Subject: Re: Variable assignment Posted by David Fanning on Tue, 22 Jul 2003 15:41:43 GMT

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## Haje Korth writes:

- > I am trying to assign a variable with data=data(index), where index is an
- > array with 300000 elements. IDL answers "Too many elements". Is there away
- > around this? Basically, I need to kill some lines in data that contain dummy
- > values. This the data files are HDF, I cannot eliminate these data when the
- > file is read with hdf\_read.

Uh, at the risk of sounding impertinent, why don't you just take smaller bites? :-)

Something like this:

```
indices = Where( array EQ BAD, count)
IF count GT 250000L THEN BEGIN; Or whatever the number is
  half = count/2
  array[indices[0:half]] = -999
  array[indices[half+1:*]] = -999
ENDIF ELSE array[indices] = -999
```

Cheers.

David

--

David W. Fanning, Ph.D. Fanning Software Consulting, Inc.

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

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

Subject: Re: Variable assignment
Posted by Craig Markwardt on Tue, 22 Jul 2003 17:28:45 GMT
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"Haje Korth" <haje.korth@jhuapl.edu> writes:

- > I am trying to assign a variable with data=data(index), where index is an
- > array with 300000 elements. IDL answers "Too many elements". Is there away
- > around this? Basically, I need to kill some lines in data that contain dummy
- > values. This the data files are HDF. I cannot eliminate these data when the
- > file is read with hdf read.

I routinely make index arrays that have millions, and tens of millions of elements. [with IDL 5.2 at that!] This should not be a problem

for you. Are you sure you have enough memory? You will probably need a fair amount of working space (perhaps 2x your biggest array) for IDL to function properly.

Craig

EMAIL: craigmnet@cow.physics.wisc.edu Craig B. Markwardt, Ph.D. Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: Variable assignment

Posted by David Fanning on Tue, 22 Jul 2003 17:37:08 GMT

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## Craig Markwardt writes:

- > I routinely make index arrays that have millions, and tens of millions
- > of elements.

What \*is\* it you guys do for a living!?

I once made an index array that had about 100 points in it. But that's about as big as mine get. :-(

Cheers.

David

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Subject: Re: Variable assignment

Posted by Haje Korth on Tue, 22 Jul 2003 19:15:58 GMT

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## Craig,

I am pretty sure that I have enough RAM. I have almost 800 MB RAM and the data I read in is less than 100 MB. If you say that you do not have a

problem, let me take a look again. Thanks, Haje Dr. Haje Korth Space Physics Group The Johns Hopkins University Applied Physics Laboratory MS MP3-E128 11100 Johns Hopkins Road Laurel, MD 20723-6099 USA Phone: 240-228-4033 (Washington), 443-778-4033 (Baltimore) Fax: 240-228-0386 (Washington), 443-778-0386 (Baltimore) e-mail: haje.korth@jhuapl.edu "Craig Markwardt" <craigmnet@cow.physics.wisc.edu> wrote in message news:onk7aawjw2.fsf@cow.physics.wisc.edu... > "Haje Korth" <haje.korth@jhuapl.edu> writes: >> I am trying to assign a variable with data=data(index), where index is an >> array with 300000 elements. IDL answers "Too many elements". Is there >> around this? Basically, I need to kill some lines in data that contain dummy >> values. This the data files are HDF, I cannot eliminate these data when the >> file is read with hdf\_read. > > I routinely make index arrays that have millions, and tens of millions > of elements. [ with IDL 5.2 at that! ] This should not be a problem > for you. Are you sure you have enough memory? You will probably need > a fair amount of working space (perhaps 2x your biggest array) for IDL > to function properly. > > Craig >

> Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu > Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

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Subject: Re: Variable assignment Posted by Haje Korth on Tue, 22 Jul 2003 19:20:56 GMT

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grrrrr, I applied the indices to the wrong level in the structure. I would have expected an "out of range" error instead of "too many elements". I just misinterpreted the message.

Thanks for helping, Haie "Craig Markwardt" <craigmnet@cow.physics.wisc.edu> wrote in message news:onk7aawjw2.fsf@cow.physics.wisc.edu... > > "Haje Korth" <haje.korth@jhuapl.edu> writes: >> I am trying to assign a variable with data=data(index), where index is an >> array with 300000 elements. IDL answers "Too many elements". Is there >> around this? Basically, I need to kill some lines in data that contain >> values. This the data files are HDF, I cannot eliminate these data when the >> file is read with hdf read. > I routinely make index arrays that have millions, and tens of millions > of elements. [ with IDL 5.2 at that! ] This should not be a problem > for you. Are you sure you have enough memory? You will probably need > a fair amount of working space (perhaps 2x your biggest array) for IDL > to function properly. > > Craig > > Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response 

Subject: Re: Variable assignment Posted by Craig Markwardt on Tue, 22 Jul 2003 21:50:30 GMT View Forum Message <> Reply to Message

David Fanning <david@dfanning.com> writes:

> Craig Markwardt writes:

>> I routinely make index arrays that have millions, and tens of millions >> of elements. > > What *is* it you guys do for a living!? > > I once made an index array that had about 100 points
> in it. But that's about as big as mine get. :-(  It's the difference between the data rich and the data poor, baby! :-)
Craig
P.S. To give a concrete example I've recently been looking at an 8 year mission timeline with 1 minute samples, or a total of 4 million samples. I use WHERE to do data filtering.
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives   Remove "net" for better response