



## MONITORING PADDY RESIDUE BURNING IN NORTH INDIA USING SATELLITE REMOTE SENSING DURING 2018



Summary report issued on 14-Nov-2018  
(Period: 30-Sep-2018 to 13-Nov-2018)

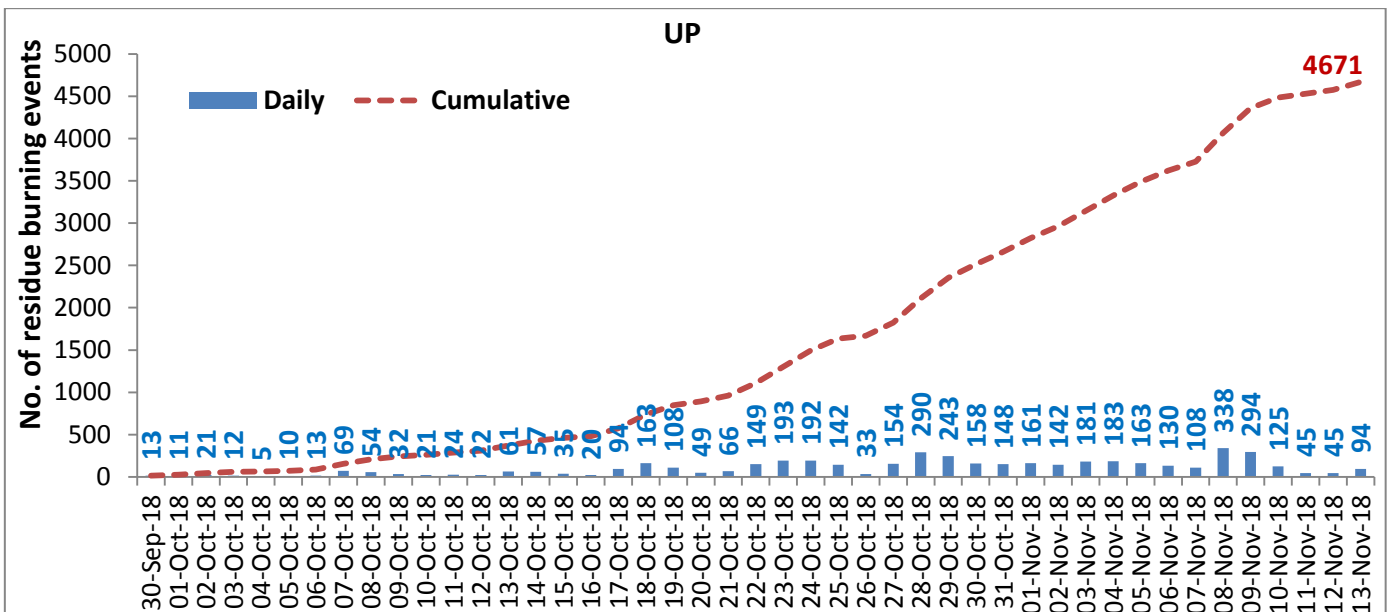
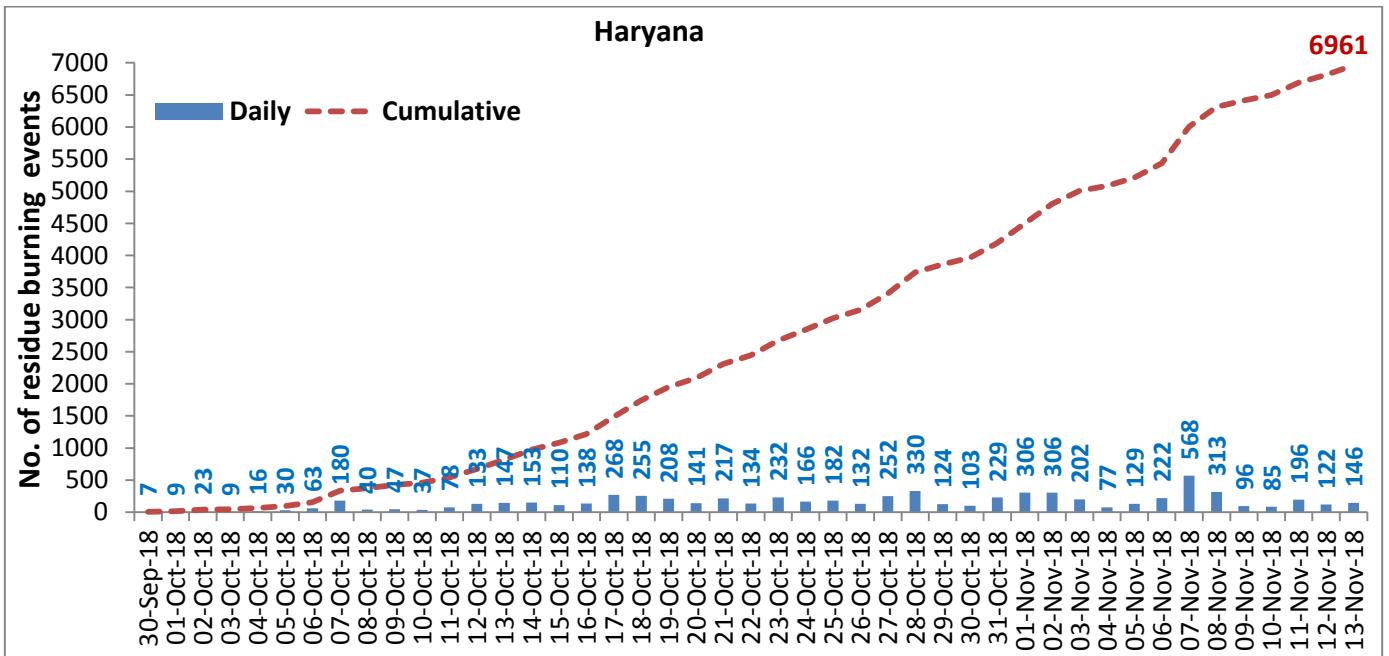
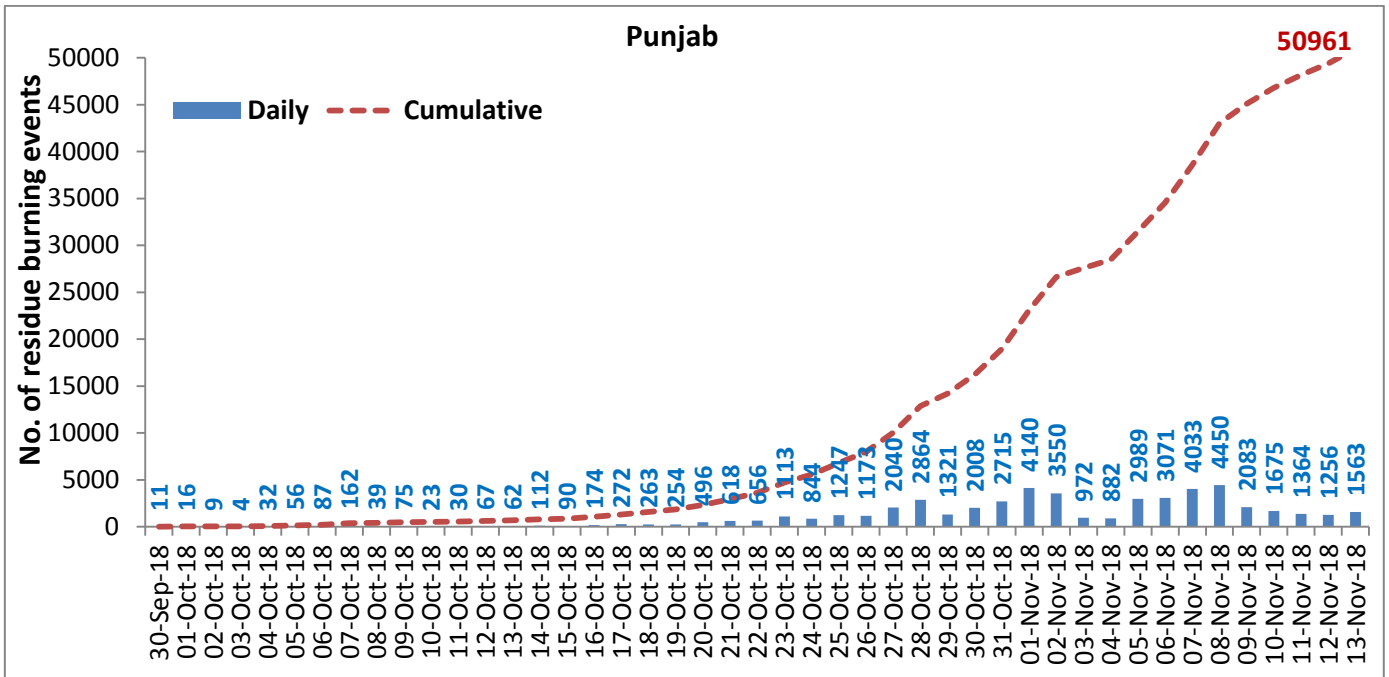
### Highlights

