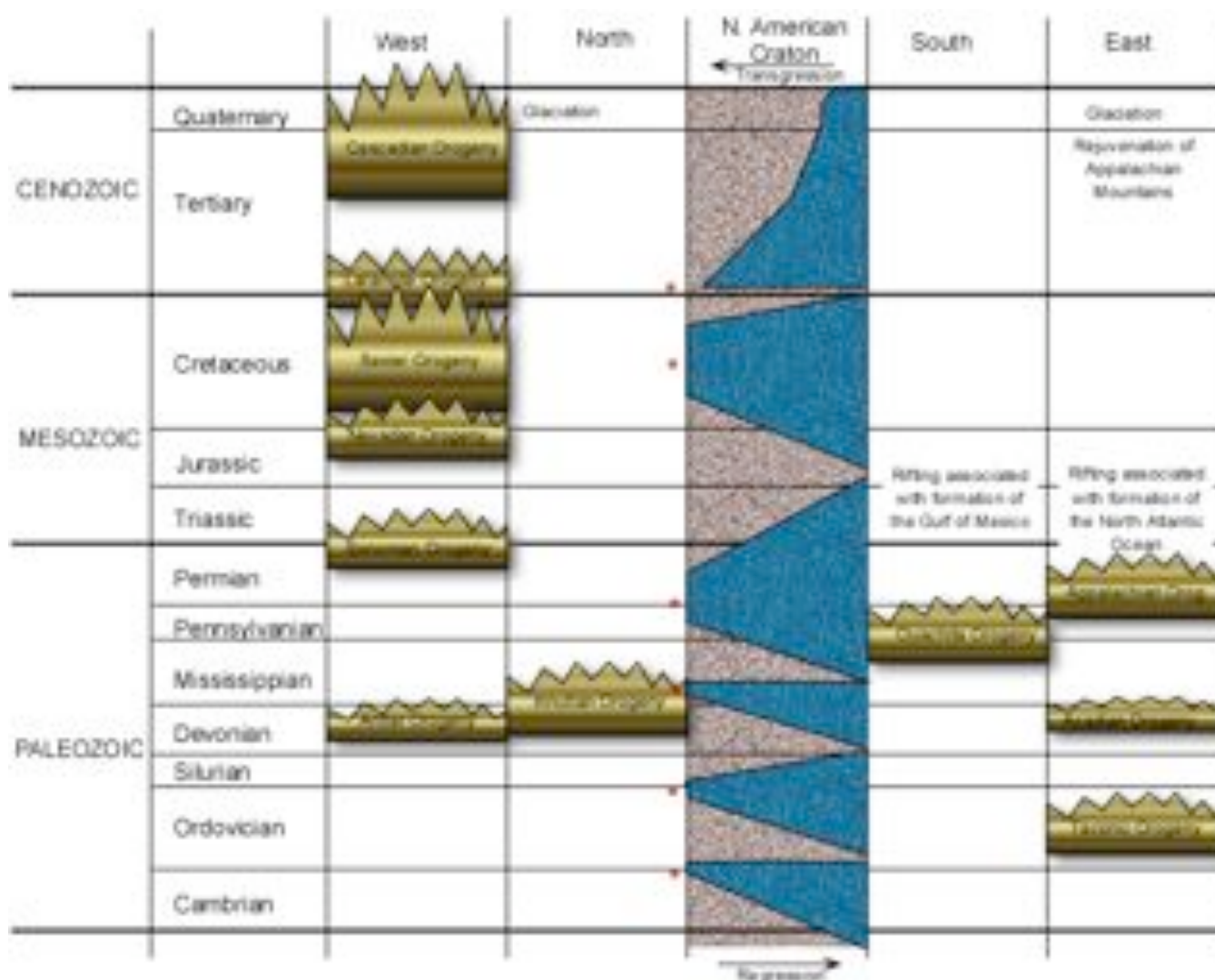


# Paleozoic

Rocks and Environments

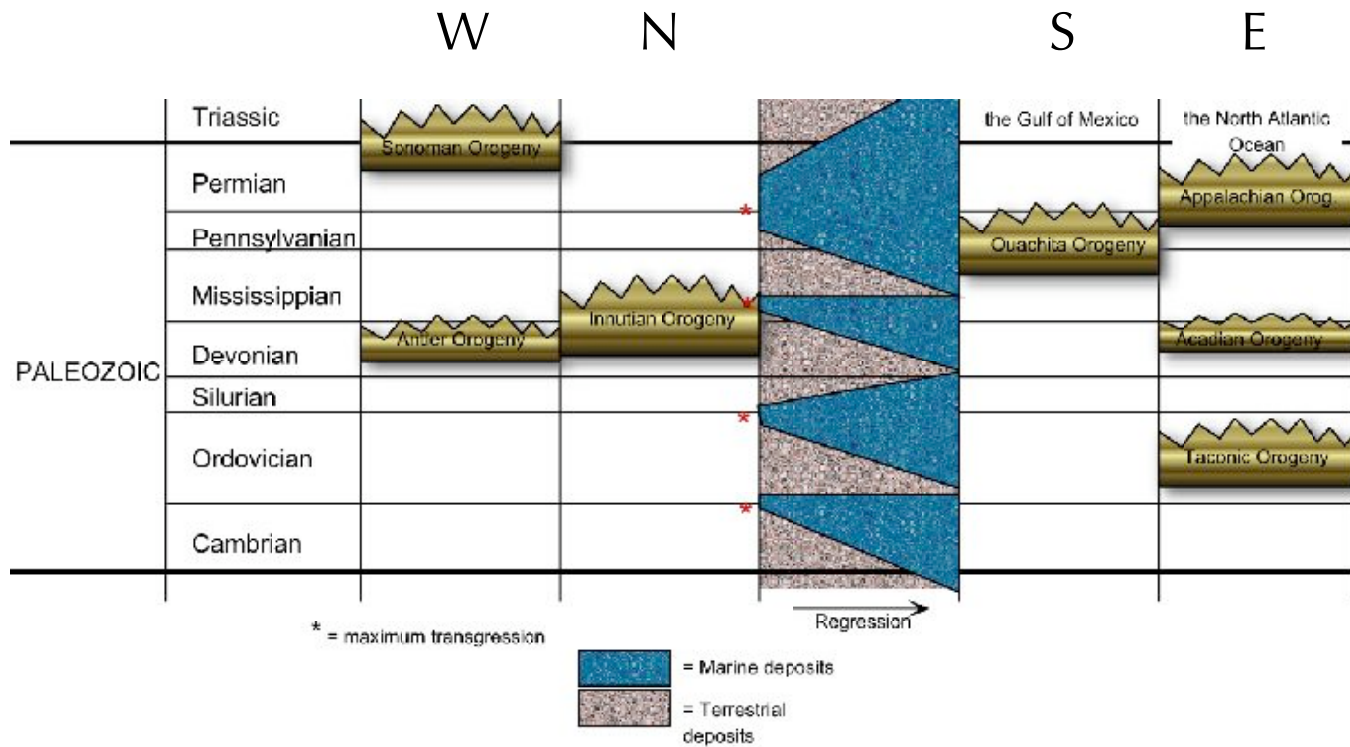


• = maximum transgression

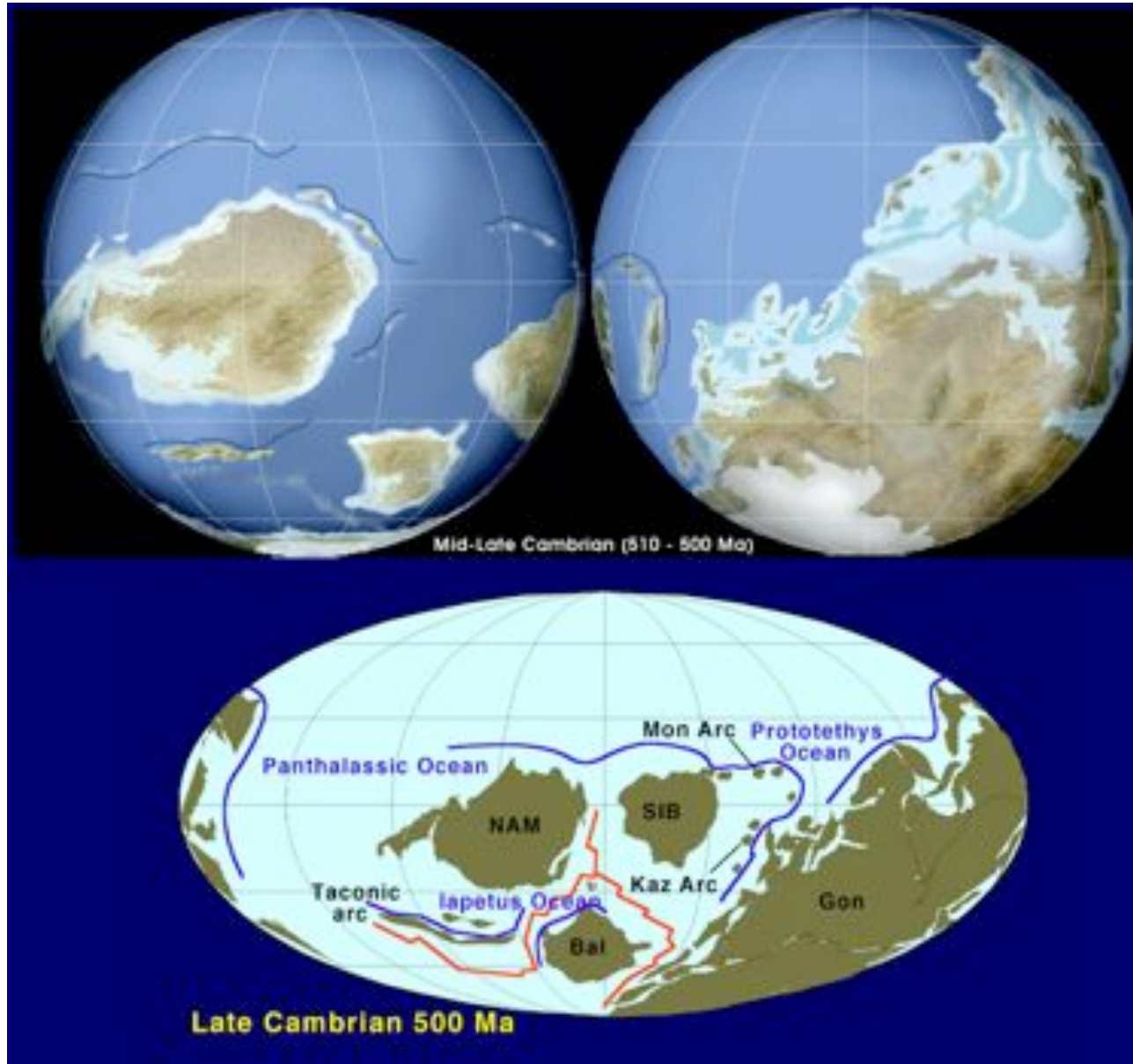
■ = Marine deposits  
 ■ = Terrestrial deposits

