APPENDIX D. PERFORMANCE DATA FROM SECOND PHASE OF TRIAL NETWORK

Figures D-1 through D-4 show cell delay variation for the four channels used by ITS in phase 2 of the network trial (as described in Section 6). The histograms were created using delay measurements from groups of 4096 consecutive cells. A group of cells was captured at 5-minute intervals for a period of 3 hours. Thus, delay measurements for 147,456 cells were used to create the histograms. The bin width of the histograms is 250 ns.

Figures D-5 through D-8 show cell transfer delay for the four channels used by ITS in phase 2 of the network trial (as described in Section 6). Statistics were calculated from groups of 4096 consecutive cells. Statistics include maximum, minimum, mean, and plus/minus one standard deviation. Groups of cells were captured at 5-minute intervals for a period of 3 hours. Thus, each graph consists of 36 sets of the statistics mentioned above. On the graphs, the heavy line indicates the mean; plus/minus one standard deviation is indicated by the shaded area; and the thin lines indicate the maximum and minimum.

Finally, Table D-1 provides a synopsis of the CLRs observed in the experiment. For Phase 2, there were no cell losses except at the highest data rate (149.76 Mbit/s). All CLR values are similar except for channel 212/213. This is most likely due to load variations in the network.

Table D-1. PVC and CLR Values for Phase 2 at 149.76 Mbit/s

Channel	CLR
210	$2.3*10^{-5}$
211	$2.3*10^{-5}$
212/213	$5.0*10^{-6}$
214/215	$2.3*10^{-5}$

