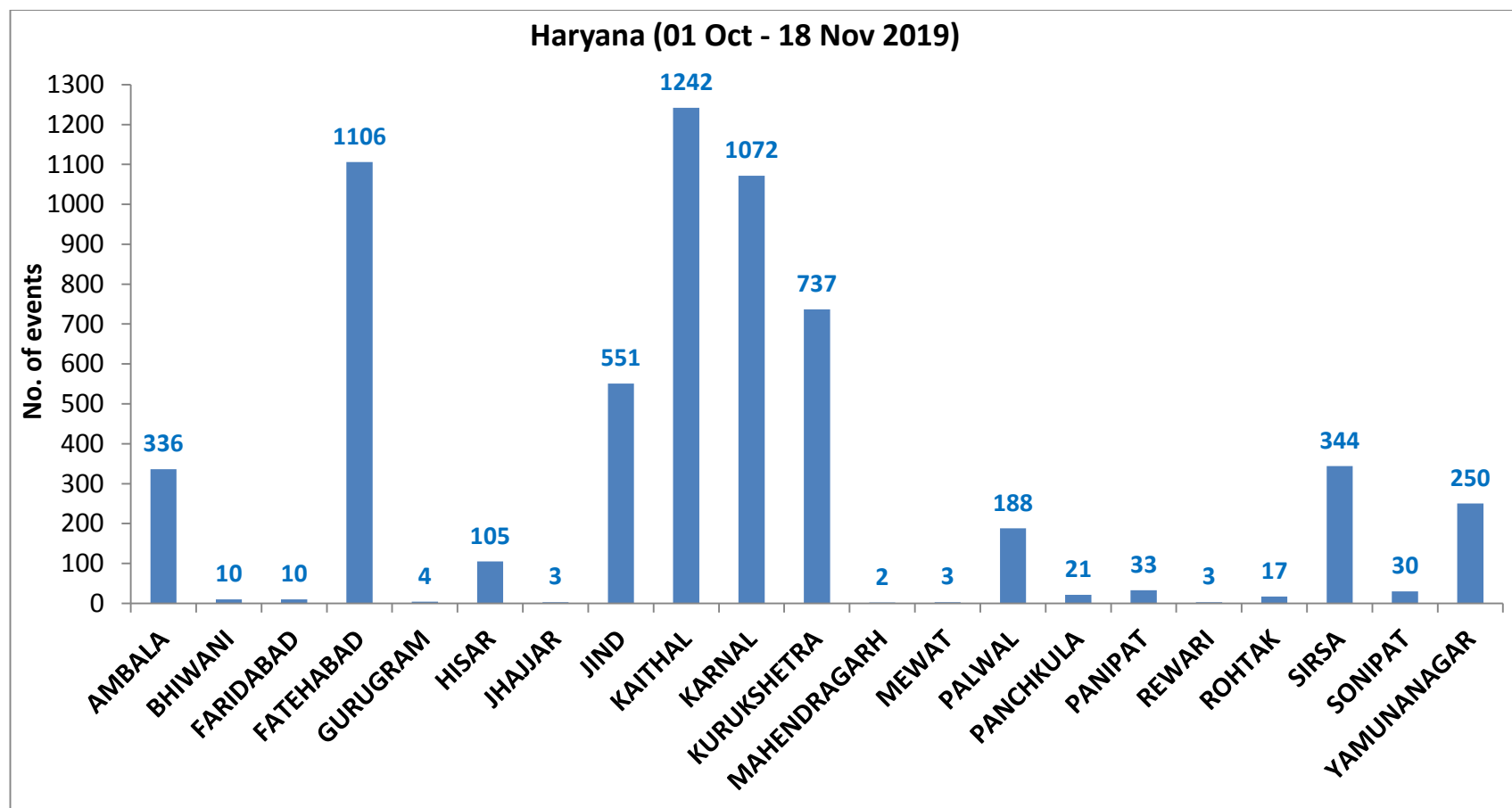
Fire Intensity (W/m²)

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



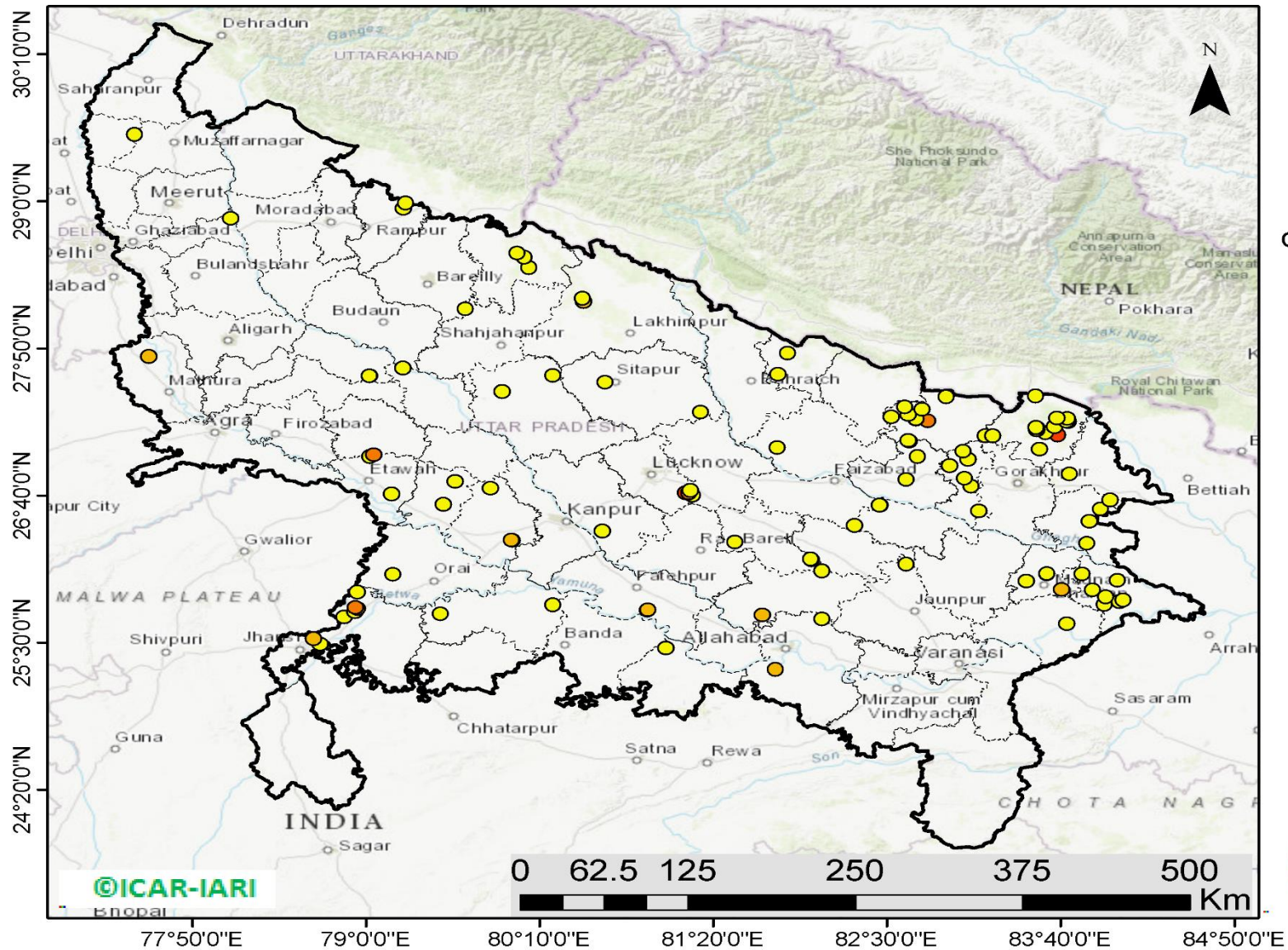
<http://geoportal.icar.gov.in:8080/geoexplorer/composer/>

District-wise cumulative number of residues burning events in Haryana (01 Oct to 18-Nov 2019)



(c) UP

RICE RESIDUE BURNING IN UTTAR PRADESH



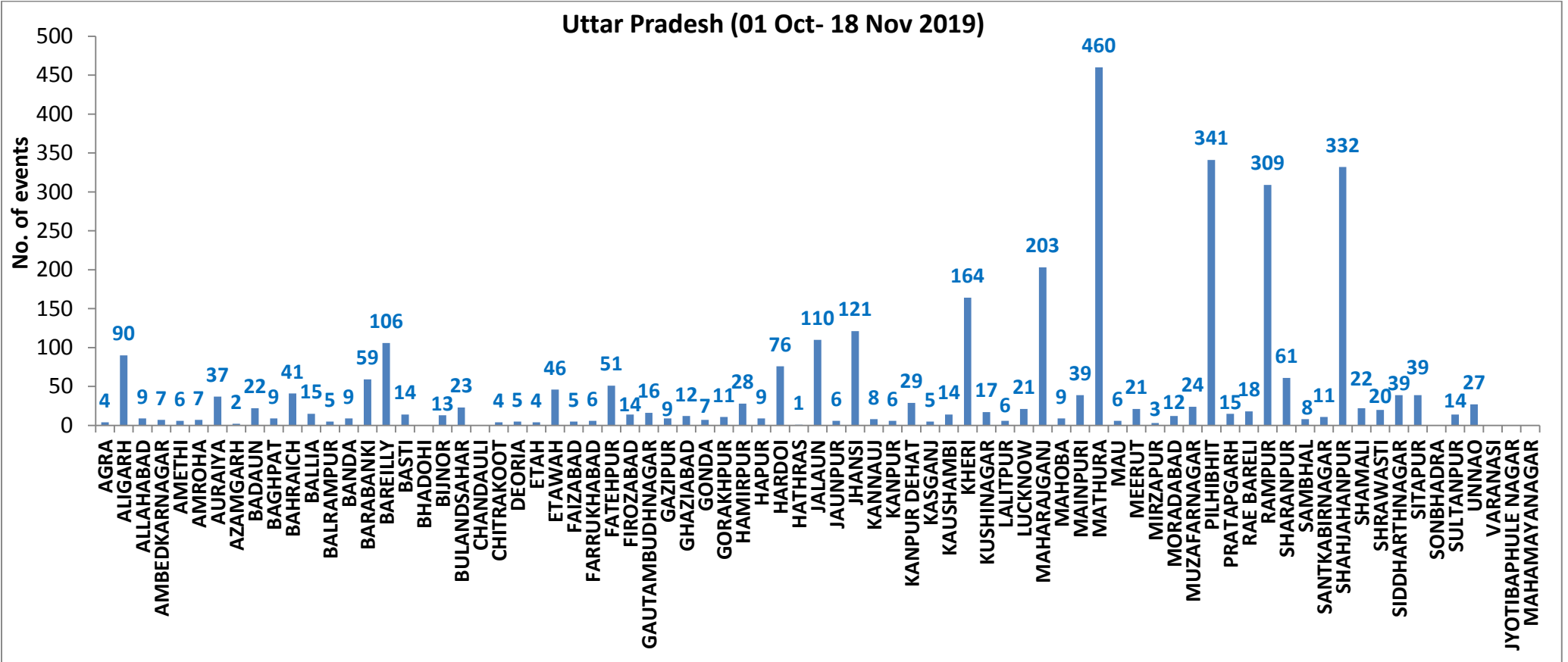
113 burning events
detected in Uttar Pradesh on
18th November 2019

Fire Intensity (W/m²)

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

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

District-wise cumulative number of residues burning events in Uttar Pradesh (01 Oct to 18-Nov 2019)



State-wise, date-wise and district-wise number of residues burning events detected in 2016, 2017, 2018 and 2019
(Period: 01-Oct to 18-Nov)

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

03-Nov	2646	972	2109	3806	68	202	240	275	56	181	75	409	2770	1355	2424	4490
04-Nov	6001	882	4603	4477	383	77	499	146	75	183	168	265	6459	1142	5270	4888
05-Nov	4199	2989	2876	4137	253	129	625	345	124	163	367	125	4576	3281	3868	4607
06-Nov	4642	3071	171	6303	243	222	26	322	118	130	357	215	5003	3423	554	6840
07-Nov	189	4033	420	8575	2	568	46	821	33	108	149	244	224	4709	615	9640
08-Nov	462	4450	2256	4129	16	313	128	432	54	338	43	419	532	5101	2427	4980
09-Nov	2003	2083	675	4857	199	199	311	608	96	294	107	205	2298	2473	1093	5670
10-Nov	2046	1675	1642	2468	151	85	509	484	147	125	131	109	2344	1885	2282	3061
11-Nov	783	1364	103	5040	78	196	29	716	174	45	358	129	1035	1605	490	5885
12-Nov	520	1256	33	1477	68	122	3	634	210	45	269	129	798	1423	305	2240
13-Nov	10	1563	237	885	16	146	7	389	79	94	109	338	105	1803	353	1612
14-Nov	0	765	1101	692	1	189	340	171	22	128	95	247	23	1082	1536	1110
15-Nov	92	1480	5	871	29	107	40	107	111	146	123	154	232	1733	168	1132
16-Nov	23	1250	8	911	59	204	17	318	79	112	218	123	161	1566	243	1352
17-Nov	332	1132	217	638	85	289	12	299	265	103	249	130	682	1524	478	1067
18-Nov	740	1400	2147	568	70	356	139	312	113	111	180	217	923	1867	2466	1097
Total	47408	56977	57233	101572	6067	8099	10480	14799	3322	5258	6918	7930	56797	70334	74631	124301

(a) Punjab

Districts	01Oct-18 Nov			
	2016	2017	2018	2019
AMRITSAR	2147	1220	1219	1358
BARNALA	5683	2790	3154	2935
BATHINDA	8795	4756	6162	5140
FARIDKOT	4612	3018	2936	2101
FATEHGARH SAHIB	2456	1611	843	817
FAZILKA	0	0	0	1539
FIROZPUR	13361	7206	9374	4458
GURDASPUR	2205	1508	1109	1452
HOSHIARPUR	899	477	189	308
JALANDHAR	4652	1991	1344	1501
KAPURTHALA	3131	1532	730	1349
LUDHIANA	9465	3978	2668	2247
MANSA	5596	4102	4206	3485
MOGA	6388	1990	2612	2104
MUKTSAR	6901	3824	5421	2711
NAWASHAHR (SBS Nagar)	1600	793	366	263
PATHANKOT	0	0	0	6
PATIALA	6533	5010	4193	3834
RUPNAGAR	713	326	78	118
SANGRUR	11846	8223	7708	6321
SAS NAGAR	114	107	104	150
TARN TARAN	4475	2771	2561	3211
Total	101572	57233	56977	47408

(b) Haryana

Districts	01Oct-18 Nov			
	2016	2017	2018	2019
AMBALA	530	492	324	336
BHIWANI	72	27	13	10
FARIDABAD	283	341	185	10
FATEHABAD	4689	2990	2197	1106
GURUGRAM	0	0	0	4
HISAR	361	161	165	105
JHAJJAR	28	15	17	3
JIND	837	901	813	551
KAITHAL	1746	1491	1281	1242
KARNAL	1624	1484	838	1072
KURUKSHETRA	1076	1141	679	737
MAHENDRAGARH	0	0	0	2
MEWAT	0	0	0	3
PALWAL	0	0	0	188
PANCHKULA	0	0	3	21
PANIPAT	79	75	55	33
REWARI	0	0	0	3
ROHTAK	81	53	27	17
SIRSA	3074	947	1290	344
SONIPAT	80	55	30	30
YAMUNANAGAR	239	307	182	250
Total	14799	10480	8099	6067