A.B. Suvsey 1957/1995  
 Based on an original idea by  
 James Spornik, ca. 1972

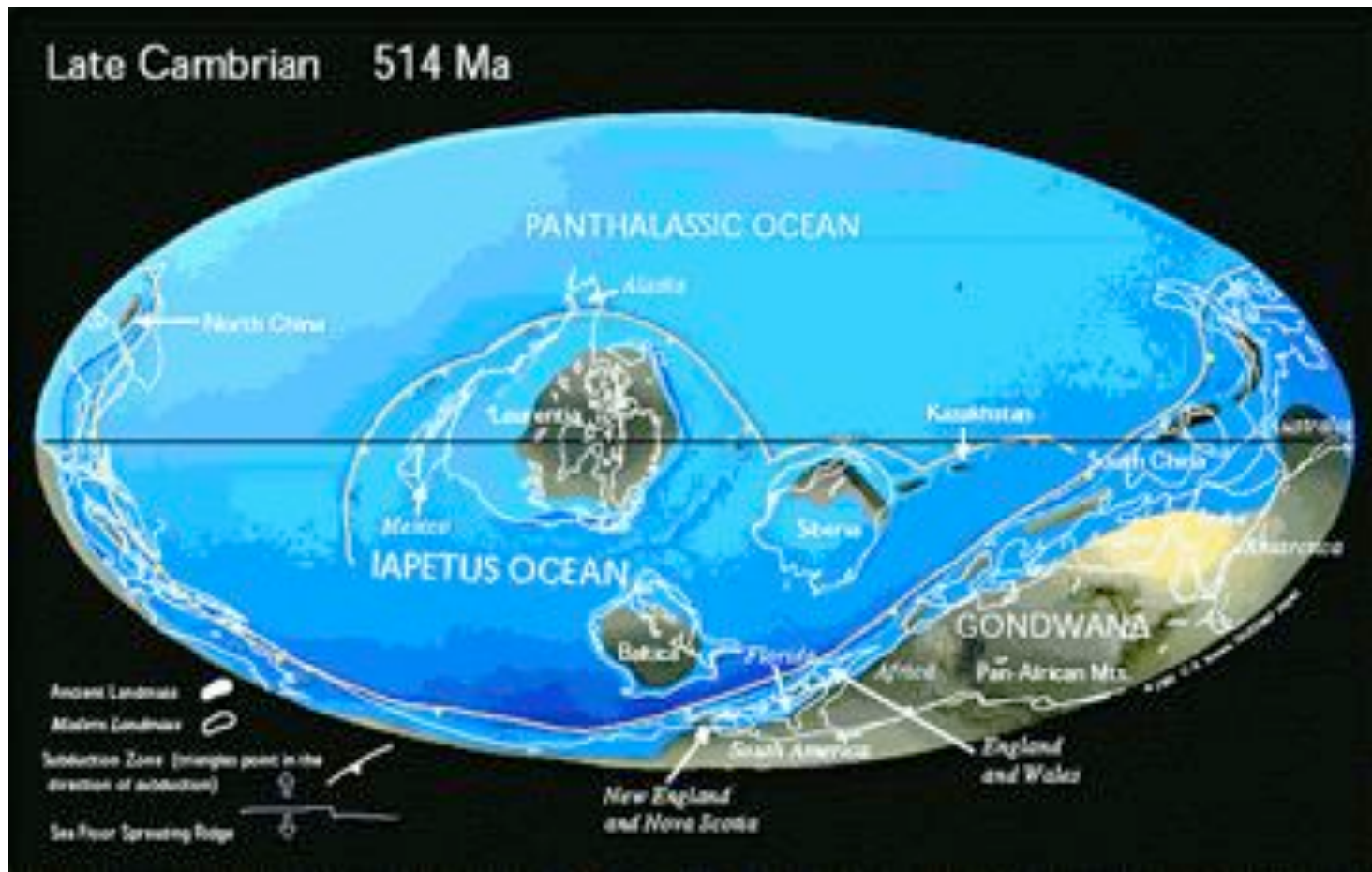
# Paleozoic Events in North America



# The Cambrian World



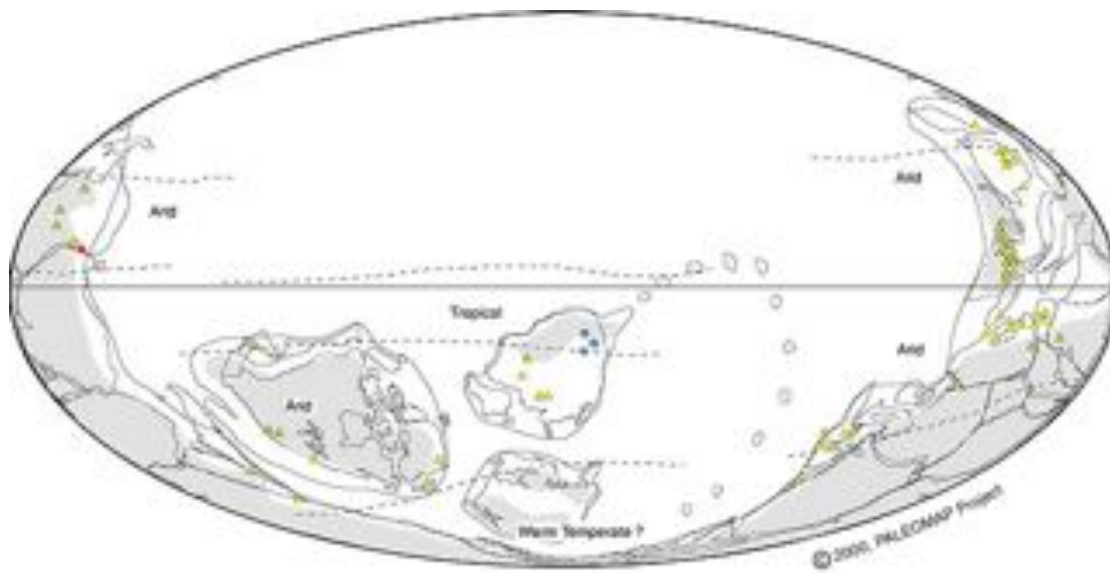
Late Cambrian 514 Ma



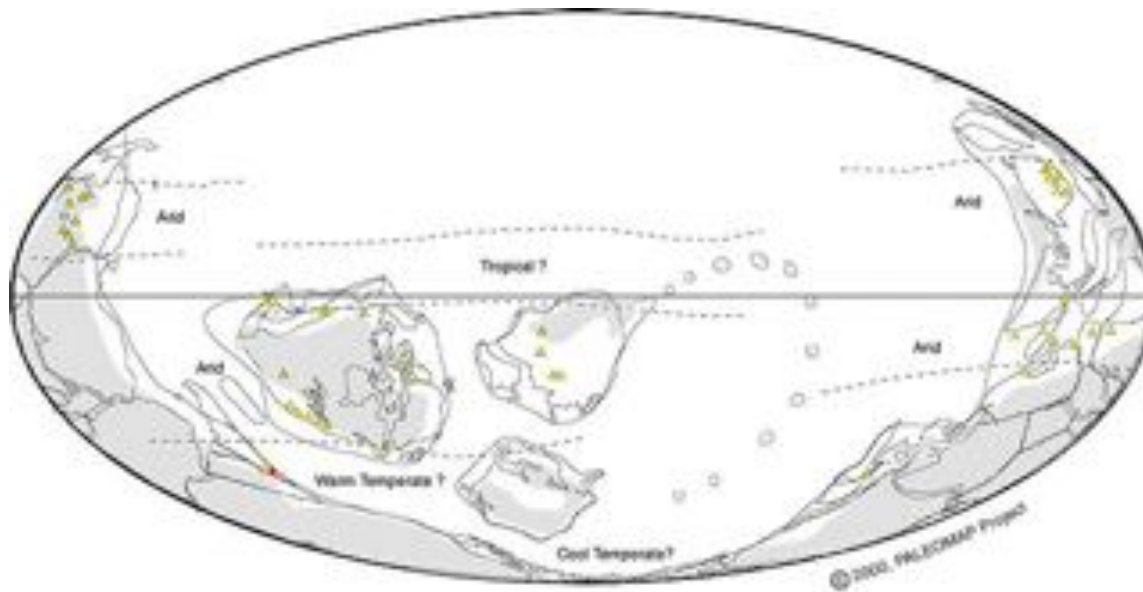


## Cambrian Rocks near Llano, Texas

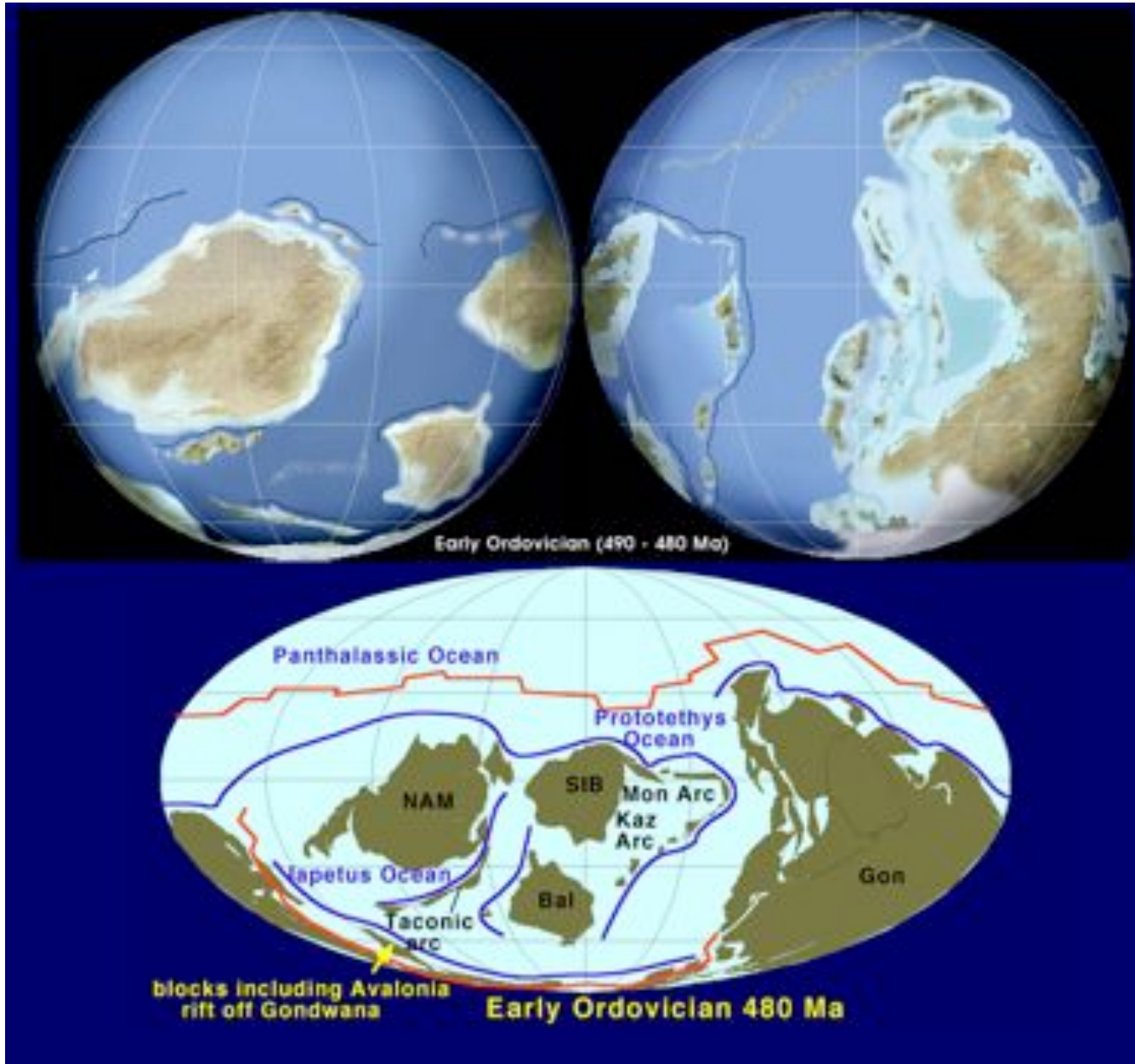


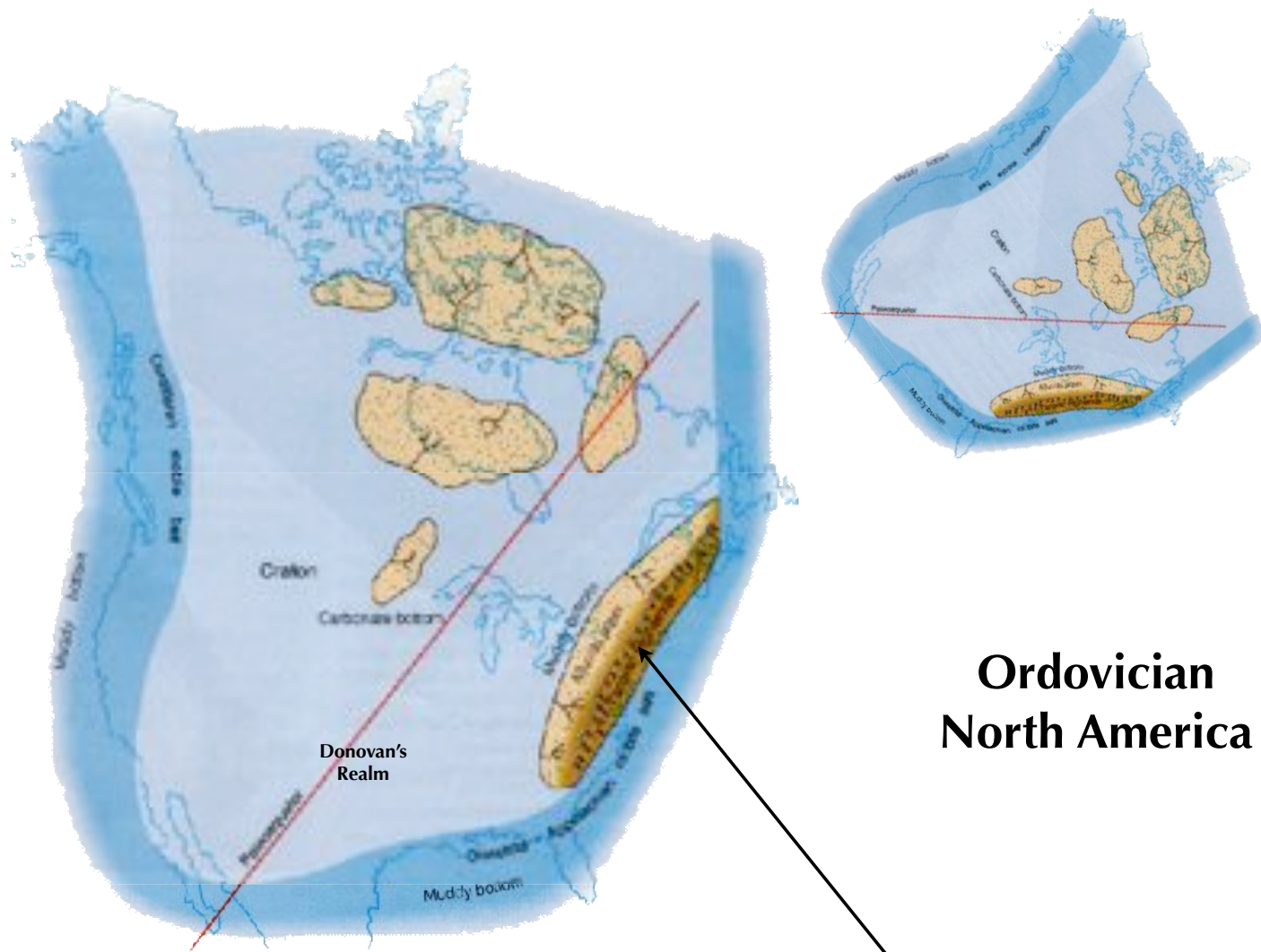


Lower Cambrian



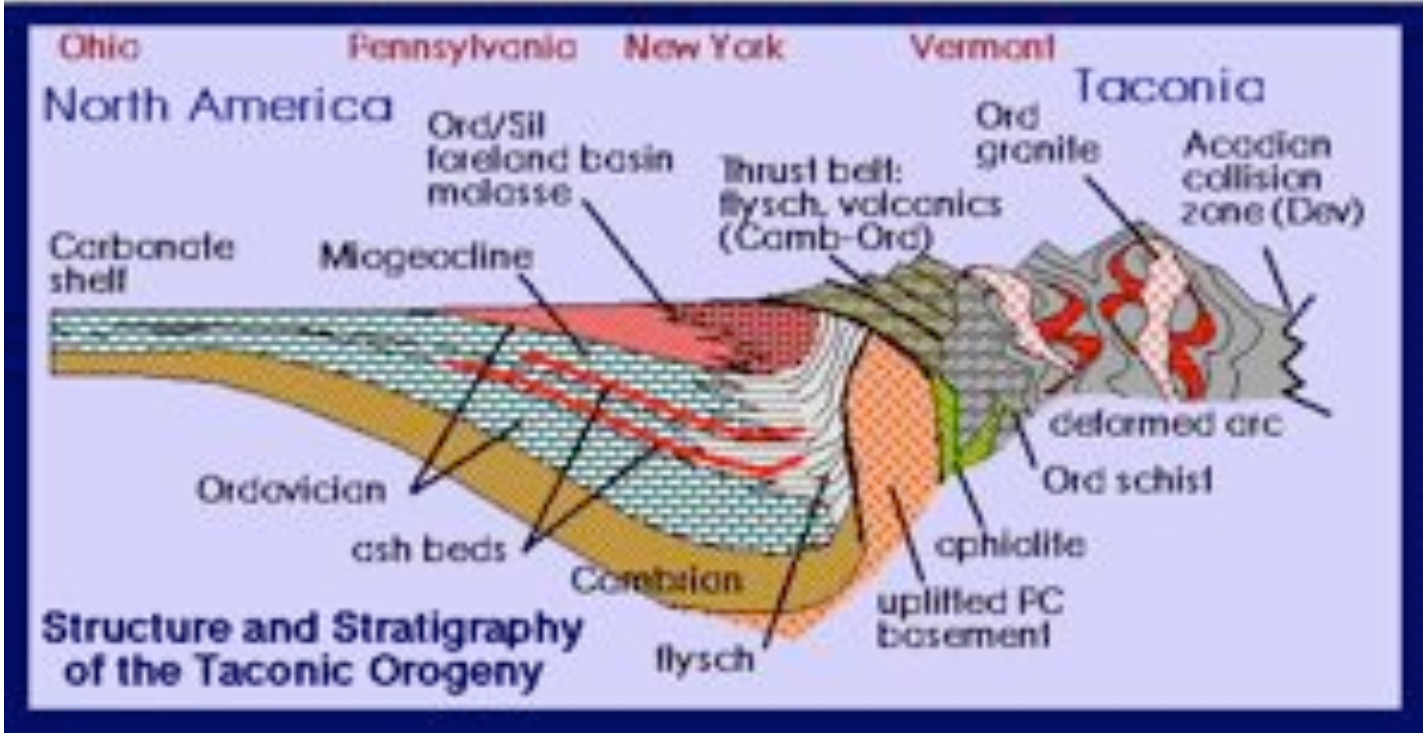
