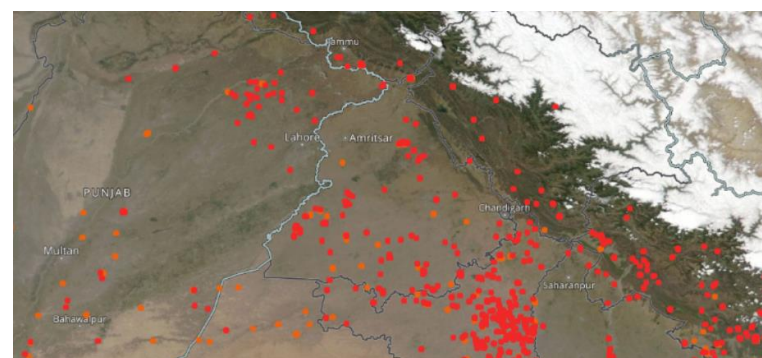


# MONITORING WHEAT RESIDUE BURNING IN PUNJAB USING GEOSPATIAL TECHNOLOGIES 2024



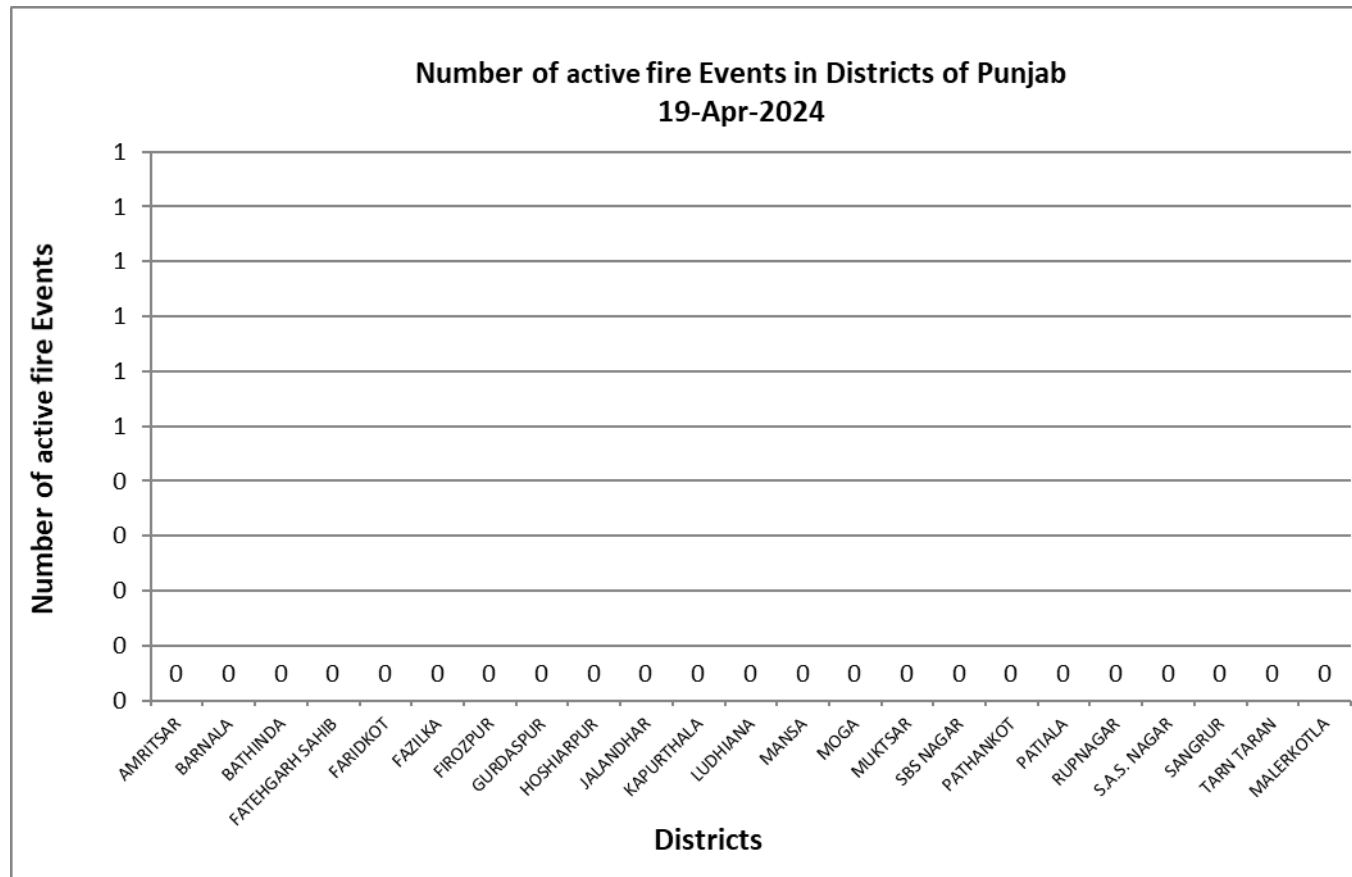
**Prepared By:**  
**Punjab Remote Sensing Centre, Ludhiana, Punjab**  
**for**  
**Punjab Pollution Control Board, Patiala, Punjab**