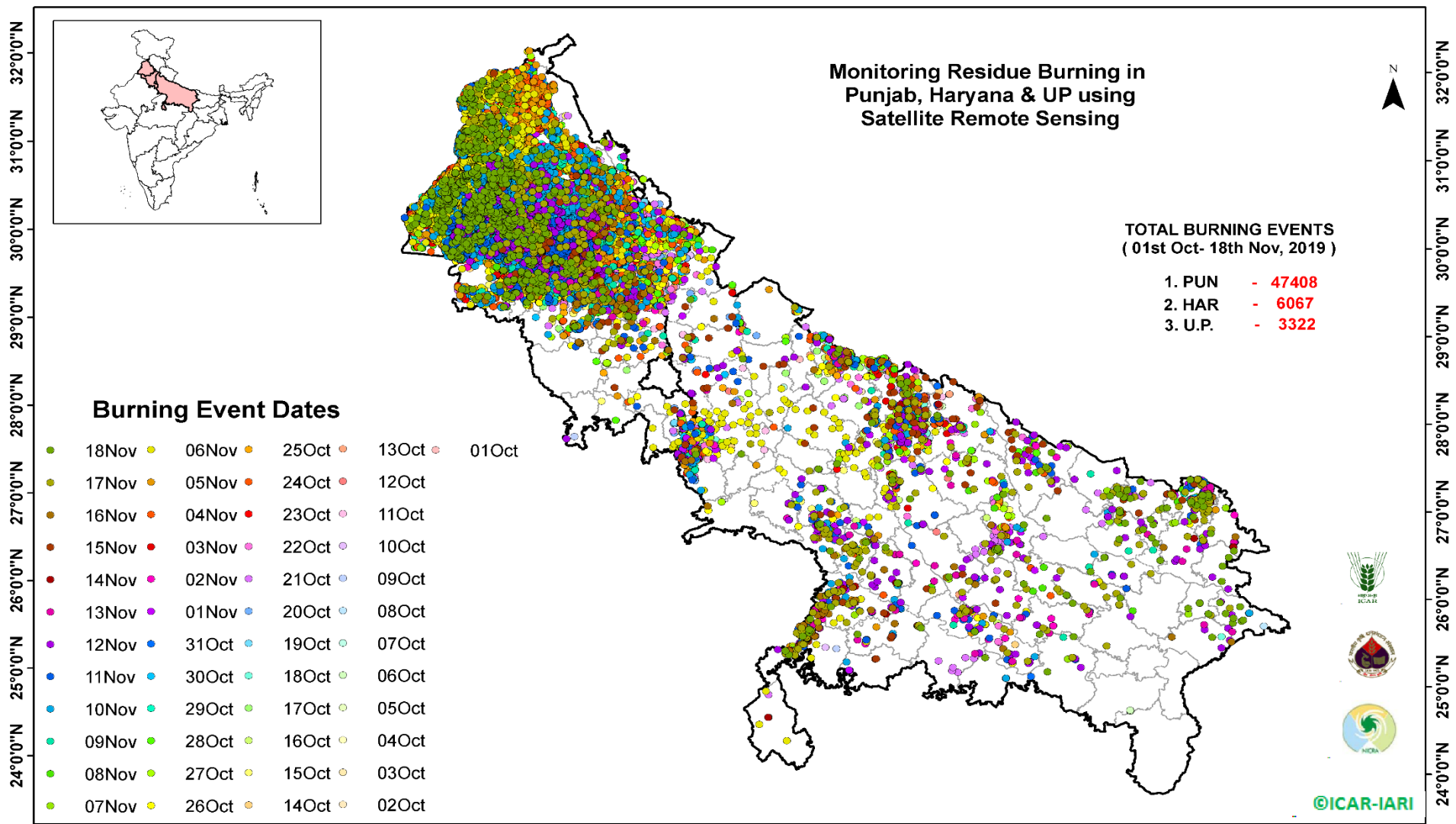
(c) Uttar Pradesh

Districts	01Oct-18 Nov			
	2016	2017	2018	2019
AGRA	0	0	0	4
ALIGARH	51	75	92	90
ALLAHABAD	4	8	11	9
AMBEDKARNAGAR	63	27	14	7
AMETHI	0	0	0	6
AMROHA	0	0	0	7
AURAIYA	201	165	52	37
AZAMGARH	27	26	20	2
BADAUN	6	6	9	22
BAGHPAT	0	0	0	9
BAHRAICH	61	39	57	41
BALLIA	11	19	12	15
BALRAMPUR	29	27	39	5
BANDA	2	14	8	9
BARABANKI	208	150	171	59
BAREILLY	237	198	114	106
BASTI	131	178	106	14
BHADOHI	0	0	0	0
BIJNOR	44	37	8	13
BULANDSAHAR	22	28	12	23
CHANDAULI	3	4	0	0
CHITRAKOOT	0	0	0	4
DEORIA	44	50	43	5
ETAH	17	28	24	4
ETAWAH	109	95	41	46
FAIZABAD	12	9	7	5
FARRUKHABAD	0	0	0	6
FATEHPUR	51	36	69	51
FIROZABAD	23	18	9	14

GAUTAMBUDHNAGAR	20	34	11	16
GAZIPUR	13	8	10	9
GHAZIABAD	62	41	27	12
GONDA	44	33	18	7
GORAKHPUR	49	94	79	11
HAMIRPUR	0	0	1	28
HAPUR	0	0	0	9
HARDOI	232	189	108	76
HATHRAS	0	0	0	1
JALAUN	0	0	0	110
JAUNPUR	13	11	14	6
JHANSI	0	0	2	121
KANNAUJ	26	14	6	8
KANPUR	10	7	9	6
KANPUR DEHAT	39	46	19	29
KASGANJ	0	0	0	5
KAUSHAMBI	16	36	35	14
KHERI	399	251	183	164
KUSHINAGAR	33	82	73	17
LALITPUR	0	0	0	6
LUCKNOW	57	30	26	21
MAHARAJGANJ	443	801	791	203
MAHOBA	0	0	0	9
MAINPURI	74	82	43	39
MATHURA	1439	1082	1048	460
MAU	10	8	9	6
MEERUT	62	65	16	21
MIRZAPUR	3	12	5	3
MORADABAD	44	32	11	12
MUZAFARNAGAR	113	114	34	24
PILHIBHIT	921	708	426	341
PRATAPGARH	25	34	25	15

RAE BARELI	60	53	32	18
RAMPUR	614	614	220	309
SHARANPUR	90	108	51	61
SAMBHAL	0	0	0	8
SANTKABIRNAGAR	52	59	48	11
SHAHJAHANPUR	1122	676	373	332
SHAMALI	0	0	0	22
SHRAWASTI	32	29	35	20
SIDDHARTHANAGAR	225	165	434	39
SITAPUR	109	69	36	39
SONBHADRA	14	10	10	0
SULTANPUR	43	24	23	14
UNNAO	53	45	37	27
VARANASI	1	0	0	0
JYOTIBAPHULE NAGAR	10	13	4	0
MAHAMAYANAGAR	2	2	8	0
Total	7930	6918	5258	3322

Map of Cumulative Burning Events (01 Oct – 18 Nov 2019)



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

Details of residue burning events in Punjab on 18-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m²)
1	AMRITSAR	AJNALA	S-NPP	74.66044	31.64308	14:30:00	D	3.10
2	AMRITSAR	AJNALA	S-NPP	74.70355	31.67628	12:54:00	D	1.40
3	AMRITSAR	AJNALA	S-NPP	74.68129	31.69525	12:54:00	D	1.30
4	AMRITSAR	AJNALA	AQUA	74.57800	31.70800	13:50:00	D	5.40
5	AMRITSAR	AJNALA	AQUA	74.63100	31.73300	13:50:00	D	4.50
6	AMRITSAR	AJNALA	AQUA	74.64200	31.73500	13:50:00	D	17.00
7	AMRITSAR	AJNALA	S-NPP	74.54105	31.74202	14:30:00	D	6.40
8	AMRITSAR	AJNALA	S-NPP	74.69421	31.74630	12:54:00	D	1.50
9	AMRITSAR	AJNALA	S-NPP	74.70100	31.74789	12:54:00	D	2.60
10	AMRITSAR	AJNALA	S-NPP	74.58595	31.75054	14:30:00	D	7.00
11	AMRITSAR	AJNALA	S-NPP	74.65880	31.75397	12:54:00	D	6.00
12	AMRITSAR	AJNALA	S-NPP	74.66220	31.75477	12:54:00	D	6.00
13	AMRITSAR	AJNALA	AQUA	74.59200	31.75700	13:50:00	D	4.90
14	AMRITSAR	AJNALA	S-NPP	74.58568	31.75751	14:30:00	D	8.20
15	AMRITSAR	AJNALA	S-NPP	74.65719	31.75893	12:54:00	D	6.70
16	AMRITSAR	AJNALA	AQUA	74.62300	31.78000	13:50:00	D	7.10
17	AMRITSAR	AJNALA	AQUA	74.63400	31.78100	13:50:00	D	12.80
18	AMRITSAR	AJNALA	AQUA	74.87800	31.79300	13:50:00	D	16.90
19	AMRITSAR	AJNALA	AQUA	74.60000	31.81100	13:50:00	D	7.80
20	AMRITSAR	AJNALA	AQUA	74.65700	31.81800	13:50:00	D	4.50
21	AMRITSAR	AJNALA	AQUA	74.86500	31.83500	13:50:00	D	4.70
22	AMRITSAR	AJNALA	AQUA	74.87600	31.83600	13:50:00	D	7.70
23	AMRITSAR	AJNALA	AQUA	74.90000	31.83900	13:50:00	D	23.90
24	AMRITSAR	AJNALA	AQUA	74.91100	31.84000	13:50:00	D	13.30
25	AMRITSAR	AJNALA	S-NPP	74.75477	31.87087	12:54:00	D	3.40
26	AMRITSAR	AJNALA	S-NPP	74.74117	31.91395	12:54:00	D	1.50
27	AMRITSAR	AJNALA	S-NPP	74.78479	31.91418	14:30:00	D	5.00
28	AMRITSAR	AJNALA	S-NPP	74.79330	31.95274	12:54:00	D	1.50
29	AMRITSAR	AMRITSAR I	AQUA	75.06800	31.79800	13:50:00	D	4.60
30	AMRITSAR	AMRITSAR II	AQUA	74.89600	31.55500	13:50:00	D	12.90

31	AMRITSAR	AMRITSAR II	AQUA	74.90800	31.55600	13:50:00	D	11.60
32	AMRITSAR	AMRITSAR II	S-NPP	74.68542	31.60343	14:30:00	D	3.90
33	AMRITSAR	AMRITSAR II	S-NPP	74.78598	31.66892	12:54:00	D	1.60
34	AMRITSAR	BABA BAKALA	S-NPP	75.06808	31.62950	12:54:00	D	3.50
35	AMRITSAR	BABA BAKALA	S-NPP	75.06655	31.62975	12:54:00	D	3.40
36	AMRITSAR	BABA BAKALA	S-NPP	75.10604	31.71481	14:30:00	D	2.90
37	BARNALA	BARNALA	S-NPP	75.60504	30.34860	12:54:00	D	6.10
38	BARNALA	BARNALA	S-NPP	75.60291	30.34867	12:54:00	D	2.80
39	BARNALA	BARNALA	S-NPP	75.62891	30.37550	12:54:00	D	13.50
40	BARNALA	BARNALA	S-NPP	75.63528	30.37697	12:54:00	D	13.50
41	BARNALA	BARNALA	S-NPP	75.57745	30.39841	14:30:00	D	4.80
42	BARNALA	BARNALA	S-NPP	75.57745	30.39993	14:30:00	D	8.10
43	BARNALA	BARNALA	S-NPP	75.53096	30.40501	12:54:00	D	3.80
44	BARNALA	BARNALA	S-NPP	75.55228	30.42550	12:54:00	D	6.40
45	BARNALA	BARNALA	S-NPP	75.55052	30.42611	12:54:00	D	9.90
46	BARNALA	BARNALA	S-NPP	75.55692	30.42761	12:54:00	D	9.90
47	BARNALA	BARNALA	S-NPP	75.55079	30.43038	12:54:00	D	6.40
48	BARNALA	BARNALA	S-NPP	75.66005	30.44628	14:30:00	D	16.30
49	BARNALA	BARNALA	AQUA	75.33500	30.49400	13:50:00	D	32.90
50	BARNALA	BARNALA	S-NPP	75.45515	30.52924	12:54:00	D	5.50
51	BARNALA	BARNALA	S-NPP	75.45701	30.52977	12:54:00	D	5.60
52	BARNALA	TAPPA	S-NPP	75.49089	30.16520	12:54:00	D	1.40
53	BARNALA	TAPPA	AQUA	75.53300	30.19600	13:50:00	D	12.20
54	BARNALA	TAPPA	S-NPP	75.47131	30.21330	12:54:00	D	3.80
55	BARNALA	TAPPA	S-NPP	75.52147	30.21452	12:54:00	D	5.30
56	BARNALA	TAPPA	S-NPP	75.52304	30.21452	12:54:00	D	3.60
57	BARNALA	TAPPA	S-NPP	75.41943	30.24659	14:30:00	D	10.80
58	BARNALA	TAPPA	AQUA	75.63200	30.24700	13:50:00	D	7.40
59	BARNALA	TAPPA	AQUA	75.64400	30.24900	13:50:00	D	11.30
60	BARNALA	TAPPA	S-NPP	75.44212	30.27492	12:54:00	D	3.00
61	BARNALA	TAPPA	S-NPP	75.43258	30.28326	12:54:00	D	2.00
62	BARNALA	TAPPA	S-NPP	75.61829	30.30482	12:54:00	D	4.50
63	BARNALA	TAPPA	S-NPP	75.41301	30.34116	12:54:00	D	5.10

