Subject: Re: Least squares fit of a model to a skeleton consisting out of 3D points.
Posted by Johan on Wed, 26 Nov 2008 08:40:38 GMT
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On Nov 24, 4:35 pm, Wox <s...@nomail.com> wrote:
> On Mon, 24 Nov 2008 17:22:53 +0100, Wox <s...@nomail.com> wrote:
>> X=[X,Y,Z] ; (you need to extract the seperate X, Y and Z in your user
>> routine)
>> Y=replicate(1,n_elements(X))
>
> Woops, redefined X :-). I mean Y=replicate(1,n3Dpoints).

Thank you, it seems that krellipsoidfit.pro works rather well. I do have another question regarding this and will appreciate if can advise me.

I need to get the 3 angles and axis lengths and use the following code to get it from the given eigenvalues (evals) and eigenvectors (evec):

```
semia = sqrt(evals[0]) * 2.0
semib = sqrt(evals[1]) * 2.0
semic = sqrt(evals[2]) * 2.0

a = semia * 2.0
b = semib * 2.0
c = semic * 2.0
semiAxes = [semia, semib, semic]
axes = [a, b, c]

eigenvector  = evec[*,0]
eigenvector2 = evec[*,1]
eigenvector3 = evec[*,2]

      orientation1 = atan(eigenvector1[1], eigenvector1[0])*!RADEG
orientation2 = atan(eigenvector2[1], eigenvector2[0])*!RADEG
orientation3 = atan(eigenvector3[1], eigenvector3[0])*!RADEG
angles = [orientation1, orientation2, orientation3]
```

Is this correct or do I need made some adjustments, especially to the orientation?

Thanks
Johan Marais