Supplementary Information

The rupture of the thin liquid film between the droplets takes place at a point which lies on the line connecting the centers of masses of the two droplets. If the film is very thin but the droplets have not coalesced yet, the x_c-coordinate, which is the distance of the center of the thin film region from the wall, can approximately be calculated from: $x_c \approx x_l - r_l cos\theta$ (see figure 7), with $h << x_l$. In doing so, we can evaluate the coalescence time t_c as a function of x_c. We calculate x_c from the last frame before coalescence takes place. $t_c(x_c)$ was calculated for all coalescing droplet pairs that were also used for the evaluation in section 3. The t_c, x_c pairs were sorted into 30 equal-sized bins of x_c, ranging from 0-500 μm. The width of the collision channel is 500 μm. The mean values $\langle t_c \rangle$ and $\langle x_c \rangle$ were calculated for each bin. To account for the effect of v_0 on t_c, $\langle t_c \rangle(\langle x_c \rangle)$ curves were evaluated for 5 bins of the initial approach velocity v_0 with an average value $\langle v_0 \rangle$ of each bin, which were the same $\langle v_0 \rangle$ bins as in table 1 of section 3. Figure 1 displays the mean coalescence time $\langle t_c \rangle$ of each bin as a function of $\langle x_c \rangle$ for the five different $\langle v_0 \rangle$ bins. Within the statistics of the experiment, no trend of $\langle t_c \rangle$ with changing $\langle x_c \rangle$ can be seen. From this we conclude that the presence of the channel walls in the x, y-plane has no measurable influence on the timescale of film drainage.

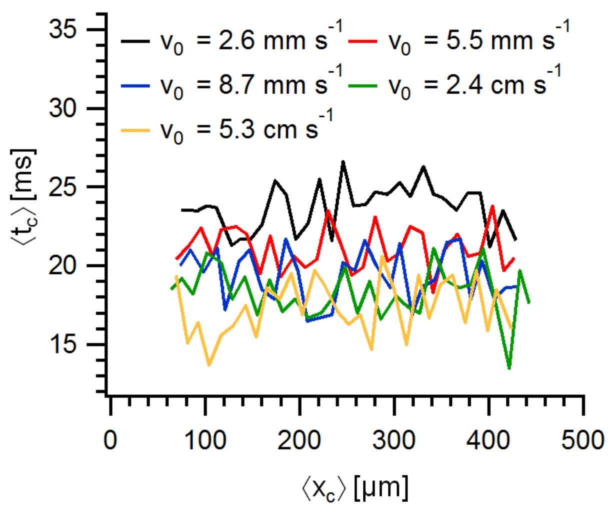

Figure 1: Mean coalescence time $\langle t_c \rangle$ as a function of the mean x-coordinate of the center of the thin liquid film $\langle x_c \rangle$ in the last recorded frame before coalescence took place. The different curves are for different values of the mean initial approach velocity $\langle v_0 \rangle$.