

StanResultsSummary

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Summary of Stan Model Fit Results: Full-Scale (850K sites)

Inverse-Gamma priors (using relaxed inv-gamma fits with x2 variance)

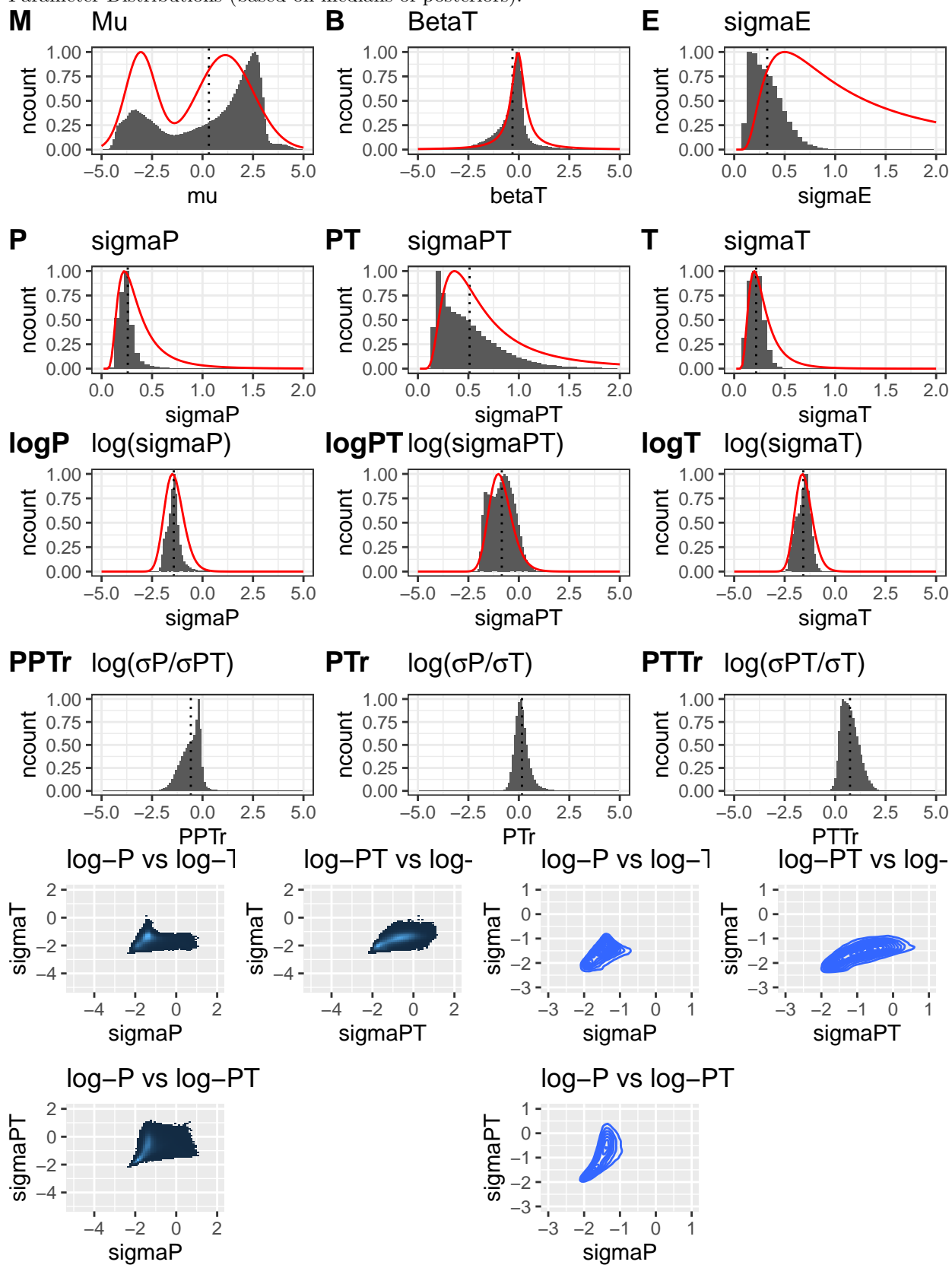
n_eff + Rhat Summary:

	Avg n_eff	Min n_eff	< Site	# <500	% <500	# <100	% <100
mu	3889.53	2.59	328416	1766	0.20	194	0.02
betaT	3627.04	3.66	328416	688	0.08	73	0.01
sigmaP	1450.90	2.44	328416	42112	4.86	463	0.05
sigmaPT	2450.90	2.62	328416	5530	0.64	308	0.04
sigmaT	698.80	9.23	189733	341613	39.44	4898	0.57
sigmaE	1215.50	5.20	689406	111094	12.83	1943	0.22
lp____	704.27	6.26	356698	241246	27.85	762	0.09

	Avg Rhat	Max Rhat	< Site	# >1.1	% >1.1	# >1.01	% >1.01
mu	1.00	2.14	328416	55	0.01	1416	0.16
betaT	1.00	1.49	328416	16	0.00	615	0.07
sigmaP	1.00	2.48	328416	122	0.01	36158	4.17
sigmaPT	1.00	2.10	328416	84	0.01	4646	0.54
sigmaT	1.01	1.25	400405	130	0.02	236806	27.34
sigmaE	1.00	1.31	689406	61	0.01	71826	8.29
lp____	1.01	1.44	356698	2	0.00	230344	26.60

