Mount Findenig (N 46°35'42" / E 13°06'14"), Achomitz-Unoka section in the eastern Carnic Alps, Kokragraben near Pöckau, Feistritzgraben and Korpitschgraben, Rio Chianaletta, Casera Collinetta di Sotto, Casera Collinetta di Sopra, Monte Cavallo, Creta di Rio Secco (SCHÖNLAUB, 1985a; KRAINER, 1992); according to MOSHAMMER (1989) sediments of the Hochwipfel Formation can be found in the Karavanke Mountains in the area of the Trögen Klamm at the Smertnik-Bach and section-group E (N 46°28'00" / E 14°30'30").

Derivation of name: After the Mountain Hochwipfel (KREUTZER, 1992a: p. 270).

Synonyms: Hochwipfelschichten (KAHLER & METZ, 1955); Unter-Karbon-Flysch (TESSENSOHN, 1968); Flysch (KUPSCH et al., 1971: Figs. 2, 3, p. 96).

Lithology: Turbidite sequence consisting of graded sandstones alternating with siltstone and shale, siliceous shale, lydites (breccias and conglomerates), tuffs.

Fossils: Plants, spores.

Origin, facies: Marine siliciclastics (flysch), pelagic unit (Distal Siliciclastic Facies).

Chronostratigraphic age: Tournaisian–Visean.

Biostratigraphy: *anchoralis* to *texanus* conodont zones.

Thickness: > 1,000 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Plotta Lydite, Kronhof Limestone and the Zollner Formation in the Carnic Alps and "Limestones" in the Karavanke Mountains (all units mentioned: unconformable contact which equates with the Variscan Event).

Overlying unit(s): Waidegg Formation in the Carnic Alps and Auernig Group in the Karavanke Mountains (all units mentioned: unconformable contact which equates with the Variscan Event).

Lateral unit(s): Dimon Formation, Kirchbach Limestone.

Geographic distribution: Carnic Alps, Karavanke Mountains.

Remarks: -

Complementary references: FRECH (1894b), FRANCAVILLA (1966), PÖLSLER (1967, 1969a), TESSENSOHN (1971, 1983), GEDIK (1974), SCHÖNLAUB (1979, 1980b, 1982c, 1982d, 1984b, 1991, 1997, 1998), HUNGER (1984), KREUTZER & SCHÖNLAUB (1984), KREUTZER (1990), PERRI & SPALLETTA (1998a, d), VAI (1998), SCHÖNLAUB & HISTON (1999, 2000), MADER & NEUBAUER (2004), SCHÖNLAUB & FORKE (2007), KUTTEROLF et al. (2008).

Dimon-Formation / Dimon Formation

THOMAS J. SUTTNER

Validity: Valid (SPALLETTA et al., 1980).

Type area: ÖK50-UTM, map sheet 3109 Oberdrauburg (ÖK50-BMN, map sheets 196 Obertilliach, 197 Kötschach).

Type section: Monte Dimon (SPALLETTA et al., 1980), N 46°34'03" / E 13°03'26".

Reference section(s): Section along the road from Paularo to Casera Ramaz in the Chiarso valley (PELLIZZER & TOMADIN, 1962; LÄUFER et al., 1993), Plenge (N 46°39'04" / E 12°54'03"), between Kreuzleitenjoch and Nostra Alm, south of the Stallonkofel (SCHÖNLAUB, 1985a).

Derivation of name: After Mount Dimon.

Synonyms: Plengeserie (GAERTNER, 1931); Plenge-Dimon Formation (SCHÖNLAUB, 1979); Plenge-Formation (SCHÖNLAUB, 1985a).

Lithology: Pillow lavas and breccias, volcanoclastic sediments, green and red argilites (PELLIZZER & TOMADIN, 1962; LÄUFER et al., 1993).

Fossils: -

Origin, facies: Volcanites and volcaniclastic deposits.

Chronostratigraphic age: Visean; according to VAI (1998) the formation is of Bashkirian age.

