
Subject: Oh what is wrong with WHERE() ?

Posted by [Liberum](#) on Sat, 29 Apr 2006 14:51:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi,

Can someone find the disappearing pixel here? I have been trying and can't seem to find it.

Two arrays m and p and both are 1215 X 1215 arrays. The code is not difficult or complex and contains where functions to check the arrays.

The following operations were performed:

```
print, size(m, /dimensions)
no_data = WHERE(m EQ 5.0 OR m EQ 0.0, cm); finding no data
IF cm GT 0 THEN m[no_data] = 255.0
nodata_m = WHERE(m EQ 255.0, count_m, COMPLEMENT=datam, $
```

```
      NCOMPLEMENT=ndatam)
print, 'Num pixs with data: ', ndatam
print, 'Num no data pixs: ', count_m
;*****
ice    = WHERE(m EQ 4.0, ci)
IF ci GT 0 THEN m[ice] = 1.0
cloudy = WHERE(m EQ 3.0, cclo)
IF cclo GT 0 THEN m[cloudy] = 2.0
r = where((m EQ 255.0 OR m EQ 1.0 OR m EQ 2.0), check_m,
COMPLEMENT=comp, NCOMPLEMENT=ncomp)
print, 'check_m: ', check_m
if ncomp gt 0 then stop, m[comp]
;*****
print, size(p, /dimensions)
no_data = WHERE(p EQ 5.0 OR p EQ 0.0, cp)
IF cp GT 0 THEN p[no_data] = 255.0
nodata_p = WHERE(p EQ 255.0, count_p, COMPLEMENT=datap,
NCOMPLEMENT=ndatap)
print, 'Num pixs with data: ', ndatap
print, 'Num no data pixs: ', count_p
;*****
ice    = WHERE(p EQ 4.0, cice)
IF cice GT 0 THEN p[ice] = 1.0
cloudy = WHERE(p EQ 3.0, ccloud)
IF ccloud GT 0 THEN p[cloudy] = 2.0
r = where((p EQ 255.0 OR p EQ 1.0 OR p EQ 2.0), check_p,
COMPLEMENT=compp, NCOMPLEMENT=ncompp)
print, 'check_p: ', check_p
IF ncompp GT 0 THEN stop, p[compp]
;*****
;setting all areas where nodata to a common area
```

```

IF count_m GE count_p THEN nodata_tot = nodata_m ELSE nodata_tot =
nodata_p
print, count_p
print, count_m
print, N_ELEMENTS(nodata_tot)
m[nodata_tot] = 255.0
p[nodata_tot] = 255.0
; finding the area with real data check
va_data = WHERE(p EQ 255.0, COMPLEMENT=vdatap, NCOMPLEMENT=chp)
va_data = WHERE(m EQ 255.0, COMPLEMENT=vdatam, NCOMPLEMENT=chm)
print, 'chp: ', chp, ' chm: ', chm
////////////////////////////////////
IDL print out:
      1215      1215
Num pixs with data:      32272
Num no data pixs:      1443953
check_m:      1476225
      1215      1215
Num pixs with data:      1476183
Num no data pixs:      42
check_p:      1476225
      42
      1443953
      1443953
chp:      32271 chm:      32272
////////////////////////////////////

```

What happened to one pixel??

This was supposed to be a simple check to ensure that the two arrays are balanced for comparison but this missing pixel eludes me.

Any help would be greatly appreciated!!!

/Sheldon