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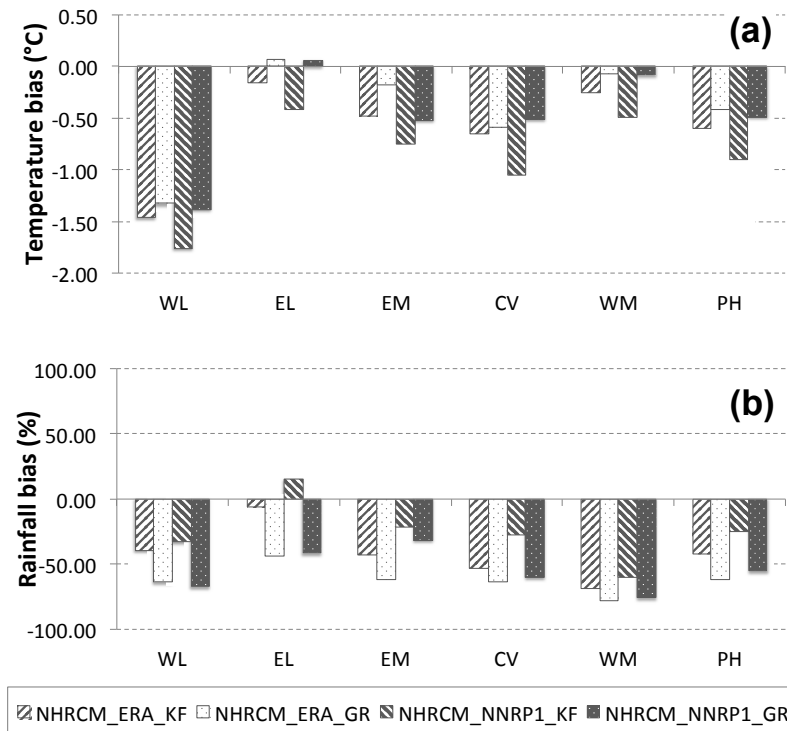


Figure 1. Bias in the (a) monthly mean temperature ($^{\circ}\text{C}$), and (b) monthly total rainfall (%) for the four model experiments relative to APHRODITE for each subregion (West Luzon (WL), East Luzon (EL), East Mindanao (EM), Central Visayas (CV) and West Mindanao (WM)), and over the Philippines (PH)

- The Non-hydrostatic Regional Climate Model (NHRM) was used to simulate present-day climate over the Philippines at 50 km resolution, using two sets of boundary conditions (ECMWF ERA-Interim and the NCEP/NCAR Reanalysis Project NNRP1), as well as two convective parameterization schemes in the model (Grell and Kain-Fritsch).
- While the seasonality of temperature and rainfall are simulated reasonably well for the Philippines, NHRM has an overall cold and dry bias over land; the degree of which depends on the boundary condition and convective scheme used (Figure 1).
- Using the Grell scheme results in low temperature bias with high skill scores, while the Kain-Fritsch scheme gives low rainfall bias with high correlation and skill scores. The boundary conditions also influence model skill, such that the model bias tends to be lower for temperature when ERA-Interim is used, but lower for rainfall with NNRP1 (Figure 1).