

THE USE OF SAR IMAGERY FOR HYDROCARBON EXPLORATION IN SARAWAK

CHIU SHAO-KANG
OVERSEAS PETROLEUM & INVESTMENT CORPORATION
&
MOHD KHAIR ABD KADIR
PETRONAS CARIGALI SDN. BHD.

Side Looking Airborne Radar (SLAR) has been widely used in hydrocarbon exploration recently. However the use of Synthetic Aperture Radar (SAR) has greatly improved the problem of aperture restriction caused by the limited antenna length in the use of real aperture SLAR.

A SAR survey of Block SK-12, onshore Sarawak, Malaysia resulted in strip prints of SAR imagery for each flight line at a scale of 1:100,000. Computer processed mosaics in three sheets were produced at the same scale for plotting geological and cultural interpretations of the SAR data.

The geological interpretation and lineament analysis resulted in more detailed information than that available from the published maps of the Geological Survey of Malaysia whilst the cultural interpretation included the identification of forest type and land use.

Areas of structural interest identified from the geological interpretation are now being surveyed from the ground. The cultural interpretation is used as a guide for accessibility for both geological field crews and seismic crews and was used in the planning of the seismic programme.