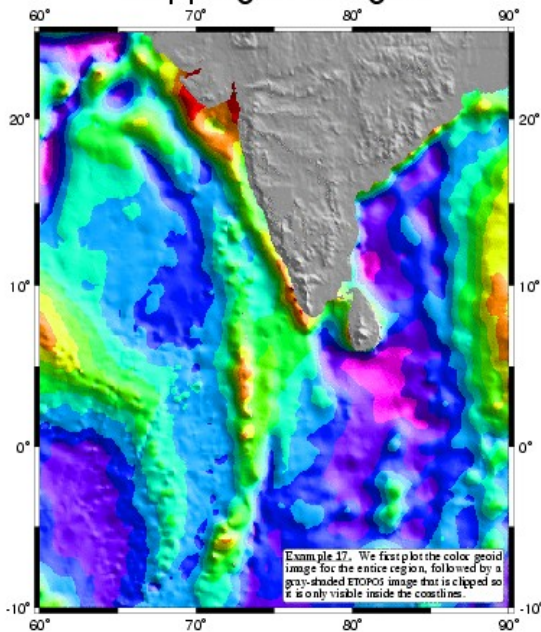


# THE GENERIC MAPPING TOOLS

<http://gmt.soest.hawaii.edu/>

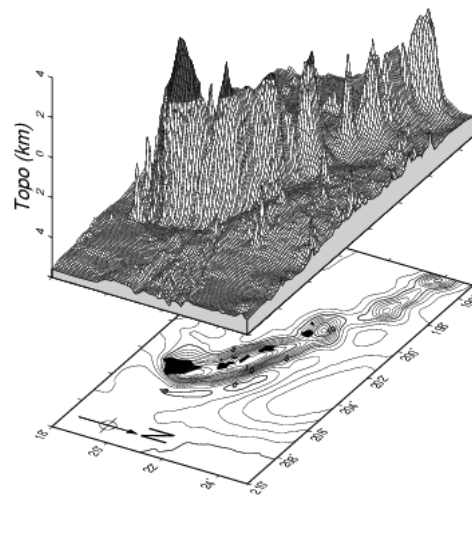
## OPEN SOURCE MAPPING SOFTWARE

### Clipping of Images



GMT 5.2.0 2004 Oct 1 13:53:29 | Example 17 in Cookbook

### HAWAIIAN RIDGE



GMT 5.2.0 2004 Oct 1 13:53:29 | Example 4 in Cookbook

## GMT summary of included programs

The following is a summary of all the programs supplied with [GMT](#) and a very short description of their purpose. For more details, see the individual *UNIX* manual pages or the online web documentation.

### Mapping and plotting:

<a href="#"><u>psbasemap</u></a>	Create a basemap plot
<a href="#"><u>pscoast</u></a>	Plot [and fill] coastlines, borders, and rivers on maps
<a href="#"><u>psxy</u></a>	Plot symbols, polygons, and lines on maps
<a href="#"><u>psxyz</u></a>	Plot symbols, polygons, and lines in 3-D
<a href="#"><u>pstext</u></a>	Plot text strings on maps
<a href="#"><u>pslegend</u></a>	Plot a legend on a map
<a href="#"><u>psscale</u></a>	Plot grayscale or color scale bars on maps
<a href="#"><u>grdview</u></a>	3-D perspective imaging of 2-D gridded data sets
<a href="#"><u>grdimage</u></a>	Produce images from 2-D gridded data sets
<a href="#"><u>grdcontour</u></a>	Contouring of 2-D gridded data sets
<a href="#"><u>grdvector</u></a>	Plot 2-D gridded vector fields
<a href="#"><u>psimage</u></a>	Plot Sun rasterfiles on a map
<a href="#"><u>pswiggle</u></a>	Draw table data time-series along track on maps
<a href="#"><u>psclip</u></a>	Use polygon files to define clipping paths

<a href="#"><u>pscontour</u></a>	Contour or image raw table data by triangulation
<a href="#"><u>pshistogram</u></a>	Plot a histogram
<a href="#"><u>psrose</u></a>	Plot sector or rose diagrams
<a href="#"><u>psmask</u></a>	Create overlay to mask out regions on maps

