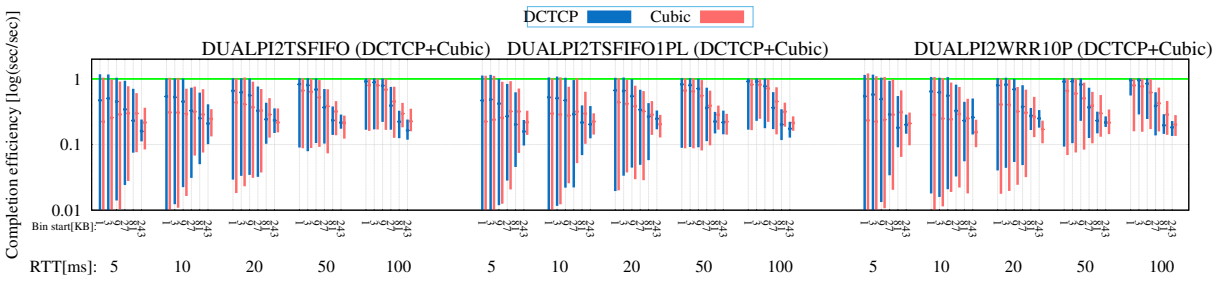
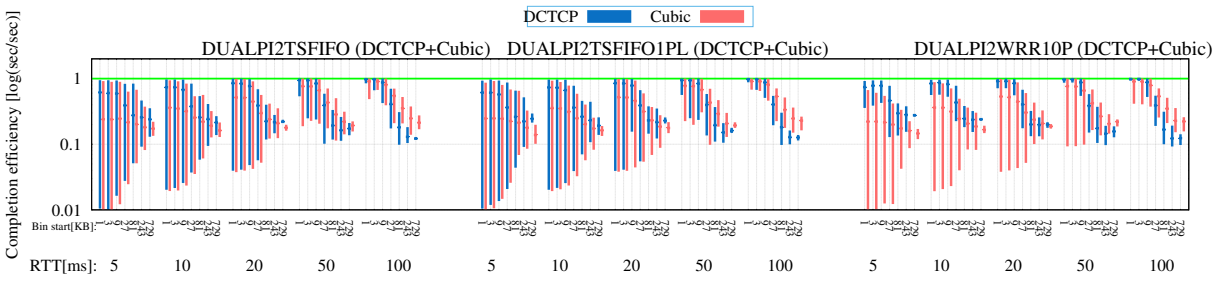
Comparing DualPI2 baseline (time shifted fifo, with and without 1 packet limit enabled) with packet based WRR (DUALPI2WRR101PL) with 1 packet limit enabled(DUALPI2WRR10). ECN threshold was set to 1 ms (not changed 6ms for 4 Mbps link and 2ms for 12 Mbps link, as previously) to test whether 1 packet limit made a difference. The rest of the parameters were default values, except for dc_ecn and dc_dualq. These experiments were done with DCTCP from 3.19 kernel with added response to drops. First column (DUALPI2) shows baseline results, with tsfifo t_shift 40ms, target 20 ms and overload enabled, the second column shows results for the same configuration, but with additional limit of 1 packet in combination with ecn threshold of 1ms for all tests.

