



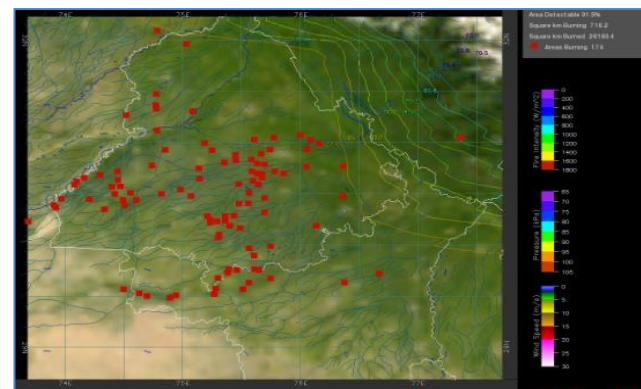
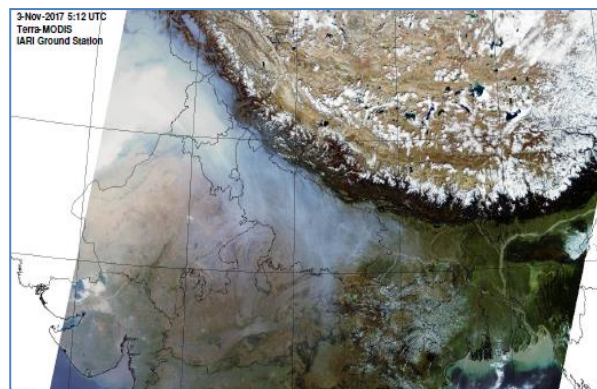
Bulletin No. 21

Events Date:
21-Apr-2023

Issued on:
21-Apr-2023



MONITORING WHEAT RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2023



Prepared by:

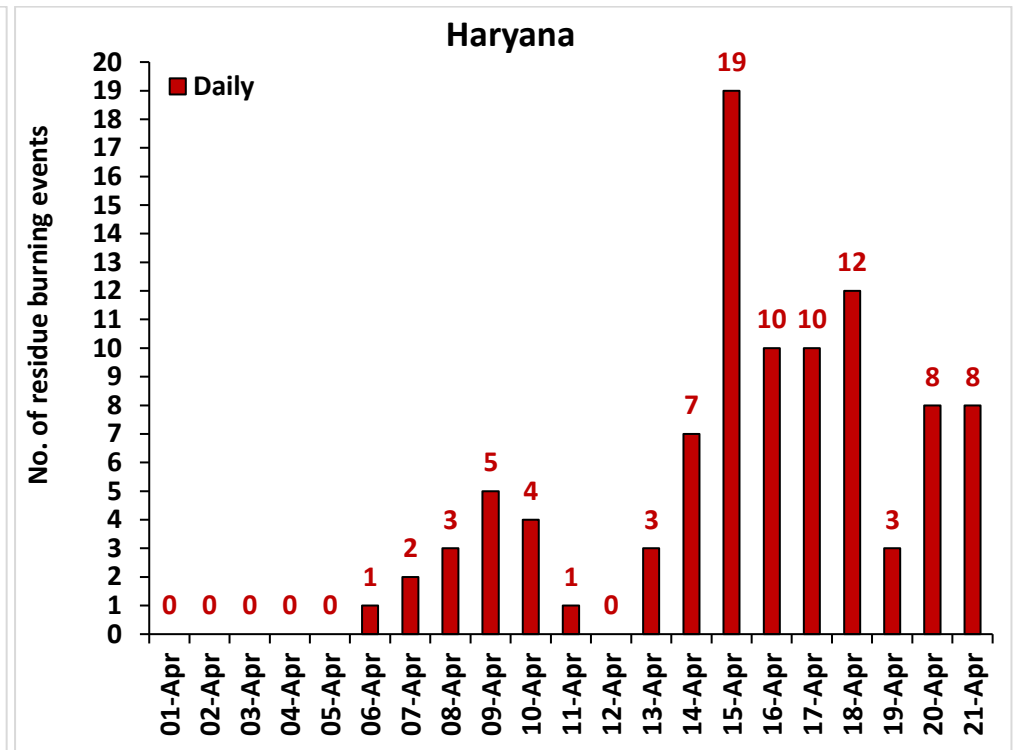
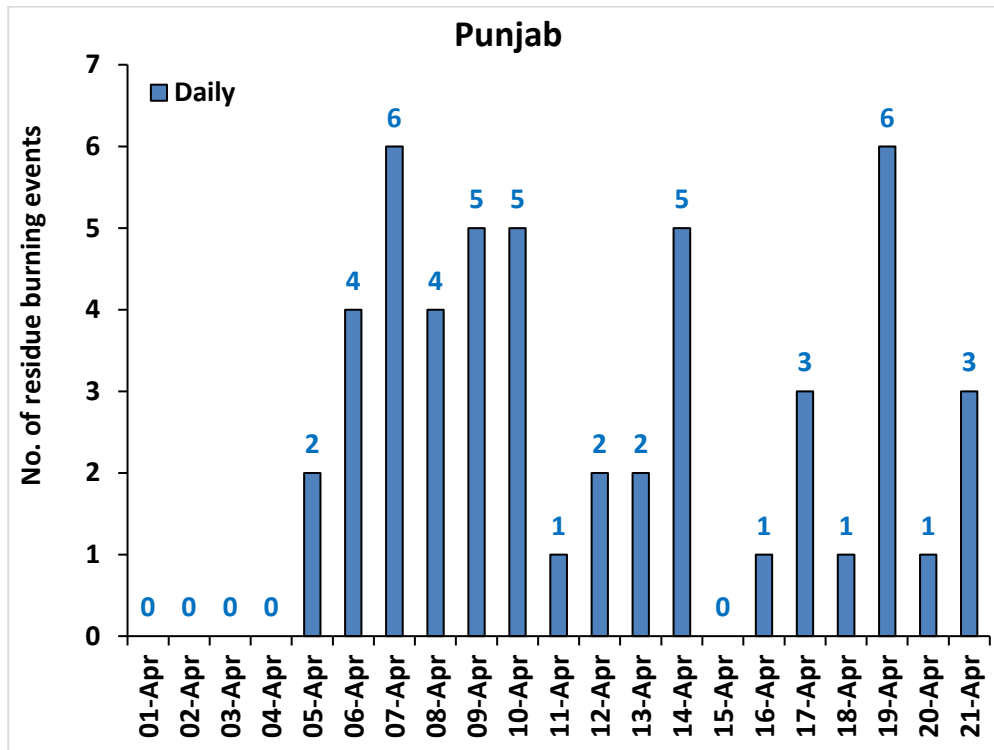
Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

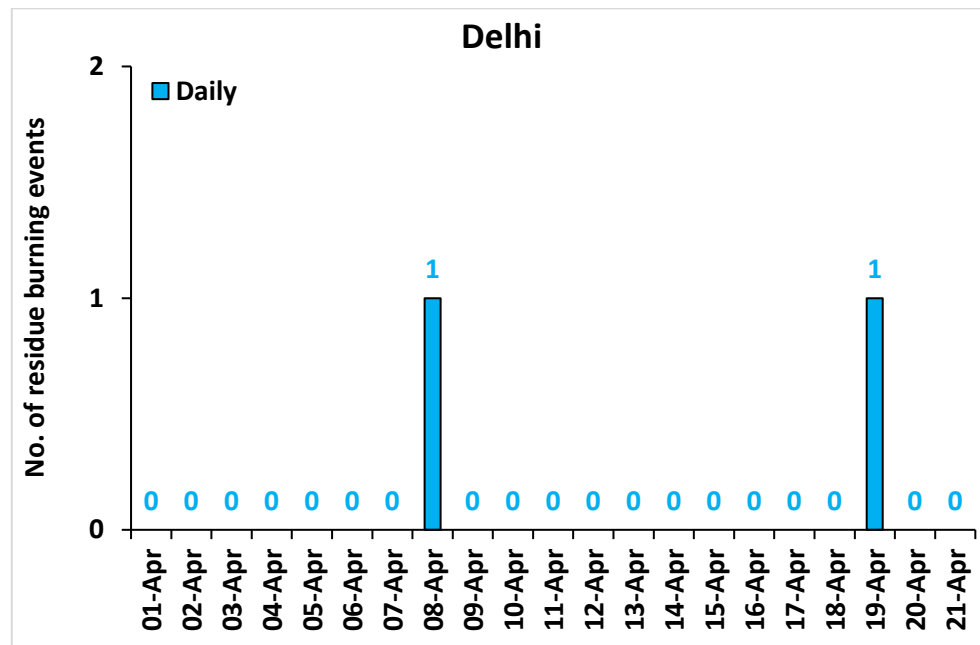
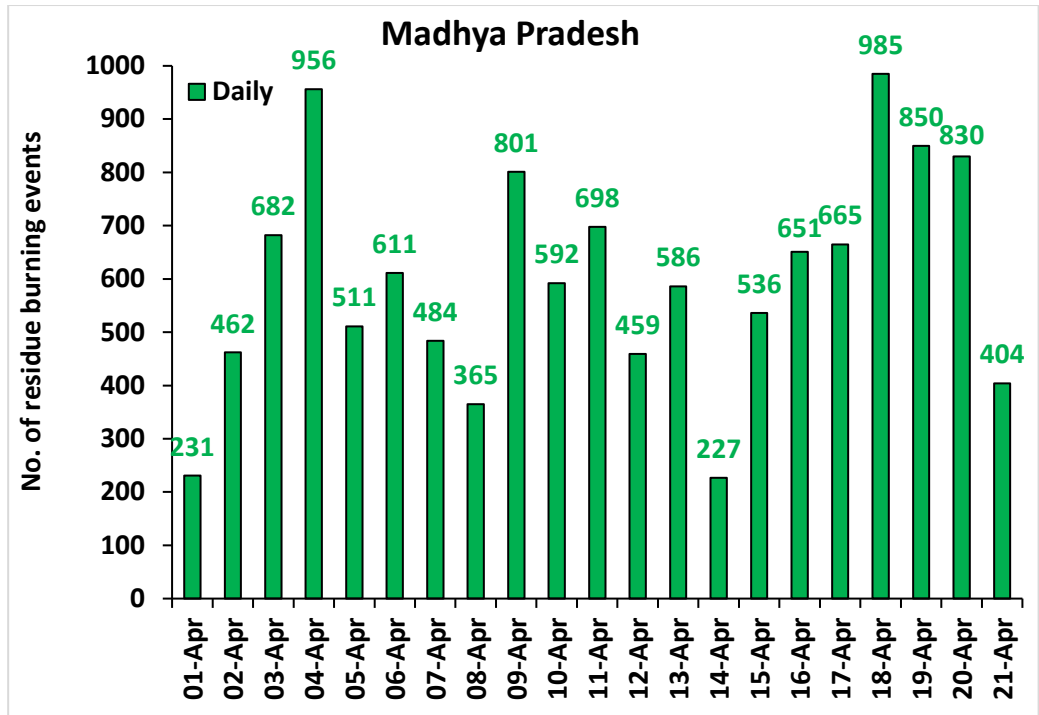
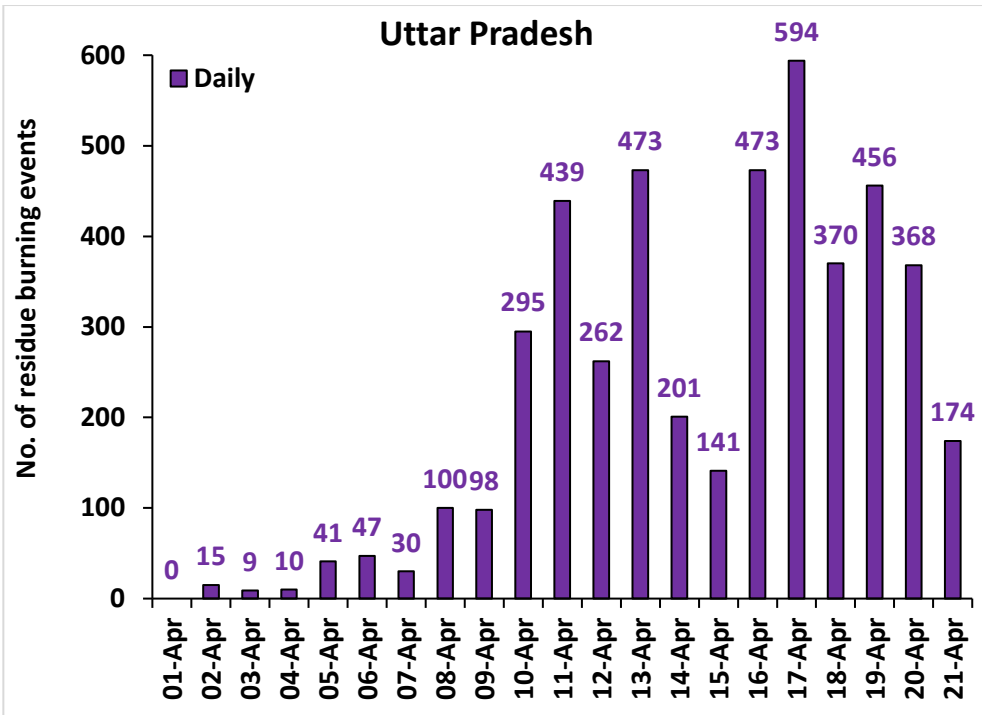
<http://creams.iari.res.in/cms2/>

