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Subject: Re: Satellite orbit procedure

Posted by [Craig Markwardt](#) on Wed, 06 Mar 2002 14:50:41 GMT

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Richard Lord <[Richard.Lord@dlr.de](mailto:Richard.Lord@dlr.de)> writes:

> Hi,

>

> I'm looking for a procedure that takes as input the parameters of a

> satellite orbit (Kepler orbit parameters), and outputs so-called

> statevectors. A statevector contains the x,y,z and vx,vy,vz

> coordinates at any particular point in time.

>

> If anybody has seen a procedure that does something along the lines

> explained above, I would be grateful to receive a copy.

Hi Richard--

This kind of code can also be found in the HELIO procedure in the IDL Astronomy Library. You have to be aware that this kind of code is only really good for bodies in the solar system. For near earth objects the story is a little different. The so-called "mean" orbital elements are also tied to an orbital model, like the SGP4. You would need to propagate the orbit using this model.

Good luck,  
Craig

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