Appendix A

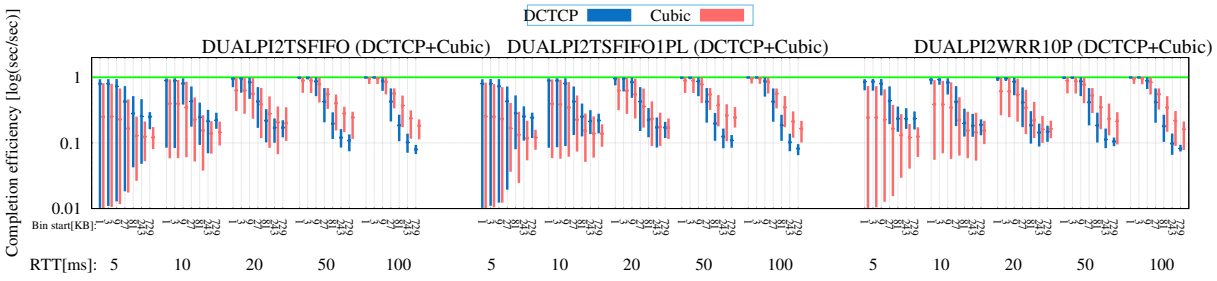
Equal RTT experiments



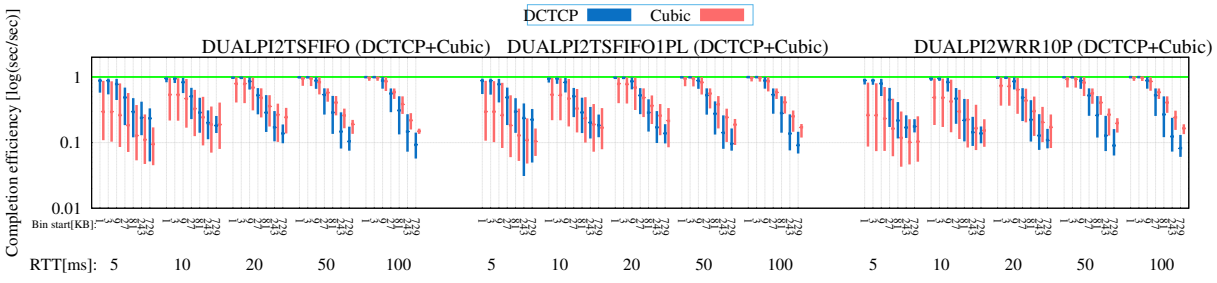
(a) 4Mbps link capacity



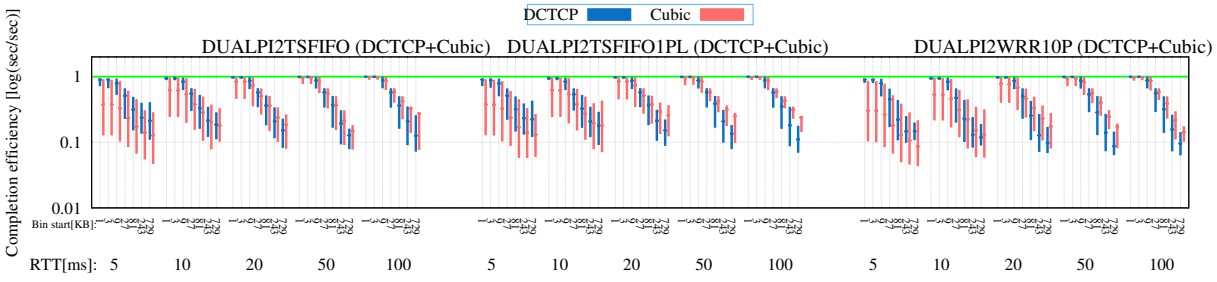
(b) 12Mbps link capacity



(c) 40Mbps link capacity



(d) 120 Mbps link capacity



(e) 200 Mbps link capacity

Figure A.1: Equal RTT (1h-1h)