Highlights for 21-April-2023

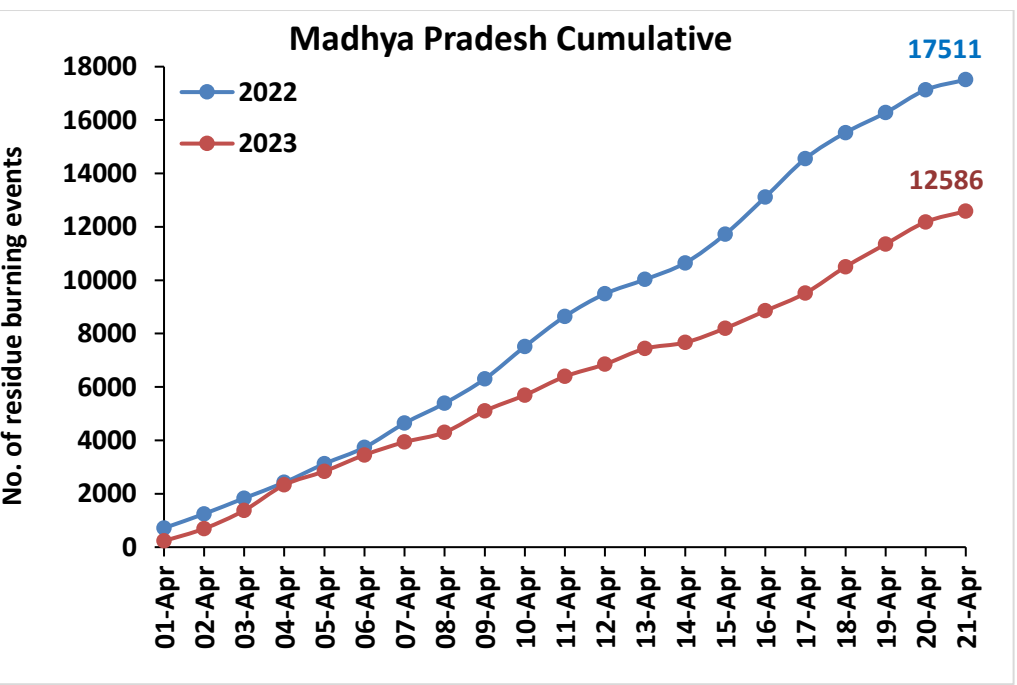
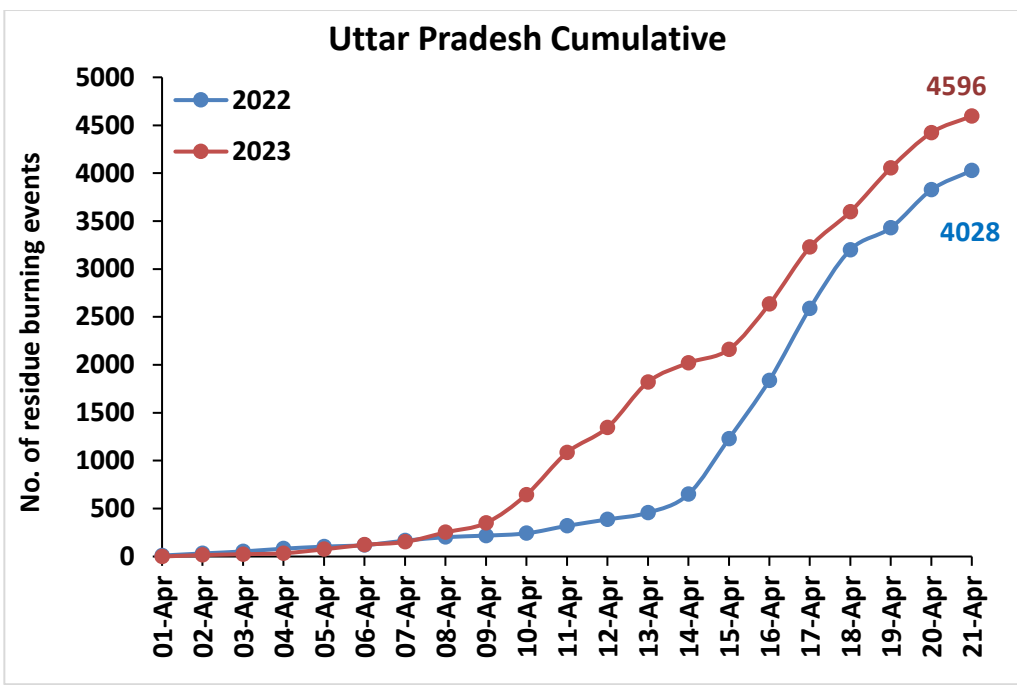
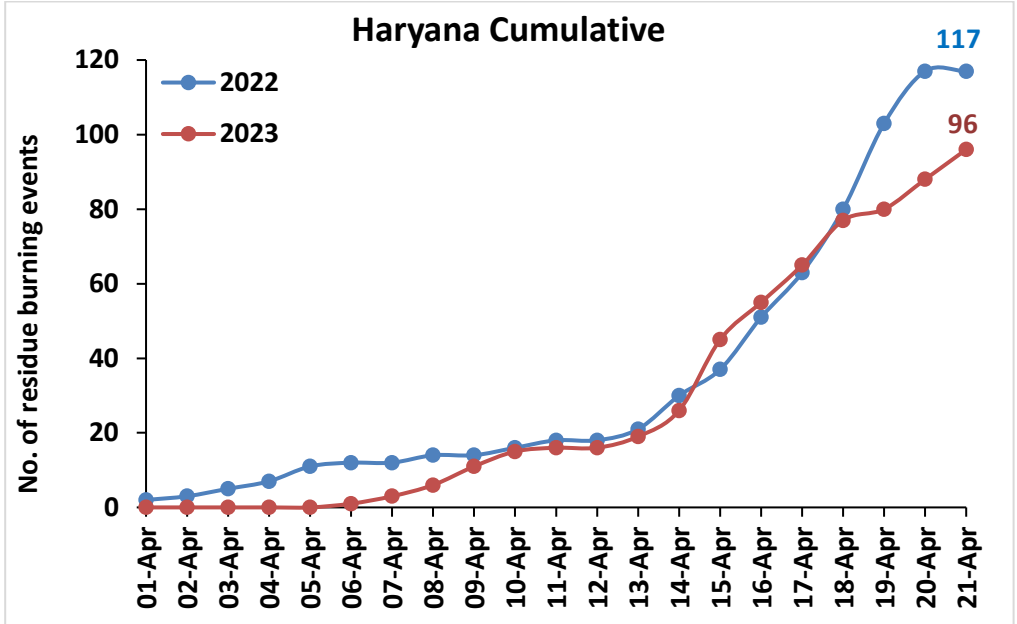
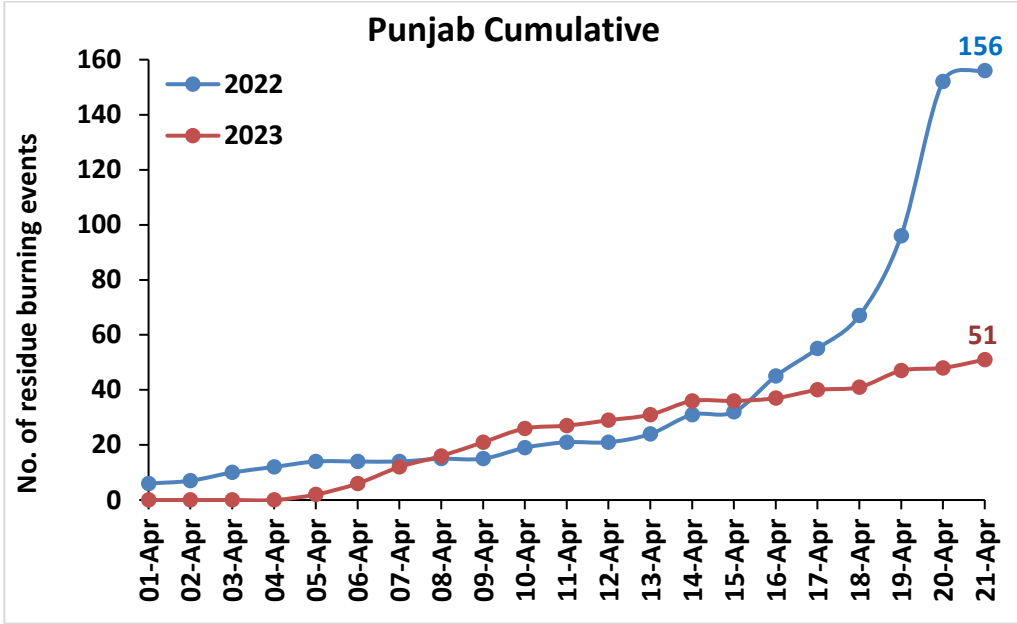
- The active fire events due to wheat residue burning were monitored using satellite remote sensing, following the new "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data".
- Satellites detected **589** residue burning events in the five study States on 21-Apr-2023.
- The state wise events detected on 21-Apr-2023 were **03** in Punjab, **08** in Haryana, **00** in Delhi, **174** in Uttar Pradesh and **404** in Madhya Pradesh.
- The number of events has decreased from **1207** on 20-Apr-2023 to **589** on 21-Apr-2023 in the five study states.
- Total **17329** burning events were detected in the five states between 01-Apr-2023 and 21-Apr-2023, which are distributed as **51, 96, 4596, 02,** and **12586** in Punjab, Haryana, UP, Delhi, and MP, respectively.

