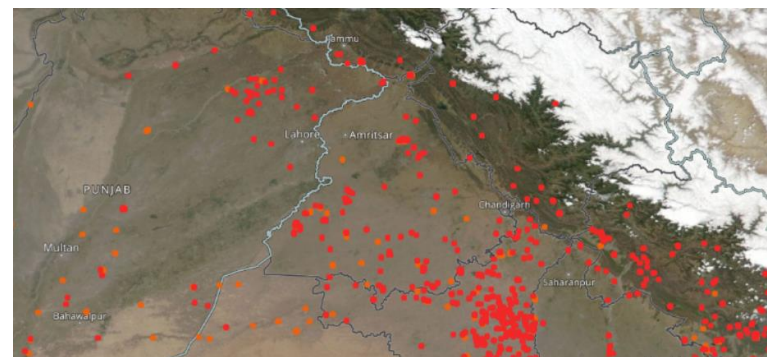


## MONITORING WHEAT RESIDUE BURNING IN PUNJAB USING GEOSPATIAL TECHNOLOGIES 2024



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



### **Highlights for 02 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 6 incidents in the Punjab State on 02 April 2024.

District-wise Active Fire Events in Punjab

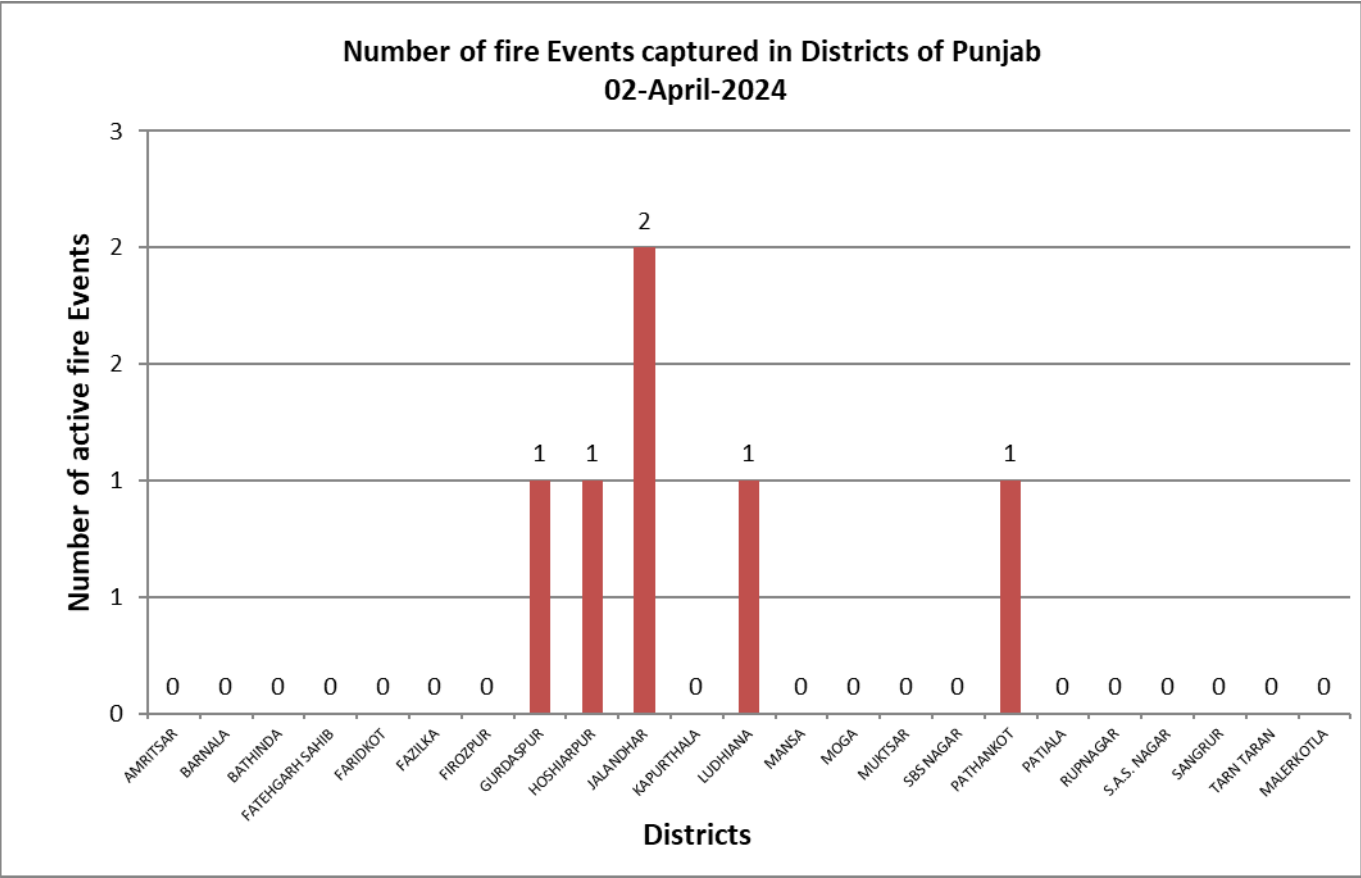
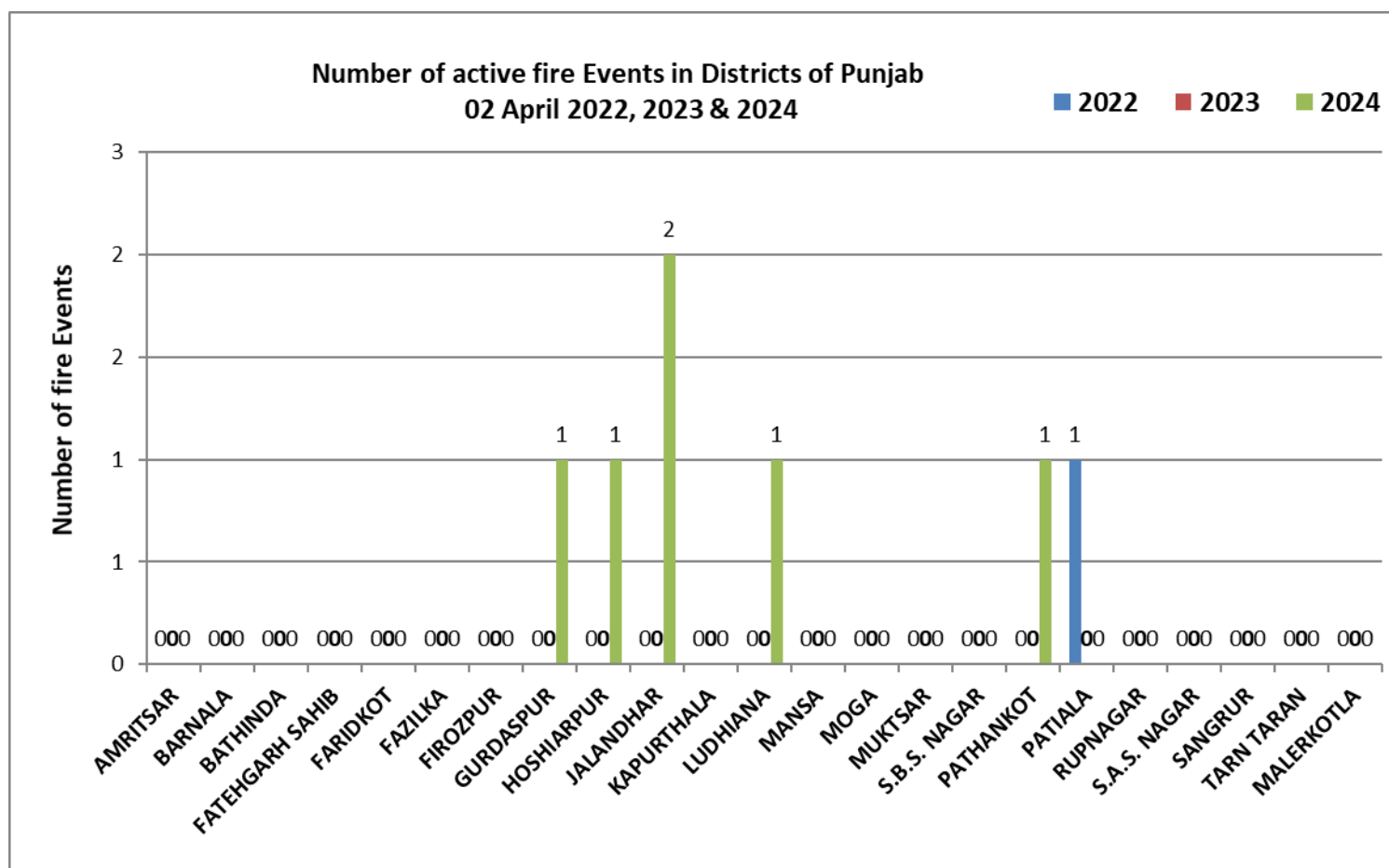