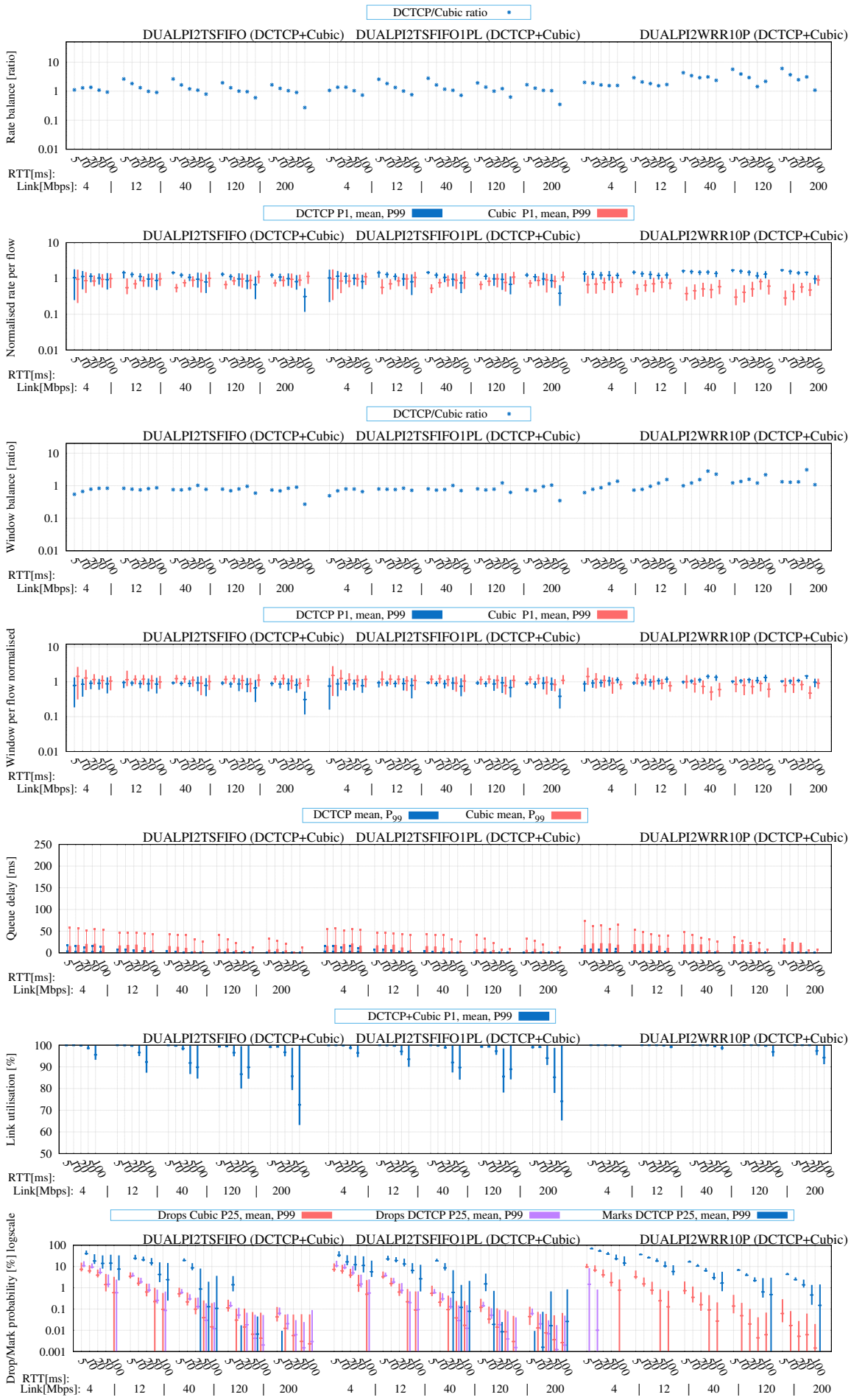


Figure A.2: Equal RTT (1-1)

