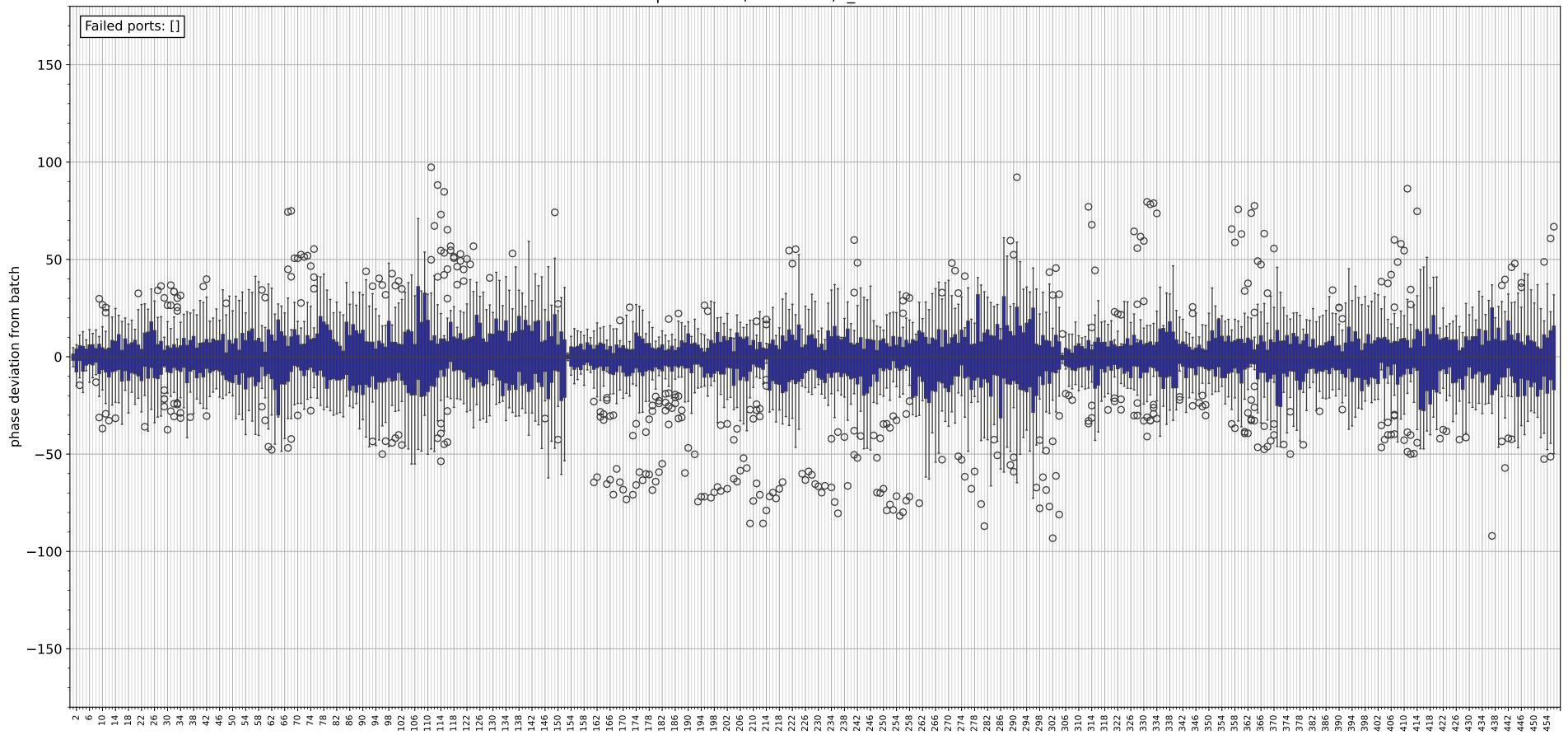


phase: RFA, beam = 2,  $f_set = 28.0$  GHz Failed ports: ['287'] 150 100 50 phase deviation from batch -50 -100-150

