



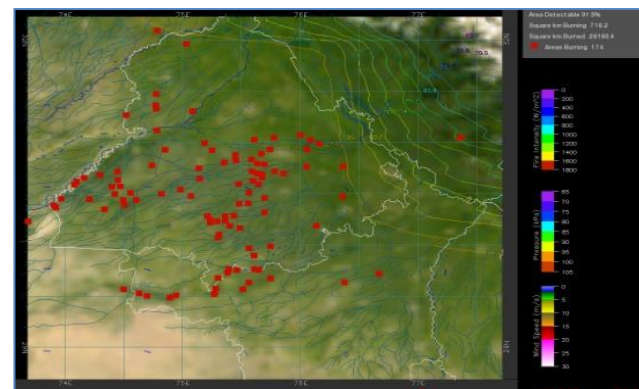
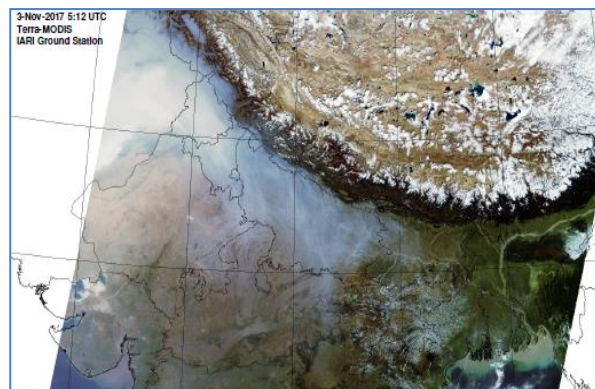
Bulletin No. 46

Events Date:
16-May-2022

Issued on:
17-May-2022



MONITORING WHEAT RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2022



Prepared by:

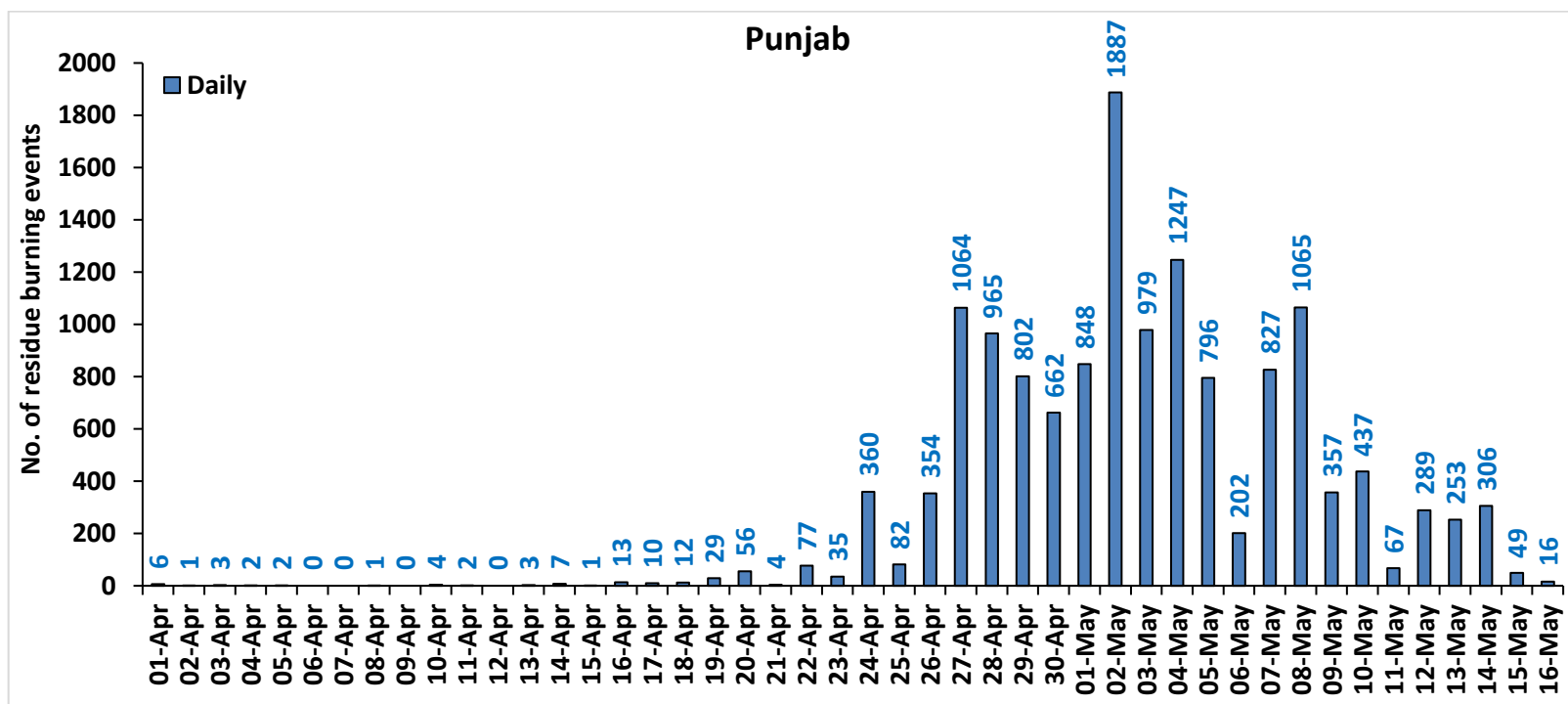
Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