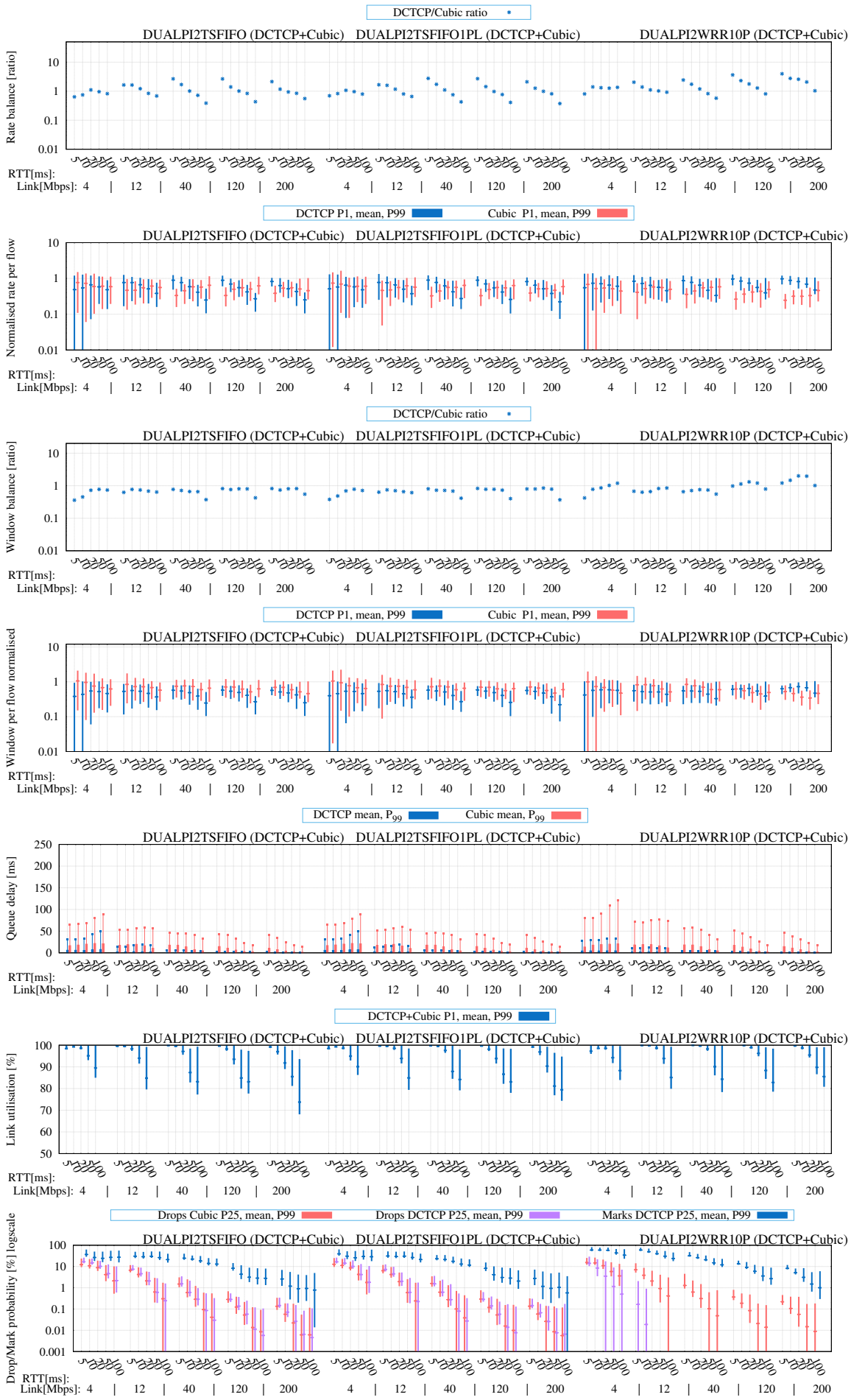


Figure A.3: Equal RTT (1h-1h)

