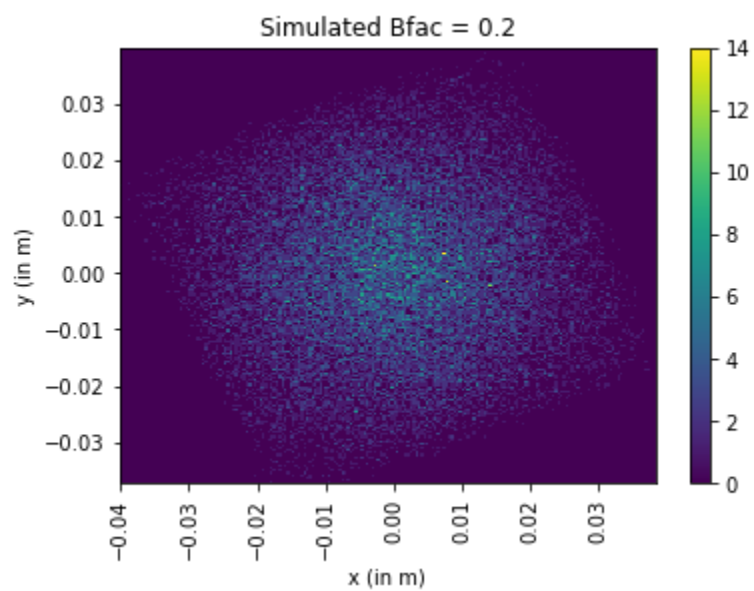
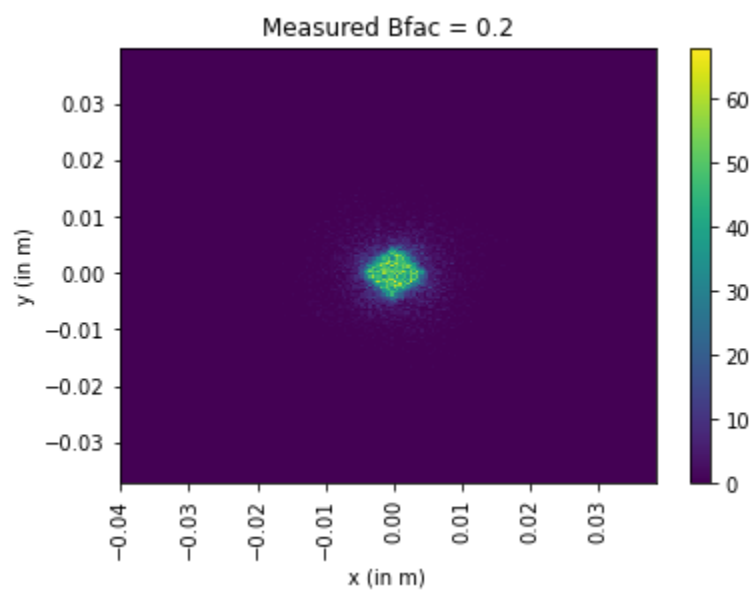
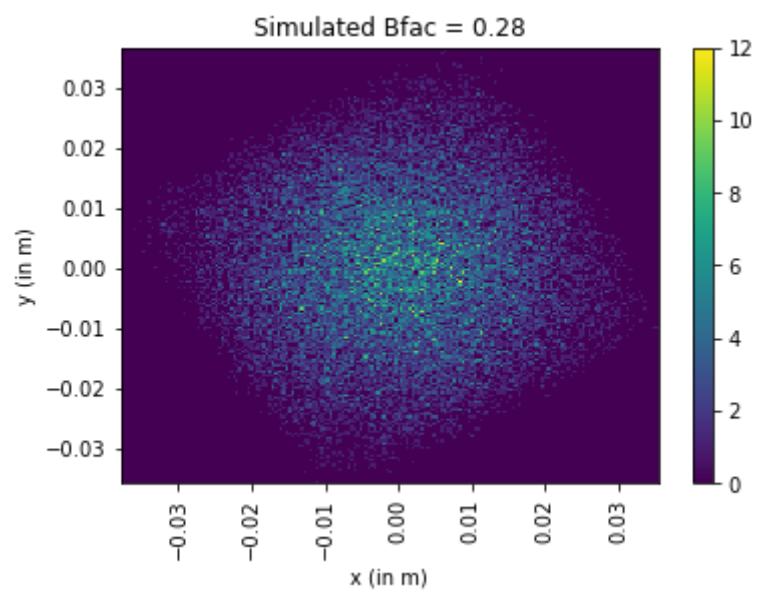
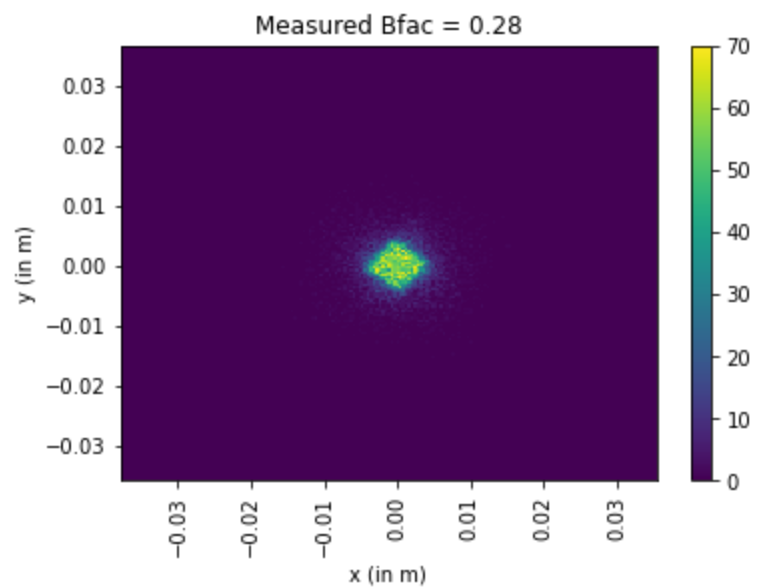
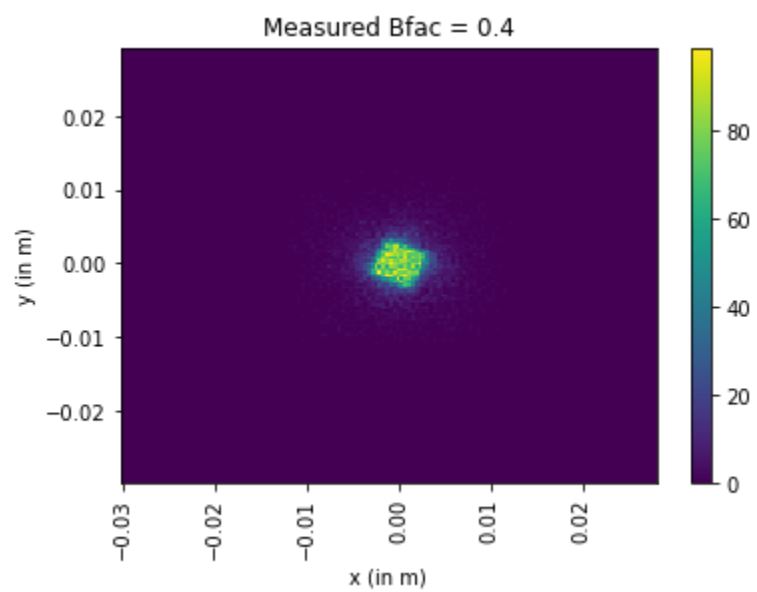
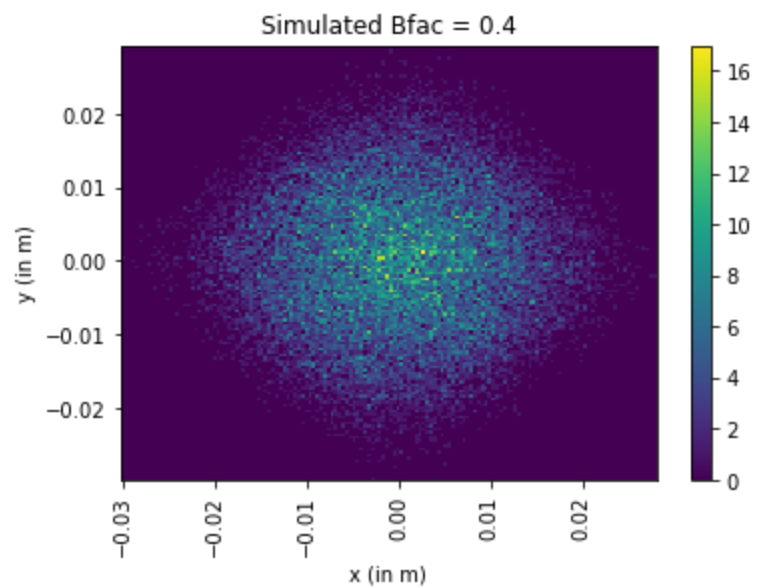


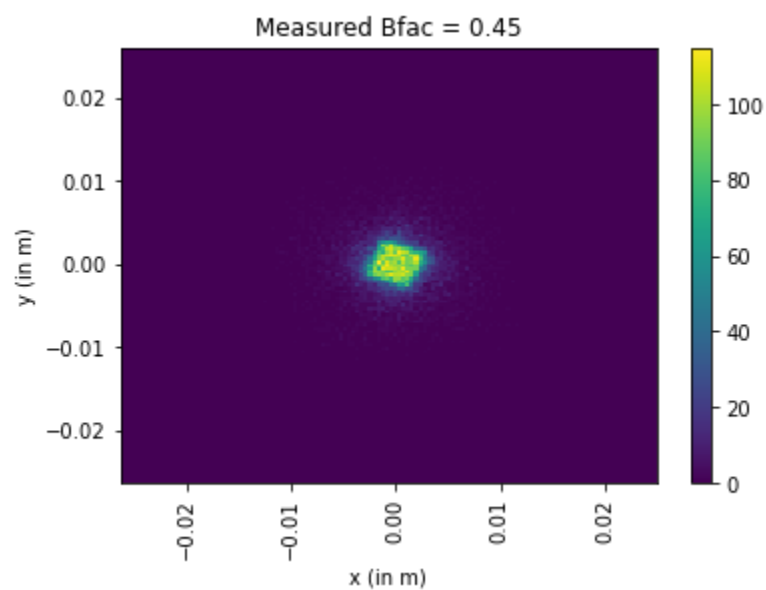
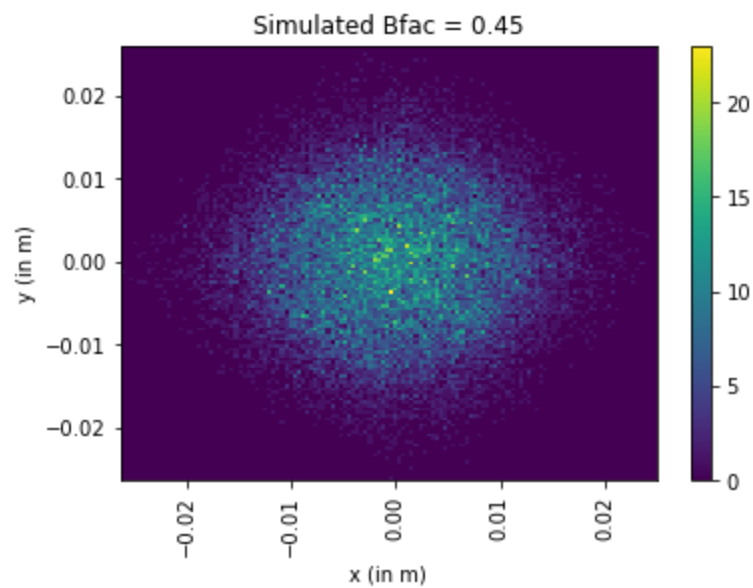
# Report

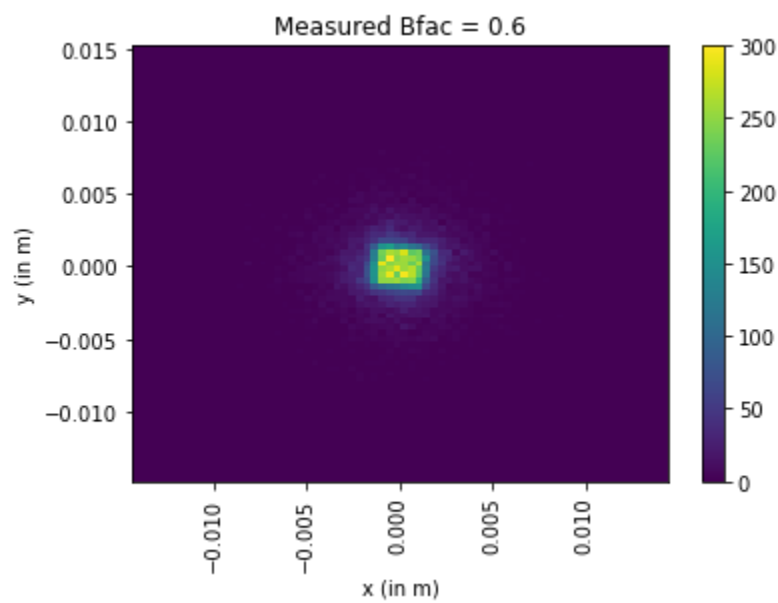
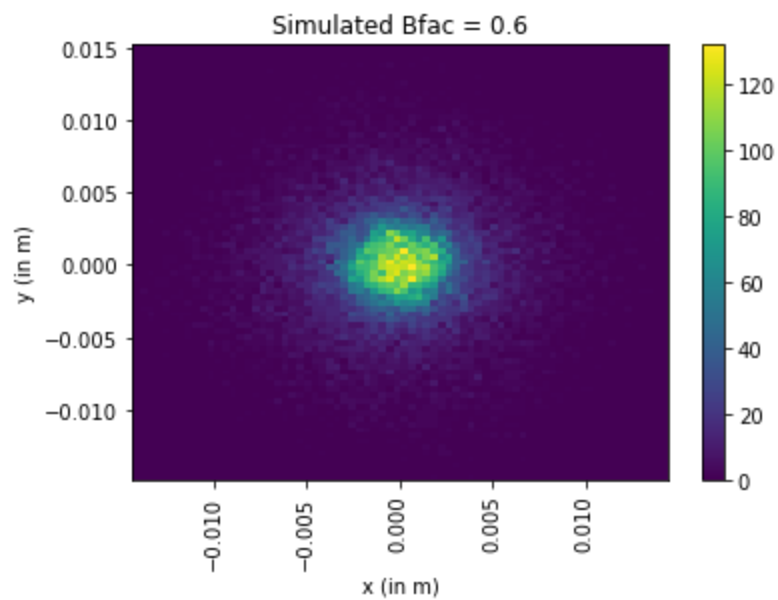
## 1st Iteration

