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Subject: Re: Image division causes Floating illegal operand  
Posted by [Paul Van Delst\[1\]](#) on Thu, 18 May 2006 18:13:06 GMT  
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elsueniero@gmail.com wrote:

> Hello,  
>  
> I am writing a small program to calculate NDVI from MODIS images. I  
> got a mask of the valid pixels (no clouds or water) and two calibration  
> coefficients. The code is  
>  
> partA = (b1\*coef[0,1] - b0\*coef[0,0])\*mask  
> partB = (b1\*coef[0,1] + b0\*coef[0,0])\*mask  
>  
> ndviimg = partA / partB

Won't this always be 1.0 ?? :o)

>  
> ind = Where(Finite(ndviimg, /NAN), count)  
> IF count GT 0 THEN ndviimg[ind] = -1000.0  
>  
> But I allways get an "Program caused arithmetic error: Floating illegal  
> operand" even if the resulting image looks good.  
> The problem is in the division, because if I comment the line, it won't  
> show.  
>  
> Any ideas how to avoid this?

You can try something like,

```
partA = (b1*coef[0,1] - b0*coef[0,0])*mask
ndviimg = (b1*coef[0,1] + b0*coef[0,0])*mask
Idx=WHERE(ABS(ndviimg) GT 0.0, Count, $
          COMPLEMENT=ZeroIdx, NCOMPLEMENT=ZeroCount)
IF (Count GT 0) THEN ndviimg[Idx] = partA[Idx] / ndviimg[Idx]
IF (ZeroCount GT 0) THEN ndviimg[ZeroIdx] = -1000.0
```

I think there's a faster way to do this though. Probably using HISTOGRAM. :o)

paulv

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