

**Lithostratigraphically higher rank unit:** -  
**Lithostratigraphic subdivision:** -  
**Underlying unit(s):** Different units of the Kaser Group.  
**Overlying unit(s):** Rosental Formation.  
**Lateral unit(s):** -  
**Geographic distribution:** In the area of the Nockalm road; ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 183 Radenthein).  
**Remarks:** -  
**Complementary references:** NEUBAUER & PISTOTNIK (1984), LOESCHKE (1989b), SCHÖNLAUB & HEINISCH (1993).

### Rosental-Formation / Rosental Formation

BERNHARD HUBMANN

**Validity:** Invalid; name of the formation and position of the unit published within a lithostratigraphic frame in SCHÖNLAUB & HEINISCH (1993: "Rosental Fm.").  
**Type area:** ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 183 Radenthein).  
**Type section:** No type section published; type region Rosental (N 46°54'25" / E 13°48'48"), a valley in the Nockalm area. NEUBAUER & PISTOTNIK (1984) published a section (location point 1 in Fig. 1 and section 1 "Nockstrasse" in Fig. 2).  
**Reference section(s):** -  
**Derivation of name:** After Rosental in Carinthia, a valley north of Bad Kleinkirchheim.  
**Synonyms:** Partly: "Vulkanogene Basisfolgen" of NEUBAUER & PISTOTNIK (1984).  
**Lithology:** Phyllites with various ferruginous dolomites and cherty intercalations that are overlain by tuffites and greenschists.  
**Fossils:** Conodonts.  
**Origin, facies:** Probably shallow marine environment.  
**Chronostratigraphic age:** Upper Ordovician.  
**Biostratigraphy:** -  
**Thickness:** ?  
**Lithostratigraphically higher rank unit:** -  
**Lithostratigraphic subdivision:** -  
**Underlying unit(s):** Units of the Nock Group.  
**Overlying unit(s):** ?Eisenhut Group.  
**Lateral unit(s):** -  
**Geographic distribution:** Along the Nockalm road in the area of the Rosentaler Alm up to an altitude of 1,800 m; ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 183 Radenthein).  
**Remarks:** -  
**Complementary references:** -

### Eisenhut-Gruppe / Eisenhut Group

BERNHARD HUBMANN

**Validity:** Invalid; first nomination by PETERS (1855: "Eisenhut-Schieferserie"), comprehensive description by KERNER & LOESCHKE (1991: "Eisenhutschiefer").

**Type area:** ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 184 Ebene Reichenau).

**Type section:** No type section defined; typical rocks are exposed at Eisenhut mountain (N 46°57'08" / E 13°55'42") (see sections in KERNER (1990) and KERNER & LOESCHKE (1991)).

**Reference section(s):** -

**Derivation of name:** After Eisenhut (2,441 m), a mountain near Turracher Höhe, approximately 65 km northwest of Klagenfurt.

**Synonyms:** Eisenhut-Schieferserie (PETERS, 1855); Eisenhutschiefer (SCHWINNER, 1932, 1938); Eisenhut-Schiefer (IIIb) (SCHWINNER, 1936); Eisenhutschiefer (HERITSCH, 1943; SCHÖNLAUB, 1979; KERNER & LOESCHKE, 1991); Eisenhutschiefer der Turracher Höhe (SCHÖNLAUB, 1979); "Eisenhutschiefer partim" (FLÜGEL & NEUBAUER, 1984); Eisenhutschieferserie (MULFINGER, 1988); volcanoclastic Eisenhut Group (SCHÖNLAUB & HEINISCH, 1993).

**Lithology:** Weakly metamorphosed lila-colored ash tuffs, dark-green hyaloclastites and green tuffites, dolomite lenses.

**Fossils:** Conodonts within the dolomite lenses.

**Origin, facies:** According to KERNER & LOESCHKE (1991) the formation of most of the rocks of the Eisenhut Group is the result of intra-plate volcanic activity which occurred in a tensional tectonic regime on thinned continental crust during the Silurian. Phreatomagmatic processes were responsible for the formation of the tuffs and hyaloclastites.