Middle & Upper Cambrian





# Ordovician North America

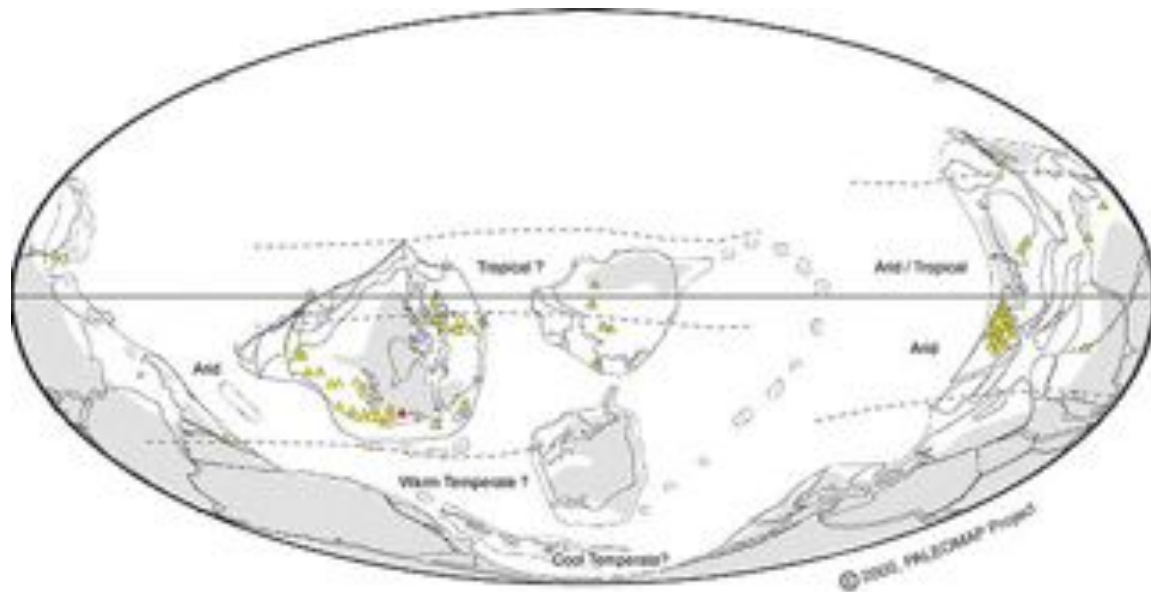




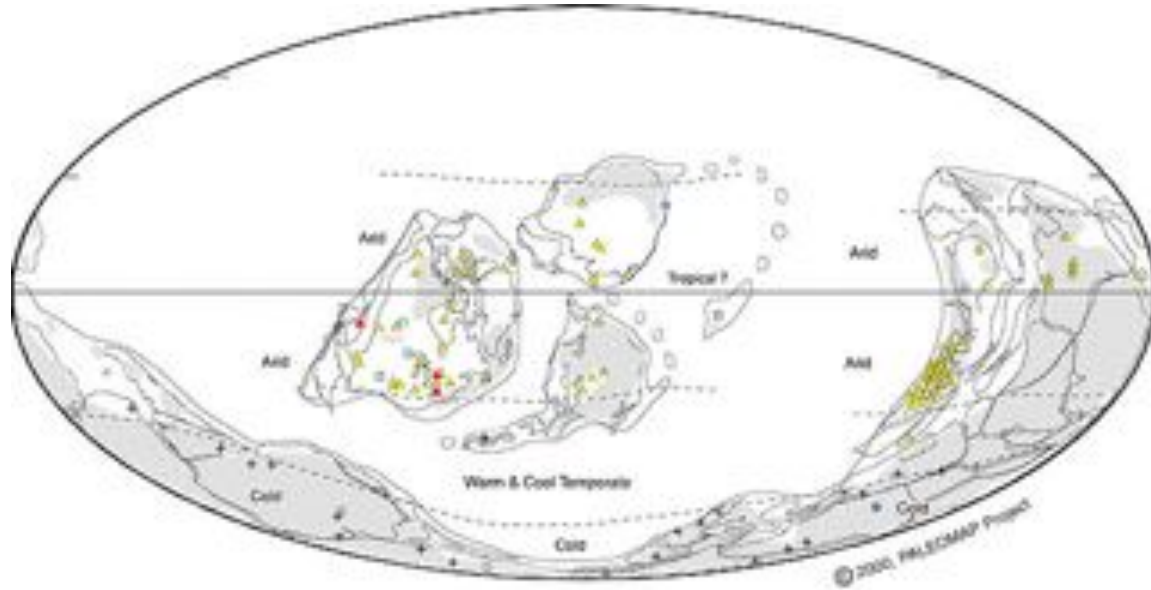


Arbuckle Mtns, Oklahoma  
Folds in  
carbonate platform  
rocks



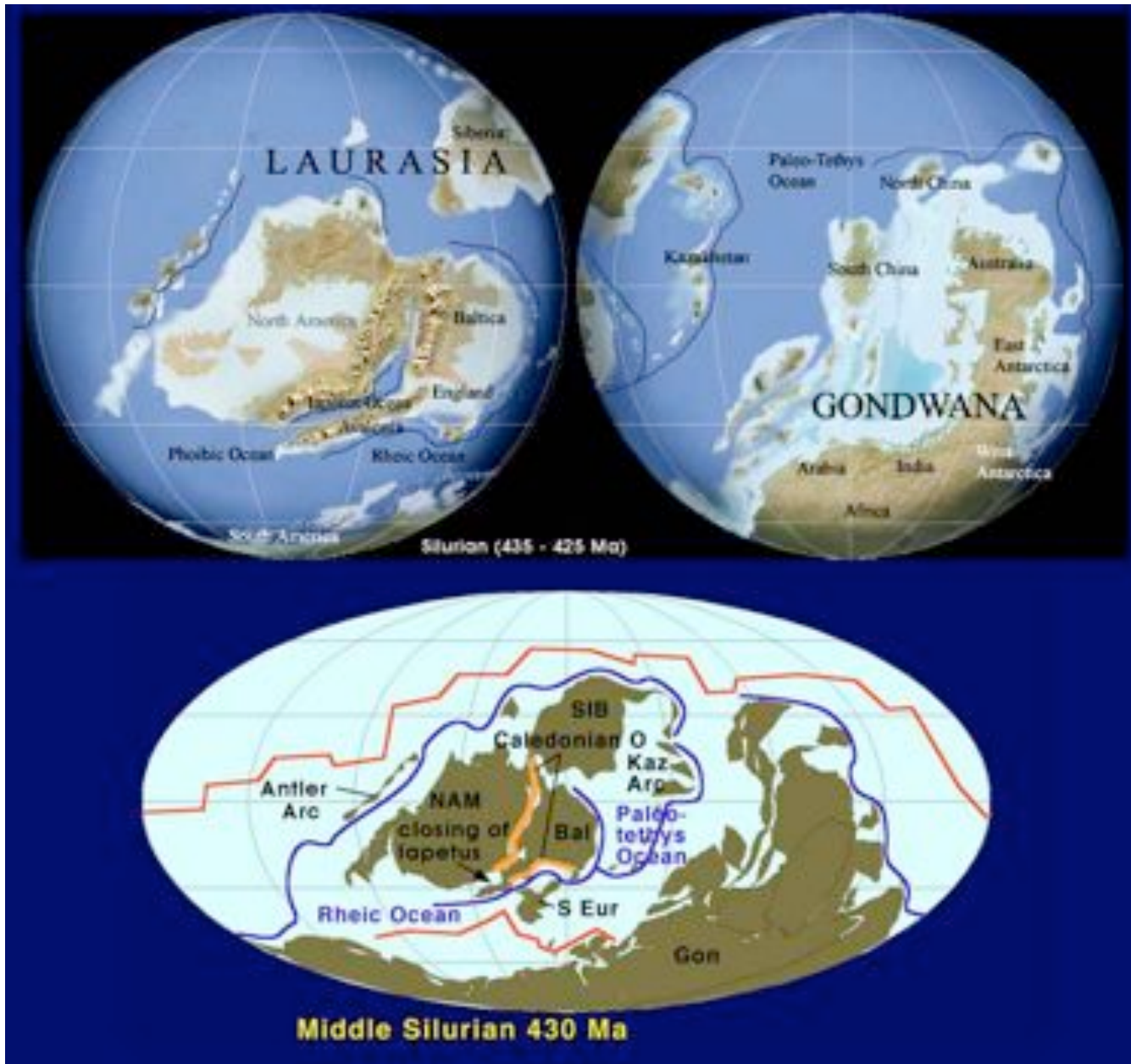


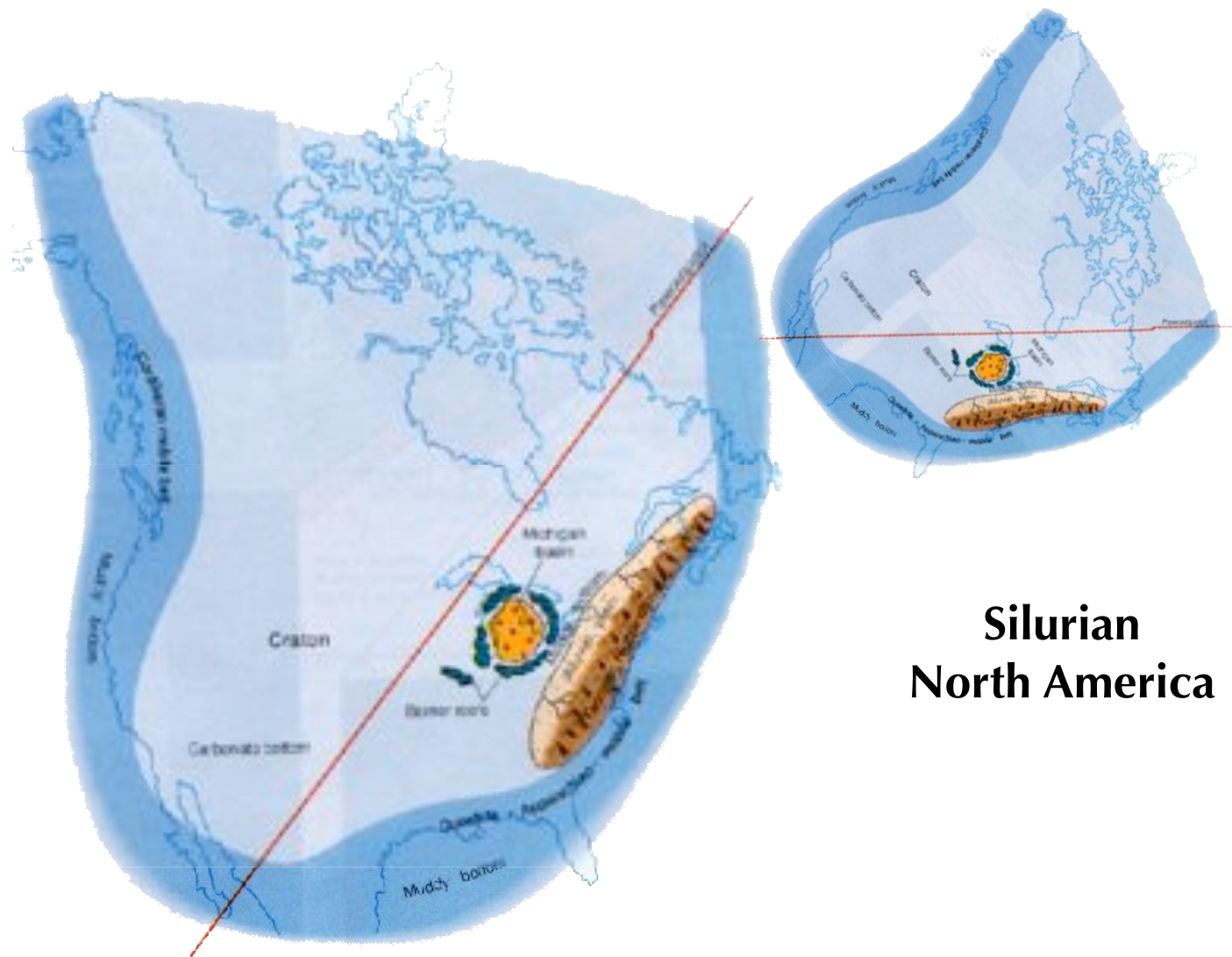
Lower Ordovician



Middle & Upper Ordovician

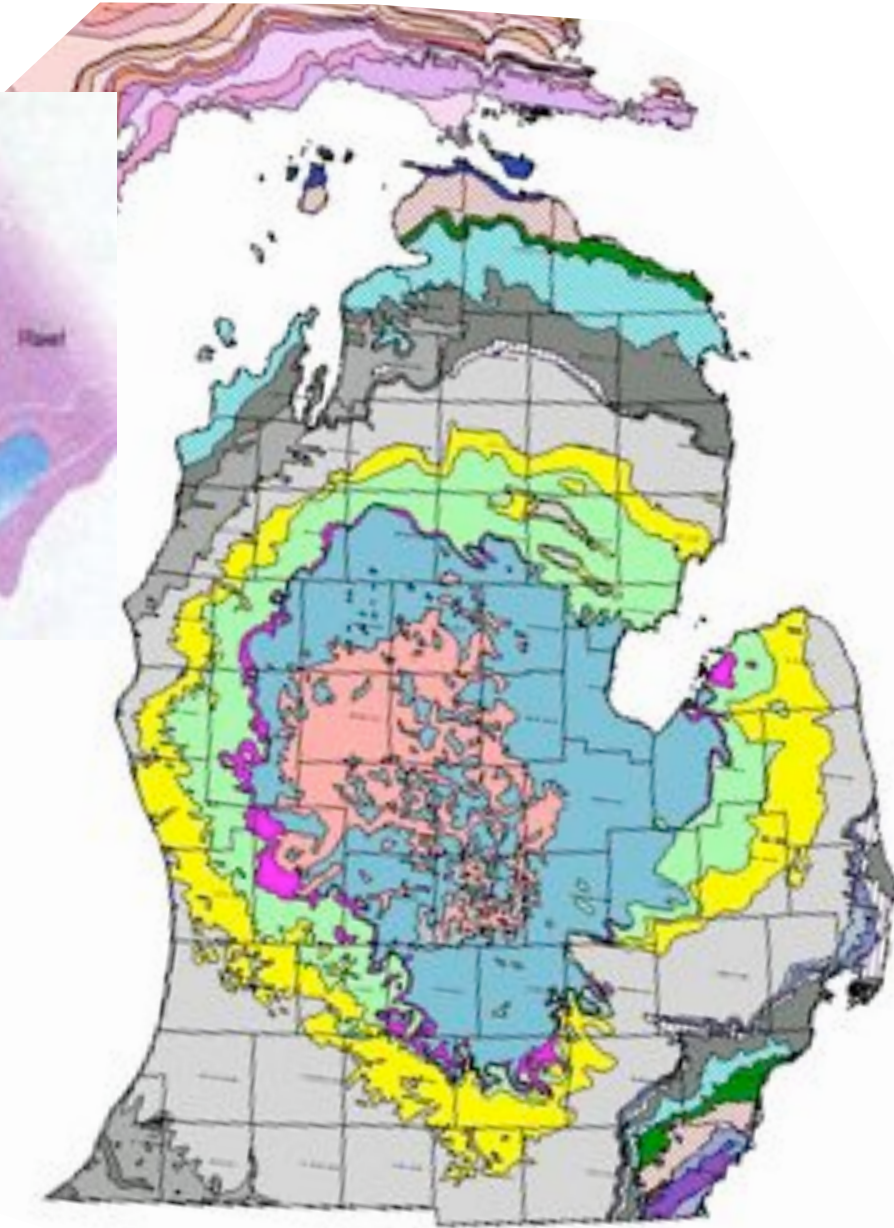
# The Silurian World

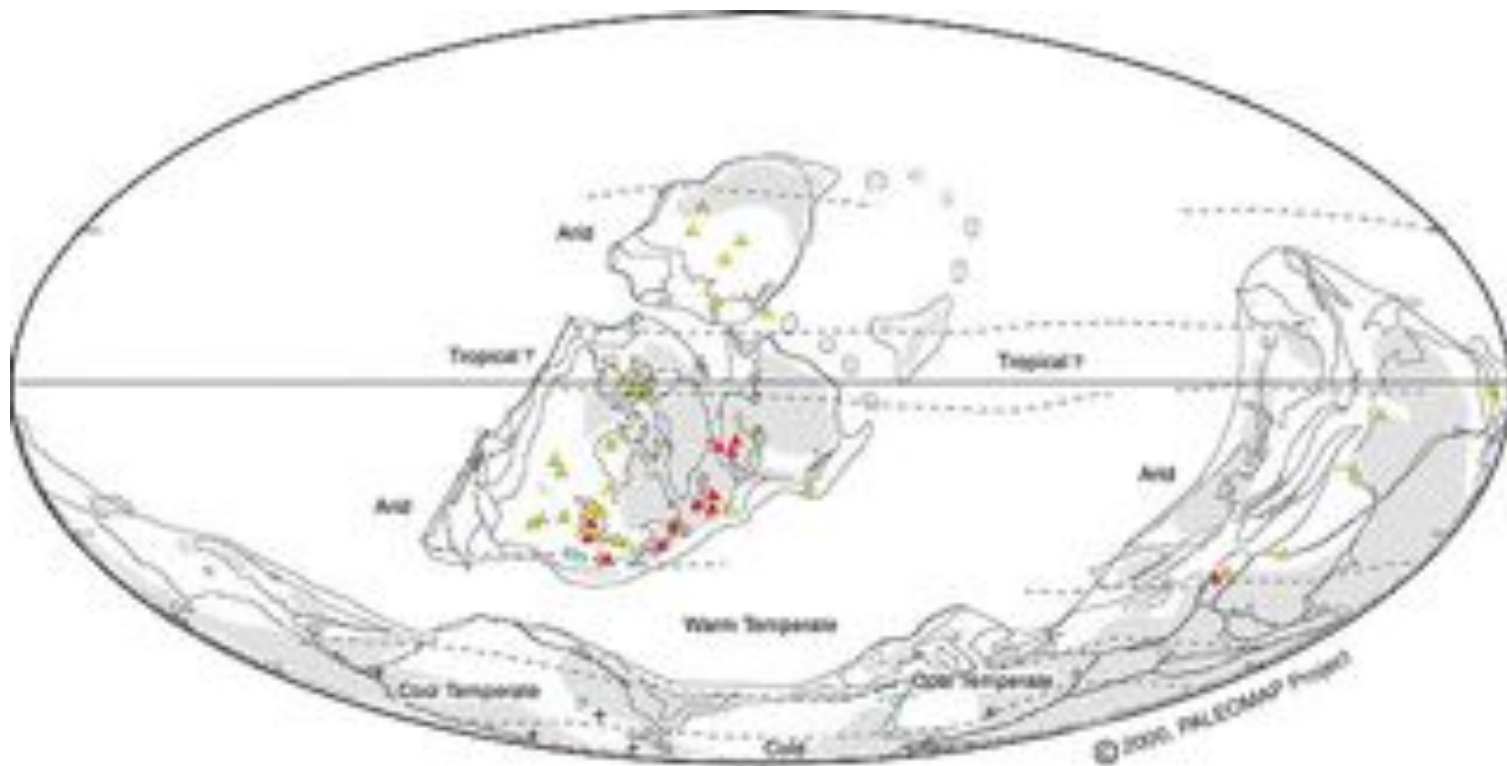




