Supplimentary analyses Exploring reliability heterogeneity with multiverse analyses: Data processing decisions unpredictably influence measurement reliability

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Author Note

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Abstract

Contains supplimental analyses for the main paper. Specifically, the same analyses including only half of the trials.

Keywords: reliability, multiverse, analytic flexibility, data processing

Supplimentary analyses Exploring reliability heterogeneity with multiverse analyses: Data processing decisions unpredictably influence measurement reliability

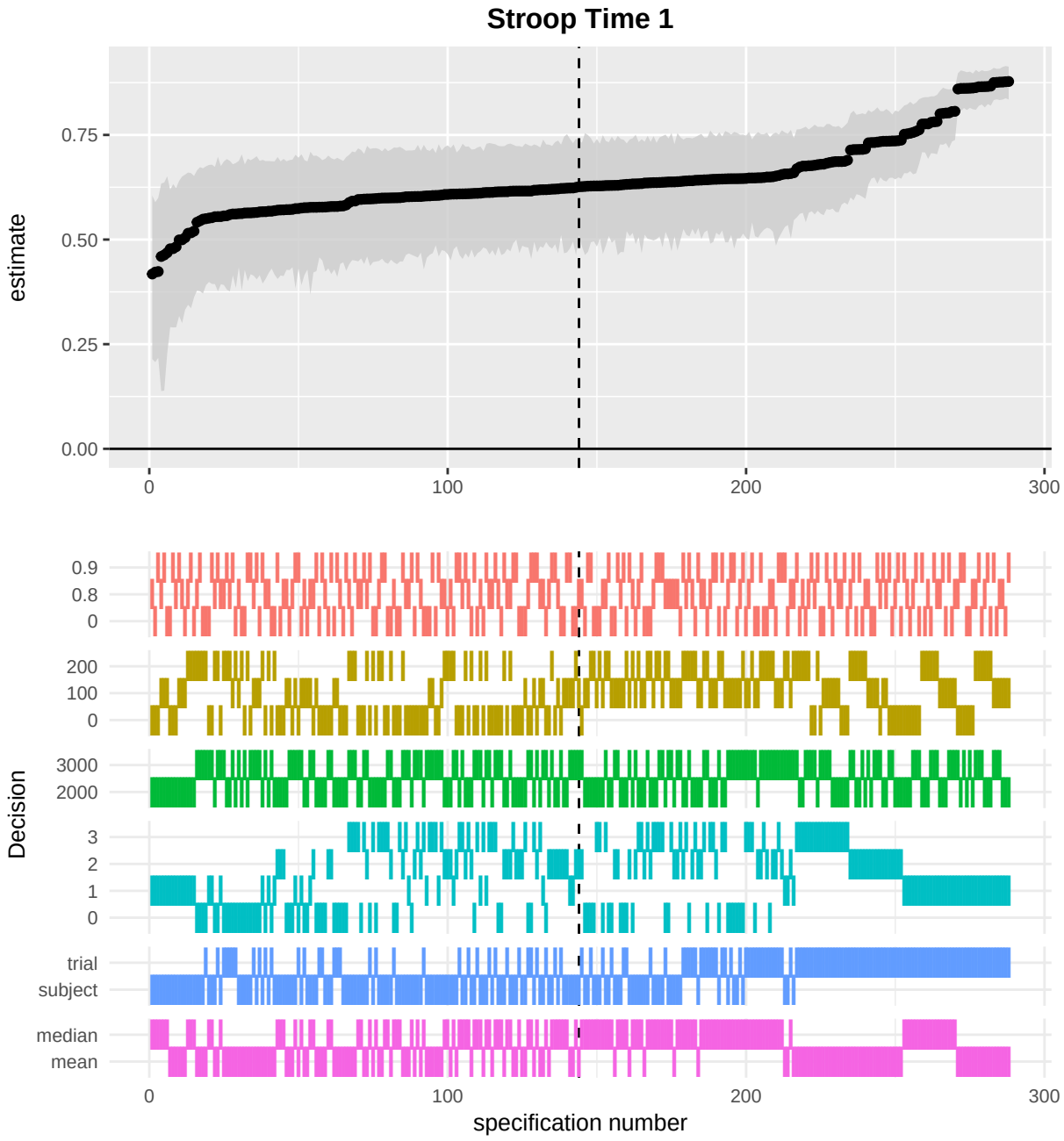

Figure 1. Internal consistency reliability multiverse for Stroop RT cost at time 1

