D2. The Regional Climate Model Evaluation System (RCMES): A Systematic Evaluation Of CORDEX Simulations Using Satellite Observations (obs4MIPs)

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Jet Propulsion Laboratory’s Regional Climate Model Evaluation System (RCMES) has been used in several hands-on training to evaluate RCM simulations for various CORDEX domains. As an instructional training session, Session D2 had two primary objectives. First, we aimed to facilitate systematic evaluations of CORDEX RCMs forced by ERA-Interim reanalysis against a suite of satellite observations. Second, we introduced NASA’s statistically downscaled CMIP5 simulations (NEX-GDDP) that are available on Amazon Cloud.

Prior to the session, we set up 55 Linux servers for the session participants, as 53 conference attendees selected our session during their registration. However, only 9 participants showed up.

Nevertheless, we had very interactive and productive time. At the beginning of the session, we explained how to access the Linux instances prepared for all participants using their own laptops. Although the conference venue’s WIFI connection was very slow, the participants could choose one of the 10 CORDEX domains and evaluate RCM simulations that are available via ESGF by running a Jupyter Notebook script. The session provided a brief slide presentation on the motivation and objectives behind RCMES followed by an overview of its capabilities and the associated website resources. After a short break, the participants analyzed statistically downscaled projections at high spatial resolution from the NASA’s Earth Exchange (NEX) project.

At the end of the session, we asked the participants to fill out our survey form. Overall, feedback for the training was very positive. The participants found the presentations and model evaluation results easy to understand. Notebook interface proved to be convenient for users due to no special requirements for installing the software.

The RCMES team has to ensure reliable internet access and reasonable connection speed to Amazon Cloud prior to any future hands-on training.