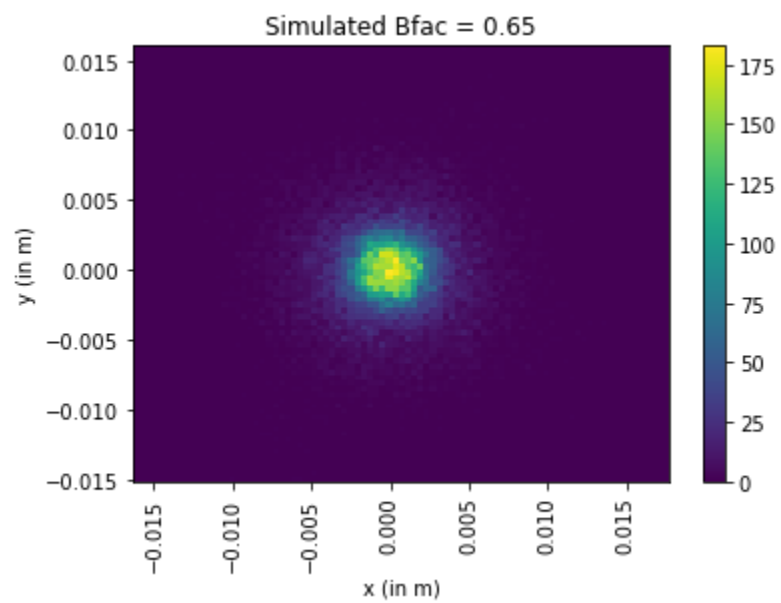
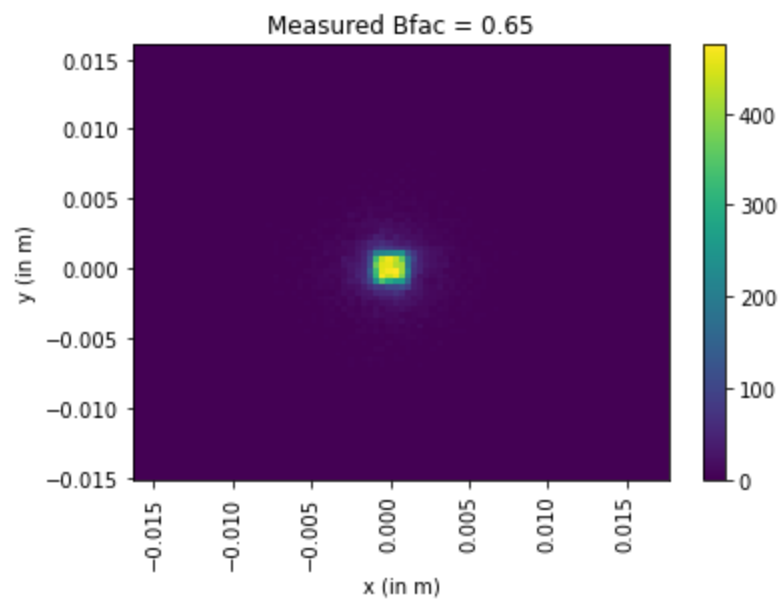


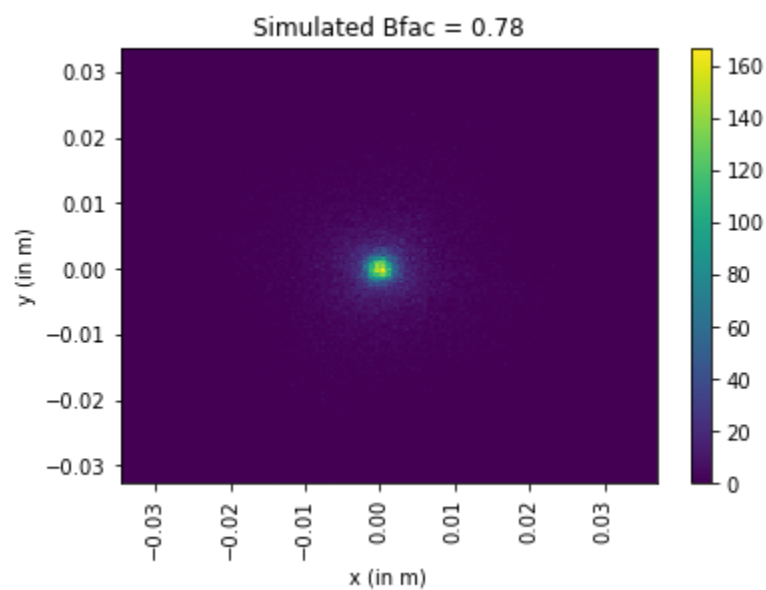
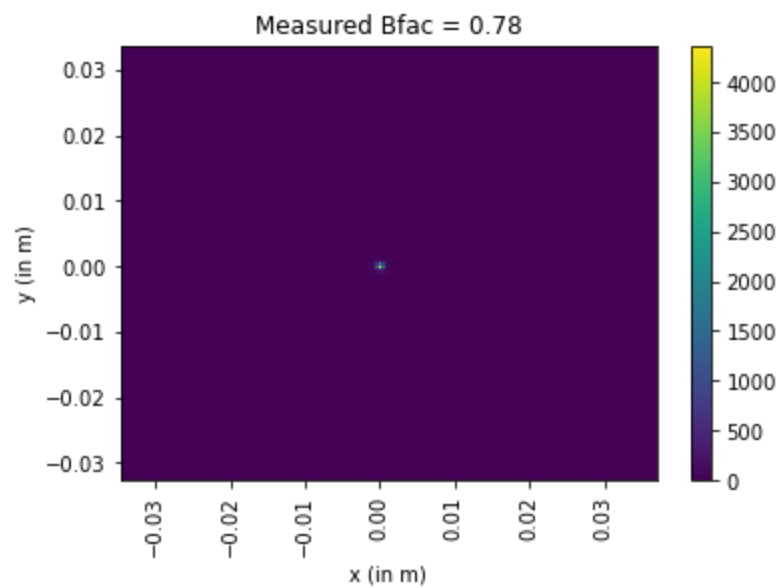




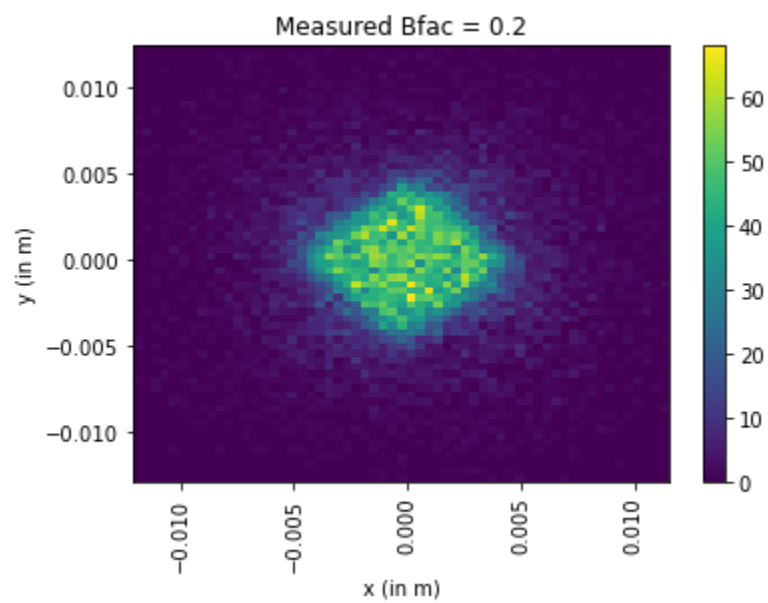
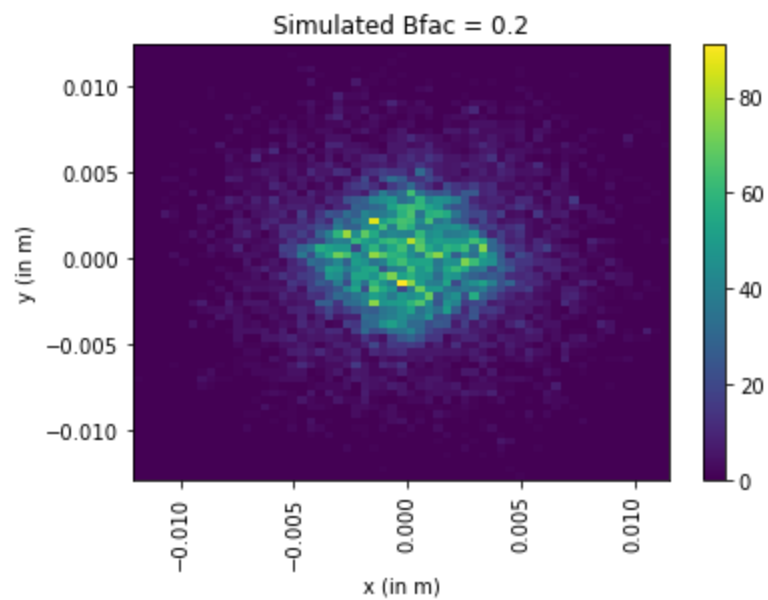




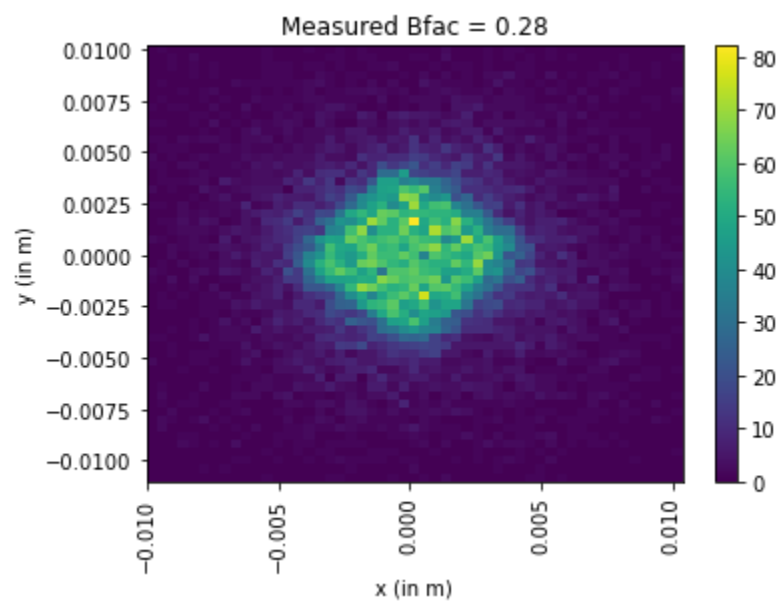
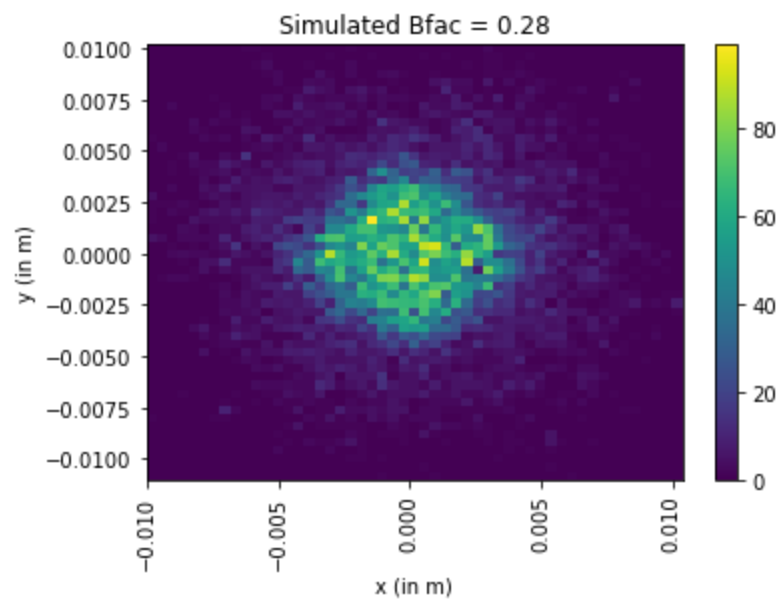


