

MDS1 model results

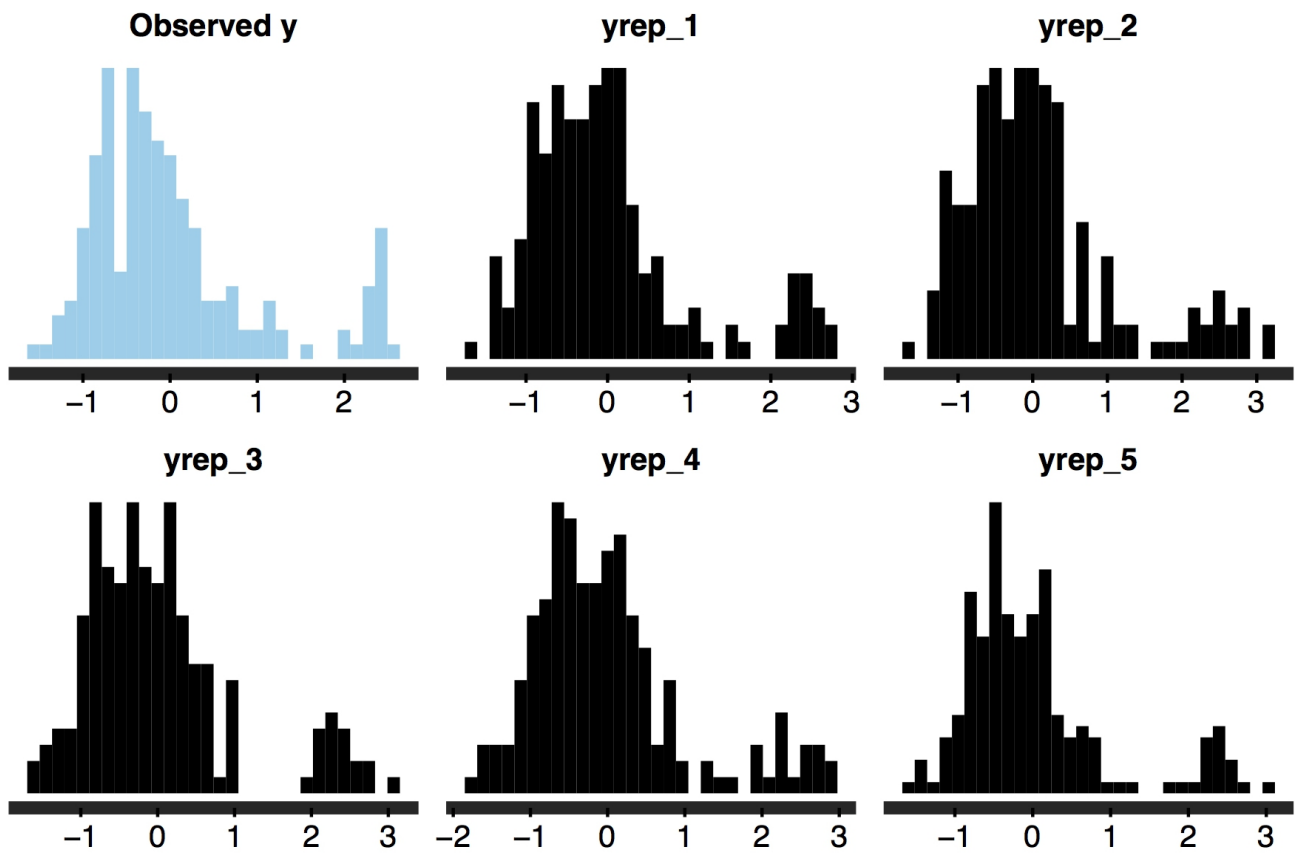
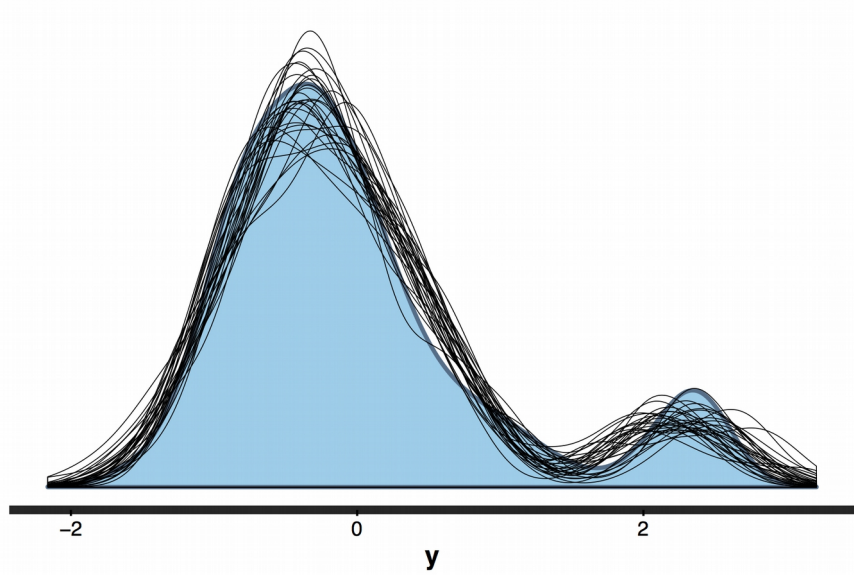
var	order	mean	mcse	sd	2.50%	95.00%	n eff	Rhat
(Intercept)	1	-12.5540029709	0.0340676959	4.9001825738	-22.754834752	-4.8330769108	20689	1.0000680861
elevation	2	0.0009930512	6.05E-06	0.0008941716	-0.0007070162	0.0024826388	21853	1.0000847404
mean annual prep mm	3	0.0008584909	1.75E-05	0.0031677677	-0.0051409246	0.0061845121	32882	0.999952344
mean temp	4	0.1314864395	0.0012249393	0.1670800861	-0.1834214828	0.4125566664	18605	1.0001377243
log npp	5	-0.1704506869	0.0010052827	0.1597040112	-0.4826492328	0.0919251297	25238	1.0000187892
soil org c	6	0.0169975796	7.44E-05	0.0114079609	-0.0056845608	0.0356450417	23495	1.0000052267
soil ph	7	1.1774618515	0.002419399	0.3945035594	0.3941126881	1.8249643798	26588	0.999981361
Antrozou s pallidus	8	-0.2817271503	0.0009183874	0.1588409362	-0.6011189204	-0.0243484766	29914	0.9999345421
Corynorhi nus townsendi i	9	-0.2510622535	0.0008515589	0.1436333555	-0.5360314215	-0.016415932	28450	0.9999835719
Eptesicus fuscus	10	-0.1536204019	0.0008158604	0.126090981	-0.4066834424	0.0489701047	23886	1.0000938532
Lasionyct eris noctivaga ns	11	0.0103725956	0.0008349433	0.133778706	-0.2557618916	0.2274677973	25672	1.0000364127
Lasiurus cinerus	12	-0.1336544385	0.0012145699	0.2429139789	-0.6248319456	0.2572795864	40000	0.9999849574
Myotis californic us	13	0.0015717239	0.0008476333	0.169526664	-0.3383690039	0.2746431944	40000	0.9999409475

