
Table of Contents

.....	1
Changing Size	1
Changing # of pixels	2
(d)	5

```
clear;
close all;

load('lightField.mat');
xData = rays(1,:);
yData = rays(3,:);
```

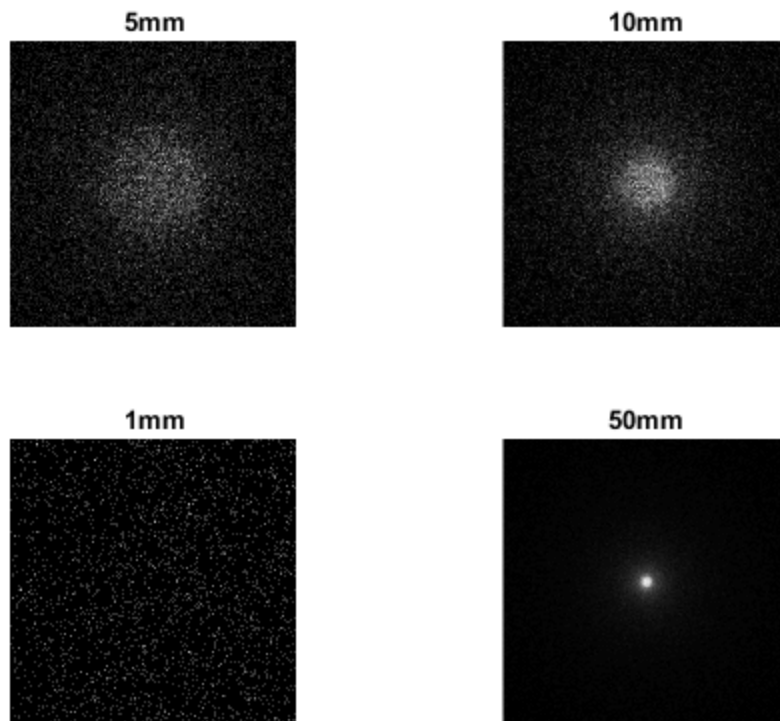
Changing Size

```
figure();
output = rays2img(xData, yData, 0.005, 500);
subplot(2,2,1);
imshow(output);
title("5mm");

output = rays2img(xData, yData, 0.01, 500);
%figure();
subplot(2,2,2);
imshow(output);
title("10mm");

output = rays2img(xData, yData, 0.001, 500);
%figure();
subplot(2,2,3);
imshow(output);
title("1mm");

output = rays2img(xData, yData, 0.05, 500);
%figure();
subplot(2,2,4);
imshow(output);
title("50mm");
```



Changing # of pixels

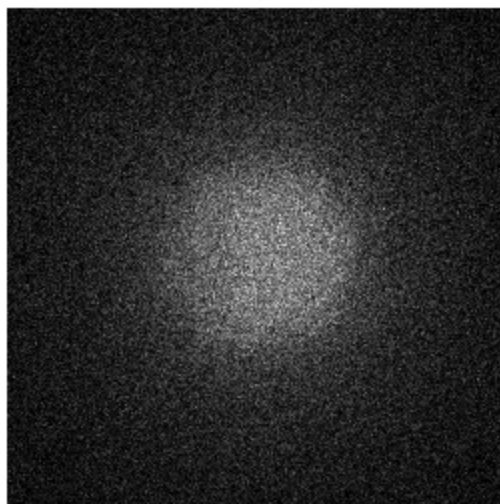
```
output = rays2img(xData, yData, 0.005, 250);  
figure();  
imshow(output);  
title("5mm, 250");
```

```
output = rays2img(xData, yData, 0.005, 500);  
figure();  
imshow(output);  
title("5mm, 500");
```

