Subject: Re: Get Latitude and Longitude from Tiff files
Posted by KRDean on Tue, 03 Jul 2007 20:17:37 GMT
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On Jul 3, 2:08 am, titan <thunder...@inwind.it> wrote:
> On Jun 27, 5:33 am, David Fanning <n...@dfanning.com> wrote:
>
>
>
>
>
>> Lucia writes:
>>> I wonder how to get latitude and longitude of each point of the files
>>> (such as tiff format) that have already included detailed projection
>>> parameters.
>
>> I presume you mean a GEOTiff file, not just a TIFF file.
>> You can presumably pull the information you need out of
>> the GeoTiff file itself. Here is an example written for
>> a slightly different reason that will give you some idea
>> of how to go about this:
>
>>   http://www.dfanning.com/map_tips/geotiffreg.html
>
>> 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.")
>
> I have the same problem and I tried to follow the example mentioned
> before but unfortunately the informations I have are different:
> GeoTiff image Structure
> ** Structure <9d0b28c>, 6 tags, length=140, data length=138, refs=1:
>   MODELTRANSFORMATIONTAG
>   DOUBLE   Array[4, 4]
>   GTMODELTYPEGEOKEY
>   INT   2
>   GTRASTERTYPEGEOKEY
>   INT   1
>   GEOGRAPHICTYPEGEOKEY
>   INT   4326
>   GEOGLINEARUNITSGEOKEY
>   INT   9001

>   GEOGANGULARUNITSGEOKEY
>   INT   9102
>
> In this case are there any possibilities to obtain latitude and
> longitude of each point of the GEOtiff image??
> Thank you- Hide quoted text -
>
> - Show quoted text -

Well...

GTMODELTYPEGEOKEY : 2 : Geographic
GTRASTERTYPEGEOKEY : 1 : Pixel is Area
GEOGRAPHICTYPEGEOKEY : 4326 : WGS 84
GEOGLINEARUNITSGEOKEY : 9001 : meter
GEOGANGULARUNITSGEOKEY : 9102 : degree

This tag is considered obsolete by the Cartographic Application Group.

MODELTRANSFORMATIONTAG

According to the IDL Help, this is a 4x4 matrix of doubles.

I haven't seen this in any GeoTIFF that I played around with, but the
tags seem reasonable to perform some kind of pixel to degree
computation. An Affine Transformation takes a 4x4 matrix to do the
conversion from pixel to degrees. Try that!

Kelly Dean
Fort Collins, CO