Subject: bimodal distribution
Posted by Giuseppe Papa on Fri, 19 Nov 2010 18:22:55 GMT
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I'm trying to simulate a bimodal "randomn" distribution with the 2 peaks having the sigmas of 0.3 each for example and mean around -1.2 and -0.7...
Do you have any tips?

I've tried adding these below, but it doesn't work..., I get a unimodal distribution...
met_1a = randomn(seed,100000)*0.3-1.2
met_1b = randomn(seed,100000)*0.3-0.7

I hope you can help me...
Cheers

Subject: Re: bimodal distribution
Posted by Dick Jackson on Tue, 23 Nov 2010 21:09:29 GMT
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Hi, ...

I think these do give a bimodal distribution, but they overlap a lot.
This might help, separating them by an extra two units:

met_1a = randomn(seed,100000)*0.3-1.2 -1
met_1b = randomn(seed,100000)*0.3-0.7 +1
plot,histogram([met_1a,met_1b],binsize=0.1),psym=10

Note: the X axis is off here, as you need to wrestle with Histogram()
and Plot() to get them right, but I think this makes the point.

Cheers,
-Dick

Dick Jackson Software Consulting
http://www.d-jackson.com

chiessantos wrote:
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> I hope you can help me...

> Cheers
>
>
>

Subject: Re: bimodal distribution
Posted by David Fanning on Tue, 23 Nov 2010 21:25:57 GMT
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Dick Jackson writes:

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>
> met_1a = randomn(seed,100000)*0.3-1.2 -1
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>
> Note: the X axis is off here, as you need to wrestle with Histogram()
> and Plot() to get them right, but I think this makes the point.

No wrestling needed with Histoplot. :-)

```
IDL> Histoplot,[met_1a,met_1b], Binsize=0.1
```

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
