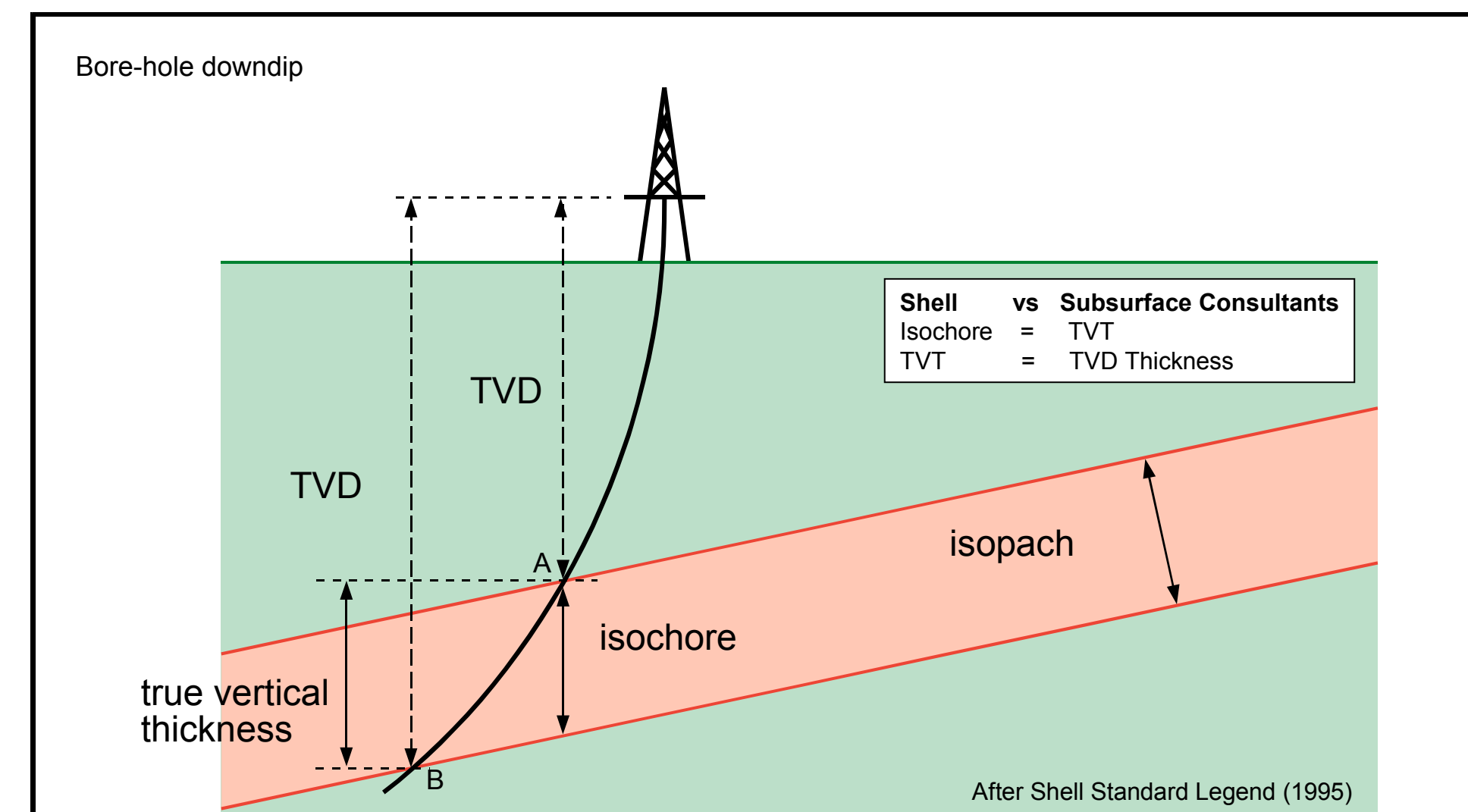
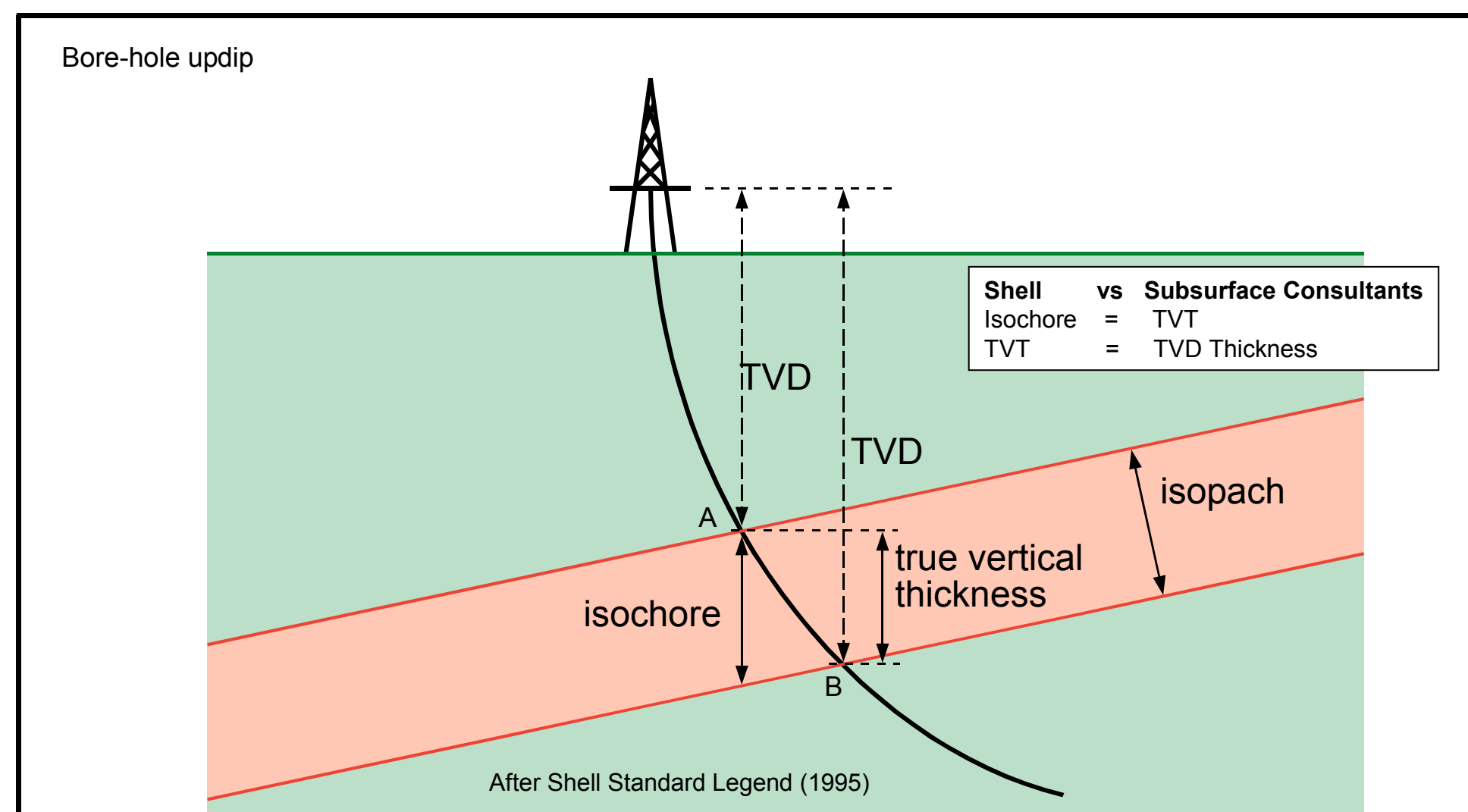
