CZECH REPUBLIC
DEVELOPMENT COOPERATION

Česká geologická služba

Czech Geological Survey

95 LET | ANNIVERSARY

LEGEND (KEY) TO GEOLOGICAL MAP

Content

Legend definition

Legend symbology

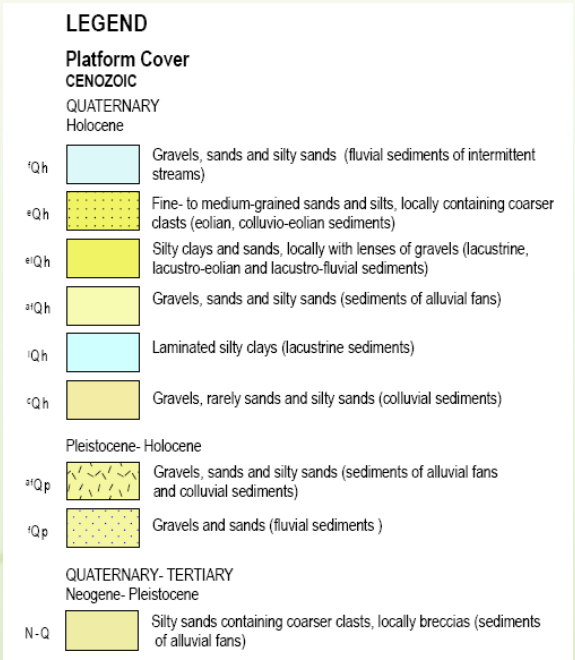
- colours
- description
- index
- geological symbols

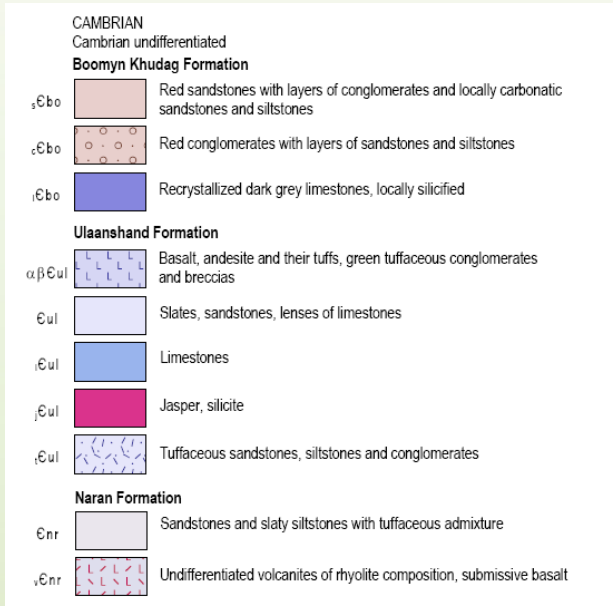
Legend structure

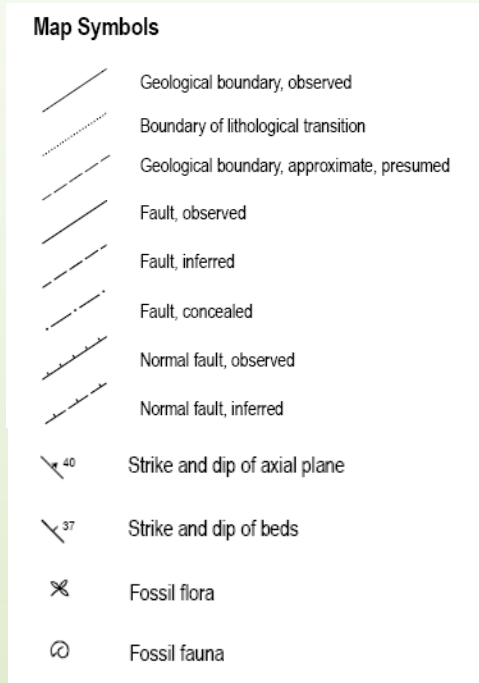
Compilation of legend

Legend definition

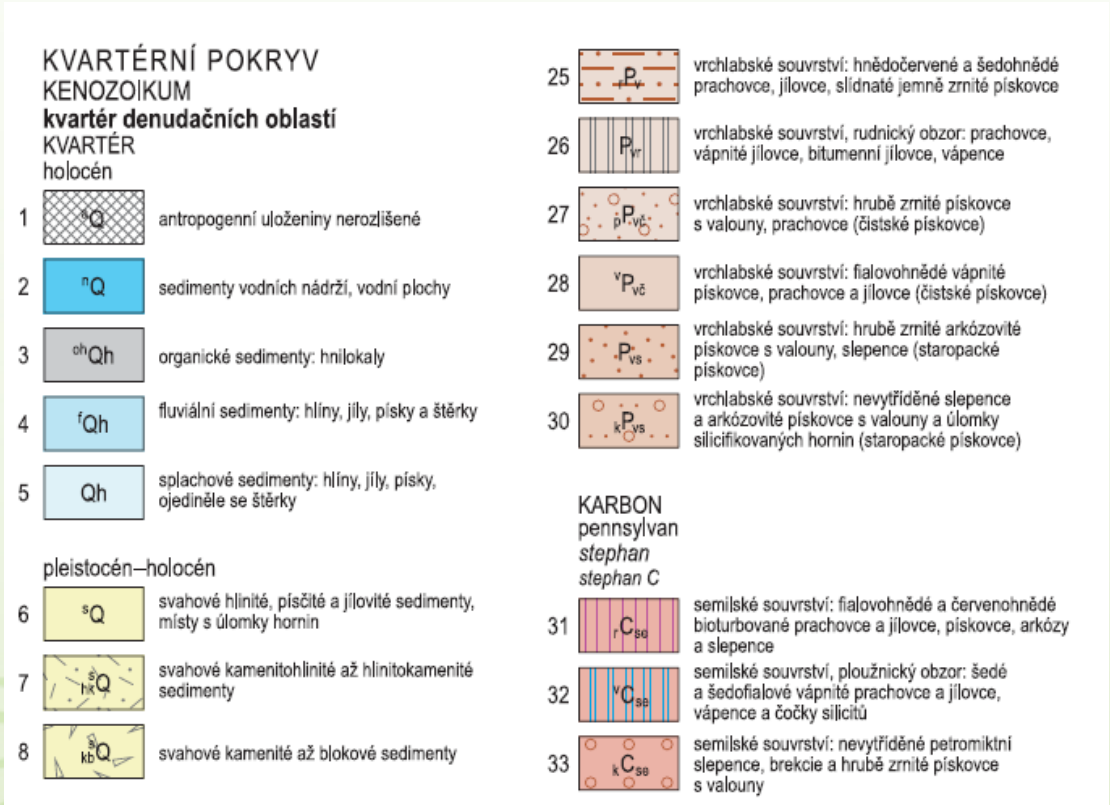
Legend is a table explaining the meanings of all colours and symbols used to represent geologic features in the geological map, cross section and litostratigraphic column.







Geological unit – element which is mappable and distinct from one another

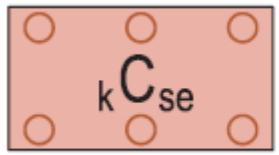


Symbols – expresions of line and point geological elements, superposed phenomena

Boundaries
Tectonic lines
Tectonic symbols
Paleontology
Alteration
Exodynamic phenomena
Mining
....