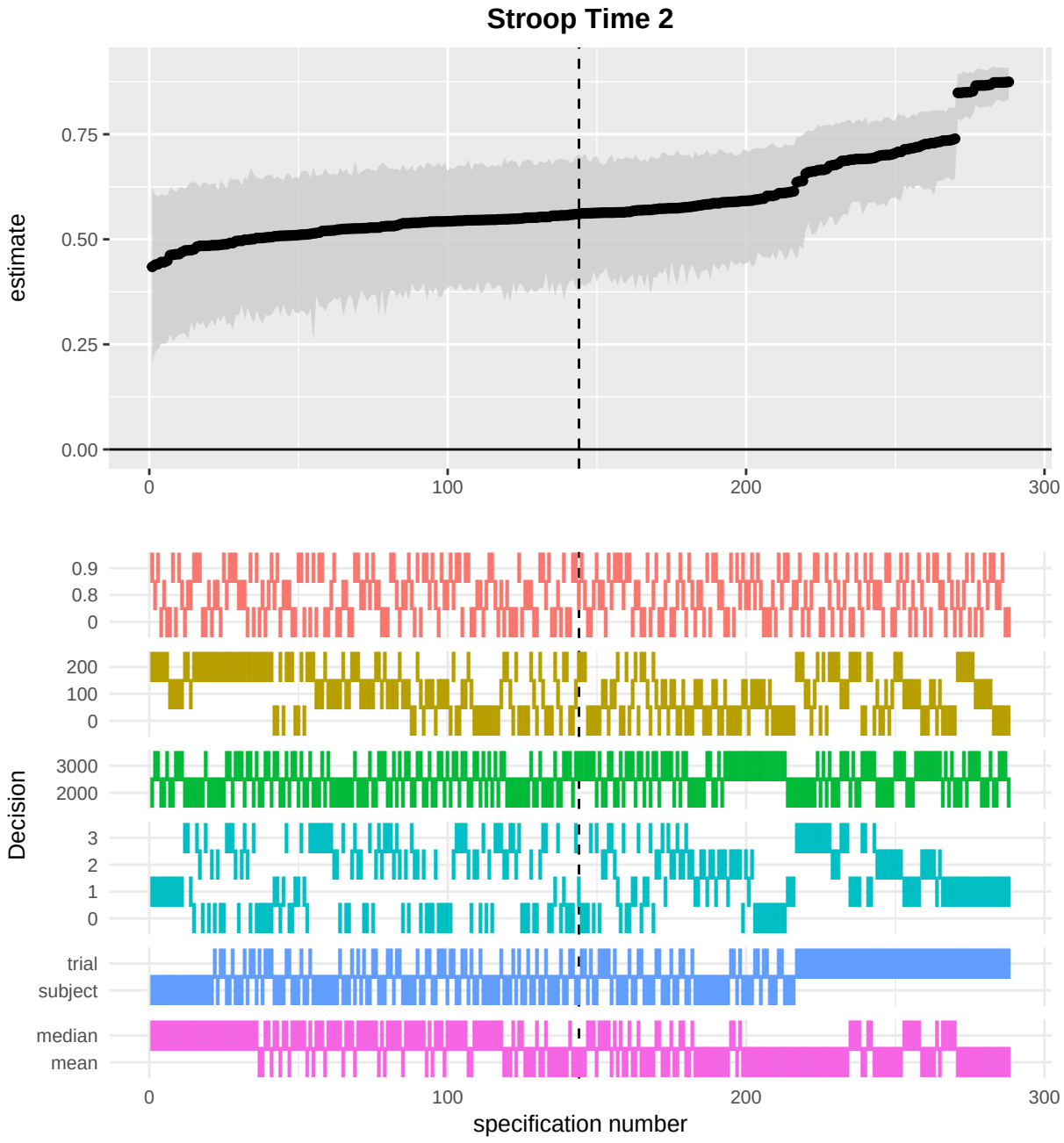

Figure 2. Internal consistency reliability multiverse for Stroop RT cost at time 2

