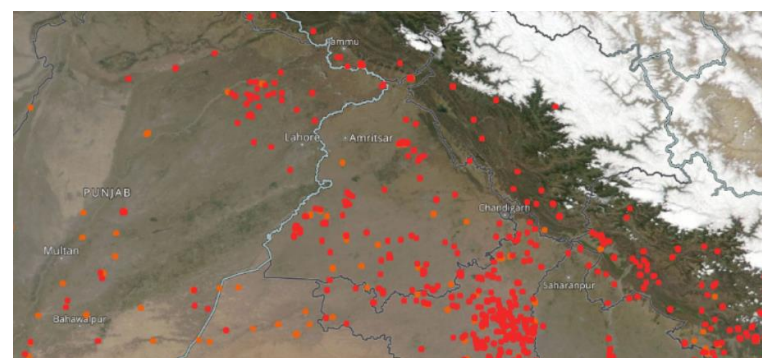


MONITORING WHEAT RESIDUE BURNING IN PUNJAB USING GEOSPATIAL TECHNOLOGIES 2024



Prepared By:
Punjab Remote Sensing Centre, Ludhiana, Punjab
for
Punjab Pollution Control Board, Patiala, Punjab



Highlights for 26 April 2024

- The active fire incidents 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" developed on the directions of "Commission for Air Quality Management in National Capital Region and Adjoining Areas".
- Satellites detected **11** incidents in the Punjab State on 26 April 2024.

