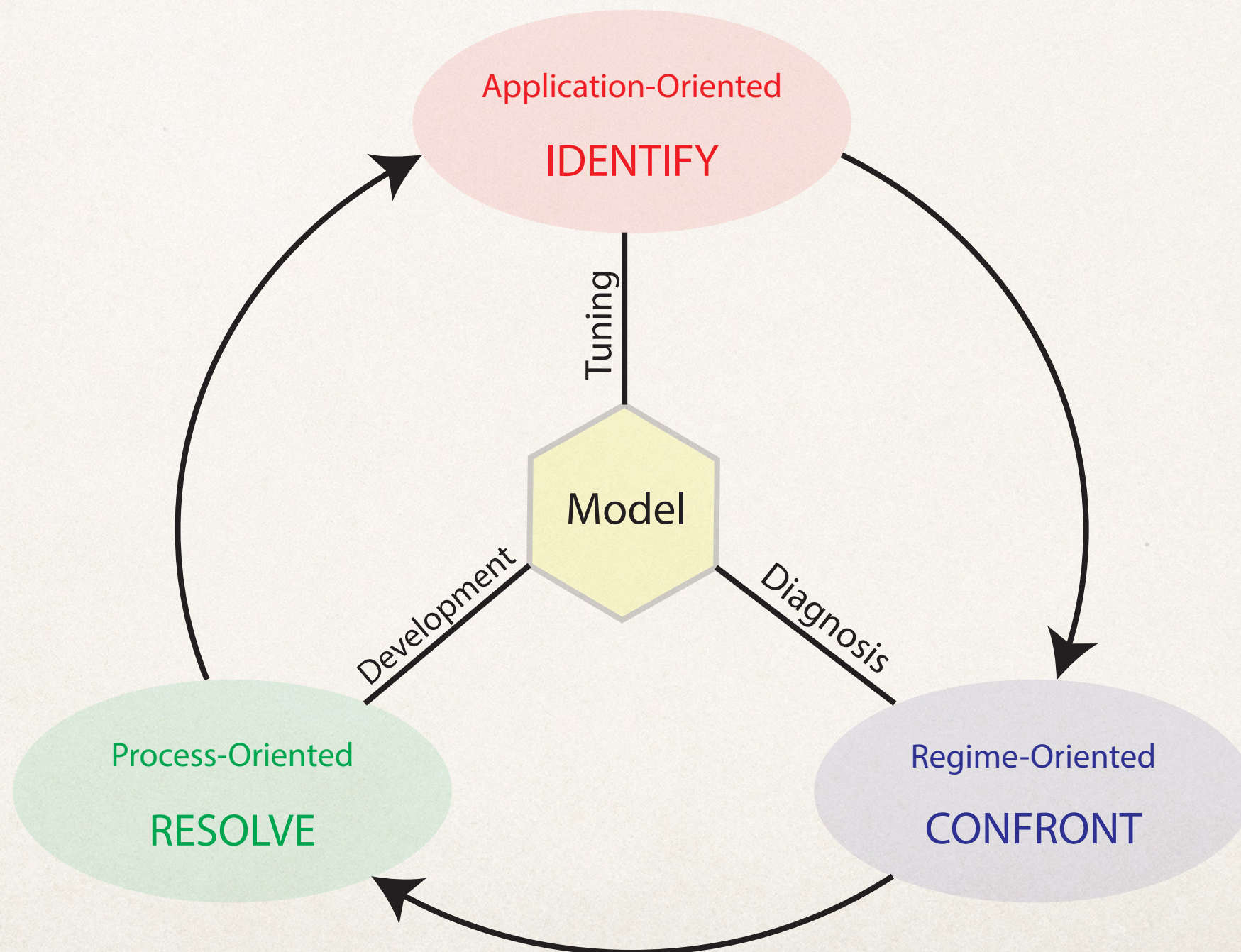


GEWEX-Process Evaluation Study

