Table 7 Runoff generation components corresponding to Figure 15

Cases	Input parameters						Output runoff (%)		
	Soil type	Regime	Slope	Soil depth (m)	K_s (m/s)	M	Q_H/P	Q_D/P	Q_S/P
(a) Climate									
a.1 humid	sand	1	0.612	1.0	5×10^{-6}	1.0	0	8.2	52.1
a.2 semi-arid	sand	6	0.612	1.0	7×10^{-6}	1.0	0	0	22.3
a.3 arid	sand	9	0.612	1.0	3×10^{-6}	1.0	0	0	19.9
(b) Pixel slope									
b.1 mild	sand	1	0.0306	1	5×10^{-6}	1.0	0	52.8	6.5
b.2 moderate	sand	1	0.3059	1	5×10^{-6}	1.0	0	15.9	43.9
b.3 steep	sand	1	0.6118	1	5×10^{-6}	1.0	0	8.2	52.1
(c) Hydraulic conductivity									
c.1 low K_s	clay	1	0.306	2.5	5×10^{-8}	0	54.1	4.0	1.5
c.2 moderate K_s	clay	1	0.306	2.5	5×10^{-7}	0	0	41.3	15.2
c.3 high K_s	clay	1	0.306	2.5	1×10^{-6}	0	0	28.4	29.5
(d) Soil depth									
d.1 shallow	sand	1	0.0306	1.0	5×10^{-6}	0	0	50.5	6.5
d.2 moderate	sand	1	0.0306	2.5	5×10^{-6}	0	0	41.2	16.3
d.3 deep	sand	1	0.0306	4.0	5×10^{-6}	0	0	32.7	26.0
(e) Vegetation (tree)									
e.1 defoliated	sand	1	0.0306	1	5×10^{-6}	0	0	50.5	6.5
e.2 partially cleared	sand	1	0.0306	1	5×10^{-6}	0.5	0	51.5	6.5
e.3 full	sand	1	0.0306	1	5×10^{-6}	1.0	0	52.8	6.5

Note: Q_H is the total volume of Hortonian overland flow generated during storm event, Q_D is the total volume of Dunne overland flow, and Q_S is the total volume of subsurface storm flow. P is total rainfall volume during a storm event.