BHOONIDHI NEW RELEASES

Indian Space Policy 2023 implemented at Bhoonidhi for EO data dissemination.

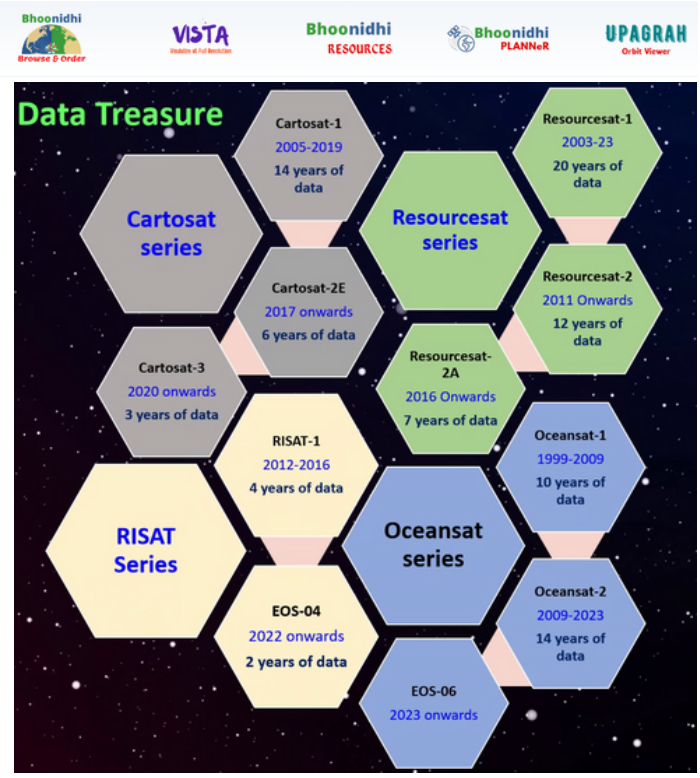
- Data of 5m spatial resolution & coarser made accessible as free data to all
- Data finer than 5m spatial resolution made available free for all Government agencies, with declaration
- Derived thematic IRS data made available free to all
- EO data dissemination on 'commercial' basis by NSIL for Non Government Entities (NGEs) through Bhoonidhi

New Product Additions @ Bhoonidhi

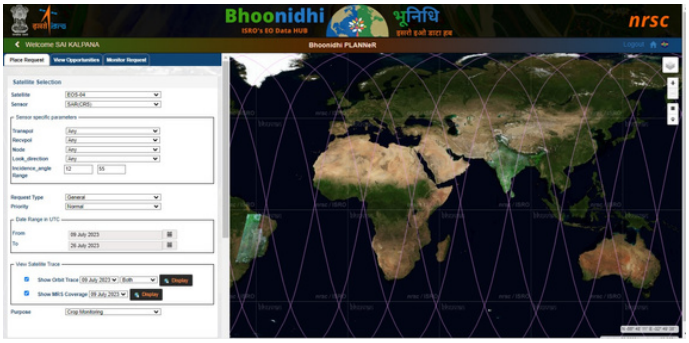
- Cartosat-3 new products
- EOS-06 SCAT L4WW products (2-day, 7-day, 15-day rolling mean)
- Resourcesat-2 AWiFS 10deg x 10deg Tiles (5-day, 15-day composites) @100m
- Resourcesat 1&2 AWiFS 1deg x 1deg Tiles, Liss3 15min x 15min tiles

Bhoonidhi PLANNeR released for placing EOS-04 fresh acquisitions.

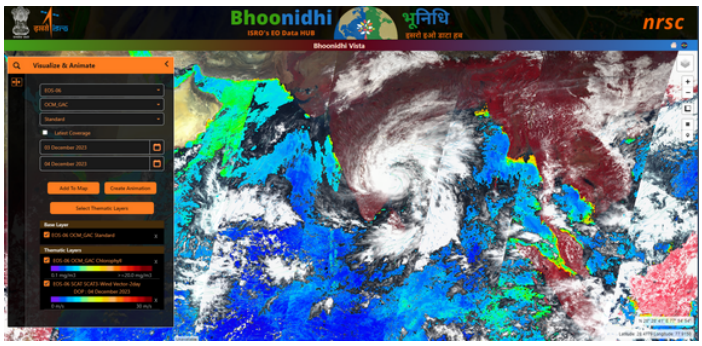
Multi-layer visualization in Bhoonidhi Vista



BHOONIDHI PLANNER



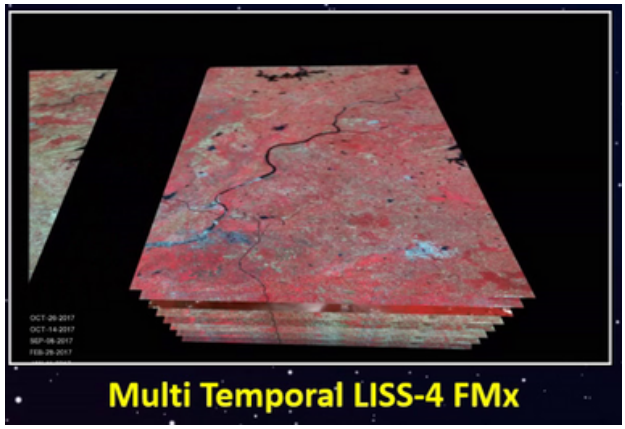
MULTI LATER VISUALISATION OF MICHAUNG CYCLONE



