
Subject: Plot [snip!] feature (was: Re: Plot bug or another "strange feature" ?)

Posted by [Nicolas Decoster](#) on Wed, 17 May 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi.

Thanks to all of you for the interesting contributions on this high-precision plotting. All this makes me understand better the spirit of IDL.

In fact I think I must say what motivates my original posting. A friend of mine tried to look what new data she computed look like using a plot. The data were double precision with very little variations: she saw the stairway thing I talk about while she expected a straight line. Like me, it is their first step using IDL. She didn't know the float conversion of plot. She thought that she had done something wrong on the computation of their data. She lost some time before figuring exactly what's happened. It is the pleasures of computer science.

I must recognize that I did not see the warning of IDL regarding the float conversion of plot, and that's why I was wrong using the word "bug" on the original subject.

I agree that to save memory a float conversion is a good thing. But I think that the range issue is a very important one even if it concerns only few scenarios.

J.D. Smith wrote:

- > It seems as if your argument is equivalent to complaining that your image value
- > which has data ranging from 1.e-12 to 2.e-12 doesn't display correctly with a
- > straight "tv" command. RSI *could* have developed some overly-generalized
- > notions of when and how to scale our data, which would work sometimes and
- > sometimes not, and when it didn't, it would take heavy magic and carnal
- > knowledge to get what you want. Thankfully they didn't.

No I don't think it is equivalent, because tv doesn't scale data at all, while plot does some scaling that is incomplete in some cases (the ones I mentionned). When you use tv you know you must manage ranging.

Paul van Delst wrote:

- > I think I understand what you mean and what you want - my point is (and
- > I'm sure you already know this) that when you want to
- > plot/print/whatever real numbers that reside near the boundaries of the
- > ability of various architectures to represent them, you're going to run
- > into problems as we have seen above. It's not a particularly IDL thing,
- > you just have to be careful.

I agree with you, my double precision data are beyond the boundaries of

the plot procedure. I think the real issue here is: "is the float conversion is a good choice". It is the RSI choice and it is ok in most case. It just does not fit my particular need. But a choice can't fit all needs. Ok. Perhaps some other RSI choices will fit some of my needs (*). Let's follow the "no exception" strategy suggested by David.

Later.

Nicolas.

(*) Well, it already happened, of course. IDL offers lots of interesting things, otherwise I would not be using it and talk about it.

--

Tél. : 00 (33) 5 62 88 11 16

Fax : 00 (33) 5 62 88 11 12

Nicolas.Decoster@Noveltis.fr

Noveltis

Parc Technologique du Canal

2, avenue de l'Europe

31520 Ramonville Saint Agne - France
