THEME IV: ADDITIONAL SALLJ RELATED TOPICS

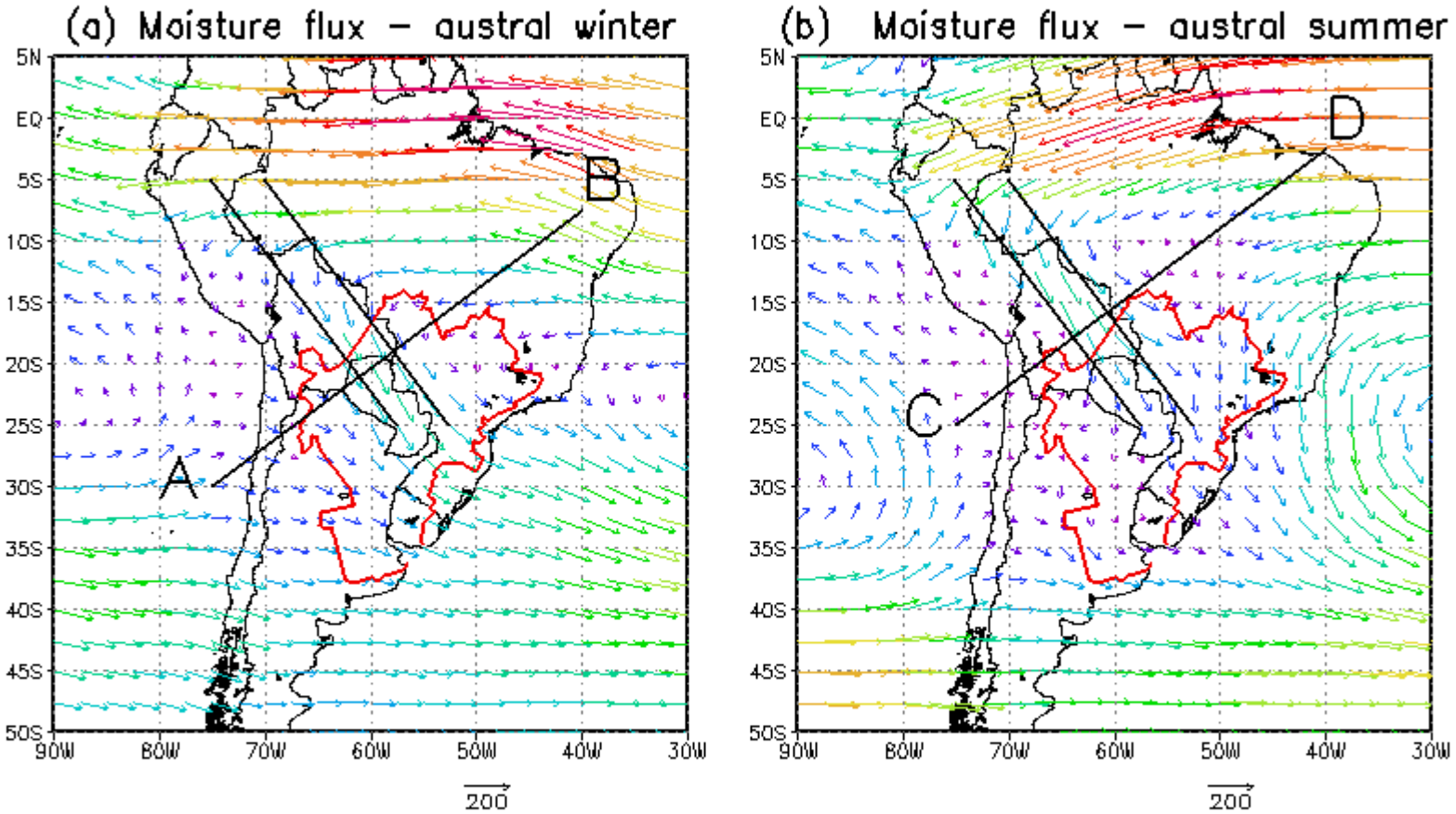
Hugo Berbery

Some related issues