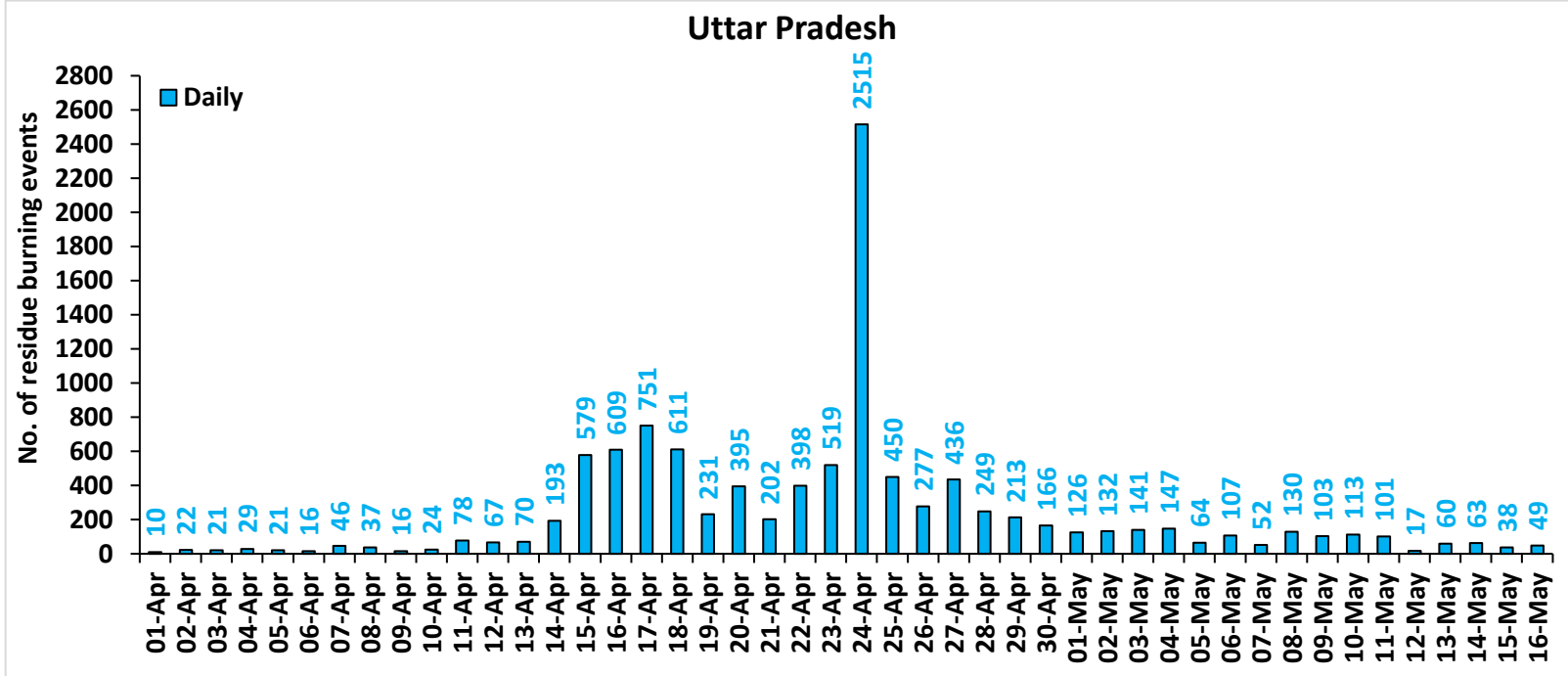
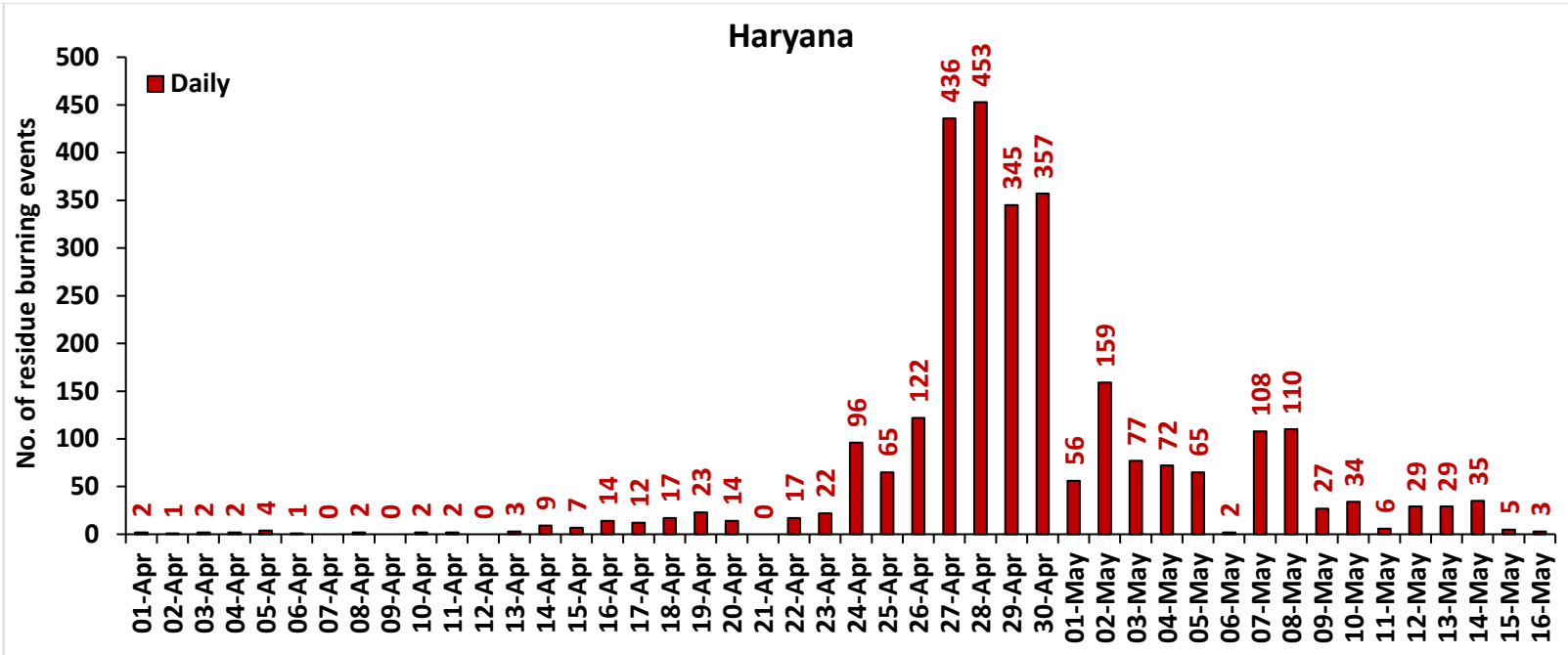
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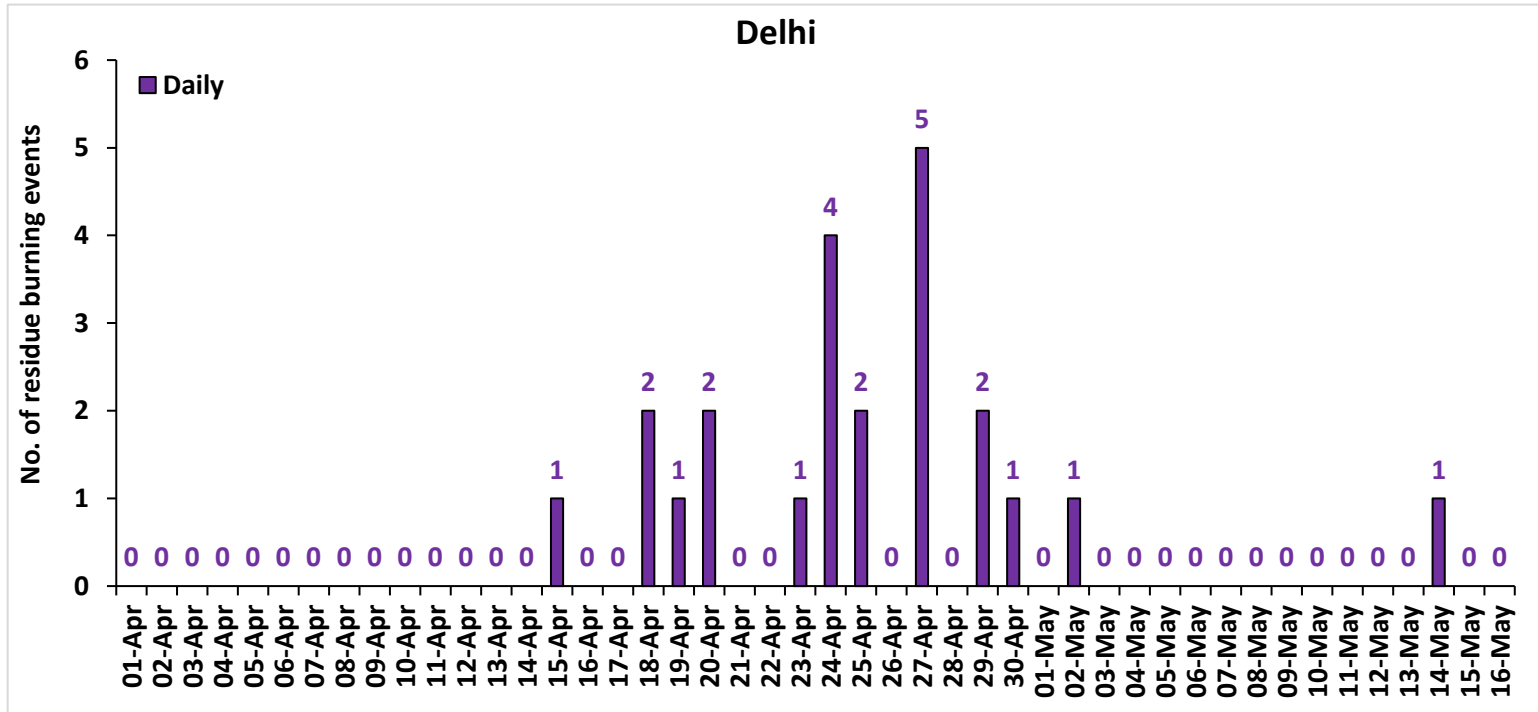
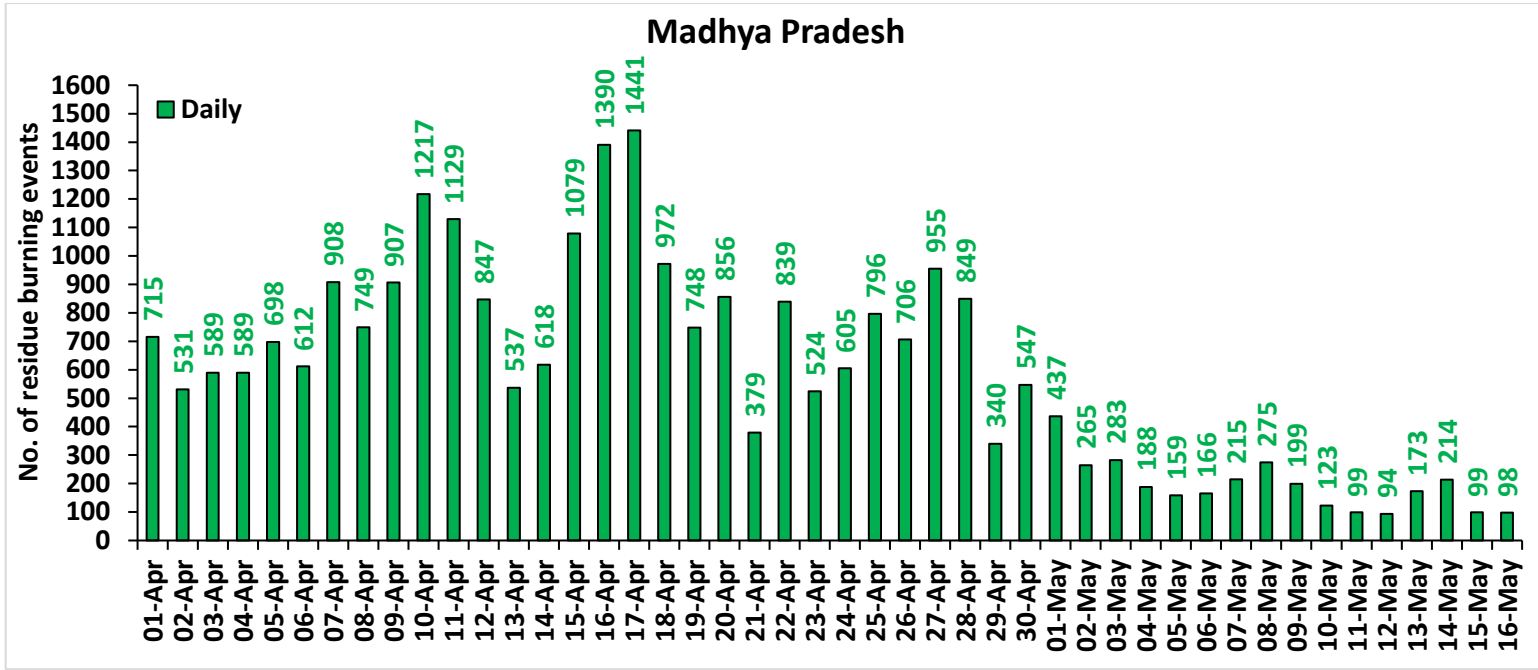
Highlights for 16-May-2022

- The active fire events due to wheat residue burning were monitored using satellite remote sensing, following the new "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data".
- Satellites detected **166** residue burning events in the five study States on 16-May-2022.
- The state wise events detected on 16-May-2022 were **16** in Punjab, **03** in Haryana, **00** in Delhi, **49** in Uttar Pradesh and **98** in Madhya Pradesh.
- The number of events has decreased from **191** on 15-May-2022 to **166** on 16-May-2022 in the five study states.
- Total **54505** burning events were detected in the five states between 01-Apr-2022 and 16-May-2022, which are distributed as **14182**, **2847**, **10694**, **23**, and **26795** in Punjab, Haryana, UP, Delhi, and MP, respectively.