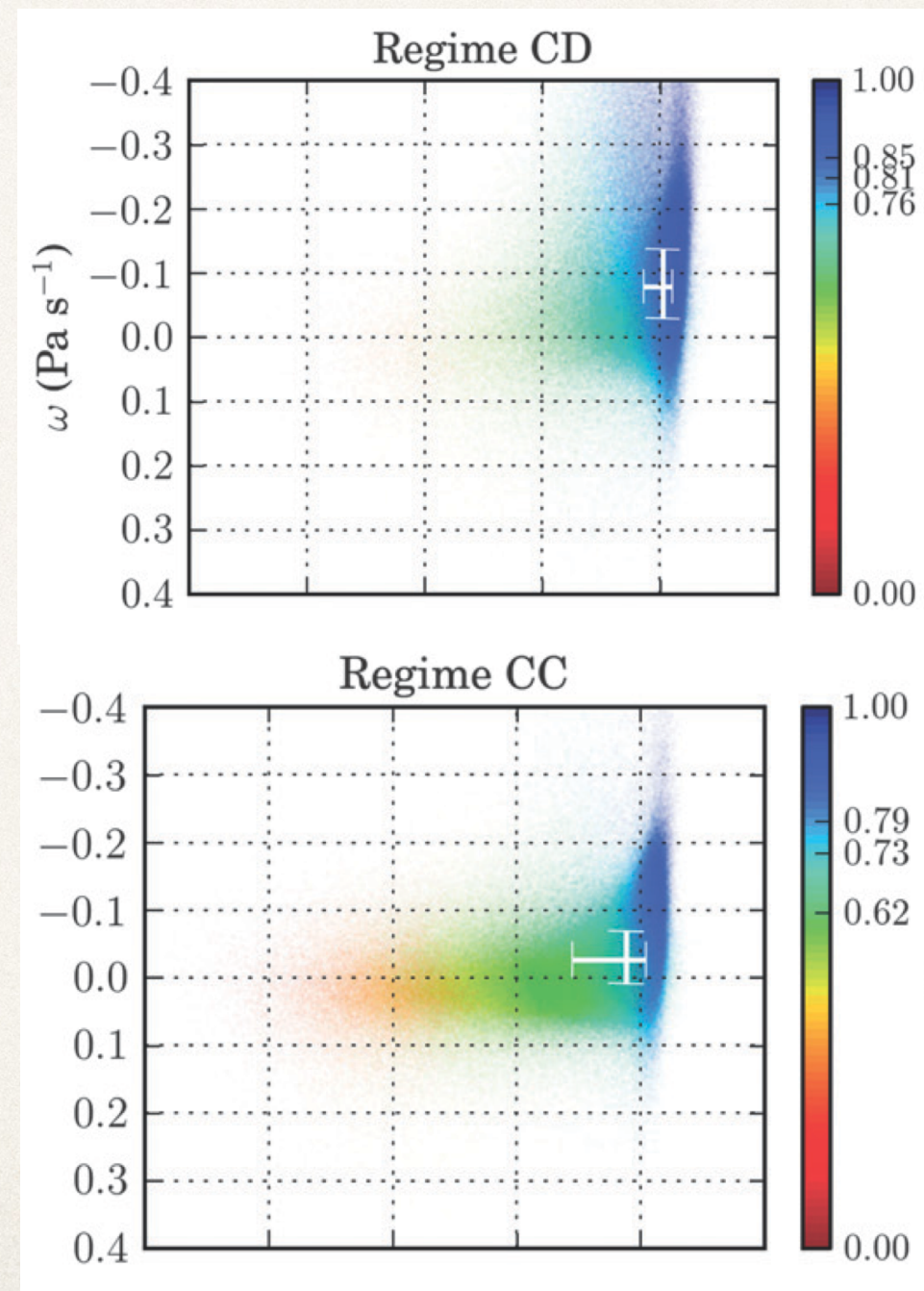
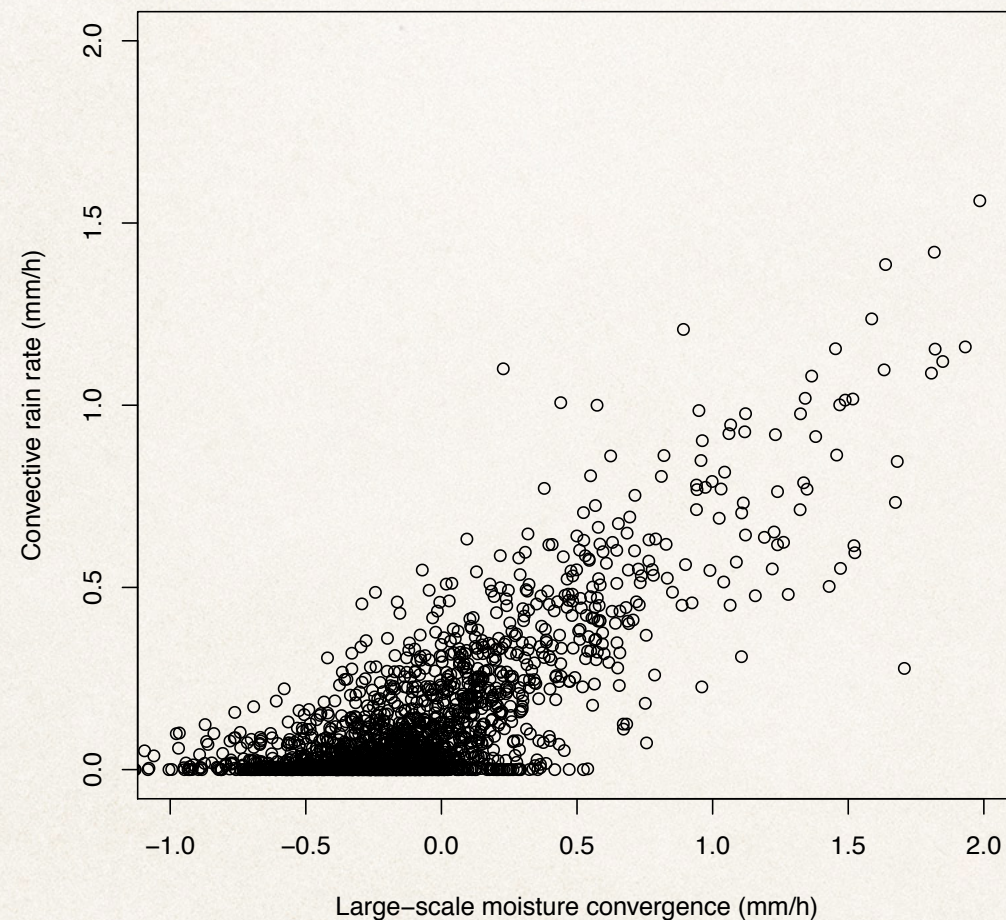
A proposal for discussion

