

Suppl. 1. Data required for Thompson model

Gully No.	A (Ikr)		S (%)	E (%)	
	1968-1994	1994-2009	1994-2009 & 1968-1994	1968-1994	1994-2009
1	0.58	0.29	5.00	12.45	15.60
2	1.22	0.79	4.00	11.60	17.60
3	0.21	0.09	13.80	8.10	13.10
4	0.37	0.17	13.30	9.85	11.70
5	0.93	0.62	1.60	15.60	16.60
6	0.79	0.33	4.40	13.75	12.20
7	0.88	0.47	4.40	10.10	7.35
8	0.38	0.11	5.50	10.85	9.60
9	0.28	0.10	17.50	7.60	7.45
10	0.51	0.16	9.50	8.30	8.60
11	1.53	0.96	7.00	6.80	6.60
12	0.24	0.19	5.00	6.10	13.10
13	1.14	1.10	8.50	14.10	11.45
14	0.50	0.28	3.30	10.60	11.45
15	0.43	0.11	20.50	6.85	9.85
16	0.17	0.11	15.80	10.85	14.45
17	0.28	0.12	9.40	11.30	6.70
18	0.48	0.10	18.30	13.45	18.45
19	0.43	0.15	22.50	11.05	12.60
20	0.20	0.05	25.00	5.85	2.30
21	0.38	0.26	9.00	13.30	13.00
22	0.96	0.74	4.00	17.55	13.75
23	0.97	0.83	3.00	11.40	13.35
24	0.60	0.41	6.50	11.70	12.60
25	0.75	0.46	6.50	10.30	11.60

A: drainage area above the gully head (Ikr); S: slope of approach channel above the gully head (%); E: percentage of clay content of soil profile through which the gully head is advancing.

Suppl. 2. Data required for SCS I model

Gully No.	A (lkr)	
	1968-1994	1994-2009
1	0.58	0.29
2	1.22	0.79
3	0.21	0.09
4	0.37	0.17
5	0.93	0.62
6	0.79	0.33
7	0.88	0.47
8	0.38	0.11
9	0.28	0.10
10	0.51	0.16
11	1.53	0.96
12	0.24	0.19
13	1.14	1.10
14	0.50	0.28
15	0.43	0.11
16	0.17	0.11
17	0.28	0.12
18	0.48	0.10
19	0.43	0.15
20	0.20	0.05
21	0.38	0.26
22	0.96	0.74
23	0.97	0.83
24	0.60	0.41
25	0.75	0.46

A: drainage area above the gully head (lkr);

Suppl. 3 Data required for SCS II model

Gully No.	A (lkr)		Rp (ft)
	1994-2009		1994-2009
	A1	A2	
1	0.29	0.29	4.03
2	0.79	0.44	4.33
3	0.09	0.11	5.73
4	0.17	0.20	4.83
5	0.62	0.32	8.33
6	0.33	0.45	8.67
7	0.47	0.41	9.47
8	0.11	0.27	4.83
9	0.10	0.19	1.10
10	0.16	0.35	5.57
11	0.96	0.57	5.27
12	0.19	0.05	2.63
13	1.10	0.04	2.17
14	0.28	0.21	2.30
15	0.11	0.32	7.17
16	0.11	0.06	0.73
17	0.12	0.16	2.37
18	0.10	0.38	4.60
19	0.15	0.28	4.53
20	0.05	0.15	4.67
21	0.26	0.13	2.83
22	0.74	0.22	4.37
23	0.83	0.14	4.10
24	0.41	0.19	4.43
25	0.46	0.30	4.30

A: drainage area above the gully head (lkr); Rp: past average annual rate of gully head advancement (m yr^{-1}).