

**Synonyms:** Schwazer Dolomit (PICHLER, 1860; PIRKL, 1961); Spielberg-Dolomit (TOLLMANN, 1977: p. 494).

**Lithology:** Grey, coarse sparry dolomite subdivided into two types: a) laminated dolomite without fossils and biotrititic material in the lower parts; b) dolomitic and biotrititic limestones and dolomite in the upper parts (PIRKL, 1961; MOSTLER, 1968).

**Fossils:** Nautilids, crinoids, corals, bivalves, conodonts.

**Origin, facies:** Shallow water shelf environment.

**Chronostratigraphic age:** Lower Devonian (Lochkovian–Pragian).

**Biostratigraphy:** Conodonts (PIRKL, 1961; MOSTLER, 1964, 1968) point to Lochkovian–Pragian ages.

**Thickness:** 600 m.

**Lithostratigraphically higher rank unit:** -

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** “Dolomites”.

**Overlying unit(s):** -

**Lateral unit(s):** Spielberg Dolomite, “Dolomites, Flaser Limestones”.

**Geographic distribution:** W-GWZ; Tyrol, Kitzbüheler Alpen.

**Remarks:** see unit “Dolomites”.

**Complementary references:** TOLLMANN (1977), SCHÖNLAUB (1979, 1980a), EBNER et al. (1989).

### Spielberg-Dolomit / Spielberg Dolomite

FRITZ EBNER

**Validity:** Invalid; since the first description by MAVRIDIS & MOSTLER (1970) used in terms of a formation but without formalization.

**Type area:** Kitzbüheler Alpen (ÖK50-UTM, map sheet 3214 Kitzbühel, ÖK50-BMN, map sheet 123 Zell am See).

**Type section:** At Spielberghorn but not further indicated in the literature.

**Reference section(s):** -

**Derivation of name:** After the Mt. Spielberghorn (N 47°25'57" / E 21°37'56"; ÖK50-UTM, map sheet 3214 Kitzbühel, ÖK50-BMN, map sheet 123 Zell am See) in the Kitzbüheler Alpen.

**Synonyms:** Partly “Schwaz-Dolomit” (TOLLMANN, 1977: p. 494); “Wilde Hag-Pfeiferkogel-Serie” (EMMANULIDIS & MOSTLER, 1970).

**Lithology:** Light dolomite, rarely with reddish-grey and partly black dolomite (MAVRIDIS & MOSTLER, 1970; EMMANULIDIS & MOSTLER, 1970).

**Fossils:** Detritus of crinoids, corals, bryozoans, gastropods, stromatoporids and ostracods (MAVRIDIS & MOSTLER, 1970; EMMANULIDIS & MOSTLER, 1970).

**Origin, facies:** Shallow water shelf environment (reworked biostromes) (MAVRIDIS & MOSTLER, 1970).

**Chronostratigraphic age:** Lower Devonian–?Eifelian.

**Biostratigraphy:** Corals indicate a Devonian age.

**Thickness:** Some hundreds of meters?

**Lithostratigraphically higher rank unit:** -

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** “Dolomites”.

**Overlying unit(s):** “Dolomites, Flaser Limestones”.

**Lateral unit(s):** Schwaz Dolomite, “Dolomites, Flaser Limestones”.

**Geographic distribution:** W-GWZ; Tyrol, Salzburg, Kitzbüheler Alpen.

**Remarks:** The younger age (?Emsian–?Eifelian) of the Spielberg Dolomite is the reason for separating it from the Schwaz Dolomite (MAVRIDIS & MOSTLER, 1970). For further remarks see unit “Dolomites”.

**Complementary references:** TOLLMANN (1977), SCHÖNLAUB (1979, 1980a), EBNER et al. (1989), SCHÖNLAUB & HEINISCH (1993).

### Dolomite, Flaserkalke / Dolomites, Flaser Limestones

FRITZ EBNER

**Validity:** Invalid; not formalized informal working term (SCHÖNLAUB & HEINISCH, 1993).

**Type area:** Kitzbüheler Alpen (ÖK50-UTM, map sheet 3214 Kitzbühel, ÖK50-BMN, map sheet 122 Kitzbühel).

**Type section:** Within the Wildseeloder Unit at the Spielberg and Kitzbüheler Horn, not further indicated.

**Reference section(s):** -

**Derivation of name:** According to the main lithologies.

**Synonyms:** Rote Flaserdolomite, dunkle Dolomite mit hohem Tongehalt, dunkelgraue, grobspätige Dolomite, Tonschiefer, Kalktonschiefer, Tonflaserkalke und Kieselschiefer der “Südfazies” (MAVRIDIS & MOSTLER, 1970); “rotgefärbte Dolomite/Flaserdolomite der Kitzbüheler Horn Serie” (EMMANULIDIS & MOSTLER, 1970).

**Lithology:** Dolomite (red-reddish flaser- and nodular dolomite, dark grey coarse sparry dolomite, dark clayey dolomite), flaser limestones with Fe-Mn crusts, shales, siliceous shales (EMMANULIDIS & MOSTLER, 1970; MAVRIDIS & MOSTLER, 1970).

