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Subject: Elevation data

Posted by [d.poreh](#) on Mon, 25 Jan 2010 13:13:51 GMT

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Folks

Hi;

I have an elevation data (elevation.dat), which has lat-long and elevation information. I want to save this file as a .tiff image and doing some surface, shade\_surf, and... presentations.

Could someone give me some tiny help for doing that?

Any help highly appreciated

Cheers

Dave

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Subject: Re: Elevation data

Posted by [jkeller](#) on Tue, 26 Jan 2010 11:12:07 GMT

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On Jan 25, 2:13 pm, Dave\_Poreh <d.po...@gmail.com> wrote:

> Folks

> Hi;

> I have an elevation data (elevation.dat), which has lat-long and elevation information. I want to save this file as a .tiff image and doing some surface, shade\_surf, and... presentations.

> Could someone give me some tiny help for doing that?

> Any help highly appreciated

> Cheers

> Dave

Hi Dave,

do you want to save the data as tiff or do you want to save the contour, shade\_surf output images as tiff-file?

Using contour and surface is pretty easy. Assuming your elevation data is the variable "elev" and your longitude and latitude information is stored in "lon" and "lat" then you can issue a filled contour plot by using

```
contour,elev,lon,lat,/fill,level=mylevels,c_color=mycolors
```

giving "mylevels" is an array containing the height levels for which contours are desired and "mycolors" is an array defining the color indices for the according level.

The surface plot would be even simpler:

```
surface,elev,lon,lat
```

Thats some good points, where you can start. If you are more specific

about what you would like to do, I could give you a more specific answer.

Regards,  
Jan

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Subject: Re: Elevation data  
Posted by [d.poreh](#) on Wed, 27 Jan 2010 08:00:45 GMT  
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On Jan 26, 3:12 am, jkeller <jkel...@uni-bonn.de> wrote:  
> On Jan 25, 2:13 pm, Dave\_Poreh <d.po...@gmail.com> wrote:  
>  
>> Folks  
>> Hi;  
>> I have an elevation data (elevation.dat), which has lat-long and  
>> elevation information. I want to save this file as a .tiff image and  
>> doing some surface, shade\_surf, and... presentations.  
>> Could someone give me some tiny help for doing that?  
>> Any help highly appreciated  
>> Cheers  
>> Dave  
>  
> Hi Dave,  
>  
> do you want to save the data as tiff or do you want to save the  
> contour, shade\_surf output images as tiff-file?  
>  
> Using contour and surface is pretty easy. Assuming your elevation data  
> is the variable "elev" and your longitude and latitude information is  
> stored in "lon" and "lat" then you can issue a filled contour plot by  
> using  
> contour,elev,lon,lat,/fill,level=mylevels,c\_color=mycolors  
> giving "mylevels" is an array containing the height levels for which  
> contours are desired and "mycolors" is an array defining the color  
> indices for the according level.  
>  
> The surface plot would be even simpler:  
> surface,elev,lon,lat  
>  
> That's some good points, where you can start. If you are more specific  
> about what you would like to do, I could give you a more specific  
> answer.  
>  
> Regards,  
> Jan

Thanks Jan. how could save the loaded data as tiff and geotiff?  
Cheers

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Subject: Re: Elevation data  
Posted by [Klemen](#) on Wed, 27 Jan 2010 08:42:38 GMT  
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> Thanks Jan. how could save the loaded data as tiff and geotiff?  
> Cheers

Here is an example:

```
; Set GeoTiff geotags: http://www.remotesensing.org/geotiff/spec/contents.html
s_geotag = {$
MODELPIXELSCALETAG: [d_resolution, d_resolution, 0], $ ;resolution
MODELTIPOINTTAG: [ 0, 0, 0, d_xL, d_yA, 0], $ ;coordinates left
above
; GEOGGEODETICDATUMGEOKEY: 6326, $ ;geodetic datum WGS84
GTMODELTYPEGEOKEY: 2, $ ;Geographic latitude-longitude System
GTRASTERTYPEGEOKEY: 1, $ ;raster type
GEOGRAPHICTYPEGEOKEY: 4326, $
; GEOLINEARUNITSGEOKEY: 9001, $ ;linear unit meter
GEOANGULARUNITSGEOKEY: 9102} ;angular unit decimal degree
```

```
;write 16-bit geotiff - data 16 can be 3D matrix - dimension 1 for
channel, D2 for columns, D3 for lines
write_tiff, 'output_16b.tif', data16, compression=1,
geotiff=s_geotag, /float
```

Hope it helps!  
Klemen

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Subject: Re: Elevation data  
Posted by [d.poreh](#) on Thu, 28 Jan 2010 13:22:41 GMT  
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On Jan 27, 12:42 am, Klemen <klemen.zak...@gmail.com> wrote:

>> Thanks Jan. how could save the loaded data as tiff and geotiff?  
>> Cheers

>  
> Here is an example:

```
> ; Set GeoTiff geotags:http://www.remotesensing.org/geotiff/spec/contents.h tml
> s_geotag = {$
> MODELPIXELSCALETAG: [d_resolution, d_resolution, 0], $ ;resolution
```

```
> MODELTIMEPOINTTAG: [ 0, 0, 0, d_xL, d_yA, 0], $ ;coordinates left
> above
> ; GEOGGEODETICDATUMGEOKEY: 6326, $
;geodetic datum WGS84
> GTMODELTYPEGEOKEY: 2, $
;Geographic latitude-longitude System
> GTRASTERTYPEGEOKEY: 1, $ ;raster
type
> GEOGRAPHICTYPEGEOKEY: 4326, $
> ; GEOGLINEARUNITSGEOKEY: 9001, $ ;linear
unit meter
> GEOANGULARUNITSGEOKEY: 9102}
;angular unit decimal degree
>
> ;write 16-bit geotiff - data 16 can be 3D matrix - dimension 1 for
> channel, D2 for columns, D3 for lines
> write_tiff, 'output_16b.tif', data16, compression=1,
> geotiff=s_geotag, /float
>
> Hope it helps!
> Klemen
```

Thanks  
It's help a lot. This is exactly what I want.  
Cheers  
Dave

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