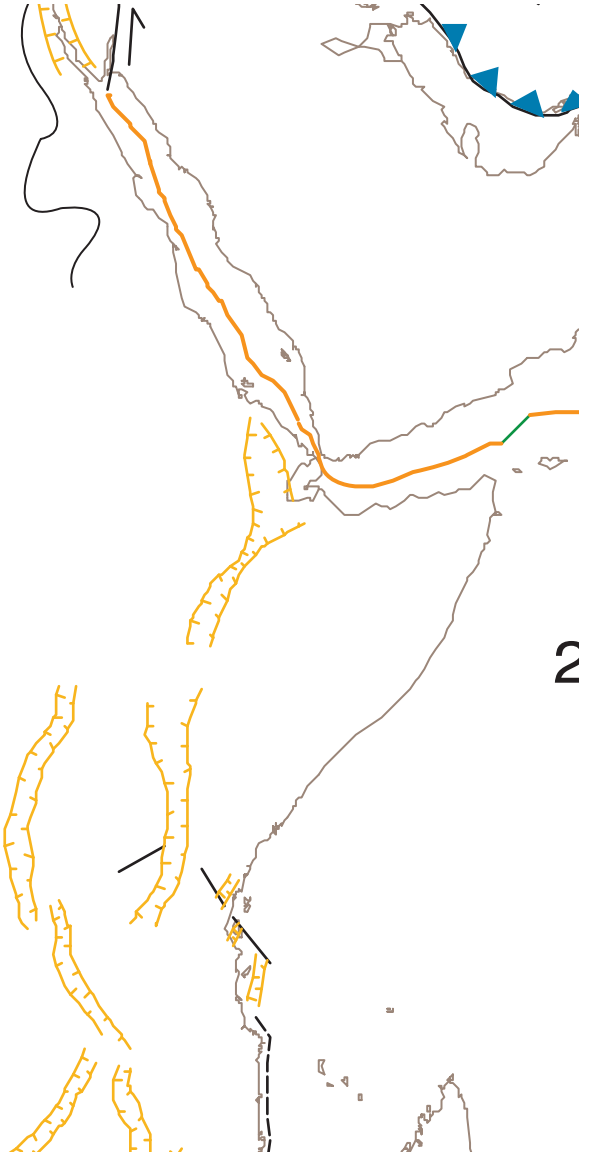
Red Sea, Gulf of Aden, Northeast Africa



Display Modified from:
DIGITAL TECTONIC ACTIVITY MAP OF THE EARTH
Tectonism and Volcanism of the Last One Million Years