## Silurian North America

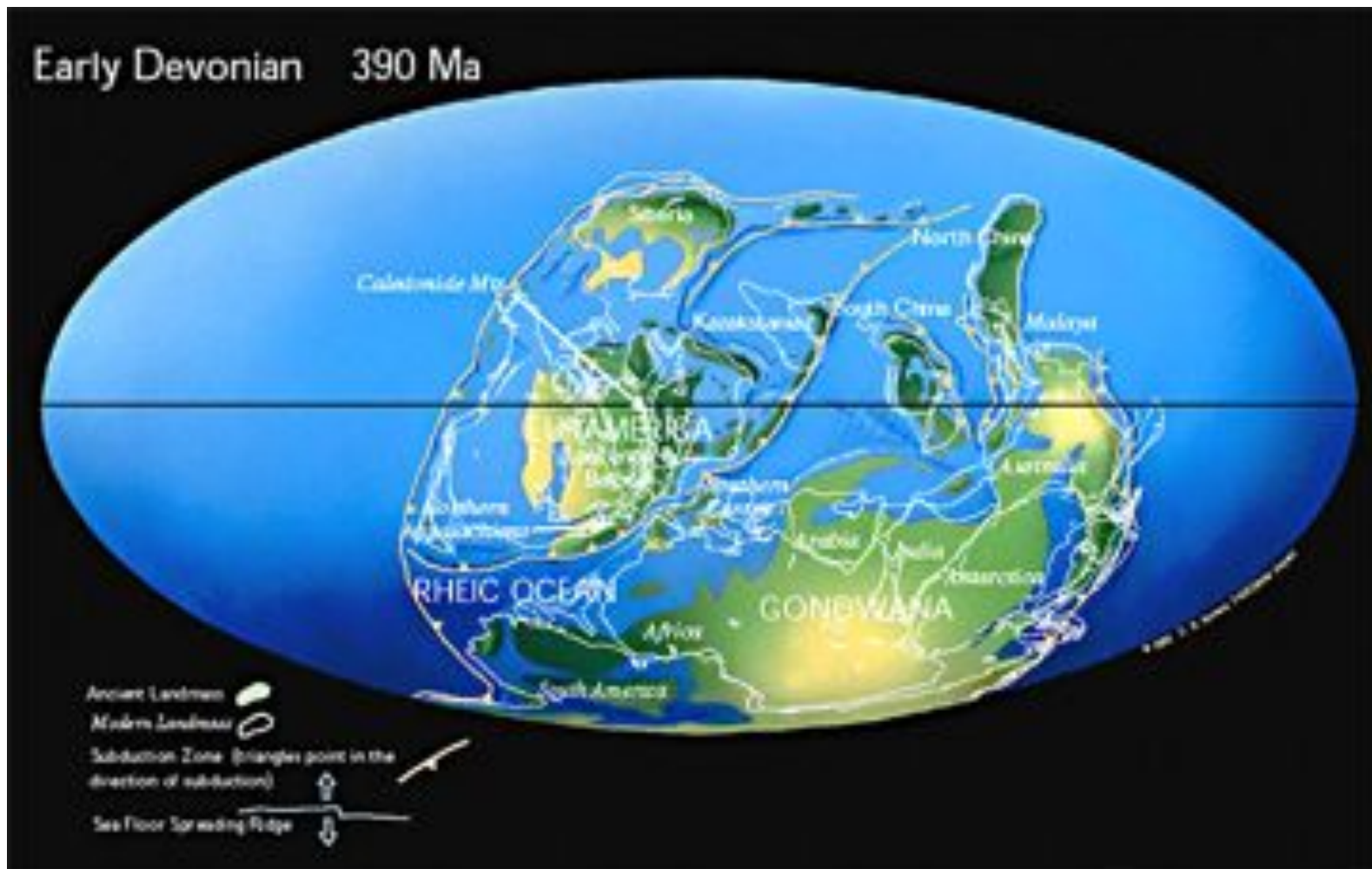




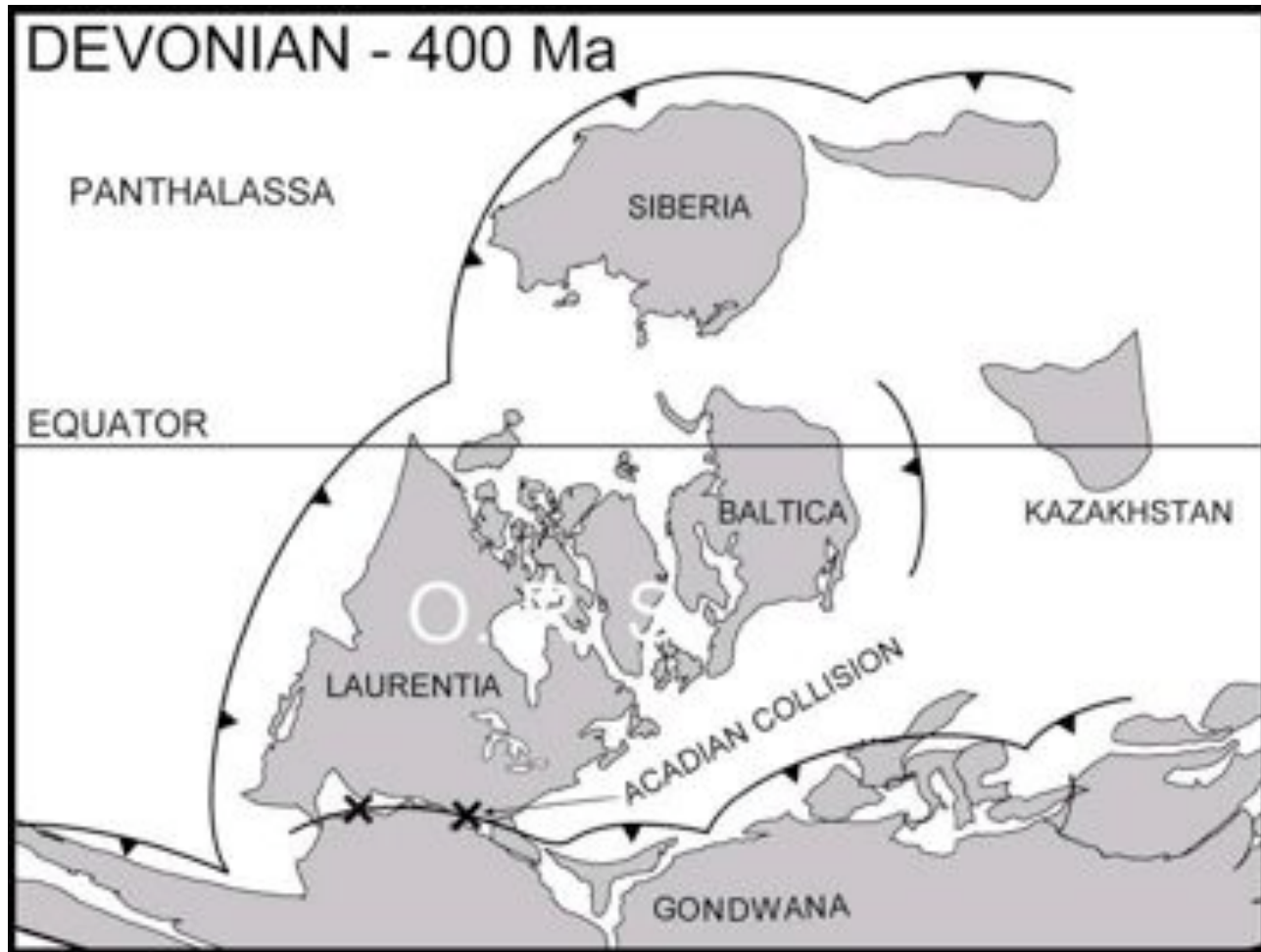


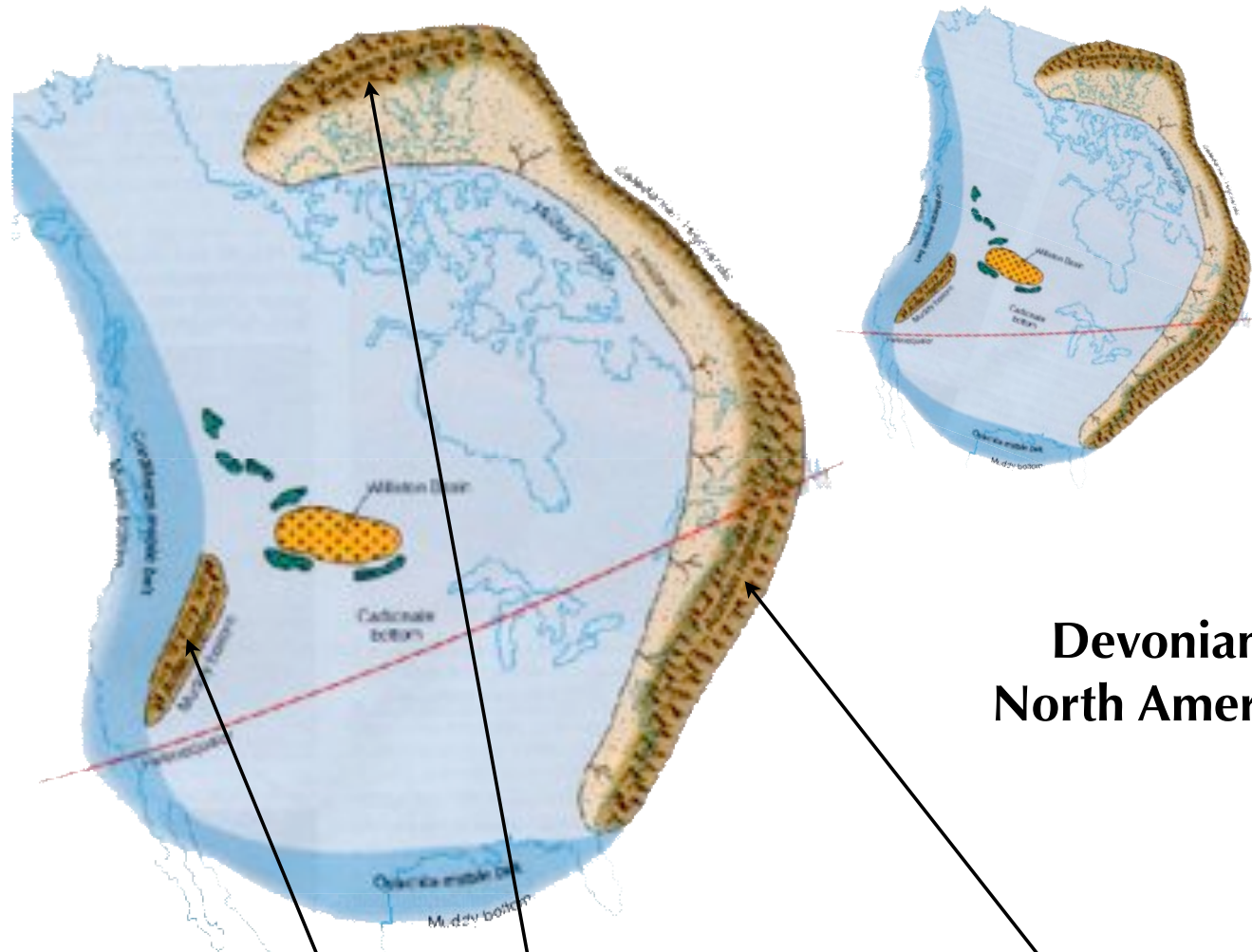
Silurian

# The Devonian World



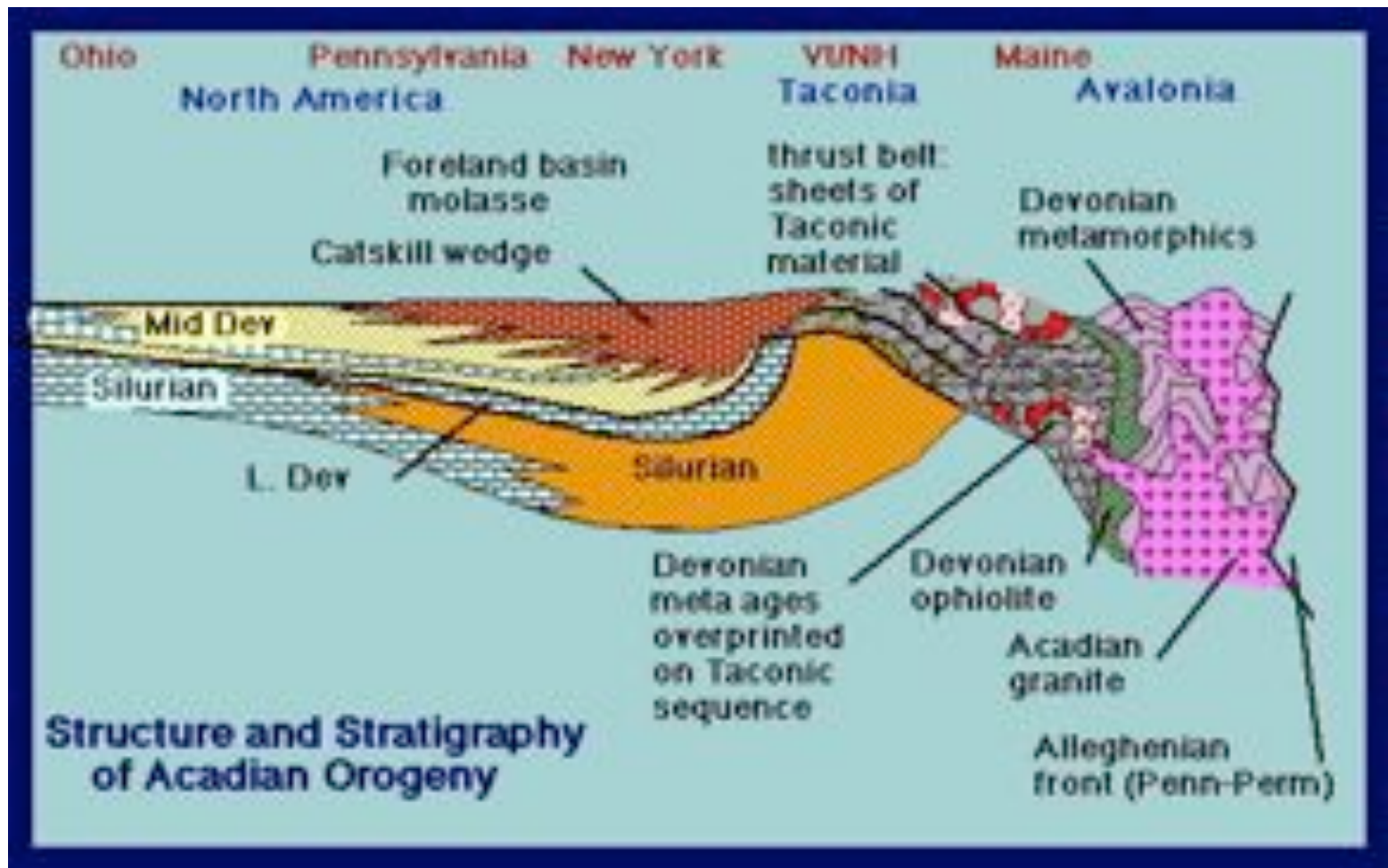


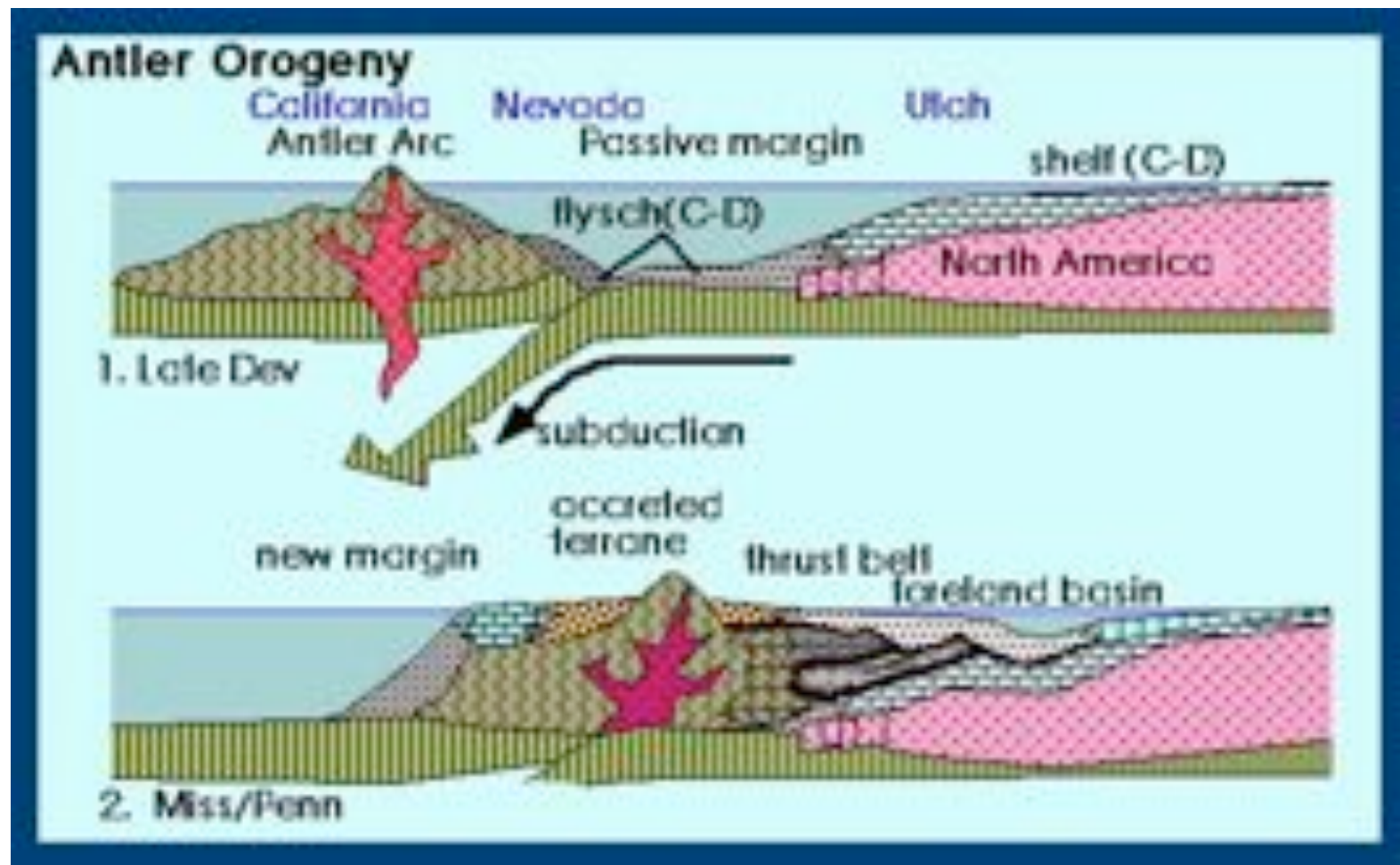


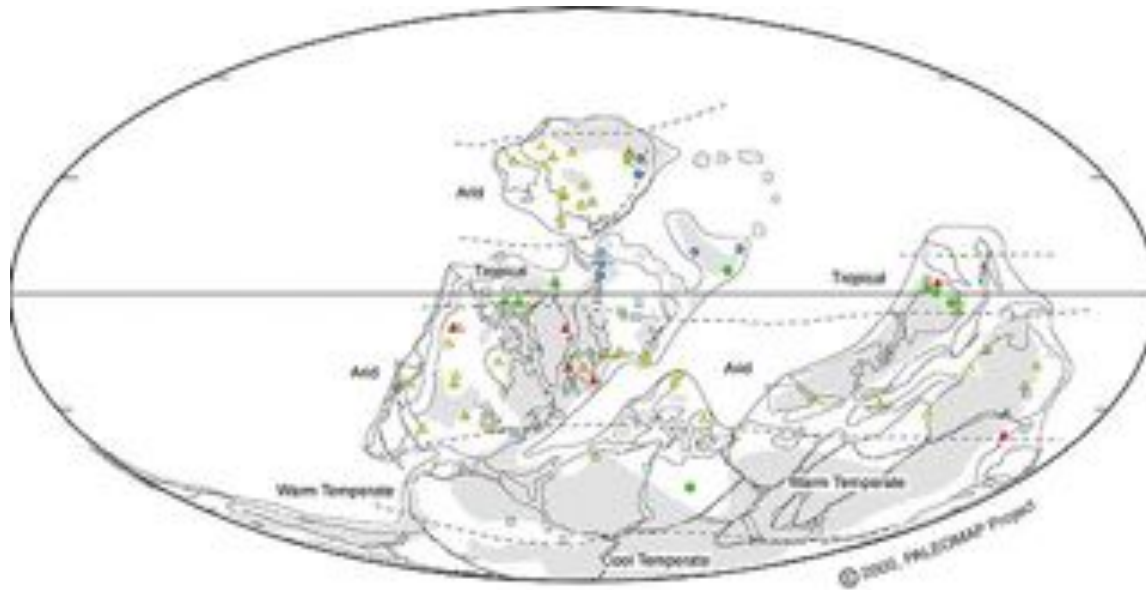


## Devonian North America

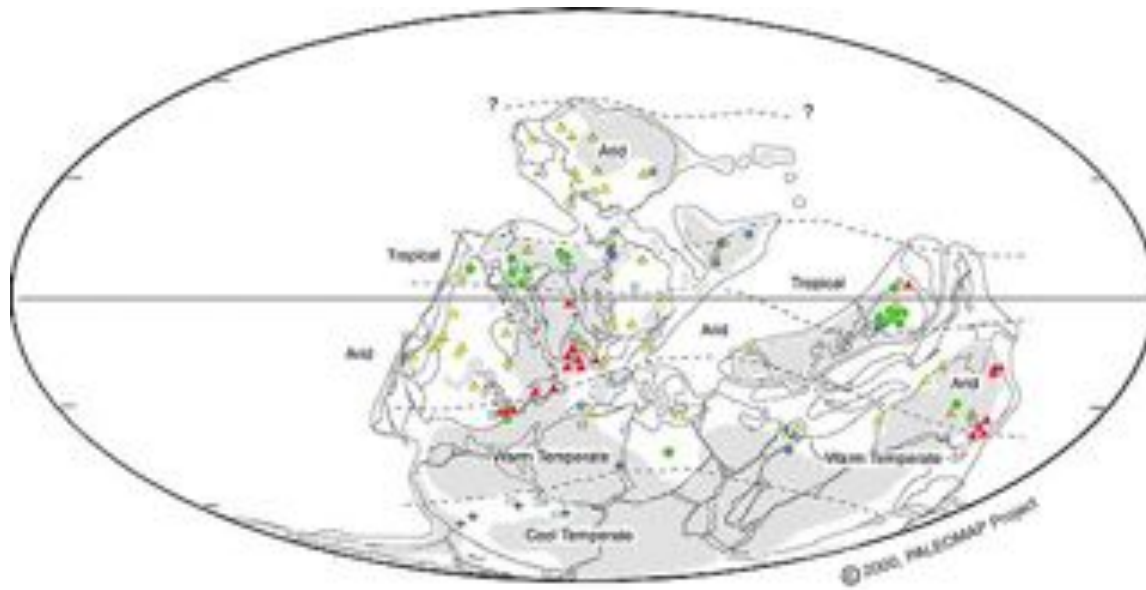






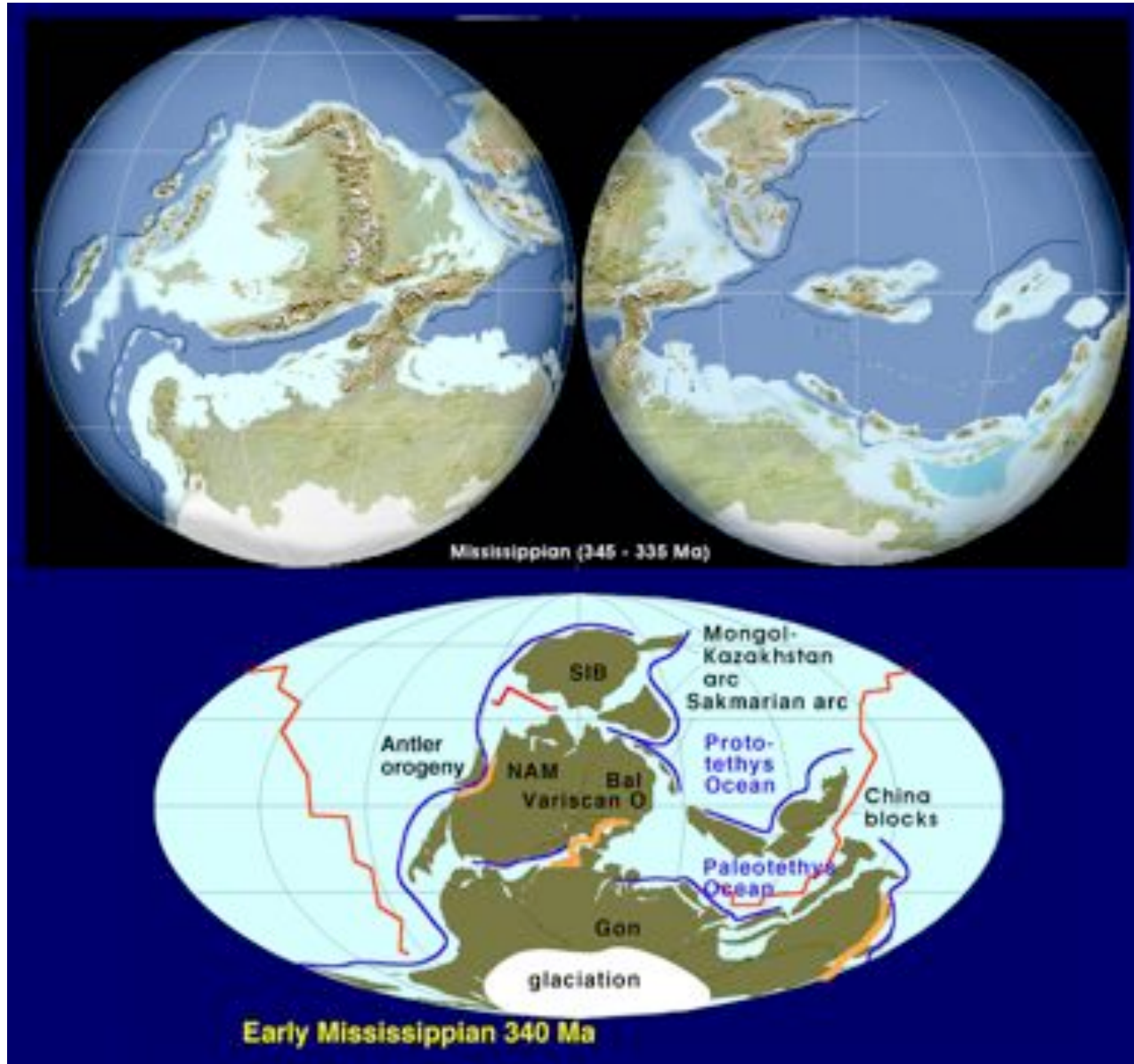


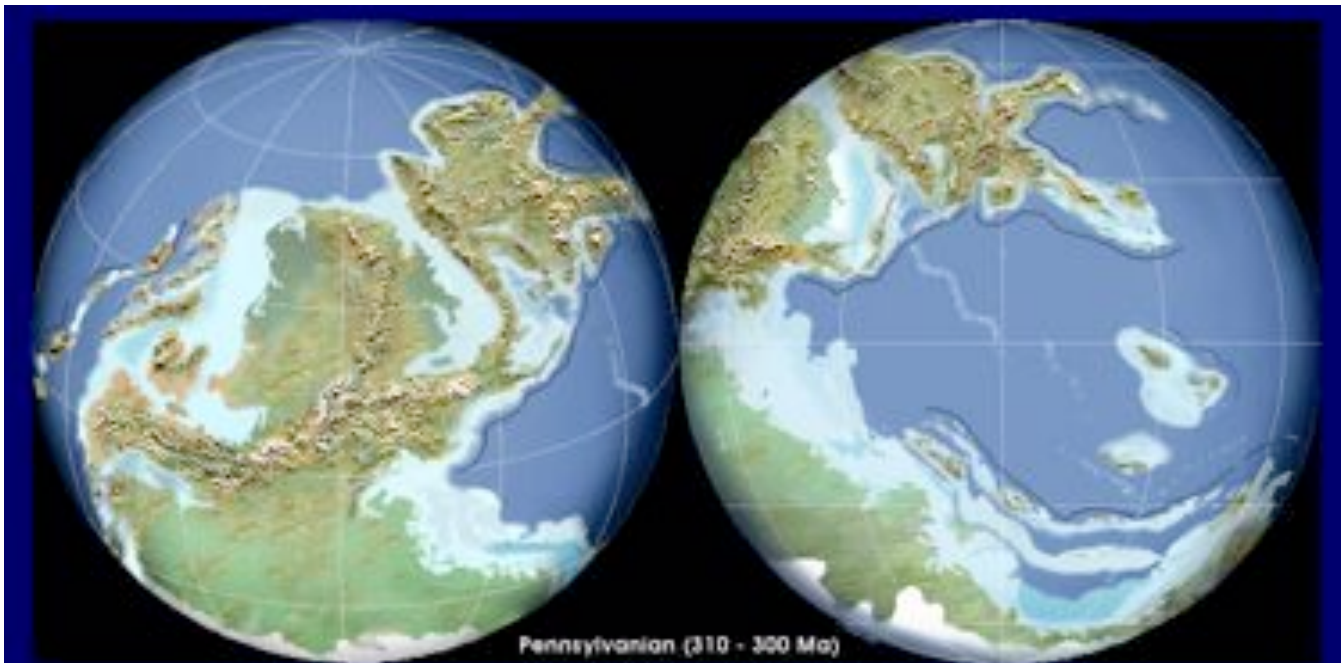
Middle Devonian



