Subject: Re: IDL orbit propagator
Posted by mankoff on Wed, 19 Mar 2008 18:17:52 GMT
View Forum Message <> Reply to Message

On Mar 19, 12:55 pm, Mark Conner <mconn...@gmail.com> wrote:
> I know this may be asking a lot, but my Google searching so far leads
> me to believe this might be out there somewhere but I haven't found
> the right place yet.
>
> I'm looking for some IDL routines that will take a two-line element
> (TLE) set for an earth-orbiting satellite and create the nadir
> position or track. Extreme precision in the orbit propagation is not
> necessary - we will probably be using times within a couple weeks of
> the TLE epoch. This will be used somewhat interactively to determine
> when a satellite has passed or will pass over a user-identified point
> on the earth.
>
> These satellites will typically be outside the range where atmospheric
> drag is a factor (normally, earth-observing polar orbiters).
>
> I'd rather not do DLLs because we'd like the same GUI available on
> Windows, Solaris, and maybe AIX but we might have to take what we can
> find.
>
> - Mark
>
> ----
> Mark D. Conner
> Sr. Staff Scientist
> Atmospheric & Environmental Research, Inc.

Errr... It has been a decade, so I have no recollection of what these did, but I have a bunch of decade-old IDL code I wrote that fetched TLEs from the (NASA?) Orbital Informations Group (OIG) website, and produced various plots of our satellite orbit. I don't know if nadir calculations were included. There was definitely not a GUI. Have at 'em: http://edgcm.columbia.edu/~mankoff/SNOE/orbit/