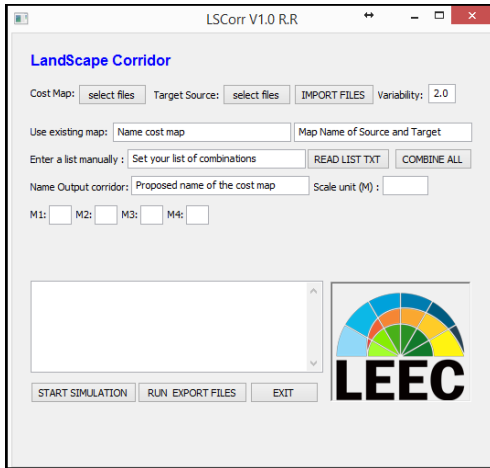


LSCorridors: an innovative ecologically based multipath corridor modeler combining Cloud Computing and Big Data



LSCorridors is a free package developed in the Python library and Graphical User Interface with access from database of the GRASS GIS. The package was designed to model possible dispersal routes of the species among resource patches and multiple routes of ecological functional corridors. LSCorridors do not have limitations of large file processing for

ecology applications. By LSCorridors and Microsoft Azure Cloud Computing for Research were simulated 6 millions of ecological corridors, during 4 months for understanding ecological processes and the effects of the agricultural landscapes in the biodiversity.

Technologies:



GRASS GIS
The world's leading Free GIS software

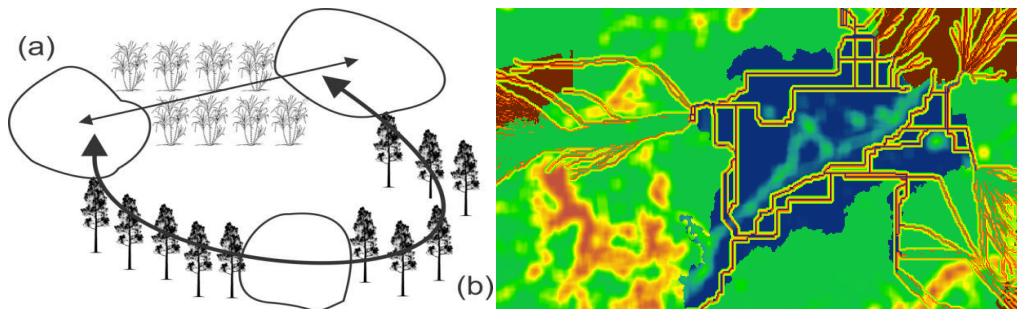
Microsoft Azure



Ongoing publications:

The advances we did with the cloud services provided for Azure Microsoft Research Cloud Computing in 2014, we are also preparing the following manuscripts:

- (1) Ribeiro JW, Santos JS, Ribeiro FR, Ribeiro MC. LandScape Corridors (**LSCorridors**): modelling ecological corridors based in multipath methods and species requirements. Methods in **Ecology and Evolution (JCR = 5.322)**, to be submitted on Feb. 2015;
- (2) Santos JS, Aguiar DA, Ribeiro JW; Ribeiro MC. Atlantic Forest: remote sensing database to investigate ecological processes. **Remote Sensing in Ecology and Conservation**, to be submitted on April 2015;
- (3) Santos JS, Fahrig L, Ribeiro MC. Influence of matrix permeability and heterogeneity landscape for biodiversity conservation. **Ecology Letters (JCR= 13.042)**, to be submitted on July 2015.



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& International Project between FAPESP & AKA/Finland (process 2013/50421-2) - *New sampling methods and statistical tools for biodiversity research: integrating animal movement ecology with population and community ecology*

More about LEEC's research: <http://www.leec.eco.br/>