

Himmelberg Formation

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Österreichische Karte 1:50.000
Blatt BMN 197 Kötschach

Carta Topografica d'Italia 1:50.000
Foglio 018 Passo di Monte Croce Carnico
Foglio 032 Tolmezzo

Blatt UTM 3109 Oberdrauburg
Blatt UTM 3110 Kötschach-Mauthen
Blatt UTM 3116 Sonnenalpe Naßfeld

Definition

Massive to well-bedded predominantly grayish sandstones and arenaceous shales with subordinate conglomeratic intercalations. Upward the clastics grade into more calcareous strata.

Description

Massive to well bedded grayish, greenish and reddish sandstones and arenaceous shales interbedded locally with conglomeratic layers and cross-bedded sandstones. These basal clastics gradually change upward into more calcareous sandstones with lense-like limestone intercalations of crinozoan debris.

Fossil content

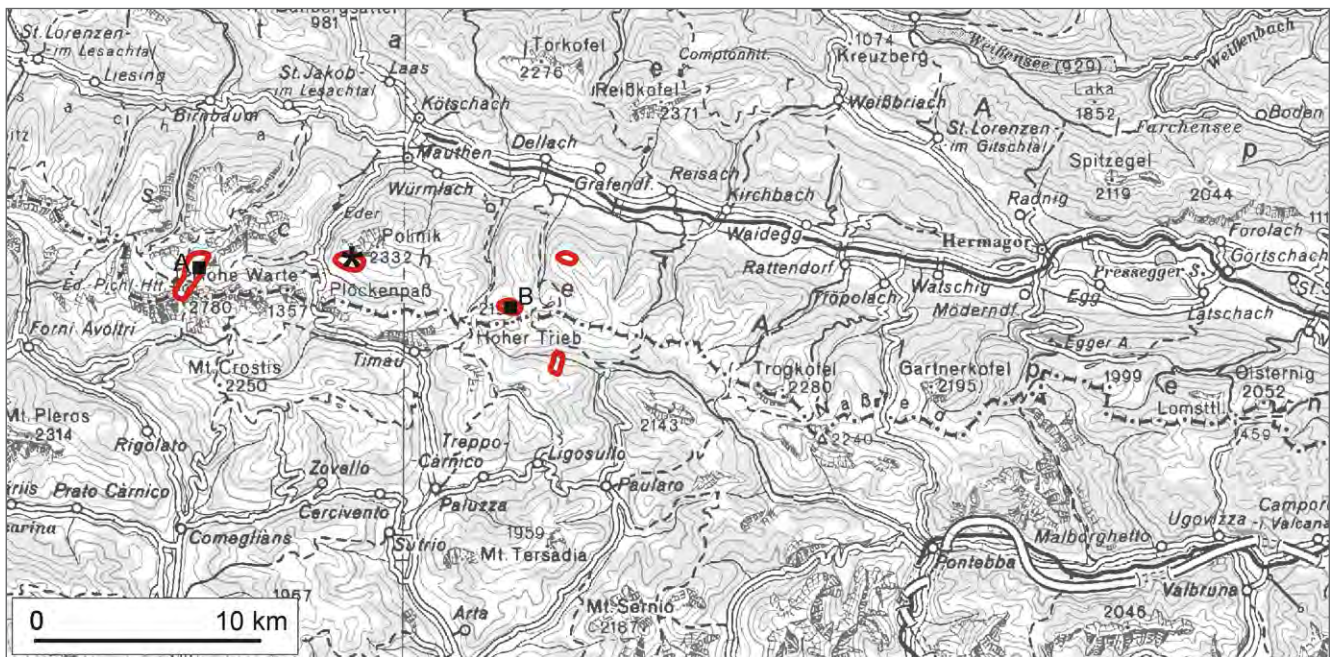
Brachiopods, bryozoans, echinoderms.