Fig. 1. District-wise fire incidents (Total events = 6) captured by Satellite in Punjab on 02 April 2024

On April, 02 2024, 06 active fire incidents were captured by the Satellite in state of Punjab.



**Fig 2 : District-wise comparison of fire incidents captured in Punjab on 02 April 2022, 2023 & 2024**

On April, 02 2024, 06 active fire events were captured by the Satellite in state of Punjab. Whereas on the same day (i.e. April 02), in the year 2022, 01 active fire events were captured and in the year 2023 there were 0 active fire events in state of Punjab.



**Map.1. Active fire locations detected in Punjab on 02 April 2024 by Satellite**

**Table.1. Active fire locations detected in Punjab on 02 April 2024 by Satellite**

S.N.	Latitude	Longitude	Detection_ Confidenc e	Radiative_ power (W/m2)	sat	Acq-date	acqtime	District	Tehsil	Block	Village	Hadb ast No	Thana
1	31.67400 0	75.421000	57	5.8	mod	4/2/2024	10:53:2 3 AM	Gurdaspur	Batala	Sri Hargobi ndpur	Pejo Chak	57	Sri Hargobindp ur, Batala
2	32.06991 0	75.592240	8	5.7	npp	4/2/2024	1:47:59 PM	Hoshiarpur	Muke rian	Mukeria n	Motla	409	Mukerian Hoshiarpur
3	31.55000 0	75.603000	57	6.0	mod	4/2/2024	10:53:2 3 AM	Jalandhar	Jaland har li	Bhogpur	Charke	15	Bhogpur Jalandhar Rural
4	31.02631 0	75.618790	8	10.4	npp	4/2/2024	1:47:59 PM	Jalandhar	Philla ur	Nur Mahal	Talwan	93	Bilga Jalandhar Rural
5	30.89000 0	76.014000	54	6.7	mod	4/2/2024	10:53:2 3 AM	Ludhiana	Ludhi ana East	Ludhian a 2	Manga rh	223	Kum Kalan Ludhiana City
6	32.23139 0	75.481160	8	6.1	npp	4/2/2024	1:47:59 PM	Pathankot	Patha nkot	Narot Jaimal Singh	Khushi Nagar	98	Taragarh, Pathankot

**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>