Subject: Re: WTD: Orbital analysis with IDL
Posted by Liam E. Gumley on Thu, 17 May 2001 14:18:44 GMT

Randall Skelton wrote:
> I know this is a long shot, but does anyone have IDL routines for
> calculating and plotting satellite orbits from state vector data (i.e.
> the space shuttle). I have measurements made on the shuttle which are
> accurately time stamped, and I have the orbit parameters below... If no
> one has code, can anyone recommend a good book on orbital mechanics?

Randall,

Unless you are extremely keen to learn the intricacies of orbital
mechanics, I'd recommend one of the many existing packages available on
the Web:

http://www.celestrak.com/software/

You may also want to look into the Satellite Tool Kit (STK), available
from

http://www.stk.com/

An evaluation version can be obtained at no cost, and it will propagate
orbits given a Two-Line-Element (TLE) set like the one you showed in
your post.

Cheers,
Liam.
http://cimss.ssec.wisc.edu/~gumley/