Need to look at images at all available bands for our 115.
Need to determine if the thing is really there (POSS, 2MASS, WISE, Spitzer), is star like or galaxy like (POSS, 2MASS, WISE, Spitzer), and if the photometry as determined from those bands is likely corrupted (*not* POSS, but yes 2MASS, WISE, Spitzer).
This had been encapsulated as "keep" (==really there, stellar PSF, photom ok), "worry" (==may not be there, or PSF may not be stellar, or photom may be corrupted), "drop" (==not there all WISE bands if identified solely from WISE colors, or photom clearly a mess, which would admittedly mean 'drop photom' not 'drop obj', which was originally an option; your inspections have revealed that we want to keep all of the newly identified objects.)

→ For POSS, 2MASS, WISE, we have the FinderChart tool.

AFAIK, all of you are done with a first pass through this.

You (collectively) requested opportunity to go back through and have a second pass. I gather about half of you have done this.

→ For Spitzer, it is not quite so trivial a process. There are several ways to do this, one of which became possible in the last week, thanks to Robert. Keep in mind that only a fraction of the 115 sources even appear in the right part of the sky to be in the Spitzer data. Robert has already done the work of identifying which of the sources might have Spitzer data, and even which bands. Look in the image inspection merged spreadsheet.

1. **APT method**: Load any Spitzer image into APT. Locate and identify the subset of the 115 sources that are in the Spitzer image (using whatever method you want; I suggest regions files in ds9 on the image and then noting the x,y, and typing that into APT, but many of you [mostly students??] raised objections to this process during the summer visit). Make notes about the image of the object in question. As long as you are there, do photometry. Repeat for all four IRAC bands and MIPS-24. **PRO**: you can do photometry at the same time. **CON**: slow. IMHO annoying to find sources.
2. **Ds9, Spitzer only** (*in MOVIE*): Load all 5 Spitzer images (four IRAC+MIPS-24) into ds9. Locate and identify the subset of the 115 sources that are in the Spitzer images (using whatever method you want; I suggest regions files in ds9 as the easiest solution). You will want to use the Frame/Match/Frame/WCS trick to snap all the images to the same location on the sky. **PRO**: you don't need to keep loading in FITS images into frames in ds9. **CON**: You still have to find the individual objects in the images and keep track of which you've done (which you can do) and which you haven't (or have just skipped). I sometimes find this challenging in this context.
3. **Ds9, Spitzer+FinderChart results**: (*in MOVIE*) Use ds9 and take advantage of the fact that the FinderChart FITS images are tiny thumbnails centered on the source in question for each source. You are

going to let ds9 find the sources for you. For the subset of the 115 sources that are in the Spitzer image, pick any of these small thumbnails and use the Frame/Match/Frame/WCS trick to align the images. You can do this in any of several ways.

a. Get the thumbnail images.
    i. During the FinderChart image inspection process above, you may have downloaded all of the FITS images together as one big zip file. If you downloaded mine, or ticked the right box when you packaged your own, you will have the files sorted by directory named for the source number.
    ii. You can go back to FinderChart and download the images (again) as you might have before, or you can download one at a time. You can even download one channel at a time. In any case, keep track of which objects are which downloads.
b. Load the relevant images into ds9
    i. If you have mastered the command line interface, you can invoke ds9 like:
    ds9 irac/ch?/pbcd/*maic.fits finderchart/source4009/*fits
    ii. If you do not want to master the command line interface, you can load all the Spitzer images one at a time into new frames, and then load one of the finderchart thumbnails into a new frame.
c. Pick one of the thumbnails in ds9. Choose Frame/Match/Frame/WCS to snap all the images to the same location on the sky.
d. Repeat with another thumbnail – you do not need to close ds9; just load another thumbnail into the same frame you have the first thumbnail.

PRO: you don't have to find the individual objects in the image; it does it for you. **CON**: you have to keep loading images.

4. **Robert's screen snapshots**: Go and download the gifs/jpegs/pngs (or whatever they were; they are on my computer at work) that Robert made for us and shared via Google. He did option 3, but then took a screen snapshot before closing the window, and made it available to us. **PRO**: you don't have to do the image loading. **CON**: you can't change the stretch or zoom.

After all of this, we need to assemble all the image assessments from POSS+2MASS+WISE, and match them up to those from Spitzer, resolve any discrepancies among us. We need to know, or at least have a sense of, what we can trust -- or not trust -- when we assemble SEDs as the next step.