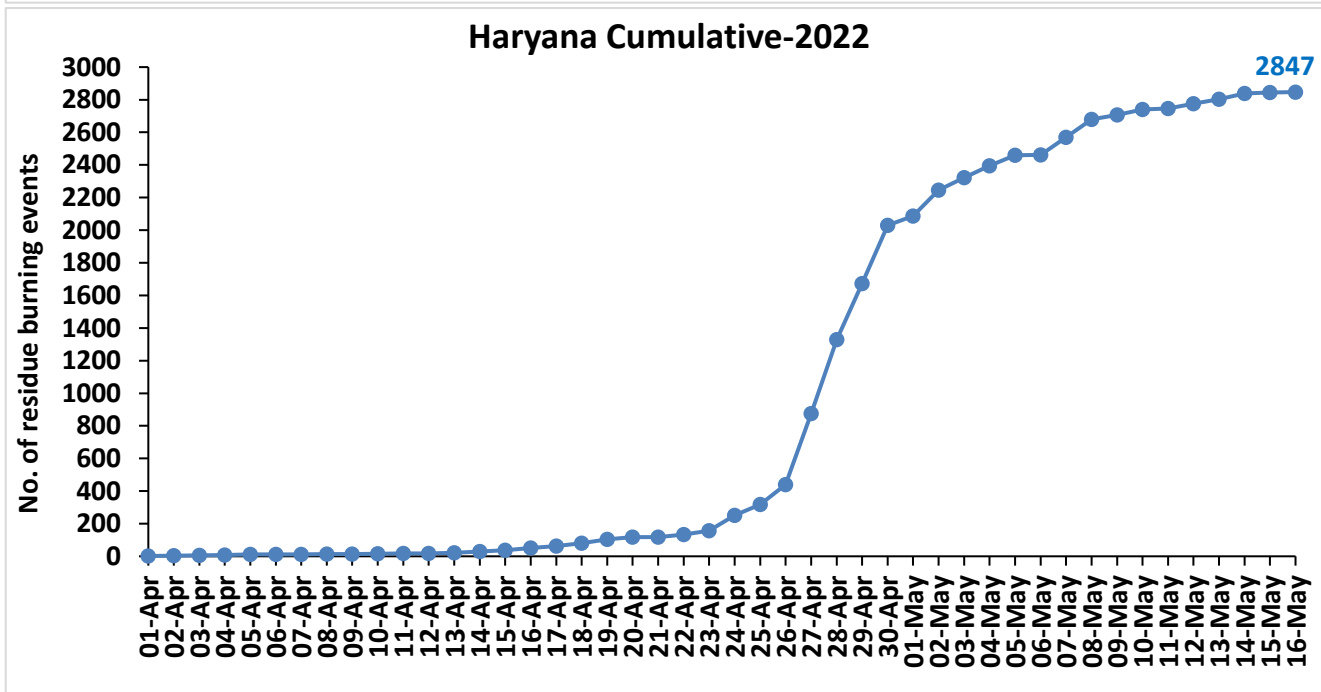
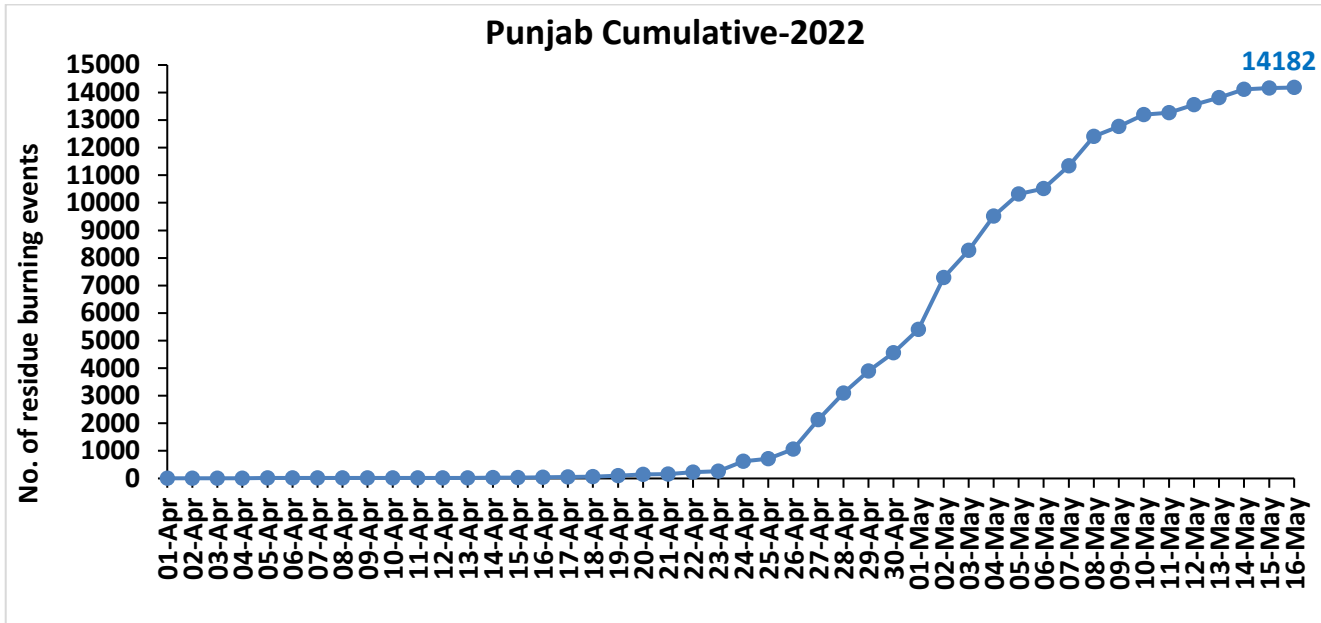
Temporal distribution of wheat residue burning events for the study States in 2022



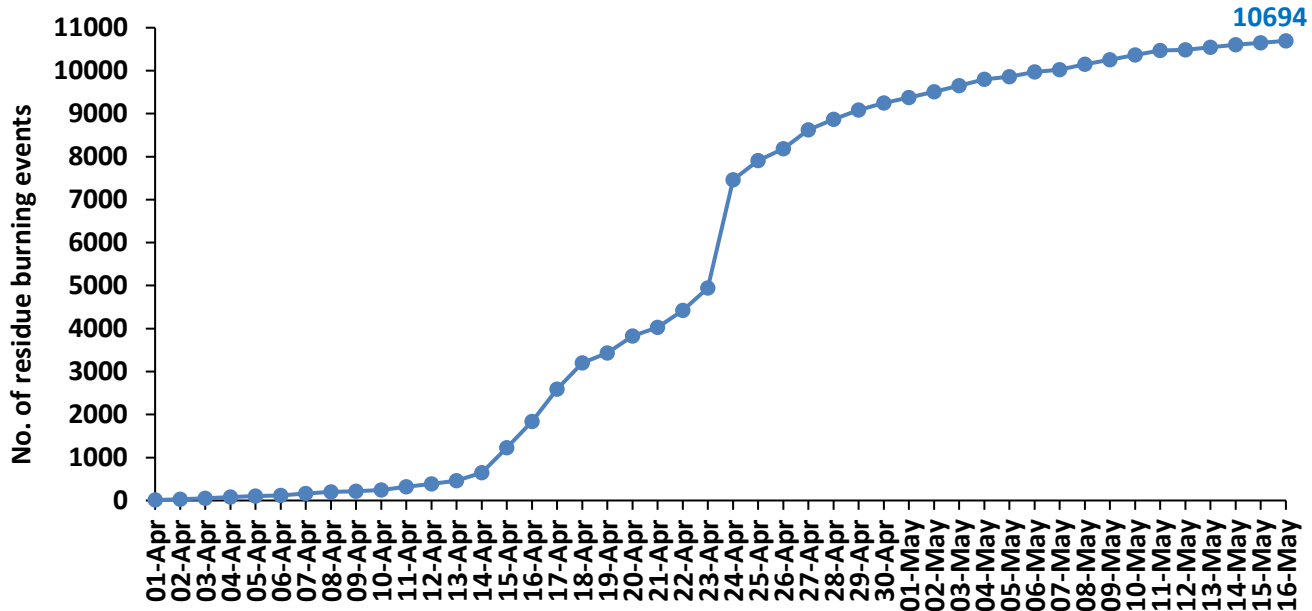




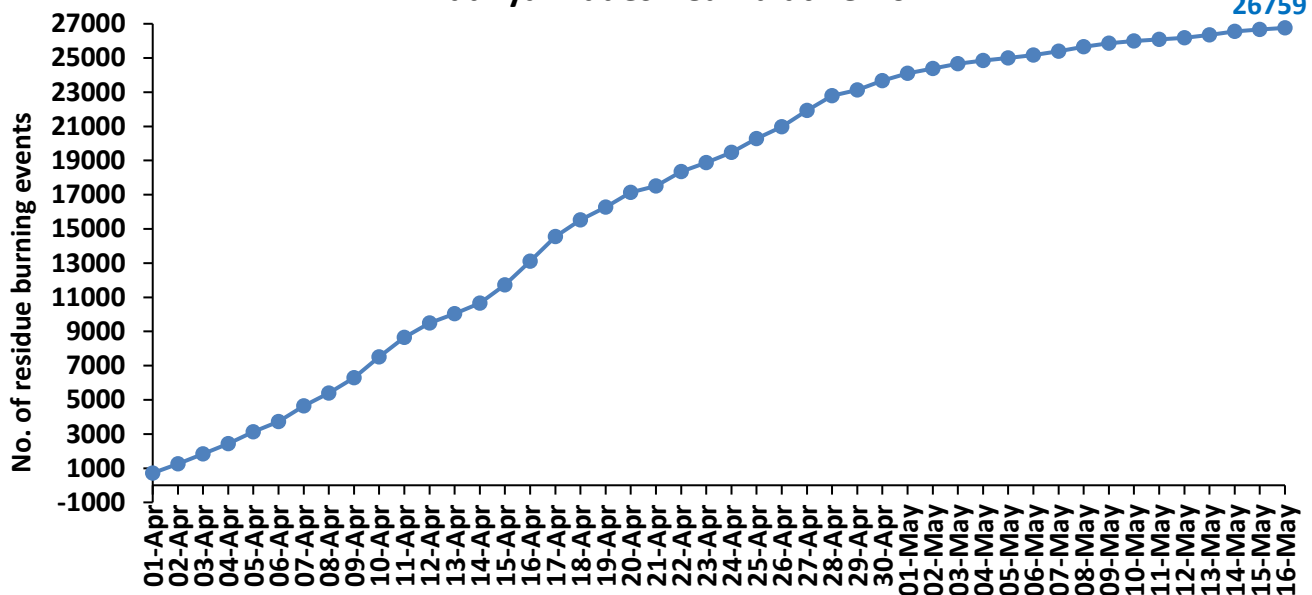
Cumulative Wheat Residue burning events in current year (2022) for the study States



