Subject: Re: shifting individual pixels within an image
Posted by penteado on Mon, 03 May 2010 13:41:55 GMT
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On May 3, 10:19 am, David Fanning <n...@dfanning.com> wrote:
> barbis writes:
>> SHIFT function returns the following:
>
>> % SHIFT: Expression must be a scalar or 1 element array in this
>> context: TX.
>
>> it does not accept 2 dim arrays as input.
>
> Not sure where you are getting this information,
> but you are being misinformed. :-)

I think that he means that the amount to shift cannot be an array.
What he seems to want is not what I would call a shift, which is
moving each dimension by a constant value, but to get, for each
position in the array, the value at some other position, given by an
offset, which is not the same for every pixel (or evey dimension).
Then add that to the original value.

It seems he wants something like:

```
sz=size(input,/dimensions)
;convert offsets (tx,ty) into indexes after offset (ix,iy)
ix=rebin(lindgen(sz[0]),sz[0],sz[1])+tx
iy=rebin(reform(lindgen(sz[1]),1,sz[1]),sz[0],sz[1])+ty
output=input[ix,iy]+input
```

That is assuming that no shifts will get to out-of-range indexes.