
Sequence Chronostratigraphy: Issues and Examples

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Work by Neftex has demonstrated that many of the MFS and SBs identified by Sharland et al. (2001; 2004), plus many newly identified additional MFS and SBs, can be identified and correlated across the coeval stratigraphy of the Middle East and North Africa, and indeed also occur on other continental plates within the same biozone (cf. Hardenbol et al. (1998); Sahagian et al. (1996); Nielsen (2004)). It is clear to us that a global sequence stratigraphic model is a reality. This proprietary work has thrown up some interesting relationships between the evolving Neftex sequence stratigraphic model and the chronostratigraphic timescale.

The purpose of this poster is to discuss the key issues relating to the identification and correlation of MFS, SBs and GSSPs and to present examples highlighting these issues.

There are clear benefits to chronostratigraphers in understanding the detailed sequence stratigraphic heartbeat, and to sequence stratigraphers in understanding the relationship of sequence stratigraphy to GSSPs. Such an approach links the biostratigraphic rigour of GSSP definition with the understanding of stratigraphic geometries in the industry through seismic interpretation and well log correlations. Although much work remains to be done, it is possible to envisage the conjugation of the global sequence stratigraphic model with the chronostratigraphic timescale.