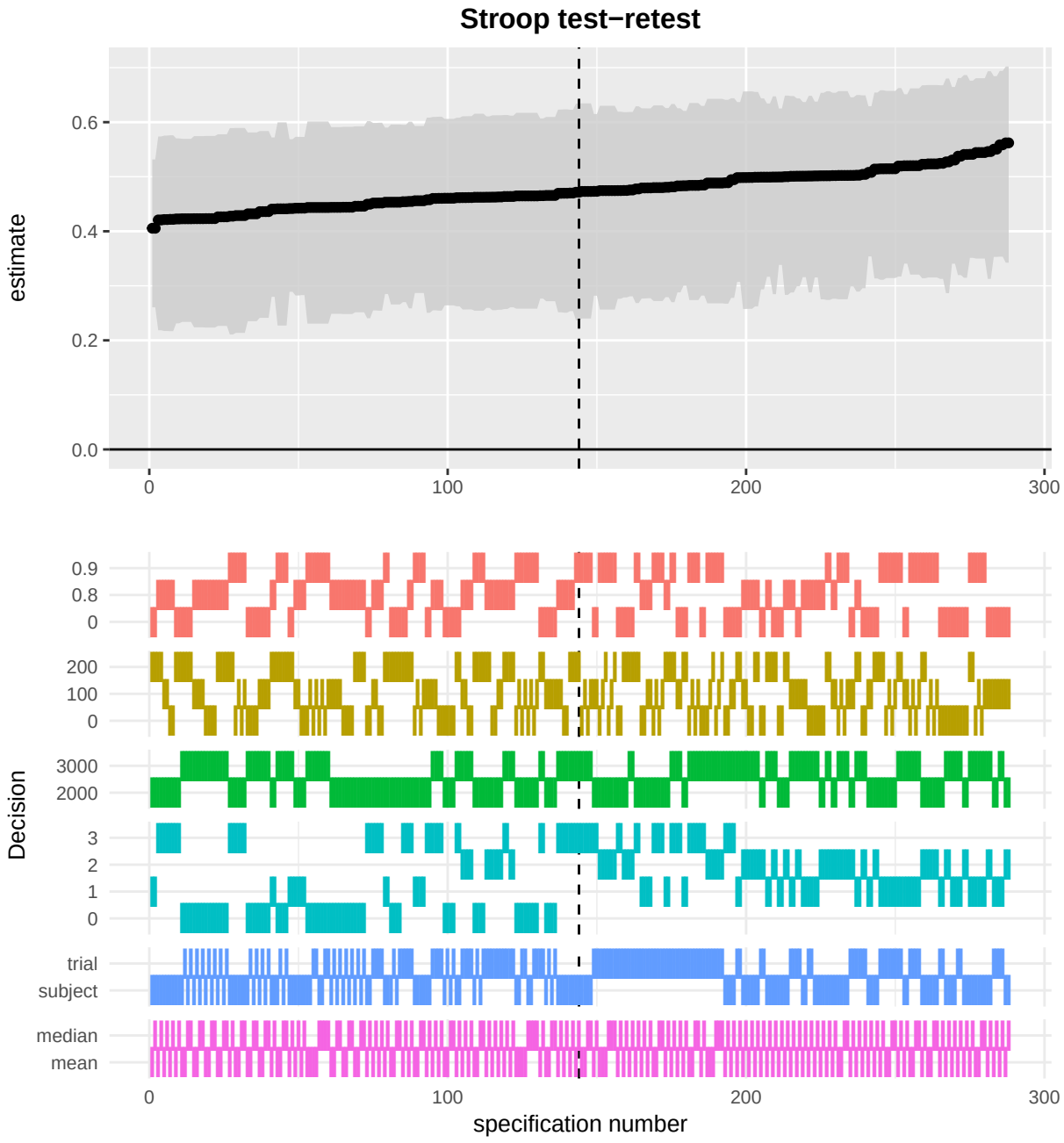

Figure 3. Test-retest reliability multiverse for Stroop RT cost

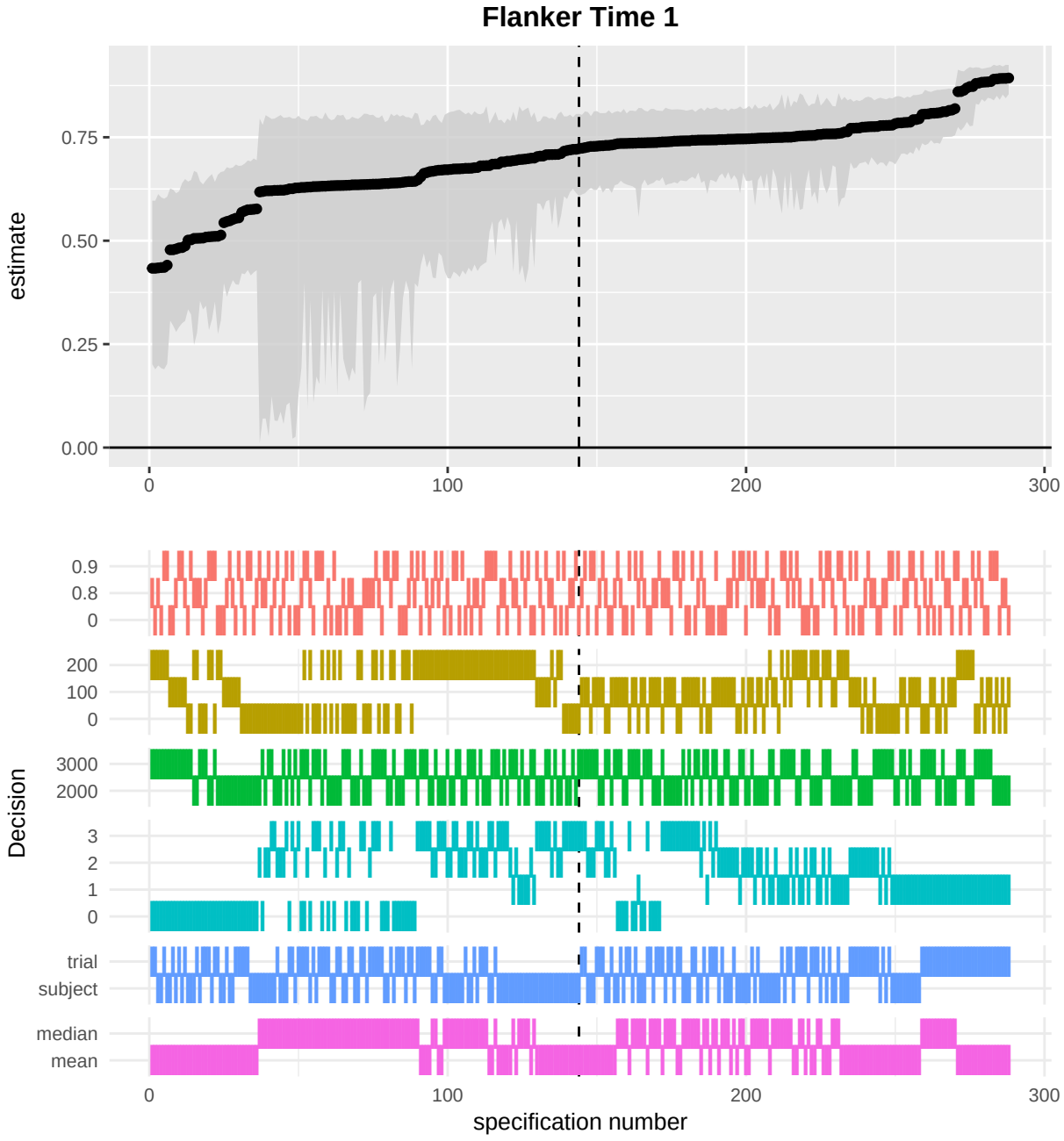

Figure 4. Internal consistency reliability multiverse for Flanker RT cost at time 1