Temporal distribution of wheat residue burning events for the study States in 2023

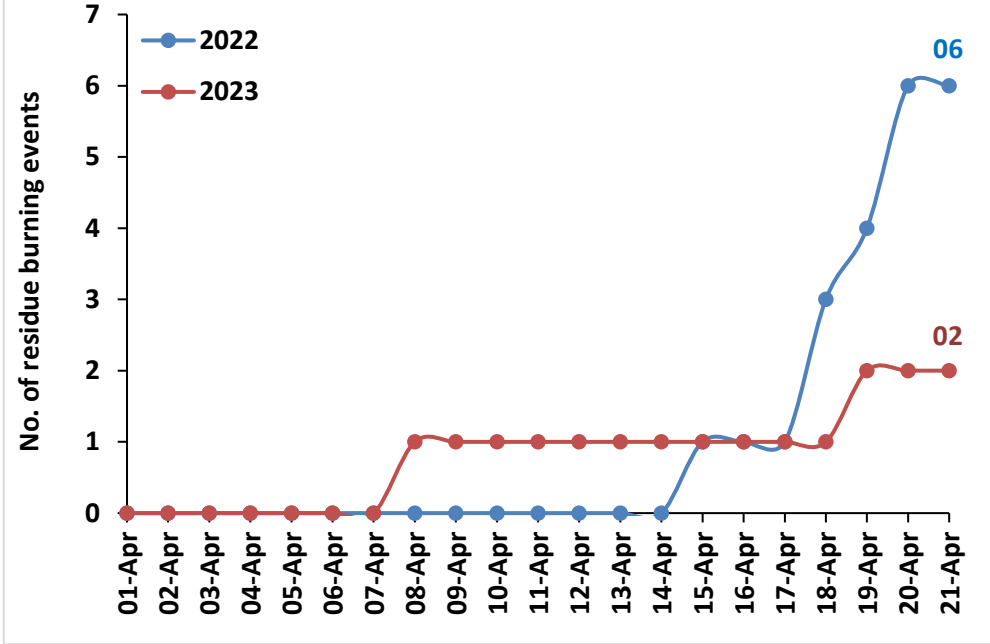




Comparison of residue burning events in current year (2023) with previous year (2022) for the study States



Delhi Cumulative



District-wise cumulative number of wheat residue burning events detected in 2022 and 2023
(Period: 01-21 April)

(a) Punjab

District	01-21 Apr	
	2022	2023
Amritsar	6	4
Barnala	3	2
Bathinda	6	7
Faridkot	4	0
Fatehgarh Sahib	0	1
Fazilka	11	2
Firozpur	13	1
Gurdaspur	4	8
Hoshiarpur	7	2
Jalandhar	8	4
Kapurthala	4	2
Ludhiana	9	2
Mansa	7	0
Moga	20	0
Muktsar	2	0
Pathankot	2	2
Patiala	20	5
Rupnagar	1	0
Sangrur	19	6
SAS NAGAR (Mohali)	1	0
SBS Nagar	6	2
Tarn Taran	3	1
Total	156	51

(b) Haryana

District	01-21 Apr	
	2022	2023
AMBALA	2	2
BHIWANI	3	3
CHARKHI DADRI	4	0
FARIDABAD	2	1
FATEHABAD	2	2
GURGAON	5	3
HISAR	3	3
JHAJJAR	9	8
JIND	10	3
KAITHAL	8	2
KARNAL	8	2
KURUKSHETRA	6	2
MAHENDRAGARH	0	0
MEWAT	0	1
PALWAL	17	19
PANCHKULA	0	0
PANIPAT	10	0
REWARI	2	1
ROHTAK	2	4
SIRSA	4	29
SONIPAT	19	9
YAMUNANAGAR	1	2
Total	117	96

(c) Uttar Pradesh

District	01-21 Apr							
	2022	2023	GAUTAMBUDHNAGAR	7	6	MUZAFARNAGAR	20	14
			GAZIPUR	2	21	PILHIBHIT	45	13
AGRA	0	0	GHAZIABAD	8	2	PRATAPGARH	9	10
ALIGARH	10	19	GONDA	1	17	RAIBEARELI	28	2
ALLAHABAD	12	9	GORAKHPUR	129	281	RAMPUR	36	7
AMBEDKARNAGAR	1	2	HAMIRPUR	5	4	SANTKABIRNAGAR	368	362
AURAIYA	34	7	HARDOI	38	14	SANTRAVIDASNAGAR	0	1
AZAMGARH	4	49	JALAUN	7	1	SHAHJAHANPUR	24	3
BADAUN	5	2	JAUNPUR	4	3	SHARANPUR	12	1
BAGHPAT	1	1	JHANSI	18	14	SHRAWASTI	21	15
BAHRAICH	22	13	JYOTIBAPHULE NAGAR	2	1	SIDDHARTH NAGAR	1789	1728
BALLIA	9	126	KANNAUJ	0	0	SITAPUR	9	7
BALRAMPUR	71	57	KANPUR	5	0	SONBHADRA	66	16
BANDA	3	1	KANPUR DEHAT	13	0	SULTANPUR	11	15
BARABANKI	3	1	KAUSHAMBI	2	2	UNNAO	17	2
BAREILLY	13	5	KHERI	66	28	VARANASI	1	0
BASTI	161	178	KUSHINAGAR	6	68	Total	4028	4596
BIJNOR	19	13	LACKNOW	2	0			
BULANDSAHAR	2	4	LALITPUR	19	19			
CHANDAULI	18	11	MAHAMAYANAGAR	0	1			
CHITRAKOOT	14	1	MAHARAJGANJ	733	935			
DEORIA	50	376	MAHOBA	2	12			
ETAH	0	0	MAINPURI	1	2			
ETAWAH	1	0	MATHURA	14	24			
FAIZABAD	1	7	MAU	0	35			
FARRUKHABAD	1	2	MEERUT	3	6			
FATEHPUR	14	3	MIRZAPUR	13	4			
FIROZABAD	1	0	MORADABAD	2	13			

(d) Madhya Pradesh

District	01-21 Apr				
	2022	2023			
			PANNA	43	44
ALIRAJPUR	0	0	RAISEN	1913	981
ANUPPUR	19	1	RAJGARH	47	117
ASHOKNAGAR	308	134	RATLAM	71	197
BALAGHAT	17	0	REWA	20	10
BARWANI	4	4	SAGAR	492	339
BETUL	100	28	SATNA	213	54
BHIND	9	4	SEHORE	716	532
BHOPAL	488	235	SEONI	955	347
BURHANPUR	7	1	SHAHDOL	69	7
CHHATARPUR	60	29	SHAJAPUR	163	369
CHHINDWARA	208	154	SHEOPUR	127	204
DAMOH	135	178	SHIVPURI	73	50
DATIA	20	28	SIDHI	16	0
DEWAS	430	508	SINGRAULI	59	3
DHAR	877	832	TIKAMGARH	15	25
DINDORI	31	3	UJJAIN	665	1349
EAST NIMAR	60	95	UMARIA	24	3
GUNA	319	244	VIDESHA	2481	941
GWALIOR	44	44	WEST NIMAR	14	29
HARDA	330	233	Total	17511	12586
HOSHANGABAD	4051	2748			
INDORE	811	951			
JABALPUR	667	309			
JHABUA	2	3			
KATNI	167	54			
MANDLA	32	10			
MANDSAUR	22	58			
MORENA	2	0			
NARSHIMAPURA	105	77			
NIMACH	10	20			

(e) Delhi

District	01-21 Apr	
	2022	2023
CENTRAL	0	0
EAST	0	0
NEW DELHI	0	0
NORTH	6	0
NORTH EAST	0	0
NORTH WEST DELHI	0	0
SHAHADRA	0	0
SOUTH	0	0
SOUTH EAST	0	0
SOUTH WEST DELHI	0	1
WEST DELHI	0	1
Total	6	2

State-wise and date-wise number of wheat residue burning events detected in 2022 and 2023
(Period: 01-21 April)

Date	Punjab		Haryana		Uttar Pradesh		Delhi		Madhya Pradesh	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
01-Apr	6	0	2	0	10	0	0	0	715	231
02-Apr	1	0	1	0	22	15	0	0	531	462
03-Apr	3	0	2	0	21	9	0	0	589	682
04-Apr	2	0	2	0	29	10	0	0	589	956
05-Apr	2	2	4	0	21	41	0	0	698	511
06-Apr	0	4	1	1	16	47	0	0	612	611
07-Apr	0	6	0	2	46	30	0	0	908	484
08-Apr	1	4	2	3	37	100	0	1	749	365
09-Apr	0	5	0	5	16	98	0	0	907	801
10-Apr	4	5	2	4	24	295	0	0	1217	592
11-Apr	2	1	2	1	78	439	0	0	1129	698
12-Apr	0	2	0	0	67	262	0	0	847	459
13-Apr	3	2	3	3	70	473	0	0	537	586
14-Apr	7	5	9	7	193	201	0	0	618	227
15-Apr	1	0	7	19	579	141	1	0	1079	536
16-Apr	13	1	14	10	609	473	0	0	1390	651
17-Apr	10	3	12	10	751	594	0	0	1441	665
18-Apr	12	1	17	12	611	370	2	0	972	985
19-Apr	29	6	23	3	231	456	1	1	748	850
20-Apr	56	1	14	8	395	368	2	0	856	830
21-Apr	4	3	0	8	202	174	0	0	379	404
Total	156	51	117	96	4028	4596	6	2	17511	12586

Details of residue burning events in Punjab on 21-Apr-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	BARNALA	BARNALA	S-NPP	30.24597	75.55064	13:55:39	D	6.40
2	FIROZPUR	GHALL KHURD	S-NPP	30.79578	74.89834	13:55:39	D	2.80
3	SANGRUR	DHURI	S-NPP	30.32135	75.94906	13:55:39	D	3.40

Details of residue burning events in Haryana on 21-Apr-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	BHIWANI	BAWANI KHERA	S-NPP	28.96021	76.09847	13:55:39	D	9.20
2	BHIWANI	KAIRU	S-NPP	28.61407	75.92964	13:55:39	D	7.90
3	JHAJJAR	JHAJJAR	S-NPP	28.47548	76.70362	13:55:39	D	5.80
4	PALWAL	HATHIN	S-NPP	27.96667	77.14883	13:55:39	D	4.90
5	PALWAL	HATHIN	S-NPP	27.98459	77.31057	13:55:39	D	5.90
6	ROHTAK	MEHAM	TERRA	28.93600	76.38200	11:01:57	D	14.50
7	SIRSA	BARAGUNDA	S-NPP	29.72116	75.10798	13:55:39	D	8.20
8	YAMUNANAGAR	RADAUR	S-NPP	30.01188	77.15265	13:55:39	D	1.90

Details of residue burning events in Uttar Pradesh on 21-Apr-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m2)
1	ALIGARH	KHAIR	S-NPP	28.08392	77.52802	13:55:39	D	8.00
2	AZAMGARH	LALGANJ	S-NPP	25.79778	82.82619	12:16:05	D	5.40
3	AZAMGARH	LALGANJ	S-NPP	25.80069	82.82854	12:16:05	D	6.40
4	AZAMGARH	LALGANJ	S-NPP	25.80202	82.83391	12:16:05	D	7.30
5	AZAMGARH	LALGANJ	S-NPP	25.80335	82.83926	12:16:05	D	7.30
6	AZAMGARH	LALGANJ	S-NPP	25.80528	82.82973	12:16:05	D	5.40
7	AZAMGARH	LALGANJ	S-NPP	25.80665	82.83509	12:16:05	D	7.40
8	AZAMGARH	MEHNAGAR	S-NPP	25.91505	83.05744	12:16:05	D	5.20
9	AZAMGARH	MEHNAGAR	S-NPP	25.91634	83.06259	12:16:05	D	6.40
10	AZAMGARH	NIZAMABAD	S-NPP	25.96669	82.97992	13:55:39	D	3.70
11	AZAMGARH	NIZAMABAD	S-NPP	25.96745	82.98025	12:16:05	D	2.50
12	AZAMGARH	PHULPUR	S-NPP	25.90839	82.87352	12:16:05	D	5.80
13	AZAMGARH	SAGRI	S-NPP	26.18393	83.33664	01:06:05	N	1.40
14	BALLIA	BELTHARA ROAD	S-NPP	26.04431	83.88909	01:06:05	N	0.30
15	BALLIA	BELTHARA ROAD	S-NPP	26.07887	83.90295	01:06:05	N	0.40
16	BALLIA	BELTHARA ROAD	S-NPP	26.14268	83.86124	01:06:05	N	1.00
17	BALLIA	RASRA	S-NPP	25.84257	83.87724	13:55:39	D	7.00
18	BALLIA	RASRA	S-NPP	25.88737	83.84938	01:06:05	N	1.70
19	BALLIA	RASRA	S-NPP	25.94797	83.78751	01:06:05	N	0.70
20	BALLIA	SIKANDARPUR	S-NPP	26.03287	83.95793	01:06:05	N	1.40
21	BALLIA	SIKANDARPUR	S-NPP	26.03791	83.95853	01:06:05	N	1.40
22	CHANDAULI	CHANDAULI	S-NPP	25.34305	83.50696	12:16:05	D	4.60
23	CHANDAULI	CHANDAULI	S-NPP	25.34409	83.50613	12:16:05	D	3.60
24	CHANDAULI	CHANDAULI	S-NPP	25.37376	83.38400	13:55:39	D	4.50
25	CHANDAULI	CHANDAULI	AQUA	25.35700	83.50300	12:58:05	D	66.00
26	DEORIA	BARHAJ	S-NPP	26.27206	83.76899	01:06:05	N	0.60
27	DEORIA	BARHAJ	S-NPP	26.33779	83.69495	01:06:05	N	0.70
28	DEORIA	BARHAJ	S-NPP	26.33877	83.66468	01:06:05	N	1.60
29	DEORIA	BARHAJ	S-NPP	26.33908	83.66129	01:06:05	N	1.20

