



Bulletin No. 3

Events Date:
17-Sep-2021

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17-Sep-2021



MONITORING PADDY RESIDUE BURNING IN INDIA USING SATELLITE REMOTE SENSING DURING 2021



Prepared by:

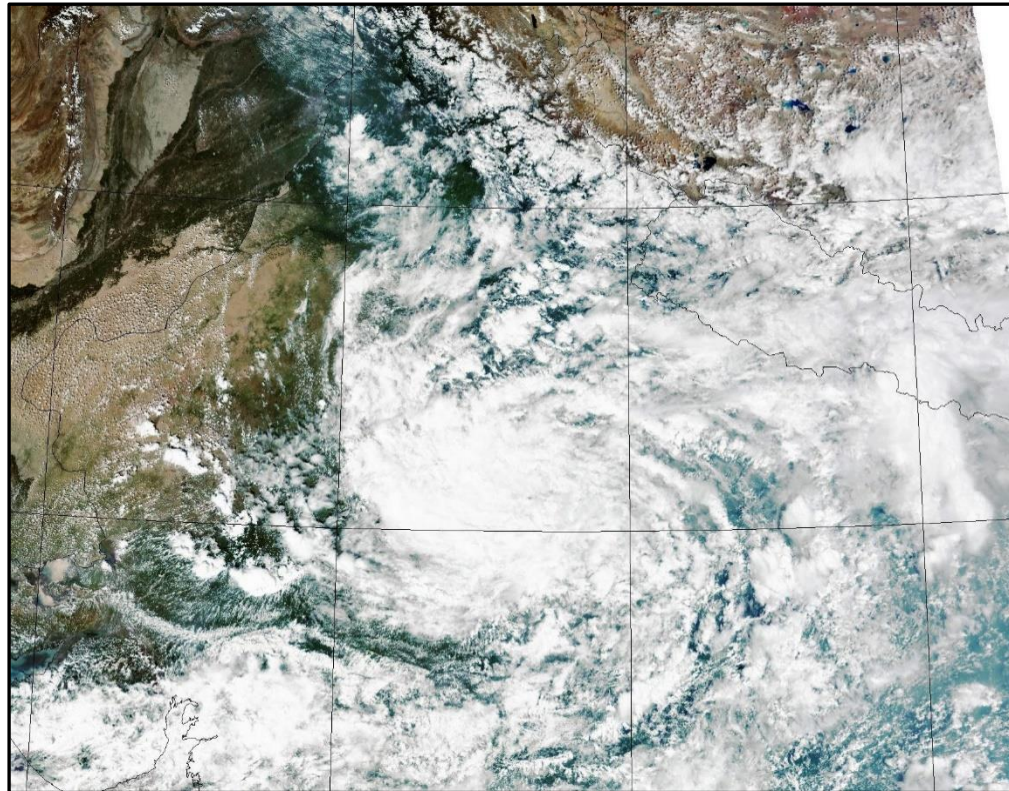
Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) Laboratory,
Division of Agricultural Physics, ICAR – Indian Agricultural Research Institute, New Delhi – 110012

