Subject: Re: Amazingly accurate UTM <-> Lat/Lon transformations
Posted by tom.grydeland on Wed, 18 Sep 2013 09:15:59 GMT
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On Tuesday, September 17, 2013 8:16:08 PM UTC+2, David Fanning wrote:
> Maybe it's just me, but it seems a little weird to me to claim that if
> you use the software in a way that it is clearly not intended to be
> used, you get bad results. Isn't this making a claim for clairvoyance on
> the part of the developers?

I'll admit to weird most Tuesdays and Saturdays, and the third Wednesday of the month, but clairvoyance I will leave to others (you know who you are!) :-)

> I agree that IDL's map projection software is probably overdue for an
> update. But, I'm not convinced this is any kind of a deal breaker.

My intention was not to throw dirt on the IDL mapping routines.

As I wrote (and you also point out), this is clearly abusing the UTM projection, and there are other projections more suited for this kind of application. I also wrote quite clearly that (depending on your requirements) the IDL routines produce acceptable results in the first and possibly second neighbouring zones.

That said, I am quite confident that I'm not the only one abusing UTM in this way, and indeed it turned out that my correspondent was also abusing UTM in exactly the same way, without being aware of the problems they were bringing upon themselves. Maybe it is the way of people to take what they know and see if it can be streched to fit over what they don't, what do you think?

So -- the information was intended for those who persist in doing this, even when told that it may not be the best of ideas, and to show them that the transformations _can_ be made in an invertible way, using the expressions from Wikipedia rather than IDL's mapping routines. Furthermore: IDL's routines will happily accept the task of transforming to UTM projections a quarter of a globe away, even if the morality of such action can be questioned. Given that the task will be performed, I think an accurate result is to be preferred over a wildly inaccurate one. Don't you agree?

> Cheers,
> David
>
> P.S. For what it's worth, I, too, was confused by the initial reference
> and had to spend 15 minutes or so figuring it out. That's about 14.5
> minutes more than most readers of the newsgroup would have, I imagine.

Maybe. I didn't find links to the particular section, and the question was meant to be about inverse hyperbolics anyway.

> David Fanning, Ph.D.

--T