

Predictor	Units	Description	Source
Maximum annual snow, $SWE_{\max}$ ; 1 April SWE, $SWE_{\text{Apr1}}$	mm	Annual maximum snow water equivalent (VIC); 1 April snow water equivalent (OBS)	VIC; MSS
October mean total column soil moisture	mm	Previous October mean value	VIC
Cold season rainfall	mm	Sum of rainfall between 1 October and 31 March	PCIC-OBS
Spring rainfall	mm	Sum of rainfall between days of $SWE_{\max}$ (VIC) or $SWE_{\text{Apr1}}$ (OBS) and annual maximum streamflow (APF)	PCIC-OBS
APF rainfall	mm	Sum of rainfall from 15 days prior to 5 days after APF	PCIC-OBS
Freezing degree days	$^{\circ}\text{C}$	Absolute value of sum of negative daily mean $T < 0^{\circ}\text{C}$ from 1 October to 31 March	PCIC-OBS
Spring warming rate	$^{\circ}\text{C day}^{-1}$	Slope of daily mean $T$ between days of $SWE_{\max}$ and $T_{\max}$	PCIC-OBS
Snowmelt rate	$\text{mm day}^{-1}$	Slope of daily SWE between dates of $SWE_{\max}$ and APF	VIC
Date of $SWE_{\max}$ , $t_{SWE_{\max}}$	day	Calendar day of maximum SWE	VIC
Melt season length, $SWE_{\text{len}}$	days	Date of 0.25 $SWE_{\max}$ minus date of $SWE_{\max}$	VIC
NINO3.4 index	$^{\circ}\text{C}$	HadISST1 anomaly over $5^{\circ}\text{N}$ – $5^{\circ}\text{S}$ and $170$ – $120^{\circ}\text{W}$	ESRL/GCOS
PDO index	$^{\circ}\text{C}$	Leading principal component of monthly SST anomalies in the North Pacific Ocean, poleward of $20^{\circ}\text{N}$	JISAO