64	BARNALA	TAPPA	S-NPP	75.38490	30.38731	12:54:00	D	2.00
65	BARNALA	TAPPA	S-NPP	75.33092	30.39210	14:30:00	D	5.60
66	BATHINDA	BATHINDA	S-NPP	74.70569	30.03203	14:30:00	D	15.60
67	BATHINDA	BATHINDA	AQUA	74.74000	30.04100	13:50:00	D	6.80
68	BATHINDA	BATHINDA	AQUA	75.03500	30.08800	13:50:00	D	12.40
69	BATHINDA	BATHINDA	S-NPP	75.03603	30.09218	12:54:00	D	1.30
70	BATHINDA	BATHINDA	S-NPP	74.73219	30.09564	14:30:00	D	16.80
71	BATHINDA	BATHINDA	S-NPP	75.08221	30.09852	14:30:00	D	4.80
72	BATHINDA	BATHINDA	AQUA	74.68500	30.12600	13:50:00	D	5.10
73	BATHINDA	BATHINDA	S-NPP	74.83486	30.12774	14:30:00	D	6.90
74	BATHINDA	BATHINDA	S-NPP	74.68948	30.12809	14:30:00	D	4.80
75	BATHINDA	BATHINDA	S-NPP	74.63528	30.13324	14:30:00	D	8.80
76	BATHINDA	BATHINDA	S-NPP	74.83768	30.13345	14:30:00	D	6.00
77	BATHINDA	BATHINDA	AQUA	74.67200	30.13400	13:50:00	D	19.70
78	BATHINDA	BATHINDA	AQUA	74.71600	30.13900	13:50:00	D	5.80
79	BATHINDA	BATHINDA	AQUA	74.78100	30.14800	13:50:00	D	5.70
80	BATHINDA	BATHINDA	S-NPP	74.85490	30.14956	12:54:00	D	1.60
81	BATHINDA	BATHINDA	S-NPP	74.77328	30.17402	14:30:00	D	3.90
82	BATHINDA	BATHINDA	S-NPP	74.84431	30.19133	12:54:00	D	3.60
83	BATHINDA	BATHINDA	AQUA	74.79000	30.19300	13:50:00	D	6.70
84	BATHINDA	BATHINDA	AQUA	74.84500	30.20000	13:50:00	D	50.00
85	BATHINDA	BATHINDA	AQUA	74.84300	30.20900	13:50:00	D	8.70
86	BATHINDA	BATHINDA	S-NPP	75.11752	30.21411	14:30:00	D	17.40
87	BATHINDA	BATHINDA	AQUA	75.14900	30.22000	13:50:00	D	5.90
88	BATHINDA	BATHINDA	AQUA	75.16000	30.22100	13:50:00	D	10.30
89	BATHINDA	BATHINDA	AQUA	74.90600	30.23600	13:50:00	D	7.70
90	BATHINDA	BATHINDA	AQUA	75.12000	30.25400	13:50:00	D	6.10
91	BATHINDA	BATHINDA	AQUA	75.11800	30.26400	13:50:00	D	7.00
92	BATHINDA	BATHINDA	AQUA	74.87200	30.26800	13:50:00	D	18.10
93	BATHINDA	BATHINDA	S-NPP	74.96832	30.27194	14:30:00	D	5.70
94	BATHINDA	BATHINDA	AQUA	74.87000	30.27700	13:50:00	D	13.10
95	BATHINDA	BATHINDA	AQUA	75.11700	30.29900	13:50:00	D	18.80
96	BATHINDA	BATHINDA	AQUA	75.07000	30.30200	13:50:00	D	8.50

97	BATHINDA	BATHINDA	AQUA	74.86400	30.31400	13:50:00	D	4.80
98	BATHINDA	BATHINDA	S-NPP	75.02133	30.33310	12:54:00	D	2.00
99	BATHINDA	BATHINDA	AQUA	75.16600	30.35300	13:50:00	D	23.50
100	BATHINDA	BATHINDA	S-NPP	75.05796	30.35791	12:54:00	D	2.80
101	BATHINDA	BATHINDA	S-NPP	75.06138	30.35872	12:54:00	D	2.80
102	BATHINDA	BATHINDA	AQUA	75.03700	30.36500	13:50:00	D	9.10
103	BATHINDA	BATHINDA	AQUA	75.04800	30.36600	13:50:00	D	13.50
104	BATHINDA	BATHINDA	AQUA	74.99100	30.36800	13:50:00	D	5.90
105	BATHINDA	BATHINDA	AQUA	75.15100	30.37000	13:50:00	D	9.00
106	BATHINDA	BATHINDA	AQUA	75.16200	30.37100	13:50:00	D	10.70
107	BATHINDA	BATHINDA	AQUA	74.98400	30.37300	13:50:00	D	10.40
108	BATHINDA	RAMPURA PHUL	AQUA	75.30300	30.13300	13:50:00	D	5.70
109	BATHINDA	RAMPURA PHUL	S-NPP	75.20888	30.19963	14:30:00	D	6.10
110	BATHINDA	RAMPURA PHUL	AQUA	75.23800	30.20700	13:50:00	D	50.40
111	BATHINDA	RAMPURA PHUL	AQUA	75.33000	30.20900	13:50:00	D	7.30
112	BATHINDA	RAMPURA PHUL	AQUA	75.19100	30.21000	13:50:00	D	7.00
113	BATHINDA	RAMPURA PHUL	S-NPP	75.27545	30.21271	14:30:00	D	5.70
114	BATHINDA	RAMPURA PHUL	S-NPP	75.27519	30.21986	14:30:00	D	14.80
115	BATHINDA	RAMPURA PHUL	S-NPP	75.29786	30.25651	14:30:00	D	4.40
116	BATHINDA	RAMPURA PHUL	AQUA	75.19600	30.28300	13:50:00	D	6.00
117	BATHINDA	RAMPURA PHUL	AQUA	75.20400	30.30300	13:50:00	D	7.50
118	BATHINDA	RAMPURA PHUL	S-NPP	75.20709	30.30384	12:54:00	D	3.90
119	BATHINDA	RAMPURA PHUL	S-NPP	75.20893	30.30961	12:54:00	D	3.90
120	BATHINDA	RAMPURA PHUL	AQUA	75.20800	30.31000	13:50:00	D	5.80
121	BATHINDA	RAMPURA PHUL	S-NPP	75.19270	30.32717	12:54:00	D	5.20
122	BATHINDA	RAMPURA PHUL	S-NPP	75.19608	30.32795	12:54:00	D	5.20
123	BATHINDA	RAMPURA PHUL	AQUA	75.23900	30.33300	13:50:00	D	14.40
124	BATHINDA	RAMPURA PHUL	AQUA	75.22400	30.35000	13:50:00	D	6.20
125	BATHINDA	RAMPURA PHUL	AQUA	75.17700	30.35400	13:50:00	D	12.80
126	BATHINDA	RAMPURA PHUL	AQUA	75.32700	30.36300	13:50:00	D	7.40
127	BATHINDA	RAMPURA PHUL	S-NPP	75.22731	30.37437	14:30:00	D	31.10
128	BATHINDA	RAMPURA PHUL	S-NPP	75.23527	30.37463	14:30:00	D	39.50
129	BATHINDA	RAMPURA PHUL	S-NPP	75.22744	30.37808	14:30:00	D	27.00

130	BATHINDA	RAMPURA PHUL	S-NPP	75.23540	30.37839	14:30:00	D	27.00
131	BATHINDA	RAMPURA PHUL	AQUA	75.27600	30.38600	13:50:00	D	14.20
132	BATHINDA	RAMPURA PHUL	AQUA	75.19300	30.39400	13:50:00	D	8.40
133	BATHINDA	RAMPURA PHUL	S-NPP	75.25610	30.40978	12:54:00	D	1.80
134	BATHINDA	RAMPURA PHUL	S-NPP	75.11121	30.43467	12:54:00	D	12.40
135	BATHINDA	RAMPURA PHUL	S-NPP	75.10886	30.43686	12:54:00	D	2.00
136	BATHINDA	RAMPURA PHUL	S-NPP	75.21430	30.46283	14:30:00	D	5.30
137	BATHINDA	RAMPURA PHUL	S-NPP	75.21590	30.46688	14:30:00	D	7.80
138	BATHINDA	RAMPURA PHUL	AQUA	75.19900	30.46700	13:50:00	D	6.70
139	BATHINDA	RAMPURA PHUL	AQUA	75.21000	30.46800	13:50:00	D	92.40
140	BATHINDA	RAMPURA PHUL	S-NPP	75.08745	30.47295	14:30:00	D	6.60
141	BATHINDA	RAMPURA PHUL	S-NPP	75.08138	30.47596	14:30:00	D	13.30
142	BATHINDA	RAMPURA PHUL	S-NPP	75.08920	30.47627	14:30:00	D	23.80
143	BATHINDA	RAMPURA PHUL	S-NPP	75.14412	30.47841	14:30:00	D	10.10
144	BATHINDA	RAMPURA PHUL	S-NPP	75.15201	30.47872	14:30:00	D	12.20
145	BATHINDA	RAMPURA PHUL	S-NPP	75.08715	30.48004	14:30:00	D	18.50
146	BATHINDA	RAMPURA PHUL	AQUA	75.23100	30.48100	13:50:00	D	17.10
147	BATHINDA	RAMPURA PHUL	S-NPP	75.14210	30.48188	14:30:00	D	13.60
148	BATHINDA	RAMPURA PHUL	AQUA	75.21100	30.49400	13:50:00	D	9.30
149	BATHINDA	RAMPURA PHUL	AQUA	75.16300	30.49800	13:50:00	D	6.80
150	BATHINDA	RAMPURA PHUL	S-NPP	75.16941	30.49921	12:54:00	D	2.60
151	BATHINDA	RAMPURA PHUL	S-NPP	75.17278	30.50000	12:54:00	D	3.20
152	BATHINDA	RAMPURA PHUL	S-NPP	75.16500	30.50404	14:30:00	D	6.40
153	BATHINDA	RAMPURA PHUL	S-NPP	75.16788	30.50418	12:54:00	D	4.00
154	BATHINDA	RAMPURA PHUL	S-NPP	75.17124	30.50496	12:54:00	D	5.70
155	BATHINDA	RAMPURA PHUL	S-NPP	75.16685	30.50781	14:30:00	D	10.20
156	BATHINDA	RAMPURA PHUL	S-NPP	75.17262	30.51143	14:30:00	D	7.40
157	BATHINDA	RAMPURA PHUL	S-NPP	75.17454	30.51525	14:30:00	D	10.20
158	BATHINDA	RAMPURA PHUL	S-NPP	75.17234	30.51855	14:30:00	D	7.40
159	BATHINDA	RAMPURA PHUL	S-NPP	75.16331	30.51908	12:54:00	D	3.50
160	BATHINDA	RAMPURA PHUL	S-NPP	75.16668	30.51986	12:54:00	D	4.60
161	BATHINDA	RAMPURA PHUL	S-NPP	75.16851	30.52561	12:54:00	D	3.50
162	BATHINDA	RAMPURA PHUL	AQUA	75.15900	30.52600	13:50:00	D	23.40

163	BATHINDA	RAMPURA PHUL	S-NPP	75.13989	30.53879	14:30:00	D	7.00
164	BATHINDA	RAMPURA PHUL	S-NPP	75.13935	30.55301	14:30:00	D	12.40
165	BATHINDA	RAMPURA PHUL	S-NPP	75.14291	30.55730	14:30:00	D	12.60
166	BATHINDA	TALWANDI SABO	AQUA	75.14600	29.80900	13:50:00	D	7.50
167	BATHINDA	TALWANDI SABO	S-NPP	75.14144	29.80996	12:54:00	D	4.20
168	BATHINDA	TALWANDI SABO	S-NPP	75.13992	29.81501	12:54:00	D	5.40
169	BATHINDA	TALWANDI SABO	S-NPP	75.23978	29.99204	12:54:00	D	1.70
170	BATHINDA	TALWANDI SABO	S-NPP	75.22309	29.99888	12:54:00	D	2.80
171	BATHINDA	TALWANDI SABO	AQUA	74.89900	30.02400	13:50:00	D	6.20
172	BATHINDA	TALWANDI SABO	AQUA	74.89700	30.03300	13:50:00	D	12.40
173	BATHINDA	TALWANDI SABO	S-NPP	74.89134	30.03885	14:30:00	D	4.30
174	BATHINDA	TALWANDI SABO	S-NPP	75.02131	30.06711	12:54:00	D	1.80
175	FARIDKOT	FARIDKOT	S-NPP	74.77487	30.48453	14:30:00	D	4.90
176	FARIDKOT	FARIDKOT	AQUA	74.77500	30.49500	13:50:00	D	19.40
177	FARIDKOT	FARIDKOT	AQUA	74.80600	30.50900	13:50:00	D	11.40
178	FARIDKOT	FARIDKOT	S-NPP	74.79347	30.51000	12:54:00	D	2.20
179	FARIDKOT	FARIDKOT	S-NPP	74.79701	30.51085	12:54:00	D	2.20
180	FARIDKOT	FARIDKOT	S-NPP	74.78652	30.51151	14:30:00	D	10.50
181	FARIDKOT	FARIDKOT	S-NPP	74.79190	30.51507	12:54:00	D	3.00
182	FARIDKOT	FARIDKOT	AQUA	74.77000	30.52300	13:50:00	D	11.60
183	FARIDKOT	FARIDKOT	S-NPP	74.69714	30.52531	12:54:00	D	1.30
184	FARIDKOT	FARIDKOT	S-NPP	74.85381	30.52810	14:30:00	D	20.60
185	FARIDKOT	FARIDKOT	AQUA	74.72800	30.53400	13:50:00	D	7.90
186	FARIDKOT	FARIDKOT	AQUA	74.72700	30.54300	13:50:00	D	10.00
187	FARIDKOT	FARIDKOT	S-NPP	74.75459	30.55918	14:30:00	D	6.80
188	FARIDKOT	FARIDKOT	S-NPP	74.79153	30.57469	14:30:00	D	5.50
189	FARIDKOT	FARIDKOT	AQUA	74.75500	30.57500	13:50:00	D	8.40
190	FARIDKOT	FARIDKOT	AQUA	74.87600	30.60000	13:50:00	D	11.80
191	FARIDKOT	FARIDKOT	AQUA	74.73900	30.60100	13:50:00	D	50.40
192	FARIDKOT	FARIDKOT	AQUA	74.75000	30.60200	13:50:00	D	17.80
193	FARIDKOT	FARIDKOT	S-NPP	74.79687	30.60423	12:54:00	D	3.70
194	FARIDKOT	FARIDKOT	S-NPP	74.87673	30.60489	14:30:00	D	8.80
195	FARIDKOT	FARIDKOT	AQUA	74.94300	30.60800	13:50:00	D	10.60

196	FARIDKOT	FARIDKOT	S-NPP	74.92370	30.62183	12:54:00	D	11.10
197	FARIDKOT	FARIDKOT	S-NPP	74.92185	30.62330	12:54:00	D	5.40
198	FARIDKOT	FARIDKOT	S-NPP	74.92530	30.62413	12:54:00	D	5.40
199	FARIDKOT	FARIDKOT	S-NPP	74.76167	30.64260	14:30:00	D	25.50
200	FARIDKOT	FARIDKOT	S-NPP	74.83134	30.65040	12:54:00	D	3.40
201	FARIDKOT	FARIDKOT	S-NPP	74.51801	30.66973	12:54:00	D	4.10
202	FARIDKOT	FARIDKOT	AQUA	74.50700	30.67200	13:50:00	D	14.10
203	FARIDKOT	FARIDKOT	S-NPP	74.91972	30.68398	14:30:00	D	7.40
204	FARIDKOT	FARIDKOT	S-NPP	74.49171	30.69101	12:54:00	D	2.00
205	FARIDKOT	FARIDKOT	S-NPP	74.50629	30.69449	12:54:00	D	5.90
206	FARIDKOT	FARIDKOT	S-NPP	74.87103	30.70295	12:54:00	D	4.00
207	FARIDKOT	FARIDKOT	S-NPP	74.65210	30.70688	14:30:00	D	10.10
208	FARIDKOT	FARIDKOT	S-NPP	74.48346	30.70725	14:30:00	D	11.60
209	FARIDKOT	FARIDKOT	S-NPP	74.54161	30.70955	14:30:00	D	10.20
210	FARIDKOT	FARIDKOT	S-NPP	74.61426	30.72626	14:30:00	D	5.10
211	FARIDKOT	FARIDKOT	S-NPP	74.49491	30.73036	12:54:00	D	6.20
212	FARIDKOT	FARIDKOT	S-NPP	74.49758	30.73055	12:54:00	D	14.70
213	FARIDKOT	FARIDKOT	S-NPP	74.49856	30.73122	12:54:00	D	14.30
214	FARIDKOT	FARIDKOT	S-NPP	74.50037	30.75880	12:54:00	D	2.20
215	FARIDKOT	FARIDKOT	S-NPP	74.58295	30.76775	12:54:00	D	2.20
216	FARIDKOT	FARIDKOT	S-NPP	74.58416	30.76784	12:54:00	D	2.30
217	FARIDKOT	FARIDKOT	AQUA	74.58400	30.77400	13:50:00	D	8.30
218	FARIDKOT	FARIDKOT	S-NPP	74.77641	30.77489	12:54:00	D	3.90
219	FARIDKOT	FARIDKOT	AQUA	74.59500	30.77500	13:50:00	D	5.20
220	FARIDKOT	FARIDKOT	S-NPP	74.55534	30.79402	12:54:00	D	9.00
221	FARIDKOT	FARIDKOT	S-NPP	74.78262	30.79449	14:30:00	D	10.60
222	FARIDKOT	FARIDKOT	S-NPP	74.55894	30.79488	12:54:00	D	9.00
223	FARIDKOT	FARIDKOT	S-NPP	74.60986	30.80907	14:30:00	D	9.00
224	FARIDKOT	FARIDKOT	S-NPP	74.60752	30.81197	12:54:00	D	8.10
225	FARIDKOT	FARIDKOT	AQUA	74.60400	30.81200	13:50:00	D	24.50
226	FARIDKOT	FARIDKOT	AQUA	74.61500	30.81400	13:50:00	D	110.50
227	FARIDKOT	JAITO	AQUA	74.83300	30.39200	13:50:00	D	18.00
228	FARIDKOT	JAITO	AQUA	74.84400	30.39300	13:50:00	D	5.50

