

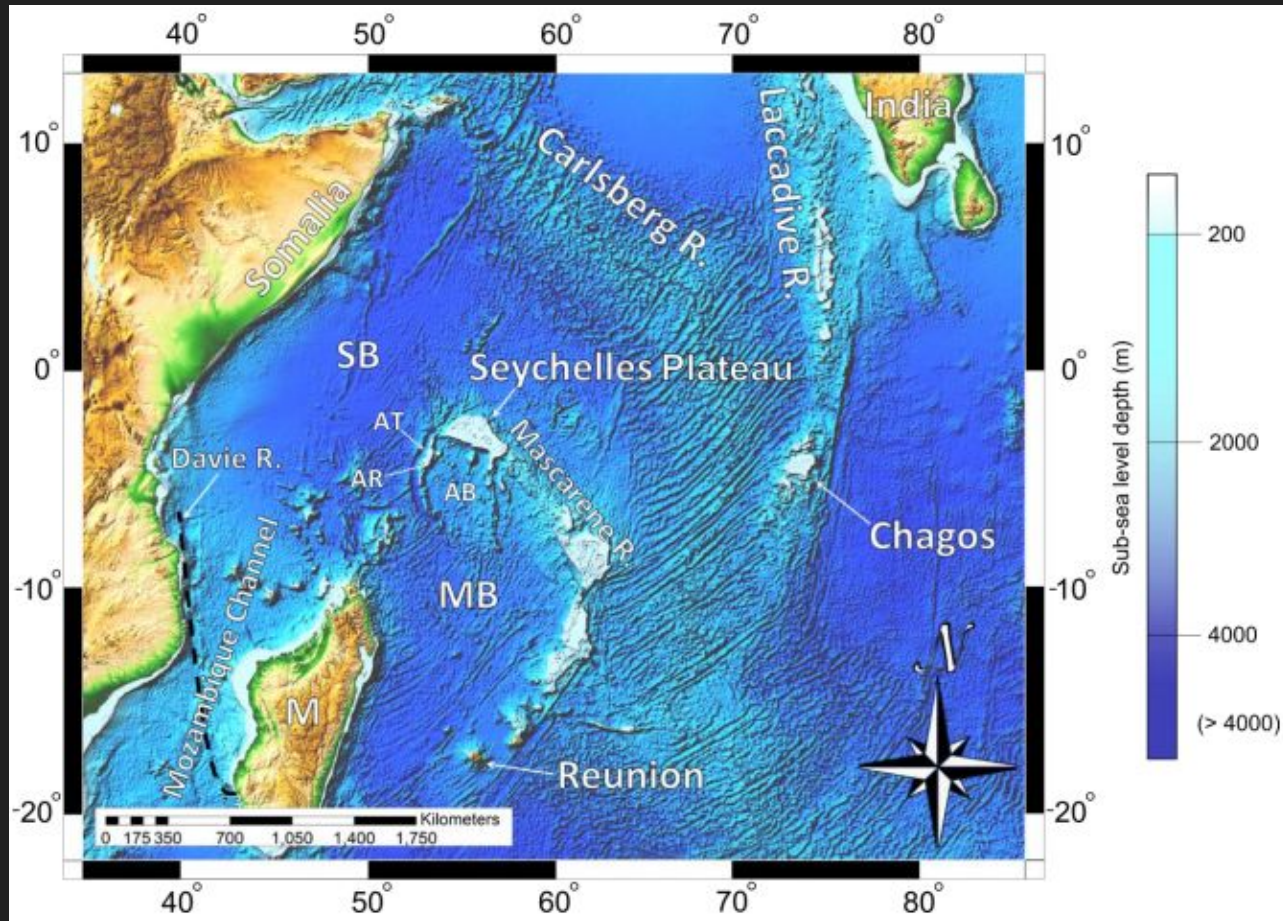
# The Seychelles Microcontinent

Ryan Olsen  
GO326  
May 2, 2021

