Middle Triassic Stratigraphy of the Swiss Prealps revisited

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The Middle Triassic in the "Médianes rigides" Nappe of the Swiss Prealps, belonging to the Briançonnais realm of the Western Alps, consists of a several hundred meters thick carbonate succession. More than 50 years ago Ellenberger (1950, 1958) proposed for it the dasycladacean biostratigraphic scheme that Baud & Mégard-Galli (1975) and Mégard-Galli & Baud (1977) followed in establishing the lithostratigraphic units. Geological mapping and a recent conodont discovery lead us to revise thoroughly the Middle Triassic stratigraphy of the Swiss Prealps (Baud et al., submitted). At the localities Wiriehorn and Rothorn, about 600 m above the basal thrust, the *Costatoria goldfussi* limestone, a remarkable coquina and widespread transgressive marker bed, yields the key conodont *Sephardiella truempyi* (HIRSCH), a proxy for the Curionii - lower Gredleri ammonoid Zones (Early Ladinian). This remarkable *Costatoria goldfussi* coquina is a widespread marker bed that corresponds to the main flooding surface (MFS) of the large marine transgression. It is correlated biostratigraphically to the now well-dated Upper Muschelkalk transgression in Provence, Sardinia and Spain and with the basal Ladinian type locality at Bagolino in the Southern Alps.

This new correlation has deep implications on the age of the different Triassic formations in the Swiss Prealps:  
- Late Anisian. Below the *S. truempyi* level, the Wiriehorn Formation, a mighty platform carbonate sequence, is built up by 2 members, the Wildgrimmi Member, a set of restricted upwards-shallowing carbonate para-sequences, 20 to 50 m thick ("calcaires rubanés") and the Bodeflue Member a 20 to 80 m thick peritidal regressive dolostone ("Dolomies claires ou cendrées") ending with mud-cracks beds. The coeval Champcella Formation in the Brianconnais realm is consequently also reassigned to the Late Anisian.  
- Ladinian. The newly proposed Pralet Formation comprises the Balmi Member with the Lower Ladinian *Costatoria goldfussi* limestone at its base, followed by the dolomitic breccias of the Erpilles Member.  
This revisited Middle Triassic Stratigraphy of the ""Médianes rigides"" thrust sheet is summarized in the Fig. 1.

REFERENCES
Figure 1. New composite section of the Middle Triassic sediments of the Western Swiss Prealps ("Medianes rigides"). In red, the position of the remarkable "goldfussi" coquina unit. Main flooding surface: -mfs. Numerical age according to the Triassic time chart, in Ogg et al. (2016).