
Subject: Re: Quaternions to Euler Angles
Posted by [Rick Towler](#) on Fri, 14 May 2004 04:25:05 GMT
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"Graham" wrote...

> I was trying to use Rick's quaternion code which pitch about x, yaw
> about y, and roll about z but x and z are swapped. My naive was to
> simply swap the pitch and roll on input/output but I cannot seem to
> reproduce the given tables:

Hi Graham,

Yeah, my quaternion code was written specifically for my camera and I'm not too surprised it didn't work out. :(

Have you tried Craig Markwardt's quaternion routines?

<http://astrog.physics.wisc.edu/~craigm/idl/idl.html>

-Rick

Subject: Re: Quaternions to Euler Angles
Posted by [Craig Markwardt](#) on Fri, 14 May 2004 06:00:07 GMT
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"Rick Towler" <tsehai@comcast.net> writes:

> "Graham" wrote...

>

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>> about y, and roll about z but x and z are swapped. My naive was to
>> simply swap the pitch and roll on input/output but I cannot seem to
>> reproduce the given tables:

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> Hi Graham,

>

> Yeah, my quaternion code was written specifically for my camera and I'm not
> too surprised it didn't work out. :(

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> Have you tried Craig Markwardt's quaternion routines?

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> <http://astrog.physics.wisc.edu/~craigm/idl/idl.html>

Thanks for the plug. However, I don't have any specialized routines for roll pitch and yaw. In fact, these are defined so many ways, and with so many sign conventions, that I believe it's nearly impossible get the one that Graham is interested in. Unfortunately I have the

forward transformation (QTEULER) but not the inverse.

One possibility is is for Graham to make a direction cosine matrix
(with QTMAT) and then decide how to decompose it from there.

Good luck!

Craig

--

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
