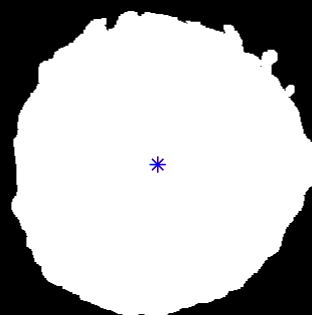
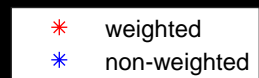
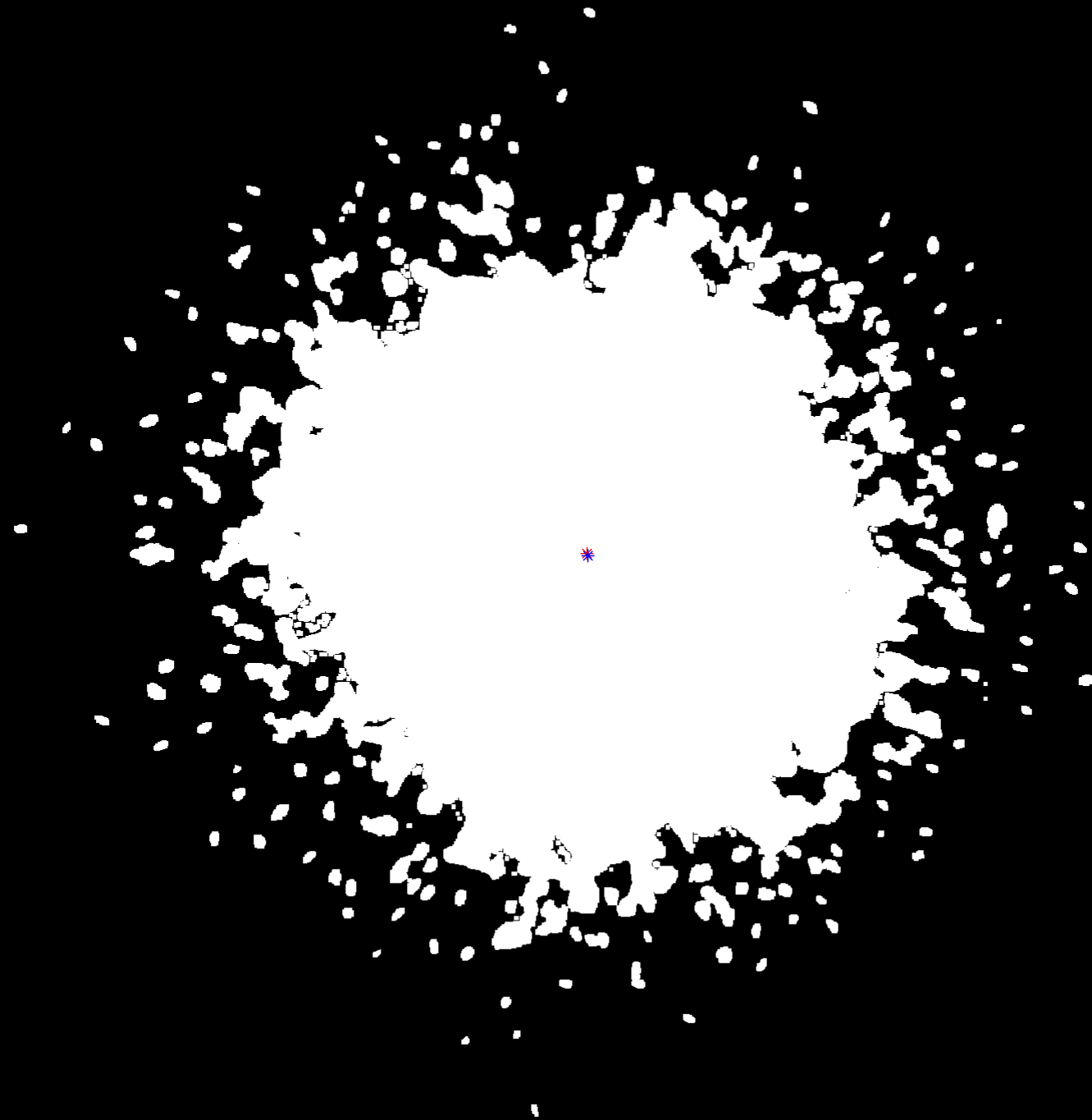


