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:
>
>> 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.

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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