
Subject: Re: Slope of a graph

Posted by [jameskuyper](#) on Sat, 02 May 2009 12:12:28 GMT

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d.poreh@gmail.com wrote:

> Folks

> I have an elevation distance plot (elevation-distance) in 2D and I

> want to calculate slope of this graph. For instance:

> DL> x=findgen(100)

> IDL> y=exp(-x)

> I need to calculate the slope of this graph in 100 points

> (corresponding to x). I tested DERIV function but seem shows incorrect

> results! In our example for low x we have high slope and for high x

> slopes are decreasing.

The slope of $\exp(-x)$ is $-\exp(-x)$, which start out with a value -1 at $x=0$, and gets smaller for large x . With a spacing of 1 you can't get very accurate values for the derivative using DERIV, but it should show the same pattern. Is that what you are seeing?