# Seychelles Microcontinent - Formation

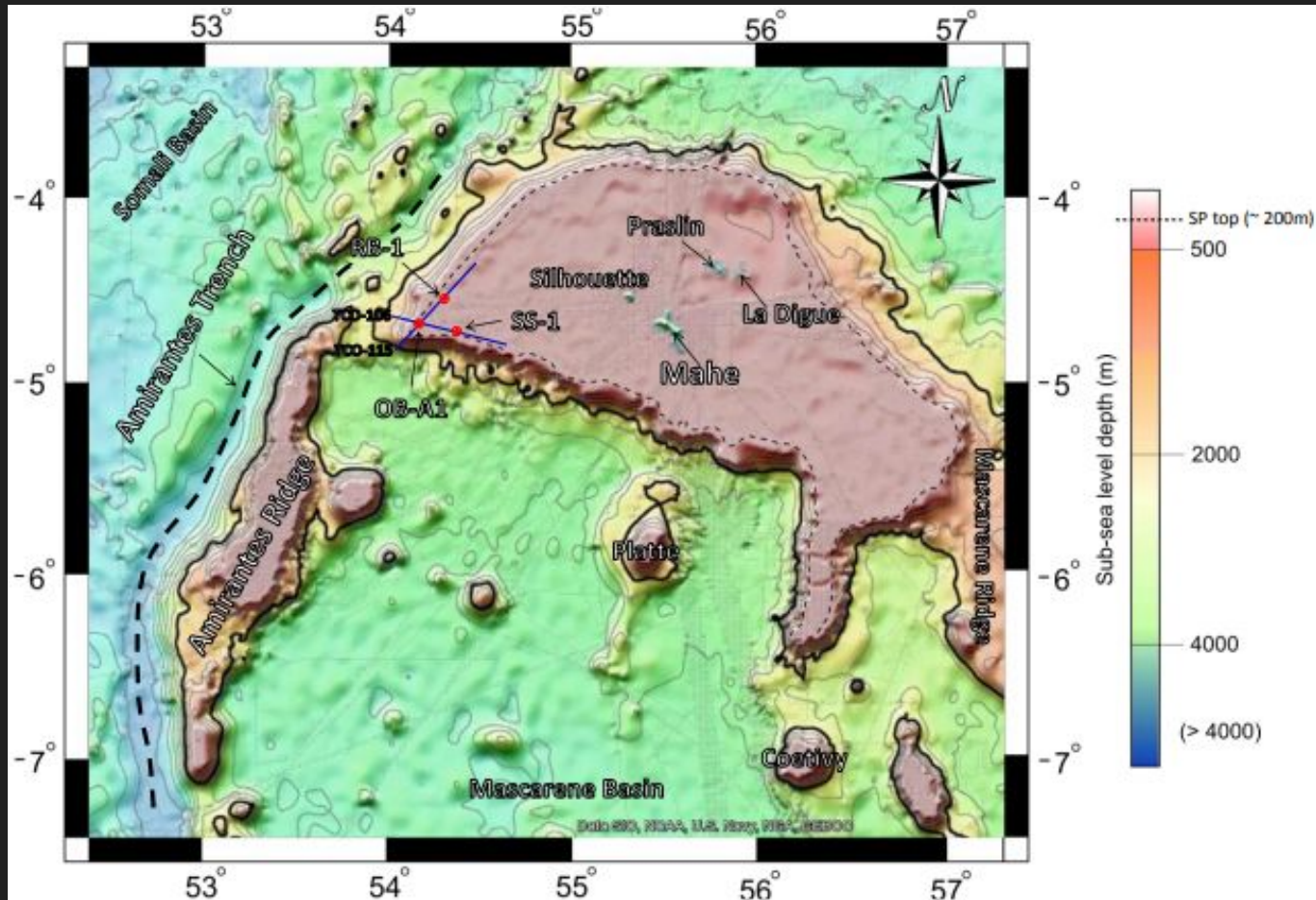
- Location
- Formation
- Geology
- Stratigraphy
- References

