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

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Author Note

Submitted to Meta-Psychology. Click here to follow the fully transparent editorial process of this submission. Participate in open peer review by commenting through hypothes.is directly on this preprint.

This work was supported by an ESRC grant [ES/R004285/1]

I would like to thank Ana Todorovic for her insightful feedback on an earlier version of this manuscript.

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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

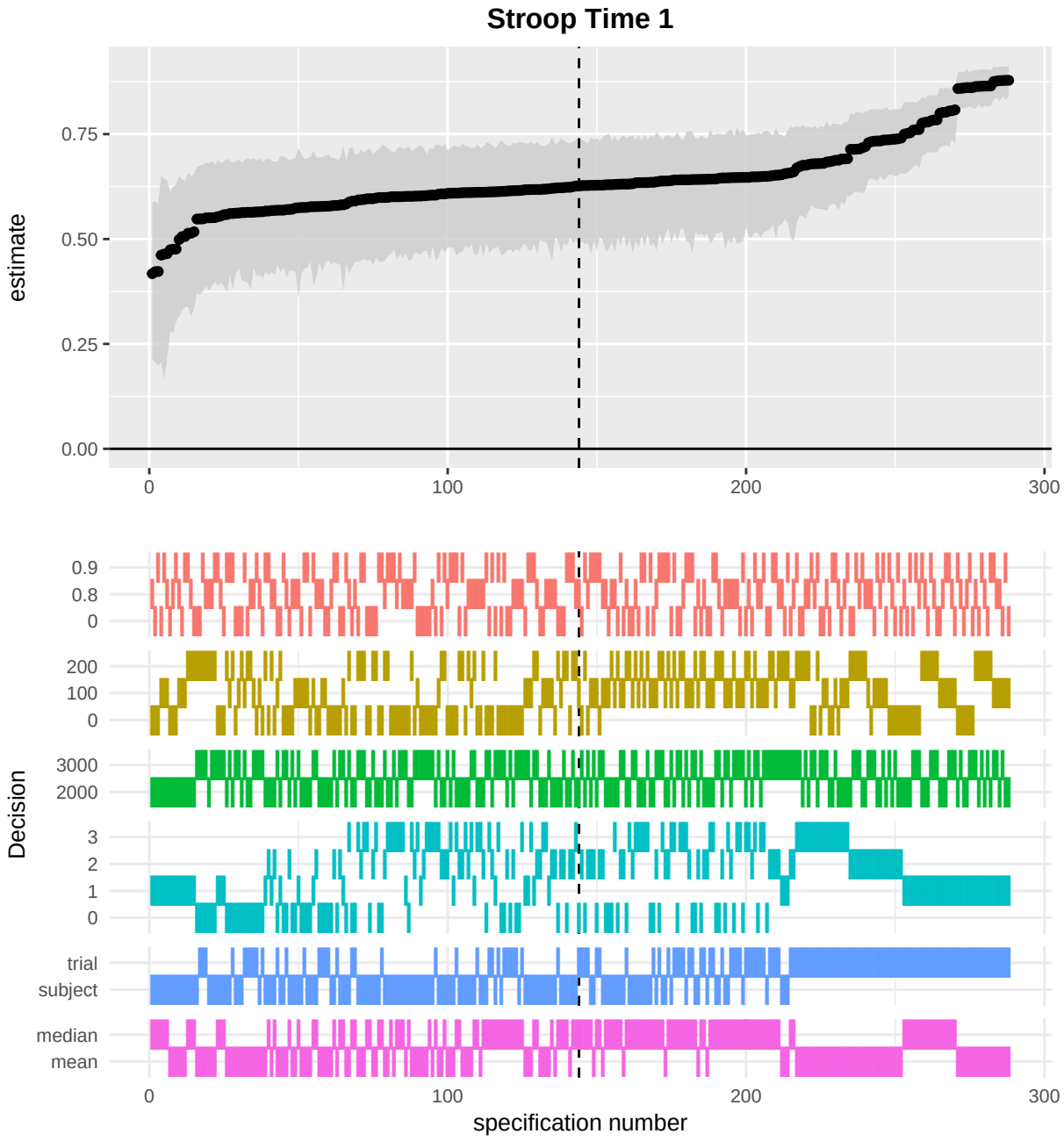

Figure 1. Internal consistency reliability multiverse for Stroop RT cost at time 1