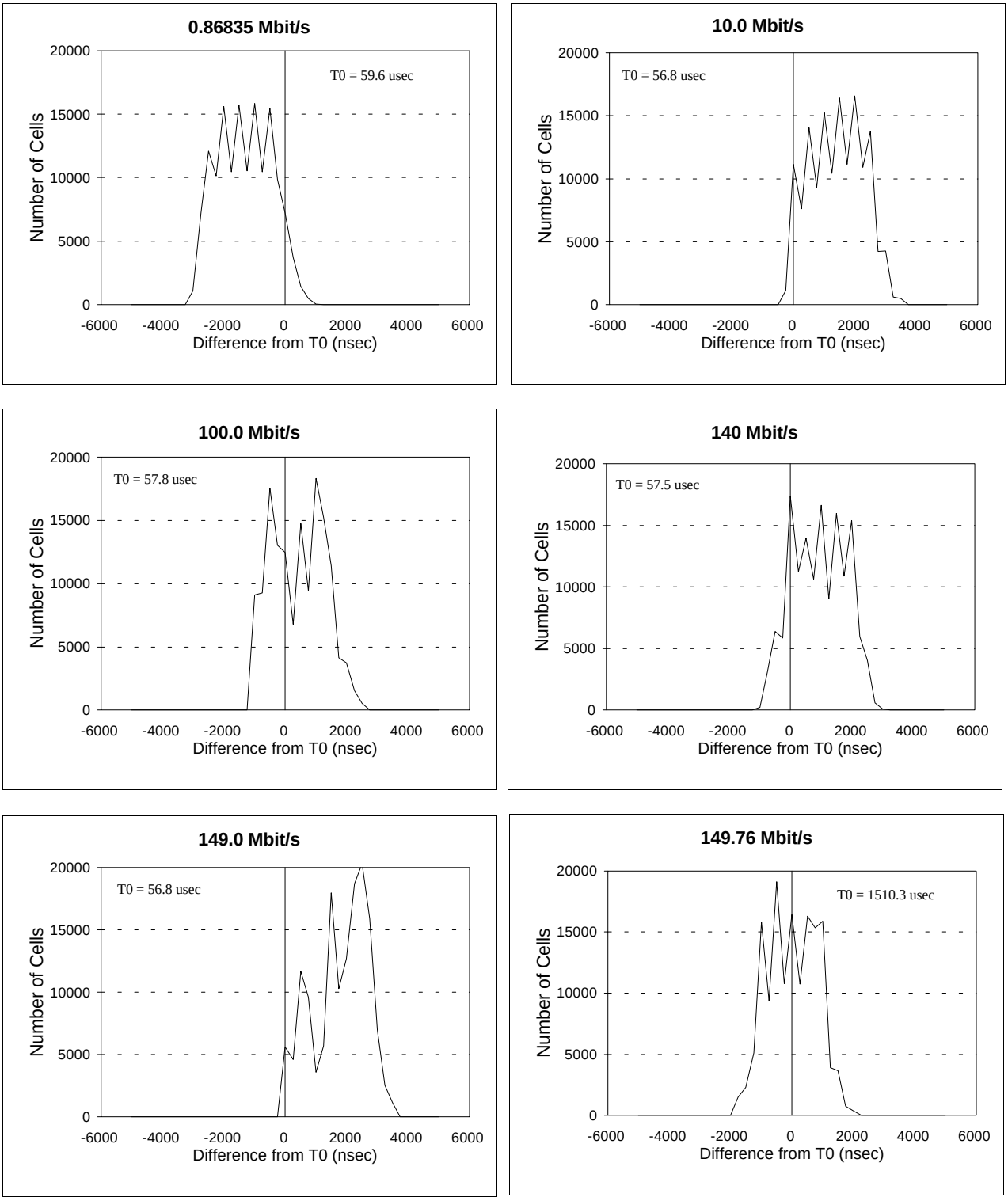

Figure D-1. ATM cell delay variation on permanent virtual connection (PVC) 210.