**Fossils:** Conodonts, nautiloids, crinoids (EMMANULIDIS & MOSTLER, 1970; MAVRIDIS & MOSTLER, 1970).

**Origin, facies:** Basinal, pelagic environment.

**Chronostratigraphic age:** Devonian (?upper Lochkovian–lower Famennian) (EMMANULIDIS & MOSTLER, 1970; MAVRIDIS & MOSTLER, 1970).

**Biostratigraphy:** Exact dating is only possible in the early Late Devonian by species of the conodont genus *Palmatolepis*.

**Thickness:** About 30 m.

**Lithostratigraphically higher rank unit:** “Südfazies” (MAVRIDIS & MOSTLER, 1990), “Kitzbüheler Horn-Serie” (EMMANULIDIS & MOSTLER, 1970) – both units are informal.

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** “Dolomites”.

**Overlying unit(s):** -

**Lateral unit(s):** Kitzbüheler Alpen: Schwaz and Spielberg Dolomite, Dientener Berge (Entachen Alm; ÖK50-UTM, map sheet 3221 Zell am See, ÖK50-BMN, map sheet 124 Saalfelden): red dolomite interfingering with reddish limestone or metasomatic magnesite (MOSTLER, 1968).

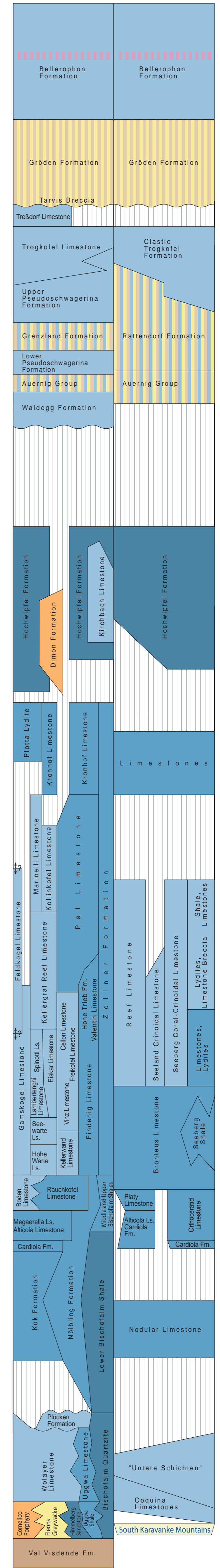
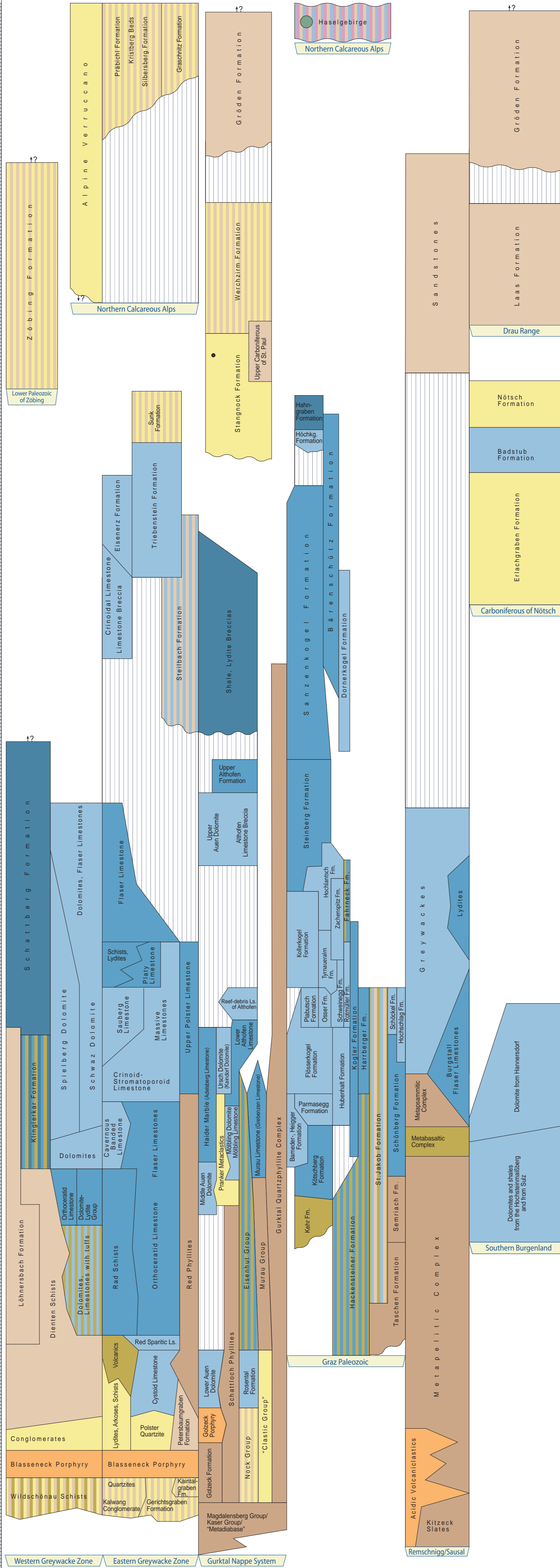
# Austrian Stratigraphic Chart 2004 - Paleozoic

