From: **Frank Masci** fmasci@ipac.caltech.edu
Subject: Re: W0855 paper v 0.1
Date: May 18, 2014 at 1:41 PM
To: Edward Wright wright@astro.ucla.edu
Cc: Davy Kirkpatrick davy@ipac.caltech.edu, Roc Cutri roc@ipac.caltech.edu, Amy Mainzer (3266) Amy.Mainzer@jpl.nasa.gov

Hi Ned,

It's hard to tell what that w1 contaminant is. It appears consistent with correlated-noise fuzz. Nonetheless, I made difference images to try and remove everything static. Attached are the w1,w2 "neowiser minus cryo" differences.

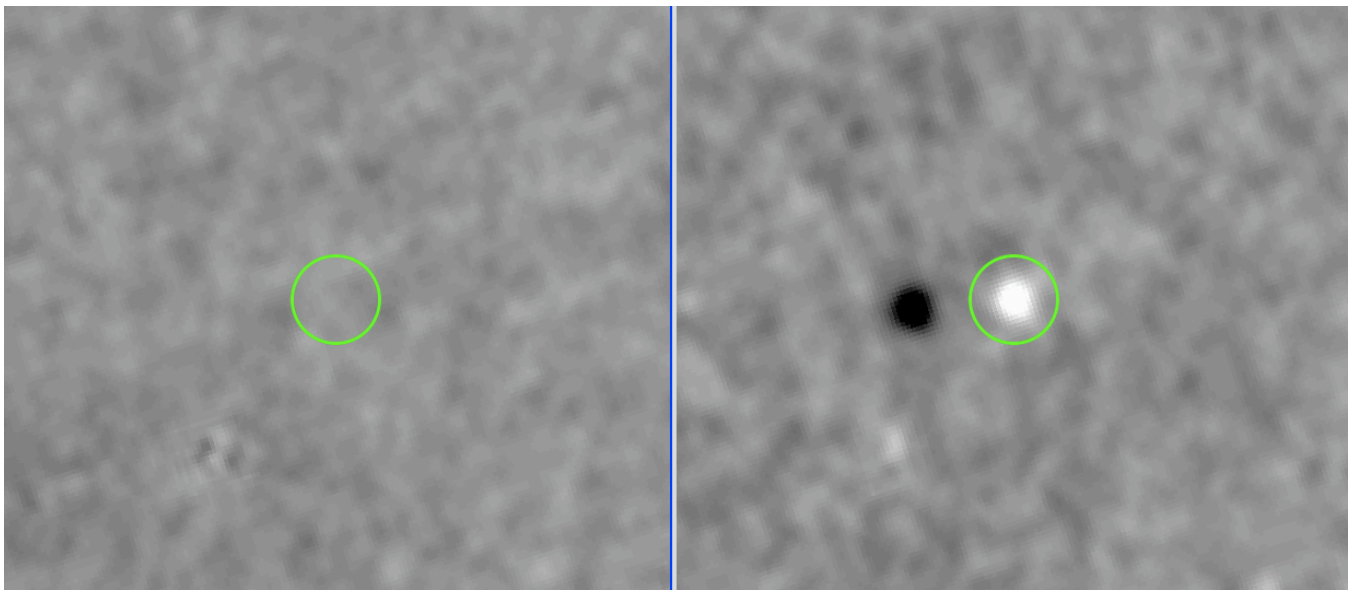
Here's the difference image photometry for cryo and neowiser using a 16" radius aperture on the BD location on the positive and negative differences. The W1 cryo flux measurement was negative and hence the mag is given as a 3-sigma upper limit.

band/epoch	s/n	mag	sigma
W1 cryo:	-0.100	>1.6406e+01	null
W2 cryo:	13.009	1.3603e+01	8.3460e-02
W1 neowiser:	2.082	1.6941e+01	5.2152e-01
W2 neowiser:	8.363	1.3874e+01	1.2982e-01

Regards, Frank

On May 16, 2014, at 11:26 AM, Edward Wright wrote:

> It seems to me that there is some background thing at the WISE 2014 position. I can't tell how bright it is from Davy's Figure, but we might get a cleaner W1 flux by image subtraction.



> ----- Original Message -----
> From: "Frank Masci" <fmasci@ipac.caltech.edu>
> To: "Davy Kirkpatrick" <davy@ipac.caltech.edu>, "Edward Wright" <wright@astro.ucla.edu>
> Cc: "Roc Cutri" <roc@ipac.caltech.edu>, "Amy Mainzer (3266)" <Amy.Mainzer@jpl.nasa.gov>
> Sent: Friday, May 16, 2014 11:07:11 AM

Subject: Re: W0855 paper v 0.1

Ned, Davy -

Here are the adjustments to the neowiser photometry in Table 2:

w1mpro(new) = w1mpro(old) + 0.005 mag (close to zero, see plots below).
w2mpro(new) = w2mpro(old) + 0.015 mag.

Also, from the w?rchi2 distributions around the magnitudes of interest, I suggest multiplying the W2 uncertainties in Table 2 by ~sqrt(0.8) ~ 0.89. W1 sigmas are fine.

With the above changes, the new W1-W2 color would be 3.803 +/- 0.329 mag.

Supporting plots are here:
http://wise2.ipac.caltech.edu/proj/fmasci/neowiser_W0855_coadphot/vs_allwise/

Regards, Frank