DATA IA, Remote sensing assignment

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1 Goal of the project and assignment summary

In this project, you will have to choose a research question and to answer it by downloading the appropriate data and coding at least 1 non AI image processing algorithm. You can, if you want, add an AI method. The project is done in groups of 1 to 3 students.
The groups have to be constituted and a research question has to be chosen before the 22/10/2025 session. You can also start to download data. If there are data downloading issue they will be addressed on the 22/10/2025 session.
Here is a summary of the two-part assignment.

1.1 Kick-off assignment

It has to contain the names of the people in the group, and the problematic (including the type of the chosen data).
Deadline: 21/10/2025 at 12:00 (noon)

1.2 End of project assignment

- Describe the data, why you choose them and what you would have chosen if you add a 1M€ project.

- Describe the chosen method(s).
  For the groups of 3 students, you have to describe, implement and compare **two** methods to answer the same research question. One of the two can be an AI method.

- Describe and analyse your results

Deadline: same as Antoine Manzara's practicals

2 Where to download data

- ESA's data: `https://browser.dataspace.copernicus.eu`

- NASA MODIS data: `https://worldview.earthdata.nasa.gov/`

- Landat (optical), declassified optical images, SIR-C (SAR): `https://earthexplorer.usgs.gov/`

- SAR Sentinel-1 and ALOS images: `https://search.asf.alaska.edu`

- AI datasets `https://github.com/chrieke/awesome-satellite-imagery-datasets`