Christian Jakob, George Tselioudis, Graeme Stephens, Sonia Seneviratne

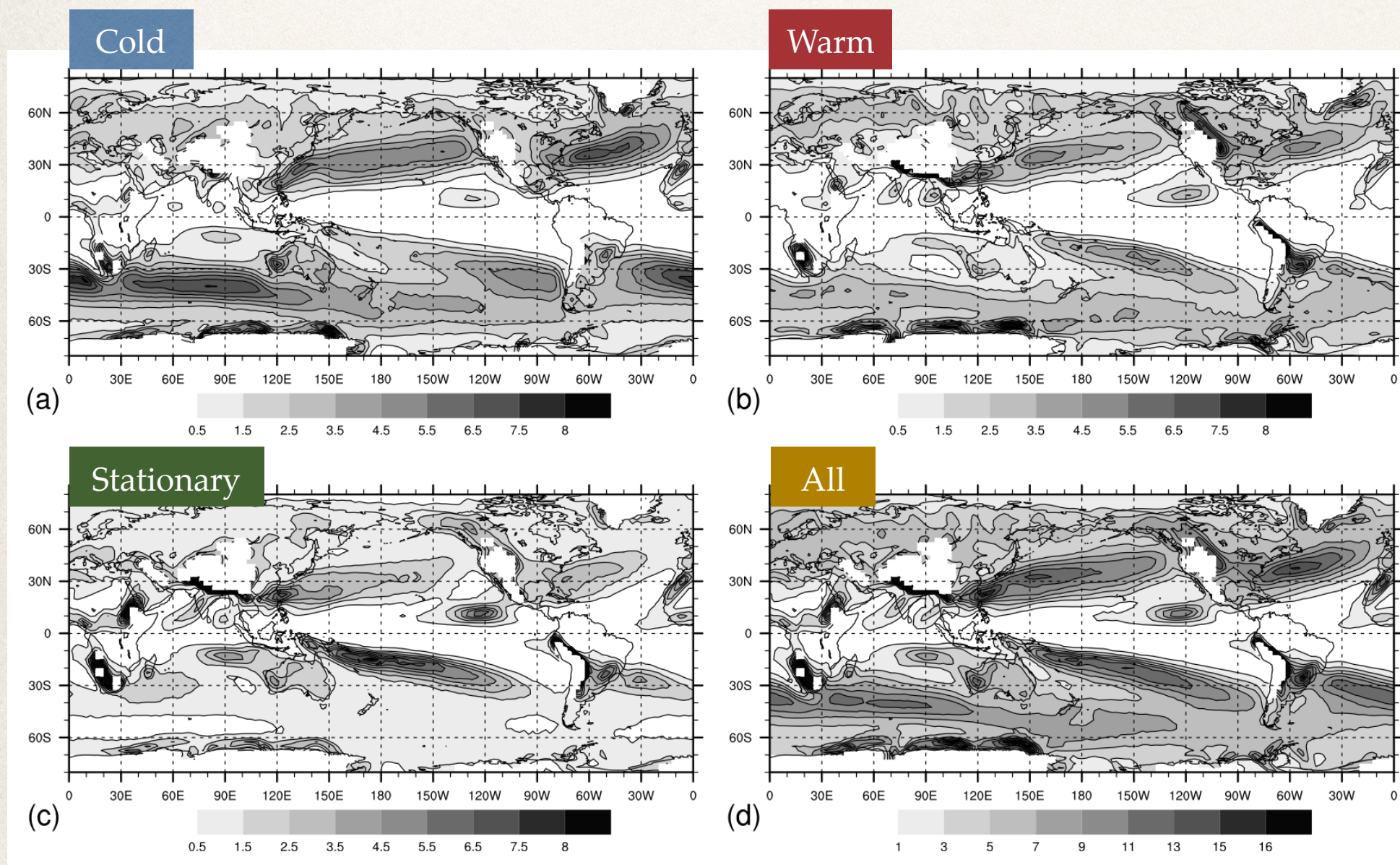
Model evaluation and development