District-wise Active Fire Events in Punjab

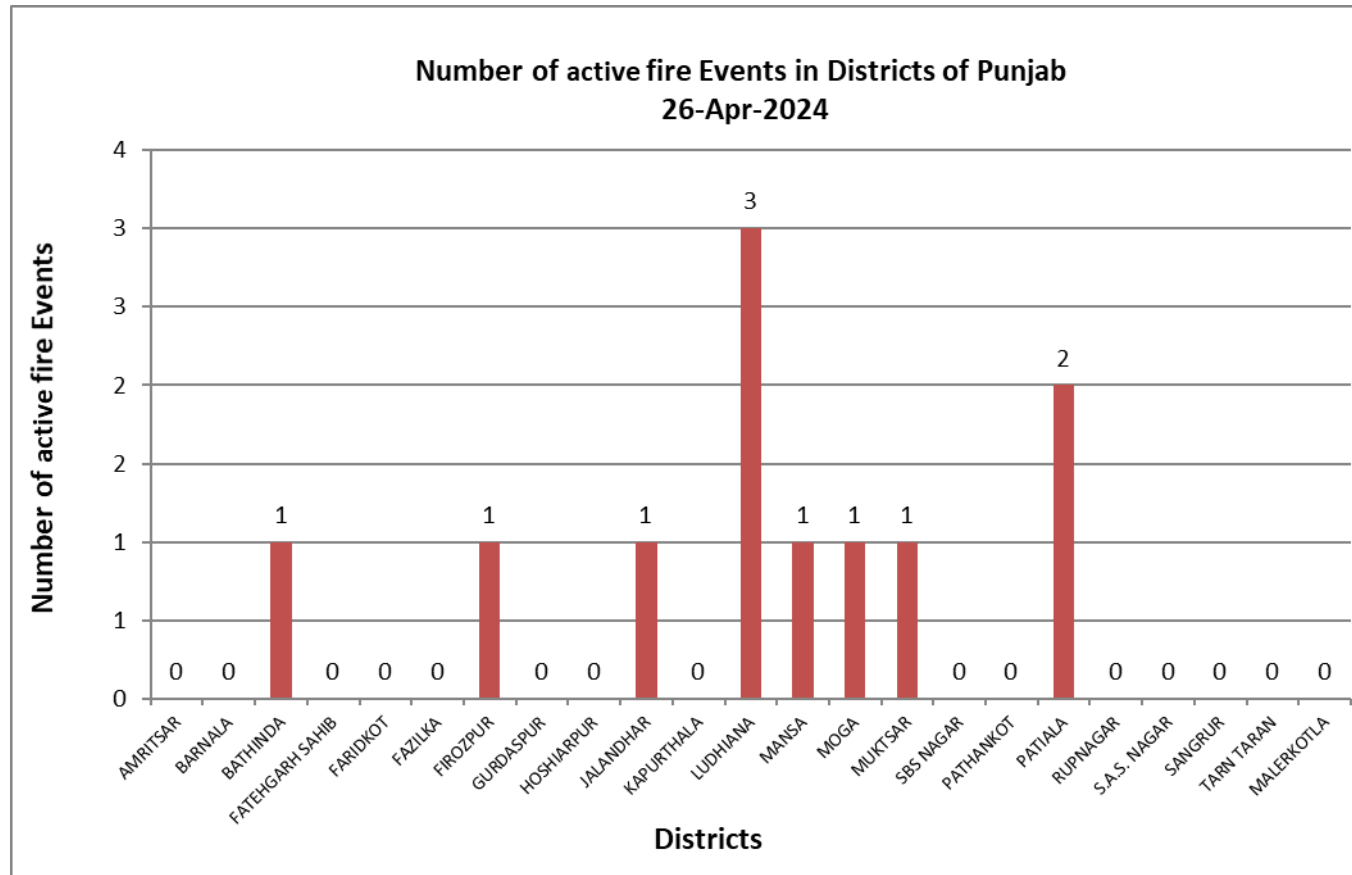


Fig. 1. District-wise fire incidents (Total events = 11) captured by Satellite in Punjab on 26 April 2024

On April, 26 2024, 11 active fire incidents were captured by the Satellite in state of Punjab.