Legend symbology

Basic parts of description of geological unit

33  semilské souvrství: nevytříděné petromiktní slepence, brekcie a hrubě zrnité pískovce s valouny

Ordinal number (individual for each map sheet)

Colored box with hatch

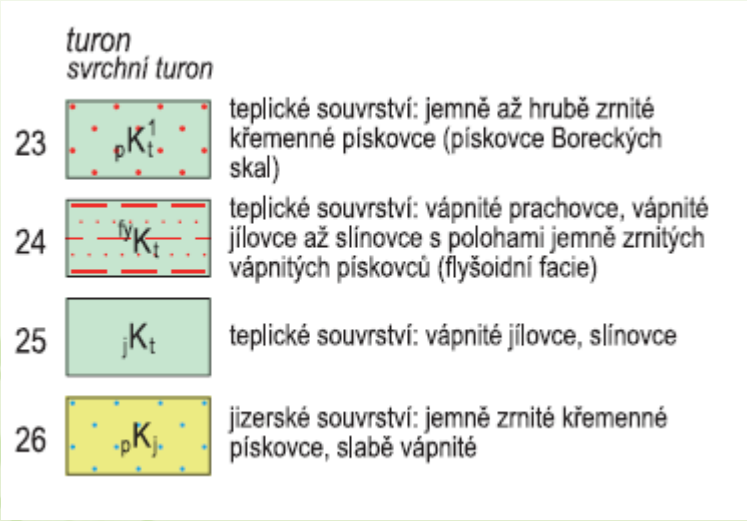
Index

Description

Colours of geological maps

Colours in geological maps should come out from international standards.

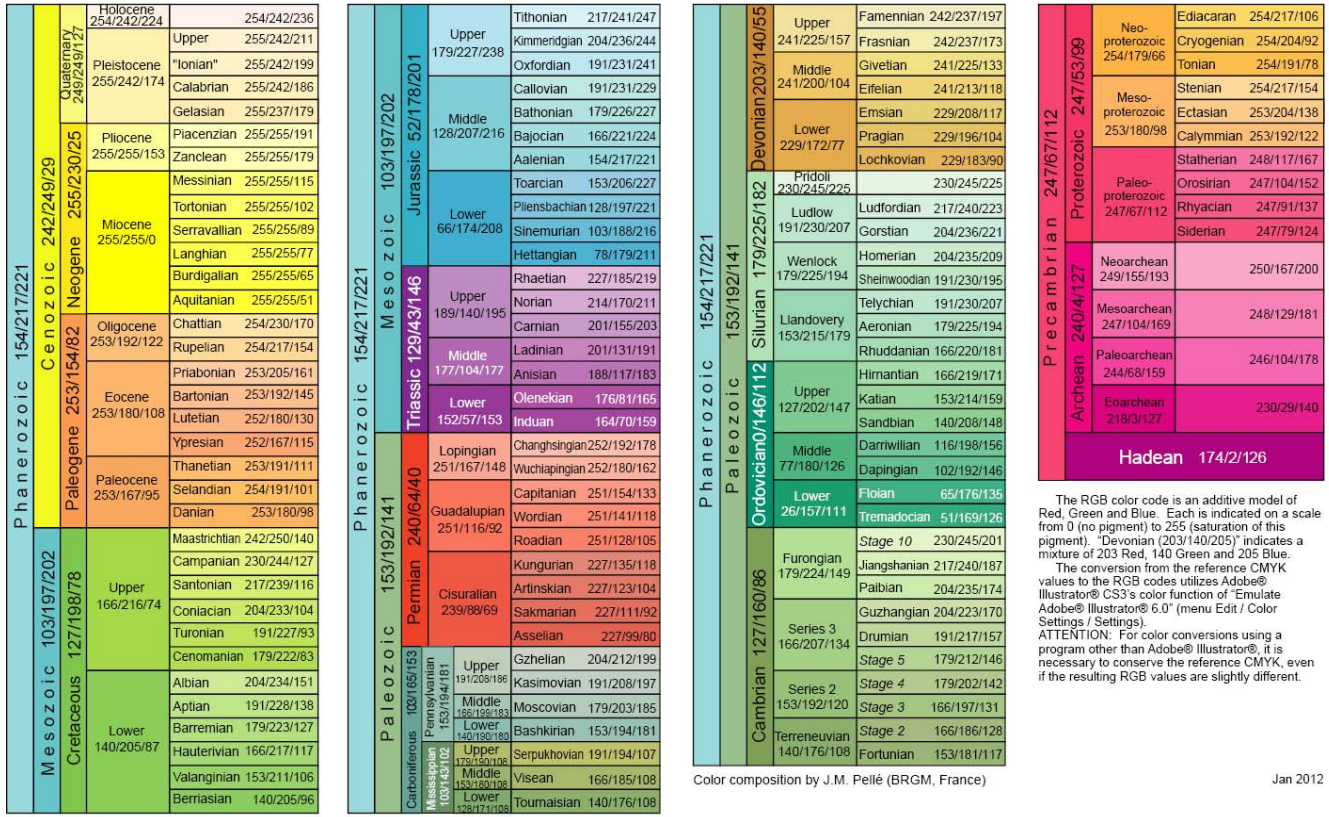
Colours commonly expresses age, hatch lithology



Colours suggested for stratigraphical units

http://www.stratigraphy.org/index.php/ics-chart-timescale
https://engineering.purdue.edu/Stratigraphy/charts/rgb.html
http://pubs.usgs.gov/tm/2005/11B01/pdf/

RGB Color Code according to the Commission for the Geological Map of the World (CGMW), Paris, France



The RGB color code is an additive model of Red, Green and Blue. Each is indicated on a scale from 0 (no pigment) to 255 (saturation of this pigment). "Devonian (203/140/205)" indicates a mixture of 203 Red, 140 Green and 205 Blue.

The conversion from the reference CMYK values to the RGB codes utilizes Adobe® Illustrator® CS3's color function of "Emulate Adobe® Illustrator® 6.0" (menu Edit / Color Settings / Settings).

ATTENTION: For color conversions using a program other than Adobe® Illustrator®, it is necessary to conserve the reference CMYK, even if the resulting RGB values are slightly different.

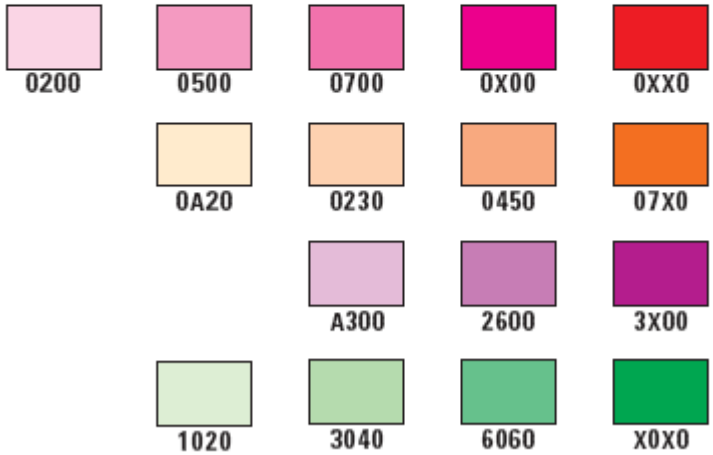
Color composition by J.M. Pellé (BRGM, France)

Jan 2012

For igneous and volcanic rocks are used colours to contrast to surroundings units

Related Igneous or Volcanic Units

A tonal sequence of a color should be used when related groups of igneous or volcanic units are shown on a map. The groups may be related by age, chemical composition, or type of igneous activity. Reds, oranges, and reddish-purples are most commonly used. Blues, greens, and purples are used when a map has several groups of igneous or volcanic units, or when these colors are needed to create contrast.

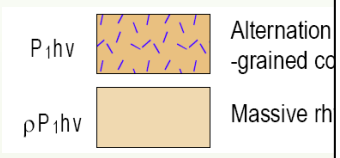


On geologic maps that have many map units, it is sometimes impossible to maintain the standard geologic age colours

Colours should be choose so the map has been well legible

- Showing contrast and clarity of map units and symbols
- Showing ages or age relationships of map units
- Matching or approximating colours and patterns used on nearby or adjacent maps to maintain consistency and continuity of colours and patterns among maps in a region
- Showing structural relationships of map units
- Using colours that are light enough for easy readability of the base map
- Do not forget that map should be nice

Description of geological unit



Alternation of sandstones, tuffitic sandstones with layers of coarse-
-grained conglomerates and of undifferentiated volcanites

Massive rhyolite and rhyolitic crystallic tuffs

Description of geological unit in legend has a descriptive (petrographic character), completed by genetic information for Quaternary sediments and volcanoclastic rocks

Sedimentary (volcanosedimentary) unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

White-creek Fm:

Lithostratigraphic units are bodies of rocks, bedded or unbedded, that are defined and characterized on the basis of their lithologic properties and their stratigraphic relations.

