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Supplement of

On the spatial organization of the ridge slough patterned landscape

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1 **Supplementary Materials**

2 **Table Captions**

3 Table S1: Generalized Pareto and truncated log-normal tests for patch area distributions for M1
4 and M3. For each site, we give the total number of data points in each empirical
5 distribution, n , along with the maximum patch area, $\max x$. For the Monte Carlo p-
6 values panel, we give the corresponding p-values for the Monte Carlo tests. Significant
7 values ($p > 0.1$) are denoted in **bold**, and represent a data set being consistent with
8 Monte Carlo tests (site j for the log-normal did not converge on a result). p-values
9 corresponding to the log-likelihood ratio tests are also given, with statistically significant
10 values ($p < 0.1$) represented in **bold** (if a value is significant, it is considered a poor fit in
11 comparison to the alternate distribution). The panel on the right gives parameter values
12 corresponding to the GP.

13
14 Table S2: Classification scheme for binary maps. For M1 and M2, vegetation classes in the
15 original maps were converted to a binary representation (note that the source map for M3
16 was already represented as binary values and required no conversion). Value represents
17 the corresponding binary class (Slough = 0; Ridge = 1). Area gives the total areal
18 coverage of each vegetation ID for the original map extent. ID gives the vegetation ID
19 corresponding to the original map's classification system. For full descriptions of each
20 vegetation ID, see Jones et al (1999) for M1 and Rutchey et al (2006) for M2.

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Site				Monte Carlo p		Likelihood p		GP Parameters		
	Observations	Max Area	Ridge Density	GP	Log-normal	GP	Lognormal	δ	k	$1+1/k$
1	428	7216732	0.51	0.04	0.00	1.00	0.43	4423	0.84	2.19
2	225	16080806	0.64	0.02	0.00	1.00	0.17	2999	0.96	2.04
3	1414	9973159	0.58	0.80	0.00	1.00	0.10	719	1.24	1.80
4	1214	5192468	0.61	0.62	0.01	1.00	0.00	534	1.30	1.77
5	757	23399024	0.73	0.02	0.00	1.00	0.08	523	1.02	1.98
6	1476	3137995	0.54	0.13	0.04	1.00	0.01	558	1.33	1.75
7	1083	4205933	0.61	0.05	0.00	1.00	0.00	711	1.17	1.85
8	1063	18466609	0.65	0.08	0.00	1.00	0.23	402	1.13	1.89
9	685	25113931	0.72	0.00	0.00	1.00	0.41	414	0.76	2.32
10	1414	2173573	0.52	0.55	0.03	1.00	0.41	642	1.37	1.73
11	1418	12266427	0.56	0.10	0.00	1.00	0.01	534	1.03	1.98
12	1099	19428337	0.64	0.12	0.00	1.00	0.16	357	1.17	1.85
13	1187	19053356	0.64	0.05	0.00	1.00	0.17	329	1.09	1.92
14	1877	8407083	0.49	0.20	0.00	1.00	0.12	456	1.18	1.85
15	1693	2307671	0.46	0.53	0.13	0.96	1.00	432	1.43	1.70
16	2092	2387455	0.48	0.46	0.13	0.38	1.00	288	1.44	1.69
17	2453	3797668	0.48	0.77	0.02	1.00	0.45	302	1.27	1.79
18	2367	3956762	0.47	0.40	0.10	1.00	0.24	302	1.39	1.72
19	2132	3442071	0.46	0.33	0.28	0.63	1.00	265	1.46	1.69
20	1765	2482129	0.47	0.20	0.05	1.00	0.07	405	1.36	1.73
21	1623	1876363	0.48	0.65	0.13	1.00	0.33	612	1.40	1.71
22	2486	4207373	0.51	0.19	0.09	0.95	1.00	285	1.35	1.74
23	35	31517817	0.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
24	4	35833341	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	16	34210049	0.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	21	33117463	0.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	42	21551629	0.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	640	22853504	0.69	0.03	0.00	1.00	0.36	494	1.09	1.91
29	898	7165571	0.48	0.41	0.01	1.00	0.09	887	1.31	1.76
30	97	32129324	0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
31	331	29628741	0.83	0.00	0.00	1.00	0.12	415	0.80	2.25
32	69	33363362	0.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	51	32409533	0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
a	216	15299260	0.73	0.03	0.00	1.00	0.09	1496.8	1.0692	1.9353
b	2	21829469	0.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A
c	637	4011815	0.55	0.11	0.15	0.35	1.00	1770	1.2104	1.8262
d	230	15331726	0.73	0.01	0.00	1.00	0.00	1137.5	0.9277	2.0779
e	578	2948251	0.59	0.30	0.04	1.00	0.00	1566.1	1.1147	1.8971
f	423	4267675	0.65	0.03	0.01	1.00	0.00	1208.4	1.1448	1.8735
g	795	1011669	0.39	0.13	0.02	1.00	0.16	1275.4	1.0156	1.9847
h	692	848690	0.41	0.38	0.47	0.15	1.00	1347.9	1.3228	1.756
i	744	1323207	0.41	0.07	0.04	1.00	0.00	1926.2	0.9684	2.0326
j	142	19226070	0.83	0.00	N/A	1.00	0.39	631.34	0.8482	2.1789

M1			M2		
Value	Area (m ²)	ID	Value	Area (m ²)	ID
0	6.44E+08	PGw	0	6.55E+08	MFO
0	37733353	PEf	0	13520000	MFGtM
0	635589	PGe	0	6467500	CStO
0	258091	PGp	0	785000	CSO
0	245020	PGa	0	107500	MFGh
0	217880	PGx	1	1.34E+09	MFGc
0	171984	PEo	1	87322500	MFGtD
0	129254	W	1	57385000	CSGc
1	1.41E+09	PGc	1	22792500	MFF
1	1.18E+08	PC	1	14917500	MFG
1	6797153	FSd	1	7767500	MFGtS
1	4050063	FSt	1	5012500	CStD
1	4016163	SBt	1	4425000	CStGc
1	107552	PEa	1	1317500	MFH
1	39287028	SB	1	1120000	CStG
1	17165990	SBs	1	200000	WStG
1	16360398	SBm	1	34280000	SSs
1	8284266	PE	1	17272500	SSB
1	6573566	HI	1	12827500	SS
1	5126269	FS	1	10617500	FSt
1	4074153	PEb	1	7112500	CSE
1	1337204	SBI	1	5810000	MFB
1	771712	EM	1	3735000	FSB
1	442097	SBa	1	2597500	CSG
1	256461	ES	1	1167500	SSm
1	9002	SBc	1	1125000	SSI
1	2215	E	1	410000	SSa
1	1582	SBy	1	350000	FHS
1	786	EC	1	330000	WStS
1	11057901	SA	1	152500	CStE
1	8989624	C	1	127500	EsD
1	2674872	RD	1	70000	SSy
1	81908	SAd	1	50000	FC
1	540	HIp	1	22500	DI
			1	15000	EsS
			1	9415000	CA
			1	6705000	HI
			1	3915000	SP
			1	3842500	LEV
			1	3222500	RD
			1	157500	OW
			1	150000	CSH
			1	95000	EmD
			1	60000	EoD
			1	50000	EoS
			1	42500	FStH
			1	20000	CStS
			1	17500	EmST
			1	5000	PS
			1	5000	EcD
			1	2500	EcS
			1	2500	E
			1	2500	EGD

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