Insightful model evaluation requires to test relationships between variables



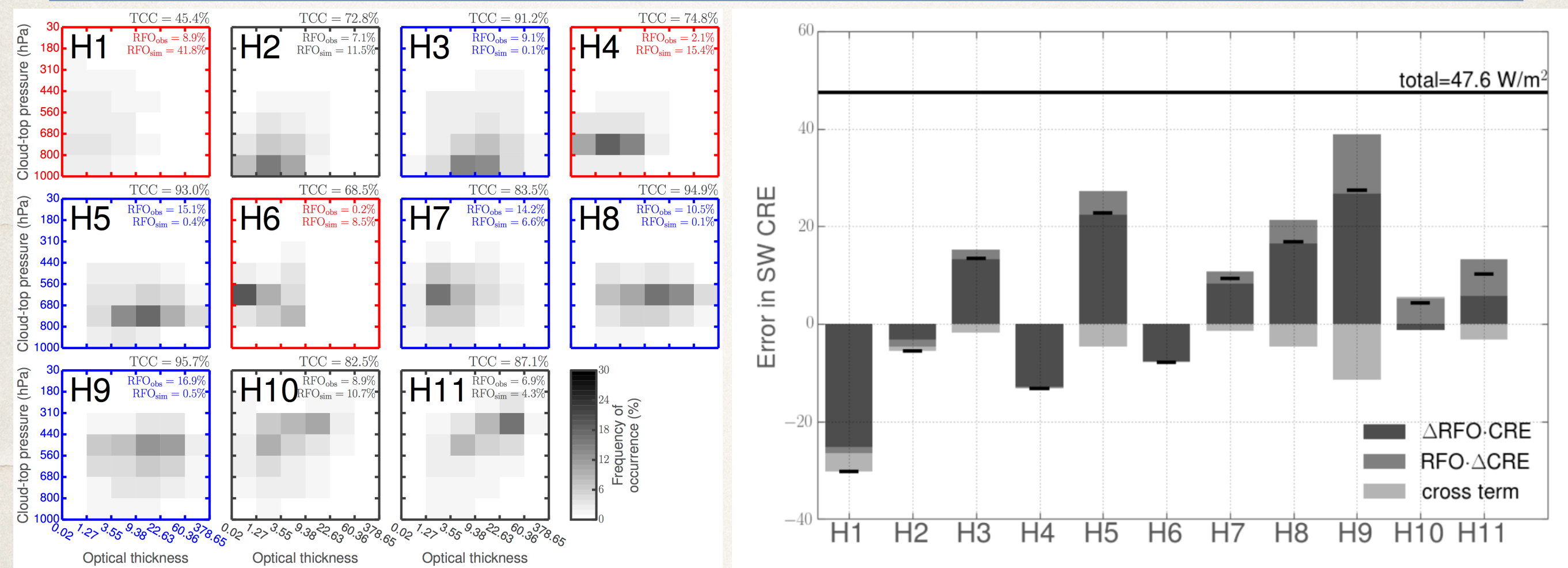
It also requires to consider including derived data sets



