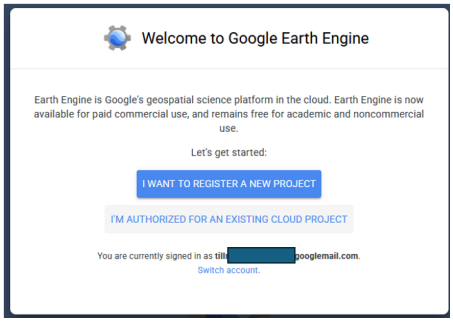
Logistics

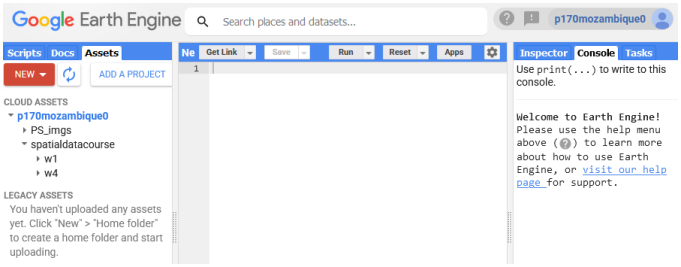
- The course will include a brief introduction to QGIS. Please have version **3.28 or later of QGIS** installed on your computer (latest version), and bring your computer to the course.

- We will work extensively with **Google Earth Engine** (GEE). You don't need to install anything locally on your computer as GEE is a browser-based tool, but please send an email to t.von.carnap@econ.uio.no by **Wednesday, 11 June** with a gmail-address that you are using. This is **necessary in order to give you access to GEE for the course**.

  - After 13 June, please go to GEE, select "I'M AUTHORIZED FOR AN EXISTING CLOUD PROJECT" when prompted as below, and select "p170mozambique0" as your project subsequently.



  You should then see the folder "spatialdatacourse" like in the screenshot below.



  - Please reach out to t.von.carnap@econ.uio.no if this doesn't work for you by the Friday before the course.

- You will receive an invitation to a shared GoogleDrive folder with the slides and other materials for the course.

Preliminary schedule

The course will feature a combination of lecture-style and tutorial-style sessions. These will generally take place during 3-hour blocks with a 20-minute break when convenient. The topics covered during each of the blocks are listed below.

	Morning	Afternoon
Monday	• Spatial data - applications & concepts • Intro to QGIS & GEE	• Visualization & zonal statistics in GEE • Geometric operations
Tuesday	• no class	• Environmental data
Wednesday	• no class	• Satellite imagery - applications & concepts • Band algebra & change detection
Thursday	• Supervised classification • At-scale workflows	• Understanding and addressing measurement error in remotely-sensed data
Friday	• Identification with spatial data • Least-cost paths	• tbd

Recommended reading

There are no required readings before the course. The following review papers will give you a good overview of the topics we will cover during the course.

Dave Donaldson and Adam Storeygard. The view from above: Applications of satellite data in economics. *Journal of Economic Perspectives*, 30:171–198, 2016. ISSN 0895-3309. doi: 10.1257/jep.30.4.171

David Wuepper, Wyclife Agumba Oluoch, and Hadi Hadi. Satellite data in agricultural and environmental economics: Theory and practice. *Agricultural Economics*, 3 2025. ISSN 0169-5150. doi: 10.1111/agec.70006

Marshall Burke, Anne Driscoll, David B. Lobell, and Stefano Ermon. Using satellite imagery to understand and promote sustainable development. *Science*, 371, 2021. ISSN 10959203. doi: 10.1126/science.abe8628

Robin Burgess, Matthew Hansen, Benjamin A. Olken, Peter Potapov, and Stefanie Sieber. The political economy of deforestation in the tropics. *Quarterly Journal of Economics*, 127, 2012

We will discuss the following papers in varying degrees of detail during the course.

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