DTAM - 1
NASA/Goddard Space Flight Center
Greenbelt, Maryland 20771

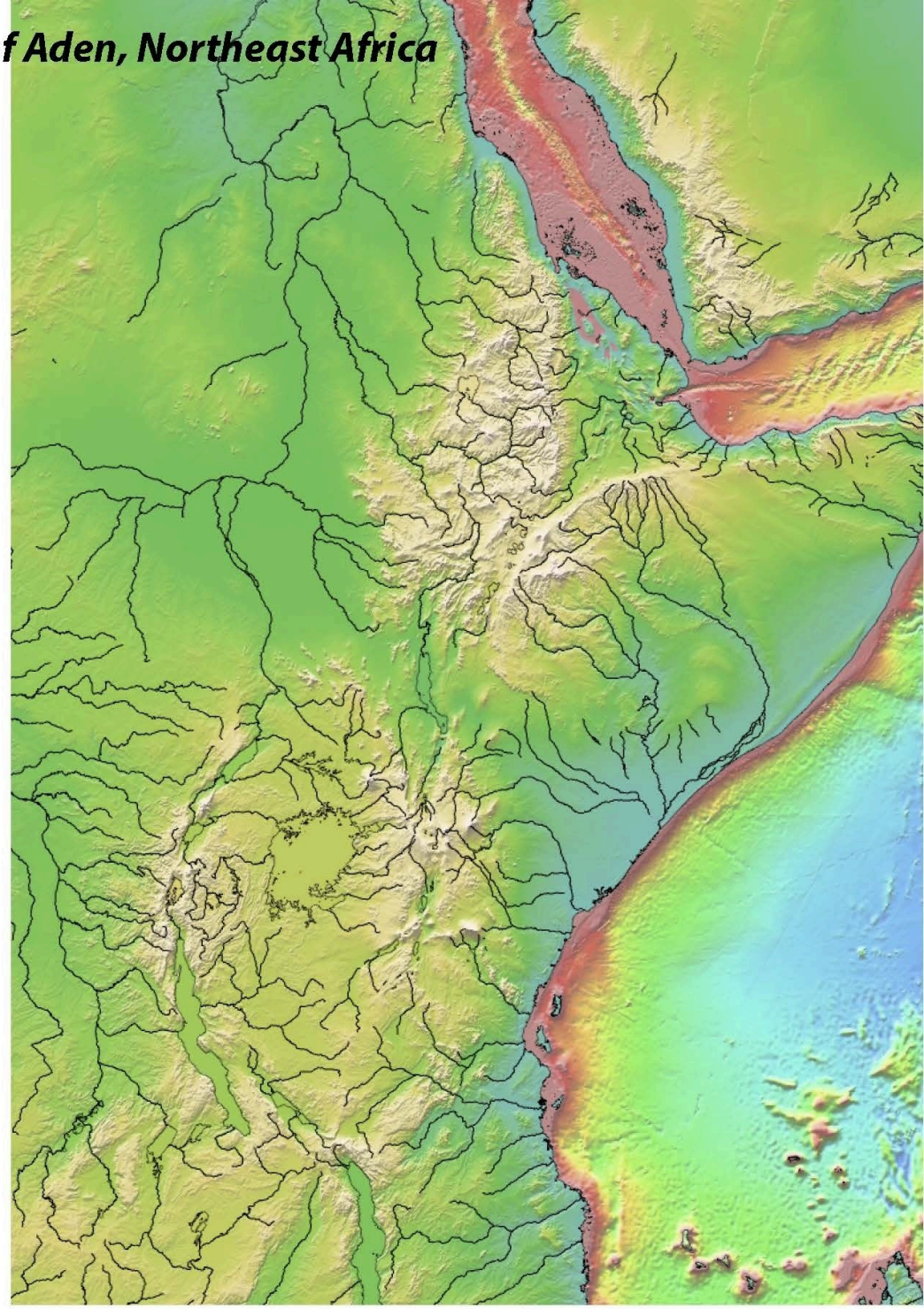
Robinson Projection

October 2002

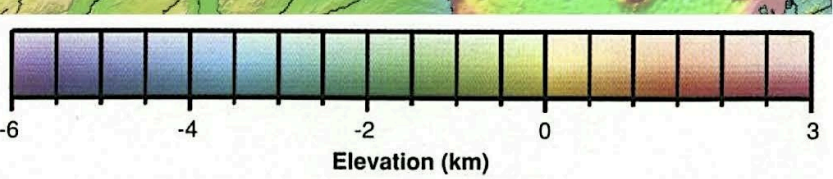
LEGEND

- Actively-spreading ridges and transform faults
- Total spreading rate, cm/year (1.4)
- Major active strike slip fault or fault zone
- Normal fault or rift; hachures on downthrown side
- Reverse fault (overthrust, subduction zones); generalized; barbs on upthrown side
- Major active fault or fault zone where nature, location, or activity are uncertain