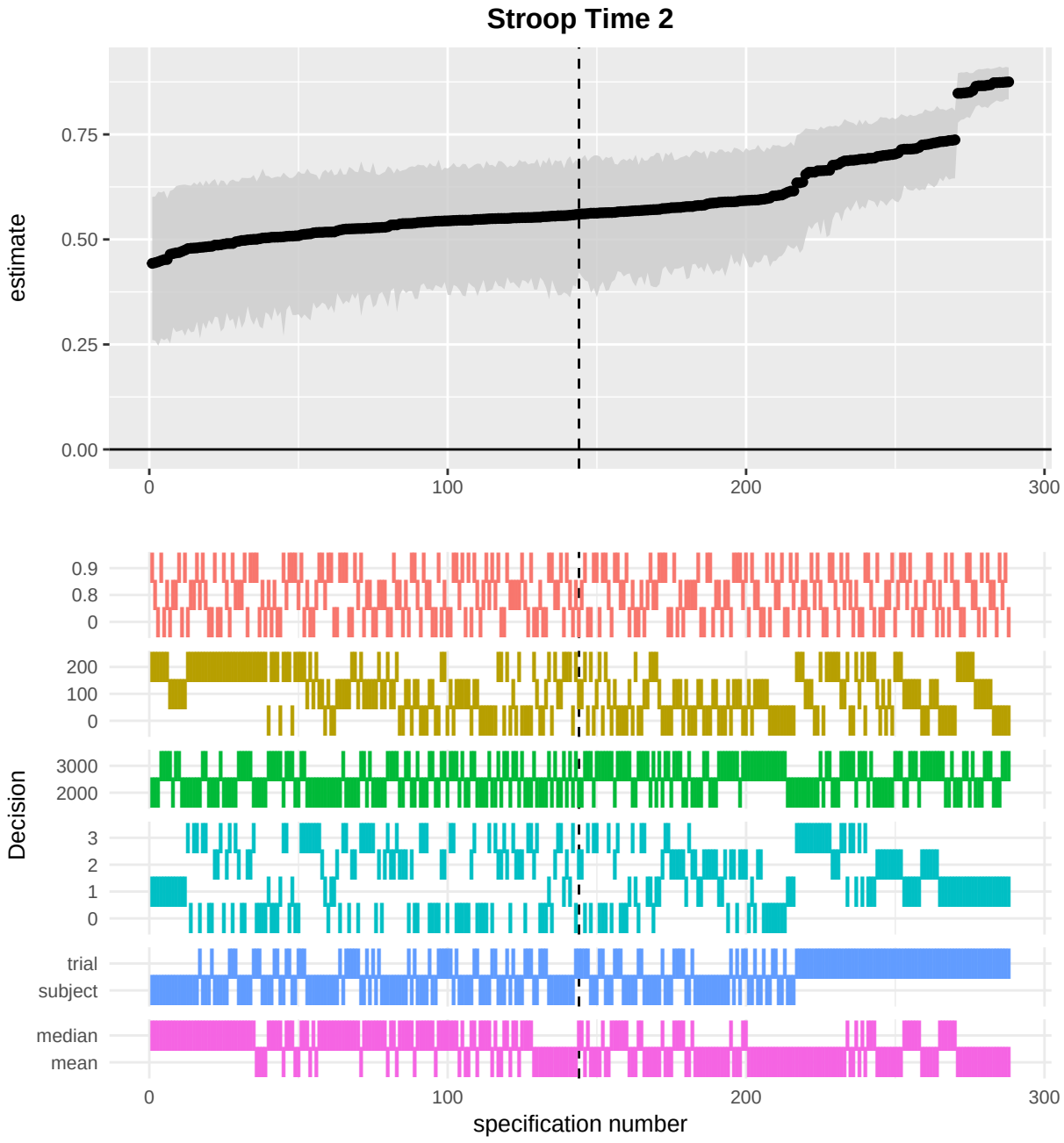

Figure 2. Internal consistency reliability multiverse for Stroop RT cost at time 2