- LLJ Annual Cycle

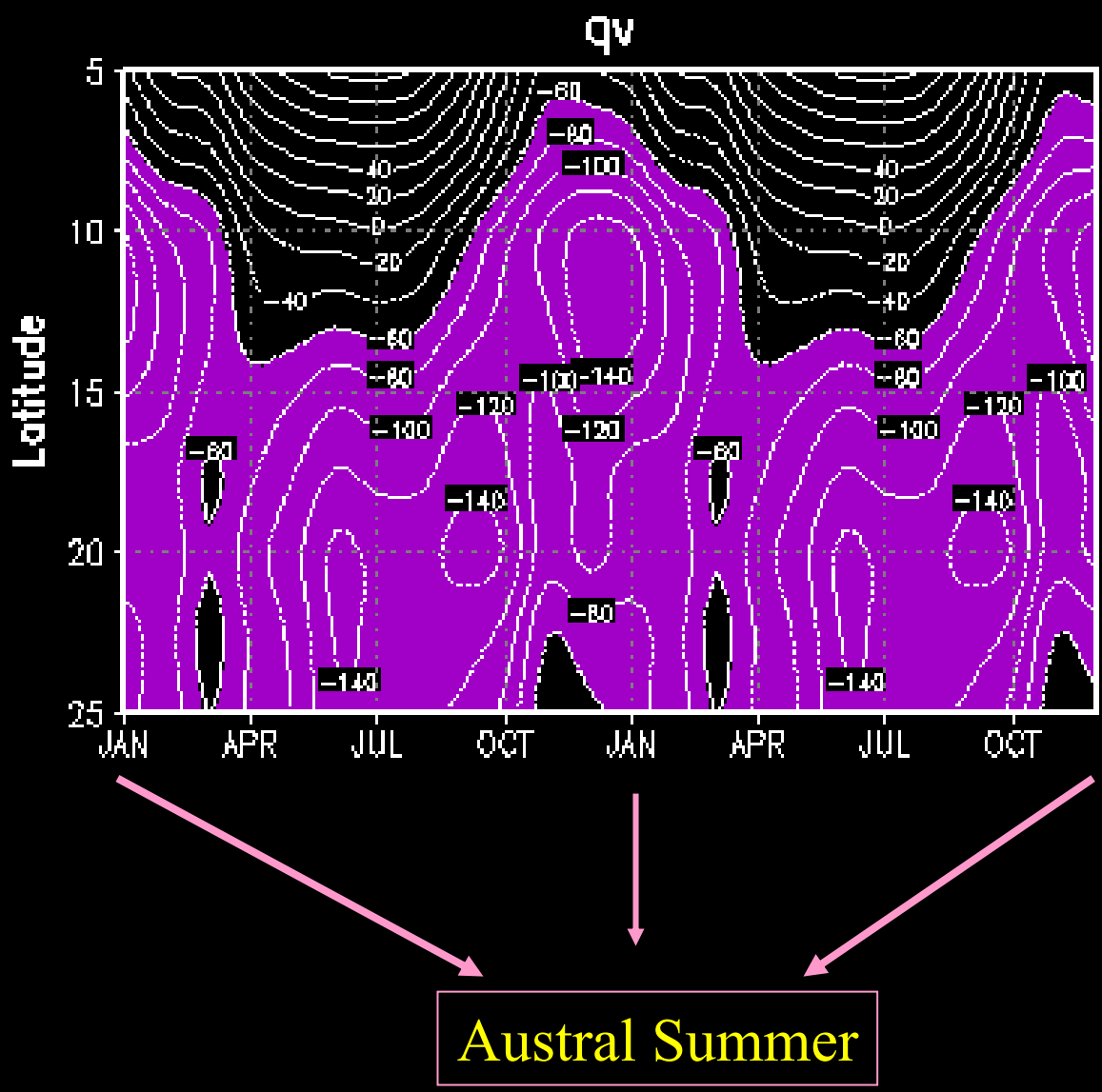
- Precipitation Modes assoc with the LLJ