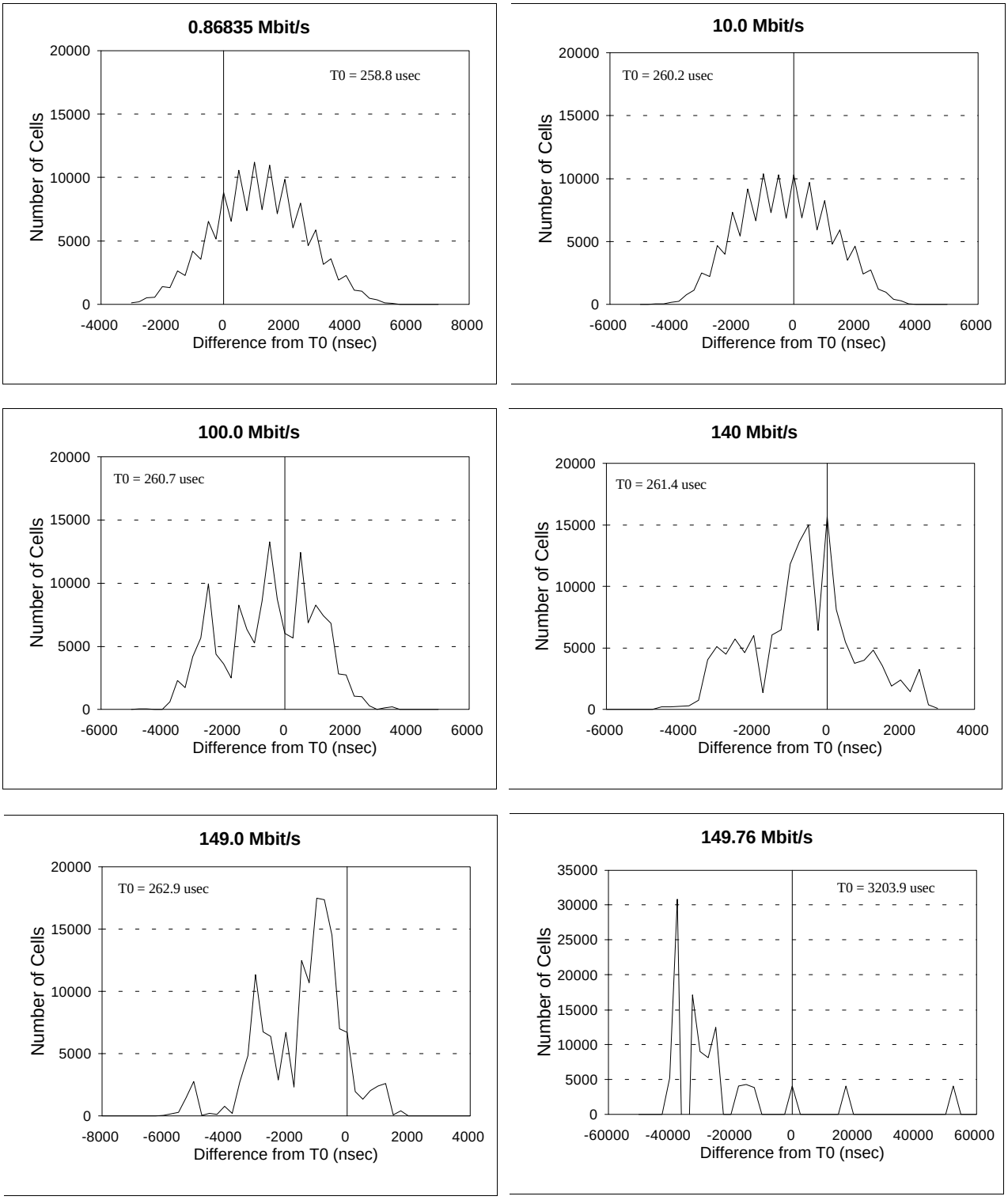

Figure D-2. ATM cell delay variation on PVC 211.