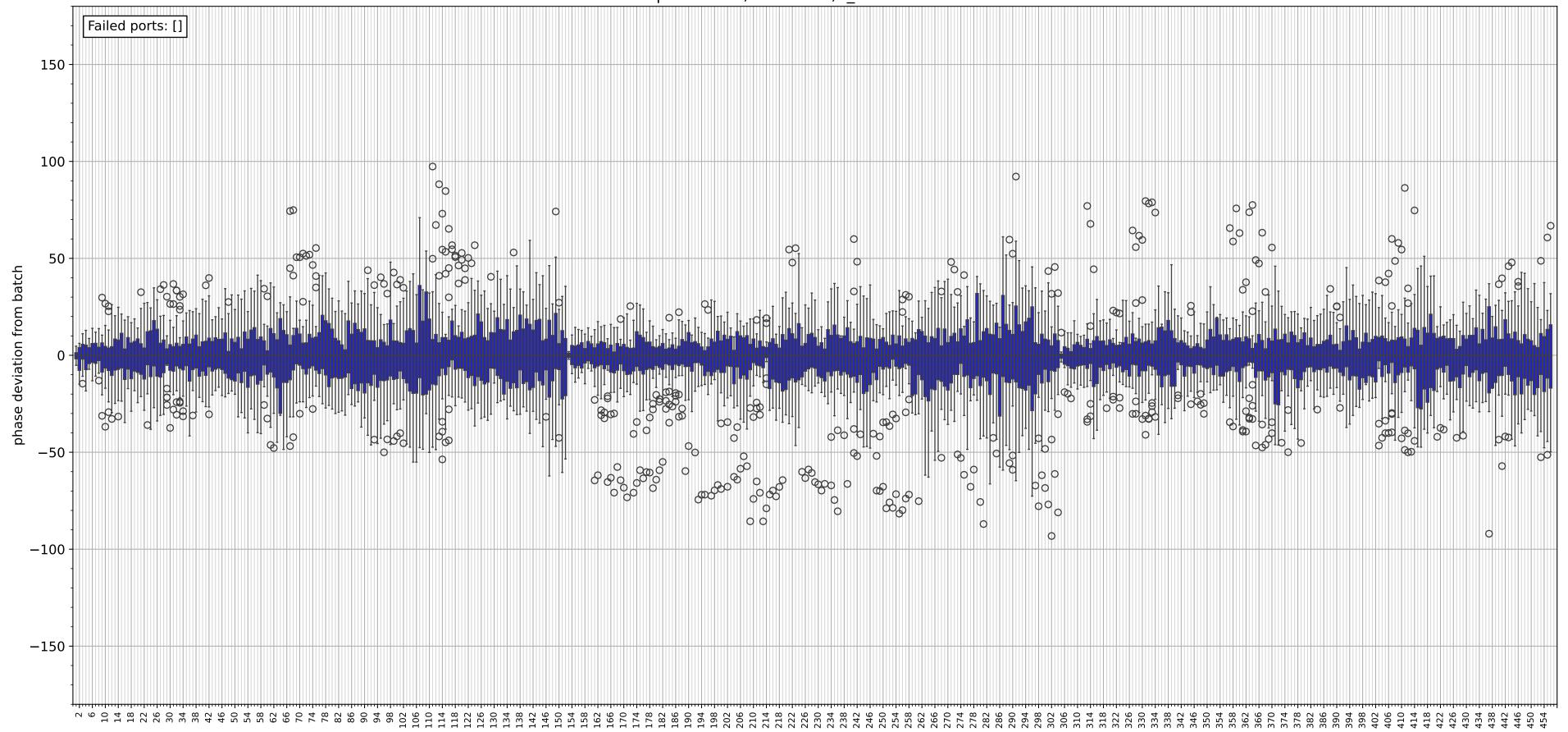
phase: RFA, beam = 1,  $f_set = 28.5 \text{ GHz}$ Failed ports: ['299'] 150 100 50 phase deviation from batch -50 -100-150

phase: RFA, beam = 2,  $f_set = 28.5$  GHz Failed ports: ['299'] 150 100 50 phase deviation from batch -50 -100-150

