
Subject: Re: do SMOOTH not on all data
Posted by [mchinand](#) on Wed, 30 Oct 2002 16:05:14 GMT
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In article <3DC00163.2010308@giub.unibe.ch>,
David Oesch <oesch@giub.unibe.ch> wrote:
> Hi outthere,
>
> I just want to use SMOOTH on a 2D array. But some data are bad (-9999)
> and should not be considered in the smoothing process. Well trying to
> assign those bad data like this
> novalid=WHERE(array NE -9999)
> result=SMOOTH(array(novalid),5)
>
> DOES not work.
>
> I think the solution is using 'NaN' option, but how to I assign -9999 as
> NaN as the !VALUES.F_NAN is write protected?
>
> Cheers
>
> Dave
>

Try:

```
array(where(array eq -9999))= !VALUES.F_NAN
```

```
result=SMOOTH(array,5,/NAN)
```

--Mike

Subject: Re: do SMOOTH not on all data
Posted by [David Fanning](#) on Wed, 30 Oct 2002 16:10:38 GMT
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David Oesch (oesch@giub.unibe.ch) writes:

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You want something like this:

```
arrayCopy = array
bad = Where(arrayCopy EQ -9999, count)
IF count GT 0 THEN arrayCopy[bad] = !Values.F_NAN
smoothedArray = Smooth(arrayCopy, /NAN, 5)
```

Cheers,

David

--

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Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: do SMOOTH not on all data
Posted by [air_jlin](#) on Thu, 31 Oct 2002 01:16:37 GMT
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hi Dave,

how about setting the values of -9999 to NaN and then use the /Nan keyword in SMOOTH? this would mean you'd convert your data to floating, but i'm assuming that's ok with you since you're smoothing it:

```
novalid=WHERE(array eq -9999)
array=FLOAT(array)
array[novalid] = !VALUES.F_NAN
result=SMOOTH(array,5,/Nan)
```

hope this helps!

best,
-Johnny

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Web: <http://cires.colorado.edu/~johnny/>

David Oesch <oesch@giub.unibe.ch> wrote in message
news:<3DC00163.2010308@giub.uninovalid=WHERE(array NE -9999)be.ch>...

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