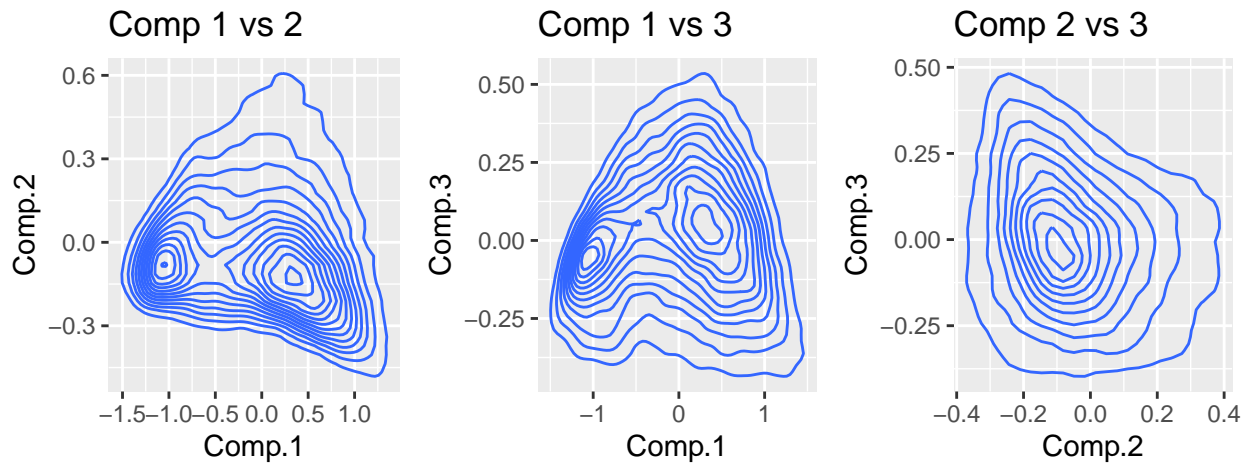
[1] "Problem sites: 328416 189733 689406 356698 400405"

Parameter Distributions (based on medians of posteriors):



Principal Component Analysis (on all sites log-sigma values)

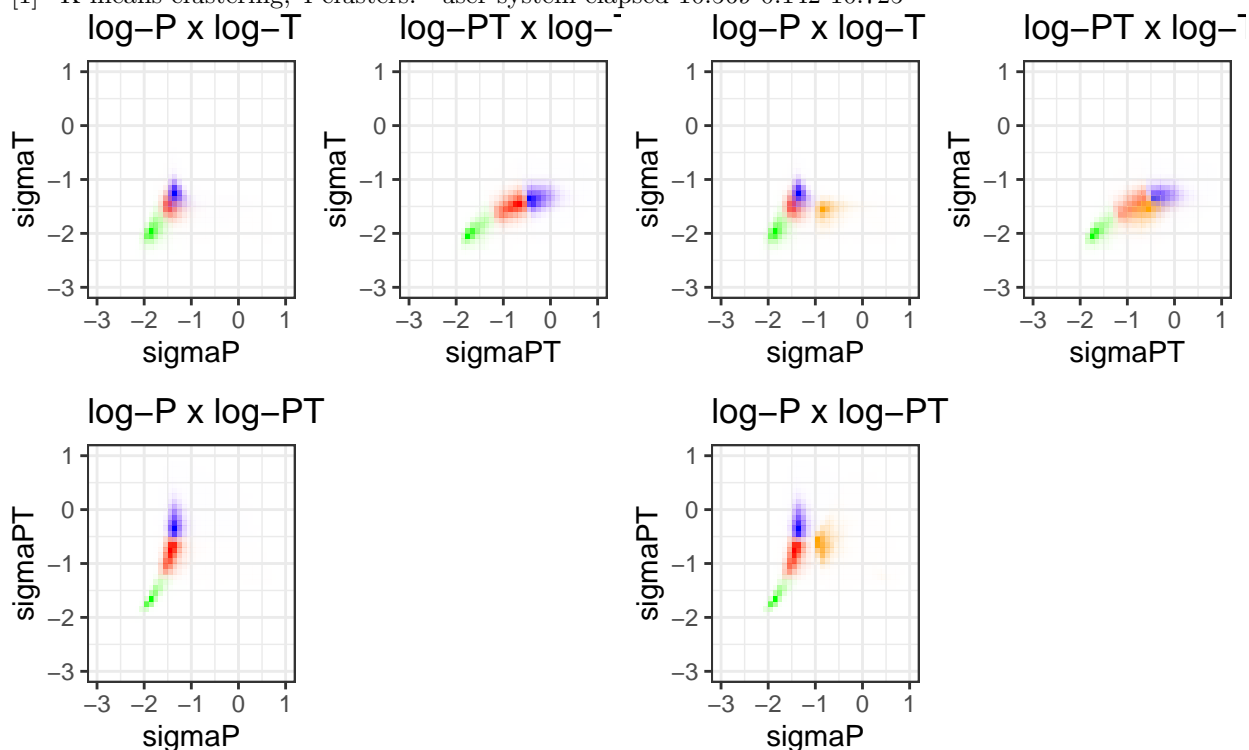
	sigmaP	sigmaPT	sigmaT	Frac. var explained
Comp.1	0.3463	0.8569	0.3818	0.7891
Comp.2	0.9040	-0.1961	-0.3800	0.1383
Comp.3	0.2507	-0.4767	0.8426	0.0726



Clustering Analysis:

[1] "K-means clustering, 3 clusters:" user system elapsed 6.822 0.184 7.014

[1] "K-means clustering, 4 clusters:" user system elapsed 10.569 0.142 10.725



[1] "Fuzzy C-means clustering, 3 clusters:" user system elapsed 13.654 0.159 13.848

[1] "Fuzzy C-means clustering, 4 clusters:" user system elapsed 21.563 0.211 21.804

