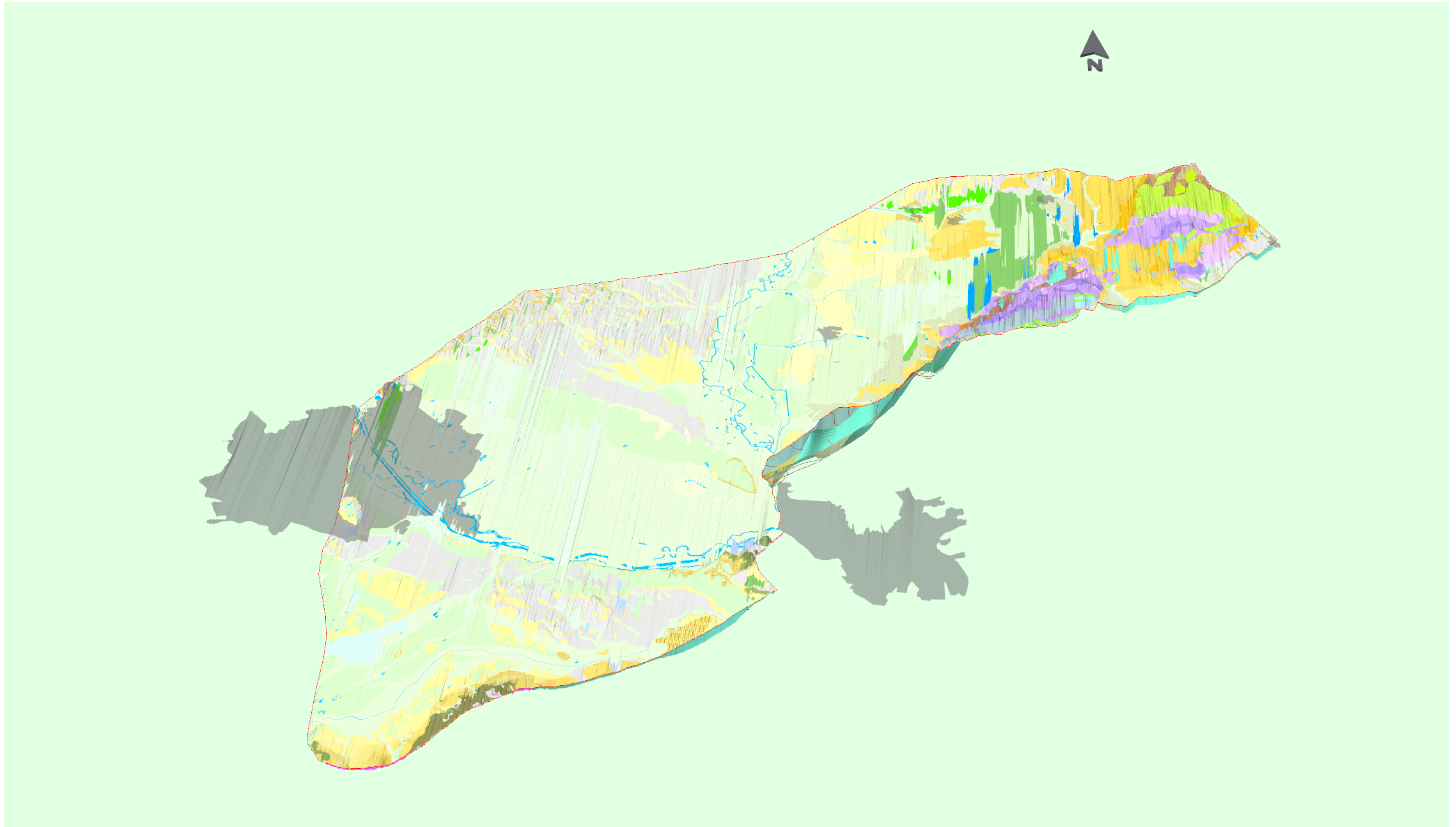


Depth below sea level of modeled geological units in the Vienna Basin pilot area



Surface Geology

- Basinal limestone, dolomite, cherty limestone, cherty dolomite, marl, clay marl, calcareous marlstone
- Basinal marl and limestone, bituminous limestone, dolomite
- Brackish-water – shoreline, mollusc-bearing limestone, sand, gravel
- Cyclical volcanosedimentary complex: clastic and basaltic rocks
- Drift sand
- Fatricum – Northern Veporicum: dark grey marl, sandy and organodetritic limestones, breccias, cherty limestones
- Fluvial clay, silt, sand, gravel
- Fluvial sediment (clay, silt, sand, gravel)
- Fluvial-aeolic sand
- Fluvial-lacustrine-continental-deltaic clay, clay marl, silt, sand, gravel
- Fluvial-paludal-brackish-water brown coal; sand-sandstone; carbonaceous clay
- Hronicum: grey to reddish limestones, marly, organodetritic or muddy limestones, marlstones
- Intertidal-subtidal sand, loose sandstone; gravel, sand, clay
- Lacustrine sediment (clay, silt, fine-grained sand)
- Lacustrine, abrasion shore quartz sand, gravel, pea gravel, siliceous sandstone; slope debris
- Loess
- Marlstone, turbitite, sandstone, limestone, coal
- Medium-grade polymetamorphic formations with Alpine overprint (gneiss, mica schist, phyllite, pegmatite, leucophyllite, quartzite, quartz schist)
- Mouth bar, shoreface
- Northern Veporicum – Fatricum: cherty, nodular and marly limestones
- Open-marine clayey, clay marly silt, clay marl; restricted sea basin: clayey silt, tuffite, sandstone
- Open-marine silt, sandy clay, clay marl
- Paludal sediment (clay, silt, sand, calcareous mud)
- Pelagic, basin limestone, nodular or cherty limestone with tuffaceous and siliciclastic intercalations
- Pieniny Klippen Belt: dominantly limestones, cherty and marly limestones
- Platform (shallow-marine) (thick-bedded, partly alga-laminated dolomite, biogenic limestone)
- Platform (shallow-marine), cyclic (thick-bedded, partly alga-laminated) limestone
- Platform dolomites
- Proluvial clay, silt, sand, gravel, rock debris
- Reefal, organogenic and organodetritic limestones, Operculina-limestones, dolomitic breccias, carbonatic sandstones
- Rhenodanubic flysch zone – sandstone, claystone, marlstone, calcareous marl, siltstone
- Shallow marine, platform, cyclic, partly bituminous limestone and dolomite; bitumenic marly limestone
- Shallow-marine and open basin foraminiferal, mollusc-bearing clay marl, clay
- Shallow-marine clay marl, marl; mollusc-bearing marl, calcareous marl, silt, sandstone
- Shallow-marine – brackish-water, mollusc-bearing clay – clay marl; sand-sandstone, calcareous marl
- Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate
- Shoreline gravel and conglomerate, sandstone; calcareous siltstone, marl
