

We would like to thank the three reviewers for providing valuable comments that helped in a better representation of our manuscript. Please find below our replies following the comments. Comments are listed first, followed by replies and associated changes. While revising the manuscript based on the comments, we have also corrected some errors throughout the manuscript to further improve it.

Reviewer #2

General comments:

Even though the paper is a good review work of RCMES, I suggest to add some appendices for completion:

- Explained examples of CFiles (YAML).
- At least one (basic) run from start to end (including CFiles and outputs).

This information will help other scientists to understand and how to use the model better.

→ We appreciate these comments. The RCMES website explains about CFiles (<https://rcmes.jpl.nasa.gov/content/config-files>) and describes basic example runs from start to end (<https://rcmes.jpl.nasa.gov/content/tutorials-overview>). CFiles and input datasets can be also downloaded. Please see P7L7 in the revised manuscript.

“The tutorials on the RCMES websites (JPL, 2018b) provide step-by-step instructions, CFiles, and datasets to reproduce all of the figures included in the two published articles.”

Specific comments:

- P8, l3: "... takes about 45 minutes on a multi-core Linux computing platform." Can you please detail the technical specs of the hardware as well as the Linux system (kernel, relevant libs...). This is important so other scientists can compare and decide what will be the cost of running RCMES on their own infrastructures.

→ We have added some details about the hardware specs.

(Before) As an example, running RCMES for CORDEX North America domain with 12 variables and 3 seasons (36 unique evaluations with 5 datasets each) takes about 45 minutes on a multi-core Linux computing platform.

(After, P8L2) As an example, running RCMES for CORDEX North America domain with 12 variables and 3 seasons (36 unique evaluations with 5 datasets each) takes about 45 minutes using an Intel Xeon CPU with a clock rate of 2.30GHz on a multi-core Linux computing platform.

- P8, l26-28: Given that some of the components are contained in another (e.g. RCMES database is a possible source for the Data Loader), and for readability reasons, I suggest to mention which section or subsection of the current document talks about each component.

→ We have revised the following paragraph.

(Before) In the following, we describe seven software components of RCMES, 1) data loader, 2) the RCMES database, 3) dataset processor, 4) metrics, and 5) plotter, 6) statistical downscaling module, and 7) installation package options for disseminating RCMES.

(After, P8L27) In the following, we describe seven software components of RCMES, 1) data loader (Section 3.1), 2) the RCMES database (Section 3.1.1), 3) dataset processor (Section 3.2), 4)

metrics and 5) plotter (Section 3.3), 6) statistical downscaling module (Section 3.4), and 7) installation package options for disseminating RCMES (Section 3.5).

- P11, I20: Please change 'json' to 'JSON'.
- P12, I2: Please change 'scipy' to 'SciPy'.
- P12, I24: I suggest to use the term 'function' instead of 'routine' on this case.

→ We have changed these as suggested and 'numpy' to 'NumPy'.

- P13, I30: "1) a map file, 2) histograms, and 3) a spreadsheet" Can you please detail the (file) formats available for this outputs?

→ We have added the following sentence.

(Added, P14L6) The map and histogram are portable graphics format (PNG) files, and the spreadsheet file has the eXceL Spreadsheet (XLS) extension.

- P14, I1: Do you provide any version for Python (any) Virtual Environments? If so, can you please detail it on this section?

- P14, I16: "the latest Python" Unless you do continuous builds of the image I suggest to change this to just "Python" and include the major version.

→ The VM includes Python 2.7. We have added the version information.

- P14, I12: Can you please mention in this section that the VM image is for VirtualBox?

- P14, I14: Containers and VMs can be complementary technologies (depending on the case). I think for this context this phrase "As a completely self-contained package running in a virtual host container..." does not make sense at all. I suggest to either remove it or rephrase it with technically correct terms.

→ We agree with this. The following sentence has been revised.

(Before) As a completely self-contained package running in a virtual host container, the VM approach offers a plug and play approach that enables users to quickly begin exploring RCMES without any trouble in the installation process.

(After, P14L24) As a completely self-contained **research environment** running with **VirtualBox** \citep{virtualbox}, the VM approach offers a plug and play approach that enables users to quickly begin exploring RCMES without any trouble in the installation process.