
Subject: Re: selecting radnom number from 2D array

Posted by [Gray](#) on Thu, 10 Mar 2011 01:09:31 GMT

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On Mar 9, 7:36 pm, Ashok <ashokrija...@gmail.com> wrote:

- > I have 3 sets of two dimensional array. I need to select random 100
- > points from each array (same random point i.e. latitude and
- > longitude). How can I do that using RANDOMU()? is there any other idea
- > to do this?

http://www.idlcoyote.com/code_tips/randomindex.html

Subject: Re: selecting radnom number from 2D array

Posted by [pgrigis](#) on Thu, 10 Mar 2011 15:46:29 GMT

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On Mar 9, 7:36 pm, Ashok <ashokrija...@gmail.com> wrote:

- > I have 3 sets of two dimensional array. I need to select random 100
- > points from each array (same random point i.e. latitude and
- > longitude). How can I do that using RANDOMU()? is there any other idea
- > to do this?

Please do be careful and recognize that a random point on a sphere will not have a uniform distribution of latitudes, and a set of point with a uniform distribution of latitudes will not be uniform on a sphere.

For instance to obtain the following uniform distributions

www.grigis.ch/spherepoints.png

I had to account for that.

Ciao,
Paolo

Subject: Re: selecting radnom number from 2D array

Posted by [David Fanning](#) on Thu, 10 Mar 2011 16:03:42 GMT

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Paolo writes:

- > Please do be careful and recognize that a random point
- > on a sphere will not have a uniform distribution of latitudes,
- > and a set of point with a uniform distribution of latitudes

> will not be uniform on a sphere.
>
> For instance to obtain the following uniform distributions
>
> www.grigis.ch/spherepoints.png
>
> I had to account for that.

Here is more information about points on a sphere:

http://www.idlcoyote.com/code_tips/pts_in_sphere.html

Cheers,

David

--

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

Subject: Re: selecting radnom number from 2D array
Posted by [David Fanning](#) on Thu, 10 Mar 2011 16:08:45 GMT
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David Fanning writes:

> Here is more information about points on a sphere:
>
> http://www.idlcoyote.com/code_tips/pts_in_sphere.html

Whoops! Good information there, too, but I meant this
article:

http://www.idlcoyote.com/math_tips/randomsurface.html

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: selecting radnom number from 2D array
Posted by [Ashok](#) on Thu, 10 Mar 2011 22:57:40 GMT
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On Mar 9, 7:09 pm, Gray <grayliketheco...@gmail.com> wrote:
> On Mar 9, 7:36 pm, Ashok <ashokrija...@gmail.com> wrote:
>
>> I have 3 sets of two dimensional array. I need to select random 100
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>> longitude). How can I do that using RANDOMU()? is there any other idea
>> to do this?
>
> http://www.idlcoyote.com/code_tips/randomindex.html

Thank you, that is something helpful.