Red Sea, Gulf of Aden, Northeast Africa

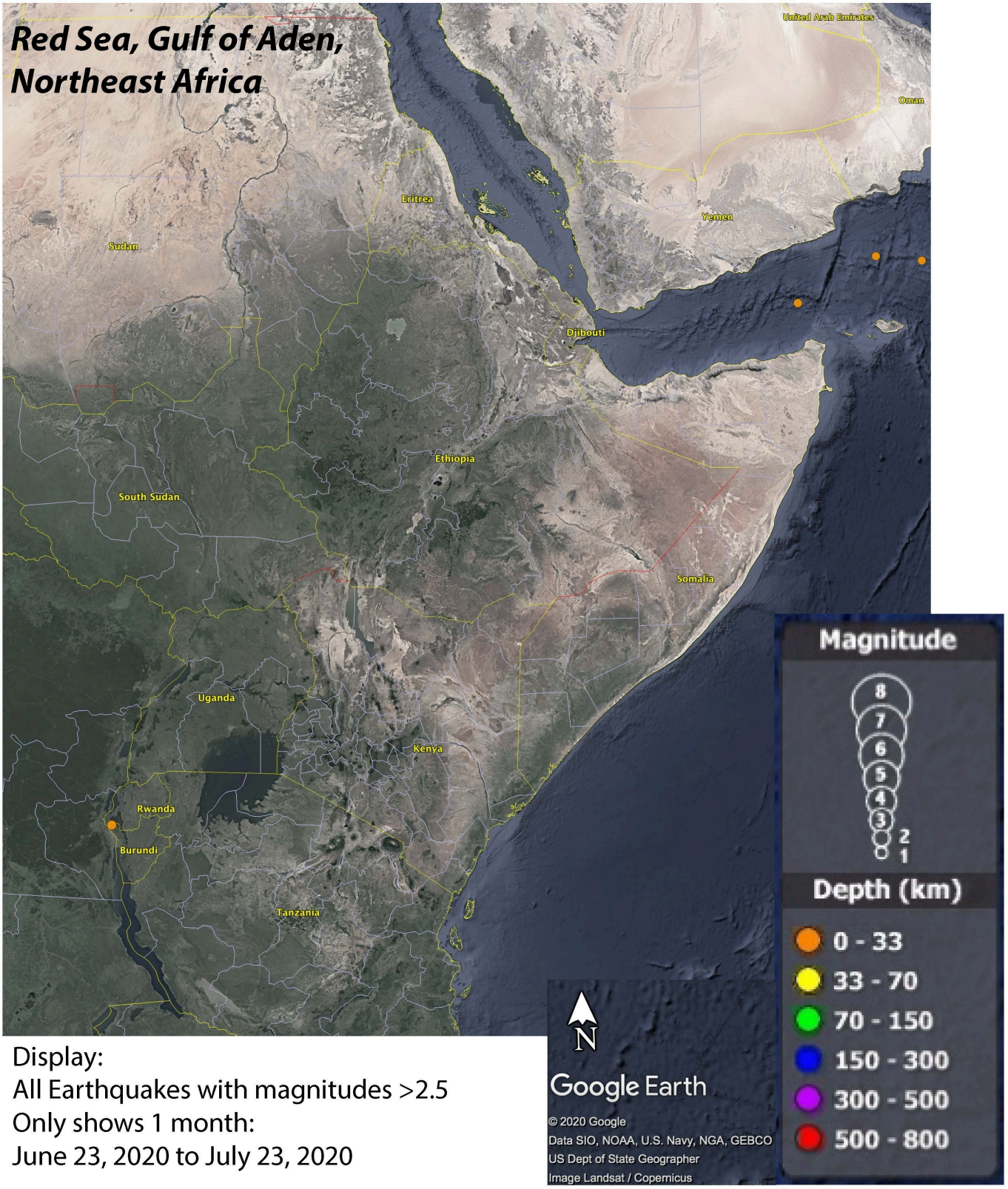


Display:
Sufrace topography including continents and seafloor
Horizontal resolution: 1-12 km



Data from: Smith, W. H. F., and D. T. Sandwell, Global seafloor topography from satellite altimetry and ship depth soundings, Science, v. 277, p. 1957-1962, 26 Sept., 1997.

