Subject: Re: New Image Processing Routines
Posted by David Fanning on Fri, 24 Feb 2006 16:07:15 GMT
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J.D. Smith writes:

> 2. The ASINCH scaling, which is linear at the low end, and logarithmic
> at the high end (which is about perfect for showing noise properties and
> high contrast features all at once). Robert Lupton wrote such a beast
> in IDL already:
>
> http://cheops1.uchicago.edu/idlhelp/sdssidl/plotting/tvasinh .html
>
> His website links to a little paper describing the method (which has
> some very nice properties, but occasionally produces strange-looking
> images:
>
> http://www.astro.princeton.edu/~rhl/PrettyPictures/
>
> The trick will be coming up with an easier way to set the 2 parameters
> required that affect the scaling.

Ah, this is like a tuned gamma function! Nice. I get it! It
is helpful to have some pictures to view:

```
alpha = 0.2 ; 0.0 > alpha < 1.0
nonlinear = 8 ; 1 > nonlinear < inf
data = indgen(256)
Plot, asinh(alpha*nonlinear*image)/nonlinear
```

Now vary alpha and nonlinear and you will see how to "tune"
the function.

Cheers,

David

P.S. Requires the ASTRO library routine ASINH.
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Coyote's Guide to IDL Programming: http://www.dfanning.com/