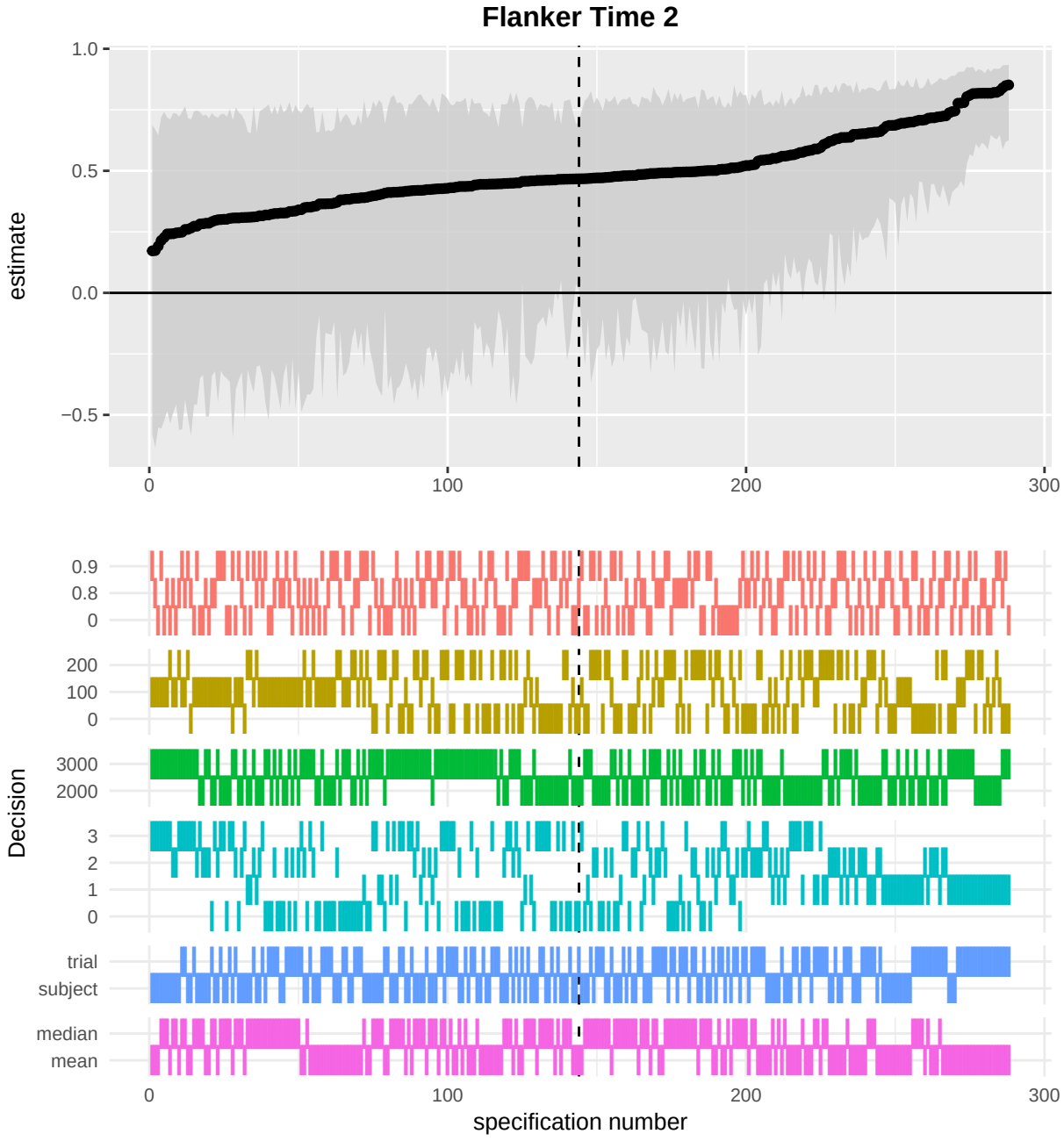

Figure 5. Internal consistency reliability multiverse for Flanker RT cost at time 2