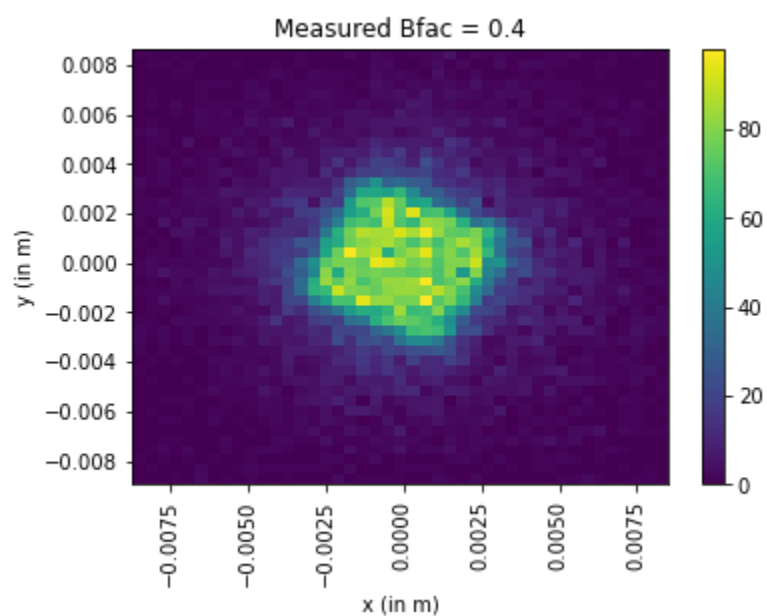
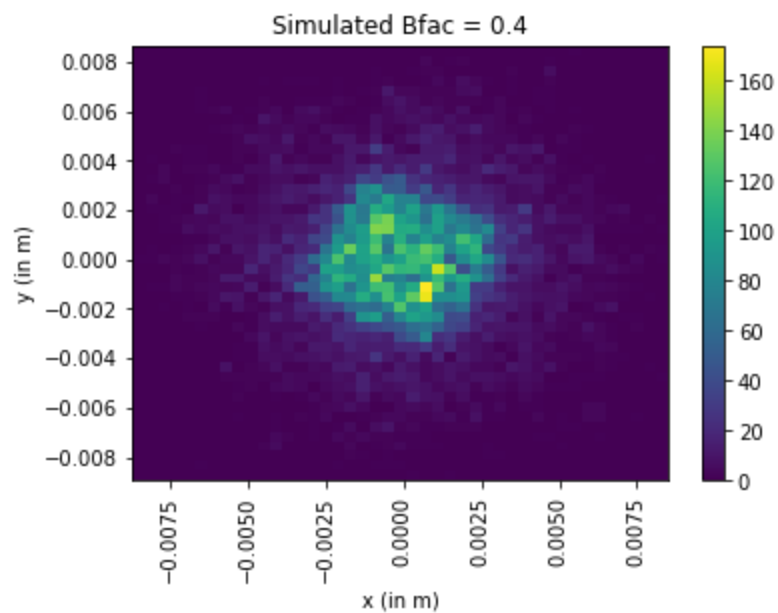


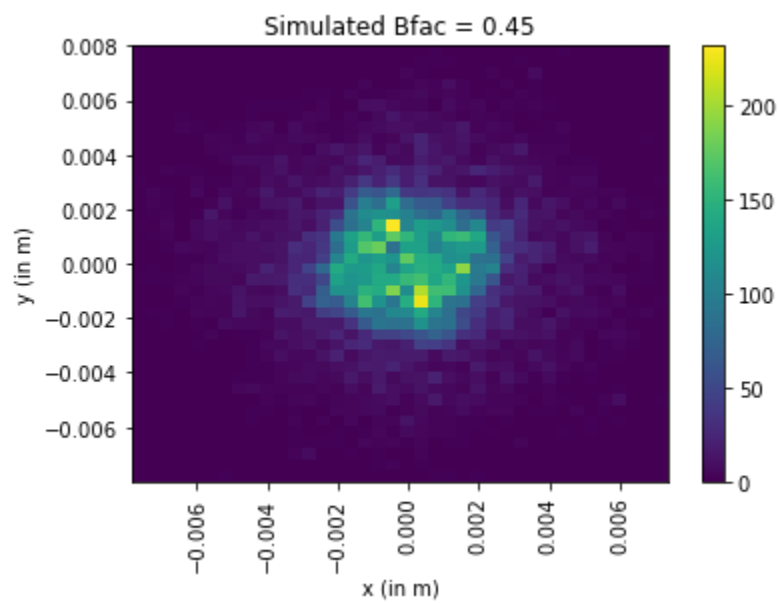
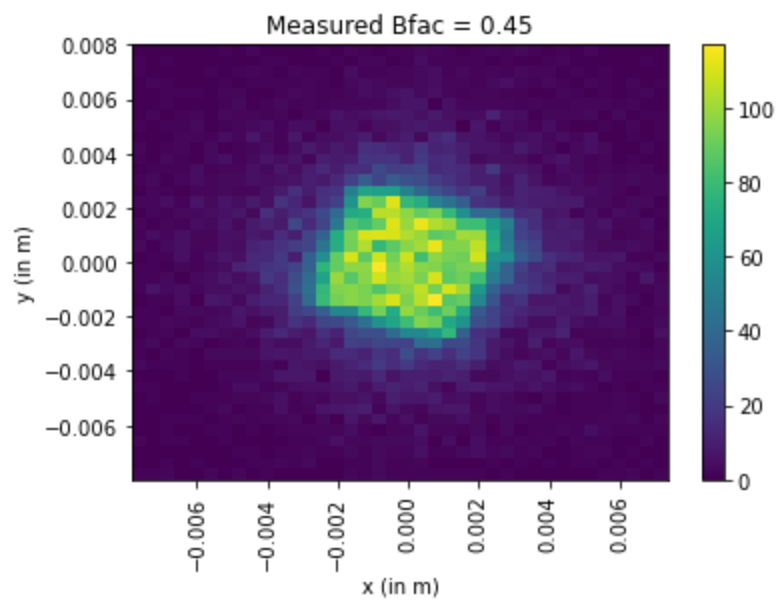
**2nd Iteration**

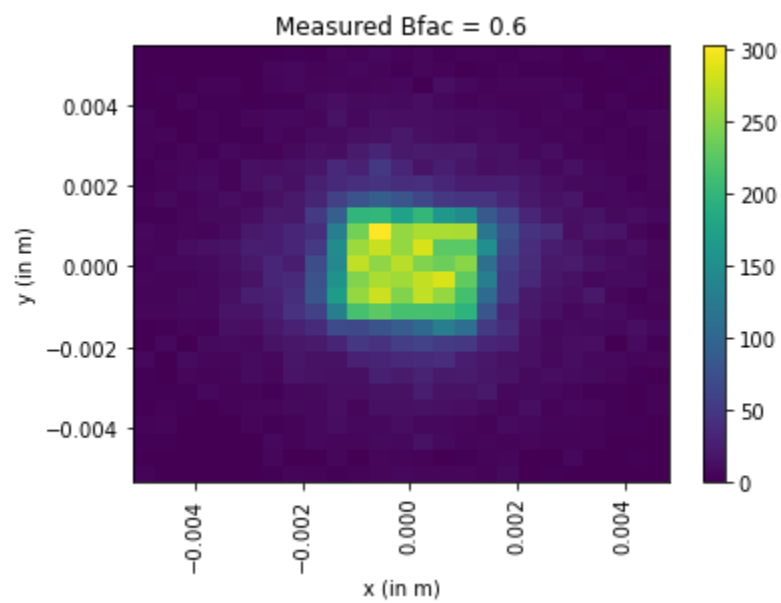
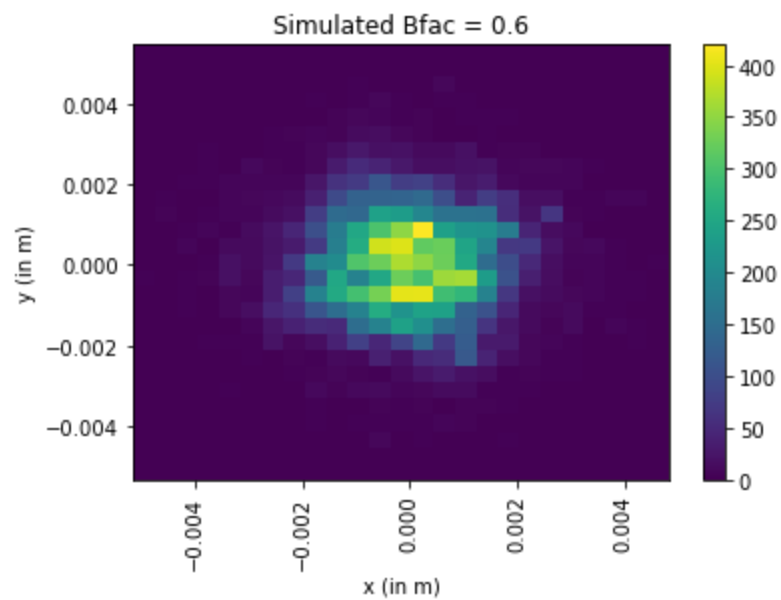


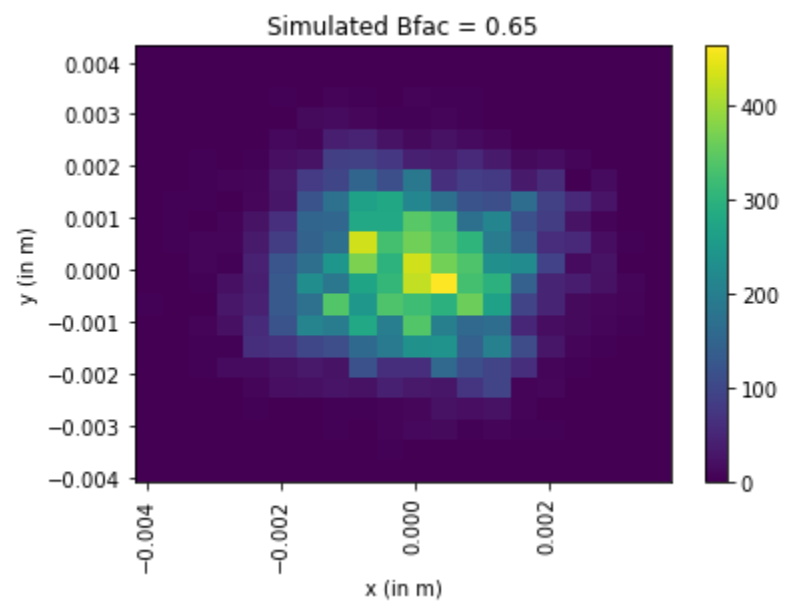
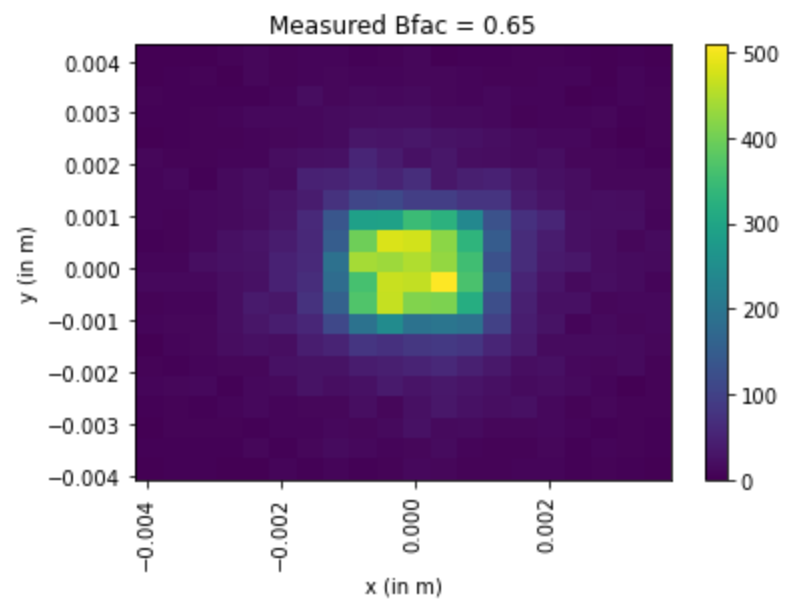




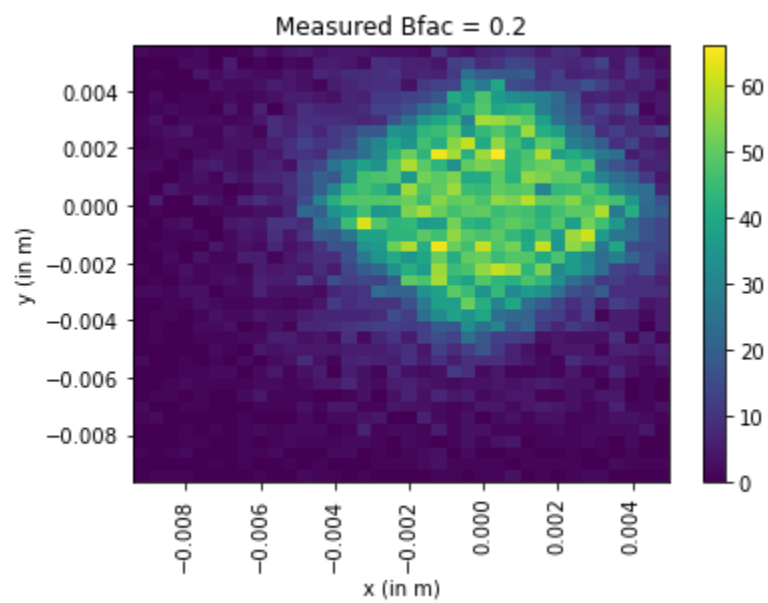
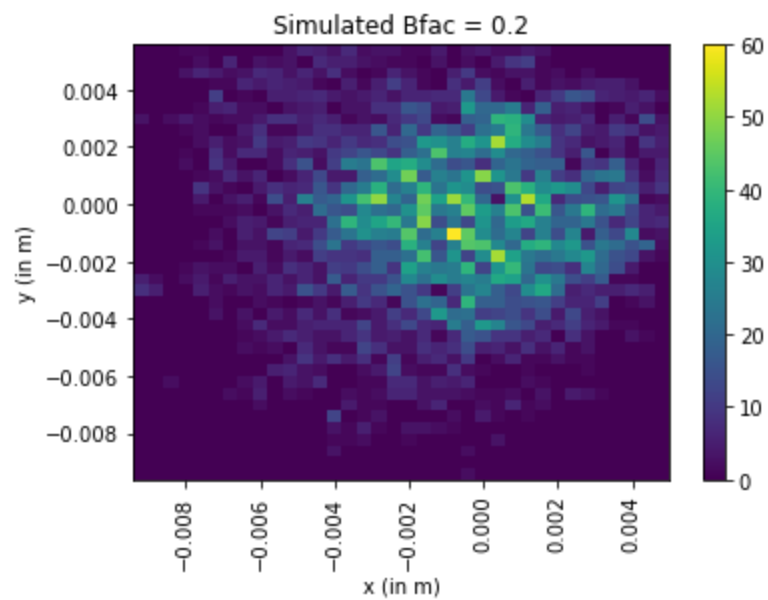


