## StanResultsSummary

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4/30/2020

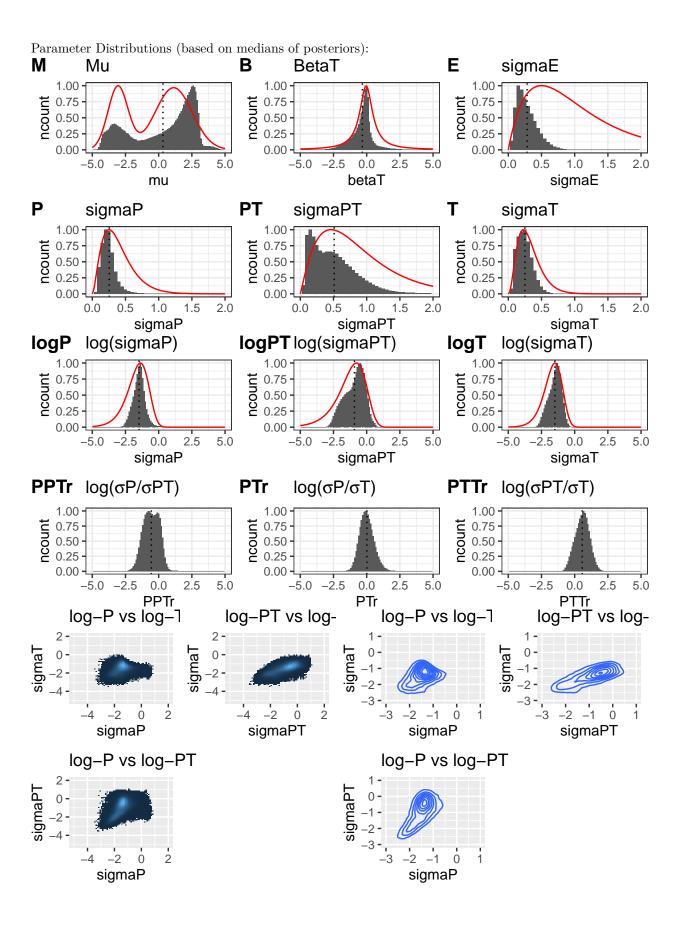
Summary of Stan Model Fit Results: Full-Scale (850K sites) Relaxed Gamma priors (using relaxed gamma fits with x3 variance)

 $n_eff + Rhat Summary:$ 

mu     3303.43     2.36     47554     9370     1.08     1476     0.1       betaT     3168.31     2.95     820432     6470     0.75     1457     0.1       sigmaP     726.65     2.45     701400     293358     33.87     3022     0.3       sigmaPT     1568.36     2.42     701400     108245     12.50     2142     0.2       sigmaT     241.96     2.50     126466     859118     99.19     35044     4.0       sigmaE     356.47     2.37     229303     707670     81.71     60477     6.9								
betaT       3168.31       2.95       820432       6470       0.75       1457       0.1         sigmaP       726.65       2.45       701400       293358       33.87       3022       0.3         sigmaPT       1568.36       2.42       701400       108245       12.50       2142       0.2         sigmaT       241.96       2.50       126466       859118       99.19       35044       4.0         sigmaE       356.47       2.37       229303       707670       81.71       60477       6.9		Avg n_eff	$Min\ n\_eff$	< Site	# < 500	% < 500	# <100	% <100
sigmaP       726.65       2.45       701400       293358       33.87       3022       0.3         sigmaPT       1568.36       2.42       701400       108245       12.50       2142       0.2         sigmaT       241.96       2.50       126466       859118       99.19       35044       4.0         sigmaE       356.47       2.37       229303       707670       81.71       60477       6.9	mu	3303.43	2.36	47554	9370	1.08	1476	0.17
sigmaPT       1568.36       2.42       701400       108245       12.50       2142       0.2         sigmaT       241.96       2.50       126466       859118       99.19       35044       4.0         sigmaE       356.47       2.37       229303       707670       81.71       60477       6.9	betaT	3168.31	2.95	820432	6470	0.75	1457	0.17
sigmaT       241.96       2.50       126466       859118       99.19       35044       4.0         sigmaE       356.47       2.37       229303       707670       81.71       60477       6.9	sigmaP	726.65	2.45	701400	293358	33.87	3022	0.35
sigmaE 356.47 2.37 229303 707670 81.71 60477 6.9	sigmaPT	1568.36	2.42	701400	108245	12.50	2142	0.25
	sigmaT	241.96	2.50	126466	859118	99.19	35044	4.05
lp 207.29 2.08 126466 864363 99.80 89816 10.3	$_{ m sigmaE}$	356.47	2.37	229303	707670	81.71	60477	6.98
	lp	207.29	2.08	126466	864363	99.80	89816	10.37

	Avg Rhat	Max Rhat	< Site	# >1.1	% >1.1	# >1.01	% >1.01
mu	1.00	2.44	47554	373	0.04	7891	0.91
betaT	1.00	1.66	98689	373	0.04	5684	0.66
sigmaP	1.01	2.53	168269	594	0.07	176300	20.36
sigmaPT	1.00	2.40	701400	574	0.07	76270	8.81
$\operatorname{sigmaT}$	1.02	2.15	126466	1810	0.21	642831	74.22
sigmaE	1.02	2.43	229303	5411	0.62	537758	62.09
lp	1.03	4.82	126466	8803	1.02	738015	85.21

 $<sup>[1] \ \</sup>hbox{``Problem sites:} \ 47554 \ 820432 \ 701400 \ 126466 \ 229303 \ 98689 \ 168269 \hbox{''}$ 



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

	sigmaP	sigmaPT	sigmaT	Frac. var explained
Comp.1	0.3398	0.8375	0.4280	0.7727
Comp.2	0.8184	-0.0391	-0.5733	0.1560
Comp.3	0.4634	-0.5451	0.6987	0.0713

