
Subject: Re: Maximum value array resampling

Posted by [Richard French](#) on Fri, 05 Aug 2005 20:45:06 GMT

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This works much better! I was being brain dead. Once you know the indices of each of the four entries in each cell, you can do a direct compare. It took 7-8 seconds on my Powerbook G4 for a 4000 x 5000 image, compared to 40-45 seconds using loops:

```
nx=4000L
```

```
ny=5000L
```

```
; put in random values (this is the slow step!)
```

```
X=rebin(fix(1000*(randomu(seed,nx*ny))),nx,ny)
```

```
nx2=nx/2L
```

```
ny2=ny/2L
```

```
; get indices of upper left element of each 2x2 cell
```

```
l=rebin(nx*2#lindgen(ny2),nx2,ny2)+rebin(lindgen(nx2)#2,nx2, ny2)
```

```
; compare with indices of ul,ur, ll, lr of each 2x2 cell
```

```
print,'Start....'
```

```
T10=systime(1)
```

```
xfinal=x[l]>x[l+1]>x[l+nx]>x[l+nx+1]
```

```
print,'Time=',systime(1)-t10
```

```
t20=systime(1)
```

```
y=intarr(nx2,ny2)
```

```
for i=0,nx2-1 do x[i,*]=x[2*i,*] > x[2*i+1,*]
```

```
for i=0,ny2-1 do y[* ,i]=x[0:nx2-1,2*i] > x[0:nx2-1,2*i+1]
```

```
print,'Time=',systime(1)-t20
```

```
print,max(abs(xfinal-y)) ; confirm that we get same result
```

```
end
```

```
~
```
