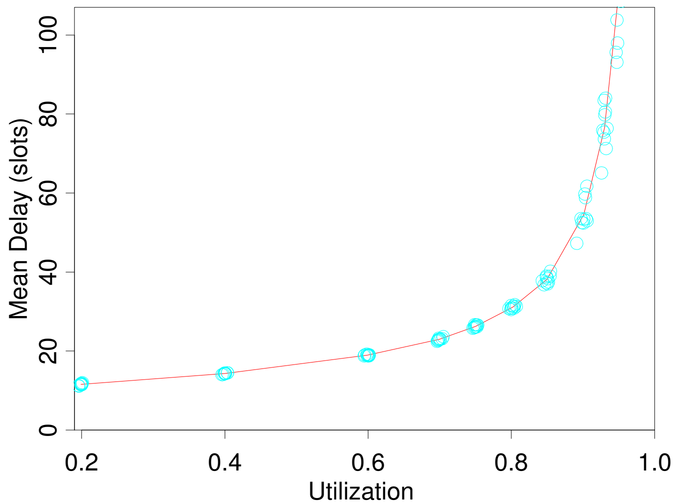

Figure 4: Mean queueing delay as a function of Utilization for the Reference Configuration: Stations = 50, Fiber = 2, Coax = 2, p = 0.2, Traffic (9/3), 1 collision minislot and with data minislot.

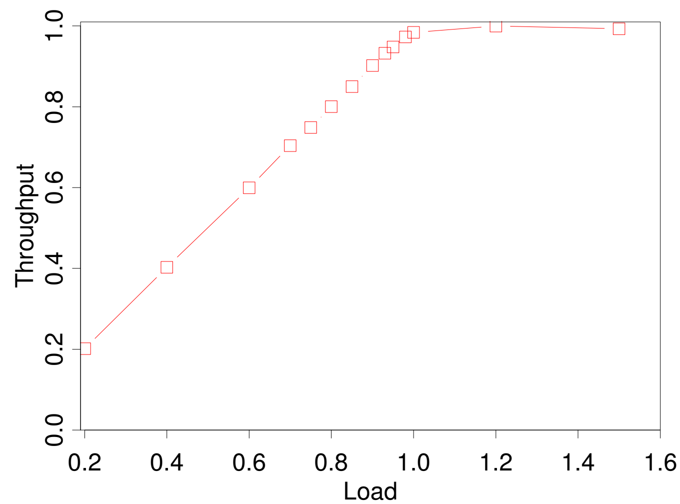

Figure 5: Throughput versus Load in the data channel. The length of the simulation is 550,000 packets up to 0.95 load, for higher loads, the simulation length has been reduced to 110,000 (gathering statistics after 10,000 packets) due to queue build up.

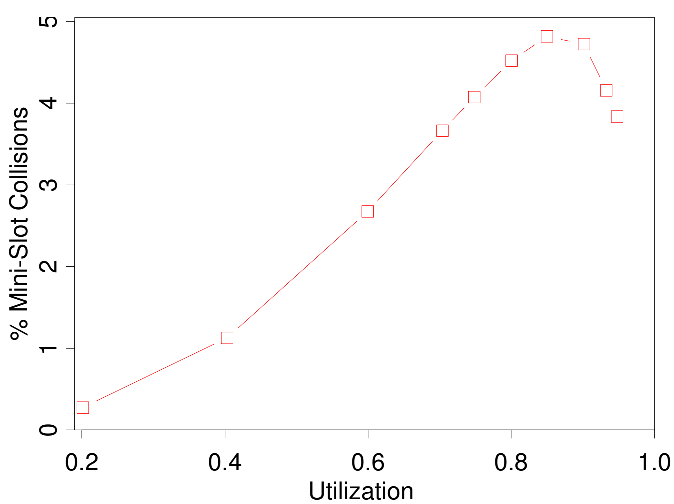

Figure 6: Percentage of collisions in the reservation channel as a function of Utilization. At high loads the usage of the data minislot increases, decreasing the collisions in the collision minislots.

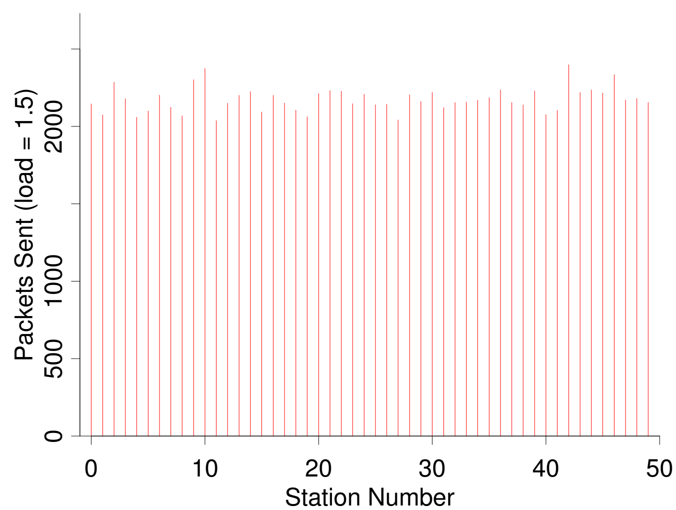

Figure 7: Packets sent by each individual station in overloaded condition (load = 1.5). There is no positional advantage in accessing the medium.

