

ts02: tRIBS soil parameters used in this study. The parameter values were inherited from the long-term calibration and validation carried out for the Lucky Hills basin in Francipane et al. [2012].

<i>Parameter</i>	<i>Description</i>	<i>Initial Values</i>	<i>Source</i>	<i>Final Values</i>	
0	ID				
1	K_s	Saturated hydraulic conductivity	32.81 mm/hr	C	19.0 mm/hr
2	θ_s	Soil moisture at saturation	0.46	C	0.39
3	θ_r	Residual soil moisture	0.0429	C	0.0463
4	λ_0	Pore-size distribution index	0.3813	L	-
5	ψ_b	Air entry bubbling pressure	-63 mm	L	-
6	f	Conductivity decay parameter	0.032 mm ⁻¹	L	-
7	A_s	Anisotropy ratio for saturated zone	1	L	-
8	A_u	Anisotropy ratio for unsaturated zone	1	L	-
9	n	Porosity	0.46	L	-
10	k_s	Volumetric heat conductivity	0.214 J/m s K	L	-
11	C_s	Soil heat capacity	1209573 J/ m ³ K	L	-
12	c_s	Soil cohesion parameter	1.706 N/m ²	L	-
13	c_r	Root cohesion parameter	1000 N/m ²	L	-
14	ϕ	Soil internal friction angle	20 °	L	-
16	K_b	Erodibility coefficient	3.77E-08 m/s(kg m ⁻¹ s ⁻²) ^{p_b}	C	9.33E-08 m/s(kg m ⁻¹ s ⁻²) ^{p_b}
17	θ_c	Critical shear stress	1.5 Pa	C	4.1 Pa
18	k_k	Coefficient k_k to calculate k_f	20	L	-
19	k_d	Diffusive coefficient	3.17E-10 m ² /s	L	-
20	n_s	Manning's roughness coefficient for soil	0.025 m ^{-1/3} /s	C	0.05 m ^{-1/3} /s

L = from literature; C = from calibration