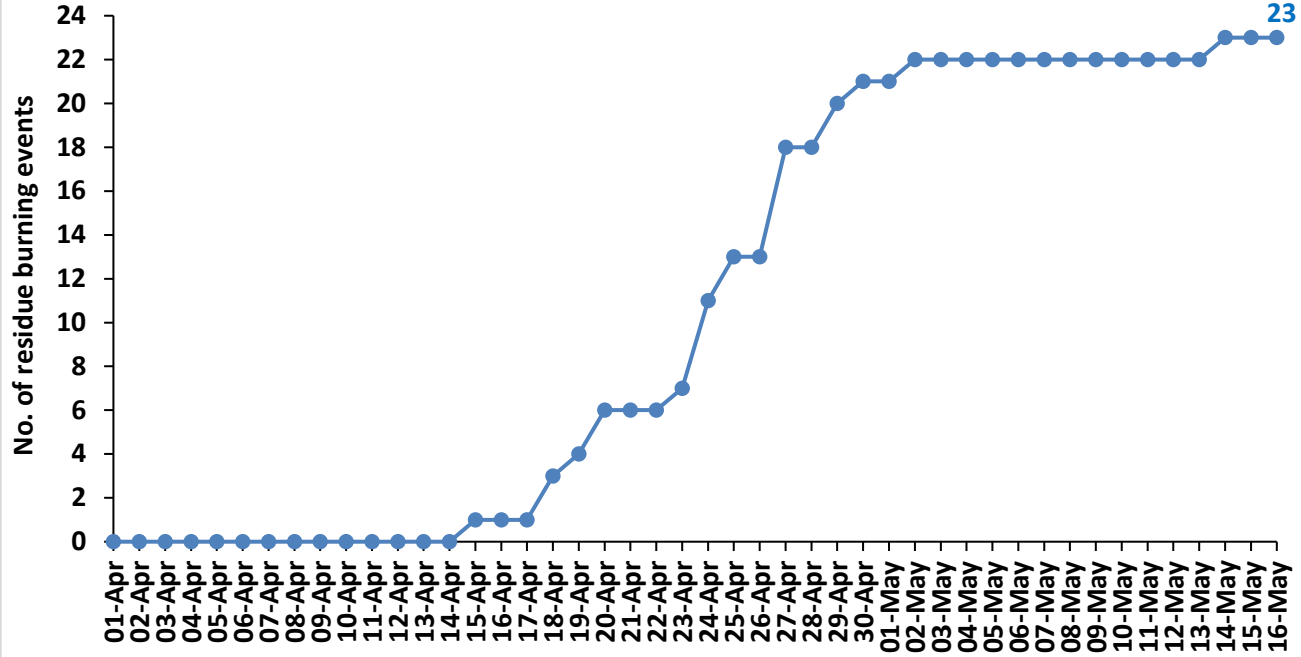
Uttar Pradesh Cumulative-2022



Madhya Pradesh Cumulative-2022

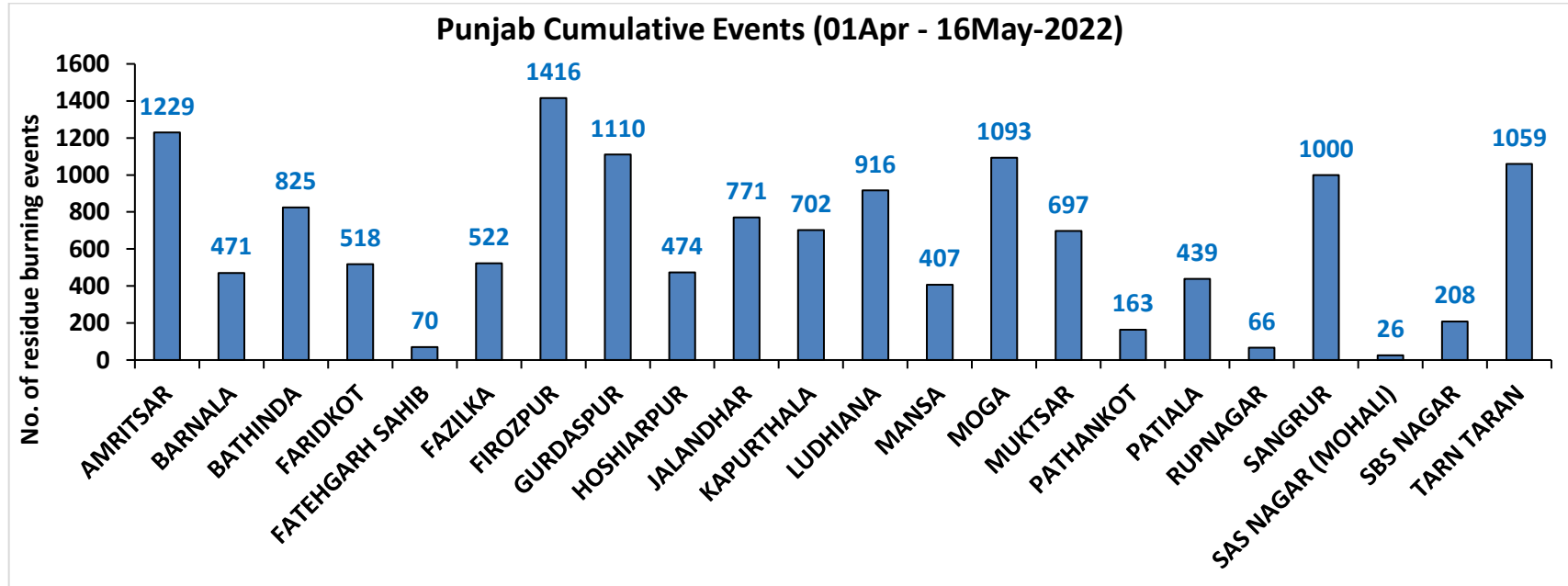
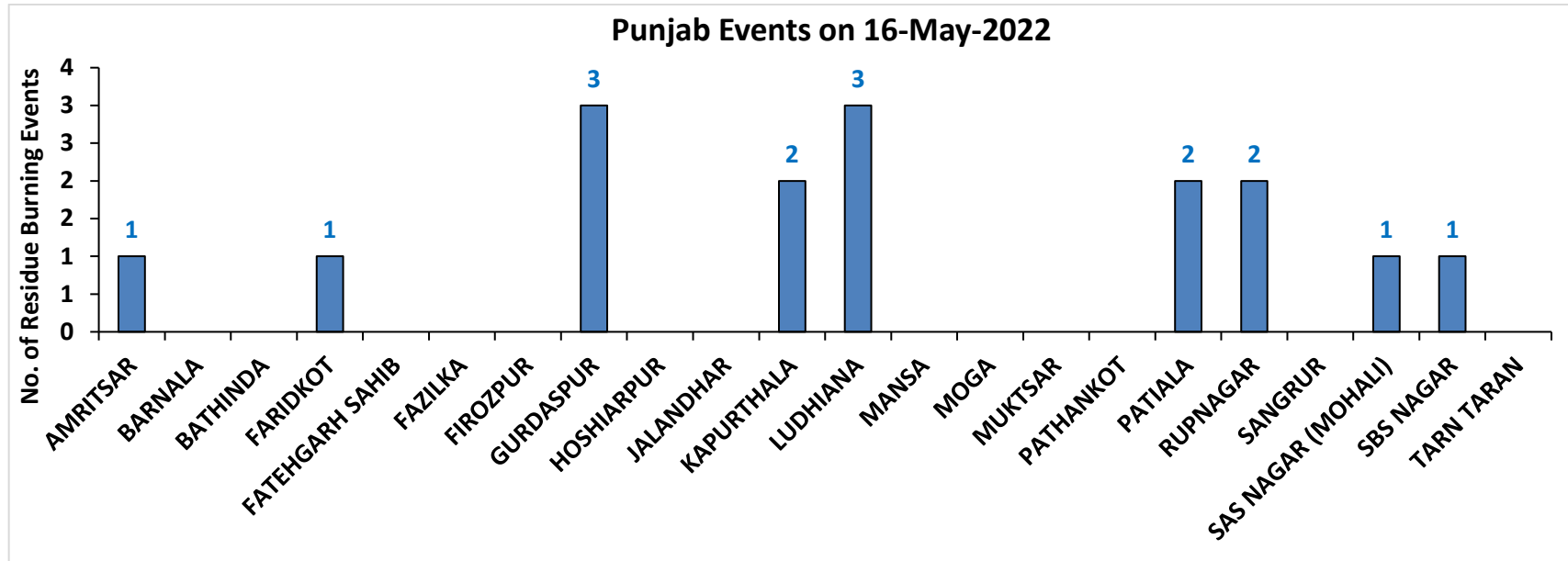


Delhi Cumulative-2022



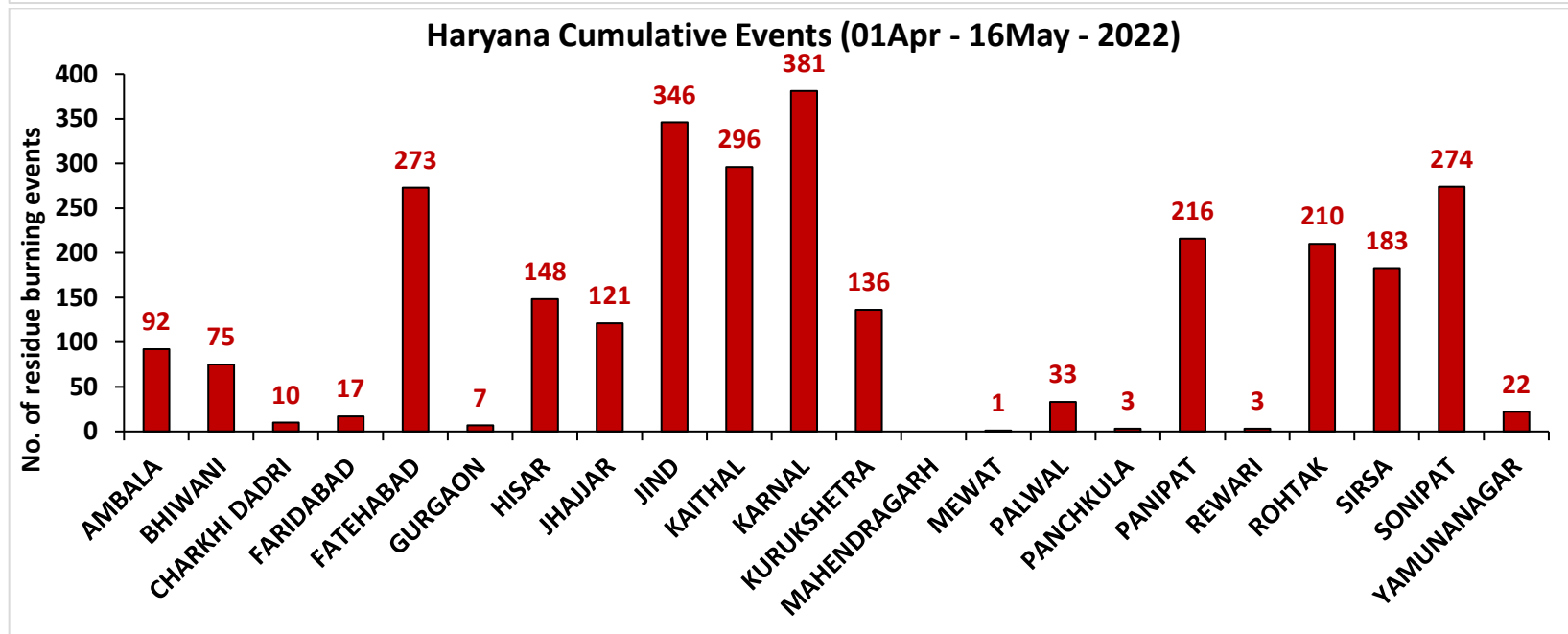
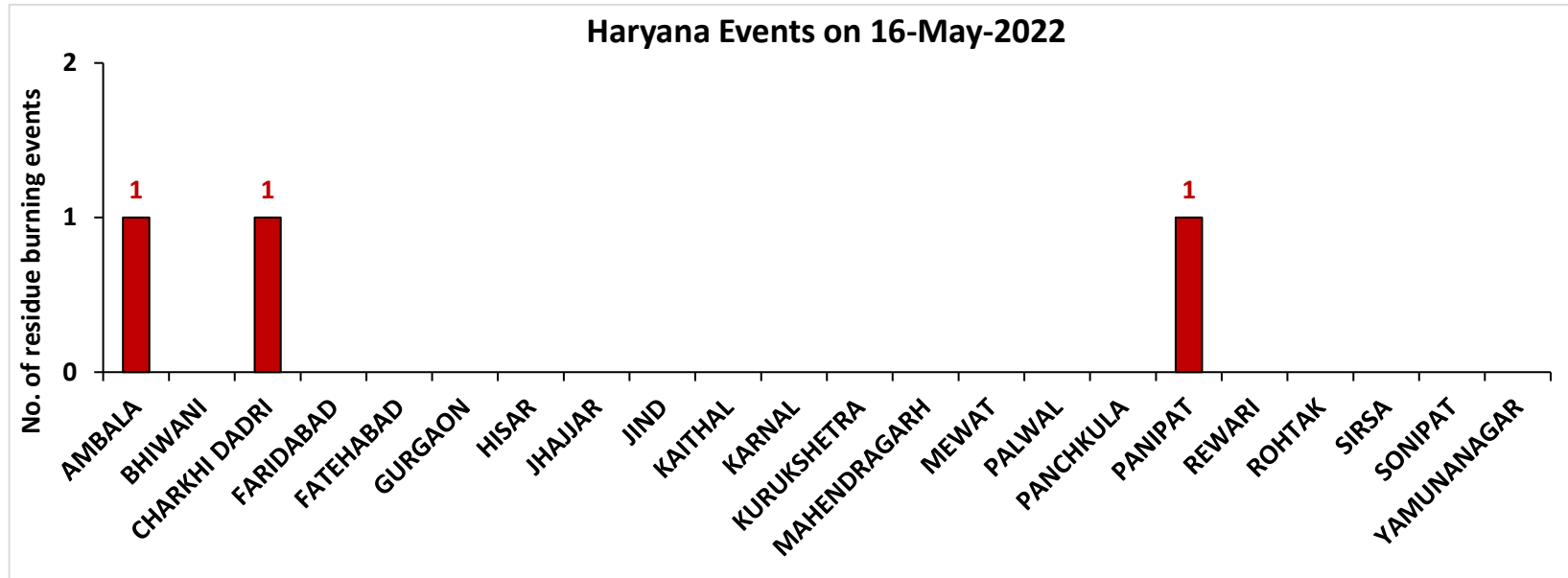
Punjab