30	DEORIA	BARHAJ	S-NPP	26.34013	83.66786	01:06:05	N	1.10
31	DEORIA	BARHAJ	S-NPP	26.34043	83.66447	01:06:05	N	1.10
32	DEORIA	BARHAJ	S-NPP	26.34072	83.66107	01:06:05	N	1.60
33	DEORIA	BARHAJ	S-NPP	26.34392	83.66528	01:06:05	N	0.80
34	DEORIA	BARHAJ	S-NPP	26.35400	83.80524	01:06:05	N	0.60
35	DEORIA	BHATPAR RANI	S-NPP	26.28049	84.06495	01:06:05	N	1.50
36	DEORIA	DEORIA	S-NPP	26.43928	83.85603	01:06:05	N	1.40
37	DEORIA	DEORIA	S-NPP	26.44584	83.84007	01:06:05	N	1.80
38	DEORIA	DEORIA	S-NPP	26.44614	83.83674	01:06:05	N	2.40
39	DEORIA	DEORIA	S-NPP	26.44702	83.82677	01:06:05	N	1.20
40	DEORIA	DEORIA	S-NPP	26.47466	83.80647	01:06:05	N	1.40
41	DEORIA	DEORIA	S-NPP	26.50342	83.81175	12:16:05	D	4.60
42	DEORIA	DEORIA	S-NPP	26.50468	83.81503	12:16:05	D	5.00
43	DEORIA	DEORIA	S-NPP	26.56159	83.78584	01:06:05	N	0.20
44	DEORIA	DEORIA	S-NPP	26.57707	83.95863	01:06:05	N	1.10
45	DEORIA	DEORIA	S-NPP	26.57737	83.95535	01:06:05	N	1.10
46	DEORIA	DEORIA	S-NPP	26.57931	83.72664	12:16:05	D	2.60
47	DEORIA	DEORIA	S-NPP	26.58081	83.72524	12:16:05	D	3.00
48	DEORIA	DEORIA	S-NPP	26.58335	83.94611	01:06:05	N	0.80
49	DEORIA	DEORIA	S-NPP	26.58365	83.94282	01:06:05	N	0.80
50	DEORIA	DEORIA	S-NPP	26.58392	83.72036	12:16:05	D	2.20
51	DEORIA	DEORIA	S-NPP	26.58656	83.72353	12:16:05	D	3.90
52	DEORIA	DEORIA	S-NPP	26.59964	83.70834	01:06:05	N	2.40
53	DEORIA	DEORIA	S-NPP	26.59994	83.70492	01:06:05	N	1.80
54	DEORIA	DEORIA	S-NPP	26.60138	83.69629	13:55:39	D	4.30
55	DEORIA	DEORIA	S-NPP	26.60215	83.96487	01:06:05	N	0.60
56	DEORIA	DEORIA	S-NPP	26.60671	83.91557	01:06:05	N	0.70
57	DEORIA	DEORIA	S-NPP	26.60934	83.71632	01:06:05	N	0.60
58	DEORIA	DEORIA	S-NPP	26.66042	83.83094	13:55:39	D	4.70
59	DEORIA	RUDRAPUR	S-NPP	26.41118	83.63142	01:06:05	N	0.90
60	DEORIA	RUDRAPUR	S-NPP	26.42309	83.56225	12:16:05	D	2.50
61	DEORIA	RUDRAPUR	S-NPP	26.42600	83.56491	12:16:05	D	5.30
62	DEORIA	RUDRAPUR	S-NPP	26.42856	83.72598	01:06:05	N	1.10

63	DEORIA	RUDRAPUR	S-NPP	26.43264	83.56796	01:06:05	N	1.20
64	DEORIA	RUDRAPUR	S-NPP	26.44931	83.56409	13:55:39	D	8.40
65	DEORIA	RUDRAPUR	S-NPP	26.46879	83.51632	01:06:05	N	0.80
66	DEORIA	RUDRAPUR	S-NPP	26.46894	83.51607	01:06:05	N	1.00
67	DEORIA	RUDRAPUR	S-NPP	26.48969	83.57835	01:06:05	N	1.90
68	DEORIA	RUDRAPUR	S-NPP	26.49171	83.56220	12:16:05	D	1.40
69	DEORIA	SALEMPUR	S-NPP	26.16916	83.98795	13:55:39	D	10.20
70	DEORIA	SALEMPUR	S-NPP	26.16954	83.99422	13:55:39	D	10.20
71	DEORIA	SALEMPUR	S-NPP	26.17369	83.99026	13:55:39	D	9.30
72	DEORIA	SALEMPUR	S-NPP	26.17404	83.99654	13:55:39	D	9.30
73	DEORIA	SALEMPUR	S-NPP	26.22784	83.91695	01:06:05	N	0.80
74	DEORIA	SALEMPUR	S-NPP	26.23320	83.91428	01:06:05	N	0.80
75	DEORIA	SALEMPUR	S-NPP	26.23798	83.91813	01:06:05	N	0.60
76	DEORIA	SALEMPUR	S-NPP	26.23827	83.91486	01:06:05	N	0.60
77	DEORIA	SALEMPUR	S-NPP	26.37622	83.90131	01:06:05	N	0.50
78	DEORIA	SALEMPUR	S-NPP	26.37803	83.88158	01:06:05	N	0.40
79	DEORIA	SALEMPUR	S-NPP	26.38251	83.88876	01:06:05	N	0.50
80	DEORIA	SALEMPUR	AQUA	26.16900	83.99200	12:58:05	D	32.20
81	DEORIA	SALEMPUR	AQUA	26.23800	83.92300	02:05:26	N	6.70
82	GAZIPUR	GAZIPUR	S-NPP	25.68726	83.65115	12:16:05	D	1.30
83	GAZIPUR	GAZIPUR	S-NPP	25.68924	83.65191	12:16:05	D	2.60
84	GAZIPUR	JAKHANIA	S-NPP	25.68502	83.29860	12:16:05	D	6.60
85	GAZIPUR	MUHAMMADBAD	S-NPP	25.84210	83.62167	12:16:05	D	3.20
86	GAZIPUR	MUHAMMADBAD	S-NPP	25.84797	83.61994	12:16:05	D	3.20
87	GAZIPUR	ZAMANIA	S-NPP	25.44378	83.65460	13:55:39	D	4.50
88	GAZIPUR	ZAMANIA	S-NPP	25.44442	83.65524	13:55:39	D	5.30
89	GORAKHPUR	BANSGAON	S-NPP	26.43103	83.45621	12:16:05	D	2.00
90	GORAKHPUR	BANSGAON	S-NPP	26.48452	83.39392	01:06:05	N	0.70
91	GORAKHPUR	BANSGAON	S-NPP	26.48463	83.45460	01:06:05	N	0.90
92	GORAKHPUR	BANSGAON	S-NPP	26.48614	83.43697	01:06:05	N	0.30
93	GORAKHPUR	BANSGAON	S-NPP	26.51260	83.31421	01:06:05	N	0.10
94	GORAKHPUR	BANSGAON	TERRA	26.47300	83.46200	11:01:57	D	60.20
95	GORAKHPUR	BANSGAON	TERRA	26.48200	83.47000	11:01:57	D	44.80

96	GORAKHPUR	CAMPIERGANJ	S-NPP	26.89744	83.27991	12:16:05	D	5.40
97	GORAKHPUR	CAMPIERGANJ	S-NPP	26.89903	83.28326	13:55:39	D	3.20
98	GORAKHPUR	CAMPIERGANJ	S-NPP	26.89973	83.28042	12:16:05	D	8.50
99	GORAKHPUR	CHAURI CHAURA	S-NPP	26.51844	83.55016	01:06:05	N	1.00
100	GORAKHPUR	CHAURI CHAURA	S-NPP	26.52030	83.55094	13:55:39	D	3.70
101	GORAKHPUR	CHAURI CHAURA	S-NPP	26.52604	83.58253	01:06:05	N	0.40
102	GORAKHPUR	CHAURI CHAURA	S-NPP	26.52636	83.57909	01:06:05	N	0.70
103	GORAKHPUR	CHAURI CHAURA	S-NPP	26.54638	83.53072	12:16:05	D	6.50
104	GORAKHPUR	CHAURI CHAURA	S-NPP	26.55737	83.51858	13:55:39	D	13.40
105	GORAKHPUR	CHAURI CHAURA	S-NPP	26.71565	83.60825	12:16:05	D	3.60
106	GORAKHPUR	CHAURI CHAURA	S-NPP	26.72141	83.60651	12:16:05	D	3.60
107	GORAKHPUR	GOLA	S-NPP	26.30411	83.46976	01:06:05	N	2.60
108	GORAKHPUR	GOLA	S-NPP	26.30442	83.46630	01:06:05	N	2.60
109	GORAKHPUR	GOLA	S-NPP	26.31828	83.42905	01:06:05	N	1.40
110	GORAKHPUR	GOLA	S-NPP	26.34699	83.40389	01:06:05	N	0.60
111	GORAKHPUR	GOLA	S-NPP	26.44195	83.24981	13:55:39	D	8.30
112	GORAKHPUR	GOLA	S-NPP	26.46248	83.23576	01:06:05	N	0.80
113	GORAKHPUR	GORAKHPUR	S-NPP	26.86907	83.48593	12:16:05	D	11.90
114	GORAKHPUR	GORAKHPUR	AQUA	26.94200	83.46500	12:58:05	D	37.00
115	GORAKHPUR	KHAJNI	S-NPP	26.46280	83.23213	01:06:05	N	0.80
116	GORAKHPUR	KHAJNI	S-NPP	26.46778	83.23634	01:06:05	N	0.30
117	GORAKHPUR	KHAJNI	S-NPP	26.49920	83.28364	01:06:05	N	1.00
118	GORAKHPUR	KHAJNI	S-NPP	26.52222	83.26433	01:06:05	N	1.30
119	GORAKHPUR	KHAJNI	S-NPP	26.56955	83.15167	01:06:05	N	0.70
120	GORAKHPUR	KHAJNI	S-NPP	26.57006	83.20728	01:06:05	N	0.80
121	GORAKHPUR	KHAJNI	S-NPP	26.57254	83.15724	12:16:05	D	3.00
122	GORAKHPUR	KHAJNI	S-NPP	26.58239	83.29576	01:06:05	N	1.00
123	GORAKHPUR	KHAJNI	S-NPP	26.58354	83.29671	01:06:05	N	0.60
124	GORAKHPUR	KHAJNI	S-NPP	26.61444	83.19769	12:16:05	D	4.80
125	GORAKHPUR	KHAJNI	TERRA	26.62100	83.19200	11:01:57	D	37.30
126	GORAKHPUR	SAHJANWA	S-NPP	26.80611	83.14033	12:16:05	D	2.90
127	GORAKHPUR	SAHJANWA	S-NPP	26.81124	83.22119	12:16:05	D	4.80
128	JAUNPUR	SHHGANJ	S-NPP	26.14822	82.59682	12:16:05	D	2.40