229	FARIDKOT	JAITO	AQUA	75.00200	30.40400	13:50:00	D	8.50
230	FARIDKOT	JAITO	AQUA	75.01300	30.40500	13:50:00	D	8.60
231	FARIDKOT	JAITO	AQUA	74.81900	30.40900	13:50:00	D	6.50
232	FARIDKOT	JAITO	AQUA	75.04600	30.41000	13:50:00	D	10.00
233	FARIDKOT	JAITO	AQUA	75.01100	30.41500	13:50:00	D	22.20
234	FARIDKOT	JAITO	S-NPP	74.78996	30.42052	12:54:00	D	3.70
235	FARIDKOT	JAITO	AQUA	74.76100	30.44700	13:50:00	D	5.40
236	FARIDKOT	JAITO	AQUA	74.99400	30.45000	13:50:00	D	12.60
237	FARIDKOT	JAITO	AQUA	75.00500	30.45200	13:50:00	D	12.60
238	FARIDKOT	JAITO	S-NPP	74.74525	30.45363	12:54:00	D	2.10
239	FARIDKOT	JAITO	S-NPP	74.74405	30.45404	14:30:00	D	16.30
240	FARIDKOT	JAITO	S-NPP	74.74613	30.45538	14:30:00	D	21.20
241	FARIDKOT	JAITO	AQUA	75.05000	30.45800	13:50:00	D	5.40
242	FARIDKOT	JAITO	S-NPP	74.87386	30.46062	14:30:00	D	6.60
243	FARIDKOT	JAITO	S-NPP	74.87164	30.46556	14:30:00	D	7.50
244	FARIDKOT	JAITO	S-NPP	74.90674	30.46980	12:54:00	D	6.90
245	FARIDKOT	JAITO	S-NPP	75.02180	30.46988	12:54:00	D	2.40
246	FARIDKOT	JAITO	S-NPP	74.95853	30.47115	12:54:00	D	1.60
247	FARIDKOT	JAITO	AQUA	74.74500	30.47300	13:50:00	D	19.60
248	FARIDKOT	JAITO	AQUA	74.80000	30.48000	13:50:00	D	7.30
249	FARIDKOT	JAITO	AQUA	74.84400	30.48600	13:50:00	D	7.50
250	FARIDKOT	JAITO	AQUA	74.92400	30.48600	13:50:00	D	9.70
251	FARIDKOT	JAITO	AQUA	74.95700	30.49100	13:50:00	D	6.10
252	FARIDKOT	JAITO	AQUA	74.83800	30.52300	13:50:00	D	7.50
253	FARIDKOT	JAITO	S-NPP	74.93739	30.53834	14:30:00	D	11.00
254	FATEHGARH SAHIB	ALMOH	S-NPP	76.16786	30.63916	12:54:00	D	4.80
255	FATEHGARH SAHIB	ALMOH	AQUA	76.21300	30.66400	13:50:00	D	7.50
256	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.48600	30.51300	13:50:00	D	6.00
257	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.32600	30.52500	13:50:00	D	7.30
258	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.33900	30.52600	13:50:00	D	18.00
259	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.38900	30.54200	13:50:00	D	13.60
260	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.39600	30.54300	13:50:00	D	26.70
261	FATEHGARH SAHIB	FATEHGARH SAHIB	AQUA	76.40100	30.54400	13:50:00	D	32.80

262	FAZILKA	ABOHAR	AQUA	74.44800	30.01100	13:50:00	D	7.20
263	FAZILKA	FAZILKA	S-NPP	73.97379	30.26340	14:30:00	D	7.80
264	FAZILKA	FAZILKA	AQUA	74.29600	30.26700	13:50:00	D	6.50
265	FAZILKA	FAZILKA	S-NPP	74.01240	30.29198	14:30:00	D	10.70
266	FAZILKA	FAZILKA	AQUA	74.03400	30.30500	13:50:00	D	5.60
267	FAZILKA	FAZILKA	S-NPP	74.19408	30.32734	14:30:00	D	4.90
268	FAZILKA	FAZILKA	S-NPP	74.19268	30.32956	14:30:00	D	2.50
269	FAZILKA	FAZILKA	S-NPP	74.13534	30.35115	12:54:00	D	12.00
270	FAZILKA	FAZILKA	S-NPP	74.30361	30.35962	14:30:00	D	26.50
271	FAZILKA	FAZILKA	S-NPP	74.30225	30.36121	14:30:00	D	22.80
272	FAZILKA	FAZILKA	S-NPP	74.30924	30.36150	14:30:00	D	17.50
273	FAZILKA	FAZILKA	S-NPP	74.05384	30.37772	14:30:00	D	4.70
274	FAZILKA	FAZILKA	AQUA	74.16200	30.39600	13:50:00	D	14.40
275	FAZILKA	FAZILKA	AQUA	74.14700	30.42200	13:50:00	D	8.60
276	FAZILKA	FAZILKA	AQUA	74.15700	30.42300	13:50:00	D	9.20
277	FAZILKA	JALALABAD	AQUA	74.28600	30.46700	13:50:00	D	4.80
278	FAZILKA	JALALABAD	AQUA	74.29600	30.46800	13:50:00	D	13.00
279	FAZILKA	JALALABAD	S-NPP	74.35233	30.48227	12:54:00	D	3.50
280	FAZILKA	JALALABAD	AQUA	74.33700	30.48300	13:50:00	D	6.40
281	FAZILKA	JALALABAD	AQUA	74.34800	30.48400	13:50:00	D	4.70
282	FAZILKA	JALALABAD	S-NPP	74.35053	30.48530	12:54:00	D	3.90
283	FAZILKA	JALALABAD	S-NPP	74.27969	30.49115	14:30:00	D	5.40
284	FAZILKA	JALALABAD	S-NPP	74.28967	30.49849	12:54:00	D	1.90
285	FAZILKA	JALALABAD	S-NPP	74.30676	30.51277	14:30:00	D	5.40
286	FAZILKA	JALALABAD	S-NPP	74.29947	30.51928	14:30:00	D	17.00
287	FAZILKA	JALALABAD	AQUA	74.32900	30.52800	13:50:00	D	7.50
288	FAZILKA	JALALABAD	AQUA	74.34000	30.53000	13:50:00	D	42.90
289	FAZILKA	JALALABAD	AQUA	74.35100	30.53100	13:50:00	D	15.40
290	FAZILKA	JALALABAD	S-NPP	74.34344	30.53649	14:30:00	D	6.00
291	FAZILKA	JALALABAD	S-NPP	74.34778	30.54189	14:30:00	D	8.50
292	FAZILKA	JALALABAD	AQUA	74.30500	30.54300	13:50:00	D	6.40
293	FAZILKA	JALALABAD	S-NPP	74.32801	30.56324	14:30:00	D	19.60
294	FAZILKA	JALALABAD	AQUA	74.31300	30.58100	13:50:00	D	9.90

295	FAZILKA	JALALABAD	AQUA	74.36700	30.58800	13:50:00	D	4.10
296	FAZILKA	JALALABAD	S-NPP	74.41098	30.61456	14:30:00	D	8.40
297	FAZILKA	JALALABAD	S-NPP	74.38216	30.62022	14:30:00	D	19.20
298	FAZILKA	JALALABAD	AQUA	74.41600	30.62300	13:50:00	D	9.10
299	FAZILKA	JALALABAD	AQUA	74.42700	30.62400	13:50:00	D	5.30
300	FAZILKA	JALALABAD	S-NPP	74.24089	30.62522	12:54:00	D	2.20
301	FAZILKA	JALALABAD	AQUA	74.38200	30.62800	13:50:00	D	10.60
302	FAZILKA	JALALABAD	AQUA	74.39300	30.62900	13:50:00	D	24.50
303	FAZILKA	JALALABAD	AQUA	74.47000	30.63000	13:50:00	D	6.90
304	FAZILKA	JALALABAD	AQUA	74.21600	30.63300	13:50:00	D	11.30
305	FAZILKA	JALALABAD	AQUA	74.22700	30.63500	13:50:00	D	10.50
306	FAZILKA	JALALABAD	S-NPP	74.22361	30.63544	14:30:00	D	5.00
307	FAZILKA	JALALABAD	S-NPP	74.22604	30.64079	14:30:00	D	9.00
308	FAZILKA	JALALABAD	S-NPP	74.41383	30.65019	12:54:00	D	1.70
309	FAZILKA	JALALABAD	AQUA	74.33500	30.67500	13:50:00	D	5.40
310	FAZILKA	JALALABAD	AQUA	74.41200	30.67600	13:50:00	D	5.70
311	FAZILKA	JALALABAD	S-NPP	74.41541	30.67657	14:30:00	D	10.00
312	FAZILKA	JALALABAD	S-NPP	74.41268	30.67694	14:30:00	D	13.30
313	FAZILKA	JALALABAD	AQUA	74.34500	30.67700	13:50:00	D	15.30
314	FAZILKA	JALALABAD	AQUA	74.21300	30.67800	13:50:00	D	7.10
315	FAZILKA	JALALABAD	AQUA	74.37800	30.68100	13:50:00	D	4.20
316	FAZILKA	JALALABAD	S-NPP	74.38908	30.72406	14:30:00	D	14.60
317	FAZILKA	JALALABAD	AQUA	74.34600	30.76000	13:50:00	D	10.70
318	FIROZPUR	FIROZPUR	S-NPP	74.45109	30.78861	14:30:00	D	8.40
319	FIROZPUR	FIROZPUR	S-NPP	74.45831	30.78893	14:30:00	D	8.40
320	FIROZPUR	FIROZPUR	S-NPP	74.44980	30.78912	14:30:00	D	9.40
321	FIROZPUR	FIROZPUR	S-NPP	74.45702	30.78939	14:30:00	D	12.90
322	FIROZPUR	FIROZPUR	S-NPP	74.78343	30.79587	14:30:00	D	13.40
323	FIROZPUR	FIROZPUR	S-NPP	74.34880	30.79890	14:30:00	D	4.20
324	FIROZPUR	FIROZPUR	S-NPP	74.45341	30.80818	12:54:00	D	5.90
325	FIROZPUR	FIROZPUR	AQUA	74.37900	30.82000	13:50:00	D	8.20
326	FIROZPUR	FIROZPUR	AQUA	74.64500	30.83600	13:50:00	D	8.30
327	FIROZPUR	FIROZPUR	AQUA	74.65600	30.83800	13:50:00	D	8.20

328	FIROZPUR	FIROZPUR	S-NPP	74.75805	30.84260	14:30:00	D	4.90
329	FIROZPUR	FIROZPUR	AQUA	74.94000	30.84600	13:50:00	D	11.40
330	FIROZPUR	FIROZPUR	S-NPP	74.94126	30.84833	12:54:00	D	2.30
331	FIROZPUR	FIROZPUR	AQUA	74.64200	30.85500	13:50:00	D	11.60
332	FIROZPUR	FIROZPUR	S-NPP	74.75279	30.85740	12:54:00	D	5.70
333	FIROZPUR	FIROZPUR	S-NPP	74.75121	30.86244	12:54:00	D	5.70
334	FIROZPUR	FIROZPUR	S-NPP	74.62736	30.86391	14:30:00	D	5.50
335	FIROZPUR	FIROZPUR	S-NPP	74.64223	30.86443	14:30:00	D	9.90
336	FIROZPUR	FIROZPUR	S-NPP	74.63719	30.86576	14:30:00	D	10.50
337	FIROZPUR	FIROZPUR	S-NPP	74.64293	30.86947	12:54:00	D	1.40
338	FIROZPUR	FIROZPUR	AQUA	74.59900	30.87500	13:50:00	D	14.50
339	FIROZPUR	FIROZPUR	AQUA	74.62100	30.87700	13:50:00	D	7.60
340	FIROZPUR	FIROZPUR	AQUA	74.63200	30.87900	13:50:00	D	6.70
341	FIROZPUR	FIROZPUR	AQUA	74.65400	30.88200	13:50:00	D	5.30
342	FIROZPUR	FIROZPUR	AQUA	74.71600	30.88300	13:50:00	D	15.10
343	FIROZPUR	FIROZPUR	S-NPP	74.77668	30.88305	14:30:00	D	16.70
344	FIROZPUR	FIROZPUR	S-NPP	74.78426	30.88331	14:30:00	D	24.50
345	FIROZPUR	FIROZPUR	S-NPP	74.63388	30.88501	14:30:00	D	10.20
346	FIROZPUR	FIROZPUR	S-NPP	74.77906	30.88545	14:30:00	D	28.40
347	FIROZPUR	FIROZPUR	S-NPP	74.66368	30.88608	14:30:00	D	2.50
348	FIROZPUR	FIROZPUR	S-NPP	74.65847	30.89448	14:30:00	D	9.30
349	FIROZPUR	FIROZPUR	S-NPP	74.50350	30.89482	14:30:00	D	8.80
350	FIROZPUR	FIROZPUR	S-NPP	74.49877	30.90225	12:54:00	D	6.40
351	FIROZPUR	FIROZPUR	S-NPP	74.50237	30.90312	12:54:00	D	6.40
352	FIROZPUR	FIROZPUR	AQUA	74.76400	30.90500	13:50:00	D	5.40
353	FIROZPUR	FIROZPUR	S-NPP	74.70769	30.90859	14:30:00	D	12.80
354	FIROZPUR	FIROZPUR	S-NPP	74.71024	30.91060	14:30:00	D	9.00
355	FIROZPUR	FIROZPUR	AQUA	74.73600	30.93000	13:50:00	D	5.10
356	FIROZPUR	FIROZPUR	S-NPP	74.77225	30.97220	14:30:00	D	6.20
357	FIROZPUR	FIROZPUR	AQUA	74.78600	31.06700	13:50:00	D	4.50
358	FIROZPUR	FIROZPUR	AQUA	74.79700	31.06800	13:50:00	D	11.80
359	FIROZPUR	FIROZPUR	AQUA	74.75100	31.07100	13:50:00	D	4.90
360	FIROZPUR	FIROZPUR	S-NPP	74.75425	31.07427	14:30:00	D	3.10