## Data Selection:

<a href="#"><u>gmtselect</u></a>	Select subsets of table data based on multiple spatial criteria
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## Data Processing:

<a href="#"><u>blockmean</u></a>	$L_2$ (x,y,z) table data filter/decimator
<a href="#"><u>blockmedian</u></a>	$L_1$ (x,y,z) table data filter/decimator
<a href="#"><u>blockmode</u></a>	Mode estimate (x,y,z) table data filter/decimator
<a href="#"><u>filter1d</u></a>	Filter 1-D table data sets (time series)
<a href="#"><u>fitcircle</u></a>	Finds the best-fitting great or small circle for a set of points
<a href="#"><u>gmt2rgb</u></a>	Convert Sun raster or grd file to red, green, blue component grids
<a href="#"><u>gmtconvert</u></a>	Convert data tables from one format to another
<a href="#"><u>gmtdefaults</u></a>	List the current default settings
<a href="#"><u>gmtmath</u></a>	Mathematical operations on table data
<a href="#"><u>gmtset</u></a>	Change selected parameters in current <code>.gmtdefaults4</code> file
<a href="#"><u>grd2cpt</u></a>	Generate a color palette table from a gridded file
<a href="#"><u>grd2xyz</u></a>	Conversion from 2-D gridded file to table data
<a href="#"><u>grdblend</u></a>	Blend several partially over-lapping grdfiles onto one grid
<a href="#"><u>grdclip</u></a>	Limit the z-range in gridded data sets
<a href="#"><u>grdcut</u></a>	Cut a sub-region from a gridded file
<a href="#"><u>grdedit</u></a>	Modify header information in a 2-D gridded file
<a href="#"><u>grdfft</u></a>	Perform operations on gridded files in the frequency domain
<a href="#"><u>grdfilter</u></a>	Filter 2-D gridded data sets in the space domain
<a href="#"><u>grdgradient</u></a>	Compute directional gradient from gridded files
<a href="#"><u>grdhisteq</u></a>	Histogram equalization for gridded files
<a href="#"><u>grdinfo</u></a>	Get information about gridded files
<a href="#"><u>grdlandmask</u></a>	Create masking gridded files from shoreline data base
<a href="#"><u>grdmask</u></a>	Reset grid nodes in/outside a clip path to constants
<a href="#"><u>grdmath</u></a>	Mathematical operations on gridded files
<a href="#"><u>grdpaste</u></a>	Paste together (mosaic) gridded files along a common edge
<a href="#"><u>grdproject</u></a>	Project gridded data sets onto a new coordinate system
<a href="#"><u>grdreform</u></a>	Converts gridded files into other grid formats
<a href="#"><u>grdsample</u></a>	Resample a 2-D gridded data set onto a new grid
<a href="#"><u>grdtrack</u></a>	Sample a 2-D gridded data set along 1-D track, with interpolation
<a href="#"><u>grdtrend</u></a>	Fit polynomial trends to gridded files
<a href="#"><u>grdvolume</u></a>	Calculate volumes under a surface within specified contour
<a href="#"><u>makecpt</u></a>	Make color palette tables
<a href="#"><u>mapproject</u></a>	Transform coordinate systems for table data
<a href="#"><u>minmax</u></a>	Report extreme values in table data files
<a href="#"><u>nearneighbor</u></a>	Nearest-neighbor gridding scheme
<a href="#"><u>project</u></a>	Project table data onto lines or great circles
<a href="#"><u>sample1d</u></a>	Resampling of 1-D table data sets
<a href="#"><u>spectrum1d</u></a>	Compute various spectral estimates from time-series
<a href="#"><u>splitxyz</u></a>	Split xyz files into several segments
<a href="#"><u>surface</u></a>	A continuous curvature gridding algorithm
<a href="#"><u>trend1d</u></a>	Fits polynomial or Fourier trends to $y = f(x)$ series
<a href="#"><u>trend2d</u></a>	Fits polynomial trends to $z = f(x,y)$ series
<a href="#"><u>triangulate</u></a>	Perform optimal Delauney triangulation and gridding
<a href="#"><u>xyz2grd</u></a>	Convert an equidistant table xyz file to a 2-D gridded file