## Online Supporting Information for: Dynamic spatiotemporal modeling of a habitat defining plant species to support wildlife management at regional scales

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## Potential scale reduction factors

Potential scale reduction factors  $(\hat{R})$  help diagnose MCMC convergence. MCMC algorithms have reached convergence when  $\hat{R} < 1.1$ .

Table 1: BearRiver

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.03
Beta[3]	1.00	1.00
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.01	1.01
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.01	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.03
_lp	1.00	1.02

Table 2: BlacksFork

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.01
Beta[3]	1.01	1.03
Beta[4]	1.02	1.05
gamma[1]	1.01	1.02
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.01	1.02
gamma[5]	1.01	1.03
gamma[6]	1.01	1.02
gamma[7]	1.01	1.04
gamma[8]	1.01	1.03
gamma[9]	1.01	1.03
gamma[10]	1.01	1.03
gamma[11]	1.02	1.05
gamma[12]	1.00	1.00
gamma[13]	1.01	1.05
gamma[14]	1.01	1.04
gamma[15]	1.01	1.03
gamma[16]	1.01	1.02
gamma[17]	1.01	1.03
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.01	1.04
gamma[23]	1.02	1.07
gamma[24]	1.01	1.02
gamma[25]	1.01	1.03
gamma[26]	1.01	1.03
gamma[27]	1.01	1.04
gamma[28]	1.01	1.04
gamma[29]	1.00	1.00
gamma[30]	1.01	1.01
gamma[31]	1.00	1.01
gamma[32]	1.01	1.02
sigma_y	1.00	1.01
<u>lp</u>	1.00	1.00

Table 3: Buffalo

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.03
Beta[3]	1.01	1.02
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.01	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.01	1.02
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.01
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.01	1.03
gamma[22]	1.01	1.02
gamma[23]	1.00	1.00
gamma[24]	1.01	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.01
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.01	1.01
lp	1.00	1.02

Table 4: ContinentalDivide

	D: /	II () I
D + [1]	Point est.	Upper C.I.
Beta[1]	1	1.00
Beta[2]	1	1.00
Beta[3]	1	1.01
Beta[4]	1	1.00
gamma[1]	1	1.01
gamma[2]	1	1.00
gamma[3]	1	1.00
gamma[4]	1	1.01
gamma[5]	1	1.00
gamma[6]	1	1.00
gamma[7]	1	1.01
gamma[8]	1	1.00
gamma[9]	1	1.00
gamma[10]	1	1.01
gamma[11]	1	1.01
gamma[12]	1	1.00
gamma[13]	1	1.00
gamma[14]	1	1.01
gamma[15]	1	1.00
gamma[16]	1	1.00
gamma[17]	1	1.01
gamma[18]	1	1.01
gamma[19]	1	1.00
gamma[20]	1	1.00
gamma[21]	1	1.00
gamma[22]	1	1.01
gamma[23]	1	1.00
gamma[24]	1	1.00
gamma[25]	1	1.00
gamma[26]	1	1.01
gamma[27]	1	1.00
gamma[28]	1	1.00
gamma[29]	1	1.01
gamma[30]	1	1.01
gamma[31]	1	1.00
gamma[32]	1	1.00
sigma_y	1	1.00
lp	1	1.00

Table 5: Crowheart

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.03
Beta[3]	1.01	1.01
Beta[4]	1.00	1.00
gamma[1]	1.01	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.01
gamma[9]	1.01	1.02
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.02
gamma[18]	1.00	1.01
gamma[19]	1.01	1.02
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.01	1.02
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.00	1.01
_lp	1.01	1.02

Table 6: Daniel

Beta[1]     1.01     1.04       Beta[2]     1.01     1.04       Beta[3]     1.00     1.00       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[29]     1.00     1.00			
Beta[2]     1.01     1.04       Beta[3]     1.00     1.00       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00			
Beta[3]     1.00     1.00       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00 <td></td> <td></td> <td></td>			
Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00<			
gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.0			
gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.			
gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1			
gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00			
gamma[5]     1.00     1.00       gamma[6]     1.01     1.01       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00 <td< td=""><td></td><td></td><td></td></td<>			
gamma[6]     1.01     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00 <t< td=""><td></td><td></td><td></td></t<>			
gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     <	gamma[5]		
gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       gamma[32]     1.01	gamma[6]		
gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11			
gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11			
gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11		1.00	
gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11			
gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11			
gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.00       gamma[32]     1.01     1.01       sigma_y     1.03     1.11	<u> </u>		
gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11	gamma[13]		
gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11	gamma[14]		
gamma[17]     1.00     1.00       gamma[18]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11	gamma[15]		
gamma[18]     1.00     1.00       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11			
gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11	gamma[17]		
gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.01       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.00       gamma[32]     1.01     1.01       sigma_y     1.03     1.11	gamma[18]		
gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.00       gamma[32]     1.01     1.01       sigma_y     1.03     1.11	gamma[19]		
gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       sigma_y     1.03     1.11			
gamma[23] 1.00 1.00   gamma[24] 1.00 1.00   gamma[25] 1.00 1.00   gamma[26] 1.00 1.01   gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.01   gamma[31] 1.00 1.01   gamma[32] 1.01 1.01   sigma_y 1.03 1.11			
gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.01       gamma[30]     1.00     1.01       gamma[31]     1.00     1.01       gamma[32]     1.01     1.01       sigma_y     1.03     1.11			
gamma[25]     1.00     1.00       gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.00       gamma[32]     1.01     1.01       sigma_y     1.03     1.11	gamma[23]		
gamma[26]     1.00     1.01       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.01       gamma[31]     1.00     1.00       gamma[32]     1.01     1.01       sigma_y     1.03     1.11	gamma[24]		
gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.01   gamma[31] 1.00 1.00   gamma[32] 1.01 1.01   sigma_y 1.03 1.11	gamma[25]		
gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.01   gamma[31] 1.00 1.00   gamma[32] 1.01 1.01   sigma_y 1.03 1.11	gamma[26]		
gamma[29] 1.00 1.00   gamma[30] 1.00 1.01   gamma[31] 1.00 1.00   gamma[32] 1.01 1.01   sigma_y 1.03 1.11			
gamma[30] 1.00 1.01   gamma[31] 1.00 1.00   gamma[32] 1.01 1.01   sigma_y 1.03 1.11			
gamma[31] 1.00 1.00   gamma[32] 1.01 1.01   sigma_y 1.03 1.11			
gamma[32] 1.01 1.01   sigma_y 1.03 1.11	0		
sigma_y 1.03 1.11			
lp 1.00 1.01	sigma_y		
	lp	1.00	1.01

Table 7: Douglas

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.02
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.00	1.02
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.02
gamma[23]	1.01	1.02
gamma[24]	1.00	1.01
gamma[25]	1.01	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.02
lp	1.00	1.00

Table 8: ElkBasinEast

	Point est.	Upper C.I.
Beta[1]	1.01	1.01
Beta[2]	1.01	1.01
Beta[3]	1.02	1.06
Beta[4]	1.01	1.01
gamma[1]	1.01	1.03
gamma[2]	1.01	1.03
gamma[3]	1.01	1.04
gamma[4]	1.01	1.02
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.01	1.03
gamma[9]	1.01	1.04
gamma[10]	1.01	1.03
gamma[11]	1.00	1.01
gamma[12]	1.01	1.02
gamma[13]	1.02	1.05
gamma[14]	1.00	1.01
gamma[15]	1.00	1.01
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.01	1.02
gamma[19]	1.01	1.03
gamma[20]	1.01	1.02
gamma[21]	1.02	1.05
gamma[22]	1.02	1.06
gamma[23]	1.01	1.02
gamma[24]	1.00	1.01
gamma[25]	1.01	1.02
gamma[26]	1.01	1.01
gamma[27]	1.01	1.03
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.01	1.02
gamma[32]	1.01	1.02
sigma_y	1.00	1.00
_lp	1.00	1.00

Table 9: ElkBasinWest

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.04	1.14
Beta[4]	1.15	1.44
gamma[1]	1.00	1.00
gamma[2]	1.05	1.15
gamma[3]	1.06	1.20
gamma[4]	1.11	1.33
gamma[5]	1.04	1.14
gamma[6]	1.00	1.00
gamma[7]	1.03	1.09
gamma[8]	1.06	1.19
gamma[9]	1.05	1.16
gamma[10]	1.02	1.07
gamma[11]	1.10	1.31
gamma[12]	1.11	1.32
gamma[13]	1.00	1.00
gamma[14]	1.03	1.11
gamma[15]	1.01	1.03
gamma[16]	1.05	1.17
gamma[17]	1.05	1.15
gamma[18]	1.12	1.36
gamma[19]	1.01	1.03
gamma[20]	1.03	1.09
gamma[21]	1.02	1.07
gamma[22]	1.02	1.07
gamma[23]	1.12	1.34
gamma[24]	1.10	1.31
gamma[25]	1.11	1.33
gamma[26]	1.05	1.16
gamma[27]	1.04	1.13
gamma[28]	1.00	1.00
gamma[29]	1.03	1.11
gamma[30]	1.05	1.16
gamma[31]	1.06	1.19
gamma[32]	1.06	1.18
sigma_y	1.04	1.11
lp	1.00	1.02

Table 10: Fontenelle

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.02
Beta[4]	1.01	1.03
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.01	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.01	1.02
gamma[24]	1.01	1.02
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.01	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.01	1.02
sigma_y	1.01	1.04
_lp	1.00	1.01

Table 11: GrassCreek

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.02
Beta[4]	1.00	1.01
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.01
gamma[8]	1.01	1.02
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.01
gamma[22]	1.01	1.02
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.00	1.01
<u>lp</u>	1.01	1.03

Table 12: GreaterSouthPass1

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.00
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.02
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.01
gamma[32]	1.01	1.01
sigma_y	1.07	1.18
_lp	1.01	1.05

Table 13: GreaterSouthPass2

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.05
Beta[4]	1.00	1.01
gamma[1]	1.01	1.02
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.01	1.03
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.01	1.03
gamma[8]	1.00	1.00
gamma[9]	1.01	1.02
gamma[10]	1.00	1.02
gamma[11]	1.01	1.04
gamma[12]	1.00	1.01
gamma[13]	1.00	1.01
gamma[14]	1.01	1.02
gamma[15]	1.01	1.02
gamma[16]	1.00	1.01
gamma[17]	1.01	1.02
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.04
gamma[23]	1.00	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.01	1.03
gamma[29]	1.00	1.00
gamma[30]	1.01	1.02
gamma[31]	1.01	1.04
gamma[32]	1.00	1.00
sigma_y	1.01	1.03
_lp	1.01	1.03

Table 14: GreaterSouthPass3

-	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.01	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.05	1.15
_lp	1.00	1.00

Table 15: GreaterSouthPass4

	Point est.	Upper C.I.
Beta[1]	1.00	1.02
Beta[2]	1.01	1.02
Beta[3]	1.01	1.02
Beta[4]	1.00	1.01
gamma[1]	1.01	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.01	1.02
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.02
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.01	1.01
gamma[14]	1.01	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.01	1.02
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.02
gamma[23]	1.00	1.01
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.00	1.00
gamma[28]	1.01	1.02
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
$sigma\_y$	1.01	1.02
lp	1.00	1.00

