Since glass shards have not been found in several localities in the investigated regions, the most recent tephra was attributed either to boreal trachytic eruptions in the Chaîne des Puys (French Central Massif), or to the Allerod phonolithic eruption of the Laacher See (Eifel). The clinopyroxenes of the Laacher See Tephra are more calcic than those of the trachytic eruptions of the Chaîne des Puys. The composition of titanite is also quite different in each tephra. Therefore the only recent tephra layer in the Vosges and in High Belgium must be correlated with the Laacher See Tephra.

A basic tephra layer which was found in loess profiles of Belgium and The Netherlands was correlated previously with the Eltville tephra which is well known in central Germany. This correlation was contested using stratigraphical criteria. Recently it has been demonstrated that the clinopyroxene and olivin respectively have identical chemical composition throughout the lobe.

For the last 40 years, enstatite is considered as the guide mineral of the widespread Rocourt Tephra. Since enstatite is only known in ultrabasic magma, its optical determination has been doubted by some authors. Microprobe analyses firmly proved the presence of enstatite in the tephra so that it can be used as guide mineral for the relevant volcanic material.

BIOSTRATIGRAPHICAL CORRELATION BETWEEN THE HANGENBERG SCHIEFER (NORTHERN «RHEINISCHES SCHIEFERGEBIRGE») AND GLACIGENIC DEPOSITS IN BRAZIL

M. STREEL[1] & S. LOBOZIAK[2]

ABSTRACT.- Clastic sedimentary sequences with glacigenic characteristics of Late Devonian age are described in several basins of Brazil. They were dated as Famennian *sensu lato*. Samples from these sequences in the Amazonas and Parnaiba basins contain well preserved miospores which allow a accurate correlation with the uppermost Famennian (Middle *praesulcata* Zone equivalent) *R. lepidophyta - H. explanatus* and *R. lepidophyta - V. nitidus* Zones (LE and LN Zones). The same miospore-zones characterize the Hangenberg Schiefer and Sandstein in the Northern «Rheinisches Schiefergebirge» which are considered to correspond to a sudden drop of sea level. Such an accurate time relationship between glacigenic sediments in Brazil and drop of sea-level in Germany (and around the world !) suggests that they might have the same climatic origin.

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DEUX SONDAGES A MALMEDY

Georges VANDENVEN[1]

avec la collaboration de Melles B. LEONARD (Lg) et A. SMOLDEREN (L) et de MM. Ph. ANCIA (Lg), F. DIMANCHE (Lg), J. THOREZ (Lg) et M. VANGUESTAINE (Lg)[1]

SITUATION DES SONDAGES

MALMEDY I

INTERMILLS, route de Robertville; X=267.851, Y=126.078, Z=+338,443 m, archivé 169E/379; profondeur atteinte: 200 m.

MALMEDY II

EMBRANCHEMENT AUTOROUTIER DE WAVREUMONT. X=265.210, Y=123.672, Z=+395,256 m' archivé 160W/928; profondeur atteinte: 200 m.

NIVEAUX LITHOLOGIQUES TRAVERSES PAR «MALMEDY I»

De 0,00 à 4,00 m :

Alluvions de la Warche.

De 4,00 à 38,36 m :

Formation moyenne des Poudingue de Malmédy (F. à galets de calcaire). Les éléments calcaires ont été attribués au Couvinien, au

1. S.G.B.: Service Géologique de Belgique (Bruxelles); (Lg): Université de Liège; (L): Katholiek Universiteit Leuven.