- Satellites detected **1803** residue burning events in the three States (Punjab, Haryana & UP) on **13-Nov-2018**.
- The burning events detected on **12-Nov-2018** are **1563, 146** and **94** in Punjab, Haryana, and UP, respectively.
- The number of events has increased from **1423** on **12-Nov-2018** to **1803** on **13-Nov-2018** in the three States.
- Total **62593** burning events were detected in the three States between **30-Sept-2018** and **13-Nov-2018**, which are distributed as **50961, 6961** and **4671** in Punjab, Haryana and UP, respectively.
- Till **13-Nov-2018**, the burning events in the current year are about **89.7%** of the events detected in 2017 and about **52.8%** of the events detected in 2016.
- Overall, about **10%** and **47%** reduction in burning events are observed in current year (2018) till date as compared to that in 2017 and 2016, respectively.

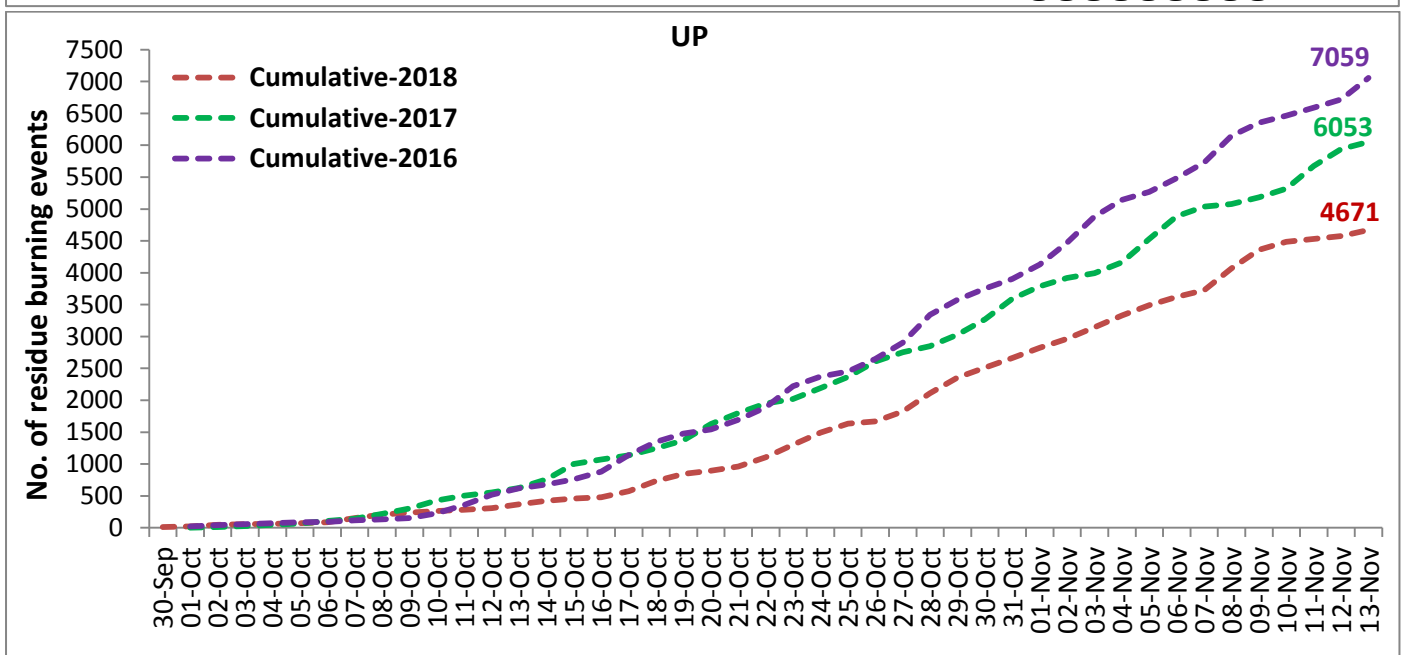
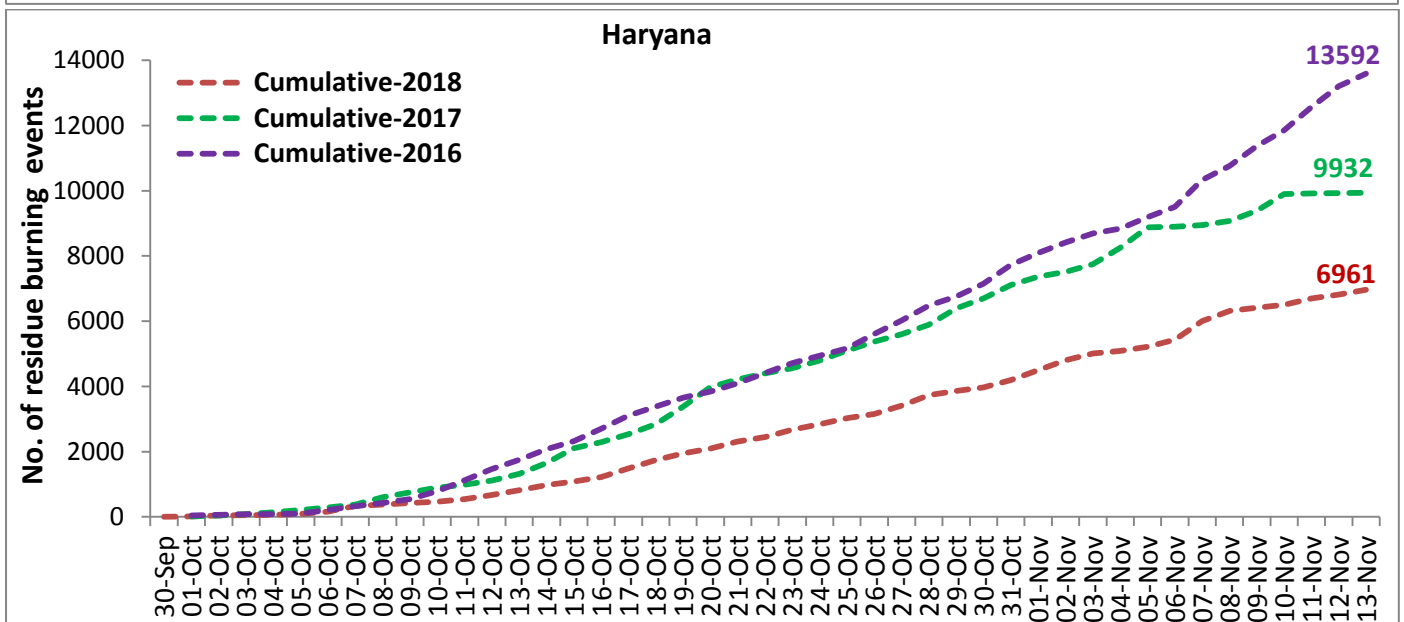
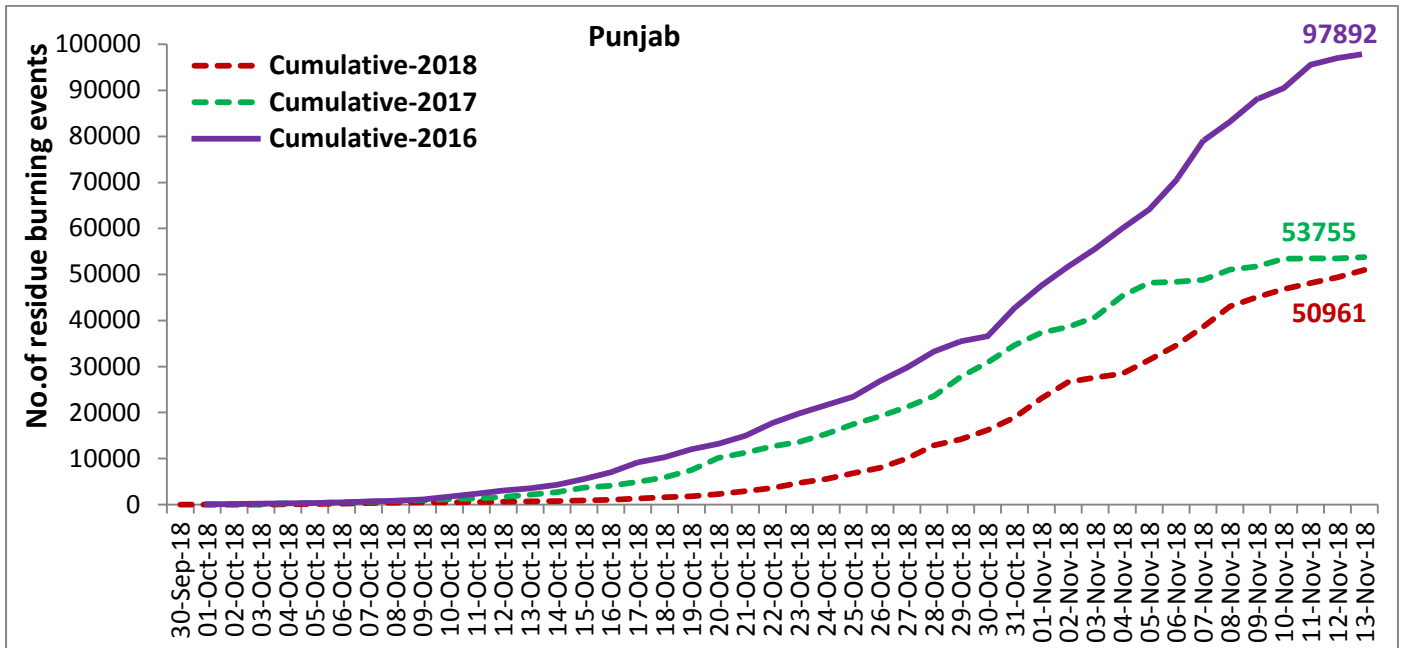
**State wise and date wise number of residue burning events detected in 2016, 2017 and 2018**

