GEOSPATIAL WORLD FORUM
23-25 JANUARY, 2017, HYDERABAD, INDIA

Bringing Geospatial Research to Business Incubation

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India

INDIAN SCIENCE AND TECHNOLOGY ENTREPRENEURS PARKS AND BUSINESS INCUBATOR ASSOCIATION

Geospatial Frontline Areas of Business Incubation

- Open Source Technology
- Democratization of Geospatial Data
- Civilian Application of (UAV's)
- Geospatial Crowd Sourcing

Geospatial: Business opportunities based on Open Source Solutions

- **Quantum GIS**

  - Desktop QGIS
  - Q GIS Spatial File Browser
  - QGIS Server (Publish records in OGC Standards)
  - QGIS Web Client (Web Publishing)

❖ Powerful integration with GRASS (Raster Processing)

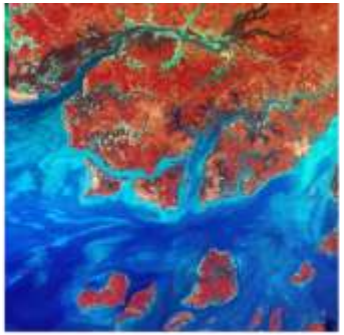
Democratization of Data

- Geospatial Information **Of** the People, **By** the People & **For** the People
- Believe in Open Data Repository for Raster and Vector Data
- Current Free Data Availability Scenario Worldwide

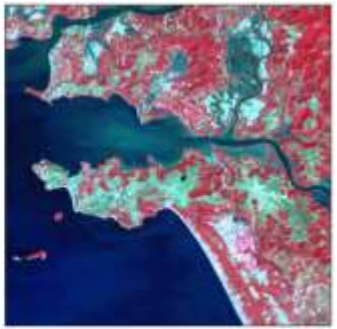
No.	DATA			
		Agency	Satellite Image/Data Availability	Frontline Application Area
1	Landsat Images	USGS	Landsat 8; Landsat 7, ETM++, MSS	Natural Resource Study, Regional and Landscape Level, Temporal Analysis,
2	Indian Images	ISRO	LISS III, AWIFs, Cartosat DEM; Bhuvan WMS, WMTS Services	Agriculture & Natural Resource Mapping a State Level, Water Resource Department
3	Sentinel Data Set	ESA	Sentinel 2, Sentinel 1 Synthetic Aperture Radar Data (SAR)	Emergency Response, Drought and Coastal Change Studies, Insurance Industry, Environmental Study
4	SRTM/ ASTER	NASA/ JAXA	Hydrogically Correct Digital Elevation Data	Watershed Analysis, Flood Plain Mapping, Emergency Response
5	SPOT	FSA	SPOT 1, 2, 3, 4, 5	Agriculture & Forestry, Natural Resource Mapping

Free Data Availability

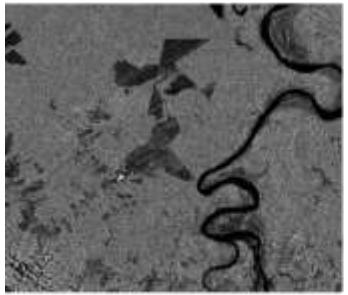
Landsat 8 True Color



Landsat 8 False Color

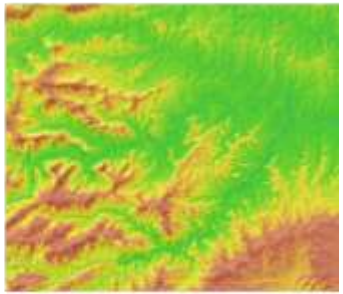


LISS III Data False Color



Sentinel 1 –SAR Data

SRTM DEM



Cartosat DEM

Civilian Application of (UAV's)

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- Accurate Property Tax Mapping & Fast Decision Making
- Above Ground Electrical Asset Mapping
- Mapping of Probable Breeding Places of Dengue / Chikungunya Mosquitoes-Open Tank
- Identifying Buildings with Genset (Polluters)
- Real/Near real Time Damage Assessment (Natural Disaster)

Geospatial Crowdsourcing

- User Driven Collective Intelligence
- Voluntary Geospatial Information (VGI)-**OSM**
- Environmental Initiatives (Tracking Changes)
- Creating Citizen Scientists
- Geospatial Awareness

Media: Social Media; Web Platforms; Geotagged Photos/Videos

ISBA

Geospatial Crowdsourcing

- Post Disaster Mapping and Helping Community and Search and Rescue Operations

bhuvan
Indian Geo-Platform of ISRO

Courtesy: NRSC/ISRO.

tomnod

Courtesy: Tomnod Inc. & Digital Globe Inc.

- Mobile App Based Scientific data Collection
- Distribution and Details Pre Loaded
- User Records geotagged Photo
- Records Sighting Detail

(Used for mapping presence of Plant and Animal Species for Analytical Study of related Ecological Parameters)

Courtesy: Center of Ecology & Hydrology, UK

Various support options for start-ups

- Incubation support
  - Development labs and maker spaces
  - Co-working & Plug-n-play offices
  - Tech. & Business mentoring
  - Access to networks – investment, industry, govt.
- Business Acceleration
- Seed funding support

ISBA role in supporting start-ups and incubators

- Incubators
  - Capacity building
  - Sharing of best practices
  - International collaborations & networks
  - Advocacy
- Startups
  - ISBA Awards

Thanks