# Introduction to Geospatial Raster and Vector Data with Python

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### Who are we?

- The Netherlands eScience Center is a national center for **innovative software** solutions in academic research.
- Established to bridge the gap between digital technologies and scientific and scholarly inquiry.
- Our Research Software Engineers
  - help researchers interpret results,
  - make tools and methods reusable for the wider research community,
  - co-author research and methodological publications.



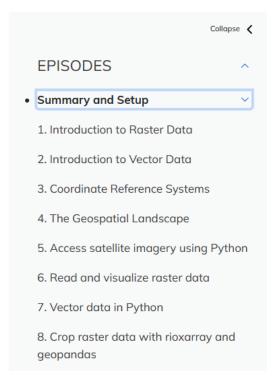


Key Points

Glossary

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#### **Summary and Setup**

Data Carpentry's teaching is hands-on, so participants are encouraged to use their own computers to ensure the proper setup of tools for an efficient workflow. To most effectively use these materials, please make sure to download the data and install everything before working through this lesson.

The data used in this lesson includes optical satellite images from the Copernicus Sentinel-2 mission and public geographical datasets from the dedicated distribution platform of the Dutch government. These are real-world data sets that entail sufficient complexity to teach many aspects of data analysis and management. They have been selected to allow students to focus on the core ideas and skills being taught while offering the chance to encounter common challenges with geospatial data.

**Data Sets** 

carpentries-incubator.github.io/geospatial-python



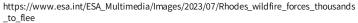






# Case: Wildfire in Rhodes, 2023







https://news.sky.com/story/wildfires-on-rhodes-force-hundreds-of-holidaymakers-to-flee-their-hotels-12925583





#### Overview of the course

- Access satellite imagery
- Access open vector data
- Vector/Raster data handling
- Raster calculation
- Zonal statistics





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tinyurl.com/geospatial2024



