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Subject: Re: IDL Procedure to read/write USGS DEMs  
Posted by [Kelly Dean](#) on Wed, 29 Sep 1999 07:00:00 GMT  
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Reading DEMs are pretty simple. Below is an sample of a routine I used to read the GTOPO30 Elevation data from the CD. Swapping is required if you are on a PC.

Kelly Dean  
CSU/CIRA

=====Colsm.pro=====

PRO COLsm

```
;
;
; Retrieve an area around Colorado
;
topo = INTarr(4800,6000)
```

OpenR, 1, 'e:\w140n90\w140n90.dem', /swap\_endian ; Swapping required on PCs

ReadU, 1, topo  
Close, 1

```
; Rotating not really required, IDL displays from bottom to top. Just my
preferred method.
topo = ROTATE(TEMPORARY(topo),7)
```

toposmall = topo(4150:4249, 0:99) ; Retrieve Colorado

SHADE\_Surf, toposmall, shades = BYTscl(toposmall), ax=83, az=0  
LoadCT, 11

END

=====

John Brock wrote:

```
> I am working on integrating topographic data at various spatial
> resolutions within a single
> USGS 7.5 minute DEM. This requires changing the data structure for a
> DEM to
> handle sections of variable resolution.
>
> Does anyone know of an existing IDL procedure that reads or writes USGS
> DEMs?
> (DEM = digital elevation model). If so, I would like to use it as a
> starting point.
>
```

> Thanks,  
>  
> John Brock

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