OPEN DATA DISSEMINATION@BHOONIDHI AS PER INDIAN SPACE POLICY 2023

5m and coarser spatial resolution EO IRS Satellite Data (Open for ALL)

- Resourcesat-1, 2, 2A
- Oceansat-1, 2
- Scatsat-1
- IMS-1
- SARAL
- IRS-1A, 1B, 1C, 1D, P2, P3
- RISAT-1 : CRS, MRS modes
- EOS-04 (Risat-1A): CRS, MRS modes
- EOS-06: OCM3-LAC, OCM3-GAC, SCAT-3

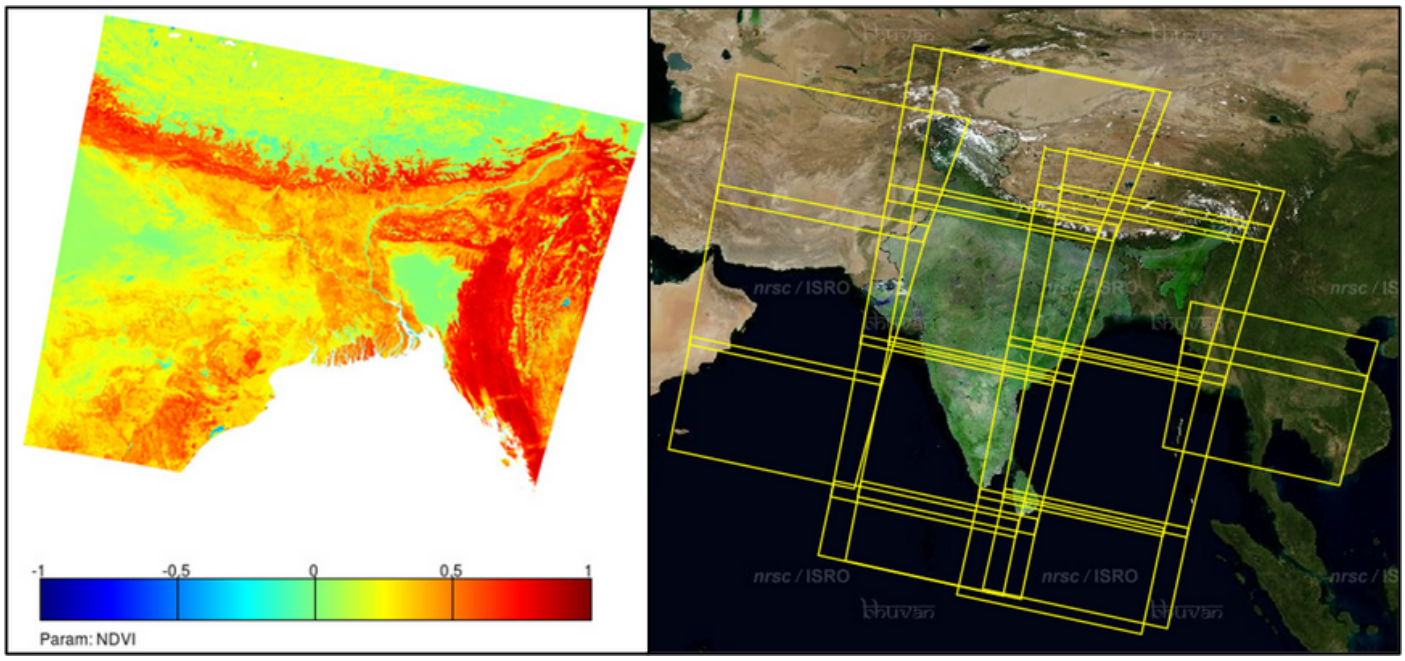


EO IRS Satellite derived Thematic Data (Free)

Thematic data products available at Bhoonidhi

- Chlorophyll
- Global wind
- Global Sigma0 (Horizontal and Vertical)
- NDVI
- Remote Sensing Reflectance
- Soil Moisture
- Suspended Sediments
- Tiles
- Total Suspended Matter
- Vegetation fraction

