

Table ..Model routine, description of calibrated model parameters and the parameters values for the study watershed

Model routine	Parameter	Description	Calibrated value
Snow	AM	Influence of aspect/slope on melt factor	0.45
	CM	Melt factor for winter solstice in open areas (mm °C ⁻¹ day ⁻¹)	0.06
	DC	Increase of melt factor between winter and summer solstice (mm °C ⁻¹ day ⁻¹)	3.45
	MRF	Ratio between melt factor in forest to melt factor in open	0.70
Soil	LP	Soil moisture content threshold where evaporation becomes limited	0.61
	FC	Soil field capacity	132
	β	Controls relationship between soil infiltration and soil water release	0.67
Runoff Transfer	KF	Proportion of fast reservoir release (day ⁻¹)	0.00026
	α	Exponent to adjust release rate of fast reservoir	1.12
	KS	Proportion of slow reservoir release (day ⁻¹)	0.03
	FRAC	Fraction of runoff directed to fast reservoir	0.90
Climate	RFCF	Rainfall correction factor	0.87
	SFCF	Snowfall correction factor	1.12