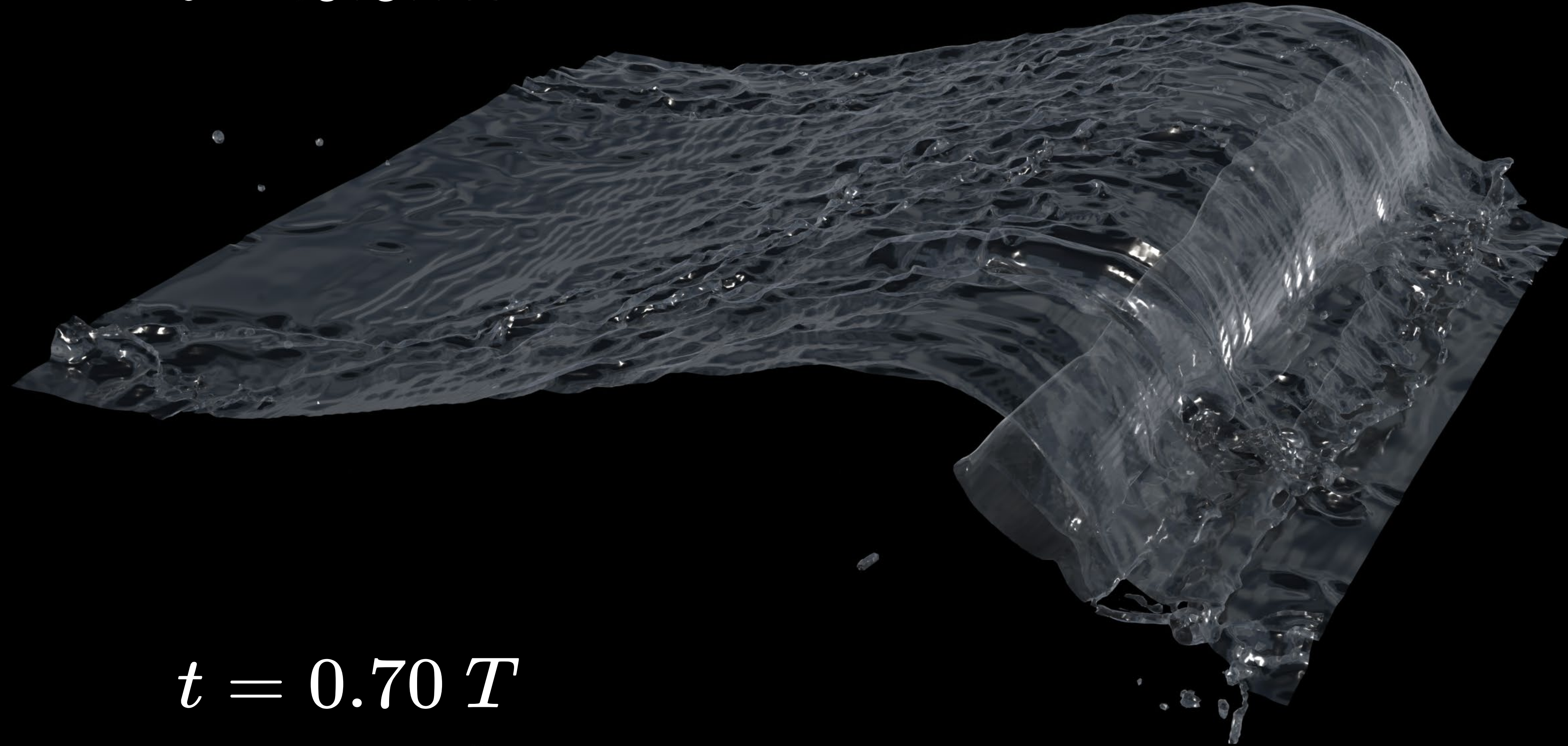


Spray Generation in Breaking Wind-Waves

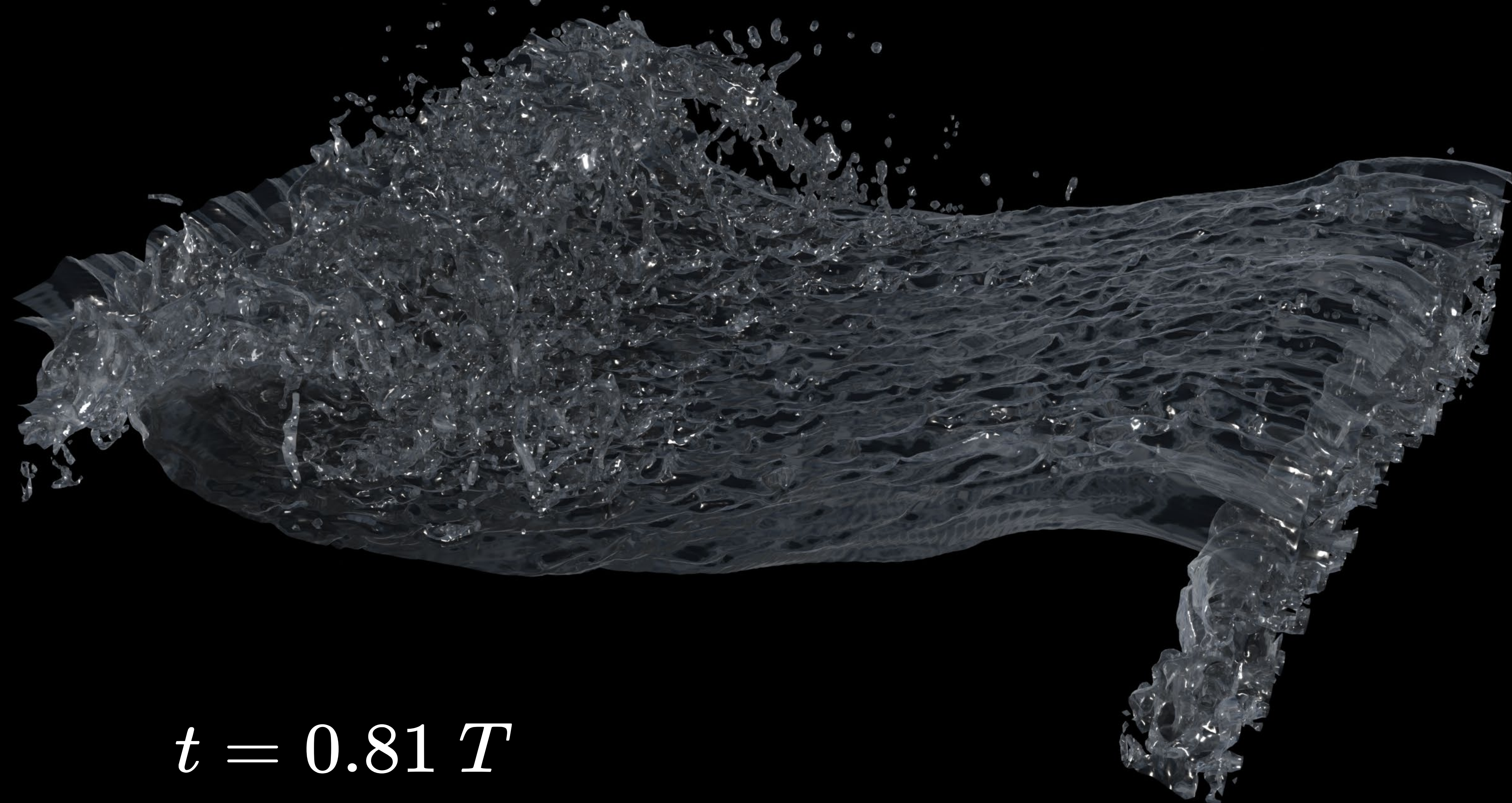
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