EOS 06 OCM LAC NDVI COLLECTION DATA @ BHOONIDHI FROM JAN 1ST TO 4TH 2023



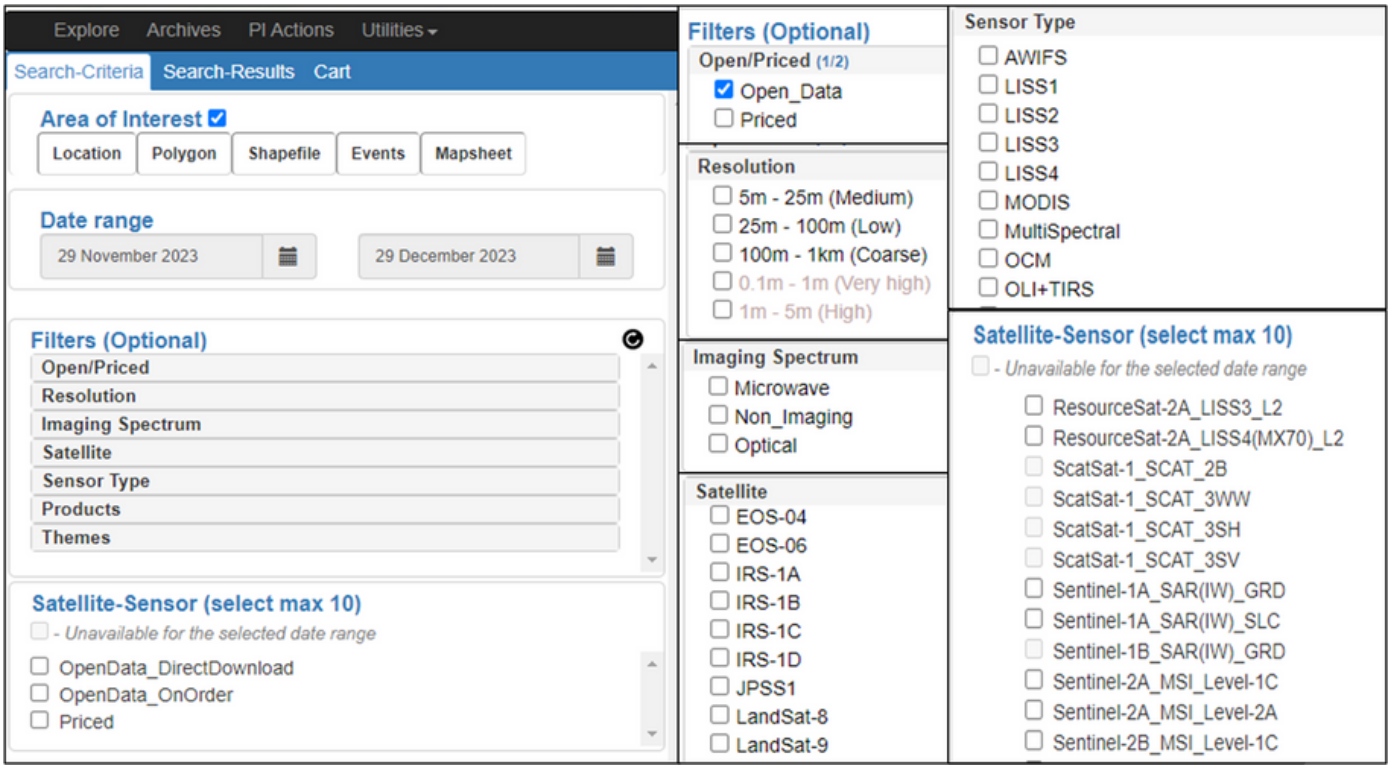
Finer than 5m High Resolution EO IRS Satellite Data (Priced for NGE)

- Cartosat-1
- Cartosat-2S
- Cartosat-3
- RISAT-1
  - FRS-1 mode
  - FRS-2 mode
- RISAT-1A
  - FRS-1 mode
  - FRS-2 mode
- DEM(Finer than 30 m)

INDIAN SPACE POLICY 2023 IMPLEMENTED FOR EO DATA DISSEMINATION

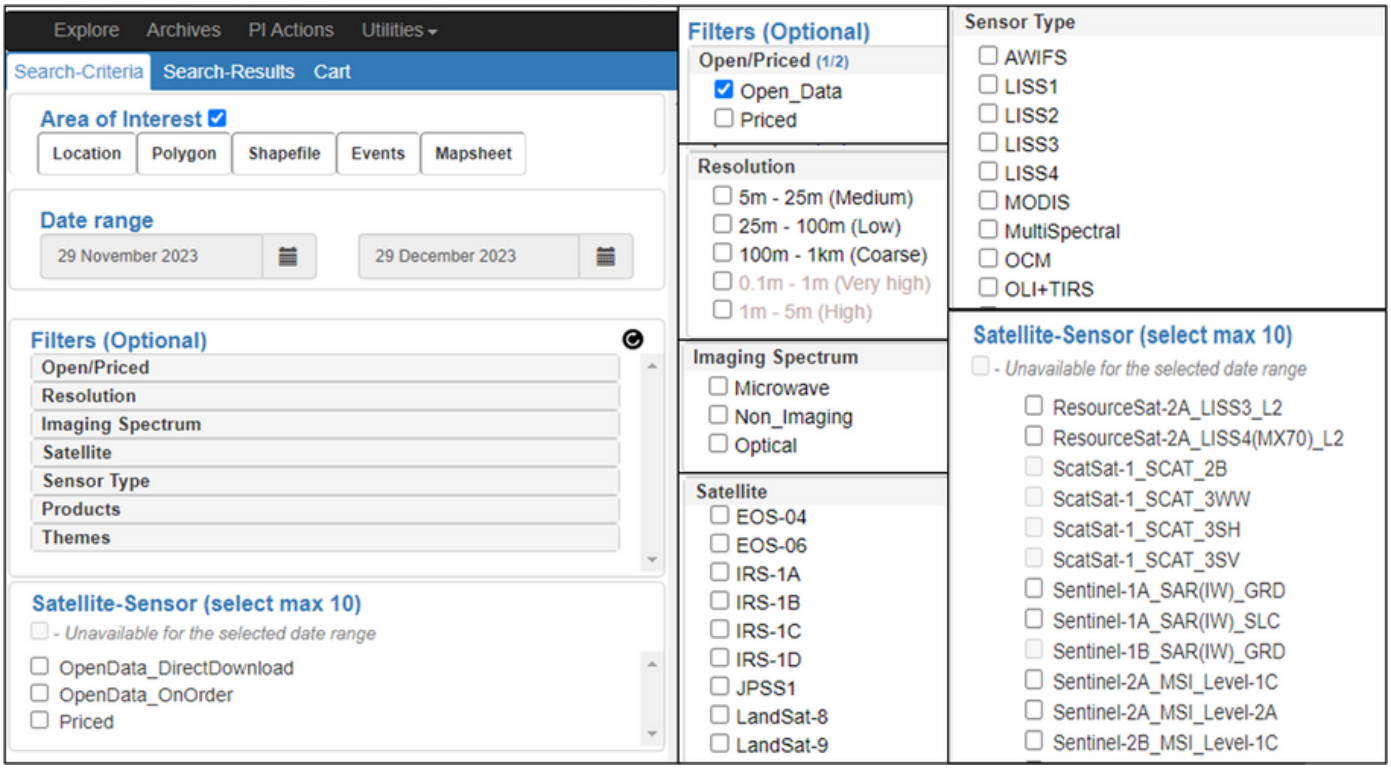
- ISRO's Earth Observation Data Portal Bhoonidhi serves as the Gateway to access the open data resources.
- Students. Researchers and Industry professionals are now empowered with valuable data.
- Categorization as Open Data, Open On-Order Data and Priced as per the Indian Space Policy 2023 is made at Bhoonidhi.
- Ease of Browsing & ordering by introducing new filter based search, new CART interface, color coded map display, etc.
- User can now search the desired data by using filters like Open/Priced, Resolution, Imaging Spectrum, Satellite, Sensor Type, Products, Themes etc.
- Resolution based search: with advanced satellite-sensor specific filtering like polarization, look direction, node and incidence angle range for EOS-04 and path-row selection for EOS-06