### **Highlights for 19 April 2024**

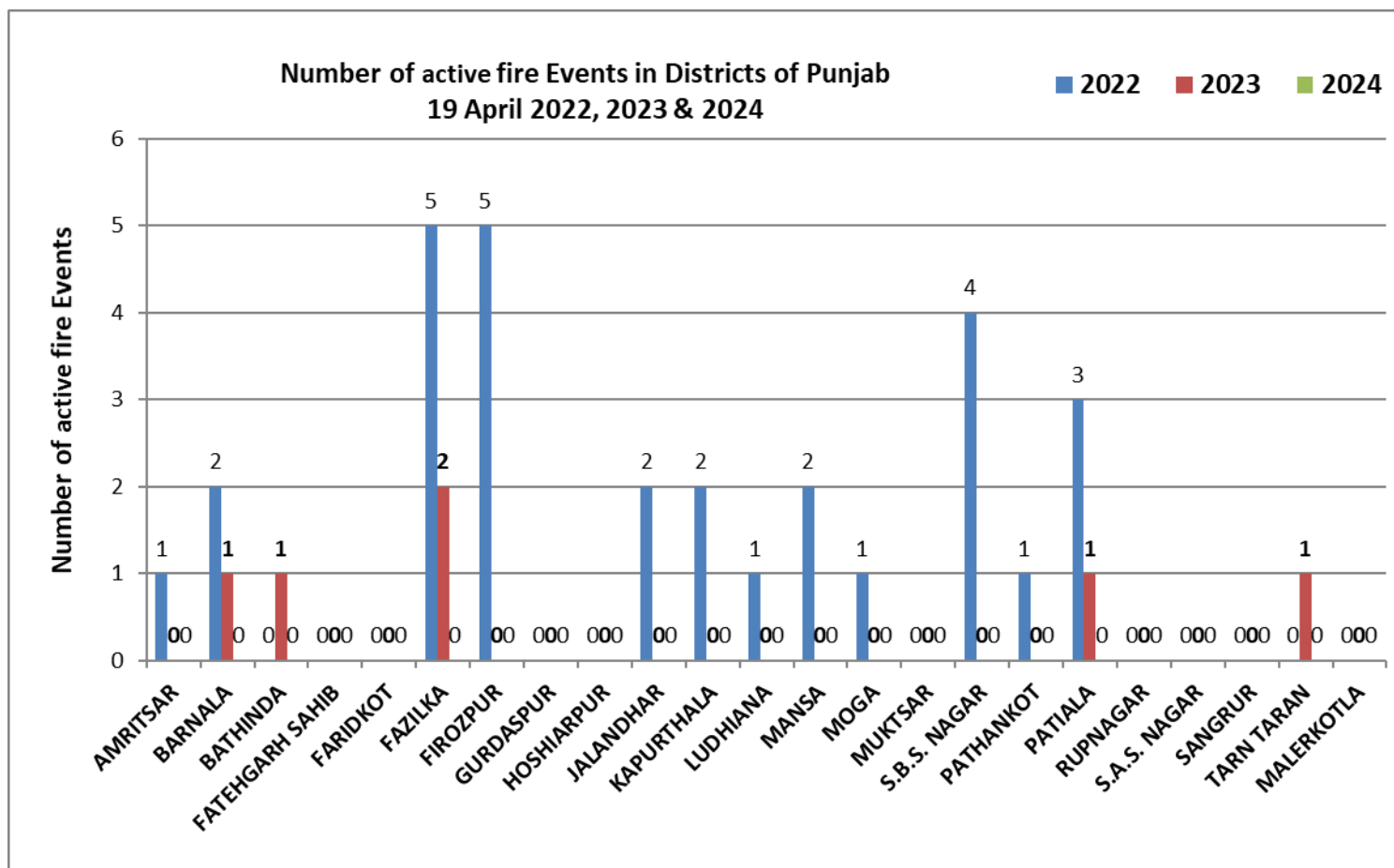
- The active fire incidents due to wheat residue burning were monitored using satellite remote sensing, following the new "Standard Protocol for Estimation of Crop Residue Burning Fire Events using Satellite Data" developed on the directions of "Commission for Air Quality Management in National Capital Region and Adjoining Areas".
- Satellites detected 00 incidents in the Punjab State on 19 April 2024.

