
Subject: Re: Interpolation problem
Posted by [sdj](#) on Tue, 04 Nov 2003 11:26:31 GMT
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Thank you for the help, yes your program indeed does the trick.

The only minor thing I had to change was to set the valid data NE to -1 AND NE to -9999 (see my original message), and then overwrite the interpolated values of the -9999 indices with the original data.

Thus, I end up interpolating the missing values without taking into account the non-valid ones.

PRO test2

```
; Make a data set
n = 100
data = SIN( FINDGEN(n,n)/n^2 )

; Missing data
mx = RANDOMU(1, n, /LONG) MOD n^2
data[mx] = -1

; Non-valid data
nv = RANDOMU(2, n, /LONG) MOD n^2
data[nv] = -9999

valid = WHERE(data NE -1 AND data NE -9999)
ix = valid MOD n
iy = valid / n

; Fill in missing data
TRIANGULATE,ix,iy,tr
new = TRIGRID(ix, iy, data[valid],tr, NX = n, NY = n)

;Reset non-valid values equal to -9999
new[nv] = data[nv]
```

Again, thanks for your help.

Hasta lluego,
Pepe

the_cacc@hotmail.com (trouble) wrote in message
news:<5f9f0a23.0311031206.167c106a@posting.google.com>...
> sdj@tiscali.it (Pepe) wrote in message
news:<56bc95a7.0311030321.42de483d@posting.google.com>...
>>

>> I have a 2-d array on a regular grid with valid values which are all
>> +ve. Non valid values are set to -9999 and some 'intermediate' values
>> I would like to interpolate are set to -1.

>

> It sounds like you may be mis-understanding the MISSING keyword in
> interpolate. In fact, you may want to be using different functions
> altogether: TRIANGULATE & TRIGRID.

>

> Try the program below and see if it's what you're looking for.

>

> Ciao.

>

> ;-----

> PRO test

>

> ; Make a data set

> n = 100

> data = SIN(FINDGEN(n,n)/n^2)

>

> ; Missing data

> mx = RANDOMU(1,n,/LONG) MOD n^2

> data[mx] = -1

> valid = WHERE(data NE -1)

> ix = valid MOD n

> iy = valid / n

>

> ; Fill in missing data

> TRIANGULATE,ix,iy,tr

> new = TRIGRID(ix,iy,data[valid],tr,NX=n,NY=n)

>

> ; Display.

> tvscl,data >0

> tvscl,new

>

> END

> ;-----
