Subject: Re: How to find second minimum and maximum in 3D array?
Posted by Craig Markwardt on Wed, 25 Feb 2015 21:25:37 GMT
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On Wednesday, February 25, 2015 at 3:01:53 PM UTC-5, hf...@ssl.berkeley.edu wrote:
> I have a time series of ~200 images with dimensions [X,Y]=[400,250]. My data is a UINTARR[200,400,250]. It is very easy to get the minimum and maximum for each pixel X,Y in my time series using
>
> res=min(array,dimension=1,max=max_val)
> IDL> help,res,max_val
> RES FLOAT = Array[400, 250]
> MAX_VAL FLOAT = Array[400, 250]
>
> However, several pixels have 0 value or 65535 value and I want the second minimum and second maximum which are not 0 or 65535. I can do this in a for-loop, but is there a more clever and faster way?

You could use WHERE() once to find the pixels that are 0 or 65535, and then set those to NAN. Then you can use min() or max() directly with the /NAN keyword to ignore NAN values.

Craig