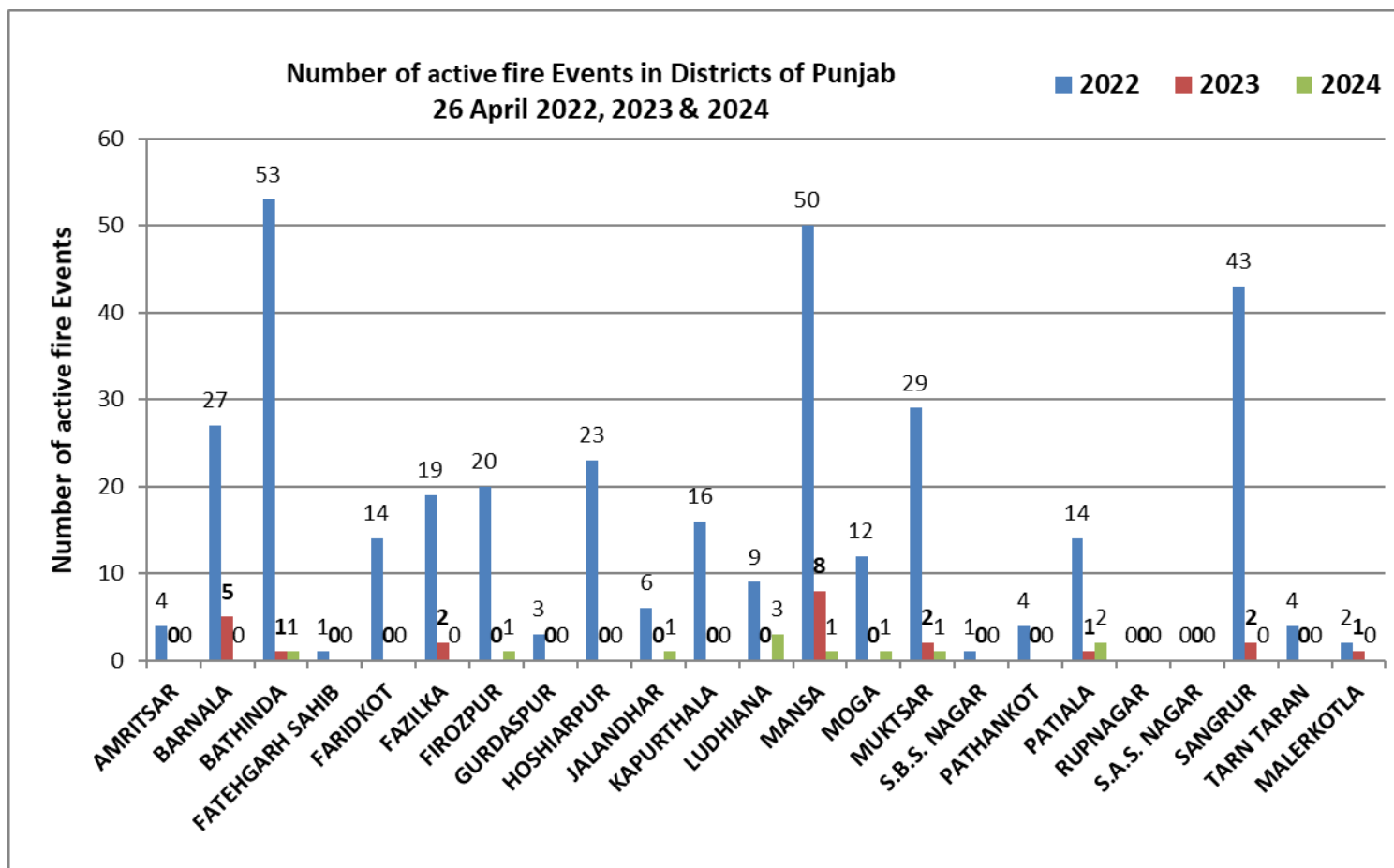


Fig 2 : District-wise comparison of fire incidents captured in Punjab on 26 April 2022, 2023 & 2024

On April, 26 2024, 11 active fire events were captured by the Satellite in state of Punjab. Whereas on the same day (i.e. April 26), in the year 2022, 354 active fire events were captured and in the year 2023 there were 22 active fire events in state of Punjab.

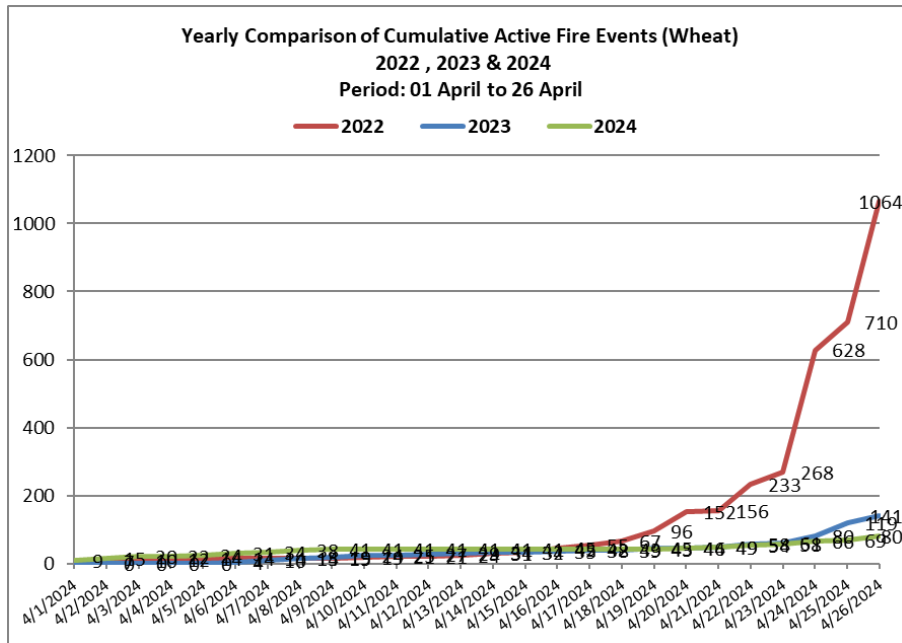


Fig 3 : Cumulative fire incidents captured in Punjab upto 26 April 2022, 2023 & 2024

