Stop 7: Hohe Wand - roadside outcrop near Herrgottschnitzer Hütte.

Dachstein Limestone, Upper Triassic (Norian) carbonate platform, reef facies.

The Hohe Wand is the easternmost carbonate plateau mountain of the NCA with altitudes up to 1100 m. It is part of the Juvavic Nappe System and consists mainly of Upper Triassic carbonates. In the northwest it is thrusted over the Jurassic Allgäu Formation of the Tirolic Göller Nappe. On the southeastern side it is bounded by the Upper Cretaceous to Paleocene rocks (Gosau-Group) of the Grünbach-Neue Welt Syncline. In its western part it is overthrusted by some Juvavic outliers in Upper Triassic slope- and basinal facies and by an outlier of the Schneeberg Nappe.

Although the Hohe Wand - area was mapped several times during the last century many subjects remained controversial due to complex tectonics, low stratigraphic resolution and bad outcrop situation. The narrow neighbourhood of pelagic sediments (Hallstatt Lmst.) and reefoidal limestones has led to the establishment of a separate lithologic unit, the „Wandkalk", summarizing both facies. Microfacial studies by SADATI 1981 interpreted the Wandkalk as Dachstein Limestone „being formed within an extended shallow lagoon with numerous ... small patch reefs". Unpublished results of extensive conodont research by SCHAUER have been briefly summarized by KRYSTYN et. al. 1996 - see Fig.10.

The lower part of the sequence is built by a dolomite which probably can be assigned to a Middle Triassic - Early Carnian Wetterstein carbonate platform. After a sedimentary gap due to the Carnian sealevel lowstand a massive, reddish to greyish partly dolomitized Hallstatt Limestone (50 to 150 meters) and the following thin bedded red limestone (20 m) reflect a transgressive event from Upper Carnian to Middle Norian. Upsection the pelagic influence decreased and a reefoidal limestone has been deposited. The transitional part corresponds to the „Wandkalk".
The top of the sequence is built by bedded Dachstein Limestone, deposited in a shallow subtidal lagoon. Intertidal Lofer facies is not developed.

The massive Dachstein Limestone with reefoidal biota (calcareous sponges, rare corals) will be visited at stop 7.

The lateral transition from the Dachstein reef to an adjacent basin is not preserved at the Hohe Wand, maybe it is burried below the Gosau sediments of the Grünbach - Neue Welt Syncline. Only one of the tectonic outliers in the western part of Hohe Wand consists of Pedata- and Pötschen Limestone. This one could originate from such an Upper Triassic platform slope as well as the other outliers represent the deposits of the Hallstatt basinal realm.

The nappe stack of the NCA dips down toward the east below the Tertiary sediments of the Vienna Basin, reaching maximal depth of about 5.600 m (top of NCA). Several drillings by OMV as well as geophysical investigations have shown the continuation of the NCA rocks and structures toward the Western Carpathians - see KRÖLL et al. 1993.