DATA SELECTION FILTERS FROM MULTIPLE SATELLITE SENSORS

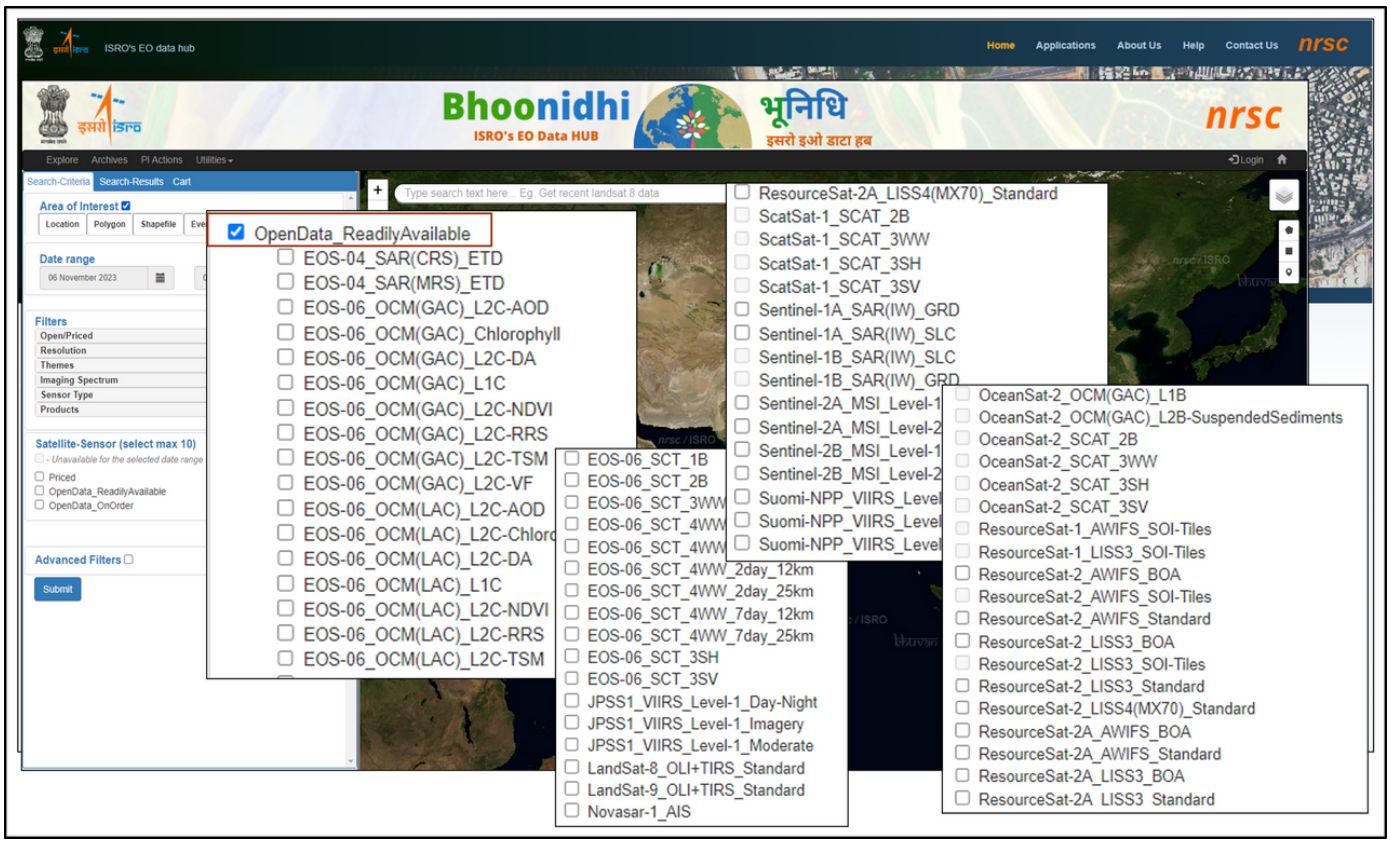


BHOONIDHI NEWSLETTER

DATA SELECTION FILTERS FROM MULTIPLE FILTERS



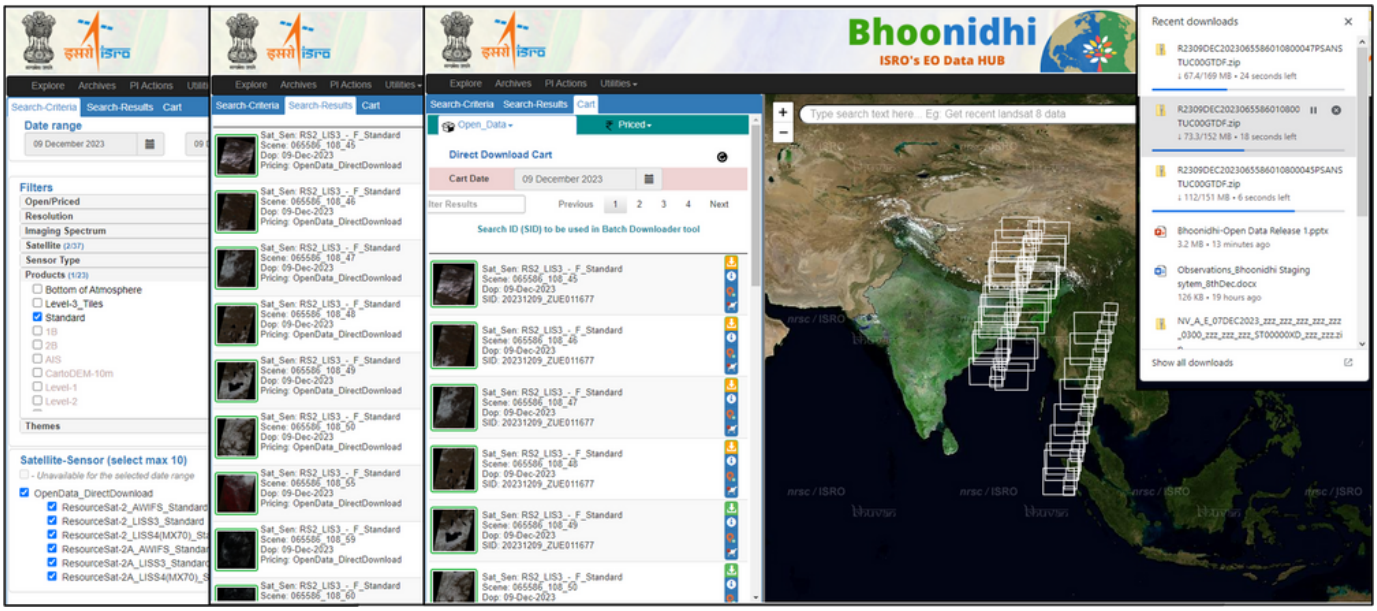
Bhoonidhi hosts huge repository of IRS and Non-IRS satellite data catalogue