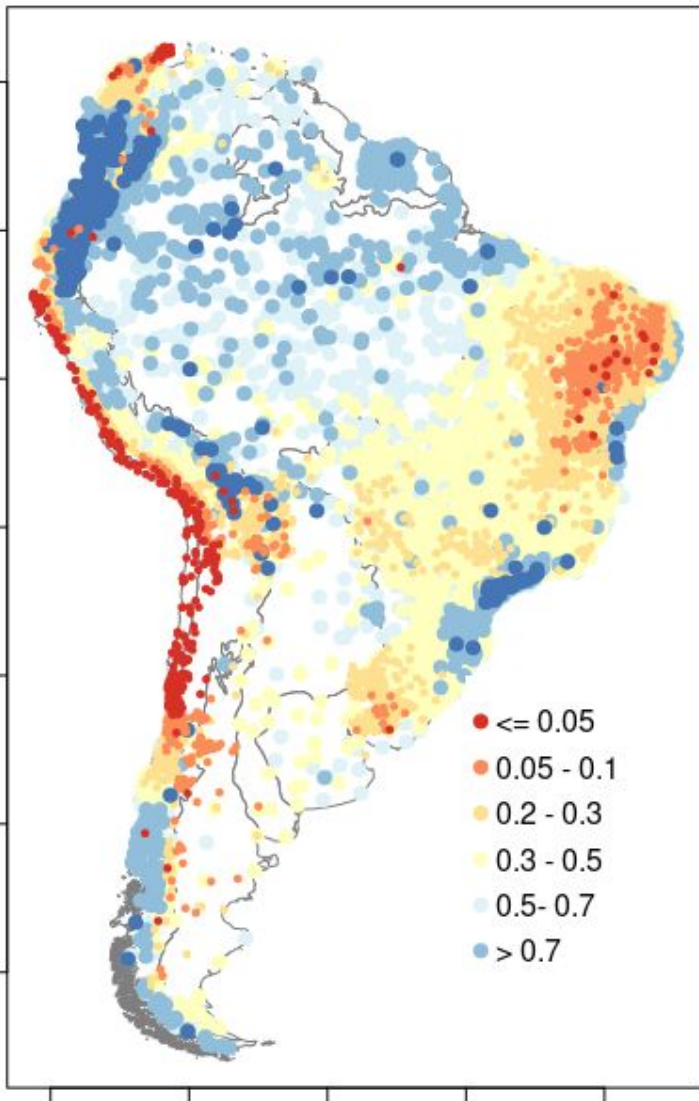


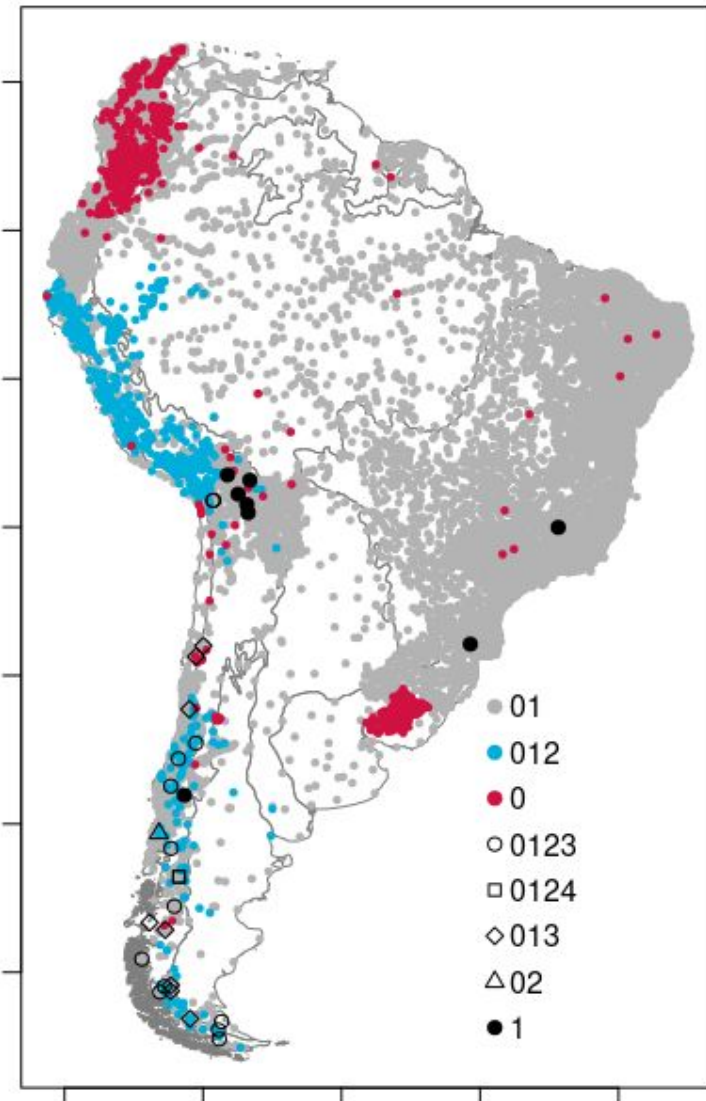
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South American RAW precipitation data