# spheroid centroid

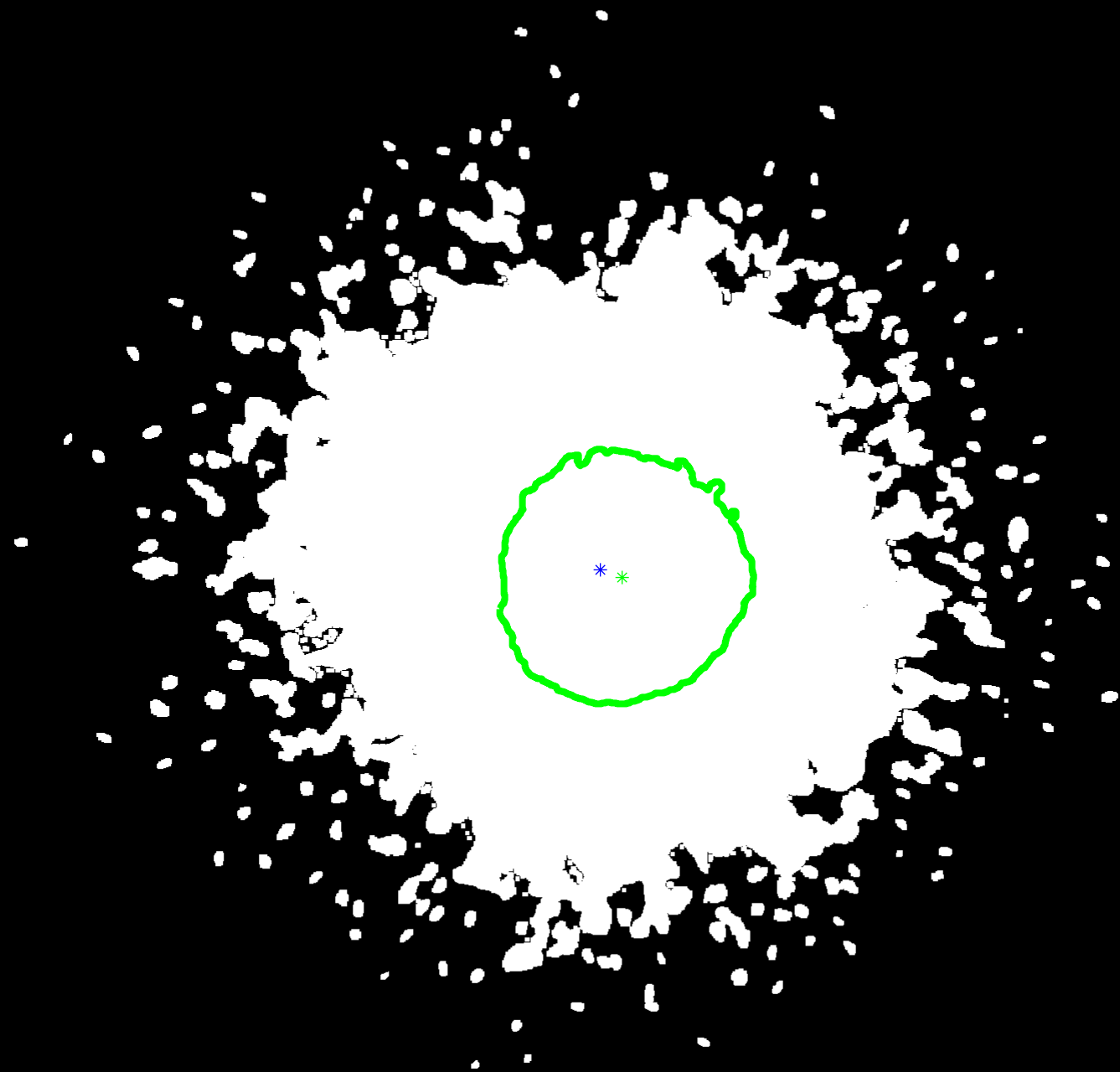


spheroid centroid

