Subject: Re: binning a point clouds in the xy plane
Posted by David Fanning on Fri, 20 Dec 2013 00:20:46 GMT
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Nafiseh M writes:

> Thanks a lot,
>
> it is really a brilliant idea. :)
>
> I have just problem with cgReverseIndices to find indices of avg z values.
>
> here is the code;
>
> readcol, 'sampledata.txt', x, y, z
>
> hist_xy=hist_nd(transpose([[x],[y]]),[0.05,0.05],$
> min=[min(x),min(y)],max=[max(x),max(y)],reverse_indices=ri)
>
> avg_hist_xyz=make_array(size(hist_xy,/DIMENSIONS),VALUE=!VAL UES.F_NAN)
>
> for j=0,n_elements(hist_xy)-1 do if ri[j+1] gt ri[j] then $
> avg_hist_xyz[j]=mean(z[ri[ri[j]:ri[j+1]-1]])
>
> ;;;;;;;;;;;;;; I am not sure how to use correctly "cgReverseIndices"
>
> help, indicesz ?????

I would use it like this:

```
for j=0,n_elements(hist_xy)-1 do begin
  indicesz = cgReverseIndices(ri, j, COUNT=cnt)
  if cnt gt 0 then avg_hist[j] = Median(z[indicesz])
endfor
```

I would use Median rather than Mean so I wasn't being confused by
outliers, but you should decide what is best for you.

Cheers,

David
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")