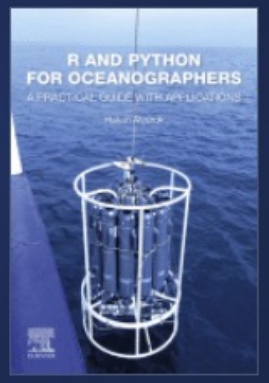
More Python & HW5

Reminder: read R & Python for Oceanographers, (Python part only)

R and Python for Oceanographers

A Practical Guide with Applications

Book • 2019



Authors:
Hakan Alyuruk

About the book

Browse this book

By table of contents

Book description

R and Python for Oceanographers: A Practical C
the uses of scientific Python packages and R in
including both script co ... read full description

1.7 Introduction to Python

Python is an interpreted, general-purpose, object-oriented and high-level programming language. It was conceived by Guido van Rossum in the late 1980s, and its first implementation started in 1989. Python is developed as a successor of ABC language at Centrum Wiskunde & Informatica (CWI) in the Netherlands. In the development of Python, van Rossum also influenced from Modula-3. As a result, Python has been evolved as a new language that includes improvements over ABC and Modula-3 [3, 4].

Currently, the development of Python language is organized and supported by Python Software Foundation (PSF).

Some advantages of Python as a data science tool are:

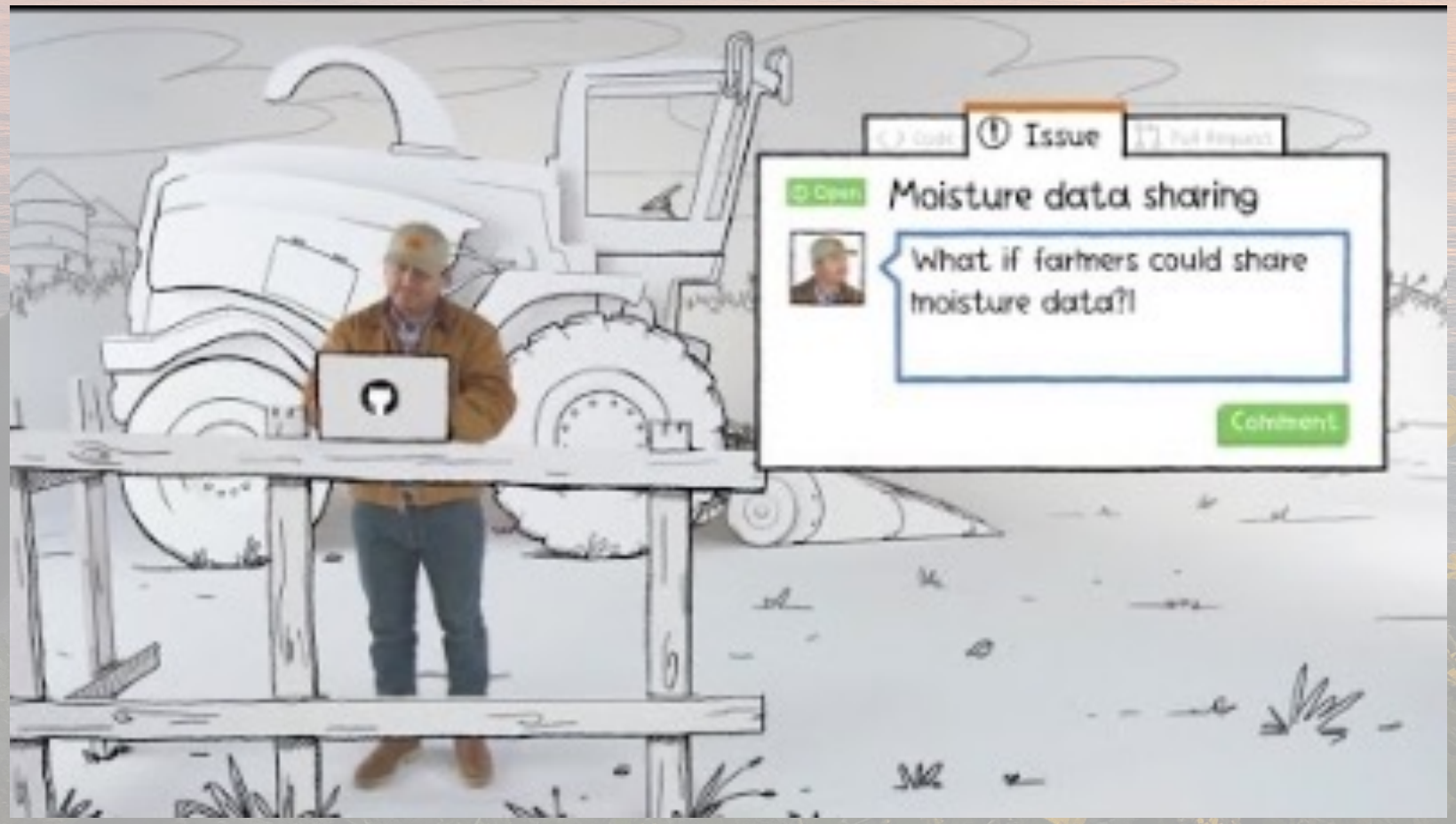
- It is simple, readable, and easy to learn.
- Python interpreter can run on multiple platforms: Windows, Linux, and Mac OSX.
- It is possible to express functions with fewer codes compared to other languages.
- It is an open source language and can be freely used and distributed.
- There are many libraries for scientific computing.
- It is possible to use Python in combination with other languages such as C or C++.