Date	Punjab			Haryana			UP			Total		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
30-Sep	--	--	11	--	---	7	--	---	13	--	---	31
1-Oct	109	54	16	46	13	9	23	2	11	178	69	36
2-Oct	51	50	9	16	27	23	20	8	21	87	85	53
3-Oct	66	62	4	16	40	9	16	17	12	98	119	25
4-Oct	37	103	32	7	60	16	15	22	5	59	185	53
5-Oct	95	106	56	15	68	30	14	20	10	124	194	96
6-Oct	152	138	87	105	75	65	6	39	13	263	252	165
7-Oct	171	105	162	126	97	180	24	31	69	321	233	411
8-Oct	166	215	39	94	218	40	14	75	54	274	508	133
9-Oct	270	163	75	121	148	47	22	87	32	413	398	154
10-Oct	597	164	23	242	151	37	74	126	21	913	441	81
11-Oct	652	177	30	336	87	78	128	74	24	1116	338	132
12-Oct	694	342	67	338	123	133	164	51	22	1196	516	222
13-Oct	467	470	62	284	207	147	102	69	61	853	746	270
14-Oct	812	582	112	328	333	153	60	137	57	1200	1052	322
15-Oct	1215	943	90	248	458	110	76	237	35	1539	1638	235
16-Oct	1478	465	174	385	186	138	125	71	20	1988	722	332
17-Oct	2173	807	272	399	244	268	261	69	94	2833	1120	634
18-Oct	1065	970	263	270	306	255	204	108	163	1539	1384	681
19-Oct	1762	1591	254	276	541	208	132	128	108	2170	2260	570
20-Oct	1175	2653	496	188	597	141	62	255	49	1425	3505	686
21-Oct	1726	1139	618	257	233	217	152	168	66	2135	1540	901
22-Oct	2837	1356	656	309	186	134	194	151	149	3340	1693	939
23-Oct	2040	994	1113	313	155	232	331	72	193	2684	1221	1538
24-Oct	1836	1714	844	221	244	166	152	171	192	2209	2129	1202
25-Oct	1813	2104	1247	229	303	182	83	175	142	2125	2582	1571
26-Oct	3390	1715	1173	434	276	132	195	240	33	4019	2231	1338
27-Oct	2904	2069	2040	417	224	252	255	145	154	3576	2438	2446
28-Oct	3493	2318	2864	458	292	330	435	99	290	4386	2709	3484
29-Oct	2258	4184	1321	278	502	124	237	180	243	2773	4866	1688
30-Oct	1076	3152	2008	395	307	103	175	238	158	1646	3697	2269
31-Oct	6132	3743	2715	575	413	229	153	321	148	6860	4447	3092
01-Nov	4843	2736	4140	362	250	306	223	199	161	5628	3185	4607
02-Nov	4183	1246	3550	332	145	306	345	131	142	4860	1522	3998
03-Nov	3806	2109	972	275	240	202	409	75	181	4409	2424	1355
04-Nov	4477	4603	882	146	499	77	265	168	183	4888	5270	1142
05-Nov	4137	2876	2989	345	625	129	125	367	163	4607	3868	3281
06-Nov	6303	171	3071	322	26	222	215	357	130	6840	327	3423
07-Nov	8575	420	4033	821	46	568	244	149	108	9640	615	4709
08-Nov	4129	2256	4450	432	128	313	419	43	338	4874	2427	5101
09-Nov	4857	675	2083	608	311	96	205	107	294	5670	1093	2473
10-Nov	2468	1642	1675	484	509	85	109	131	125	3061	2282	1885
11-Nov	5040	103	1364	716	29	196	129	358	45	5885	490	1605
12-Nov	1477	33	1256	634	3	122	129	269	45	2240	305	1423
13-Nov	885	237	1563	389	7	146	338	109	94	1612	353	1803
<b>Total</b>	<b>97892</b>	<b>53755</b>	<b>50961</b>	<b>13592</b>	<b>9932</b>	<b>6961</b>	<b>7059</b>	<b>6053</b>	<b>4671</b>	<b>118543</b>	<b>69740</b>	<b>62593</b>

