

*Mancini, F. & Williamson, P. 2005.*

Analysis of C-Wave PSTM Results from Three 2D 4C Lines Acquired Offshore West Africa  
*EAGE 67th Conference, Madrid, 13-16 June.*

#### ABSTRACT

We present an analysis of C-wave PSTM images obtained on three 2D multicomponent (4C) lines acquired offshore West Africa. We applied an anisotropic PSTM sequence developed by the Edinburgh Anisotropy Project (EAP), characterised by a complex parameterisation and robust parameter estimation with a relatively fast workflow. We also analyse the overall contribution of converted waves in this area. The geological setting is not ideal for S-wave propagation due to the presence of low-velocity unconsolidated shales, which behave like mud. Nonetheless C-waves give improved images in the deeper part of the section and clear definition of the main faults, which leads us to believe that joint interpretation of P- and C-wave sections can help improve interpreter confidence. These lines were also processed (in parallel) by two contractors. There are large differences in the imaging results, which highlights a diversity of approaches to C-wave processing and the high sensitivity of C-waves to the parameters used.