# Bug #4016

**ctffind4 crashes when resmax is low**

03/08/2016 08:31 PM - Anchi Cheng

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
</tr>
<tr>
<td>Assignee:</td>
<td></td>
</tr>
<tr>
<td>Category:</td>
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</tr>
<tr>
<td>Target version:</td>
<td>Appion/Leginon 3.3</td>
</tr>
<tr>
<td>Affected Version:</td>
<td>Appion/Leginon 3.2</td>
</tr>
<tr>
<td>% Done:</td>
<td>0%</td>
</tr>
<tr>
<td>Start date:</td>
<td>03/08/2016</td>
</tr>
<tr>
<td>Due date:</td>
<td></td>
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<tr>
<td>Estimated:</td>
<td>0.00 hour</td>
</tr>
<tr>
<td>Spent time:</td>
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<tr>
<td>Workaround:</td>
<td></td>
</tr>
<tr>
<td>Show in known bugs:</td>
<td>No</td>
</tr>
</tbody>
</table>

**Description**

The default ctffind4.py value on the attached image fails during ctffind4 rotational average.

```
**warning(Image::ComputeRotationalAverageOfPower Spectrum): unable to rescale 1D average of experimental power
forrtl: error (73): floating divide by zero
```

parameters example:

```
--ampcontrast=0.07 --fieldsize=1024 --resmin=50 --resmax=10 --defstep=0.1 --numstep=50 --dast=0.05
```

passes if resmax=8

While this a problem of ctffind4, we should handle the error and give proper error log.

**Associated revisions**

Revision 19571 - 03/08/2016 08:32 PM - acheng
refs #4016 log error

Revision 41ae6837 - 03/08/2016 08:32 PM - Anchi Cheng
refs #4016 log error

**History**

**#1 - 03/08/2016 09:18 PM - Anchi Cheng**

- File test.mrc added
- Status changed from Assigned to In Code Review
- Assignee changed from Anchi Cheng to Neil Voss

r19571 just make sure the message printed corresponds.

test.mrc attached.

pixelsize = 1.27
kv = 200.0
cs = 2.0 mm
nominal defocus 1.236 um
actual defocus 2.9 um or so.

**#2 - 05/24/2016 03:24 PM - Neil Voss**

- Status changed from In Code Review to Closed
- Assignee deleted (Neil Voss)

looks good.

**Files**

03/18/2020