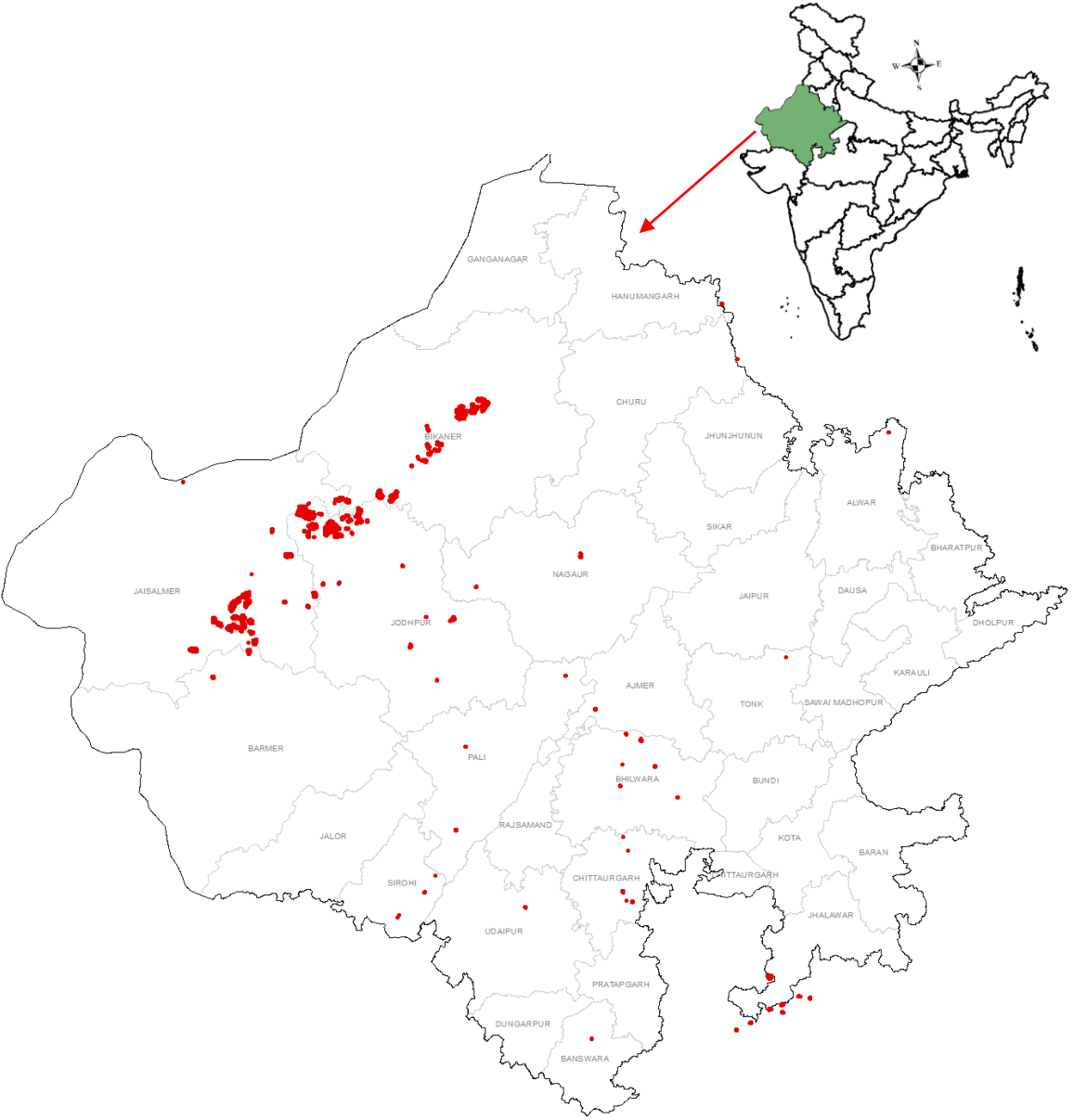
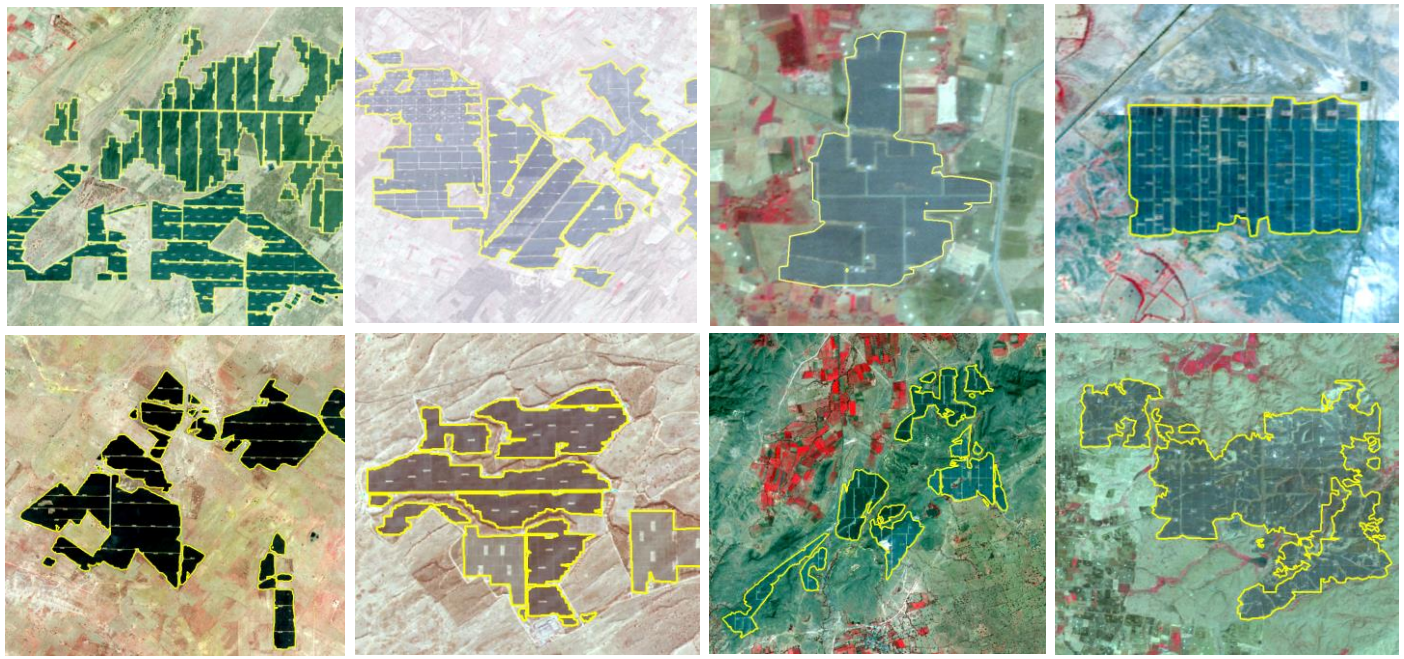
AI based Solar power plants extraction for Rajasthan from Resouresat LISS IV data