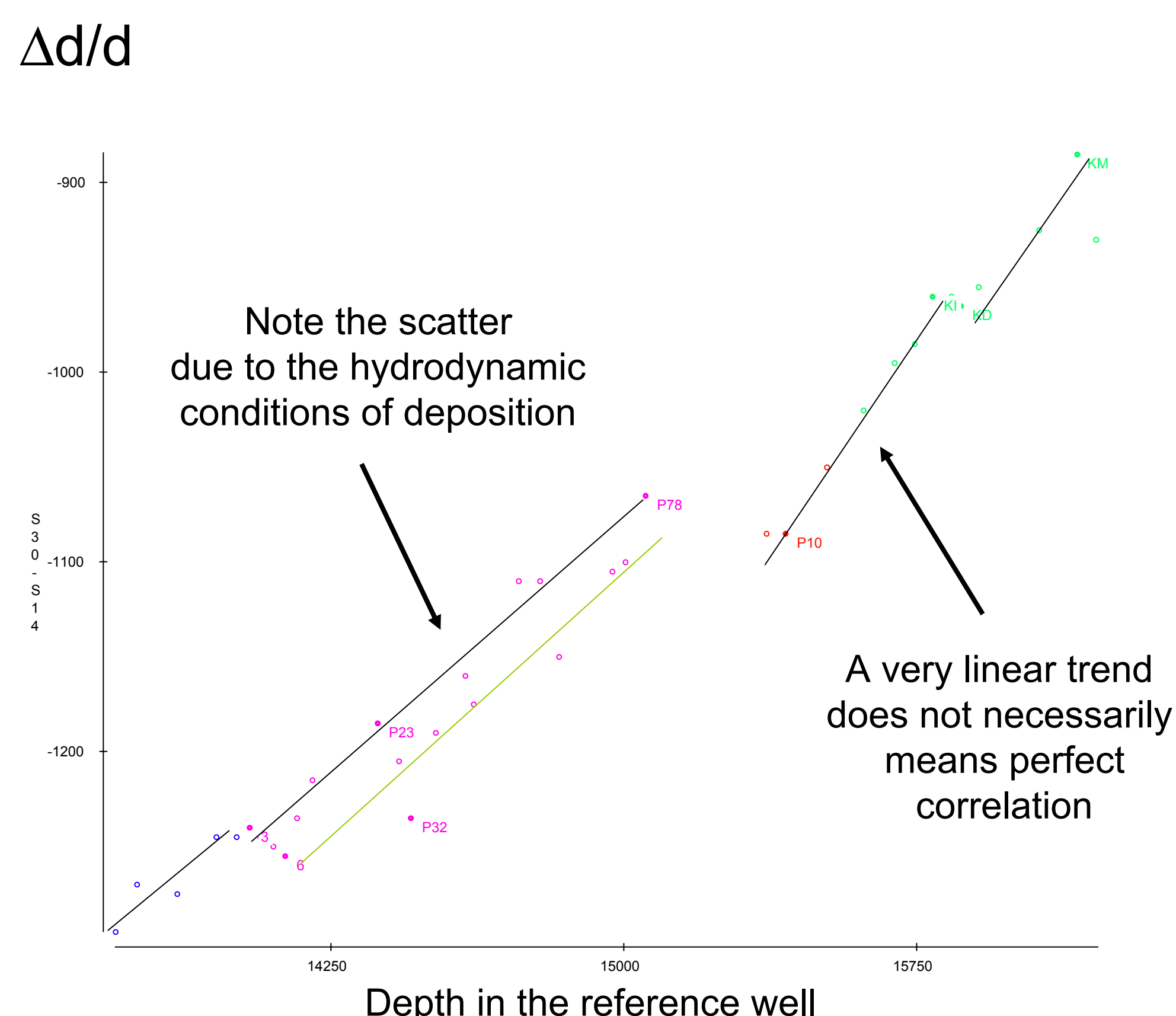