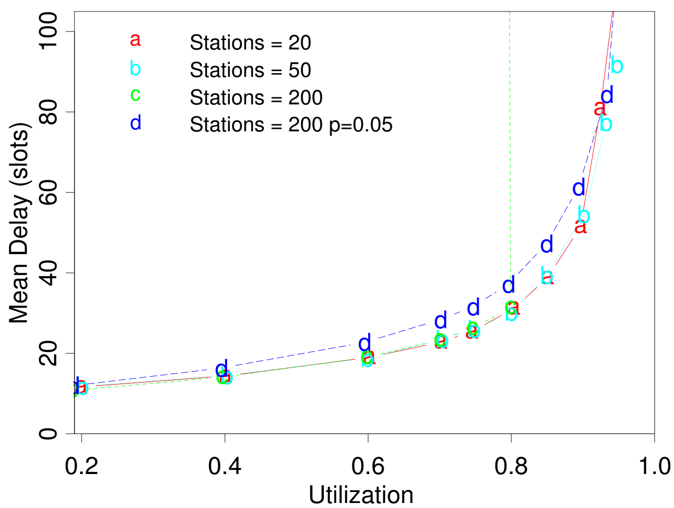

Figure 8: Mean queueing delay versus Utilization for different numbers of stations.

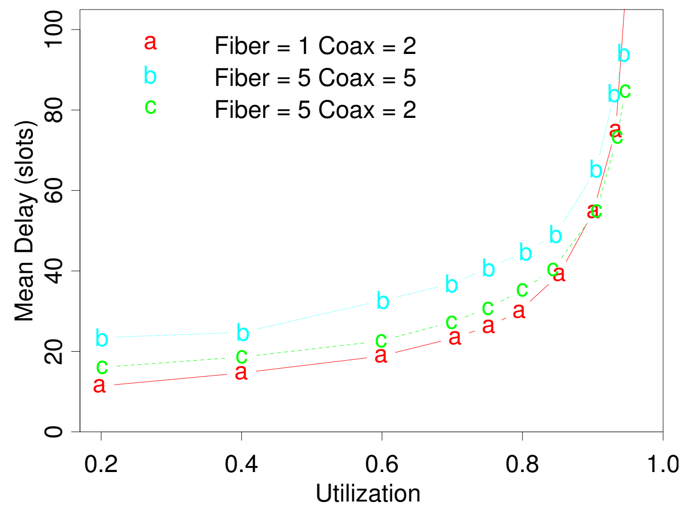

Figure 9: Mean delay versus Utilization for different cable lengths.

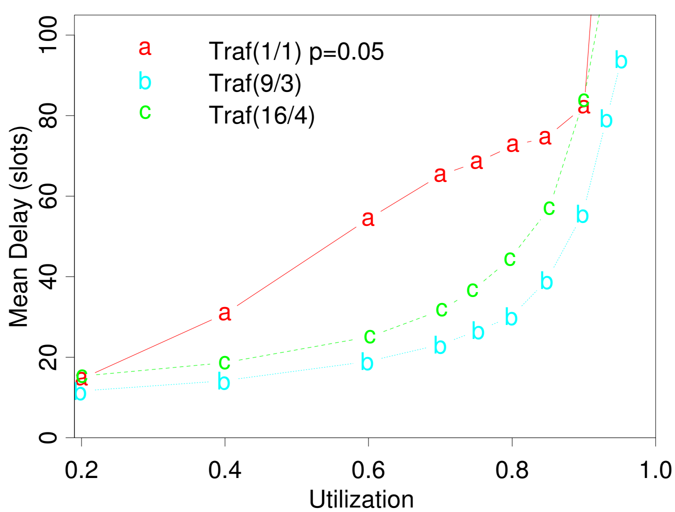

Figure 10(a): Delay versus Utilization for different traffic models using the Reference Configuration except for the p-persistence probability in the Traffic (1/1) where the p has been adjusted to 0.05.