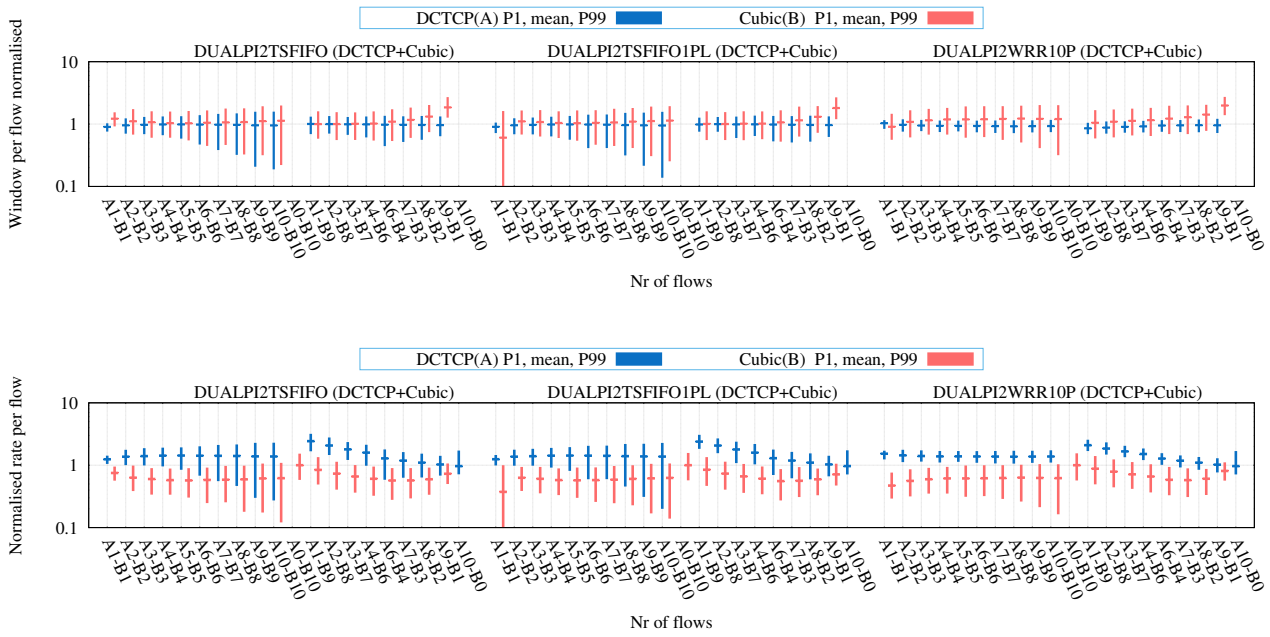


Figure A.4: Normalised rate and window size per flow. 40Mbps link capacity, 10ms RTT. Equal RTT