Myotis ciliolabrum	14	-0.3470079442	0.0008566785	0.1364979323	-0.6214313953	-0.1271538629	25387	1.0000447414
Myotis evotis	15	-0.2241148621	0.0008709037	0.1521900508	-0.5305047076	0.020317798	30537	1.0000577804
Myotis occultus	16	-0.0628864987	0.0008997699	0.179953987	-0.4202319902	0.2300068809	40000	0.9999473158
Myotis thysanodes	17	0.2596848283	0.0008146286	0.1343894651	0.0029159389	0.4841705014	27215	1.0000030391
Myotis velifer	18	0.5421370166	0.0011334302	0.1968346781	0.1715310786	0.8747850824	30159	0.9999789661
Myotis volans	19	0.4340979733	0.0009790283	0.1715260958	0.1064770271	0.7229408201	30695	1.0001403215
Parastrellus hesperus	20	-0.1302150292	0.0008996392	0.179927849	-0.490521591	0.1601709512	40000	0.9999321625
Tadarida brasiliensis	21	0.3230062607	0.0008649226	0.1495910137	0.0362589008	0.5715608928	29913	1.0000158496
Chihuahuan Basins and Playas	22	0.758919917	0.0021630453	0.3675854527	0.0633500457	1.3809480369	28879	0.9999570507
Chihuahuan Desert Grasslands	23	-0.3590867858	0.0023042267	0.3632290251	-1.1333034999	0.2010830841	24849	0.9999947228
Chihuahuan Desert Slopes	24	-0.4758103884	0.0021921862	0.352985824	-1.2307770959	0.0609718855	25927	0.9999896013
Conifer Woodlands and Savannas	25	-0.4429197692	0.0021088629	0.3497888342	-1.177118428	0.1046685416	27512	0.9999487906
Eastern Mojave Basins	26	0.3469936276	0.0025441874	0.4405106395	-0.458500882	1.1077922724	29979	1.0000252107