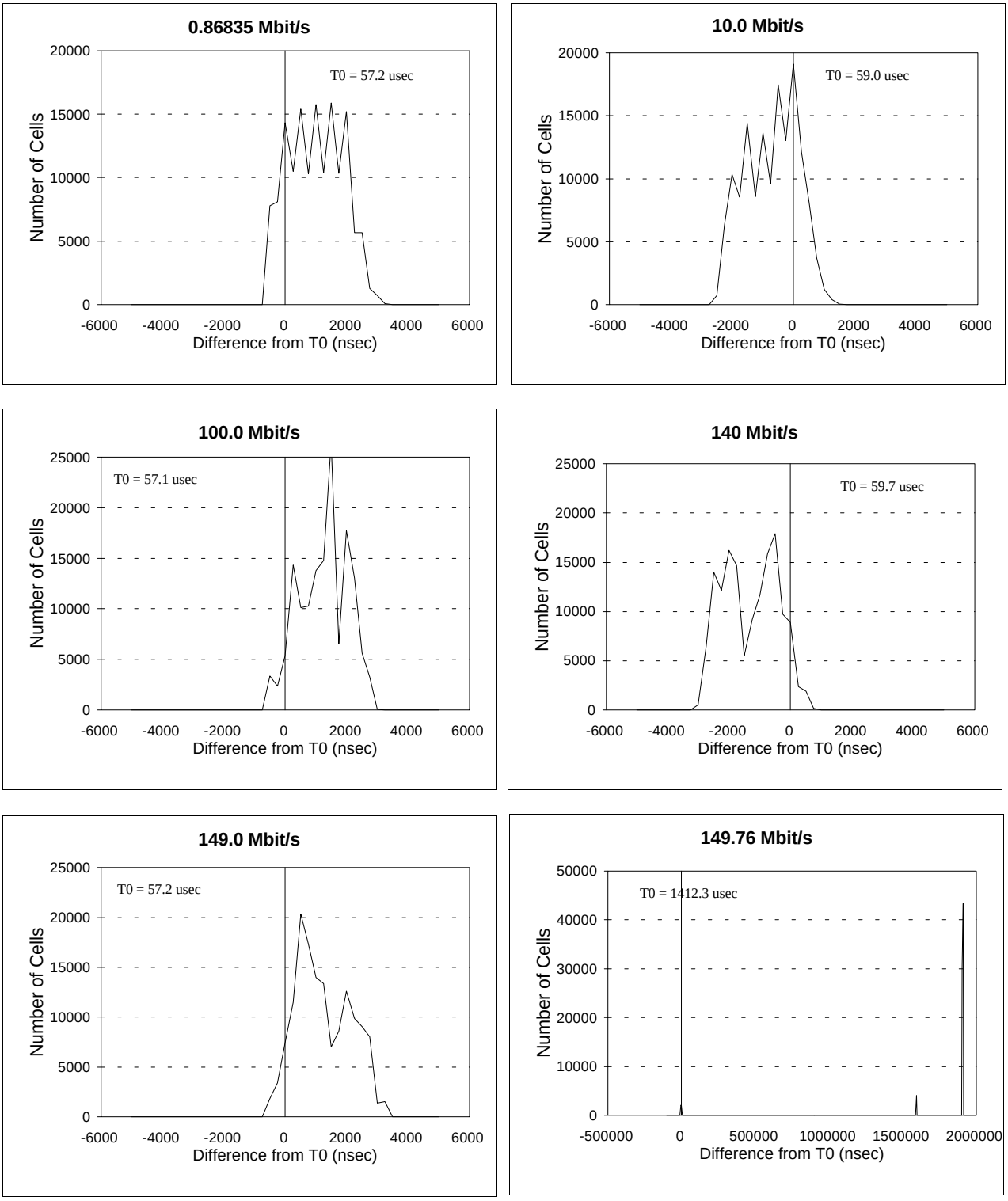

Figure D-3. ATM cell delay variation on PVC 212/213.

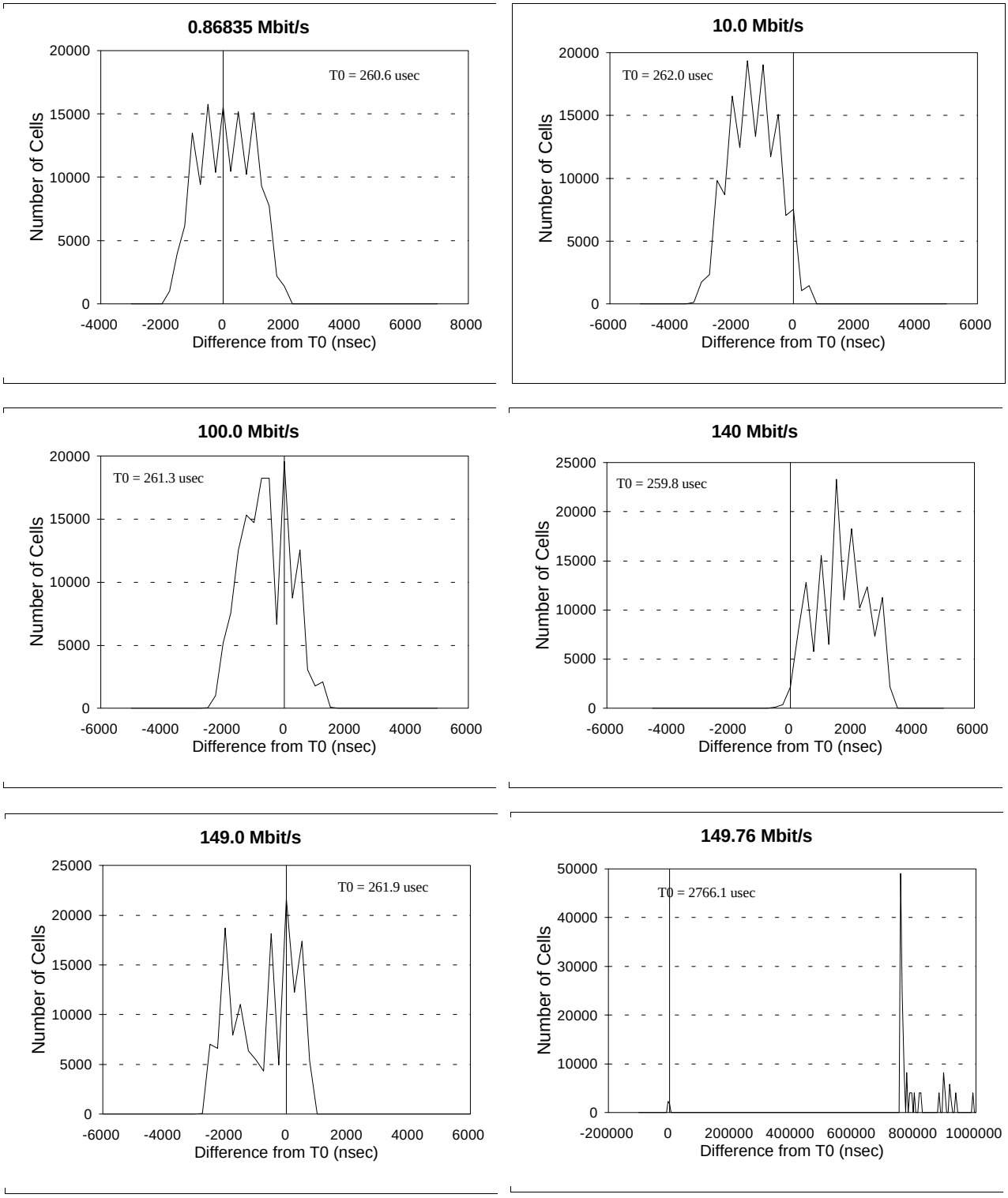

Figure D-4. ATM cell delay variation on PVC 214/215.