- Organization and future activities



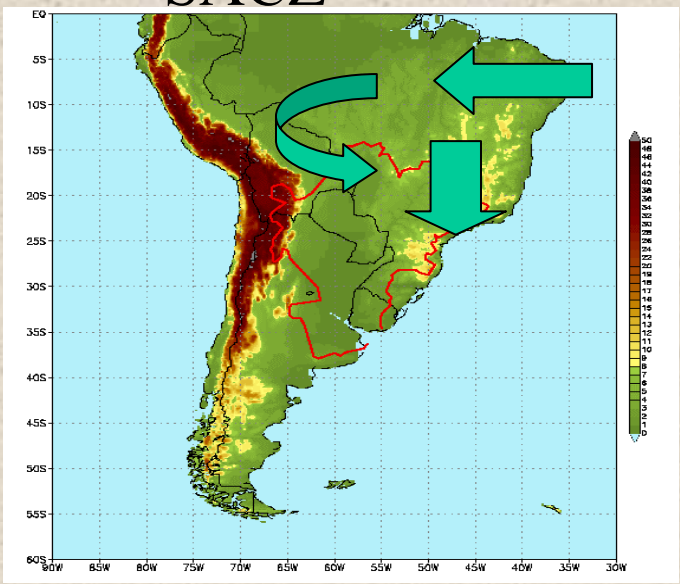
Vertically integrated moisture flux for (a) austral winter, and (b) austral summer.
Units are kg m^{-1} s^{-1}.
The two parallel solid lines east of the Andes represent the core of the LLJ;
AB and CD are transects used to show cross sections.