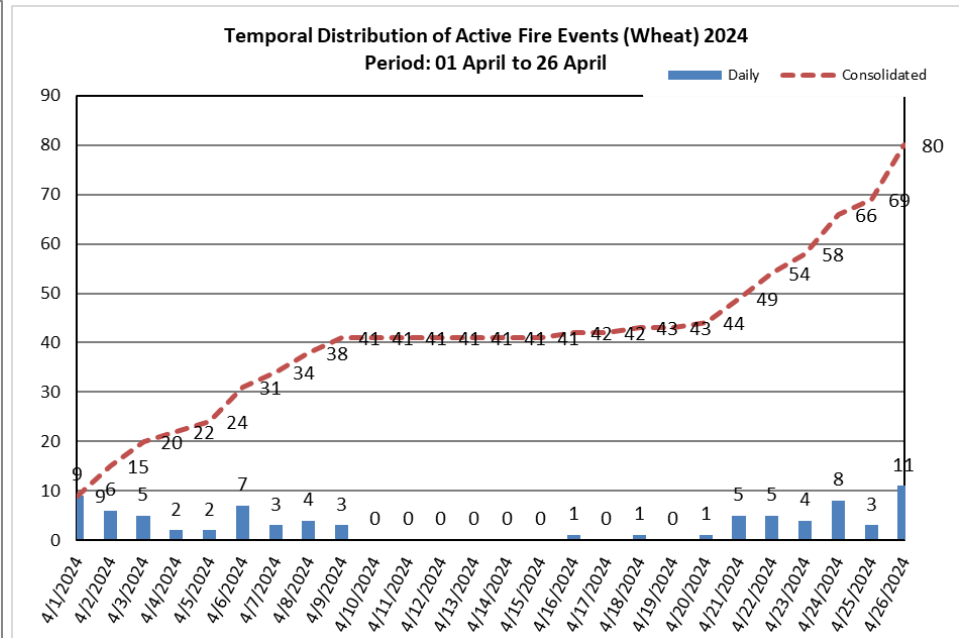
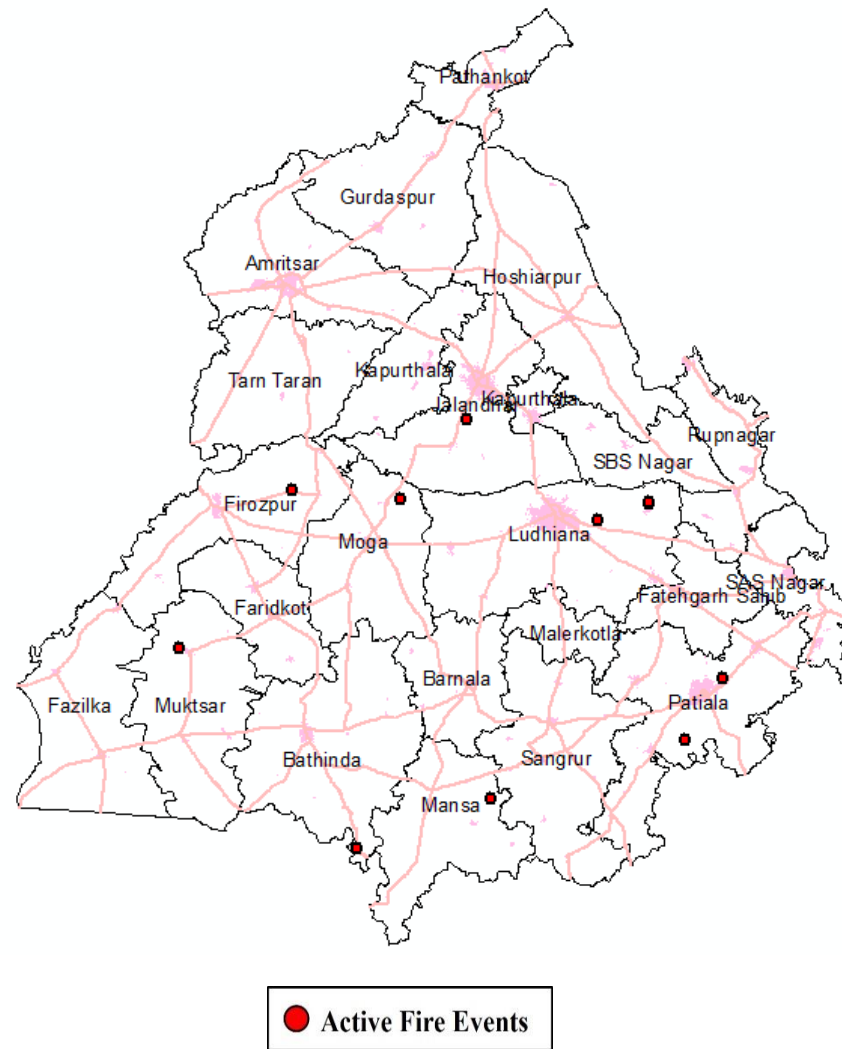