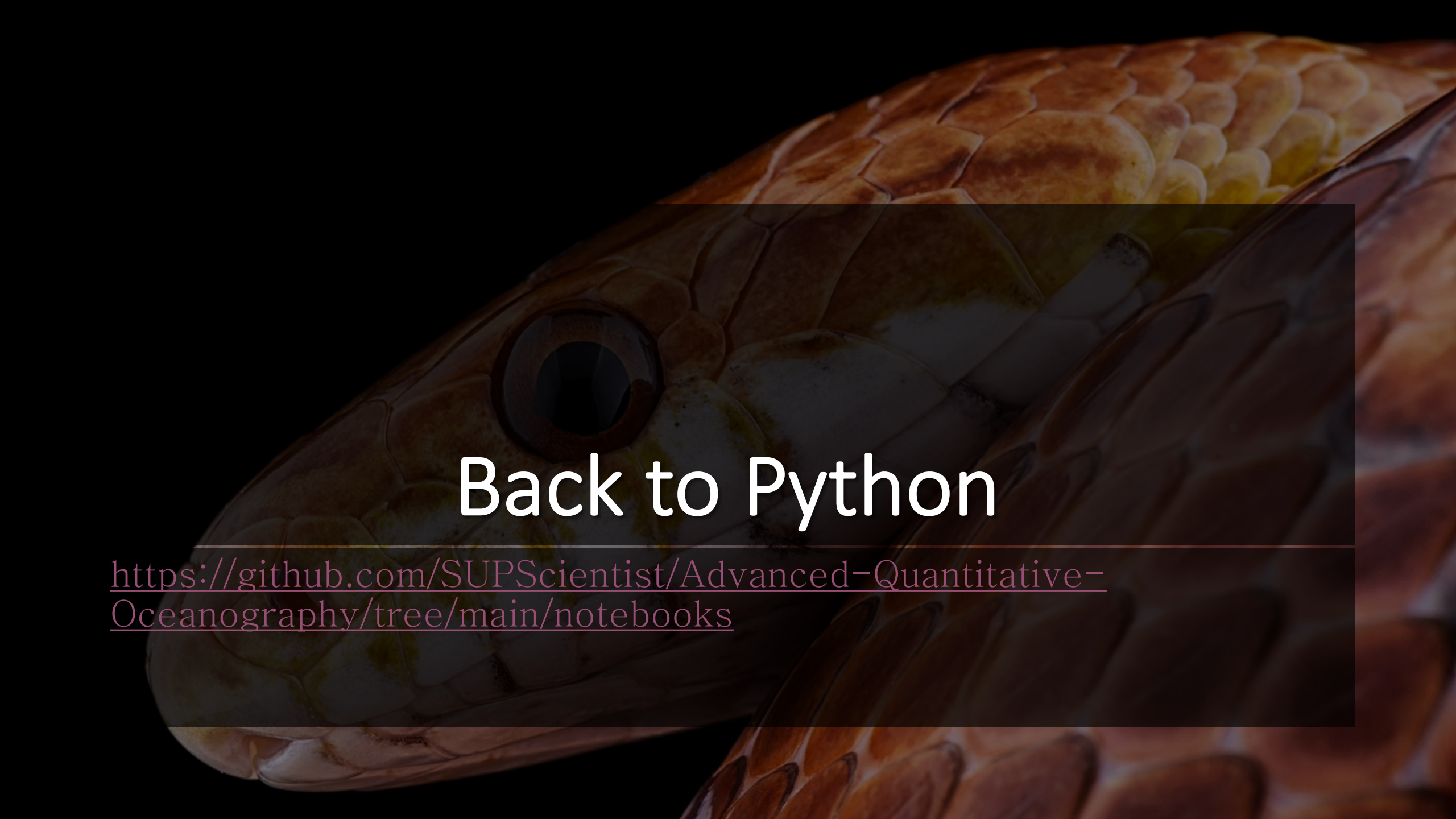
https://www.sciencedirect.com/book/9780128134917/r-and-python-for-oceanographers

GitHub + Colab

- Class info (and more!) now available at https://github.com/SUPScientist/Advanced-Quantitative-Oceanography
- Why GitHub (in addition to Canvas..)
- Canvas is tied to UNCW. Assignments, grades, etc. Good for internal university work.
- GitHub is open to the world. Good for sharing (reproducible!) science.

Git + GitHub


Issue
Open
Moisture data sharing
What if farmers could share moisture data?!
Comment



Back to Python

https://github.com/SUPScientist/Advanced-Quantitative-Oceanography/tree/main/notebooks

HW5

HW5

- Go to https://github.com/SUPScientist/Advanced-Quantitative-Oceanography/blob/main/notebooks/Intro_04_DataTypesStructures.ipynb
- Open in Colab
- Save to Drive
- Complete all steps
- Save as .ipynb
- Submit .ipynb file in Canvas