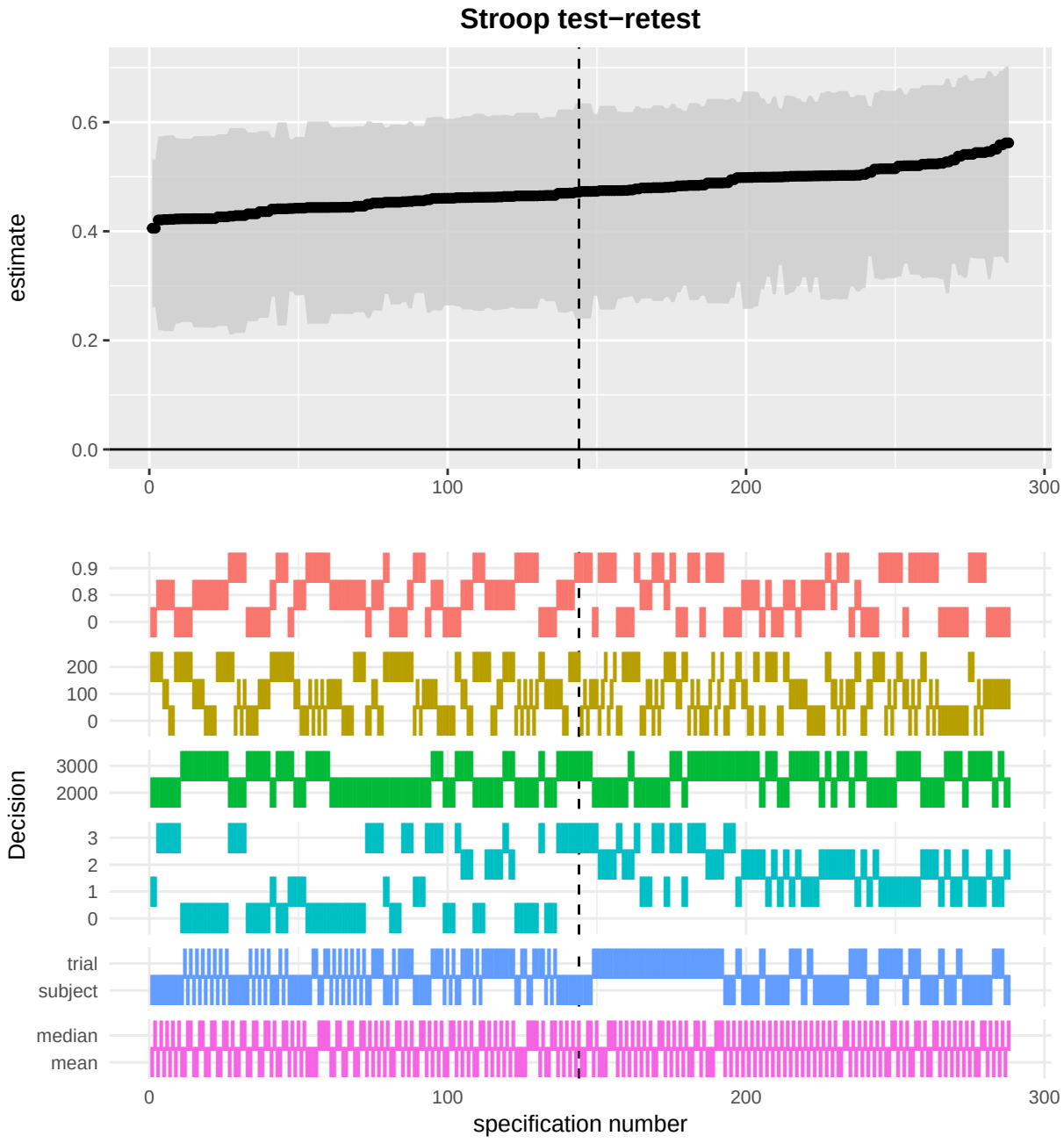

Figure 3. Test-retest reliability multiverse for Stroop RT cost

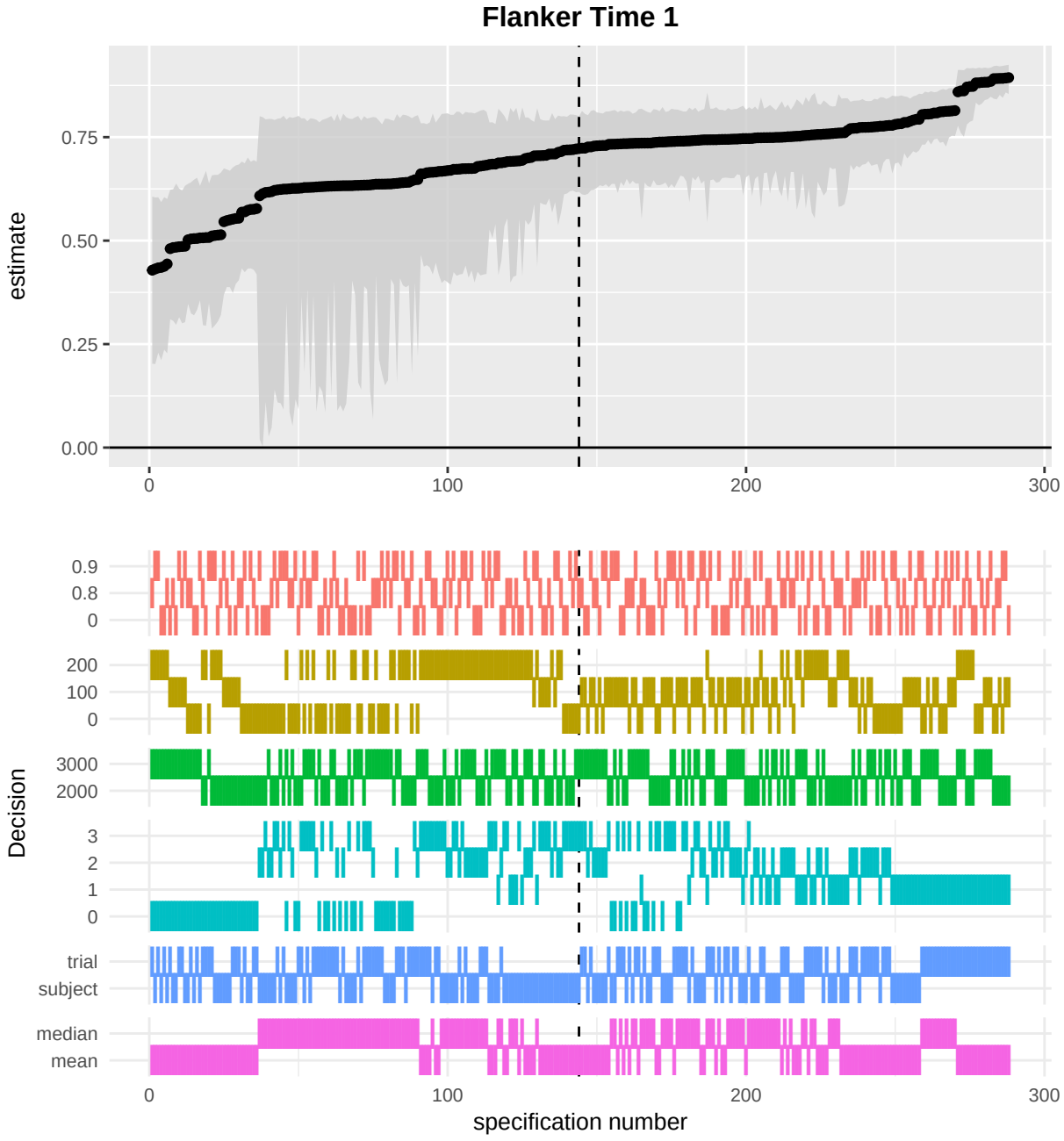

Figure 4. Internal consistency reliability multiverse for Flanker RT cost at time 1