District-wise cumulative number of wheat residue burning events in Punjab (01 Apr-16 May-2022)



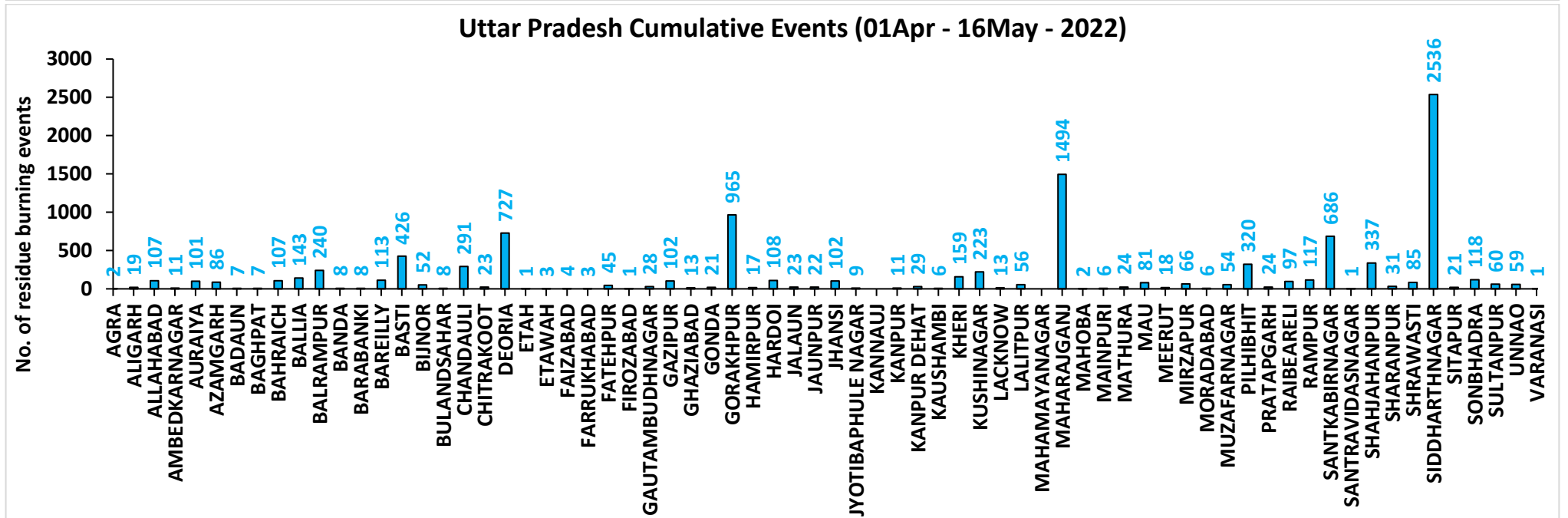
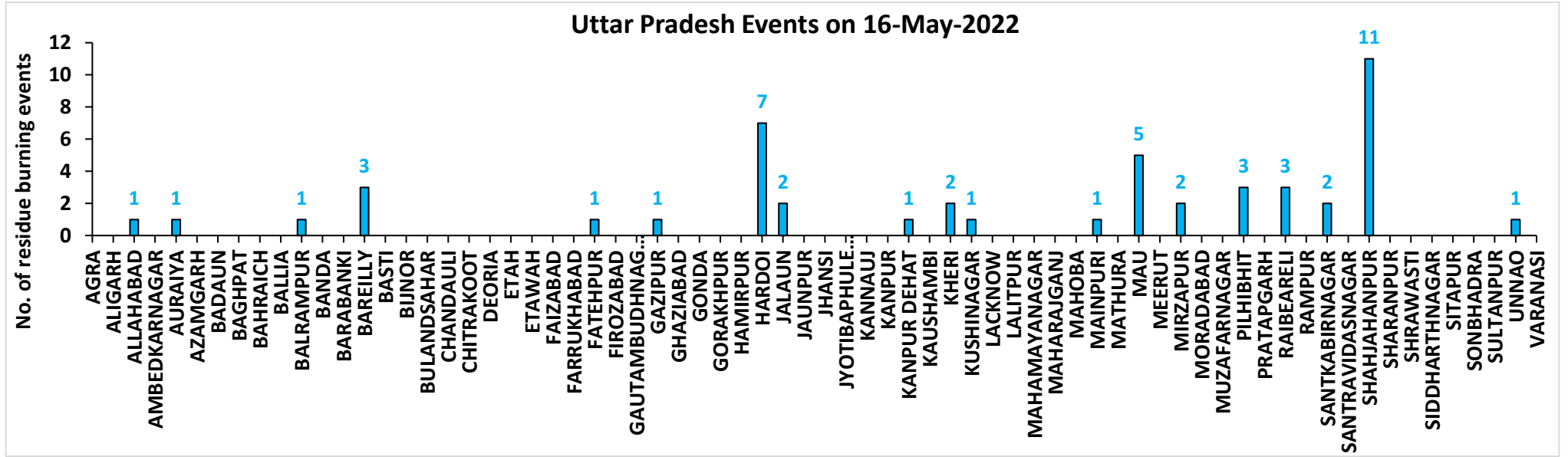
Haryana

District-wise cumulative number of residue burning events in Haryana (01 Apr-16 May-2022)



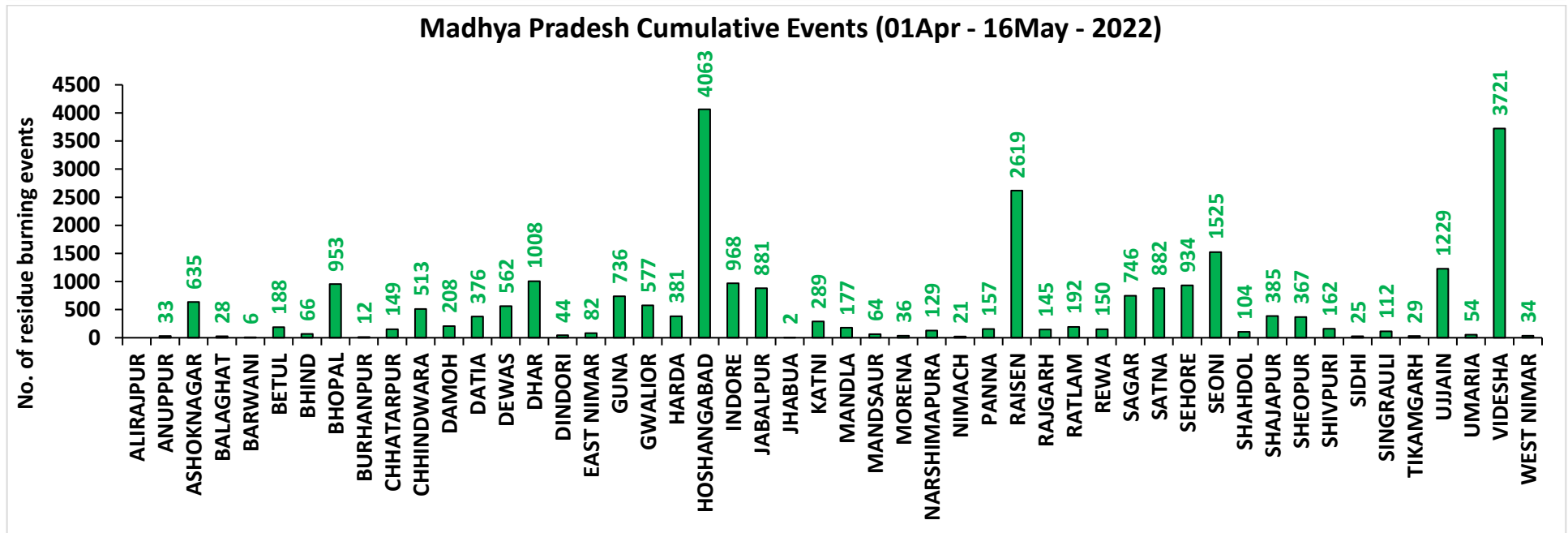
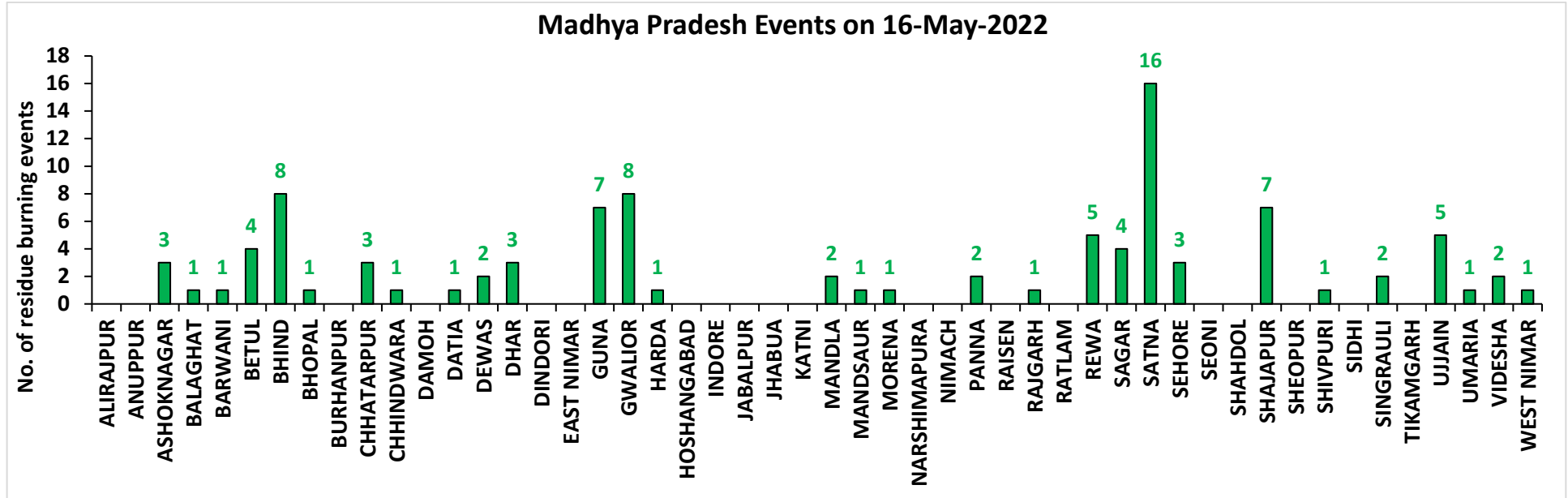
Uttar Pradesh

