

Supplementary table 1. Performance indexes (NSeff, Log NSeff, R² and %ADiff) for calibration period. For eight sub-catchments (S1-S8) and eight model structures (M1-M8).

Index	Sub-catchment	Model structure								Min	Max
		M1	M2	M3	M4	M5	M6	M7	M8		
NSeff	S1	0.82	0.84	0.82	0.84	0.84	0.83	0.82	0.83	0.82	0.84
	S2	0.64	0.65	0.65	0.65	0.65	0.65	0.65	0.64	0.64	0.65
	S3	0.80	0.80	0.80	0.79	0.80	0.80	0.79	0.78	0.78	0.80
	S4	0.69	0.67	0.67	0.66	0.67	0.66	0.66	0.66	0.66	0.69
	S5	0.63	0.67	0.64	0.67	0.66	0.65	0.65	0.67	0.63	0.67
	S6	0.83	0.83	0.84	0.83	0.84	0.84	0.83	0.82	0.82	0.84
	S7	0.84	0.81	0.81	0.80	0.80	0.80	0.81	0.80	0.80	0.84
	S8	0.80	0.81	0.82	0.83	0.81	0.80	0.81	0.81	0.80	0.83
Log NSeff	S1	0.77	0.79	0.84	0.81	0.81	0.78	0.80	0.73	0.73	0.84
	S2	0.67	0.74	0.71	0.72	0.72	0.73	0.72	0.65	0.65	0.74
	S3	0.80	0.58	0.82	0.59	0.79	0.81	0.51	0.40	0.40	0.82
	S4	0.60	0.71	0.69	0.66	0.71	0.56	0.59	0.16	0.16	0.71
	S5	0.68	0.73	0.72	0.71	0.73	0.68	0.69	0.52	0.52	0.73
	S6	0.78	0.79	0.80	0.78	0.81	0.79	0.79	0.66	0.66	0.81
	S7	0.70	0.64	0.71	0.63	0.65	0.67	0.69	0.67	0.63	0.71
	S8	0.63	0.63	0.62	0.60	0.63	0.66	0.62	0.62	0.60	0.66
R ²	S1	0.83	0.86	0.85	0.85	0.85	0.85	0.83	0.83	0.83	0.86
	S2	0.66	0.67	0.66	0.66	0.66	0.67	0.66	0.65	0.65	0.67
	S3	0.82	0.82	0.84	0.81	0.83	0.83	0.81	0.80	0.80	0.84
	S4	0.78	0.80	0.77	0.80	0.79	0.79	0.79	0.79	0.77	0.80
	S5	0.76	0.80	0.80	0.78	0.80	0.78	0.80	0.78	0.76	0.80
	S6	0.84	0.83	0.84	0.84	0.84	0.85	0.83	0.82	0.82	0.85
	S7	0.86	0.83	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.86
	S8	0.82	0.88	0.87	0.87	0.87	0.86	0.85	0.87	0.82	0.88
%ADiff	S1	3.72	3.84	11.15	7.56	4.87	-0.64	5.38	2.05	-0.64	11.15
	S2	11.28	9.13	7.41	5.91	6.12	8.81	8.81	7.20	5.91	11.28
	S3	13.77	13.12	13.64	16.92	12.07	10.10	14.04	16.92	10.10	16.92
	S4	26.42	28.03	26.85	27.82	26.85	29.65	27.71	28.68	26.42	29.65
	S5	31.80	28.95	28.69	28.87	28.35	29.04	29.56	29.30	28.35	31.80
	S6	1.59	2.65	4.37	1.32	1.72	1.72	-1.98	0.93	-1.98	4.37
	S7	-3.13	-5.99	-1.63	-6.94	1.23	-7.49	-1.63	-4.22	-7.49	1.23
	S8	3.43	2.64	1.32	-0.66	1.32	3.30	2.11	3.43	-0.66	3.43

Supplementary table 2: Performance indexes (NSEff, Log NSEff, R2 and %ADiff) for validation period. For eight sub-catchments (S1-S8) and eight model structures (M1-M8).

