Open data with public repositories

Image by Ainsley Seago: “To deposit or not to deposit, that is the question – journal.pbio.1001779.g001”, in doi:10.1371/journal.pbio.1001779.

Grippa Taïs - October 23, 2019

*Mini Open Science Fair: from researchers to researchers*
Why sharing your data?

• Data is keystone of research!

• If you want to go for open-research, you need to share your data
  – Journals are developing ‘open’ policy and push authors for making their data available
  – Allow a better scientific peer (open-)review
  – Allow other researcher to attempt exact replication of your results => Speed up research
  – BUT: be sure you’re allowed to share (license, rights, GDPR...)
Appendix B

Hereafter are referenced the dataset, pieces of computer code, and processing chains used in this research. These are all made available under Creative Common License (CC-BY).

The land-cover maps used as input data for the computation of landscape metrics:

Ouagadougou land-cover map [62] is referenced and available on https://doi.org/10.5281/zenodo.1290653. The version used in this research is referred as v1.0 (10.5281/zenodo.1290654).

Dakar land-cover map [63] is referenced and available on https://doi.org/10.5281/zenodo.1290799. The version used in this research is referred as v1.0 (10.5281/zenodo.1290800).

The results of the land use classification and the street blocks extracted:

Ouagadougou land-use map [64] is referenced and available on https://doi.org/10.5281/zenodo.1291384. The version produced in this research is referred as v1.0 (10.5281/zenodo.1291385).

Dakar land-use map [65] is referenced and available on https://doi.org/10.5281/zenodo.1291388. The version produced in this research is referred as v1.0 (10.5281/zenodo.1291380).

The R code used for the feature selection and RF classification steps, belonging to the dataset of features used and training/test sets, is available in the following Github repository: https://github.com/ANAGEO/R_stuff/tree/master/VSURF_FeatureSelection_RF_Optimization.

The semi-automated processing chain for extraction of street block from OSM using PostGIS is available in the following Github repository: https://github.com/ANAGEO/OSM_Streetblocks_extraction.

The semi-automated processing chain for computation of spatial metrics using GRASS GIS is available in the following Github repository: https://github.com/tgrippa/Street_blocks_features_computation.

The piece of Python code used for computing uncertainty form the probabilistic output of RF: https://github.com/ANAGEO/RFprob_to_uncertainty.

Cite your input data and your results directly in your publications!
What is Zenodo

- **Zenodo** is an interdisciplinary open data repository service maintained by CERN, Geneva.
- Launched in 2013 under the OpenAIRE project (EC), in order to support the EU Open Data policy.
- Data is stored in the CERN cloud infrastructure.
One among other

• There exists (many) other platforms to store your datasets publicly. Another one could better fit your needs.

• Check on =>

re3data.org

REGISTRY OF RESEARCH DATA REPOSITORIES
Zenodo dataset

• You can create as many dataset as you need. E.g., one for each project or product.
• You can store up to 50Gb of data in one single Zenodo dataset. Data could be any file format.
• You have to provide different metadata to create your dataset.
• Different kind of access are possible.
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(minimum 1 file required, max 50 GB per dataset - contact us for larger datasets)
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• If you want, you can add a new version of your dataset but the original one will still be available.

• You can edit metadata as you want.
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• A Zenodo repository can have multiple versions and each version has its own DOI.
Github code citation

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Cite this code

Please use the following DOI for citing this code: DOI 10.5281/zenodo.2548565

• You can create a general DOI for a Github repository and specific DOI for different versions of your code.

• More info => here
More information

• Official website:
  – About
  – FAQ

• Official presentation from which this presentation is largely inspired:
  https://zenodo.org/record/802100#.XaWcMiUzaM8