Berbery and Barros, 2002: JHM

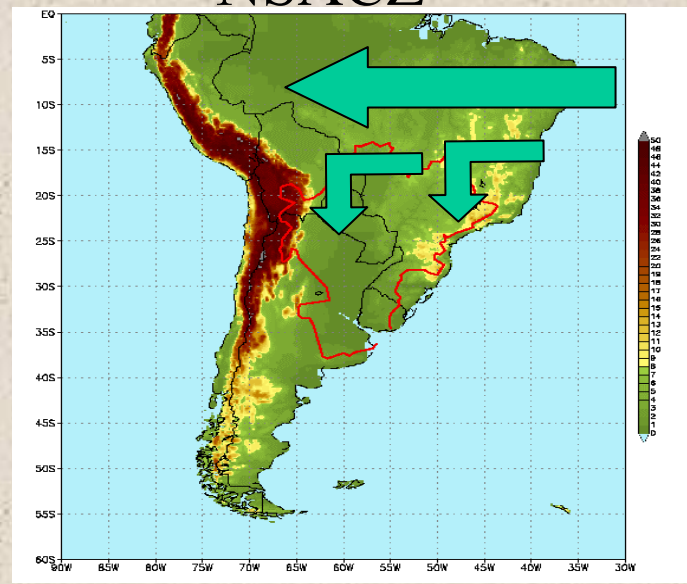

qv
Latitude
5
10
15
20
25
JAN
APR
JUL
OCT
JAN
APR
JUL
OCT
Austral Summer

The summer dipole

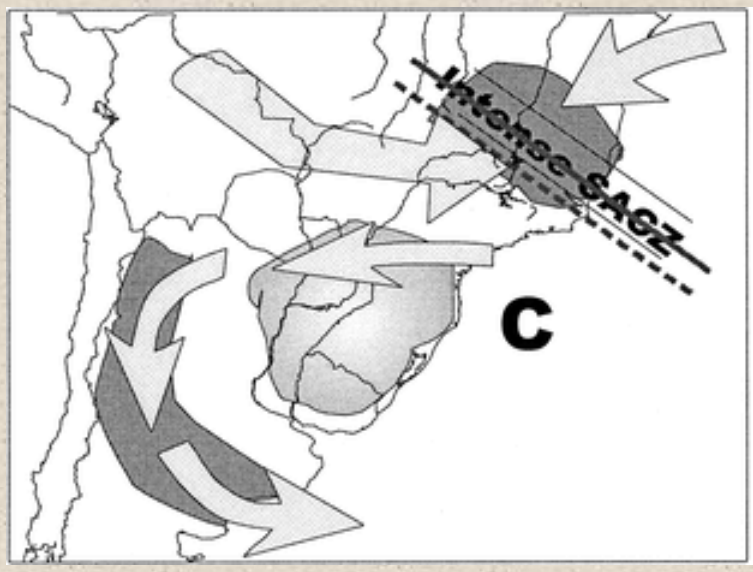
SACZ

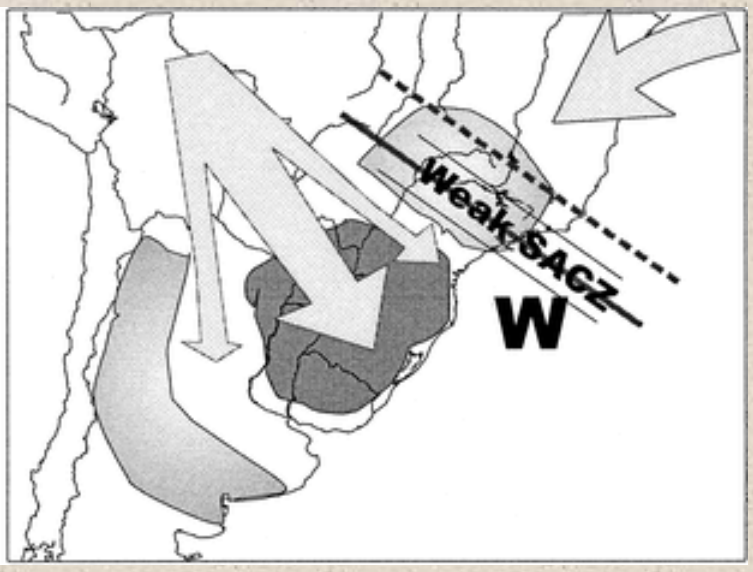


