

---

Subject: Speed problem

Posted by [lloyd](#) on Wed, 23 Feb 2005 18:22:00 GMT

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

---

Hi

Can anyone help me speed up this piece of code. I've hear that using histograms might be good, any ideas?

This piece of code takes a point centered at [pixel\_z,pixel\_y] and looks for all detections within a 'radius'. The position of these detections are defined by two arrays, z and y, giving their coordinates. After this other things are done but this isn't a problem. The really slow part is the pt1 where section. This identifies from the arrays of 200,000 points, the points which lie in a box +-radius in y and z. Then the coners are removed using then next where condition.

```
for pixel_y=uint(min(y)),roundup(max(y))-1 do begin
  for pixel_z=uint(min(z)),roundup(max(z))-1 do begin
    pt1 = where(y ge pixel_y-radius and y le pixel_y+radius and z ge
pixel_z-radius and z le pixel_z+radius)
    if pt1[0] ne -1 then begin
      b = where((y[pt1]-pixel_y)^2+(z[pt1]-pixel_z)^2 le radius^2)
      if b[0] ne -1 then begin
        a = pt1[b]
        w = weight(SQRT((y[a]-pixel_y)^2+(z[a]-pixel_z)^2),FWHM/3.0)
        m[(pixel_y-uint(min(y))), (pixel_z-uint(min(z)))] = total(w*s[a])
      endif
    endif
  endfor
endfor
```

Any help would be greatly appriciated

Lloyd

---