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**Autor:** Wyss, R.  
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Basin in two parts: to the NW, a relatively undisturbed basin thinning out towards the Jura and filled essentially with USM deposits. To the SE, an older and deeper basin where UMM sediments are present and overlain by thick thrustured USM deposits. This configuration resembles that recently described from seismic in the Molasse Basin of Central and Eastern Switzerland.

## The Mesozoic strata in the Swiss Molasse Basin: An overview

By R. WYSS

geoform/Swisspetrol, Anton Graff-Str. 6, CH-8401 Winterthur

Based on surface data and on 8000 km of seismic lines, 24 exploration wells have been drilled within the last 30 years through Swisspetrol and its partners in the Swiss Molasse Basin and adjacent regions. Of these wells 19 drilled into or through the Mesozoic strata.

Two characteristic stratigraphic sequences, mainly influenced by basinal facies in Western Switzerland and platform facies in Eastern Switzerland, show the different evolution during Mesozoic times. The Mesozoic sediments are bordered by two main unconformities. Below the underlying "Base Triassic Unconformity" crystalline basement or permocarboniferous sediments are found. Above the predominantly carbonaceous sediments of Mesozoic age, the clastic Molasse sequence is overlaying the "Base Molasse Unconformity". These two unconformities mark not only two tectonic events but also a change in the depositional environment.

The facies and distribution of Mesozoic sediments in the Swiss Molasse Basin show the migration of the trough axis and the depositional environment during time. These movements are induced by tectonic movements along different tectonic trend lines. Transpressive faulting is an important process in forming the Mesozoic realm in the region of the future Swiss Molasse Basin.

## The Basal Tertiary unconformity in the Helvetic realm

By R. HERB

Geological Institute, University of Bern, Baltzerstr. 1, CH-3012 Bern

In the Helvetic domain, including the Aar Massif, the onlap of shallow water sediments on the basal Tertiary unconformity which occurred between the Middle of the Paleocene and the Late Eocene, reflects the progradation of the coastline in NW direc-