

Table S1. Model evaluation statistics for monthly and annual time steps for the period 1970-2005

Basin	r (monthly)	r (annual)	RSR (monthly)	RSR (annual)	PBIAS (%)	NSE (monthly)	NSE (annual)	KGE (monthly)	KGE (annual)
Rapel*	0.88	0.87	0.92	0.89	-5.1	0.14	0.16	0.31	0.34
Mataquito	0.81	0.82	0.77	0.68	-12.6	0.4	0.53	0.63	0.77
Maule	0.87	0.86	0.71	0.6	-10.8	0.5	0.62	0.6	0.82
Itata	0.91	0.91	0.44	0.48	-8.6	0.8	0.77	0.87	0.83

r= Pearson correlation coefficient

RSR= Ratio of RMSE to the standard deviation of the observations

PBIAS= Percent bias

NSE= Nash-Sutcliffe efficiency

KGE= Kling-Gupta efficiency

* Due to many missing values, we choose 1990-2005 period for Rapel Basin.