Appendix B

Mixed RTT experiments

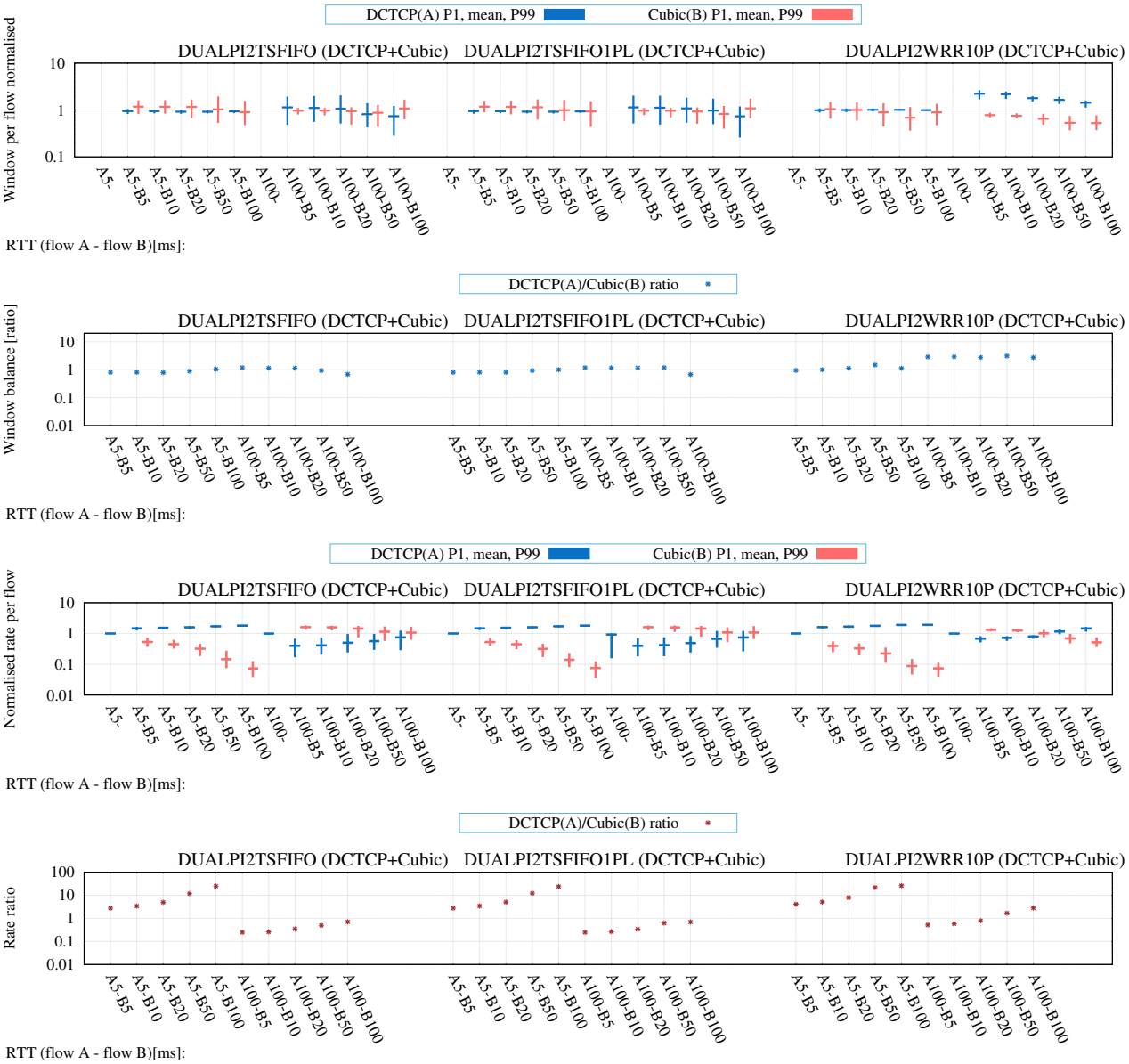


Figure B.1: 1 flow for each CC. Mixed RTT (mrtt2˙link40)

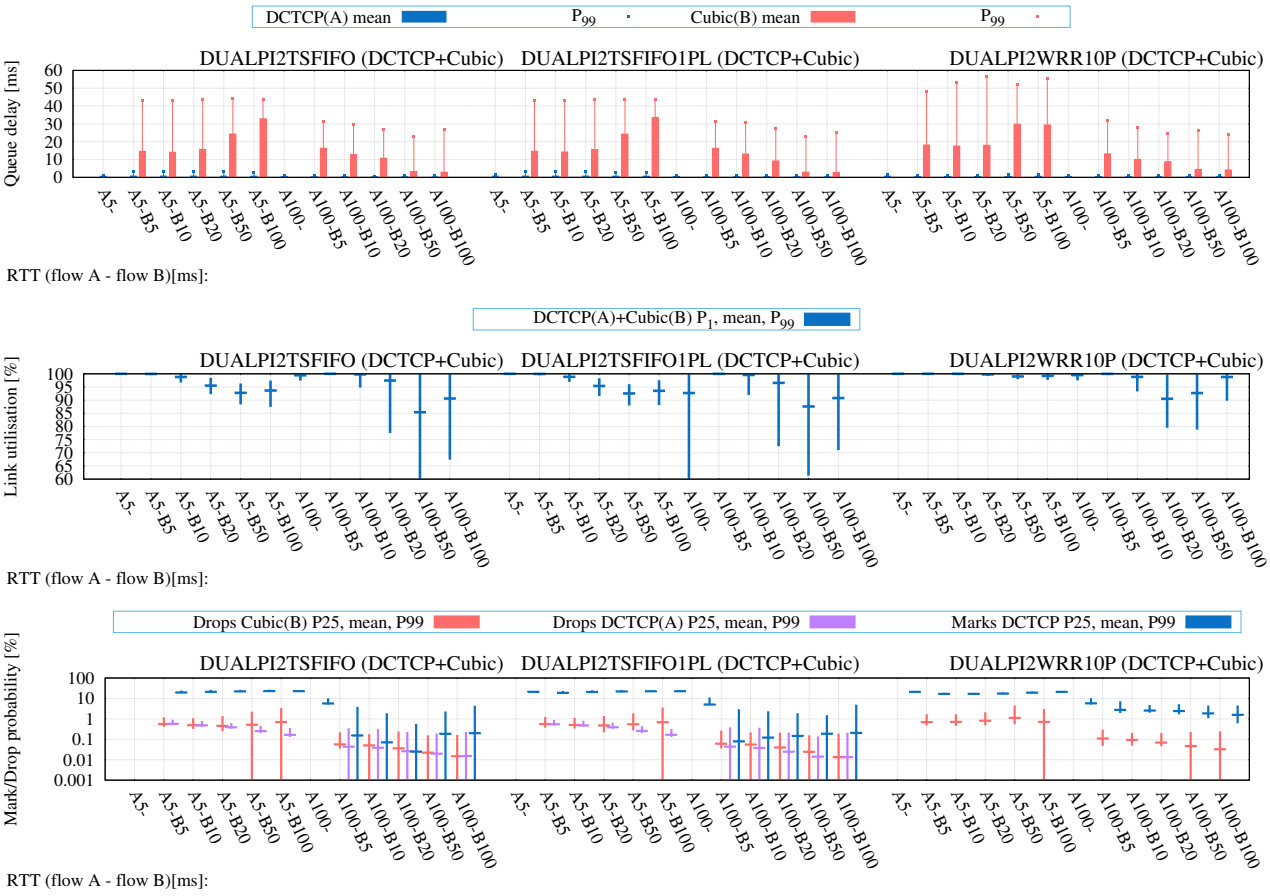


Figure B.2: 1 flow for each CC. Mixed RTT (mrtt2˙link40)