# Seychelles Microcontinent - Location



*Amante and Eakins, 2009*

# Seychelles Microcontinent - Location

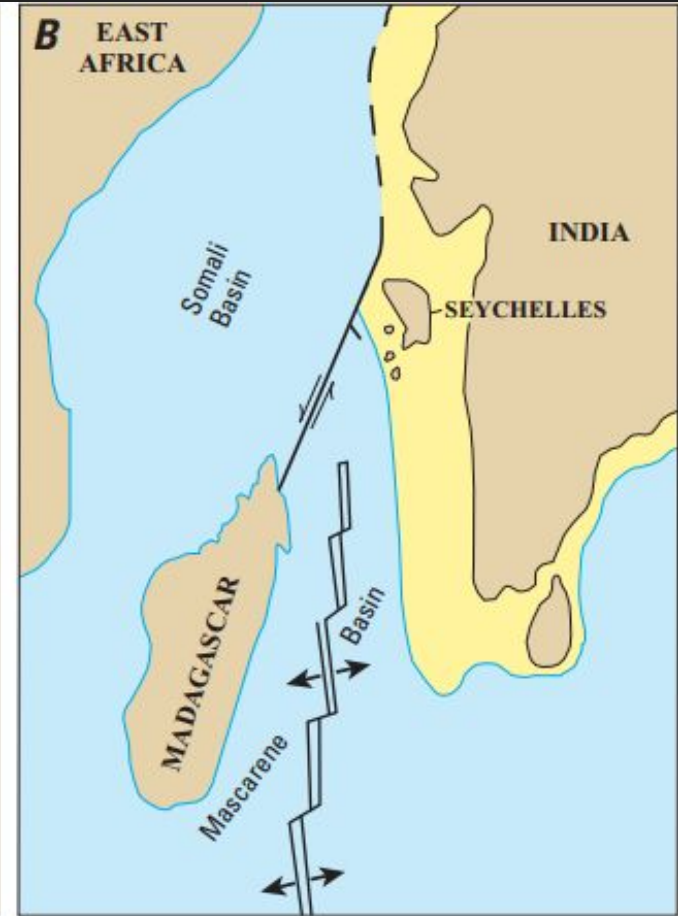
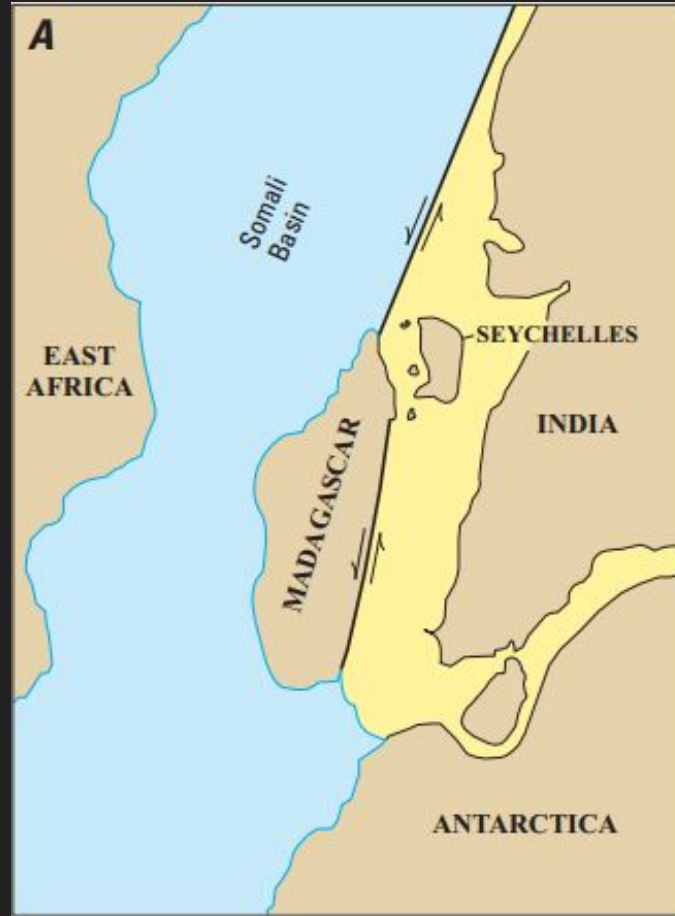


