





## Bhoonidhi Vista Online Visualization and Exploration of Multi-mission EO data

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- Satellite data has been employed for many societal applications, including change detection, feature monitoring, and disaster support.
- The pre-requisite for some of these applications is to visualize the geo-referenced satellite data with overlays of administrative or feature layers to identify the regions.
- Efficient visualization has been proven to provide solutions for diverse applications ranging from navigation to disease monitoring





ISRO's EO data hub



nrsc



We enable access to our extensive archive of Remote Sensing data from 44 satellites, including Indian and Foreign Remote Sensing sensors acquired since 1986./ We also facilitate the Regional distribution of Sentinel, R LandSat (8 & 9) data in India.



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VISTA Visualize at Full Resolution







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https://bhoonidhi.nrsc.gov.in





## Introduction

## **Bhoonidhi VISTA** - Visualization of Terrestrial Acquisitions is a visualization portal providing full resolution multi-mission data visualization capabilities

### nrsc

With Vista, Users can visualize the latest view of India captured by Indian and other EO sensors in native resolution.







## **Salient Features**

Multi Mission- Multi Sensor support



Visualization layers published incrementally upon each acquisition



Multiple Visualization and analysis modes



Bhoonidhi-VISTA Time Lapse animation







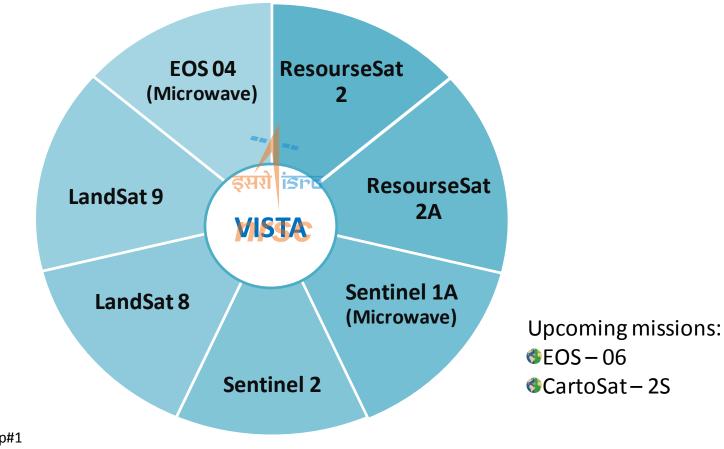
# Visualization & Analysis Modes

- Day-wise layer visualization
- Date-range visualization
- Latest cycle visualization
- Change visualization through time-lapse animation over selected AOI
- Change analysis using comparison slider
- Selementary impact measurement using measurement tools





# **Missions Supported**









## **Additional Capabilities**

- Provides essential insights for decision-making in diverse application domains.
- Saves users the need to search, download/purchase satellite data and process it for visualization.
- Administrative and infrastructure overlays are available for the users to overlay on visualization layers.