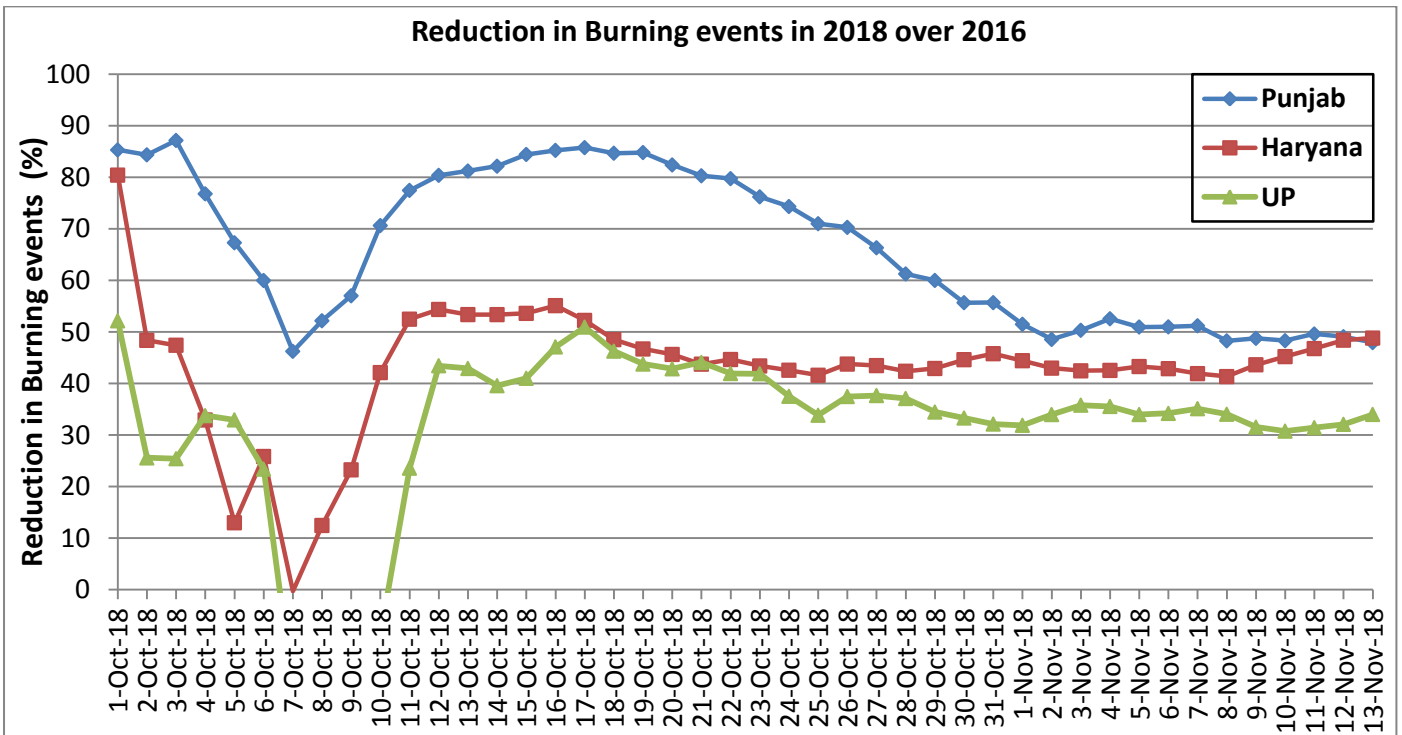
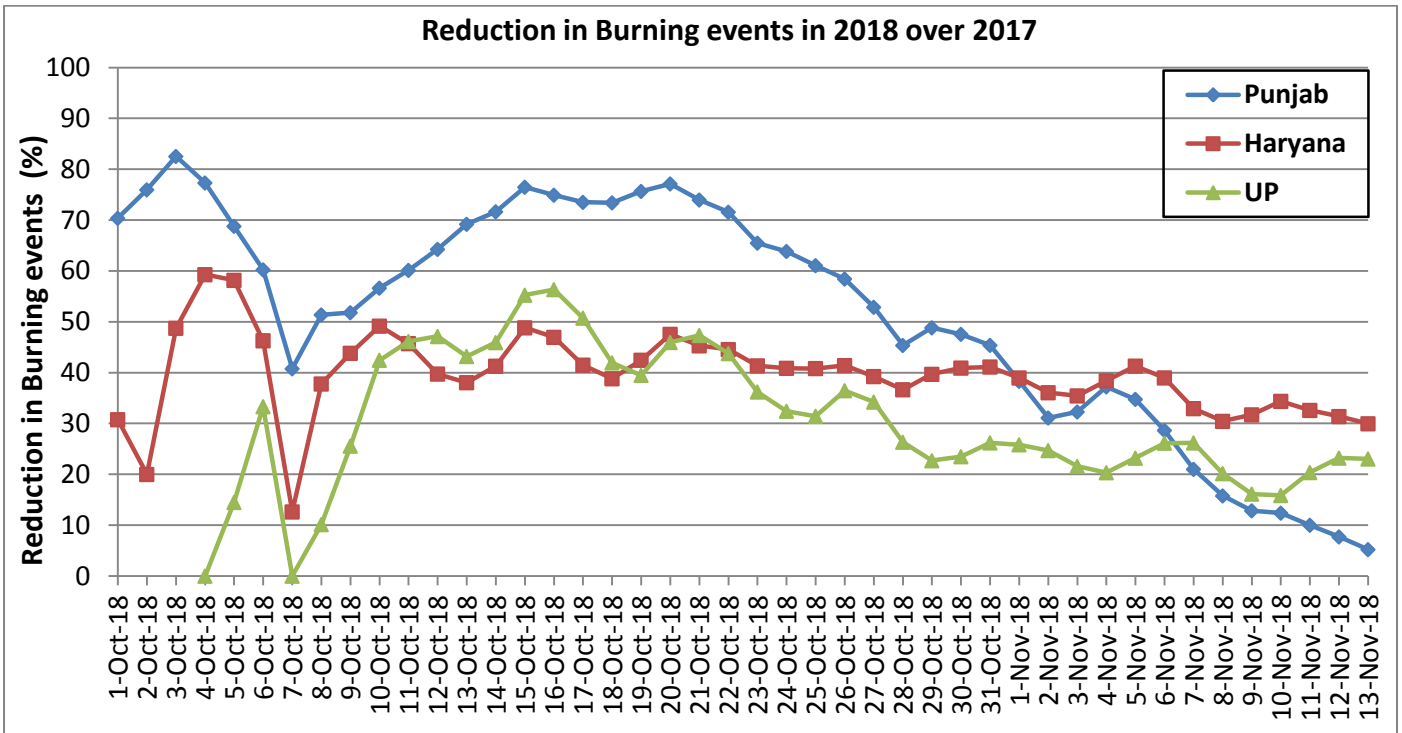
## Daily and cumulative Graphs for 2018



