What can GMT do?

A) Data processing and manipulation:

- Filter time series
- Filter 2-D gridded data in space or frequency domain
- Find polynomial or Fourier trends in 1-D or 2-D data
- Filter / Decimate arbitrarily spaced (x,y,z) data
- Grid arbitrarily spaced (x,y,z) data
- Sample 1-D and 2-D data sets at new positions
- Determine best-fit great (or small) circles to (lon ,lat) data
- Perform operations on gridded data in the frequency domain
- Do arbitrary mathematical operations on gridded data
- Compute spectral estimates from time series and gridded data
- Cut and paste gridded data sets
- Compute directional derivatives from gridded data
- Mask polygonal regions of gridded data
- Project gridded data using map projections
- Find optimal triangulation of arbitrarily spaced (x,y,z) data

B) Data presentation:

- Simple x-y diagrams
- Rectangular or polar histograms
- Maps with coastlines, land-masses, and borders
- Contour maps
- Data images
- Perspective views of surfaces with artificial illumination
- Plot vector fields