**Chronostratigraphic age:** Lower Silurian–(presumably) Lower Devonian.

**Biostratigraphy:** -

**Thickness:** About 200 m.

**Lithostratigraphically higher rank unit:** -

**Lithostratigraphic subdivision:** -

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

**Overlying unit(s):** ?

**Lateral unit(s):** Murau Group (?).

**Geographic distribution:** Gurktal mountains; ÖK50-BMN, map sheet 184 Ebene Reichenau.

**Remarks:** -

**Complementary references:** -

### „Klastische Gruppe“ / "Clastic Group"

BERNHARD HUBMANN

**Validity:** Invalid; comprehensive description of the unit by MULFINGER (1988: "Klastische Serie").

**Type area:** ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 184 Ebene Reichenau).

**Type section:** No type section defined; MULFINGER (1988) mentioned typical occurrences at Rapitzsattel (2,088 m; N 46°55'56" / E 13°56'35"), Torer and Spielriegel to Schafferalm (1,365 m; N 46°58'10" / E 14°00'14").

**Reference section(s):** -

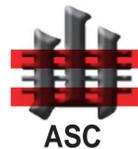
**Derivation of name:** Collective name for a unit built up by various clastic rocks.

**Synonyms:** Klastische Serie (MULFINGER, 1988).

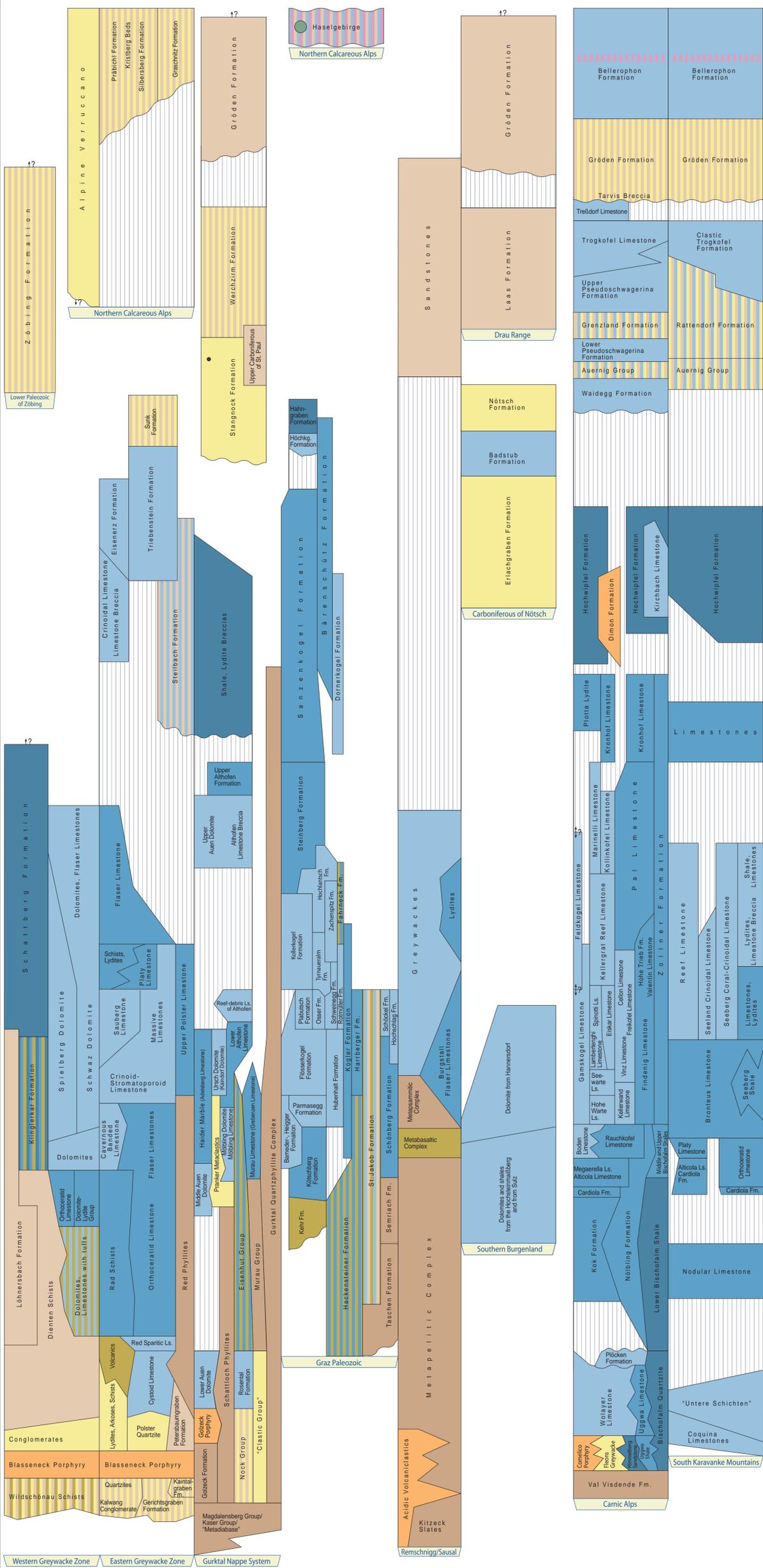
# Austrian Stratigraphic Chart 2004 - Paleozoic