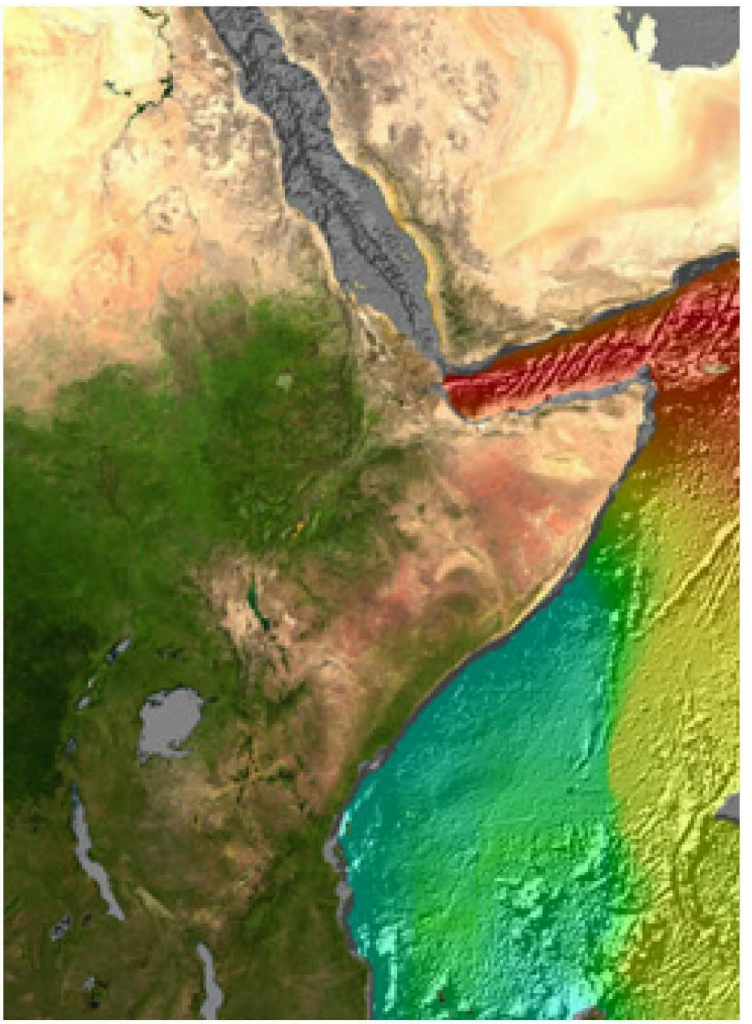
Data plotted on an Interactive map here:
https://topex.ucsd.edu/marine_topo/mar_topo.html



Display:
All Earthquakes with magnitudes >2.5
Only shows 1 month:
June 23, 2020 to July 23, 2020

https://earthquake.usgs.gov/earthquakes/map/

Red Sea, Gulf od Aden, Northeast Africa



Age of Oceanic Lithosphere (m.y.)

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280

million years

Display: Cut image from global map of Crustal Age Image No Plates:
https://www.ngdc.noaa.gov/mgg/image/crustalimages.html
Global Image created by Elliot Lim, Cooperative Institute for Research in Environmental Sciences, NOAA National Geophysical Data Center (NGDC), Marine Geology and Geophysics Division
Data & Images available from http://www.ngdc.noaa.gov/mgg/