### District-wise Active Fire Events in Punjab



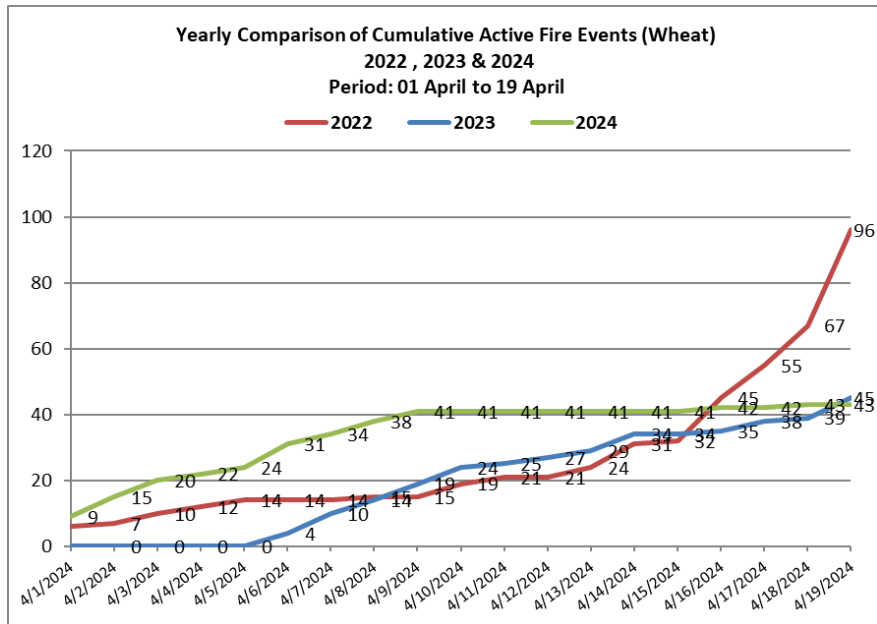
**Fig. 1. District-wise fire incidents (Total events = 00) captured by Satellite in Punjab on 19 April 2024**

On April, 19 2024, 00 active fire incidents were captured by the Satellite in state of Punjab.

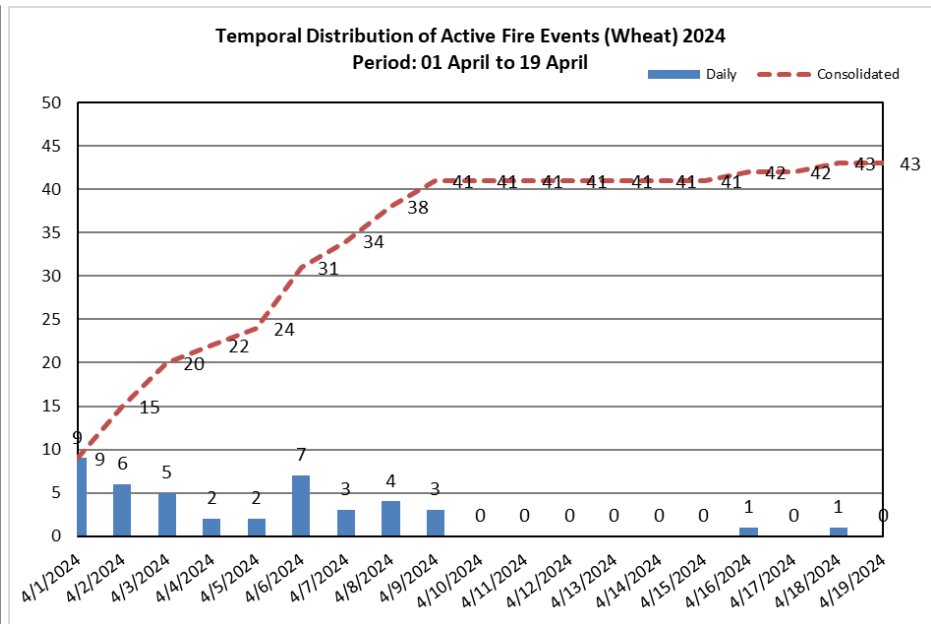


**Fig 2 : District-wise comparison of fire incidents captured in Punjab on 19 April 2022, 2023 & 2024**

On April, 19 2024, 00 active fire events were captured by the Satellite in state of Punjab. Whereas on the same day (i.e. April 19), in the year 2022, 29 active fire events were captured and in the year 2023 there were 06 active fire events in state of Punjab.



**Fig 3 : Cumulative fire incidents captured in Punjab upto 19 April 2022, 2023 & 2024**



**Fig 4: Date-wise Cumulative fire incidents captured in Punjab upto 19 April 2024**



● Active Fire Events

**Map.1. Active fire locations detected in Punjab on 19 April 2024 by Satellite**

**Table.1. Active fire locations detected in Punjab on 19 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 |
|--|----------|-----------|-----------------------|-------------------------|-----|----------|---------|----------|--------|-------|---------|------------|-------|
|  |          |           |                       |                         |     |          |         |          |        |       |         |            |       |
| There are No Active Fire Events captured Today |          |           |                       |                         |     |          |         |          |        |       |         |            |       |
|  |          |           |                       |                         |     |          |         |          |        |       |         |            |       |

**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>