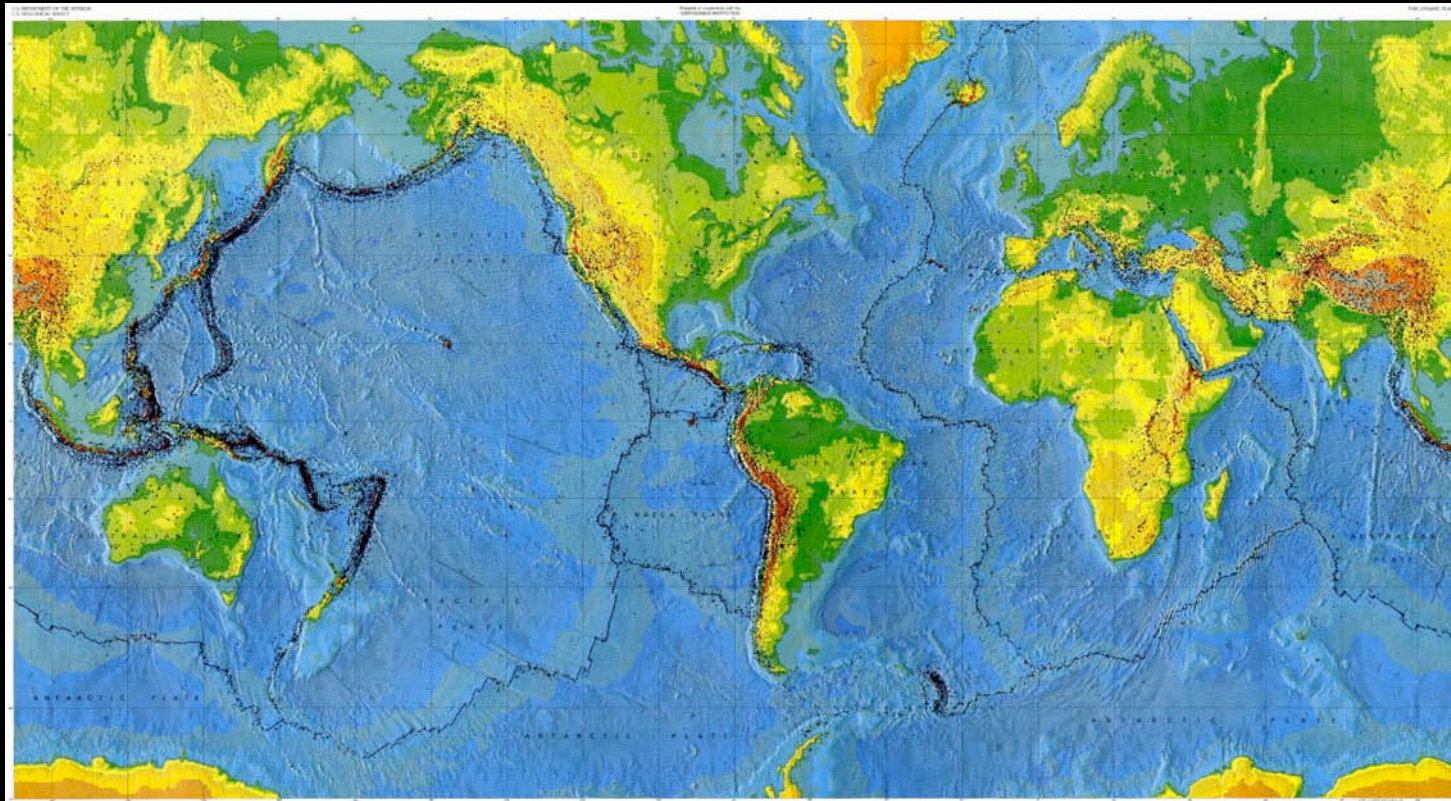




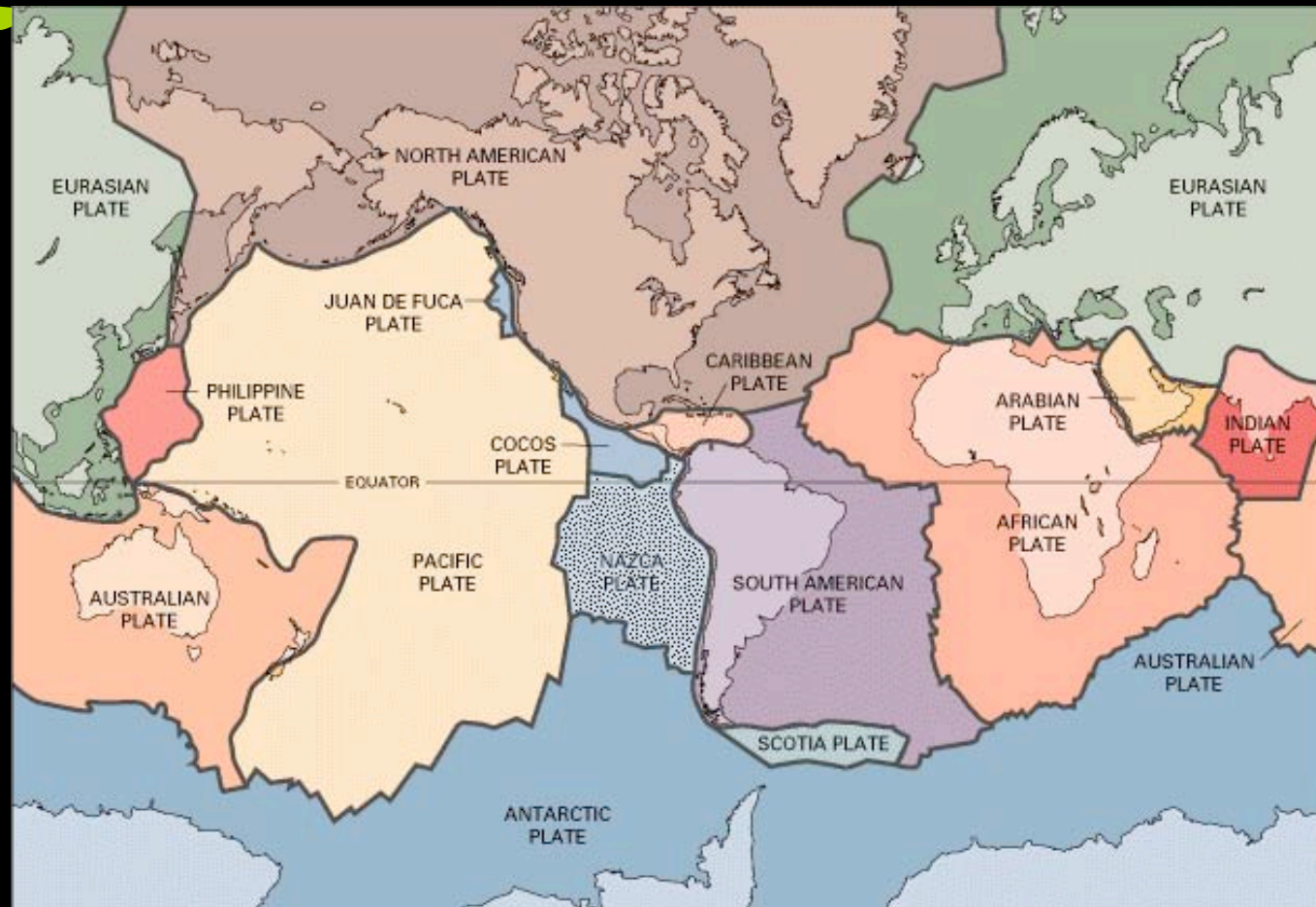
Global and Regional Tectonics

Kathy Haller

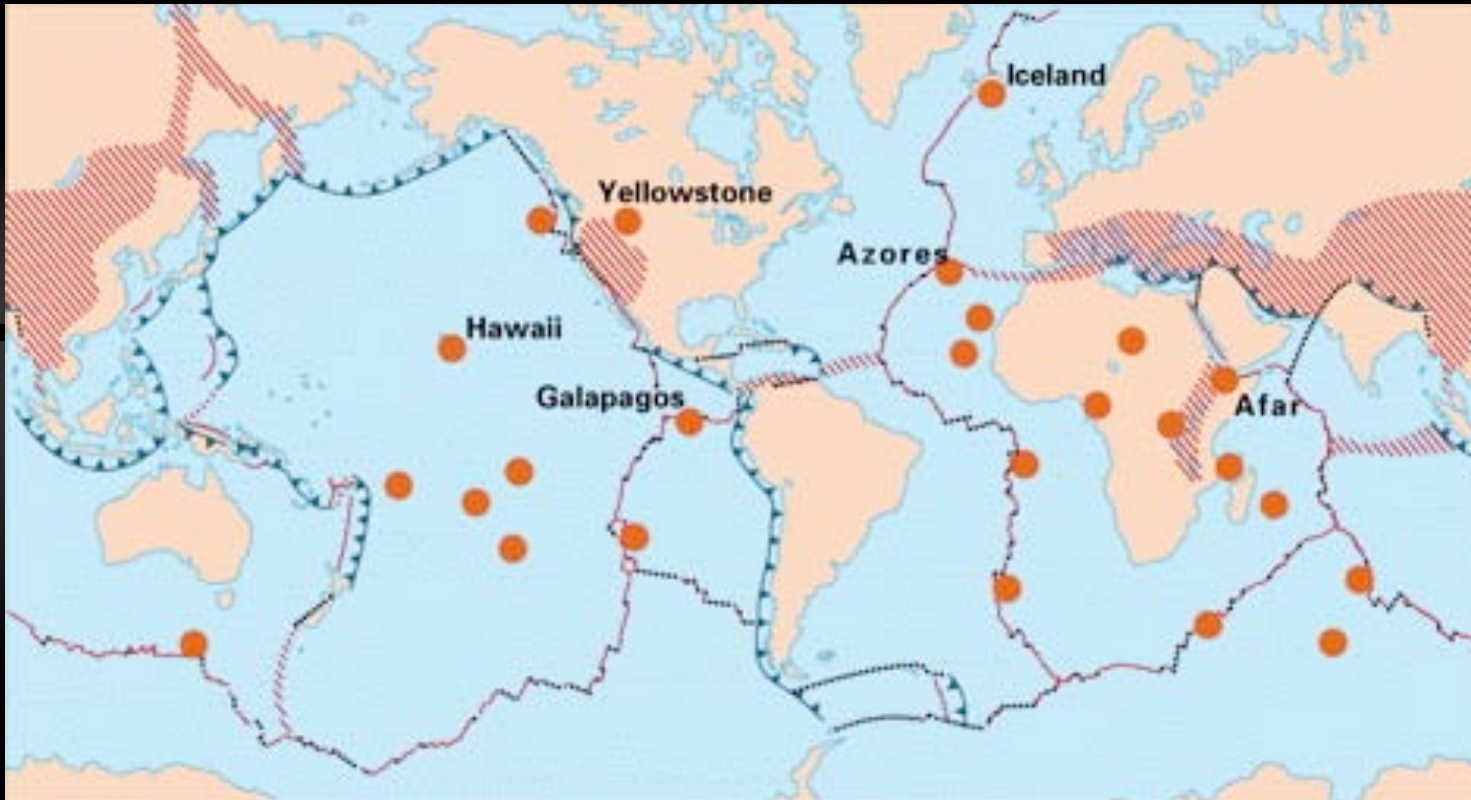
Plate boundaries and earthquakes



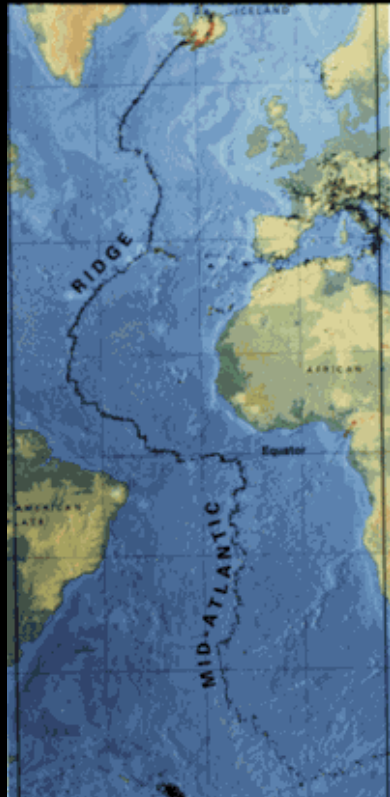