(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	MIDDLE DEVONIAN			Dalejian	400		
						405			
		DEVONIAN	LOWER DEVONIAN			EMSIAN	410		
						415			
		PERMIAN	LOWER DEVONIAN			Zlichovian	420	PERMIAN	LOWER DEVONIAN
						PRAGIAN	425		
LOCHKOVIAN	430								
435									
440									
443.7									
445									
450									
455									
460									
PERMIAN	UPPER ORDOVICIAN	LUDFORDIAN / GORSTIAN	465	PERMIAN	UPPER ORDOVICIAN				
		HOMERIAN / SHEINWOOD	470						
		TELYCHIAN	475						
		AERONIAN	480						
		RHUDDANIAN	485						
		HIRNANTIAN	490						
		495							
		498.3							
		499							
		500							
PERMIAN	MIDDLE ORDOVICIAN	DARRIWILIAN	505	PERMIAN	MIDDLE ORDOVICIAN				
		510							
		515							
		520							
		525							
		530							
		535							
		540							
		542							
		PERMIAN	LOWER ORDOVICIAN			TREMA-DOCIAN	545	PERMIAN	LOWER ORDOVICIAN
550									
555									
560									
565									
570									
575									
580									
585									
590									
PERMIAN	UPPER CAMBRIAN	PAIBIAN	595	PERMIAN	UPPER CAMBRIAN				
		600							
		605							
		610							
		615							
		620							
		625							
		630							
		635							
		640							
PERMIAN	MIDDLE CAMBRIAN	PAIBIAN	645	PERMIAN	MIDDLE CAMBRIAN				
			650						
			655						
			660						
			665						
			670						
			675						
			680						
			685						
			690						
PERMIAN	LOWER CAMBRIAN	PAIBIAN	695	PERMIAN	LOWER CAMBRIAN				
			700						
			705						
			710						
			715						
			720						
			725						
			730						
			735						
			740						



- 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

The Austrian Stratigraphic Chart 2004 - Paleozoic is a supplement of:  
 Hubmann, B., Ebner, F., Ferretti, A., Kido, E., Krainer, K., Neubauer, F., Schönlaub, H.-P. & Suttner, T.J. (2014): The Paleozoic Era (them), 2<sup>nd</sup> edition. - In: Pillner, W.E. (Ed.): The lithostratigraphic units of the Austrian Stratigraphic Chart 2004 (sedimentary successions) - Vol. 1 - Abhandlungen der Geologischen Bundesanstalt, 66, 9-133, Wien.

Printing: Grasl Druck & Neue Medien GmbH, Bad Vöslau 2014

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