Eastern Mojave Low Ranges and Arid Footslopes	27	0.1197250246	0.0022167963	0.3708088064	-0.5803024373	0.7488451545	27980	1.0000526593
Lava Malpais	28	-0.1226850027	0.0029632157	0.4555635048	-1.0606495794	0.6106737781	23636	1.0000917491
Shivwits Woodland	29	0.1752268181	0.0018359766	0.3100173221	-0.4400017089	0.6841469508	28513	1.0000519627
April	30	0.1605528372	0.0010223368	0.168512239	-0.1746243839	0.4326389655	27169	1.00014694
August	31	0.292004496	0.0011704211	0.2032354794	-0.0958352516	0.6320855896	30152	1.0001463586
July	32	0.2408308352	0.0010103242	0.1816121245	-0.110092954	0.5429736184	32312	1.0000446951
June	33	-0.2837913187	0.0011765701	0.198714236	-0.6845481903	0.0365505369	28525	1.0000436895
March	34	-0.2613615385	0.0011017621	0.1925084135	-0.6573923342	0.0423514771	30530	1.0001257002
May	35	-0.3068619303	0.0010458432	0.1828844401	-0.6831242976	-0.0180222967	30579	1.0000390789
September	36	0.149925148	0.0010404554	0.1933264014	-0.225682415	0.4695625695	34525	1.0000188738
Cave	37	0.1585901324	0.0020626275	0.3079881244	-0.4362353261	0.6650648231	22296	1.0000384692
Surface	38	-0.1641209659	0.0020364323	0.3075518626	-0.8572122986	0.2656397521	22809	1.0001784314
sigma	39	0.33054554	9.50E-05	0.0190079346	0.2958004099	0.3632528817	40000	0.9999651178
mean	40	-	0.000173	0.034478	-	0.056312	39690	1.000005

PPD		0.000292 6719	0678	9636	0.068316 7403	8178		9337
log- posterior	41	- 124.6959 459884	0.059303 6895	6.055449 5329	- 137.6720 549709	- 115.4037 282302	10426	1.000174 6099

Posterior predictive distribution for MDS1 model



MDS2 model results.