129	JHANSI	TAHRAULI	S-NPP	25.61129	78.97889	02:45:39	N	0.90
130	KUSHINAGAR	HATA	S-NPP	26.90431	83.56151	12:16:05	D	4.40
131	KUSHINAGAR	HATA	S-NPP	26.90660	83.57076	12:16:05	D	7.20
132	KUSHINAGAR	HATA	S-NPP	26.90773	83.57538	12:16:05	D	7.20
133	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.93796	83.47862	13:55:39	D	6.30
134	MAHARAJGANJ	MAHARAJGANJ	S-NPP	26.94378	83.46976	12:16:05	D	4.80
135	MAHARAJGANJ	MAHARAJGANJ	S-NPP	27.23837	83.58478	12:16:05	D	5.60
136	MAHARAJGANJ	PHARENDA	S-NPP	27.15784	83.14136	13:55:39	D	5.00
137	MAHARAJGANJ	PHARENDA	S-NPP	27.16421	83.14092	13:55:39	D	11.20
138	MAHOBA	MAHOBA	TERRA	25.15800	79.72000	11:01:57	D	33.10
139	MAHOBA	MAHOBA	TERRA	25.16200	79.70000	11:01:57	D	111.40
140	MATHURA	CHHATA	S-NPP	27.80749	77.58808	13:55:39	D	4.00
141	MATHURA	CHHATA	S-NPP	27.80819	77.59109	13:55:39	D	5.60
142	MAU	MADHUBAN	S-NPP	26.05053	83.64932	01:06:05	N	2.00
143	MAU	MADHUBAN	S-NPP	26.07987	83.66969	01:06:05	N	0.40
144	MAU	MADHUBAN	S-NPP	26.12286	83.56447	13:55:39	D	8.10
145	MAU	MADHUBAN	S-NPP	26.14342	83.65276	12:16:05	D	5.60
146	MAU	MADHUBAN	S-NPP	26.14476	83.60538	01:06:05	N	0.30
147	MAU	MADHUBAN	S-NPP	26.14655	83.65285	12:16:05	D	6.10
148	MAU	MADHUBAN	S-NPP	26.14772	83.65758	12:16:05	D	6.10
149	MAU	MADHUBAN	S-NPP	26.15037	83.65576	12:16:05	D	5.60
150	MAU	MADHUBAN	S-NPP	26.15150	83.66049	12:16:05	D	6.50
151	MAU	MADHUBAN	S-NPP	26.17080	83.72612	12:16:05	D	15.50
152	MAU	MADHUBAN	AQUA	26.17200	83.72200	12:58:05	D	23.00
153	MAU	MADHUBAN	AQUA	26.18100	83.72600	12:58:05	D	38.20
154	MAU	MAU	S-NPP	25.91739	83.47498	01:06:05	N	0.80
155	MAU	MAU	S-NPP	25.95906	83.77887	01:06:05	N	1.10
156	MAU	MAU	S-NPP	26.03488	83.51570	12:16:05	D	5.30
157	MAU	MUHAMMADABAD	S-NPP	25.86731	83.38898	01:06:05	N	0.70
158	MEERUT	MAWANA	S-NPP	29.18969	78.03091	13:55:39	D	5.40
159	MUZAFARNAGAR	KAIRANA	TERRA	29.34700	77.14800	11:01:57	D	8.60
160	SANTKABIRNAGAR	GHANGHATA	S-NPP	26.49891	83.18834	01:06:05	N	1.00
161	SANTKABIRNAGAR	GHANGHATA	S-NPP	26.51267	83.17875	12:16:05	D	8.10

162	SANTKABIRNAGAR	GHANGHATA	S-NPP	26.55614	83.05656	01:06:05	N	0.20
163	SANTKABIRNAGAR	GHANGHATA	S-NPP	26.57739	83.04624	13:55:39	D	5.80
164	SANTKABIRNAGAR	GHANGHATA	S-NPP	26.57887	83.03128	13:55:39	D	10.70
165	SANTKABIRNAGAR	GHANGHATA	AQUA	26.57800	83.03000	12:58:05	D	69.40
166	SANTKABIRNAGAR	GHANGHATA	TERRA	26.57800	83.03400	11:01:57	D	171.00
167	SANTKABIRNAGAR	GHANGHATA	TERRA	26.58100	83.03000	11:01:57	D	107.30
168	SHAHJAHANPUR	SHAHJAHANPUR	S-NPP	27.94821	79.88216	13:55:39	D	2.80
169	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	27.27233	82.64674	13:55:39	D	3.90
170	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	27.27266	82.65208	13:55:39	D	7.30
171	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	27.27376	82.64976	13:55:39	D	7.00
172	SIDDHARTHANAGAR	DOMARIYAGANJ	S-NPP	27.27942	82.51218	12:16:05	D	8.00
173	SIDDHARTHANAGAR	NAUGARH	S-NPP	27.16565	83.14001	13:55:39	D	4.70
174	SULTANPUR	GAURIGANJ	S-NPP	26.28399	81.59867	12:16:05	D	3.40

Details of wheat residue burning events in Madhya Pradesh on 21-Apr-2023

S. No.	District	Tehsil / Block	Satellite	Latitude	Longitude	ACQ_TIME	Day / Night	Fire Power (W/m ²)
1	ASHOKNAGAR	ASHOKNAGAR	S-NPP	24.66546	77.81293	13:55:39	D	9.30
2	ASHOKNAGAR	CHANDERI	S-NPP	24.59166	77.90051	02:45:39	N	1.20
3	ASHOKNAGAR	CHANDERI	S-NPP	24.59258	77.89658	02:45:39	N	1.50
4	ASHOKNAGAR	CHANDERI	S-NPP	24.59312	77.89697	01:06:05	N	3.10
5	ASHOKNAGAR	CHANDERI	S-NPP	24.59604	77.89803	01:06:05	N	0.90
6	ASHOKNAGAR	CHANDERI	S-NPP	24.59646	77.89064	01:06:05	N	0.90
7	ASHOKNAGAR	CHANDERI	S-NPP	24.59707	77.90204	02:45:39	N	1.20
8	ASHOKNAGAR	CHANDERI	S-NPP	24.59799	77.89810	02:45:39	N	1.50
9	ASHOKNAGAR	ISAGARH	S-NPP	24.84046	77.86971	02:45:39	N	2.00
10	ASHOKNAGAR	ISAGARH	S-NPP	24.90170	77.84153	01:06:05	N	1.40
11	ASHOKNAGAR	ISAGARH	S-NPP	24.90363	77.84518	02:45:39	N	0.30
12	ASHOKNAGAR	ISAGARH	S-NPP	24.90599	77.84265	01:06:05	N	1.70
13	ASHOKNAGAR	ISAGARH	S-NPP	24.96798	77.88793	02:45:39	N	0.80
14	ASHOKNAGAR	MUNGAOLI	TERRA	24.33400	77.96500	11:01:57	D	17.90
15	BETUL	AMLAL	TERRA	21.96900	78.34500	11:01:57	D	25.70
16	BETUL	SHAHPUR	S-NPP	22.18116	77.93424	13:55:39	D	12.00
17	BETUL	SHAHPUR	S-NPP	22.18220	77.93527	13:55:39	D	12.00
18	BHOPAL	BERASIYA	S-NPP	23.45270	77.32606	13:55:39	D	3.90
19	BHOPAL	BERASIYA	S-NPP	23.67457	77.61569	02:45:39	N	2.80
20	BHOPAL	BERASIYA	S-NPP	23.67951	77.61552	01:06:05	N	3.10
21	BHOPAL	BERASIYA	S-NPP	23.67999	77.61721	02:45:39	N	2.80
22	BHOPAL	BERASIYA	S-NPP	23.68216	77.61832	01:06:05	N	1.80
23	BHOPAL	BERASIYA	S-NPP	23.68261	77.61073	01:06:05	N	1.80
24	BHOPAL	BERASIYA	S-NPP	23.68362	77.50081	02:45:39	N	0.60
25	BHOPAL	BERASIYA	S-NPP	23.68418	77.49932	02:45:39	N	0.60
26	BHOPAL	BERASIYA	S-NPP	23.68631	77.61483	02:45:39	N	0.60
27	BHOPAL	BERASIYA	S-NPP	23.68668	77.61600	01:06:05	N	3.10
28	BHOPAL	BERASIYA	S-NPP	23.68933	77.61886	01:06:05	N	1.80
29	BHOPAL	BERASIYA	S-NPP	23.68979	77.61124	01:06:05	N	1.80

30	BHOPAL	BERASIYA	S-NPP	23.68988	77.59933	02:45:39	N	1.90
31	BHOPAL	BERASIYA	S-NPP	23.72981	77.24870	13:55:39	D	13.70
32	BHOPAL	BERASIYA	S-NPP	23.73028	77.25300	13:55:39	D	21.20
33	BHOPAL	BERASIYA	S-NPP	23.73075	77.25729	13:55:39	D	21.20
34	BHOPAL	BERASIYA	S-NPP	23.73359	77.24390	13:55:39	D	6.60
35	BHOPAL	BERASIYA	S-NPP	23.73454	77.25246	13:55:39	D	7.80
36	BHOPAL	BERASIYA	S-NPP	23.73501	77.25676	13:55:39	D	7.80
37	BHOPAL	BERASIYA	S-NPP	23.74952	77.34835	01:06:05	N	1.40
38	BHOPAL	BERASIYA	TERRA	23.63300	77.53700	11:01:57	D	34.20
39	BHOPAL	BERASIYA	TERRA	23.69700	77.57200	11:01:57	D	20.90
40	BHOPAL	BERASIYA	TERRA	23.70800	77.57500	11:01:57	D	30.50
41	BHOPAL	HUZUR	S-NPP	23.31778	77.38535	13:55:39	D	11.50
42	BHOPAL	HUZUR	S-NPP	23.32204	77.38480	13:55:39	D	19.50
43	BHOPAL	HUZUR	S-NPP	23.32252	77.38912	13:55:39	D	34.50
44	BHOPAL	HUZUR	TERRA	23.10600	77.50100	11:01:57	D	22.20
45	BHOPAL	HUZUR	TERRA	23.10900	77.49300	11:01:57	D	14.20
46	CHHINDWARA	CHAURAI	S-NPP	21.87157	79.14127	13:55:39	D	12.00
47	CHHINDWARA	CHAURAI	S-NPP	21.92931	79.12667	13:55:39	D	16.10
48	CHHINDWARA	CHAURAI	S-NPP	21.93344	79.12077	13:55:39	D	6.70
49	CHHINDWARA	CHAURAI	S-NPP	21.93400	79.12610	13:55:39	D	16.10
50	CHHINDWARA	CHAURAI	S-NPP	22.11532	79.29092	13:55:39	D	6.70
51	CHHINDWARA	CHAURAI	S-NPP	22.11629	79.29379	13:55:39	D	3.10
52	CHHINDWARA	CHHINDWARA	S-NPP	22.03234	78.96225	13:55:39	D	6.10
53	CHHINDWARA	CHHINDWARA	S-NPP	22.13393	79.04782	13:55:39	D	5.00
54	DAMOH	BATIAGARH	TERRA	24.07100	79.37600	11:01:57	D	25.90
55	DAMOH	DAMOH	S-NPP	23.57662	79.40794	13:55:39	D	14.10
56	DAMOH	PATHARIA	S-NPP	23.77278	79.24741	13:55:39	D	27.90
57	DATIA	BHANDER	S-NPP	25.62074	78.70636	13:55:39	D	8.60
58	DATIA	BHANDER	S-NPP	25.62553	78.70583	13:55:39	D	12.00
59	DATIA	BHANDER	S-NPP	25.69743	78.74734	13:55:39	D	8.20
60	DATIA	BHANDER	S-NPP	25.91558	78.80493	13:55:39	D	7.10
61	DATIA	SEONDHA	S-NPP	25.83057	78.57440	13:55:39	D	6.70
62	DATIA	SEONDHA	S-NPP	25.83953	78.56771	13:55:39	D	5.10