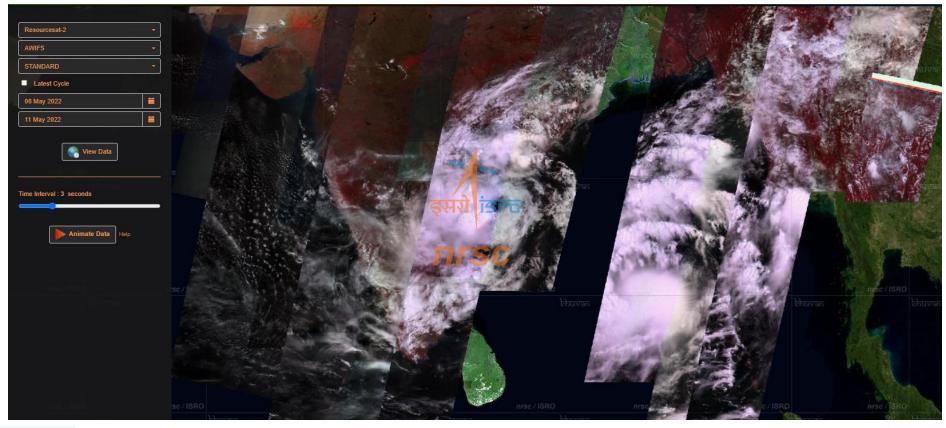


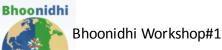


## Cyclone Gulab: RS2 AWIFS: 27 Sep 2021

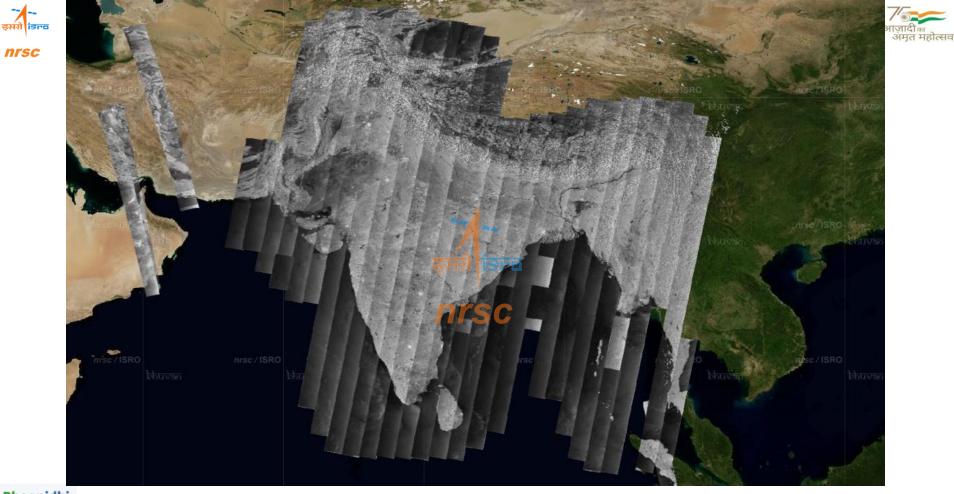








## Cyclone Asani: RS2 AWIFS: 8-11 May 2021

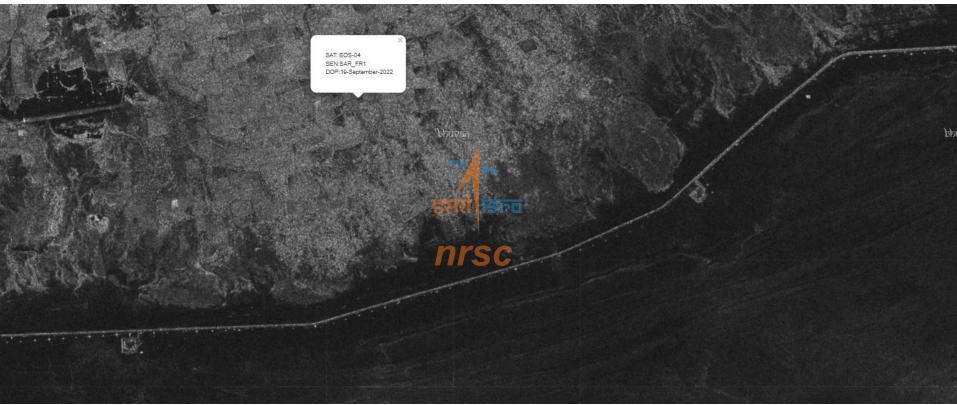


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EOS-04 SAR-MRS - Full cycle - India coverage





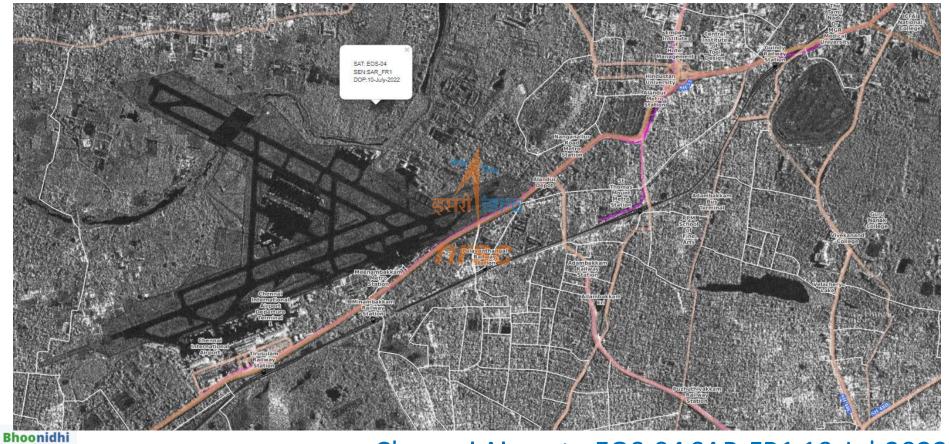


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## Western International Fence EOS-04 SAR-FR1 19 Sep 2022

