Subject: Re: AVHRR Image Mapping Problem
Posted by Richard French on Mon, 18 Dec 2006 04:11:13 GMT
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Thanks for the post - as I mentioned in the part of my post not quoted
below:

"you need to find out from experience (or
preferably from the spacecraft/instrument teams) what the actual pointing
performance is likely to be."

Your post answered that question. It sounds as though pointing error is not
the culprit in David's example.
Dick

On 12/17/06 11:05 PM, in article
1166414746.299151.321950@79g2000cws.googlegroups.com, "kuyper@wizard.net"
<kuyper@wizard.net> wrote:

> Richard G. French wrote:
> ...
>
>> If one trusted the data headers from Hubble Space Telescope images as a
>> guide to where the spacecraft was actually pointed, one would be up to 10
>> pixels off - that's because what's listed in the header is where they
>> expected to be pointing, not a reconstructed view of where they were
>> actually pointing. The same is true of Cassini images of Saturn. I don't
>> know about Earth-pointing satellites, but unless one has done some pretty
>> accurate post-image checking, it is not obvious to me that the header
>> information for such an image would have anything other than the predicted
>> location of the image,
>
> I only know about one instrument (MODIS) on two Earth-pointing
> satellites (Terra and Aqua), but I'm personally responsible for the
> geolocation on the MODIS data from those satellites. The file
> attributes summarizing the location of a granule are just as accurate
> as the geolocation which is provided in the MOD03 files for every 1km
> pixel: the RMS error is nominally 50 meters, though we're actually
> doing a bit better than that, with our smallest pixel size being 250
> meters. Except during a maneuver, the actual orientation of the
> satellite is used, not the planned orientation.
>
> The software I'm responsible for was modified from software for earlier
> instruments, and has been borrowed as the basis for sofware for the
> VIIRS instrument on NPP, so I suspect this is not uncommon for
> earth-pointing satellite imagery.

>