63	DATIA	SEONDHA	S-NPP	25.84008	78.57331	13:55:39	D	5.10
64	DEWAS	KANNOD	S-NPP	22.67156	76.74001	02:45:39	N	0.80
65	DEWAS	KHATEGOAN	S-NPP	22.66170	76.84703	13:55:39	D	10.70
66	DEWAS	SONKACH	S-NPP	23.01372	76.24368	13:55:39	D	9.50
67	DEWAS	SONKACH	S-NPP	23.01717	76.24315	02:45:39	N	0.50
68	DEWAS	SONKACH	S-NPP	23.01790	76.23985	02:45:39	N	1.10
69	DEWAS	SONKACH	TERRA	23.04100	76.42300	11:01:57	D	12.90
70	DEWAS	TONK KHURD	S-NPP	23.02297	76.24115	02:45:39	N	0.80
71	DEWAS	TONK KHURD	S-NPP	23.09213	76.16882	02:45:39	N	0.50
72	DEWAS	TONK KHURD	TERRA	23.08900	76.32600	11:01:57	D	23.70
73	DEWAS	TONK KHURD	TERRA	23.09100	76.31300	11:01:57	D	30.40
74	DHAR	BADNAWAR	S-NPP	22.87531	75.31016	13:55:39	D	16.20
75	DHAR	BADNAWAR	S-NPP	22.87906	75.30961	13:55:39	D	27.70
76	DHAR	DHAR	TERRA	22.76800	75.40500	11:01:57	D	11.90
77	DHAR	MANAWAR	S-NPP	22.26405	75.13334	02:45:39	N	1.70
78	DHAR	SARDARPUR	S-NPP	22.80696	75.06695	13:55:39	D	20.10
79	GUNA	ARON	S-NPP	24.30042	77.46512	02:45:39	N	0.50
80	GUNA	ARON	TERRA	24.42200	77.48000	11:01:57	D	31.90
81	GUNA	GUNA	S-NPP	24.55688	77.41274	01:06:05	N	1.10
82	GUNA	GUNA	S-NPP	24.55962	77.43279	02:45:39	N	1.50
83	GUNA	GUNA	S-NPP	24.56137	77.43587	02:45:39	N	0.80
84	GUNA	GUNA	S-NPP	24.56222	77.43221	02:45:39	N	1.10
85	GUNA	GUNA	S-NPP	24.69591	77.08955	02:45:39	N	0.90
86	GUNA	GUNA	S-NPP	24.69668	77.08611	02:45:39	N	0.90
87	GUNA	GUNA	S-NPP	24.71679	77.06961	02:45:39	N	1.00
88	GUNA	GUNA	S-NPP	24.75620	77.01505	02:45:39	N	0.90
89	GUNA	GUNA	S-NPP	24.76159	77.01958	02:45:39	N	0.70
90	GUNA	GUNA	S-NPP	24.76571	77.02121	02:45:39	N	0.70
91	GUNA	GUNA	S-NPP	24.82359	76.98582	02:45:39	N	1.10
92	GUNA	GUNA	S-NPP	24.82435	76.98244	02:45:39	N	1.00
93	GUNA	GUNA	S-NPP	24.82893	77.13198	02:45:39	N	1.20
94	GUNA	GUNA	S-NPP	24.82970	77.12854	02:45:39	N	1.50
95	GUNA	GUNA	S-NPP	24.90131	76.94572	13:55:39	D	8.80

96	GUNA	GUNA	S-NPP	24.94142	77.01865	02:45:39	N	1.10
97	GUNA	GUNA	S-NPP	24.96095	77.01665	13:55:39	D	12.50
98	GUNA	GUNA	S-NPP	24.96145	77.02100	13:55:39	D	12.50
99	GUNA	GUNA	S-NPP	24.96194	77.02535	13:55:39	D	9.50
100	GUNA	GUNA	S-NPP	24.96426	77.02122	13:55:39	D	4.20
101	GUNA	RAGHOGARH	S-NPP	24.05687	77.24448	01:06:05	N	1.70
102	GUNA	RAGHOGARH	S-NPP	24.05743	77.24196	01:06:05	N	2.00
103	GWALIOR	BHITARWAR	S-NPP	25.77305	78.18435	13:55:39	D	4.70
104	GWALIOR	BHITARWAR	S-NPP	25.86558	78.02140	02:45:39	N	0.70
105	GWALIOR	BHITARWAR	S-NPP	25.87089	78.02292	02:45:39	N	0.70
106	GWALIOR	BHITARWAR	S-NPP	25.89485	78.09023	02:45:39	N	0.80
107	GWALIOR	BHITARWAR	S-NPP	25.89929	78.09556	02:45:39	N	0.80
108	GWALIOR	BHITARWAR	S-NPP	25.90018	78.09176	02:45:39	N	0.80
109	GWALIOR	BHITARWAR	S-NPP	25.92739	78.19016	13:55:39	D	5.00
110	GWALIOR	BHITARWAR	S-NPP	25.92789	78.19585	02:45:39	N	1.00
111	GWALIOR	BHITARWAR	S-NPP	25.93241	78.19873	02:45:39	N	1.00
112	GWALIOR	BHITARWAR	S-NPP	25.93325	78.19737	02:45:39	N	1.90
113	GWALIOR	BHITARWAR	S-NPP	25.93329	78.19489	02:45:39	N	3.70
114	GWALIOR	BHITARWAR	S-NPP	25.93415	78.19354	02:45:39	N	2.50
115	GWALIOR	DABRA	S-NPP	25.90202	78.17171	13:55:39	D	8.10
116	GWALIOR	DABRA	S-NPP	25.90667	78.17117	13:55:39	D	8.10
117	GWALIOR	DABRA	S-NPP	25.92706	78.19719	02:45:39	N	1.00
118	GWALIOR	DABRA	S-NPP	26.01265	78.21576	13:55:39	D	21.80
119	HARDA	HARDA	S-NPP	22.18720	77.21951	13:55:39	D	5.00
120	HARDA	KHIRKIYAN	S-NPP	22.23066	76.93225	13:55:39	D	9.50
121	INDORE	DEPALPUR	S-NPP	22.62993	75.70213	02:45:39	N	0.70
122	INDORE	DEPALPUR	S-NPP	22.98396	75.62617	02:45:39	N	0.80
123	INDORE	DEPALPUR	S-NPP	22.98462	75.62648	02:45:39	N	1.60
124	INDORE	DEPALPUR	S-NPP	22.98886	75.62742	02:45:39	N	1.30
125	INDORE	DEPALPUR	S-NPP	22.98951	75.62772	02:45:39	N	1.60
126	INDORE	DEPALPUR	TERRA	22.90400	75.64800	11:01:57	D	15.20
127	INDORE	INDORE	S-NPP	22.70259	76.00825	02:45:39	N	0.40
128	INDORE	INDORE	TERRA	22.77200	76.06800	11:01:57	D	11.70

129	INDORE	SANWER	S-NPP	22.82331	75.74370	02:45:39	N	0.90
130	INDORE	SANWER	S-NPP	22.82825	75.74496	02:45:39	N	0.90
131	INDORE	SANWER	S-NPP	22.91444	75.92820	02:45:39	N	0.80
132	JABALPUR	JABALPUR	S-NPP	22.96761	79.83152	13:55:39	D	12.40
133	JABALPUR	JABALPUR	S-NPP	23.00426	79.89559	13:55:39	D	17.40
134	JABALPUR	JABALPUR	S-NPP	23.33983	79.96751	13:55:39	D	8.00
135	JABALPUR	MAJHOULI	S-NPP	23.50867	80.16351	13:55:39	D	3.40
136	JABALPUR	MAJHOULI	S-NPP	23.51380	80.16309	13:55:39	D	3.40
137	JABALPUR	SIHORA	S-NPP	23.37201	80.11104	13:55:39	D	2.00
138	JABALPUR	SIHORA	S-NPP	23.37231	80.11425	13:55:39	D	2.50
139	JABALPUR	SIHORA	S-NPP	23.37481	80.11294	13:55:39	D	6.30
140	KATNI	BAHURIBAND	S-NPP	23.61313	80.04237	13:55:39	D	4.90
141	KATNI	BIJERAGHOGARH	S-NPP	23.97347	80.73664	12:16:05	D	3.20
142	KATNI	DHIMERKHEDA	S-NPP	23.34805	80.31682	13:55:39	D	1.20
143	KATNI	DHIMERKHEDA	S-NPP	23.49749	80.28574	13:55:39	D	4.50
144	KATNI	DHIMERKHEDA	S-NPP	23.49903	80.28423	13:55:39	D	2.20
145	KATNI	DHIMERKHEDA	S-NPP	23.49933	80.28755	13:55:39	D	2.20
146	KATNI	MURBARA	S-NPP	23.94006	80.48804	13:55:39	D	3.30
147	MANDSAUR	MALHARGARH	S-NPP	24.27929	75.12980	13:55:39	D	19.10
148	MANDSAUR	MALHARGARH	S-NPP	24.30377	74.99015	13:55:39	D	11.20
149	MANDSAUR	MALHARGARH	S-NPP	24.30751	74.98961	13:55:39	D	11.20
150	MANDSAUR	MALHARGARH	S-NPP	24.30814	74.99132	13:55:39	D	21.00
151	MANDSAUR	MALHARGARH	S-NPP	24.30814	74.99451	13:55:39	D	29.90
152	MANDSAUR	SITAMAU	S-NPP	24.13684	75.31684	13:55:39	D	20.50
153	NIMACH	JAWAD	S-NPP	24.59840	74.89251	13:55:39	D	11.40
154	NIMACH	MANASA	S-NPP	24.33416	75.22910	13:55:39	D	20.30
155	PANNA	GUNAUR	S-NPP	24.43394	80.16475	13:55:39	D	5.40
156	PANNA	GUNAUR	S-NPP	24.53066	80.36185	13:55:39	D	6.40
157	PANNA	GUNAUR	S-NPP	24.53098	80.36533	13:55:39	D	4.70
158	PANNA	GUNAUR	S-NPP	24.53380	80.28149	13:55:39	D	7.30
159	PANNA	GUNAUR	S-NPP	24.53412	80.28491	13:55:39	D	7.30
160	PANNA	PAWAI	S-NPP	24.33287	79.86876	13:55:39	D	5.20
161	PANNA	PAWAI	S-NPP	24.33316	79.87197	13:55:39	D	5.20

162	RAISEN	BAGAMGANJ	S-NPP	23.60272	78.40428	13:55:39	D	6.70
163	RAISEN	GAIRATGANJ	S-NPP	23.36224	78.19305	13:55:39	D	11.50
164	RAISEN	GAIRATGANJ	S-NPP	23.45084	77.99073	13:55:39	D	8.10
165	RAISEN	GOHARGANJ	S-NPP	23.01268	77.61566	13:55:39	D	10.40
166	RAISEN	GOHARGANJ	TERRA	23.00400	77.62500	11:01:57	D	18.10
167	RAISEN	GOHARGANJ	TERRA	23.00700	77.60900	11:01:57	D	13.50
168	RAISEN	RAISEN	S-NPP	23.21596	77.79671	13:55:39	D	26.20
169	RAISEN	RAISEN	S-NPP	23.22034	77.79623	13:55:39	D	26.20
170	RAISEN	RAISEN	S-NPP	23.33438	77.82024	13:55:39	D	11.20
171	RAISEN	RAISEN	TERRA	23.32600	77.83100	11:01:57	D	15.90
172	RAISEN	RAISEN	TERRA	23.32700	77.82600	11:01:57	D	21.60
173	RAJGARH	BIYAVRA	S-NPP	23.76595	76.85425	13:55:39	D	11.30
174	RAJGARH	BIYAVRA	S-NPP	23.81900	76.93459	02:45:39	N	0.30
175	RAJGARH	BIYAVRA	S-NPP	23.83523	76.88723	02:45:39	N	0.90
176	RAJGARH	NARSINGHGAR	TERRA	23.51600	76.70600	11:01:57	D	19.40
177	RAJGARH	NARSINGHGAR	TERRA	23.51800	76.69300	11:01:57	D	15.80
178	RAJGARH	NARSINGHGAR	TERRA	23.52000	76.70100	11:01:57	D	22.20
179	RAJGARH	SARANGPUR	S-NPP	23.68855	76.61353	02:45:39	N	0.50
180	RAJGARH	SARANGPUR	S-NPP	23.72354	76.63617	13:55:39	D	9.40
181	RATLAM	JAURA	TERRA	23.52800	75.16800	11:01:57	D	11.00
182	RATLAM	PIPLODA	S-NPP	23.65601	74.99894	02:45:39	N	0.50
183	RATLAM	RATLAM	S-NPP	23.22155	75.27439	02:45:39	N	2.30
184	RATLAM	RATLAM	S-NPP	23.22631	75.27563	02:45:39	N	2.30
185	RATLAM	RATLAM	S-NPP	23.24057	75.09148	02:45:39	N	0.50
186	RATLAM	RATLAM	S-NPP	23.24207	75.11252	13:55:39	D	14.40
187	SAGAR	BINA	S-NPP	24.14789	78.18143	02:45:39	N	0.40
188	SAGAR	GARHAKOTA	S-NPP	23.82274	79.17035	13:55:39	D	9.00
189	SAGAR	GARHAKOTA	S-NPP	23.82376	79.17246	13:55:39	D	8.60
190	SAGAR	GARHAKOTA	S-NPP	23.82868	79.18121	13:55:39	D	4.20
191	SAGAR	KHURAI	S-NPP	23.91944	78.30644	02:45:39	N	0.50
192	SAGAR	KHURAI	S-NPP	23.92052	78.30437	02:45:39	N	0.40
193	SAGAR	RAHAT GARH	S-NPP	23.86449	78.29759	13:55:39	D	5.20
194	SAGAR	RAHAT GARH	S-NPP	23.87979	78.32238	02:45:39	N	1.40