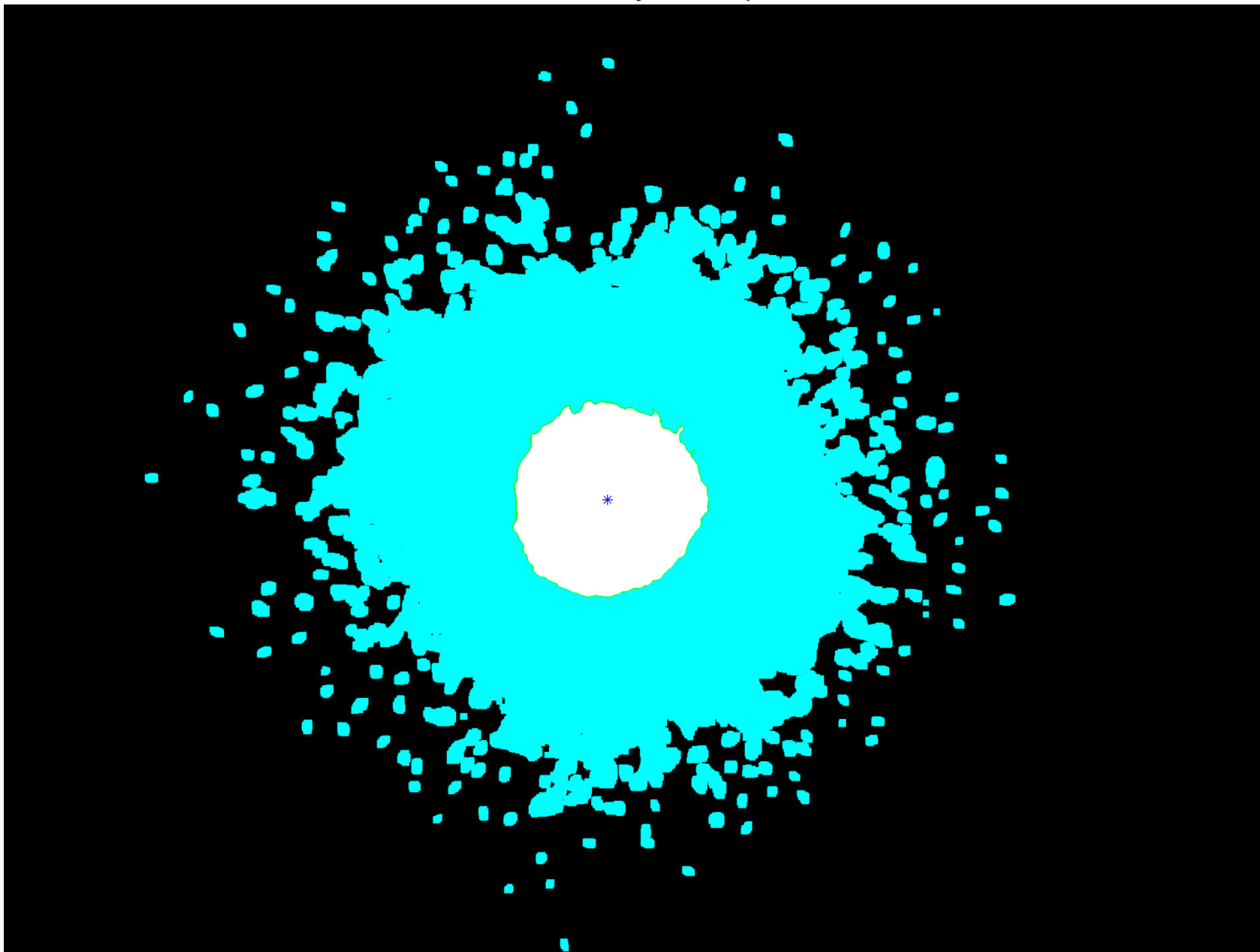
\* weighted  
\* non-weighted



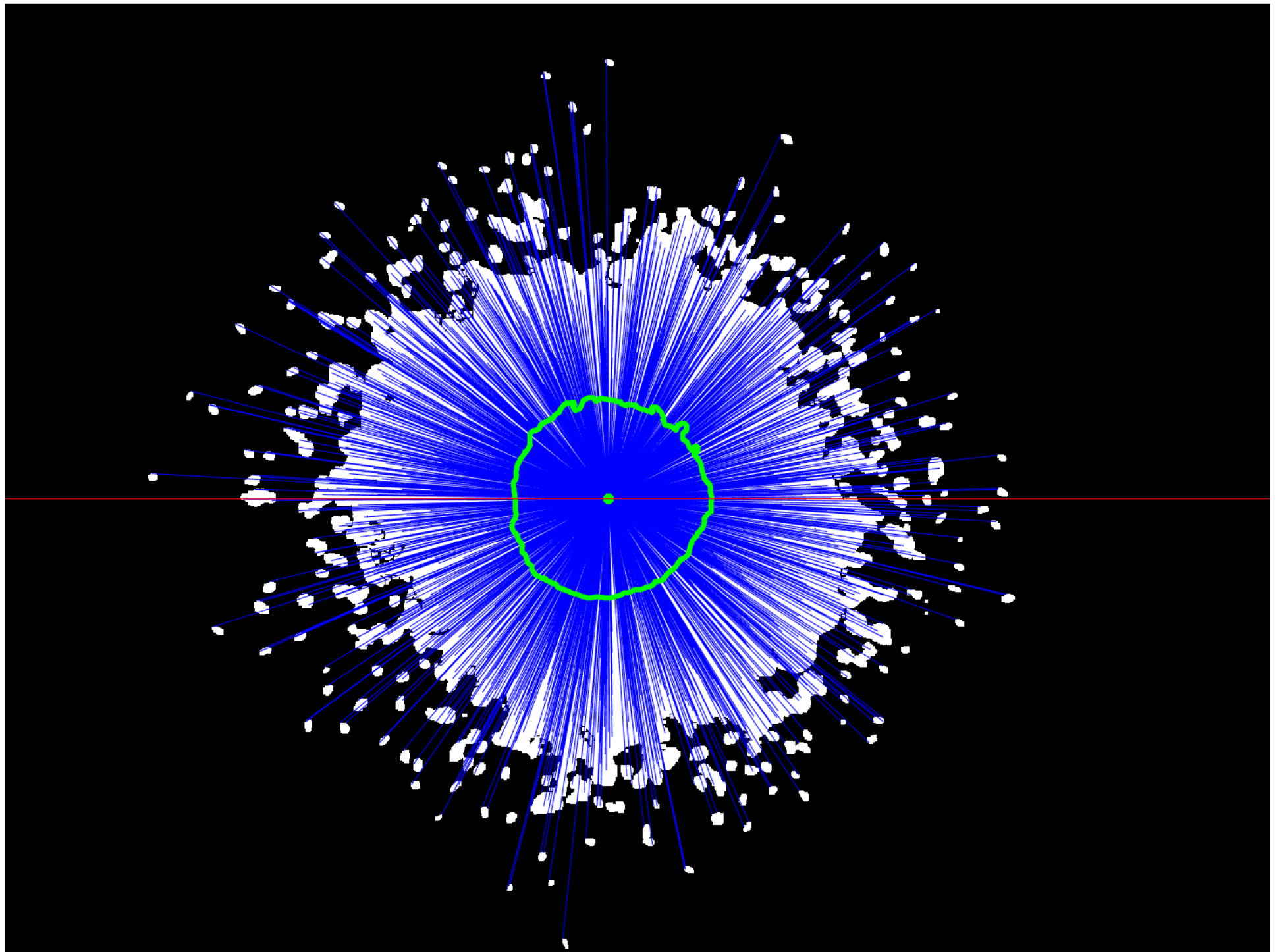
