**Task 3**

I compared the centroids of ellipses drawn on the resulting regions of the common pixels in Task 2 to the results of Task 3.

The coordinates of the centroids from Task 2 are mostly similar to the coordinates of the centroids from Task 3, with a difference of approximately ±4 maximum. In 13.33% of the images, the difference between the coordinates resulted in Task 2 and Task 3 is the greatest, being in the range of 6.1 to 12.31, for both X and Y. In conclusion, both algorithms produced similar results and detected similar centers of faces, which are the mouths.