

Genovevakreuz Member: Brownish to grey flaser limestones and nodular limestones; about 10 m in thickness.  
Lend Member: Red to violet sometimes brecciated dolomites and dolomitic phyllites and platy limestones; known only from temporarily exposed subsurface outcrops.  
Thalwinkel Member: Red to violet cephalopod limestones; up to 30 m in thickness.

**Underlying unit(s):** Kehr Formation.

**Overlying unit(s):** Parmasegg Formation.

**Lateral unit(s):** -

**Geographic distribution:** Styria, highland in the surroundings of Graz; ÖK50-BMN, map sheet 163 Voitsberg, 164 Graz.

**Remarks:** -

**Complementary references:** HUBMANN & MESSNER (2005, 2007), HUBMANN & SUTTNER (2007), HISTON et al. (2010), EBNER & HUBMANN (2012).

### Bameder-Formation / Bameder Formation

BERNHARD HUBMANN

**Validity:** Valid; first description by EBNER (1989: "Bameder-Formation"); formalized by EBNER (1998: p. 129–130).

**Type area:** ÖK50-UTM, map sheet 4228 Voitsberg (ÖK50-BMN, map sheet 163 Voitsberg).

**Type section:** Not defined, but EBNER (1998) proposed a type region at Bamederkogel (1,160 m) (N 47°11'45" / E 15°12'20") west of village Groß-Stübing (ÖK50-BMN, map sheet 163 Voitsberg).

**Reference section(s):** -

**Derivation of name:** After the hill Bameder 30 km north of Graz.

**Synonyms:** Partly: Bythotrephis-Schiefer (STACHE, 1874); Neritenschiefer (PENECKE, 1894); Nereitenschiefer (HERITSCH, 1906); Scalarituba-Sandsteine (WEBER, 1990).

**Lithology:** Grey sand/siltstones and clay shales with intercalations of black platy nodular and flaser limestones.

**Fossils:** Rare solitary rugose corals.

**Origin, facies:** Intertidal to shallow subtidal environment.

**Chronostratigraphic age:** Lochkovian–Pragian.

**Biostratigraphy:** -

**Thickness:** 300–500 m.

**Lithostratigraphically higher rank unit:** Rannach Group.

**Lithostratigraphic subdivision:** EBNER (1998) distinguished 2 members, both outcropping on Bameder hill west of Groß-Stübing.

Krahfuß Member: Predominantly grey sandstones with *Scalarituba* and intercalations of dark coloured platy (crinoidal) limestones; about 150–200 m in thickness.

Spandl Member: Succession overlying the Krahfuß Member; alternating silty and clayey shales and sand/siltstones with darkgrey platy limestones; about 200–300 m in thickness.

**Underlying unit(s):** Unknown.

**Overlying unit(s):** Unknown.

**Lateral unit(s):** -

**Geographic distribution:** Styria, western parts of highland in the surroundings of Graz; ÖK50-UTM, map sheet 4228 Voitsberg (ÖK50-BMN, map sheet 163 Voitsberg).

**Remarks:** -

**Complementary references:** EBNER (2001), FLÜGEL (2000).

### Heigger-Formation / Heigger Formation

BERNHARD HUBMANN

**Validity:** Valid; first abridged description by FLÜGEL (1984) (herein: "Haiggerfolge"); formalized by FLÜGEL (2000: p. 23; Heigger-Formation).

**Type area:** ÖK50-UTM, map sheet 4228 Voitsberg (ÖK50-BMN, map sheet 163 Voitsberg).

**Type section:** No type section defined; FLÜGEL (1984, 2000) proposed an area between the western slopes of Pleschkogel (1,061 m) and Mühlbacherkogel (1,050 m) as type region (Heiggerkogel: N 47°09'34" / E 15°14'20").

**Reference section(s):** -

**Derivation of name:** After the hill Heiggerkogel (1,098 m) northwest of Rein.

**Synonyms:** Partly: Kalkschieferstufe i.w.S. (HERITSCH, 1917b, c).

**Lithology:** Light grey to brownish thin bedded limestones locally intercalated by marly clay/siltstones.

**Fossils:** Spicules, styliolids, conodonts (BUCHROITHNER, 1978).

**Origin, facies:** Shallow subtidal deposits.

**Chronostratigraphic age:** Lochkovian–Emsian.

**Biostratigraphy:** -

**Thickness:** Local strong variation in thickness; more than 100 m.

**Lithostratigraphically higher rank unit:** Rannach Group.

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Parmasegg Formation.

**Overlying unit(s):** Flösserkogel Formation.

**Lateral unit(s):** Flösserkogel Formation.

**Geographic distribution:** Styria, highland in the surroundings of Graz.

**Remarks:** Transitions from dolomitic and sandy/silty deposits of the Flösserkogel Formation into successions dominated by thin bedded limestones northwest of Pleschkogel-Heiggerkogel-Mühlbacherkogel were interpreted as transitional zone between tidal flat environments and basinal settings (FENNINGER & HOLZER, 1978) of the "Rannachfacies" (H. FLÜGEL, 1975).