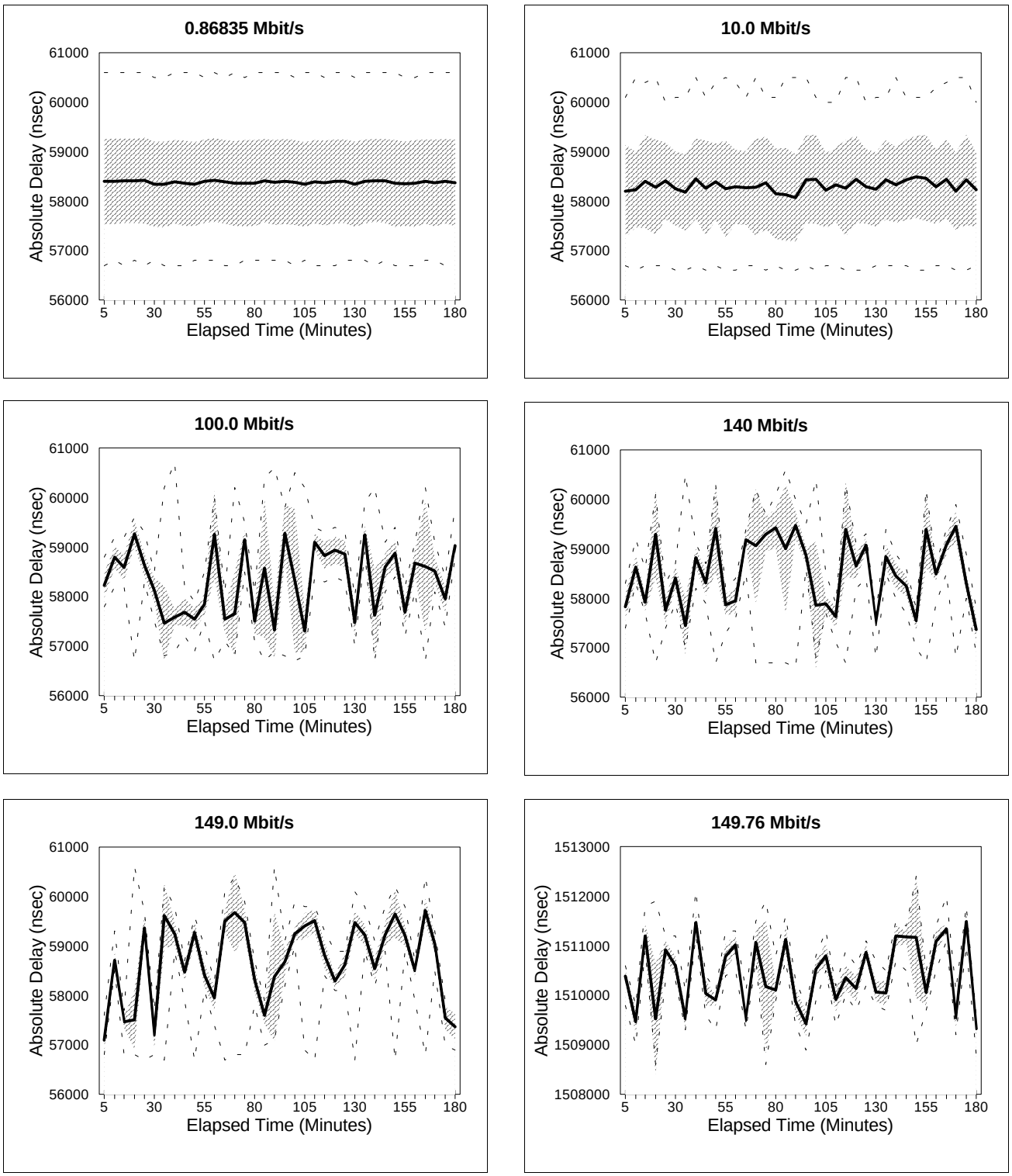

Figure D-5. ATM cell transfer delay versus time on PVC 210 (dark line = mean; dotted lines = max and min; shaded area = +/- 1 standard deviation).

