Data management

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Data management

See https://dataoneorg.github.io/Education/bestpractices/

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- 1. Planification (e.g. DMPTool)
- 2. Collection
- 3. Metadata description (dataspice, EML, Data Packages, DataPackageR)
- 4. Quality control (e.g. assertr, validate, pointblank)
- 5. Storage

Document your data

https://docs.ropensci.org/dataspice/

```
library("dataspice")
create_spice() # create CSV templates for metadata
edit_creators() # open Shiny apps to edit the CSVs
prep_access()
edit access()
prep_attributes()
edit_attributes()
edit biblio()
write spice() # write machine-readable metadata
build site() # build human-readable metadata report
```

Check data before analysis

```
library("assertr")

dataset %>%
  assert(within_bounds(0, 0.20), fruit.weight) %>%
  assert(in_set("black", "red"), colour)
```

Check out also pointblank

Editorial expression of concern

IN THE 3 June issue, Science published the Report "Environmentally relevant concentrations of microplastic particles influence larval fish ecology" by Oona M. Lönnstedt and Peter Eklöv (1). The authors have notified *Science* of the theft of the computer on which the raw data for the paper were stored. These data were not backed up on any other device nor deposited in an appropriate repository. Science is publishing this Editorial Expression of Concern to alert our readers to the fact that no further data can be made available, beyond those already presented in the paper and its supplement, to enable readers to understand, assess, reproduce, or extend the conclusions of the paper.

> Jeremy Berg Editor in Chief

Storage

Use the cloud: safe, persistent, easy to share

- · Open Science Framework
- · GitHub
- · Dropbox
- · Figshare, Zenodo, etc
- · See all data repositories in www.re3data.org