Lithostratigraphic unit is the basic unit of geological mapping.

https://engineering.purdue.edu/Stratigraphy/strat_guide/litho.html

Supergroup
Group
Formation
Member

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

White-creek Fm:

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

No-name Fm: brown

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

No-name Fm: brown fine grained

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition, characteristic attribute, name of rock(s), suplemental information

No-name Fm: brown fine grained micaceous

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

No-name Fm: brown fine grained micaceous limonitic

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

No-name Fm: brown fine grained micaceous limonitic sandstones

Sedimentary unit

Litostratigraphic unit: colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information

No-name Fm: brown fine grained micaceous limonitic sandstones with tuffaceous admixture

Magmatic and metamorphic units

grain-size, texture, mineral composition, name of rock(s), suplemental information

Magmatic and metamorphic units

grain-size, texture, mineral composition, name of rock(s), suplemental information

Medium-grained stromatitic biotitic migmatite with sillimanite

Magmatic and metamorphic units

grain-size, texture, mineral composition, name of rock(s), suplemental information

Medium-grained stromatitic biotitic migmatite with sillimanite

Magmatic and metamorphic units

grain-size, texture, mineral composition (max two minerals), name of rock(s), suplemental information

Medium-grained stromatitic biotitic migmatite with sillimanite

Magmatic and metamorphic units

grain-size, texture, mineral composition, name of rock(s), suplemental information

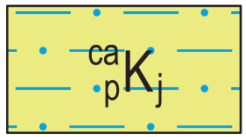
Medium-grained stromatitic biotitic migmatite with sillimanite

Magmatic and metamorphic units

grain-size, texture, mineral composition, name of rock(s), suplemental information

Medium-grained stromatitic biotitic migmatite with sillimanite

Index



Index of geological unit is used for unique identification of legend unit in a map

Generally, index is composed from body which expresses main stratigraphic and lithological information and symbols in lower and upper cases, which characterize supplemental signs

The index building slightly differs for sedimentary, volcanic, igneous and metamorphic rocks

Sedimentary rocks

$$\begin{matrix} te \\ li \end{matrix} S o \begin{matrix} 1 \\ ls \end{matrix}$$

Body of index

S – system

o – series

1 – lower, 2 – middle/upper, 3 – upper

Symbols in upper and lower cases

te – expressive sign (*characteristic texture, mineral, colour, admixture, matrix, texture, genesis, grain size etc.*)

li – dominant lithology

ls – lithostratigraphic or geologic unit

Chronostratigraphic indexes

Sytem	Series	Index
Quaternary		Q
	Holocene	Qh
	Pleistocene	Qp
Neogene		N
	Pliocene	N2
	Miocene	N1
Paleogene		p
	Oligocene	p 3
	Eocene	p 2
	Paleocene	p 1
Cretaceous		K
	Upper C.	K2
	Lower C	K1
Jurassic		J
	Upper J.	J3
	Middle J	J2
	Lower J.	J1
Triassic		T
	Upper T.	T3
	Middle T.	T2
	Lower T.	T1
Permian		P
	Lopingian	P3
	Guadalupian	P2
	Cisuralian	P1

System	Series	Index
Carboniferous		C
	pennsylvanian	C2
	mississipian	C1
Devonian		D
	Upper D.	D1
	Middle D.	D2
	Lower D.	D3
Silurian		S
	Pridoli	S4
	Ludlow	S3
	Wenlock	S2
	Llandovery	S1
Ordovician		O
	Upper O.	O1
	Middle O.	O2
	Lower O.	O3
Cambrian		Є
	Furongian	Є4
	Series 3	Є3
	Series 2	Є2
	Terrenuvian	Є1
Erathem		
Neoproterozoic		NP
Mezoproterozoic		MP
Paleoproterozoic		PP

Important sedimentary textures and gentic feature (te)

bd	biodetritic
if	ichnofossil
bi	existence of bitumene
ca	carbonaceous rocks, admixture
cb	cross bedding
dt	detritic
e	eolian sediment, admixture
f	fluvial sedimet
fy	flysh sediment
fw	fossil weathering
g	glacial sediments
ch	chaotic texture
co	coral sediments
l	limnic sediments
la	lamination
mv	massive texture
my	mylonitization
bo	biogenic rock
vc	variocoloured
ry	rhytmite
s	spotted
si	silicification
t	tuffaceous admixture

Sedimentary lithology (li)

a	arcose
b	breccia
d	dolomite
di	diatomite
e	evaporite
cy	clay, claystone
sh	shale
c	conglomerate
l	loes
ld	lydite
s	sandstone
q	quartzite
r	siltstone
ra	radiolarite
ch	chert
m	marl
sg	spongilite
g	gravel
co	coal
li	limestone
w	grauwacke

Coherent volcanic rocks

$$^{te}_{mi}\,rSo^{1}_{ls}$$

Pyroclastic rocks

$$^{ge}\,rSo^{1}_{ls}$$

Body of index

r – rock, small letter of Greek alphabet
S – system
o – series
1 – lower, 2 – middle/upper,
3 – upper, (used according to stage of knowledge)

Symbols in upper and lower cases

te – texture
mi – characteristic mineral
ge – genetic type
ls – litostratigraphic (regional) unit

Coherent volcanic rock (r)

α	andezite
β	bazalt
βα	basaltic andezite
η	bazanite
ζ	dacite
φ	foidite
υ	phonolite
ω	pikrite, polzenite
ρ	rhyolite
ψ	tefrite
τα	trachyandezite
τβ	trachybazalt
τ	trachyte

Pyroclastic rocks - genetic types (ge)

b	breccia
ig	ignimbrite
l	lappili-stone
la	lahar
p	pumice
s	scoria
t	tuff

Textural and genetic specification of volcanic rocks (te)

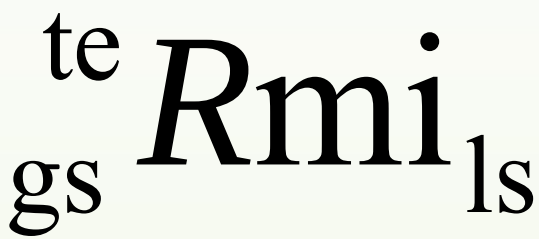
f	fluidal
gt	granulate
la	lamination
an	amygdaloidal
mv	massive
my	mylonitic
p	porphyric
pl	pillow lavas
gs	glassy
v	vitritophyric
vl	variolitic
s	stratification
at	altered
e	effusive
ep	epiclastic
fr	freatomagmatic

Igneous (plutonic)rocks

Body of index
r – rock, small letter of Greek alphabet
S – system
mi – significant minerals

Symbols in upper and lower cases
te – texture or other expressive sign (colour)
gs – grain size
ls – lithostratigraphic or geologic unit

Metamorphic rocks



Body of index
R – rock, large (orthometamorphites) or small (metasediments) letter in italic
mi – significant minerals

Symbols in upper and lower cases
te – texture or other expressive sign (colour)
gs – grain size
ls – lithostratigraphic or geologic unit

Igneous (plutonic) rocks (r)

ι	aplite
δ	diorite
δq	quartz diorite
v	gabbro
vδ	gabbrodiorite
γ	granite
γδ	granodiorite
hσ	hornblendite
av	hyperite
si	quartz vein
χ	lamprophyre
pv	norite
κ	pegmatite
σ	peridotite
γπ	porphyric microgranite
vπ	porphyric microgabbro
γδπ	porphyric microgranodiorite
ξπ	porphyric microsyenite
δπ	porphyric mikrodiorite
pσ	pyroxenite
ξ	syenite, monzonite
ξδ	syenodiorite
ξv	syenogabbro
δ´	diorite dyke
γ´	granite dyke
γδ´	granodiorite dyke
ξ´	syenite dyke