361	FIROZPUR	ZIRA	S-NPP	75.32260	30.86296	14:30:00	D	8.40
362	FIROZPUR	ZIRA	AQUA	75.33000	30.87000	13:50:00	D	13.80
363	FIROZPUR	ZIRA	S-NPP	75.33053	30.87044	14:30:00	D	10.50
364	FIROZPUR	ZIRA	AQUA	75.34100	30.87100	13:50:00	D	8.80
365	FIROZPUR	ZIRA	AQUA	75.14500	30.87200	13:50:00	D	5.30
366	FIROZPUR	ZIRA	AQUA	75.01600	30.87400	13:50:00	D	8.70
367	FIROZPUR	ZIRA	AQUA	75.05000	30.87900	13:50:00	D	5.90
368	FIROZPUR	ZIRA	S-NPP	75.24727	30.87940	12:54:00	D	4.40
369	FIROZPUR	ZIRA	S-NPP	75.15027	30.88108	14:30:00	D	6.30
370	FIROZPUR	ZIRA	S-NPP	75.23031	30.89069	14:30:00	D	5.50
371	FIROZPUR	ZIRA	S-NPP	74.92947	30.89528	14:30:00	D	4.50
372	FIROZPUR	ZIRA	AQUA	75.12900	30.89800	13:50:00	D	6.90
373	FIROZPUR	ZIRA	AQUA	74.98700	30.90900	13:50:00	D	16.70
374	FIROZPUR	ZIRA	S-NPP	75.26434	30.91481	12:54:00	D	3.90
375	FIROZPUR	ZIRA	S-NPP	75.27573	30.91712	12:54:00	D	7.00
376	FIROZPUR	ZIRA	S-NPP	75.27739	30.91780	12:54:00	D	6.90
377	FIROZPUR	ZIRA	AQUA	74.98500	30.91800	13:50:00	D	11.60
378	FIROZPUR	ZIRA	S-NPP	75.18900	30.91804	14:30:00	D	18.90
379	FIROZPUR	ZIRA	S-NPP	75.18311	30.92253	14:30:00	D	17.00
380	FIROZPUR	ZIRA	S-NPP	75.06096	30.93518	14:30:00	D	10.40
381	FIROZPUR	ZIRA	AQUA	74.84800	30.94400	13:50:00	D	6.10
382	FIROZPUR	ZIRA	AQUA	75.18200	30.96700	13:50:00	D	7.50
383	FIROZPUR	ZIRA	AQUA	75.15700	30.97400	13:50:00	D	7.70
384	FIROZPUR	ZIRA	S-NPP	75.14322	30.97553	12:54:00	D	6.30
385	FIROZPUR	ZIRA	S-NPP	75.04981	31.00958	14:30:00	D	8.40
386	FIROZPUR	ZIRA	S-NPP	75.16195	31.01009	14:30:00	D	9.70
387	FIROZPUR	ZIRA	S-NPP	75.05042	31.01301	14:30:00	D	5.50
388	FIROZPUR	ZIRA	S-NPP	75.16125	31.01316	14:30:00	D	7.30
389	FIROZPUR	ZIRA	AQUA	75.02200	31.01400	13:50:00	D	5.70
390	FIROZPUR	ZIRA	AQUA	75.17400	31.01400	13:50:00	D	11.60
391	FIROZPUR	ZIRA	AQUA	75.18600	31.01600	13:50:00	D	6.30
392	FIROZPUR	ZIRA	S-NPP	75.15423	31.02028	12:54:00	D	6.90
393	FIROZPUR	ZIRA	S-NPP	75.17757	31.02498	14:30:00	D	11.80

394	FIROZPUR	ZIRA	S-NPP	75.17680	31.02796	14:30:00	D	12.50
395	FIROZPUR	ZIRA	AQUA	75.12900	31.03400	13:50:00	D	20.30
396	FIROZPUR	ZIRA	AQUA	75.14000	31.03500	13:50:00	D	23.00
397	FIROZPUR	ZIRA	S-NPP	74.83767	31.05879	14:30:00	D	8.80
398	FIROZPUR	ZIRA	AQUA	74.80800	31.06900	13:50:00	D	20.80
399	FIROZPUR	ZIRA	AQUA	75.12200	31.07100	13:50:00	D	10.10
400	FIROZPUR	ZIRA	AQUA	74.85300	31.07500	13:50:00	D	8.20
401	FIROZPUR	ZIRA	AQUA	74.92300	31.07500	13:50:00	D	5.40
402	FIROZPUR	ZIRA	AQUA	74.93400	31.07600	13:50:00	D	10.80
403	FIROZPUR	ZIRA	AQUA	74.86500	31.07700	13:50:00	D	5.60
404	FIROZPUR	ZIRA	AQUA	75.00300	31.08500	13:50:00	D	12.10
405	FIROZPUR	ZIRA	AQUA	75.01400	31.08600	13:50:00	D	5.30
406	FIROZPUR	ZIRA	S-NPP	74.96021	31.09867	14:30:00	D	13.10
407	FIROZPUR	ZIRA	S-NPP	74.96146	31.10217	14:30:00	D	22.60
408	GURDASPUR	BATALA	AQUA	75.16600	31.75600	13:50:00	D	6.10
409	GURDASPUR	BATALA	AQUA	75.12900	31.76100	13:50:00	D	5.50
410	GURDASPUR	BATALA	AQUA	75.04200	31.80400	13:50:00	D	7.30
411	GURDASPUR	BATALA	AQUA	75.09400	31.89200	13:50:00	D	5.70
412	GURDASPUR	DERA BABA NANAK	AQUA	74.94500	31.92100	13:50:00	D	4.90
413	GURDASPUR	DERA BABA NANAK	AQUA	74.96800	31.92400	13:50:00	D	6.60
414	GURDASPUR	DERA BABA NANAK	AQUA	74.97200	31.93100	13:50:00	D	9.70
415	GURDASPUR	DERA BABA NANAK	AQUA	75.02300	31.98500	13:50:00	D	7.70
416	GURDASPUR	DERA BABA NANAK	S-NPP	75.08803	32.01847	14:30:00	D	5.50
417	JALANDHAR	JALANDHAR I	AQUA	75.67900	31.41400	13:50:00	D	5.10
418	JALANDHAR	NAKODAR	AQUA	75.51500	31.09000	13:50:00	D	6.80
419	JALANDHAR	NAKODAR	AQUA	75.44600	31.18300	13:50:00	D	8.40
420	JALANDHAR	NAKODAR	AQUA	75.45800	31.18400	13:50:00	D	11.80
421	JALANDHAR	NAKODAR	AQUA	75.46900	31.18600	13:50:00	D	4.50
422	JALANDHAR	NAKODAR	AQUA	75.48100	31.18700	13:50:00	D	8.00
423	JALANDHAR	PHILLAUR	AQUA	75.54600	31.12400	13:50:00	D	14.90
424	JALANDHAR	PHILLAUR	S-NPP	75.82160	31.12552	12:54:00	D	4.20
425	JALANDHAR	PHILLAUR	S-NPP	75.61569	31.12902	14:30:00	D	8.00
426	JALANDHAR	PHILLAUR	S-NPP	75.61346	31.12909	14:30:00	D	6.50

427	JALANDHAR	PHILLAUR	AQUA	75.64200	31.14500	13:50:00	D	11.60
428	KAPURTHALA	KAPURTHALA	AQUA	75.21700	31.38600	13:50:00	D	7.40
429	KAPURTHALA	KAPURTHALA	AQUA	75.25100	31.43400	13:50:00	D	4.80
430	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.16020	31.21582	12:54:00	D	9.90
431	KAPURTHALA	SULTANPUR LODHI	S-NPP	75.15843	31.21602	12:54:00	D	5.60
432	LUDHIANA	JAGRAON	AQUA	75.46500	30.63500	13:50:00	D	19.20
433	LUDHIANA	JAGRAON	AQUA	75.54300	30.81800	13:50:00	D	20.50
434	LUDHIANA	JAGRAON	S-NPP	75.54855	30.82295	12:54:00	D	4.10
435	LUDHIANA	JAGRAON	AQUA	75.54000	30.83700	13:50:00	D	5.70
436	LUDHIANA	JAGRAON	AQUA	75.61200	30.84600	13:50:00	D	21.40
437	LUDHIANA	JAGRAON	AQUA	75.48700	30.89400	13:50:00	D	6.90
438	LUDHIANA	JAGRAON	S-NPP	75.51204	30.89832	14:30:00	D	34.20
439	LUDHIANA	JAGRAON	S-NPP	75.51019	30.89894	14:30:00	D	26.00
440	LUDHIANA	JAGRAON	S-NPP	75.49991	30.93241	12:54:00	D	4.90
441	LUDHIANA	KHANNA	AQUA	76.09000	30.63000	13:50:00	D	9.30
442	LUDHIANA	KHANNA	S-NPP	76.13765	30.73200	12:54:00	D	3.10
443	LUDHIANA	KHANNA	S-NPP	76.07907	30.73884	12:54:00	D	2.60
444	LUDHIANA	LUDHIANA EAST	AQUA	75.73300	30.74100	13:50:00	D	8.30
445	LUDHIANA	LUDHIANA WEST	AQUA	75.62400	30.84800	13:50:00	D	7.50
446	LUDHIANA	PAYAL	AQUA	76.10500	30.57900	13:50:00	D	16.90
447	LUDHIANA	RAIKOT	S-NPP	75.67991	30.67603	14:30:00	D	7.80
448	LUDHIANA	RAIKOT	S-NPP	75.73367	30.70456	12:54:00	D	6.30
449	LUDHIANA	RAIKOT	AQUA	75.73100	30.71700	13:50:00	D	11.50
450	LUDHIANA	RAIKOT	AQUA	75.81800	30.71800	13:50:00	D	5.80
451	LUDHIANA	RAIKOT	AQUA	75.74000	30.73800	13:50:00	D	28.50
452	MANSA	BUDHLADA	S-NPP	75.42820	29.78417	14:30:00	D	12.20
453	MANSA	BUDHLADA	S-NPP	75.42829	29.78848	14:30:00	D	15.10
454	MANSA	BUDHLADA	S-NPP	75.42864	29.79464	12:54:00	D	5.40
455	MANSA	BUDHLADA	S-NPP	75.43198	29.79542	12:54:00	D	9.10
456	MANSA	BUDHLADA	S-NPP	75.56203	29.79918	12:54:00	D	4.50
457	MANSA	BUDHLADA	S-NPP	75.56532	29.79995	12:54:00	D	4.70
458	MANSA	BUDHLADA	S-NPP	75.47997	29.87899	12:54:00	D	5.30
459	MANSA	BUDHLADA	AQUA	75.46100	29.89200	13:50:00	D	16.10

460	MANSA	BUDHLADA	S-NPP	75.47026	29.91018	14:30:00	D	6.90
461	MANSA	BUDHLADA	S-NPP	75.46999	29.91738	14:30:00	D	8.00
462	MANSA	BUDHLADA	S-NPP	75.51049	29.92605	14:30:00	D	6.90
463	MANSA	MANSA	METOP-2	75.18665	29.93060	20:32:00	N	10.00
464	MANSA	MANSA	S-NPP	75.44073	29.93875	12:54:00	D	1.80
465	MANSA	MANSA	S-NPP	75.21821	29.95481	12:54:00	D	8.90
466	MANSA	MANSA	S-NPP	75.22163	29.95561	12:54:00	D	16.50
467	MANSA	MANSA	S-NPP	75.26289	29.97601	12:54:00	D	6.10
468	MANSA	MANSA	S-NPP	75.33195	29.98680	12:54:00	D	1.80
469	MANSA	MANSA	S-NPP	75.48550	30.09024	12:54:00	D	1.80
470	MANSA	MANSA	S-NPP	75.48531	30.09102	12:54:00	D	1.60
471	MANSA	MANSA	AQUA	75.38600	30.12400	13:50:00	D	6.80
472	MANSA	MANSA	S-NPP	75.38276	30.16146	12:54:00	D	3.10
473	MANSA	MANSA	S-NPP	75.47510	30.18261	12:54:00	D	2.50
474	MANSA	SARDULGARH	AQUA	75.28700	29.56100	13:50:00	D	5.00
475	MANSA	SARDULGARH	AQUA	75.29800	29.56200	13:50:00	D	7.80
476	MANSA	SARDULGARH	S-NPP	75.30807	29.56221	14:30:00	D	7.40
477	MANSA	SARDULGARH	AQUA	75.19800	29.67600	13:50:00	D	5.10
478	MANSA	SARDULGARH	AQUA	75.20900	29.67700	13:50:00	D	39.80
479	MANSA	SARDULGARH	AQUA	75.26500	29.68500	13:50:00	D	5.90
480	MANSA	SARDULGARH	S-NPP	75.26225	29.69964	12:54:00	D	8.10
481	MANSA	SARDULGARH	S-NPP	75.35719	29.70008	12:54:00	D	1.70
482	MANSA	SARDULGARH	S-NPP	75.26074	29.70163	12:54:00	D	3.70
483	MANSA	SARDULGARH	S-NPP	75.27785	29.70569	12:54:00	D	8.80
484	MANSA	SARDULGARH	S-NPP	75.27446	29.70784	12:54:00	D	5.80
485	MANSA	SARDULGARH	S-NPP	75.27790	29.70863	12:54:00	D	14.40
486	MANSA	SARDULGARH	S-NPP	75.27292	29.70991	12:54:00	D	5.60
487	MANSA	SARDULGARH	S-NPP	75.27634	29.71072	12:54:00	D	8.80
488	MANSA	SARDULGARH	S-NPP	75.27294	29.71286	12:54:00	D	2.60
489	MANSA	SARDULGARH	S-NPP	75.41302	29.77502	12:54:00	D	11.20
490	MANSA	SARDULGARH	S-NPP	75.41154	29.78001	12:54:00	D	2.00
491	MANSA	SARDULGARH	S-NPP	75.36394	29.79300	14:30:00	D	5.90
492	MANSA	SARDULGARH	S-NPP	75.36349	29.79622	14:30:00	D	9.70

