

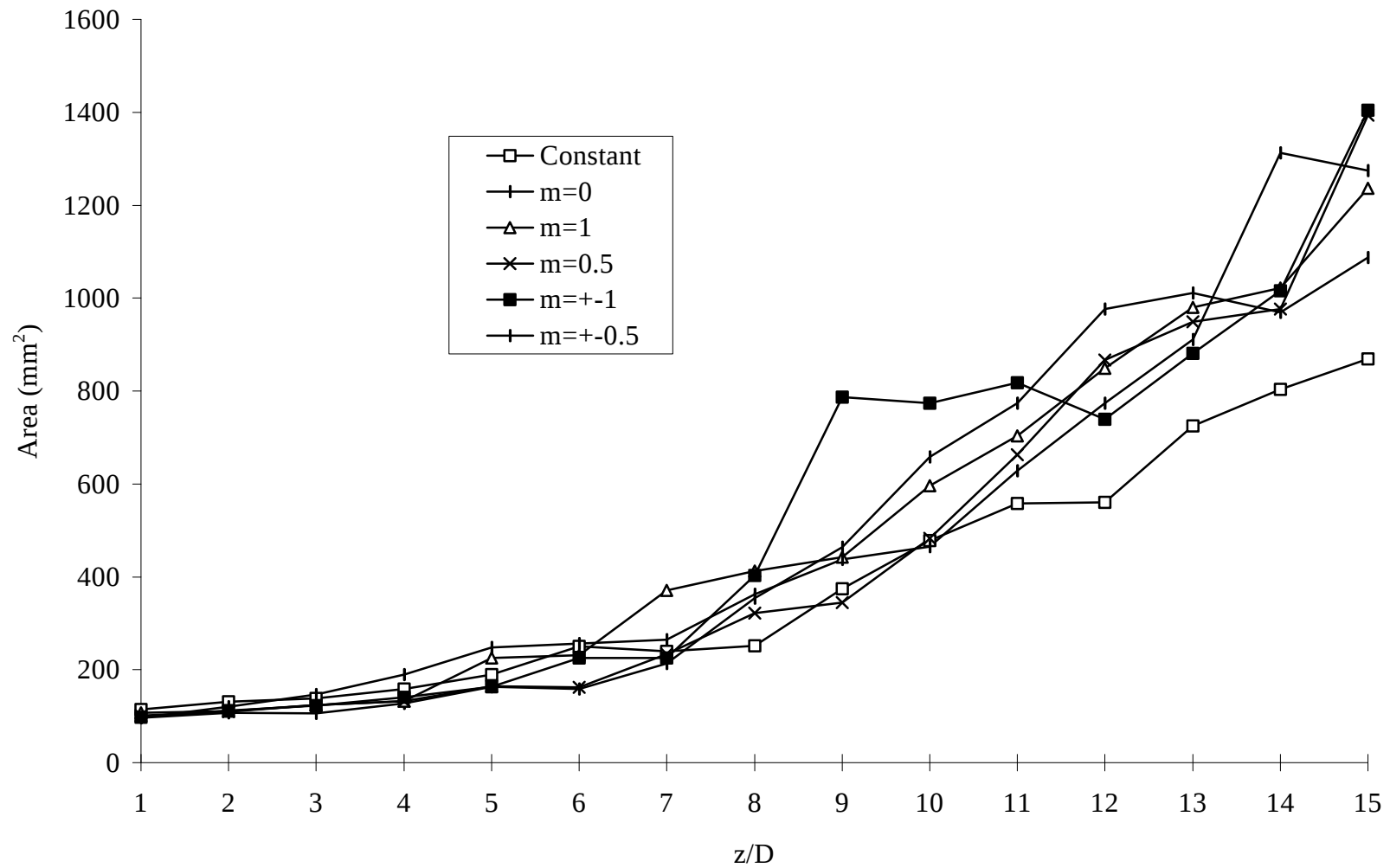


Figure 4.10: Area Enclosed by $I/I_{\max}(z) = 0.5$ Contour vs. Downstream Position
Swirl Nozzle with 10 Hz Pulsation, $MR = 0.08$