Textures and expressive signs of igneous rocks (te)

al	alkalic
at	altered
s	schistosed
b	brecciated
en	enclave
l	leukocratic
la	lamination
ml	melanocratic
mv	massive
my	mylonitic
p	porphyric

Grain size (gs)

m	massive
f	fine-grained
m	medium-grained
c	coarse-grained

Metamorphic rocs (*R*)

A	amphibolite
s	schist
E	eklogite
e	erlan, calc-silicate rock
ph	phyllite
vA	gabbroamfibolite
Gr	granulite
h	hornfels
v	crystallic limestone (marble)
q	quartzite
$^{m}\beta$	metabazalt
M	migmatite
G	orthogneiss
g	gneiss, paragneiss
S	serpentinite
sk	skarn
m	mica schist
B	greenschist

Textures and expressive signs of metamorphic rocks (te)

a	agmatitic
ca	carbonatic
f	phlebitic
i	injected
c	cataclastic
l	leucocratic
M	migmatitized
ml	melanocratic
mv	massive
my	mylonitic
n	nebulitic
o	ophtalmitic, augen
la	laminated
po	porhyroblastic
q	quartzitic
s	stromatitic

Minerals (mi)

mineral	index	abb.*
actionolite	ak	Act
albite	ab	Ab
almandine	al	Alm
hornblende	h	Amp
analcime	ac	Anl
andalusite	ad	And
andesine	as	
anhydrite	ah	Anh
ankerite	ai	Ank
anorthite	an	An
anortoklase	ao	Ano
antophylite	ay	Ath
apatite	ap	Ap
arfvedsonite	af	Arf
augite	ag	Aug
axinite	ax	Ax
baryte	ba	Brt
beryl	be	Brl
biotite	b	Bt
bronzite	bz	
brucite	bc	Brc
bytownite	by	
zinvaldite	zw	Znw
cordierite	co	Crd
datolite	da	Dat
dialage	dl	
diopside	dp	Di
dolomite	do	Dol
aegirine	ae	Aeg
enstatite	en	En
epidote	e	Ep
phlogopite	pl	Phl
fluorite	fl	Fl
fuchsite	fu	
gedrite	gd	Ged
glaucophane	gl	Gln
glaukonite	gk	Glt
graphite	gf	Gr
garnet	g	Grt
grosular	gr	Grs
halloysite	hl	
haüyn	ha	Hyn
hedenbergite	he	Hd
haematite	hm	Hem
humite	hu	Hu
hypersthene	hy	Hyp
chalcedona	cl	
chamosite	cm	Chm
chiastolite	ch	
chlorite	c	Chl
chloritoide	cd	Cld
chromite	cr	Chr
ilmenite	i	Ilm
jadeite	j	Jd
calcite	ca	Cal
cancrinite	cc	Ccn
kaolinite	k	Kln
cassiterite	cs	Cst
corundum	co	Crn
quartz	q	Qz
cyanite	ky	Ky
labradore	la	
lepidolite	le	Lpd
leptochlorite	lc	
leucite	l	Lct
limonite	lm	Lm
litionite	li	
magnetite	mt	Mag
magnezite	mg	Mgs
marcasite	ma	Mrc
talk	tk	Tlc
melilite	me	Mll
microcilen	mi	Mc
monazite	mz	Mnz
monticellite	mc	Mtc
montmorilonite	mo	Mnt
muscovite	m	Ms
nepheline	n	Nph
nosean	no	Nsn
oligoklase	ol	
olivine	o	Ol
omfacite	om	Omp
opal	op	Opl
orthite	or	
orthoclase	ok	Or
otrelite	ot	
ozokerite	oz	
paragonite	pa	Pg
periklase	pe	Per
phillipsite	ph	Php
plagioclase	pg	Pl
prehnite	pr	Prh
pumpellyite	pu	Pmp
pyrhotine	pn	Po
pyrite	py	Py
pyrope	po	Prp
pyroxene	p	Pyx
rutile	r	Rt
gypsum	gi	Gp
sanidine	sa	Sa
sericite	s	Ser
serpentine	se	Srp
siderit	sr	Sd
sillimanite	si	Sil
scapolite	sk	Scp
sodalite	so	Sdl
spessartine	sn	Sps
spinel	sp	Spl
staurolite	st	St
stilpnomelane	sm	Stp
halite	sl	Hl
thuringite	th	
titanaugite	ta	
titanite	ti	Ttn
titanomagnetite	tm	
topaz	to	Tpz
tremolite	tr	Tr
tourmaline	t	Tur
wollastonite	wo	Wo
wolframite	w	
zeolite	z	Zeo
zircon	zr	Zrn
zoisite	zt	Zo
feldpars	f	Fsp

Exercise – creation of legend index

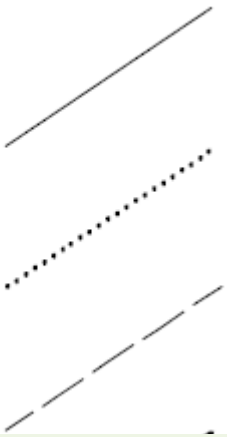
Link to legend

Link to index

Map symbols - expreses aerial, line and point geological phenomena superposed on geological units.

- Lithological (unit) boundaries
- Tectonic lines
- Structural elements
- Paleontological symbols
- Superposed geological and geodynamic phenomena
- Occurrence and exploitation of raw materials
- Hydrogeological elements
- Documentation symbols

