Subject: hist_nd question
Posted by Wox on Mon, 05 Mar 2007 15:17:09 GMT
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Hi all,

I have been using JD's hist_nd before, but I just found something strange. Maybe this is already corrected somewhere or maybe this is a "feature", but N-dimensional points falling outside of the given min/max boundries, are mapped to the first and the last bin. To clarify:

```
IDL> ha=hist_nd([[0,1,0],[2,0,1],[3,2,2],[0,1,1],[-1,0,0]],
Min=[0,0,0], Max=[2,2,2],1) & print,ha
       1*        0        0
        1        0        0
        0        0        0

        0        0        1
        1        0        0
        0        0        0

        0        0        0
        0        0        0
        0        0        0
```

The 1* must be 0.

The fix is simple: change two lines.

```
h=(nbins[s[0]-1]-1)<long((V[s[0]-1,*]-mn[s[0]-1])/bs[s[0]-1]) >0L
=>
h=nbins[s[0]-1]<long((V[s[0]-1,*]-mn[s[0]-1])/bs[s[0]-1])>-1L

h=nbins[i]*h+((nbins[i]-1)<long((V[i,*]-mn[i])/bs[i])>0L)
=>
h=nbins[i]*h+(nbins[i]<long((V[i,*]-mn[i])/bs[i])>-1L)
```

But since this function was written be JD and presented on Fanning's website, I obviously started doubting myself :-). Hence the question: is this a bug or a feature? And by changing these two lines, are there negative consequences which I overlooked?