Table 16: GreaterSouthPass5

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.03
Beta[4]	1.00	1.01
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.01
gamma[25]	1.01	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.00
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.00
sigma_y	1.03	1.08
_lp	1.00	1.01

Table 17: Hanna

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.01	1.02
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.01	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.02
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.04	1.13
_lp	1.00	1.00

Table 18: HeartMountain

-	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.01	1.01
Beta[3]	1.01	1.03
Beta[4]	1.01	1.04
gamma[1]	1.00	1.02
gamma[2]	1.00	1.01
gamma[3]	1.01	1.02
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.01	1.03
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.02
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.02
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.00	1.02
_lp	1.01	1.03

Table 19: Hyattville

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.00
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.02
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.01	1.01
gamma[15]	1.00	1.01
gamma[16]	1.01	1.01
gamma[17]	1.01	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.01	1.02
lp	1.00	1.01
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Table 20: Jackson

Beta[1]		Point est.	Upper C.I.
Beta[2]     1.00     1.01       Beta[3]     1.00     1.01       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01	Doto[1]		
Beta[3]     1.00     1.01       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[23]     1.00     1.00 <th></th> <th></th> <th></th>			
Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.00<			
gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.00       gamma[25]     1.00     1.			
gamma[2]     1.00     1.00       gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1			
gamma[3]     1.00     1.00       gamma[4]     1.00     1.00       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1			
gamma[4]     1.00     1.01       gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[18]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00			
gamma[5]     1.00     1.01       gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[18]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00 <td< th=""><th></th><th></th><th></th></td<>			
gamma[6]     1.00     1.00       gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00 <t< th=""><th></th><th></th><th></th></t<>			
gamma[7]     1.00     1.00       gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     <			
gamma[8]     1.00     1.00       gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00			
gamma[9]     1.00     1.00       gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[18]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.01       sigma_y     1.05     <			
gamma[10]     1.00     1.00       gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.01       gamma[18]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[11]     1.00     1.00       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05	_ ,		
gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.01       sigma_y     1.02     1.05	0 [ ]		
gamma[15]     1.00     1.00       gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.00       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05	gamma[13]		
gamma[16]     1.00     1.00       gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.00       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05	gamma[14]		
gamma[17]     1.00     1.00       gamma[18]     1.00     1.01       gamma[19]     1.00     1.00       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[18]     1.00     1.01       gamma[19]     1.00     1.00       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05	_ ,		
gamma[19]     1.00     1.00       gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[20]     1.00     1.01       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.01       sigma_y     1.02     1.05	gamma[18]		
gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[22]     1.00     1.00       gamma[23]     1.00     1.01       gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[23] 1.00 1.01   gamma[24] 1.00 1.01   gamma[25] 1.00 1.00   gamma[26] 1.00 1.00   gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05			
gamma[24]     1.00     1.01       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.01       sigma_y     1.02     1.05			
gamma[25] 1.00 1.00   gamma[26] 1.00 1.00   gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05			
gamma[26] 1.00 1.00   gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05	gamma[24]		
gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05	gamma[25]		
gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05	gamma[26]		
gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05			
gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05	gamma[28]		
gamma[31] 1.00 1.00   gamma[32] 1.00 1.01   sigma_y 1.02 1.05			
gamma[32] 1.00 1.01 sigma_y 1.02 1.05	0		
sigma_y 1.02 1.05	0		
<u> </u>	0		
lp 1.00 1.02			
	_lp	1.00	1.02

Table 21: LittleMountain

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.03
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.01	1.02
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.01	1.03
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.01
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.01	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.01	1.01
gamma[32]	1.00	1.00
sigma_y	1.00	1.00
_lp	1.00	1.01

Table 22: Natrona1

Beta[1]		Point est.	Upper C.I.
Beta[2]     1.00     1.00       Beta[3]     1.00     1.00       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.01       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.01       gamma[9]     1.00     1.01       gamma[10]     1.00     1.01       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00	Doto[1]		
Beta[3]     1.00     1.00       Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.01       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.01       gamma[7]     1.00     1.01       gamma[8]     1.00     1.01       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00 <th></th> <th></th> <th></th>			
Beta[4]     1.00     1.00       gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.01       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.01       gamma[9]     1.00     1.01       gamma[10]     1.00     1.01       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00<			
gamma[1]     1.00     1.00       gamma[2]     1.00     1.00       gamma[3]     1.00     1.01       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.01       gamma[9]     1.00     1.01       gamma[10]     1.00     1.01       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.0			
gamma[2]     1.00     1.01       gamma[3]     1.00     1.01       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.00       gamma[10]     1.00     1.01       gamma[10]     1.00     1.01       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[27]     1.00     1			
gamma[3]     1.00     1.01       gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.01       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[19]     1.00     1.00       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[27]     1.00     1			
gamma[4]     1.00     1.00       gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.00       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00			
gamma[5]     1.00     1.00       gamma[6]     1.00     1.00       gamma[7]     1.00     1.01       gamma[8]     1.00     1.00       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00 <td< th=""><th></th><th></th><th></th></td<>			
gamma[6]     1.00     1.01       gamma[7]     1.00     1.01       gamma[8]     1.00     1.00       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.01       gamma[22]     1.00     1.00       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00 <t< th=""><th></th><th></th><th></th></t<>			
gamma[7]     1.00     1.01       gamma[8]     1.00     1.00       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     <			
gamma[8]     1.00     1.00       gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01 <t< th=""><th>gamma[6]</th><th></th><th></th></t<>	gamma[6]		
gamma[9]     1.00     1.01       gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.01       gamma[18]     1.01     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[7]		
gamma[10]     1.00     1.00       gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[8]		
gamma[11]     1.00     1.01       gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02			
gamma[12]     1.00     1.00       gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[10]		
gamma[13]     1.00     1.00       gamma[14]     1.00     1.00       gamma[15]     1.00     1.01       gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	_ ,		
gamma[14]     1.00     1.00       gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.01       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.00       sigma_y     1.01     1.02	0 [ ]		
gamma[15]     1.00     1.00       gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[13]		
gamma[16]     1.00     1.01       gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[14]		
gamma[17]     1.00     1.00       gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[15]		
gamma[18]     1.01     1.01       gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[16]		
gamma[19]     1.00     1.01       gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02	gamma[17]	1.00	1.00
gamma[20]     1.00     1.00       gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.00       sigma_y     1.01     1.02	gamma[18]		
gamma[21]     1.00     1.00       gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02		1.00	
gamma[22]     1.00     1.01       gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       sigma_y     1.01     1.02		1.00	
gamma[23]     1.00     1.00       gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.00       sigma_y     1.01     1.02			
gamma[24]     1.00     1.00       gamma[25]     1.00     1.00       gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.00       sigma_y     1.01     1.02	gamma[22]	1.00	1.01
gamma[25] 1.00 1.00   gamma[26] 1.00 1.00   gamma[27] 1.00 1.00   gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.00   sigma_y 1.01 1.02	gamma[23]	1.00	
gamma[26]     1.00     1.00       gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.00       sigma_y     1.01     1.02	gamma[24]	1.00	1.00
gamma[27]     1.00     1.00       gamma[28]     1.00     1.00       gamma[29]     1.00     1.00       gamma[30]     1.00     1.00       gamma[31]     1.00     1.00       gamma[32]     1.00     1.00       sigma_y     1.01     1.02	gamma[25]	1.00	1.00
gamma[28] 1.00 1.00   gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.00   sigma_y 1.01 1.02	gamma[26]		1.00
gamma[29] 1.00 1.00   gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.00   sigma_y 1.01 1.02	gamma[27]	1.00	
gamma[30] 1.00 1.00   gamma[31] 1.00 1.00   gamma[32] 1.00 1.00   sigma_y 1.01 1.02	gamma[28]	1.00	1.00
gamma[31] 1.00 1.00   gamma[32] 1.00 1.00   sigma_y 1.01 1.02	gamma[29]		
gamma[32] 1.00 1.00   sigma_y 1.01 1.02	0		
sigma_y 1.01 1.02	0		
9 1			
lp 1.00 1.01	sigma_y		
	lp	1.00	1.01

Table 23: Natrona2

-	Point est.	Upper C.I.
Beta[1]	1.01	1.02
Beta[2]	1.01	1.02
Beta[3]	1.00	1.02
Beta[4]	1.01	1.02
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.02
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.02	1.07
_lp	1.01	1.01

Table 24: Natrona3

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.00	1.00
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.01	1.01
gamma[3]	1.00	1.00
gamma[4]	1.01	1.03
gamma[5]	1.00	1.01
gamma[6]	1.01	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.01	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.02	1.07
_lp	1.01	1.02

Table 25: Newcastle

	Point est.	Upper C.I.
Beta[1]	1.00	1.02
Beta[2]	1.00	1.01
Beta[3]	1.00	1.01
Beta[4]	1.01	1.04
gamma[1]	1.00	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.01	1.03
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.01	1.03
gamma[13]	1.00	1.01
gamma[14]	1.01	1.02
gamma[15]	1.00	1.00
gamma[16]	1.00	1.02
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.02
gamma[23]	1.01	1.02
gamma[24]	1.00	1.01
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.02
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.04
_lp	1.00	1.01

Table 26: NorthGillette

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.05
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.02
gamma[3]	1.01	1.02
gamma[4]	1.01	1.02
gamma[5]	1.00	1.01
gamma[6]	1.01	1.01
gamma[7]	1.00	1.01
gamma[8]	1.00	1.01
gamma[9]	1.00	1.01
gamma[10]	1.00	1.02
gamma[11]	1.01	1.02
gamma[12]	1.01	1.02
gamma[13]	1.01	1.04
gamma[14]	1.00	1.01
gamma[15]	1.00	1.01
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.01	1.03
gamma[19]	1.00	1.00
gamma[20]	1.01	1.04
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.01	1.03
gamma[24]	1.01	1.02
gamma[25]	1.01	1.02
gamma[26]	1.01	1.02
gamma[27]	1.00	1.02
gamma[28]	1.01	1.04
gamma[29]	1.00	1.01
gamma[30]	1.01	1.03
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.03
_lp	1.00	1.01

Table 27: NorthGlenrock

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.02
Beta[4]	1.01	1.01
gamma[1]	1.01	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.02
gamma[5]	1.01	1.03
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.01	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.01	1.02
gamma[19]	1.00	1.00
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.01	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.01
_lp	1.00	1.01

Table 28: NorthLaramie

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.02
Beta[4]	1.00	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.01	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.02
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.01	1.01
gamma[32]	1.01	1.01
sigma_y	1.01	1.02
lp	1.00	1.00

Table 29: OregonBasin

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.01
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.03
lp	1.00	1.01