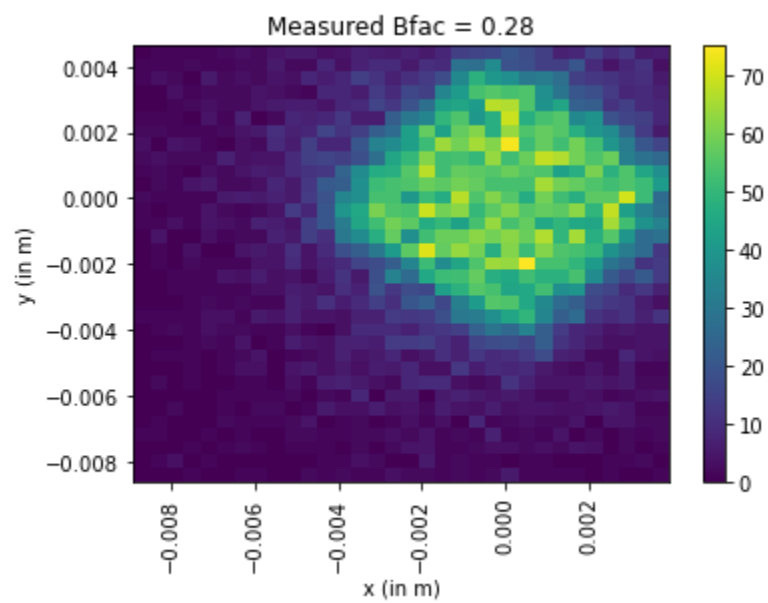
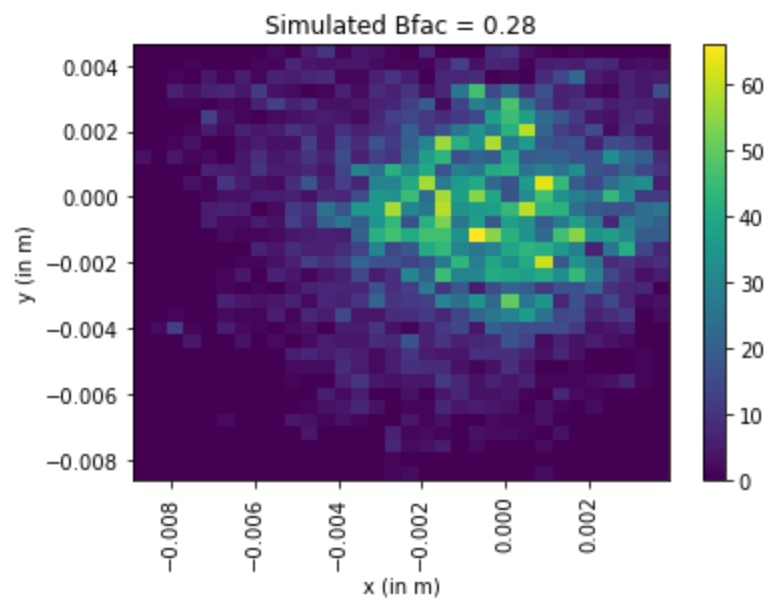


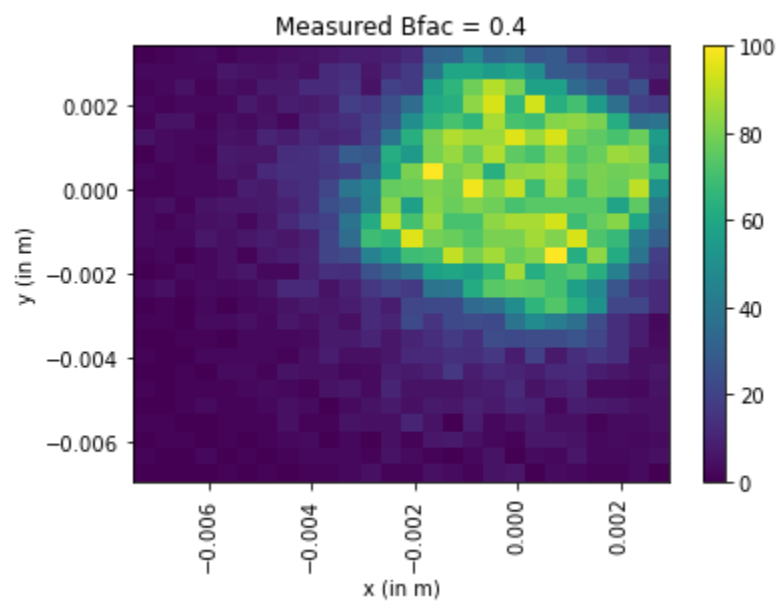
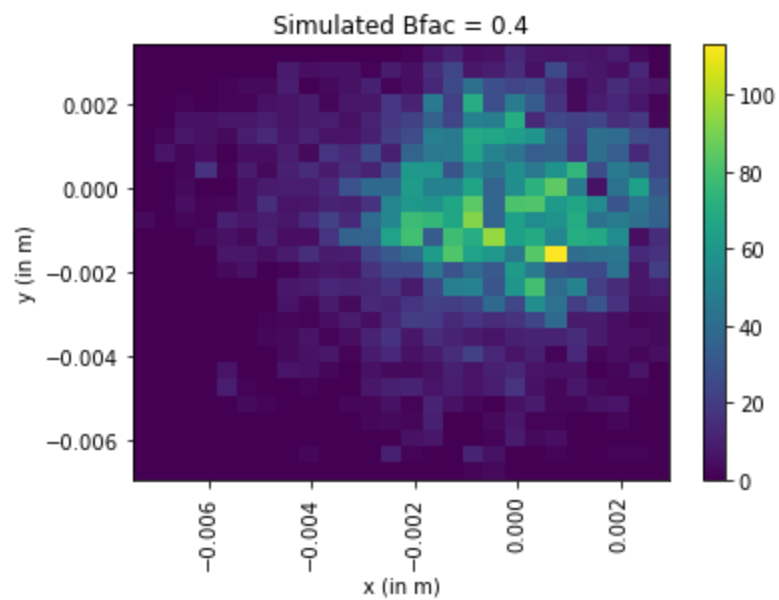




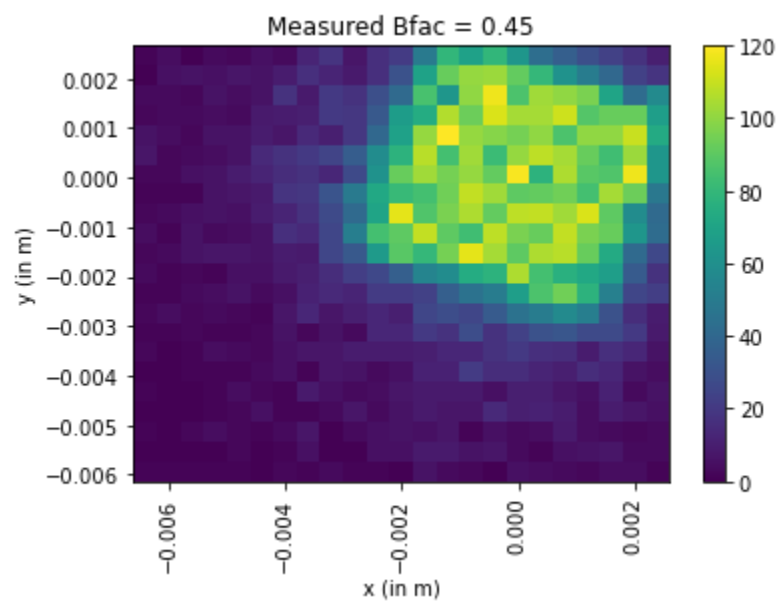
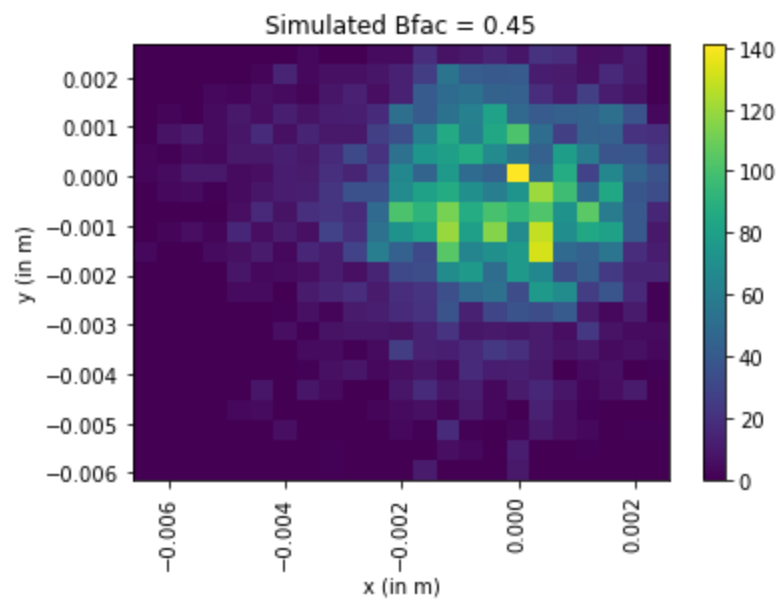
**3rd Iteration**

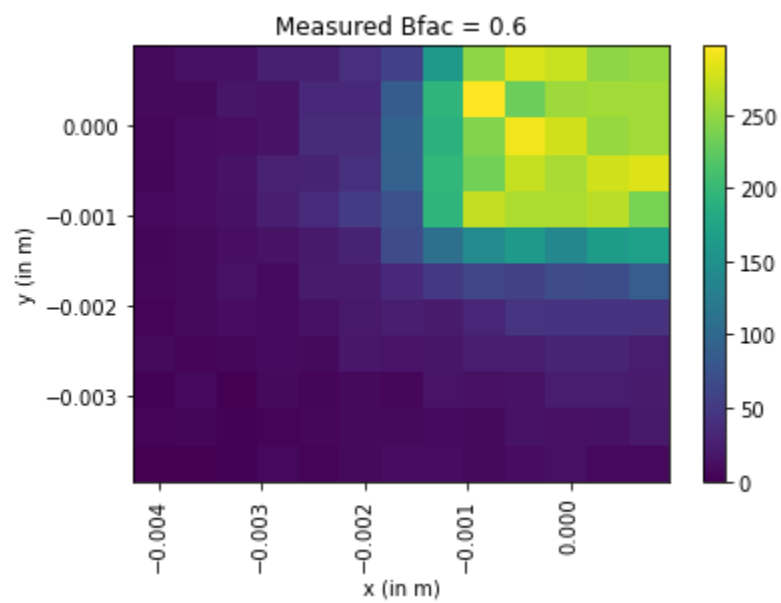
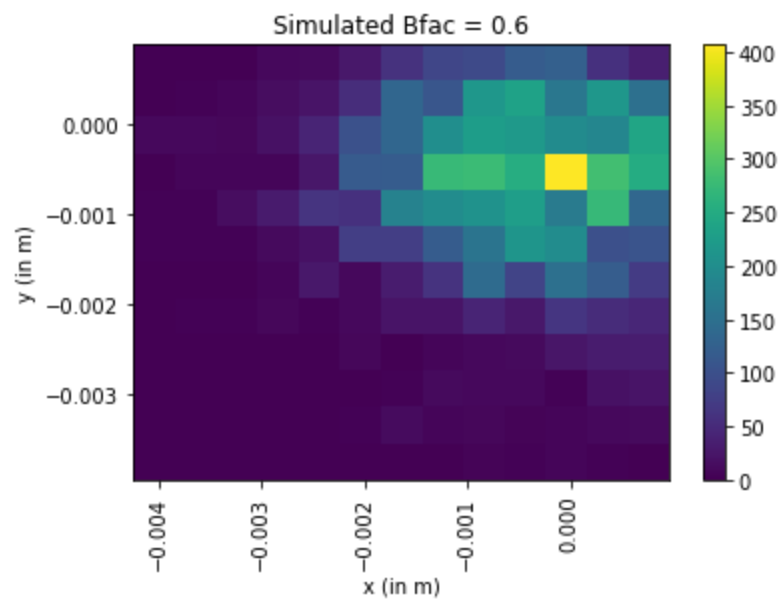


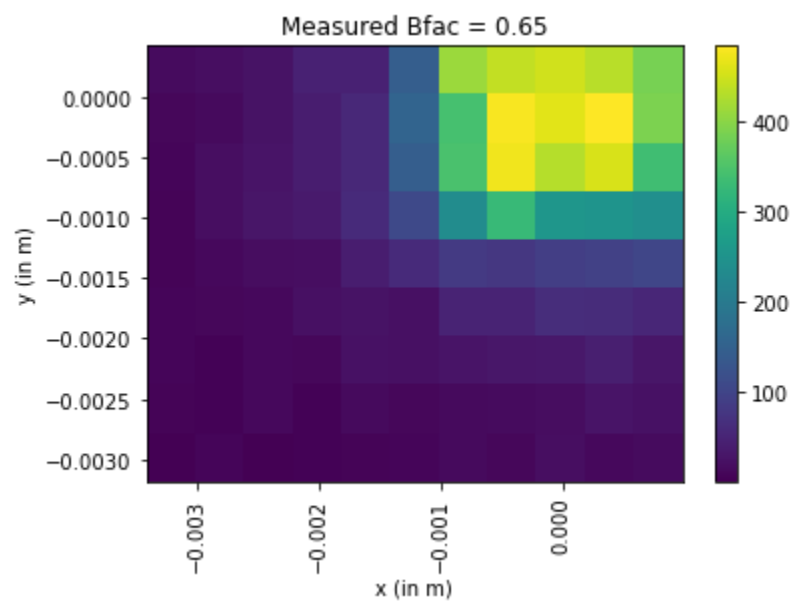
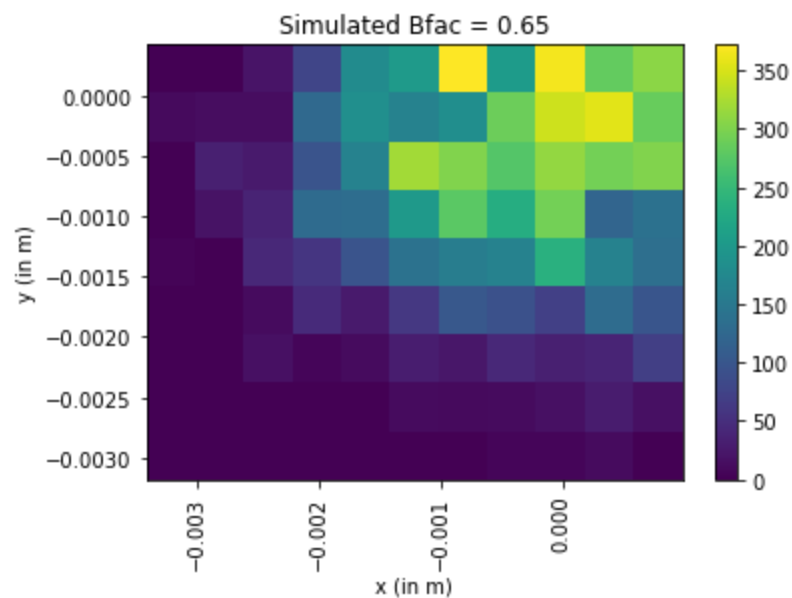