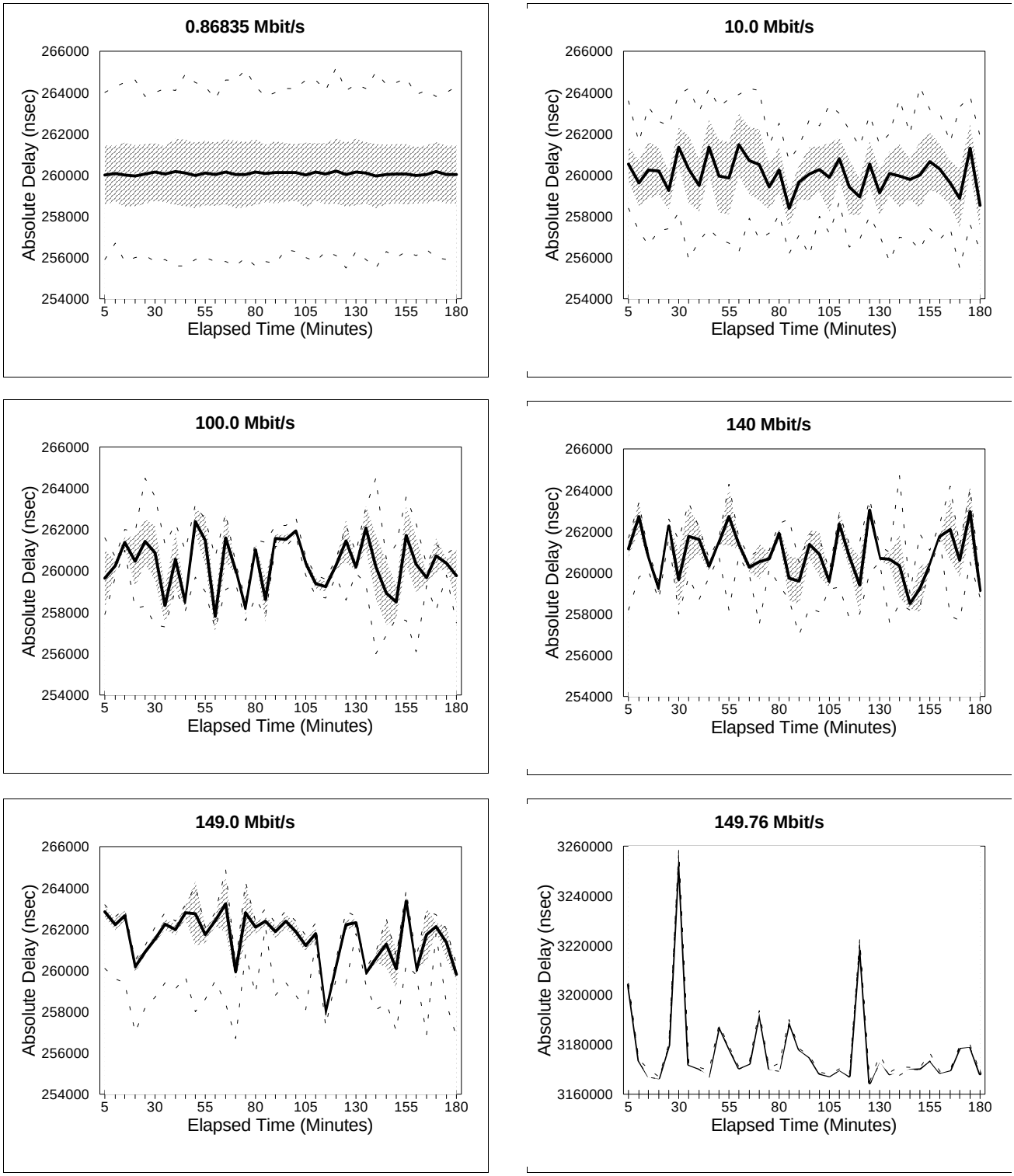

Figure D-6. ATM cell transfer delay versus time on PVC 211. (dark line = mean; dotted lines = max and min; shaded area = +/- 1 standard deviation).

