
Subject: Re: How to store compressed data ?
Posted by [rogass](#) on Tue, 01 Dec 2009 08:02:55 GMT
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On 30 Nov., 22:27, nata <bernat.puigdomen...@gmail.com> wrote:

> Hi guys,
>
> See the following example:
>
> help, /mem
> aa=fltarr(240,360,24,47,2)
> help, /mem
>
> IDL returns:
> heap memory used: 708636, max: 780382426, gets: 13719,
> frees: 12874
> heap memory used: 780382333, max: 780382428, gets: 13731,
> frees: 12885
>
> That's 780 Mb for one big array. My question is if there is a way to
> store this array (in memory) compressed. I'm developing an application
> and I don't know if that's possible in order to use less RAM of the
> computer.
> Thanks,
>
> nata

IF you can implement ASSOC, THEN you would be able to use the /PACKED
switch ELSE you can just use HDF_PACKDATA :)

Maybe it helps

CR

Subject: Re: How to store compressed data ?
Posted by [natha](#) on Tue, 01 Dec 2009 14:56:20 GMT
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MmmmMMm..... I don't understand the ASSOC function. Here is what I do:

```
aa=FLTARR(240,360,24,97,2)
OPENW, lun, 'temporary_file.dat', /GET_LUN
ll=ASSOC(lun,aa,/PACKED)
HELP, ll
```

```
LL          FLOAT    = File<temporary_file.dat> Array[240, 360,
24, 97, 2]
```

Ok. And now:

```
aa=0l  
aa=ll[*,*,*,0,0]
```

```
% End of file encountered. Unit: 100, File: temporary_file.dat  
% Execution halted at: $MAIN$
```

OUPS ! What's happening here ?

Subject: Re: How to store compressed data ?
Posted by [natha](#) on Tue, 01 Dec 2009 15:00:49 GMT
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Using HDF_PACKDATA I don't see the difference:

```
aa=fltarr(240,360,24,47,2)  
help, /mem  
heap memory used: 780326120, max: 1559999875, gets: 1126,  
frees: 317
```

```
rr=hdf_packdata(aa)  
aa=0l  
help, /mem  
heap memory used: 780326085, max: 1559999860, gets: 1143,  
frees: 334
```

Subject: Re: How to store compressed data ?
Posted by [rogass](#) on Tue, 01 Dec 2009 21:03:09 GMT
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On 1 Dez., 16:00, nata <bernat.puigdomen...@gmail.com> wrote:

```
> Using HDF_PACKDATA I don't see the difference:  
>  
> aa=fltarr(240,360,24,47,2)  
> help, /mem  
> heap memory used: 780326120, max: 1559999875, gets: 1126,  
> frees: 317  
>  
> rr=hdf_packdata(aa)  
> aa=0l  
> help, /mem  
> heap memory used: 780326085, max: 1559999860, gets: 1143,  
> frees: 334
```

Strange... Maybe you will find some appraoches here:

<http://www.astro.washington.edu/docs/idl/htmlhelp/index.html> or maybe one of the IDL-gurus has an idea :) If not, then you may use some ENVI routines which can handle handle compressed data in memory (slows drastically down). Some of lossless compressing techniques such as RLE or LZW maybe also interesting...

CR