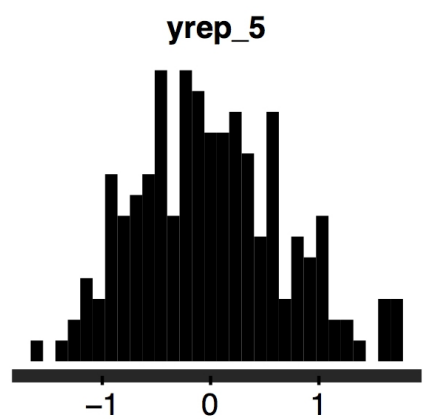
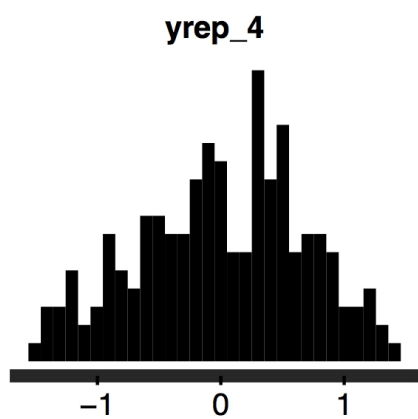
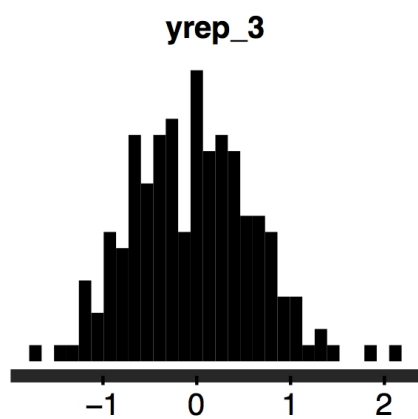
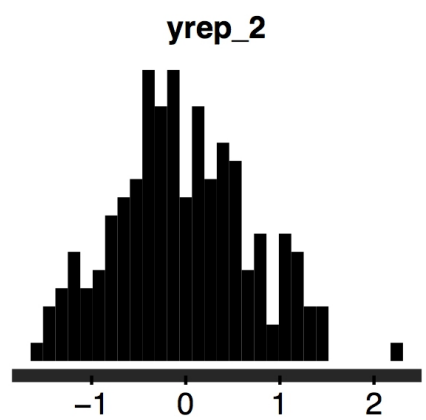
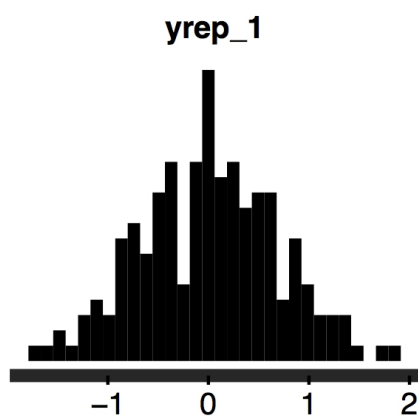
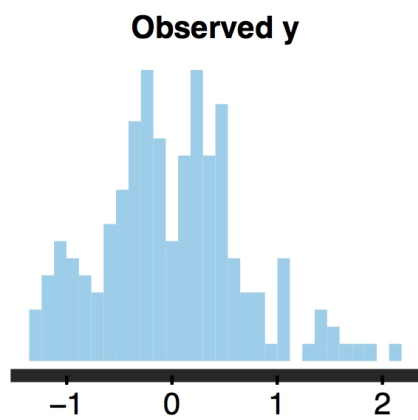
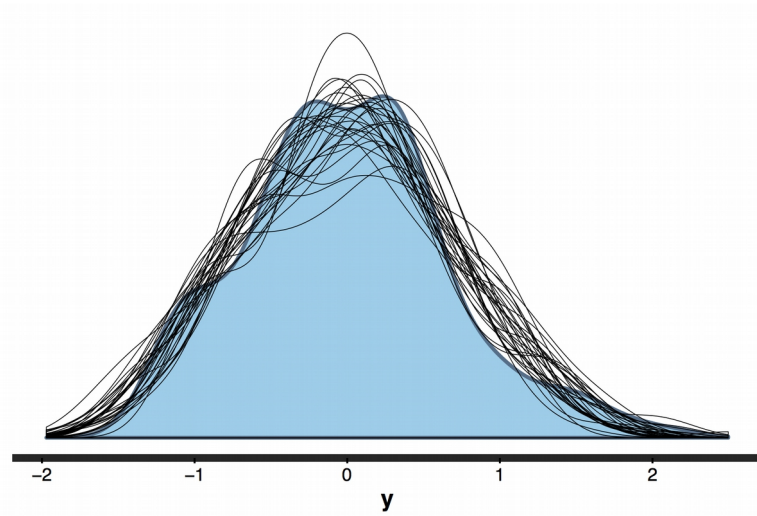
var	mean	mcse	sd	2.5%	95%	n eff	Rhat
(Intercept)	- 2.7712905 8401493	0.0148751 411633168	2.2269585 98698	- 7.3124374 876009	0.7881067 73263997	22413	1.0000472 9690616
elevation	0.0005108 256766797 83	4.5185738 218131e- 06	0.0006148 533944473 69	- 0.0006750 709272878 4	0.0015275 975320870 9	18516	1.0000987 4268304
mean annual prep mm	0.0002089 086982619 2	1.0630126 3279809e- 05	0.0017829 093964749 6	- 0.0032977 496391892 7	0.00311945 901870794	28131	1.00011754 031273
mean temp	0.1064033 76558157	0.0006846 589926049 02	0.0891763 120599601	- 0.0624402 813043654	0.2567926 29474471	16965	1.0000392 6910792
log npp	- 0.1040952 332348	0.0007526 168870888 41	0.1235676 95674893	- 0.3470066 69057284	0.0994974 50790268	26956	1.00011974 446017
soil org c	0.0041543 139579053 5	5.1319059 1797327e- 05	0.0075686 098290429 2	- 0.01114069 3465815	0.0164376 974159817	21751	1.0001525 9372178
soil ph	0.0333207 657839859	0.0014546 158871490 1	0.2070507 18495082	- 0.3893947 0411675	0.3660028 34953553	20261	1.0000269 9565006
Antrozous pallidus	- 0.0359814 029238876	0.0008894 855821350 85	0.1406807 43059957	- 0.3094486 56536341	0.1954127 80243655	25014	1.0001412 8069677
Corynorhin us townsendii	- 0.0683572 313953863	0.0008539 423115311 58	0.1256304 68138395	- 0.3175056 05710603	0.1378822 19070143	21644	1.0001397 0983926
Eptesicus fuscus	- 0.0909386 668275081	0.0008257 871833906 88	0.11315577 8993977	- 0.3191523 80137332	0.0918546 86555367	18777	1.0001591 8272895
Lasionycter is noctivagan s	0.0552632 959189359	0.0008675 450589303 3	0.1249187 16162325	- 0.1907629 82385001	0.2607615 74389563	20733	1.0001438 6971082
Lasiurus cinerus	0.0374491 725647722	0.00111834 2289873	0.2236684 579746	- 0.4054390 20300707	0.4043550 07118927	40000	1.0000838 0848447
Myotis	0.0300924	0.0009298	0.1539495	-	0.2847464	27412	1.0000045