493	MANSA	SARDULGARH	AQUA	75.36400	29.80800	13:50:00	D	5.50
494	MOGA	BAGHA PURANA	AQUA	74.97900	30.59400	13:50:00	D	9.40
495	MOGA	BAGHA PURANA	S-NPP	75.11805	30.59757	12:54:00	D	6.80
496	MOGA	BAGHA PURANA	S-NPP	74.97691	30.63644	12:54:00	D	1.60
497	MOGA	BAGHA PURANA	AQUA	75.14500	30.64400	13:50:00	D	8.30
498	MOGA	BAGHA PURANA	S-NPP	74.96685	30.65759	14:30:00	D	16.70
499	MOGA	BAGHA PURANA	S-NPP	74.96455	30.66186	14:30:00	D	23.90
500	MOGA	BAGHA PURANA	S-NPP	74.98132	30.68643	14:30:00	D	8.60
501	MOGA	BAGHA PURANA	S-NPP	75.04086	30.69981	14:30:00	D	20.20
502	MOGA	BAGHA PURANA	S-NPP	75.03521	30.70273	14:30:00	D	22.50
503	MOGA	BAGHA PURANA	S-NPP	75.04299	30.70304	14:30:00	D	22.50
504	MOGA	BAGHA PURANA	S-NPP	75.04061	30.70690	14:30:00	D	20.20
505	MOGA	BAGHA PURANA	S-NPP	74.98149	30.74804	12:54:00	D	1.90
506	MOGA	BAGHA PURANA	S-NPP	74.98186	30.75017	12:54:00	D	4.00
507	MOGA	BAGHA PURANA	AQUA	74.99800	30.75100	13:50:00	D	5.10
508	MOGA	BAGHA PURANA	S-NPP	74.97993	30.75303	12:54:00	D	1.90
509	MOGA	BAGHA PURANA	S-NPP	75.00037	30.75788	12:54:00	D	1.40
510	MOGA	BAGHA PURANA	S-NPP	74.92238	30.76081	12:54:00	D	2.90
511	MOGA	BAGHA PURANA	S-NPP	74.91740	30.76501	12:54:00	D	4.10
512	MOGA	BAGHA PURANA	S-NPP	74.92082	30.76582	12:54:00	D	6.00
513	MOGA	BAGHA PURANA	S-NPP	74.98392	30.77539	12:54:00	D	5.70
514	MOGA	MOGA	AQUA	74.95700	30.78400	13:50:00	D	11.10
515	MOGA	MOGA	AQUA	74.96900	30.78600	13:50:00	D	12.80
516	MOGA	MOGA	S-NPP	75.13991	30.79585	14:30:00	D	4.10
517	MOGA	MOGA	AQUA	75.13000	30.79600	13:50:00	D	6.70
518	MOGA	MOGA	S-NPP	75.08384	30.79774	14:30:00	D	4.70
519	MOGA	MOGA	S-NPP	75.13931	30.79955	14:30:00	D	5.20
520	MOGA	MOGA	AQUA	75.31300	30.82900	13:50:00	D	16.60
521	MOGA	MOGA	AQUA	75.07600	30.83700	13:50:00	D	26.20
522	MOGA	MOGA	AQUA	75.06800	30.84300	13:50:00	D	22.80
523	MOGA	MOGA	S-NPP	75.11993	30.84987	12:54:00	D	3.60
524	MOGA	MOGA	S-NPP	75.00787	30.85042	12:54:00	D	2.50
525	MOGA	MOGA	S-NPP	74.97229	30.85062	14:30:00	D	33.90

526	MOGA	NIHAL SINGH WALA	S-NPP	75.23179	30.52972	12:54:00	D	4.50
527	MOGA	NIHAL SINGH WALA	AQUA	75.18600	30.56700	13:50:00	D	8.30
528	MOGA	NIHAL SINGH WALA	AQUA	75.29100	30.57100	13:50:00	D	6.30
529	MOGA	NIHAL SINGH WALA	AQUA	75.30300	30.57300	13:50:00	D	6.70
530	MOGA	NIHAL SINGH WALA	AQUA	75.30300	30.60600	13:50:00	D	6.00
531	MUKTSAR	GIDDARBAHA	AQUA	74.63200	30.11000	13:50:00	D	8.70
532	MUKTSAR	GIDDARBAHA	S-NPP	74.62154	30.12139	12:54:00	D	7.20
533	MUKTSAR	GIDDARBAHA	S-NPP	74.58376	30.20707	14:30:00	D	8.70
534	MUKTSAR	GIDDARBAHA	AQUA	74.60800	30.21600	13:50:00	D	5.50
535	MUKTSAR	GIDDARBAHA	AQUA	74.57400	30.22100	13:50:00	D	5.90
536	MUKTSAR	GIDDARBAHA	S-NPP	74.59040	30.22117	14:30:00	D	6.70
537	MUKTSAR	GIDDARBAHA	S-NPP	74.55808	30.24004	14:30:00	D	6.90
538	MUKTSAR	GIDDARBAHA	S-NPP	74.68897	30.25190	14:30:00	D	5.40
539	MUKTSAR	GIDDARBAHA	S-NPP	74.69130	30.25322	14:30:00	D	5.70
540	MUKTSAR	GIDDARBAHA	S-NPP	74.70296	30.28462	12:54:00	D	2.60
541	MUKTSAR	GIDDARBAHA	AQUA	74.72200	30.28600	13:50:00	D	9.80
542	MUKTSAR	GIDDARBAHA	S-NPP	74.70137	30.28974	12:54:00	D	2.60
543	MUKTSAR	GIDDARBAHA	AQUA	74.65100	30.34000	13:50:00	D	6.00
544	MUKTSAR	GIDDARBAHA	AQUA	74.72900	30.34100	13:50:00	D	8.80
545	MUKTSAR	GIDDARBAHA	AQUA	74.78300	30.35700	13:50:00	D	7.80
546	MUKTSAR	GIDDARBAHA	S-NPP	74.57353	30.35821	14:30:00	D	5.50
547	MUKTSAR	GIDDARBAHA	AQUA	74.68700	30.39200	13:50:00	D	6.50
548	MUKTSAR	GIDDARBAHA	S-NPP	74.81358	30.39342	12:54:00	D	4.60
549	MUKTSAR	GIDDARBAHA	AQUA	74.70700	30.40400	13:50:00	D	4.90
550	MUKTSAR	GIDDARBAHA	AQUA	74.71800	30.40500	13:50:00	D	5.10
551	MUKTSAR	GIDDARBAHA	AQUA	74.71700	30.44100	13:50:00	D	21.10
552	MUKTSAR	GIDDARBAHA	S-NPP	74.70159	30.45353	14:30:00	D	3.40
553	MUKTSAR	GIDDARBAHA	AQUA	74.64300	30.47800	13:50:00	D	8.80
554	MUKTSAR	MALAUT	AQUA	74.61000	29.93200	13:50:00	D	22.20
555	MUKTSAR	MALAUT	S-NPP	74.61163	29.94295	12:54:00	D	1.00
556	MUKTSAR	MALAUT	S-NPP	74.55356	29.94340	14:30:00	D	19.20
557	MUKTSAR	MALAUT	S-NPP	74.55272	29.94380	14:30:00	D	15.10
558	MUKTSAR	MALAUT	S-NPP	74.56758	29.95094	14:30:00	D	17.10

559	MUKTSAR	MALAUT	S-NPP	74.56673	29.95126	14:30:00	D	28.00
560	MUKTSAR	MALAUT	S-NPP	74.57475	29.95127	14:30:00	D	17.10
561	MUKTSAR	MALAUT	S-NPP	74.57391	29.95155	14:30:00	D	32.20
562	MUKTSAR	MALAUT	AQUA	74.49100	29.95200	13:50:00	D	5.50
563	MUKTSAR	MALAUT	S-NPP	74.58129	29.96537	14:30:00	D	4.70
564	MUKTSAR	MALAUT	S-NPP	74.58041	29.96560	14:30:00	D	4.60
565	MUKTSAR	MALAUT	S-NPP	74.56783	29.99386	12:54:00	D	1.90
566	MUKTSAR	MALAUT	S-NPP	74.56593	29.99798	12:54:00	D	1.70
567	MUKTSAR	MALAUT	S-NPP	74.50346	30.00527	12:54:00	D	4.80
568	MUKTSAR	MALAUT	S-NPP	74.54982	30.00568	14:30:00	D	22.30
569	MUKTSAR	MALAUT	S-NPP	74.55697	30.00599	14:30:00	D	24.10
570	MUKTSAR	MALAUT	AQUA	74.54700	30.00600	13:50:00	D	6.50
571	MUKTSAR	MALAUT	AQUA	74.55800	30.00700	13:50:00	D	9.60
572	MUKTSAR	MALAUT	AQUA	74.51300	30.01100	13:50:00	D	4.90
573	MUKTSAR	MALAUT	S-NPP	74.60445	30.04069	12:54:00	D	2.90
574	MUKTSAR	MALAUT	S-NPP	74.42027	30.04107	14:30:00	D	4.60
575	MUKTSAR	MALAUT	S-NPP	74.41743	30.04146	14:30:00	D	6.30
576	MUKTSAR	MALAUT	S-NPP	74.68641	30.04367	12:54:00	D	6.10
577	MUKTSAR	MALAUT	AQUA	74.62000	30.05200	13:50:00	D	12.70
578	MUKTSAR	MALAUT	S-NPP	74.69672	30.06643	14:30:00	D	9.70
579	MUKTSAR	MALAUT	S-NPP	74.69931	30.06764	14:30:00	D	14.00
580	MUKTSAR	MALAUT	AQUA	74.67000	30.08600	13:50:00	D	9.50
581	MUKTSAR	MALAUT	S-NPP	74.65134	30.09928	14:30:00	D	7.60
582	MUKTSAR	MALAUT	S-NPP	74.67325	30.10018	14:30:00	D	10.00
583	MUKTSAR	MALAUT	AQUA	74.50200	30.10200	13:50:00	D	10.80
584	MUKTSAR	MALAUT	S-NPP	74.54172	30.12226	14:30:00	D	10.00
585	MUKTSAR	MALAUT	S-NPP	74.54433	30.12267	14:30:00	D	7.80
586	MUKTSAR	MALAUT	S-NPP	74.56866	30.16485	14:30:00	D	8.30
587	MUKTSAR	MALAUT	S-NPP	74.57116	30.16511	14:30:00	D	8.60
588	MUKTSAR	MALAUT	S-NPP	74.37095	30.21624	12:54:00	D	6.70
589	MUKTSAR	MALAUT	AQUA	74.35700	30.22900	13:50:00	D	7.90
590	MUKTSAR	MALAUT	AQUA	74.36800	30.23000	13:50:00	D	4.50
591	MUKTSAR	MALAUT	S-NPP	74.39474	30.27432	14:30:00	D	6.60

592	MUKTSAR	MALAUT	S-NPP	74.39192	30.27469	14:30:00	D	13.00
593	MUKTSAR	MALAUT	AQUA	74.31600	30.30500	13:50:00	D	5.40
594	MUKTSAR	MALAUT	AQUA	74.35200	30.34700	13:50:00	D	14.30
595	MUKTSAR	MALAUT	AQUA	74.36300	30.34900	13:50:00	D	7.00
596	MUKTSAR	MUKTSAR	S-NPP	74.44546	30.34556	14:30:00	D	7.50
597	MUKTSAR	MUKTSAR	S-NPP	74.44437	30.34635	14:30:00	D	7.30
598	MUKTSAR	MUKTSAR	AQUA	74.40200	30.37300	13:50:00	D	8.50
599	MUKTSAR	MUKTSAR	AQUA	74.39000	30.38000	13:50:00	D	4.90
600	MUKTSAR	MUKTSAR	AQUA	74.40100	30.38200	13:50:00	D	9.40
601	MUKTSAR	MUKTSAR	S-NPP	74.36990	30.41871	14:30:00	D	14.00
602	MUKTSAR	MUKTSAR	AQUA	74.55100	30.42900	13:50:00	D	4.80
603	MUKTSAR	MUKTSAR	AQUA	74.37100	30.45200	13:50:00	D	11.60
604	MUKTSAR	MUKTSAR	S-NPP	74.66927	30.46526	14:30:00	D	11.50
605	MUKTSAR	MUKTSAR	S-NPP	74.67667	30.46553	14:30:00	D	11.50
606	MUKTSAR	MUKTSAR	S-NPP	74.67149	30.46617	14:30:00	D	14.40
607	MUKTSAR	MUKTSAR	S-NPP	74.67886	30.46649	14:30:00	D	14.80
608	MUKTSAR	MUKTSAR	S-NPP	74.43622	30.47016	14:30:00	D	7.50
609	MUKTSAR	MUKTSAR	S-NPP	74.66867	30.47914	14:30:00	D	6.10
610	MUKTSAR	MUKTSAR	AQUA	74.65400	30.48000	13:50:00	D	15.40
611	MUKTSAR	MUKTSAR	S-NPP	74.44311	30.48711	12:54:00	D	2.00
612	MUKTSAR	MUKTSAR	S-NPP	74.72763	30.48832	14:30:00	D	8.10
613	MUKTSAR	MUKTSAR	S-NPP	74.72990	30.48958	14:30:00	D	17.70
614	MUKTSAR	MUKTSAR	S-NPP	74.73124	30.48968	12:54:00	D	15.50
615	MUKTSAR	MUKTSAR	S-NPP	74.73480	30.49053	12:54:00	D	15.50
616	MUKTSAR	MUKTSAR	AQUA	74.74200	30.49100	13:50:00	D	14.00
617	MUKTSAR	MUKTSAR	S-NPP	74.72733	30.49528	14:30:00	D	9.10
618	MUKTSAR	MUKTSAR	S-NPP	74.71480	30.49589	14:30:00	D	5.30
619	MUKTSAR	MUKTSAR	S-NPP	74.66248	30.50065	12:54:00	D	9.00
620	MUKTSAR	MUKTSAR	S-NPP	74.69232	30.54059	12:54:00	D	13.00
621	MUKTSAR	MUKTSAR	S-NPP	74.47624	30.54060	14:30:00	D	21.90
622	MUKTSAR	MUKTSAR	S-NPP	74.47165	30.54130	14:30:00	D	25.20
623	MUKTSAR	MUKTSAR	AQUA	74.42500	30.55000	13:50:00	D	4.60
624	MUKTSAR	MUKTSAR	S-NPP	74.68989	30.55668	12:54:00	D	2.20