Lithological boundaries

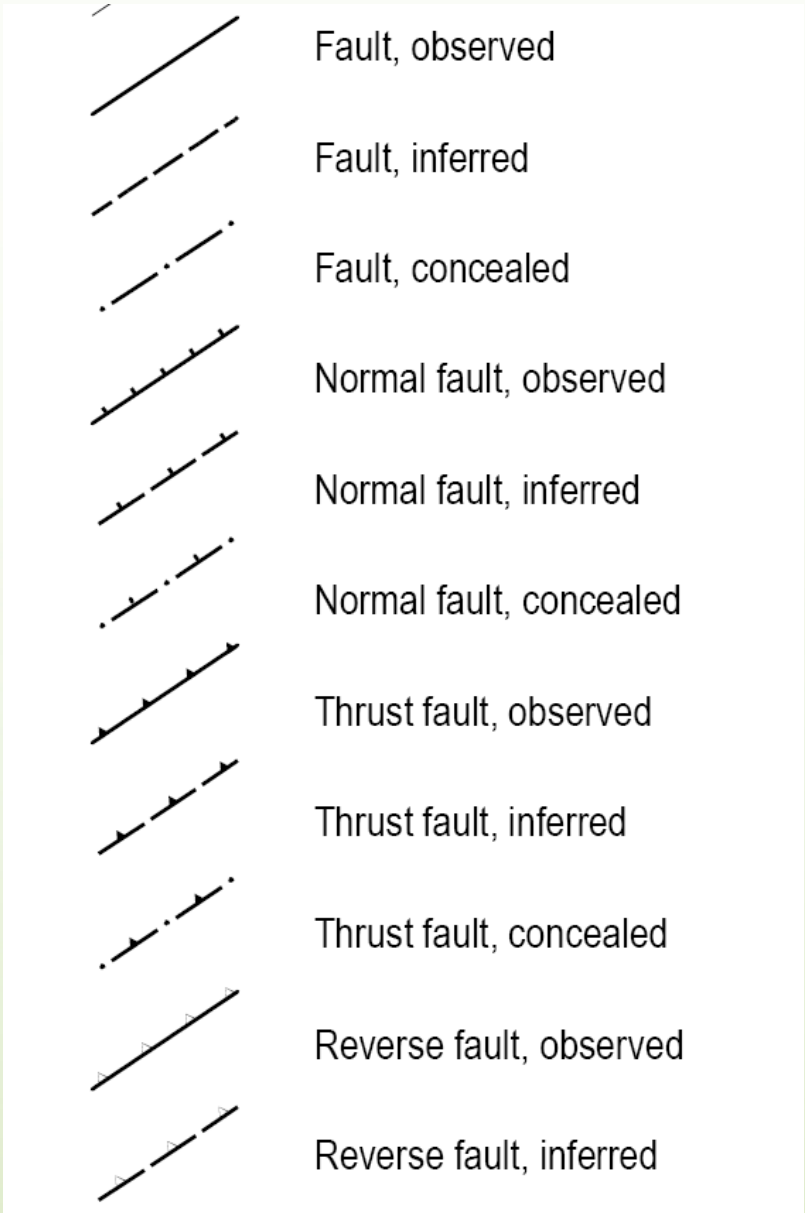


Geological boundary, observed

Boundary of lithological transition

Geological boundary, approximate, presumed

Tectonic lines



Structural elements

Strike and dip of beds

Strike of subvertical beds

Subhorizontal bedding

Strike and dip of cleavage

Strike of subvertical cleavage

Strike and dip of foliation

Bearing and plunge of lineation

Bearing and plunge of fold axe

Ripple marks

Paleontological symbols

	Fossil microflora
	Ichnofossil
	Fossil macrofauna
	Fossil macroflora
	Fossil vertebrata
	Microfossil

Superposed geological and geodynamic phenomena

	flute cast
	imbrication
	landslide
	active landslide
	blocky landslide
	single rocky block
li	limonitization

Occurrence and exploitation of raw materials

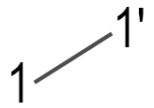
	Active mine
	Abandoned mine
	Active quarry
	Abandoned sand-pit
	Active clay-pit
	Abandoned placer

Hydrogeological elements

	Underground water spring
	Spring area
	Mineral water spring
	Thermal water spring

Documentation symbols

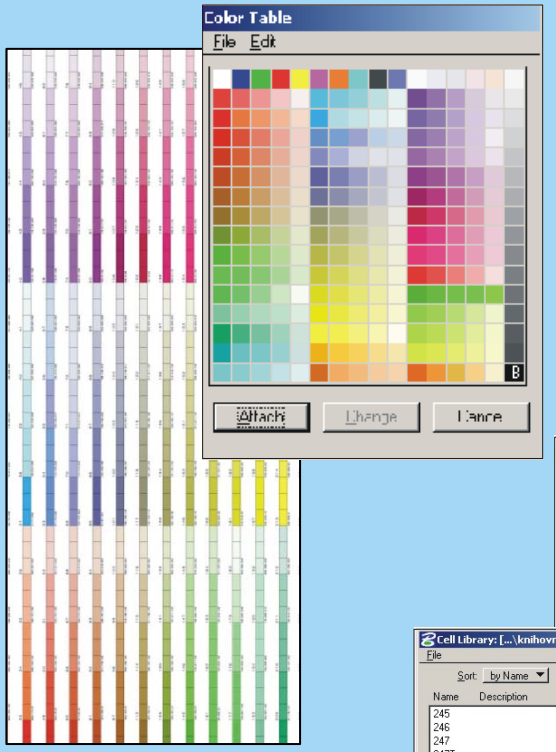
	Economic borehole
	Other borehole
	Mapping borehole
	Important geological site