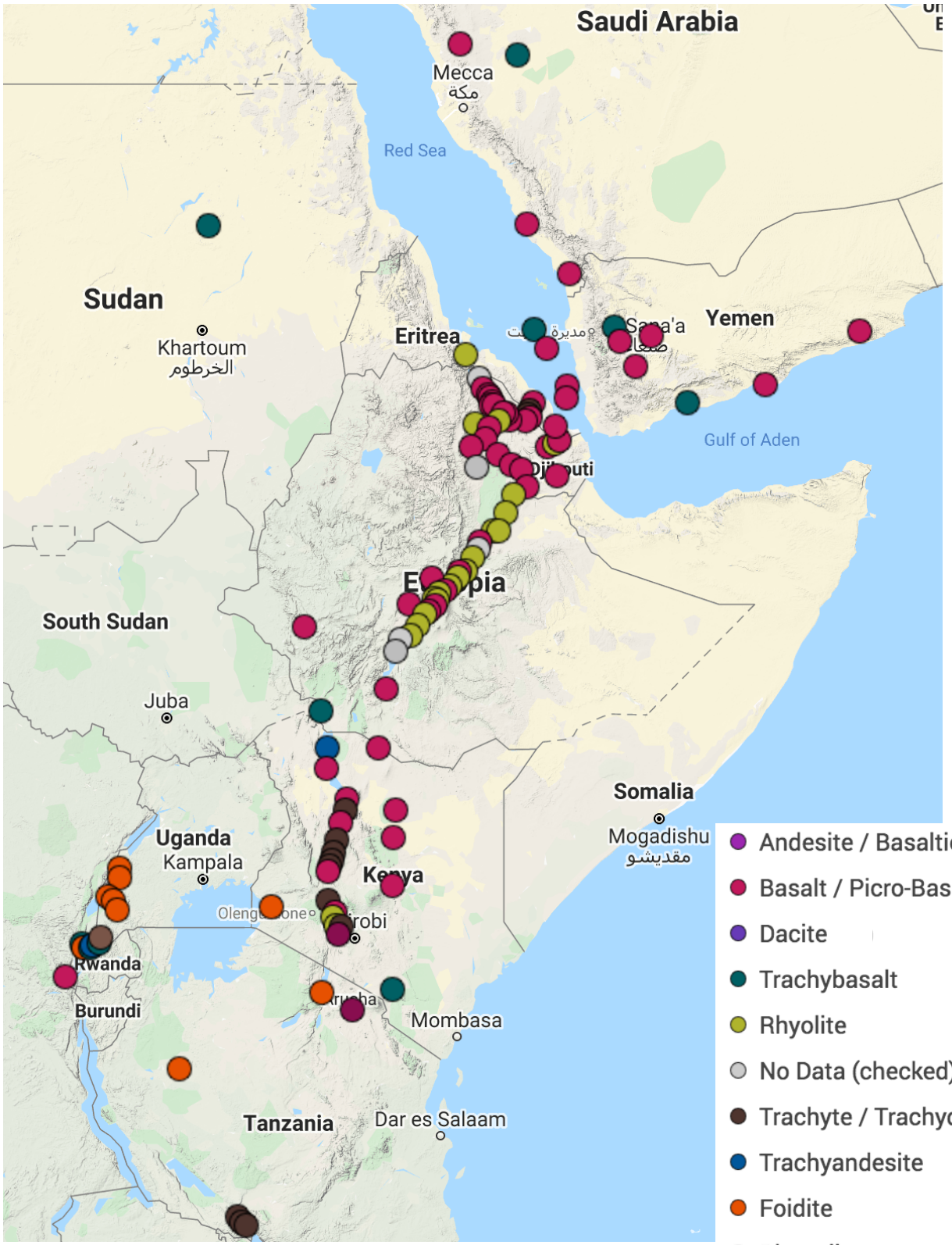
Original Data Source:
Müller, R.D., M. Sdrolias, C. Gaina, and W.R. Roest 2008. Age, spreading rates and spreading symmetry of the world's ocean crust, Geochem. Geophys. Geosyst., 9, Q04006, doi:10.1029/2007GC001743 .

Red Sea, Gulf of Aden, Northeast Africa

Display Data:
World, IGS08/NNR, GEM, GSRM
Vector scaling: 1x
Showing 1 in 10 vector markers

Data Source:
Interactive site from UNAVCO: GPS Velocity Viewer
https://www.unavco.org/software/visualization/GPS-Velocity-Viewer/GPS-Velocity-Viewer.html

Red Sea, Gulf of Aden, Northeast Africa



Display:
All Volcanoes from the last ~10,000 years (Holocene)
https://volcano.si.edu/list_volcano_holocene.cfm