Table 30: Powder

	Point est.	Upper C.I.
Beta[1]	1.01	1.01
Beta[2]	1.01	1.02
Beta[3]	1.01	1.05
Beta[4]	1.00	1.00
gamma[1]	1.00	1.02
gamma[2]	1.01	1.04
gamma[3]	1.00	1.01
gamma[4]	1.02	1.05
gamma[5]	1.01	1.05
gamma[6]	1.01	1.02
gamma[7]	1.01	1.02
gamma[8]	1.00	1.01
gamma[9]	1.01	1.03
gamma[10]	1.01	1.03
gamma[11]	1.01	1.04
gamma[12]	1.01	1.03
gamma[13]	1.01	1.02
gamma[14]	1.01	1.02
gamma[15]	1.01	1.04
gamma[16]	1.01	1.03
gamma[17]	1.01	1.02
gamma[18]	1.02	1.05
gamma[19]	1.00	1.01
gamma[20]	1.01	1.03
gamma[21]	1.00	1.00
gamma[22]	1.01	1.03
gamma[23]	1.01	1.02
gamma[24]	1.00	1.02
gamma[25]	1.01	1.04
gamma[26]	1.01	1.02
gamma[27]	1.01	1.04
gamma[28]	1.01	1.03
gamma[29]	1.00	1.00
gamma[30]	1.01	1.03
gamma[31]	1.01	1.03
gamma[32]	1.00	1.02
sigma_y	1.00	1.01
<u>lp</u>	1.00	1.00

Table 31: Sage

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.02
Beta[3]	1.01	1.02
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.01
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.01	1.02
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.00
sigma_y	1.05	1.18
lp	1.00	1.01

Table 32: SaltWells

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.00	1.00
Beta[4]	1.01	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.02	1.05
_lp	1.00	1.01

Table 33: Seedskadee

	Point est.	Upper C.I.
Beta[1]	1.01	1.01
Beta[2]	1.01	1.01
Beta[3]	1.02	1.07
Beta[4]	1.00	1.00
gamma[1]	1.02	1.08
gamma[2]	1.02	1.06
gamma[3]	1.02	1.06
gamma[4]	1.02	1.06
gamma[5]	1.01	1.05
gamma[6]	1.01	1.02
gamma[7]	1.02	1.06
gamma[8]	1.01	1.03
gamma[9]	1.01	1.04
gamma[10]	1.02	1.07
gamma[11]	1.02	1.06
gamma[12]	1.01	1.05
gamma[13]	1.01	1.04
gamma[14]	1.02	1.06
gamma[15]	1.01	1.04
gamma[16]	1.02	1.06
gamma[17]	1.01	1.05
gamma[18]	1.02	1.07
gamma[19]	1.01	1.02
gamma[20]	1.01	1.02
gamma[21]	1.01	1.03
gamma[22]	1.02	1.07
gamma[23]	1.01	1.04
gamma[24]	1.02	1.07
gamma[25]	1.01	1.05
gamma[26]	1.01	1.03
gamma[27]	1.02	1.06
gamma[28]	1.01	1.05
gamma[29]	1.01	1.03
gamma[30]	1.02	1.07
gamma[31]	1.02	1.07
gamma[32]	1.01	1.03
sigma_y	1.00	1.00
_lp	1.00	1.00

Table 34: Shell

-	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.02	1.07
Beta[4]	1.02	1.07
gamma[1]	1.00	1.02
gamma[2]	1.00	1.01
gamma[3]	1.02	1.05
gamma[4]	1.00	1.00
gamma[5]	1.01	1.02
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.05
gamma[9]	1.01	1.02
gamma[10]	1.01	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.02
gamma[13]	1.01	1.03
gamma[14]	1.00	1.02
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.01	1.02
gamma[18]	1.01	1.04
gamma[19]	1.00	1.00
gamma[20]	1.01	1.02
gamma[21]	1.01	1.02
gamma[22]	1.01	1.02
gamma[23]	1.01	1.05
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.01	1.02
gamma[28]	1.01	1.03
gamma[29]	1.01	1.01
gamma[30]	1.00	1.00
gamma[31]	1.00	1.01
gamma[32]	1.01	1.01
sigma_y	1.01	1.03
_lp	1.00	1.01

Table 35: SouthRawlins

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.01	1.01
gamma[14]	1.00	1.00
gamma[15]	1.01	1.01
gamma[16]	1.01	1.01
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.01
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.03
lp	1.00	1.00
· · · · · · · · · · · · · · · · · · ·		

Table 36: Thermopolis

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.03
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.02
gamma[8]	1.01	1.03
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.01	1.03
gamma[13]	1.00	1.01
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.01	1.02
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.01
gamma[23]	1.01	1.01
gamma[24]	1.01	1.01
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.01	1.02
gamma[28]	1.01	1.02
gamma[29]	1.01	1.02
gamma[30]	1.00	1.02
gamma[31]	1.00	1.01
gamma[32]	1.01	1.03
$sigma\_y$	1.00	1.01
_lp	1.00	1.01

Table 37: ThunderBasin

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.02
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.01
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.04
_lp	1.00	1.01

Table 38: Uinta

	Point est.	Upper C.I.
Beta[1]	1.00	1.02
Beta[2]	1.01	1.02
Beta[3]	1.02	1.06
Beta[4]	1.01	1.04
gamma[1]	1.01	1.03
gamma[2]	1.01	1.02
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.01
gamma[7]	1.00	1.02
gamma[8]	1.00	1.01
gamma[9]	1.00	1.00
gamma[10]	1.01	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.02
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.00
gamma[18]	1.01	1.02
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.01	1.03
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.01	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.01	1.03
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.00	1.02
lp	1.01	1.02

Table 39: Washakie

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.02	1.05
Beta[4]	1.00	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.01	1.02
gamma[9]	1.01	1.03
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.01	1.01
gamma[14]	1.00	1.00
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.02
gamma[18]	1.00	1.01
gamma[19]	1.01	1.04
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.02
gamma[28]	1.00	1.02
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.01	1.03
sigma_y	1.04	1.12
<u>lp</u>	1.00	1.01

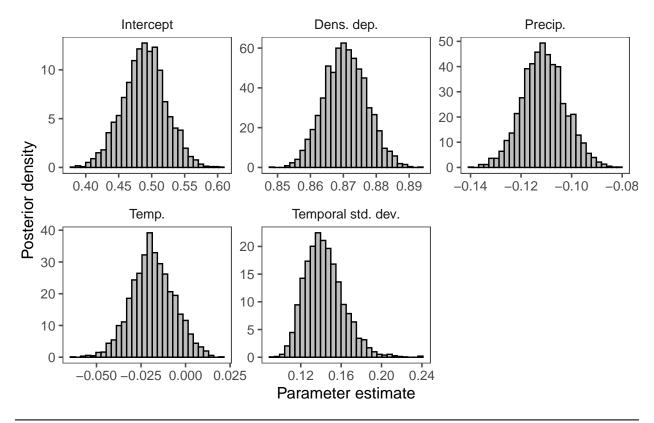
# Bayesian p-values

D realizes town	D **-1	Cons Ansa
P-value type	P-value	Core Area
SpatialDiscrep	0.71	Bear River
TemporalDiscrep	0.73	Bear River
SpatialDiscrep	0.30	Blacks Fork
TemporalDiscrep	0.64	Blacks Fork
SpatialDiscrep	0.42	Buffalo
TemporalDiscrep	0.75	Buffalo
SpatialDiscrep	0.50	Continental Divide
TemporalDiscrep	0.81	Continental Divide
SpatialDiscrep	0.20	Crowheart
TemporalDiscrep	0.81	Crowheart
SpatialDiscrep	0.34	Daniel
TemporalDiscrep	0.71	Daniel
SpatialDiscrep	0.46	Douglas
TemporalDiscrep	0.81	Douglas
SpatialDiscrep	0.30	Elk Basin East
TemporalDiscrep	0.92	Elk Basin East
SpatialDiscrep	0.91	Elk Basin West
TemporalDiscrep	0.97	Elk Basin West
SpatialDiscrep	0.30	Fontenelle
TemporalDiscrep	0.72	Fontenelle
SpatialDiscrep	0.49	Grass Creek
TemporalDiscrep	0.80	Grass Creek
SpatialDiscrep	0.35	Greater South Pass 1
TemporalDiscrep	0.74	Greater South Pass 1
SpatialDiscrep	0.22	Greater South Pass 3
TemporalDiscrep	0.81	Greater South Pass 3
SpatialDiscrep	0.19	Greater South Pass 4
TemporalDiscrep	0.81	Greater South Pass 4
SpatialDiscrep	0.68	Greater South Pass 5
TemporalDiscrep	0.85	Greater South Pass 5
SpatialDiscrep	0.10	Hanna
TemporalDiscrep	0.83	Hanna
SpatialDiscrep	0.06	Heart Mountain
TemporalDiscrep	0.66	Heart Mountain
SpatialDiscrep	0.19	Hyattville
TemporalDiscrep	0.57	Hyattville
SpatialDiscrep	0.09	Jackson
TemporalDiscrep	0.60	Jackson
SpatialDiscrep	0.13	Little Mountain
TemporalDiscrep	0.27	Little Mountain
SpatialDiscrep	0.09	Natrona 1
TemporalDiscrep	0.73	Natrona 1
SpatialDiscrep	0.22	Natrona 2
TemporalDiscrep	0.90	Natrona 2
SpatialDiscrep	0.19	Natrona 3
TemporalDiscrep	0.78	Natrona 3
SpatialDiscrep	0.66	Newcastle
TemporalDiscrep	0.68	Newcastle
SpatialDiscrep	0.25	North Gillette
TemporalDiscrep	0.65	North Gillette

P-value type	P-value	Core Area
SpatialDiscrep	0.55	North Glenrock
TemporalDiscrep	0.62	North Glenrock
SpatialDiscrep	0.73	North Laramie
TemporalDiscrep	0.76	North Laramie
SpatialDiscrep	0.12	Oregon Basin
TemporalDiscrep	0.71	Oregon Basin
SpatialDiscrep	0.04	Powder
TemporalDiscrep	0.05	Powder
SpatialDiscrep	0.00	Sage
TemporalDiscrep	0.54	Sage
SpatialDiscrep	0.07	Salt Wells
TemporalDiscrep	0.71	Salt Wells
SpatialDiscrep	0.02	Seedskadee
TemporalDiscrep	0.26	Seedskadee
SpatialDiscrep	0.06	Shell
TemporalDiscrep	0.79	Shell
SpatialDiscrep	0.09	South Rawlins
TemporalDiscrep	0.73	South Rawlins
SpatialDiscrep	0.59	Thermopolis
TemporalDiscrep	0.65	Thermopolis
SpatialDiscrep	0.19	Thunder Basin
TemporalDiscrep	0.69	Thunder Basin
SpatialDiscrep	0.34	Washakie
TemporalDiscrep	0.64	Washakie
SpatialDiscrep	0.25	Greater South Pass 2
TemporalDiscrep	0.76	Greater South Pass 2
SpatialDiscrep	0.02	Uinta
TemporalDiscrep	0.49	Uinta

