Subject: Re: How to compute SIP distortion parameters?
Posted by MichaelT on Sun, 11 Sep 2011 20:23:47 GMT
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Thanks for your reply Wayne!

> 1. It would be nice if one could directly use the IDL POLYWARP function, which computes distortion coefficients.

I was thinking about using mpfit. Then I could choose the function I want to use for fitting.

> 2. I wrote a program a couple of years ago to use mpfit2dfun to find quadratic SIP parameters.
I can send this to you, though it is not documented and was written for a specific situation.
One thing to note though is that you don't want to first find a linear solution (e.g. with STARAST) and then determine the nonlinear SIP coefficients, but rather you want to find all astrometric parameters at the same time.

OK, thanks for that advice. So the optimal procedure it is not as simple as I had thought. The distortions are small (< 3 pixels) - so maybe I could still do it in two steps? Anyway, it would certainly be great if I could have a look at your code!

>
> 3. You might want to also look at the remarkablehttp://astrometry.netWeb page.

I know this page and have used it quite often. It basically inspired me to have a look at all the fits header astrometry stuff. But for an amateur who wants to stack 40+ images, uploading all the images would be a bit inconvenient. So I try to come up with something that is quicker.

Michael