District-wise cumulative number of wheat residue burning events in Uttar Pradesh (01 Apr-16 May-2022)



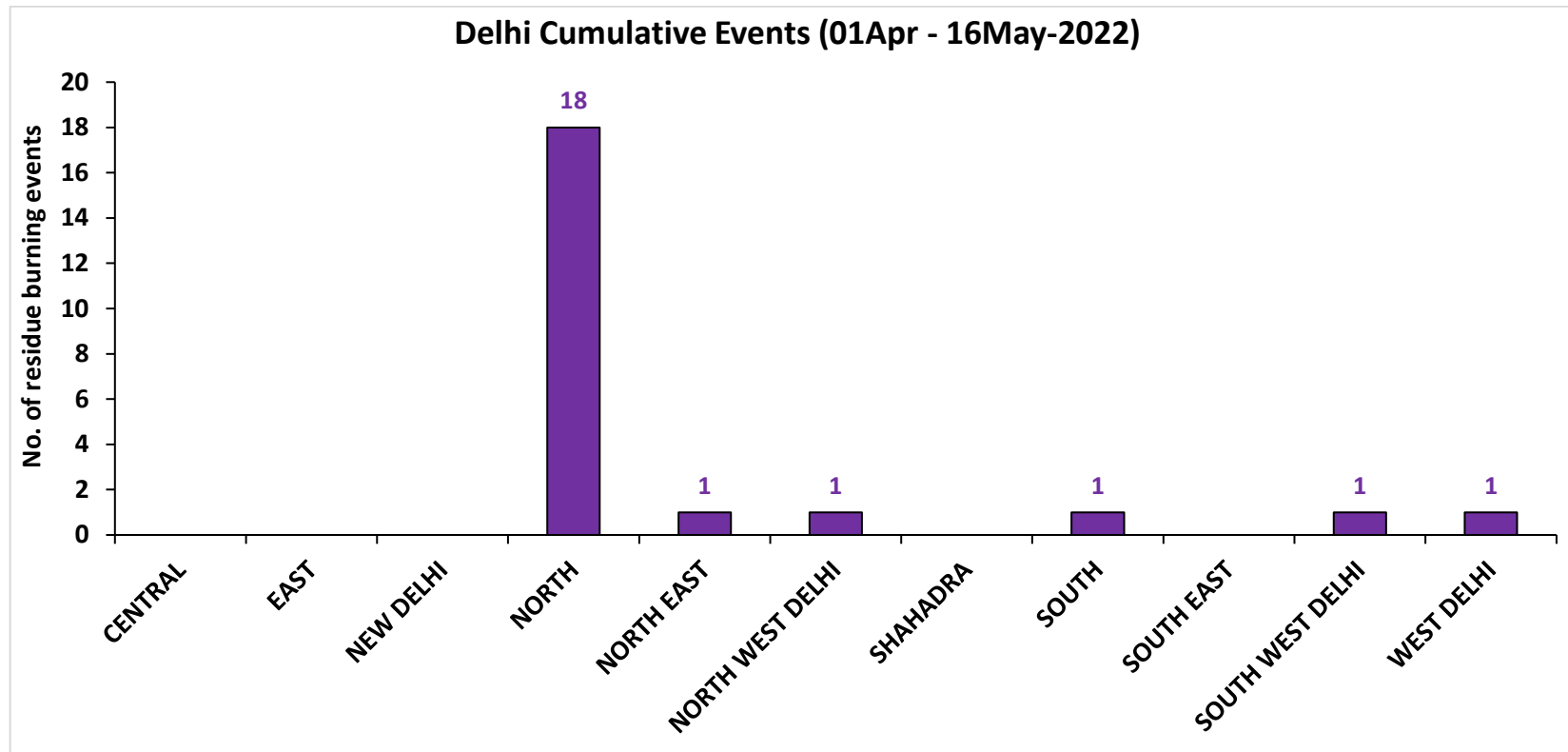
Madhya Pradesh

District-wise cumulative number of wheat residue burning events in Madhya Pradesh (01 Apr-16 May-2022)



Delhi

District-wise cumulative number of wheat residue burning events in Delhi (01 Apr-16May-2022)



District-wise cumulative number of wheat residue burning events detected in 2022
(Period: 01 April – 16 May)

(a) Punjab

District	01Apr-16 May
	Year 2022
Amritsar	1229
Barnala	471
Bathinda	825
Faridkot	518
Fatehgarh Sahib	70
Fazilka	522
Firozpur	1416
Gurdaspur	1110
Hoshiarpur	474
Jalandhar	771
Kapurthala	702
Ludhiana	916
Mansa	407
Moga	1093
Muktsar	697
Pathankot	163
Patiala	439
Rupnagar	66
Sangrur	1000
SAS NAGAR (Mohali)	26
SBS Nagar	208
Tarn Taran	1059
Total	14182

(b) Haryana

District	01Apr-16 May
	Year 2022
Ambala	92
Bhiwani	75
Charkhi Dadri	10
Faridabad	17
Fatehabad	273
Gurgaon	7
Hisar	148
Jhajjar	121
Jind	346
Kaithal	296
Karnal	381
Kurukshetra	136
Mahendragarh	0
Mewat	1
Palwal	33
Panchkula	3
Panipat	216
Rewari	3
Rohtak	210
Sirsa	183
Sonipat	274
Yamunanagar	22
Total	2847

(c) Uttar Pradesh

District	01Apr-16 May				
	Year 2022				
		GAUTAMBUDHNAGAR	28	MUZAFARNAGAR	54
		GAZIPUR	102	PILHIBHIT	320
AGRA	2	GHAZIABAD	13	PRATAPGARH	24
ALIGARH	19	GONDA	21	RAIBEARELI	97
ALLAHABAD	107	GORAKHPUR	965	RAMPUR	117
AMBEDKARNAGAR	11	HAMIRPUR	17	SANTKABIRNAGAR	686
AURAIYA	101	HARDOI	108	SANTRAVIDASNAGAR	1
AZAMGARH	86	JALAUN	23	SHAHJAHANPUR	337
BADAUN	7	JAUNPUR	22	SHARANPUR	31
BAGHPAT	7	JHANSI	102	SHRAWASTI	85
BAHRAICH	107	JYOTIBAPHULE NAGAR	9	SIDDHARTHANAGAR	2536
BALLIA	143	KANNAUJ	0	SITAPUR	21
BALRAMPUR	240	KANPUR	11	SONBHADRA	118
BANDA	8	KANPUR DEHAT	29	SULTANPUR	60
BARABANKI	8	KAUSHAMBI	6	UNNAO	59
BAREILLY	113	KHERI	159	VARANASI	1
BASTI	426	KUSHINAGAR	223	Total	10694
BIJNOR	52	LACKNOW	13		
BULANDSAHAR	8	LALITPUR	56		
CHANDAULI	291	MAHAMAYANAGAR	0		
CHITRAKOOT	23	MAHARAJGANJ	1494		
DEORIA	727	MAHOBA	2		
ETAH	1	MAINPURI	6		
ETAWAH	3	MATHURA	24		
FAIZABAD	4	MAU	81		
FARRUKHABAD	3	MEERUT	18		
FATEHPUR	45	MIRZAPUR	66		
FIROZABAD	1	MORADABAD	6		

(f) Madhya Pradesh

District	01Apr-16 May	
	Year 2022	
ALIRAJPUR	0	PANNA 157
ANUPPUR	33	RAISEN 2619
ASHOKNAGAR	635	RAJGARH 145
BALAGHAT	28	RATLAM 192
BARWANI	6	REWA 150
BETUL	188	SAGAR 746
BHIND	66	SATNA 882
BHOPAL	953	SEHORE 934
BURHANPUR	12	SEONI 1525
CHHATARPUR	149	SHAHDOL 104
CHHINDWARA	513	SHAJAPUR 385
DAMOH	208	SHEOPUR 367
DATIA	376	SHIVPURI 162
DEWAS	562	SIDHI 25
DHAR	1008	SINGRAULI 112
DINDORI	44	TIKAMGARH 29
EAST NIMAR	82	UJJAIN 1229
GUNA	736	UMARIA 54
GWALIOR	577	VIDESHA 3721
HARDA	381	WEST NIMAR 34
HOSHANGABAD	4063	Total 26759
INDORE	968	
JABALPUR	881	
JHABUA	2	
KATNI	289	
MANDLA	177	
MANDSAUR	64	
MORENA	36	
NARSHIMAPURA	129	
NIMACH	21	

(g) Delhi

District	01Apr-16 May
	2022
CENTRAL	0
EAST	0
NEW DELHI	0
NORTH	18
NORTH EAST	1
NORTH WEST DELHI	1
SHAHADRA	0
SOUTH	1
SOUTH EAST	0
SOUTH WEST DELHI	1
WEST DELHI	1
Total	23

State-wise and date-wise number of wheat residue burning events detected in 2022

(Period: 01 April – 16 May)

