The data provided was collected by Dr Matt Bird. The method was slightly different from that described in the script; rather than viewing the image through the microscope directly, it was collected via a webcam and viewed on a computer screen.

Oil droplets were introduced to the chamber as described in the script, then the voltage across the plates was adjusted until a selected droplet was neither falling nor rising.

The webcam software started to record, then the plates were earthed, so the oil droplet began to fall.

The falling motion was recorded for several seconds, then the recording was stopped.

Separate software called 'Tracker' was then used. The oil droplet of interest was identified to the software, then a table of the vertical position of the droplet as a function of time was generated. The error in vertical position for all readings is 5×10^{-5} m.

In order for these measurements to be accurate, the lines on the reticle, which were 0.1 mm apart, were used to calibrate the software.

30 droplets were recorded in this manner. The data is all stored in the Origin file attached, with details of the voltage required to hold each droplet stationary and the thermistor resistance indicated in the table header.

Example: The workbook for Drop 1 is labelled 'Drop_1_604p9V_2M037. The voltage was 604.9V, and the resistance was 2.037MΩ .

For all of these readings you may take the error in the voltage as 0.1 V, and the error in the thermistor resistance as 0.001 MΩ.

Finally, the density of the mineral oil used in this experiment is 886 ± 1 kg m^{-3}, and the spacer thickness, measured with a micrometer, is 7.7 ± 0.1 mm.

If using this data for a formal report make sure to acknowledge the help from Dr Bird.