Appendix C

Overload experiments

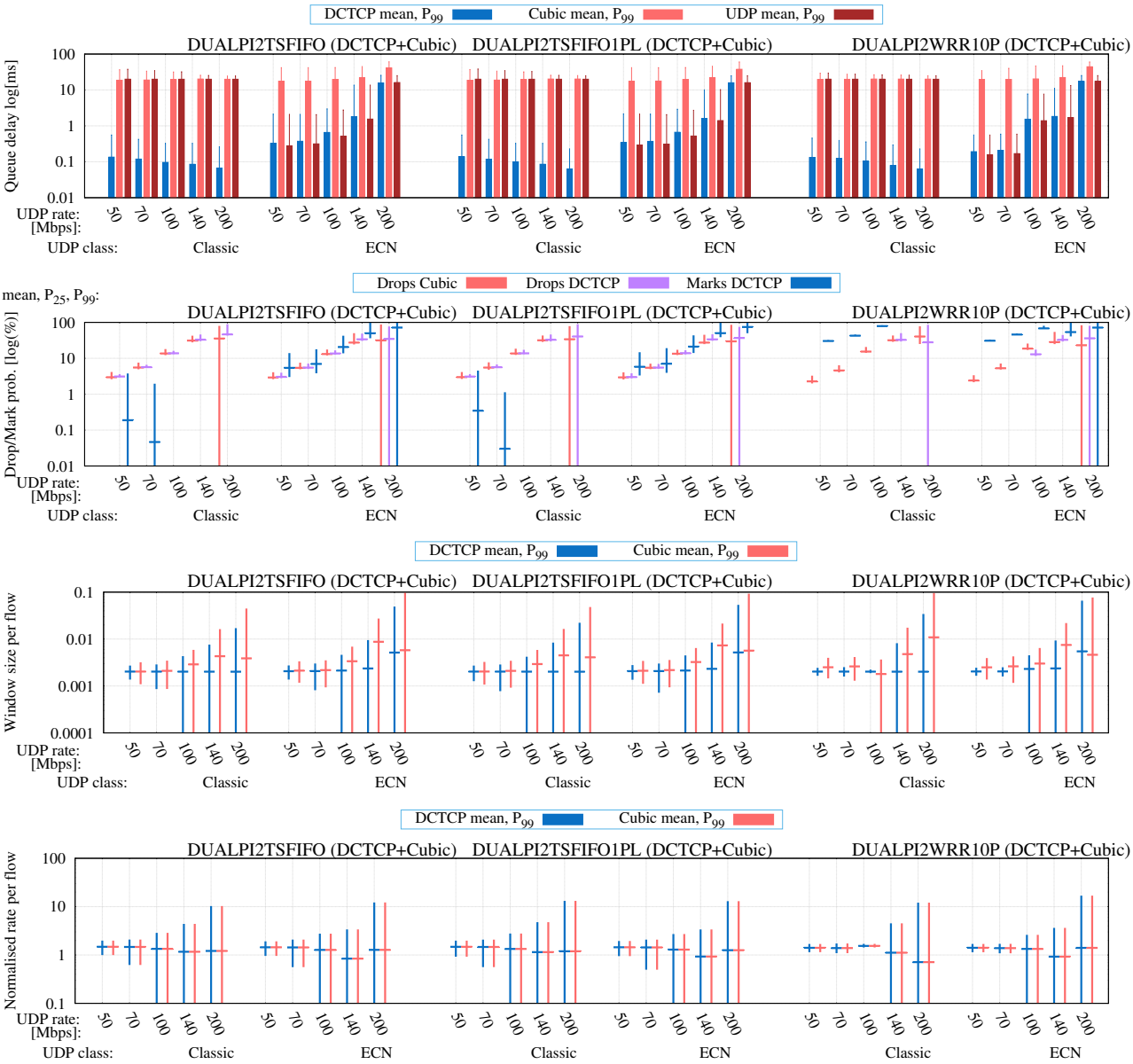


Figure C.1: Overload experiments. 1 flow for each CC