DEVELOPMENT OF A PYTHON PACKAGE FOR IMPROVED DATA ANALYSIS

Introduction

In any modelling context, data takes up a large and important role. We cannot expect a model to predict reality when we don't feed it with real (or at least realistic) data. The analysis of (large) amounts of data and their preparation for use in a modelling context is therefore a major, and often very time-consuming step in the modelling process. This thesis will help to develop a structured and time-saving workflow to accomplish that, for different kinds of data.

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BACKGROUND

L&W, B&N, M, C&B

LANGUAGE

English

MORE INFO

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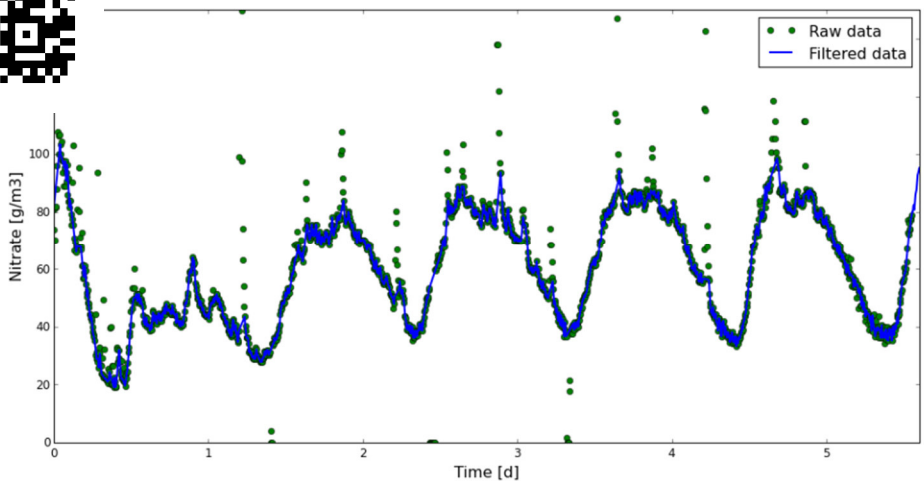
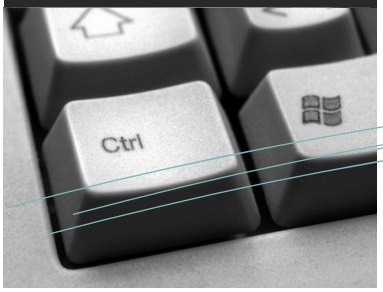
Methodology

A first version of a Python package (wwdata, see QR-code) that aims to analyze and prepare data obtained online was already developed at BIOMATH. The package is available online for everyone to use, and will also be the basis that this thesis will build upon.



Objectives of the thesis

This thesis aims at further developing the wwdata package and explore possibilities to analyze different kinds of data (e.g. lab experiments), analyze them in a different way (e.g. statistically, making use of novel approaches such as Artificial Neural Networks) and make the package more user-friendly (e.g. through a user interface).



BIOMATH