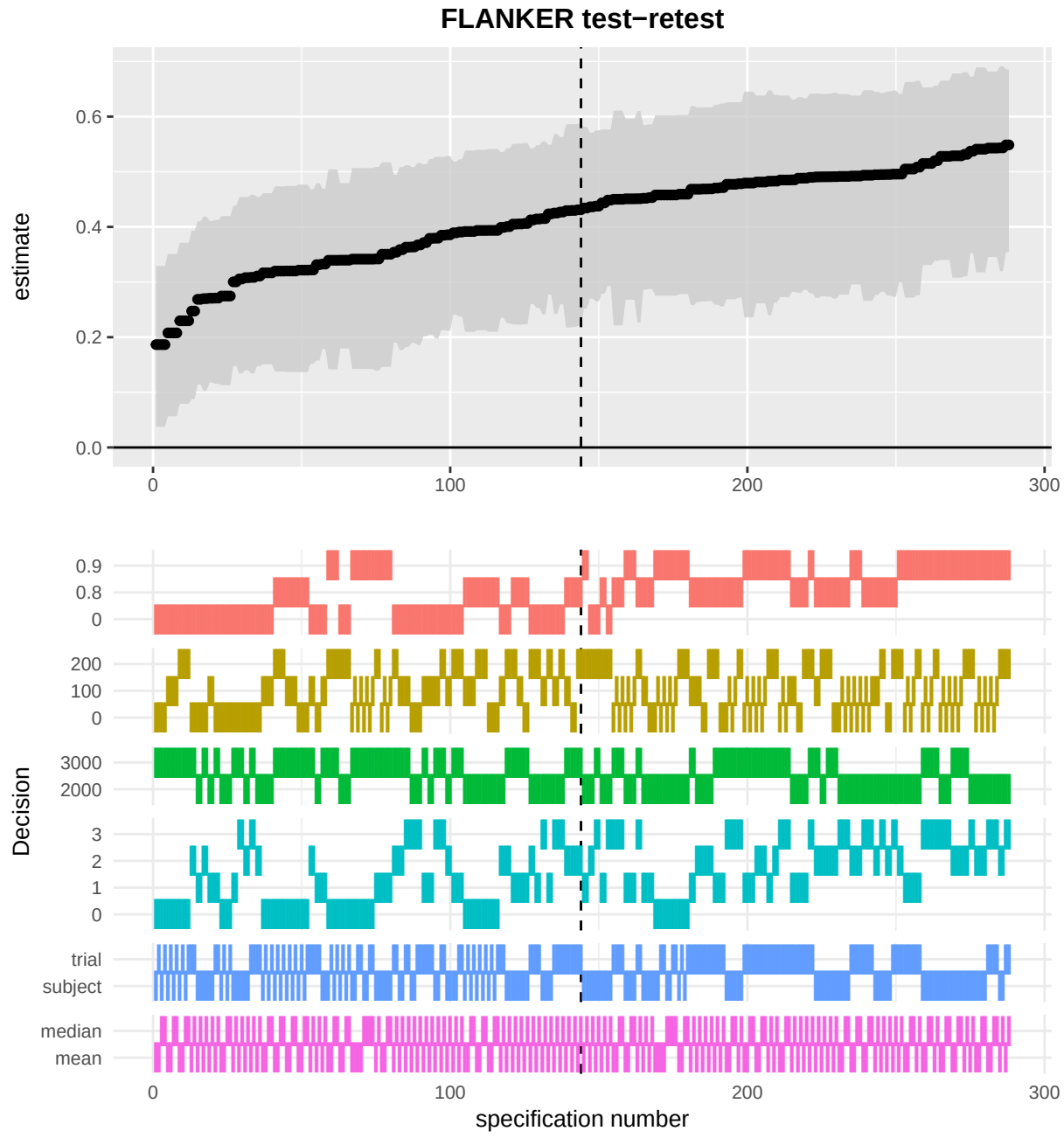

Figure 6. Test-retest reliability multiverse for Flanker RT cost

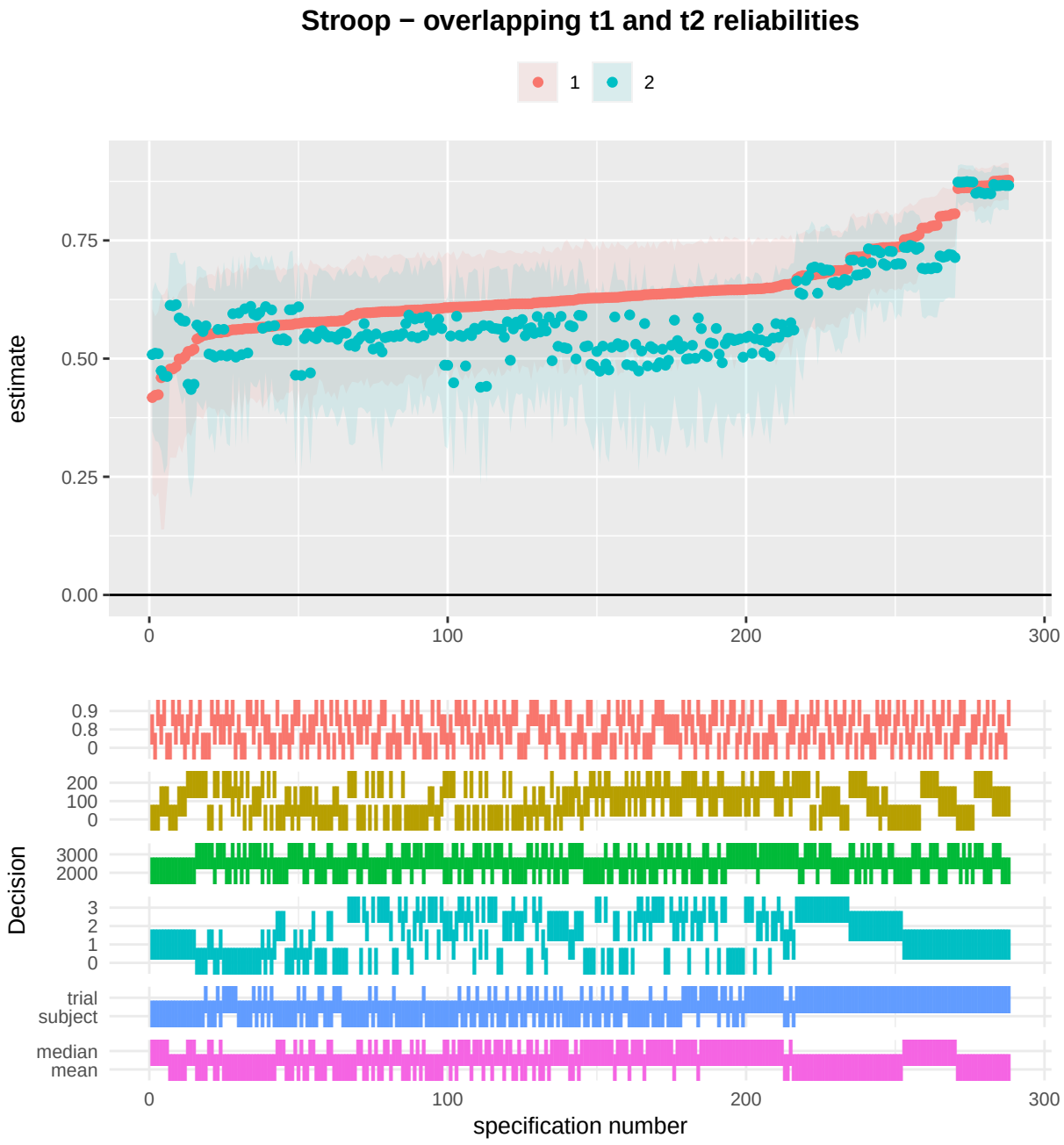

Figure 7. Overlapped internal consistency reliability multiverse for Stroop RT cost at times 1 and 2

