Subject: Delete bad data and interplate the new data
Posted by duxiyu@gmail.com on Mon, 12 Mar 2007 09:23:54 GMT
View Forum Message <> Reply to Message

I have a data array.
But there is some bad data in it.
I want to use the interpolative data to replace these bad points.

It is easy to make a procedure to do it, but I wonder whether there is
internal procedure in IDL.

Best regards,
Du Jian

Subject: Re: Delete bad data and interplate the new data
Posted by JD Smith on Tue, 13 Mar 2007 16:18:47 GMT
View Forum Message <> Reply to Message

On Mon, 12 Mar 2007 02:23:54 -0700, duxiyu@gmail.com wrote:

> I have a data array.
> But there is some bad data in it.
> I want to use the interpolative data to replace these bad points.
>
> It is easy to make a procedure to do it, but I wonder whether there is
> internal procedure in IDL.

Yes, INTERPOL:

```
data=[1,2,3,42,5,6,7]
badval=42
bad=where(data eq badval,nbad,COMPLEMENT=good,NCOMPLEMENT=ngood)
if nbad gt 0 && ngood gt 1 then data[bad]=interpol(data[good],good,bad)
```

If you want to do 2D or higher-dimension interpolation, you'll need a
bit more magic.

JD

Subject: Re: Delete bad data and interplate the new data
Posted by David Fanning on Tue, 13 Mar 2007 17:26:44 GMT
View Forum Message <> Reply to Message

JD Smith writes:

> Yes, INTERPOL:
>
> data=[1,2,3,42,5,6,7]
> badval=42
> bad=where(data eq badval,nbad,COMPLEMENT=good,NCOMPLEMENT=ngood)
> if nbad gt 0 && ngood gt 1 then data[bad]=interpol(data[good],good,bad)
>
> If you want to do 2D or higher-dimension interpolation, you'll need a
> bit more magic.

Yikes! If you showed us the 2D case we would have the makings
of a nice little article here. :-)

Cheers,

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