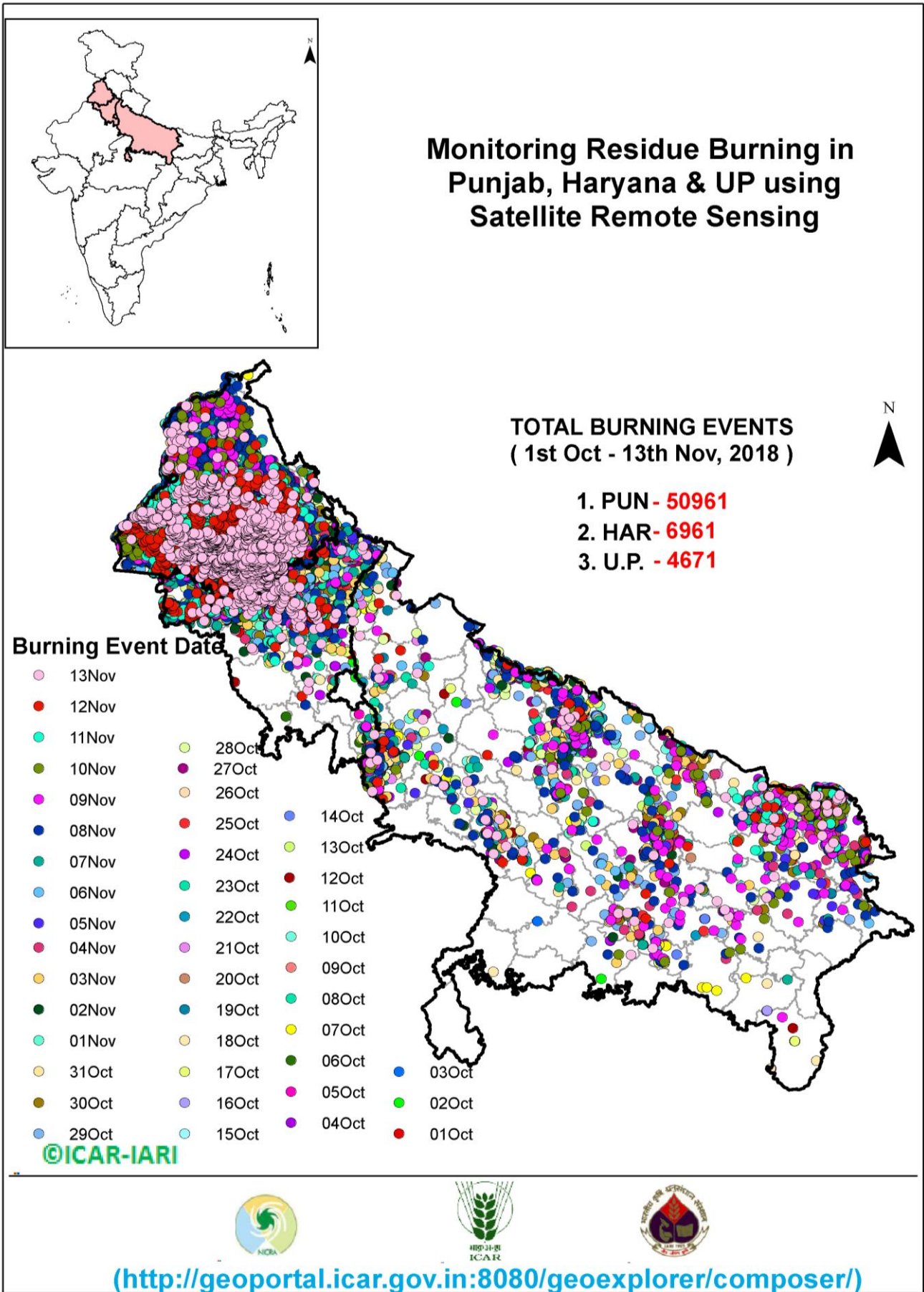
### Comparison of burning events of 2018 with events in 2016 and 2017



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



**Map of Events in 2018**



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

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

(Website: <http://creams.iari.res.in>)

(Email: [iaricreams@gmail.com](mailto:iaricreams@gmail.com))

GIS Maps of burning events can be visualized online: <http://geoportal.icar.gov.in:8080/geoexplorer/composer/>