

# StanResultsSummary

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

Relaxed Gamma priors (using relaxed gamma fits with x5 variance)

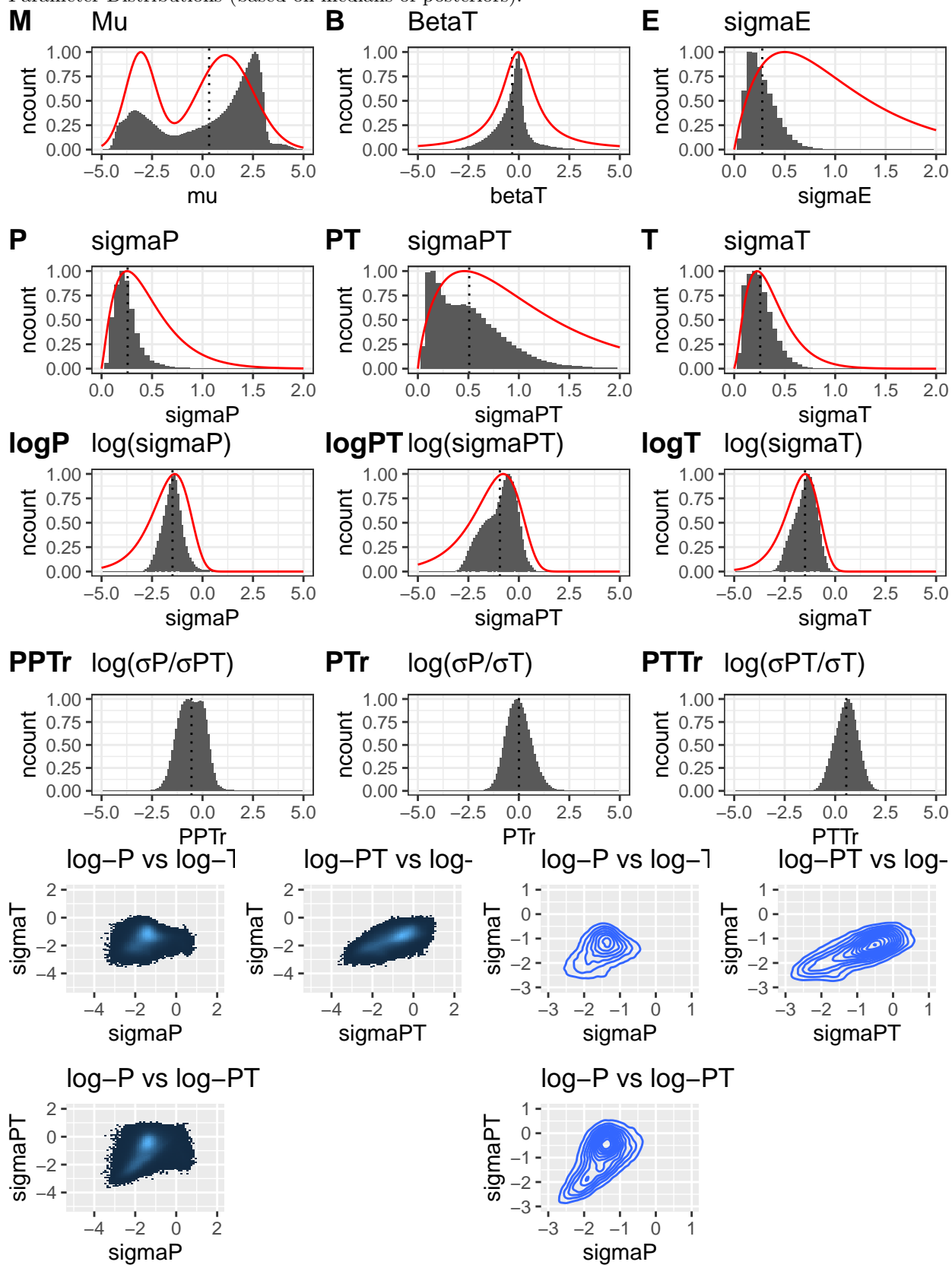
n\_eff + Rhat Summary:

	Avg n_eff	Min n_eff	< Site	# <500	% <500	# <100	% <100
mu	3248.02	2.65	542383	11042	1.27	1649	0.19
betaT	3112.39	2.68	429400	7888	0.91	1575	0.18
sigmaP	622.15	2.13	542383	470618	54.34	4128	0.48
sigmaPT	1399.74	2.14	542383	220047	25.41	2985	0.34
sigmaT	193.84	2.58	706666	864907	99.86	75718	8.74
sigmaE	322.85	2.26	339006	734732	84.83	71981	8.31
lp____	166.25	2.08	197562	866024	99.99	156990	18.13

	Avg Rhat	Max Rhat	< Site	# >1.1	% >1.1	# >1.01	% >1.01
mu	1.00	1.96	542383	431	0.05	9169	1.06
betaT	1.00	1.88	429400	414	0.05	6810	0.79
sigmaP	1.01	3.83	542383	742	0.09	262286	30.28
sigmaPT	1.01	3.61	542383	763	0.09	131157	15.14
sigmaT	1.02	2.05	706666	2853	0.33	723273	83.51
sigmaE	1.02	2.79	339006	5444	0.63	574905	66.38
lp____	1.03	4.75	197562	12509	1.44	786744	90.84

