

Simulation of temperature and precipitation climatology using Regional Climate Modelling

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To do climate modeling we need three pieces of information. Energy coming to the atmospheric system, surface structure of the planet and the composition of the atmosphere. But the simulation needs require the simulations run for all of the globe. Yet, as the area covered is very large, the resolution of the output cannot be very high due to computational requirements. Unfortunately, this coarse resolution output does not give us enough information about local atmospheric processes. Therefore we need to downscale this information to regionally useful scales. These scales depend on the application purpose. Regional climate modeling is one of the tools which gives us locally useful information.