since 1988; fresh acquisitions added on a daily basis covering INDIA and surroundings; while facilitating regional distribution of Sentinel and LandSat-8/9 data in India.



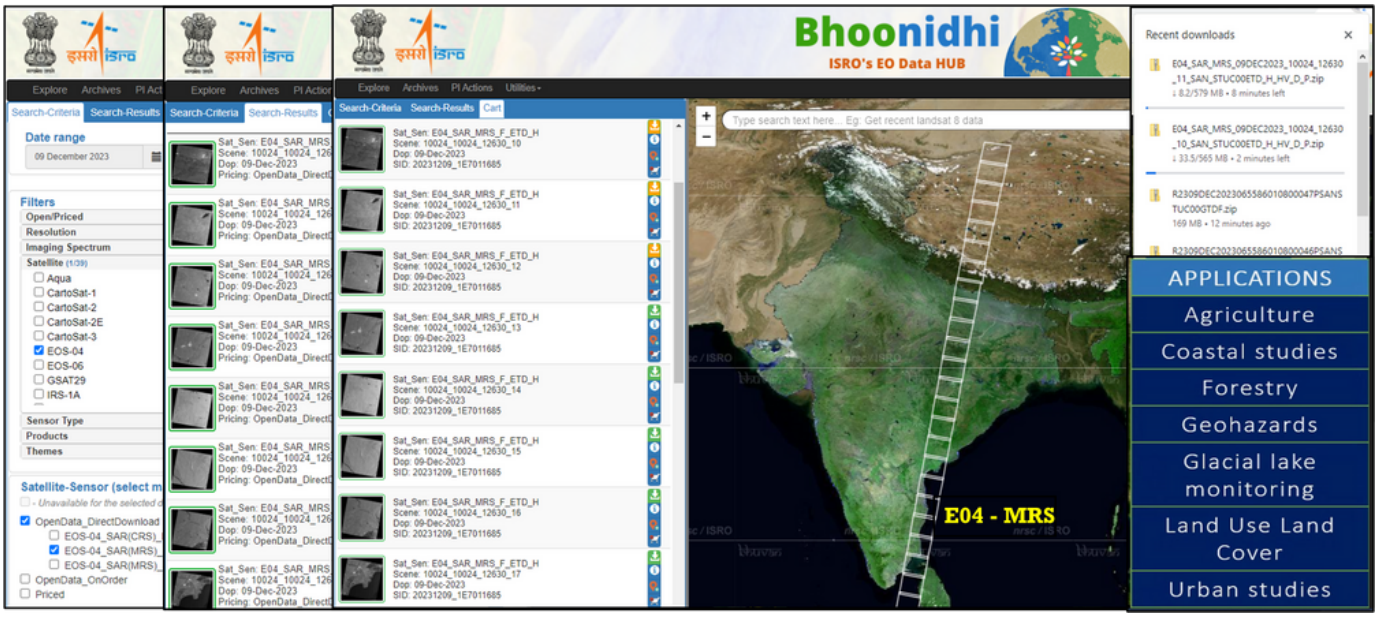
THE SEQUENCE OF STEPS TO DOWNLOAD THE OPEN DATA FROM BHOONIDHI.