- Siliciclastic and carbonate formations
- Slope sediment (clay, silt, sand, gravel, rock debris)
- Subtidal sediments: limestone and calcareous marl containing large foraminiferans and red algae
- Upper Paleozoic and Mesozoic formations in general
- Western Carpathian Flysch Belt: flysch with dominant grey calcareous shelly claystones

Base of Quaternary

- Alteration of clay, sand and gravel deposited on deltaic and alluvial plains
- Alternation of shallow-marine, mollusc- and red-algae-bearing limestone and conglomerate; foraminiferal, mollusc-bearing clay marl, clay
- Austroalpine units – gneiss, schist, phyllite, marble, amphibolite
- Austroalpine units – gneiss, schist, phyllite, marble, amphibolite (surface)
- Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations
- Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations (surface)
- Biotitic and two-mica granite, granodiorite and tonalite, leucocratic granite, diorite
- Brackish-water – shoreline, mollusc-bearing limestone, sand, gravel
- Frankenfels, Lunz, Vysoka nappes – siliciclastic and carbonate formations
- Intertidal-subtidal sand, loose sandstone; gravel, sand, clay
- Kahlenberg nappe – flysch sediments
- Kahlenberg nappe – flysch sediments (surface)
- Lacustrine silty clayey marl (with sporadic occurrences of a turbiditic unit thinner than 100 m)
- Lacustrine silty clayey marl and littoral-deltaic-fluvial coarse deposits
- Lignite, silt, clay and carbonaceous clay deposited in shallow basins or deltaic and alluvial plains
- Littoral, deltaic and fluvial coarse deposits (mainly sand and gravel)
- Marlstone, turbitite, sandstone, limestone, coal (surface)
- Open-marine silt, sandy clay, clay marl
- Open-marine silt, sandy clay, clay marl (surface)
- Permian sediments in general in Transdanubian Unit (surface)
- Reefal, organogenic and organodetritic limestones, Operculina-limestones, dolomitic breccias, carbonatic sandstones
- Shallow-marine and open basin foraminiferal, mollusc-bearing clay marl, clay
- Shallow-marine – brackish-water, mollusc-bearing clay – clay marl; sand-sandstone, calcareous marl
- Shallow-marine – brackish-water, mollusc-bearing clay – clay marl; sand-sandstone, calcareous marl (surface)
- Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate
- Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate (surface)
- Shallow-marine-brackish-water, clay marl; sand-sandstone; brackish-water-shoreline limestone, sand, gravel
- Shoreline gravel and conglomerate, sandstone; calcareous siltstone, marl
- Unterberg, Havranica, Reissalpe, Göller, Vaternic, Jablonica, Choc nappes – siliciclastic and carbonate formations
- Unterberg, Havranica, Reissalpe, Göller, Vaternic, Jablonica, Choc nappes – siliciclastic and carbonate formations (surface)