625	MUKTSAR	MUKTSAR	S-NPP	74.69110	30.55670	12:54:00	D	1.60
626	MUKTSAR	MUKTSAR	AQUA	74.48900	30.55900	13:50:00	D	4.50
627	MUKTSAR	MUKTSAR	S-NPP	74.42017	30.56904	12:54:00	D	8.20
628	MUKTSAR	MUKTSAR	S-NPP	74.43426	30.57427	14:30:00	D	6.70
629	MUKTSAR	MUKTSAR	S-NPP	74.41730	30.57927	14:30:00	D	9.60
630	MUKTSAR	MUKTSAR	S-NPP	74.41254	30.58029	14:30:00	D	11.40
631	MUKTSAR	MUKTSAR	S-NPP	74.43846	30.58710	14:30:00	D	3.90
632	MUKTSAR	MUKTSAR	S-NPP	74.43047	30.59925	12:54:00	D	4.60
633	MUKTSAR	MUKTSAR	S-NPP	74.43417	30.60012	12:54:00	D	4.60
634	MUKTSAR	MUKTSAR	S-NPP	74.42110	30.60196	12:54:00	D	4.30
635	MUKTSAR	MUKTSAR	S-NPP	74.42142	30.60265	12:54:00	D	4.10
636	MUKTSAR	MUKTSAR	S-NPP	74.52441	30.66066	14:30:00	D	6.10
637	MUKTSAR	MUKTSAR	S-NPP	74.52160	30.66730	14:30:00	D	6.30
638	MUKTSAR	MUKTSAR	S-NPP	74.52412	30.66755	14:30:00	D	6.10
639	NAWASHAHR	BALACHAUR	S-NPP	76.34528	31.01304	12:54:00	D	3.70
640	NAWASHAHR	NAWASHAHR	AQUA	76.09200	31.02600	13:50:00	D	11.50
641	PATIALA	NABHA	AQUA	76.20400	30.35800	13:50:00	D	11.60
642	PATIALA	NABHA	AQUA	76.07500	30.48500	13:50:00	D	8.80
643	PATIALA	PATIALA	S-NPP	76.29057	30.17133	12:54:00	D	7.00
644	PATIALA	PATIALA	S-NPP	76.42918	30.20672	12:54:00	D	26.10
645	PATIALA	PATIALA	S-NPP	76.43266	30.20867	12:54:00	D	53.00
646	PATIALA	SAMANA	AQUA	76.15300	29.91500	13:50:00	D	14.30
647	PATIALA	SAMANA	AQUA	76.16500	29.91700	13:50:00	D	23.20
648	PATIALA	SAMANA	AQUA	76.19900	29.98200	13:50:00	D	7.60
649	PATIALA	SAMANA	S-NPP	76.19769	30.02136	12:54:00	D	19.20
650	PATIALA	SAMANA	S-NPP	76.19462	30.02398	12:54:00	D	17.40
651	SANGRUR	DHURI	AQUA	75.70200	30.52000	13:50:00	D	6.70
652	SANGRUR	MOONAK	S-NPP	76.02423	29.77910	12:54:00	D	2.60
653	SANGRUR	MOONAK	S-NPP	75.87685	29.80346	12:54:00	D	4.30
654	SANGRUR	MOONAK	S-NPP	75.97221	29.81998	12:54:00	D	7.80
655	SANGRUR	MOONAK	S-NPP	75.92423	29.82455	12:54:00	D	4.50
656	SANGRUR	MOONAK	AQUA	76.01100	29.83500	13:50:00	D	5.40
657	SANGRUR	MOONAK	S-NPP	75.96847	29.85513	12:54:00	D	6.60

658	SANGRUR	MOONAK	AQUA	75.91000	29.88600	13:50:00	D	7.40
659	SANGRUR	MOONAK	S-NPP	75.91534	29.91705	12:54:00	D	4.20
660	SANGRUR	MOONAK	S-NPP	75.96514	29.92836	12:54:00	D	2.70
661	SANGRUR	MOONAK	AQUA	75.83500	29.93800	13:50:00	D	10.40
662	SANGRUR	MOONAK	AQUA	75.84700	29.93900	13:50:00	D	6.10
663	SANGRUR	SANGRUR	S-NPP	75.58967	30.17742	12:54:00	D	1.60
664	SANGRUR	SANGRUR	S-NPP	75.82972	30.19114	12:54:00	D	2.90
665	SANGRUR	SANGRUR	S-NPP	75.82828	30.19596	12:54:00	D	6.30
666	SANGRUR	SUNAM	S-NPP	75.68611	29.95323	12:54:00	D	3.40
667	SANGRUR	SUNAM	S-NPP	75.76767	29.97723	12:54:00	D	4.80
668	SANGRUR	SUNAM	S-NPP	75.77402	29.97868	12:54:00	D	4.80
669	TARN TARAN	KHADOOR SAHIB	AQUA	74.96900	31.20700	13:50:00	D	24.50
670	TARN TARAN	KHADOOR SAHIB	S-NPP	74.98834	31.22365	14:30:00	D	12.30
671	TARN TARAN	KHADOOR SAHIB	S-NPP	74.98769	31.22749	14:30:00	D	8.20
672	TARN TARAN	KHADOOR SAHIB	AQUA	75.00600	31.26900	13:50:00	D	12.10
673	TARN TARAN	KHADOOR SAHIB	AQUA	75.03800	31.28200	13:50:00	D	5.90
674	TARN TARAN	KHADOOR SAHIB	AQUA	75.08500	31.28800	13:50:00	D	7.20
675	TARN TARAN	KHADOOR SAHIB	AQUA	74.94500	31.31400	13:50:00	D	7.30
676	TARN TARAN	KHADOOR SAHIB	S-NPP	74.91840	31.34204	14:30:00	D	11.10
677	TARN TARAN	KHADOOR SAHIB	AQUA	75.00800	31.36000	13:50:00	D	7.00
678	TARN TARAN	KHADOOR SAHIB	AQUA	75.11400	31.36400	13:50:00	D	8.00
679	TARN TARAN	KHADOOR SAHIB	AQUA	74.81200	31.37000	13:50:00	D	7.10
680	TARN TARAN	KHADOOR SAHIB	AQUA	75.11200	31.37300	13:50:00	D	4.00
681	TARN TARAN	KHADOOR SAHIB	AQUA	74.85800	31.37600	13:50:00	D	13.70
682	TARN TARAN	KHADOOR SAHIB	AQUA	74.79600	31.39700	13:50:00	D	5.20
683	TARN TARAN	KHADOOR SAHIB	S-NPP	74.96242	31.41848	14:30:00	D	8.00
684	TARN TARAN	KHADOOR SAHIB	S-NPP	74.97031	31.41872	14:30:00	D	12.10
685	TARN TARAN	KHADOOR SAHIB	S-NPP	74.93064	31.41948	12:54:00	D	1.50
686	TARN TARAN	KHADOOR SAHIB	AQUA	74.85800	31.47700	13:50:00	D	9.90
687	TARN TARAN	KHADOOR SAHIB	AQUA	74.86900	31.47800	13:50:00	D	21.20
688	TARN TARAN	KHADOOR SAHIB	S-NPP	74.94558	31.49235	14:30:00	D	11.40
689	TARN TARAN	KHADOOR SAHIB	AQUA	74.91300	31.49300	13:50:00	D	5.10
690	TARN TARAN	KHADOOR SAHIB	AQUA	74.98400	31.49300	13:50:00	D	4.80

691	TARN TARAN	KHADOOR SAHIB	AQUA	74.92500	31.49500	13:50:00	D	7.80
692	TARN TARAN	KHADOOR SAHIB	S-NPP	74.94392	31.49589	14:30:00	D	12.00
693	TARN TARAN	KHADOOR SAHIB	S-NPP	74.93745	31.49919	14:30:00	D	10.80
694	TARN TARAN	PATTI	S-NPP	74.57124	31.13061	14:30:00	D	6.20
695	TARN TARAN	PATTI	S-NPP	74.59567	31.14633	12:54:00	D	2.70
696	TARN TARAN	PATTI	AQUA	74.64400	31.15600	13:50:00	D	5.00
697	TARN TARAN	PATTI	AQUA	74.70700	31.15700	13:50:00	D	10.60
698	TARN TARAN	PATTI	S-NPP	74.63818	31.16727	12:54:00	D	1.70
699	TARN TARAN	PATTI	AQUA	74.60700	31.17000	13:50:00	D	8.30
700	TARN TARAN	PATTI	S-NPP	74.77319	31.17312	14:30:00	D	6.30
701	TARN TARAN	PATTI	S-NPP	74.83932	31.17735	12:54:00	D	2.20
702	TARN TARAN	PATTI	AQUA	74.68500	31.18000	13:50:00	D	15.80
703	TARN TARAN	PATTI	S-NPP	74.68885	31.18467	12:54:00	D	3.00
704	TARN TARAN	PATTI	S-NPP	74.74064	31.18614	12:54:00	D	2.60
705	TARN TARAN	PATTI	AQUA	74.56900	31.19400	13:50:00	D	18.30
706	TARN TARAN	PATTI	AQUA	74.58000	31.19500	13:50:00	D	8.10
707	TARN TARAN	PATTI	AQUA	74.55600	31.20100	13:50:00	D	7.60
708	TARN TARAN	PATTI	AQUA	74.92400	31.20100	13:50:00	D	7.20
709	TARN TARAN	PATTI	S-NPP	74.76858	31.20348	12:54:00	D	4.50
710	TARN TARAN	PATTI	S-NPP	74.54607	31.20598	14:30:00	D	6.30
711	TARN TARAN	PATTI	AQUA	74.53200	31.20800	13:50:00	D	7.40
712	TARN TARAN	PATTI	AQUA	74.76000	31.20900	13:50:00	D	20.20
713	TARN TARAN	PATTI	S-NPP	74.54488	31.21220	14:30:00	D	9.80
714	TARN TARAN	PATTI	S-NPP	74.54581	31.21291	14:30:00	D	6.30
715	TARN TARAN	PATTI	AQUA	74.64500	31.21300	13:50:00	D	11.60
716	TARN TARAN	PATTI	S-NPP	74.59935	31.21375	12:54:00	D	1.80
717	TARN TARAN	PATTI	AQUA	74.65600	31.21400	13:50:00	D	6.10
718	TARN TARAN	PATTI	S-NPP	74.83211	31.22376	12:54:00	D	4.30
719	TARN TARAN	PATTI	AQUA	74.75400	31.24600	13:50:00	D	5.00
720	TARN TARAN	PATTI	S-NPP	74.74057	31.26379	12:54:00	D	1.40
721	TARN TARAN	PATTI	AQUA	74.52700	31.27000	13:50:00	D	7.20
722	TARN TARAN	PATTI	AQUA	74.78600	31.29400	13:50:00	D	7.20
723	TARN TARAN	PATTI	AQUA	74.56500	31.31300	13:50:00	D	10.00

724	TARN TARAN	PATTI	S-NPP	74.78740	31.31649	14:30:00	D	5.10
725	TARN TARAN	PATTI	S-NPP	74.78985	31.31924	14:30:00	D	7.10
726	TARN TARAN	PATTI	S-NPP	74.75595	31.33178	12:54:00	D	1.90
727	TARN TARAN	PATTI	S-NPP	74.76337	31.34376	14:30:00	D	12.70
728	TARN TARAN	PATTI	AQUA	74.65400	31.35000	13:50:00	D	4.20
729	TARN TARAN	PATTI	S-NPP	74.70178	31.35971	12:54:00	D	5.60
730	TARN TARAN	PATTI	S-NPP	74.60749	31.37494	12:54:00	D	2.70
731	TARN TARAN	PATTI	S-NPP	74.61097	31.37577	12:54:00	D	4.30
732	TARN TARAN	PATTI	AQUA	74.63800	31.37700	13:50:00	D	17.70
733	TARN TARAN	PATTI	AQUA	74.64900	31.37800	13:50:00	D	7.00
734	TARN TARAN	PATTI	S-NPP	74.62456	31.37954	14:30:00	D	9.40
735	TARN TARAN	PATTI	S-NPP	74.61771	31.38039	14:30:00	D	7.30
736	TARN TARAN	PATTI	S-NPP	74.62524	31.38068	14:30:00	D	13.60
737	TARN TARAN	PATTI	AQUA	74.63600	31.38600	13:50:00	D	7.70
738	TARN TARAN	PATTI	S-NPP	74.72955	31.41096	14:30:00	D	15.80
739	TARN TARAN	PATTI	S-NPP	74.73019	31.41271	14:30:00	D	22.30
740	TARN TARAN	PATTI	AQUA	74.69900	31.42200	13:50:00	D	8.40

Details of residue burning events in Haryana on 18-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m ²)
1	FATEHABAD	FATEHABAD	S-NPP	75.43800	29.45693	12:54:00	D	7.80
2	FATEHABAD	FATEHABAD	S-NPP	75.44138	29.45772	12:54:00	D	7.70
3	FATEHABAD	FATEHABAD	S-NPP	75.48794	29.51267	01:36:00	N	1.70
4	FATEHABAD	FATEHABAD	S-NPP	75.48232	29.51810	01:36:00	N	1.70
5	FATEHABAD	FATEHABAD	S-NPP	75.30775	29.55888	14:30:00	D	7.10
6	FATEHABAD	FATEHABAD	S-NPP	75.58059	29.57340	14:30:00	D	8.80
7	FATEHABAD	FATEHABAD	METOP-2	75.63797	29.58025	20:32:00	N	7.00
8	FATEHABAD	FATEHABAD	S-NPP	75.46478	29.60511	12:54:00	D	3.70
9	FATEHABAD	FATEHABAD	S-NPP	75.46814	29.60588	12:54:00	D	4.40
10	FATEHABAD	RATIA	S-NPP	75.61588	29.58707	12:54:00	D	6.70
11	FATEHABAD	RATIA	S-NPP	75.61442	29.59202	12:54:00	D	6.70
12	FATEHABAD	RATIA	S-NPP	75.55082	29.60373	12:54:00	D	1.00
13	FATEHABAD	RATIA	AQUA	75.62400	29.65800	13:50:00	D	13.20
14	FATEHABAD	RATIA	S-NPP	75.38467	29.66900	12:54:00	D	12.60
15	FATEHABAD	RATIA	S-NPP	75.54607	29.67749	14:30:00	D	13.40
16	FATEHABAD	RATIA	S-NPP	75.54369	29.68289	14:30:00	D	13.40
17	FATEHABAD	RATIA	S-NPP	75.59544	29.69158	12:54:00	D	4.00
18	FATEHABAD	RATIA	S-NPP	75.53733	29.69166	14:30:00	D	6.10
19	FATEHABAD	RATIA	AQUA	75.41200	29.70300	13:50:00	D	8.60
20	FATEHABAD	RATIA	AQUA	75.42300	29.70400	13:50:00	D	8.00
21	FATEHABAD	RATIA	S-NPP	75.50421	29.70492	14:30:00	D	3.80
22	FATEHABAD	RATIA	S-NPP	75.63488	29.72411	14:30:00	D	4.00
23	FATEHABAD	RATIA	S-NPP	75.57230	29.73375	12:54:00	D	5.80
24	FATEHABAD	RATIA	S-NPP	75.60994	29.73714	12:54:00	D	3.30
25	FATEHABAD	RATIA	AQUA	75.43500	29.77300	13:50:00	D	5.30
26	FATEHABAD	RATIA	S-NPP	75.44492	29.77476	14:30:00	D	5.00
27	FATEHABAD	RATIA	S-NPP	75.44461	29.77754	14:30:00	D	4.60
28	FATEHABAD	TOHANA	AQUA	75.89400	29.57900	13:50:00	D	31.80
29	FATEHABAD	TOHANA	S-NPP	75.83276	29.63693	12:54:00	D	3.80
30	FATEHABAD	TOHANA	S-NPP	75.83134	29.63707	12:54:00	D	5.20

