Activity-3/ Part.1:

Comparing RGB products between Low orbiting Satellite and Geostationary Satellite

For this activity, we would like you to explore and compare **Natural Color RGB imagery** from two different satellite and instruments:

- 1. **MODIS** on the Terra and Aqua satellites <u>https://go.nasa.gov/41pFejU</u>
- 2. SEVIRI on the Meteosat-9 satellite <u>https://view.eumetsat.int/productviewer?v=default</u>

Please:

- 1. Open both links and examine the Natural Color RGB imagery provided by each satellite / instrument.
- 2. Compare the imagery based on features such as:
 - Resolution
 - Color representation (are there differences in color (if so, Why?),
 - Coverage area
 - Frequency of observation.
- 3. Identify and list the **advantages** and **disadvantages** of each product in your own words.



- 4. You may examine the imagery and focus on the following features:
- Smoke: How clearly can you see smoke from wildfires or pollution?
- Land: How well are land features represented, such as deserts, forests, or urban areas?
- Mountains: Look for elevation-related features like high and low terrain.
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- **Clouds**: Differentiate between:
 - 1. High and low clouds
 - 2. Cloud phase (water phase)
 - 3. Thick and thin clouds
 - 4. Vegetation and Green Cover: How effectively is vegetation depicted?
- Snow on the Ground: Can you distinguish snow cover from clouds or land?
- Overall Visual Clarity: Which satellite gives a clearer or more detailed view of these features?

Activity-3/ Part.2:

Comparing SEVIRI Natural Color RGB with FCI True Color RGB

 compare the Natural Color RGB imagery from SEVIRI on Meteosat-9 with the True Color RGB imagery from the FCI instrument using EUMERVIEW: https://view.eumetsat.int/productviewer?v=default

Please:

- 2. Examine the imagery from both instruments (SEVIRI &FCI).
- 3. Identify and comment on the main differences you observe, such as:
- 4. Color representation (why are there differences?)
 - Overall clarity of features like clouds, vegetation, and water bodies.
 - General resolution and level of details.