

Table 4.6 Comparison of mean observed near-surface temperature and precipitation over the western alpine region with corresponding values derived from model simulations of current $1 \times \text{CO}_2$ and putative $2 \times \text{CO}_2$ climate.

		Temperature ($^{\circ}\text{C}$)		Precipitation	
		Jan	Jul	Jan	Jul
Observed	OBS	-0.8	17.8	2.91	3.87
$1 \times \text{CO}_2$ bias	ECHAM-OBS	+0.7	+1.2	+12%	-61%
	RegCM2-OBS	+2.7	+1.8	+41%	-34%
$2 \times \text{CO}_2$ effect	ECHAM	+1.8	+5.5	+30%	-40%
	RegCM2	+0.9	+3.9	+6%	-38%

Note: The labels OBS, ECHAM and RegCM2 refer to observations, the ECHAM3-T106 high-resolution general circulation model, and the nested RegCM2 regional climate model, respectively. The $2 \times \text{CO}_2$ effect is defined as $2 \times \text{CO}_2 - 1 \times \text{CO}_2$. Precipitation is given in millimeters per day for the observations, otherwise in percentage of the observed values. Compiled from data in Marinucci et al. 1995 and Beniston et al. 1995.