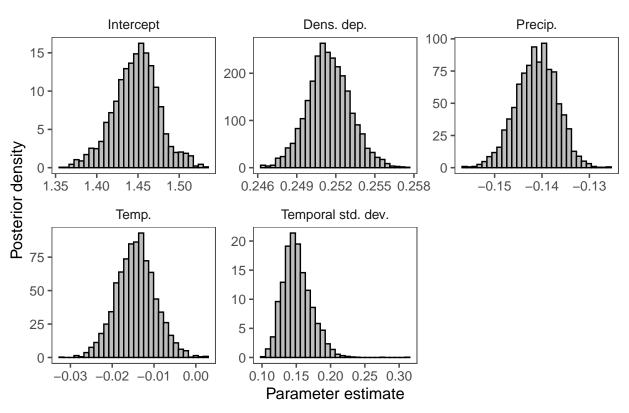
#### Posterior distributions

#### **BearRiver**



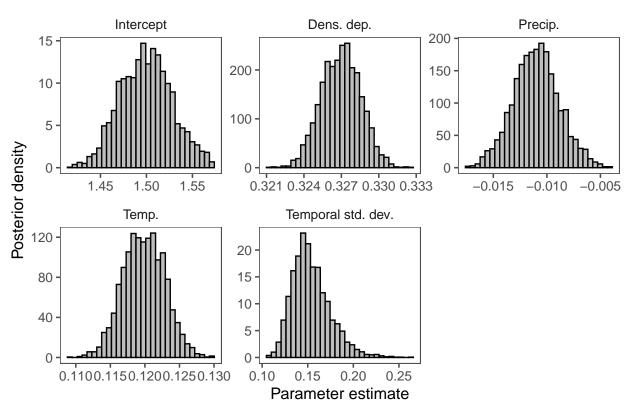
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.49	0.49	0.03	0.42	0.55
Density dependence, $\beta_2$	0.87	0.87	0.01	0.86	0.88
Precipitation effect, $\beta_3$	-0.11	-0.11	0.01	-0.13	-0.09
Temperature effect, $\beta_4$	-0.02	-0.02	0.01	-0.04	0.01
Std. dev. of temporal random effect, $\sigma_y$	0.14	0.14	0.02	0.11	0.18

### BlacksFork



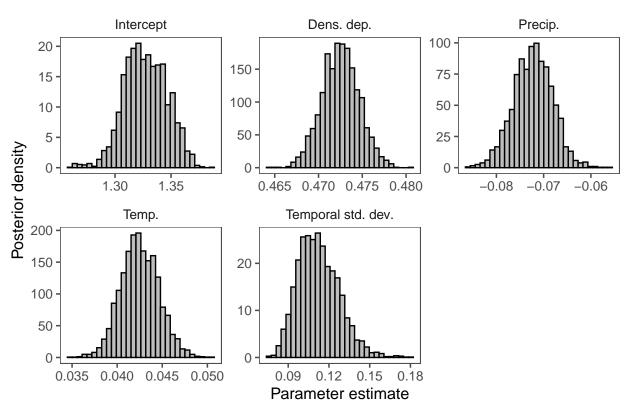
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.45	1.45	0.03	1.39	1.51
Density dependence, $\beta_2$	0.25	0.25	0.00	0.25	0.25
Precipitation effect, $\beta_3$	-0.14	-0.14	0.00	-0.15	-0.13
Temperature effect, $\beta_4$	-0.01	-0.01	0.00	-0.02	0.00
Std. dev. of temporal random effect, $\sigma_y$	0.15	0.15	0.02	0.12	0.20

# Buffalo



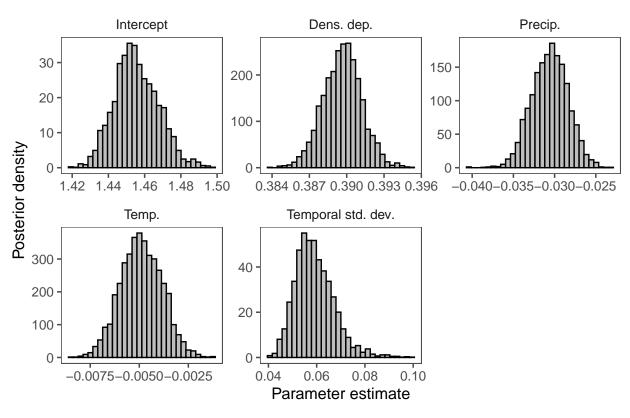
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.50	1.50	0.03	1.45	1.56
Density dependence, $\beta_2$	0.33	0.33	0.00	0.32	0.33
Precipitation effect, $\beta_3$	-0.01	-0.01	0.00	-0.02	-0.01
Temperature effect, $\beta_4$	0.12	0.12	0.00	0.11	0.13
Std. dev. of temporal random effect, $\sigma_y$	0.15	0.15	0.02	0.12	0.20

### ContinentalDivide



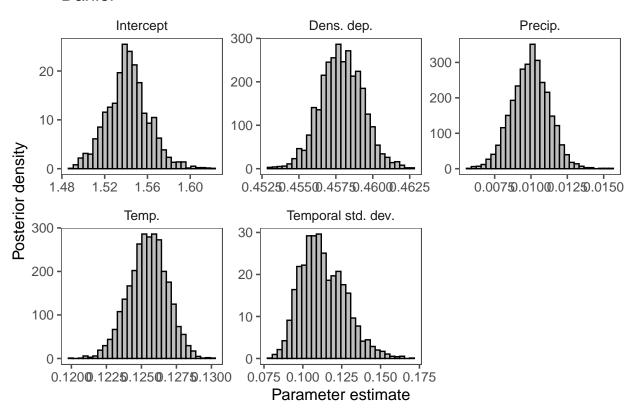
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.33	1.33	0.02	1.29	1.36
Density dependence, $\beta_2$	0.47	0.47	0.00	0.47	0.48
Precipitation effect, $\beta_3$	-0.07	-0.07	0.00	-0.08	-0.06
Temperature effect, $\beta_4$	0.04	0.04	0.00	0.04	0.05
Std. dev. of temporal random effect, $\sigma_y$	0.11	0.11	0.02	0.09	0.15

### Crowheart



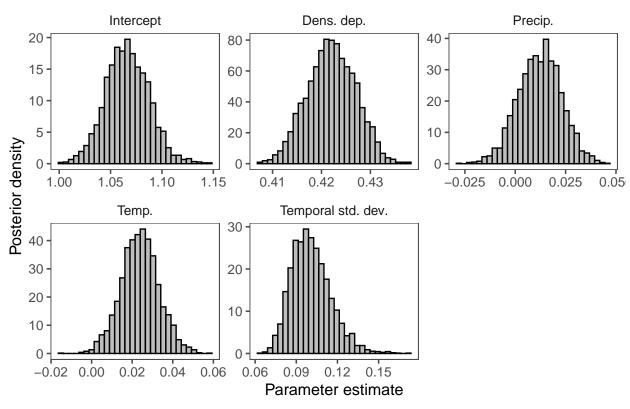
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.46	1.45	0.01	1.43	1.48
Density dependence, $\beta_2$	0.39	0.39	0.00	0.39	0.39
Precipitation effect, $\beta_3$	-0.03	-0.03	0.00	-0.03	-0.03
Temperature effect, $\beta_4$	0.00	0.00	0.00	-0.01	0.00
Std. dev. of temporal random effect, $\sigma_y$	0.06	0.06	0.01	0.05	0.08

### Daniel



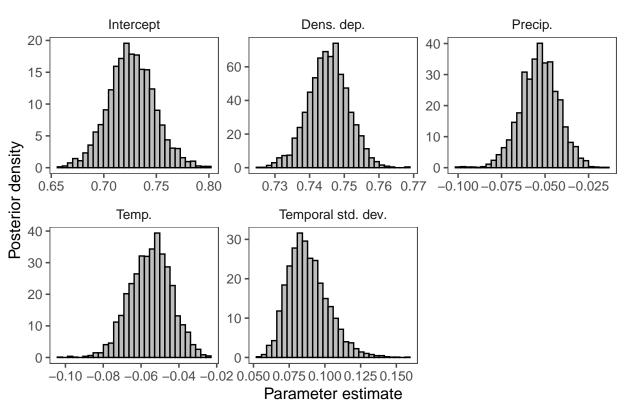
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.54	1.54	0.02	1.50	1.58
Density dependence, $\beta_2$	0.46	0.46	0.00	0.46	0.46
Precipitation effect, $\beta_3$	0.01	0.01	0.00	0.01	0.01
Temperature effect, $\beta_4$	0.13	0.13	0.00	0.12	0.13
Std. dev. of temporal random effect, $\sigma_y$	0.11	0.11	0.01	0.09	0.14

# Douglas



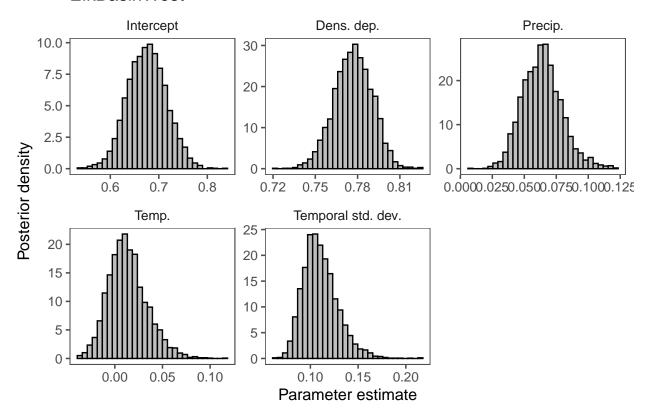
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.07	1.07	0.02	1.03	1.11
Density dependence, $\beta_2$	0.42	0.42	0.00	0.41	0.43
Precipitation effect, $\beta_3$	0.01	0.01	0.01	-0.01	0.03
Temperature effect, $\beta_4$	0.02	0.02	0.01	0.01	0.04
Std. dev. of temporal random effect, $\sigma_y$	0.10	0.10	0.01	0.08	0.13

### ElkBasinEast



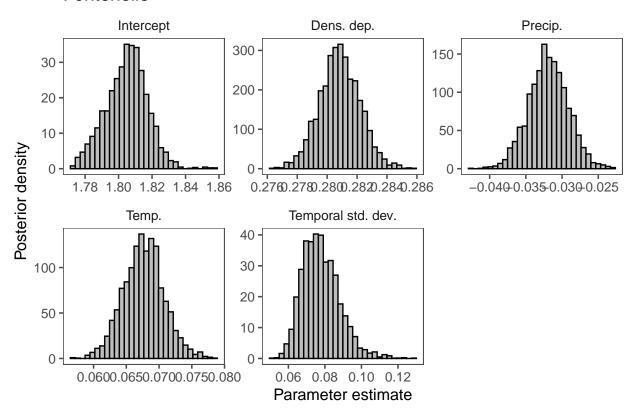
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.73	0.73	0.02	0.68	0.77
Density dependence, $\beta_2$	0.75	0.75	0.01	0.73	0.76
Precipitation effect, $\beta_3$	-0.05	-0.05	0.01	-0.08	-0.03
Temperature effect, $\beta_4$	-0.06	-0.05	0.01	-0.08	-0.03
Std. dev. of temporal random effect, $\sigma_y$	0.09	0.09	0.01	0.07	0.12

