

Learning R

Session 2: Creating graphical plots with R

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Overview of this R Course

1. Introduction to R (session 1)
2. Creating graphical plots with R (session 2)

Task 1

3. Correlation and Regression with R (session 3)
4. Creating a model with R using For loops and if-else statements (session 4)

Task 2

5. Hypothesis testing with R (session 5)
6. Using R packages to solve problems (session 6)

Task 3

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All R code & data files are on Github

<https://github.com/edmundryan>

github.com/edmundryan

The screenshot shows the GitHub profile page for user **edmundryan**. The browser address bar displays `github.com/edmundryan`, with a blue arrow pointing to it from the URL above. The page header includes navigation links: **Pull requests**, **Issues**, **Marketplace**, and **Explore**.

The profile section on the left features a large pink and white avatar, the username **edmundryan**, an **Edit profile** button, and statistics: **0 followers · 1 following · 0 stars**. It also notes the user **Joined 20 days ago**.

The main content area has tabs for **Overview**, **Repositories**, **Projects**, and **Packages**. Under the **Pinned** section, two repositories are listed: **Rcourse_session1** and **Rcourse_session2**, both using the R programming language.

The **10 contributions in the last year** section displays a calendar grid from July to June. Contributions are marked with green squares, primarily in June. A link [Learn how we count contributions](#) is provided. **Contribution settings** are also visible.

The **Contribution activity** section for **June 2020** shows two main activities:

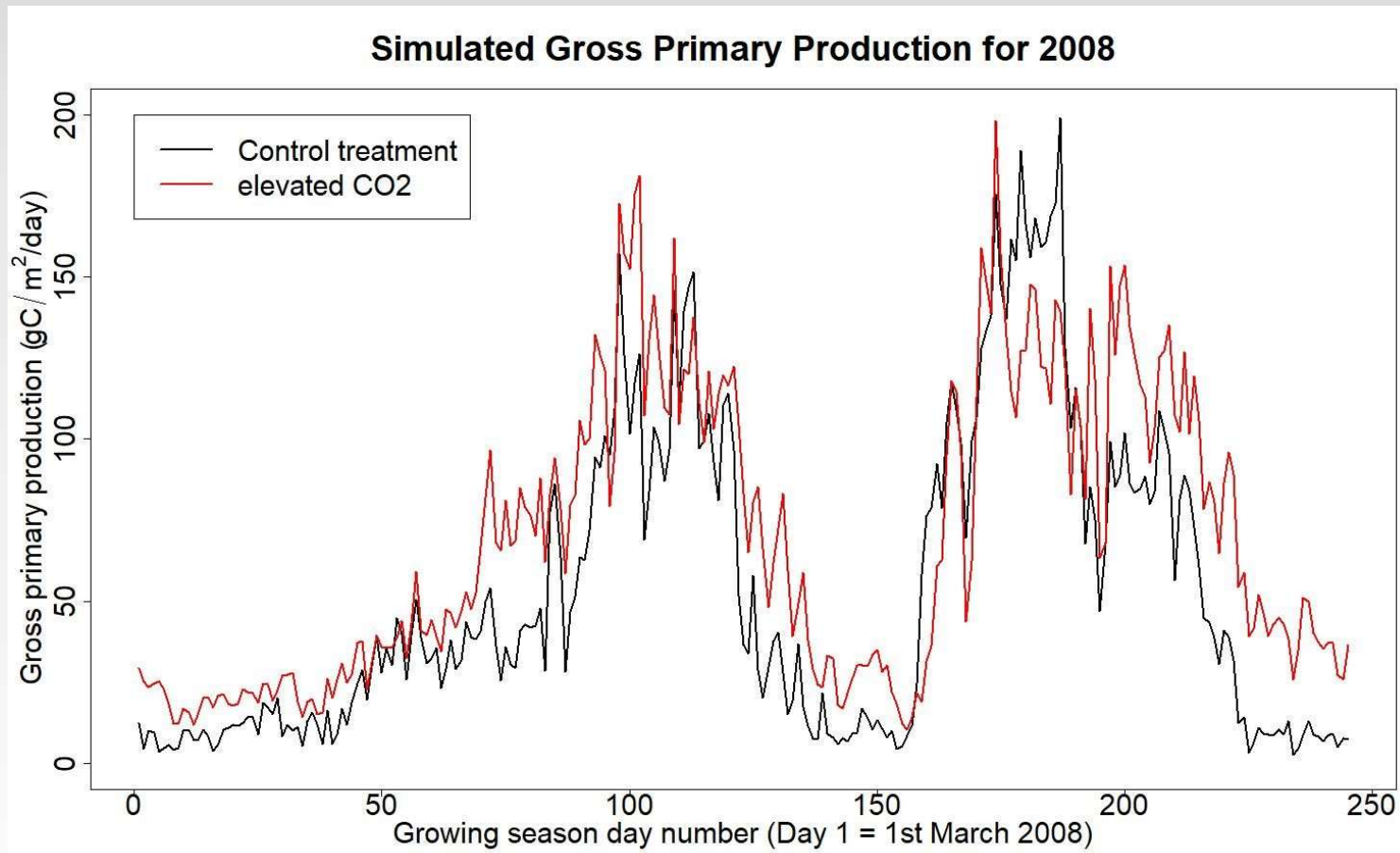
- Created 7 commits in 2 repositories** (June 27):
 - `edmundryan/Rcourse_session1`: 4 commits
 - `edmundryan/Rcourse_session2`: 3 commits
- Created their first repository** (June 27)