(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                     | TRIAS                      |                            |                                       | GZHELIAN   | 295            | TRIAS                      | U. CARBONIFEROUS / PENNSYLVANIAN |
| KASIMOVIAN | 300                                 |                             |                            |                            |                                       |            |                |                            |                                  |
| MOSKOVIAN  | 305                                 |                             |                            |                            |                                       |            |                |                            |                                  |
| BASHKIRIAN | 310                                 |                             |                            |                            |                                       |            |                |                            |                                  |
| PERMIAN    | LOWER CARBONIFEROUS / MISSISSIPPIAN |                             |                            | SERPUKHOVIAN               | 315                                   |            |                |                            |                                  |
|            |                                     |                             |                            | VISEAN                     | 320                                   |            |                |                            |                                  |
|            |                                     |                             |                            | TOURNAISIAN                | 325                                   |            |                |                            |                                  |
| PERMIAN    | DEVONIAN                            |                             |                            | FAMENNIAN                  | 330                                   | DEVONIAN   | UPPER DEVONIAN |                            |                                  |
|            |                                     |                             |                            | FRASNIAN                   | 335                                   |            |                |                            |                                  |
|            |                                     |                             |                            | GIVETIAN                   | 340                                   |            |                |                            |                                  |
|            |                                     | EIFELIAN                    | 345                        |                            |                                       |            |                |                            |                                  |
|            |                                     | DEVONIAN                    | LOWER DEVONIAN             | EMSIAN                     | 350                                   |            |                |                            |                                  |
|            |                                     |                             |                            | PRAGIAN                    | 355                                   |            |                |                            |                                  |
|            |                                     |                             |                            | LOCHKOVIAN                 | 359.2                                 |            |                |                            |                                  |
|            |                                     | PERMIAN                     | DEVONIAN                   | LUDFORDIAN / GORSTIAN      | 365                                   |            |                | DEVONIAN                   | MIDDLE DEVONIAN                  |
|            |                                     |                             |                            | HOMERIAN / SHEINWOOD       | 370                                   |            |                |                            |                                  |
|            |                                     |                             |                            | TELYCHIAN                  | 375                                   |            |                |                            |                                  |
| AERONIAN   | 380                                 |                             |                            |                            |                                       |            |                |                            |                                  |
| RHUDDANIAN | 385                                 |                             |                            |                            |                                       |            |                |                            |                                  |
| PERMIAN    | UPPER ORDOVICIAN                    |                             |                            | HIRNANTIAN                 | 390                                   |            |                |                            |                                  |
|            |                                     |                             |                            | DARRIWILIAN                | 395                                   |            |                |                            |                                  |
|            |                                     |                             |                            | TREMA-DOCIAN               | 400                                   |            |                |                            |                                  |
| PERMIAN    | CAMBRIAN                            |                             |                            | PAIBIAN                    | 405                                   | CAMBRIAN   | UPPER CAMBRIAN |                            |                                  |
|            |                                     |                             |                            | CAMBRIAN                   | MIDDLE CAMBRIAN                       |            |                |                            |                                  |
|            |                                     | 415                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 420                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | CAMBRIAN                    | LOWER CAMBRIAN             | 425                        |                                       |            |                |                            |                                  |
|            |                                     |                             |                            | 430                        |                                       |            |                |                            |                                  |
|            |                                     |                             |                            | 435                        |                                       |            |                |                            |                                  |
|            |                                     |                             |                            | 440                        |                                       |            |                |                            |                                  |
|            |                                     | PALEOZOIC                   | PERMIAN                    | 443.7                      | PERMIAN                               |            |                | LOWER PERMIAN / CISURALIAN |                                  |
|            |                                     |                             |                            | 445                        |                                       |            |                |                            |                                  |
| 450        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 455        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 460        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 465        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 470        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 475        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 480        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 485        |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| 488.3      |                                     |                             |                            |                            |                                       |            |                |                            |                                  |
| PALEOZOIC  | PERMIAN                             | 490                         | PERMIAN                    | LOWER PERMIAN / CISURALIAN |                                       |            |                |                            |                                  |
|            |                                     | 495                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 500                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 505                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 510                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 515                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 520                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 525                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 530                         |                            |                            |                                       |            |                |                            |                                  |
|            |                                     | 535                         |                            |                            |                                       |            |                |                            |                                  |
| PALEOZOIC  | PERMIAN                             | 540                         | PERMIAN                    | LOWER PERMIAN / CISURALIAN |                                       |            |                |                            |                                  |
|            |                                     | 542                         |                            |                            |                                       |            |                |                            |                                  |



**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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