Plates of the world



Major classes of plate boundaries

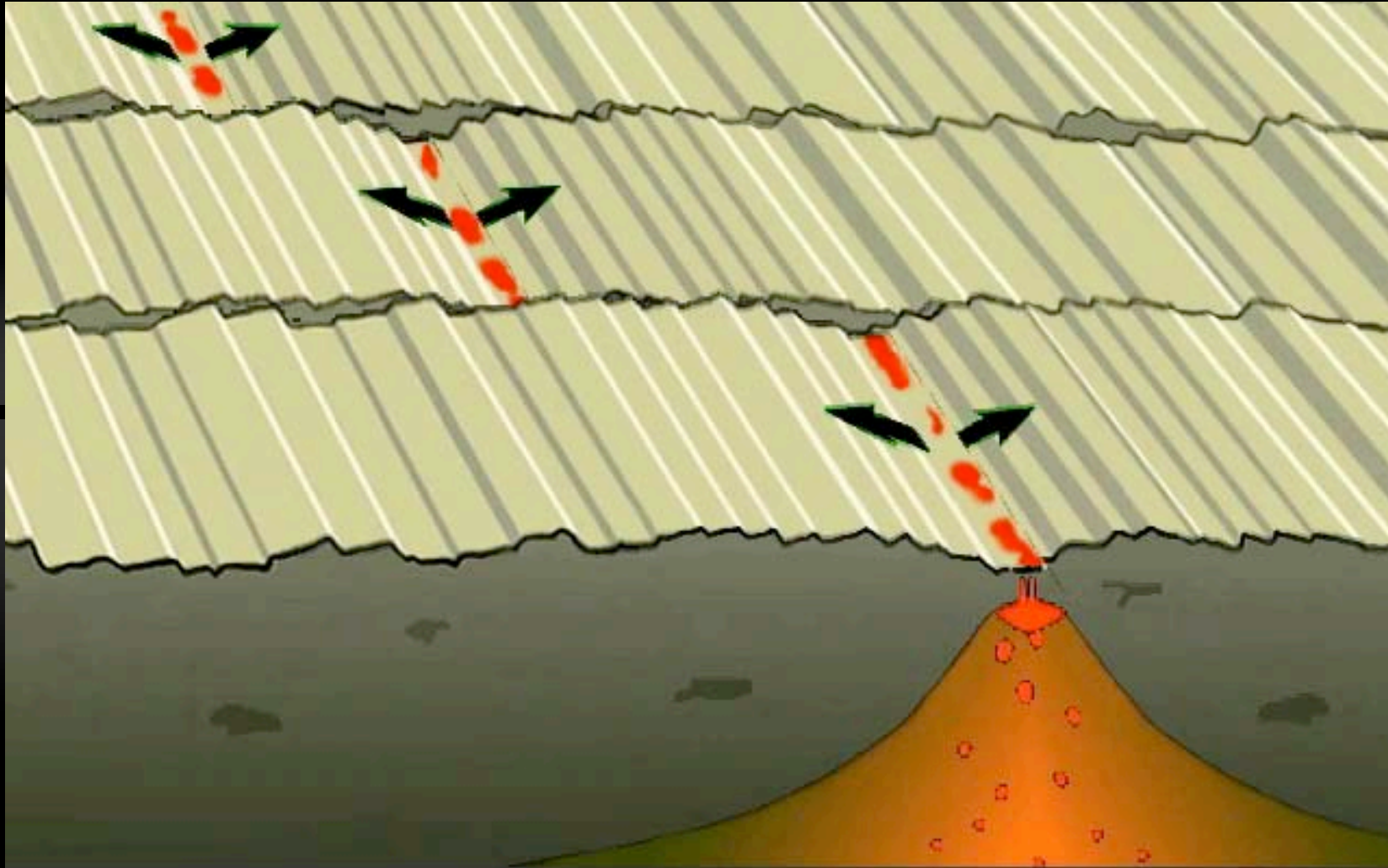


Divergent boundaries



- ✓ Average spreading rate 46.6 mm/yr
- ✓ 10 km³ of crust added each year worldwide