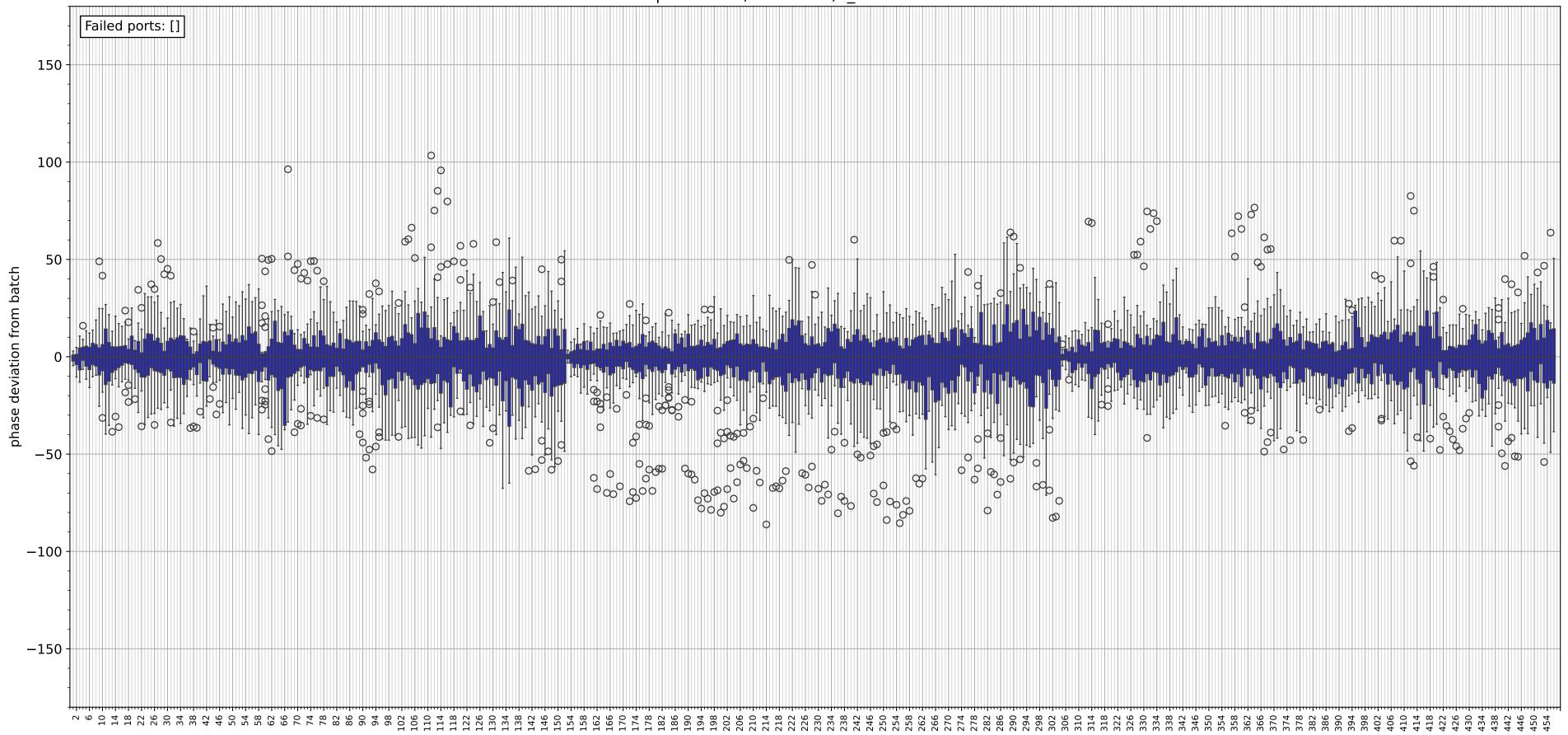
phase: RFA, beam = 1,  $f_set = 29.0 \text{ GHz}$ 



