

**AAPG HEDBERG CONFERENCE**  
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**New remote sensing data & techniques in North African frontier zones**

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The knowledge of geomorphological characteristics of the surface is important to optimize the petroleum exploration in North African frontier zones.

The permanent development of satellite or airborne sensors enhances this knowledge based upon:

- an increase of the number of data available
- a ground resolution improvement
- a better accuracy of positioning
- a highest capability for 3D image production
- a slight diminution of the costs

All of these enhancements are due to new satellites data. Particularly SPOT-5 and Aster images are the base for such developments.

The worldwide coverage for the satellite data allows to conduct such studies even over frontier zones where few surface data are available. The Remote Sensing techniques are applied even over buried basins when other sub-surface data are combined.

We present some case studies over Libya, Tunisia, Algeria, Marrocco and Egypt, that were an aid for seismic campaigns preparation, physiographic patterns evaluation, environmental purposes as well as geological cartography.

We also point out the present developments that will allow to quantify the surface morphology as well as the content of superficial geological formations.