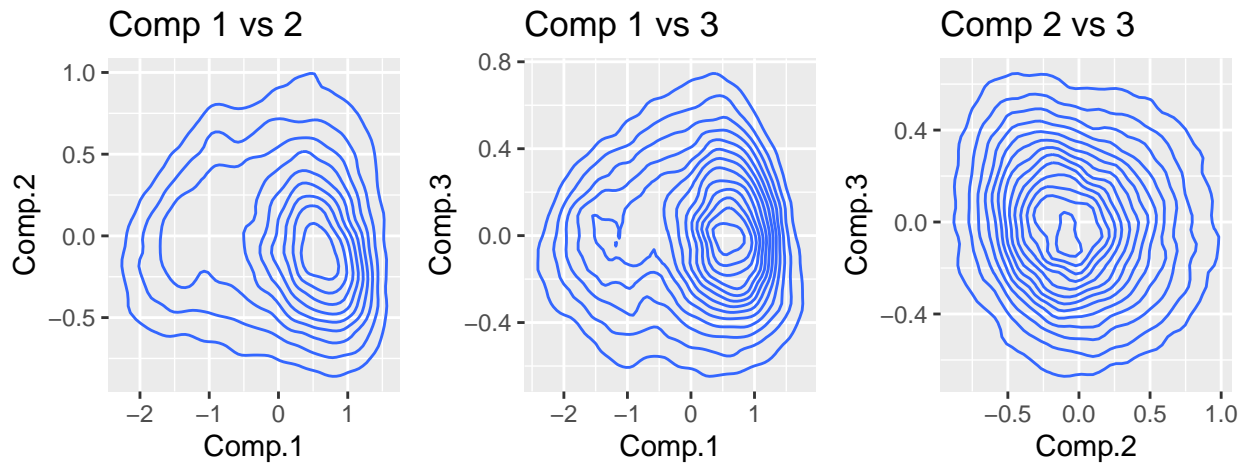
[1] "Problem sites: 542383 429400 706666 339006 197562"

Parameter Distributions (based on medians of posteriors):



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

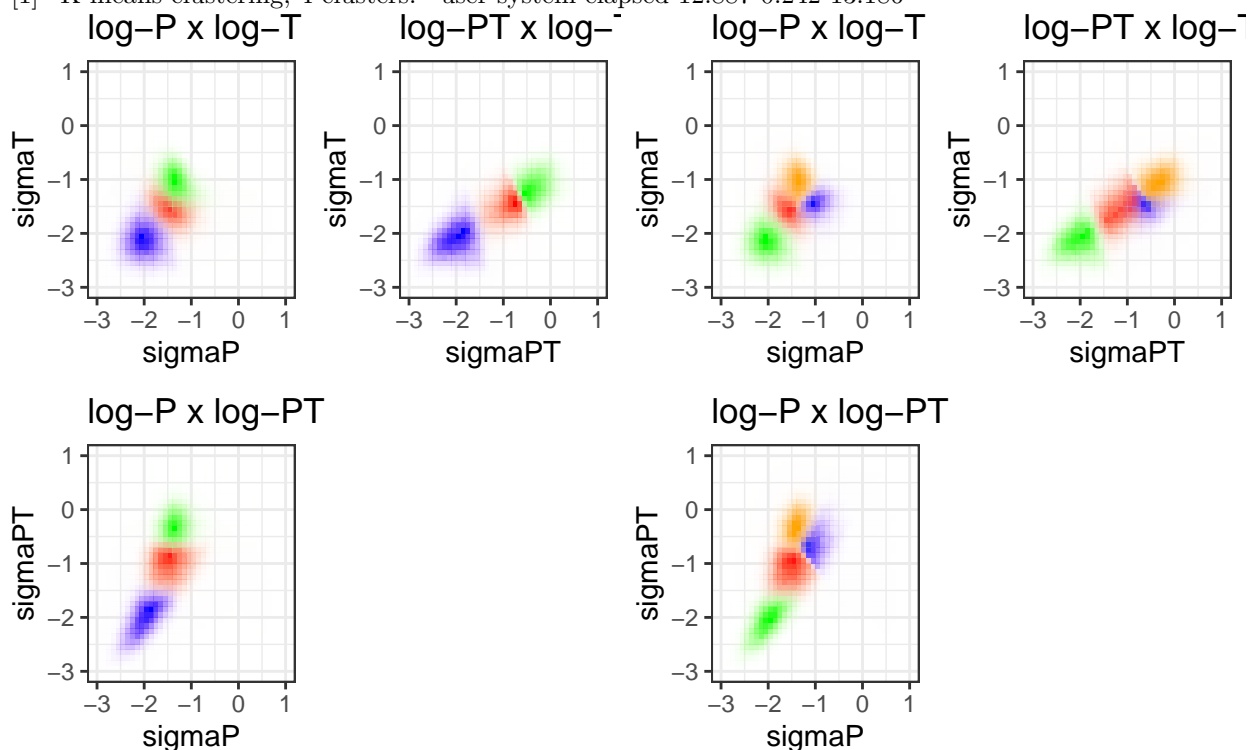
	sigmaP	sigmaPT	sigmaT	Frac. var explained
Comp.1	0.3464	0.8163	0.4622	0.7553
Comp.2	0.8218	-0.0265	-0.5692	0.1677
Comp.3	0.4524	-0.5770	0.6800	0.0770



Clustering Analysis:

[1] "K-means clustering, 3 clusters:" user system elapsed 10.756 0.308 11.807

[1] "K-means clustering, 4 clusters:" user system elapsed 12.887 0.242 13.186



[1] "Fuzzy C-means clustering, 3 clusters:" user system elapsed 15.714 0.299 16.173

[1] "Fuzzy C-means clustering, 4 clusters:" user system elapsed 39.884 0.440 40.605

