Stop 5: Florianikogel - walk on forest paths up to the hill peak.

Tectonic Klippes of Meliaticum.
Olistolites of Triassic deepwater facies within Jurassic deepwater sediments (radiolarite, shale).

Recently two occurrences of radiolarite and associated carbonates have been proved to be of Middle Triassic age - MANDL & ONDREJICKOVA 1991, 1993, KOZUR & MOSTLER 1992.
This was the first proof of a Triassic deepwater facies in the Eastern Alps, comparable to the Meliaticum of the Western Carpathians.

The sequence is tectonically embedded between Permian Prebichl conglomerates of the Werning Zone below and the Schneeberg Nappe above, having nearly the same tectonical position as the Geyerstein-Sieding Slices - see Figs. 7 and 8. Anisian so called "Flaser limestone" and rauhwackes on the northern slope of Florianikogel may be part of the Schneeberg Nappe as well as part of the Geyerstein-Sieding Slices. The latter interpretation seems more probable.

The contrast in Triassic facies between the rocks of Geyerstein-Sieding Slices, Schneeberg Nappe and Floriani Klippe points at the significance of the overthrust plane between Werning Zone and Schneeberg Nappe. This overthrust cannot be interpreted as a local and secondary post-Cretaceous backthrusting within a former sedimentary succession.

The sequence consists of dark, partly sandy shales, associated with greenish cherty shales and radiolarites of about Middle Jurassic age - radiolarians: *Acaeniotyle diaphorogona, Triactoma trigonum, Tritrabs simplex* and others.
Red radiolarites, containig Ladinian radiolarians - *Pseudostylosphaera compacta, P. japonica*, and *P. tenuis* together with *Baumgartneria retrospina* and *Eptingium manfredi* - are interpreted as olistolites within the Jurassic shales. Unfortunately no outcrop exists which exposes the contact between them.
Large bodies of a light coloured coarsegrained marble are also thought to be of olistolitic origin. In comparison with the Carpathian Meliaticum an Anisian age is assumed. The Ladinian red radiolarit locally contains breccias of a similar marble as well as of a white limestone exhibiting a Steinalm microfacies. These observations confirm the assumption above.

Basic volcanics like in the Carpathian Meliaticum have been found until now in the eastern NCA Meliata Klippes only as reworked detritus in a few thinsections. A small occurence of serpentinite has been reported in older maps in the area of Ödenhof Window, it is not exposed any more.
Larger bodies of serpentinite exist between the villages Puchberg and Höflein, embedded in Permo-Scythian evaporites, Werfen Shales and rauhwacke. The contact seems to be tectonically, the association may be interpreted as a salinar melange. The age of the serpentinite remains doubtful, the origin as a dismembered Ladinian ophiolite could not be proved until now.

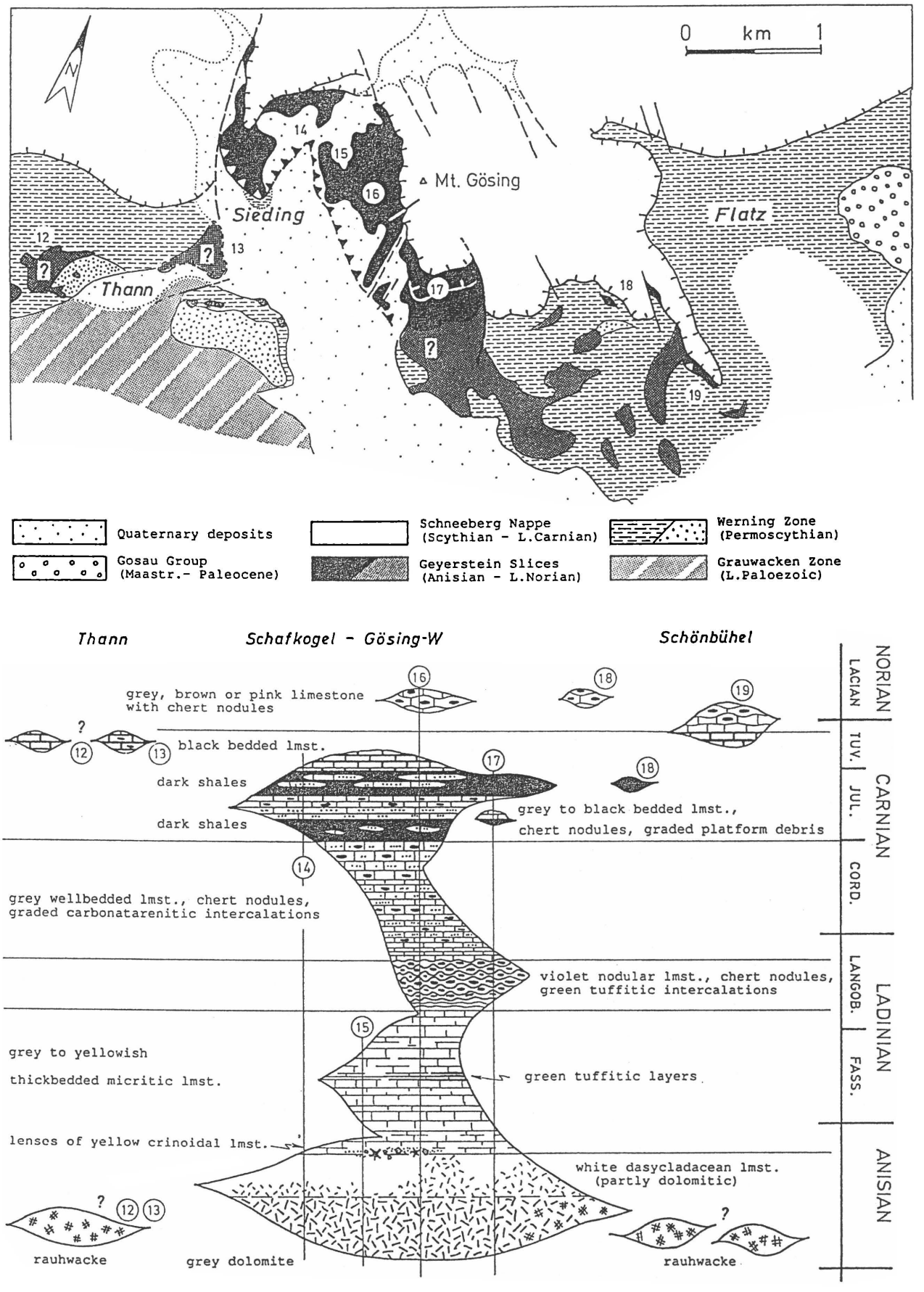

Fig. 9: Tectonic Position and Stratigraphy of the Geyerstein-Sieding Slice System in the surrounding of the Village Sieding.