

CASA0023 Remotely Sensing Cities and Environments

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Welcome

Hello and welcome to the Term 2 module Remotely Sensing Cities and Environments.

Similarly, to my Term 1 MSc module, CASA0005, this website holds all the practical instructions for the module. CASA0005 Geographic Information Systems and Science is a pre-requisite of the module so concepts taught there will mainly be assumed here.

Acknowledgement

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- Dr Ellie Biggs
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The R package and analysis artwork used within this book has been produced by `allison_horst`, whilst artwork used in information boxes has been produced by Desirée De Leon. You can find Allison's images on the stats illustration GitHub repository and Desirée's on the `rstudio4edu` GitHub repository.

I've certainly learnt a lot from their open code repositories!

Course information

Hello Remote Sensing

Earth Observation can yield fascinating insights into geographical relationships. However, at times it can be difficult to work with. You will get lots of error messages and have software crash. The academic staff are here to help you work through these practicals but we do not know everything. It's a good idea to become familiar with online sources of help, such as:

- Stack Exchange
- RStudio community
- QGIS documentation
- R documentation
- ArcGIS help pages

Learning outcomes

At the end of this module you should be able to:

- Create a reproducible online portfolio workbook
- Explain and evaluate common issues with urban and environmental policies at the local, national and international level that fail to consider spatial data
- Revise vague and ambiguous development targets
- Appropriately pre-process Earth observation imagery ready for analysis
- Apply published methodologies to extract meaning from Earth observation data
- Combine a variety of spatial data to demonstrate the benefits of data-informed governance and planning.
- Create and design a reproducible workflow for consistent monitoring of urban and environmental metrics