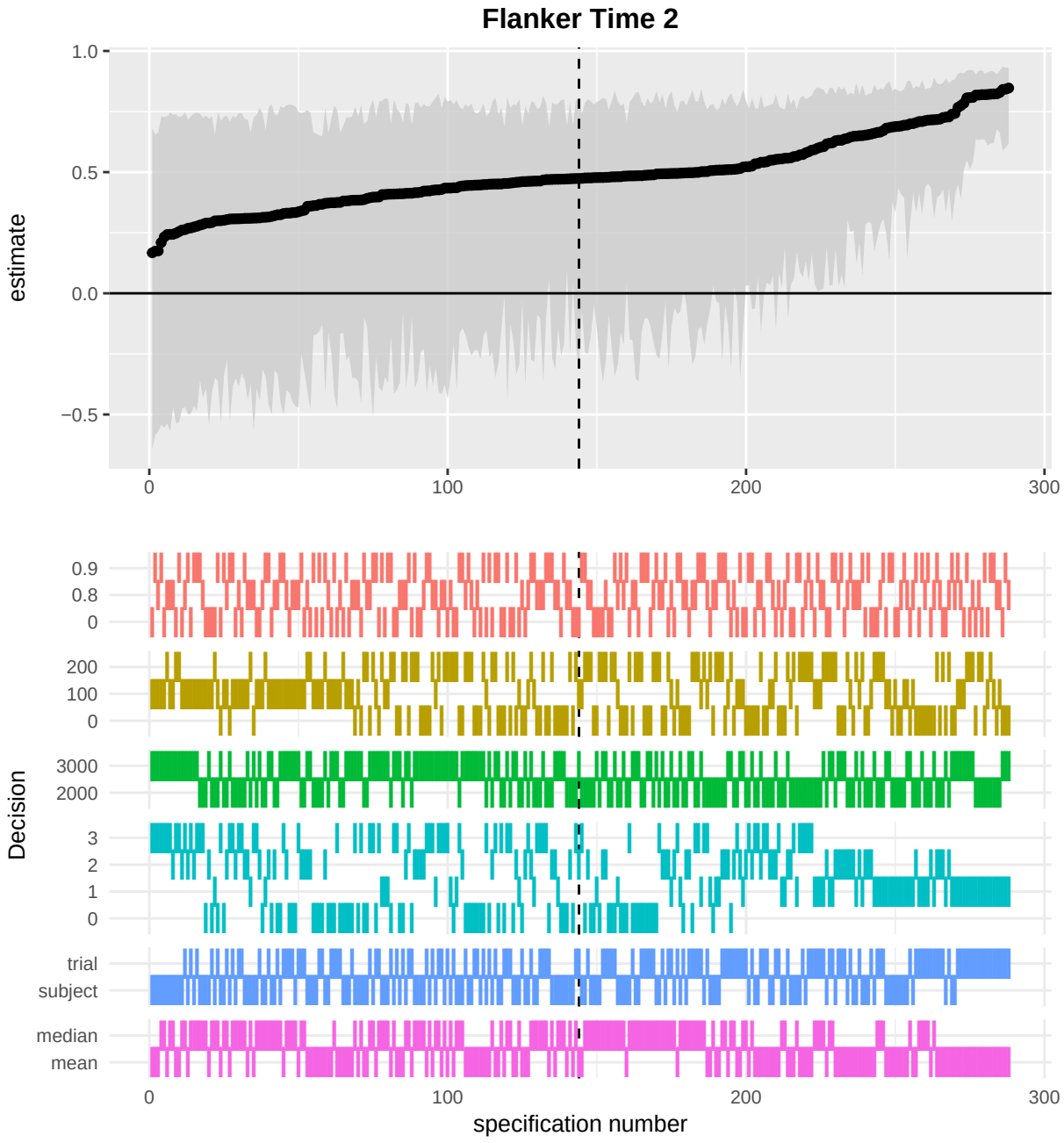

Figure 5. Internal consistency reliability multiverse for Flanker RT cost at time 2