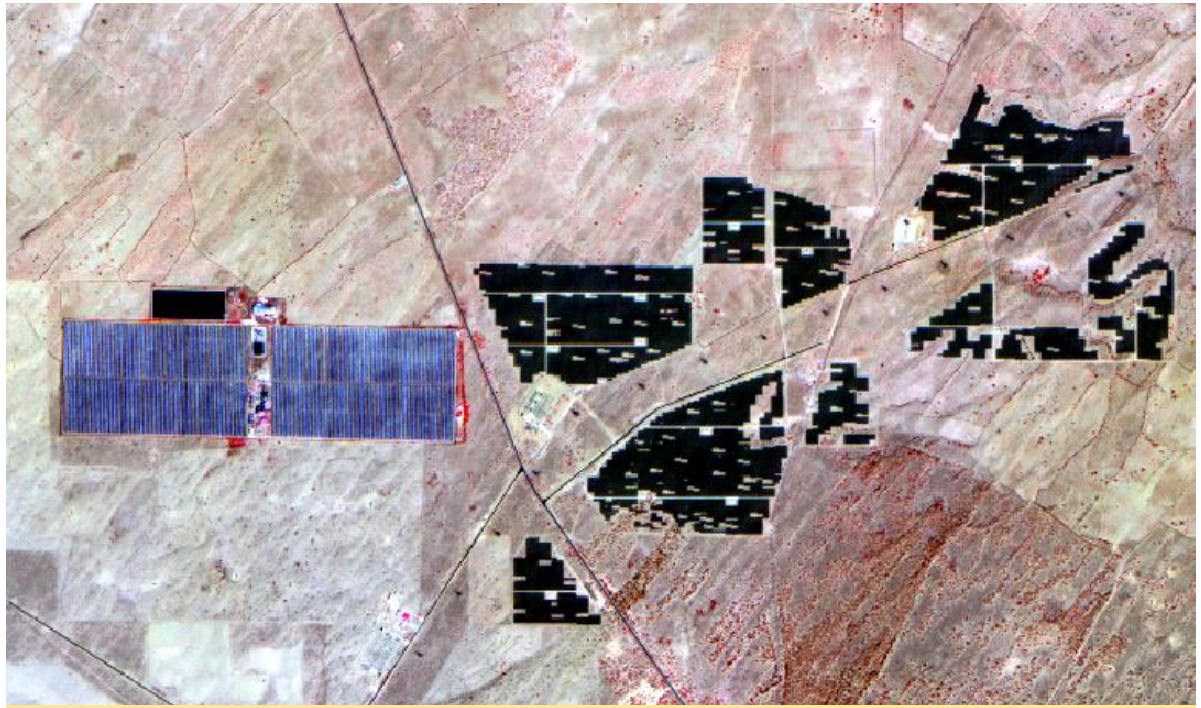
Solar power plants extracted from R2A LISS IV data for year Jan-April, 2023.