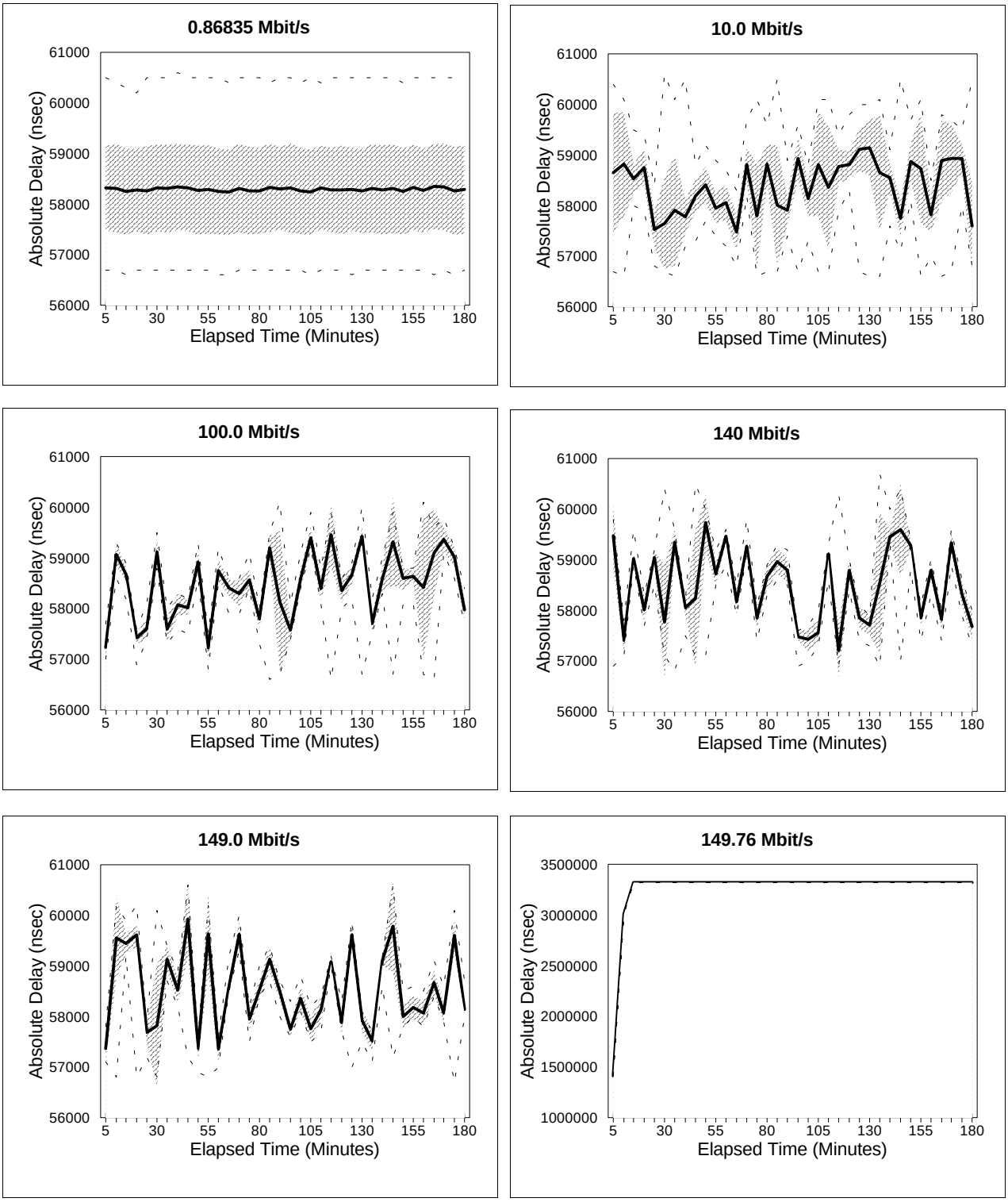

Figure D-7. ATM cell transfer delay versus time on PVC 212/213 (dark line = mean; dotted lines = max and min; shaded area = +/- 1 standard deviation).

