Subject: Re: Registration of 3D shells?
Posted by Craig Markwardt on Wed, 15 May 2002 22:31:05 GMT
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"Dick Jackson" <dick@d-jackson.com> writes:

> Hi all,
>
> I'd like to know if anyone has any experience to share on registration of 3D
> shells. That is, if you have two IDLgrPolygons (or Surfaces) that are
> 'snapshots' of the surface of an object, which:
...

Hi Dick--

Are these 2d or 3d data sets? When you say surface that could be an
isosurface within a 3d data volume, or simple the surface z = f(x,y)
of a 2d data set.

I think registration of 2d data sets is commonly done with a cross
correlation.

Craig

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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Subject: Re: Registration of 3D shells?
Posted by Dick Jackson on Thu, 16 May 2002 15:25:51 GMT
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"Craig Markwardt" <craigmnet@cow.physics.wisc.edu> wrote in message
news:onptzxkpqu.fsf@cow.physics.wisc.edu...
>
> "Dick Jackson" <dick@d-jackson.com> writes:
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> Hi Dick--
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> isosurface within a 3d data volume, or simple the surface z = f(x,y)
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> correlation.

Yes, they are generally like a z = f(x,y) surface, in that a surface doesn't wrap around behind itself. With some datasets we have regular (x,y), sometimes not.

As I understand it, cross correlation could find the best x-y translation with regular (x,y), but we have rotation and translation in 3D to contend with. My solution will need 6 parameters, can cross correlation help out here?

Thanks for your interest!

Cheers,
--
-Dick

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