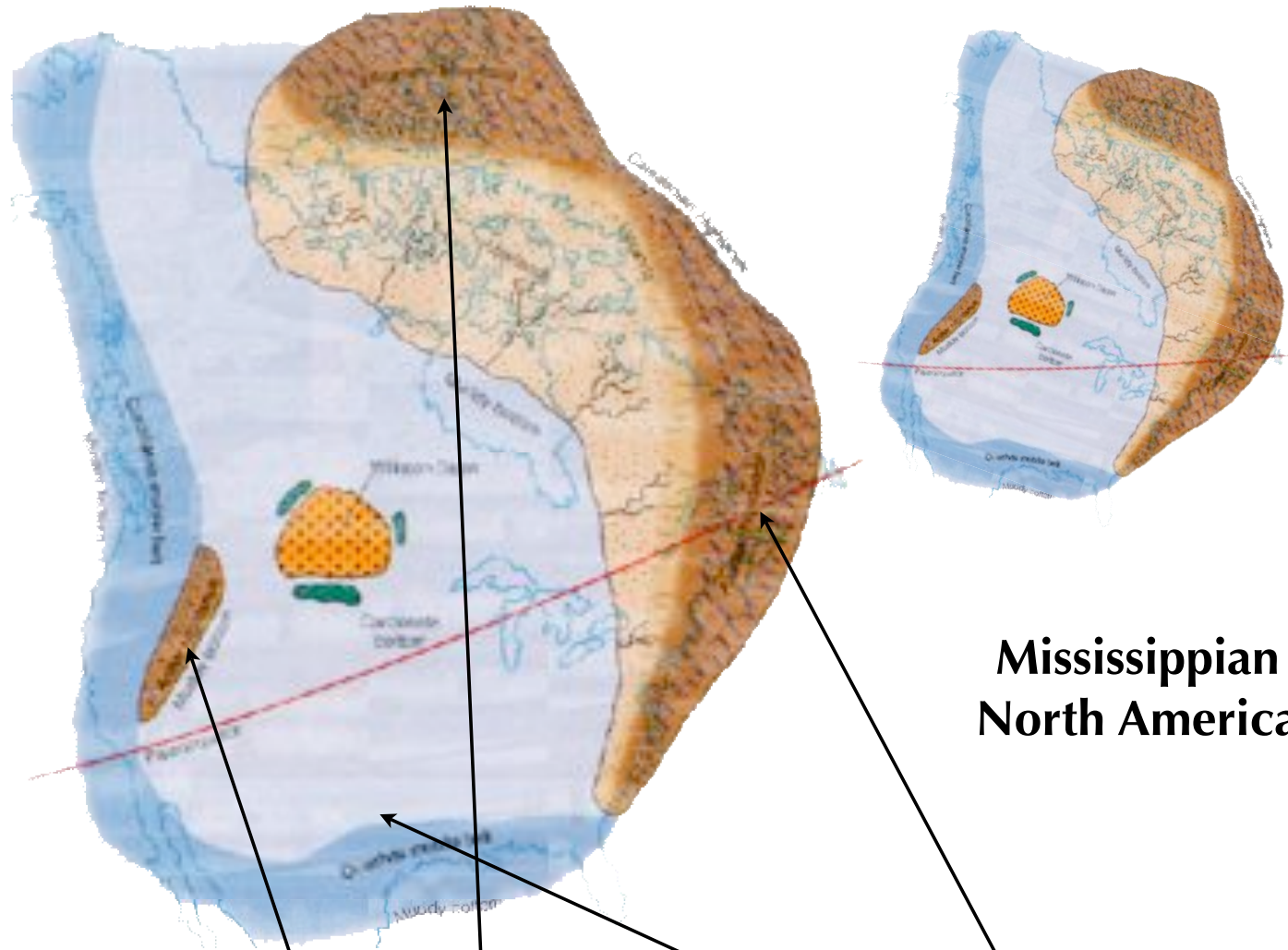
Upper Devonian

# The Carboniferous World





Late Pennsylvanian 300 Ma

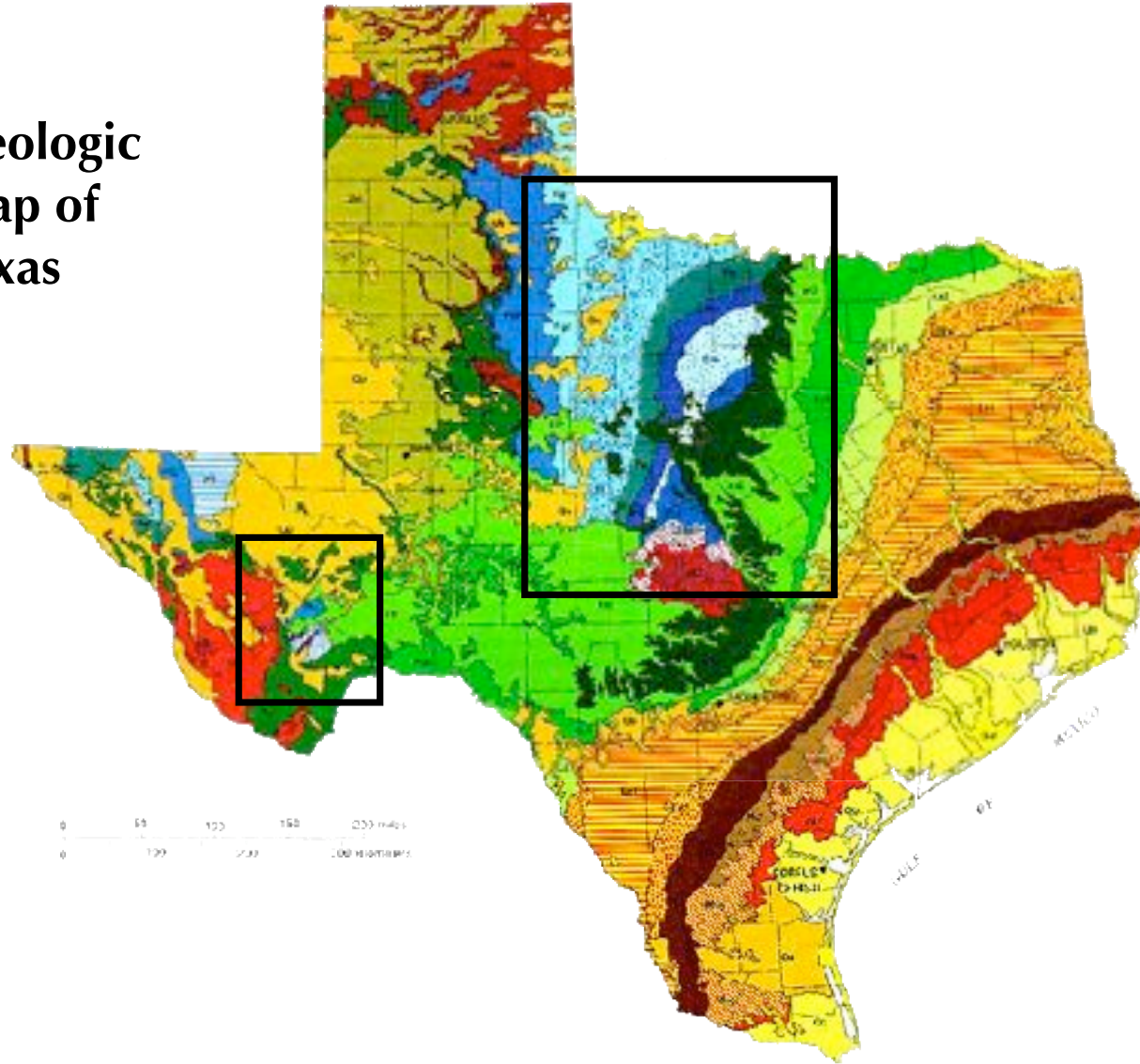


## Mississippian North America

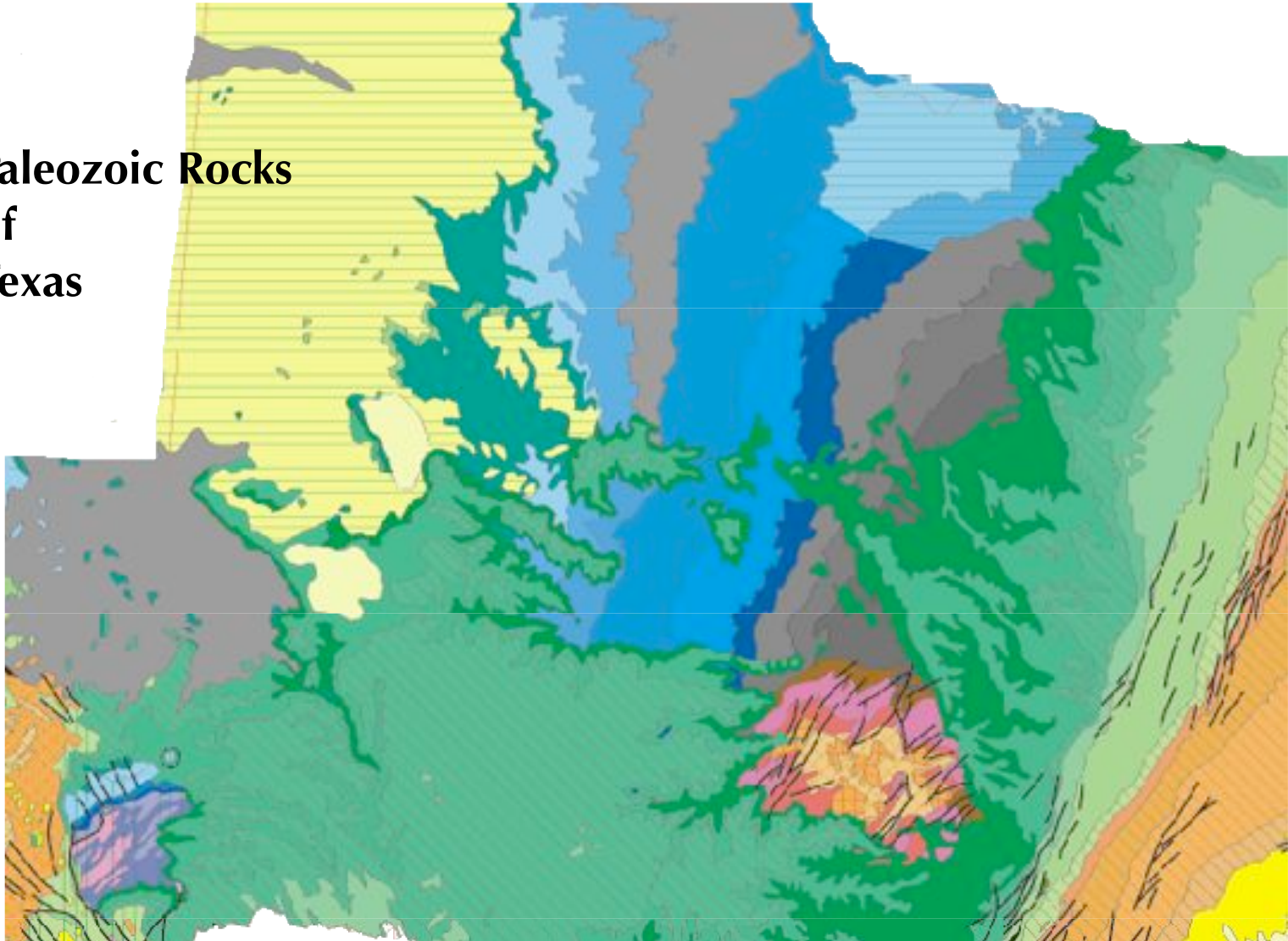




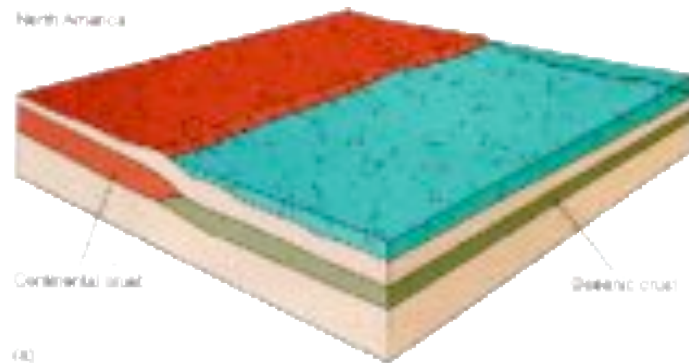
# Geologic Map of Texas



# Paleozoic Rocks of Texas

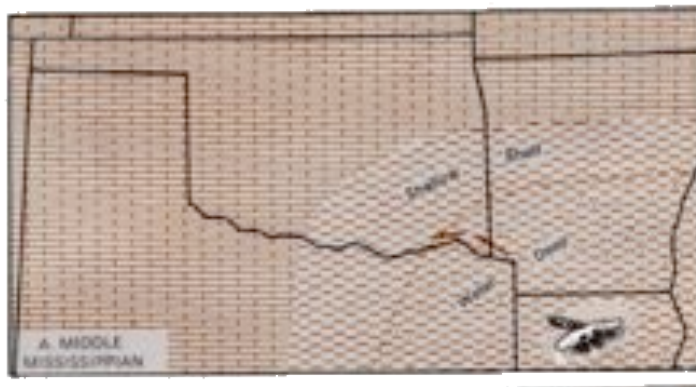


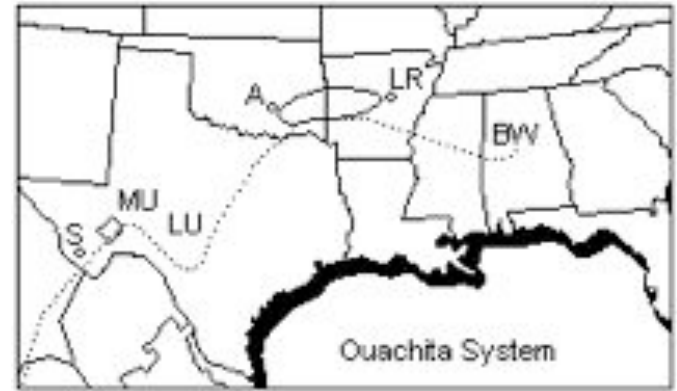
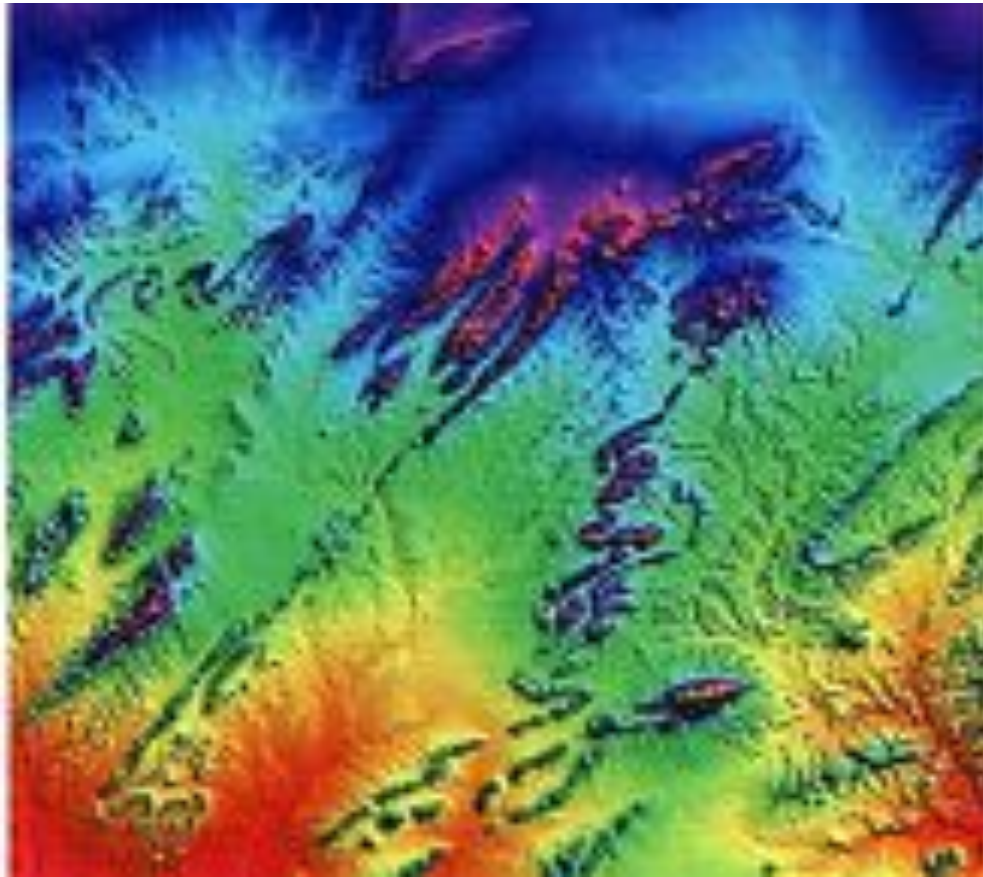