uncentered boundary



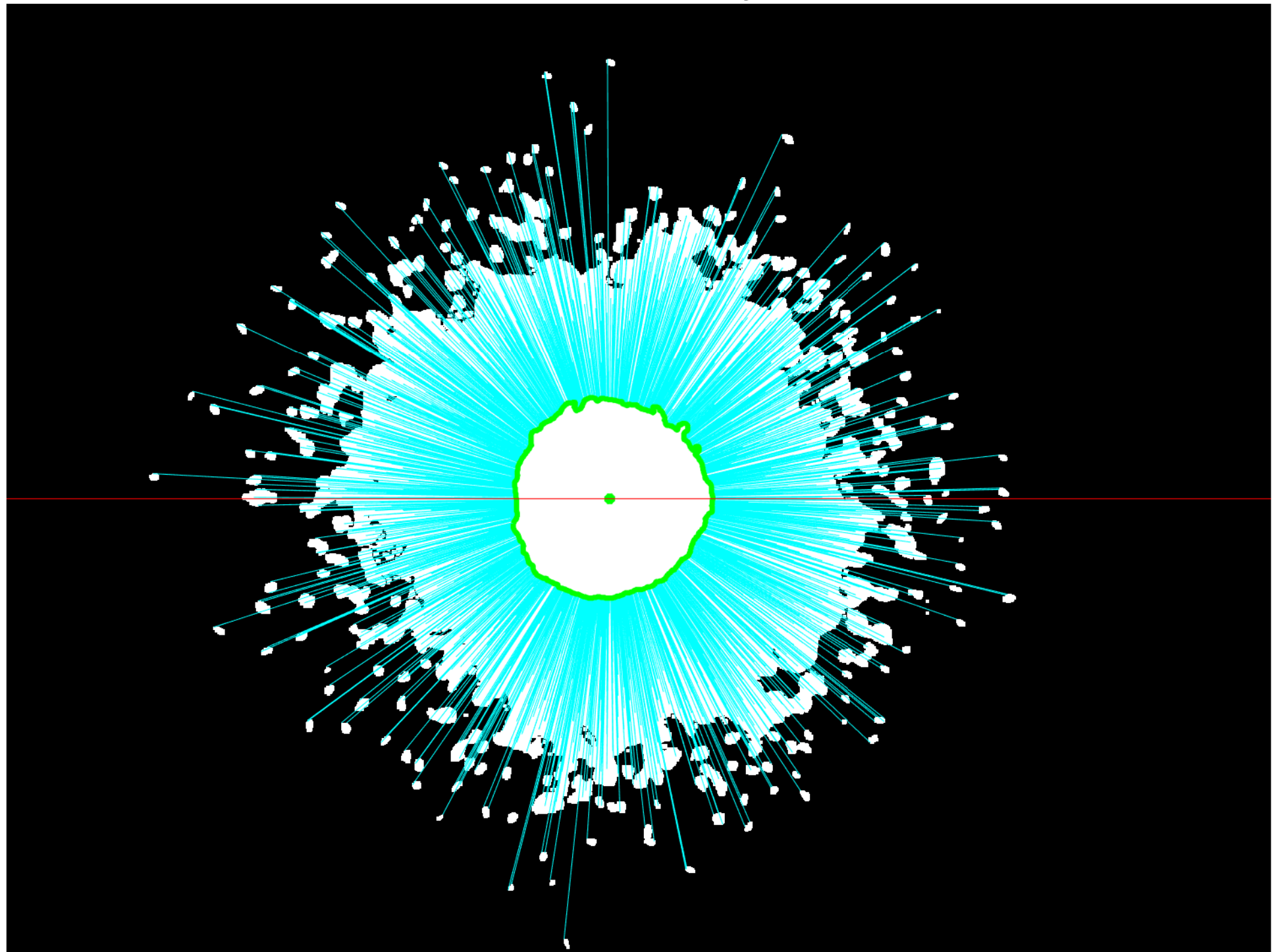
centered boundary and outer pixels