### ElkBasinWest



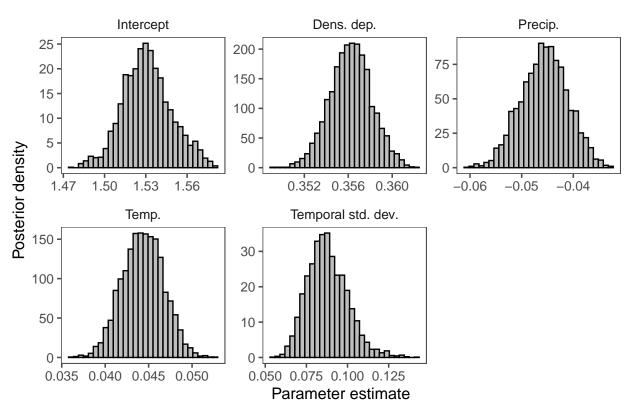
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.68	0.68	0.04	0.60	0.75
Density dependence, $\beta_2$	0.78	0.78	0.01	0.75	0.80
Precipitation effect, $\beta_3$	0.06	0.06	0.02	0.04	0.10
Temperature effect, $\beta_4$	0.01	0.01	0.02	-0.02	0.06
Std. dev. of temporal random effect, $\sigma_y$	0.11	0.11	0.02	0.08	0.15

### Fontenelle

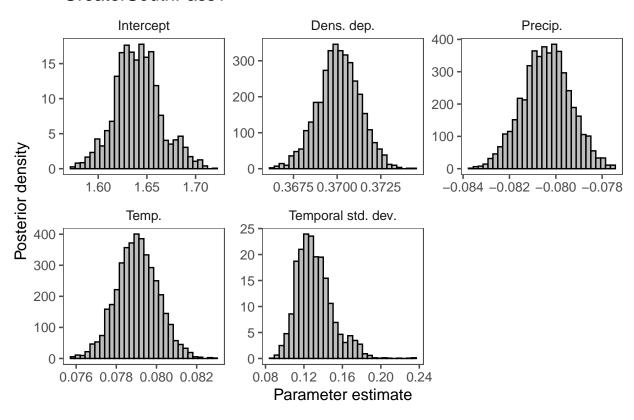


	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.80	1.81	0.01	1.78	1.83
Density dependence, $\beta_2$	0.28	0.28	0.00	0.28	0.28
Precipitation effect, $\beta_3$	-0.03	-0.03	0.00	-0.04	-0.03
Temperature effect, $\beta_4$	0.07	0.07	0.00	0.06	0.07
Std. dev. of temporal random effect, $\sigma_y$	0.08	0.08	0.01	0.06	0.10

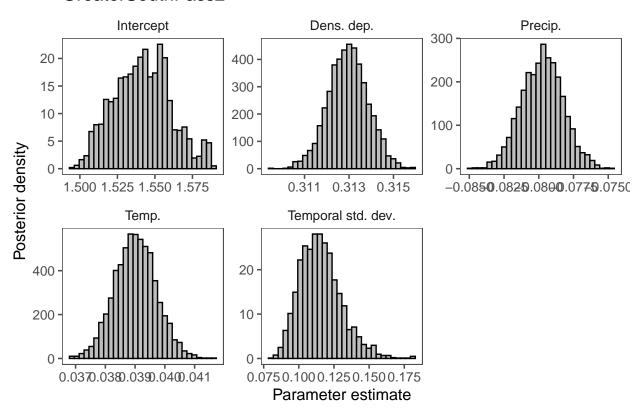
## GrassCreek



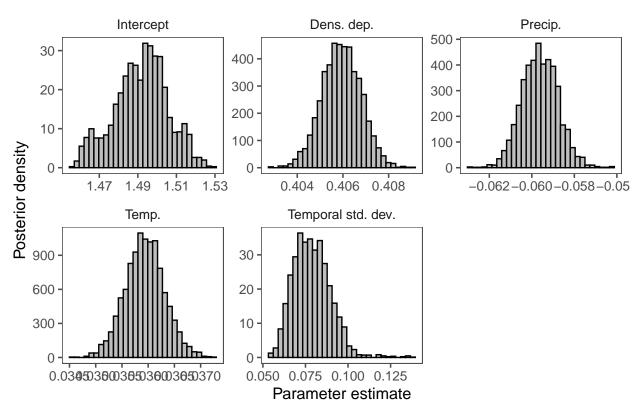
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.53	1.53	0.02	1.50	1.57
Density dependence, $\beta_2$	0.36	0.36	0.00	0.35	0.36
Precipitation effect, $\beta_3$	-0.05	-0.05	0.00	-0.05	-0.04
Temperature effect, $\beta_4$	0.04	0.04	0.00	0.04	0.05
Std. dev. of temporal random effect, $\sigma_y$	0.09	0.09	0.01	0.07	0.12



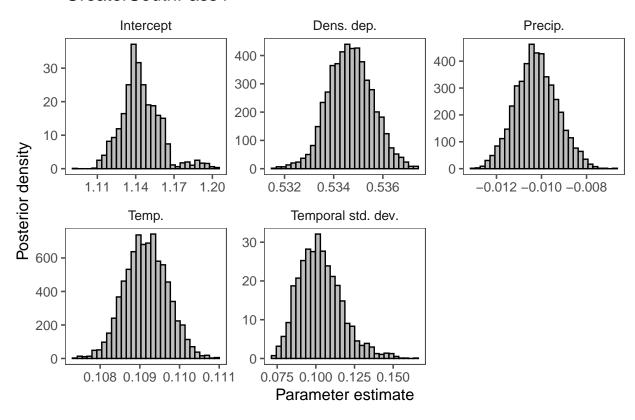
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.64	1.64	0.02	1.60	1.69
Density dependence, $\beta_2$	0.37	0.37	0.00	0.37	0.37
Precipitation effect, $\beta_3$	-0.08	-0.08	0.00	-0.08	-0.08
Temperature effect, $\beta_4$	0.08	0.08	0.00	0.08	0.08
Std. dev. of temporal random effect, $\sigma_y$	0.13	0.13	0.02	0.10	0.18



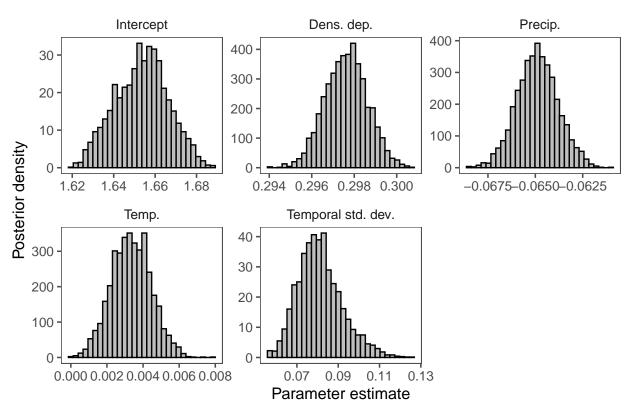
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.54	1.54	0.02	1.51	1.58
Density dependence, $\beta_2$	0.31	0.31	0.00	0.31	0.31
Precipitation effect, $\beta_3$	-0.08	-0.08	0.00	-0.08	-0.08
Temperature effect, $\beta_4$	0.04	0.04	0.00	0.04	0.04
Std. dev. of temporal random effect, $\sigma_y$	0.12	0.11	0.01	0.09	0.15



	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.49	1.49	0.01	1.46	1.52
Density dependence, $\beta_2$	0.41	0.41	0.00	0.40	0.41
Precipitation effect, $\beta_3$	-0.06	-0.06	0.00	-0.06	-0.06
Temperature effect, $\beta_4$	0.04	0.04	0.00	0.04	0.04
Std. dev. of temporal random effect, $\sigma_y$	0.08	0.08	0.01	0.06	0.10

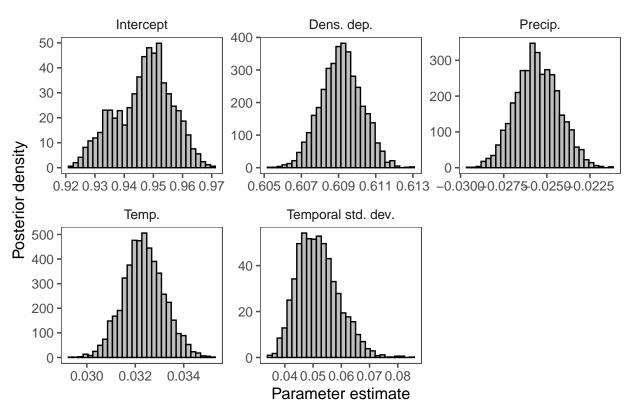


	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.14	1.14	0.02	1.12	1.19
Density dependence, $\beta_2$	0.53	0.53	0.00	0.53	0.54
Precipitation effect, $\beta_3$	-0.01	-0.01	0.00	-0.01	-0.01
Temperature effect, $\beta_4$	0.11	0.11	0.00	0.11	0.11
Std. dev. of temporal random effect, $\sigma_y$	0.10	0.10	0.01	0.08	0.14



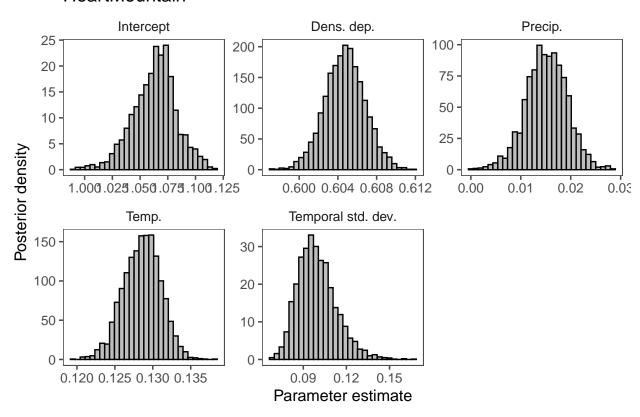
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.65	1.65	0.01	1.63	1.68
Density dependence, $\beta_2$	0.30	0.30	0.00	0.30	0.30
Precipitation effect, $\beta_3$	-0.06	-0.06	0.00	-0.07	-0.06
Temperature effect, $\beta_4$	0.00	0.00	0.00	0.00	0.01
Std. dev. of temporal random effect, $\sigma_y$	0.08	0.08	0.01	0.06	0.11

## Hanna



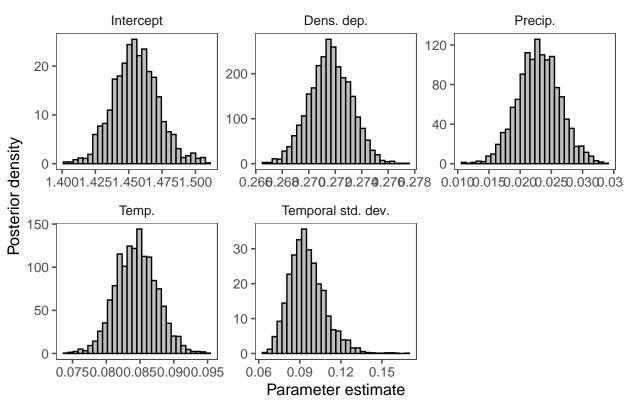
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.95	0.95	0.01	0.93	0.96
Density dependence, $\beta_2$	0.61	0.61	0.00	0.61	0.61
Precipitation effect, $\beta_3$	-0.03	-0.03	0.00	-0.03	-0.02
Temperature effect, $\beta_4$	0.03	0.03	0.00	0.03	0.03
Std. dev. of temporal random effect, $\sigma_y$	0.05	0.05	0.01	0.04	0.07