% of wet days



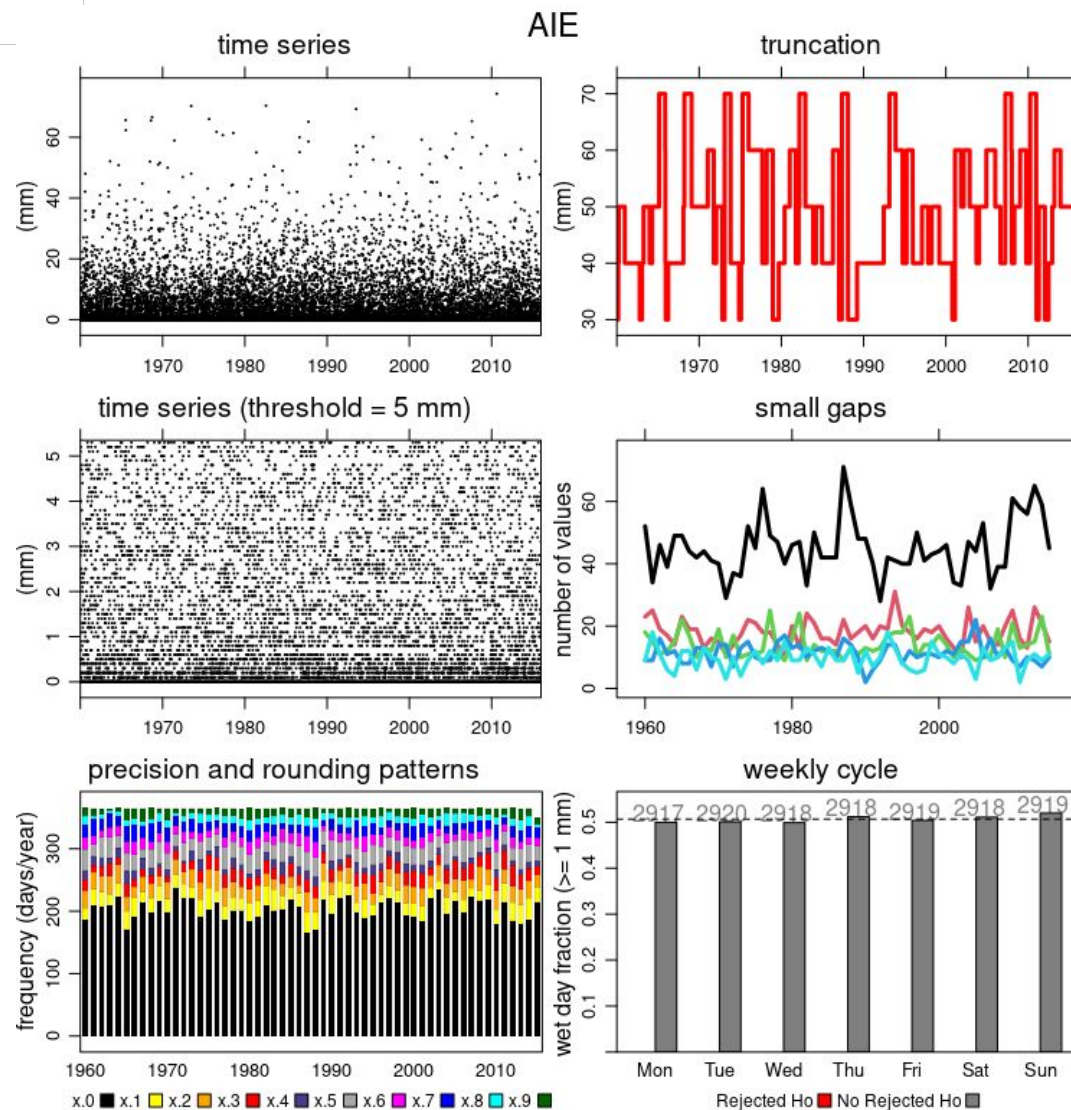
Scale of daily values



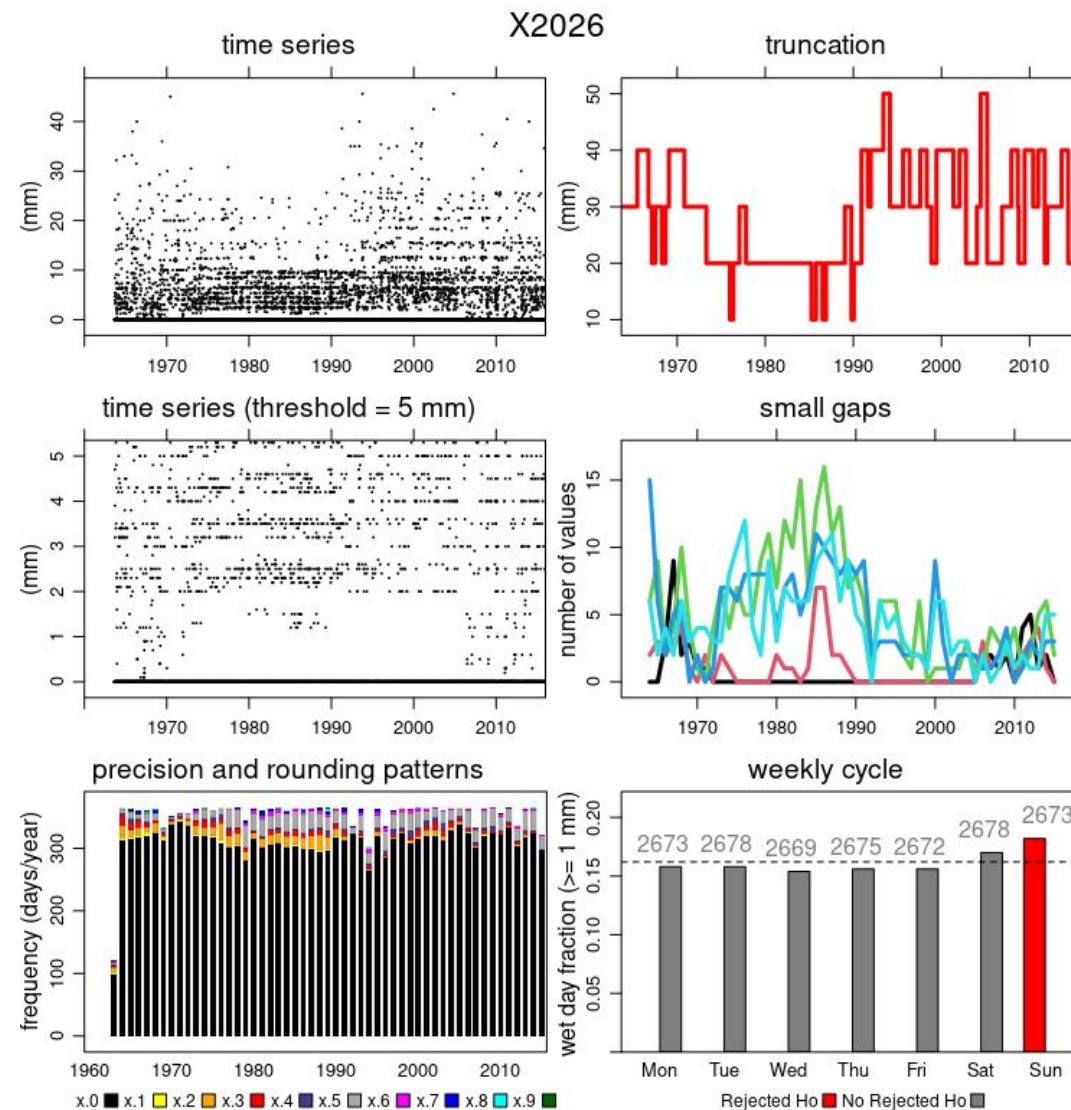
- Diversity of climates based on % of wet days
 - Disparities in some spatial regions
 - Length / bad location of the station
 - QC (and other) process based on % of wet days
- Some diversity in the precision of measurement
 - No too much problem if there are ≥ 3 decimals
 - Some time series are full of integers
 - QC (and other) process affected by the scale/precision of daily precipitation

