
Subject: Re: matching coordinates
Posted by [JD Smith](#) on Tue, 31 Jul 2007 00:20:55 GMT
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On Mon, 30 Jul 2007 11:12:23 +0000, jradavenport wrote:

```
>  
> % HISTOGRAM: Illegal binsize or max/min.  
>  
> This is for the line:  
>      ;; Dual HISTOGRAM method, loop by repeat count in bins  
>      h2 = histogram(h[b],MIN=1,REVERSE_INDICES=ri2)  
>  
> Anybody have ideas who knows about Histogram?
```

That is due to an array of all zeroes being passed to HISTOGRAM, with MIN=1. It seems that *none* of your bins had a match in it, which is very likely an indication that you need a larger search radius.

I've rolled the original algorithm into the function MATCH_2D, available here:

http://turtle.as.arizona.edu/idl/match_2d.pro

This version deals gracefully with the case of no search points in any target point bin, and also returns -1 in all cases where no point was found within the search radius (vs. returning a close-but-not-necessarily-the-closest point).

In principle one could also write MATCH_ND, but the sensitivity to a poorly chosen search_radius would become quite extreme in dimensions higher than 2, as would the need to search 2^d adjacent bins.

JD