Mid-ocean ridge spreading center

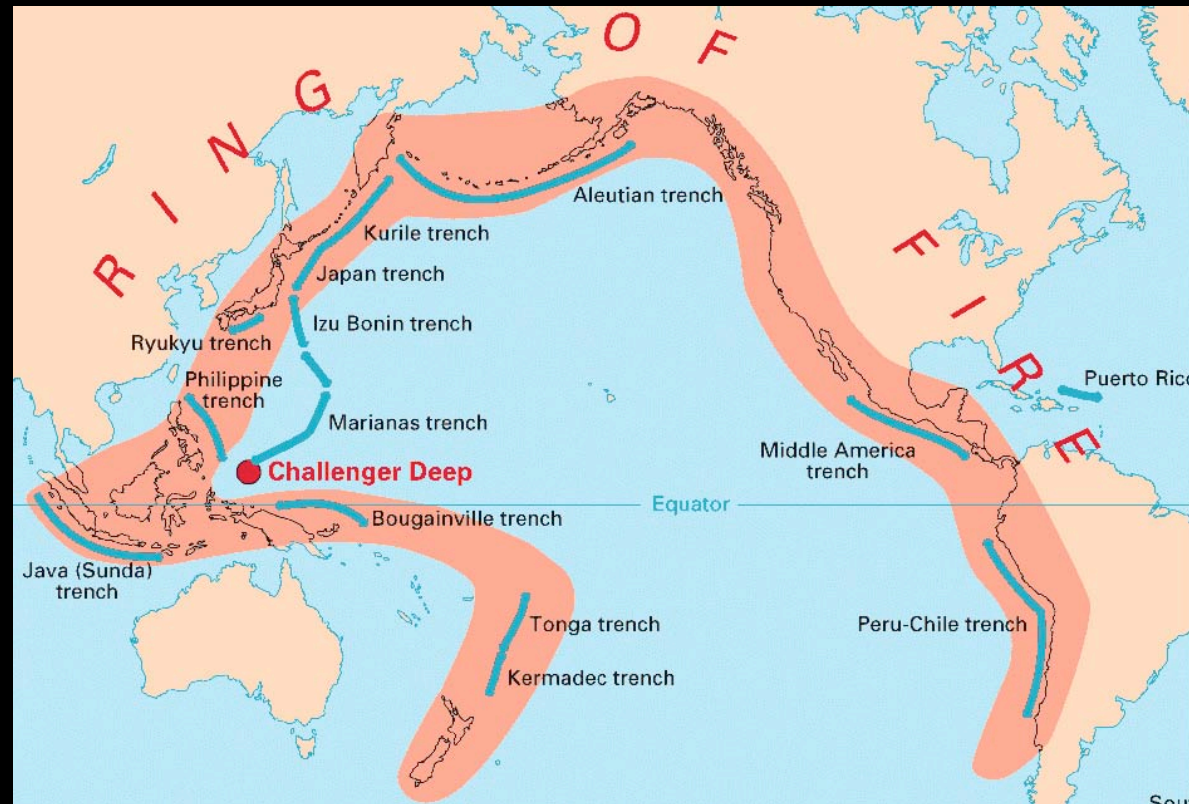


Transform boundaries

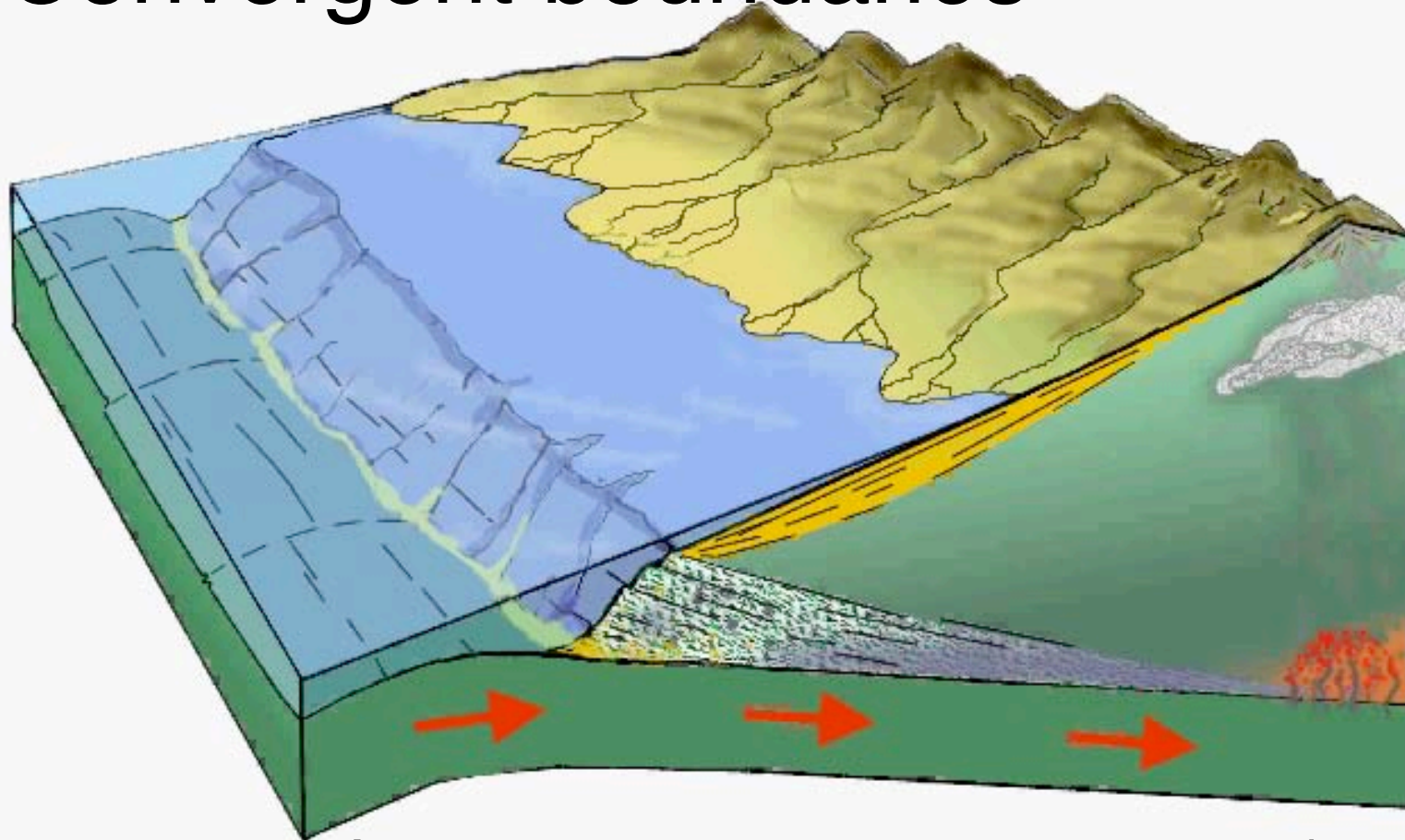


- ✓ Average slip rate of oceanic transform faults=40.5 mm/yr
- ✓ Average slip rate of continental transform faults=24.7 mm/yr
- ✓ Little or no crust is created or consumed

