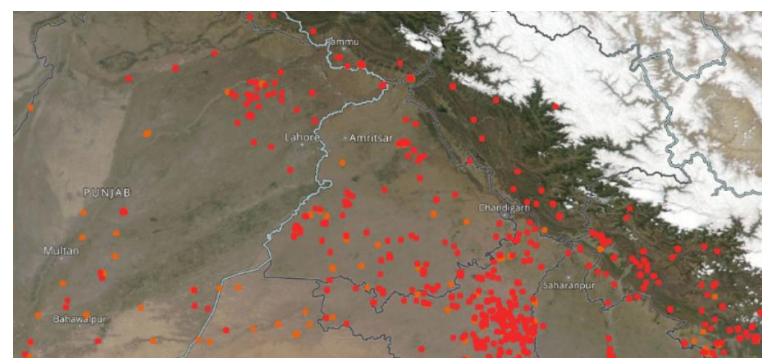


MONITORING WHEAT RESIDUE BURNING IN PUNJAB USING GEOSPATIAL TECHNOLOGIES 2024



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for
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Highlights for 01 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 09 incidents in the Punjab State on 01 April 2024.

District-wise Active Fire Events in Punjab

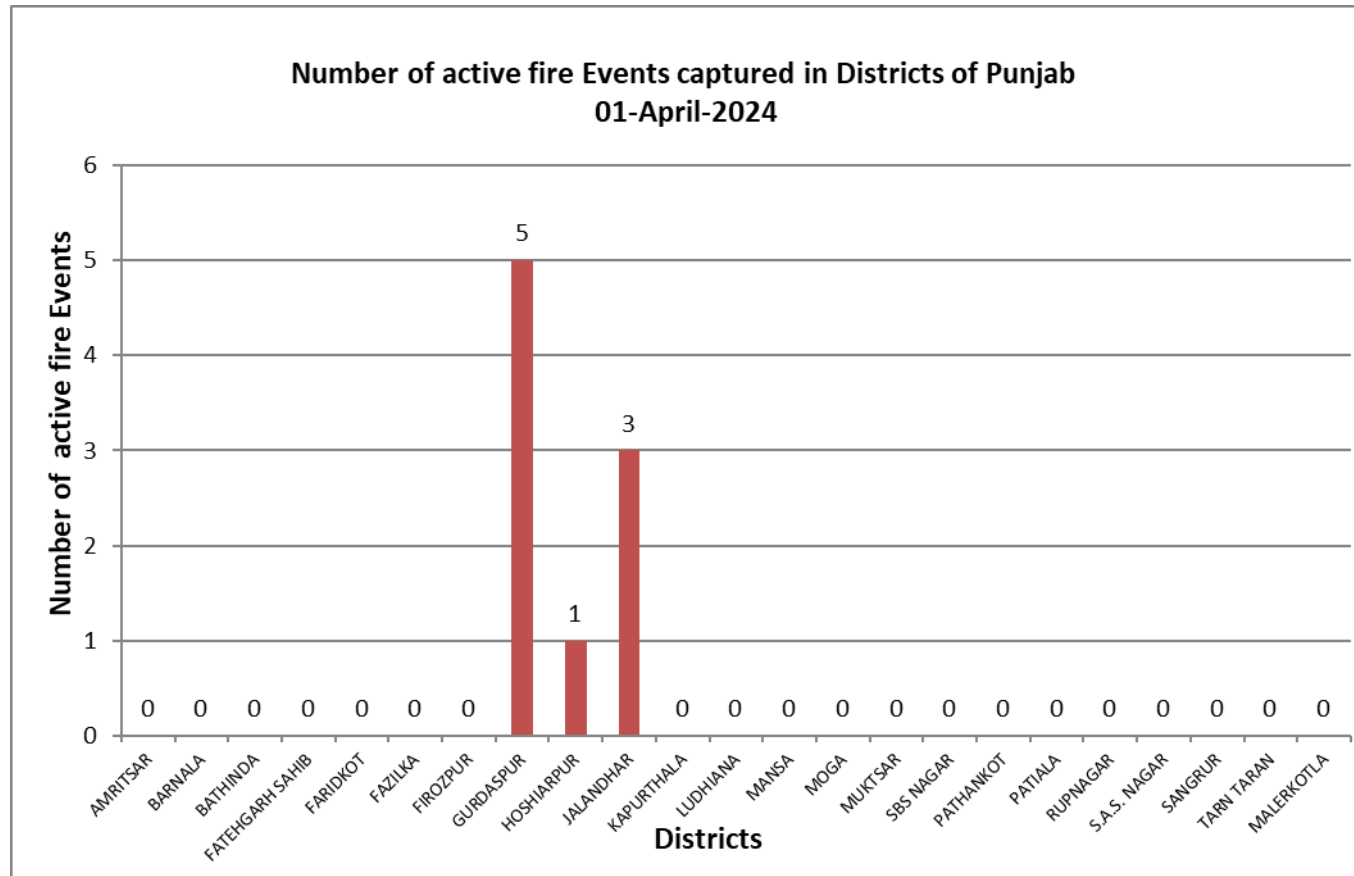


Fig. 1. District-wise fire incidents (Total events = 09) captured by Satellite in Punjab on 01 April 2024

On April, 01 2024, 09 active fire incidents were captured by the Satellite in state of Punjab.

