Subject: INTERPOLATE function - Question
Posted by dmfl0590 on Wed, 09 Mar 2016 12:34:01 GMT
View Forum Message <> Reply to Message

Hi all

I wrote the following code because I'm interested to understand how the INTERPOLATE (bilinear) function works.

```
Big = randomu(2,136,136)
nint = size(Big, /dimensions)

Small = fltarr(4,4)
Small[0,0]=0.1
n = size(Small, /dimensions)
n = n[1:*]

X = (n[0]-1)*findgen(nint[0])/(nint[0]-1E)
Y = (n[0]-1)*findgen(nint[0])/(nint[0]-1E)

Small_int = fltarr(nint[0],nint[1])
Small_int = INTERPOLATE(reform(Small[*,*]), X, Y, /GRID)
```

The Small array which is the array I want to interpolate has only one non-zero entry. When I interpolated from [4,4] to [136,136] I noticed that Small_int[0:44,0:44] its the non-zero part of the matrix (2025 non-zero pixels), i.e. that part of matrix affected by interpolation.

I did the same test but this time the Small=[8,8]. I interpolated to [136,136] and I got 400 non-zero pixels (i.e. Small_int[0:19,0:19]).

Does anyone knows if it's possible to know how many pixels will be affected when we interpolate our matrices?

Thanks in advance