Ring of fire

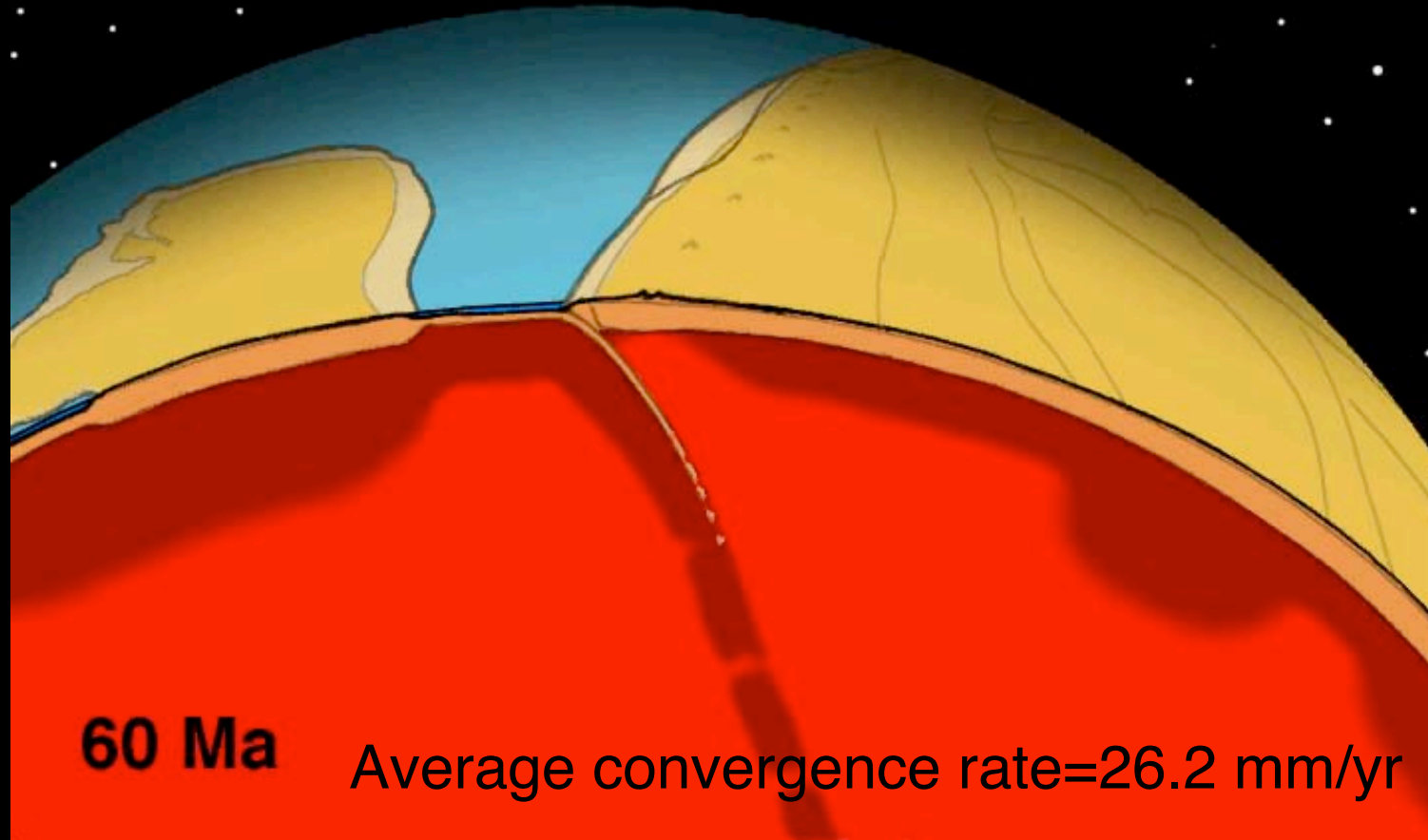


Convergent boundaries



Average convergence rate=62.3 mm/yr

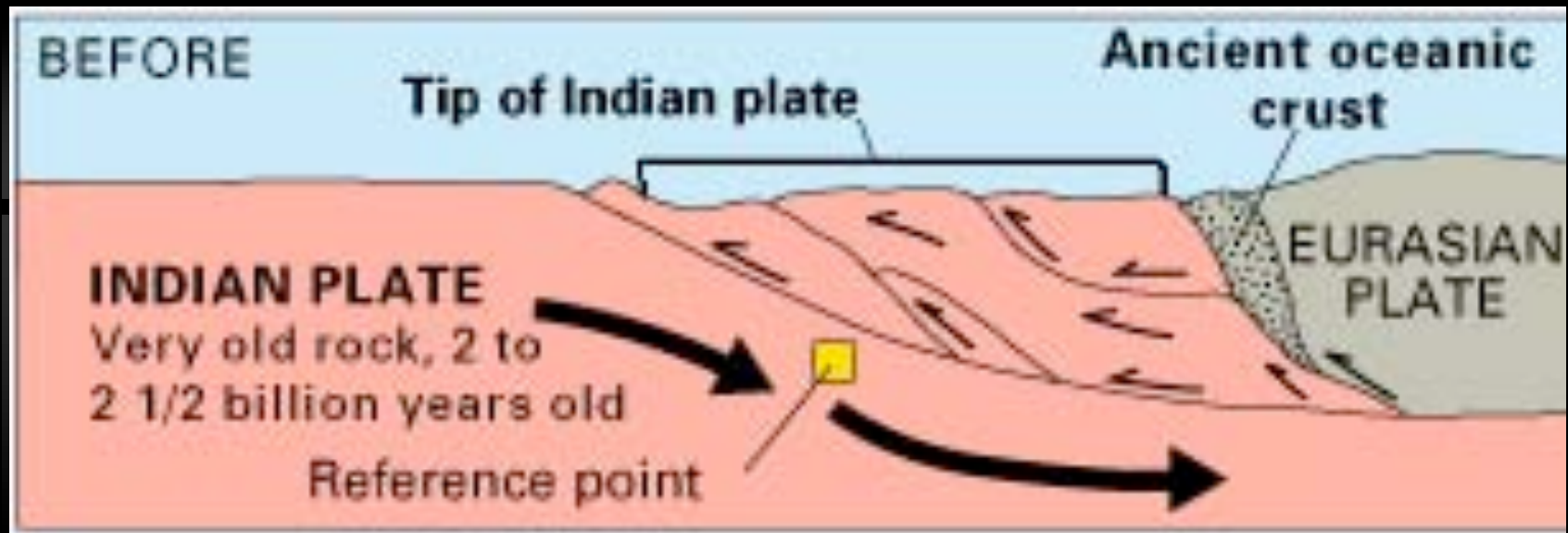
Continent-continent collision



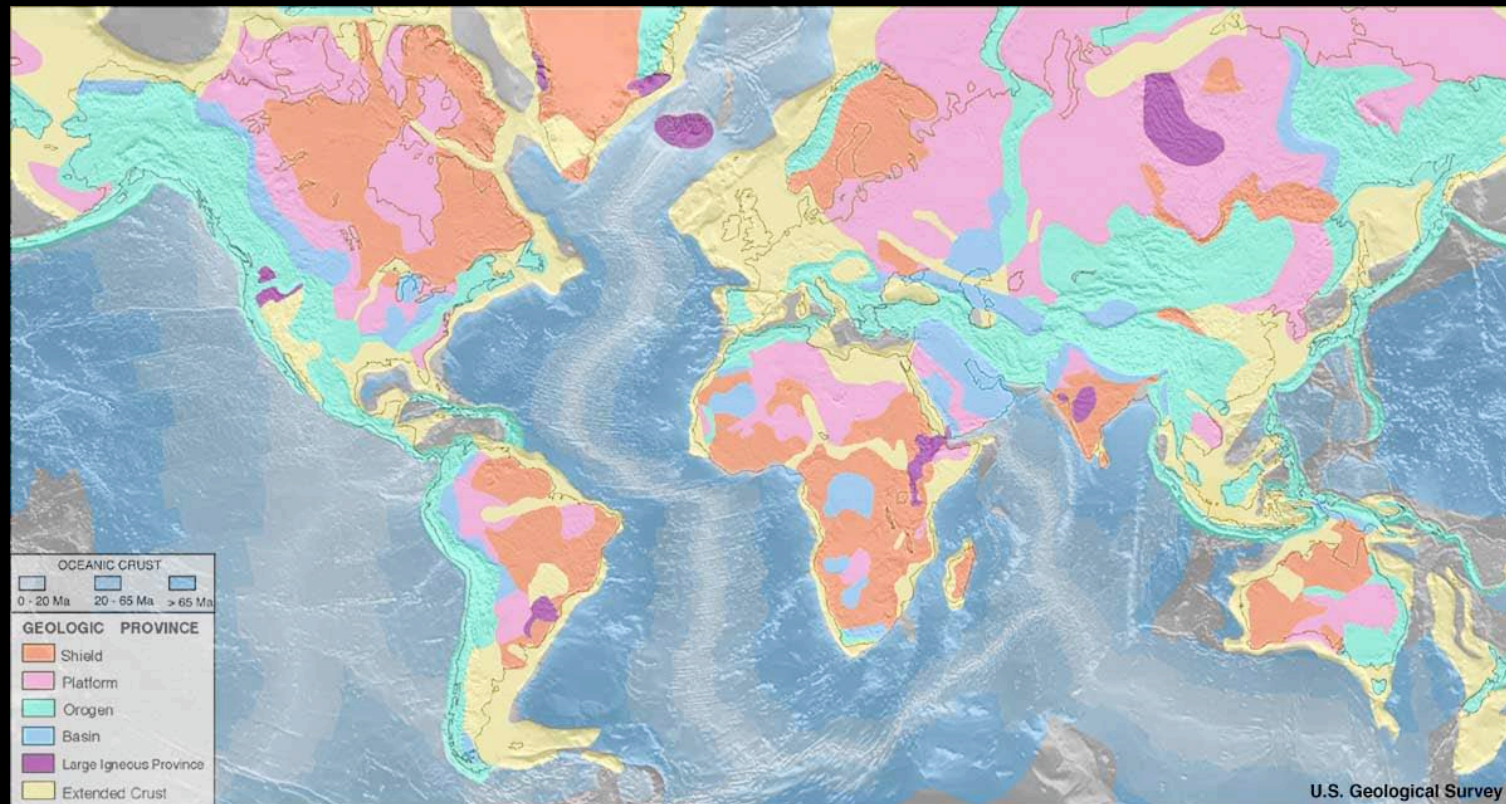
Indian-Eurasian plate collision

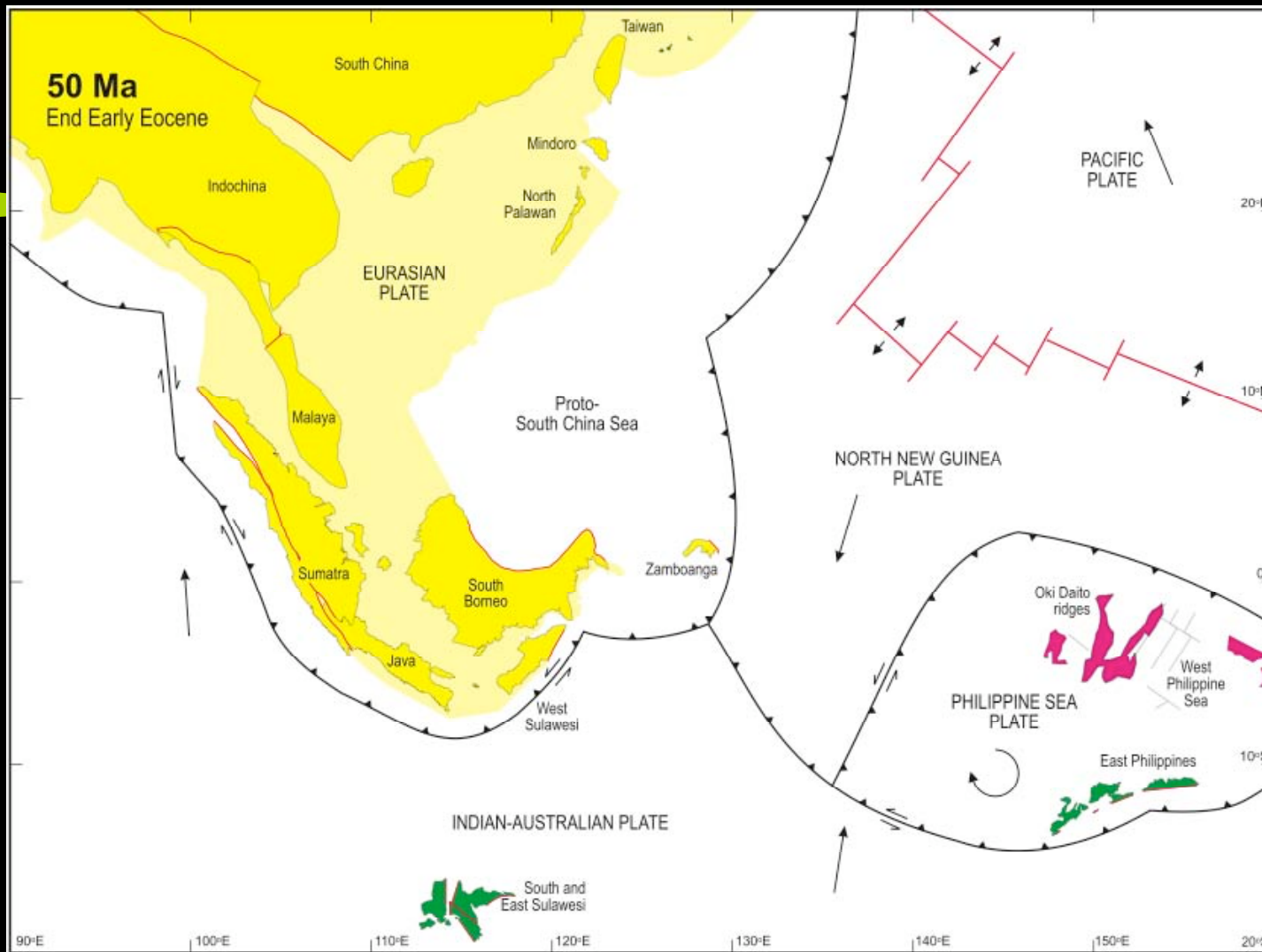


