

Correlation

- **Rock (Lithologic) Correlation:** The process of determining whether two rock bodies are (were) really part of the same lithologic rock unit.
- **Correlation Methods:**
 - **Direct Methods**
 - Physical continuity
 - Lithologic identity (e.g. texture, thickness, mineralogy ... etc.)
 - Position in the stratigraphic sequence
 - **Indirect Methods**
 - Well logs (e.g. electrical, gamma, neutron, sonic ... etc.)

Correlation

- **Time Correlation:** The process of determining whether two rock bodies were deposited at the same time.
- **Correlation Methods:**
 - Index fossils
 - Radioactive dating

Correlation

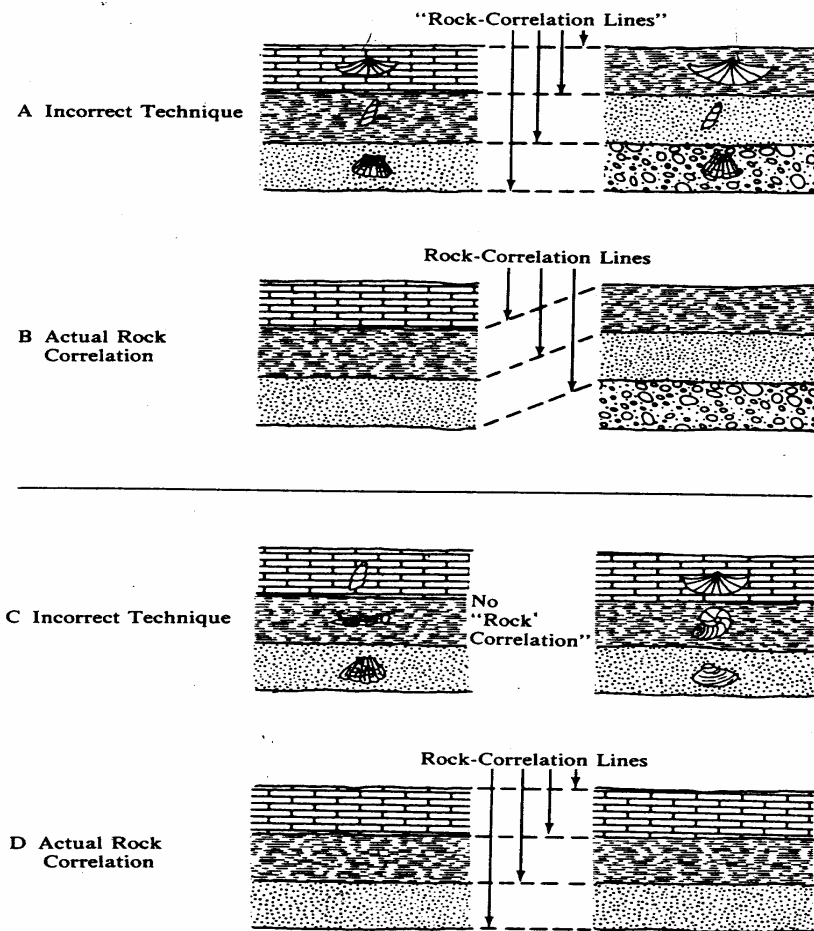


FIGURE 10.21. Diagram Illustrating Errors that result when time correlations are substituted for rock correlations. **A, C.** Incorrect technique, **B, D.** Actual time correlations.