### HeartMountain



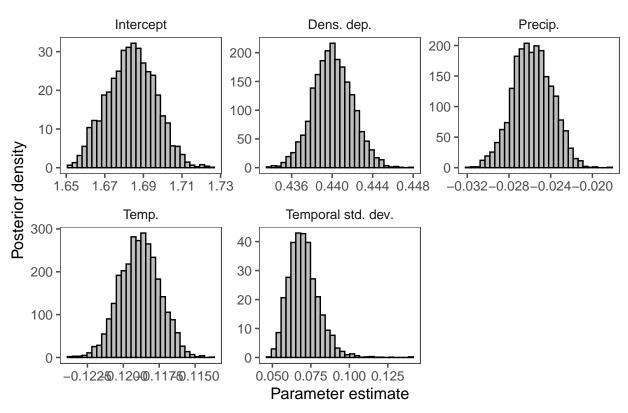
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.06	1.06	0.02	1.02	1.10
Density dependence, $\beta_2$	0.60	0.60	0.00	0.60	0.61
Precipitation effect, $\beta_3$	0.02	0.02	0.00	0.01	0.02
Temperature effect, $\beta_4$	0.13	0.13	0.00	0.12	0.13
Std. dev. of temporal random effect, $\sigma_y$	0.10	0.10	0.01	0.08	0.13

# Hyattville



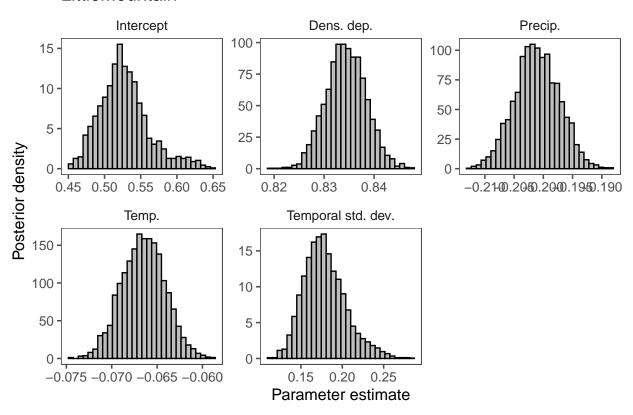
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.46	1.45	0.02	1.42	1.49
Density dependence, $\beta_2$	0.27	0.27	0.00	0.27	0.27
Precipitation effect, $\beta_3$	0.02	0.02	0.00	0.02	0.03
Temperature effect, $\beta_4$	0.08	0.08	0.00	0.08	0.09
Std. dev. of temporal random effect, $\sigma_y$	0.10	0.09	0.01	0.07	0.12

## Jackson



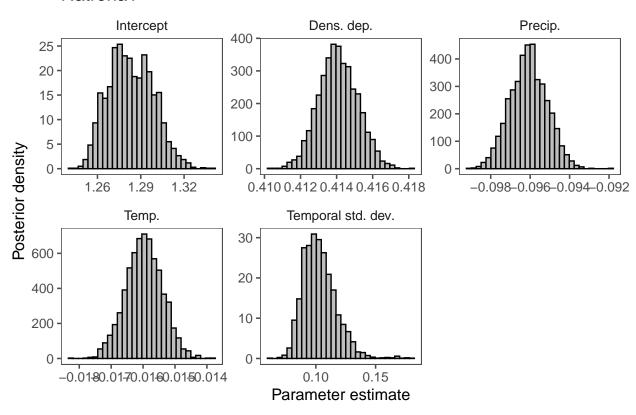
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.68	1.68	0.01	1.66	1.71
Density dependence, $\beta_2$	0.44	0.44	0.00	0.44	0.44
Precipitation effect, $\beta_3$	-0.03	-0.03	0.00	-0.03	-0.02
Temperature effect, $\beta_4$	-0.12	-0.12	0.00	-0.12	-0.12
Std. dev. of temporal random effect, $\sigma_y$	0.07	0.07	0.01	0.05	0.09

### LittleMountain



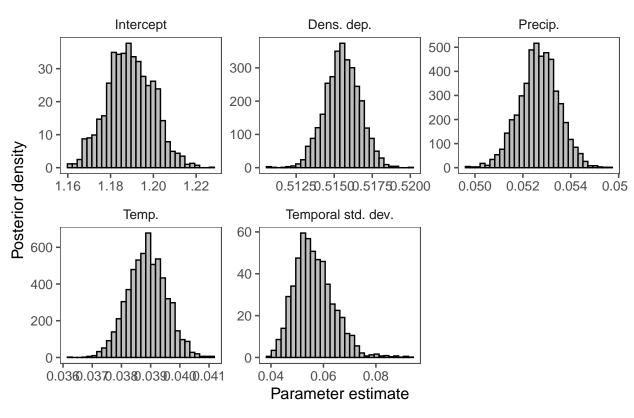
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.53	0.52	0.03	0.47	0.61
Density dependence, $\beta_2$	0.83	0.83	0.00	0.83	0.84
Precipitation effect, $\beta_3$	-0.20	-0.20	0.00	-0.21	-0.19
Temperature effect, $\beta_4$	-0.07	-0.07	0.00	-0.07	-0.06
Std. dev. of temporal random effect, $\sigma_y$	0.18	0.18	0.03	0.14	0.24

### Natrona1



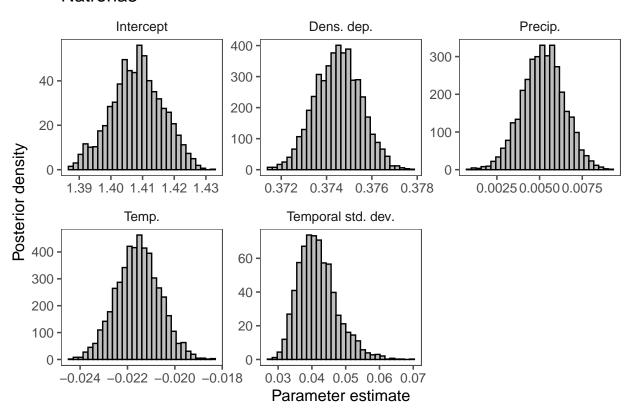
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.28	1.28	0.02	1.26	1.31
Density dependence, $\beta_2$	0.41	0.41	0.00	0.41	0.42
Precipitation effect, $\beta_3$	-0.10	-0.10	0.00	-0.10	-0.09
Temperature effect, $\beta_4$	-0.02	-0.02	0.00	-0.02	-0.01
Std. dev. of temporal random effect, $\sigma_y$	0.10	0.10	0.01	0.08	0.13

## Natrona2



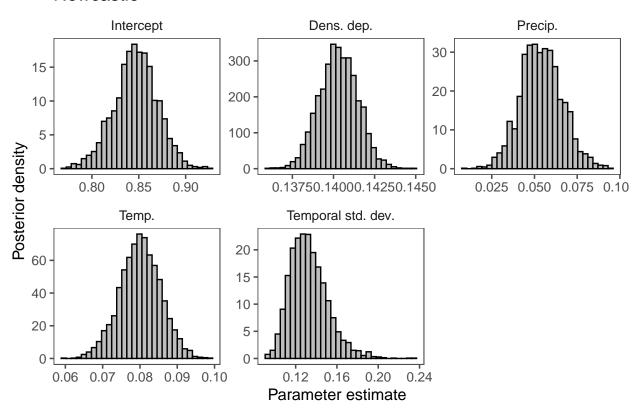
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.19	1.19	0.01	1.17	1.21
Density dependence, $\beta_2$	0.52	0.52	0.00	0.51	0.52
Precipitation effect, $\beta_3$	0.05	0.05	0.00	0.05	0.05
Temperature effect, $\beta_4$	0.04	0.04	0.00	0.04	0.04
Std. dev. of temporal random effect, $\sigma_y$	0.06	0.06	0.01	0.04	0.07

## Natrona3



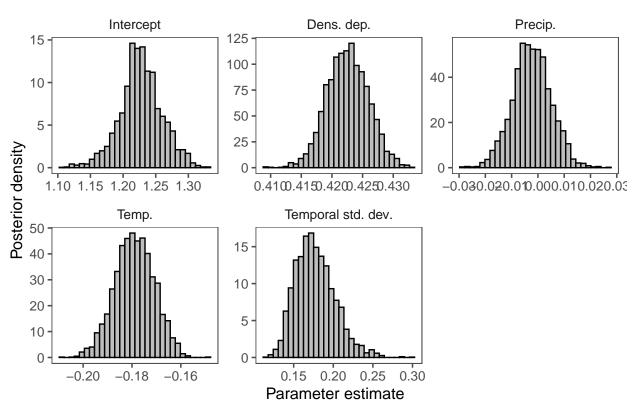
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.41	1.41	0.01	1.39	1.42
Density dependence, $\beta_2$	0.37	0.37	0.00	0.37	0.38
Precipitation effect, $\beta_3$	0.01	0.01	0.00	0.00	0.01
Temperature effect, $\beta_4$	-0.02	-0.02	0.00	-0.02	-0.02
Std. dev. of temporal random effect, $\sigma_y$	0.04	0.04	0.01	0.03	0.05

### Newcastle



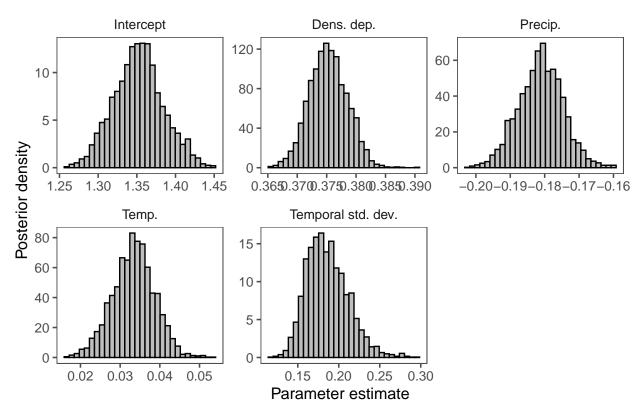
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.85	0.85	0.02	0.80	0.89
Density dependence, $\beta_2$	0.14	0.14	0.00	0.14	0.14
Precipitation effect, $\beta_3$	0.05	0.05	0.01	0.03	0.08
Temperature effect, $\beta_4$	0.08	0.08	0.01	0.07	0.09
Std. dev. of temporal random effect, $\sigma_y$	0.13	0.13	0.02	0.10	0.17