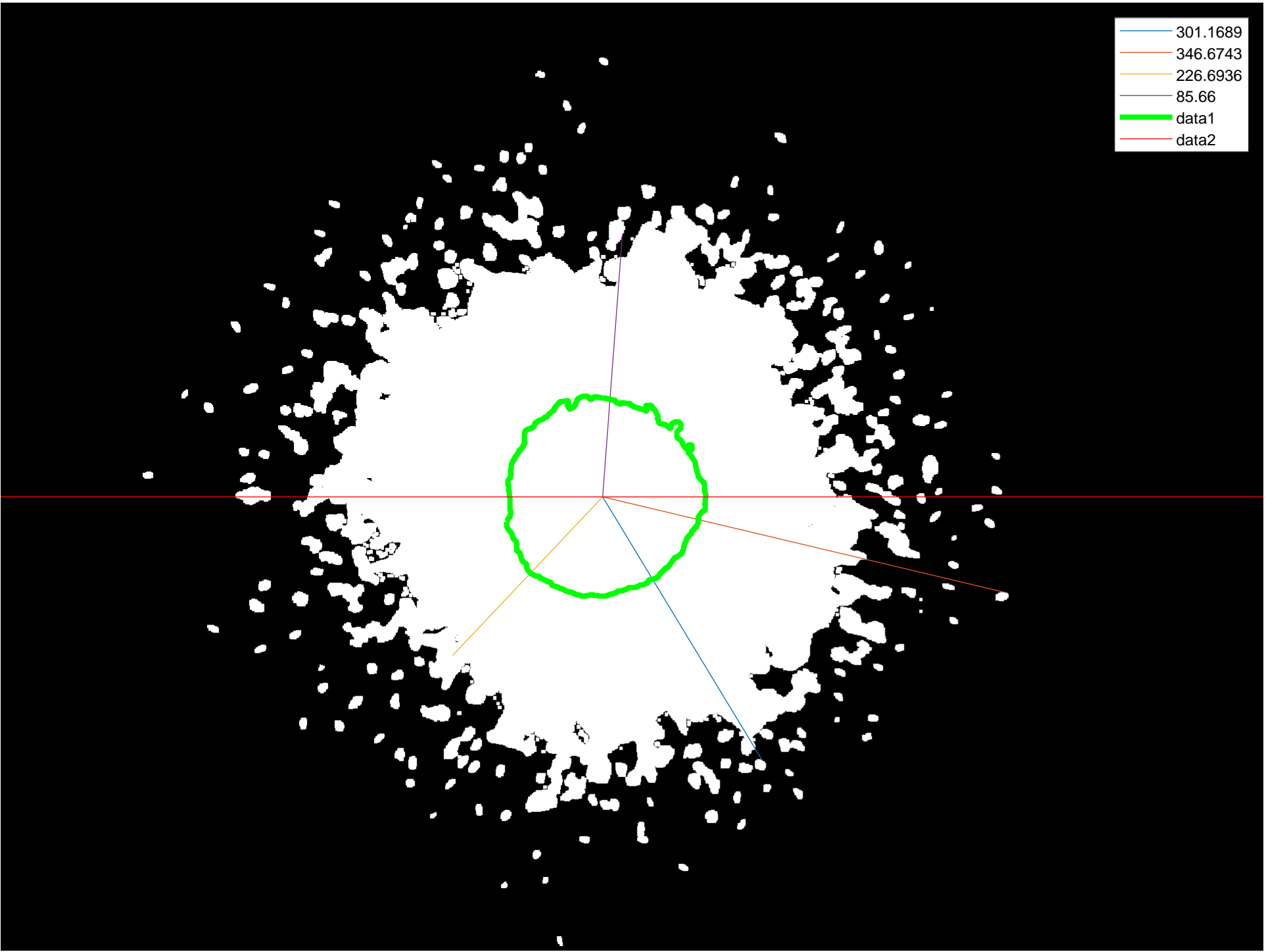
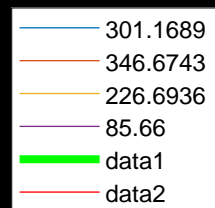
distances from center