Himalayan deformation



Distribution of similar crust

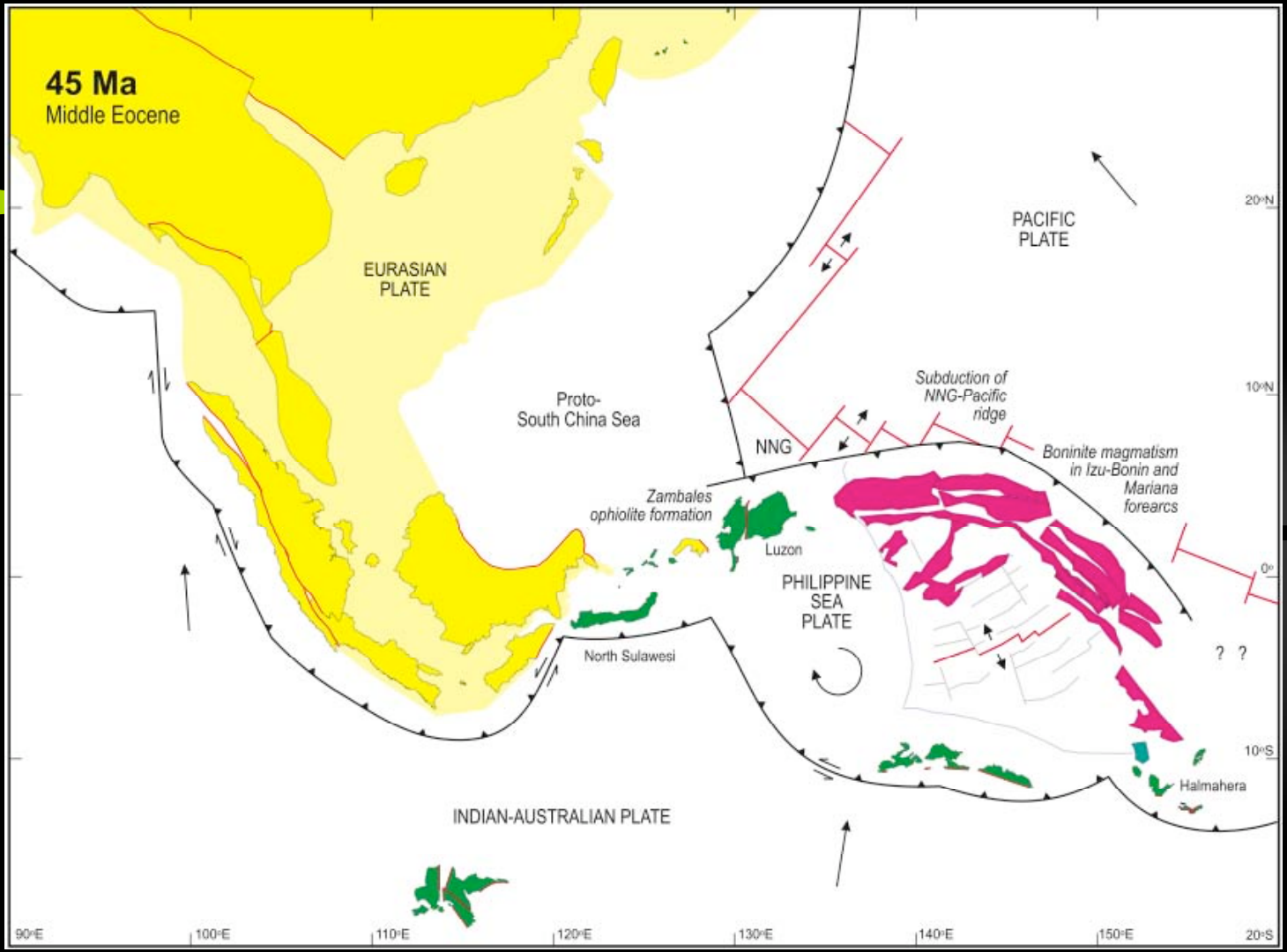




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

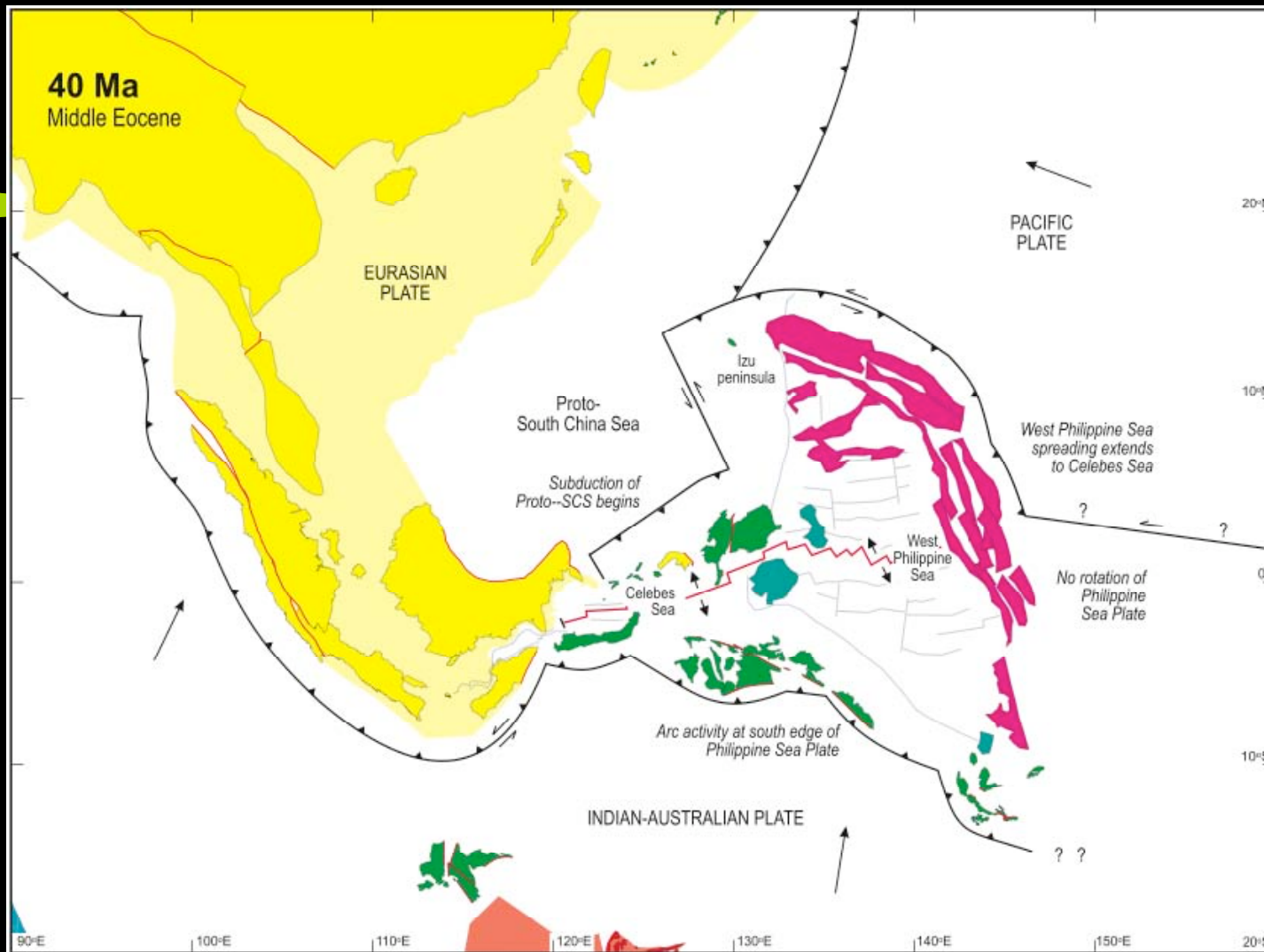




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