Becker et al., 2009 and Smith et al., 1997

# Seychelles Microcontinent - Formation

Breakup of Gondwana  
A - Early Cretaceous  
B - Late Cretaceous

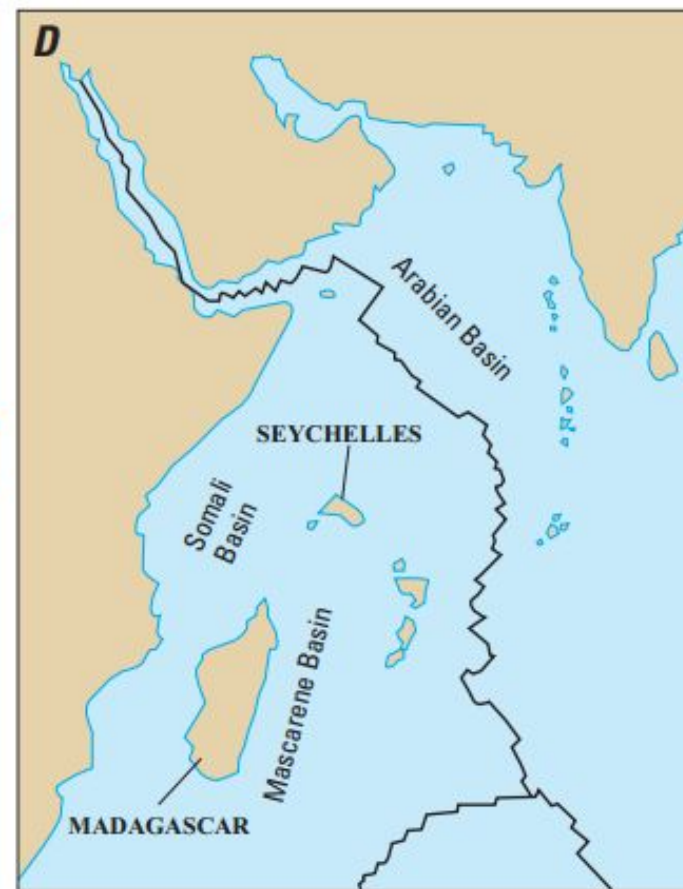
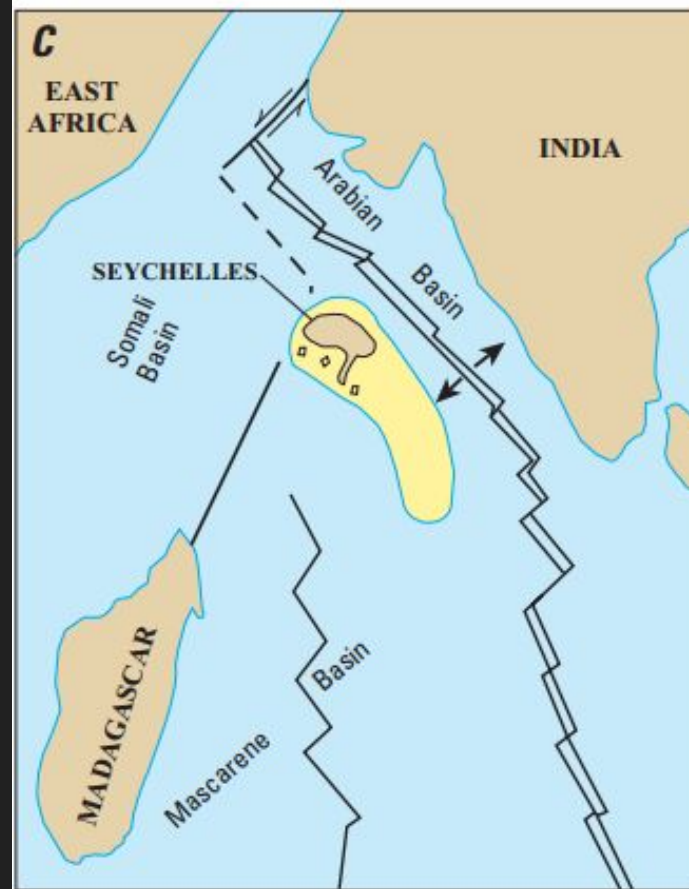
- Brownfield and Schenk, 2016



Brownfield and Schenk, 2016



# Seychelles Microcontinent - Formation



*Brownfield and Schenk, 2016*

Breakup of Gondwana - cont.