Biostratigraphy: -

Thickness: approx. 300 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Kronhof Limestone (unconformable contact).

Overlying unit(s): Waidegg Formation (unconformable contact which equates with the Variscan Event).

Lateral unit(s): Hochwipfel Formation.

Geographic distribution: Carnic Alps.

Remarks: -

Complementary references: FRECH (1894b), PÖLSLER (1967), KRAINER (1992), SCHÖNLAUB et al. (1992, 2004), SCHÖNLAUB (1997, 1998), VENTURINI & SPALLETTA (1998), SCHÖNLAUB & HISTON (1999, 2000), VENTURINI (2006), SCHÖNLAUB & FORKE (2007).

Kirchbach-Kalk / Kirchbach Limestone

THOMAS J. SUTTNER

Validity: Invalid; first described by PÖLSLER (1967); further description and fossil data by SCHÖNLAUB (1985a: p. 44), FLÜGEL & SCHÖNLAUB (1990) and AMLER et al. (1991).

Type area: ÖK50-UTM, map sheets 3109 Oberdrauburg, 3110 Kötschach-Mauthen, 3116 Sonnenalpe Naßfeld (ÖK50-BMN, map sheets 197 Kötschach, 198 Weißbriach).

Type section: -

Reference section(s): Plöckentunnel, Hochwipfel (SCHÖNLAUB, 1985a), N 46°35'40" / E 13°10'35".

Derivation of name: After the village of Kirchbach.

Synonyms: Kalke in den Hochwipfelschichten (PÖLSLER, 1967: p. 40).

Lithology: Micritic, light grey nodular limestone; it occurs only in lenticular bodies which laterally grade into silty shale.

Fossils: Conodonts, crinoids.

Origin, facies: Marine limestone, neritic unit.

Chronostratigraphic age: Visean.

Biostratigraphy: According to SCHÖNLAUB (1985a), the conodont assemblage points to Visean age; no distinct conodont zone is mentioned.

Thickness: 8–10 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Hochwipfel Formation (unconformable contact?).

Overlying unit(s): Hochwipfel Formation (unconformable contact?).

Lateral unit(s): Hochwipfel Formation.

Geographic distribution: Carnic Alps.

Remarks: -

Complementary references: KRAINER (1992), SCHÖNLAUB et al. (1992, 2004), SCHÖNLAUB (1997), SCHÖNLAUB & HISTON (1999, 2000), SCHÖNLAUB & FORKE (2007).

Post-Variscan Sequence

Waidegg-Formation / Waidegg Formation

HANS P. SCHÖNLAUB

Validity: Valid; first denomination and formalization by SCHÖNLAUB (1985a: p. 46). Note that SCHÖNLAUB & FORKE (2005: p. 17) renamed the formation in Collendiaul Formation.

Type area: ÖK50-UTM, map sheet 3110 Kötschach-Mauthen (ÖK50-BMN, map sheet 197 Kötschach), Carnic Alps, Carinthia.

Type section: Outflow of Lake Zollner to the west forming a waterfall and a cliff at approx. 1,760 m (N 46°36'13" / E 13°04'39").

Reference section(s): -

Derivation of name: After the ridge west of Lake Zollner (Italian: "Collen") in the Gail Valley between Hermagor and Kötschach-Mauthen.

Synonyms: Waidegger Gruppe (pars) (FENNINGER et al., 1971) exposed at the northern part of the "Waschbühel" ridge east of Waidegger Alm.