## NorthGillette



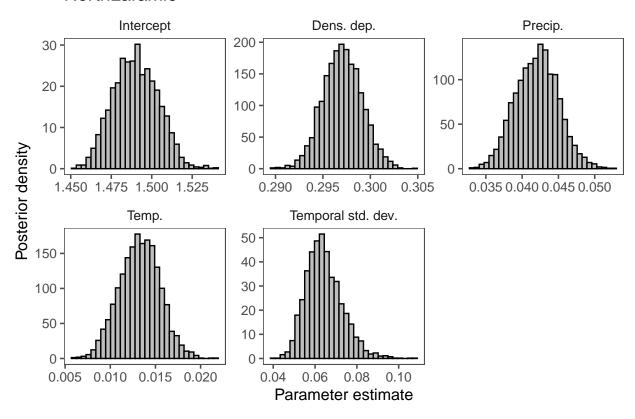
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.23	1.23	0.03	1.16	1.29
Density dependence, $\beta_2$	0.42	0.42	0.00	0.42	0.43
Precipitation effect, $\beta_3$	0.00	0.00	0.01	-0.02	0.01
Temperature effect, $\beta_4$	-0.18	-0.18	0.01	-0.20	-0.16
Std. dev. of temporal random effect, $\sigma_y$	0.18	0.17	0.02	0.14	0.23

### NorthGlenrock



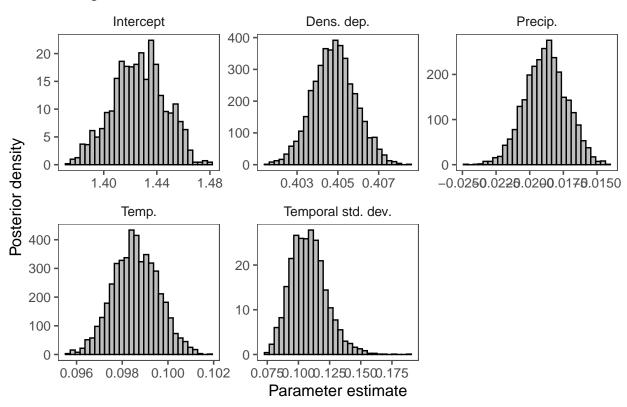
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.35	1.35	0.03	1.29	1.42
Density dependence, $\beta_2$	0.38	0.38	0.00	0.37	0.38
Precipitation effect, $\beta_3$	-0.18	-0.18	0.01	-0.19	-0.17
Temperature effect, $\beta_4$	0.03	0.03	0.01	0.02	0.04
Std. dev. of temporal random effect, $\sigma_y$	0.19	0.18	0.03	0.14	0.24

### NorthLaramie



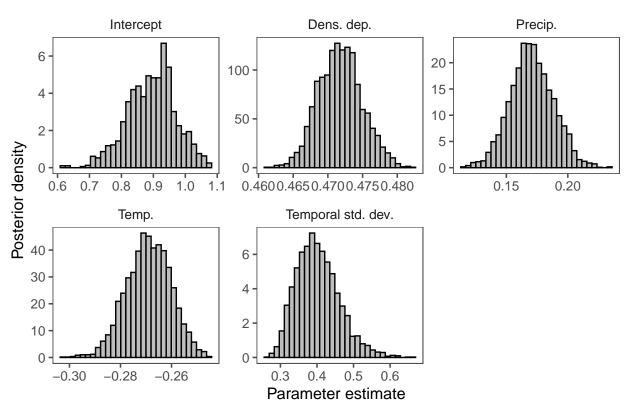
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.49	1.49	0.01	1.46	1.52
Density dependence, $\beta_2$	0.30	0.30	0.00	0.29	0.30
Precipitation effect, $\beta_3$	0.04	0.04	0.00	0.04	0.05
Temperature effect, $\beta_4$	0.01	0.01	0.00	0.01	0.02
Std. dev. of temporal random effect, $\sigma_y$	0.06	0.06	0.01	0.05	0.08

# OregonBasin



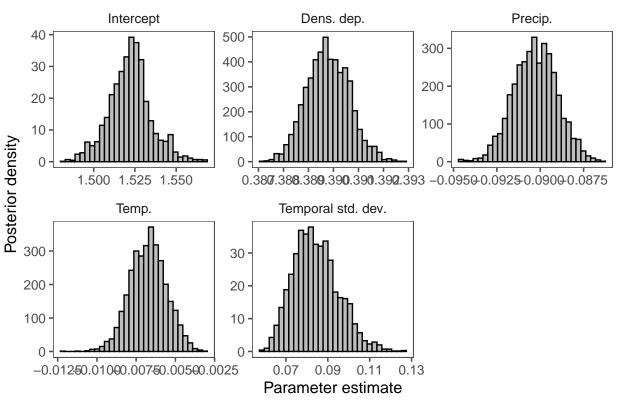
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.43	1.43	0.02	1.39	1.46
Density dependence, $\beta_2$	0.40	0.40	0.00	0.40	0.41
Precipitation effect, $\beta_3$	-0.02	-0.02	0.00	-0.02	-0.02
Temperature effect, $\beta_4$	0.10	0.10	0.00	0.10	0.10
Std. dev. of temporal random effect, $\sigma_y$	0.11	0.11	0.01	0.08	0.14

### Powder



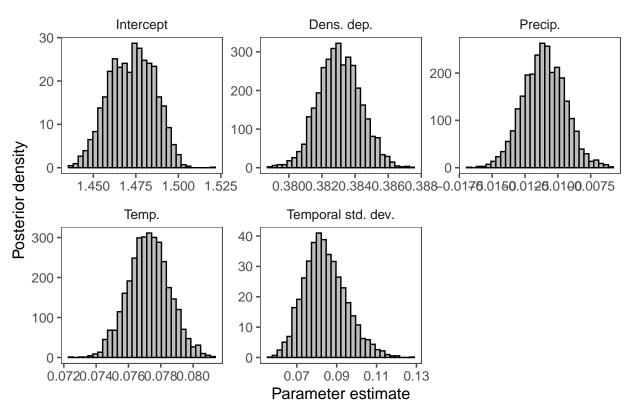
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.89	0.90	0.08	0.74	1.04
Density dependence, $\beta_2$	0.47	0.47	0.00	0.47	0.48
Precipitation effect, $\beta_3$	0.17	0.17	0.02	0.14	0.21
Temperature effect, $\beta_4$	-0.27	-0.27	0.01	-0.29	-0.25
Std. dev. of temporal random effect, $\sigma_y$	0.40	0.40	0.06	0.31	0.54





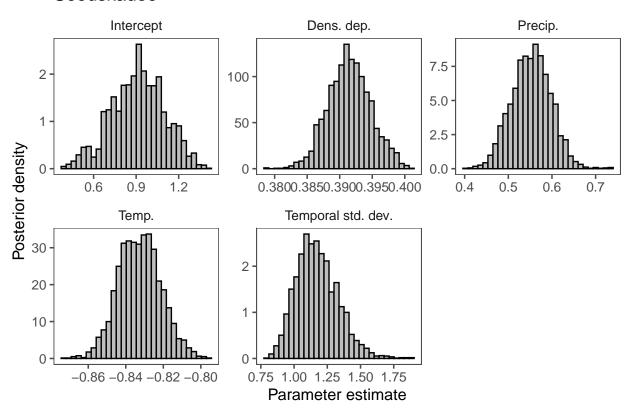
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.52	1.52	0.01	1.50	1.55
Density dependence, $\beta_2$	0.39	0.39	0.00	0.39	0.39
Precipitation effect, $\beta_3$	-0.09	-0.09	0.00	-0.09	-0.09
Temperature effect, $\beta_4$	-0.01	-0.01	0.00	-0.01	0.00
Std. dev. of temporal random effect, $\sigma_y$	0.08	0.08	0.01	0.07	0.11

## SaltWells



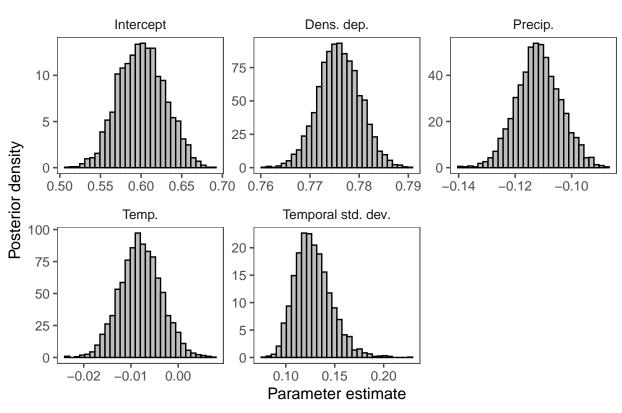
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.47	1.47	0.01	1.45	1.50
Density dependence, $\beta_2$	0.38	0.38	0.00	0.38	0.39
Precipitation effect, $\beta_3$	-0.01	-0.01	0.00	-0.01	-0.01
Temperature effect, $\beta_4$	0.08	0.08	0.00	0.07	0.08
Std. dev. of temporal random effect, $\sigma_y$	0.08	0.08	0.01	0.07	0.11

## Seedskadee



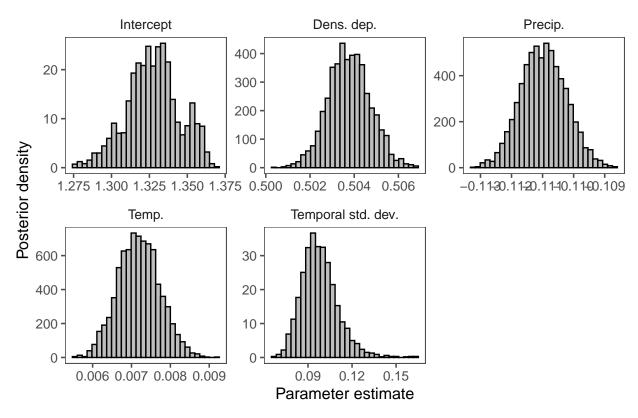
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.91	0.92	0.19	0.52	1.27
Density dependence, $\beta_2$	0.39	0.39	0.00	0.39	0.40
Precipitation effect, $\beta_3$	0.55	0.55	0.04	0.47	0.64
Temperature effect, $\beta_4$	-0.83	-0.83	0.01	-0.85	-0.81
Std. dev. of temporal random effect, $\sigma_y$	1.17	1.16	0.16	0.91	1.52

## Shell



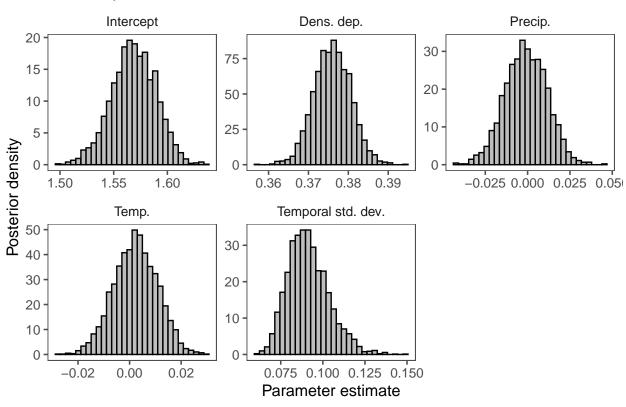
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	0.60	0.60	0.03	0.55	0.66
Density dependence, $\beta_2$	0.78	0.78	0.00	0.77	0.78
Precipitation effect, $\beta_3$	-0.11	-0.11	0.01	-0.13	-0.10
Temperature effect, $\beta_4$	-0.01	-0.01	0.00	-0.02	0.00
Std. dev. of temporal random effect, $\sigma_y$	0.13	0.13	0.02	0.10	0.17

