
Subject: Re: Finding pairs of points within a certain distance
Posted by [Kenneth Bowman](#) on Tue, 09 Apr 2013 13:43:09 GMT
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On 2013-04-08 22:56:23 +0000, koensayr@gmail.com said:

> Hello all,
>
> I have a problem that I'm trying to find an efficient way to solve.
>
> I have a large list of points (on the order of 10^8), that I need to
> match to a second list of points (on the order of 10^5 points), and
> find all pairs that are within a certain distance from each other.
>
> The points are located on the surface of the Earth, so they are given
> in lat/lon coordinates. I have looked at functions like map_2points
> that can calculate the distance, but brute force way of matching them
> would be way too slow.
>
> I noticed a user written library in the Documents of Exelis called
> match_sph that seem to do what I need, but I cannot find where to
> download it, and the website where that library was hosted seems to be
> down.
>
> I have also thought about maybe dividing the points into small chunks
> using something like hist_nd, but was hoping that there might be an
> existing program for something like this already.
>
> Any help is greatly appreciated,
>
> Thanks!

There are vectorized version of MAP_2POINTS and LL_ARC_AZIMUTH in my
library that you can download here

<http://learnidl.com/downloads/>

Ken Bowman
