Training Day 7 Daily Dairy

June 14, 2024

- Calculated 16 day EVI(500m) using MODIS
- Implemented code to display RGB of punjab using SENTINEL -2
- Studied basics of LST
- Displayed 8 day LST(1km) using MODIS

Tasks Accomplished:

1. EVI Calculation:

- Calculated 16-day Enhanced Vegetation Index (EVI) at a 500m resolution using MODIS data.
- Processed and analysed the data to understand vegetation dynamics over the selected period.

2. RGB Display using Sentinel 2:

- Implemented code to display RGB images of Punjab using Sentinel 2 satellite data.
- Visualized the region to identify land cover types and changes over time.

3. LST Basics:

- Studied the basics of Land Surface Temperature (LST) to enhance understanding of temperature analysis methodologies.
- Reviewed key concepts, measurement techniques, and applications of LST data in environmental studies.

4. LST Display:

- Displayed 8-day LST at a 1km resolution using MODIS data.
- Generated visual representations to observe temperature variations and trends over the selected period.

Key Learnings:

- Understanding and calculating EVI provides valuable insights into vegetation health and dynamics.
- Using Sentinel 2 data for RGB display enhances visualization capabilities and aids in land cover analysis.
- Studying the basics of LST builds a strong foundation for temperature analysis and its applications.
- Displaying 8-day LST data helps in monitoring short-term temperature variations and patterns.

Challenges Faced:

- Ensuring accurate calculation and visualization of EVI and LST data.
- Integrating and processing large datasets from different satellite sources effectively.