Remarks: In Austrian literature, the basal "Auernig beds" (Auernigschichten sensu HERITSCH et al., 1934) have long been described as "Waidegger Group" (FENNINGER et al., 1971). Consequently, SCHÖNLAUB (1985a: p. 46) has defined the Waidegg Formation with the type locality at the outflow of the Lake Zollner. However, the term Waidegger Group has always been intimately connected with the "Waidegger Fauna" (HERITSCH, 1934; HERITSCH et al., 1934; METZ, 1936; GAURI, 1965), which occurs in siltstones of the basal Auernig Formation and is therefore not part of the Waidegg Formation. To avoid further confusion about the lithologic subdivision and the fossil content, the new name "Collendiaul Formation" has been introduced by SCHÖNLAUB & FORKE (2005: p. 17). VENTURINI (1990a), when describing the basal conglomerates and breccias below the Auernig Formation (= Bombaso Formation), introduced the term "Pramollo Member" as part of the "Bombaso Formation". However, the type section of the "Pramollo Member" of the "Bombaso Formation" at the southern foothill of Auernig Mountain in fact represents sediments of the pre-Variscan Hochwipfel Formation. They are not equivalent to the basal conglomerates and breccias at Lake Zollner.

Lithology: Up to 20 m thick lydite breccias and conglomerates which are clast-supported in the lower and matrix-supported in the upper part.

Fossils: The coarse breccia and conglomerate contain no fossils except at the transition to the overlying pebble-bearing beds where some crinoids and gastropods occur.

Origin, facies: According to KRAINER (1992) and VENTURINI (1990a, b) these rocks are interpreted as alluvial fan deposits at the transition to an offshore beach environment.

Chronostratigraphic age: Since direct fossil evidence is missing, the age can only be inferred from conodonts and fusulinids occurring in the overlying beds. They indicate an equivalent of the lower Kasimovian Stage (FORKE & SAMANKASSOU, 2000; SCHÖNLAUB & FORKE, 2007). At locality Tomritsch in the basal deposits also plants of Cantabrian age occur suggesting an overall late Moscovian to early Kasimovian age for the formation of the Waidegg Formation (Collendiaul Formation).

Biostratigraphy: In the basal Auernig Fm. fusulinds (*Protriticites permirus, Beedeina asiatica*) and *conodonts* (*Idiognathodus* cf. *expansus, Swadelina ?* aff. *makhlinae*) indicate lower Kasimovian.

Thickness: Approximately 20 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Bischofalm and Zollner Formations (Silurian to Devonian). An unconformity separates the post-Variscan Waidegg Formation from the underlying pre-Variscan basement (FENNINGER et al., 1976; SCHÖNLAUB, 1985a).

Overlying unit(s): Auernig Formation.

Lateral unit(s): Malinfier Formation (VENTURINI, 1982) and Auernigalm Limestone Breccia (VENTURINI 1990a, b; SCHÖNLAUB & FORKE, 2005) (both not indicated in the ASC 2004).

Geographic distribution: Carnic Alps, Naßfeld and Zollner region across the Austrian/Italian border.

Remarks: -

Complementary references: -

Auernig-Gruppe / Auernig Group

HANS P. SCHÖNLAUB

Validity: Invalid; the name "Auernigschichten" was introduced by FRECH (1894b).

Type area: ÖK50-UTM, map sheet 3116 Sonnenalpe Naßfeld and 3110 Kötschach-Mauthen (ÖK50-BMN, map sheets 197 Kötschach, 198 Weißbriach), central Carnic Alps extending on both sides of the state border between Garnitzen gorge, Naßfeld and Lake Zollner.