Fig 4: Date-wise Cumulative fire incidents captured in Punjab upto 26 April 2024



Map.1. Active fire locations detected in Punjab on 26 April 2024 by Satellite

Table.1. Active fire locations detected in Punjab on 26 April 2024 by Satellite

S.N.	Latitude	Longitude	Detection_Confidence	Radiative_power (W/m2)	sat	Acq-date	acqtime	District	Tehsil	Block	Village	Hadbast No	Thana
1	29.85063	75.12736	8	4.8	npp	4/26/2024	12:57:50 PM	Bathinda	Talwandi Sabo	Talwandi Sabo	Koreana	143	Talwandi Sabo Bathinda
2	30.98654	74.88800	8	8.8	npp	4/26/2024	12:57:50 PM	Firozpur	Zira	Zira	Jhite	9	Mallan Wala Firozpur
3	31.20761	75.53616	8	3.8	npp	4/26/2024	12:57:50 PM	Jalandhar	Jalandhar I	Jalandhar East	Khun Khun	262	Sadar Jalandhar City
4	30.88700	76.01500	73	7.7	mod	4/26/2024	10:44:49 AM	Ludhiana	Ludhiana East	Ludhiana 2	Mangarh	223	Kum Kalan Ludhiana City
5	30.93570	76.20102	8	5.0	npp	4/26/2024	1:48:33 AM	Ludhiana	Samrala	Machhiwara	Laban Garh	56	Machhiwara Khanna
6	30.93999	76.20163	8	5.0	npp	4/26/2024	1:48:33 AM	Ludhiana	Samrala	Machhiwara	Laban Garh	56	Machhiwara Khanna
7	30.00434	75.61501	8	6.5	npp	4/26/2024	12:57:50 PM	Mansa	Budhlada	Budhlada	Guraddi	37	Sadar Budhlada Mansa
8	30.95619	75.28906	8	1.5	npp	4/26/2024	12:57:50 PM	Moga	Dharamkot	Kot Ise Khan At Dharamkot	Izzat Wala	271	Dharamkot Moga
9	30.48372	74.47511	8	5.0	npp	4/26/2024	12:57:50 PM	Muktsar	Muktsar	Muktsar	Muktsar	54	City Sri Muktsar Sahib
10	30.38298	76.46581	8	0.3	npp	4/26/2024	1:48:33 AM	Patiala	Patiala	Patiala	Daun Kalan	93	Sadar Patiala

11	30.18467	76.32458	8	2.5	npp	4/26/202 4	1:48:33 AM	Patiala	Patial a	Sanaur	Bathoi Khurd	33	Passiana Patiala
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The data from following Satellites received at NRSC Ground Station were used

S. No.	Satellite Name	Sensor	Resolution (m)	Day/Night Passses
1	Suomi NPP	VIIRS	375	Both
2	Terra	MODIS	1000	Both
3	Aqua	MODIS	1000	Both

The Wheat mask for the States was provided by MNCFC, MoA&FW, Govt. of India

GIS Maps of fire events can be visualized online on Crop Residue Burning (CRB) Information and Management System of **Punjab Remote Sensing Centre**, Ludhiana by following the link: <http://202.164.39.172/residue/Index.aspx>