
Subject: Re: evenly spaced vector

Posted by [sivan](#) on Thu, 06 Sep 2012 17:22:00 GMT

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On Thursday, September 6, 2012 5:00:29 PM UTC+3, Craig Markwardt wrote:

> On Thursday, September 6, 2012 7:22:21 AM UTC-4, sivan wrote:

>

>> On Sunday, September 2, 2012 11:46:56 PM UTC+3, Craig Markwardt wrote:

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>

>> i appreciated for your reply.

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>> it doesn't matter whether I use arcsample or not.

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>> the problem is that i don't place evenly spaced points along the curve.

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>> modified or unmodified arcsample routine doesn't work as requested. i tried both.

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>

>

> I tried this example:

>

> x0 = randomn(seed,5) & y0 = randomn(seed,5)

>

> arcsample, x0, y0, x, y

>

>

>

> plot, x0, y0 & oplot, x, y, psym=1

>

> plot, sqrt((x(1:*)-x)^2 + (y(1:*)-y)^2)

>

>

>

> It looks evenly spaced to me.

>

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>
> The points are evenly spaced along the (spline interpolation) path, but that does not necessarily mean equally distant from each other (linear interpolation).
>
>
>
> ARCSAMPLE up-samples by a factor of 100. If you modify that to a larger and larger number, then neighbor points will tend to be more and more equidistant.
>
>
>
> CM

this is the graphic:

<https://docs.google.com/open?id=0B8iEehZBld1OLUVXdndEQ2RwcE0>

as you can see, arcsample doesn't work properly. moreover, some points fall outside the curve.

this is the code and the data:

<https://docs.google.com/open?id=0B8iEehZBld1OaEI5UkJiTvfkelk>

inform me if links are broken.