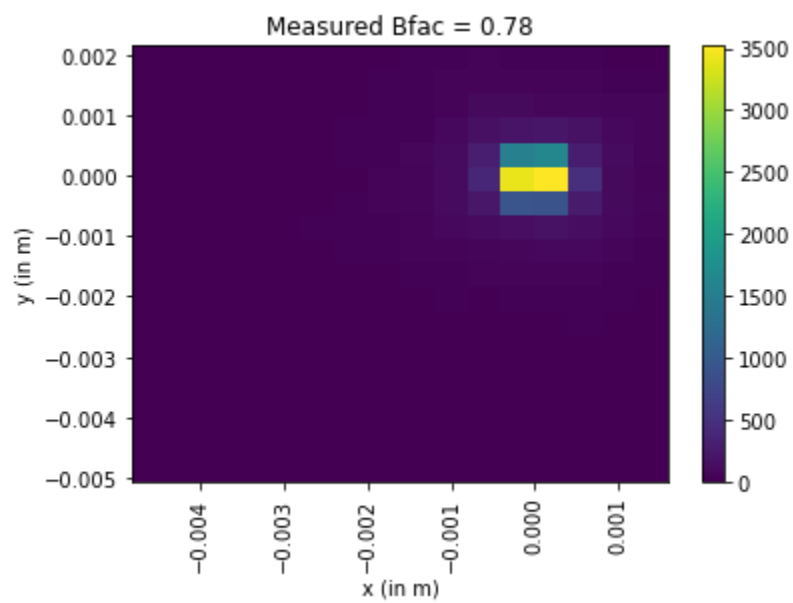
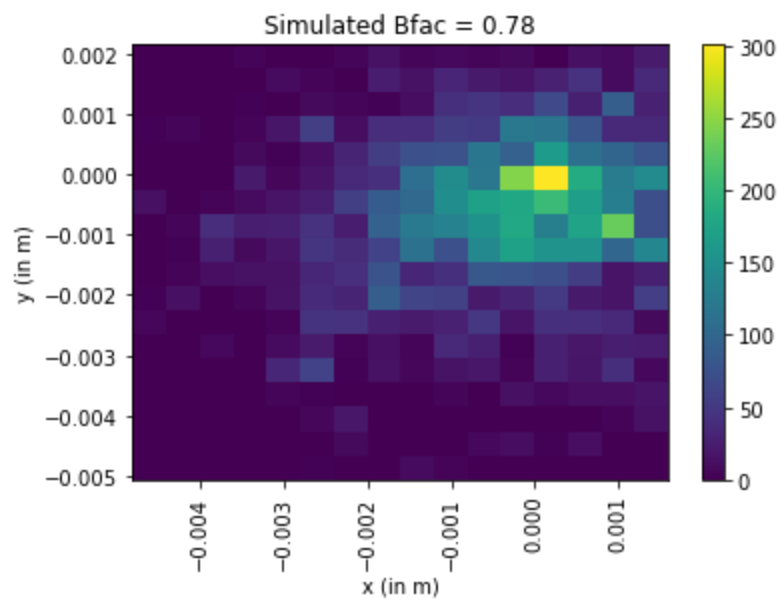




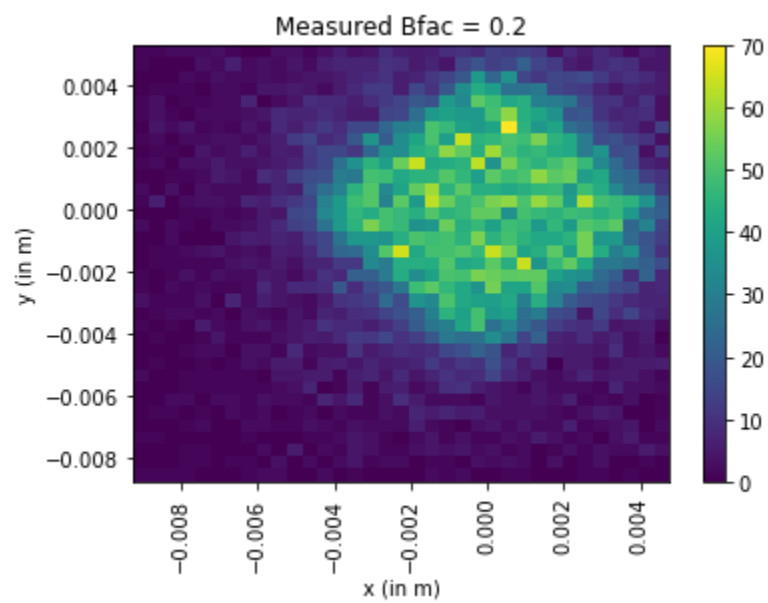
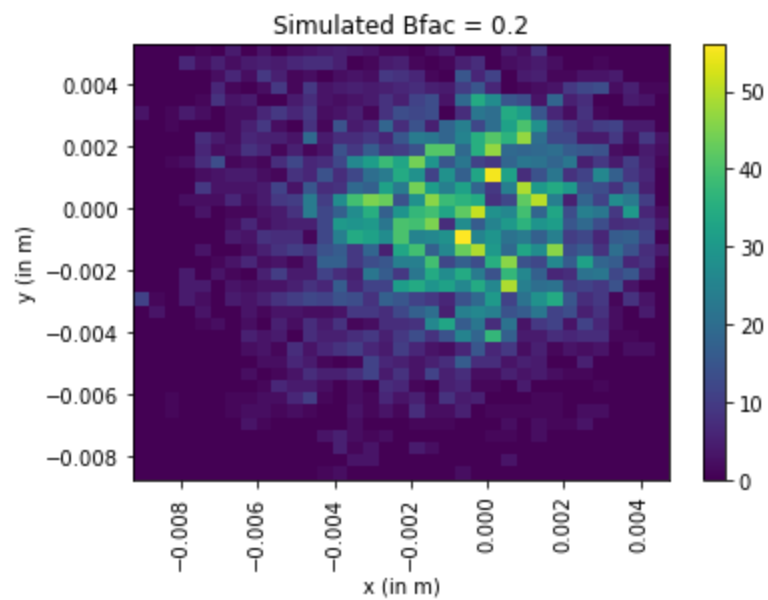


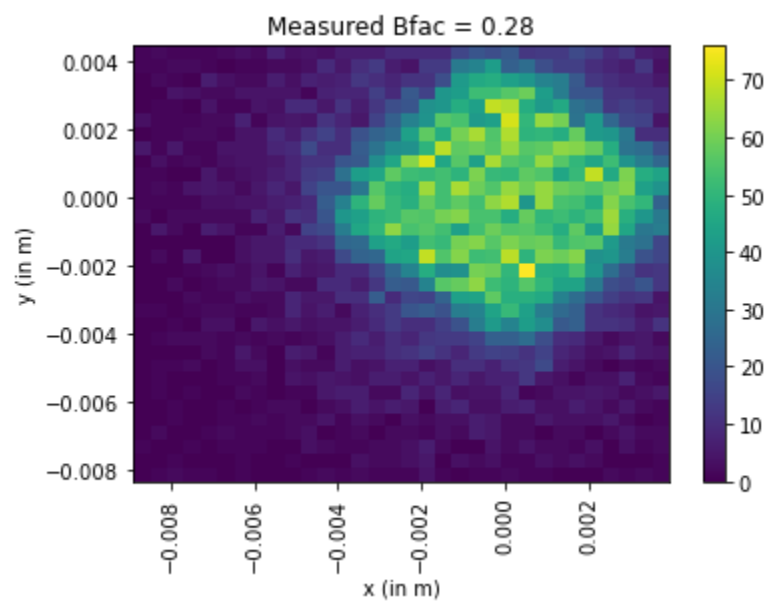
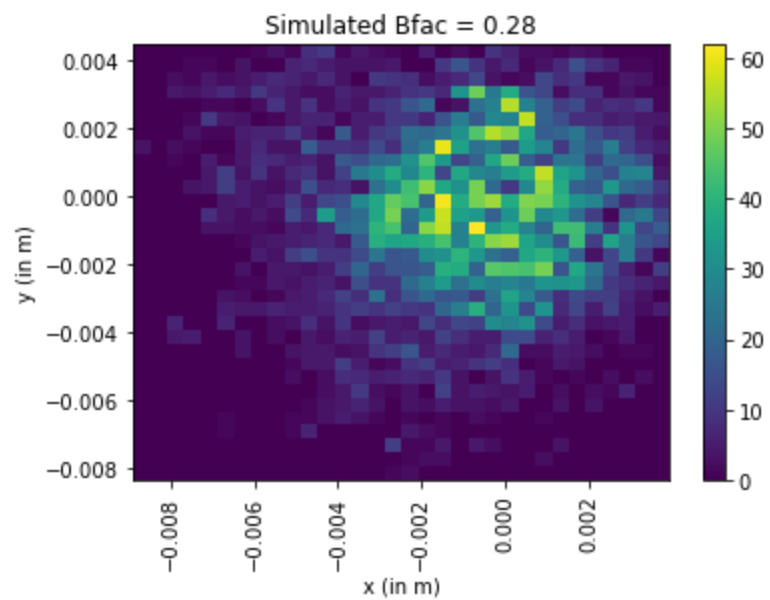


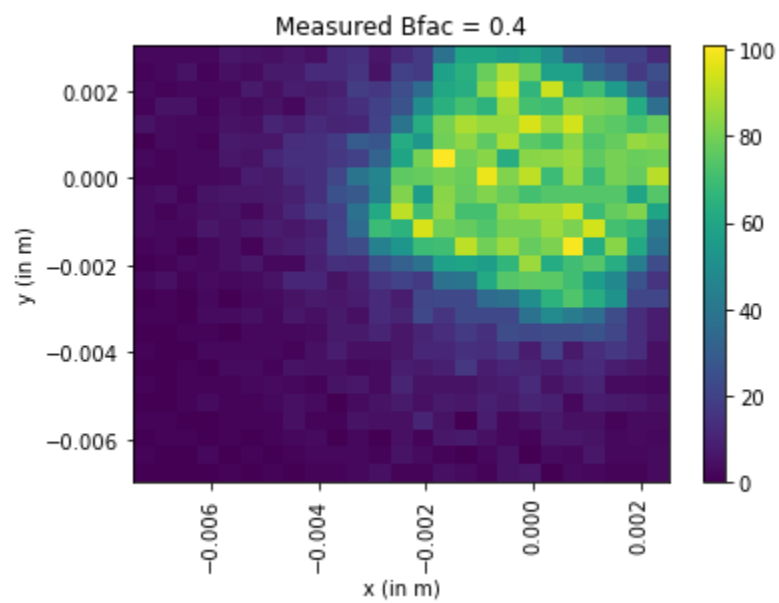
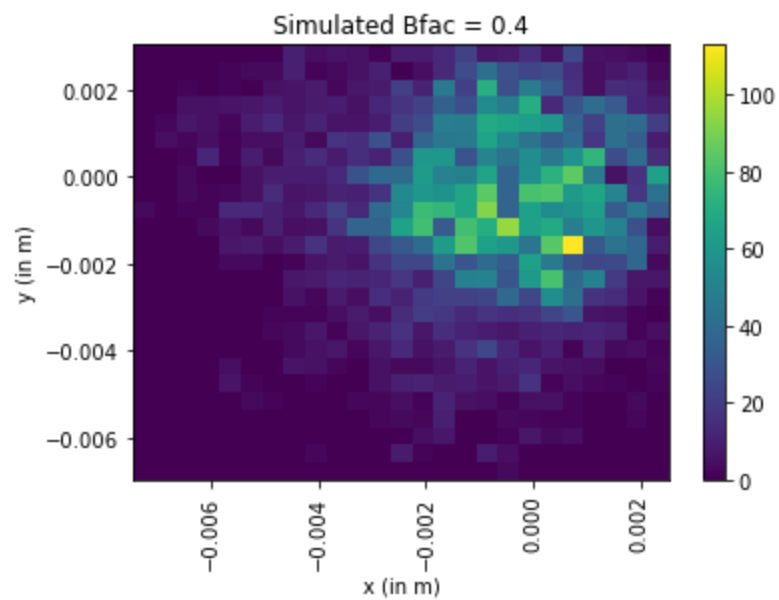