u^b

Visual enhanced quality control



truncation (0) + small gaps (0) + weekly cycle (0) +
precision and rounding patterns (0) = 0

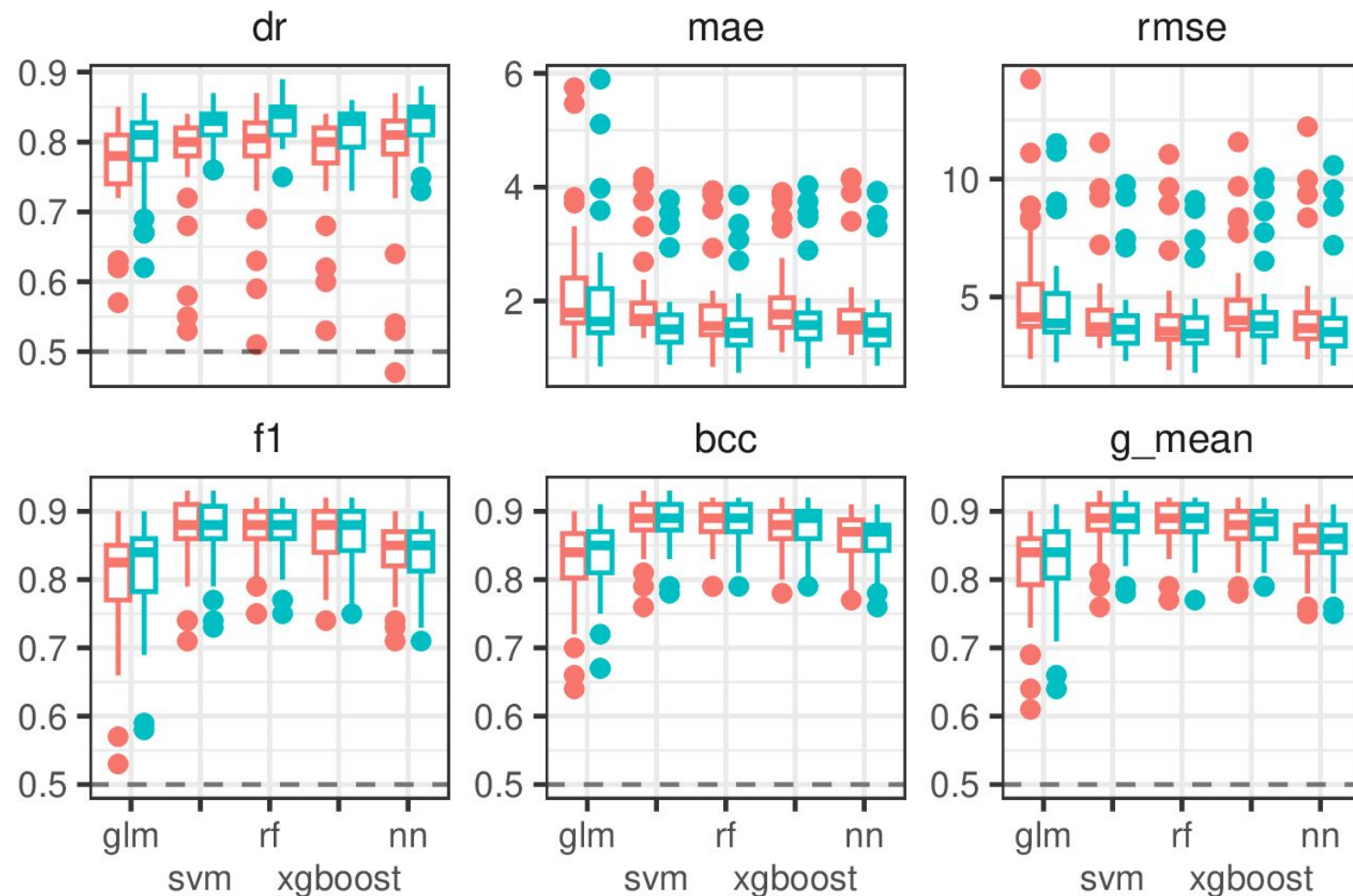


truncation (2) + small gaps (2) + weekly cycle (1) +
precision and rounding patterns (2) = 7



u^b

Gap-filling testing

- glm: original reddPrec