NSACZ

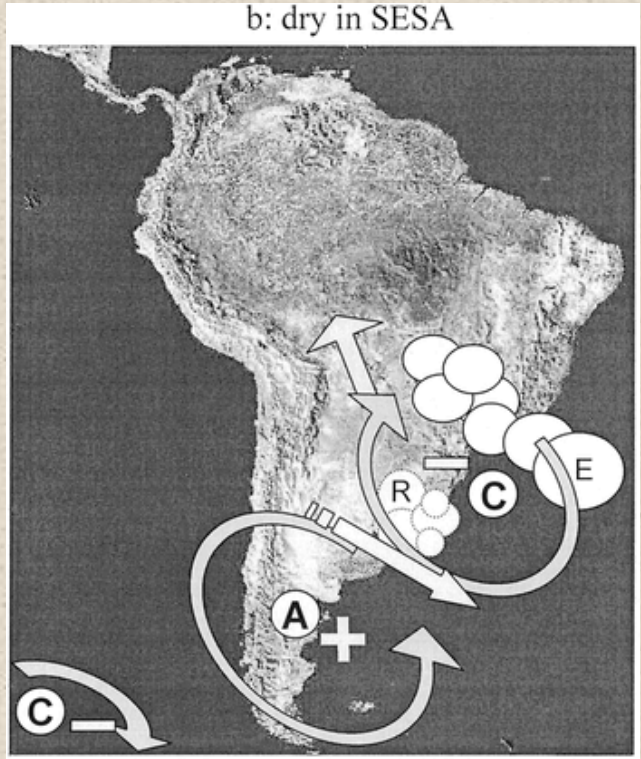


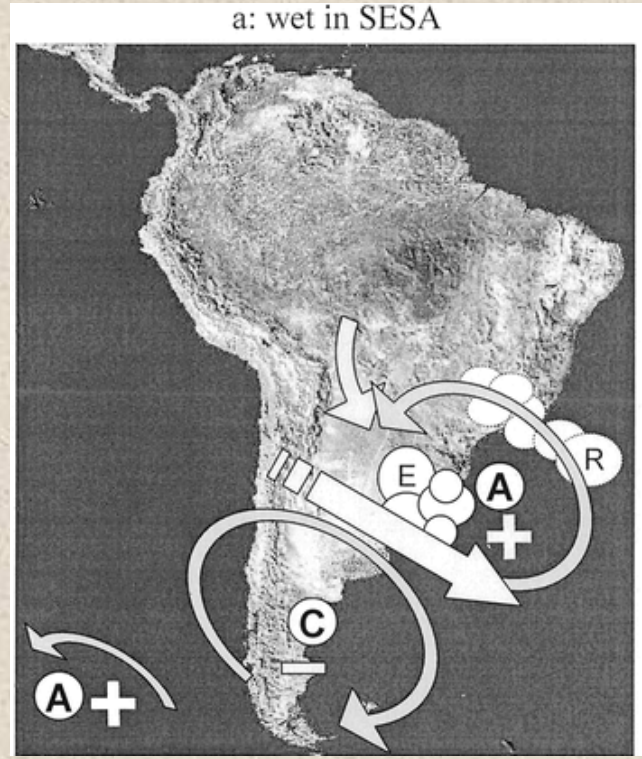
Herdies et al. 2002



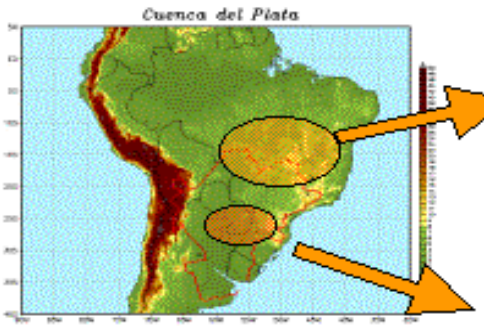


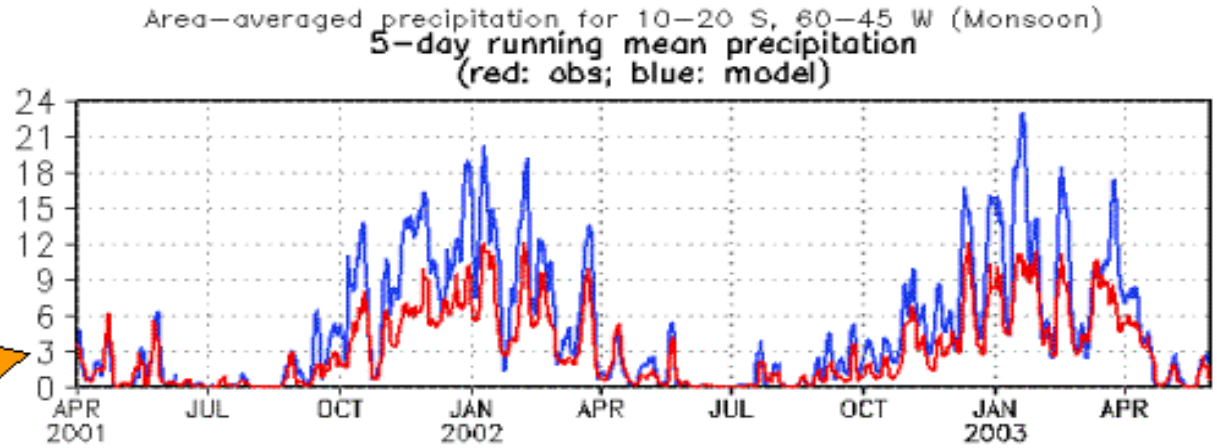
Doyle and Barros 2002