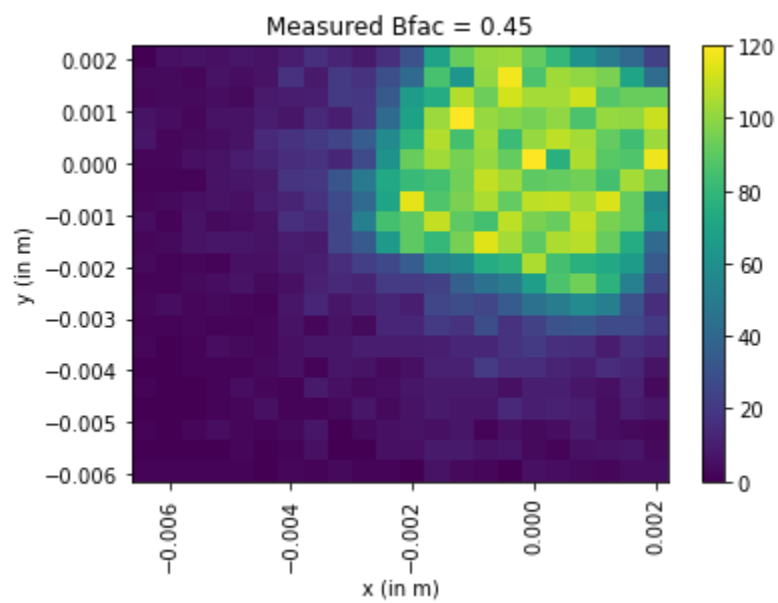
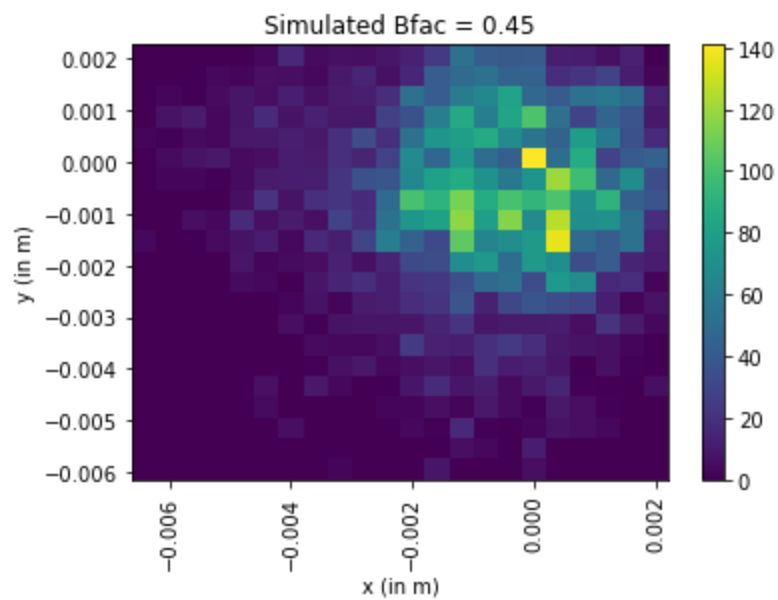


**4th Iteration**

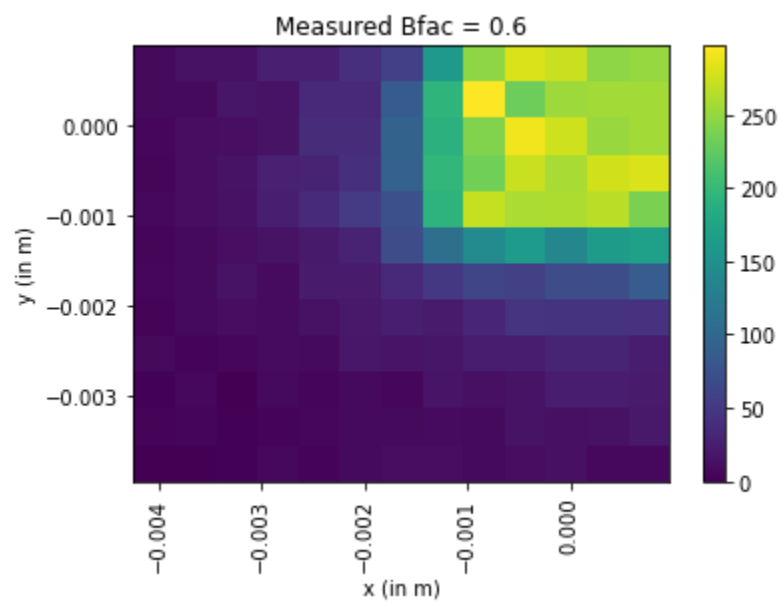
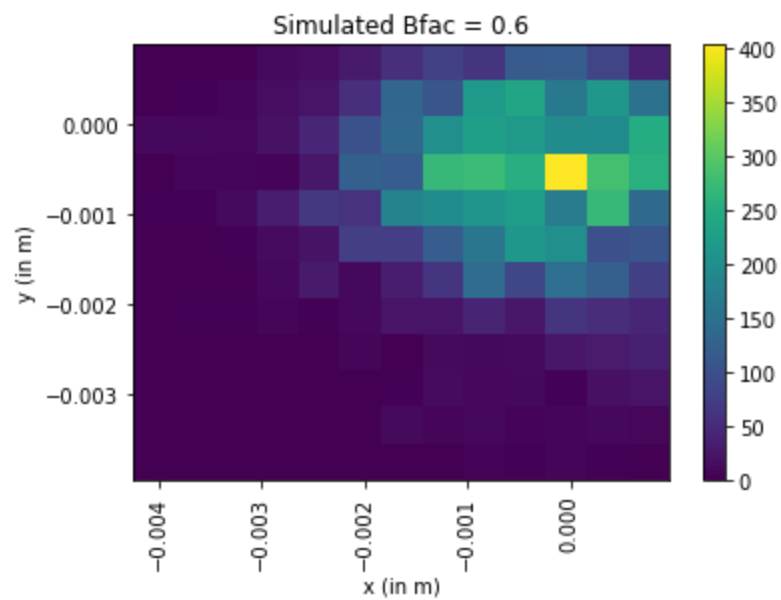


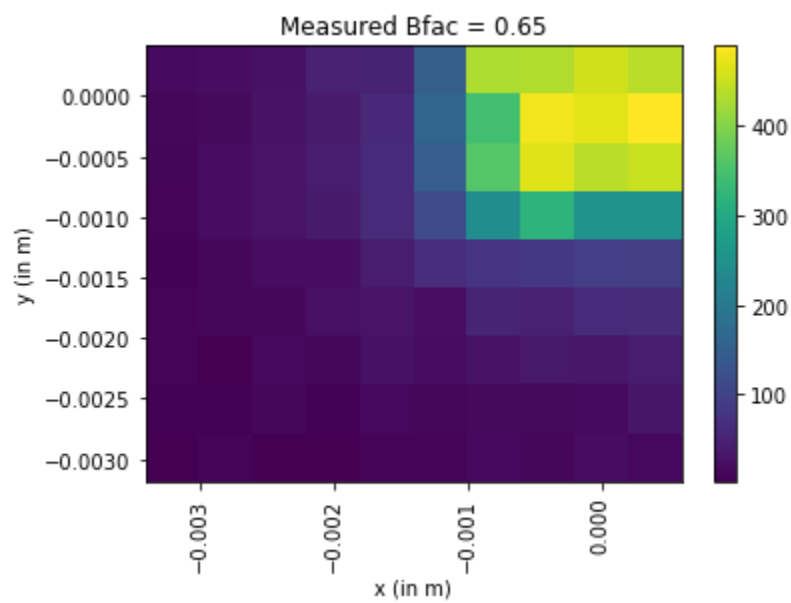
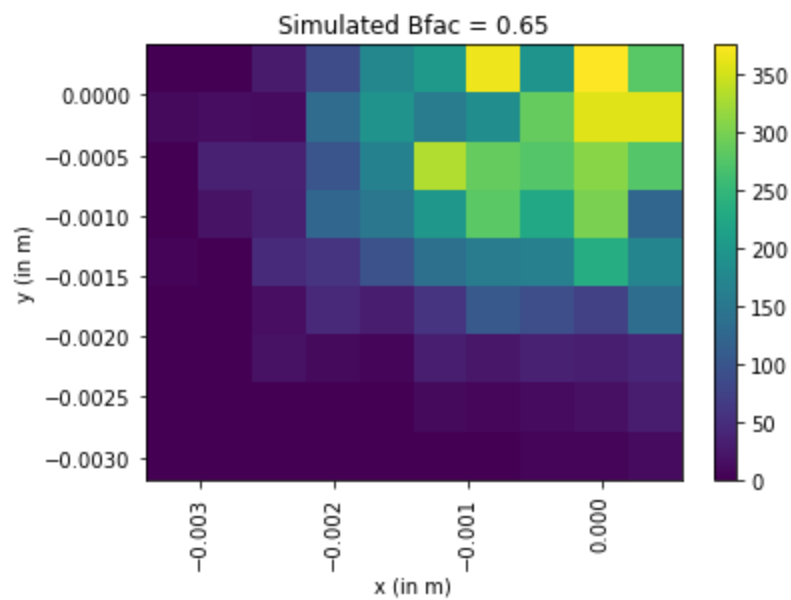


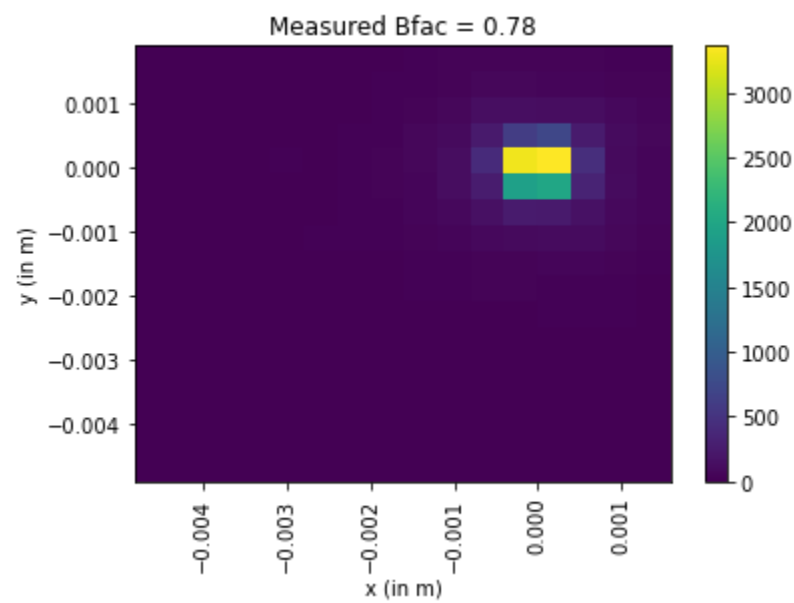
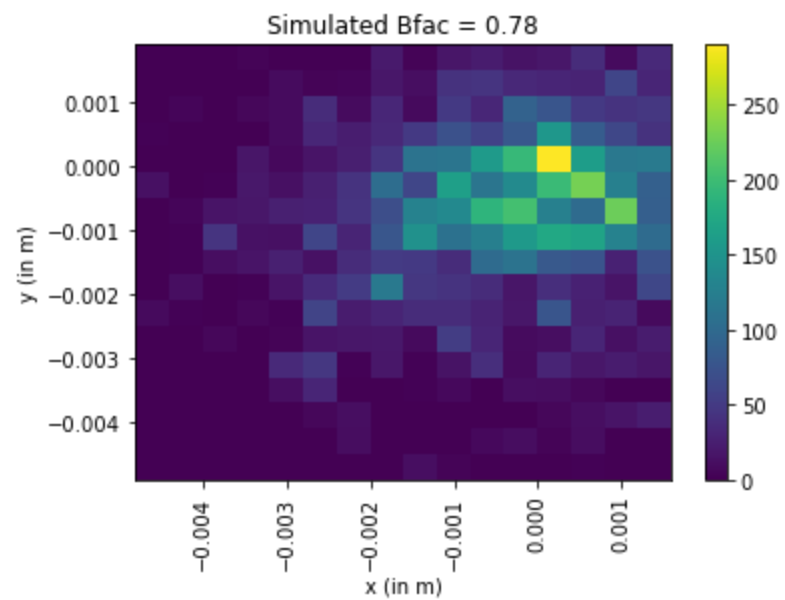




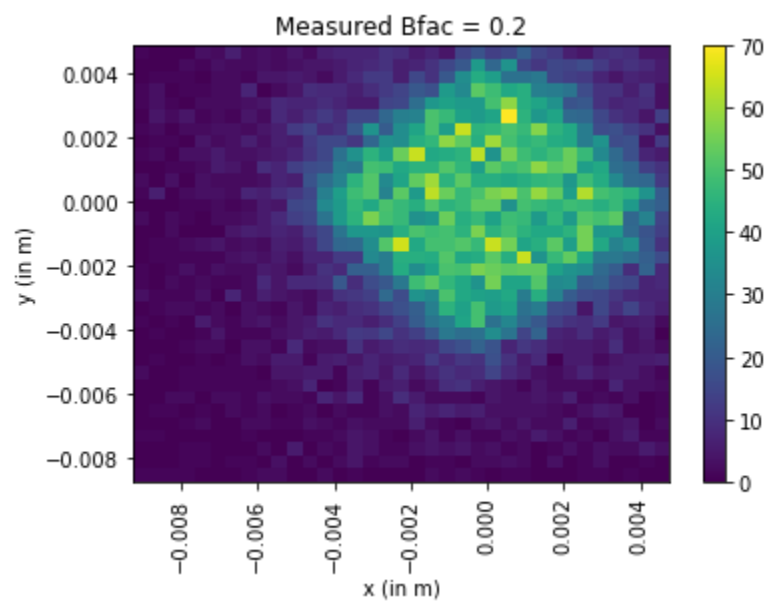
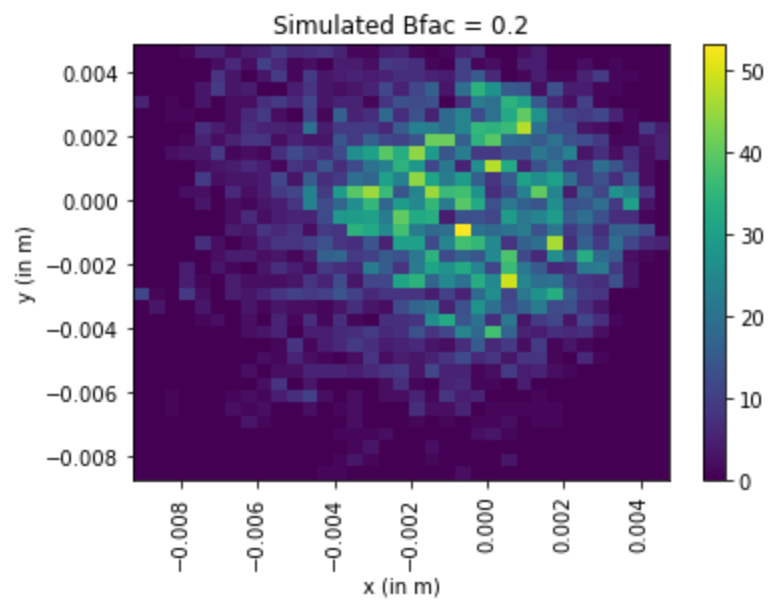


