
Subject: Particle_Trace question ?

Posted by [millward.george](#) on Tue, 18 Mar 2008 22:56:51 GMT

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

Hi there,

I am trying to use particle_trace to create streamlines from a vector field - but I'm having quite a lot of trouble understanding the documentation.

I have a velocity field which is a longitude,latitude array of Southward and Eastward velocities.
My arrays are 20 longitudes by 91 latitudes. So my 2 arrays are:

V_south(20,91) and V_east(20,91)

I now want to feed these into Particle_trace.

The syntax for Particle_trace requires a single array (which they call Data) of
size Data[2,dx,dy]

I'm assuming that dx and dy are the indexes for longitude and latitude and the first dimension (2)
is for the 2 components of the field, so:

```
data(0,lon,lat) = V_east(lon,lat)
data(1,lon,lat) = 0.0 - V_south(lon,lat)
```

Nowhere in the documentation does it define the directions - is dx Eastwards - is dy Northwards? Very confusing !!

And the seed points - are these longitude, latitude points or something ? Again, no real explanation in the documentation.

....or have I got it completely wrong ?

Any help with this very much appreciated

Cheers,

George.