<http://creams.iari.res.in>

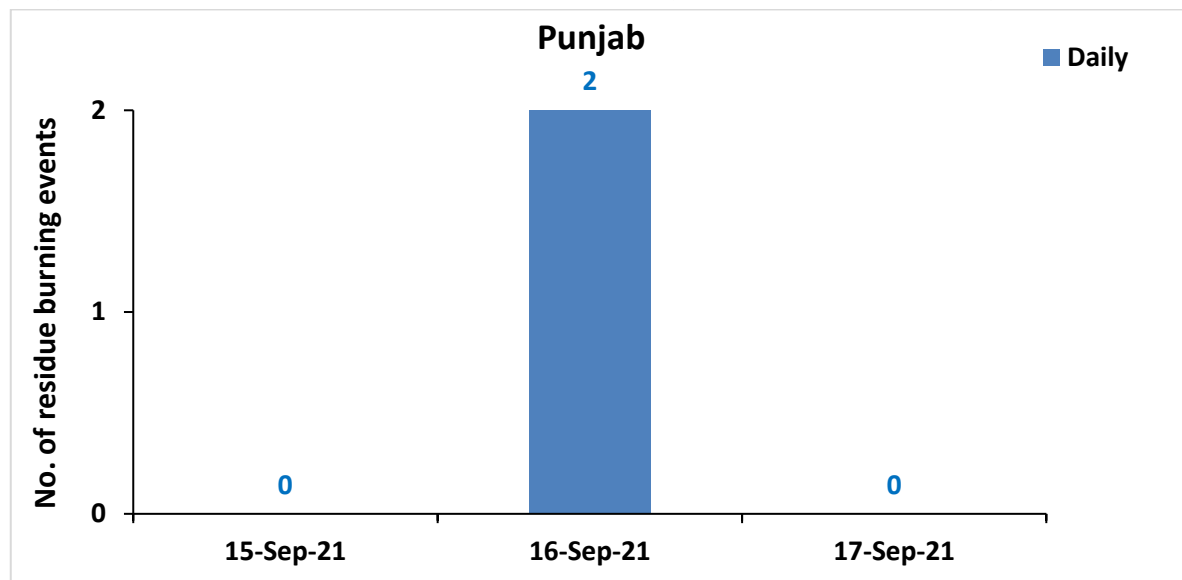
Highlights for 17-September-2021

- The active fire events due to rice 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 0 residue burning events in the six study States on 17-Sep-2021.
- The state wise events detected on 17-Sep-2021 were 0 in Punjab, 0 in Haryana, 0 in UP, 0 in Delhi, 0 in Rajasthan and 0 in MP.
- Detection of burning events by satellites was hampered due to cloud cover over Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, Delhi, and Eastern Rajasthan.

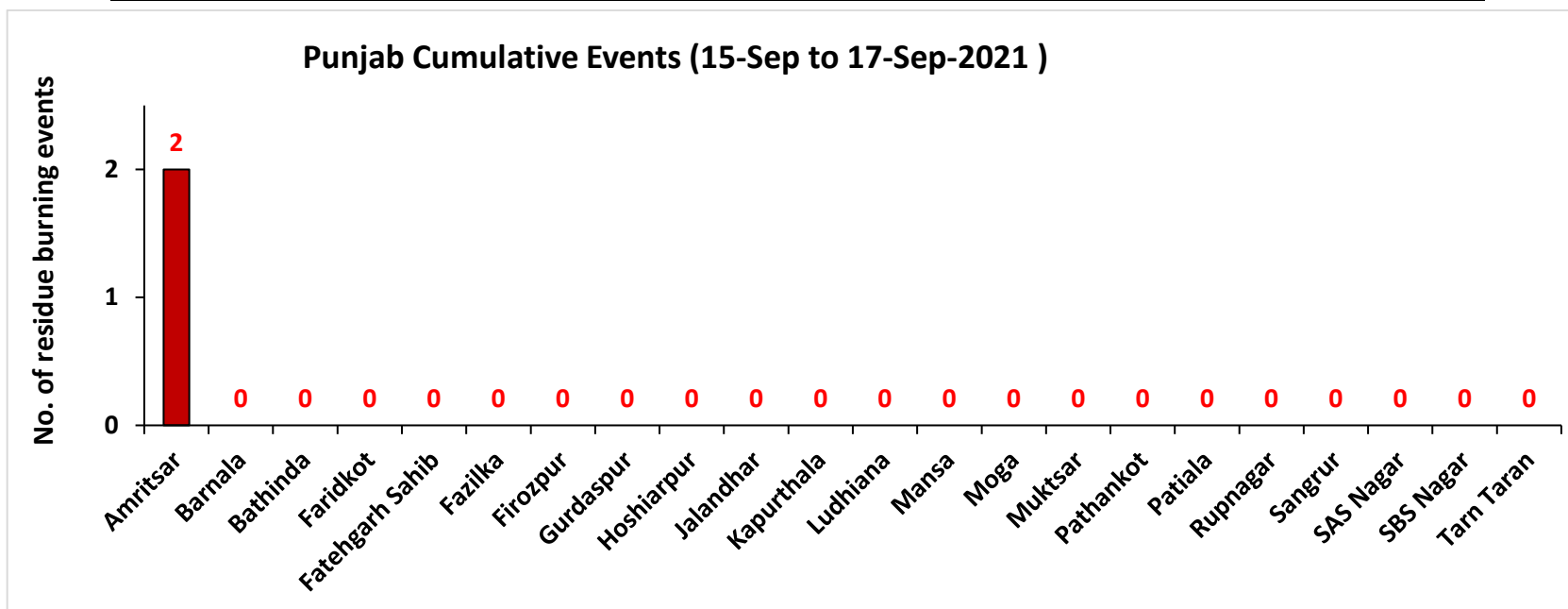
[S-NPP \(VIIRS\) Satellite image \(TCC\) of North and Central India Acquired on 16-Sep-2021 at 14:57 IST by IARI Ground Station](#)



Temporal distribution of rice residue burning events for the study States in 2021



District-wise cumulative number of residues burning events in Punjab (15-Sep to 17-Sep 2021)



The study used data received at NRSC Hyderabad Ground Station from following Satellites

S. No.	Satellite Name	Sensor	Resolution (meter)	Day / Night Passes
1.	Suomi NPP	VIIRS	375 / 750	Both
2.	Terra	MODIS	1000	Both
3.	Aqua	MODIS	1000	Both

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

Study Team

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GIS Maps of fire events can be visualized online on ICAR KRISHI Geoportal website: <http://geoportal.icar.gov.in:8080/geoexplorer/composer/>
(Part of KRISHI Portal: <https://krishi.icar.gov.in> initiative)