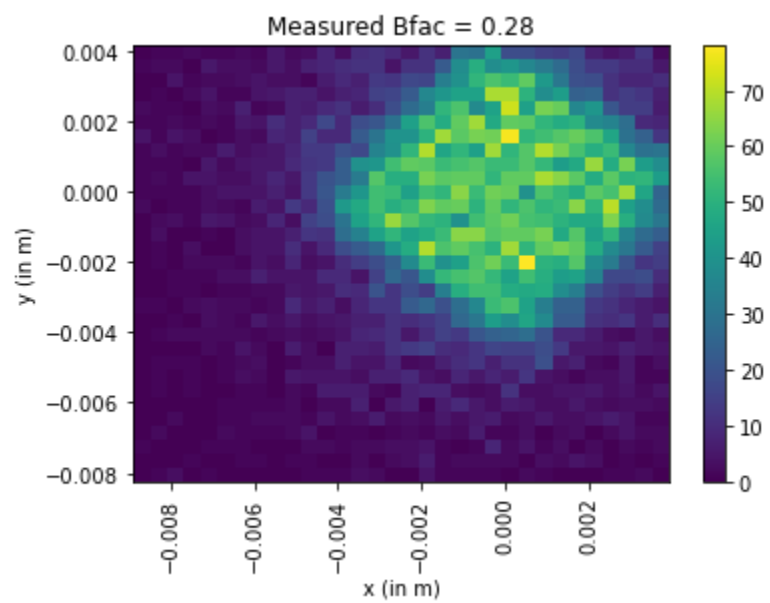
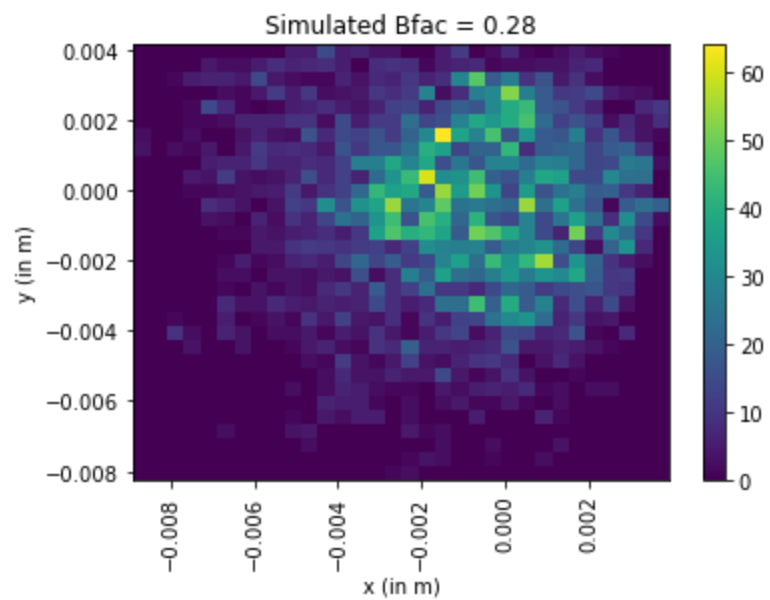


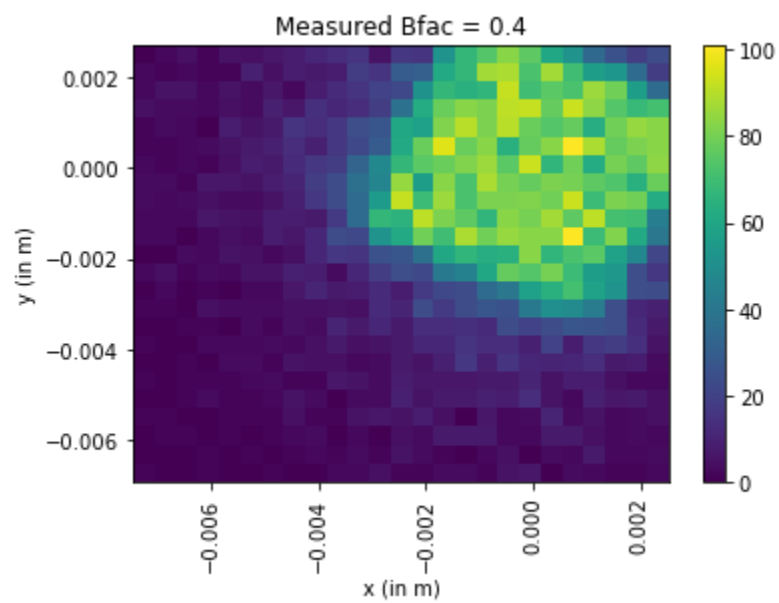
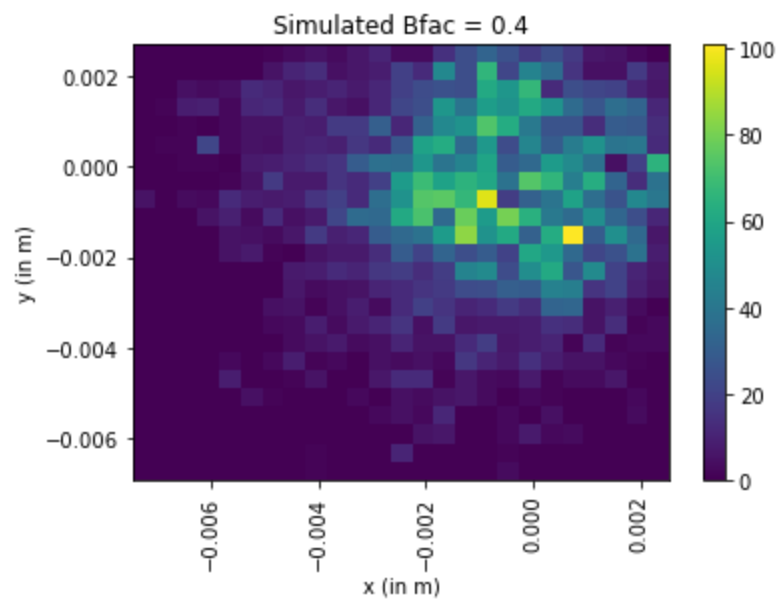


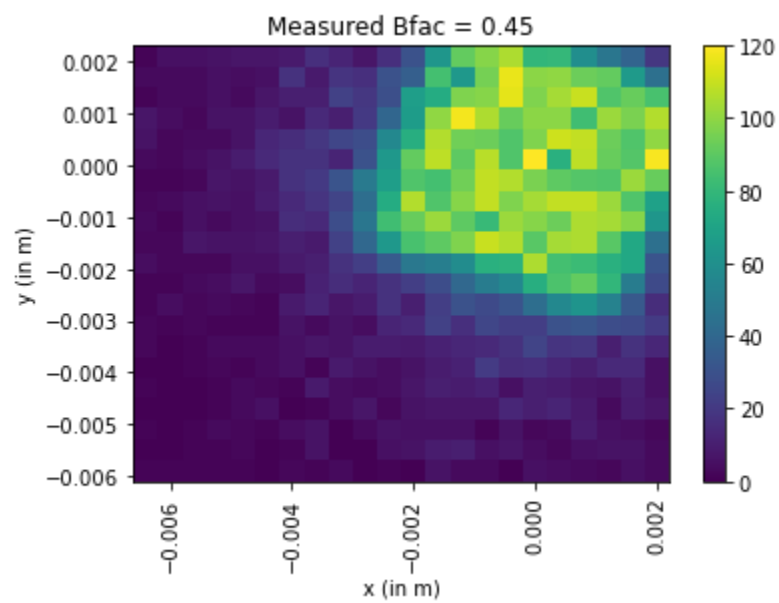
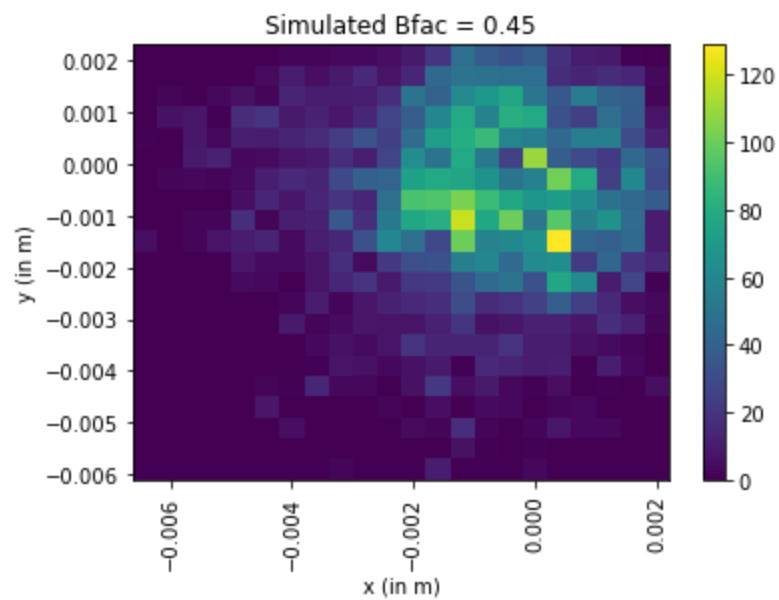


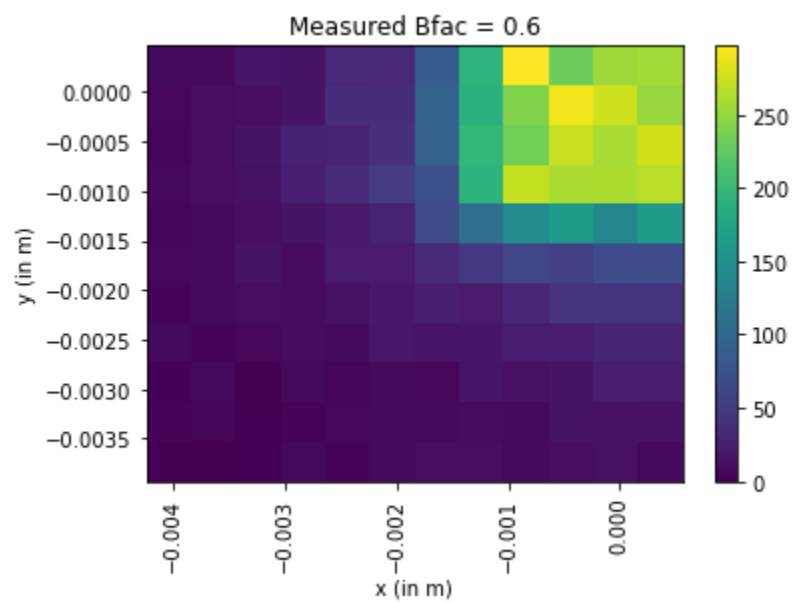
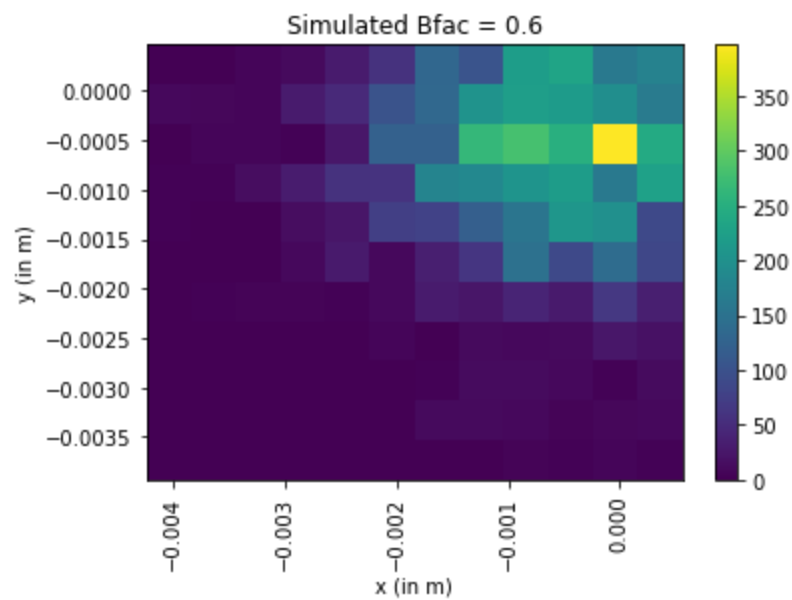
**5th Iteration**



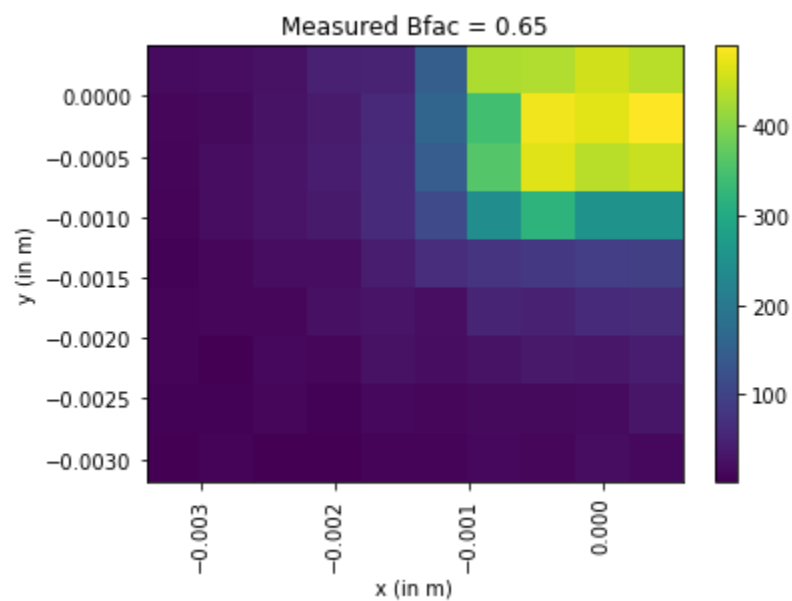
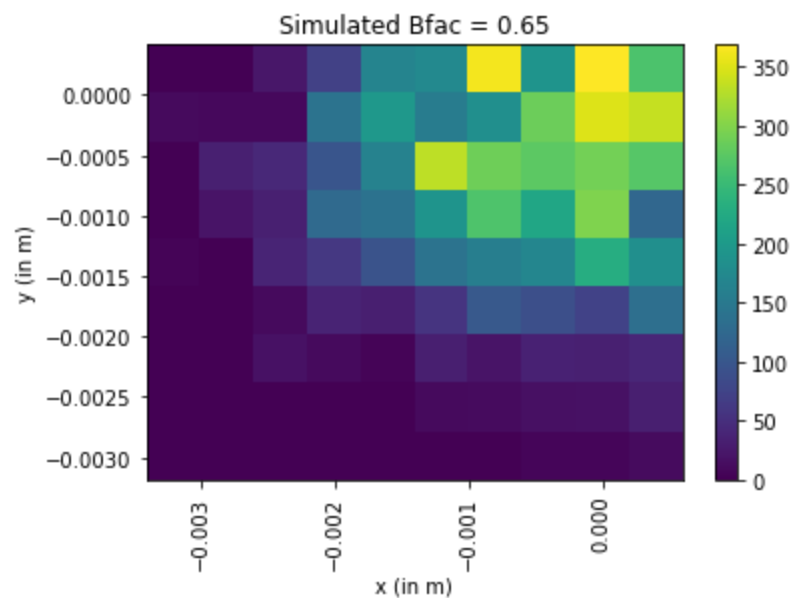