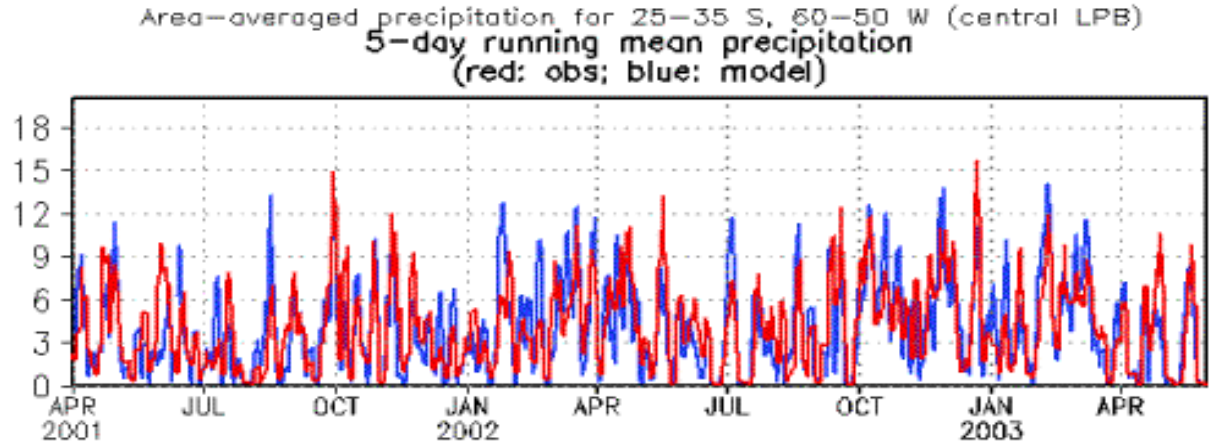




Diaz and Aceituno 2003

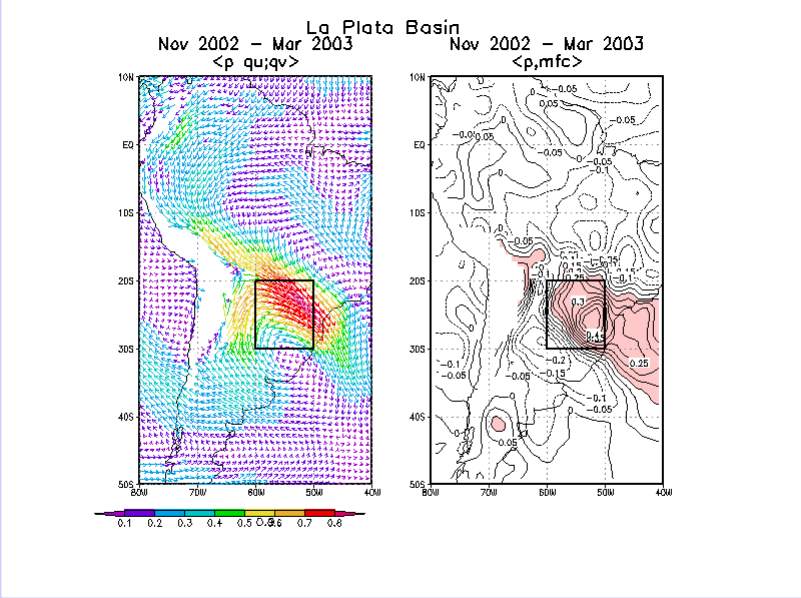


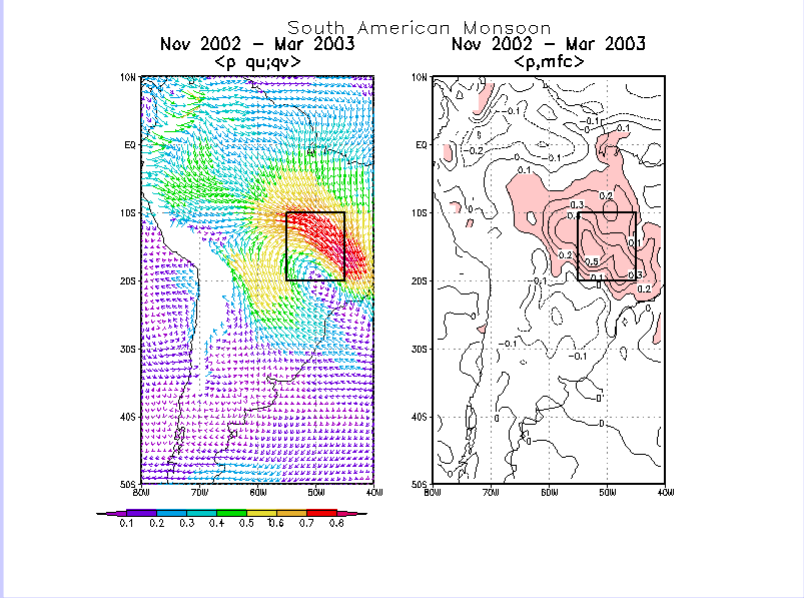


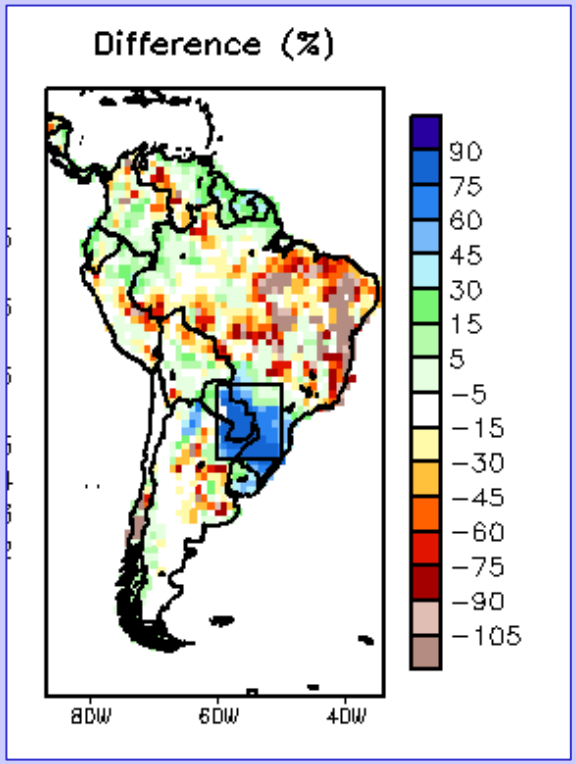


While there is an excess of model precipitation