# Formation of the Ouachita Mountains



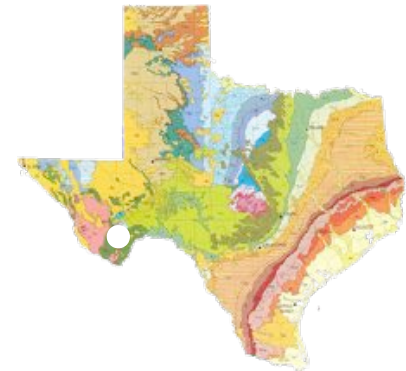
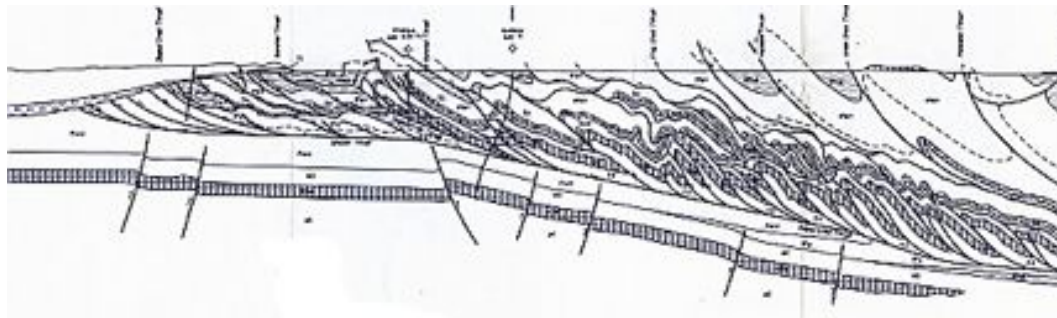
Middle to Early  
Mississippian

# Formation of the Ouachita Mtns Take II





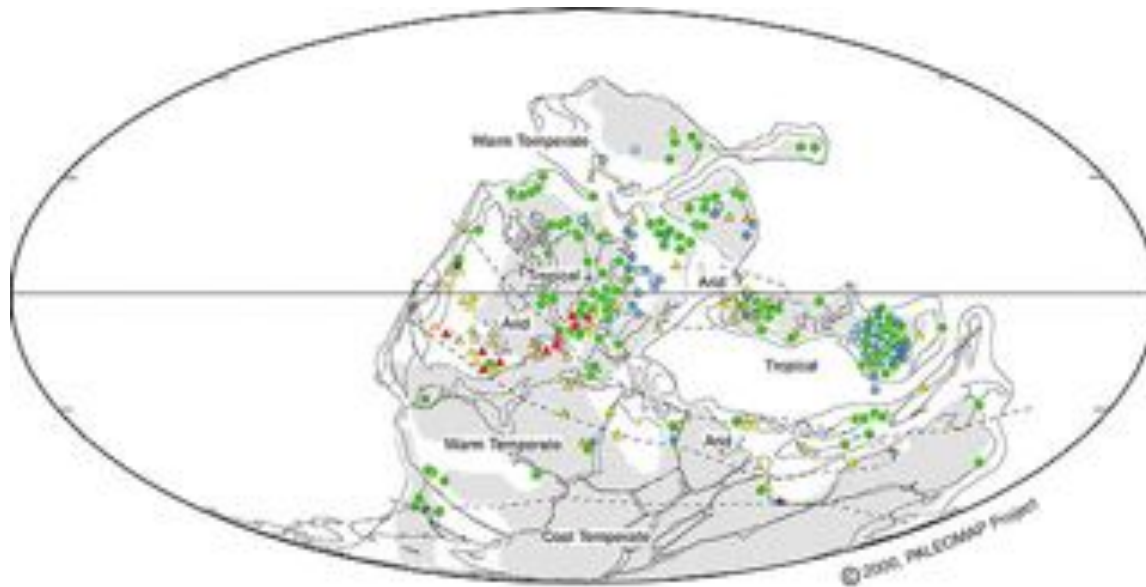
## MARATHON FOLD BELT, BREWSTER CO.



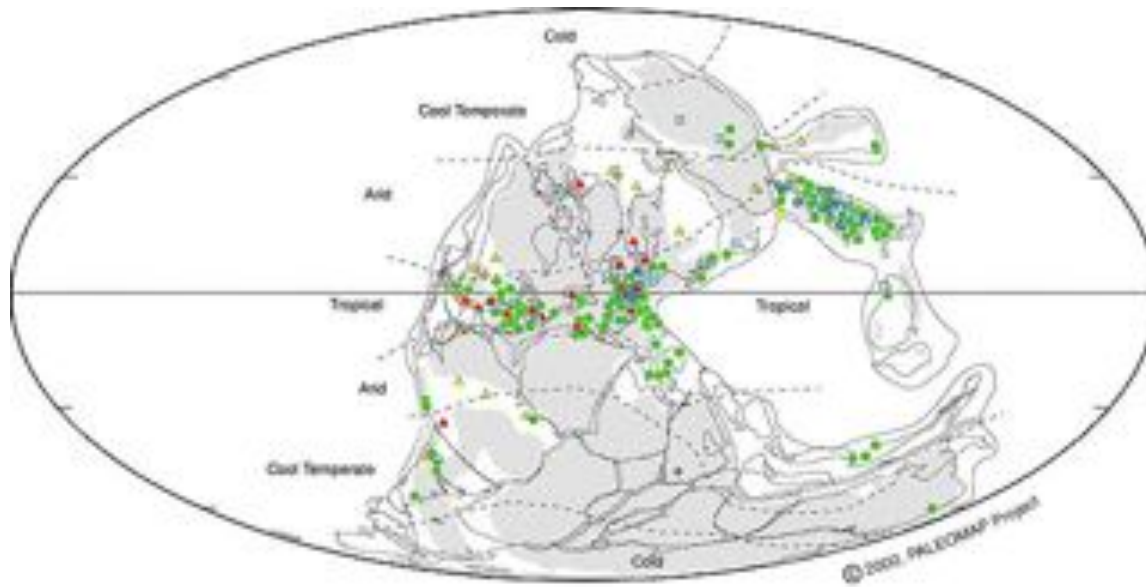


## Pennsylvanian Rocks in Central Texas



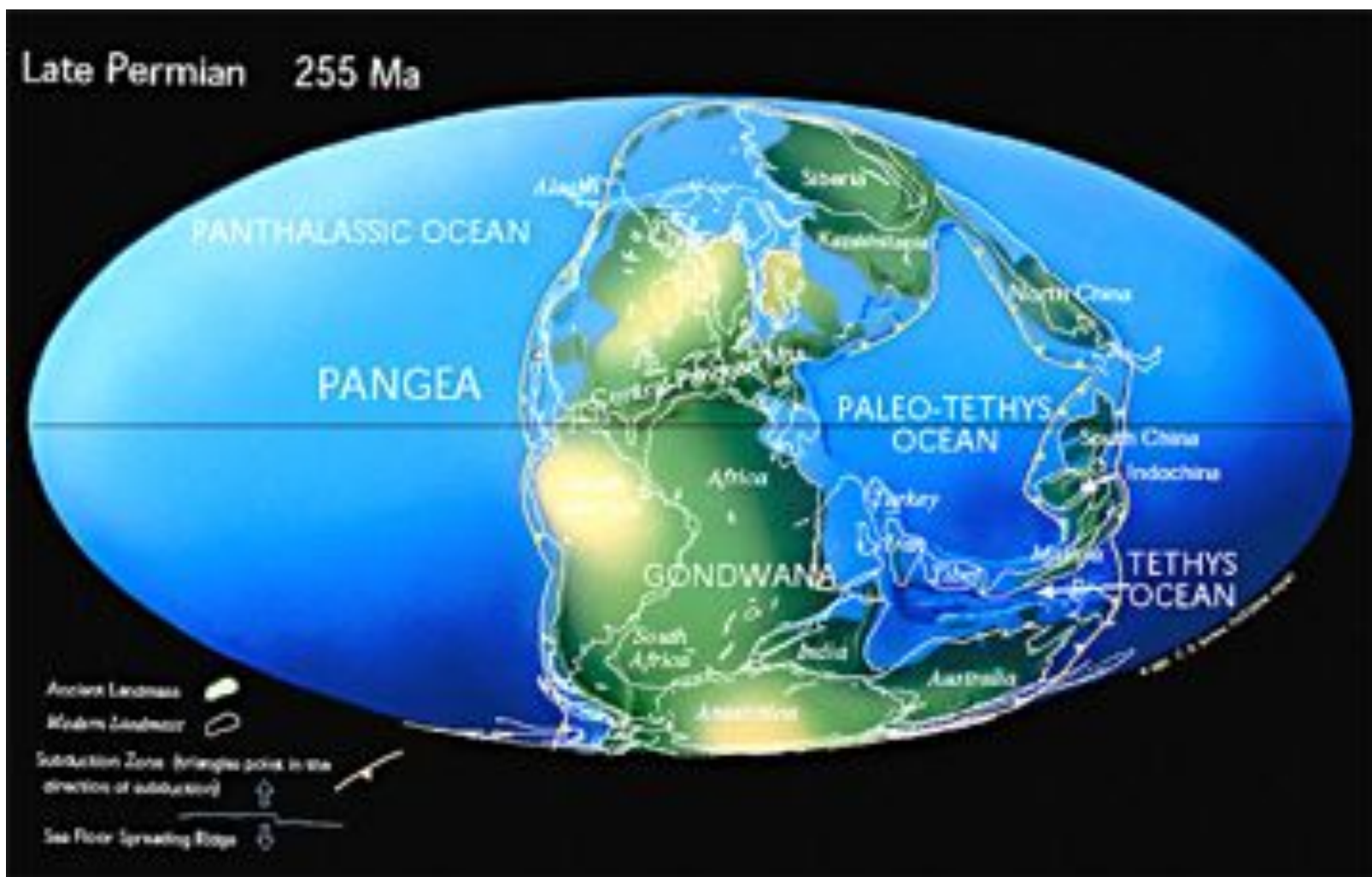


Lower Carboniferous (Tournaisian - Visean)



Upper Carboniferous (Gzelian)

