Appion - Bug #4505

apCtf crashes on bad display rather than moving on

10/05/2016 02:19 PM - Anchi Cheng

Status: Closed
Priority: High
Assignee: Neil Voss
Category: 
Target version: Appion/Leginon 3.3
Affected Version: Appion/Leginon 3.2
Show in known bugs: No

Start date: 10/05/2016
Due date:
% Done: 0%
Estimated time: 0.00 hour
Spent time: 0.00 hour
Workaround:

Description
This happens from time to time that one of the printError statement is hit. While this is useful in debug, there need to be a general mechanism for appion script to move on in production mode.

These images would be thrown out at the end, but a run done during automated data collection should move on since the it needs to keep up with data collection.

Related issues:
Related to Appion - Bug #4506: ctfinsert.py rejects angle of stigmation happe... New 10/05/2016

Associated revisions
Revision 282249e0 - 10/05/2016 05:08 PM - Anchi Cheng
refs #4505 avoid crash on non-fatal error

Revision ceb2901e - 10/05/2016 07:15 PM - Anchi Cheng
refs #4505 don't let appion script die from bad ctf display result check

Revision 76528e0c - 10/06/2016 07:56 PM - Anchi Cheng
refs #4505 log failed CTFdisplayTools plots and calculation but move on unless in debug mode.

Revision 1d14cf39 - 10/24/2016 11:14 PM - Anchi Cheng
refs #4505 move on if can not fit 30/10

History
#1 - 10/05/2016 02:27 PM - Anchi Cheng
One possibility is to put them in

if self.debug:

An example of this is in normalizeCTF:

```
if self.res80 < 6 and self.conf3010 < 0.3:
    print (numpy.around(confdata[:15],3))
apDisplay.printError("confidence below 0.3 and resolution better than 6A")
```

#2 - 10/05/2016 02:33 PM - Anchi Cheng
- Subject changed from apCtf crashes on bad display even though rather than moving on to apCtf crashes on bad display rather than moving on

#3 - 10/05/2016 03:30 PM - Neil Voss
This is to avoid false positive fits. What it needs to do is return None or something, so it is does upload the values to the database.

I initially put the crash in, because it usually meant something was wrong with the program.

#4 - 10/05/2016 03:30 PM - Neil Voss
There are many places that does this in the same module. Do you suggest me to go through them one by one? You should be better in judging which should be fatal. In addition, I start this issue to bounce ideas on how to make it possible to have both needs meet.

Okay, I see what you mean.

I am okay with adding self.debug flag, my test suite runs apCIf on 1000's of images looking for these fails and I do not reach them, so I like to know when they occur. Of course, I do not have time to work on any fix at the moment.

pushed two cases of this using self.debug is True

Related to Bug #4506: ctfinsert.py rejects angle of stigmation happens to be near 90 degrees. added

Most problems come from images with defocus close to zero and from phase plate data. With -0.5 um defocus that I use with phase plate, ctfdisplay fails to create graph about 90% of the time.