C - Paleocene

D - Present Day

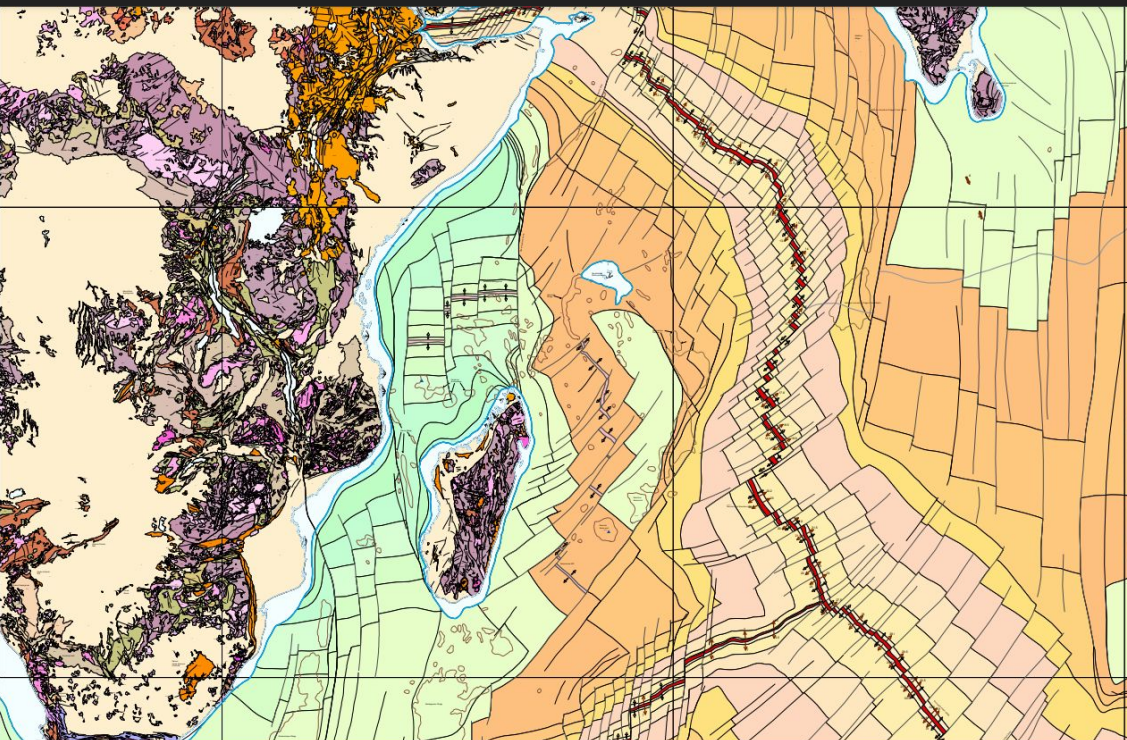
- *Brownfield and Schenk, 2016*

# Seychelles Microcontinent - Geology

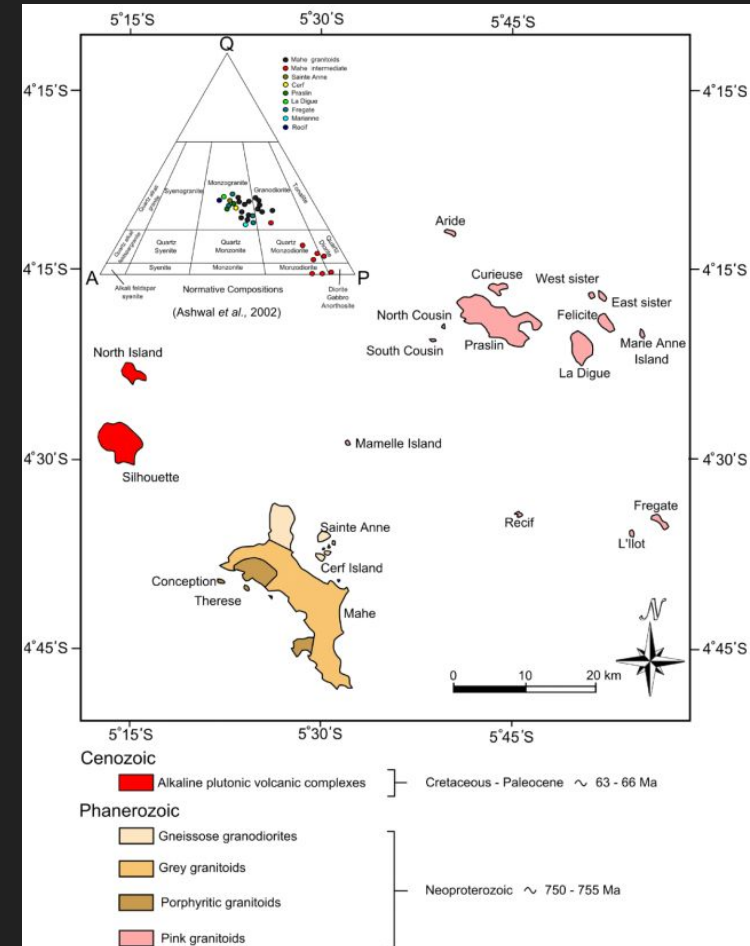
115 islands, 41 of which are granitic

- Similar in age to Madagascar and NW India

- *Hammond et al., 2013*

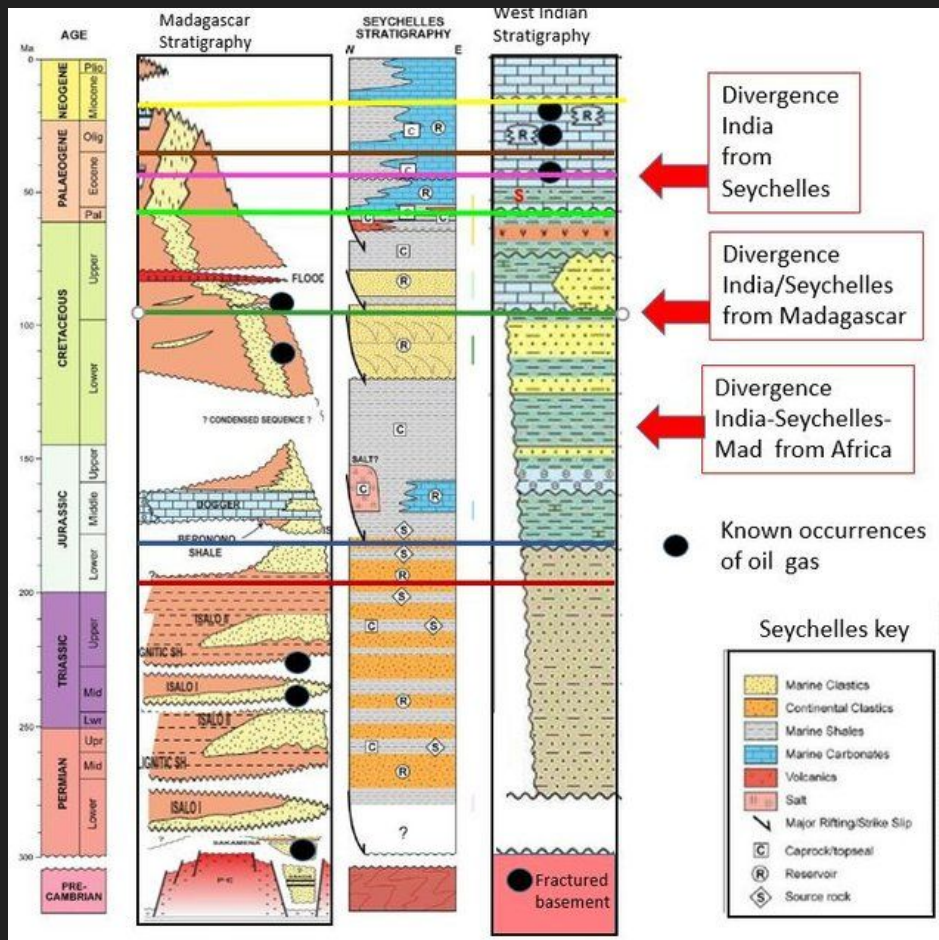


Ross, 2014



Modified from Baker, 1963; Ashwal et al., 2002

# Seychelles Microcontinent - Stratigraphy





# Seychelles Microcontinent

- Amante, C. and B.W. Eakins, 2009. ETOPO1 1 Arc-Minute Global Relief Model: Procedures, Data Sources and Analysis. NOAA Technical Memorandum NESDIS NGDC-24. National Geophysical Data Center, NOAA. doi:10.7289/V5C8276M
- Brownfield, M.E., comp., 2016, Assessment of undiscovered hydrocarbon resources of Sub-Saharan Africa: U.S. Geological Survey Digital Data Series 69–GG, 16 chap., variously paged, <https://dx.doi.org/10.3133/ds69GG>.
- Granath, J., Rango, R., Emmer, P., Ford, C., Lambert, R., Kasli, M., 2017. New Viewpoint on the Geology and Hydrocarbon Prospectivity of the Seychelles Plateau, *AAPG/SPE AETC Conference in Nairobi, Dec. 2016*.
- Hammond, J.O.S., Kendall, J.-M., Collier, J.S., and Rümpker, G., 2013, The extent of continental crust beneath the Seychelles. *Earth and Planetary Science Letters* vol. 381, p. 166-176.
- Mondon, J.-L. A, 2014. Analysis of the Tectonic and Basin Evolution of the Seychelles Microcontinent during the Mesozoic to Cenozoic, based on seismic and well data. *Department of Geosciences and AEON-ESSRI, Nelson Mandela Metropolitan University, South Africa*.
- Plummer, P.S. 1995, Ages and geological significance of the igneous rocks from Seychelles, *Journal of African Earth Sciences*, vol. 20, no. 2, pp. 91-101
- Ross, C., 2014. The Seychelles Plateau <<https://africa-arabia-plate.weebly.com/seychelles-plate.html>>, accessed April 30, 2021