

## Plotta Formation

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Österreichische Karte 1:50.000

Blatt BMN 197 Kötschach

Blatt BMN 198 Weißbriach

Blatt UTM 3109 Oberdrauburg

Blatt UTM 3110 Kötschach-Mauthen

Blatt UTM 3116 Sonnenalpe Naßfeld

Carta Topografica d'Italia 1:50.000

Foglio 018 Passo di Monte Croce Carnico

Foglio 031 Ampezzo

Foglio 032 Tolmezzo

### Definition

Discontinuous silcrete layers (hard grounds), weakly bedded breccia or massive and laminated chert at places enriched in mineralization of Cu and Pb.

### Description

The Plotta Formation is mainly composed of white, grayish or blackish porous chert. Locally, at its base, a thin breccia layer is developed. It is composed by small subrounded limestone clasts, angular relict chert fragments and dark siliceous crust.

### Fossil content

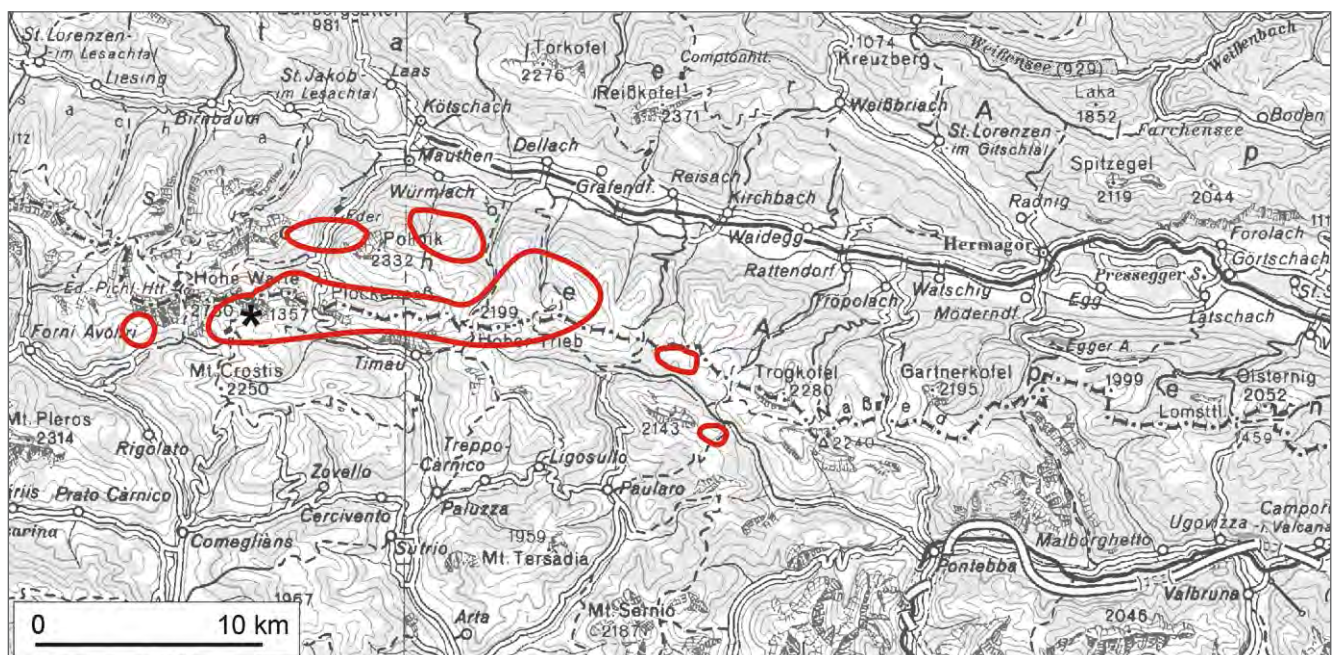
No autochthonous fossil content, mixed conodont faunas of various ages, goniatites and trilobites from the underlying limestone are present.

### Depositional environment

Paleokarstic environment due to subaerial exposure; hard grounds?

### Stratotype

Cima Plotta Section (SCHÖNLAUB et al., 1991), at coordinates N 46°35'40.57", E 12°54'26.37".