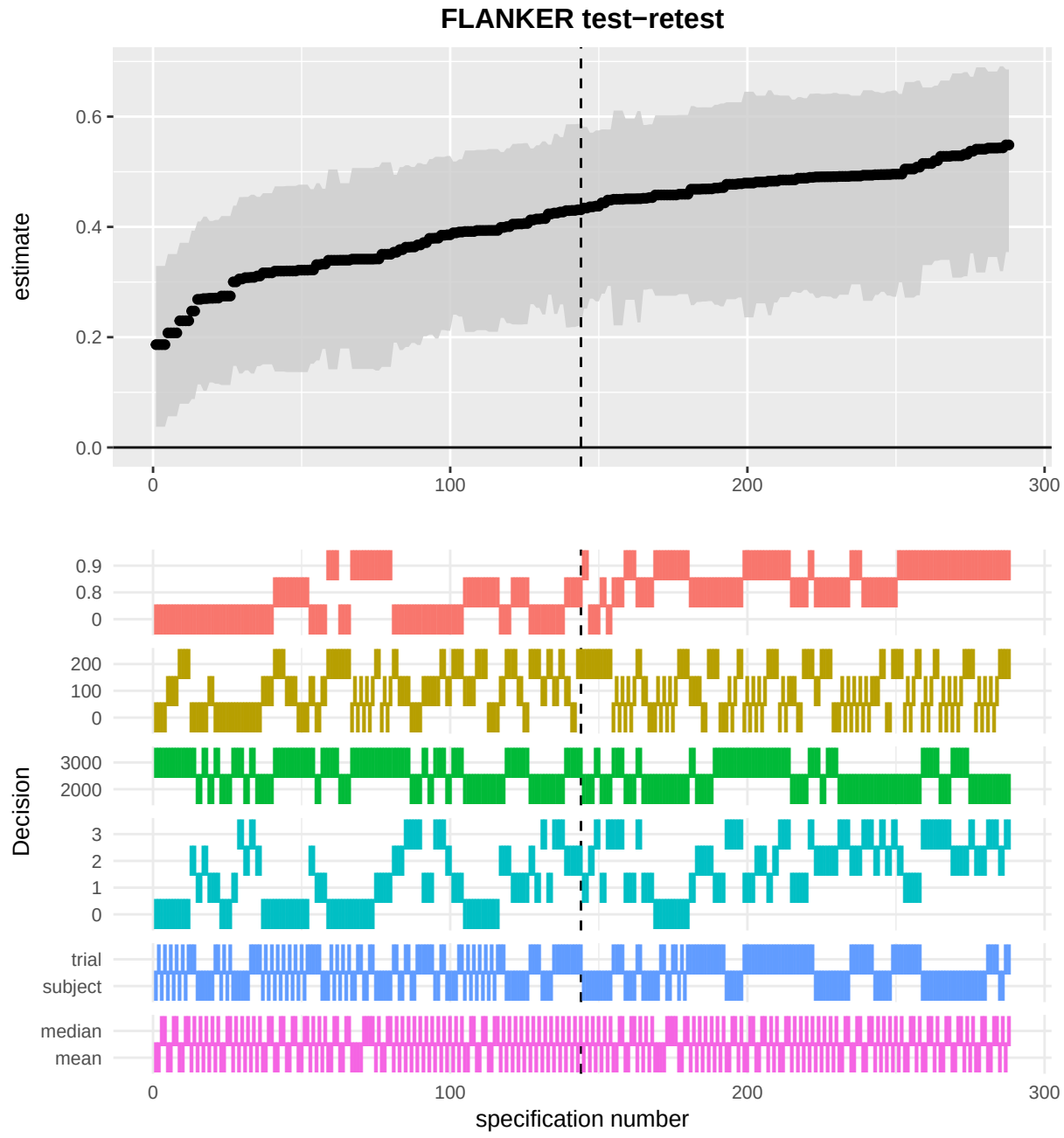

Figure 6. Test-retest reliability multiverse for Flanker RT cost

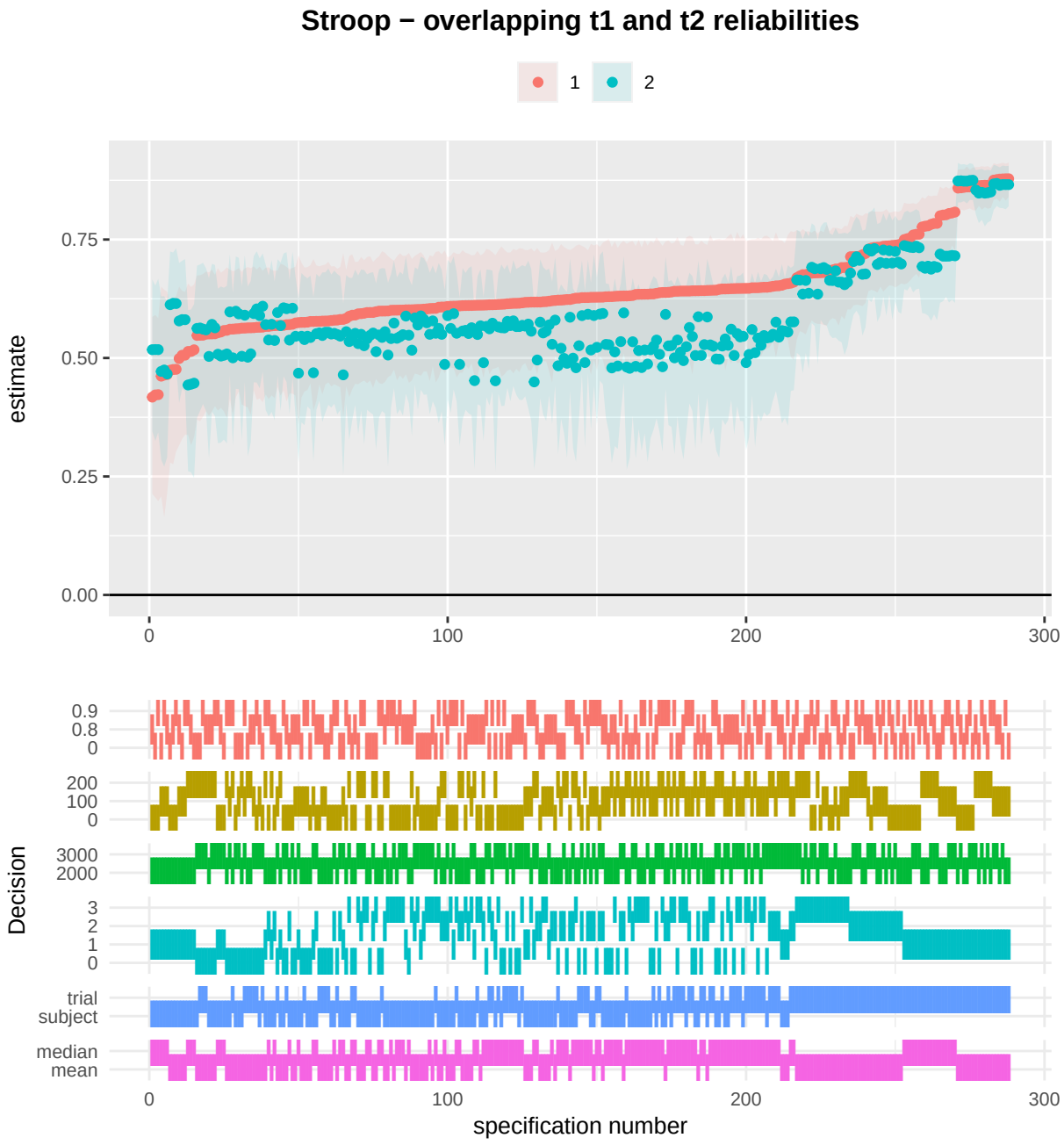

Figure 7. Overlapped internal consistency reliability multiverse for Stroop RT cost at times 1 and 2