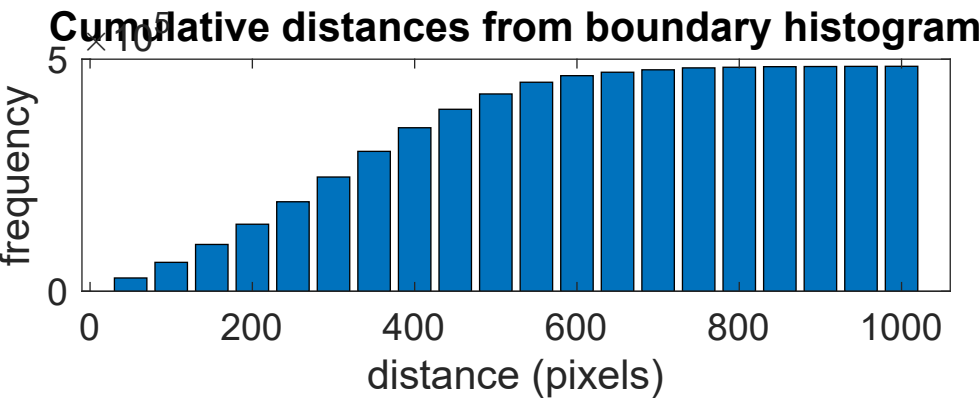
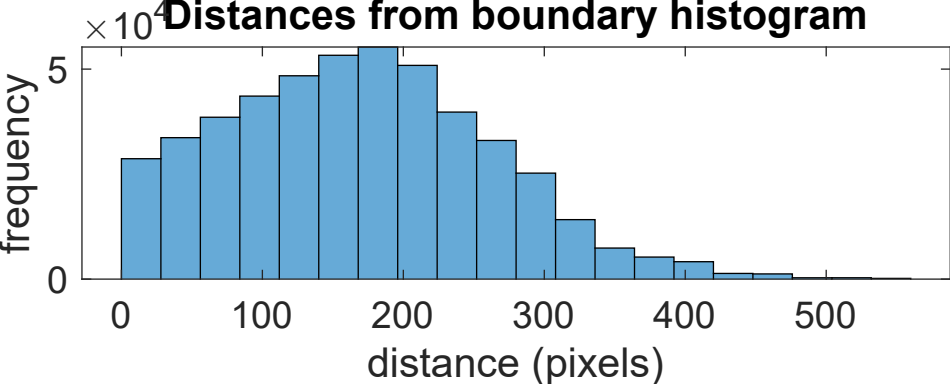
distances from boundary



