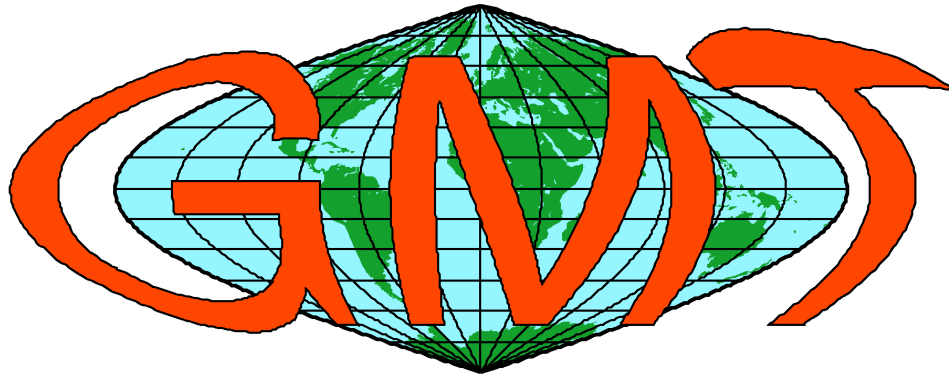


Data Processing and Plotting Using Generic Mapping Tools



Generic Mapping Tools Graphics

Maria Seton and Sabin Zahirovic

EarthByte Group

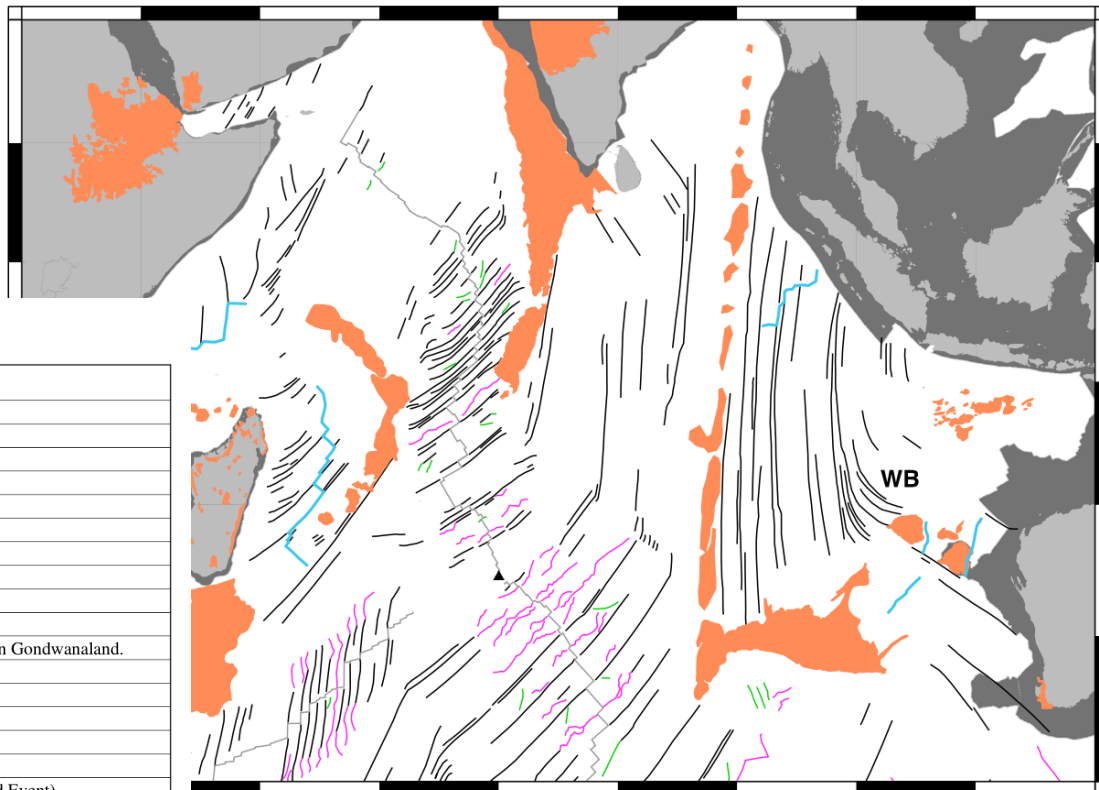
School of Geosciences, University of Sydney

Aim of the course

- 🌐 Learn basic UNIX commands
- 🌐 Plot maps and graphs of geo-data
- 🌐 Process vector and raster data
- 🌐 Convert between various file formats
- 🌐 Make animations

