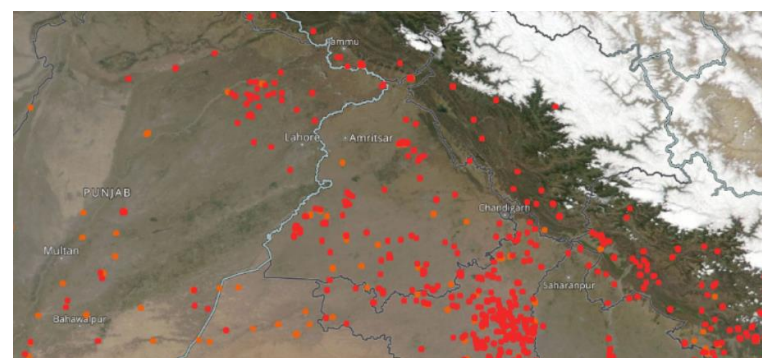


MONITORING WHEAT RESIDUE BURNING IN PUNJAB USING GEOSPATIAL TECHNOLOGIES 2024



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for
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Highlights for 06 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 07 incidents in the Punjab State on 06 April 2024.

District-wise Active Fire Events in Punjab

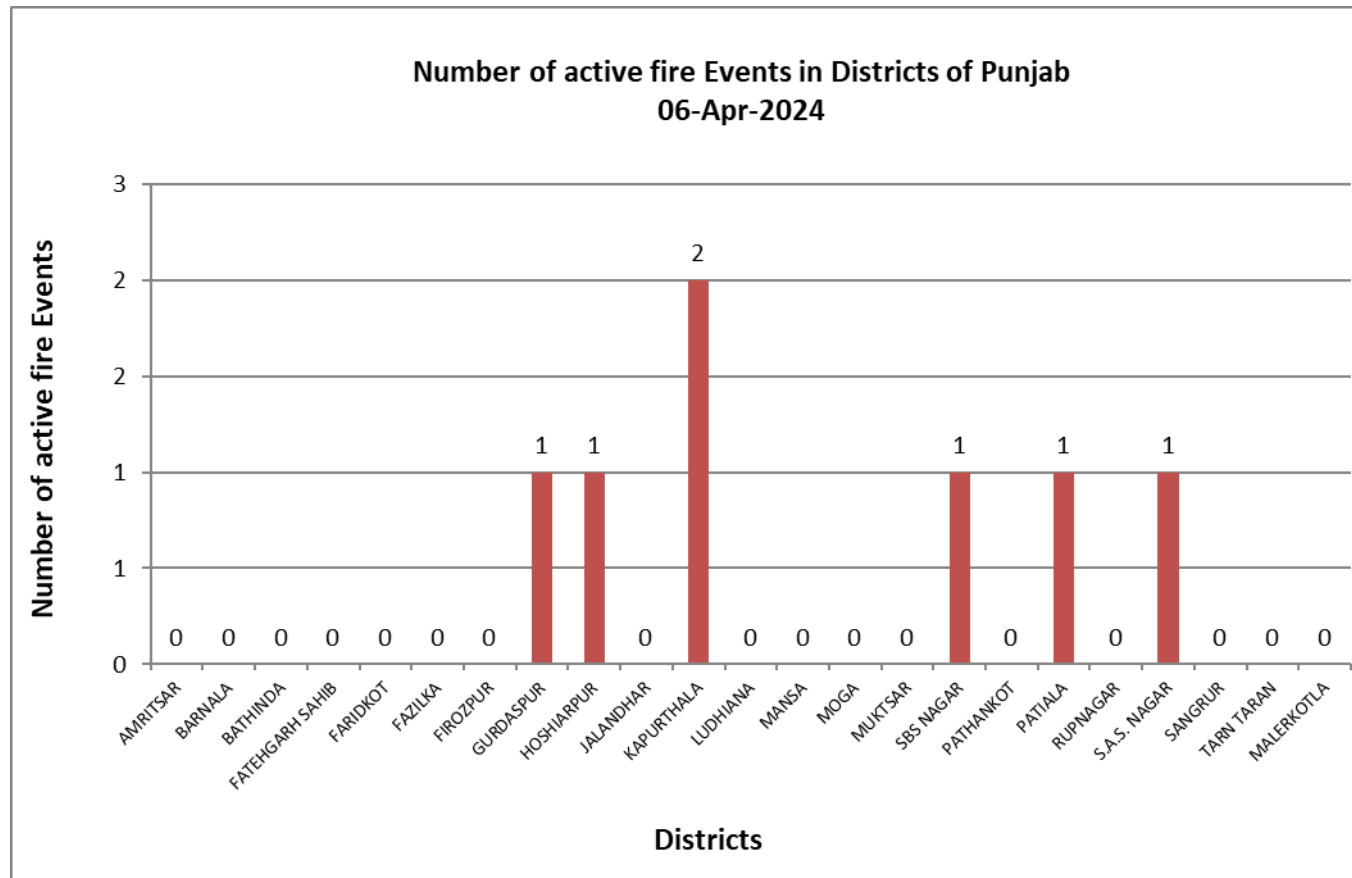


Fig. 1. District-wise fire incidents (Total events = 07) captured by Satellite in Punjab on 06 April 2024

On April, 06 2024, 07 active fire incidents were captured by the Satellite in state of Punjab.

