Subject: Re: Real Number on PVWAVE
Posted by davidf on Wed, 17 Nov 1999 08:00:00 GMT
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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
    37374.001000
    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
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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
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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:
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> ...
> How can I read numbers with more then six or eight digits?
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> 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.
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Subject: Re: Real Number on PVWAVE
Posted by Adrian Clark on Thu, 18 Nov 1999 08:00:00 GMT
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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