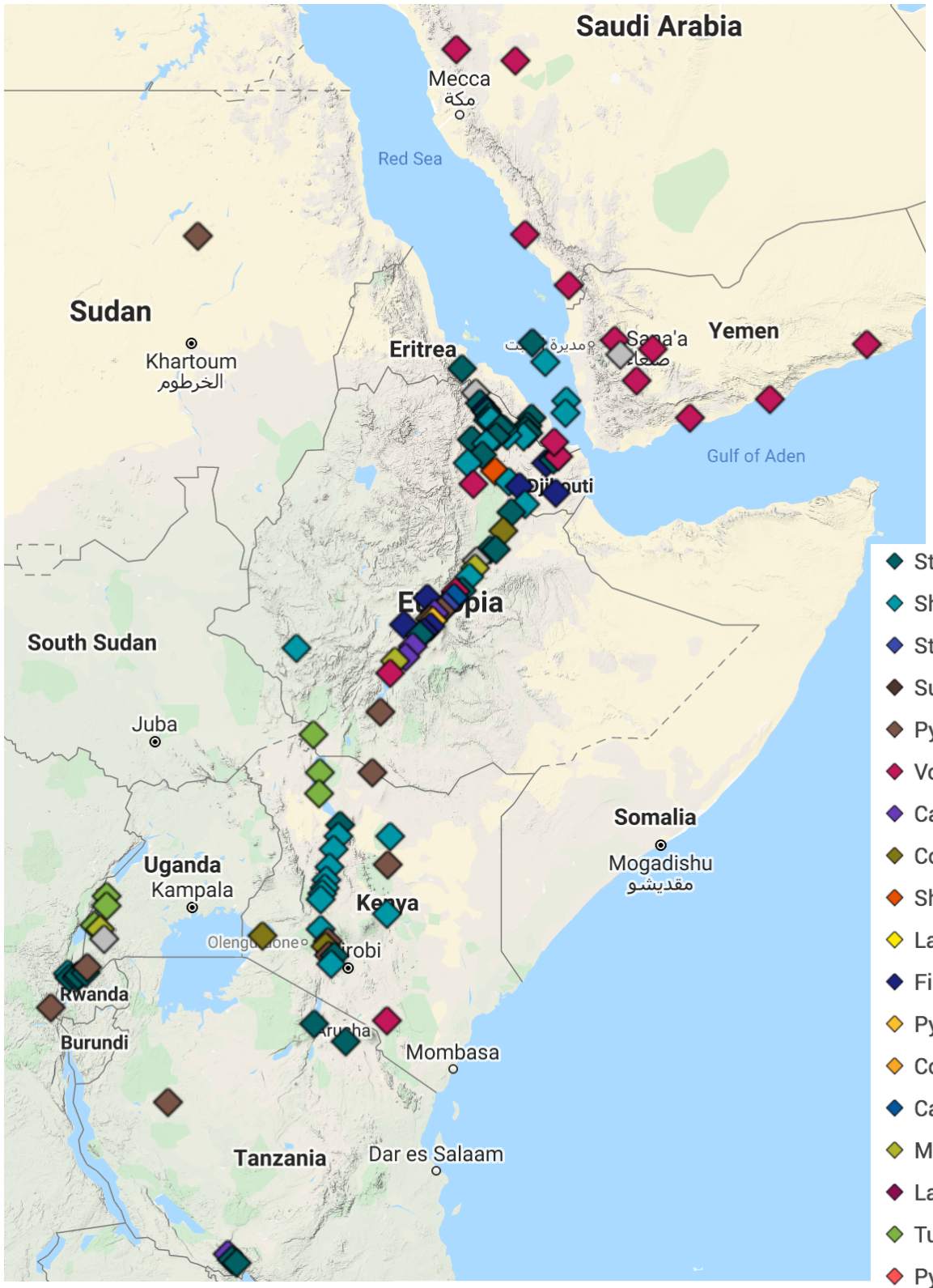
This map is credited from the following website: https://en.wikipedia.org/wiki/Red_Sea_Rift

Two education videos can be found at the following websites:

https://www.youtube.com/watch?v=Z6J0RvgbIMA

https://www.geolsoc.org.uk/Plate-Tectonics/Chap3-Plate-Margins/Divergent/Triple-Junction

Red Sea, Gulf of Aden, Northeast Africa



- Stratovolcano
- Shield
- Stratovolcano(es)
- Submarine
- Pyroclastic cone(s)
- Volcanic field
- Caldera
- Complex
- Shield
- Lava dome(s)
- Fissure vent(s)
- Pyroclastic cone
- Compound
- Caldera(s)
- Maar(s)
- Lava dome
- Tuff cone(s)
- Pyroclastic shield
- Crater rows
- Maar
- Other / No value

Display: All Volcanoes from the last ~10,000 years (Holocene)
https://volcano.si.edu/list_volcano_holocene.cfm