



Projected future changes in regional seasonal cycles

Fernando Arizmendi (1), Marcelo Barreiro (1), and Henk Dijkstra (2)

(1) Instituto de Física, Facultad de Ciencias, Universidad de la Republica, Montevideo, Uruguay (arizmendi.f@gmail.com),

(2) Institute for Marine and Atmospheric research Utrecht, Utrecht University, Utrecht, The Netherlands

Understanding the consequences of climate change is relevant for social, biological and economical interests. Particularly, knowing the potential changes in the seasonal cycle is useful for taking the appropriate actions to prevent adverse circumstances. In this study, we aim to detect future changes in the surface air temperature (SAT) seasonal cycles. We do so by analyzing differences in the response of the SAT field to the solar annual forcing in different scenarios of models of the phase 5 of the Coupled Model Intercomparison Project (CMIP5). With this approach, we are able to find well-localized areas where the temperature cycle change considerably.