over the Monsoon region, the Eta model successfully reproduces the day to day variability.

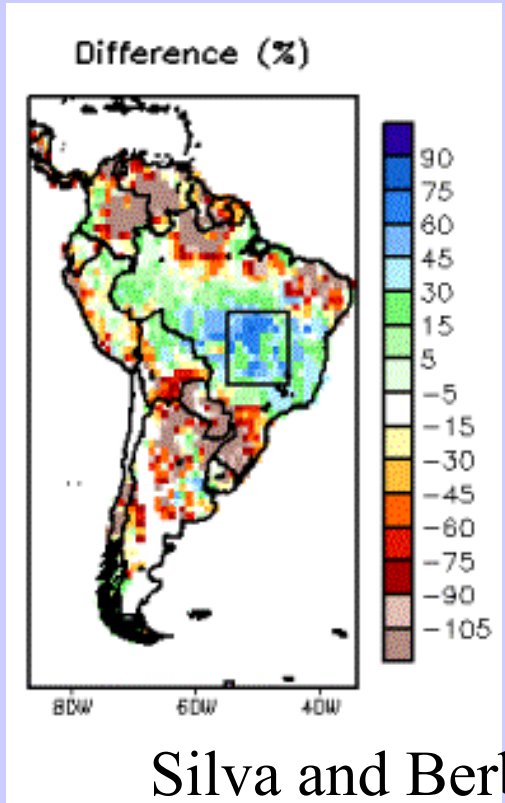
In the southern region, the model reproduces the variability and magnitude of the precipitation.



