

Supplementary materials for

Uncertainties in Contact Angle Goniometry

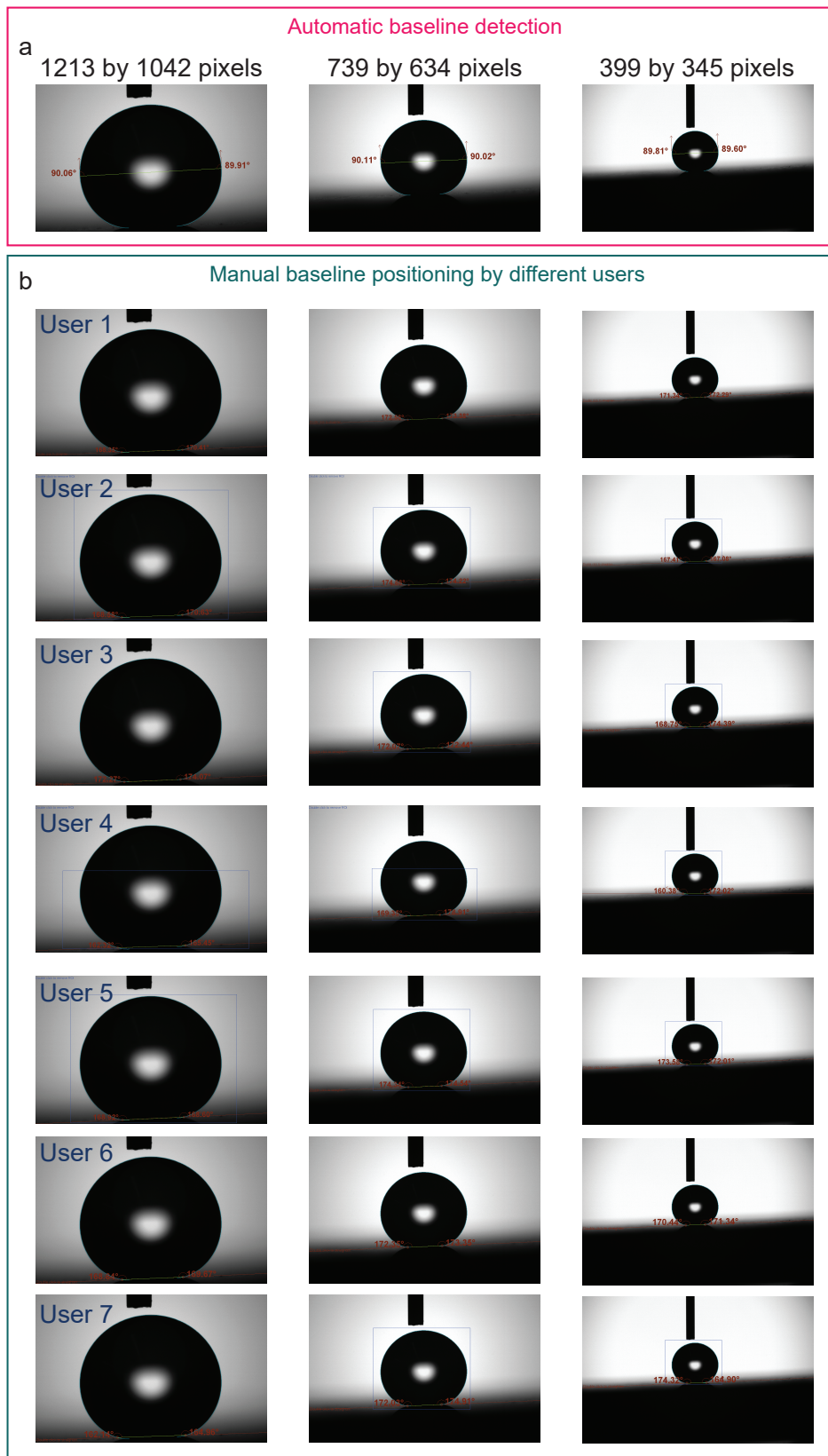
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Differences in contact angles obtained by different users using the same image for the analysis

Automatic baseline detection usually fails for the surfaces that are not reflective. One example of the failure of automatic baseline detection is shown in Supplementary Figure 1a for different pixel dimensions of the droplet (the number of pixels along the width and the height of the droplet). In such a case, the user needs to find the baseline position manually. We let seven experienced users place baseline manually for the same droplet images. Supplementary Figure 1b demonstrates that contact angle goniometry remains subjective and the difference in obtained contact angles can be up to 10° even if the same image is analyzed.



Supplementary Figure 1. Automatic and manual positioning of the baseline for three different pixel dimensions of the droplet (1213 by 1042 pixels, 739 by 634 pixels and 399 by 345 pixels). **(a)** Automatic baseline detection fails and results in incorrect contact angle values. **(b)** The results obtained by manual positioning of the baseline for seven independent, experienced scientists using the same image for analysis.