

Description	Symbol	Unit
Interception storage	S_{int}	m
Snow cover/storage in water equivalent thickness (excluding liquid part S_{slq})	S_{swe}	m
Liquid/meltwater storage in the snowpack	S_{slq}	m
Upper and lower soil storages	S_1 and S_2	m
Surface water storage (lakes, reservoirs, rivers, and inundated water)	S_{wat}	m
Groundwater storage (renewable part)	S_3	m
Fossil groundwater storage (non-renewable)	S_{nrw}	m
Total groundwater storage = $S_3 + S_{\text{nrw}}$	S_{gwt}	m
Total water storage thickness = $S_{\text{int}} + S_{\text{swe}} + S_{\text{slq}} + S_1 + S_2 + S_{\text{gwt}}$	TWS	m
Potential evaporation	E_{pot}	m day^{-1}
Evaporation flux from the intercepted precipitation	E_{int}	m day^{-1}
Evaporation from meltwater stored in the snowpack	E_{slq}	m day^{-1}
Bare soil evaporation	E_{soil}	m day^{-1}
Transpiration from the upper and lower soil stores	T_1 and T_2	m day^{-1}
Total land evaporation = $E_{\text{int}} + E_{\text{slq}} + E_{\text{soil}} + T_1 + T_2$	E_{land}	m day^{-1}
Surface water evaporation	E_{wat}	m day^{-1}
Total evaporation = $E_{\text{land}} + E_{\text{wat}}$	E_{tot}	m day^{-1}
Direct run-off	Q_{dr}	m day^{-1}
Interflow, shallow sub-surface flow	Q_{sf}	m day^{-1}
Baseflow, groundwater discharge	Q_{bf}	m day^{-1}
Specific run-off from land	Q_{loc}	m day^{-1}
Local change in surface water storage	Q_{wat}	m day^{-1}
Total specific run-off	Q_{tot}	m day^{-1}
Routed channel (surface water) discharge	Q_{chn}	$\text{m}^3 \text{ s}^{-1}$
Net fluxes from the upper to lower soil stores	Q_{12}	m day^{-1}
Net groundwater recharge, fluxes from the lower soil to groundwater stores	$\text{RCH} = Q_{23}$	m day^{-1}
Surface water infiltration to groundwater	Inf	m day^{-1}
Desalinated water withdrawal	W_{sal}	m day^{-1}
Surface water withdrawal	W_{wat}	m day^{-1}
Renewable groundwater withdrawal	W_3	m day^{-1}
Non-renewable groundwater withdrawal (groundwater depletion)	W_{nrw}	m day^{-1}
Total groundwater withdrawal = $W_3 + W_{\text{nrw}}$	W_{gwt}	m day^{-1}
Water withdrawal allocated for irrigation purposes	A_{irr}	m day^{-1}
Water withdrawal allocated for livestock demand/sector	A_{liv}	m day^{-1}
Water withdrawal allocated for agricultural sector = $A_{\text{irr}} + A_{\text{liv}}$	A_{agr}	m day^{-1}
Domestic water withdrawal	A_{dom}	m day^{-1}
Industrial water withdrawal	A_{ind}	m day^{-1}