Difference between Polynomial and Young Laplace Method

Calibration Process · https://dropletlab.com/knowledge-doc/what-is-the-difference-between-polynomial-and-young-laplace-method/

The table below highlights the key differences between Polynomial and Young Laplace methods.

Young - Laplace Method	Polynomial Method
Uses the whole drop profile to calculate the contact angle value	Uses only a certain percentage of the drop profile to calculate the contact angle value.
Only compatible with an axisymmetric drop. This is not always seen in practice, as a needle is typically inserted into the drop to increase/decrease the drop volume.	Compatible with both axisymmetric and non-axisymmetric drops.
Measurement results are more consistent compared to the polynomial fitting method.	Measurement results are less consistent, as they are affected by local surface imperfections.