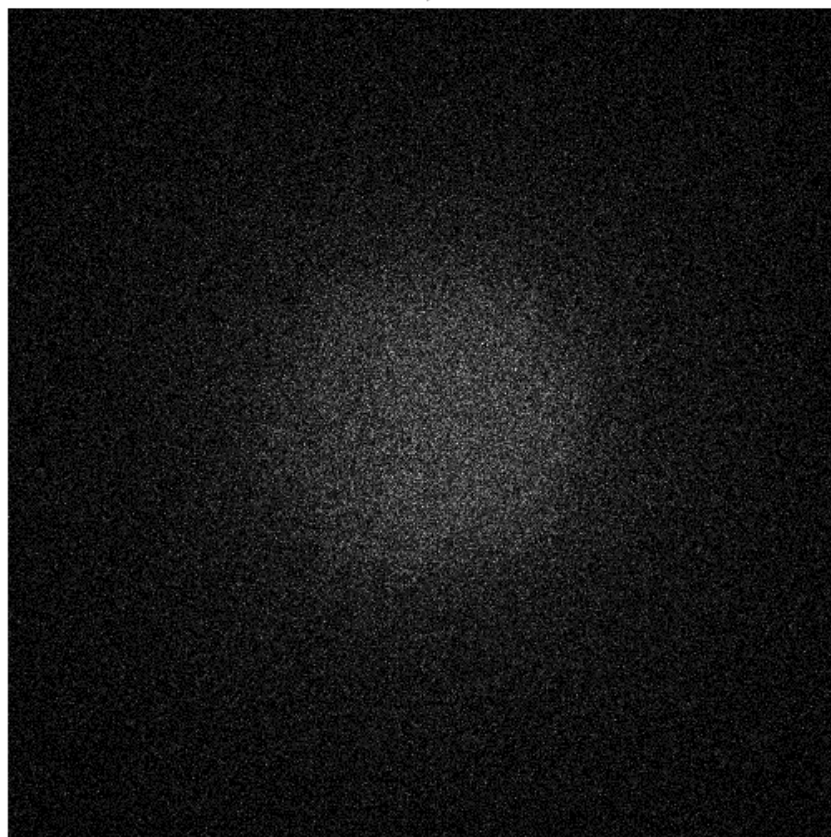
```
output = rays2img(xData, yData, 0.005, 750);  
figure();  
imshow(output);  
title("5mm, 750");
```

```
output = rays2img(xData, yData, 0.005, 1000);  
figure();  
imshow(output);  
title("5mm, 1000");
```

