

APPLICATION OF AMPLITUDE VOLUME METHOD TO MAPPING STRUCTURAL STYLES ON FAZENDA CEDRO PALEOCANYON - ESPIRITO SANTO BASIN

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Despite technological evolution, three dimensional seismic imaging is still dependent on the sedimentary fill and structural framework of an area, as in the Fazenda Cedro, onshore the Espirito Santo Basin, Brazil. The canyon, established in the Cenomanian, is filled by several sequences of thick marine shales and thin turbiditic sandstones. Most oil fields in the area are reservoired in these thin and localized sandstones bodies. The amplitude volume method allows to generate images of structural features from a continuous surface of a seismic volume without influence of the interpreter. Three dimensional visualization, with use of amplitude volume application allowed the definition of details related to fault geometry, and a better understanding the geologic model of the canyon fill. This method had been previously successfully applied in the Reconcavo Basin, and also allowed the visualization of important structural features in Espirito Santo Basin, especially along of Cedro/Rio Doce fault system, the principal migration route of the basin's petroleum system.