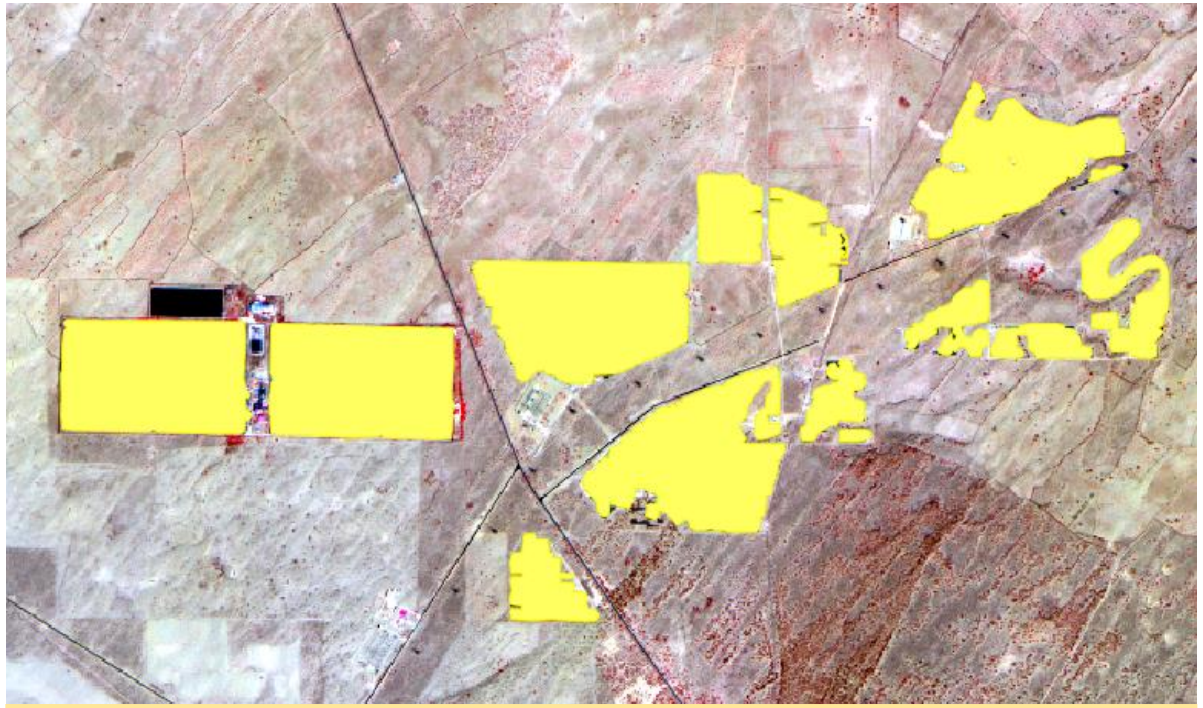
Solar power plants extracted across Rajasthan from R2A LISS IV data using Artificial Intelligence model .