californicus	639261463	449534234 81	34246622	0.2758412 77537661	21932711		8879767
Myotis ciliolabrum	- 0.2683301 80239039	0.0008660 761358103 88	0.1253344 17427607	- 0.51981931 1287405	- 0.0656481 814910166	20943	1.0000319 0151779
Myotis evotis	- 0.2944971 99315332	0.0009318 156535296 83	0.1468447 73201548	- 0.5917753 68886651	- 0.0587383 840823601	24835	1.0000443 6364336
Myotis occultus	- 0.3175152 51212725	0.0009016 129036604 86	0.1803225 80732097	- 0.6813109 93597922	- 0.0297190 559722571	40000	1.0000580 6835587
Myotis thysanodes	- 0.0222776 784609385	0.0008247 188394145 62	0.1243739 79993238	- 0.2669087 44841665	0.1823774 78114047	22743	1.0001385 6526165
Myotis velifer	0.2188220 33346906	0.0009653 271286852 5	0.1619363 88724994	- 0.09112748 50905196	0.4900145 30723054	28141	1.00012881 104594
Myotis volans	- 0.0191587 029422176	0.0007792 342439729 88	0.1558468 48794598	- 0.3295895 4869504	0.2363888 77505153	40000	0.9999972 04938737
Parastrellus hesperus	0.11813899 0669814	0.0008257 434228940 07	0.1651486 84578801	- 0.2022190 45862054	0.3894519 40978732	40000	0.9999771 78735402
Tadarida brasiliensis	0.6690231 80459912	0.0009552 513393636 81	0.1466712 92644419	0.3912512 74933585	0.9167795 08992791	23575	1.0000078 9330488
Chihuahua n Basins and Playas	0.0214539 419639465	0.0006351 318503611 26	0.11253611 8764003	- 0.1960673 62186176	0.2181445 70079203	31395	1.0001059 5698934
Chihuahua n Desert Grasslands	0.0218558 176836209	0.0005365 834688087 75	0.1073166 93761755	- 0.1870155 20723646	0.2077722 2533895	40000	1.0000529 5071271
Chihuahua n Desert Slopes	- 0.0387647 702644485	0.0006871 742360450 21	0.11181910 9140096	- 0.3174495 64620624	0.1052689 68651711	26479	1.0000301 4024587
Conifer Woodlands and Savannas	- 0.01911121 2867263	0.0006425 802204446 02	0.1073247 85949064	- 0.2704172 74315754	0.1383910 95194686	27896	1.0000426 4758355
Eastern Mojave Basins	- 0.01806411 01249903	0.0006618 664650355 14	0.12211349 3370799	- 0.3057000 76943431	0.1549545 35457267	34040	0.9999916 74167253
Eastern	0.0360065	0.0007366	0.1200042	-	0.2592696	26540	1.0000832

