
Subject: Re: "Object Graphics and Vectors" Reloaded
Posted by [Ralf Schaa](#) on Wed, 04 Aug 2004 17:28:29 GMT
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David Fanning wrote:

> ... who have lost *weeks* (perhaps *months*!) struggling with the same thing. :-)

okay, I thought 'well, before taking David's hint I give it a try myself, this can't be soo hard ...'

This is what I have:

a nice 3d object plot in data-coordinates with all rangings from -2.5e4 to 2.5e4, so far so good.

Now I add a vector with Rick Towler's vector object, which needs as input a 'location' (the startpoint of the vector) and a 'magnitude' (the endpoint), these are defined in normalized coordinates.

Okay, all i have to do is give the location and the magnitude in values which are near my ranging-values, actually I calculated them with the formula taking from the idl help:

$$\text{NormX} = -\text{range}[0]/(\text{range}[1]-\text{range}[0]) + 1/(\text{range}[1]-\text{range}[0]) * \text{DataX}$$

I need the other way round:

$$\text{DataX} = \text{NormX} * ((\text{range}[1]-\text{range}[0])) + \text{range}[0]$$

e.g a vector in normalized coordinates from [0,0,0] to [1,1,1]

would be in datacoordinates

from [range[0],range[0],range[0]]

to [3*range[1],3*range[1],3*range[1]]

but nothing exciting happened ...

so where is my bug ?

Cheers

-Ralf
