

Travel of about 100 km by bus to the first stop at the village Payerbach, south of Vienna.

Stop 1: Roadside at Payerbach, viewpoint.

Explanation of the geological situation at the southern margin of NCA - see Fig.4.

The village Payerbach is situated within the Palaeozoic rocks of the Greywacke Zone. This zone can be separated into three nappes:

- 1) the lower Veitsch Nappe, built by Carboniferous conglomerates, sandstones and dark shales and small bodies of magnesite;
- 2) the intermediate Silbersberg Nappe with remnants of a crystalline basement („Vöstenhof-Crystalline”) and transgressing siliciclastics of probably Permian age - the sequence is tectonically overturned; a very characteristic element are small intercalated bodies of Riebeckit-gneiss;
- 3) the upper Noric Nappe, built by grey shales, greenschists and sandy shales with lydites of probably Lower Palaeozoic age. Above follow with transgressive contact the Permo-Skythian Prebichl-Fm and Werfen-Fm.

The transgressive siliciclastics are shown in Fig.4 as Werning Zone and are assigned to the Tirolic units.

Above follows with overthrust contact a zone of tectonized narrow slices with Middle to Upper Triassic pelagic carbonates - the Juvavic Geyerstein-Sieding Slices in a basinal facies. In the same tectonic position we will see the Meliata-Klippe at Florianikogel.

The uppermost tectonic element is represented by the Schneeberg Nappe. It is part of a mainly Middle Triassic carbonate platform (Wetterstein Limestone). Its southern margin has been affected by Post-Gosauic backthrusting, which has created a complex pattern of small slices of Werfen Shales, Wetterstein Limestone and associated pelagic limestones, as well as of rocks of the Gosau-Group - see also Figs. 5, 7.

The Juvavic units below the Schneeberg Nappe, as there are the Mürzalpen Nappe, Hohe Wand Unit, Geyerstein-Sieding Slices and numerous smaller units, are not the erosional remnants of a former continuous nappe. They have different palaeogeographic origins - see Fig.2. Their today arrangement to each other is thought to be a product of the Upper Jurassic gravitational tectonics.

For the reconstruction of the pre-tectonic arrangement of the Juvavic units the facies trends within them can be used.

For example the Schneeberg Nappe shows a platform to basin transition (Grafensteig Limestone) toward the north with onlapping Reingraben Shales in the Carnian - Figs.2 and 6. A similar trend is visible in the northeastern part of the Mürzalpen Nappe (Schneealpen area) - Fig.2. Therefore the two nappes may belong to the same northern margin of a larger carbonate platform. On the other hand there is also a platform margin preserved at the southern slope of Rax Mountain, which one shows a transition from reef to allodapic slope sediments and to variegated limestones of Hallstatt-type. Middle Triassic Hallstatt Limestones today can be found in the Geyerstein-Sieding Slices, within the Ödenhof Window and north of the Hohe Wand. Their depositional area can be assigned to an area „south” of the Wetterstein platform of the Schneeberg Nappe.

Stop 2: Kaiserbrunn, Vienna Water Supply.

Visit of the tapping of Kaiserbrunn Spring.

For some datas see chapter „The Water Supply of Vienna”.