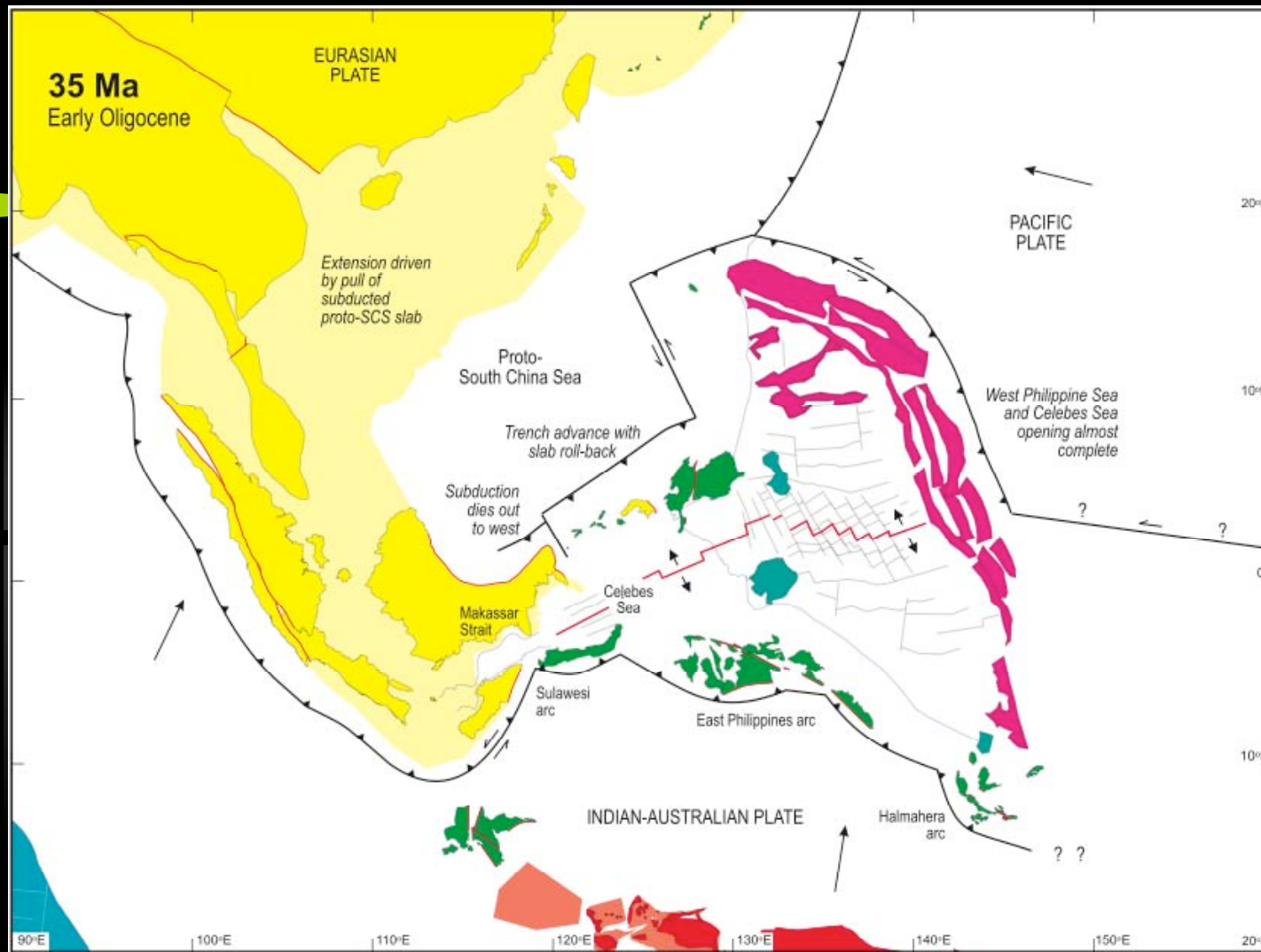




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

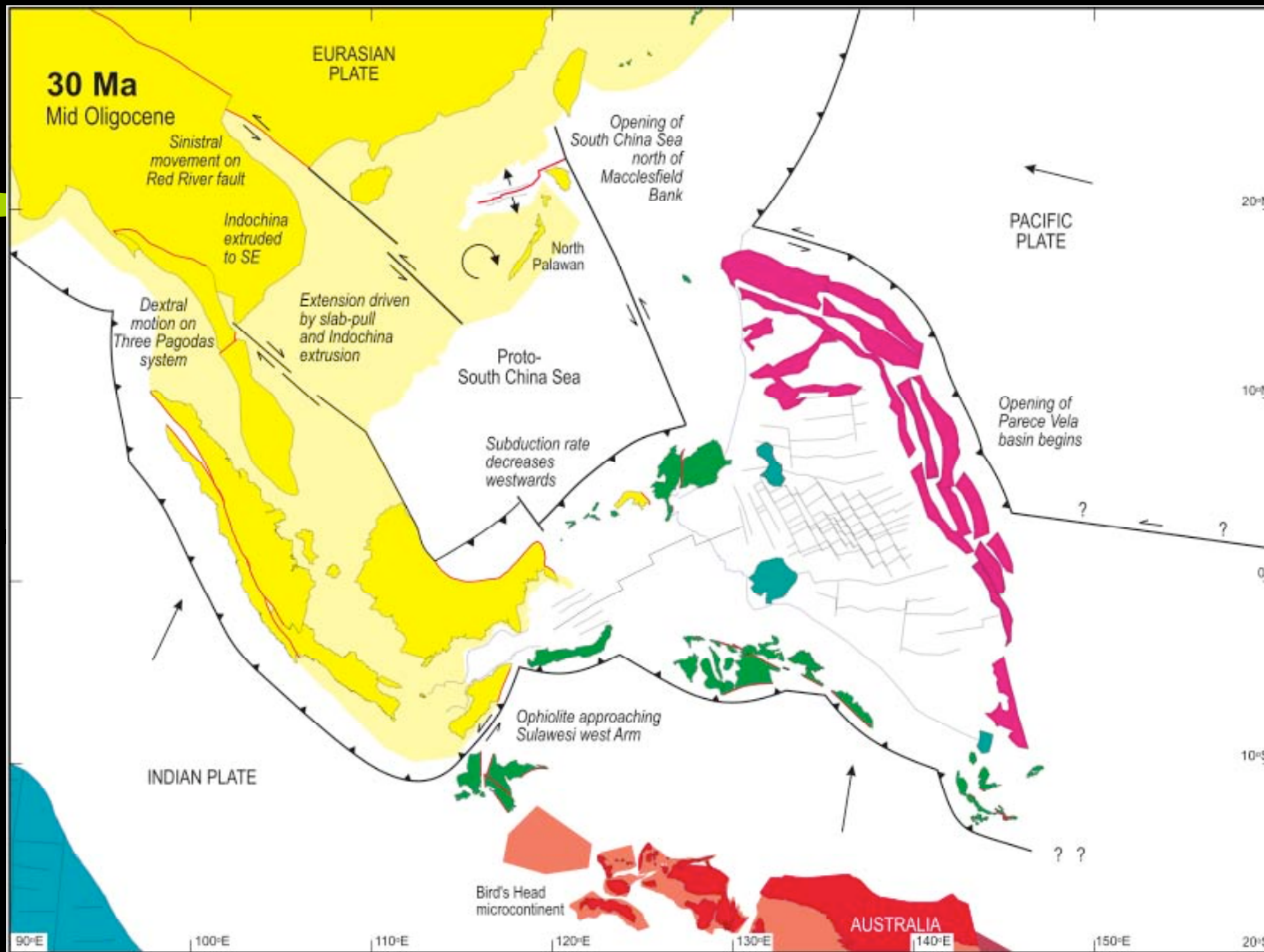




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

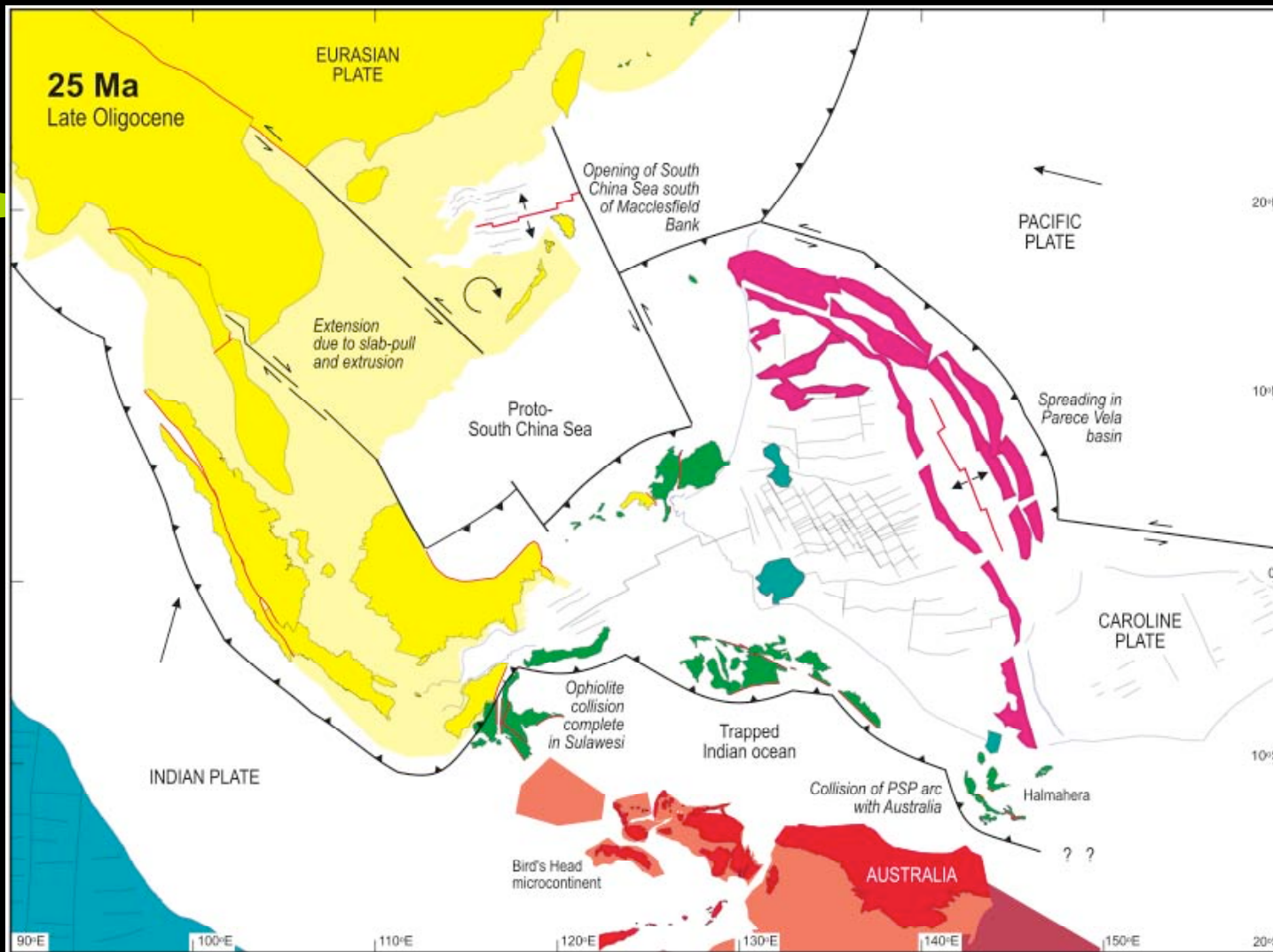




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