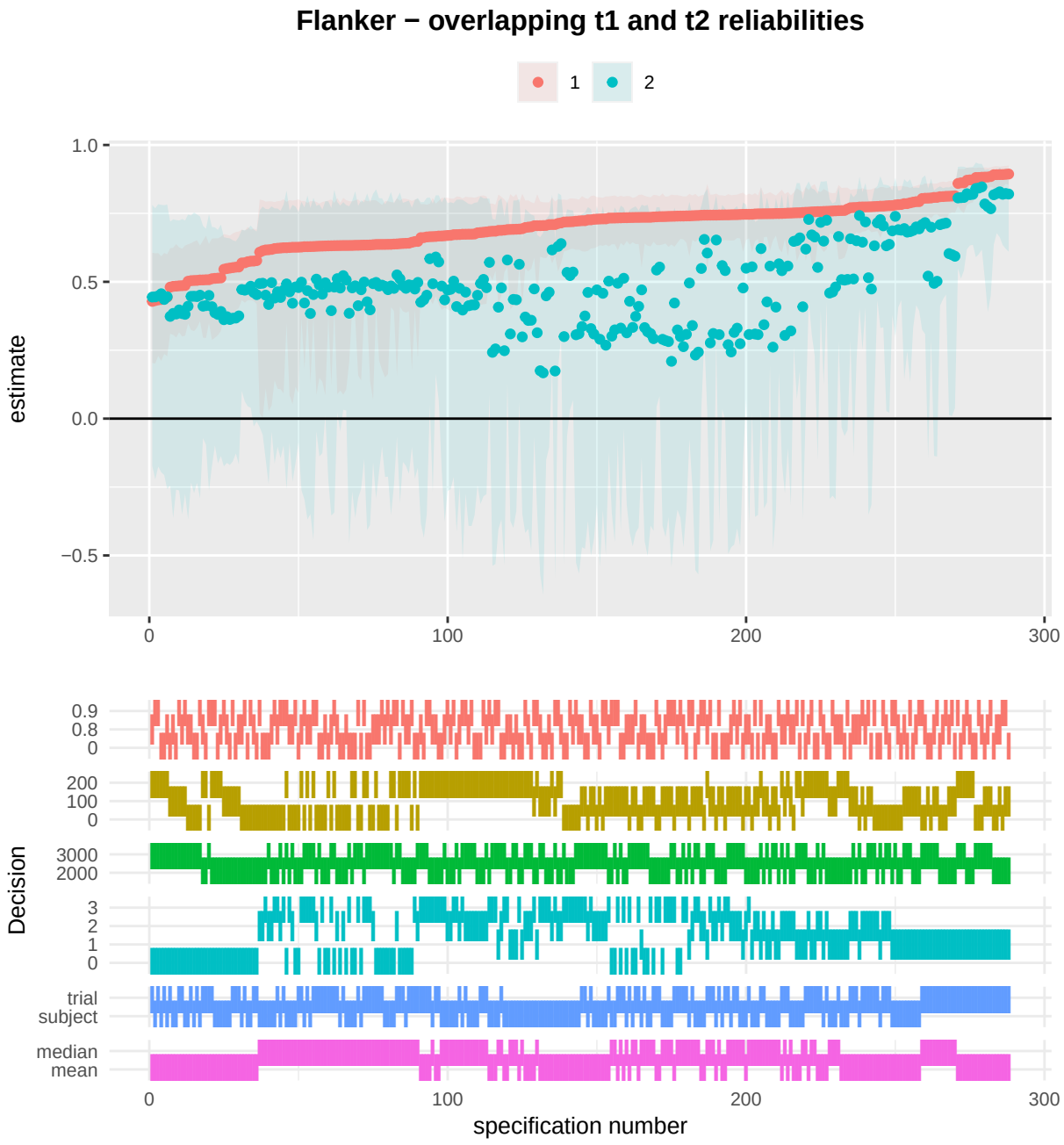

Figure 8. Overlapped internal consistency reliability multiverse for Flanker RT cost at times 1 and 2

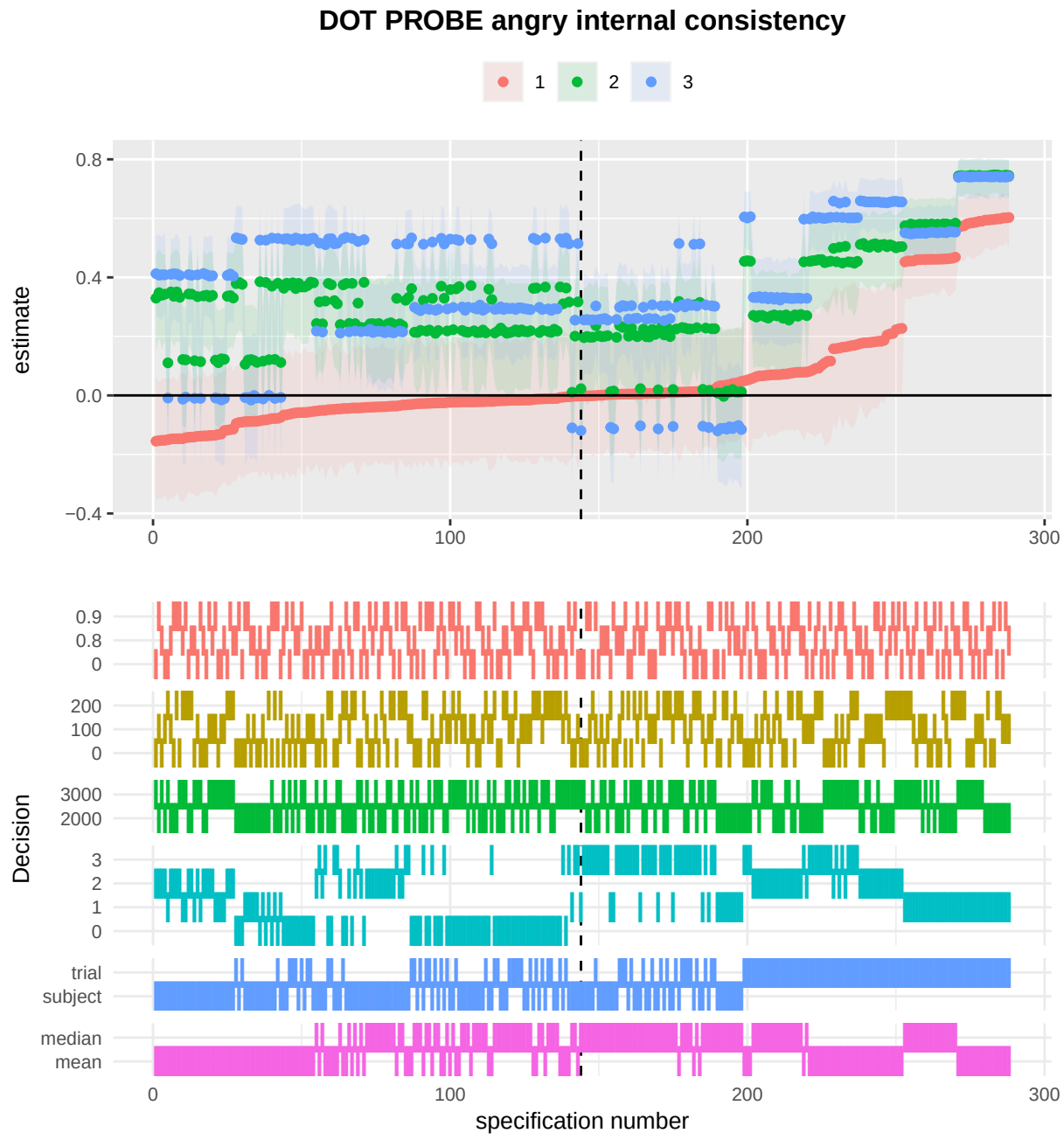

Figure 9. Internal consistency reliability multiverse for Dot Probe attention bias (angry faces) at times 1, 2, and 3

