

Re: Guiding and Magnification?

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Davoud,

I always used as high a power for visual guiding as I could and some times a little out of focus to make a disk making the center of the cross hairs easier to see. One old timer taught me to not to use the center of the cross but just off to the side as it worked better with his eyes. It depended on the telescope and cross hair pattern on how I did it.

Guiding with a ccd one can centroid to better than one pixel in cases where you have the signal to noise. I usually try to find a guide star that requires an exposure time over 1 second to reject seeing motion.

Because of the sub pixel resolution one can get with a ccd guider we have used a focal reducer on the guide camera to widen the field of view giving us a better chance of finding a guide star.

Dan

Davoud wrote:

- > *Conventional wisdom once held that the guide 'scope should have a*
- > *greater magnification than the imaging 'scope/lens by a factor of*
- > *(something or other.) With the advent of cameras that contain both*
- > *imaging and guiding chips, or that image and guide using the same chip,*
- > *this notion seems to have fallen by the wayside, and I haven't seen*
- > *this "old rule" mentioned in some time.*
- >
- > *This is not an issue if I am imaging with my little Tele Vue 76*
- > *(particularly with the reducer/flatener is in place) while guiding with*
- > *my Meade 8". But what about the opposite situation -- won't it be*
- > *necessary to put a TV "Powermate" or a Barlow in front of the ST-4 when*
- > *it is mounted on the TV 76 and I am imaging with the Meade?*
- >
- > *TIA*
- >
- > *Davoud*
- >
- > *(I don't actually expect to have the opportunity to *use* any knowledge*

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- > *that I may gain in response to this post; I have just guaranteed*
- > *another six weeks of clouds in the Mid-Atlantic by taking delivery of*
- > *an ST-4 autoguider that I bought from a gentleman who advertised it on*
- > *AstroMart. Today's weather: flash-flood warning. Tomorrow: worse.)*
- >