195	SAGAR	REHLI	S-NPP	23.61823	79.00607	13:55:39	D	54.70
196	SAGAR	REHLI	S-NPP	23.63627	79.15858	02:45:39	N	0.90
197	SAGAR	SAGAR	TERRA	23.67600	78.58400	11:01:57	D	22.90
198	SATNA	AMARPATAN	S-NPP	24.32010	80.93697	12:16:05	D	8.10
199	SATNA	AMARPATAN	S-NPP	24.32276	80.93420	12:16:05	D	13.00
200	SATNA	AMARPATAN	S-NPP	24.32827	80.93975	13:55:39	D	6.80
201	SATNA	AMARPATAN	S-NPP	24.32860	80.94356	13:55:39	D	5.90
202	SATNA	AMARPATAN	S-NPP	24.34111	80.96130	13:55:39	D	6.00
203	SATNA	AMARPATAN	AQUA	24.31900	80.94000	12:58:05	D	113.70
204	SATNA	AMARPATAN	AQUA	24.32400	80.94600	12:58:05	D	86.80
205	SATNA	MAIHAR	S-NPP	24.23960	80.81657	13:55:39	D	11.90
206	SATNA	MAIHAR	S-NPP	24.23993	80.82024	13:55:39	D	11.90
207	SATNA	MAIHAR	S-NPP	24.31814	80.92954	12:16:05	D	10.00
208	SATNA	MAIHAR	TERRA	24.30900	80.92300	11:01:57	D	38.20
209	SATNA	MAIHAR	AQUA	24.31700	80.91200	12:58:05	D	76.70
210	SATNA	RAGURAJNAGAR	S-NPP	24.56277	80.90037	13:55:39	D	17.00
211	SATNA	RAGURAJNAGAR	TERRA	24.61400	80.72800	11:01:57	D	72.60
212	SATNA	RAGURAJNAGAR	TERRA	24.62000	80.72400	11:01:57	D	57.30
213	SATNA	UCHAHAR	S-NPP	24.47640	80.84412	12:16:05	D	14.50
214	SATNA	UCHAHAR	S-NPP	24.47838	80.85155	12:16:05	D	12.50
215	SATNA	UCHAHAR	S-NPP	24.51122	80.83334	12:16:05	D	3.20
216	SATNA	UCHAHAR	S-NPP	24.51354	80.83693	13:55:39	D	3.50
217	SATNA	UCHAHAR	S-NPP	24.51392	80.83081	12:16:05	D	4.70
218	SEHORE	BUDHNI	S-NPP	22.80042	77.52866	13:55:39	D	7.30
219	SEHORE	SEHORE	S-NPP	23.16590	77.13051	13:55:39	D	6.50
220	SEHORE	SEHORE	S-NPP	23.32480	77.03045	13:55:39	D	10.20
221	SEHORE	SEHORE	S-NPP	23.34920	77.11686	01:06:05	N	1.00
222	SEHORE	SEHORE	S-NPP	23.34946	77.11307	01:06:05	N	0.90
223	SEHORE	SEHORE	S-NPP	23.44606	77.09394	02:45:39	N	0.50
224	SEHORE	SEHORE	S-NPP	23.46820	77.23322	02:45:39	N	0.20
225	SEHORE	SEHORE	S-NPP	23.51743	77.11428	02:45:39	N	0.60
226	SEHORE	SEHORE	S-NPP	23.55350	77.16761	01:06:05	N	1.90
227	SEHORE	SEHORE	S-NPP	23.56608	77.20732	02:45:39	N	0.30

228	SEHORE	SEHORE	S-NPP	23.60163	77.16927	13:55:39	D	6.90
229	SEONI	GHANSAUR	S-NPP	22.39107	79.82569	13:55:39	D	5.00
230	SEONI	GHANSAUR	S-NPP	22.39164	79.83160	13:55:39	D	5.00
231	SEONI	GHANSAUR	S-NPP	22.76583	80.20412	13:55:39	D	4.30
232	SEONI	GHANSAUR	S-NPP	22.76613	80.20733	13:55:39	D	3.70
233	SEONI	SEONI	S-NPP	22.14157	79.39941	13:55:39	D	16.40
234	SEONI	SEONI	S-NPP	22.16379	79.42809	13:55:39	D	13.80
235	SEONI	SEONI	S-NPP	22.16744	79.41636	13:55:39	D	8.60
236	SEONI	SEONI	S-NPP	22.16802	79.42194	13:55:39	D	13.80
237	SEONI	SEONI	S-NPP	22.16859	79.42754	13:55:39	D	13.80
238	SEONI	SEONI	S-NPP	22.18667	79.70246	13:55:39	D	2.40
239	SEONI	SEONI	S-NPP	22.18725	79.70830	13:55:39	D	3.70
240	SEONI	SEONI	S-NPP	22.20060	79.54895	13:55:39	D	15.20
241	SHAH DOL	JASINGH NAGAR	S-NPP	23.64521	81.52386	12:16:05	D	2.80
242	SHAJAPUR	AGAR	S-NPP	23.58966	75.85297	13:55:39	D	22.90
243	SHAJAPUR	AGAR	S-NPP	23.59580	76.13969	02:45:39	N	0.60
244	SHAJAPUR	BAROUD	S-NPP	23.58903	75.84769	13:55:39	D	22.90
245	SHAJAPUR	BAROUD	S-NPP	23.59292	75.84714	13:55:39	D	22.90
246	SHAJAPUR	BAROUD	S-NPP	23.59356	75.85242	13:55:39	D	22.90
247	SHAJAPUR	BAROUD	S-NPP	23.64099	75.85118	13:55:39	D	14.50
248	SHAJAPUR	BAROUD	S-NPP	23.76782	75.71594	13:55:39	D	15.60
249	SHAJAPUR	BAROUD	S-NPP	23.87254	75.87235	02:45:39	N	0.90
250	SHAJAPUR	BAROUD	TERRA	23.88600	75.86800	11:01:57	D	14.50
251	SHAJAPUR	GULNA	S-NPP	23.34884	76.49198	02:45:39	N	0.30
252	SHAJAPUR	GULNA	S-NPP	23.40702	76.52828	02:45:39	N	0.60
253	SHAJAPUR	GULNA	S-NPP	23.51317	76.49515	13:55:39	D	9.10
254	SHAJAPUR	KALA PIPAL	S-NPP	23.33840	76.96283	02:45:39	N	0.60
255	SHAJAPUR	MOMAN BARODIY	S-NPP	23.51811	76.16635	02:45:39	N	1.30
256	SHAJAPUR	MOMAN BARODIY	S-NPP	23.52620	76.20243	02:45:39	N	0.20
257	SHAJAPUR	MOMAN BARODIY	S-NPP	23.52901	76.20303	02:45:39	N	0.30
258	SHAJAPUR	MOMAN BARODIY	S-NPP	23.53625	76.26610	02:45:39	N	0.70
259	SHAJAPUR	MOMAN BARODIY	S-NPP	23.65846	76.40285	02:45:39	N	0.60
260	SHAJAPUR	NALKHERA	S-NPP	23.87683	76.21220	02:45:39	N	1.00

261	SHAJAPUR	SHAJAPUR	S-NPP	23.44482	76.28345	02:45:39	N	2.10
262	SHAJAPUR	SHAJAPUR	S-NPP	23.44553	76.28022	02:45:39	N	2.10
263	SHAJAPUR	SHAJAPUR	S-NPP	23.44624	76.38038	13:55:39	D	10.40
264	SHAJAPUR	SUJALPUR	S-NPP	23.43323	76.60687	02:45:39	N	0.30
265	SHAJAPUR	SUJALPUR	S-NPP	23.43332	76.60628	02:45:39	N	0.40
266	SHAJAPUR	SUJALPUR	S-NPP	23.45539	76.60501	02:45:39	N	0.30
267	SHEOPUR	SHEOPUR	S-NPP	25.52147	76.64166	13:55:39	D	7.60
268	SHEOPUR	SHEOPUR	S-NPP	25.52938	76.63631	13:55:39	D	54.00
269	SHEOPUR	SHEOPUR	S-NPP	25.54670	76.67680	13:55:39	D	14.60
270	SHEOPUR	SHEOPUR	S-NPP	25.60449	76.54147	13:55:39	D	10.00
271	SHEOPUR	SHEOPUR	S-NPP	25.60866	76.54093	13:55:39	D	10.00
272	SHEOPUR	SHEOPUR	S-NPP	25.60913	76.54510	13:55:39	D	10.00
273	SHEOPUR	SHEOPUR	S-NPP	25.61330	76.54456	13:55:39	D	11.20
274	SHEOPUR	SHEOPUR	S-NPP	25.69074	76.54324	13:55:39	D	11.50
275	SHEOPUR	SHEOPUR	S-NPP	25.76826	76.67126	02:45:39	N	1.40
276	SHEOPUR	SHEOPUR	S-NPP	25.78364	76.64899	02:45:39	N	1.20
277	SHEOPUR	SHEOPUR	S-NPP	25.79973	76.64683	02:45:39	N	1.30
278	SHEOPUR	SHEOPUR	S-NPP	25.80110	76.64062	02:45:39	N	2.40
279	SHEOPUR	SHEOPUR	S-NPP	25.80247	76.63441	02:45:39	N	2.40
280	SHEOPUR	SHEOPUR	S-NPP	25.83089	76.65463	13:55:39	D	11.10
281	SHEOPUR	SHEOPUR	S-NPP	25.90083	76.66800	13:55:39	D	14.20
282	SHEOPUR	SHEOPUR	TERRA	25.39000	76.66000	11:01:57	D	17.50
283	SHEOPUR	SHEOPUR	TERRA	25.52700	76.64200	11:01:57	D	15.50
284	SHEOPUR	SHEOPUR	TERRA	25.77700	76.57000	11:01:57	D	13.80
285	SHEOPUR	SHEOPUR	TERRA	25.77900	76.55800	11:01:57	D	25.90
286	SHIVPURI	KOLARAS	TERRA	24.88000	77.69900	11:01:57	D	15.70
287	UJJAIN	BARNAGAR	S-NPP	23.12740	75.58051	13:55:39	D	18.50
288	UJJAIN	BARNAGAR	S-NPP	23.13121	75.57996	13:55:39	D	18.50
289	UJJAIN	BARNAGAR	S-NPP	23.15413	75.54591	13:55:39	D	10.60
290	UJJAIN	BARNAGAR	S-NPP	23.24180	75.27359	02:45:39	N	1.60
291	UJJAIN	BARNAGAR	S-NPP	23.24388	75.40697	02:45:39	N	2.30
292	UJJAIN	BARNAGAR	S-NPP	23.24657	75.27479	02:45:39	N	1.60
293	UJJAIN	BARNAGAR	TERRA	23.22200	75.52200	11:01:57	D	12.70