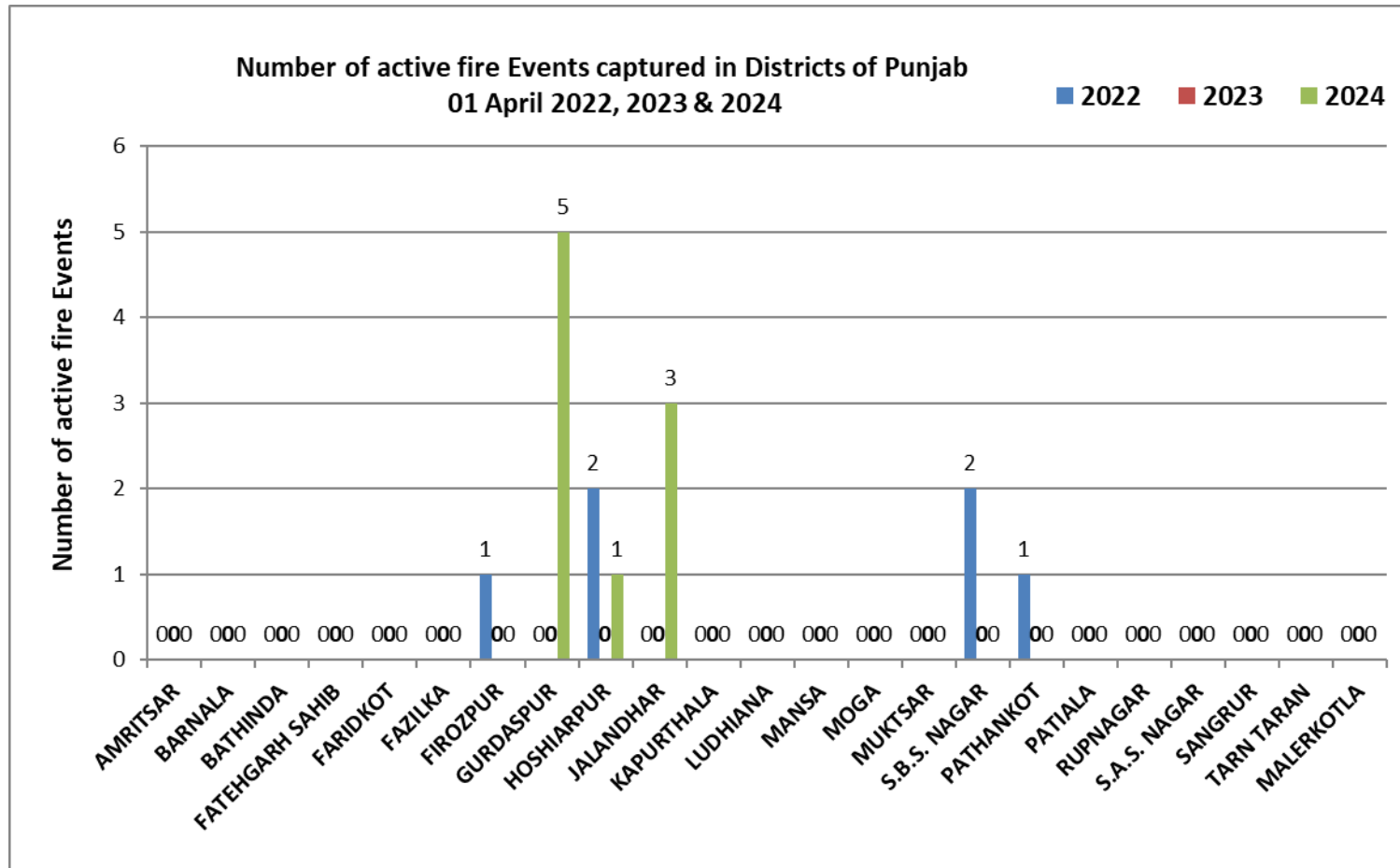


Fig 2 : District-wise comparison of fire incidents captured in Punjab on 01 April 2022, 2023 & 2024

On April, 01 2024, 09 active fire events were captured by the Satellite in state of Punjab. Whereas on the same day (i.e. April 01), in the year 2022, 6 active fire events were captured and in the year 2023 there were 0 active fire events in state of Punjab.



● Active Fire Events

Map.1. Active fire locations detected in Punjab on 01 April 2024 by Satellite

Table.1. Active fire locations detected in Punjab on 01 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	31.79738	75.51311	8	2.5	npp	4/1/2024	2:06:54 PM	Gurdaspur	Batala	Qadian	Aulakh	21	Kahnuwan Gurdaspur
2	32.14867	75.33829	8	1.3	npp	4/1/2024	2:06:54 PM	Gurdaspur	Gurdaspur	Dorangala	Thathi	31	Dorangla Gurdaspur
