Subject: Re: Real Number on PVWAVE Posted by davidf on Wed, 17 Nov 1999 08:00:00 GMT

View Forum Message <> Reply to Message

Daniele Monti (daniele.monti@usa.net) writes:

```
> Thanks a lot for your help
> I've already tried to print data as you said but if I read these
> numbers using "DC READ FREE":
>
> 37374.000200
> 37374.000400
> 37374.000600
> 37374.000800
> 37374.001000
> 37374.001200
> 37374.001400
> 37374.001600
> 37374.001800
> 37374.002000
>
>
  The result I get is:
>
 WAVE> Print, x , Format='(D20.6)'
      37374.000000
>
      37374.000000
>
      37374.000000
>
      37374.000000
>
>
      37374.000000
      37374.000000
      37374.000000
>
      37374.000000
>
      37374.000000
>
      37374.003906
>
 Why????
```

Well, I suspect that DC_READ_FREE is reading the data as Floats, rather than as Doubles. I'm not familiar with the routine, but I'd guess it was written in the PV-Wave language and probably of the same quality as something like READ_IMAGE in IDL. :-)

Is there a DOUBLE keyword that you can set?

In any case, I put your data into a text file

named "test.txt" and read it perfectly like this:

OpenR, lun, 'test.txt', /Get_Lun data = DblArr(10)
ReadF, lun, data
Free_Lun, lun
Print, data, Format='(F20.6)'

Here is the output:

37374.000200 37374.000400 37374.000600 37374.000800 37374.001200 37374.001200 37374.001400 37374.001600 37374.001800 37374.002000

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Real Number on PVWAVE
Posted by daniele.monti on Wed, 17 Nov 1999 08:00:00 GMT
View Forum Message <> Reply to Message

On Wed, 17 Nov 1999 09:48:29 -0700, davidf@dfanning.com (David Fanning) wrote:

> Daniele Monti (daniele.monti@usa.net) writes:

>

- >> I'm in big trouble with PV_WAVE.
- >> I have to read a very simple file like this:
- >> 37122.00002
- >> 37122.00004
- >> 37122.00006

>> ...

```
>> How can I read numbers with more then six or eight digits?
>> I tried using Double Precision format but I didn't get any positive
>> result.
> What makes you think you didn't get any positive results?
> I think you probably *did* read the numbers correctly,
> but you are printing them out improperly. Try printing
> the result like this:
   Print, result, Format='(D20.6)'
>
>
> Cheers,
> David
Dear David
Thanks a lot for your help
I've already tried to print data as you said but if I read these
numbers using "DC_READ_FREE":
37374.000200
37374.000400
37374.000600
37374.000800
37374.001000
37374.001200
37374.001400
37374.001600
37374.001800
37374.002000
The result I get is:
WAVE> Print, x, Format='(D20.6)'
    37374.000000
    37374.000000
    37374.000000
    37374.000000
    37374.000000
    37374.000000
    37374.000000
    37374.000000
    37374.000000
    37374.003906
```

Why????

Subject: Re: Real Number on PVWAVE Posted by davidf on Wed, 17 Nov 1999 08:00:00 GMT

View Forum Message <> Reply to Message

Daniele Monti (daniele.monti@usa.net) writes:

- > I'm in big trouble with PV_WAVE.
- > I have to read a very simple file like this:
- > 37122.00002
- > 37122.00004
- > 37122.00006
- >
- > How can I read numbers with more then six or eight digits?
- > I tried using Double Precision format but I didn't get any positive
- > result.

What makes you think you didn't get any positive results? I think you probably *did* read the numbers correctly, but you are printing them out improperly. Try printing the result like this:

Print, result, Format='(D20.6)'

Cheers.

David

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Real Number on PVWAVE
Posted by Adrian Clark on Thu, 18 Nov 1999 08:00:00 GMT
View Forum Message <> Reply to Message

Dear Daniele,

It looks to me as though WAVE is interpreting your numbers as floats and then truncating them. Did you specify your variable as a double before reading? I suspect that if this is not specified, float is the expected default when a '.' is found in a number. I got the following to work:

wave> DELVAR,varArray make sure varArray doesn't already exist as a float from previous attempts! wave> varArray=DBLARR(1)

tell wave to expect doubles wave> status=DC_READ_FREE('filename',varArray,/resize) /resize will resize varArray to cope with amount of data present wave> PRINT,varArray,Format="(D11.5)" print it in whatever format seems appropriate

HTH

Yours, Adrian