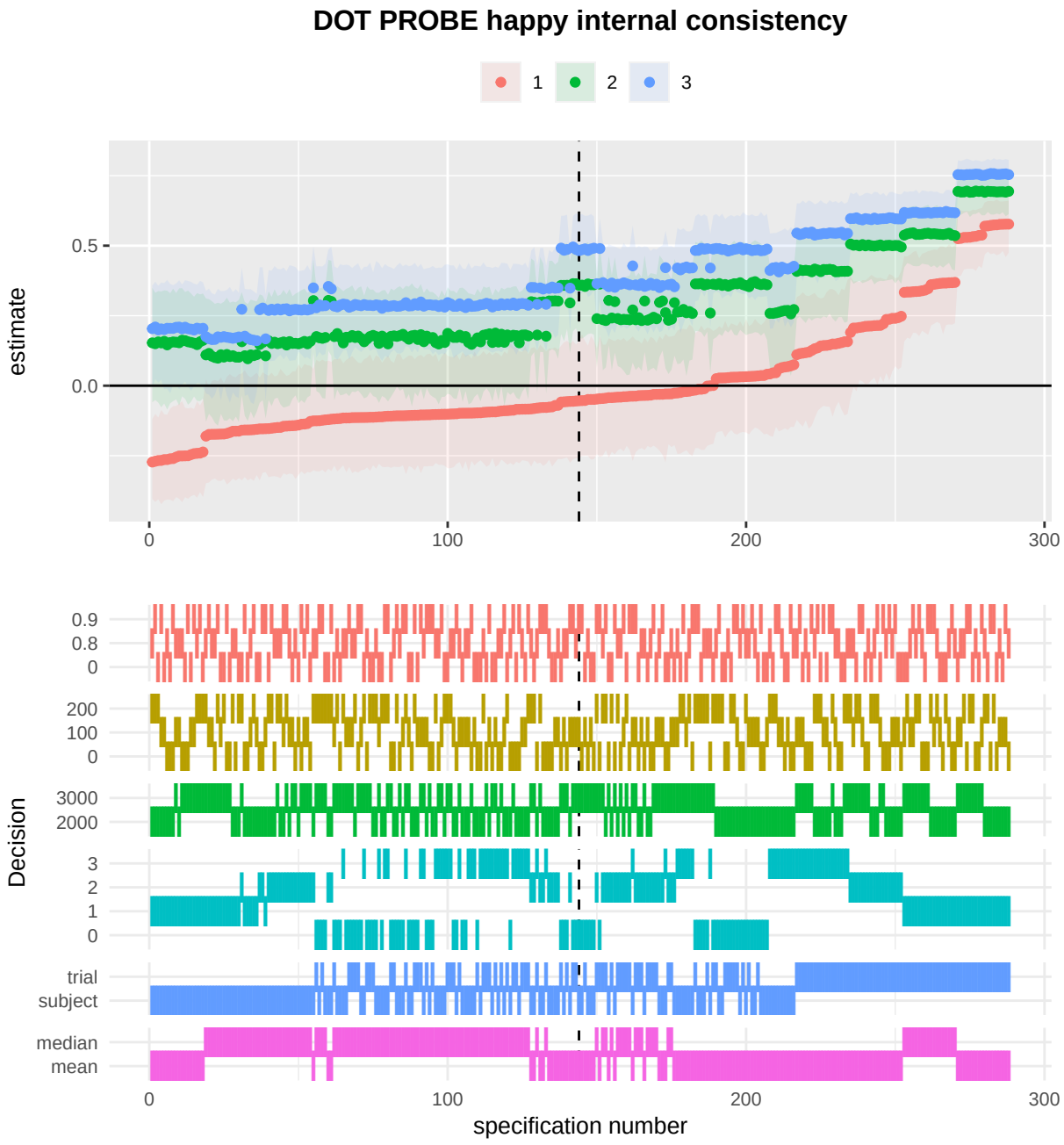

Figure 10. Internal consistency reliability multiverse for Dot Probe attention bias (happy faces) at times 1, 2, and 3