Date	Punjab	Haryana	UP	MP	Delhi
1-Apr	6	2	10	715	0
2-Apr	1	1	22	531	0
3-Apr	3	2	21	589	0
4-Apr	2	2	29	589	0
5-Apr	2	4	21	698	0
6-Apr	0	1	16	612	0
7-Apr	0	0	46	908	0
8-Apr	1	2	37	749	0
9-Apr	0	0	16	907	0
10-Apr	4	2	24	1217	0
11-Apr	2	2	78	1129	0
12-Apr	0	0	67	847	0
13-Apr	3	3	70	537	0
14-Apr	7	9	193	618	0
15-Apr	1	7	579	1079	1
16-Apr	13	14	609	1390	0
17-Apr	10	12	751	1441	0
18-Apr	12	17	611	972	2
19-Apr	29	23	231	748	1
20-Apr	56	14	395	856	2
21-Apr	4	0	202	379	0
22-Apr	77	17	398	839	0
23-Apr	35	22	519	524	1
24-Apr	360	96	2515	605	4
25-Apr	82	65	450	796	2
26-Apr	354	122	277	706	0
27-Apr	1064	436	436	955	5
28-Apr	965	453	249	849	0
29-Apr	802	345	213	340	2
30-Apr	662	357	166	547	1
01-May	848	56	126	437	0

02-May	1887	159	132	265	1
03-May	979	77	141	283	0
04-May	1247	72	147	188	0
05-May	796	65	64	159	0
06-May	202	2	107	166	0
07-May	827	108	52	215	0
08-May	1065	110	130	275	0
09-May	357	27	103	199	0
10-May	437	34	113	123	0
11-May	67	6	101	99	0
12-May	289	29	17	94	0
13-May	253	29	60	173	0
14-May	306	35	63	214	1
15-May	49	5	38	99	0
16-May	16	3	49	98	0
Total	14182	2847	10694	26759	23

Details of wheat residue burning events in Punjab on 16-May-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	AMRITSAR	RAYYA	npp	31.61800	75.24530	5/16/2022	13:28:18	D	8.50
2	FARIDKOT	JAITON	Aqua	30.50300	74.95500	5/16/2022	13:55:50	D	11.20
3	GURDASPUR	DERA BABA NANAK	Aqua	32.04400	74.92000	5/16/2022	13:55:50	D	45.00
4	GURDASPUR	KAHNUWAN	npp	31.88600	75.51590	5/16/2022	13:28:18	D	14.30
5	GURDASPUR	SRI HARGOBINDPUR	npp	31.68950	75.44660	5/16/2022	13:28:18	D	4.00
6	KAPURTHALA	DHILWAN	npp	31.40990	75.21320	5/16/2022	13:28:18	D	11.20
7	KAPURTHALA	PHAGWARA	npp	31.25150	75.73420	5/16/2022	02:18:19	N	2.40
8	LUDHIANA	MACHHIWARA	npp	30.93240	76.29680	5/16/2022	13:28:18	D	11.80
9	LUDHIANA	MACHHIWARA	npp	30.96320	76.27410	5/16/2022	13:28:18	D	6.40
10	LUDHIANA	MACHHIWARA	Terra	30.91700	76.28300	5/16/2022	10:44:49	D	14.60
11	PATIALA	GHANAUR	npp	30.34600	76.72760	5/16/2022	13:28:18	D	4.30
12	PATIALA	RAJPURA	npp	30.50890	76.72600	5/16/2022	13:28:18	D	3.80
13	RUPNAGAR	CHAMKAUR SAHIB	npp	30.93800	76.35810	5/16/2022	13:28:18	D	2.70
14	RUPNAGAR	RUPNAGAR	npp	31.05090	76.57990	5/16/2022	13:28:18	D	2.70
15	SAS NAGAR (MOHALI)	DERABASSI	npp	30.42740	76.91260	5/16/2022	13:28:18	D	2.50
16	SBS NAGAR	AUR	Terra	31.12900	75.99900	5/16/2022	10:44:49	D	14.20

Details of wheat residue burning events in Haryana on 16-May-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	AMBALA	SHAHZADPUR	npp	30.47960	77.05040	5/16/2022	13:28:18	D	5.70
2	CHARKHI DADRI	DADRI-I	Aqua	28.62200	76.41600	5/16/2022	13:55:50	D	28.40
3	PANIPAT	MADLAUDA	npp	29.42320	76.86150	5/16/2022	13:28:18	D	7.30

Details of wheat residue burning events in Uttar Pradesh on 16-May-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	ALLAHABAD	MEZA	npp	25.09460	82.03360	5/16/2022	13:28:18	D	8.90
2	AURAIYA	BIDHUNA	npp	26.74860	79.71110	5/16/2022	13:28:18	D	8.70
3	BALRAMPUR	TULSIPUR	npp	27.39110	82.45570	5/16/2022	02:18:19	N	1.50
4	BAREILLY	BAREILY	npp	28.44700	79.53410	5/16/2022	13:28:18	D	2.40
5	BAREILLY	FARIDPUR	npp	28.21680	79.65670	5/16/2022	13:28:18	D	1.70
6	BAREILLY	FARIDPUR	npp	28.21830	79.65810	5/16/2022	13:28:18	D	2.10
7	FATEHPUR	KHAGA	Terra	25.54900	81.09900	5/16/2022	10:44:49	D	9.20
8	GAZIPUR	JAKHANIA	npp	25.69220	83.43780	5/16/2022	13:28:18	D	5.00
9	HARDOI	BILGRAM	npp	27.13700	80.26060	5/16/2022	13:28:18	D	2.50
10	HARDOI	BILGRAM	npp	27.21210	80.03010	5/16/2022	13:28:18	D	4.70
11	HARDOI	HARDOI	npp	27.32760	80.06590	5/16/2022	13:28:18	D	3.70
12	HARDOI	HARDOI	npp	27.36000	80.38780	5/16/2022	13:28:18	D	6.40
13	HARDOI	HARDOI	npp	27.36370	80.38730	5/16/2022	13:28:18	D	6.40
14	HARDOI	SANDILA	npp	27.19310	80.29090	5/16/2022	13:28:18	D	6.40
15	HARDOI	SIWAIJPUR	Terra	27.47800	79.82400	5/16/2022	10:44:49	D	15.80
16	JALAUN	KONCH	npp	25.98750	78.95500	5/16/2022	13:28:18	D	7.00
17	JALAUN	URAI	npp	25.83660	79.27660	5/16/2022	13:28:18	D	9.80
18	KANPUR DEHAT	RASULABAD	Terra	26.70600	79.94300	5/16/2022	10:44:49	D	9.90
19	KHERI	DHAURAHRA	npp	27.89660	81.15820	5/16/2022	13:28:18	D	4.80
20	KHERI	MOHMADI	npp	27.75160	80.39830	5/16/2022	13:28:18	D	3.20

21	KUSHINAGAR	PADRAUNA	npp	26.83850	83.94810	5/16/2022	02:18:19	N	1.40
22	MAINPURI	KARHAL	Terra	27.06200	79.04200	5/16/2022	10:44:49	D	12.30
23	MAU	MADHUBAN	npp	26.11520	83.65800	5/16/2022	13:28:18	D	3.50
24	MAU	MADHUBAN	npp	26.11530	83.65970	5/16/2022	13:28:18	D	3.00
25	MAU	MUHAMMADABAD	npp	25.87500	83.41620	5/16/2022	13:28:18	D	2.60
26	MAU	MUHAMMADABAD	npp	25.96740	83.34710	5/16/2022	13:28:18	D	2.60
27	MAU	MUHAMMADABAD	npp	25.97030	83.35050	5/16/2022	13:28:18	D	2.80
28	MIRZAPUR	LALGANJ	npp	24.93580	82.37030	5/16/2022	13:28:18	D	6.10
29	MIRZAPUR	MIRZAPUR	npp	25.19420	82.43500	5/16/2022	13:28:18	D	3.30
30	PILHIBHIT	PILHIBHIT	npp	28.72400	79.73290	5/16/2022	13:28:18	D	1.60
31	PILHIBHIT	PURANPUR	npp	28.61700	80.03760	5/16/2022	13:28:18	D	5.50
32	PILHIBHIT	PURANPUR	npp	28.75330	80.18060	5/16/2022	13:28:18	D	7.30
33	RAIBEARELI	LALGANJ	npp	26.28790	80.99400	5/16/2022	13:28:18	D	7.10
34	RAIBEARELI	SALON	npp	26.22490	81.39250	5/16/2022	13:28:18	D	2.90
35	RAIBEARELI	TILOI	npp	26.46050	81.53690	5/16/2022	13:28:18	D	2.60
36	SANTKABIRNAGAR	GHANGHATA	npp	26.59310	83.04730	5/16/2022	13:28:18	D	1.40
37	SANTKABIRNAGAR	GHANGHATA	npp	26.63190	83.04670	5/16/2022	13:28:18	D	3.30
38	SHAHJAHANPUR	PUWANYA	npp	28.06560	80.19320	5/16/2022	13:28:18	D	3.20
39	SHAHJAHANPUR	PUWANYA	npp	28.17240	80.23650	5/16/2022	13:28:18	D	4.70
40	SHAHJAHANPUR	PUWANYA	npp	28.22020	80.15180	5/16/2022	13:28:18	D	2.20
41	SHAHJAHANPUR	PUWANYA	npp	28.31340	80.00550	5/16/2022	13:28:18	D	7.40
42	SHAHJAHANPUR	PUWANYA	npp	28.34030	80.01110	5/16/2022	13:28:18	D	7.30
43	SHAHJAHANPUR	SHAHJAHANPUR	npp	27.80370	79.75120	5/16/2022	13:28:18	D	11.80
44	SHAHJAHANPUR	SHAHJAHANPUR	npp	27.81510	79.75410	5/16/2022	13:28:18	D	11.70
45	SHAHJAHANPUR	TILHAR	npp	27.94990	79.62530	5/16/2022	13:28:18	D	8.00
46	SHAHJAHANPUR	TILHAR	npp	28.07860	79.93550	5/16/2022	13:28:18	D	6.80
47	SHAHJAHANPUR	TILHAR	npp	28.11320	79.74240	5/16/2022	13:28:18	D	3.30
48	SHAHJAHANPUR	TILHAR	npp	28.14420	79.89850	5/16/2022	13:28:18	D	4.70
49	UNNAO	UNNAO	Terra	26.63800	80.28800	5/16/2022	10:44:49	D	7.80

