
Subject: /fill_ocean

Posted by [Kelly Dean](#) on Mon, 24 Nov 1997 08:00:00 GMT

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The MAP_CONTINENTS in IDL 5.0 has a /FILL_CONTINENT keyword which works out great, but I need a /FILL_OCEAN keyword. I am attempting to add the worldelev.dat to a map, but I don't need the ocean depths. Anyone have an idea how to do a /FILL_OCEAN on a map projection?

The example below use the /FILL_CONTIENTS.

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```
=====Satmap.pro=====
FUNCTION GetElevation, DISPLAY=DISPLAY, SHIFT180=SHIFT180
;
; Open IDL data file with world elevation data.
;
OpenR, LUN, FILEPATH('worldelv.dat', SUB=['examples','data']), /GET_LUN
elev = BYTARR(360,360)
ReadU, LUN, elev
CLOSE, LUN
FREE_LUN, LUN
;
; Shift data 180 pixels to the right. Required for adding to maps.
;
IF ( KEYWORD_SET(SHIFT180) ) THEN BEGIN
  elev = SHIFT(elev, 180, 0 )
ENDIF
;
; Display Elevation data in a separate window.
;
IF ( KEYWORD_SET(DISPLAY) ) THEN BEGIN
  WINDOW, 0, XSIZE= 360, YSIZE =360, Title = 'World Elevation'
; LOADCT, 26
  TV, elev
ENDIF

RETURN, elev
END

PRO EarthSat, longitude, latitude, ElevMap=ElevMap
;
; Load discrete color table.
;
tek_color
```

```

;
; Match color indices to colors we want to use
;
IF ( !D.N_COLORS GT 256 ) THEN BEGIN
  TVLCT, RedTable, GreenTable, BlueTable, /GET
  black = ( 256L * BlueTable(0) + GreenTable(0) ) * 256L + RedTable(0)

  white = ( 256L * BlueTable(1) + GreenTable(1) ) * 256L + RedTable(1)

  red = ( 256L * BlueTable(2) + GreenTable(2) ) * 256L + RedTable(2)

  green = ( 256L * BlueTable(3) + GreenTable(3) ) * 256L + RedTable(3)

  dk_blue = ( 256L * BlueTable(4) + GreenTable(4) ) * 256L + RedTable(4)

  lt_blue = ( 256L * BlueTable(5) + GreenTable(5) ) * 256L + RedTable(5)

ENDIF ELSE BEGIN
  black=0 & white=1 & red=2 & green=3 & dk_blue=4 & lt_blue=5
ENDELSE
;
; Define map region.
;
MAP_SET, /ORTHO, latitude, longitude, 0, $
  TITLE = 'Orthographic Projection' + STRING(latitude,
FORMAT="(1x,F6.1)") + STRING(longitude, FORMAT="(1x,F7.1)", $
  XMargin = [0.0,1.0], $
  YMargin = [0.0,1.0], $
;   E_HORIZON={FILL:1, COLOR:dk_blue}, $
;   COLOR=lt_blue, $
  /Advance, $
  /HORIZON, $
  /ISOTROPIC, $
;   /Label, $
  /NoBorder, $
  /NoErase
;
; Use the map parameters to remap the image.
;
IF ( KEYWORD_SET(ElevMap) GT 0 ) THEN BEGIN
  elev = GetElevation(/Shift180)
  rmdata = MAP_IMAGE(elev,sx,sy, /BILIN)
  TV, rmdata, SX, SY
ENDIF
;
; Add Grid and continental outlines, Fill the continent boundaries with
solid white. and
; and grid map

```

```
MAP_CONTINENTS, /FILL_CONTINENTS, COLOR=white
MAP_CONTINENTS, /COASTS, COLOR=black
MAP_GRID, LatDel = 15, LonDel = 30, Label=2, Color = black
```

```
END
```

```
PRO SATmap
```

```
;
```

```
; Draw maps
```

```
;
```

```
WINDOW, 2, XSIZE = 512, YSIZE = 512, Title = 'Elevation View'
```

```
EarthSat, -104.0, 40., /ElevMap
```

```
END
```