1. Go to the URL https://bhoonidhi.nrsc.gov.in/
2. Click Browse and Order Icon. Visit Bhoonidhi Browse and Order link.
3. In the Search Criteria tab, the user has to provided the date range for the area of interest, select the required filters from the list to fetch the desired data.
4. In the Search Results tab, the list of products are displayed. The registered user can directly add to cart the required products after login.
5. In the Cart tab, the products added to cart can be seen in the open cart. The user has to confirm the required products and then download directly.
6. The sequence of steps to browse and download Resourcesat-2 Liss3 data and EOS-04 MRS data is demonstrated below.

OPEN DATA-RESOURCESAT-2/2A DOWNLOAD



OPEN DATA-EOS-04 DOWNLOAD



CARTOSAT-3 NEW PRODUCTS

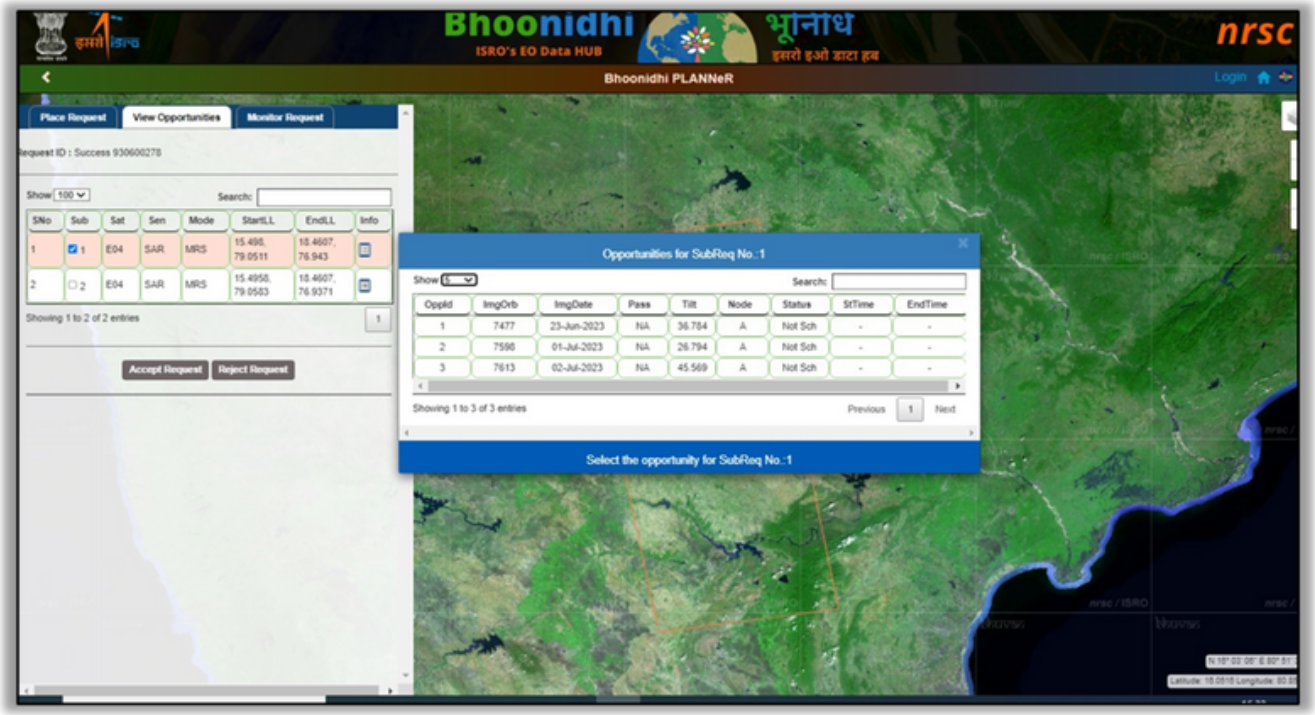
Cartosat-3 new 0.45 m PAN Sharpened Products

New Product Specifications

1. PAN sharpened 0.45m Product, 10km swath : This product enables uniform radiometric quality across the complete swath and improved sharpness.
2. MX 1.1m Standard Georeferenced product, 10km swath : This product enables uniform radiometric quality across the complete swath.
3. PAN 0.45m Standard Georeferenced product, 17km swath :This resampled product enables improved sharpness.