20°N

0°

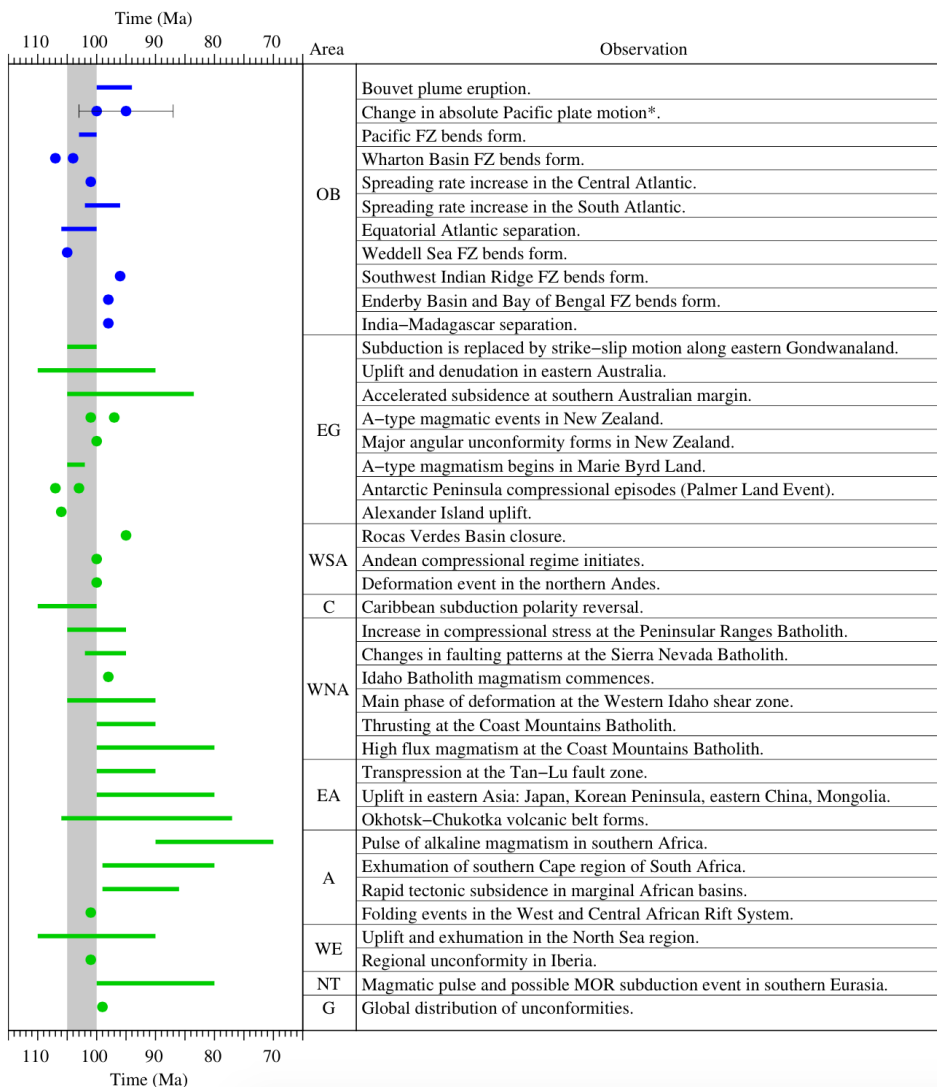


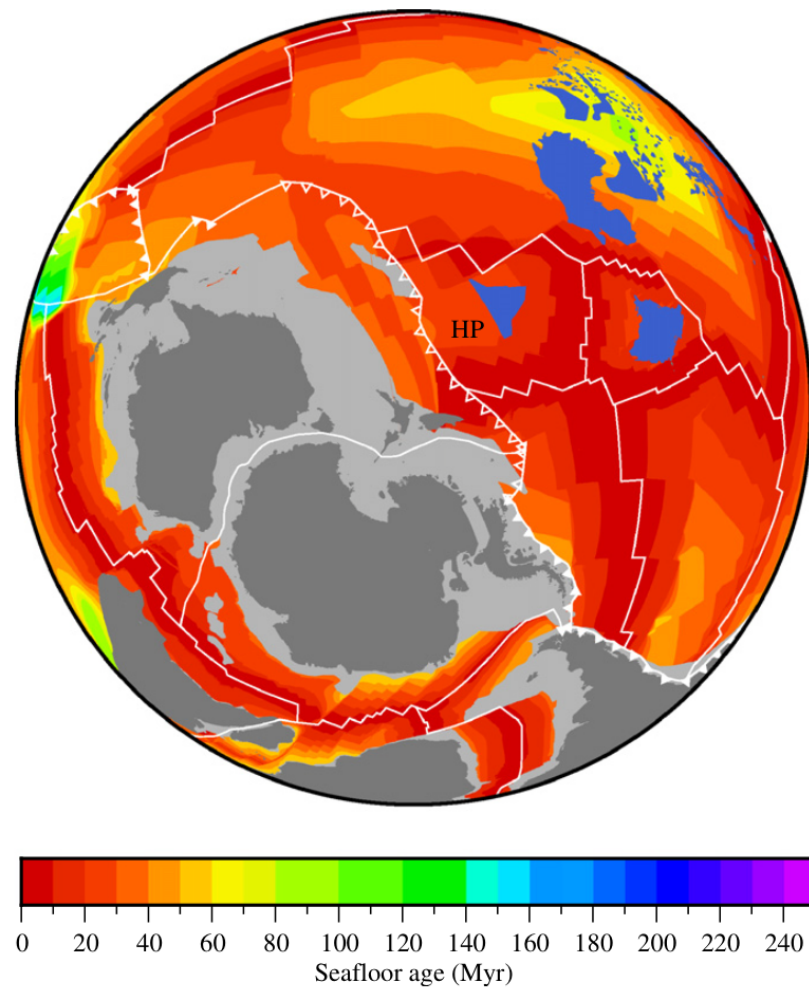
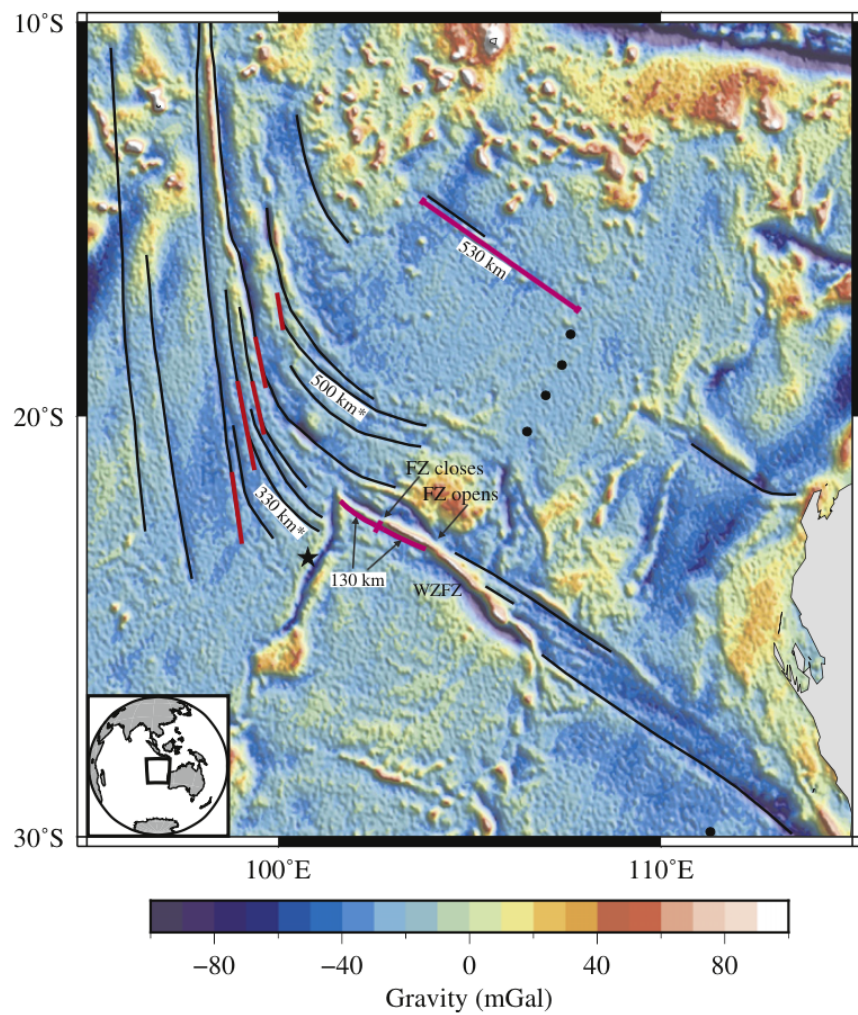
60°E

80°E

100°E

120°E





Course Information

- Course will consist of lectures with practical exercises imbedded
- Two sessions:
 - 9am – 12pm
 - 1pm – 5pm
- Assessment
 - Due 5 May
 - Read handout carefully!

Assessment

- Assessment is a final practical assignment
- Any questions:
 - Maria (Rm 400) email
maria.seton@sydney.edu.au
 - Sabin (Rm 403) email
sabin.zahirovic@sydney.edu.au

Day 1 outline

- Installation and setup of GMT and other useful programs
- Introduction to GMT podcast by Prof. Paul Wessel
- Basic UNIX commands
- GMT default parameters
- GMT file formats

Installation and set-up

- 🌐 Who needs help?
- 🌐 Those that are set-up, just go ahead and watch the podcast

Podcast

- Watch a podcast:

- Background: 20 Years with GMT – The Generic Mapping Tools

- <https://itunes.apple.com/au/itunes-u/gmt-the-generic-mapping-tools/id805972861?mt=10#>

- Or type “GMT podcast iTunes University” in google and select the first podcast

IMPORTANT

- In some of the slides, you will see a GMT command that has a “\” (backslash)
 - This just means that the command could not fit on one line on screen, but you should type it out on one line without the backslash
- Depending on your version of GMT, and how you installed it, you may need to call GMT tools using:
 - psxy ... (Typically GMT4)
 - gmt4 psxy ... (GMT4)
 - gmt psxy ... (Typically GMT5)
 - gmt5 psxy ... (GMT5)

Download GMT Course file bundle

 Files required can be downloaded from:

 LECTURES

https://www.earthbyte.org/webdav/ftp/Training_Outreach/Courses/2017/GMT/GMT_Course_Lecture_PDFs.zip

 DATA

https://www.earthbyte.org/webdav/ftp/Training_Outreach/Courses/2017/GMT/GMT_Course_Data.zip