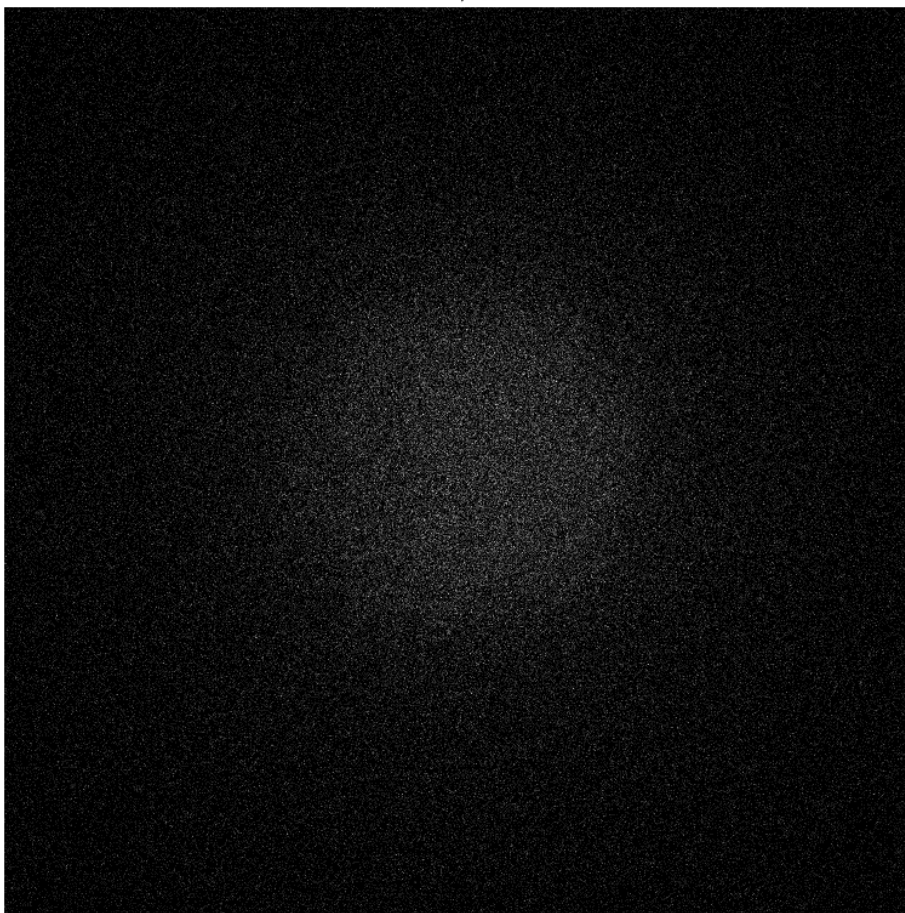
5mm, 250



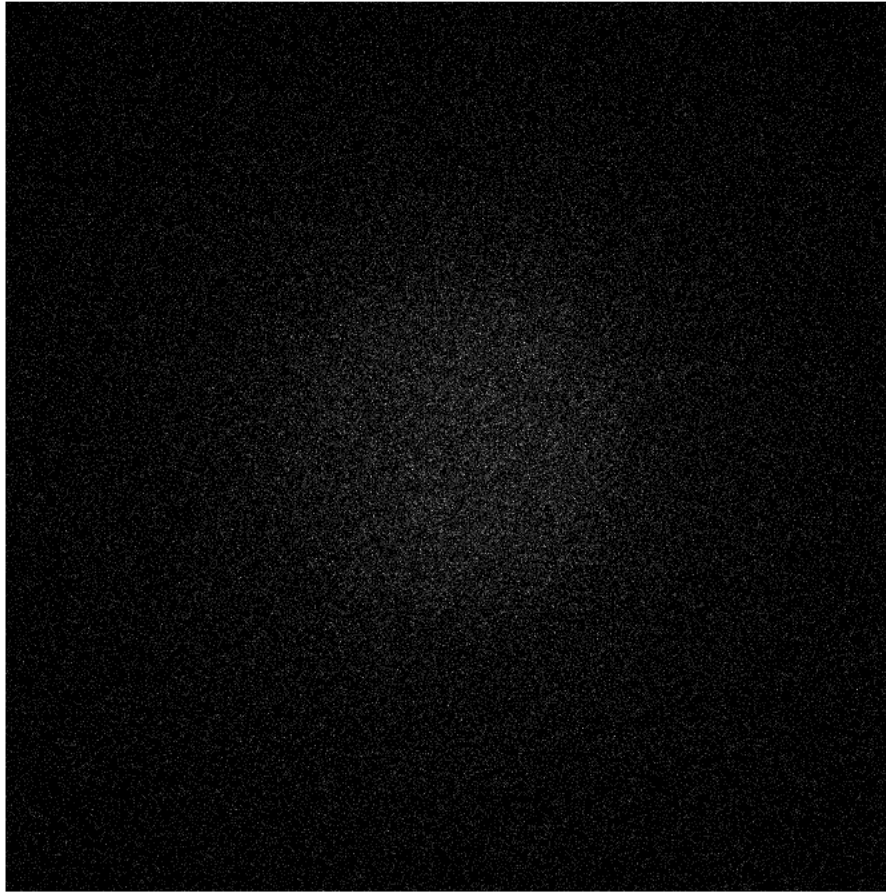
5mm, 500



5mm, 750



5mm, 1000

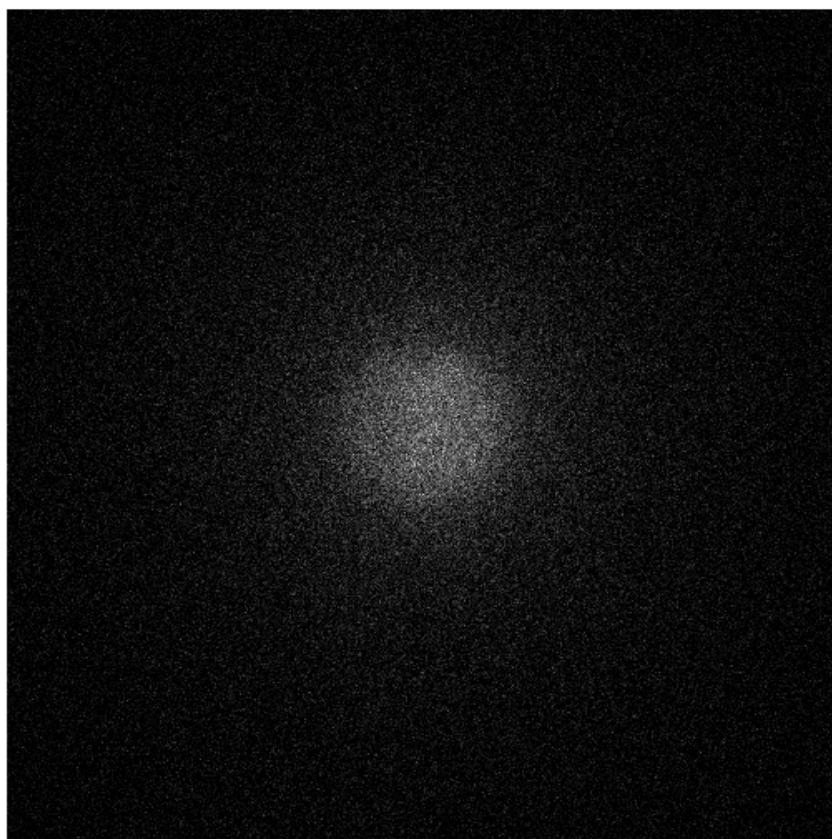


(d)

```
xData = rays(1,:);
yData = rays(3,:);
thetaxData = rays(2,:);
thetayData = rays(4,:);

d = .2;

finalX = xData + (thetaxData*d);
finalY = yData + (thetayData *d);
propagateRays = rays2img(finalX, finalY, 0.01, 500);
figure;
imshow(propagateRays);
```



Published with MATLAB® R2021a