Bhoonidhi PLANNeR

PayLoad Acquisition PlaNNing Requests Service is an online web application facilitates the users to place requests for future dates. The future acquisition request placing service for EOS-04 can be accessed at
https://bhoonidhi-planner.nrsc.gov.in/



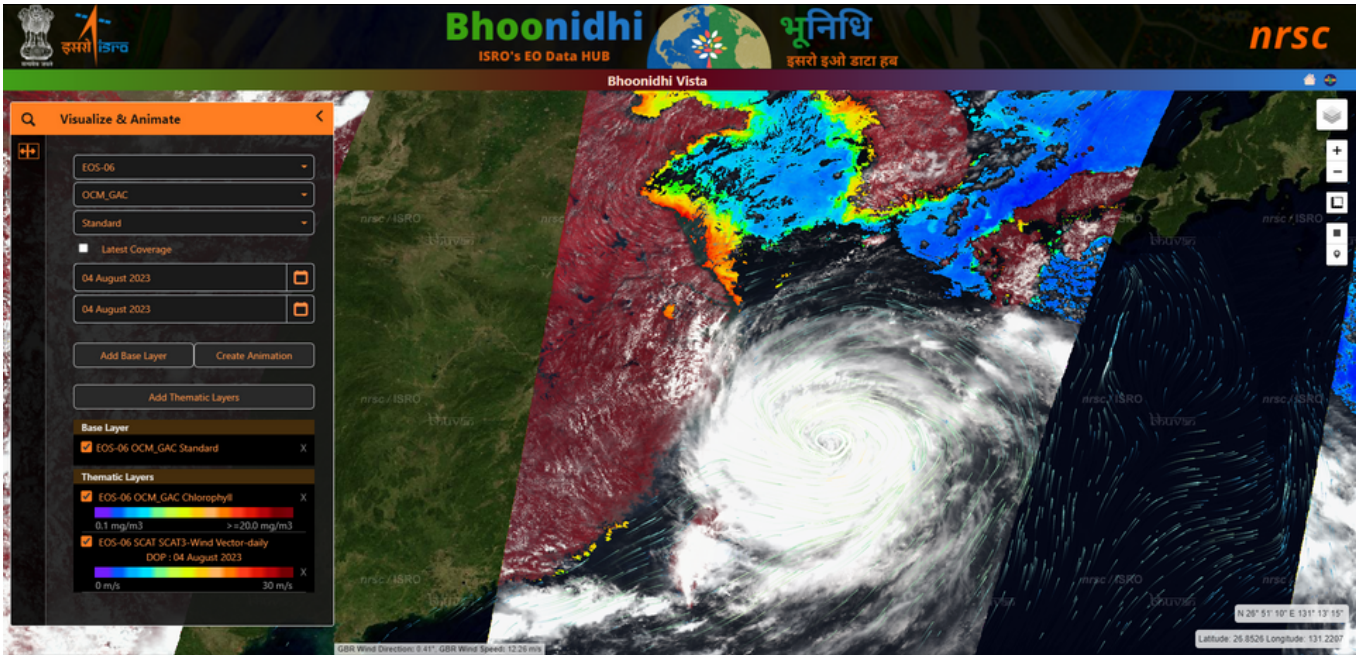
- Provision to view possibility & dates of acquisitions to all users.
- The user should have been registered with Bhoonidhi and authorized by NRSC to the Place request.
- The request will be honored as per the feasibility.
- Post acquisition, the user may see the acquired coverage and subsequent product can be ordered.

Release of Bhoonidhi PLANNeR by Director, NRSC

BHOONIDHI VISTA- MULTI LAYER VISUALISATION

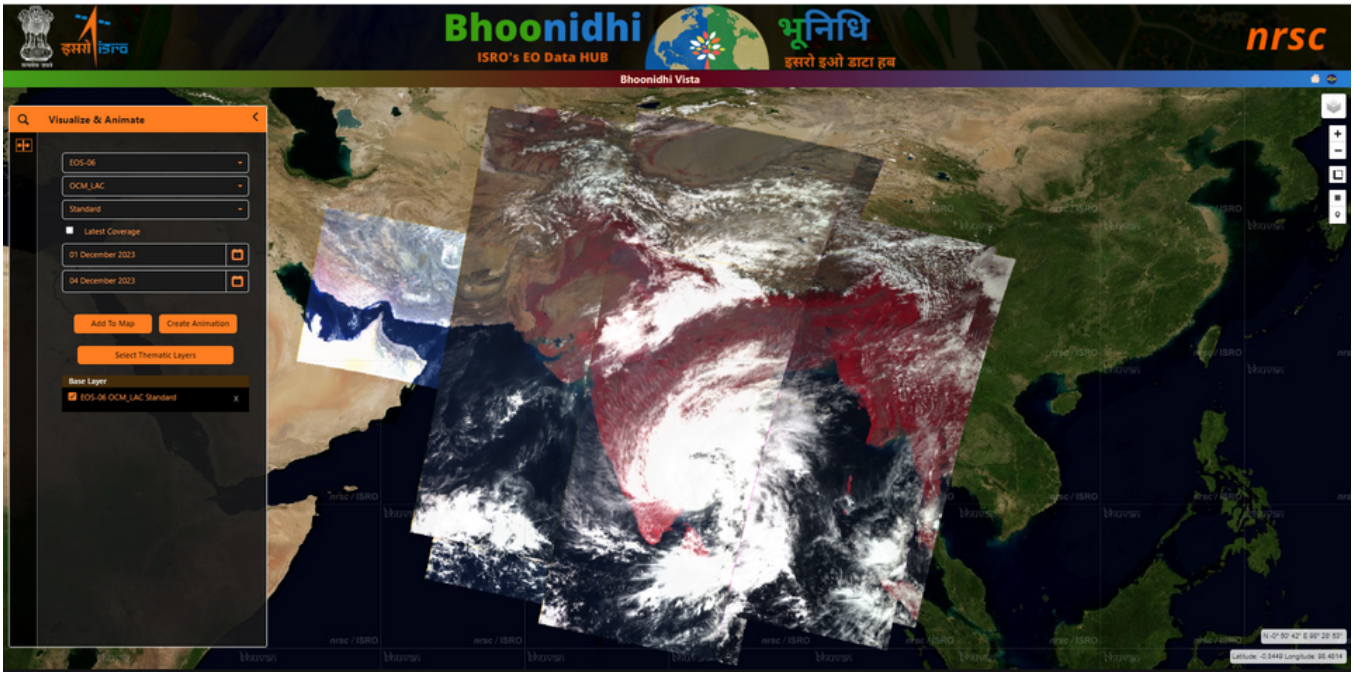
- Multi-layer visualization in Bhoonidhi Vista enables users to simultaneously display and analyze multiple satellite data layers.
- This versatile feature allows users to customize their view by choosing whether to include or exclude a standard satellite layer while visualizing selected thematic layers.
- This flexibility in layer management, with an additional ability to toggle any added layer to hide/unhide the layer, enhances the platform's utility in exploring spatial data and making informed decisions, making it a valuable tool for geographic data visualization.
- In the below image we can view the visualization of Typhoon Khanun over the northern Philippine Sea on 4th August 2023.
- The base layer used is EOS-06 OCM GAC Standard, Thematic layers used are EOS-06 OCM GAC-Chlorophyll and EOS-06 SCAT3 Wind Vector-daily.

