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?