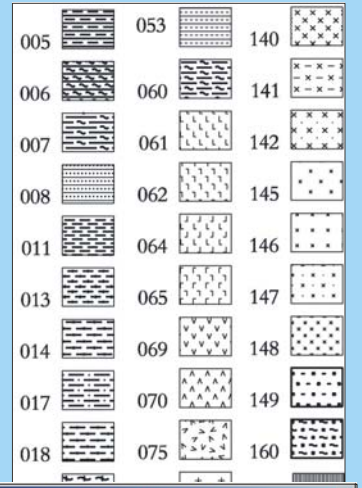


Geological cross section

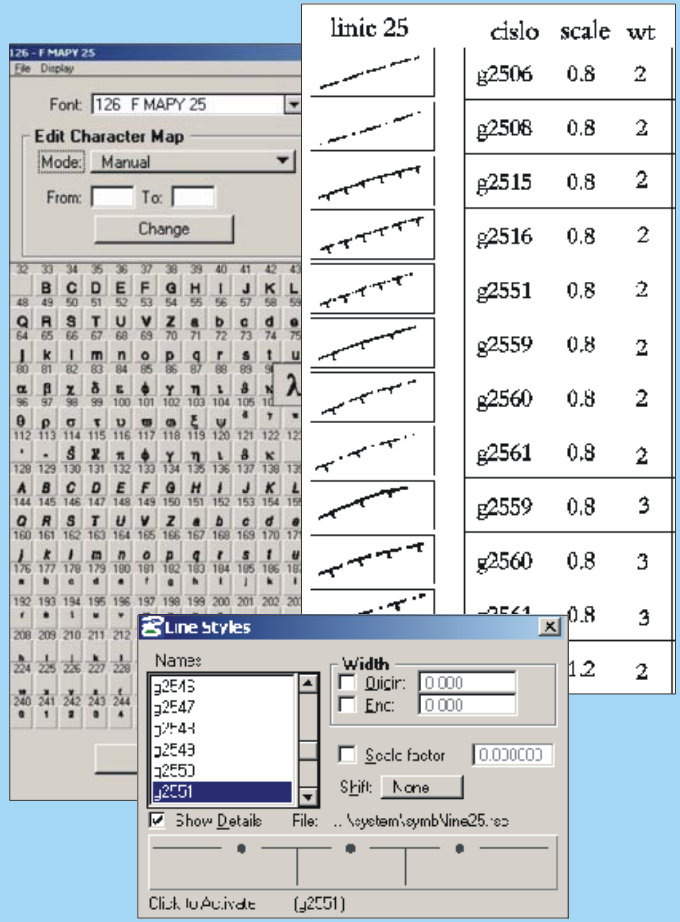
CGS has prepared own symbols library

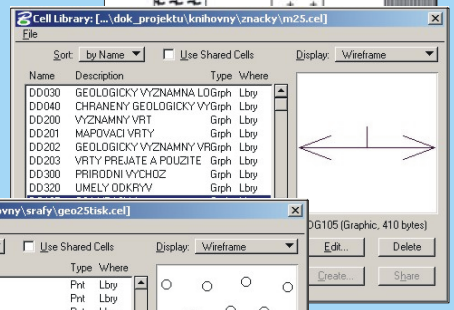
Microstation color table

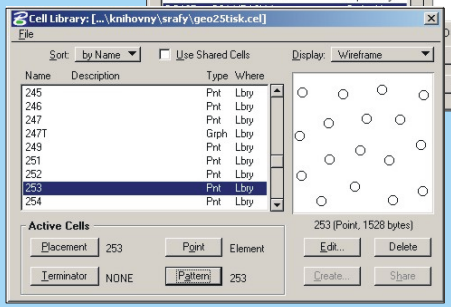




Microstation rsc library

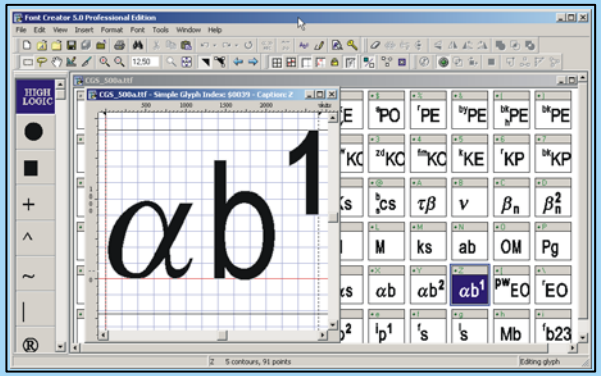




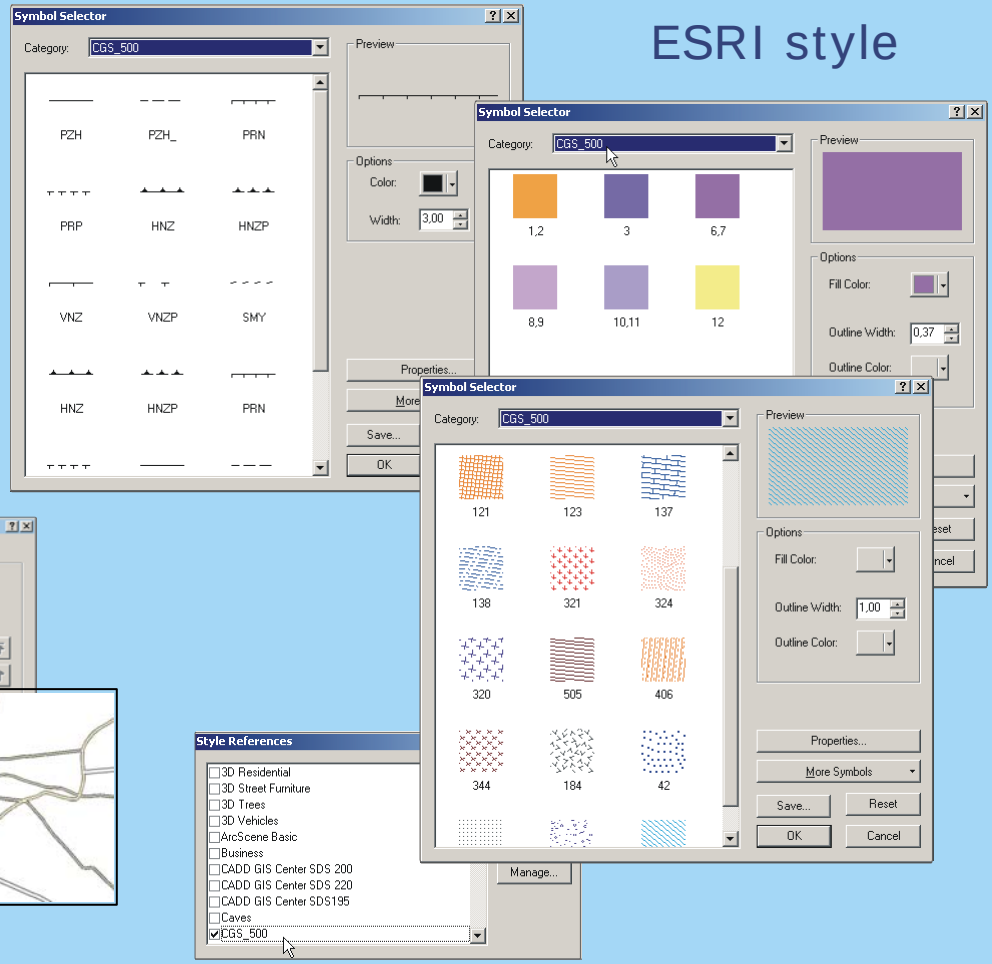


Microstation cell library

True Type Fonts



ESRI style



ArcMap Symbol Levels

Sources of geological symbols

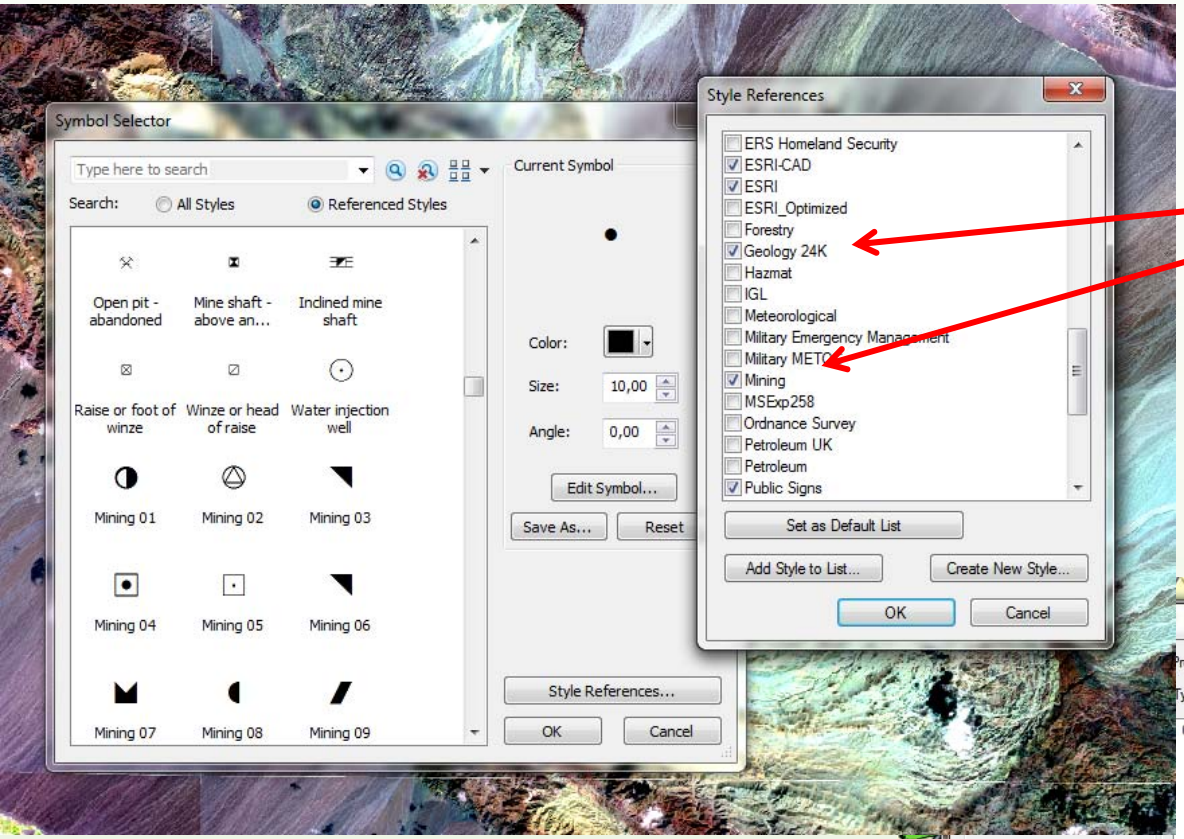
Symbols library

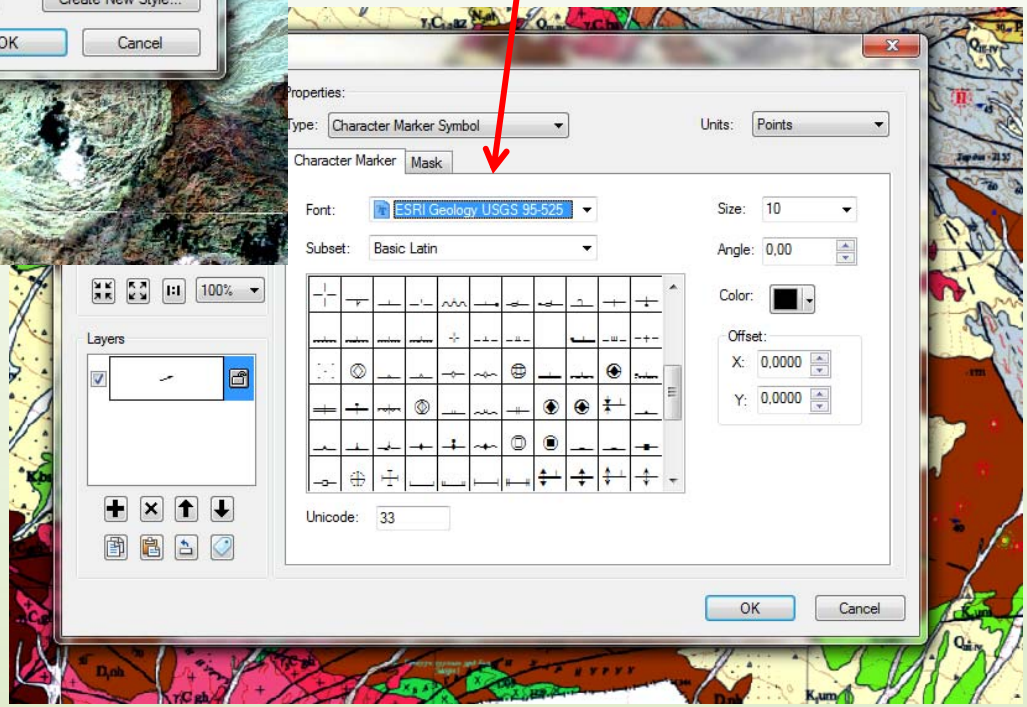
Corel Draw

http://www.geologynet.com/corel.htm
http://pangaeasci.com/index.php?page=rfill
http://pubs.usgs.gov/of/1995/ofr-95-0526/downloads/