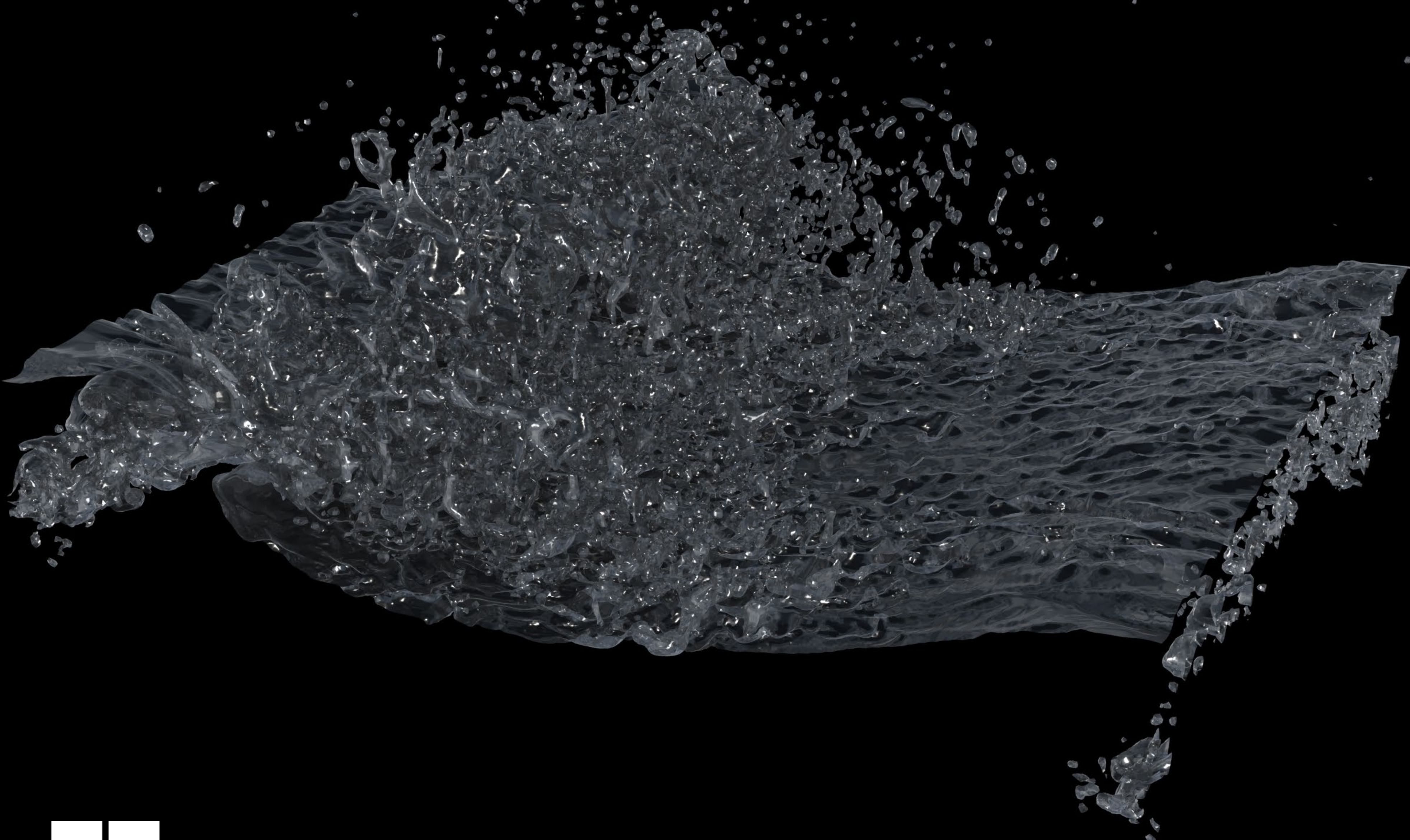
$t = 0.51 T$



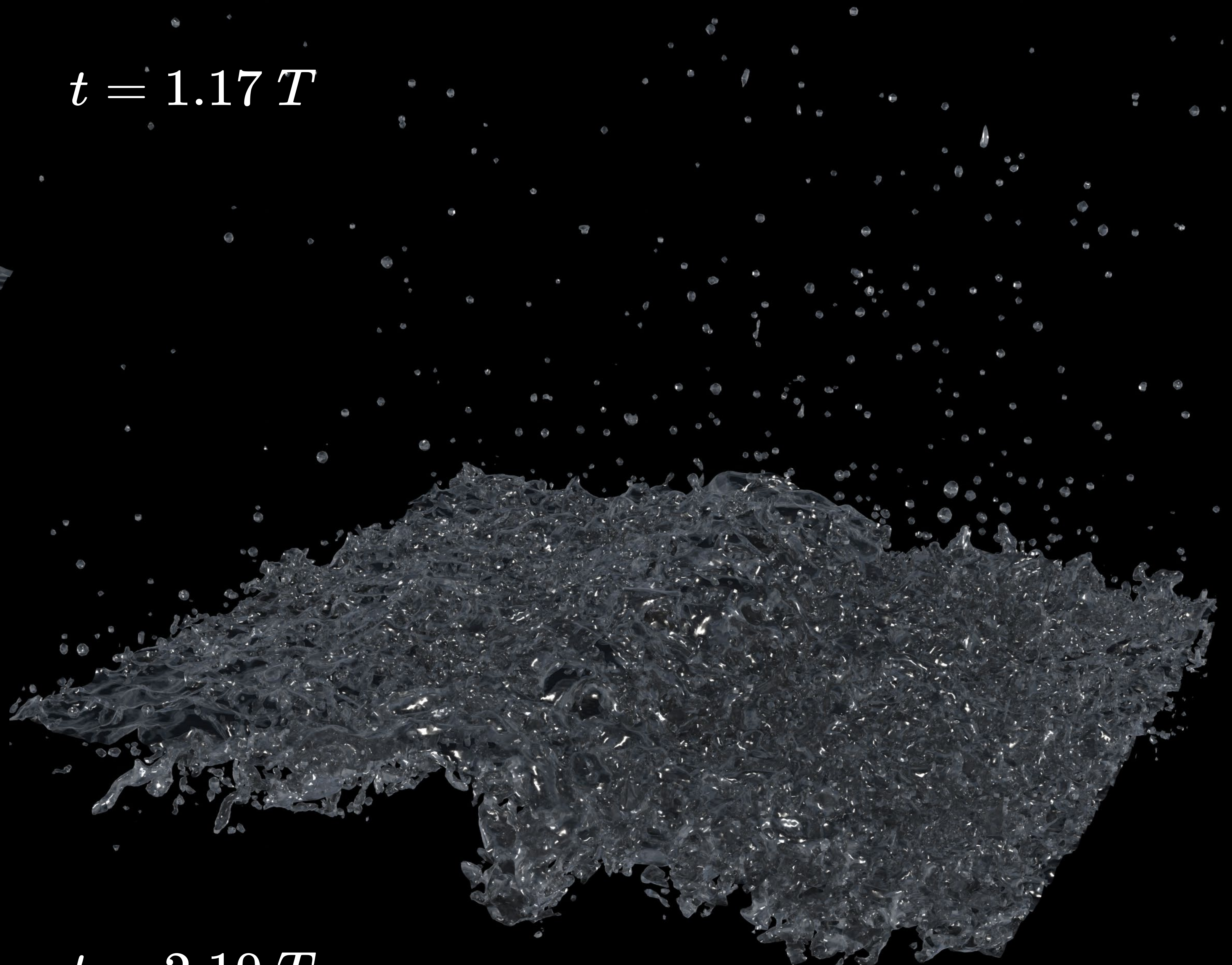
$t = 0.70 T$



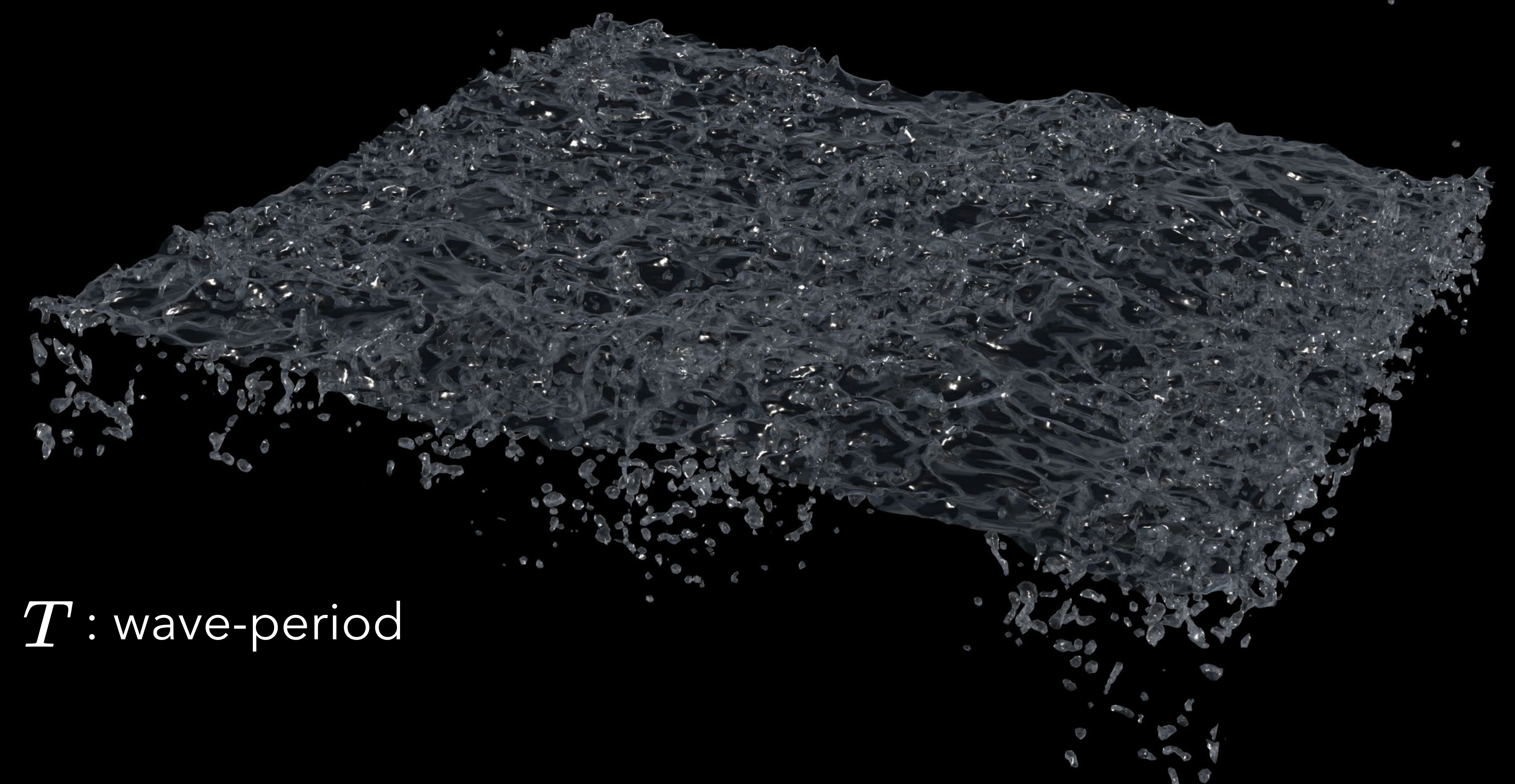
$t = 0.81 T$



$t = 1.17 T$



$t = 2.10 T$



T : wave-period

The figures depict the process of spray formation captured by a 3D Direct Numerical Simulation of a plunging breaking wave ($Re=440,000$) in turbulent wind conditions. As the wave collapses, it interacts with the wind, leading to the ejection of droplets into the air. These airborne droplets disperse in all directions, with their residence times depending on their sizes, where larger droplets tend to settle quickly due to gravity.