3	32.07988	75.20035	8	3.0	npp	4/1/2024	2:06:54 PM	Gurdaspur	Gurdaspur	Kalanaur	Fathe Pur	75	Kalanaur Gurdaspur
4	32.07961	75.19685	8	3.0	npp	4/1/2024	2:06:54 PM	Gurdaspur	Gurdaspur	Kalanaur	Shahur Kalan	78	Kalanaur Gurdaspur
5	32.08000	75.19800	62	9.9	mod	4/1/2024	2:09:23 PM	Gurdaspur	Gurdaspur	Kalanaur	Shahur Kalan	78	Kalanaur Gurdaspur
6	31.70857	75.51822	8	3.0	npp	4/1/2024	12:26:37 PM	Hoshiarpur	Dasuya	Tanda	Gandowal	520	Tanda Hoshiarpur
7	31.32793	75.66107	8	3.9	npp	4/1/2024	12:26:37 PM	Jalandhar	Jalandhar I	Jalandhar East	Muzafarpur	193	Patara Jalandhar Rural
8	31.55536	75.58635	8	13.3	npp	4/1/2024	2:06:54 PM	Jalandhar	Jalandhar li	Bhogpur	Buttran	79	Bhogpur Jalandhar Rural
9	31.55400	75.58400	94	52.1	mod	4/1/2024	2:09:23 PM	Jalandhar	Jalandhar li	Bhogpur	Buttran	79	Bhogpur Jalandhar Rural

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>