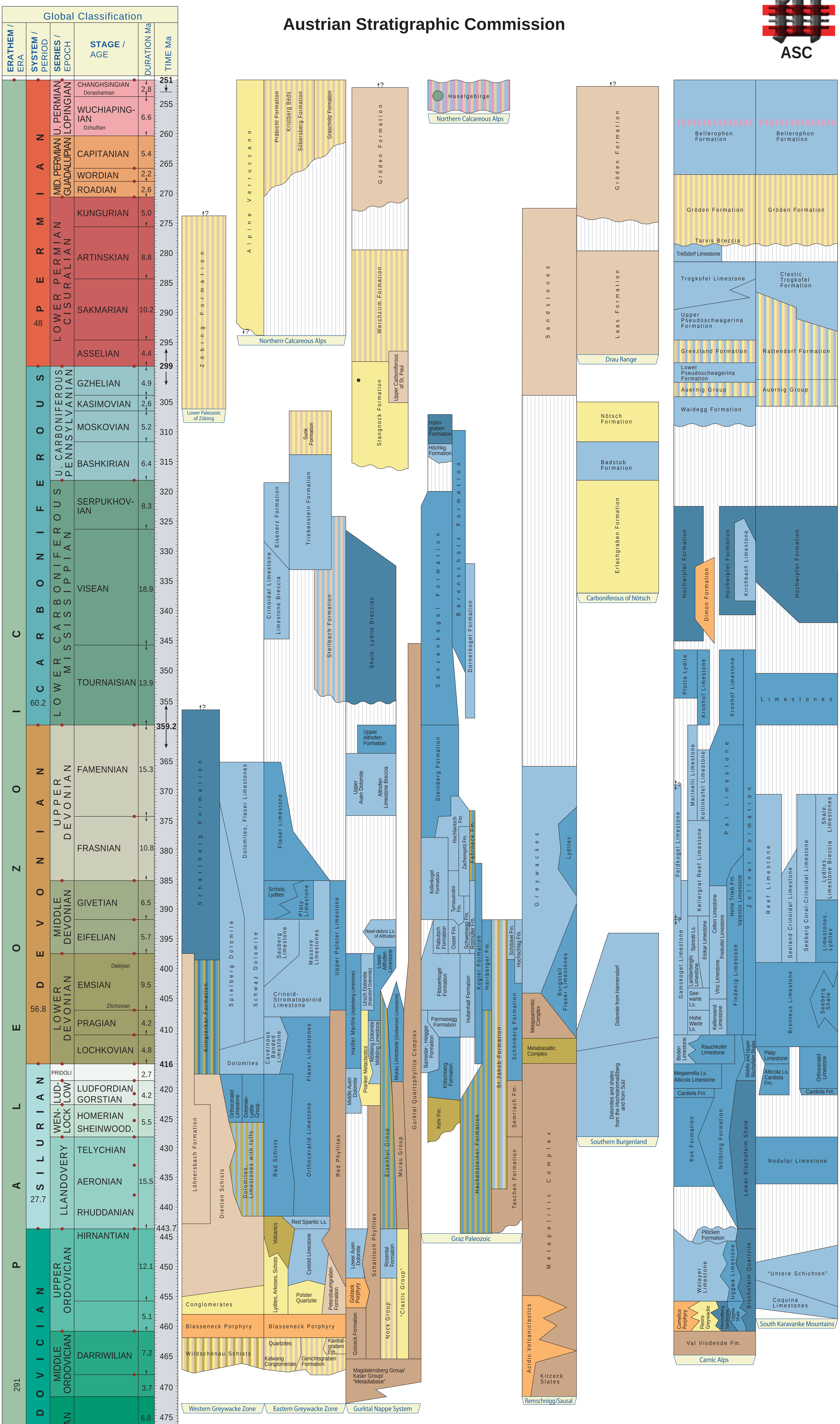
Type section: No continuous section is known through the whole succession. FORKE et al. (2006) proposed for the lower parts the "Waschbühel" ridge in the vicinity of the Waidegger Alm (N 46°35'39" / E 13°07'02"), for the middle parts the Naßfeld region above the Watschiger Alm, and for its upper parts the ridge from Gugga to Garnitzen south of Watschiger Alm (N 46°33'37" / E 13°17'53") as type sections.

Reference section(s): -

Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



Legend

	pelagic, offshore, siliciclastic	•	coal (may include several seams)
	pelagic, nearshore, calcareous	?	position/age doubtful/controversial
	shallow marin, neritic		equal units
	terrestrial-continental, coarse clastic	\	older unit left \ younger unit right
	terrestrial-continental, fine clastic		hiatus
	evaporite (chloride, sulphate)		unconformity
	rhyolite, dacite	•	GSSP
	(basaltic) andesite, trachyandesite		
	basalt	Fm.	Formation
	phyllite	Ls.	Limestone
	mixed-facies (in corresponding colors)		

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:
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