Frequency of
occurrence of
fronts

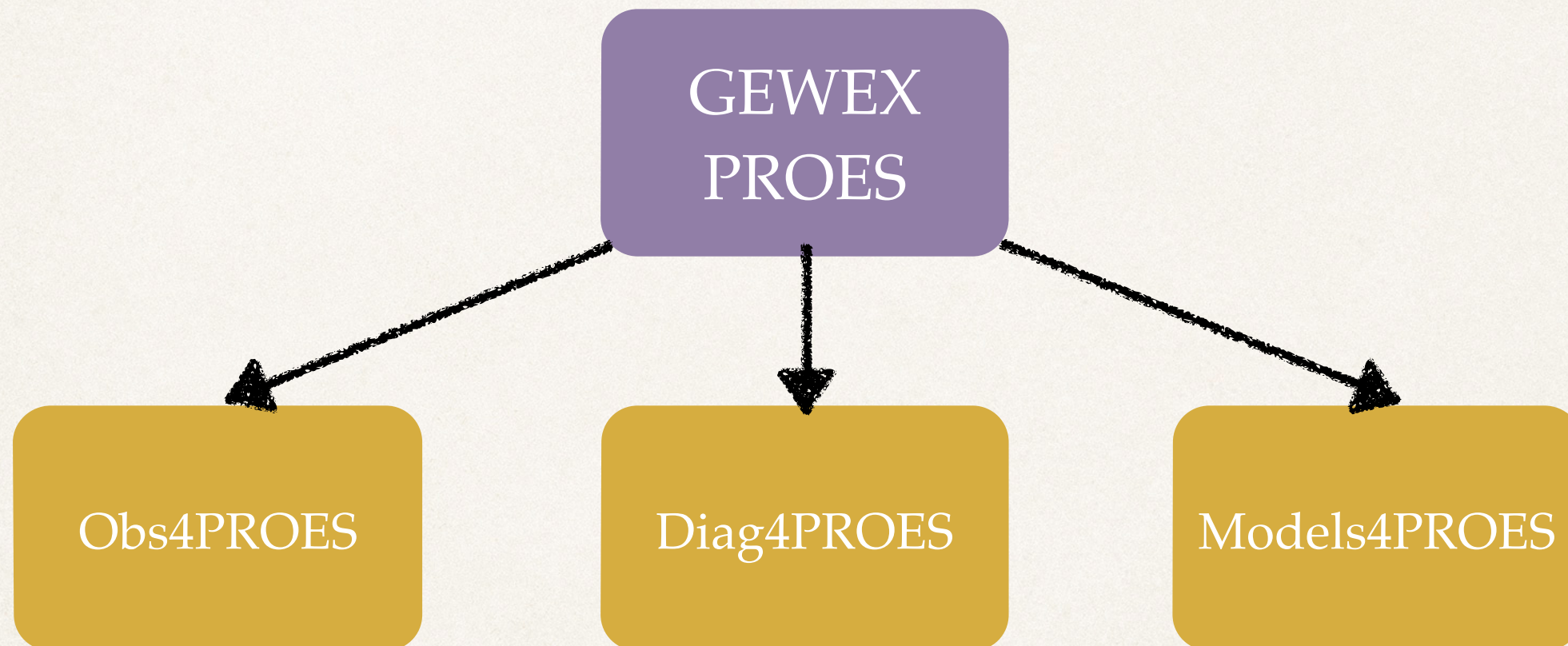
Berry et al., GRL
2011

It also requires more advanced diagnostic techniques



$$\Delta CRE = \sum_{r=1}^{11} RFO_r \Delta CRE_r + \sum_{r=1}^{11} CRE_r \Delta RFO_r + \sum_{r=1}^{11} \Delta RFO_r \Delta CRE_r$$

As a result we propose the GEWEX Process Evaluation Study - GEWEX-PROES



Main goals

- ❖ Obs4PROES

- ❖ provide high time resolution data sets relevant to the energy and water cycles of the ESGF - strong link to Obs4MIPS!?

- ❖ Diag4PROES

- ❖ collect, document and share major community-accepted diagnostic tools in a repository closely associated with that of the data sets and models

- ❖ Models4PROES

- ❖ ensure model output for PROES is available by collaboration with CMIP and potentially organize extra experiments

Some final remarks

- ❖ Initiation of a discussion with the GEWEX and wider community to determine the scope and feasibility of the project, not as a fait accompli
- ❖ Must add and not duplicate to be successful
- ❖ Consultation draft has been provided to the community and discussions are underway
- ❖ We need volunteers to participate!
- ❖ Further discussions will take place at next week's GEWEX meeting