Reproduceerbaar Analyseren voor Praktijkgerichte Onderzoekers:

Dag 2

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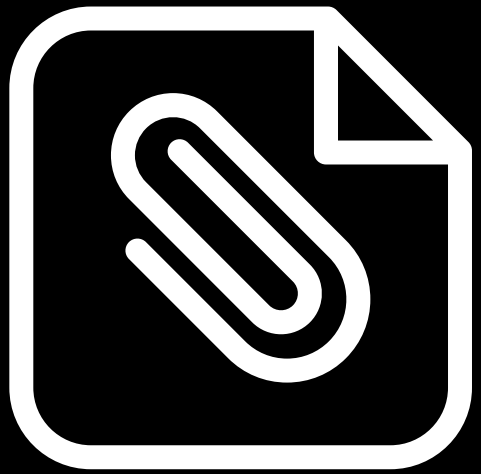
Programma

- Introductie Rstudio
- Introductie R
- Beginnen met data

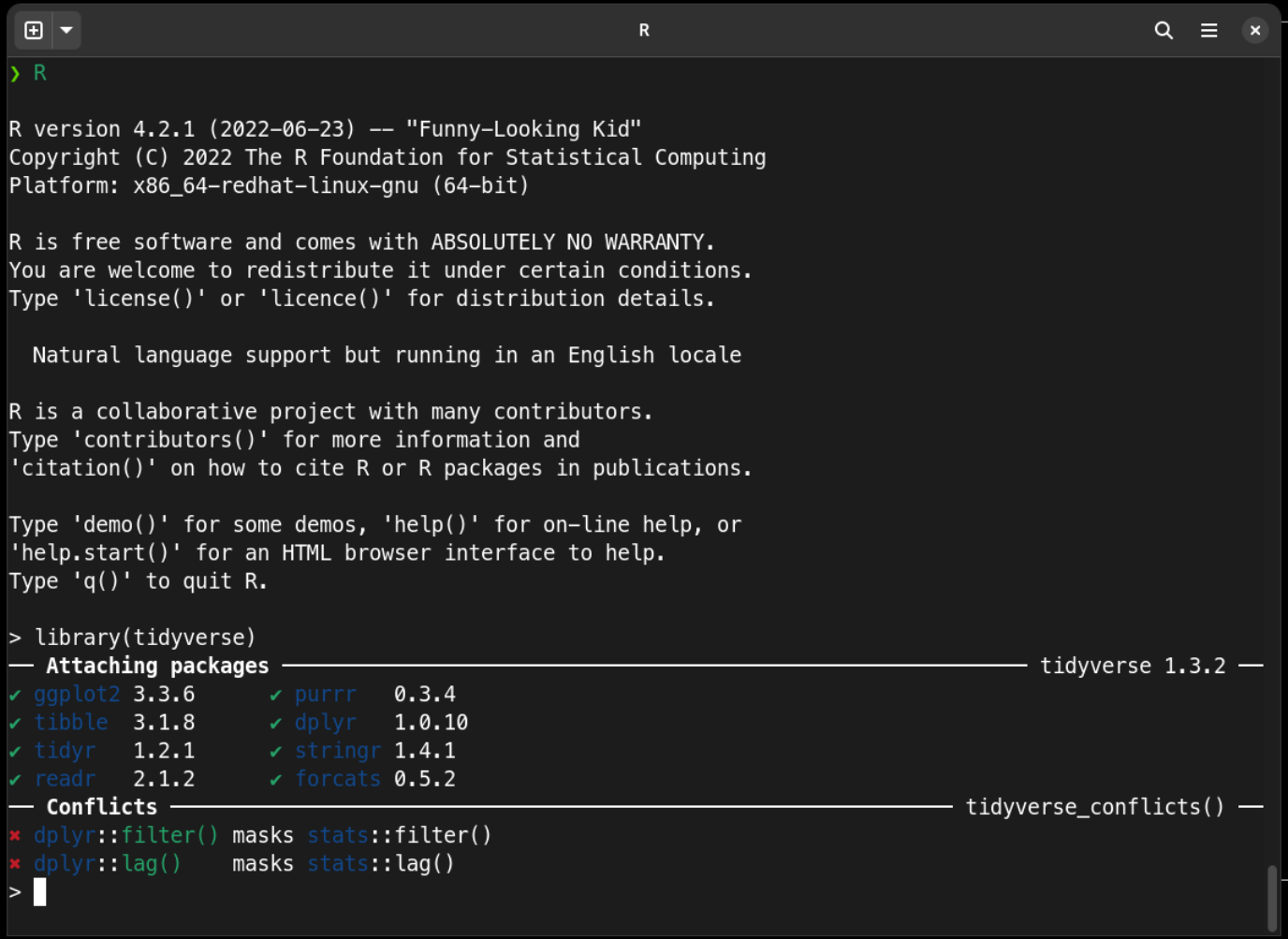


- Morgen: Data Wrangling
- Overmorgen: Data visualisatie

Waarom R?

- Geen klikken
- Reproduceerbaar
- Interdisciplinair
- Werkt op alle data
- Hoge kwaliteit figuren
- Vrije en open source software

Waarom RStudio?