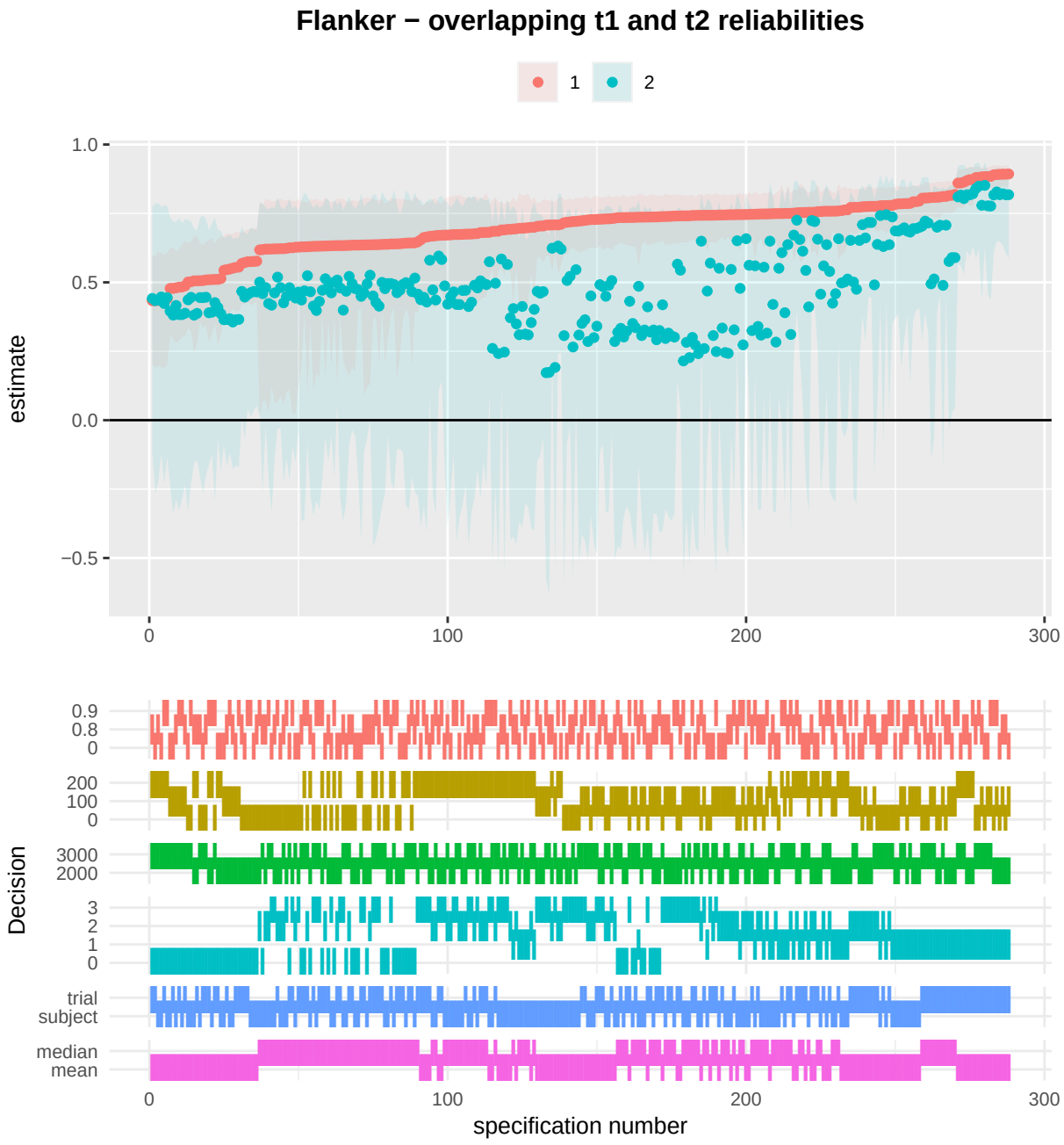

Figure 8. Overlapped internal consistency reliability multiverse for Flanker RT cost at times 1 and 2

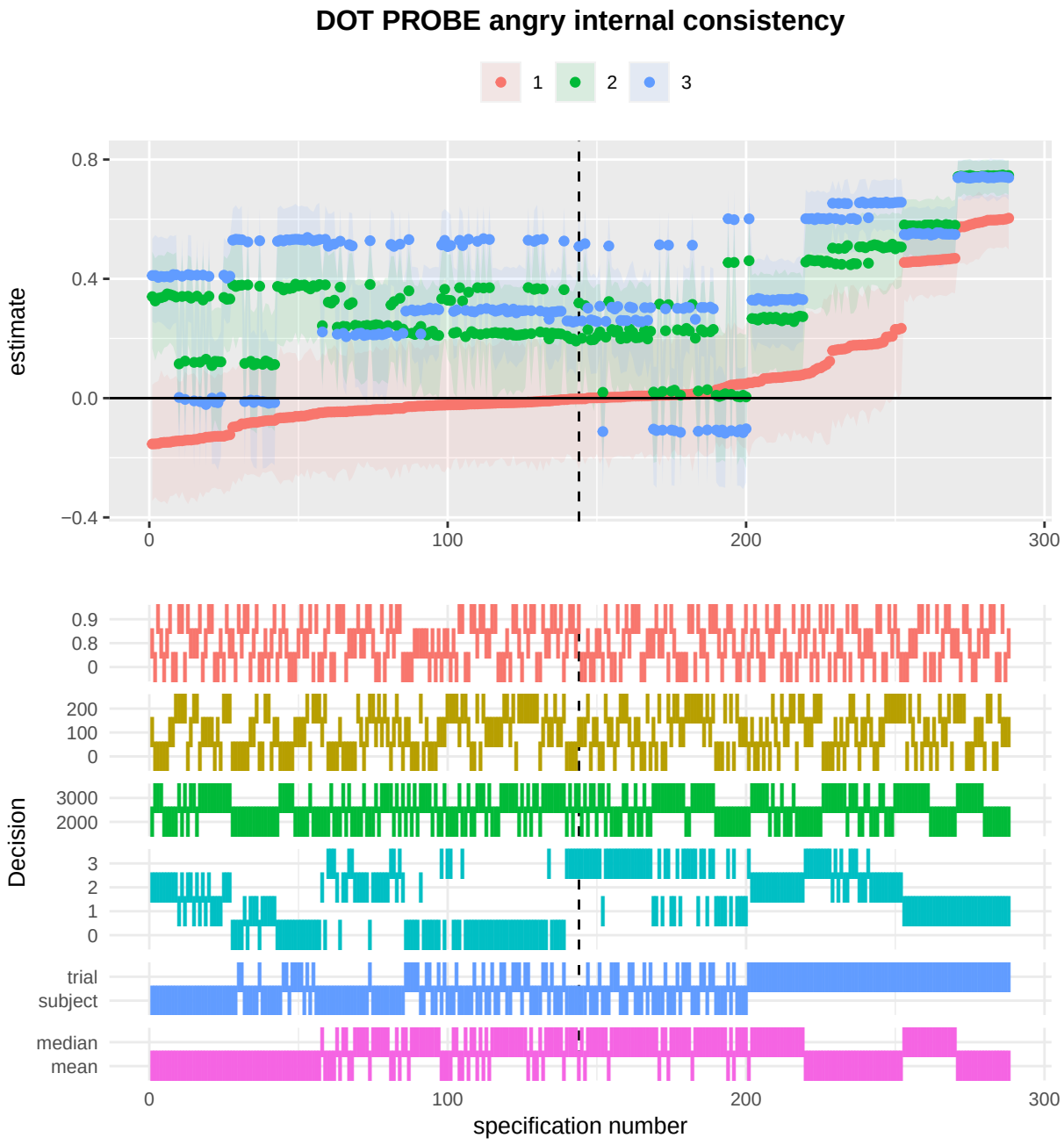

Figure 9. Internal consistency reliability multiverse for Dot Probe attention bias (angry faces) at times 1, 2, and 3

