

## Wieman, Seth

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**From:** Wieman, Seth  
**Sent:** Monday, June 20, 2016 6:48 PM  
**To:** 'Dimitri Mawet'  
**Cc:** Dekany, Richard G.  
**Subject:** RE: WIRC-POL work plan  
**Attachments:** NESSI dispersion.pdf

Hi Dimitri,

The attached diagram shows dispersion at the NESSI detector plane based on the Zemax model with the currently specified polarization grating at the pupil plane in place of the NESSI grisms. The delta lambda per pixel is about 2.95nm which is similar to that modeled for WIRC (about 2.8 nm).

Best,  
Seth

**From:** Dimitri Mawet [mailto:dmawet@astro.caltech.edu]  
**Sent:** Thursday, June 16, 2016 3:30 PM  
**To:** Wieman, Seth <swieman@caltech.edu>  
**Cc:** Dekany, Richard G. <rgd@astro.caltech.edu>  
**Subject:** Re: WIRC-POL work plan

Hi Seth,

I just discussed with Rich, and Ricky. I think it would be wise to put everything on hold for now, and postpone the PDR. We should hold a detector test review instead with Rebecca.

Regarding the polarization grating order, we need to proceed quickly. The risk is that the JPL budget evaporates if we do not use it by the end of the fiscal year.

Rich will send you the NESSI ZMX file, can you check if the polarization grating as currently specified roughly fits into NESSI and produces a similar results as in WIRC? This is just to make sure we have that option as a backup.

Best,

Dimitri

On Thu, Jun 16, 2016 at 12:24 PM, Wieman, Seth <[swieman@caltech.edu](mailto:swieman@caltech.edu)> wrote:

Hi Dimitri and Rich,

When we met on Monday the question arose regarding changes to Chuck Henderson's WIRC-POL SOW over whether his work on the project should be suspended immediately or should continue through the June 24<sup>th</sup>

PDR. We were withholding a decision on this pending further results from Roger and Dave's latest round of tests (expected sometime this week) and related decision on whether to postpone the PDR.

Has there been any additional information from Roger or further discussion about the PDR? I would like to talk with Chuck about the change in work plan and finish revising the SOW with tasks divided in two phases (past+current, and pending 'go-ahead') as suggested by Rich, and this information will help to estimate how much time to include in each phase.

I am returning from Palomar this evening and will be back at Caltech for the WIRC-POL meeting tomorrow.

Many thanks,

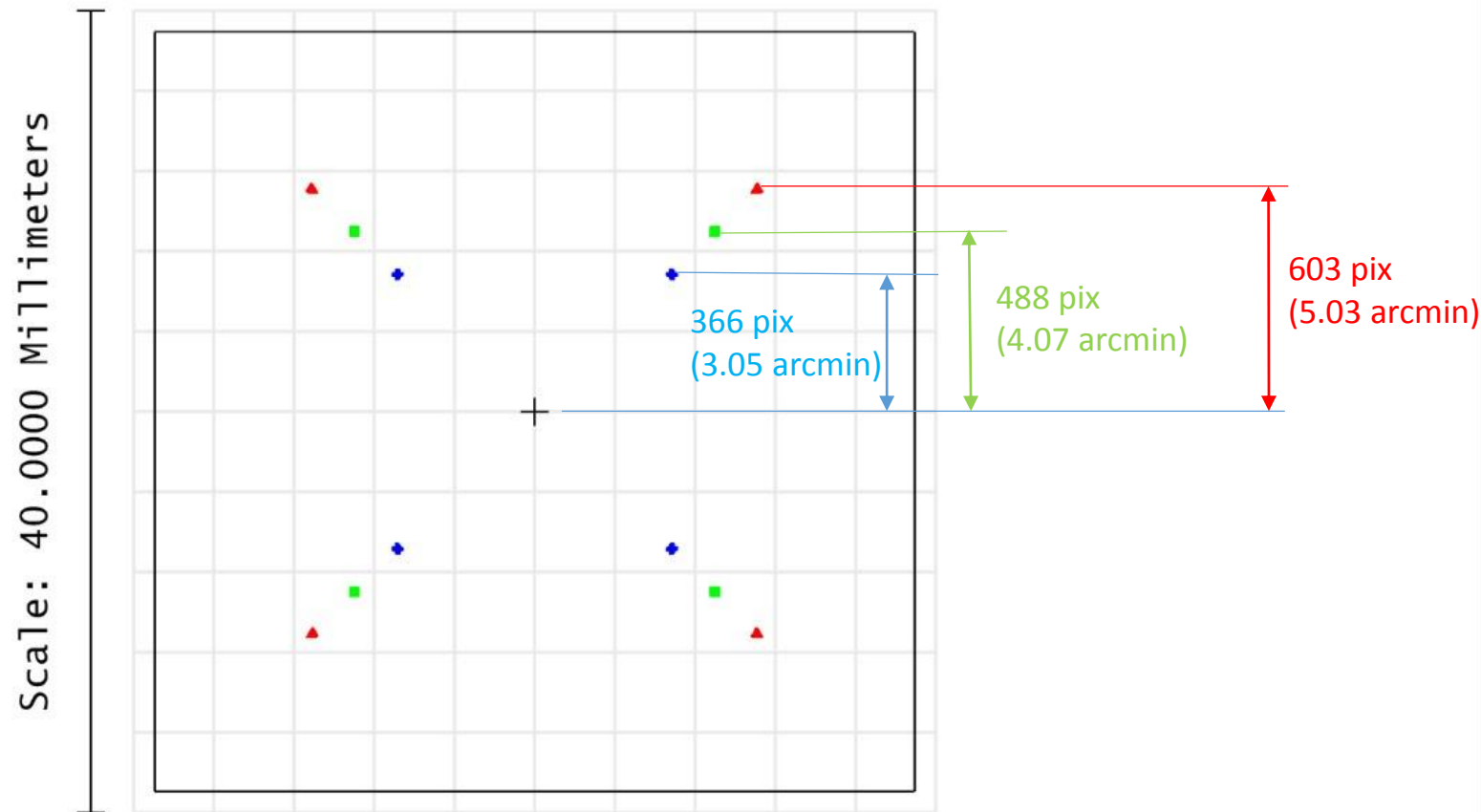
Seth

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Dispersion at NESSI  
detector plane (Plate  
scale : 0.5"/pixel) for  
1.1, 1.45 , and 1.8  $\mu\text{m}$   
beams using a 17 $\mu\text{m}$   
period PG.



Aperture Full X Width : 37.8880  
Aperture Full Y Height: 37.8880

Footprint Diagram

6/20/2016 Surface 46: Ray X Min = -11.1538 Ray X Max = 11.1538 Ray Y Min = -11.1538 Ray Y Max = 11.1538 Max Radius= 15.7679 Wavelength= All	Zemax Zemax OpticStudio 15.5 SP2
	ZernikeSYS-12-2o13a_1_o_2a_PG.zmx Configurations 1, 2, 3, 4.