
Subject: VECTOR_FIELD trouble

Posted by [Jo Klein](#) on Tue, 22 Aug 2006 11:12:02 GMT

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Dear IDL wizards,

Has anyone got experience with the use of VECTOR_FIELD? The data I have is quite simple: It's a volume of vectors, where for each spatial position of a 3D regular grid I've got x, y and z as the projections of a unit-length vector centred on those grid locations. It's volume data from diffusion tensor MRI, and the vectors describe apparent diffusion directions at any given point in the object studied (a brain, in this case). So, to visualise the vectors, I browsed the docs and thought VECTOR_FIELD should do the job, but I can't figure out how to use it. One slice extracted from the data looks like this (z dimension of the vectors dropped):

```
IDL> help,myslice
```

```
MYSLICE      FLOAT    = Array[2, 128, 104]
```

```
IDL> print,myslice[*,:62,50]
```

```
  -0.393992   0.305778
```

```
  -0.353878   0.368543
```

```
  -0.505301   0.394556
```

I set up my vectors like this:

```
IDL> vector_field,myslice,outverts,outconn
```

```
IDL> plots,outverts
```

.. and the result is a window with just a wobbly looking vertical line, instead of lots of little vectors on a rectangular region.

```
IDL> print,outverts[*,:10000:10002]
```

```
  8.00000    39.0000
```

```
  8.00000    39.0000
```

```
  9.00000    39.0000
```

I suppose I'm misinterpreting how IDL would like my input data to be formatted, but as there are no examples in the VECTOR_FIELD docs, I'm a bit at a loss here.

I'd appreciate any help you can give.

Thanks a lot everyone,

Jo
