
Subject: Re: Non-linear axis

Posted by [Irene Dumkow](#) on Wed, 25 Oct 2000 07:00:00 GMT

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Martin Schultz wrote:

>

> Craig Markwardt wrote:

>>

>>

>> Pay no attention to Martin. :-) ...

>

> Oh Craig. Thanks for bringing me back on Earth ;-) Guess, I just got
> carried away by the word non-linear axis ... You only need resampling
> if you want to display an image which was sampled in linear "bins" on
> a non-linear axis.

>

> Never mind,
> Martin

>

I have the impression, that the elegant solution does need the
resampling

part. I am not sure if I brought my point across the first time. What I
have

is an image which needs two different y-axes, one is a standard linear
scale, the other is related to the first one as each value is
essentially

$a \cdot y_1 \cdot y_1$. I have seen the same style of axis-labeling for phase diagrams
with

one x-axis label linearly with values of 1000 K/ T and the second x-axis
labeled with standard Celsius temperatures as most thermometers aren't
labeled in 1000K / T.

The solution I found now with the hints given here (but which I consider
rather clumsy and almost like cheating):

While doing the contourplot getting the tickvalues with

Y_TICK_GET=y_value

Calculating the corresponding values for my second y-axis (y2_value).

Drawing the second y-axis using the AXIS procedure with positing the
ticks with YTICKV=y_value, labeling the ticks via YTICKNAME=y2_value,
and

using YTICKS to make sure I have the correct number of ticks.

This does not give me very nice numbers and if I want to get that I
supposed

I have to do quite some calculating back and forth. I think what I am
dreaming about is something kind of like the YLOG keyword.

Thanks for the help I have gotten so far

Irene
