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Subject: Re: IDL removes dimensions of size 1 automatically  
Posted by [Paul Van Delst\[1\]](#) on Fri, 24 Sep 2004 18:14:14 GMT  
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Benjamin Hornberger wrote:

```
> Hi all,
>
> I had a hard time finding a bug which came from IDL's behaviour to
> remove dimensions of size 1 automatically sometimes.
>
> IDL> a=[[1u,1u]]
> IDL> help,a
> A          UINT      = Array[2]
> IDL> ;; IDL doesn't even let me specify this (2,1) element array
> IDL> a=reform(a,2,1)
> IDL> help,a
> A          UINT      = Array[2, 1]
> IDL> b=fix(a)
> IDL> help,b
> B          INT       = Array[2]
> IDL> ;; IDL removed my second dimension even though I just wanted to
> change the type
> IDL> c=2*a
> IDL> help,c
> C          INT       = Array[2]
> IDL> print,c
>      2      2
> IDL> ;; again IDL kicked out my second dimension
>
> I found this very annoying. Does anyone know more about it? Why is it
> like that? In which situations will IDL do that?
```

Only trailing dimensions of size 1 are removed.

```
IDL> x=fltarr(20,1,1,1,1)
IDL> help, x
X          FLOAT      = Array[20]
IDL> x=fltarr(1,1,1,1,20)
IDL> help, x
X          FLOAT      = Array[1, 1, 1, 1, 20]
IDL> x=fltarr(20,1,3,1,1)
IDL> help, x
X          FLOAT      = Array[20, 1, 3]
```

This has always been the case (in my experience) - much to the consternation of some IDL users, and to the joy to others. YMMV.

paulv

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