Subject: Re: Generate 3D Surface out of Points in Space
Posted by siliconcube on Thu, 24 Jun 2004 16:33:40 GMT
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I had the same problem and this board did a great job helping me
figure out where i went wrong. I had 85 SEM image slices, instead of
having contours I just cleared the background noise leaving me with
whatever it is I was looking at. Then I reduced resolution (otherwise
IDL would give me problems with lack of memory and i have a 5GB of DDR
Ram installed), my image files went from 1.8MB each to about 60KB each
and i ran the code (slightly modified) from Dr. Fanning's website
which he posted in the earlier message and everythign worked out
pretty darn well =D.

Good luck
Aleks
"Karl Schultz" <kschultz_no_spam@rsinc.com> wrote in message
news:<10djeuf4dhht95b@corp.supernews.com>...
> "Tukee10" <turgutkaracay@hotmail.com> wrote in message
> news:b599c09a391226a337d5f4fe4e8672fd@localhost.talkaboutpro gramming.com...
>> Hi everybody. I have 50 sliced images, that represent a splitting blood
>> vessel. I went through the slices and extracted the contours of the blood
>> vessel with the function CONTOURS. Now I have many points that lie on the
>> surface of the vessel. I would like to reconstruct the 3d surface of the
>> vessel out of these points. Is there any function or procedure that is
>> able to do that?
>
> Surface reconstruction is a hard problem. If you google around you will see
> that quite a few people have spent much of their lives working on small
> parts of the problem.
>
> That being said, if your data has certain constraints, then the job can be
> done.
>
> In your case, are the images such that the blood vessels are a very distinct
> color, or otherwise distinguishable from the rest of the image? If so, you
> can stack the images into a volume and then run ISOSURFACE to generate a
> surface. You would need to determine what isovalue to use that selects the
> pixels representing the vessels the best. You might consider running some
> image filtering tools to sharpen or clean up the images to make it as close
> to "on-off" as possible with respect to the blood vessel pixels.
>
> I think that this is your best shot, given what I know about your data.
>
> Karl