
Subject: UTM Map Projection Produces Incorrect Results
Posted by [David Fanning](#) on Mon, 31 Oct 2011 15:48:24 GMT
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Folks,

I have written an article this morning that describes the problem with the UTM map projection in IDL and the reason it creates incorrect results when used with the normal WGS84 datum. (This is the datum that is used for almost all satellite data.)

http://www.idlcoyote.com/map_tips/utmwrong.php

This is a problem that arises, I think, because the GCTP map projection software in IDL is nearly 20 years old and badly in need of an update to bring it up to modern standards. The state of the art in map projection software comes from ESRI, which has now been incorporated into the latest version of ENVI. The ESRI software, as I understand it, relies in part on the proj4 open source software project, which is pretty much the gold standard for open source map projection software. ITTVIS should **seriously** consider either porting the ESRI software to IDL, if their agreement with ESRI allows this, or incorporating the proj4 map projection software into IDL.

Otherwise, the reliability of map projection results in IDL becomes questionable and unsuitable for scientific work.

Cheers,

David

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")