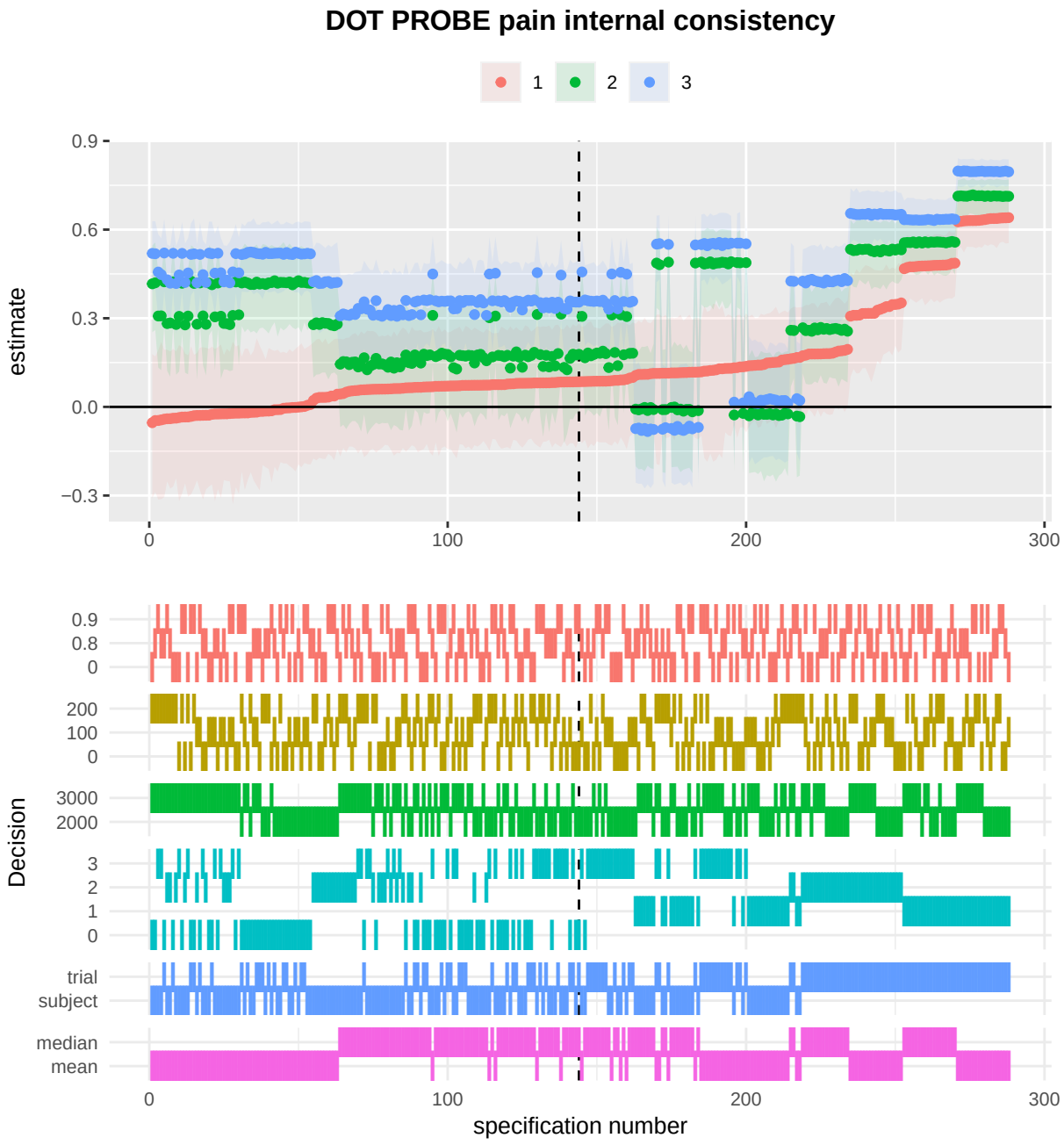

Figure 11. Internal consistency reliability multiverse for Dot Probe attention bias (pain faces) at times 1, 2, and 3

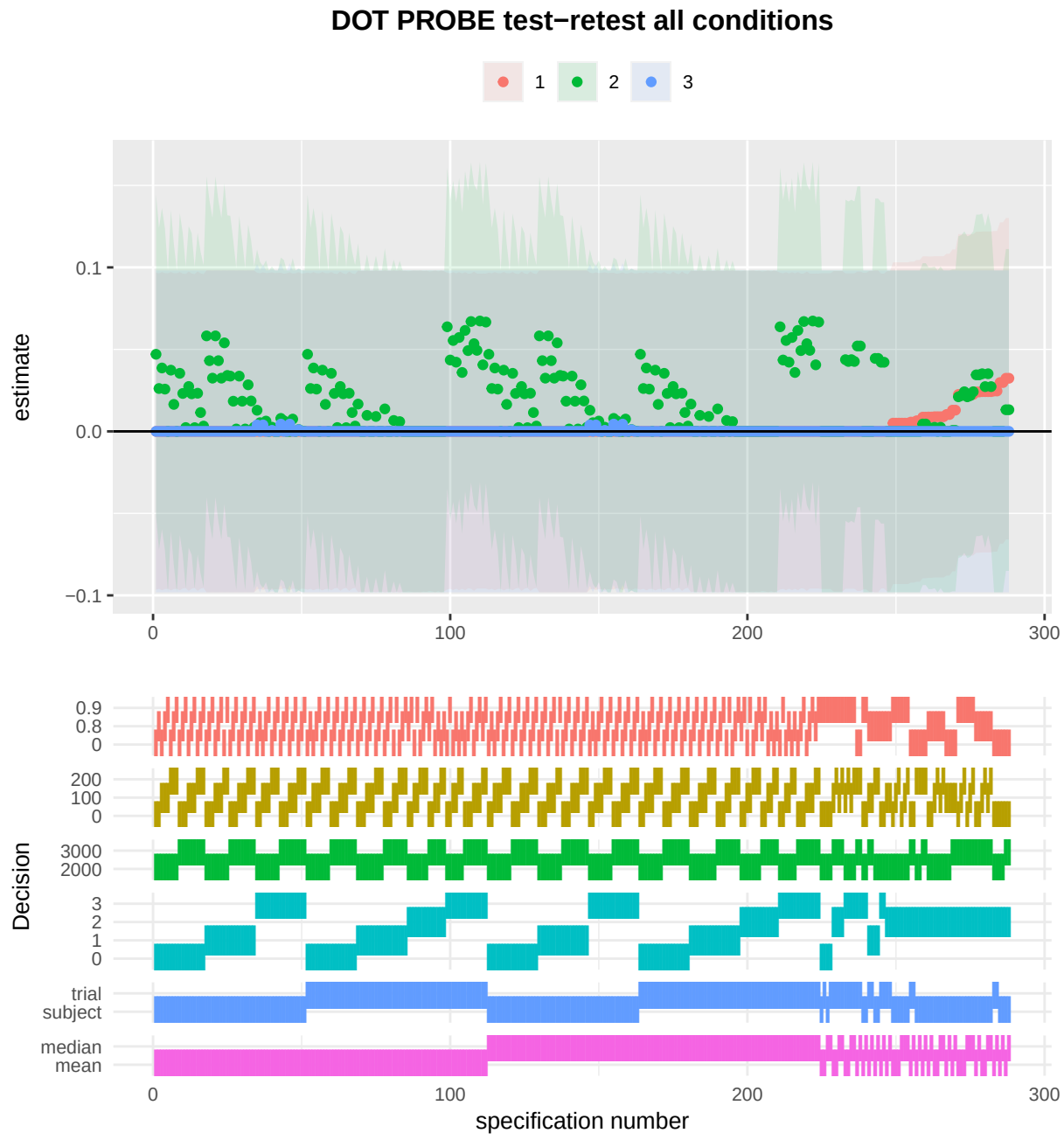

Figure 12. Test-retest reliability multiverse for Dot Probe attention bias for all three conditions. Note: red = angry, green = happy, blue = pained

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	-0.20
Stroop	2	splithalf	-0.42	-0.51	-0.32
Flanker	1	splithalf	-0.66	-0.72	-0.58
Flanker	2	splithalf	-0.60	-0.67	-0.52
DPTangry	1	splithalf	-0.56	-0.64	-0.48
DPTangry	2	splithalf	-0.17	-0.28	-0.05
DPTangry	3	splithalf	0.20	0.08	0.30
DPThappy	1	splithalf	-0.36	-0.45	-0.25
DPThappy	2	splithalf	-0.31	-0.41	-0.20
DPThappy	3	splithalf	-0.16	-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