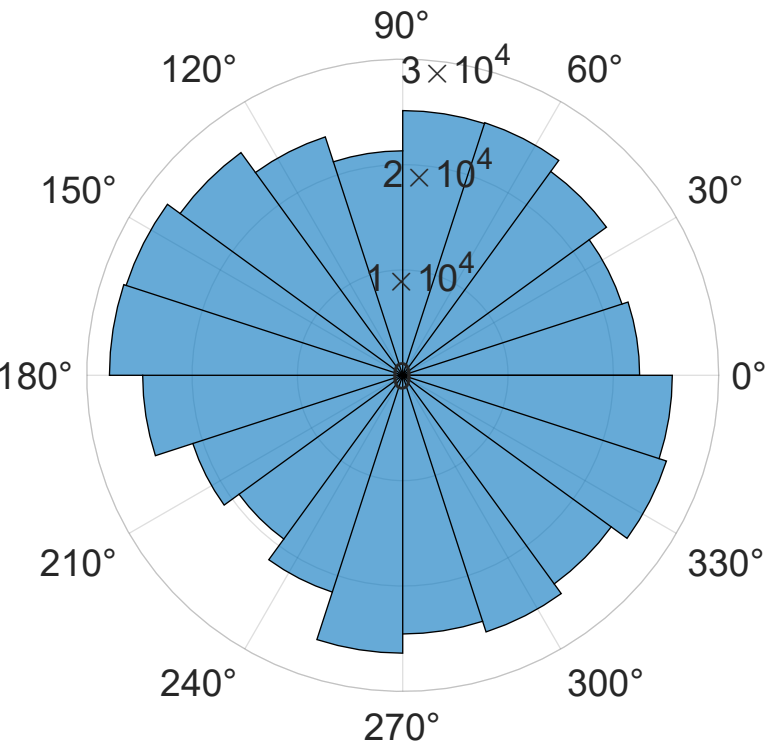
angles of migration

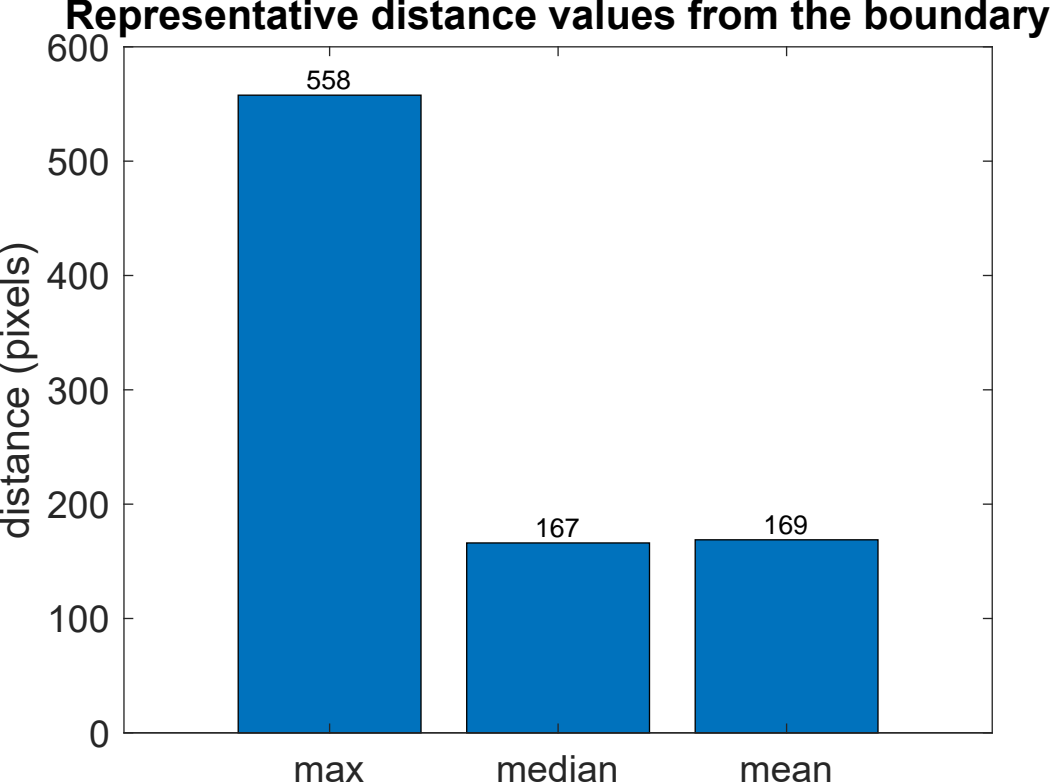




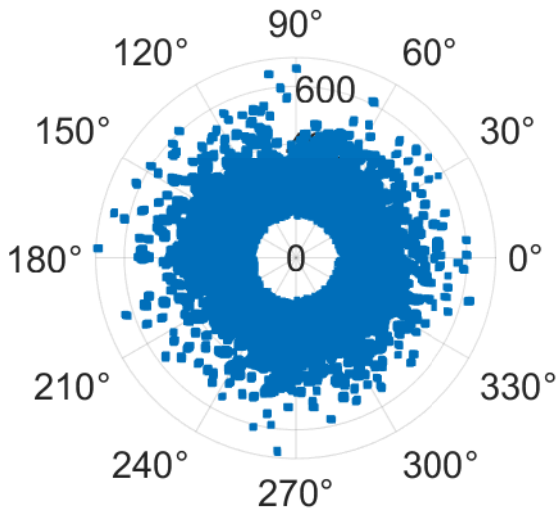


# Angles histogram

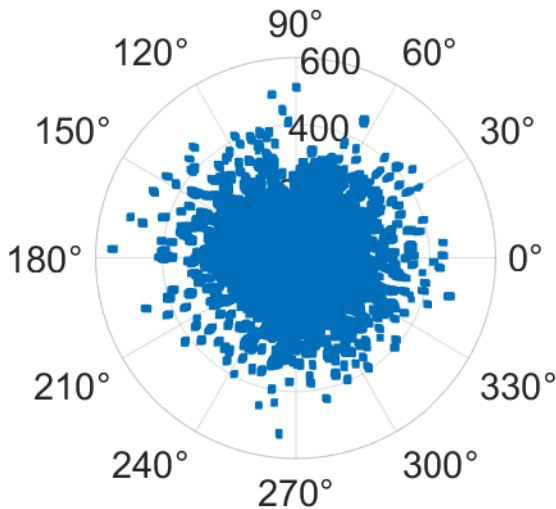




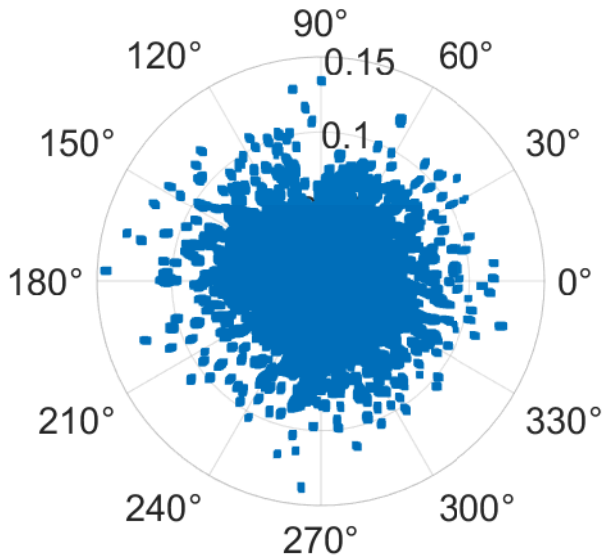
## Distances from spheroid center (pixels) vs migration angle

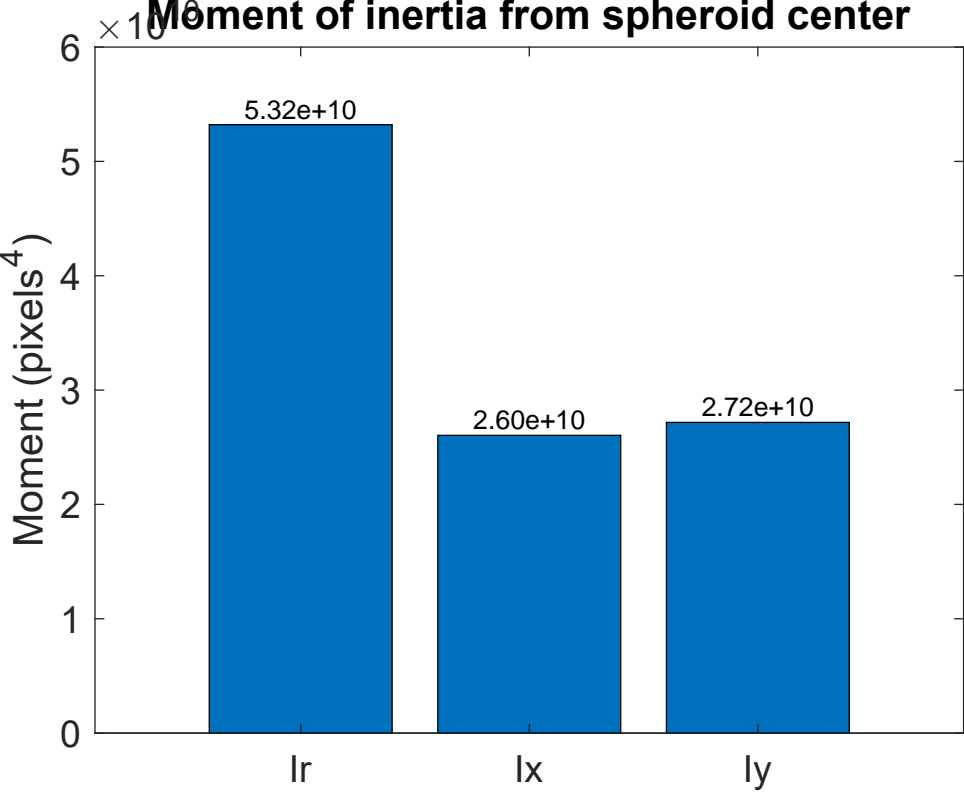


## Distances from spheroid boundary (pixels) vs migration angle



## Persistence speed (um/min) vs migration angle





# Moment of inertia from spheroid boundary

Moment (pixels<sup>4</sup>)

$\times 10^{10}$

2

1.5

1

0.5

0

1.81e+10

8.70e+09

9.36e+09

lr

lx

ly