Correlation

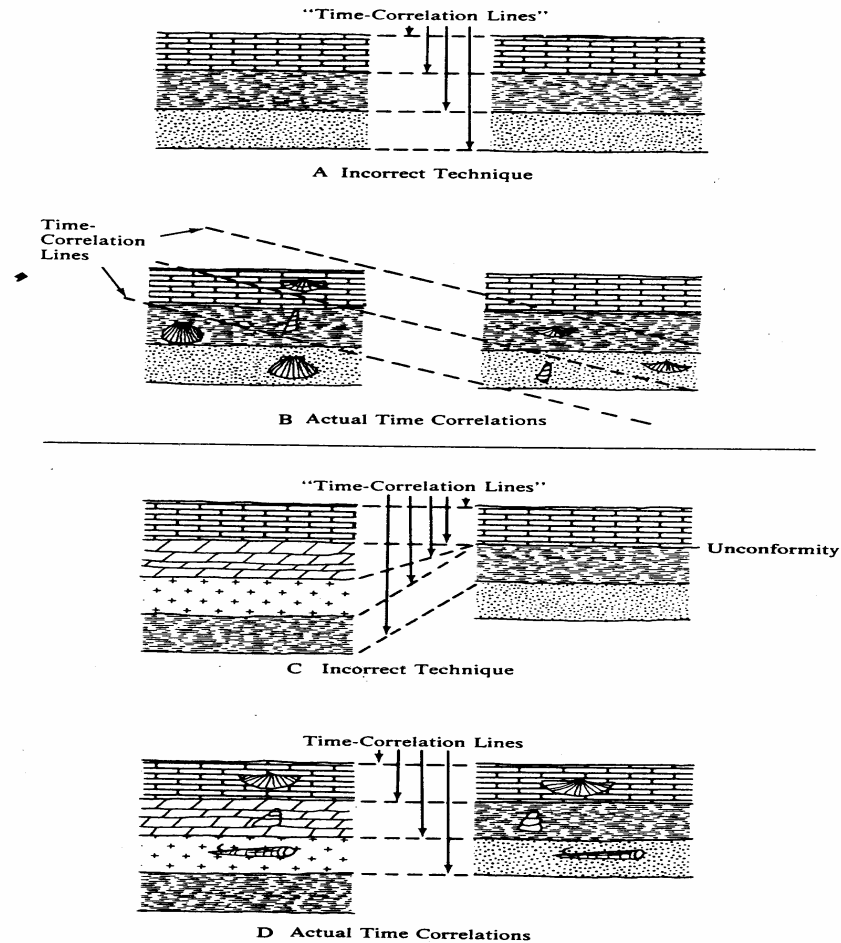
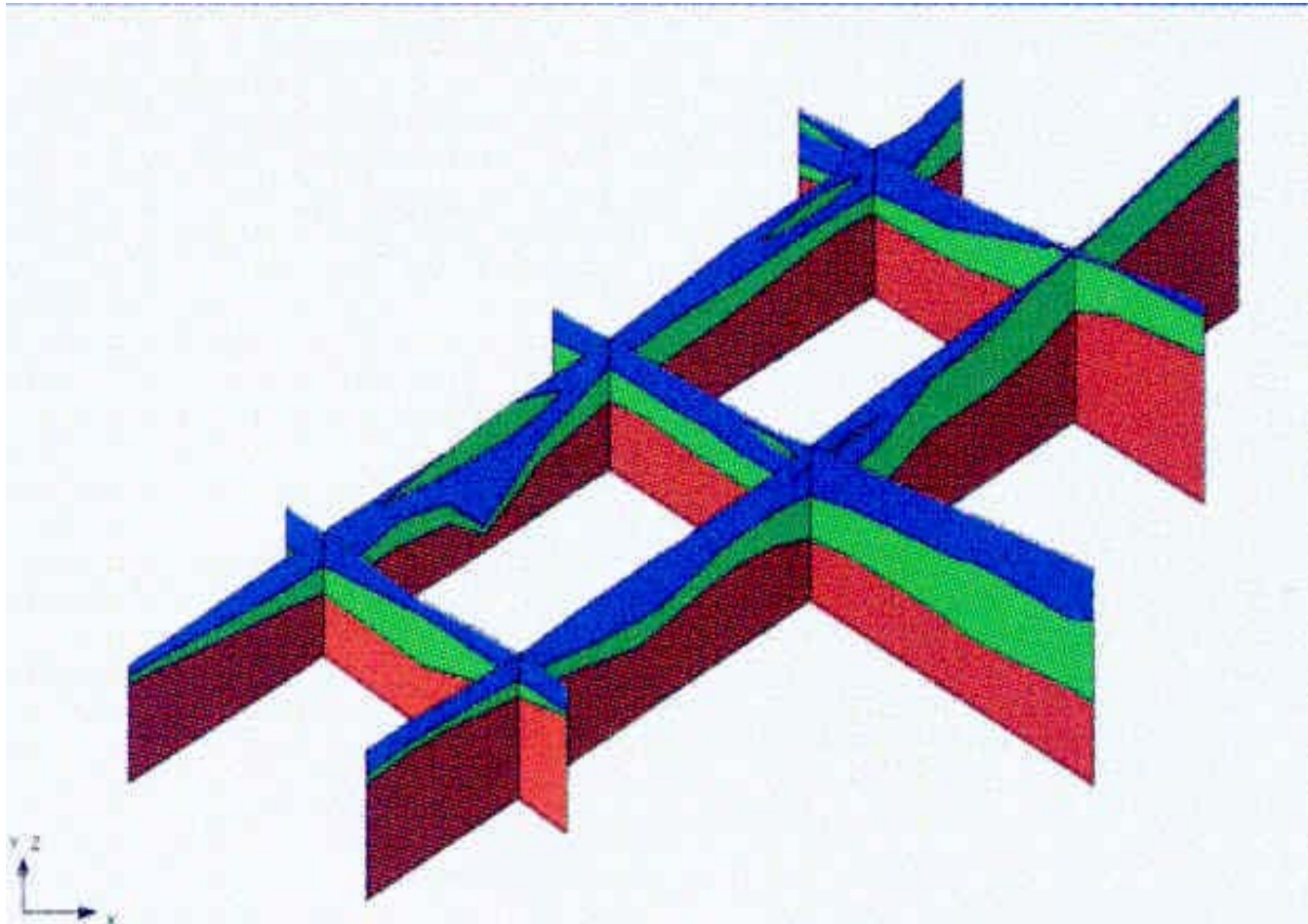


FIGURE 10.20. Diagram illustrating Errors that result when rock correlations are substituted for time correlations. A, C. Incorrect technique, B, D. Actual time correlations.

Fence Diagram



Links

- <http://pubs.usgs.gov/of/2003/of03-235/images/pdf/fig3.pdf>
- <http://www.geo.wvu.edu/~kammer/g100%5CStratCorrText.htm>
- http://gpc.edu/~pgore/geology/historical_lab/stratigraphy.php
- <http://www.glossary.oilfield.slb.com/Display.cfm?Term=fence%20diagram>
- <http://www.geocities.com/athens/forum/7309/fence.html>
- <http://www.rockware.com/support/casestudies/yucca.html>
- http://www.scisoftware.com/products/fence_diagram_details/fence_diagram_details.html
- http://gsa.confex.com/gsa/2003AM/finalprogram/abstract_65312.htm
- <http://www.glossary.oilfield.slb.com/DisplayImage.cfm?ID=78>