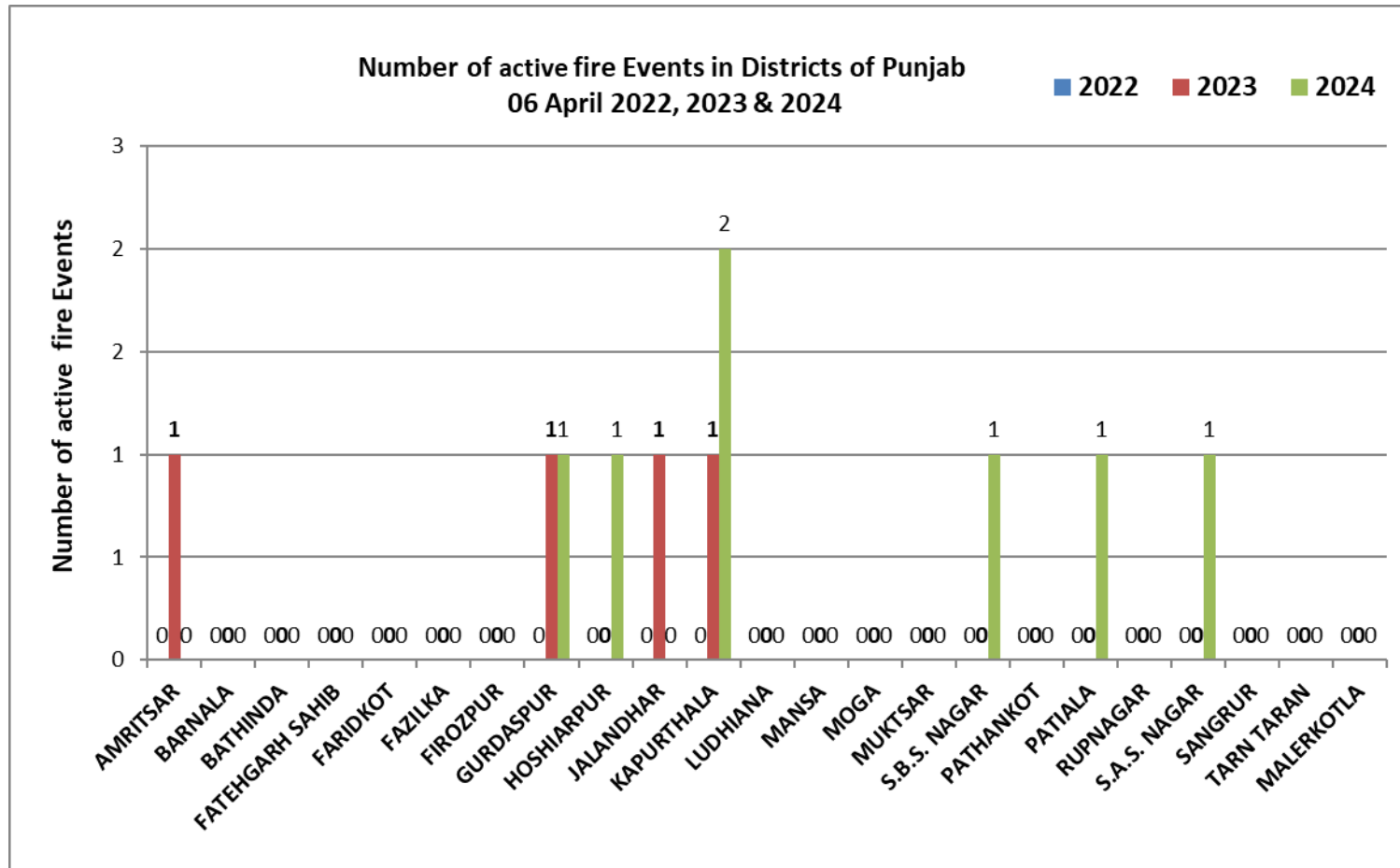


Fig 2 : District-wise comparison of fire incidents captured in Punjab on 06 April 2022, 2023 & 2024

On April, 05 2024, 07 active fire events were captured by the Satellite in state of Punjab. Whereas on the same day (i.e. April 06), in the year 2022, 00 active fire events were captured and in the year 2023 there were 04 active fire events in state of Punjab.