294	UJJAIN	BARNAGAR	TERRA	23.22400	75.51000	11:01:57	D	24.00
295	UJJAIN	GHATIYA	S-NPP	23.18350	75.71745	02:45:39	N	1.20
296	UJJAIN	GHATIYA	S-NPP	23.18375	75.71551	02:45:39	N	1.30
297	UJJAIN	GHATIYA	S-NPP	23.32339	75.71515	02:45:39	N	0.80
298	UJJAIN	GHATIYA	S-NPP	23.32419	75.73320	13:55:39	D	18.00
299	UJJAIN	GHATIYA	S-NPP	23.32440	75.71593	02:45:39	N	0.70
300	UJJAIN	GHATIYA	S-NPP	23.32496	75.73025	13:55:39	D	19.60
301	UJJAIN	GHATIYA	S-NPP	23.32929	75.71715	02:45:39	N	0.70
302	UJJAIN	GHATIYA	S-NPP	23.35346	75.86972	13:55:39	D	12.60
303	UJJAIN	GHATIYA	S-NPP	23.38912	75.87010	13:55:39	D	15.30
304	UJJAIN	GHATIYA	S-NPP	23.39301	75.86955	13:55:39	D	19.00
305	UJJAIN	GHATIYA	TERRA	23.32300	75.65500	11:01:57	D	10.20
306	UJJAIN	GHATIYA	TERRA	23.32400	75.66200	11:01:57	D	13.10
307	UJJAIN	GHATIYA	TERRA	23.37300	75.91700	11:01:57	D	20.90
308	UJJAIN	GHATIYA	TERRA	23.37300	75.92300	11:01:57	D	19.90
309	UJJAIN	GHATIYA	TERRA	23.37500	75.91100	11:01:57	D	12.30
310	UJJAIN	KACHROD	S-NPP	23.34133	75.20626	13:55:39	D	19.80
311	UJJAIN	KACHROD	S-NPP	23.40931	75.16386	13:55:39	D	17.70
312	UJJAIN	KACHROD	S-NPP	23.44939	75.34724	02:45:39	N	2.10
313	UJJAIN	KACHROD	S-NPP	23.48377	75.20817	02:45:39	N	0.90
314	UJJAIN	KACHROD	S-NPP	23.51100	75.31006	02:45:39	N	0.90
315	UJJAIN	MEHIDPUR	S-NPP	23.40920	75.77641	13:55:39	D	19.70
316	UJJAIN	MEHIDPUR	S-NPP	23.41629	75.77008	13:55:39	D	23.60
317	UJJAIN	MEHIDPUR	S-NPP	23.41950	75.76430	13:55:39	D	15.30
318	UJJAIN	MEHIDPUR	S-NPP	23.55100	75.86127	13:55:39	D	26.20
319	UJJAIN	MEHIDPUR	S-NPP	23.55458	75.85791	13:55:39	D	30.10
320	UJJAIN	MEHIDPUR	S-NPP	23.55490	75.86073	13:55:39	D	26.40
321	UJJAIN	MEHIDPUR	S-NPP	23.58459	75.77823	13:55:39	D	42.10
322	UJJAIN	MEHIDPUR	TERRA	23.37900	75.75700	11:01:57	D	13.90
323	UJJAIN	MEHIDPUR	TERRA	23.49700	75.72600	11:01:57	D	18.70
324	UJJAIN	NAGDA	S-NPP	23.40218	75.47411	02:45:39	N	2.80
325	UJJAIN	NAGDA	TERRA	23.37500	75.48000	11:01:57	D	10.10
326	UJJAIN	NAGDA	TERRA	23.37700	75.46800	11:01:57	D	67.80

327	UJJAIN	TARANA	S-NPP	23.49518	76.19414	13:55:39	D	13.00
328	UJJAIN	TARANA	S-NPP	23.49915	76.19357	13:55:39	D	17.00
329	UJJAIN	TARANA	S-NPP	23.56816	76.16953	02:45:39	N	0.40
330	UJJAIN	UJJAIN	S-NPP	23.12135	75.69016	13:55:39	D	12.40
331	UJJAIN	UJJAIN	S-NPP	23.23474	75.86392	02:45:39	N	1.00
332	UJJAIN	UJJAIN	TERRA	23.07700	75.84100	11:01:57	D	12.20
333	UJJAIN	UJJAIN	TERRA	23.07900	75.82900	11:01:57	D	26.60
334	UMARIA	MANPUR	S-NPP	23.79828	80.97189	13:55:39	D	5.50
335	VIDESHA	BASODA	S-NPP	23.75273	78.18768	02:45:39	N	1.50
336	VIDESHA	BASODA	S-NPP	23.75356	78.18993	02:45:39	N	5.40
337	VIDESHA	BASODA	S-NPP	23.75916	78.19151	02:45:39	N	1.40
338	VIDESHA	BASODA	S-NPP	23.88231	77.83915	02:45:39	N	1.00
339	VIDESHA	BASODA	S-NPP	23.91201	77.93098	02:45:39	N	0.60
340	VIDESHA	BASODA	S-NPP	23.99072	77.96656	13:55:39	D	5.90
341	VIDESHA	BASODA	TERRA	23.75200	77.84700	11:01:57	D	21.90
342	VIDESHA	BASODA	TERRA	23.75500	77.83100	11:01:57	D	21.50
343	VIDESHA	GYARASPUR	S-NPP	23.56202	77.98949	13:55:39	D	10.00
344	VIDESHA	GYARASPUR	S-NPP	23.62622	78.23203	13:55:39	D	90.90
345	VIDESHA	GYARASPUR	S-NPP	23.64437	77.97563	13:55:39	D	14.20
346	VIDESHA	GYARASPUR	S-NPP	23.67345	78.03484	13:55:39	D	8.00
347	VIDESHA	GYARASPUR	S-NPP	23.69896	78.26834	13:55:39	D	15.00
348	VIDESHA	GYARASPUR	S-NPP	23.70350	78.26780	13:55:39	D	10.90
349	VIDESHA	GYARASPUR	S-NPP	23.72115	77.90553	13:55:39	D	12.30
350	VIDESHA	GYARASPUR	S-NPP	23.72558	77.90498	13:55:39	D	13.40
351	VIDESHA	GYARASPUR	S-NPP	23.75029	77.83874	02:45:39	N	0.90
352	VIDESHA	GYARASPUR	TERRA	23.55300	77.99200	11:01:57	D	19.10
353	VIDESHA	GYARASPUR	TERRA	23.73000	77.90800	11:01:57	D	19.60
354	VIDESHA	NATERAN	S-NPP	23.74721	77.61682	13:55:39	D	3.50
355	VIDESHA	NATERAN	S-NPP	23.74772	77.62135	13:55:39	D	3.50
356	VIDESHA	NATERAN	S-NPP	23.75555	77.60726	13:55:39	D	4.80
357	VIDESHA	NATERAN	S-NPP	23.75762	77.60532	02:45:39	N	0.70
358	VIDESHA	NATERAN	S-NPP	23.75780	77.60619	02:45:39	N	0.30
359	VIDESHA	NATERAN	S-NPP	23.75869	77.60236	02:45:39	N	0.80

360	VIDESHA	NATERAN	S-NPP	23.76247	77.60204	01:06:05	N	1.20
361	VIDESHA	NATERAN	S-NPP	23.76619	77.62423	13:55:39	D	47.20
362	VIDESHA	NATERAN	S-NPP	23.82384	77.64470	02:45:39	N	2.50
363	VIDESHA	NATERAN	S-NPP	23.86483	77.56528	02:45:39	N	1.30
364	VIDESHA	NATERAN	S-NPP	23.91163	77.86063	13:55:39	D	9.10
365	VIDESHA	NATERAN	S-NPP	23.93939	77.71616	02:45:39	N	1.20
366	VIDESHA	NATERAN	S-NPP	23.93992	77.71806	01:06:05	N	0.80
367	VIDESHA	NATERAN	S-NPP	23.94283	77.78585	01:06:05	N	1.30
368	VIDESHA	NATERAN	S-NPP	23.94466	77.79134	02:45:39	N	0.90
369	VIDESHA	NATERAN	S-NPP	23.94511	77.79305	02:45:39	N	1.10
370	VIDESHA	NATERAN	S-NPP	23.94545	77.79106	01:06:05	N	1.20
371	VIDESHA	NATERAN	S-NPP	23.94557	77.78741	02:45:39	N	0.90
372	VIDESHA	NATERAN	S-NPP	23.94587	77.78362	01:06:05	N	1.20
373	VIDESHA	NATERAN	S-NPP	23.94600	77.78912	02:45:39	N	1.10
374	VIDESHA	NATERAN	S-NPP	23.94650	77.78345	02:45:39	N	1.60
375	VIDESHA	NATERAN	S-NPP	23.94690	77.78514	02:45:39	N	1.50
376	VIDESHA	NATERAN	S-NPP	23.94921	77.79674	02:45:39	N	1.40
377	VIDESHA	NATERAN	S-NPP	23.94947	77.79394	01:06:05	N	0.70
378	VIDESHA	NATERAN	S-NPP	23.94969	77.79848	02:45:39	N	1.40
379	VIDESHA	NATERAN	S-NPP	23.95012	77.79281	02:45:39	N	1.60
380	VIDESHA	NATERAN	S-NPP	23.95041	77.77908	01:06:05	N	1.90
381	VIDESHA	NATERAN	S-NPP	23.95057	77.79453	02:45:39	N	1.10
382	VIDESHA	NATERAN	S-NPP	23.95288	77.82676	13:55:39	D	10.30
383	VIDESHA	NATERAN	S-NPP	23.96563	77.77600	02:45:39	N	0.60
384	VIDESHA	NATERAN	TERRA	23.75800	77.62300	11:01:57	D	73.90
385	VIDESHA	NATERAN	TERRA	23.76100	77.60700	11:01:57	D	47.70
386	VIDESHA	NATERAN	TERRA	23.86500	77.86100	11:01:57	D	27.10
387	VIDESHA	NATERAN	TERRA	23.86800	77.84500	11:01:57	D	24.20
388	VIDESHA	NATERAN	TERRA	23.86800	77.85100	11:01:57	D	42.00
389	VIDESHA	NATERAN	TERRA	23.91200	77.86000	11:01:57	D	30.40
390	VIDESHA	NATERAN	AQUA	23.94100	77.79800	02:05:26	N	9.40
391	VIDESHA	NATERAN	AQUA	23.94200	77.78400	02:05:26	N	10.20
392	VIDESHA	SIRANJ	S-NPP	23.95063	77.76532	13:55:39	D	5.40

393	VIDESHA	SIRANJ	S-NPP	23.95385	77.76945	01:06:05	N	1.00
394	VIDESHA	SIRANJ	S-NPP	23.97929	77.74200	02:45:39	N	0.80
395	VIDESHA	SIRANJ	S-NPP	24.08436	77.75687	02:45:39	N	0.90
396	VIDESHA	SIRANJ	S-NPP	24.08526	77.75298	02:45:39	N	1.30
397	VIDESHA	SIRANJ	S-NPP	24.24576	77.48173	02:45:39	N	0.50
398	VIDESHA	SIRANJ	S-NPP	24.24951	77.48437	01:06:05	N	1.30
399	VIDESHA	SIRANJ	S-NPP	24.25108	77.48319	02:45:39	N	0.80
400	VIDESHA	SIRANJ	S-NPP	24.25137	77.48256	01:06:05	N	1.40
401	VIDESHA	VIDESHA	S-NPP	23.51444	77.60329	13:55:39	D	4.90
402	VIDESHA	VIDESHA	S-NPP	23.51878	77.60275	13:55:39	D	4.90
403	VIDESHA	VIDESHA	S-NPP	23.57470	77.58270	13:55:39	D	6.10
404	WEST NIMAR	BHAGWANPURA	S-NPP	21.70891	75.58100	13:55:39	D	17.00

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

Study Team

ICAR – HQ	Dr S.N. Jha	DDG (AG. ENGG.)	ddgengg@icar.org.in
ICAR - IARI	Dr V.K. Sehgal	Pr. Scientist & Nodal Officer	iaricreams@gmail.com
	Dr Rajkumar Dhakar	Scientist	rajdhakar.iari@gmail.com
	Mr Mohd Jahangir	Lab Assistant (KRISHI)	mjahangir198@gmail.com
ICAR - ATARI		Director ATARI (Zone-I) Ludhiana	rajbirsingh.zpd@gmail.com
		Director ATARI (Zone-II) Jodhpur	sushilsinghiipr@yahoo.co.in
		Director ATARI (Zone-III) Kanpur	zpdicarkanpur@gmail.com
ICAR - IASRI	Dr Rajender Parsad	Director	rajender.parsad@icar.gov.in

GIS Maps of fire events can be visualized online on ICAR KRISHI Geoportal website: <http://geoportal.icar.gov.in:8080/geoexplorer/composer/>
(Part of KRISHI Portal: <https://krishi.icar.gov.in> initiative)
