

## PROPOSAL FOR A NEW SUBDIVISION OF THE NAPPE SYSTEMS OF THE NORTHERN CALCAREOUS ALPS (EASTERN ALPS, AUSTRIA).

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Eastern Alps, Northern Calcareous Alps, Nappe Systems, Geodynamic

The Northern Calcareous Alps (NCA) consist of a complex nappe stack of late Palaeozoic to Paleogene sedimentary rocks. The nappes are grouped into the Bajuvaric, Tirolic and Juvavic Nappe Systems (NS), following a proposal of the Bavarian Geologist F. Hahn (1913). The terms are still in use, although their delimitation is in discussion in some areas.

Tollmann (latest in 1985, *Geology of Austria*, volume 2) tried to trace distinct tectonic units across the NCA as a whole, following the "cylindrical" thinking of that time. Moreover, in subdividing the Juvavic NS he emphasized facial arguments in a sometimes misleading way. Therefore, his tectonic maps for the middle and eastern NCA show in some parts the presumed paleogeographic origin of, rather than the tectonic relations within, the Juvavic NS and between the Juvavic and Tirolic NS. Concerning the western NCA recent mapping has led to new discussions about the northern boundary of the Inntal nappe, including also a discussion about one of the boundaries between the Tirolic and Bajuvaric NS.

In the meantime, several authors have shown that syn- and post-tectonic sediments (especially clastics) of Jurassic and Cretaceous age can be used for tracing the deformation history as well as for characterizing tectonic units on several hierarchic levels.

Currently the Geological Survey of Austria is preparing a digital database of Geological maps (scale 1:200.000). It is used to adapt the hitherto used tectonic maps of the NCA to the recent knowledge. Several methodological approaches are combined to define clear criteria for the delimitation of tectonic units within the NCA. Special focus is on the question, if modern definitions for the traditional terms Bajuvaricum, Tirolicum and Juvavicum can be found. This will be crucial for the further use of these terms as geodynamically meaningful subunits of the Austroalpine Unit within the recent model of the Alpine orogeny.

The current state of this project will be presented as sketch maps and graphics and may be discussed at the poster session.