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Subject: Re: Resolution returned from MAP\_PROJ\_IMAGE?  
Posted by [David Fanning](#) on Mon, 24 Nov 2008 17:40:56 GMT  
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bryan.s.hong@gmail.com writes:

> I'm using NLDAS (North America Land Data Assimilation System) data  
> which has 0.125 degree resolution with 464 X 224 grid boxes, and I'm  
> trying to project this data to the Albers map projection using the  
> code below. The LIMIT key used in the MAP\_PROJ\_IMAGE indicates the  
> total area coverage of NLDAS. Using this code, the result returns with  
> 464 X 224 grid boxes which are the exact same size as the original  
> data input. How can I know the spatial resolution of the result. I  
> believe the result should have a spatial resolution in meters, right?  
> Is there any way to give a specific resolution when the original data  
> are being warped?

>  
>     sMap = MAP\_PROJ\_INIT(103, SEMIMAJOR\_AXIS=6378137.0,  
> SEMIMINOR\_AXIS=6356752.31414,\$  
>         FALSE\_EASTING=0., FALSE\_NORTHING=0,  
> STANDARD\_PAR1=29.5,\$  
>         STANDARD\_PAR2=45.5, CENTER\_LATITUDE=23.,  
> CENTER\_LONGITUDE=-96.)  
>     Result = MAP\_PROJ\_IMAGE(Image, [-125.,25.,-67.,53.],  
> Map\_structure=sMap, missing=0)

I presume the results have the same units as your map projection, which appear to be in meters. The resolution is the extent (in meters) divided by the number of pixels in the result. You can increase or decrease the number of pixels in the result by using the DIMENSION keyword to MAP\_PROJ\_IMAGE.

Cheers,

David

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David Fanning, Ph.D.  
Coyote's Guide to IDL Programming ([www.dfanning.com](http://www.dfanning.com))  
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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