Geoscientific
Model Development
Discussions

Interactive comment on "The University of Victoria Cloud Feedback Emulator (UVic-CFE): cloud radiative feedbacks in an intermediate complexity model" *by* David Ullman and Andreas Schmittner

Anonymous Referee #2

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From the reference to the paper by Weaver and co-authors, UVic needs a choice between options, like humidity transport or diffusive. It also looks as if the atm wind can be prescribedd or sensitive to SAT and density. Evidently,such options impact the feedbacks in UVic. I suggest a table to summarize these options, and the feedback concerned..

In the same views, the way cloud feedback, as approximated by the atm-albedo could be explicitly described for clarity. The description of some feedback-loops would be of great help. For instance, atm-albedo -> SAT-> OLW etc How is the ocean dynamics impacted ? What changes are observed concerning the thermohaline circulation, the thermocline etc What about the sea-ice extent?

Some comments are already included in the RESULTS sections that could be related more closely to the UVic extended results others that the averaged global results directly as support to the comparison with the seven GCMs