EOS-06 DATA VISUALISATION (TYPHOON KHANUN)

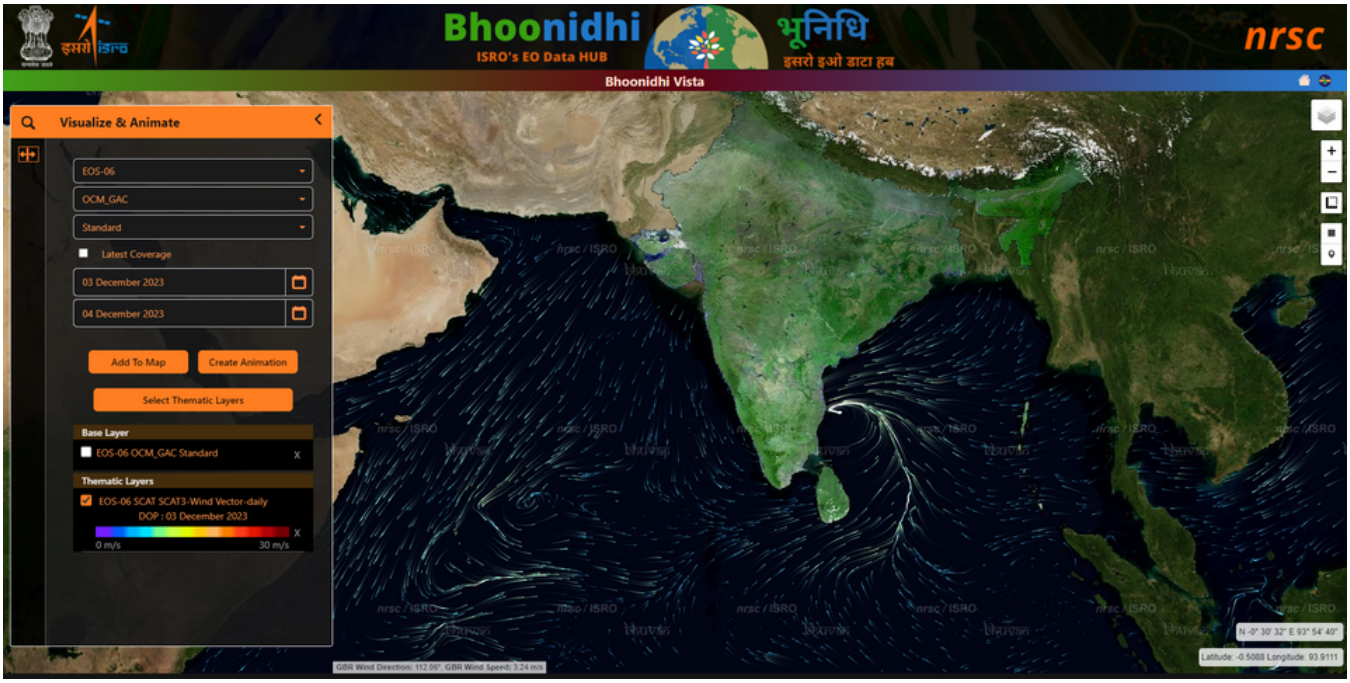


BHOONIDHI VISTA- MICHUANG CYCLONE VISUALISATION

CYCLONE MICHAUNG AS VISUALISED BY EOS-06 OCM LAC FROM 3RD TO 4TH DEC 2023



The visualization of cyclone Michaung over the Bay of Bengal with EOS-06 SCAT3 wind vector daily as seen at Bhoonidhi Vista from 3rd to 4th December 2023.



BHOONIDHI @GEO SMART INDIA 2023

Bhoonidhi was showcased and demonstrated to the users at unique global platform GEO SMART INDIA 2023 which is the largest geospatial industry event for the the geospatial community.

Bhoonidhi Browse & Order

VISTA Visualize at Full Resolution

Bhoonidhi RESOURCES

Bhoonidhi PLANNeR

UPAGRAH Orbit Viewer