## SouthRawlins



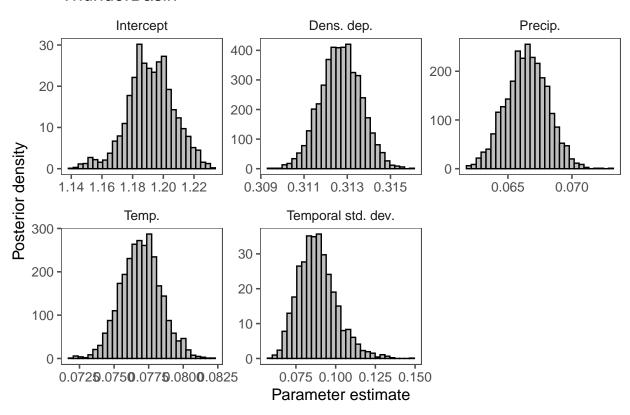
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.33	1.33	0.02	1.29	1.36
Density dependence, $\beta_2$	0.50	0.50	0.00	0.50	0.51
Precipitation effect, $\beta_3$	-0.11	-0.11	0.00	-0.11	-0.11
Temperature effect, $\beta_4$	0.01	0.01	0.00	0.01	0.01
Std. dev. of temporal random effect, $\sigma_y$	0.10	0.10	0.01	0.08	0.13

## Thermopolis



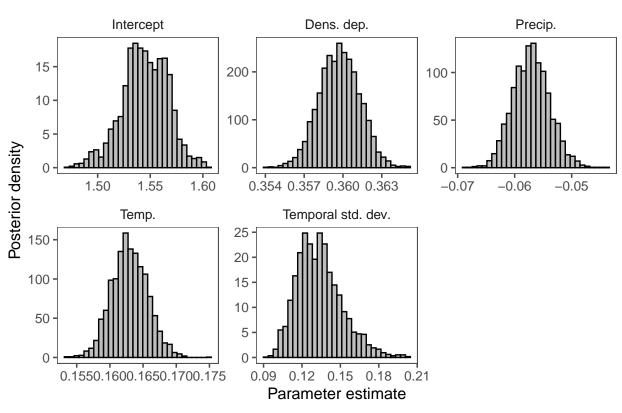
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.57	1.57	0.02	1.53	1.61
Density dependence, $\beta_2$	0.38	0.38	0.00	0.37	0.39
Precipitation effect, $\beta_3$	0.00	0.00	0.01	-0.03	0.02
Temperature effect, $\beta_4$	0.00	0.00	0.01	-0.01	0.02
Std. dev. of temporal random effect, $\sigma_y$	0.09	0.09	0.01	0.07	0.12

## ThunderBasin



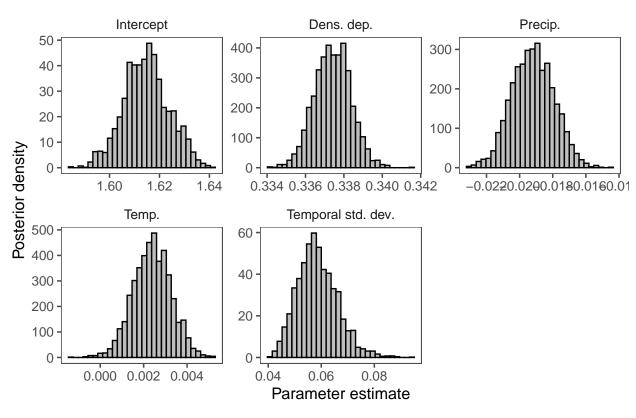
	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.19	1.19	0.02	1.16	1.22
Density dependence, $\beta_2$	0.31	0.31	0.00	0.31	0.31
Precipitation effect, $\beta_3$	0.07	0.07	0.00	0.06	0.07
Temperature effect, $\beta_4$	0.08	0.08	0.00	0.07	0.08
Std. dev. of temporal random effect, $\sigma_y$	0.09	0.09	0.01	0.07	0.12

Uinta



	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.54	1.54	0.02	1.50	1.59
Density dependence, $\beta_2$	0.36	0.36	0.00	0.36	0.36
Precipitation effect, $\beta_3$	-0.06	-0.06	0.00	-0.06	-0.05
Temperature effect, $\beta_4$	0.16	0.16	0.00	0.16	0.17
Std. dev. of temporal random effect, $\sigma_y$	0.13	0.13	0.02	0.10	0.17

## Washakie

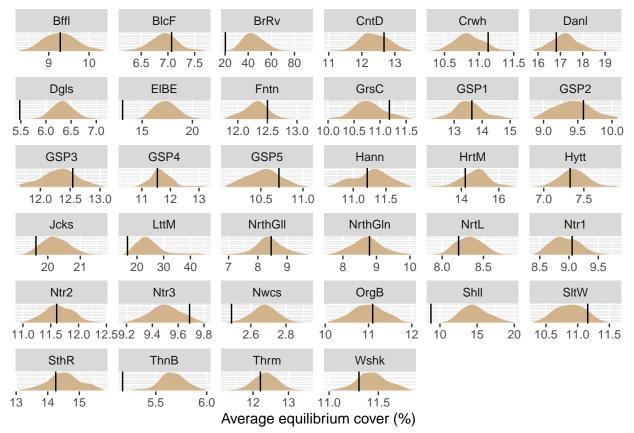


	Mean	Median	SD	2.5%	97.5%
Intercept, $\beta_1$	1.61	1.61	0.01	1.60	1.63
Density dependence, $\beta_2$	0.34	0.34	0.00	0.34	0.34
Precipitation effect, $\beta_3$	-0.02	-0.02	0.00	-0.02	-0.02
Temperature effect, $\beta_4$	0.00	0.00	0.00	0.00	0.00
Std. dev. of temporal random effect, $\sigma_y$	0.06	0.06	0.01	0.05	0.08

# Elk Basin West traceplots

#### Estimated equilibrium cover

Posterior distributions of equilibrium cover calculated from fitted model parameters. The vertical black lines show the observed mean cover for each core area from 1985-2018.



## Estimated colonization probabilities

Results from colonization model for each core area.  $Pr(colonize \mid cover = 0)$  reads, "the probability of colonization given that current cover is zero."

Core area	$Pr(colonize \mid cover = 0)$	Mean cover in colonized cells
Bear River	0.35	3
Blacks Fork	0.14	2
Buffalo	0.35	2
Continental Divide	0.22	2
Crowheart	0.21	2
Daniel	0.22	2
Douglas	0.37	2
Elk Basin East	0.42	2
Fontenelle	0.17	2
Grass Creek	0.15	2
Greater South Pass 1	0.17	2
Greater South Pass 2	0.14	2
Greater South Pass 3	0.18	2
Greater South Pass 4	0.23	2
Greater South Pass 5	0.13	2
Hanna	0.21	2
Heart Mountain	0.31	2
Hyattville	0.18	2
Jackson	0.42	4
Little Mountain	0.43	3
Natrona 1	0.21	2
Natrona 2	0.30	2
Natrona 3	0.19	2
Newcastle	0.19	2
North Gillette	0.17	2
North Glenrock	0.28	3
North Laramie	0.38	3
Oregon Basin	0.19	2
Salt Wells	0.20	2
Shell	0.19	2
South Rawlins	0.39	3
Thermopolis	0.26	3
Thunder Basin	0.24	2
Washakie	0.36	3

# Nesting and summer cover thresholds

Name	Abbreviation	Region	NestingTarget	SummerTarget
Bear River	BrRv	Southwest Region	15.43	16.71
Blacks Fork	$\operatorname{BlcF}$	Southwest Region	15.43	16.71
Buffalo	Bffl	Northeast Region	9.04	10.36
Continental Divide	$\operatorname{CntD}$	Southwest Region	15.43	16.71
Crowheart	$\operatorname{Crwh}$	Central Region	13.32	12.29
Daniel	Danl	Southwest Region	15.43	16.71
Douglas	Dgls	Northeast Region	9.04	10.36
Elk Basin East	ElBE	Central Region	13.32	12.29
Elk Basin West	ElBW	Central Region	13.32	12.29
Fontenelle	$\operatorname{Fntn}$	Southwest Region	15.43	16.71
Grass Creek	$\operatorname{GrsC}$	Central Region	13.32	12.29
Greater South Pass 1	GSP1	Southwest Region	15.43	16.71
Greater South Pass 2	GSP2	Southwest Region	15.43	16.71
Greater South Pass 3	GSP3	Central Region	13.32	12.29
Greater South Pass 4	GSP4	Central Region	13.32	12.29
Greater South Pass 5	GSP5	Southwest Region	15.43	16.71
Hanna	Hann	Central Region	13.32	12.29
Heart Mountain	$\operatorname{HrtM}$	Central Region	13.32	12.29
Hyattville	Hytt	Central Region	13.32	12.29
Jackson	Jcks	Southwest Region	15.43	16.71
Little Mountain	$\operatorname{LttM}$	Central Region	13.32	12.29
Natrona 1	Ntr1	Central Region	13.32	12.29
Natrona 2	Ntr2	Central Region	13.32	12.29
Natrona 3	Ntr3	Northeast Region	9.04	10.36
Newcastle	Nwcs	Northeast Region	9.04	10.36
North Gillette	NrthGll	Northeast Region	9.04	10.36
North Glenrock	NrthGln	Northeast Region	9.04	10.36
North Laramie	$\mathrm{NrtL}$	Central Region	13.32	12.29
Oregon Basin	OrgB	Central Region	13.32	12.29
Powder	Pwdr	Southwest Region	15.43	16.71
Sage	Sage	Southwest Region	15.43	16.71
Salt Wells	$\operatorname{SltW}$	Southwest Region	15.43	16.71
Seedskadee	Sdsk	Southwest Region	15.43	16.71
Shell	Shll	Central Region	13.32	12.29
South Rawlins	SthR	Central Region	13.32	12.29
Thermopolis	Thrm	Central Region	13.32	12.29
Thunder Basin	ThnB	Northeast Region	9.04	10.36
Uinta	$\operatorname{Uint}$	Southwest Region	15.43	16.71
Washakie	Wshk	Central Region	13.32	12.29

#### Summer habitat cover targets compared to projections

Projections of the proportion of 100-meter cells within a core area where sagebrush percent cover exceeds the sage-grouse summer cover threshold defined for each core area. The solid line is the median of the posterior predictive distribution; light shaded ribbon bounds the 68% BCI; very light shaded ribbon bounds the 95% BCI. The dashed horizontal line shows where the proportion of cells is equal to 50% of the area.