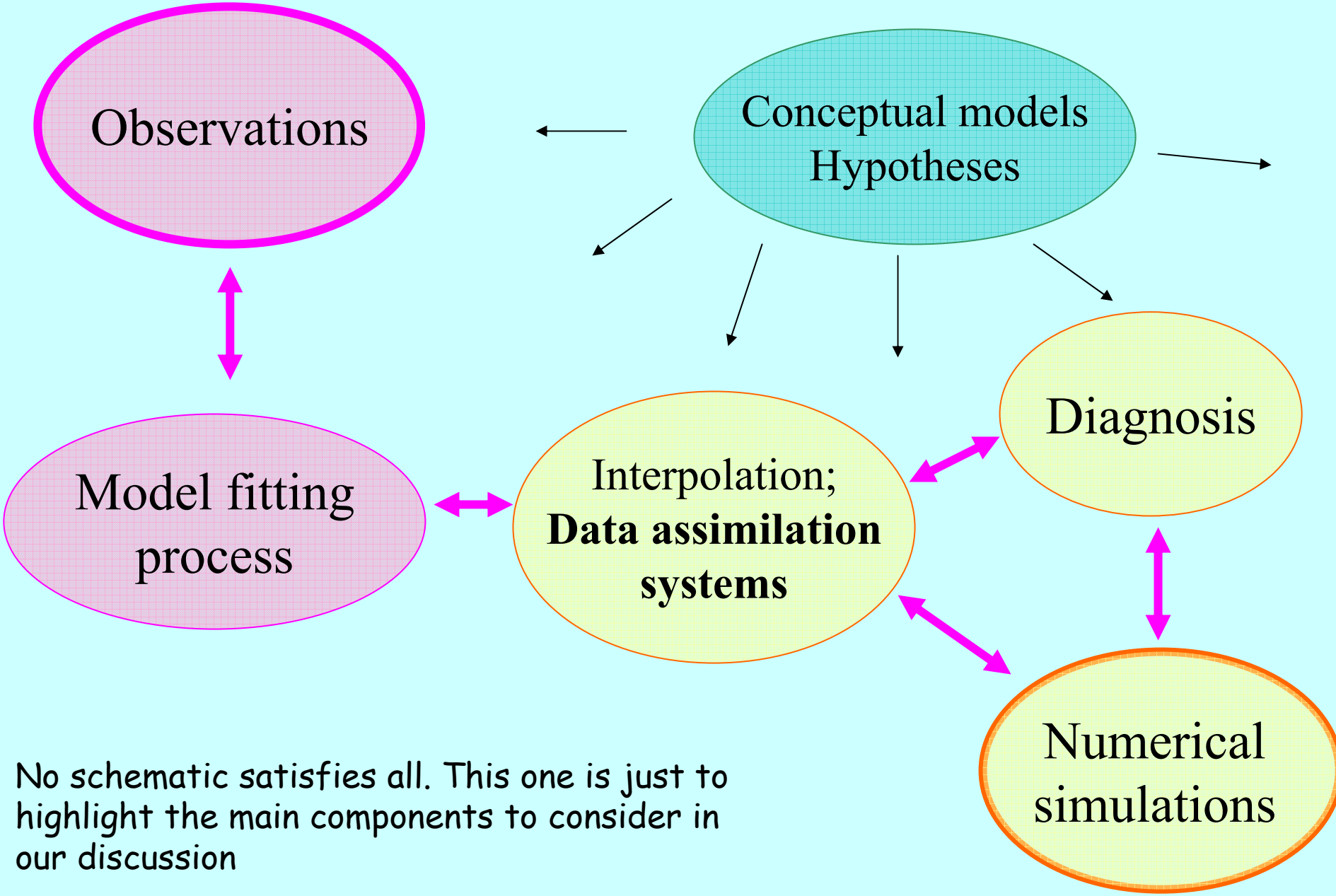




Runoff



Silva and Berbery, 2004



No schematic satisfies all. This one is just to highlight the main components to consider in our discussion

Verification issues:

Let's not confuse ***observations*** with ***truth***

Oh oh…

What is the best strategy for improvements in operational climate prediction of warm season precipitation?

What we have today:

- Different types of observations are (or will become) available.
- Regional models are available.

The missing link:

A user friendly Data Assimilation System for research/application purposes.