Hello all,

I currently have an array:

IDL> help, cl_xy
CL_XY   LONG   = Array[2, 118090]

This array seems to be causing issues with the array indices command:

IDL> col_eight = FIX(DISTANCE_MEASURE(cl_xy, /MATRIX,MEASURE = 2), type = 3)

% Illegal subscript range: INDEX1.
% Execution halted at: CLOUDWALKER   979 /home/dbresnahan/idl/cloudroutines/cloudwalke
  r/cloudwalker.pro
% $MAIN$

I am clearly missing something very obvious here. My array is correctly set up as a Long, so I am
unsure as to what this issue is.

For the record my array is just a box of pixels where I am using the array_indices to implement a
shortest path algorithm. Before someone shouts at me, I am exporting to Julia as it handles FOR
loops much better than IDL and working my shortest path in there.

David

On 20.03.2015 13:51, David B wrote:
> IDL> help, cl_xy
> CL_XY   LONG   = Array[2, 118090]
>
> This array seems to be causing issues with the array indices command:
>
> IDL> col_eight = FIX(DISTANCE_MEASURE(cl_xy, /MATRIX,MEASURE = 2), type = 3)
>
> % Illegal subscript range: INDEX1.
> % Execution halted at: CLOUDWALKER   979
/home/dbresnahan/idl/cloudroutines/cloudwalke
>   r/cloudwalker.pro
> % $MAIN$

I tried your example with a smaller input and it worked fine. According
to the documentation, with the /MATRIX keyword you are going to build a
matrix of 118090 x 118090 elements, which could be the reason for crashing.

Fabien

Subject: Re: IDL Array Indices Command
Posted by David B on Fri, 20 Mar 2015 13:30:00 GMT
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On Friday, March 20, 2015 at 1:24:19 PM UTC, Fabien wrote:
> On 20.03.2015 13:51, David B wrote:
>> IDL> help, cl_xy
>> CL_XY   LONG   = Array[2, 118090]
>>
>> This array seems to be causing issues with the array indices command:
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>> IDL> col_eight = FIX(DISTANCE_MEASURE(cl_xy, /MATRIX,MEASURE = 2), type = 3)
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>
>
> I tried your example with a smaller input and it worked fine. According
> to the documentation, with the /MATRIX keyword you are going to build a
> matrix of 118090 x 118090 elements, which could be the reason for crashing.
>
> Fabien

That is unfortunate.

Thanks a lot for your help. I know it is a massive array, but I thought IDL could handle it. Mistaken
I am.

David

Subject: Re: IDL Array Indices Command
Posted by Fabzi on Fri, 20 Mar 2015 13:48:00 GMT
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On 20.03.2015 14:30, David B wrote:

> That is unfortunate.
>
> Thanks a lot for your help. I know it is a massive array, but I thought IDL could handle it.
Mistaken I am.
>
> David

If I calculated well, this matrix would take ~55Gb of memory:

IDL> (4LL*118090LL*118090LL) / 1000. / 1000. / 1000.
      55.780991

Cheers,

Fabien