Details of wheat residue burning events in Madhya Pradesh on 16-May-2022

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_DATE	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ASHOKNAGAR	ASHOKNAGAR	npp	24.52980	77.60570	5/16/2022	02:18:19	N	6.00
2	ASHOKNAGAR	CHANDERI	npp	24.79710	78.13590	5/16/2022	02:18:19	N	0.70
3	ASHOKNAGAR	MUNGAOLI	Terra	24.36700	77.89300	5/16/2022	10:44:49	D	12.20
4	BALAGHAT	KIRNAPUR	npp	21.78840	80.26830	5/16/2022	13:28:18	D	3.30
5	BARWANI	PANSEMAL	npp	21.66060	74.64080	5/16/2022	02:18:19	N	4.80
6	BETUL	MULTAI	npp	21.68430	78.41530	5/16/2022	13:28:18	D	7.90
7	BETUL	MULTAI	npp	21.70640	78.35820	5/16/2022	13:28:18	D	8.60
8	BETUL	MULTAI	npp	21.81440	78.30970	5/16/2022	13:28:18	D	10.30
9	BETUL	MULTAI	npp	21.86410	78.46120	5/16/2022	13:28:18	D	2.40
10	BHIND	GOHAD	npp	26.42540	78.30010	5/16/2022	02:18:19	N	3.90
11	BHIND	GOHAD	npp	26.42580	78.30270	5/16/2022	02:18:19	N	2.80
12	BHIND	GOHAD	npp	26.42670	78.29780	5/16/2022	02:18:19	N	2.80
13	BHIND	GOHAD	npp	26.42910	78.30090	5/16/2022	02:18:19	N	2.20
14	BHIND	GOHAD	npp	26.43040	78.29860	5/16/2022	02:18:19	N	1.60
15	BHIND	LAHAR	npp	26.14760	78.90320	5/16/2022	13:28:18	D	7.00
16	BHIND	MAJHGAWAN	npp	26.28550	79.01710	5/16/2022	13:28:18	D	7.50
17	BHIND	MAJHGAWAN	npp	26.28890	79.01660	5/16/2022	13:28:18	D	7.50
18	BHOPAL	HUZUR	npp	23.37090	77.42510	5/16/2022	02:18:19	N	4.20
19	CHHATARPUR	BARAMALEHRA	npp	24.47430	79.20030	5/16/2022	02:18:19	N	4.30
20	CHHATARPUR	BARAMALEHRA	npp	24.65680	79.24770	5/16/2022	13:28:18	D	9.20
21	CHHATARPUR	RAJNAGAR	npp	25.03790	79.96480	5/16/2022	13:28:18	D	30.60
22	CHHINDWARA	JAMAI	npp	22.12500	78.37770	5/16/2022	13:28:18	D	12.60
23	DATIA	SEONDHA	npp	25.93260	78.55660	5/16/2022	13:28:18	D	8.50
24	DEWAS	SONKACH	npp	23.18130	76.42830	5/16/2022	02:18:19	N	2.60
25	DEWAS	SONKACH	Aqua	23.17700	76.49000	5/16/2022	13:55:50	D	14.40
26	DHAR	DHAR	npp	22.74600	75.25110	5/16/2022	02:18:19	N	1.90
27	DHAR	MANAWAR	npp	22.09900	74.97230	5/16/2022	02:18:19	N	0.80
28	DHAR	MANAWAR	npp	22.18310	75.09270	5/16/2022	13:28:18	D	3.80
29	GUNA	GUNA	npp	24.52530	77.40380	5/16/2022	02:18:19	N	3.40
30	GUNA	GUNA	npp	24.52600	77.40170	5/16/2022	02:18:19	N	4.00
31	GUNA	GUNA	npp	24.96810	77.03420	5/16/2022	02:18:19	N	1.00
32	GUNA	GUNA	npp	24.99640	77.12380	5/16/2022	02:18:19	N	0.80
33	GUNA	GUNA	Terra	24.89200	77.15300	5/16/2022	10:44:49	D	12.00
34	GUNA	KUMBHRAJ	Aqua	24.47100	77.08300	5/16/2022	13:55:50	D	15.80

35	GUNA	RAGHOGARH	npp	24.01360	77.26190	5/16/2022	02:18:19	N	3.40
36	GWALIOR	BHITARWAR	npp	25.73470	78.01980	5/16/2022	13:28:18	D	9.70
37	GWALIOR	BHITARWAR	npp	25.73860	78.02310	5/16/2022	13:28:18	D	10.90
38	GWALIOR	BHITARWAR	npp	25.76430	78.10670	5/16/2022	13:28:18	D	15.20
39	GWALIOR	BHITARWAR	npp	25.79090	77.98200	5/16/2022	13:28:18	D	15.20
40	GWALIOR	BHITARWAR	npp	25.81560	77.95560	5/16/2022	02:18:19	N	1.40
41	GWALIOR	BHITARWAR	Terra	25.75700	78.09100	5/16/2022	10:44:49	D	15.20
42	GWALIOR	DABRA	npp	25.86470	78.32090	5/16/2022	02:18:19	N	0.70
43	GWALIOR	DABRA	npp	25.89750	78.27320	5/16/2022	02:18:19	N	0.80
44	HARDA	HARDA	Terra	22.35900	77.10500	5/16/2022	10:44:49	D	20.70
45	MANDLA	NAINPUR	npp	22.46880	80.08540	5/16/2022	13:28:18	D	9.10
46	MANDLA	NAINPUR	npp	22.51210	80.06600	5/16/2022	13:28:18	D	5.20
47	MANDSAUR	BHANPURA	Terra	24.48600	75.88400	5/16/2022	10:44:49	D	14.40
48	MORENA	SABALGARH	Terra	26.28000	77.36900	5/16/2022	10:44:49	D	16.50
49	PANNA	PANNA	npp	24.53650	80.42550	5/16/2022	02:18:19	N	1.00
50	PANNA	PANNA	npp	24.54080	80.42650	5/16/2022	02:18:19	N	0.90
51	RAJGARH	SARANGPUR	npp	23.71270	76.70320	5/16/2022	02:18:19	N	0.50
52	REWA	HUZUR	npp	24.49280	81.27230	5/16/2022	13:28:18	D	6.50
53	REWA	SIRMAUR	npp	24.71500	81.17950	5/16/2022	13:28:18	D	5.90
54	REWA	SIRMAUR	npp	24.77910	81.04390	5/16/2022	13:28:18	D	13.10
55	REWA	SIRMAUR	npp	24.77970	81.04870	5/16/2022	13:28:18	D	10.80
56	REWA	TEONTHAR	npp	25.00570	81.60050	5/16/2022	13:28:18	D	9.50
57	SAGAR	SAGAR	npp	23.70790	78.52600	5/16/2022	13:28:18	D	6.60
58	SAGAR	SAGAR	npp	23.77360	78.85130	5/16/2022	02:18:19	N	1.40
59	SAGAR	SAGAR	Aqua	23.89600	78.90100	5/16/2022	13:55:50	D	17.70
60	SAGAR	SAGAR	Aqua	23.89700	78.90600	5/16/2022	13:55:50	D	22.00
61	SATNA	MAIHAR	npp	24.16800	80.69410	5/16/2022	02:18:19	N	5.60
62	SATNA	MAIHAR	npp	24.34910	80.85320	5/16/2022	02:18:19	N	4.40
63	SATNA	MAJHGAWAN	npp	24.80620	81.02680	5/16/2022	02:18:19	N	1.30
64	SATNA	NAGOD	npp	24.47330	80.51320	5/16/2022	02:18:19	N	1.50
65	SATNA	NAGOD	npp	24.47370	80.51040	5/16/2022	02:18:19	N	1.90
66	SATNA	NAGOD	npp	24.47420	80.50860	5/16/2022	02:18:19	N	2.00
67	SATNA	NAGOD	npp	24.47470	80.50580	5/16/2022	02:18:19	N	0.90
68	SATNA	NAGOD	npp	24.52880	80.48550	5/16/2022	02:18:19	N	1.60
69	SATNA	NAGOD	npp	24.60880	80.58570	5/16/2022	02:18:19	N	0.80
70	SATNA	NAGOD	npp	24.61310	80.58680	5/16/2022	02:18:19	N	0.80
71	SATNA	RAGURAJNAGAR	npp	24.67330	80.62400	5/16/2022	13:28:18	D	4.10
72	SATNA	RAMNAGAR	npp	24.13850	80.99810	5/16/2022	02:18:19	N	2.00

73	SATNA	RAMNAGAR	npp	24.13870	80.99950	5/16/2022	02:18:19	N	1.10
74	SATNA	RAMPURBAGHLEAN	npp	24.47690	80.98890	5/16/2022	02:18:19	N	1.20
75	SATNA	RAMPURBAGHLEAN	npp	24.47900	80.98740	5/16/2022	02:18:19	N	2.00
76	SATNA	UCHAHAR	npp	24.48920	80.76890	5/16/2022	02:18:19	N	1.10
77	SEHORE	NASRULLAHGANJ	Terra	22.72500	77.03900	5/16/2022	10:44:49	D	12.60
78	SEHORE	SEHORE	npp	23.29540	77.14100	5/16/2022	02:18:19	N	1.50
79	SEHORE	SEHORE	npp	23.34130	76.99230	5/16/2022	02:18:19	N	1.80
80	SHAJAPUR	AGAR	npp	23.56890	76.20220	5/16/2022	02:18:19	N	0.90
81	SHAJAPUR	AGAR	npp	23.62050	75.88770	5/16/2022	02:18:19	N	1.40
82	SHAJAPUR	NALKHERA	npp	23.85550	76.18280	5/16/2022	02:18:19	N	1.30
83	SHAJAPUR	NALKHERA	npp	23.85900	76.18350	5/16/2022	02:18:19	N	0.70
84	SHAJAPUR	NALKHERA	Aqua	23.73000	76.21200	5/16/2022	13:55:50	D	16.60
85	SHAJAPUR	SHAJAPUR	npp	23.38220	76.42330	5/16/2022	02:18:19	N	1.80
86	SHAJAPUR	SHAJAPUR	npp	23.38580	76.42410	5/16/2022	02:18:19	N	1.80
87	SHIVPURI	KHANIYADHAN	Terra	25.04000	77.88600	5/16/2022	10:44:49	D	11.30
88	SINGRAULI	SINGRAULI	npp	23.95960	82.68990	5/16/2022	13:28:18	D	6.20
89	SINGRAULI	SINGRAULI	npp	24.17240	82.67830	5/16/2022	13:28:18	D	4.00
90	UJJAIN	BARNAGAR	Aqua	23.20700	75.39100	5/16/2022	13:55:50	D	17.60
91	UJJAIN	KACHROD	npp	23.55850	75.35650	5/16/2022	02:18:19	N	1.10
92	UJJAIN	MEHIDPUR	Aqua	23.66500	75.64800	5/16/2022	13:55:50	D	23.60
93	UJJAIN	MEHIDPUR	Aqua	23.66600	75.65800	5/16/2022	13:55:50	D	16.50
94	UJJAIN	MEHIDPUR	Terra	23.73500	75.72500	5/16/2022	10:44:49	D	11.70
95	UMARIA	PALI	npp	23.49810	81.28960	5/16/2022	13:28:18	D	6.10
96	VIDESHA	NATERAN	npp	23.92370	77.57490	5/16/2022	02:18:19	N	5.30
97	VIDESHA	NATERAN	npp	23.94640	77.56170	5/16/2022	02:18:19	N	8.10
98	WEST NIMAR	BARWAH	npp	22.29960	76.00360	5/16/2022	13:28:18	D	12.70

The study used data received from following Satellites at NRSC 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

**The wheat masks for the Punjab and Haryana were provided by MNCFC, MoA&FW, Govt of India
The rabi crop masks for Delhi, Uttar Pradesh and Madhya Pradesh were provided by NRSC (ISRO)**

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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)