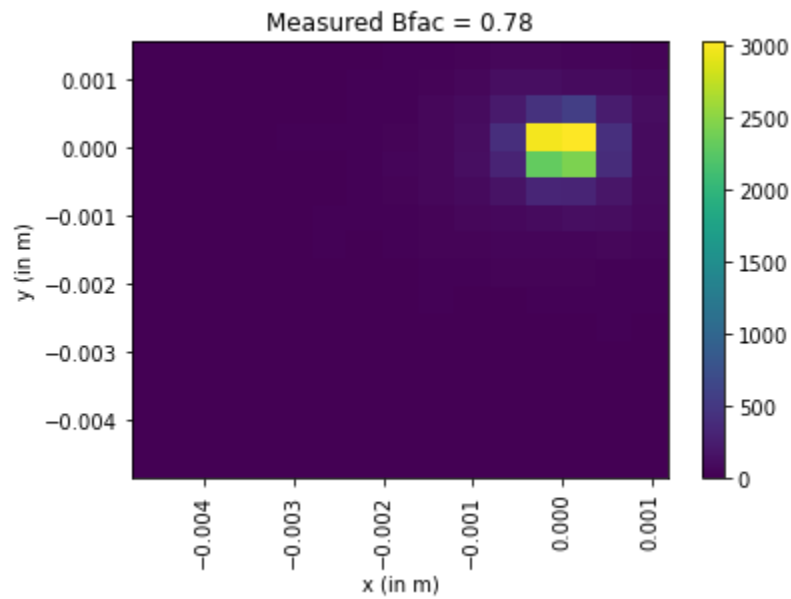
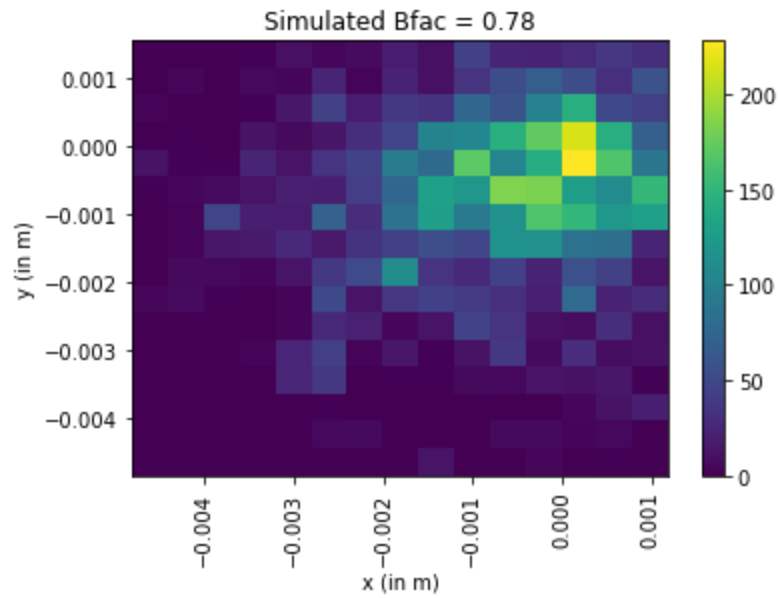




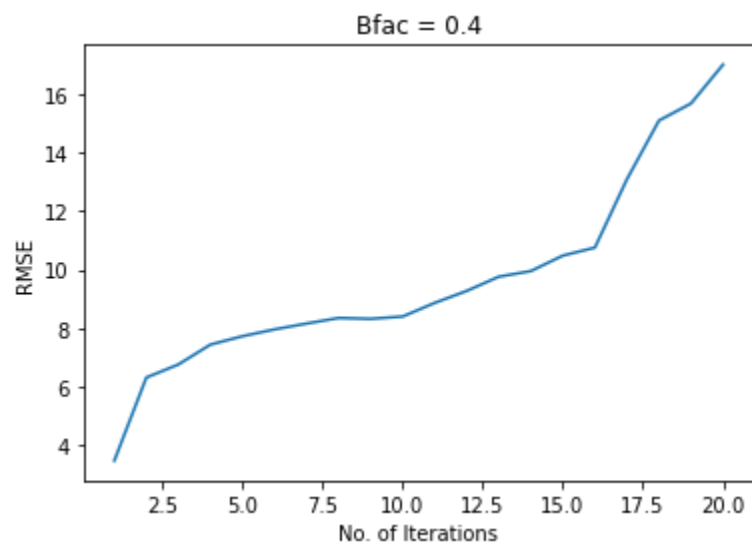
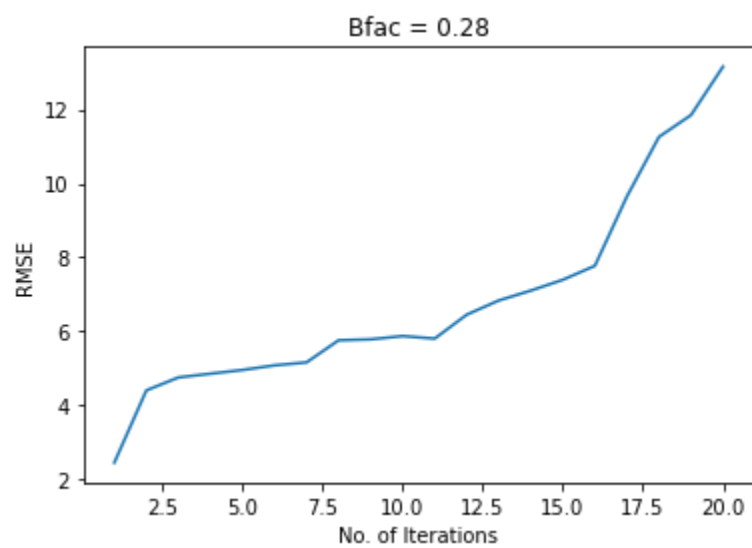
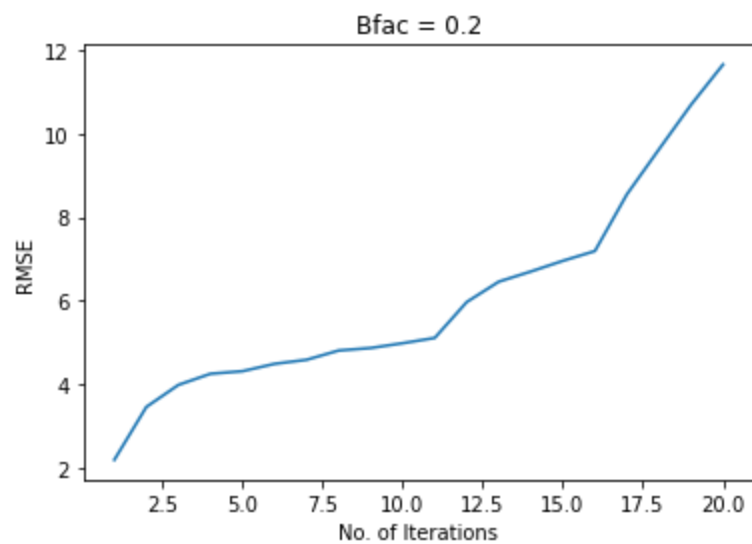


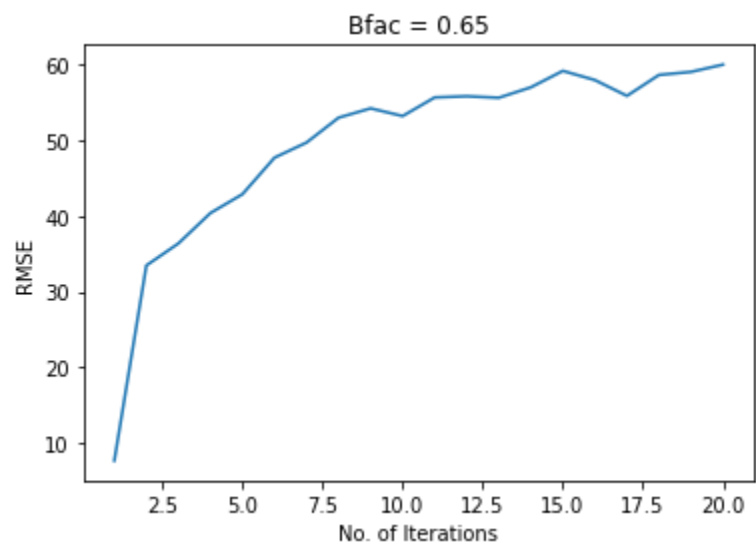
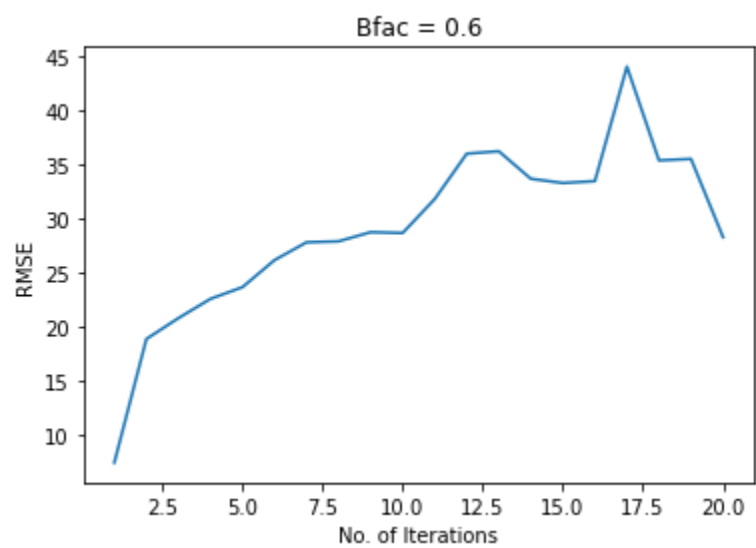
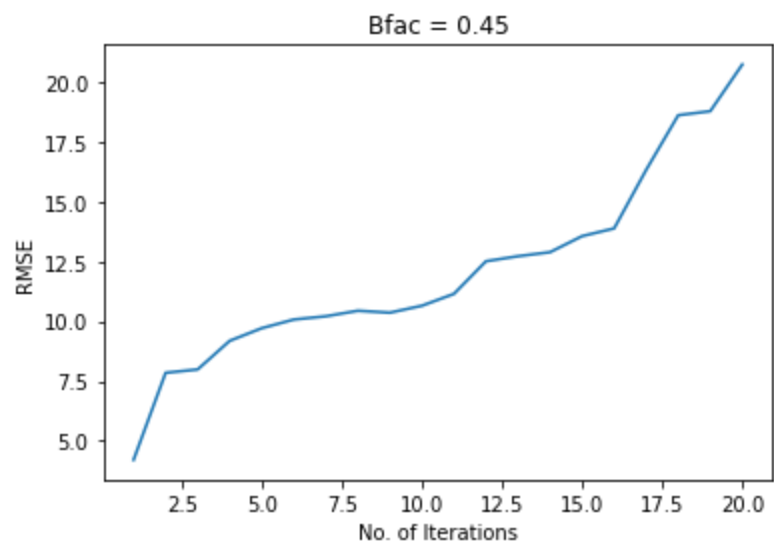


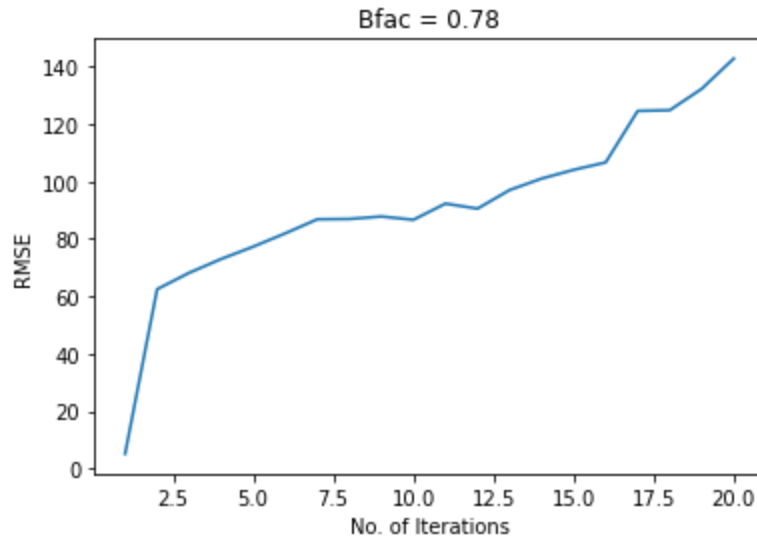




**Plots of RMSE vs No. of Iterations**







## **Problems**

1. RMSE is continuing to increase for all Bfac profiles as we can see from the graphs.
2. The shape of measured and simulated profiles seems to converge for the initial iterations but RMSE keeps on increasing, which I believe is due to the different intensities of the bins.
3. Couldn't understand and implement the 2nd moments of the distribution.
4. No saturation was observed in the RMSE values even after 20 iterations.
5. Even after doing some trial and error with different weight reductions, the RMSE could not be reduced.