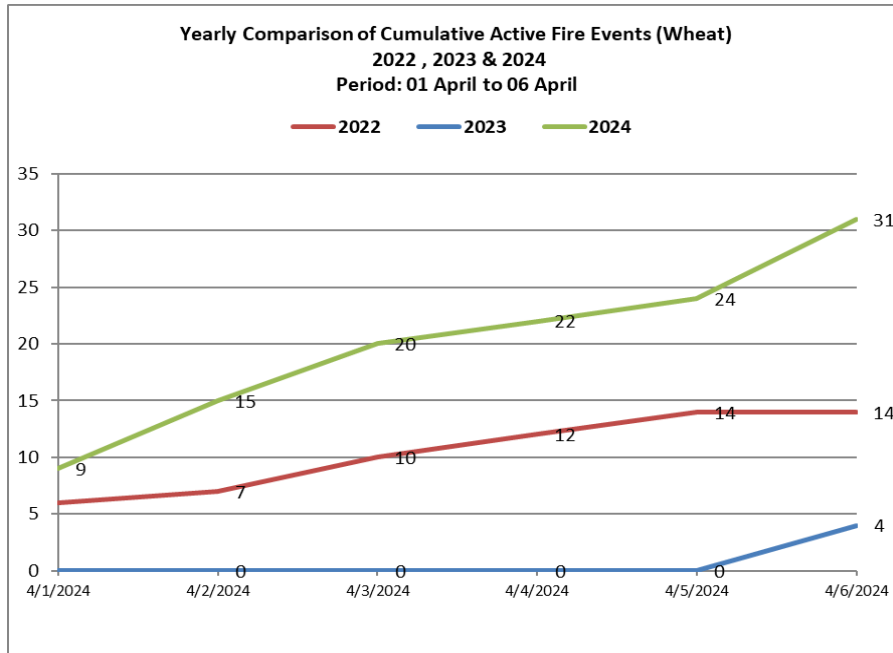


Fig 3 : Cumulative fire incidents captured in Punjab upto 06 April 2022, 2023 & 2024

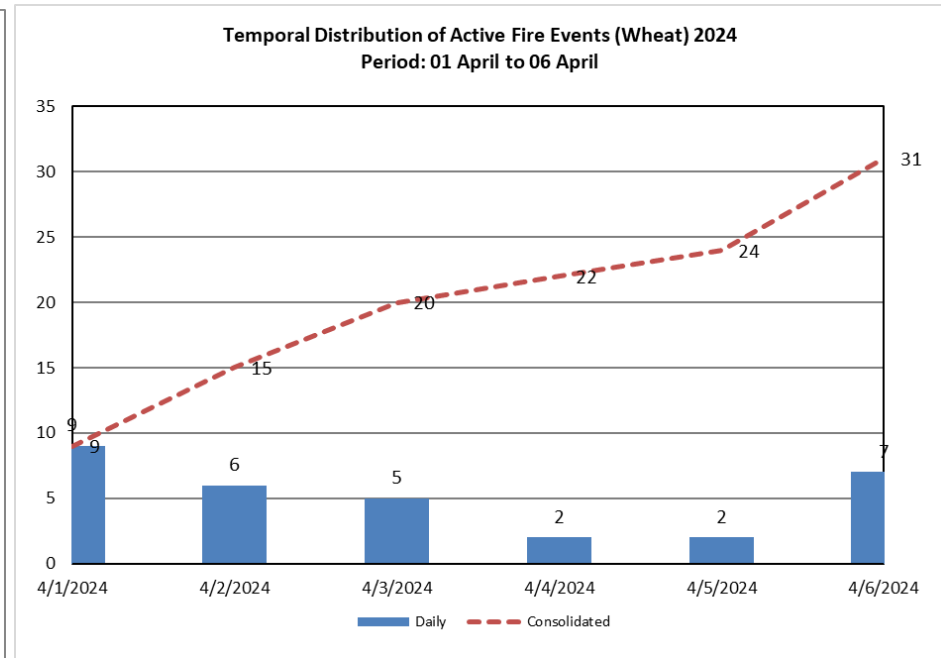


Fig 4: Date-wise Cumulative fire incidents captured in Punjab upto 06 April 2024



Map.1. Active fire locations detected in Punjab on 06 April 2024 by Satellite

Table.1. Active fire locations detected in Punjab on 06 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	31.97536	75.49340	8	3.6	npp	4/6/2024	2:13:17 PM	Gurdaspur	Gurdaspur	Kahnuwan	Fateh Pur	618	Purana Shalla Gurdaspur
2	31.56659	75.73714	8	4.1	npp	4/6/2024	12:33:00 PM	Hoshiarpur	Hoshiarpur	Hoshiarpur 1	Koont	122	Bullawal Hoshiarpur
3	31.27800	75.77400	75	26.6	mod	4/6/2024	10:19:07 AM	Kapurthala	Phagwara	Phagwara	Hargobind Garh	59	Sadar, Phagwara
4	31.27600	75.79100	53	9.1	mod	4/6/2024	10:19:07 AM	Kapurthala	Phagwara	Phagwara	Khatti	57	Sadar, Phagwara
5	30.45700	76.54400	64	10.2	mod	4/6/2024	2:18:14 PM	Patiala	Rajpura	Shambukalan	Sardar Garh	67	Kheri Gandian Patiala
6	30.76100	76.53000	58	8.7	mod	4/6/2024	10:19:07 AM	SAS Nagar	Kharar	Kharar	Machhi Pur	387	Kharar Mohali
7	31.14200	75.99100	55	8.9	mod	4/6/2024	10:19:07 AM	SBS Nagar	Nawan Shahr	Aur	Gunachaur	91	Sadar Banga Sbs Nagar

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
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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>