Depositional environment

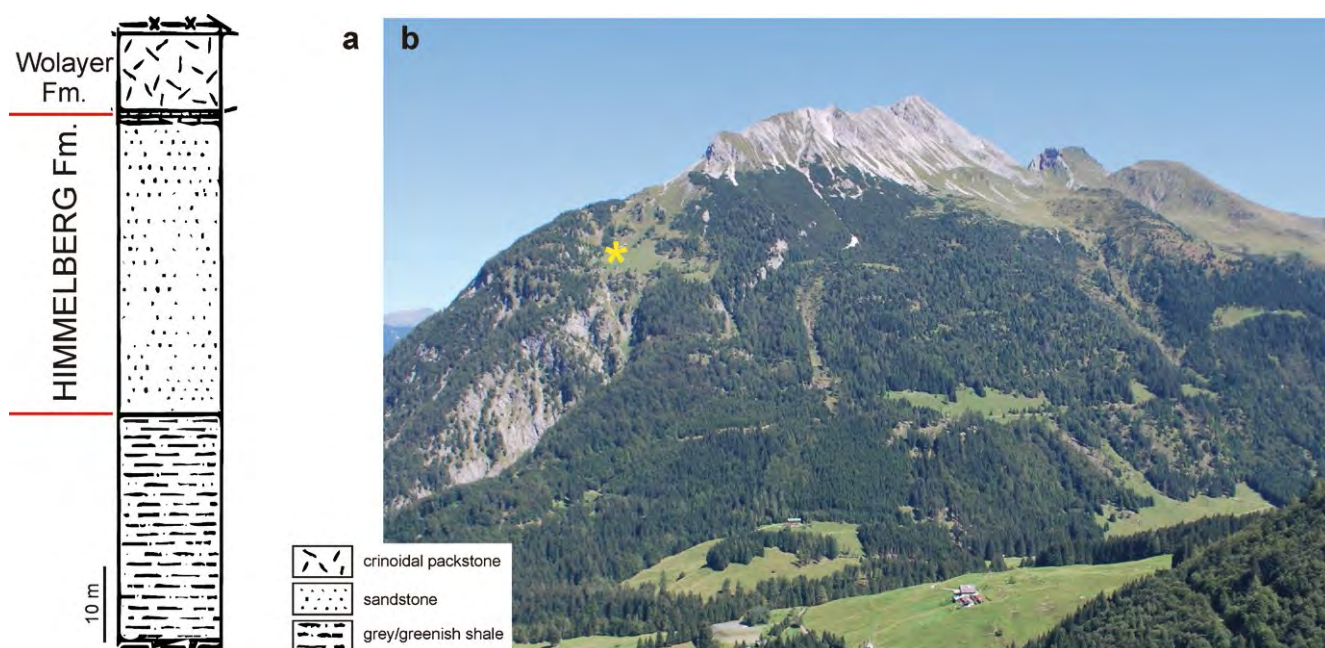
Shallow marine siliciclastics (SCHÖNLAUB, 1971).

Stratotype

Upper Himmelberg Alm Section, west of Mount Polinik (SCHÖNLAUB, 1985a, b), at coordinates N 46°37'36", E 12°58'00".



Areas of outcrop of the Himmelberg Formation with indication of the stratotype (asterisk) and reference sections (squares). A: Rauchkofel section; B: Hoher Trieb section.



The Himmelberger Alm Section. a) log of the section (modified after SCHÖNLAUB, 1970); b) panoramic view of Mt. Polinik, with indication of Himmelberger Alm (asterisk) (photo M. PONDRELLI).

Reference sections

Rauchkofel Section (SCHÖNLAUB, 1971, 1985a), on the southern slope of Mt. Rauchkofel at coordinates N 46°36'55", E 12°52'31", where, compared with the stratotype, shallower deposition is evident.

Hoher Trieb Section (SCHÖNLAUB, 1969), north of Mt. Hoher Trieb/Cuestalta at coordinates N 46°36'02", E 13°03'11", where limestones are interbedded within the clastic sequence.

Type area

Central Carnic Alps.

Main outcrop areas

Himmelberger Alm (SCHÖNLAUB, 1985a), base of Mount Seekopf, Rauchkofel-Boden, Hoher Trieb, Rio Cercevesa (VENTURINI et al., 2002).

Thickness

Approx. 60 m.

Boundaries

Underlying units – ?

Overlying units – Wolayer Formation (conformable contact).

Lateral units – Fleons Formation, Valbertad Formation.

Derivation of name

After Himmelberg Alm west of Mount Polinik (GAERTNER, 1931).



Cross-bedded siliciclastics (sandstones) of the Himmelberg Formation on upper Rauchkofelboden along the trail (2150 m) from Lake Wolayer Hut to Mt. Rauchkofel (Photo H.P. SCHÖNLAUB).

Synonymy

Himmelberger Quarzit: GAERTNER (1931).

Formazione dell'Himmelberger Alm: SELLI (1963).

Dolomitische Sandsteine: SCHÖNLAUB (1969).

Wechsellagerung Echinodermatenkalke-Karbonatsandsteine: SCHÖNLAUB (1969).

Siltiti, arenarie e biocalcareniti: MANARA & VAI (1970).

Biocalcarénites Quartzseuses: VAI (1971).

Himmelberger Sandstein: SCHÖNLAUB (1971); DULLO (1992).

Himmelberg-Sandstein/Sandstone: SUTTNER et al. (2014).

Chronostratigraphic age

(?) Ordovician: Not well dated yet. A Katian age is inferred from the overlying fossiliferous Wolayer Formation.

Biostratigraphy -

Complementary references -

Remarks -

References

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