

---

Subject: Slicing a volume

Posted by [Nuno Oliveira](#) on Tue, 04 Nov 2003 16:52:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Since I began to work with IDL one of the things that makes confuse is when I want to make a two-dimension array from a three-dimension array (and I often do).

For example I can create de three-dimension array vol

```
vol=INTARR(100,100,100)
```

But when I try to extract slices along different axes I get "different" variables.

```
sliceX=vol(50,*,*)
```

```
sliceY=vol(*,50,*)
```

```
sliceZ=vol(*,*,50)
```

Then, I see that sliceX is an array [1,100,100], and the same with sliceY but, sliceZ is an array [100,100]. sliceX and sliceY are what I am tempted to call a false 3D array because one of the dimensions can have only one value. My question is why they are not equal: all 2D arrays or all 3D arrays?

I know this not very important, just bores me that I need to make a specific code for the Z direction. I can use the function `EXTRACT_SLICE`, but it really makes me sad that it doesn't work the easy way. Anyone knows why? Am I making any mistake? Anyone had some time the same problem? Is the `EXTRACT_SLICE` the only solution?

Cordially,

Nuno.

---