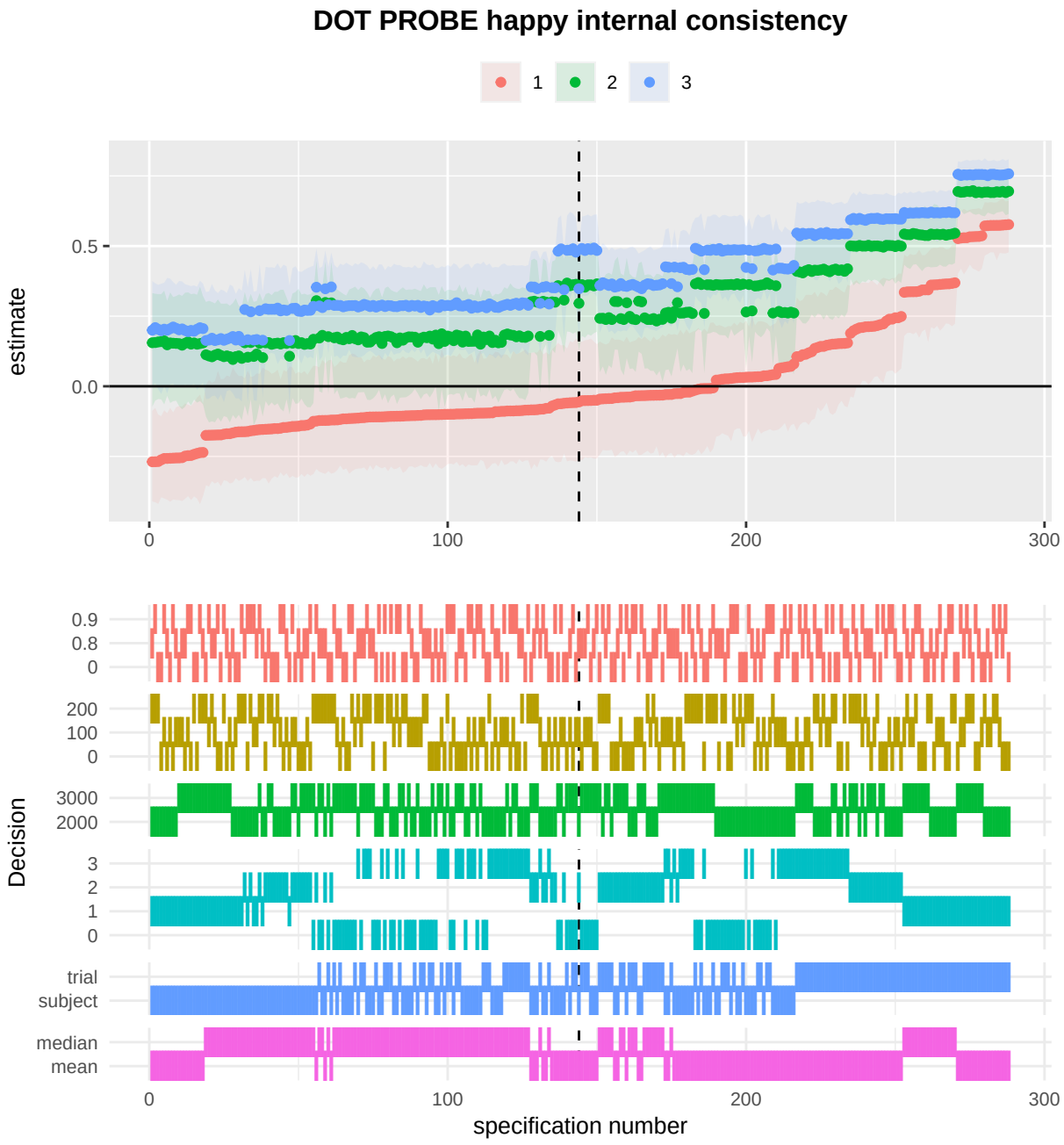

Figure 10. Internal consistency reliability multiverse for Dot Probe attention bias (happy faces) at times 1, 2, and 3

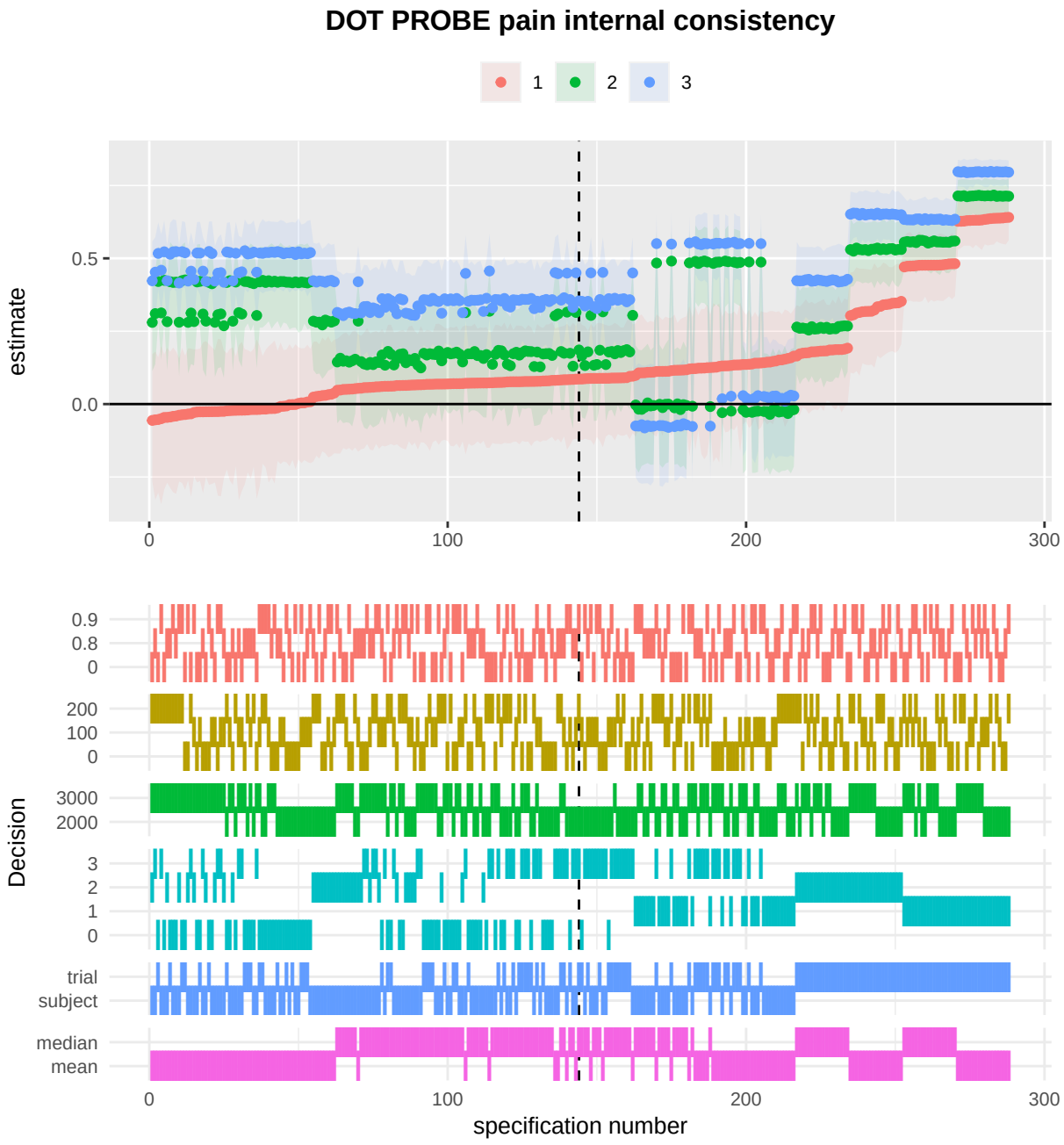

Figure 11. Internal consistency reliability multiverse for Dot Probe attention bias (pain faces) at times 1, 2, and 3