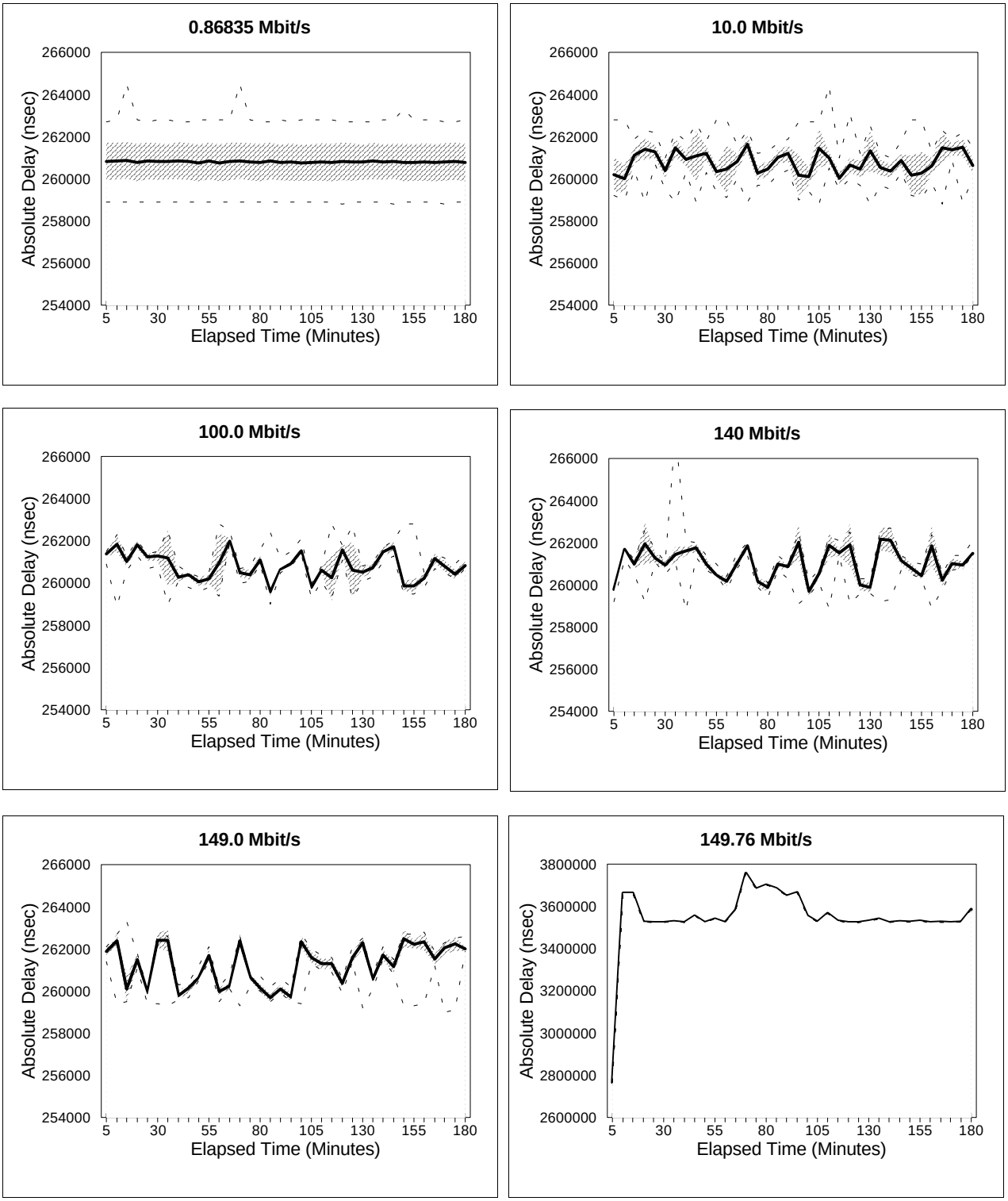

Figure D-8. ATM cell transfer delay versus time on PVC 214/215 (dark line = mean; dotted lines = max and min; shaded area = +/- 1 standard deviation).