Base of Upper Pannonian

- Brackish-water – shoreline, mollusc-bearing limestone, sand, gravel
- Lacustrine silty clayey marl (with sporadic occurrences of a turbiditic unit thinner than 100 m)
- Lacustrine silty clayey marl and littoral-deltaic-fluvial coarse deposits
- Littoral, deltaic and fluvial coarse deposits (mainly sand and gravel)
- Shallow-marine – brackish-water, mollusc-bearing clay – clay marl; sand-sandstone, calcareous marl

Base of Lower Pannonian

- Alternation of shallow-marine, mollusc- and red-algae-bearing limestone and conglomerate; foraminiferal, mollusc-bearing clay marl, clay
- Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations
- Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations (surface)
- Brackish-water – shoreline, mollusc-bearing limestone, sand, gravel
- Brackish-water – shoreline, mollusc-bearing limestone, sand, gravel (surface)
- Open-marine silt, sandy clay, clay marl
- Shallow-marine and open basin foraminiferal, mollusc-bearing clay marl, clay
- Shallow-marine – brackish-water, mollusc-bearing clay – clay marl; sand-sandstone, calcareous marl
- Shallow-marine – brackish-water, mollusc-bearing clay – clay marl; sand-sandstone, calcareous marl (surface)
- Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate
- Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate (surface)
- Shallow-marine-brackish-water, clay marl; sand-sandstone; brackish-water-shoreline limestone, sand, gravel
- Shoreline gravel and conglomerate, sandstone; calcareous siltstone, marl
- Shoreline gravel and conglomerate, sandstone; calcareous siltstone, marl (surface)
- Unterberg, Havranica, Reissalpe, Göller, Vaternic, Jablonica, Choc nappes – siliciclastic and carbonate formations
- Unterberg, Havranica, Reissalpe, Göller, Vaternic, Jablonica, Choc nappes – siliciclastic and carbonate formations (surface)

Base of Sarmatian

- Alternation of shallow-marine, mollusc- and red-algae-bearing limestone and conglomerate; foraminiferal, mollusc-bearing clay marl, clay
 - Austroalpine units – gneiss, schist, phyllite, marble, amphibolite
 - Austroalpine units – gneiss, schist, phyllite, marble, amphibolite (surface)
 - Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations
 - Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations (surface)
 - Helvetic unit
 - Kahlenberg nappe – flysch sediments
 - Laab nappe – flysch sediments
 - Marlstone, turbitite, sandstone, limestone, coal
 - Open-marine silt, sandy clay, clay marl
 - Open-marine silt, sandy clay, clay marl (surface)
 - Pieniny Klippen Belt – Jurassic limestones, cherty and marly limestones and Cretaceous flysch complex
 - Shallow-marine and open basin foraminiferal, mollusc-bearing clay marl, clay
 - Shallow-marine and open basin foraminiferal, mollusc-bearing clay marl, clay (surface)
 - Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate
 - Shallow-marine, mollusc- and red-algae-bearing limestone with patch reefs; conglomerate (surface)
 - Shoreline gravel and conglomerate, sandstone; calcareous siltstone, marl
 - Shoreline gravel and conglomerate, sandstone; calcareous siltstone, marl (surface)
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations (surface)
- #### Base of Badenian
- Austroalpine units – gneiss, schist, phyllite, marble, amphibolite
 - Austroalpine units – gneiss, schist, phyllite, marble, amphibolite (surface)
 - Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations
 - Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations (surface)
 - Biotitic and two-mica granite, granodiorite and tonalite, leucocratic granite, diorite
 - Fluvial – brackish-water gravel–conglomerate, sand, marl
 - Fluvial–paludal–brackish-water brown coal; sand–sandstone; carbonaceous clay
 - Fluvial–paludal–brackish-water brown coal; sand–sandstone; carbonaceous clay (surface)
 - Fluvial–paludal–brackish-water brown coal; sand–sandstone; carbonaceous clay, gravel–conglomerate, sand, marl
 - Frankenfels, Lunz, Vysoka nappes – siliciclastic and carbonate formations
 - Greifenstein nappe (Göstling slice) – flysch sediments
 - Greifenstein nappe (Zistersdorf slice) – flysch sediments
 - Greifenstein nappe – flysch sediments
 - Greywakezone in general
 - Helvetic unit
 - Helvetic unit (surface)
 - Hronic unit – sandstone, shale
 - Hronic unit – sandstone, shale (surface)
 - Intertidal–subtidal sand, loose sandstone; gravel, sand, clay (surface)
 - Kahlenberg nappe – flysch sediments
 - Kahlenberg nappe – flysch sediments (surface)
 - Laab nappe – flysch sediments
 - Marlstone, turbitite, sandstone, limestone, coal
 - Open-marine silt, sandy clay, clay marl
 - Open-marine silty marl; tuff, bentonite, tuffite, glauconitic sandstone; shallow-marine clay marl, marl, fresh-water calcareous marl, fluvial sand, calcareous sandstone
 - Permian sediments in general in Transdanubian Unit (surface)
 - Pieniny Klippen Belt – Jurassic limestones, cherty and marly limestones and Cretaceous flysch complex
 - Reefal, organogenic and organodetritic limestones, Operculina-limestones, dolomitic breccias, carbonatic sandstones (surface)
 - Sand-sandstone, claystone, marl, cherty limestone (A: Molasse, Waschberzone) (surface)
 - Sausal unit in general
 - Sausal unit in general (surface)
 - Sausal unit – Radochen beds
 - Shallow marine, platform, cyclic, partly bituminous limestone and dolomite; bitumenic marly limestone
 - Shallow-marine limestone and calcareous marl containing large foraminiferans and red algae
 - Shallow-marine limestone and calcareous marl containing large foraminiferans and red algae (surface)
 - Shoreline coarse-grained sandstone; fine-grained sandstone, conglomerate, fireclay; calcareous conglomerate, variegated clay; calcareous sandstone
 - Shoreline sand–sandstone, gravel–conglomerate; shallow-marine sand–sandstone with patch reefs, gypsum-bearing clay
 - Tatric unit – gneiss, schist, phyllite, marble, amphibolite
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations (surface)
 - Uppermost Austroalpine nappes – siliciclastic and carbonate formations