# The Permian World



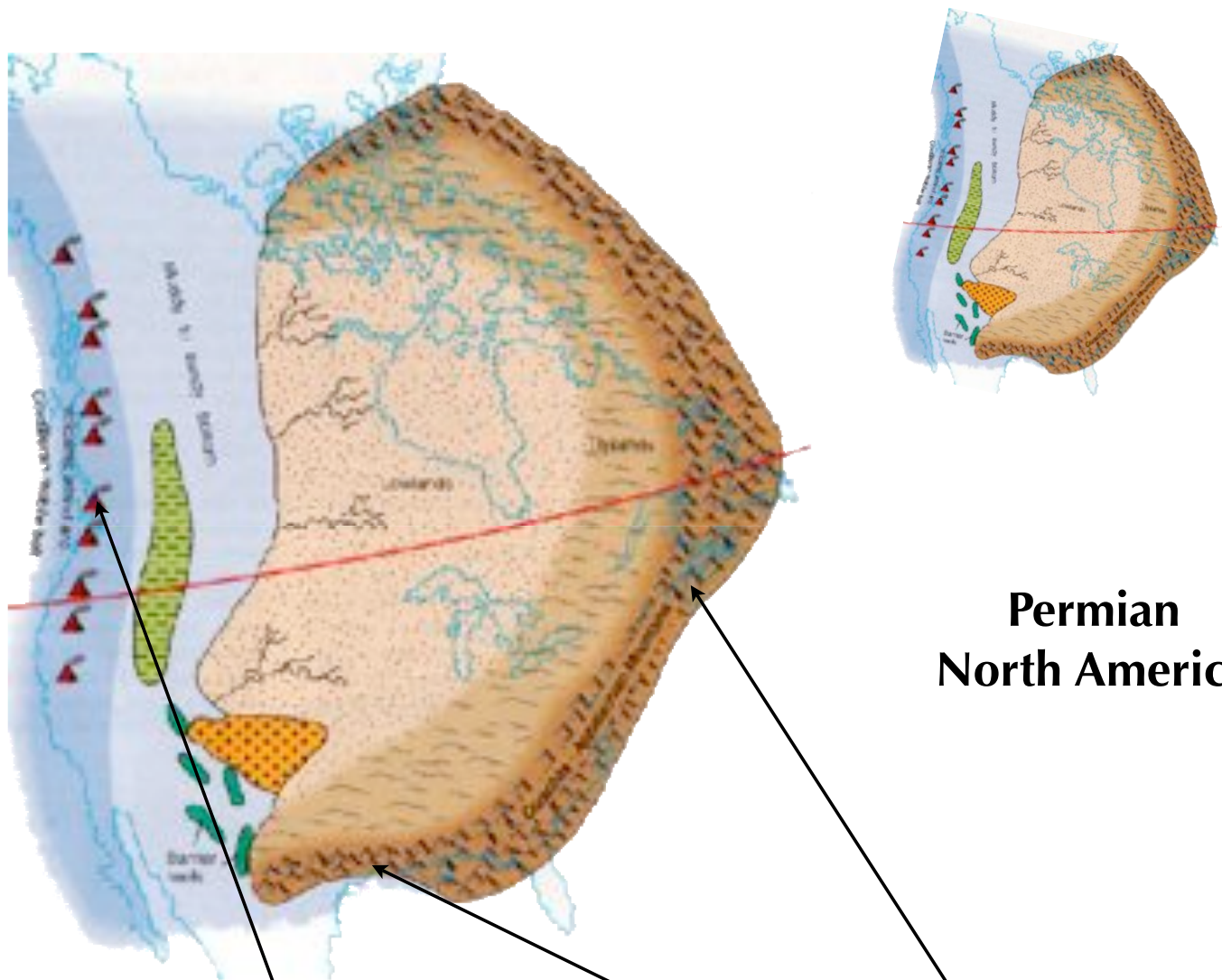
# Permian Glaciation

Coal

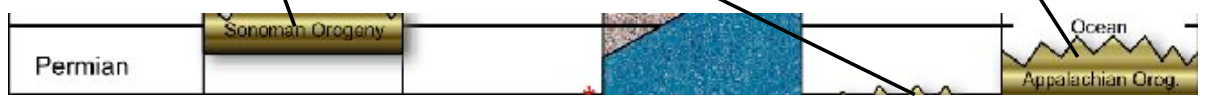
Tillites

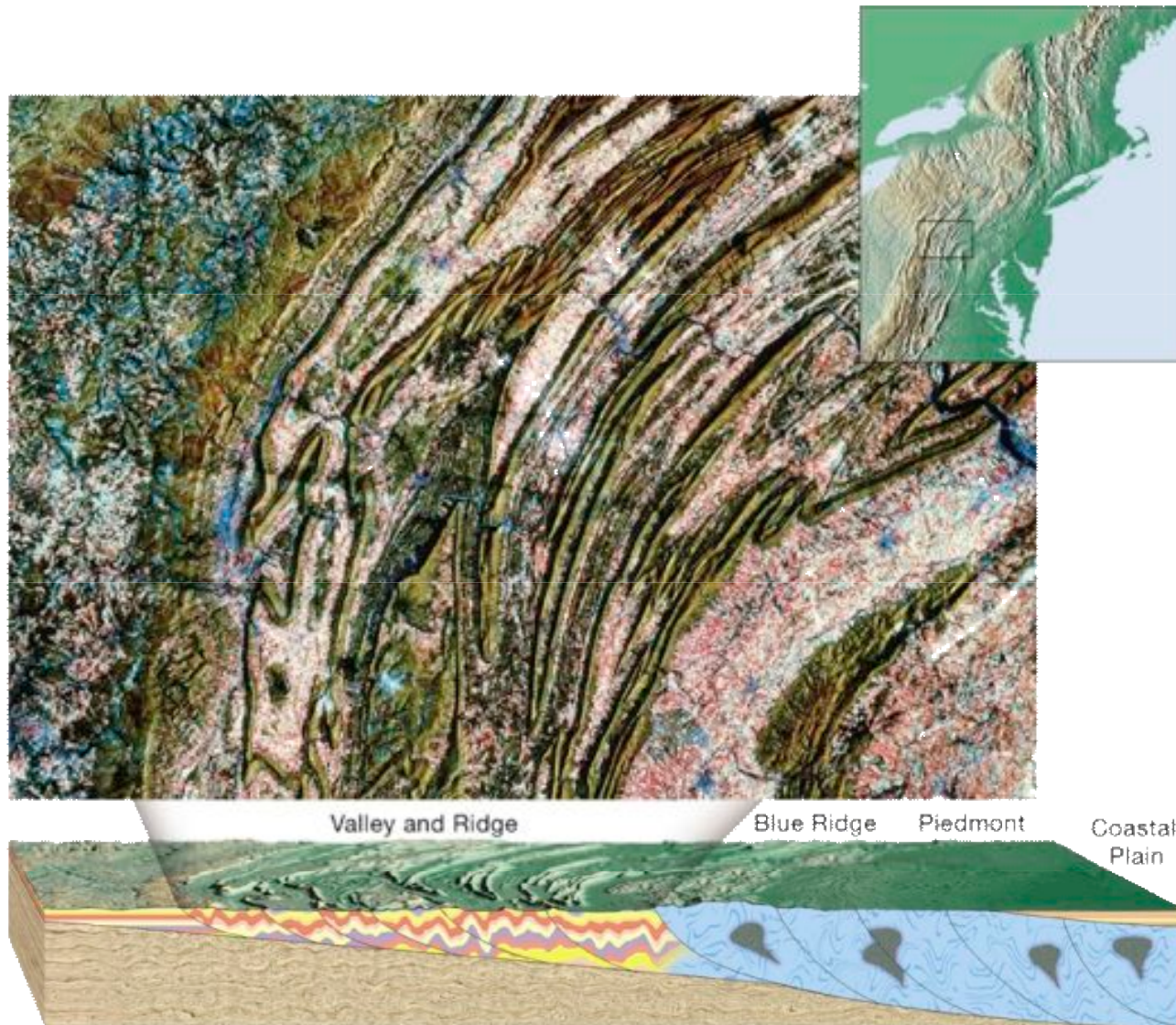
Evaporites



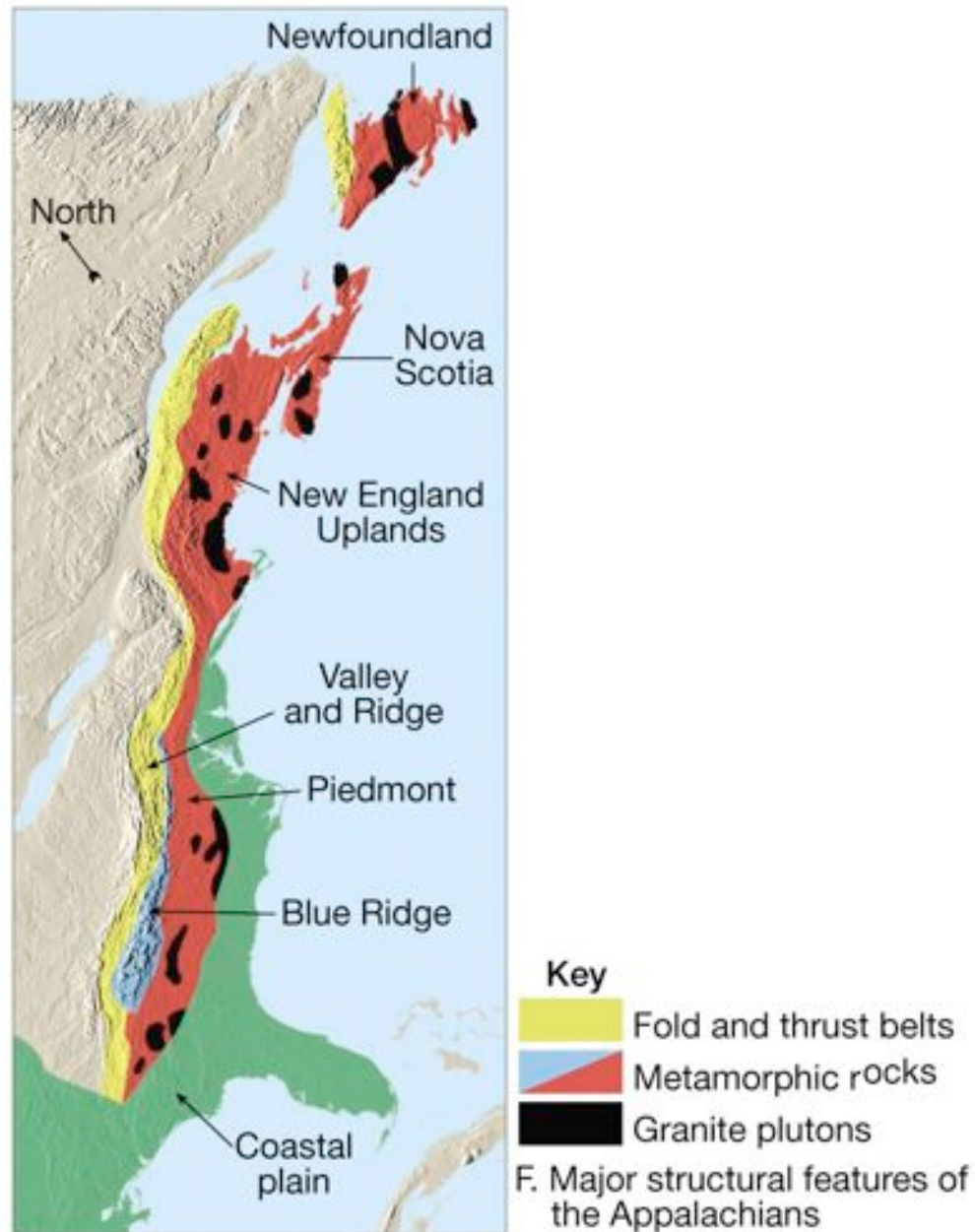


**Permian  
North America**

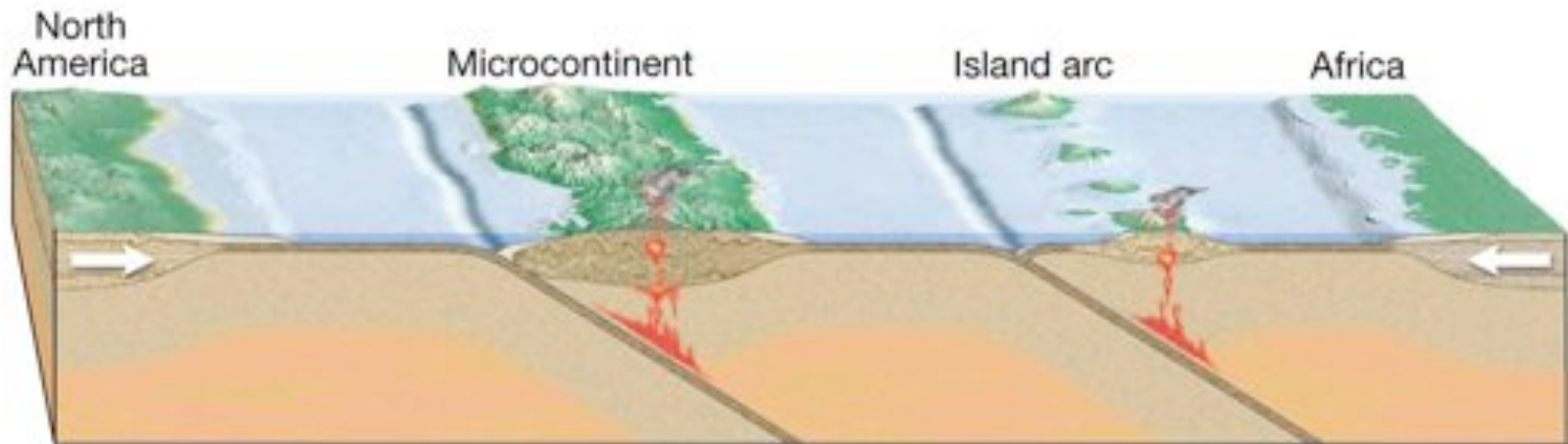




Copyright © 2005 Pearson Prentice Hall, Inc.



Copyright © 2005 Pearson Prentice Hall, Inc.

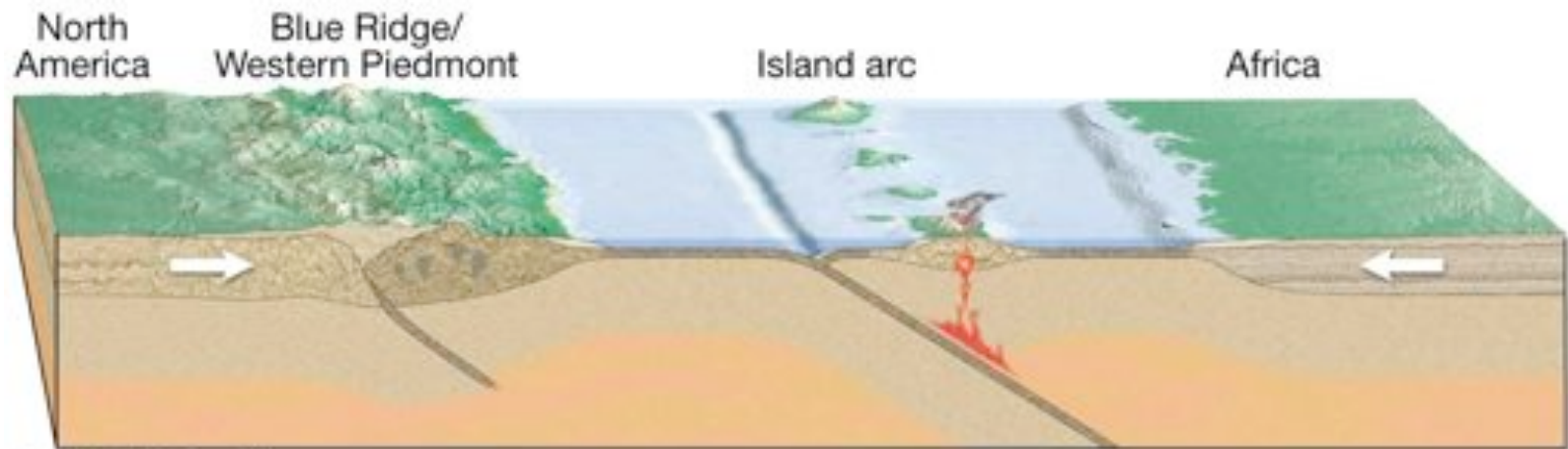


A. 600 million years ago



B. 450-500 million years ago

Copyright © 2005 Pearson Prentice Hall, Inc.



B. 450–500 million years ago

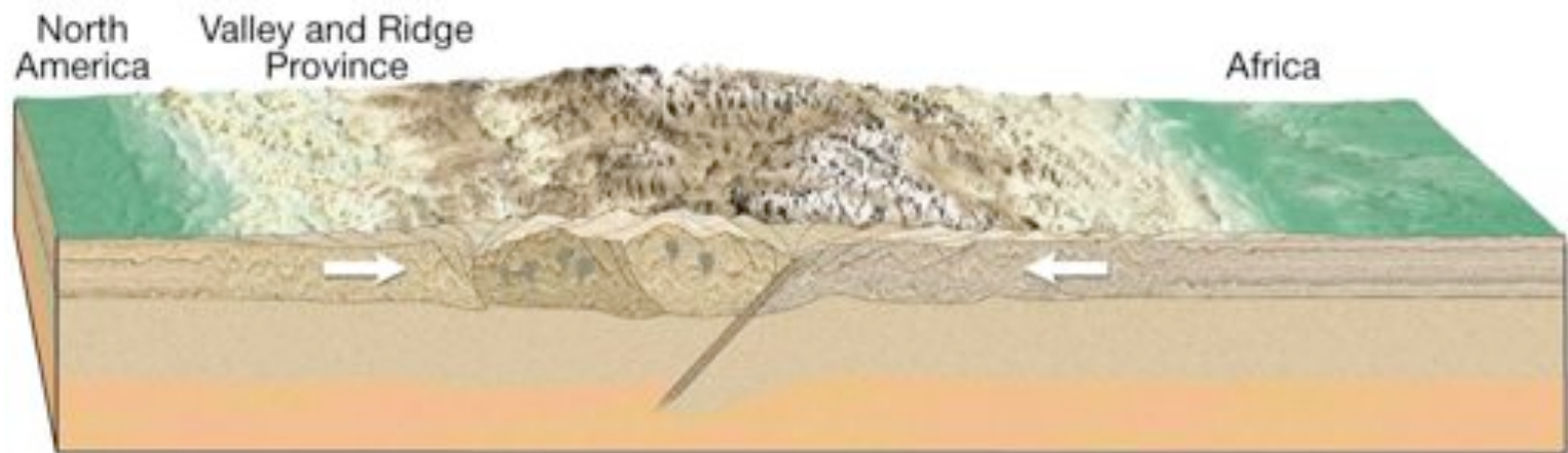


C. 400 million years ago

Copyright © 2005 Pearson Prentice Hall, Inc.

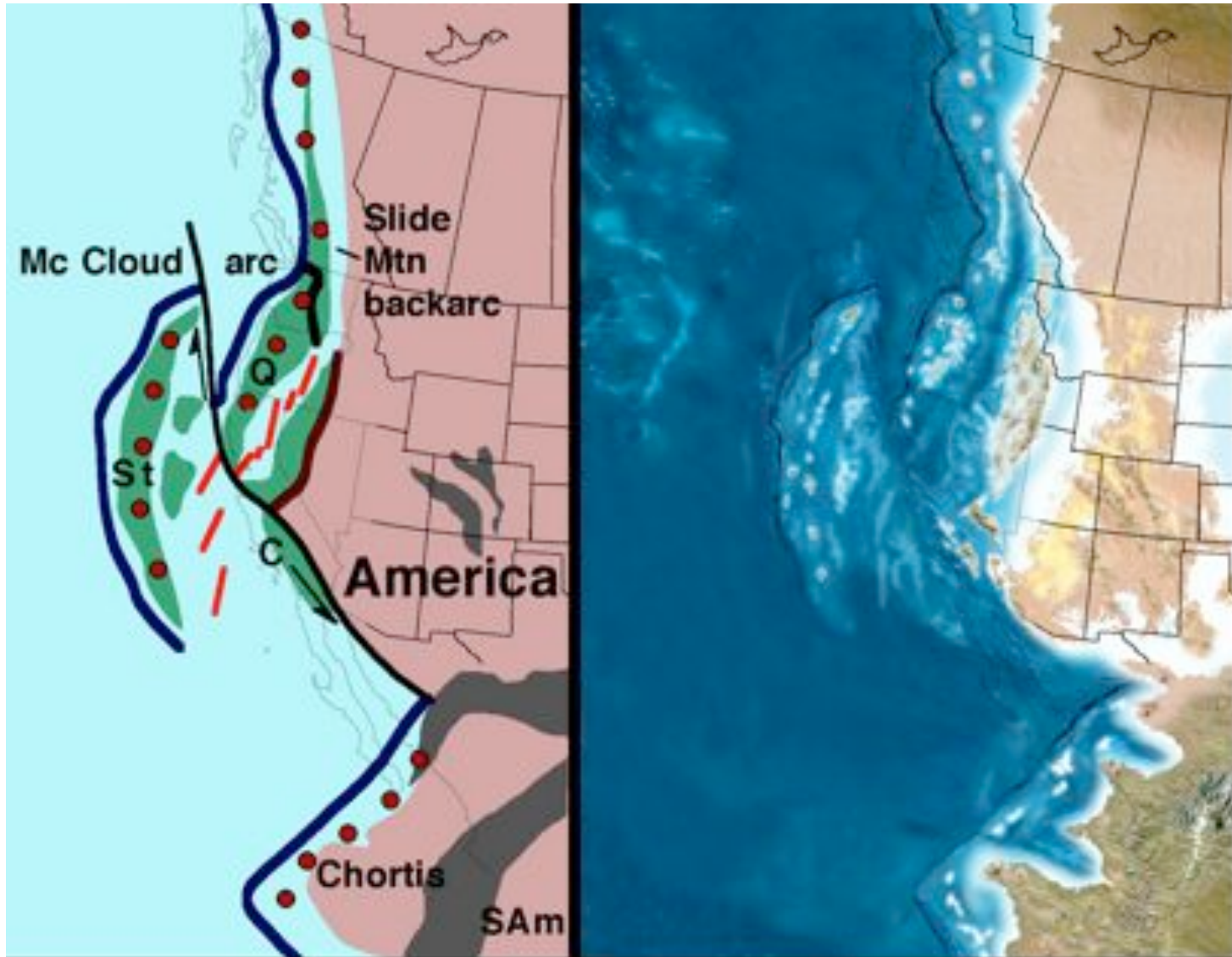


C. 400 million years ago



D. 250–300 million years ago

Copyright © 2005 Pearson Prentice Hall, Inc.



