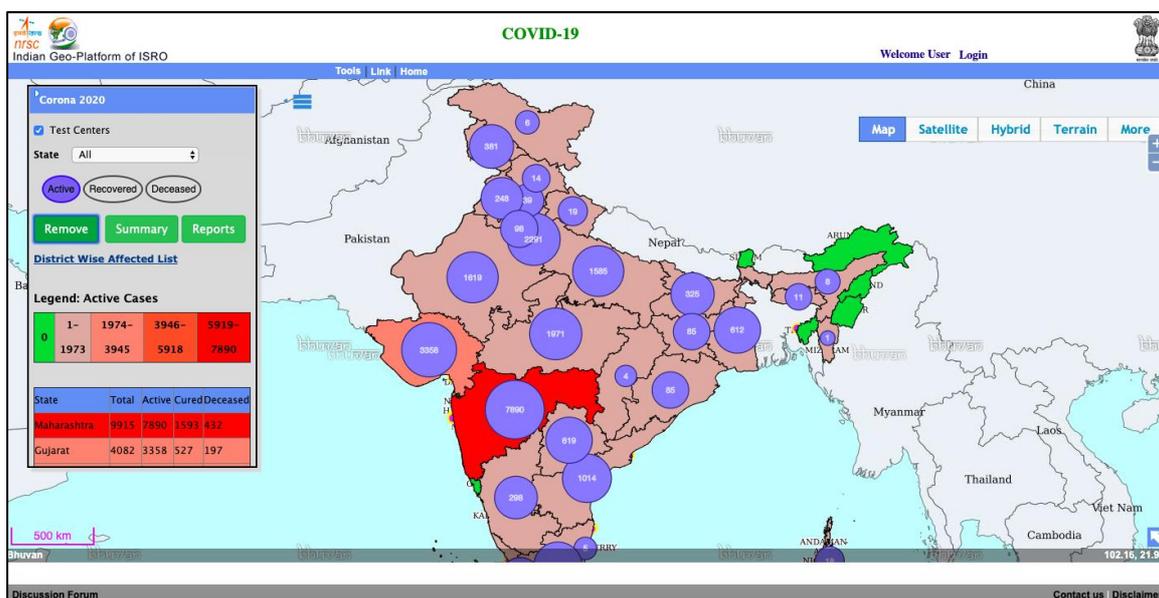


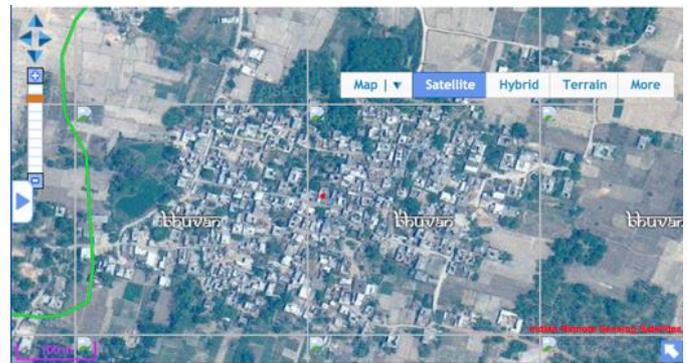
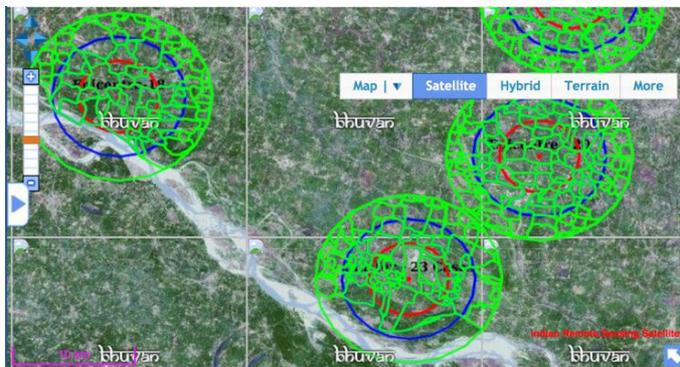
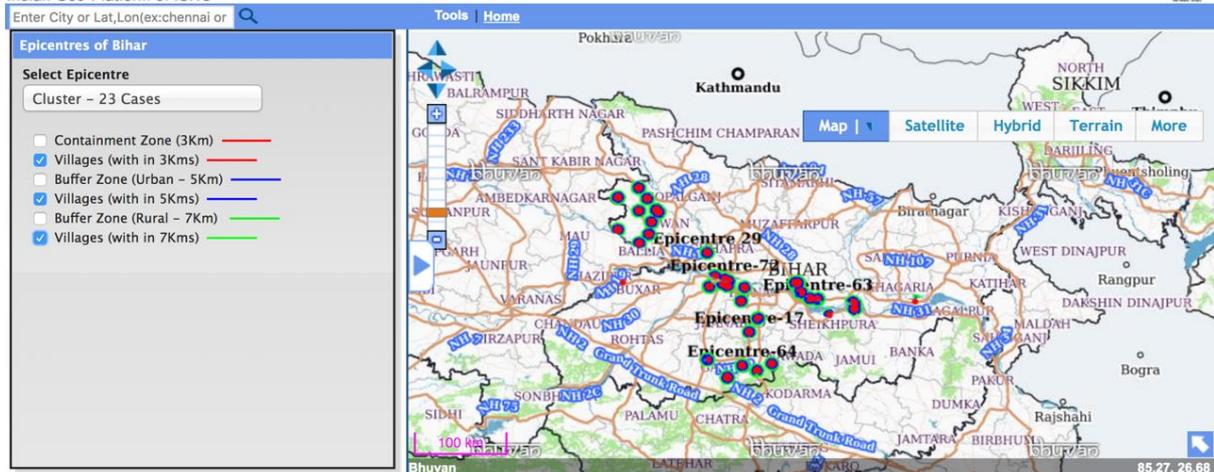
COVID-19 related studies in India

Indian Space Agency, ISRO Support

ISRO, Department of Space is supporting various States (Provinces) by providing Geo-spatial tools and location based solutions to fight against COVID-19, including national level Corona virus tracker. At the same time, ISRO also carried out studies to assess the benefits that accrued due to lockdown in the country and the major portion of the globe, in terms of reduced air pollution and water pollution over India.



- It is very complex proposition to fight COVID-19 in a country like India that hosts about 1.3 billion population, in addition to a huge population of livestock and pets. However, appropriate counter to this challenge has been taken up at the highest level and necessary directions are being given to the entire country by our Hon'ble Prime Minister himself. Towards this, ISRO has customised Geo-portal 'Bhuvan-COVID-19' at national level as part of Covid-19 tracker to update common public on the current situation.
- For Bihar State, a unique tool is deployed that helps in mapping the Epicenter of the infections and depict containment zone Or hotspots for containment with tertiary buffer zones to manage the requirements of the people. This is implemented as per stipulated Govt. regulations/strategy to effectively contain the virus. This tool is helping various districts in Bihar State (North Indian State) for easily identifying the villages, population, etc in the containment zones, as very high resolution satellite images are able to provide household level information for management at local level.



- Similarly, in Telangana State (South Indian State), location based services are enabled using mobile App linked to Geo-portal 'Bhuvan-COVID-19' that helps in services of mobile vegetable market at different places in Hyderabad. More than 150 wards residents are provided with vegetables and other requirements at their doorsteps and also GNSS based tracking of vegetable vans is also enabled for the public to know the vehicle movements and location. Such tools help in providing technology based information updates and support to livelihood under such critical conditions.
- There are many such solutions also being provided to people in Tamilnadu and other places. This clearly proves that under such crisis, simple geospatial solutions

adoption helps local government in addressing many important issues that are people-centric.