In two-phase simulations, breakup events of liquid ligaments into droplets are prevalent. However, to resolve the exact breakup process is very expensive in terms of computational cost because the length scale of a breakup event approaches to zero in its process. Thus, the idea here would be to train NN using velocity fields of many breakup events. Local Reynolds number and Weber number can be useful in this exercise. On the Re-We plot, we can plot many sample data, and then, draw a breakup probability map. We can setup to a threshold on that probability to determine whether the breakup occurs or not. Using the supervised learning we can train the model, and as a metric for success, we can compare the total numbers of droplet that are generated by the model and the high-fidelity simulation.