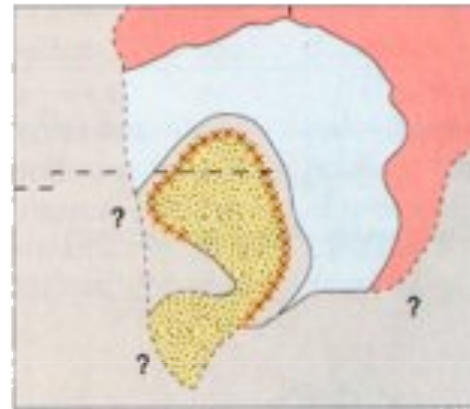


El Capitan

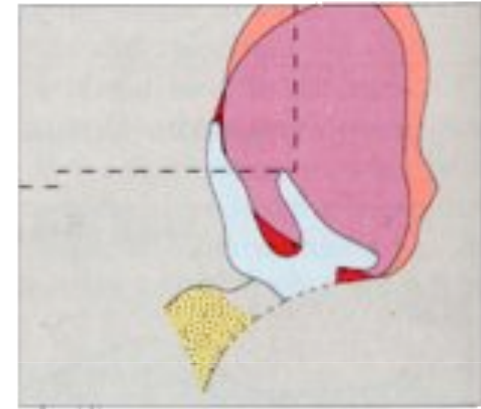
# Permian Basin History



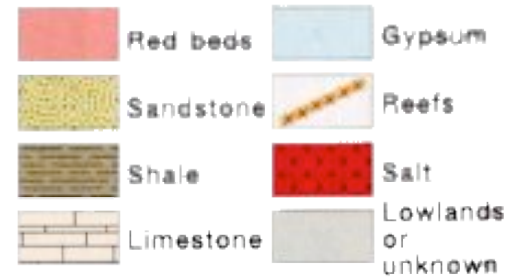
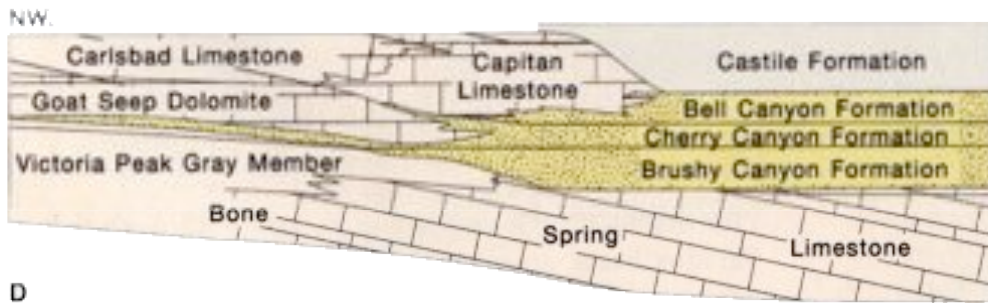
A Early Permian

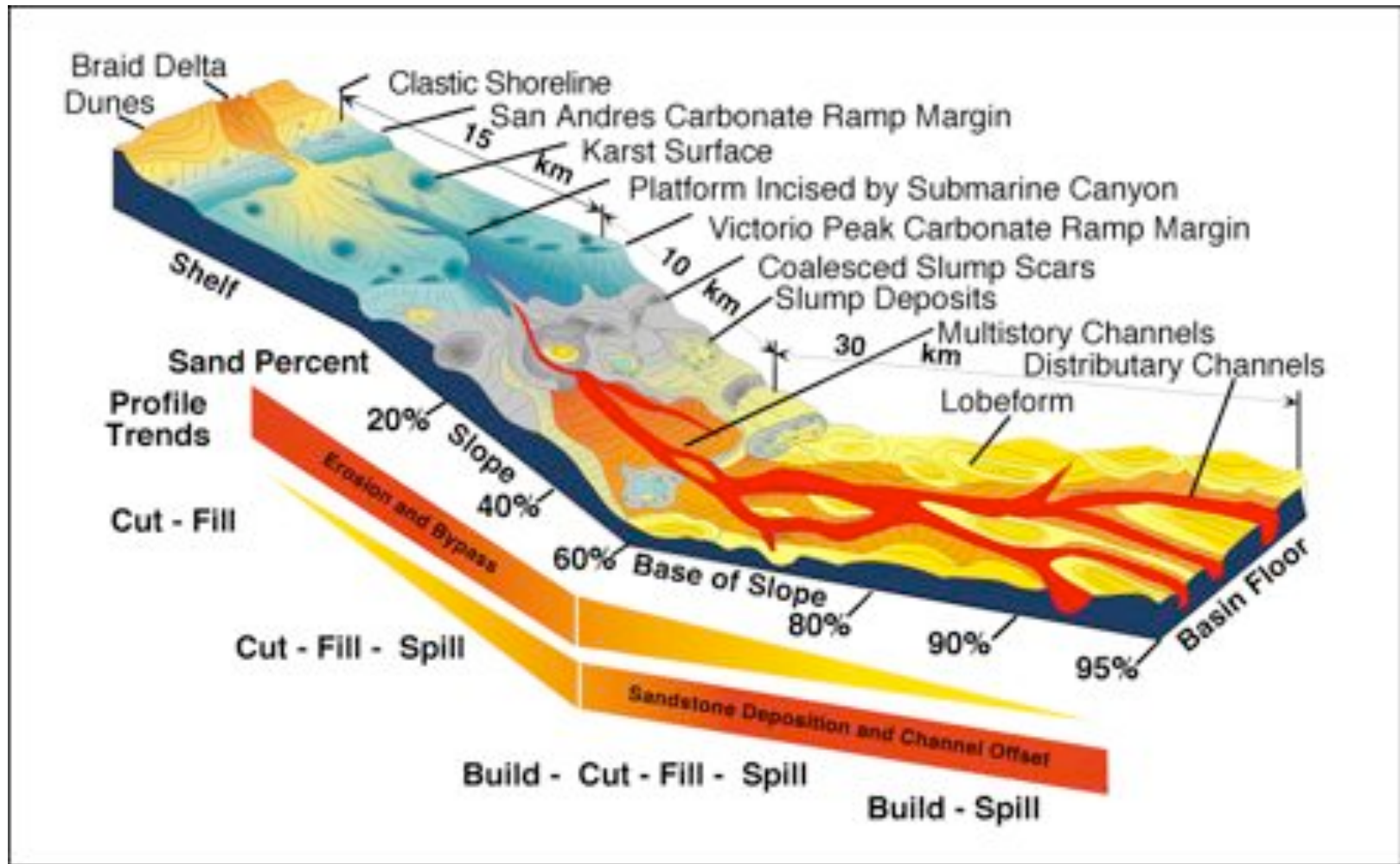


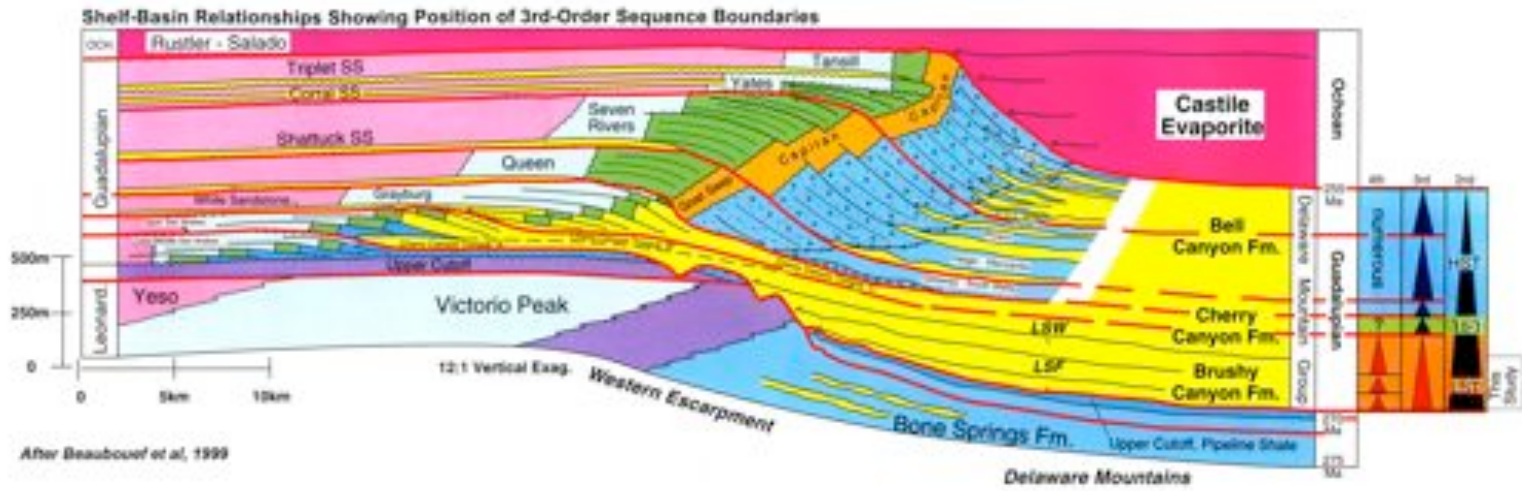
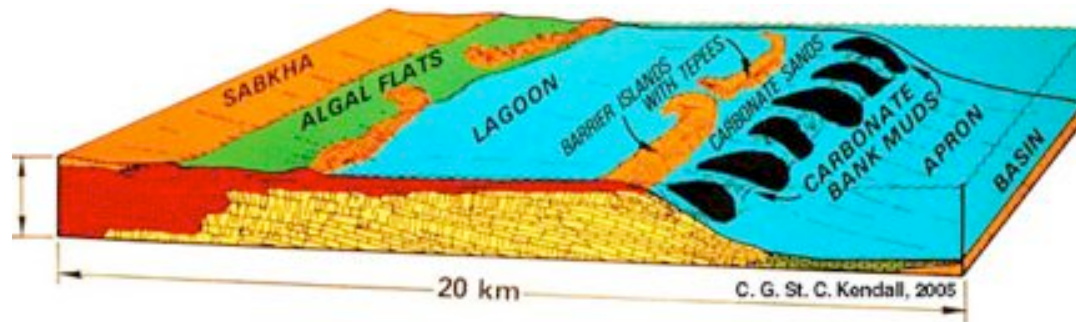
B Middle Permian

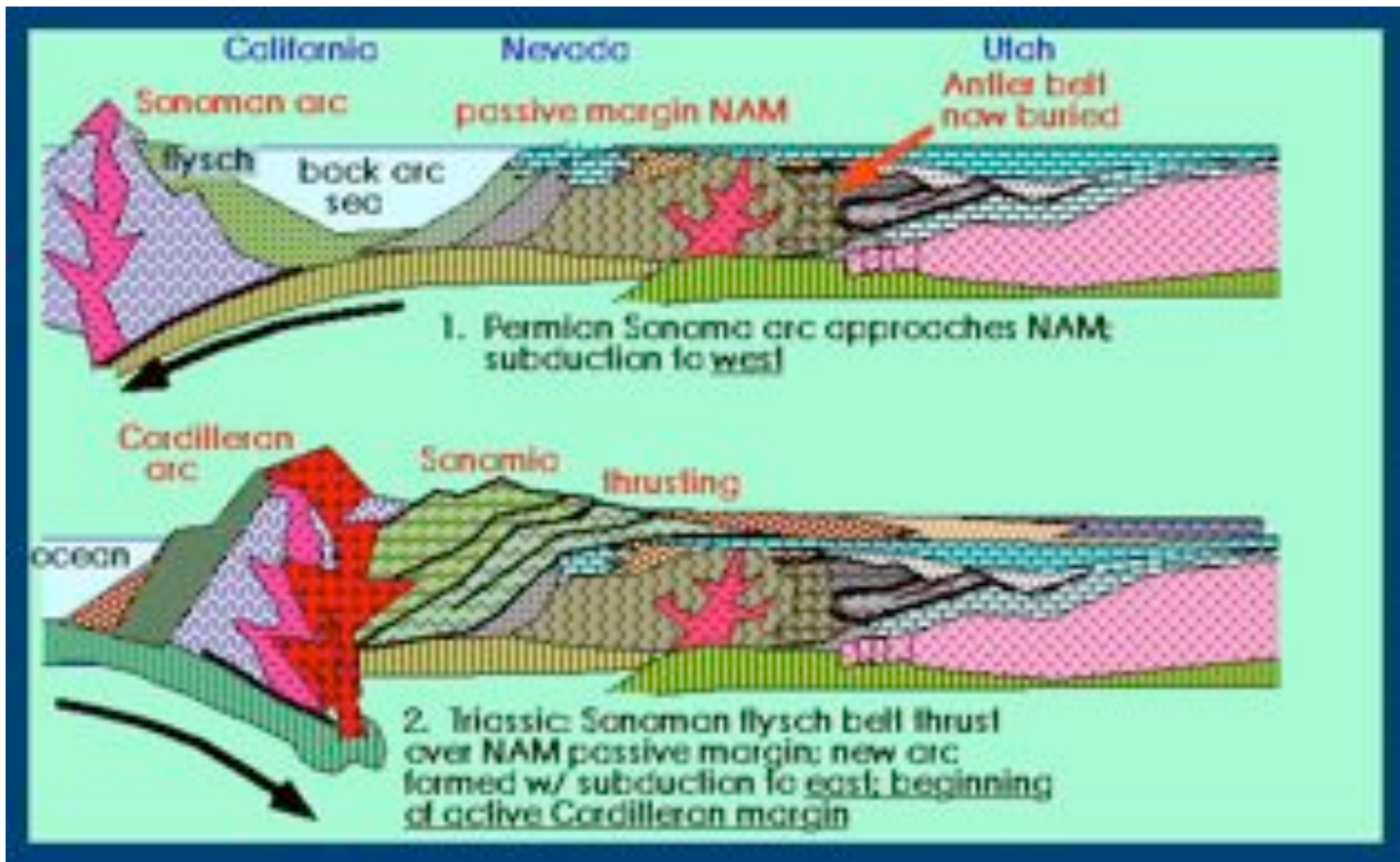


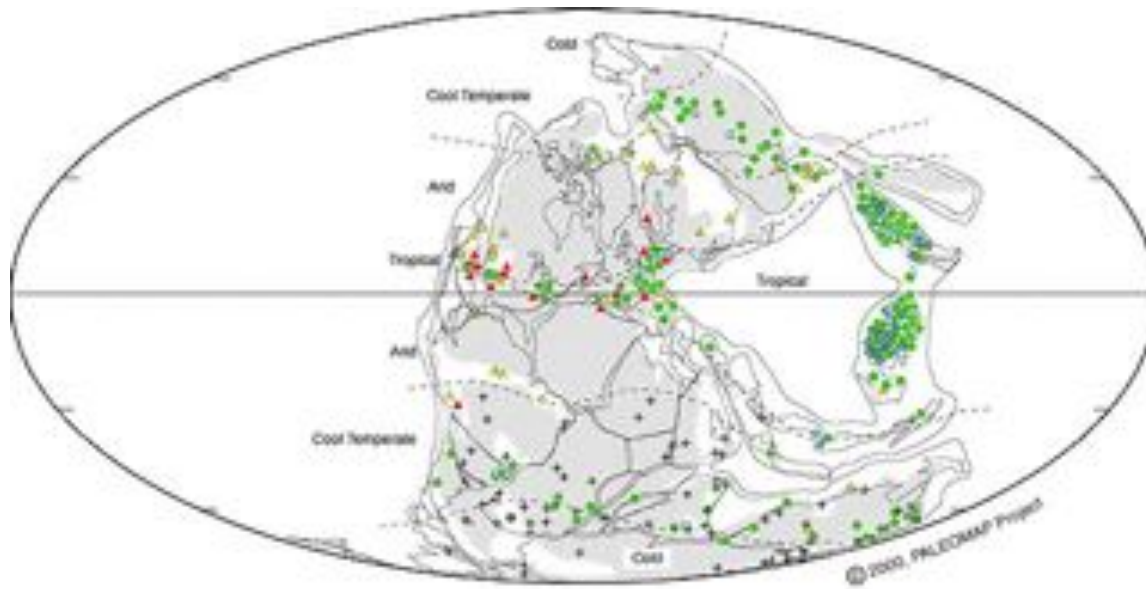
C Late Permian



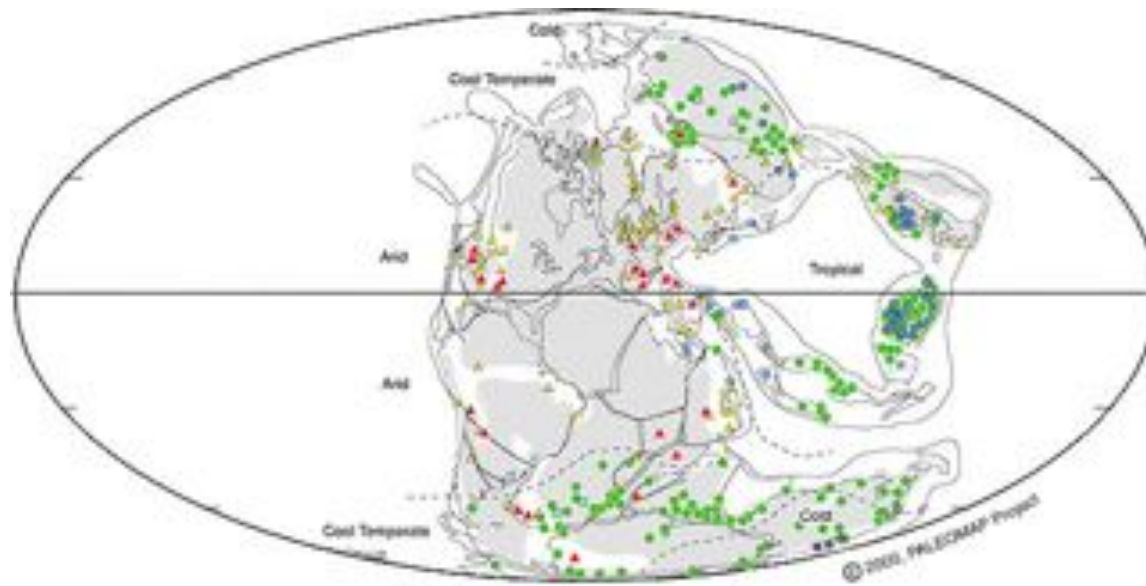








Lower Permian



Middle & Upper Permian