Areas of outcrop of the Plotta Formation with indication of the stratotype (asterisk).



The Plotta Section. a) log of the section (modified after SCHÖNLAUB & KREUTZER, 1993); b) view of the section in the field (photo H.P. SCHÖNLAUB).

## Reference sections -

### Type area

Central Carnic Alps.

### Main outcrop areas

The Plotta Formation crops out mainly in the Rifugio Marinelli area; scattered, patchy outcrops are found in several localities between Monte Croce Carnico/Plöcken Pass and Mt. Pal Grande/Grosser Pal, and in the Mt. Zermula area to the east.

### Thickness

Very variable, from a few centimetres to a maximum of 7 m.

### Boundaries

*Underlying units* – Polinik Formation, Kellergrat Formation, Pal Grande Formation (unconformable contacts).

*Overlying units* – Hochwipfel Formation (unconformable contact).

*Lateral units* – Pal Grande Formation.

### Derivation of name

After Cima Plotta.

### Synonymy

Lydite: SCHÖNLAUB (1980).

Plotta Formation: SCHÖNLAUB et al. (1991).

Radiolarian chert: VENTURINI & SPALLETTA (1998).

Plotta Lydite: SCHÖNLAUB et al. (2004).

Plotta-Lydit/Plotta Lydite: SUTTNER (2014).





Views of the Plotta Formation in the field. a) in the Rifugio Marinelli area (photo C. SPALLETTA); b) at Pal Grande (photo M. PONDRELLI); c) near Casera Pal Grande di Sotto (photo M. PONDRELLI).

## Chronostratigraphic age

(?) Devonian – (?) Carboniferous: (?) topmost Famennian to (?) Tournaisian (SCHÖNLAUB & KREUTZER, 1993).

## Biostratigraphy -

## Complementary references -

## Remarks -

## References

- SCHÖNLAUB, H.P. (1980): Carnic Alps. Field Trip A. with contributions from JAEGER, H., HOUSE, M.R., PRICE, J.D., GÖDDERTZ, B., PRIEWALDER, H., WALLISER, O.H., KŘÍŽ, J., HAAS, W. & VAI, G.B. – In: SCHÖNLAUB, H.P. (ed.): Second European Conodont Symposium, ECOS II, Guidebook, Abstracts. – *Abhandlungen der Geologischen Bundesanstalt*, **35**, 5–57, Wien.
- SCHÖNLAUB, H.P. & KREUTZER, L.H. (1993): Lower Carboniferous Conodonts from the Cima di Plotta Section (Carnic Alps, Italy). – *Jahrbuch der Geologischen Bundesanstalt*, **136/1**, 247–269, Wien.
- SCHÖNLAUB, H.P., KLEIN, P., MAGARITZ, M., RANTITSCH, R.G. & SCHARBERT, S. (1991): Lower Carboniferous Paleokarst in the Carnic Alps (Austria, Italy). – *Facies*, **25**, 91–118, Erlangen.
- SCHÖNLAUB, H.P., HISTON, K. & POHLER, S. (2004): The Palaeozoic of the Carnic Alps. – In: SCHÖNLAUB, H.P. (ed.): *Field Trip Carnic Alps Guidebook*. June 23–24, 2004, Carinthia, Austria. – *Geologische Bundesanstalt*, 2–32, Wien.
- SUTTNER, T.J. (2014): Plotta-Lydit/Plotta Lydite. – In: PILLER, W.E. (ed.): *The lithostratigraphic units of the Austrian Stratigraphic Chart 2004 (sedimentary successions)*, Vol. I – The Paleozoic Era(them). – *Abhandlungen der Geologischen Bundesanstalt*, **66**, 80, Wien.
- VENTURINI, C. & SPALLETTA, C. (1998): Remarks on the Palaeozoic stratigraphy and the Hercynian tectonics of the Palaeocarnic Chain (Southern Alps). – In: PERRI, M.C. & SPALLETTA, C. (eds.): *Southern Alps Field Trip Guidebook*. Seventh International Conodont Symposium held in Europe. – *Giornale di Geologia, Special Issue*, **60**, 69–88, Bologna.