Description

Solar power plants are extracted for Rajasthan state using artificial intelligence based deep learning neural network for year (Jan-April) 2023. Indian Remote sensing (IRS) Resourcesat-2A LISS IV satellite data is used with 5m ground spatial resolution and three spectral bands green, red and NIR. This work is carried under TDP- 202302021, title "*Deep learning Based Solar Plants Identification using high-resolution remote sensing data*". It is available in "New and Renewable Energy Applications" under VEDAS. All India level solar power plants extraction utilizing IRS data is in progress. Available at https://vedas.sac.gov.in/renewable-energy/index.html

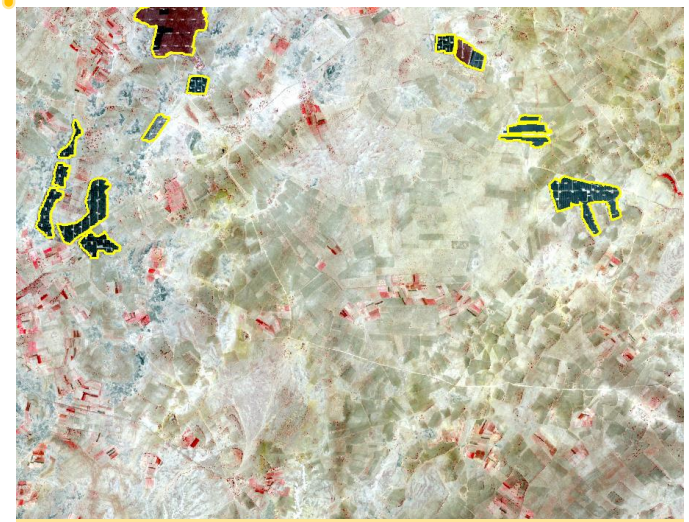


Resourcesat-2A LISS-IV FCC satellite data, 24th April, 2023

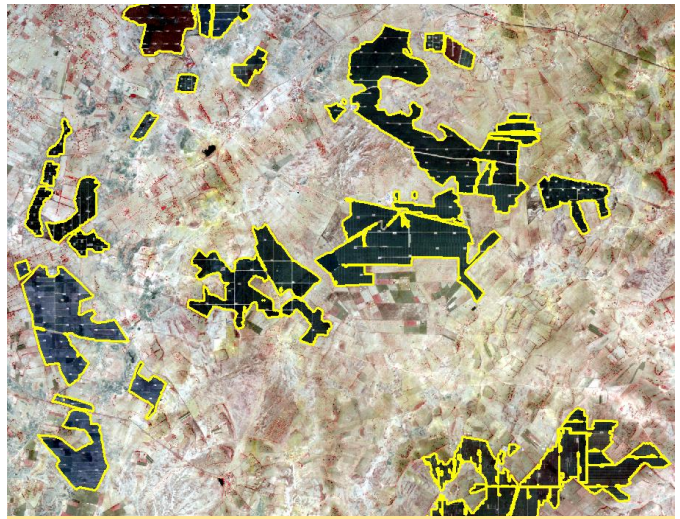


Solar Panels extracted using AI-Deep learning, 24th April, 2023

Temporal Change of Solar Plants in Rajasthan from year 2018 to 2023



Extracted Solar Panels in 16th March, 2018



Extracted Solar Panels in 24th April, 2023

Temporal change analysis of Solar Plants for the Rajasthan state from year 2018 till 2023 is done using Resourcesat-2A LISS-IV data. It is found that in past five years solar power plants inventories are increased nearly six times.