"Spatialized Phylogenetic Climate-driven Ecodiversity Simulator" (SpyCiEs) v.0.0

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1 Rationale

SpyCiES is a biodiversity model built upon the model of Brayard et al.

2 Obtaining the code

The model code is hosted on Github. You can visit the webpage and download an archive of the code, but the best solution to obtain a full copy of the model code with possibility to easily update it later, is to clone the repository:

```
git clone https://github.com/alexpohl/biodiv_model
```

3 Prerequisite and code structuring

SPyCieS has been developed to run on **Linux** (clusters). It has not been tested on other operating systems, although it is coded in python and should be fully usable on MacOS and Windows. You need a **python 3** install and may need to install new modules (probably using pip install --user package_name). The **main program** can be found in "mainprog.py". It also uses miscellaneous python functions gathered in the "source" directory. Mainprog.py requires one positional argument, which is the **userconfig**.

Here is the line you should run into your linux terminal to execute a model simulation interactively:

```
python mainprog.py userconfigs/userconfig.py
```

A small utilitary is also provided to directly submit a batch Job. It has been designed to work on the regional cluster (CCUB) but can be easily adapted to other clusters:

```
python runbatch.py userconfigs/userconfig.py
```