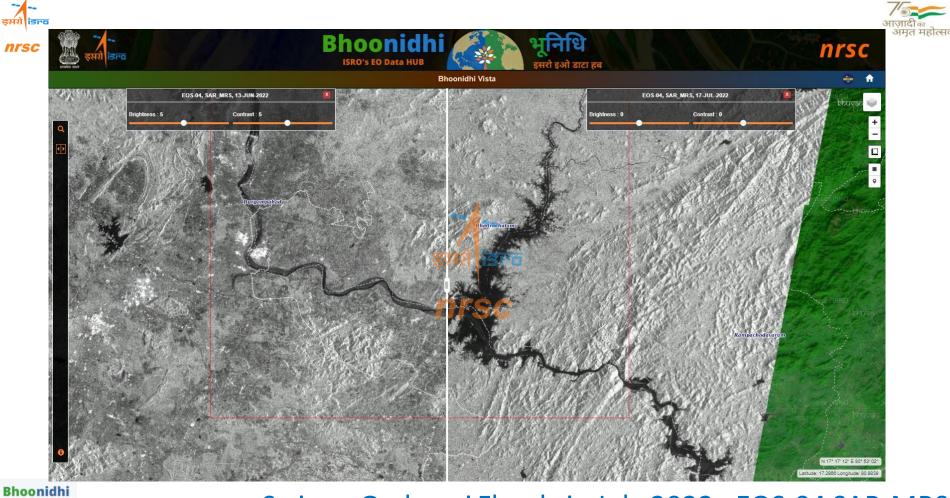






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## Chennai Airport - EOS-04 SAR-FR1 10-Jul-2022

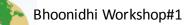


Swipe - Godavari Floods in July 2022 - EOS-04 SAR-MRS

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### Pakistan Floods in Sep 2022 – RS2 AWiFS



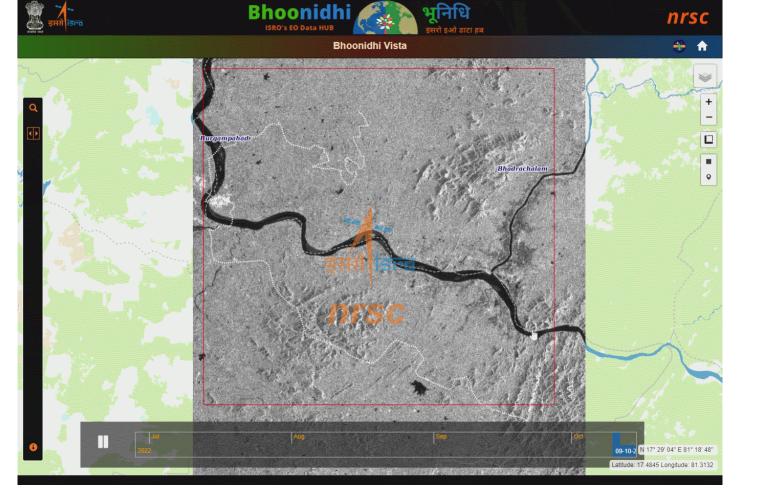




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### Comparison - Pakistan Floods in Sep 2022 – RS2 AWiFS







## Bhoonidhi Workshop#1 Time-lapse animation – Floods in Godavari river - 2022

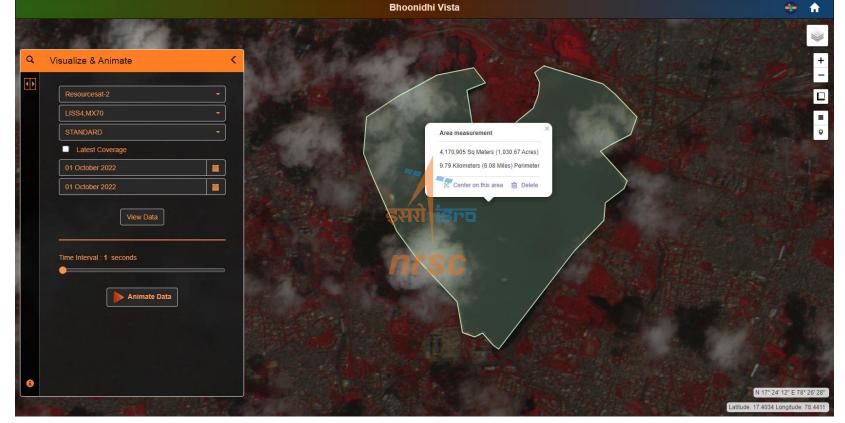












## Measurement – Hussain Sagar Lake, Hyd RS2 LISS4 -01 October2022