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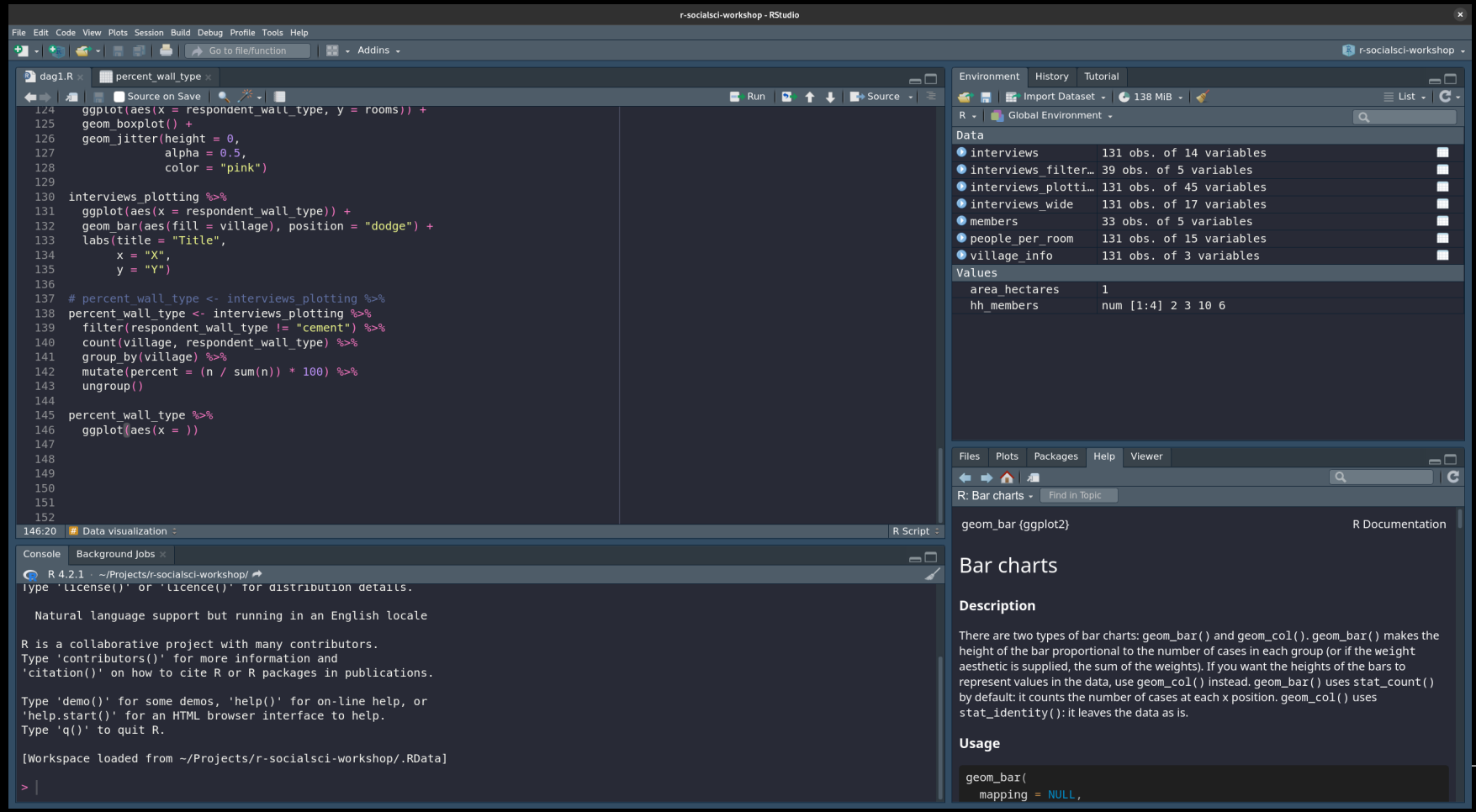

Rondleiding

Opdracht

Gebruik het Console en de Packages tab om te bevestigen dat de “tidyverse” is geïnstalleerd.

Introductie R

- Rekenen
- Comments
- Functies
- Vectors
- Missing data

Opdracht: variabelen

Wat staat er nu in **`area_acres`**?
123.5 of 6.175?

Opdracht: functies

Typ **`?round`** in de Console en kijk naar de output in de help pagina. Welke functies bestaan er nog meer die lijken op **`round`**? Wat doet de **`floor`** functie?

Opdracht: vectors

Wat gebeurt er als je datatypes door elkaar gebruikt?

Opdracht: missing values

- Maak de volgende vector aan en verwijder de NAs:

```
rooms <- c(1, 2, 1, 1, NA, 3, 1, 3, 2, 1, 1, 8, 3, 1, NA, 1)
```

- Gebruik de functie median() om de mediaan te berekenen.
- Kijk hoe veel huishoudens meer dan 2 kamers hebben.

Starting with Data

data frame

columns

	key_id	village	has_bicycle
rows	1	"God"	TRUE
	7	"God"	FALSE
	3	"Chirodzo"	TRUE
	numeric	character	logical

De data

column_name	description
key_id	Added to provide a unique Id for each observation. (The InstanceID field does this as well but it is not as convenient to use)
village	Village name
interview_date	Date of interview
no_membrs	How many members in the household?
years_liv	How many years have you been living in this village or neighboring village?
respondent_wall_type	What type of walls does their house have (from list)
rooms	How many rooms in the main house are used for sleeping?
memb_assoc	Are you a member of an irrigation association?
affect_conflicts	Have you been affected by conflicts with other irrigators in the area?
liv_count	Number of livestock owned.
items_owned	Which of the following items are owned by the household? (list)
no_meals	How many meals do people in your household normally eat in a day?
months_lack_food	Indicate which months, In the last 12 months have you faced a situation when you did not have enough food to feed the household?
instanceID	Unique identifier for the form data submission