- In Switzerland (testing):
 - Machine learning
 - Multiple covariables

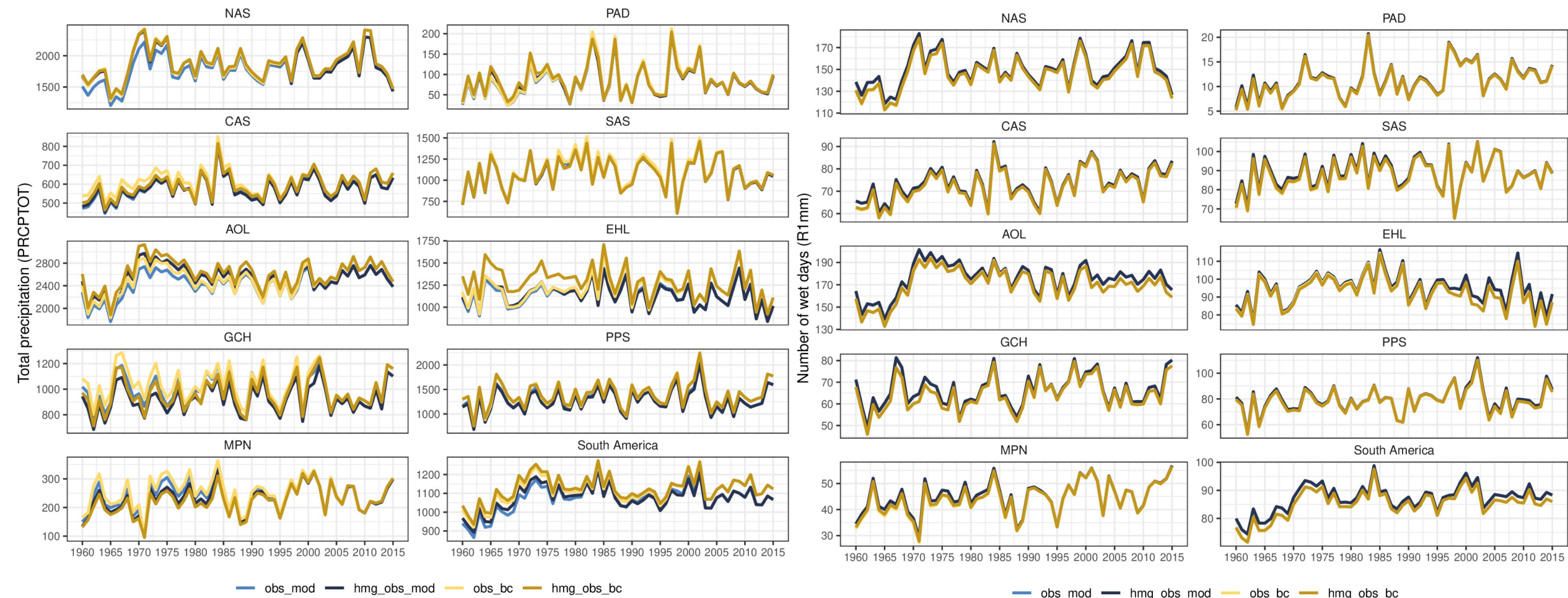


dr: measure regression (best 1)
bcc: measure classification

Model output:  mod_pred  bc_pred

u^b

Mean PRCPTOT and R1mm in SA



u^b

Evaluation of reconstructed data: wet/dry days vs daily position of Bolivian High System