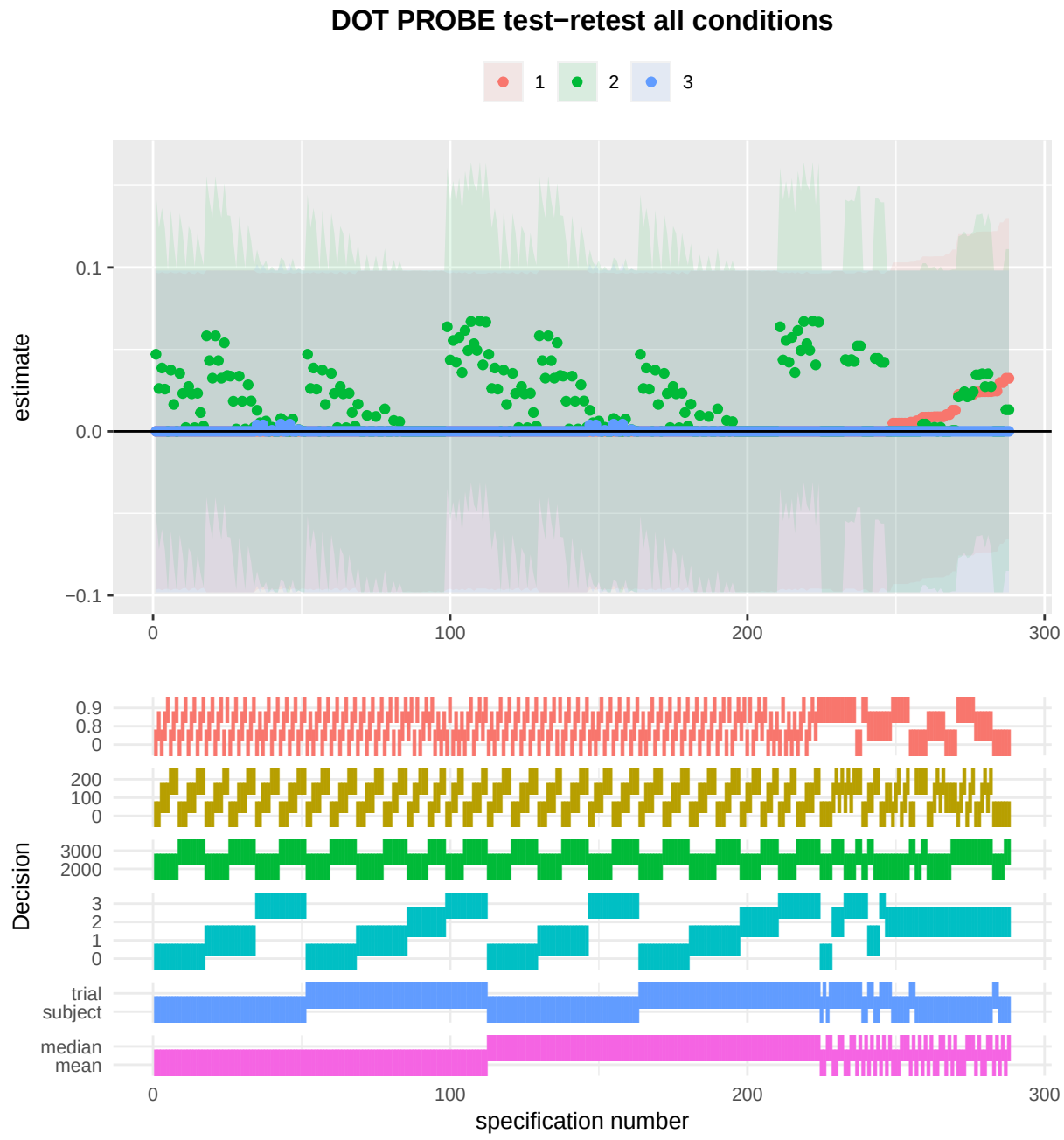

Figure 12. Test-retest reliability multiverse for Dot Probe attention bias for all three conditions. Note: red = angry, green = happy, blue = pained

Table 1

Correlations between reliability estimates and number of trials retained across specifications

task	time	measure	correlation	95% CI low	95% CI high
Stroop	1	splithalf	-0.31	-0.41	-0.21
Stroop	2	splithalf	-0.42	-0.51	-0.32
Flanker	1	splithalf	-0.66	-0.72	-0.59
Flanker	2	splithalf	-0.59	-0.66	-0.51
DPTangry	1	splithalf	-0.57	-0.64	-0.49
DPTangry	2	splithalf	-0.17	-0.28	-0.05
DPTangry	3	splithalf	0.20	0.08	0.30
DPThappy	1	splithalf	-0.36	-0.46	-0.25
DPThappy	2	splithalf	-0.31	-0.41	-0.20
DPThappy	3	splithalf	-0.15	-0.27	-0.04
DPTpain	1	splithalf	-0.68	-0.74	-0.61
DPTpain	2	splithalf	-0.07	-0.18	0.05
DPTpain	3	splithalf	0.17	0.05	0.28
Stroop		ICC	-0.38	-0.47	-0.27
Flanker		ICC	-0.52	-0.60	-0.43
DPTangry		ICC	0.11	0.00	0.23
DPThappy		ICC	0.13	0.01	0.24
DPTpain		ICC	0.15	0.03	0.26