Getting Started

All aboard the Open Climate Workbench train... lets begin

Introduction

The following guide will help you setup the recommended working environment for OCW power users.

This guide will focus on setup for OS X 10.8.x or newer (with Developer Tools already installed) and Ubuntu 12.04. It assumes you are familiar using a terminal.

For *nix Users

If you run some *nix variant you shouldn't have too much trouble following the guide.

Windows Users

If you're on Windows, please let us know what sort of troubles you run into so we can hopefully provide help for future users.

Get the Open Climate Workbench Source Code

There are a few possible ways to get the code.

Get the latest release

Grab the latest official release from Apache OCW website.

Recommended Release

It is recommended that you use one of the below options instead as it is easier for the development team to help you address any problems you may have.

Grab the latest code from the ASF (User)

If you're a user and you don't plan on contributing code back to the project you should pull the code from the primary project's **git** repository. You can download it into **~/climate** with:

```
git clone http://git-wip-us.apache.org/repos/asf/climate.git
```

Grab the latest code from the ASF (Developer)

If you plan to help out the project and send in a patch (thanks by the way!) then you should fork the project on Github. After doing that you can clone the code into **~/climate** with:

```
git clone https://github.com/<your Github username>/climate.git
```

Dependency Installation

Using conda

This is the simplest and recommended installation method. You will first need to install the conda package manager, which can be readily obtained through either the Anaconda or Miniconda scientific python distributions. Be sure to allow the installation to update your PATH for you.

Before invoking conda to install the dependencies, it's always a good idea to ensure that your version of conda is up to date. You can do this with:

```
# Update conda packages
$ conda update conda
# Add the conda-forge repository to your package manager
$ conda config --add channels conda-forge
# Install ocw to ~/anaconda or ~/miniconda2/3
conda install ocw
```

This installation method should work for all major platforms, making it particularly advantageous. Additional information for advanced users who wish to contribute to the project's development can be found here.

Test Your Installation

The easiest way to test your installation is to run one of the example scripts in **$HOME/climate/examples**.

```
cd $HOME/climate/examples
python simple_model_to_model_bias.py
```

If you face run-time exceptions with the above, make sure you have the libpng16 library installed, and are not running libpng12.

If everything runs successfully you should see a plot similar to the one below in the **examples** folder.

TASMAX Bias of WRF Compared to KNMI (1989 - 2008)
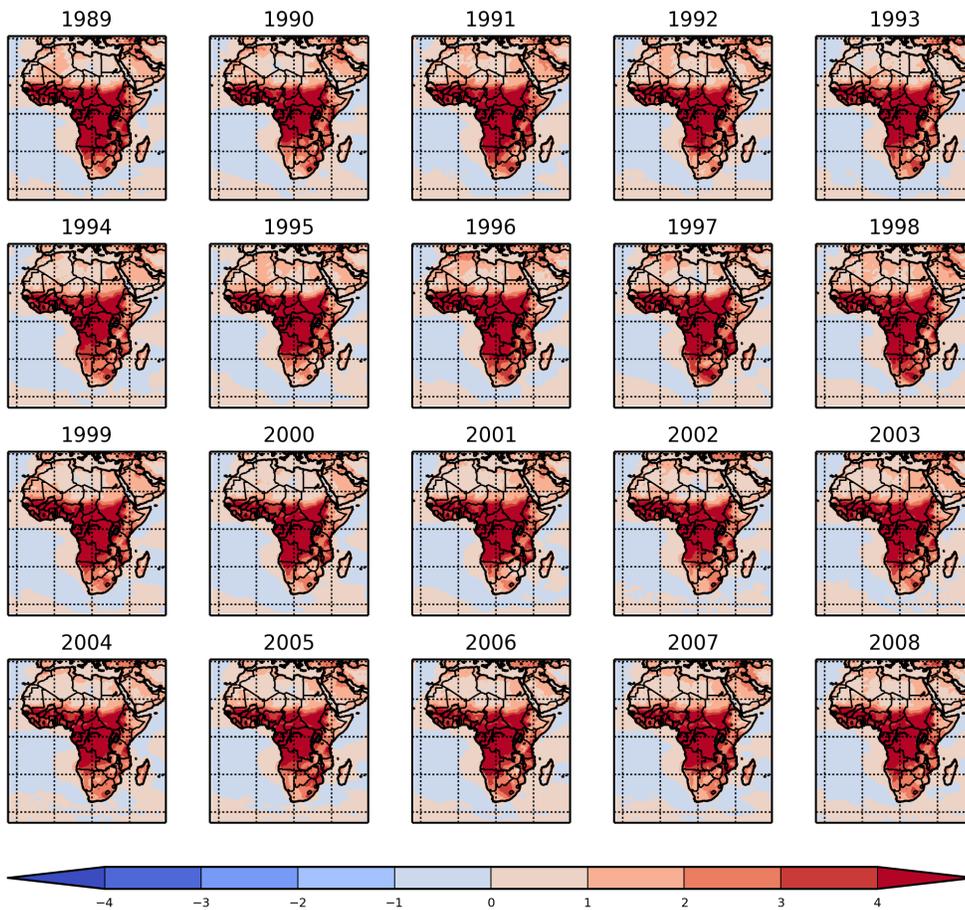
Installing the OCW UI

If you would like to install and use the OCW-UI for running simple evaluations through your web browser, check the Open Climate Workbench User Interface Installation and Overview guide to get started.

Using the OCW VM

If you want to get up and running with OCW quickly and with minimal overhead consider using the OCW VM. You can read about how to build the VM on the OCW VM - A Self Contained OCW Environment page. The OCW VM gives you an isolated VM environment with OCW pre-setup for you so you can get up and running without installing dependencies or configuring your system.