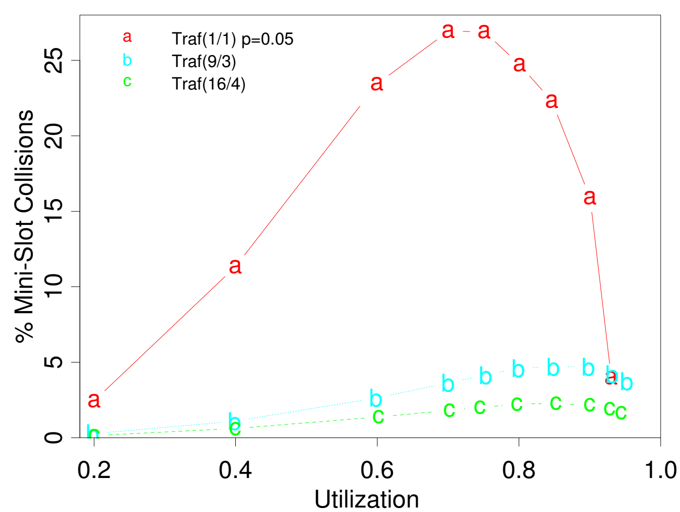

Figure 10(b): Percentage of minislots collisions for different traffic models. Data minislot usage is much greater for traffic models with a small burst length, reducing significantly the contention in the reservation channel at higher loads.

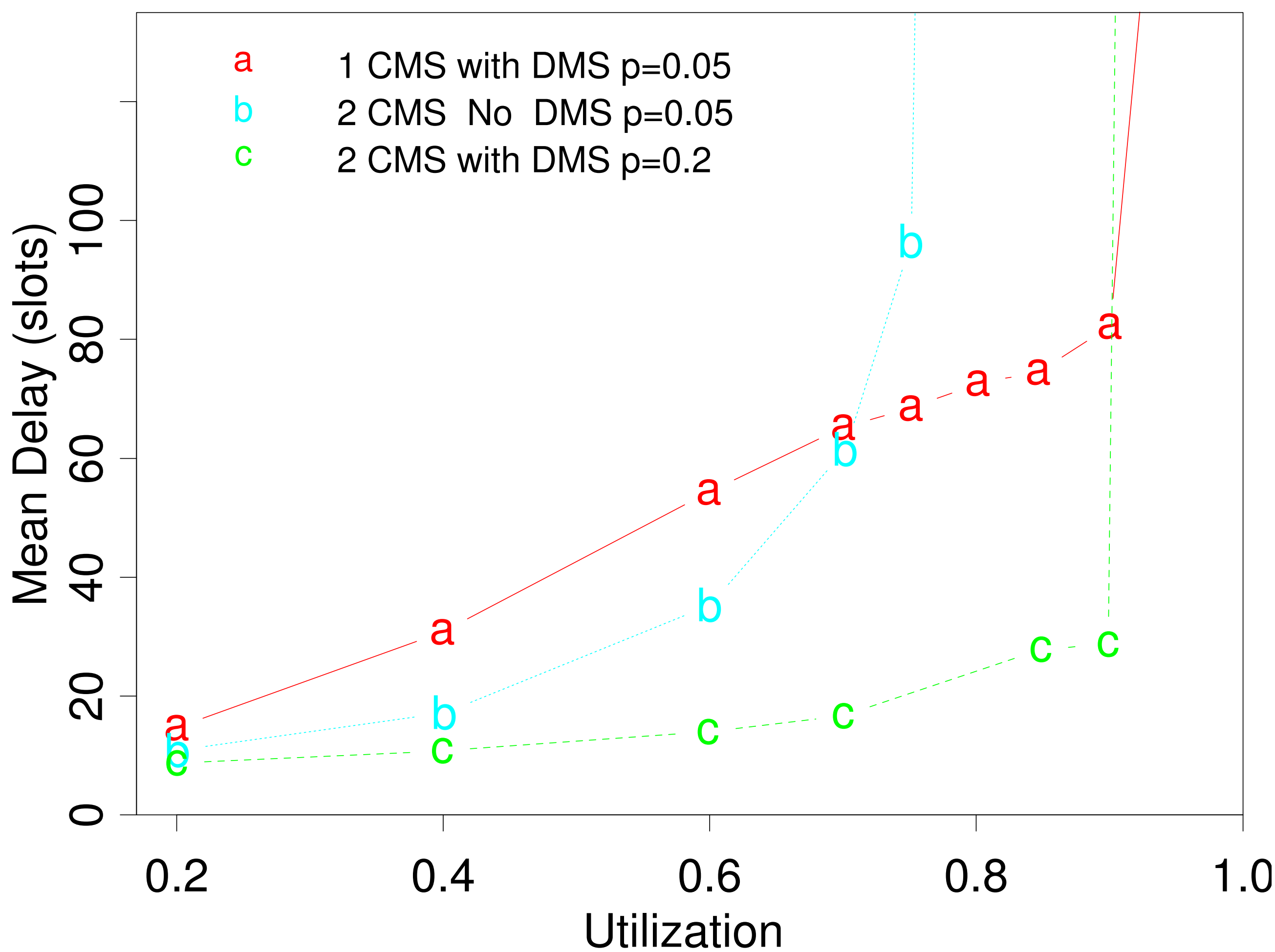

Figure 11: Mean queueing delay versus Utilization for 3 different reservation channels: (a) 1 collision minislot (CMS) with a data minislot (DMS), (b) 2 CMS with no DMS, (c) 2 CMS with a DMS. Even with 2 collision minislots the data minislot plays an important role at high loads.