```
C:\Users\adity\PycharmProjects\pythonProject\.venv\Scripts\python.exe "C:\Users\adity\PycharmProjects\pythonProject\MachineLearningProjects\SATELLITE IMAGE DATA ANALYSIS USING NUMPY.py"
[[[  0  17  57]
  [  0  11  71]
  [ 15  33 135]
  ...
  [ 19  25  77]
  [  0   4  33]
  [  0  14  17]]

 [[ 34  59 125]
  [ 25  47 130]
  [ 20  37 155]
  ...
  [  1   6  44]
  [  0   5  34]
  [  0   4  22]]

 [[ 26  53 170]
  [ 14  37 165]
  [ 12  27 178]
  ...
  [  0   4  14]
  [  0   5  31]
  [  1   4  55]]

 ...
```

```
27
28  [[  2   0   1]
29   [  2   0   1]
30   [  2   0   1]
31   ...
32   [  2   0   1]
33   [  2   0   1]
34   [  2   0   1]]
35
36  [[  2   0   1]
37   [  2   0   1]
38   [  2   0   1]
39   ...
40   [  2   0   1]
41   [  2   0   1]
42   [  2   0   1]]
43
44  [[  2   0   1]
45   [  2   0   1]
46   [  2   0   1]
47   ...
48   [  2   0   1]
49   [  2   0   1]
50   [  2   0   1]]]
51 (3725, 4797, 3)
52 Shape of photo_data: (3725, 4797, 3)
53 Shape of low_value_filter: (3725, 4797
   , 3)
54 [   0    1    2 ... 3722 3723 3724]
55 [   0    1    2 ... 3722 3723 3724]
56 <class 'numpy.ndarray'>
```

```
[[[255 255 255]
  [  0   0   0]
  [  0   0 135]
  ...
  [  0   0   0]
  [  0   0   0]
  [  0   0   0]]

 [[  0   0 125]
  [255 255 255]
  [  0   0 155]
  ...
  [  0   0   0]
  [  0   0   0]
  [  0   0   0]]

 [[  0   0 170]
  [  0   0 165]
  [255 255 255]
  ...
  [  0   0   0]
  [  0   0   0]
  [  0   0   0]]

 ...

 [[  0   0   0]
  [  0   0   0]
  [  0   0   0]
  ...
  [  0   0   0]
```

```
 88    [  0   0   0]
 89    [  0   0   0]]
 90
 91   [[  0   0   0]
 92    [  0   0   0]
 93    [  0   0   0]
 94    ...
 95    [  0   0   0]
 96    [  0   0   0]
 97    [  0   0   0]]
 98
 99   [[  0   0   0]
100    [  0   0   0]
101    [  0   0   0]
102    ...
103    [  0   0   0]
104    [  0   0   0]
105    [  0   0   0]]]
106 photo_data =  (3725, 4797, 3)
107 X =  (3725, 1)  and Y =  (1, 4797)
108 center_row =  1862.5 AND center_col
     =  2398.5
109 [[-1862.5]
110  [-1861.5]
111  [-1860.5]
112  ...
113  [ 1859.5]
114  [ 1860.5]
115  [ 1861.5]]
116 [[-2398.5 -2397.5 -2396.5 ...  2395.5
      2396.5  2397.5]]
```

```
117 [[9221708.5 9216912.5 9212118.5 ...
    9207326.5 9212118.5 9216912.5]
118  [9217984.5 9213188.5 9208394.5 ...
    9203602.5 9208394.5 9213188.5]
119  [9214262.5 9209466.5 9204672.5 ...
    9199880.5 9204672.5 9209466.5]
120  ...
121  [9210542.5 9205746.5 9200952.5 ...
    9196160.5 9200952.5 9205746.5]
122  [9214262.5 9209466.5 9204672.5 ...
    9199880.5 9204672.5 9209466.5]
123  [9217984.5 9213188.5 9208394.5 ...
    9203602.5 9208394.5 9213188.5]]
124 Radius =  3468906.25
125 [[ True  True  True ...  True  True
    True]
126  [ True  True  True ...  True  True
    True]
127  [ True  True  True ...  True  True
    True]
128  ...
129  [ True  True  True ...  True  True
    True]
130  [ True  True  True ...  True  True
    True]
131  [ True  True  True ...  True  True
    True]]
132 [[False False False ... False False
    False]
133  [False False False ... False False
    False]
```

```
 [False False False ... False False
  False]
 ...
 [False False False ... False False
  False]
 [False False False ... False False
  False]
 [False False False ... False False
  False]]

Process finished with exit code 0

```