31	FATEHABAD	TOHANA	S-NPP	75.89013	29.65942	14:30:00	D	12.10
32	FATEHABAD	TOHANA	S-NPP	75.88730	29.65949	14:30:00	D	10.70
33	HISAR	HANSI	S-NPP	76.02911	29.19545	12:54:00	D	9.40
34	HISAR	HANSI	S-NPP	76.03545	29.19688	12:54:00	D	11.80
35	HISAR	NARNAUND	AQUA	76.19500	29.29900	13:50:00	D	12.80
36	JIND	JIND	S-NPP	76.37249	29.38753	12:54:00	D	3.40
37	JIND	JIND	AQUA	76.37400	29.51300	13:50:00	D	10.30
38	JIND	JIND	S-NPP	76.43482	29.52081	12:54:00	D	7.40
39	JIND	JIND	AQUA	76.37200	29.52300	13:50:00	D	8.90
40	JIND	NARWANA	AQUA	76.14300	29.74100	13:50:00	D	6.80
41	JIND	SAFIDON	S-NPP	76.63426	29.41554	12:54:00	D	8.60
42	KAITHAL	GUHLA	AQUA	76.25300	29.91700	13:50:00	D	7.70
43	KAITHAL	KAITHAL	AQUA	76.36400	29.61400	13:50:00	D	6.60
44	KAITHAL	KAITHAL	S-NPP	76.24051	29.69206	12:54:00	D	4.20
45	KAITHAL	KAITHAL	AQUA	76.26100	29.70500	13:50:00	D	7.30
46	KAITHAL	KAITHAL	S-NPP	76.63508	29.75460	12:54:00	D	5.20
47	KAITHAL	KAITHAL	S-NPP	76.43018	29.83893	12:54:00	D	4.00
48	KARNAL	NILOKHERI	AQUA	76.70100	29.78700	13:50:00	D	8.00
49	PANIPAT	ISRANA	S-NPP	76.74908	29.32100	12:54:00	D	6.60
50	PANIPAT	ISRANA	S-NPP	76.68630	29.32698	12:54:00	D	5.70
51	PANIPAT	ISRANA	S-NPP	76.68497	29.33166	12:54:00	D	3.70
52	SIRSA	ELLENABAD	S-NPP	74.82076	29.46527	14:30:00	D	9.30
53	SIRSA	ELLENABAD	S-NPP	74.81788	29.47106	14:30:00	D	7.60
54	SIRSA	RANIA	S-NPP	74.85355	29.50154	01:36:00	N	0.80
55	SIRSA	RANIA	AQUA	74.69800	29.56700	13:50:00	D	15.00
56	SIRSA	RANIA	S-NPP	74.69862	29.57232	12:54:00	D	3.00
57	SIRSA	RANIA	S-NPP	74.69850	29.57393	12:54:00	D	3.40
58	SIRSA	RANIA	S-NPP	74.64371	29.58145	12:54:00	D	2.50
59	SIRSA	RANIA	S-NPP	74.77420	29.58504	12:54:00	D	3.00
60	SIRSA	RANIA	S-NPP	74.77430	29.58616	12:54:00	D	2.60
61	SIRSA	SIRSA	AQUA	75.16100	29.39700	13:50:00	D	6.30
62	SIRSA	SIRSA	AQUA	75.18300	29.50000	13:50:00	D	39.50
63	SIRSA	SIRSA	AQUA	74.95800	29.50900	13:50:00	D	5.20
64	SIRSA	SIRSA	S-NPP	75.25512	29.51326	12:54:00	D	1.60

65	SIRSA	SIRSA	METOP-1	75.19150	29.53534	21:47:00	N	6.00
66	SIRSA	SIRSA	AQUA	75.09700	29.63800	13:50:00	D	6.00
67	SIRSA	SIRSA	AQUA	75.19500	29.69500	13:50:00	D	7.00
68	SONIPAT	GOHANA	S-NPP	76.71396	29.05948	12:54:00	D	2.80
69	SONIPAT	SONIPAT	AQUA	76.88600	29.07700	13:50:00	D	16.90
70	YAMUNANAGAR	JAGADHRI	AQUA	77.34300	30.27800	13:50:00	D	11.40

Details of residue burning events in Uttar Pradesh on 18-Nov-2019

S. No.	District	Tehsil / Block	Satellite	Longitude	Latitude	Time (IST)	Day / Night	Fire Power (W/m²)
1	ALIGARH	KOL	S-NPP	78.09140	27.77764	01:36:00	N	0.30
2	ALLAHABAD	BARA	S-NPP	81.74942	25.28789	12:48:00	D	8.60
3	AMBEDKARNAGAR	AKBARPUR	S-NPP	82.28060	26.42770	12:48:00	D	2.90
4	AURAIYA	AURAIYA	S-NPP	79.51764	26.59539	12:48:00	D	1.80
5	AURAIYA	BIDHUNA	S-NPP	79.59791	26.77820	12:48:00	D	2.20
6	BALLIA	BALLIA	S-NPP	84.06229	25.82539	12:48:00	D	1.40
7	BALLIA	BALLIA	S-NPP	84.08556	25.83635	12:48:00	D	3.30
8	BALLIA	BELTHARA ROAD	S-NPP	83.81355	26.04348	12:48:00	D	2.30
9	BALLIA	RASRA	S-NPP	83.95974	25.80460	12:48:00	D	3.80
10	BALLIA	RASRA	S-NPP	83.96924	25.86289	12:48:00	D	2.10
11	BALLIA	RASRA	S-NPP	83.88120	25.91757	12:48:00	D	3.90
12	BALLIA	SIKANDARPUR	S-NPP	84.05004	25.99179	12:48:00	D	4.00
13	BANDA	BANDA	S-NPP	80.25586	25.79922	12:48:00	D	3.90
14	BARABANKI	Haidargarh	S-NPP	81.19202	26.66819	01:36:00	N	0.60
15	BARABANKI	SIRAULI GAUSPUR	S-NPP	81.48800	26.97400	01:36:00	N	0.20
16	BASTI	BASTI	S-NPP	82.63113	26.79361	01:36:00	N	0.50
17	BASTI	BHANPUR	S-NPP	82.70674	26.97657	12:48:00	D	3.10
18	BASTI	BHANPUR	S-NPP	82.64895	27.09753	12:48:00	D	2.30
19	BASTI	BHANPUR	S-NPP	82.64288	27.10382	12:48:00	D	3.00
20	CHITRAKOOT	KARWI	S-NPP	81.01385	25.45542	12:48:00	D	2.20
21	DEORIA	BARHAJ	S-NPP	83.84214	26.28683	12:48:00	D	2.10
22	DEORIA	DEORIA	S-NPP	83.85882	26.46096	12:48:00	D	3.00
23	DEORIA	DEORIA	S-NPP	83.93398	26.55742	12:48:00	D	3.60
24	ETAWAH	BHARTHNA	S-NPP	79.17037	26.67903	12:48:00	D	4.80
25	FAIZABAD	FAIZSBAD	S-NPP	82.45184	26.58916	12:48:00	D	4.70
26	FAIZABAD	FAIZSBAD	S-NPP	82.44875	26.58918	12:48:00	D	4.70
27	FARRUKHABAD	KARIMGANJ	S-NPP	79.24696	27.67723	12:48:00	D	3.20
28	FATEHPUR	FATEHPUR	S-NPP	80.89090	25.75464	12:48:00	D	6.50
29	FATEHPUR	FATEHPUR	S-NPP	80.89263	25.75753	12:48:00	D	6.40
30	GAZIPUR	MUHAMMADBAD	S-NPP	83.70921	25.64952	12:48:00	D	1.70

31	GONDA	COLONELGANJ	S-NPP	81.76401	27.04655	12:48:00	D	3.10
32	HAMIRPUR	SARILA	S-NPP	79.50051	25.72703	12:48:00	D	2.20
33	HAPUR	GARHMUKTESAR	S-NPP	78.08987	28.86306	12:54:00	D	3.30
34	HARDOI	HARDOI	S-NPP	80.12676	27.27825	01:36:00	N	0.30
35	HARDOI	HARDOI	S-NPP	80.25668	27.61720	01:36:00	N	0.40
36	HARDOI	SHAHABAD	S-NPP	79.91266	27.49073	12:48:00	D	2.90
37	JALAUN	KONCH	S-NPP	79.18169	26.04023	12:48:00	D	4.20
38	JAUNPUR	SHHGANJ	S-NPP	82.62895	26.12120	12:48:00	D	4.00
39	JHANSI	JHANSI	S-NPP	78.68955	25.48833	12:48:00	D	4.90
40	JHANSI	JHANSI	S-NPP	78.64645	25.53176	12:48:00	D	8.50
41	JHANSI	MOTH	S-NPP	78.85261	25.70345	12:48:00	D	3.40
42	JHANSI	MOTH	S-NPP	78.92570	25.74195	12:48:00	D	4.30
43	JHANSI	MOTH	S-NPP	78.94461	25.76910	12:48:00	D	4.70
44	JHANSI	MOTH	AQUA	78.92700	25.77900	13:50:00	D	13.80
45	JHANSI	MOTH	S-NPP	78.93931	25.90014	12:48:00	D	4.60
46	KANPUR DEHAT	AKBARPUR	S-NPP	79.98289	26.30849	12:48:00	D	4.60
47	KANPUR DEHAT	AKBARPUR	S-NPP	79.98189	26.31261	12:48:00	D	4.60
48	KANPUR DEHAT	AKBARPUR	TERRA	79.97800	26.31300	10:40:00	D	8.90
49	KANPUR DEHAT	RASULABAD	S-NPP	79.83482	26.72277	01:36:00	N	0.50
50	KASGANJ	PATIALI	S-NPP	79.02446	27.61327	01:36:00	N	1.00
51	KASGANJ	PATIALI	S-NPP	79.02356	27.61591	01:36:00	N	0.90
52	KHERI	GOLA	TERRA	80.46200	28.20600	10:40:00	D	7.30
53	KHERI	GOLA	S-NPP	80.45547	28.23105	12:48:00	D	3.70
54	KUSHINAGAR	HATA	S-NPP	83.72749	26.83842	12:48:00	D	2.30
55	KUSHINAGAR	KASAYA	S-NPP	83.99946	26.63167	12:48:00	D	3.40
56	LUCKNOW	MOHANLAL GANJ	AQUA	81.16500	26.68500	13:50:00	D	22.30
57	LUCKNOW	MOHANLAL GANJ	AQUA	81.14700	26.68700	13:50:00	D	15.20
58	LUCKNOW	MOHANLAL GANJ	AQUA	81.16900	26.68900	13:50:00	D	14.20
59	LUCKNOW	MOHANLAL GANJ	S-NPP	81.17976	26.70763	12:48:00	D	3.30
60	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.52428	27.03191	12:48:00	D	3.50
61	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.64826	27.14722	12:48:00	D	19.00
62	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.56648	27.16527	12:48:00	D	4.40
63	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.50531	27.18691	12:48:00	D	1.90

64	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.50589	27.20478	12:48:00	D	5.90
65	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.50200	27.20642	12:48:00	D	3.90
66	MAHARAJGANJ	MAHARAJGANJ	S-NPP	83.62554	27.21418	12:48:00	D	1.70
67	MAHARAJGANJ	NAUTANWA	S-NPP	83.49941	27.45544	12:48:00	D	2.50
68	MAHARAJGANJ	NICHLAUL	S-NPP	83.71781	27.25029	12:48:00	D	6.30
69	MAHARAJGANJ	NICHLAUL	S-NPP	83.70395	27.25500	12:48:00	D	2.00
70	MAHARAJGANJ	NICHLAUL	S-NPP	83.71212	27.27755	12:48:00	D	4.40
71	MAHARAJGANJ	NICHLAUL	S-NPP	83.64272	27.27998	12:48:00	D	5.00
72	MAHARAJGANJ	PHARENDA	S-NPP	83.16153	27.13940	12:48:00	D	2.40
73	MAHARAJGANJ	PHARENDA	S-NPP	83.21052	27.14055	12:48:00	D	2.00
74	MAINPURI	KARHAL	S-NPP	79.02708	26.97744	12:48:00	D	3.20
75	MAINPURI	KARHAL	AQUA	79.05000	26.99000	13:50:00	D	12.70
76	MATHURA	CHHATA	S-NPP	77.54015	27.76955	12:48:00	D	9.30
77	MAU	GHOSI	S-NPP	83.57420	26.04344	12:48:00	D	3.10
78	MAU	GHOSI	S-NPP	83.57347	26.04690	12:48:00	D	3.10
79	MAU	MAU	TERRA	83.67400	25.92000	10:40:00	D	8.00
80	MAU	MUHAMMADABAD	S-NPP	83.43468	25.98664	12:48:00	D	3.80
81	PILHIBHIT	PURANPUR	S-NPP	80.09523	28.47583	01:36:00	N	1.30
82	PILHIBHIT	PURANPUR	S-NPP	80.06300	28.55517	01:36:00	N	4.50
83	PILHIBHIT	PURANPUR	S-NPP	80.01565	28.58963	01:36:00	N	1.70
84	PILHIBHIT	PURANPUR	S-NPP	80.09557	28.61354	01:36:00	N	0.30
85	PRATAPGARH	KUNDA	TERRA	81.66200	25.71800	10:40:00	D	5.70
86	PRATAPGARH	PATTI	S-NPP	82.06434	25.68511	12:48:00	D	3.10
87	RAIBEARELI	TILOI	S-NPP	81.47969	26.29655	01:36:00	N	0.70
88	RAMPUR	BILASPUR	S-NPP	79.24999	28.94380	12:54:00	D	2.00
89	RAMPUR	BILASPUR	S-NPP	79.26570	28.98555	12:54:00	D	1.10
90	SANTKABIRNAGAR	GHANGHATA	S-NPP	83.11659	26.54133	12:48:00	D	1.60
91	SANTKABIRNAGAR	KHALILABAD	S-NPP	83.06727	26.73945	12:48:00	D	3.40
92	SANTKABIRNAGAR	KHALILABAD	S-NPP	83.02290	26.80143	01:36:00	N	0.60
93	SANTKABIRNAGAR	KHALILABAD	S-NPP	82.92107	26.90226	12:48:00	D	3.90
94	SANTKABIRNAGAR	MEHDAWAL	S-NPP	83.04298	26.95454	01:36:00	N	0.40
95	SANTKABIRNAGAR	MEHDAWAL	S-NPP	83.01354	27.01608	01:36:00	N	0.50
96	SHAHJAHANPUR	TILHAR	S-NPP	79.66720	28.14530	01:36:00	N	0.70

97	SHAMLI	SHAMLI	S-NPP	77.44379	29.53098	12:54:00	D	3.90
98	SHRAWASTI	BHINGA	S-NPP	81.83340	27.79576	12:48:00	D	2.20
99	SHRAWASTI	IKAUNA	S-NPP	81.76693	27.62675	12:48:00	D	1.90
100	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	82.52999	27.29050	12:48:00	D	2.80
101	SIDDHARTHANAGAR	ITWA	S-NPP	82.77376	27.25739	12:48:00	D	10.20
102	SIDDHARTHANAGAR	ITWA	S-NPP	82.69675	27.26961	12:48:00	D	3.80
103	SIDDHARTHANAGAR	ITWA	S-NPP	82.69598	27.27314	12:48:00	D	3.80
104	SIDDHARTHANAGAR	ITWA	S-NPP	82.64397	27.30703	12:48:00	D	1.90
105	SIDDHARTHANAGAR	ITWA	S-NPP	82.73724	27.34911	12:48:00	D	2.60
106	SIDDHARTHANAGAR	ITWA	S-NPP	82.62097	27.36913	12:48:00	D	3.20
107	SIDDHARTHANAGAR	SHOHRATGARH	S-NPP	82.89960	27.44946	01:36:00	N	0.60
108	SITAPUR	MAHMUDABAD	S-NPP	81.24904	27.32554	12:48:00	D	2.70
109	SITAPUR	SITAPUR	S-NPP	80.60635	27.56387	12:48:00	D	3.70
110	SULTANPUR	AMETHI	S-NPP	81.99376	26.15823	12:48:00	D	2.90
111	SULTANPUR	AMETHI	S-NPP	81.98717	26.16475	12:48:00	D	2.20
112	SULTANPUR	LAMBHUA	S-NPP	82.06243	26.06906	12:48:00	D	1.90
113	UNNAO	UNNAO	S-NPP	80.58836	26.38429	12:48:00	D	2.00

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 / 1000	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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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)
