
Subject: Re: A complicate problem for building a map
Posted by [condor](#) on Thu, 16 Oct 2003 23:36:48 GMT
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ftls1@uaf.edu (ftls1@uaf.edu) wrote in message
news:<44042ede.0310150951.71dad28a@posting.google.com>...

> I met a problem of map building as below,
> I have two 2-D tables of RT(nw,nt), RW(nw,nt), nw and nt are
> constants,

i.e. not variables. OK.

Are RT and RW unique? I.e. can there be values in these tables that appear more than once.

E.g. is it possible that $RT[3,5] = RT[10,15]$

> both RT and RW range from -1 to +1,

What is the meaning of these numbers? In particular: what is the granularity? Are we talking three possible values (-1,0,1) or many many values?

> the value of nw, even though it is
> 'integer', actually means wind speed from
> -50 m/s to 50 m/s and the nt means temperature from 0 to 300 K.

Speaking only for myself, at this point you're confusing me. Are they constant or are they variable? When you say "0 to 300K" then you seem to imply that there's more than one possibility

> Now I want to get a table with x and y axis of RT and RW respectively.
> The purpose to build such a table is that if there is an arbitrary
> pair of RW and RT value, I can look it in the table and find the
> appropriate wind and temperature.

But what would be the "appropriate" wind and temperature?

Obviously you can create an array where RT and RW are the (appropriately scaled) indices. Call it "A". Then you could do something like

$A[(RT+1)/n, (RW+1)/n]$

but from the given information it is not clear what should be written in this array at that location. If various different values of nw and nt can produce the same RT and/or RW values, which of them are the "appropriate" ones to store at that location?

> I've been thinking on this topic for a couple of weeks without any
> idea, in C language there is a concept of 'Group', but IDL does not.

Unfortunately my understanding of C is on the basic side, and I don't think I have ever heard of a "group" in C, so I don't know what functionality you are looking for. Can you describe what that is supposed to do and maybe someone could tell you how to emulate this in IDL.