Mojave Low Ranges and Arid Footslopes	076710107	23088943354	4843996	0.167221648885369	52709003		9443804
Lava Malpais	-0.0104088194987248	0.000683955645961704	0.122984965516615	-0.290538196039996	0.169507824190748	32333	0.999999216347465
Shivwits Woodland	0.00963445702514978	0.000636194546923068	0.105338547223474	-0.211664469205752	0.183977431347602	27415	0.999983497084721
April	2.95272357146594e-05	0.00119437581899695	0.159914346324854	-0.318987127603605	0.255330597469689	17926	1.00042783466507
August	-0.166343439039627	0.00128004763404643	0.180983320096972	-0.535345168367076	0.121806191640627	19991	1.00028988150249
July	0.587909789028178	0.00131917599022691	0.182022121414508	0.254701515802733	0.900277916898855	19039	1.00040364267643
June	-0.0934435026460136	0.00123256705468319	0.162827694949063	-0.419725942337236	0.167828149629491	17452	1.00038278566555
March	-0.0471606267665871	0.00126963972860691	0.179093939005413	-0.413427245923153	0.240743580368901	19898	1.00021657256485
May	-0.0120837310744602	0.00117375018396693	0.15402293202688	-0.31534156962372	0.240431716624278	17219	1.00060365996671
September	-0.275931109242723	0.00118955837299065	0.18830962868811	-0.661967062803888	0.0235257823906251	25060	1.00022680715231
Cave	-0.508210101401873	0.00399767448326552	0.512630330431273	-1.56722339226219	0.305268300524692	16443	1.00033672865175
Surface	0.514498873780427	0.00403863458183288	0.51345329079967	-0.531939435912214	1.34421608903246	16163	1.00028168567038
sigma	0.33041436891182	9.4517572846062e-05	0.0189035145692124	0.29613392617472	0.362794648653073	40000	1.00001586538321
mean PPD	-3.11850011	0.0001722806392310	0.0344561278462075	-0.0675056	0.0567134054984901	40000	0.99993088409464

	128886e-05	38		44346783			
log-posterior	-125.20038828906	0.0601725690415562	5.99433407067446	-138.091515032647	-116.042567262613	9924	1.00017071857376

Posterior predictive distribution for MDS2 model.



