Gondwanide terranes towards the Equator. The Prague Basin Silurian as well as Devonian fauna points to the Barrandian Terrane position within the peri–equatorial zone. The Middle Devonian paleolatitude is estimated to be less than 10° S. During the Mid–Devonian, the Prague Basin extension terminated; appearance of the flysch facies sediments derived from southern sources during the Givetian correlate with the onset of the Ligerian orogenic pulse of the Variscan orogenic cycle with which sedimentation ceased in the Barrandian Terrane.

The Lower Paleozoic Prague Basin and the other Early Paleozoic sequences of the Barrandian Terrane represent the remnants of an originally much larger basin which can be interpreted as a component of a back–arc basin of the Ligerian–Moldanubian Cordillera that is thought to correspond to a primeval tectonic element of the Variscan foldbelt.

THE STORY OF VARISCAN GRANITE MAGMATISM IN THE WESTERN CARPATHIANS (SLOVAKIA)

I. PETRÍK, I. BROSKA, P. UHER

Geological Institute of the Slovak Academy of Sciences, Dúbravská cesta 9, 842 26 Bratislava, Slovak Republic

The first granite–forming event, producing *S–type* magmas in the Western Carpathian segment of the Variscan orogen occurred probably during upper Devonian/lower Carboniferous times. It might have resulted both from the thermal re–equilibration and resulting metamorphism after crustal shortening, and from the heat input following a possible slab detachment. Later, at the end of Carboniferous a widespread thermal event, possibly intrusion in hot mantle magmas, might have caused melting of lower crustal lithologies to give *I–type* granitoid magmas bearing distinct features of magma mixing (enclaves). This event may record either a renewed subduction or lithospheric thinning following the previous delamination. The last (Permian) granite group, with the *A–type* tendency, may have formed during the post–orogenic stage in tensional régime along huge faults. In general, the development of granite magmatism in the Western Carpathians is analogical to that along the whole Variscan orogenic belt.

While the *S–type* granites record a formation from quartzo–feldspathic mica–bearing source rocks *via* muscovite ± biotite dehydration melting in reducing and relatively water–poor conditions, those of the *I–type* group indicate a deeper origin from intermediate biotite–bearing source lithologies due to biotite (hornblende?) dehydration reactions. Primary mineralogy confirms the formation in oxidizing and relatively water–rich conditions. These features evoke the basic magmas to be have been enriched in volatiles during an earlier subduction event. Mafic magmatic enclaves point to a deep heat source. Smallest by volume, the *A–type* granite group suggests an origin from a drier source rock (possibly having already experienced a melting event) in moderate oxidation conditions stressing a more significant role of other volatiles (e.g. F).

STRATIGRAPHY, SEDIMENTOLOGY AND SANDSTONE COMPOSITIONS OF LATE ORDOVICIAN CLASTIC SEQUENCES IN THE CARNIC ALPS

P. POSCHESCHNIK[1], F. NEUBAUER[2]

[1] *Dept. of Geology and Paleontology, University of Graz, Heinrichstr. 26, A–8010 Graz, Austria*

[2] *Dept. of Geology and Paleontology, University of Salzburg, Hellbrunner Str. 34, A–5020 Salzburg, Austria*

Sedimentological parameters of ca. 20 sections including Late Ordovician sequences distributed over the eastern and central Carnic Alps reflect several depositional cycles. In the Fleons Fm., the lowermost here studied formation, marine sedimentation was dominated by high sediment supply into a fan delta environment and by mafic, later acidic pyroclastic rocks. In the following Trieb Fm., high energetic near shore environments with coarse clastics and transitions into low energetic, deeper marine environments were observed. A sequence stratigraphic model was used for correlation of sections (Fig.1). Sections reflecting shallow marine environments are marked by low angle angular disconformities pointing to an erosional phase within the lower Trieb Formation. Above this disconformity, up to 80 m thick clastic sequences reflect sedimentation under transgressive conditions. This large, by a rising sea level dominated cycle is overprinted by smaller regressive and transgressive cycles. In the follow–