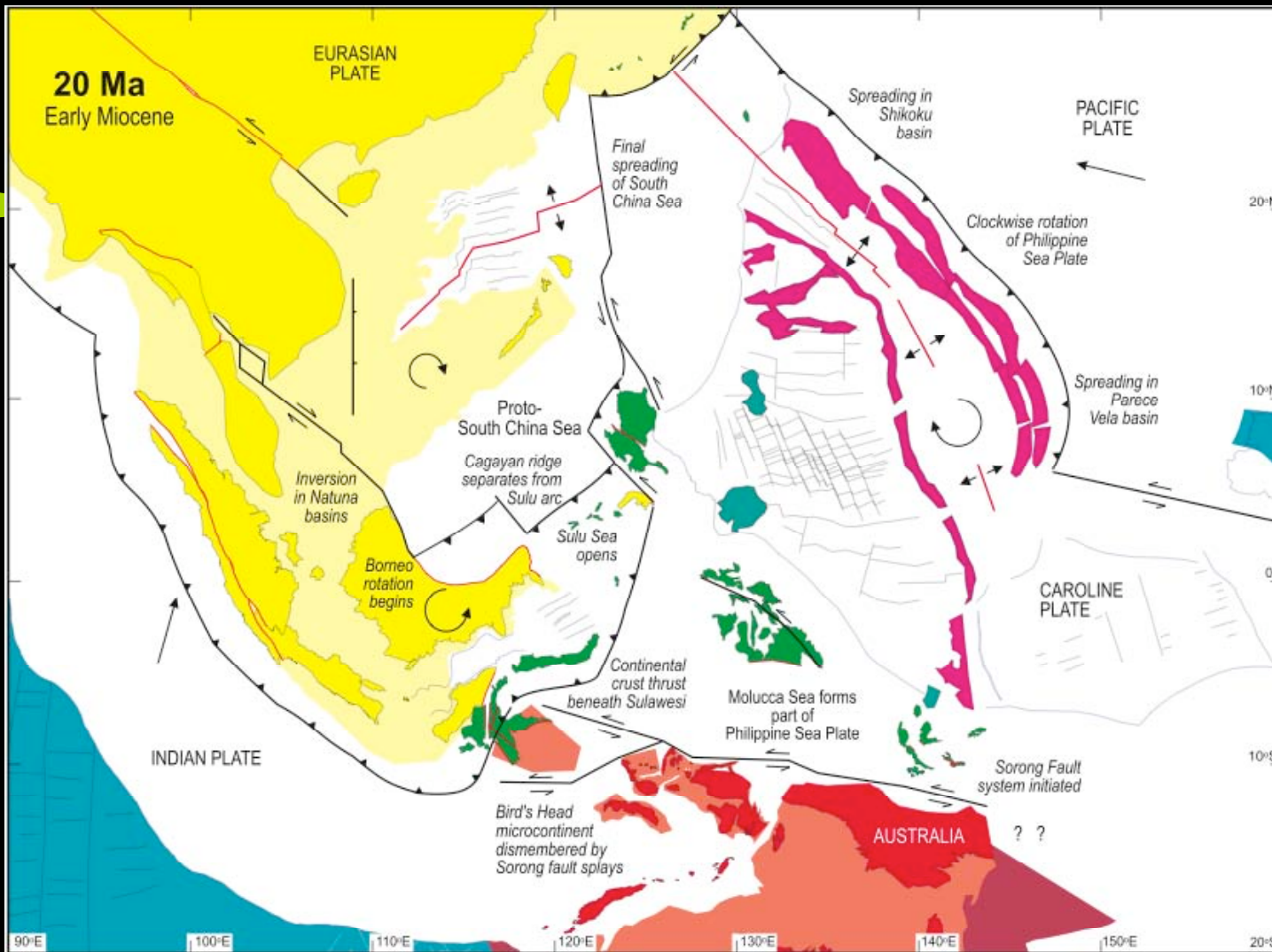




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

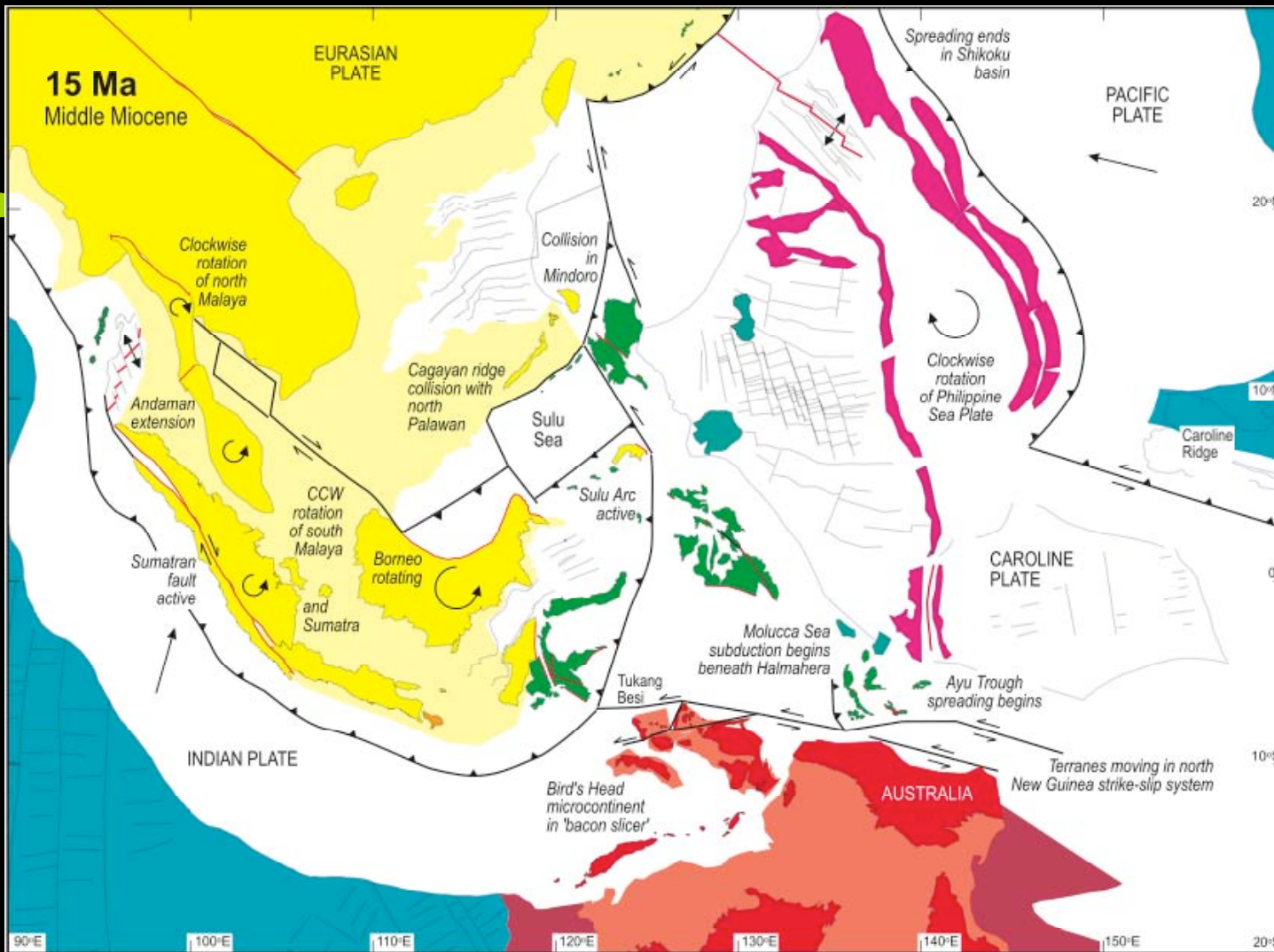




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

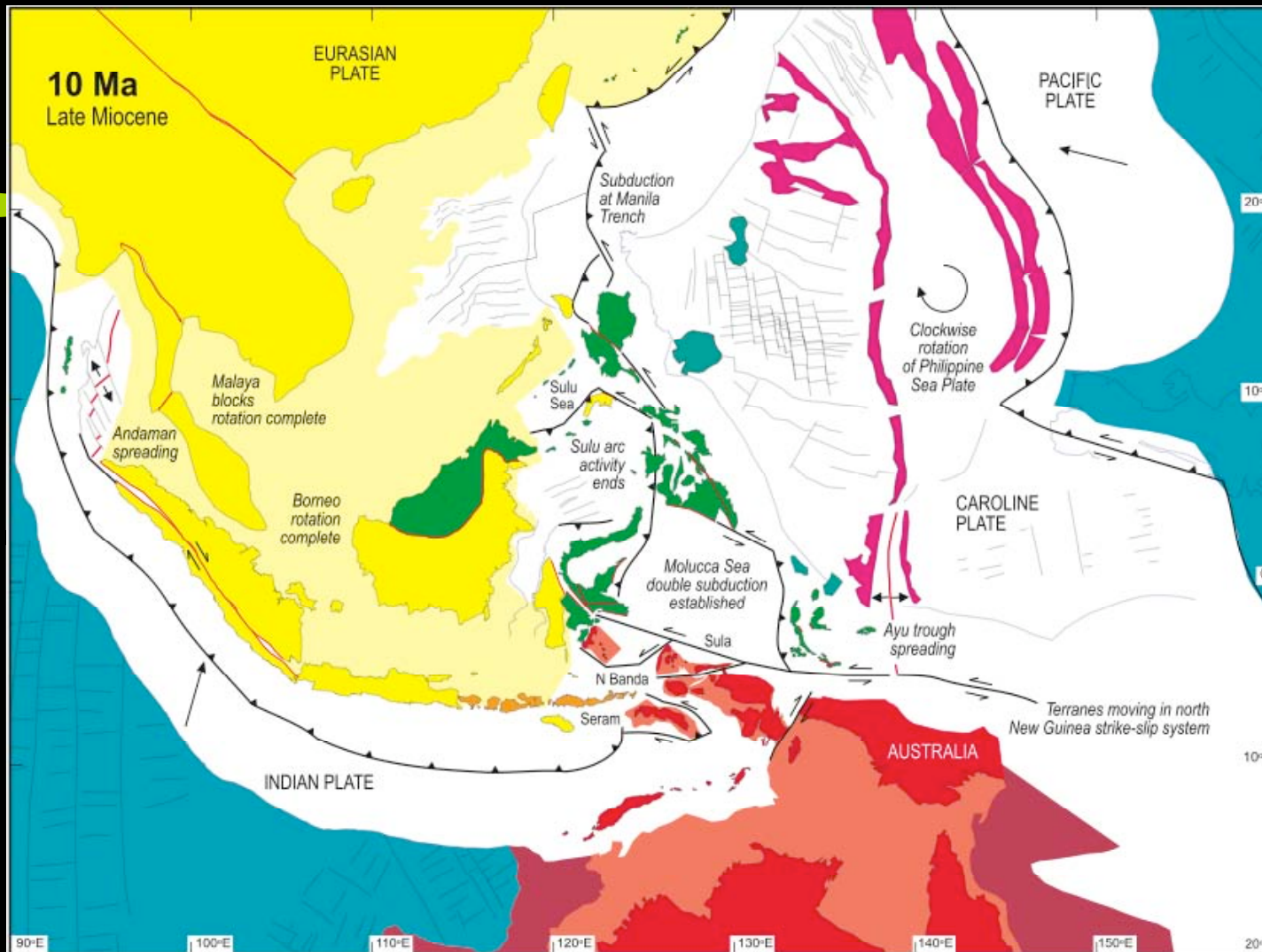




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

