Subject: Re: Reprojecting an image file derived from Level 1B MODIS HDF
Posted by devin.white on Wed, 05 Jan 2011 03:47:19 GMT
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In addition to the excellent recommendations made already, I can add
at least one more that is fairly easy to try:

Use the Latitude and Longitude bands stored in the L1B file to
reproject the image in ENVI by taking advantage of the "Georeference
from IGM" tool (Map->Georeference From Input Geometry). To get at
these bands in ENVI, you'll either have to save them to ENVI files
using IDL or open the L1B HDF using the generic HDF option (File->Open
External File->HDF), which allows you to select which datasets from
the file you want to load. The bands will probably be smaller than
the swath image, so you'll have to resize them to match (Basic Tools-
> Resize Data). This is by no means the most accurate way to resize
them, but it is easy. Besides some accuracy issues, the IGM approach
is also very slow, so be prepared to wait for the output.

As other folks have pointed out, the most reliable option is to first
reproject the original L1B image using MRTSwath or the MODIS
Conversion Toolkit (MCTK is an ENVI plugin). Either software package
will generate a georeferenced file that can then be processed further
to create the image you need, which can then be displayed in Google
Earth. How you get the image into Google Earth is another matter.
One option is the Google Earth Super-Overlay Tool (GEST, also an ENVI
plugin), which can generate full resolution image overlays that look
exactly like what you see in an ENVI display window (it even honors
stretching and filters). Both MCTK and GEST can be downloaded from
the ITT VIS website under User Community->Code Library. Because of
how their site is set up, I can't post links to them here--you'll have
to search for them. Luckily, they're not too hard to find.

On Jan 2, 6:23 pm, Kasia <sia...@gmail.com> wrote:
> Hi,
>
> I have an image file that I created using IDL from a Level 1B MODIS
> HDF file. I now need to reproject this image file to display in Google
> Earth, but I'm having a hard time figuring out how to do this. The
> code that generated the image file also outputs a lat/lon for each
> value so I thought that would help since there is geographic
> information contained in the image file. But, that hasn't helped me.
>
> I've tried applying the header information from the original HDF file
> to the new image file using ENVI because I know it can read these
> MODIS files, but that hasn't worked too well. ENVI can reproject the
> MODIS HDF file beautifully but I also need it to do the same for the

> new image file.
>
> All of the projection and lat/lon information in the new image file is
> identical to that of the original MODIS HDF file that I can easily
> reproject in ENVI. I just can't figure out how to add that information
> to the image file so ENVI can do the same sort of magic on the new
> file.
>
> Any help would be greatly appreciated!
> Kasia