



Parameters to be changed by the user in the graphical user interface (GUI) and resulting data generated by the plugin acting on an input image (top). The window length chosen by the user to define major protrusions ($\text{Window}_{\text{major}}$) and the sensitivity threshold value of b -ratio for detecting protrusions (dashed black line) are illustrated. Detection of protrusions by b -ratio (det) and localisation of them by maxima in b -product (max) are labelled in the graph. The plugin considers the outline as a closed polygonal line, and so the location of the third peak, i.e. the maximum in b -product between 'det 3' and 'det 1', appears before 'det 1' on the graph. E = eccentricity between perimeter and rounded perimeter, RP = rounded perimeter.