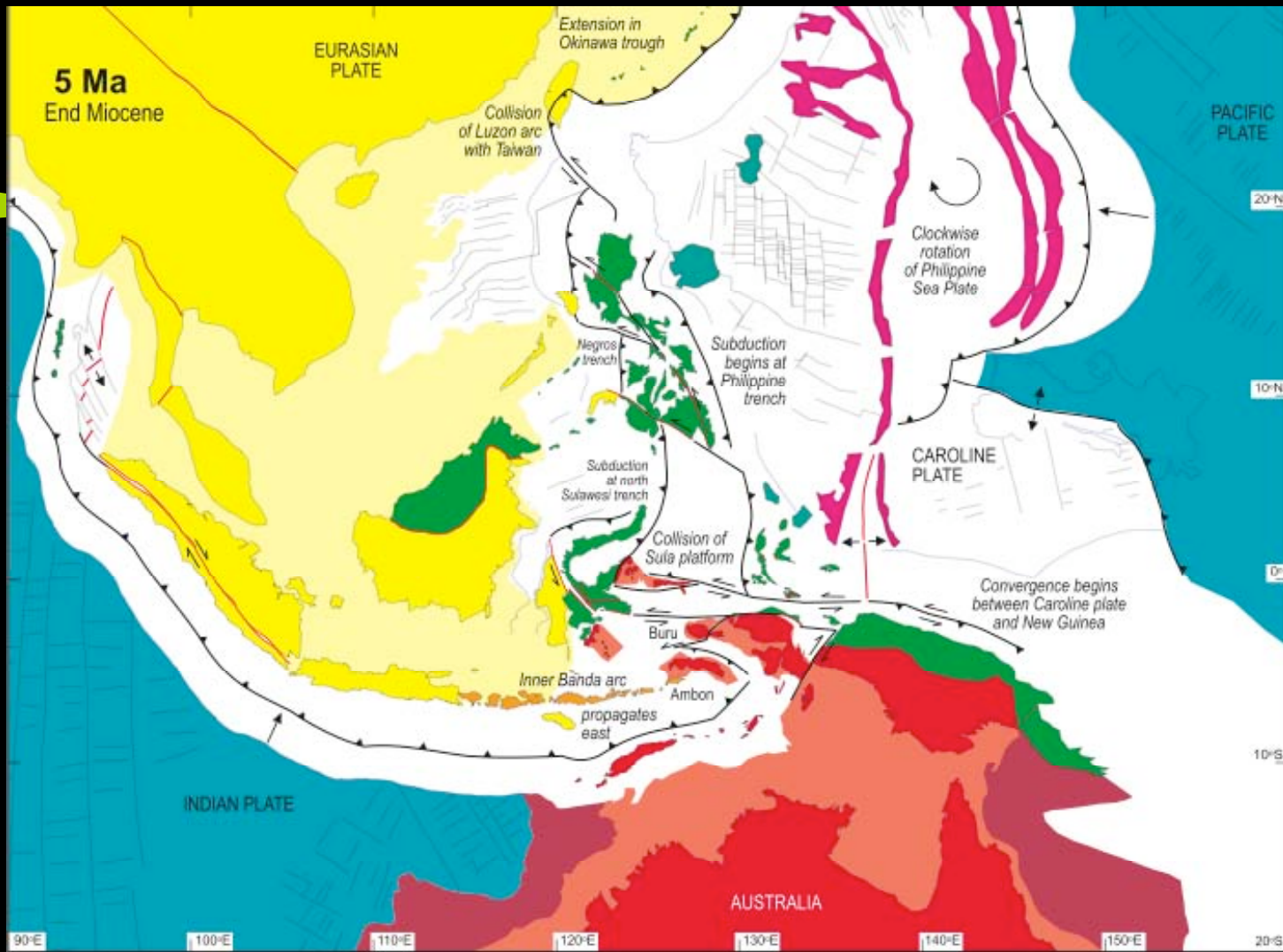




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>

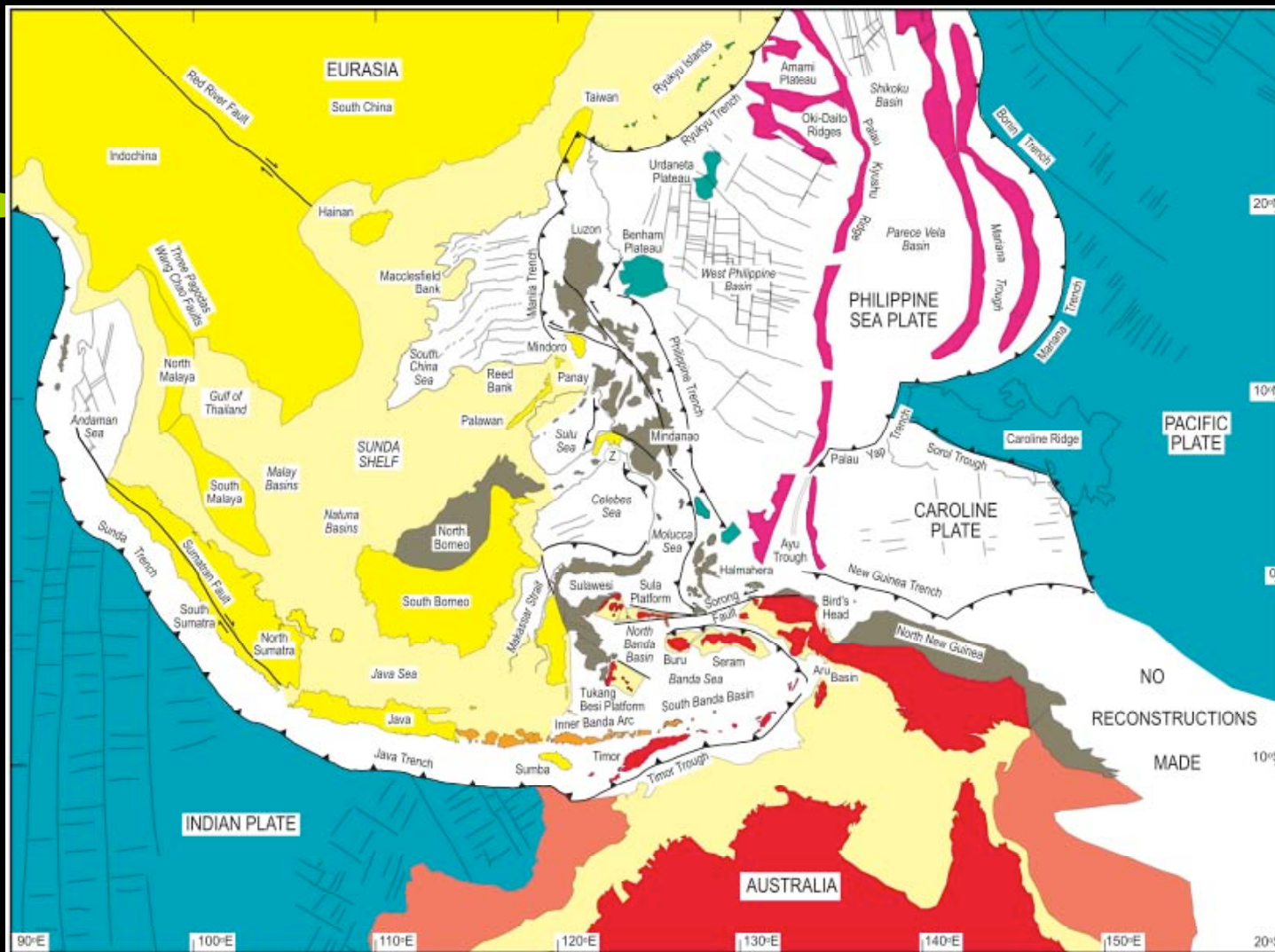




(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>





(Hall, 1996)

<http://www.gl.rhul.ac.uk/seasia/Publications/papers/papers.html>



Summary