VDS richness model results.

var	mean	mcse	sd	2.5%	95%	n eff	Rhat
(Intercept)	1693.83491 142595	15.750466 330294	1989.3548 3527119	- 1916.8576 537898	5129.9994 6420984	15953	1.0000840 3693721
elevation	0.6014055 13896817	0.0027886 622422151	0.3876884 9424997	- 0.1695484 57596177	1.2306179 5423949	19327	1.0002109 2610984
mean annual prep mm	- 1.9140267 5868804	0.0098027 582338534 8	1.4681478 610893	- 5.02106611 119491	0.3751448 56063723	22431	1.00011286 702972
mean temp	54.736979 4946569	0.5236893 0385556	67.435994 2118983	- 82.538886 8861866	163.05010 4211908	16582	1.0002331 3003133
log npp	205.82005 6976129	0.5483367 14264117	76.430076 2491828	56.654489 0603463	333.268311 198018	19428	1.0001030 8039104
soil org c	- 14.435538 2314947	0.0390590 315381059	5.3129852 9721101	- 24.934826 2230318	- 5.7207806 5635268	18503	1.0001393 2480916
soil ph	- 262.39525 3035022	1.1887097 7599424	167.57652 2138671	- 604.10557 8400494	7.8139704 2931798	19874	1.0000542 0447413
Antrozous pallidus	93.295822 4690591	0.2943712 47608877	58.874249 5217753	- 12.529869 9636973	194.08849 0876033	40000	0.9999504 19538476
Corynorhin us townsendii	64.710963 5850702	0.3610315 07204447	52.959744 2204866	- 31.608425 3976043	156.58836 3423569	21518	1.0001337 9946004
Eptesicus fuscus	47.838468 2938751	0.2226861 43883492	44.537228 7766984	- 34.621584 0697152	123.73995 2884935	40000	1.0000092 7690034
Lasionycter	-	0.2372888	47.457762	-	36.547795	40000	1.0001932

is noctivagans	39.739015 3342297	14791915	958383	135.85907 3679582	7469323		6214551
Lasiurus cinereus	- 3.7726781 0870121	0.3728963 31723998	74.579266 3447997	- 156.95371 7828493	118.289097 524908	40000	0.9999355 47000202
Myotis californicus	- 57.007022 10955	0.3018651 01856031	60.373020 3712062	- 183.99613 819246	35.1164192 863013	40000	0.9999854 83488427
Myotis ciliolabrum	43.361083 9236252	0.24511704 8625582	49.023409 7251164	- 47.324902 5984803	127.29609 6580073	40000	1.0001305 4656558
Myotis evotis	78.088298 0393943	0.2957155 50465931	59.1431100 931863	- 27.086109 7192648	180.01235 7015034	40000	1.0002832 8840031
Myotis occultus	- 15.488962 4414339	0.3160528 17791629	63.210563 5583259	- 144.69818 0795338	86.460350 3103722	40000	1.0000281 3629324
Myotis thysanodes	- 64.654260 6395923	0.2435757 80940921	48.715156 1881843	- 165.34122 9619898	11.6631317 435377	40000	0.9999916 10805463
Myotis velifer	25.445676 0415358	0.3146506 4534371	62.930129 068742	- 96.5646491 16397	130.71779 5424112	40000	1.0000362 5075476
Myotis volans	- 60.933442 5373116	0.3070256 16549331	61.405123 3098662	- 190.16376 9372779	32.420137 8880042	40000	0.9999643 52563333
Parastrellus hesperus	- 52.991902 7960799	0.31884541 1505745	63.769082 301149	- 190.32293 2310516	43.6766113 899499	40000	1.0000342 8542769
Tadarida brasiliensis	- 54.818735 8135925	0.26811980 7167368	53.623961 4334736	- 165.85317 0586579	29.3118262 483642	40000	0.9999447 3009321
Chihuahua n Basins and Playas	- 204.44191 8923596	0.8825319 46571252	139.36308 8482373	- 487.60253 209005	12.828975 6015745	24936	1.0001349 8703349
Chihuahua n Desert Grasslands	66.592500 8302583	0.8876499 9112801	137.47821 2993977	- 206.311940 046552	291.87702 9018076	23987	1.0000617 964452
Chihuahua n Desert Slopes	36.762720 7011905	0.8498230 31142501	133.57531 6047262	- 232.42120 2220787	256.39786 2860892	24706	1.0000058 5909669
Conifer	260.16697	1.1737413	152.70915	8.1643635	533.92496	16927	1.0001695