A solid orange bar is located at the bottom of the image.

The screenshot shows a web browser displaying the GitHub repository page for 'edmundryan/Rcourse_session2'. The repository is on the 'master' branch. A commit by 'edmundryan' is shown with four files: 'Rcourse_session2.pdf', 'Rcourse_session2_plot1.R', 'Rcourse_session2_plot2.R', and 'Rcourse_session2_plot3.R'. A dropdown menu is open next to the 'Clone' button, showing options to 'Clone with HTTPS' (with a 'Use SSH' link), 'Open in Desktop', and 'Download ZIP'. A red arrow points to the 'Download ZIP' button. At the bottom of the repository view, there is a prompt to 'Add a README'.

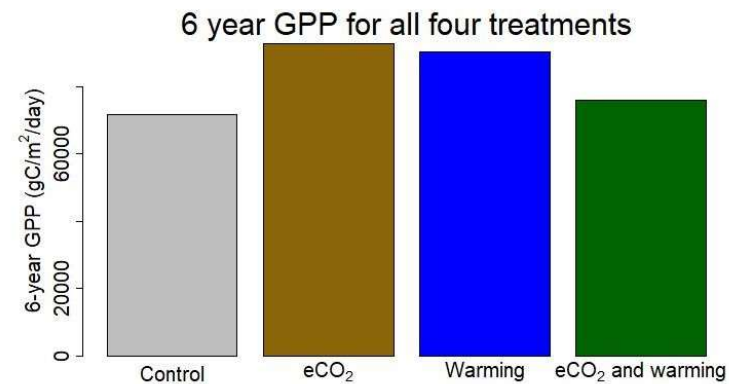
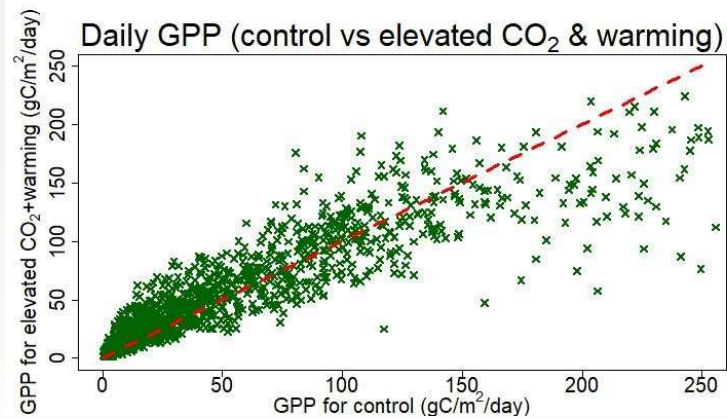
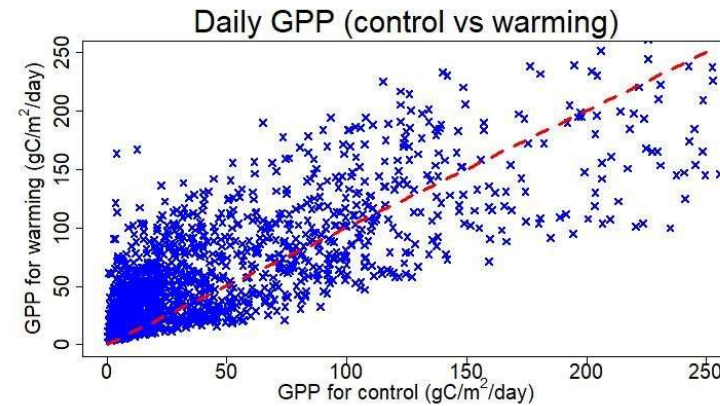
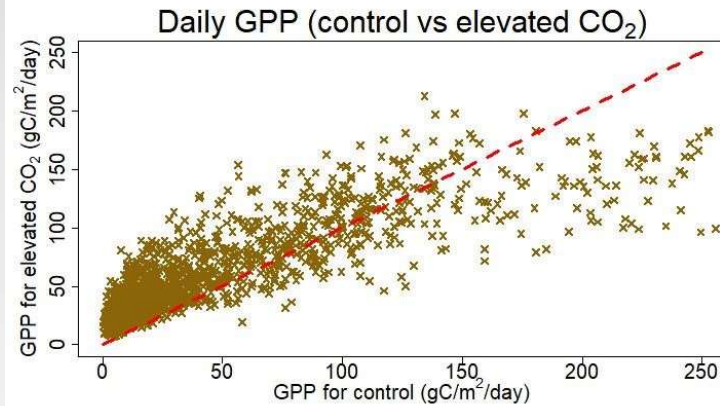
To download a zip folder of all the files, click on the 'Clone' button and then 'Download ZIP'.

