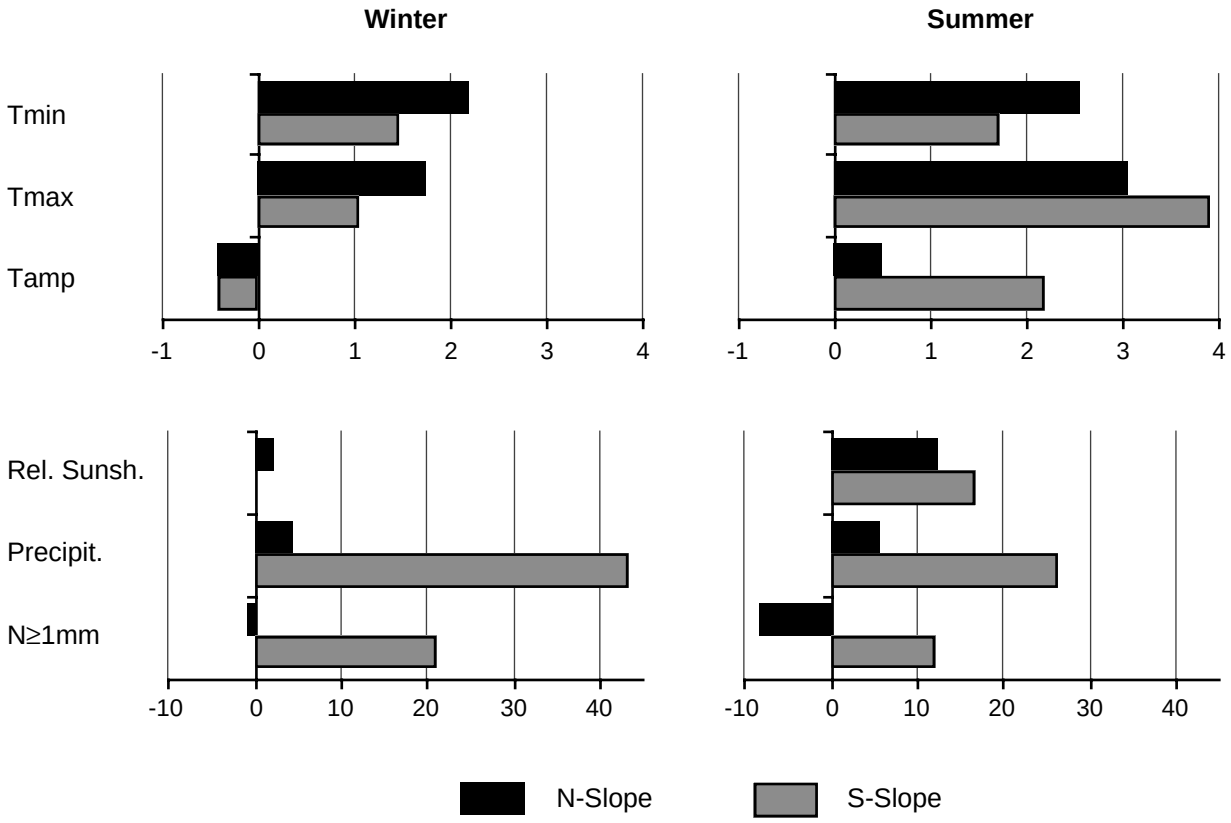

Figure 4.11 A Business As Usual climate change scenario for the Swiss Alps for 2075-84 derived with the semiempirical downscaling technique. The scenario is based on a global simu-lation with the ECHAM1-T21/LSG-GCM (Cubasch et al. 1992) under the time-dependent IPCC Business As Usual scenario for future atmospheric GHG concentrations. N-Slope and S-slope refer respectively to mean changes from three locations on alpine northside (Bern, Davos, Saentis), and two locations on the alpine southside (Bever, Lugano). Rel. Sunsh. = seasonal mean daily relative sunshine duration; Precipit. = total precipitation; N ≥ 1 = number of days within total precipitation greater than one millimeter; T_{min}/T_{max} = seasonal mean daily minimum/maximum temperature; T_{amp} = seasonal mean daily temperature amplitude. Temperatures are in ˚C; all other weather statistics are in precentage of the 1901-80 long-term means. (The N-slope values for sunshine and precipitation exclude Saentis.) After Gyalistras et al. 1994.