Base of Lower Moicene

- Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations
 - Frankenfels, Lunz, Vysoka nappes – siliciclastic and carbonate formations
 - Greifenstein nappe (Zistersdorf slice) – flysch sediments
 - Greifenstein nappe – flysch sediments
 - Greywakezone in general
 - Helvetic unit
 - Kahlenberg nappe – flysch sediments
 - Laab nappe – flysch sediments
 - Marlstone, turbitite, sandstone, limestone, coal
 - Marlstone, turbitite, sandstone, limestone, coal (surface)
 - Pieniny Klippen Belt – Jurassic limestones, cherty and marly limestones and Cretaceous flysch complex
 - Reefal, organogenic and organodetritic limestones, Operculina-limestones, dolomitic breccias, carbonatic sandstones (surface)
 - Subtidal sediments: limestone and calcareous marl containing large foraminiferans and red algae
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations (surface)
 - Uppermost Austroalpine nappes – siliciclastic and carbonate formations
- #### Base of Tertiary
- Austroalpine units – gneiss, schist, phyllite, marble, amphibolite
 - Austroalpine units – gneiss, schist, phyllite, marble, amphibolite (surface)
 - Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations
 - Austroalpine, Tatric units – very low-grade to low-grade siliciclastic and carbonate formations (surface)
 - Biotitic and two-mica granite, granodiorite and tonalite, leucocratic granite, diorite
 - Frankenfels, Lunz, Vysoka nappes – siliciclastic and carbonate formations
 - Greifenstein nappe (Göstling slice) – flysch sediments
 - Greifenstein nappe (Zistersdorf slice) – flysch sediments
 - Greifenstein nappe – flysch sediments
 - Greywakezone in general
 - Helvetic unit
 - Helvetic unit (surface)
 - Hronic unit – sandstone, shale
 - Hronic unit – sandstone, shale (surface)
 - Kahlenberg nappe – flysch sediments
 - Kahlenberg nappe – flysch sediments (surface)
 - Laab nappe – flysch sediments
 - Marlstone, turbitite, sandstone, limestone, coal
 - Marlstone, turbitite, sandstone, limestone, coal (surface)
 - Permian sediments in general in Transdanubian Unit (surface)
 - Pieniny Klippen Belt – Jurassic limestones, cherty and marly limestones and Cretaceous flysch complex
 - Tatric unit – gneiss, schist, phyllite, marble, amphibolite
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations
 - Unterberg, Havranica, Reisalpe, Göller, Veternic, Jablonica, Choc nappes – siliciclastic and carbonate formations (surface)
 - Uppermost Austroalpine nappes – siliciclastic and carbonate formations