1)



It is **vital** to integrate and understand well deviation and bed dips; this is especially true when interpreting **stacked Bischke plots** for which a correction for the well deviation is necessary in order to compare isochores.

2)



A nice linear trend seen in a Bischke plot does not necessarily mean that the stratigraphy is correct, thus:

A forced layer cake stratigraphy could appear perfect using a Bischke Plot or any of the modified Multiple Bischke Plot Analysis.

In all cases isopach, paleogeographic and net to gross maps need to be used in order to validate the MBPA findings.

Any conclusion from a Multiple Bischke Plot Analysis needs to be corroborated by other lines of evidence especially dipmeter or pressure data.

CONCLUSIONS

The Multiple Bischke Plot Analysis is a very powerful tool:

- To objectively validate or review any existing geological or seismic correlation consisting of at least 10 markers
- To identify or confirm unconformities, sequence boundaries, wrong correlations or low angle fault planes
- To help understand large folded complex structures in the absence of dipmeter data

However it will not do the correlation for you nor will it give a solution if the correlation is completely wrong.

It will however help identify zones which need revisions or help define limits between areas of coherent stratigraphic correlation.

The MBPA helps focus on the real problem, saving time and money.

References

- Bischke, R.E., 1994, Interpreting sedimentary growth structures from well log and seismic data (with examples), American Association of Petroleum Geologists Bulletin, vol. 78-6, p. 873-892
- Bischke, R.E., Finley, W. and Tearpock, D.J., 1999, Growth Analysis ($\Delta d/d$): Case Histories of the resolution of correlation problems as encountered while mapping around salt, Gulf Coast association of Geological Societies Transactions, Vol. XLIX 1999, p. 102-110
- Chatellier, J-Y., de Sifontes, R., Mijares, O. and Muñoz, P., 1999, Geological and production problems solved by recognizing the strike slip component on reverse faults, VLA-31, Lake Maracaibo, Venezuela, SPE Annual Technical Conference, Houston, SPE No. 56558
- Sanchez, R., Chatellier, J-Y., de Sifontes, R., Parra, N. and Muñoz P., 1997, Multiple Bischke Plots Analysis, a powerful method to distinguish between tectonic or sedimentary complexity and miscorrelations; methodology and examples from Venezuelan oil fields, Memorias del Primero Congreso Latinoamericano de Sedimentología, Soc. Venezolana de Geologo, Tomo II, Noviembre 1997, p.257-264

Acknowledgements

Thanks are given to Shell and to PDVSA, especially Carlos Porras for allocating time to the author for investigating and revising the method originally proposed by Dr Bischke. More particularly we would like to thank Rick Carter, Taco van der Haart and Richard Bischke for their contribution to our understanding of the subject. Some of the diagrams have been created using a spreadsheet designed by Taco van der Haart.