**Complementary references:** EBNER (1998, 2001).

### Parmasegg-Formation / Parmasegg Formation

BERNHARD HUBMANN

**Validity:** Valid; first description by FLÜGEL (1960: "Crinoiden-Schichten"); formalized by FRITZ (1991: p. 230–233; Parmasegg Formation).

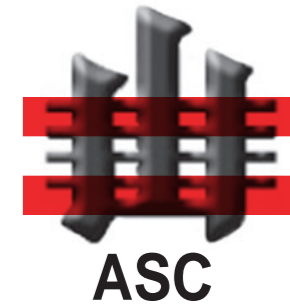
**Type area:** ÖK50-UTM, map sheet 4222 Leoben (ÖK50-BMN, map sheet 163 Voitsberg).

**Type section:** FRITZ (1991) proposed a type section at Parmaseggkogel (N 47°13'29" / E 15°28'50").

# Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



ERA	SYSTEM / PERIOD / SERIES / EPOCH	STAGE / AGE	DURATION Ma	Global Classification					
				ERATHM / ERA	SYSTEM / PERIOD / SERIES / EPOCH				
PALEOZOIC	PERMIAN	CHANGHSINGIAN / Dorashanian	251	PERMIAN	MID PERMIAN / GUADALUPIAN / LOPINGIAN				
		WUCHIAPINGIAN / Dzhulfian	255						
		CAPITANIAN	260						
		WORDIAN	265						
		ROADIAN	270						
		PERMIAN	LOWER PERMIAN / CISURALIAN			KUNGURIAN	275		
						ARTINSKIAN	280		
						SAKMARIAN	285		
						ASSELIAN	290		
		PERMIAN	UPPER PERMIAN / CARBONIFEROUS / PENNSYLVANIAN			GZHELIAN	295	PERMIAN	LOWER PERMIAN / CISURALIAN
KASIMOVIAN	300								
MOSKOVIAN	305								
BASHKIRIAN	310								
PERMIAN	UPPER PERMIAN / CARBONIFEROUS / PENNSYLVANIAN			SERPUKHOVIAN	315				
				VISEAN	320				
					325				
PERMIAN	LOWER PERMIAN / MISSISSIPPIAN			TOURNAISIAN	330	PERMIAN	LOWER PERMIAN / MISSISSIPPIAN		
				335					
				340					
		345							
		350							
		355							
		359.2							
		365							
		370							
		375							
PERMIAN	UPPER DEVONIAN	FAMENNIAN	380	PERMIAN	UPPER DEVONIAN				
		FRASNIAN	385						
		GIVETIAN	390						
		EIFELIAN	395						
		DEVONIAN	LOWER DEVONIAN			EMSIAAN	400		
						405			
		DEVONIAN	LOWER DEVONIAN			PRAGIAN	410		
						415			
		PERMIAN	MIDDLE DEVONIAN			LOCHKOVIAN	420	PERMIAN	MIDDLE DEVONIAN
						425			
430									
435									
440									
443.7									
445									
450									
455									
460									
PERMIAN	LOWER DEVONIAN	LUDFORDIAN / GORSTIAN	465	PERMIAN	LOWER DEVONIAN				
		HOMERIAN / SHEINWOOD	470						
		TELYCHIAN	475						
		AERONIAN	480						
		RHUDDANIAN	485						
		HIRNANTIAN	490						
		495							
		498.3							
		499							
		500							
PERMIAN	UPPER CAMBRIAN	PAIBIAN	505	PERMIAN	UPPER CAMBRIAN				
		510							
		515							
		520							
		525							
		530							
		535							
		540							
		542							
		CAMBRIAN	MIDDLE CAMBRIAN			TREMADOCIAN	44.6	CAMBRIAN	MIDDLE CAMBRIAN
44.6									
44.6									
44.6									
44.6									
44.6									
44.6									
44.6									
44.6									
44.6									
CAMBRIAN	LOWER CAMBRIAN	PAIBIAN	53.7	CAMBRIAN	LOWER CAMBRIAN				
			53.7						
			53.7						
			53.7						
			53.7						
			53.7						
			53.7						
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- Legend**
- pelagic, offshore, siliciclastic
  - pelagic, nearshore, calcareous
  - shallow marin, neritic
  - terrestrial-continental, coarse clastic
  - terrestrial-continental, fine clastic
  - evaporite (chloride, sulphate)
  - rhyolite, dacite
  - (basaltic) andesite, trachyandesite
  - basalt
  - phyllite
  - mixed-facies (in corresponding colors)
  - coal (may include several seams)
  - ? position/age doubtful/controversial
  - | equal units
  - \ older unit left \ younger unit right
  - hiatus
  - unconformity
  - GSSP
  - Fm. Formation
  - Ls. Limestone

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Cutout and English adaptation of the "Die Stratigraphische Tabelle von Österreich 2004": Geological Survey of Austria

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