Folks,

The first order of business when starting a project that
will involve satellite data is to define some region
of the Earth that you are interested in. Then you find
satellite data that passes over or through that area.
This data is often in a different map projection or
resolution than you wish to use in your study, so you
are forced to grid the satellite data into a common
map projection and resolution so you can work with it.

Tools are often provided that help with the gridding
step. At NSIDC we often use, for example, mapx or
ms2gt. These tools require the use of a "gpd" file
that describes the particular map projection you
wish to use, and the location and resolution of the
grid you wish to use on that map projection.

When I first starting working with satellite data
at NSIDC I didn't have the first clue about gpd files
and how they worked, and--especially--how to create
a new one for the particular region of the globe I
wanted to study. I would usually walk down the hall
to the office of the "gpd guru" and try to glean some
insight from him.

It would be kind of like listening to me speak
German in a thick Tex-Mex accent. That is to say,
not a language you would immediately recognize.

In any case, over the months I've worked there, I've
emerged somewhat from the muck and mess of my own
map projection ignorance and I have been down enough
box canyons and blind alleys, not to mention into the
undocumented bowels of IDL's map projection software,
that I am beginning to at least vaguely perceive the
lay of the land.

To that end, I am offering up a new tool that I really
couldn't live without in my professional work. Although
I think it is safe to say most of the "professionals" I
know still poo-pooh it. Whatever. If I were bashful about
displaying my ignorance I wouldn't be in this business.

I will say this, most of what I know about map projections came from building this sucker. I call it GPD_Viewer. You can read about it here:

http://www.dfanning.com/map_tips/gpdviewer.html

It will probably be of limited value to those of you who are not using NSIDC data. But it might be of some use to those of you who are.

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")