Index	Sub-catchment	Model structure								Min	Max
		M1	M2	M3	M4	M5	M6	M7	M8		
NSEff	S1	0.79	0.83	0.81	0.82	0.81	0.79	0.79	0.81	0.79	0.83
	S2	0.63	0.67	0.66	0.67	0.66	0.65	0.64	0.63	0.63	0.67
	S3	0.77	0.72	0.78	0.74	0.76	0.74	0.75	0.72	0.72	0.78
	S4	0.67	0.68	0.67	0.63	0.65	0.66	0.64	0.66	0.63	0.68
	S5	0.72	0.74	0.70	0.74	0.72	0.71	0.71	0.73	0.70	0.74
	S6	0.65	0.66	0.64	0.67	0.64	0.64	0.63	0.64	0.63	0.67
	S7	0.71	0.68	0.70	0.69	0.68	0.68	0.70	0.70	0.68	0.71
	S8	0.72	0.71	0.70	0.73	0.69	0.68	0.69	0.70	0.68	0.73
Log NSEff	S1	0.56	0.60	0.71	0.67	0.66	0.54	0.61	0.57	0.54	0.71
	S2	0.50	0.62	0.60	0.60	0.64	0.64	0.61	0.44	0.44	0.64
	S3	0.64	0.48	0.63	0.54	0.61	0.58	0.50	0.48	0.48	0.64
	S4	0.65	0.69	0.69	0.66	0.70	0.65	0.64	0.40	0.40	0.70
	S5	0.63	0.56	0.58	0.57	0.59	0.59	0.60	0.55	0.55	0.63
	S6	0.55	0.53	0.58	0.54	0.55	0.55	0.50	0.49	0.49	0.58
	S7	0.73	0.70	0.72	0.66	0.62	0.67	0.78	0.64	0.62	0.78
	S8	0.74	0.71	0.72	0.68	0.71	0.71	0.71	0.62	0.62	0.74
R ²	S1	0.83	0.86	0.86	0.83	0.85	0.84	0.83	0.83	0.83	0.86
	S2	0.65	0.68	0.66	0.67	0.66	0.66	0.65	0.63	0.63	0.68
	S3	0.77	0.73	0.79	0.75	0.77	0.74	0.76	0.73	0.73	0.79
	S4	0.74	0.76	0.73	0.74	0.73	0.76	0.73	0.75	0.73	0.76
	S5	0.76	0.78	0.76	0.77	0.77	0.75	0.76	0.76	0.75	0.78
	S6	0.71	0.71	0.71	0.72	0.71	0.72	0.68	0.69	0.68	0.72
	S7	0.80	0.77	0.78	0.79	0.76	0.74	0.80	0.78	0.74	0.80
	S8	0.85	0.90	0.87	0.89	0.87	0.86	0.86	0.88	0.85	0.90
%ADiff	S1	-0.28	0.56	8.78	4.63	1.53	-5.15	1.67	-2.51	-5.15	8.78
	S2	11.64	9.36	7.30	5.79	6.39	9.70	9.13	6.96	5.79	11.64
	S3	8.86	7.67	8.60	11.89	7.14	4.90	8.86	11.64	4.90	11.89
	S4	18.56	20.51	19.13	20.00	19.02	22.11	19.93	20.74	18.56	22.11
	S5	-2.08	-7.49	-7.90	-6.79	-7.90	-7.07	-6.24	-7.21	-7.90	-2.08
	S6	10.45	11.08	12.97	10.38	10.58	10.70	6.55	9.07	6.55	12.97
	S7	8.42	5.11	10.83	3.22	14.28	3.16	10.68	6.92	3.16	14.28
	S8	25.22	23.77	22.99	20.97	22.66	24.88	23.22	24.11	20.97	25.22