First graphical plot



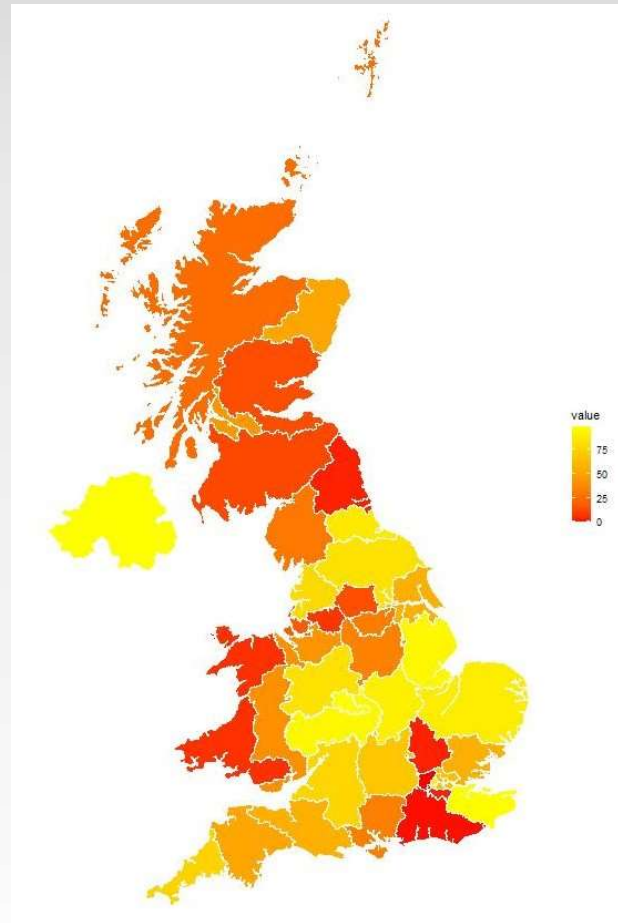
Second graphical plot

Gross primary production (GPP) on daily scale (panels 1-3) and six-year scale (panel 4)



Third graphical plot

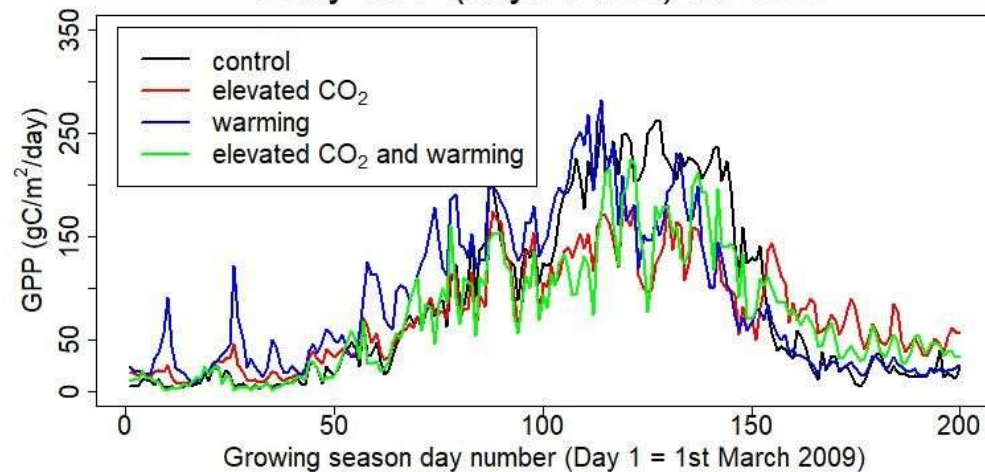
<https://datatricks.co.uk/creating-maps-in-r-2019>



Task 1 – create the following plot:

Gross primary production (GPP) at daily and annual time scales

Daily GPP (days 1-200) for 2009



Annual GPP under elevated CO₂ for all years