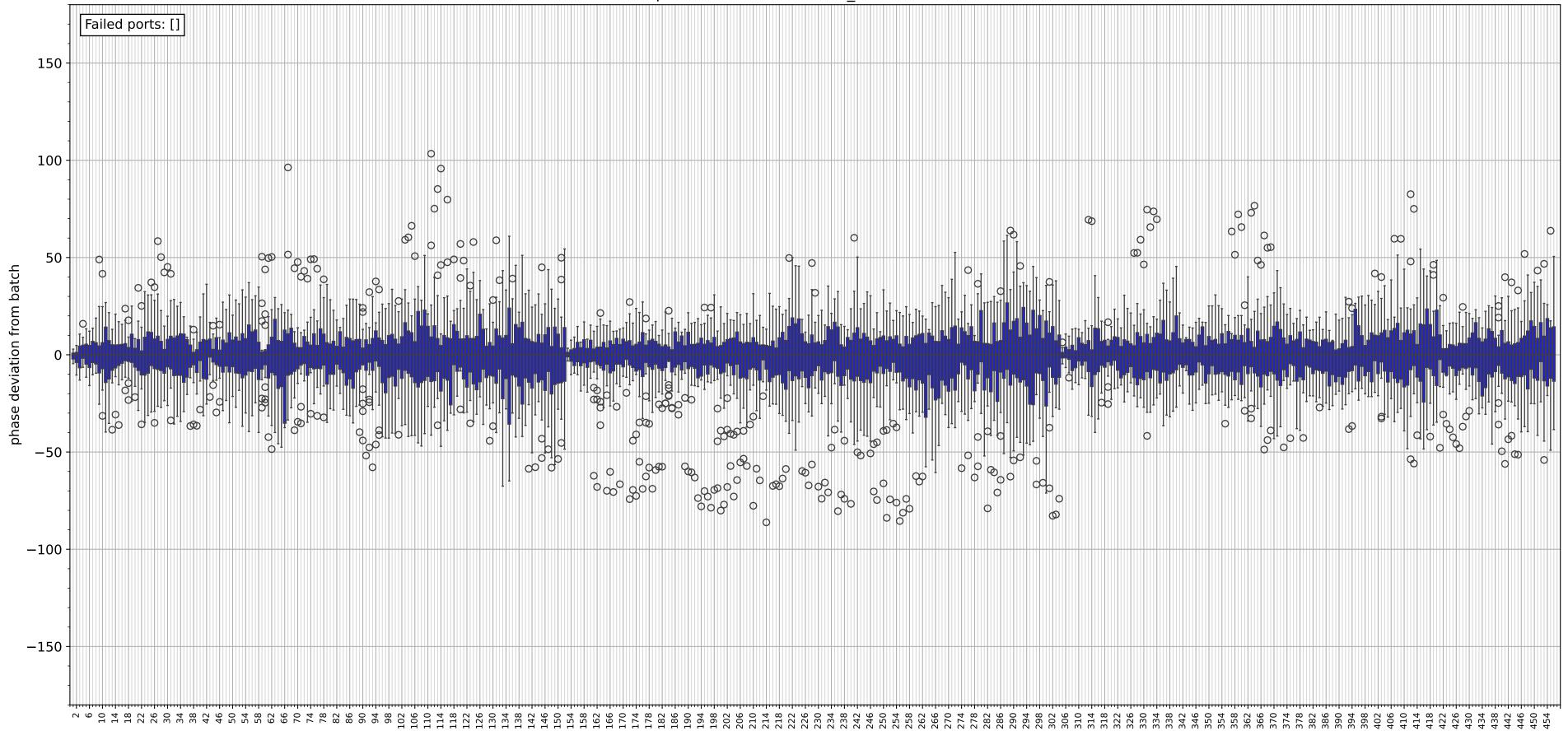
phase: RFA, beam = 2,  $f_set = 29.0$  GHz



phase: RFA, beam = 1,  $f_set = 29.5 GHz$ 



phase: RFA, beam = 2,  $f_set = 29.5$  GHz



phase: RFA, beam = 1,  $f_set = 30.0 \text{ GHz}$ Failed ports: ['287', '295'] 150 0 100 50 phase deviation from batch -50 -100-150

phase: RFA, beam = 2,  $f_set = 30.0$  GHz Failed ports: ['287', '295'] 150 0 100 50 phase deviation from batch -50 -100-150

phase: RFA, beam = 1,  $f_set = 30.5$  GHz Failed ports: ['111', '287', '304', '413'] 150 100 50 phase deviation from batch -50 -100-150

phase: RFA, beam = 2,  $f_set = 30.5$  GHz Failed ports: ['111', '287', '304', '413'] 150 100 50 phase deviation from batch -50 -100-150

phase: RFA, beam = 1, f\_set = 31.0 GHz Failed ports: ['109', '297'] 150 100 50 phase deviation from batch -50 -1000 -150

phase: RFA, beam = 2,  $f_set = 31.0$  GHz Failed ports: ['109', '297'] 150 100 50 phase deviation from batch -50 -1000 -150

Ports with high phase correction spread between TLMs 413(109) 400 304(0) 299(147) 297(145) 300 295(143) 287(135) 287(135) 287(135) 266(114) 237(85) 200 198(46) 112(112) 111(111) 109(109) 100 67(67) 27.5 28.0 28.5 30.0 29.0 29.5 30.5 31.0 freq [GHz]