Woodlands and Savannas	3019414	7224799	4727669	3590742	7149189		5250827
Eastern Mojave Basins	- 137.36304 2682513	1.1893934 9438778	182.14760 9492921	- 561.20526 5163008	117.314612 907337	23453	1.0003158 28375
Eastern Mojave Low Ranges and Arid Footslopes	- 14.929448 5962333	0.9152230 46331314	147.29503 3932107	- 333.15879 5466359	214.52041 9273524	25901	1.0000379 8131526
Lava Malpais	25.220540 4785448	1.1845680 1374166	177.22778 6451605	- 314.33447 9179897	325.57675 7327593	22384	1.0001497 7782206
Shivwits Woodland	- 31.259517 5251142	0.7964580 07113997	127.13852 1653247	- 275.012921 170687	180.25225 2440158	25482	0.9999579 25453296
April	- 202.55612 9307798	0.6508962 08706195	91.171234 1721703	- 388.97618 354567	- 55.674070 8624039	19620	1.0003012 1353303
August	- 107.22038 7979105	0.7270665 01048297	106.54627 8268131	- 320.18855 87664	65.447195 7967253	21475	1.0001044 0954503
July	- 190.60906 2875611	0.6675192 89119755	97.945447 7918396	- 391.571126 007864	- 35.860557 5613866	21530	1.0003600 1365675
June	137.86586 5287002	0.7307686 91463448	102.09692 7235546	- 57.595243 4987454	309.08456 2040699	19519	1.0002331 3313823
March	192.19457 8947808	0.6714421 38058424	103.22798 267304	- 7.88420115 47959	363.74167 8491511	23636	1.0001551 3858908
May	139.10706 4477089	0.6649377 69579306	96.783621 6411425	- 51.260144 3116644	297.55235 9220741	21186	1.0002750 6033392
September	33.885555 9350778	0.6729544 55331731	104.09233 8901863	- 173.06801 3085703	202.01829 7714316	23926	1.0001877 1295253
Cave	37.598842 2896924	1.0054788 0774412	111.951361 509101	- 178.24593 133852	232.00836 3341236	12397	1.0004497 3691829
Surface	-	1.1503929	112.152381	-	122.74510	9504	1.0005591

	34.171220 9047428	0442001	840583	290.59298 9522747	0340573		9804771
sigma	163.61804 9855485	0.04691111 29607779	9.3822225 9215557	146.29746 2083931	179.70849 9503977	40000	1.0000896 7156507
mean PPD	431.84621 3751889	0.0851835 332640061	17.036706 6528012	398.91769 8420816	460.01373 4543095	40000	1.0000739 9992759
log- posterior	- 1286.4019 4903912	0.0698084 897003111	6.3896406 1577697	- 1300.0677 777553	- 1276.7058 8711014	8378	1.0002160 9058681