Complete library

USGS Digital Cartographic Standard for Geologic Map Symbolization
http://ngmdb.usgs.gov/fgdc_gds/geolsymstd.php

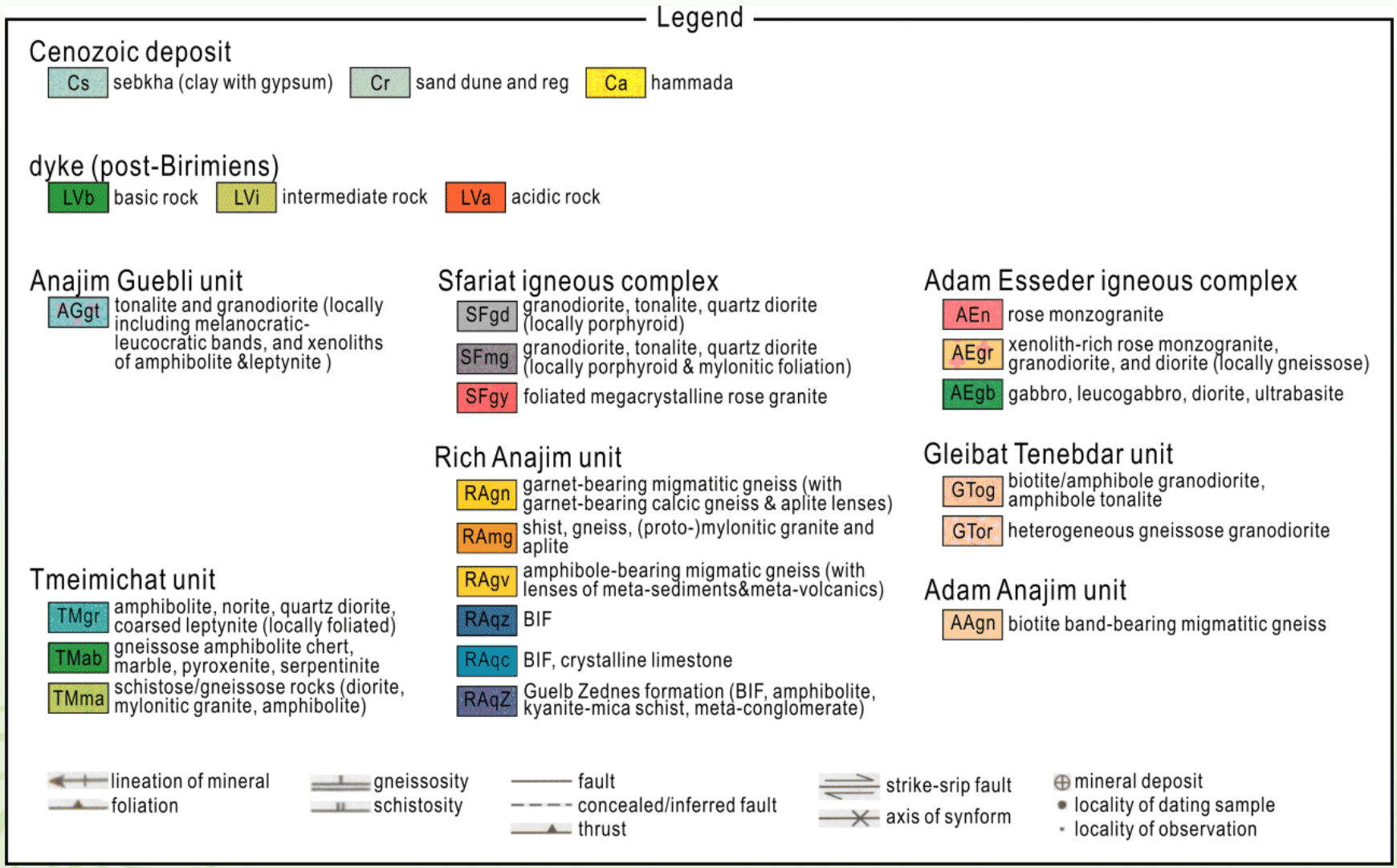




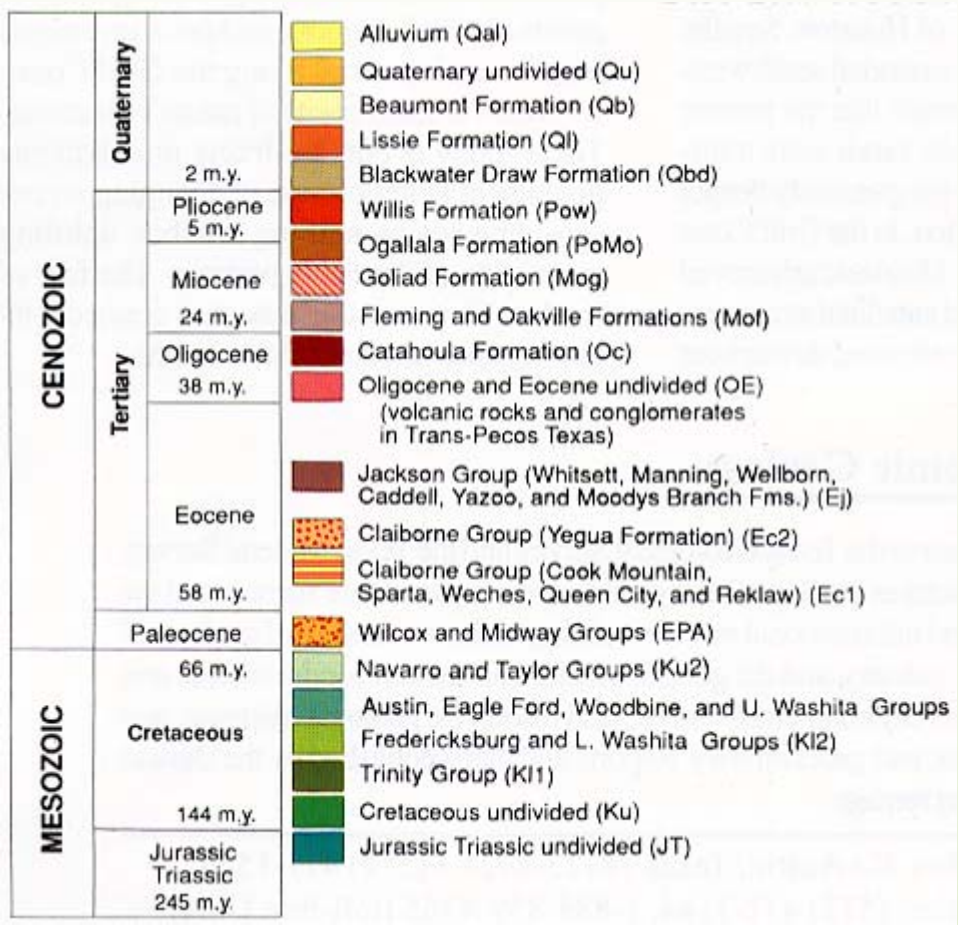
Arc GIS default library

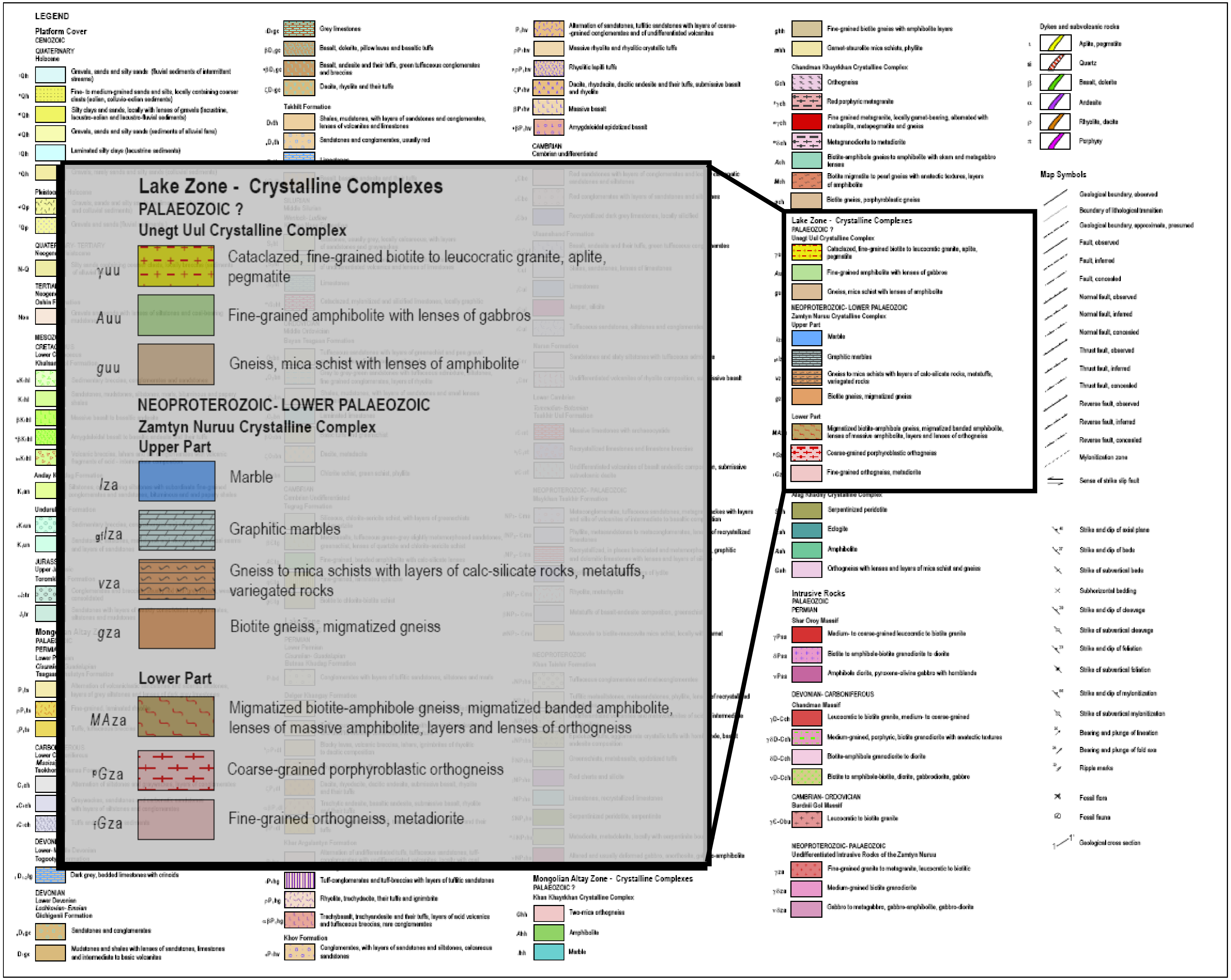
Legend structure

Regional approach



Chronostratigraphical approach

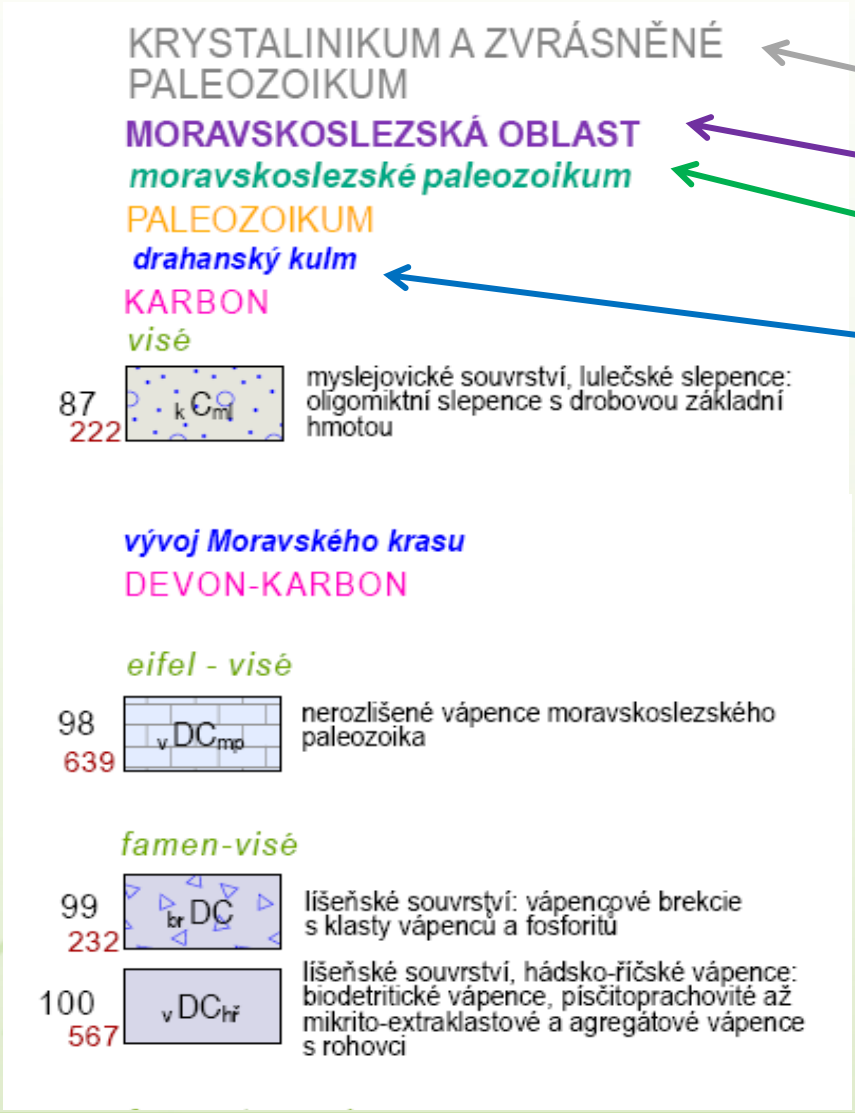



LEGEND
Lake Zone - Crystalline Complexes
PALAEOZOIC ?
Unegt Uul Crystalline Complex
γuu
Cataclazed, fine-grained biotite to leucocratic granite, aplite, pegmatite
Auu
Fine-grained amphibolite with lenses of gabbros
guu
Gneiss, mica schist with lenses of amphibolite
NEOPROTEROZOIC- LOWER PALAEOZOIC
Zamtyn Nuruu Crystalline Complex
Upper Part
lza
Marble
gllza
Graphitic marbles
vza
Gneiss to mica schists with layers of calc-silicate rocks, metatuffs, variegated rocks
gza
Biotite gneiss, migmatized gneiss
Lower Part
MAza
Migmatized biotite-amphibole gneiss, migmatized banded amphibolite, lenses of massive amphibolite, layers and lenses of orthogneiss
pGza
Coarse-grained porphyroblastic orthogneiss
fGza
Fine-grained orthogneiss, metadiorite
Map Symbols

Legend is compiled in logical structure according to regional-geologic and chronostratigraphic units

Logical blocks are introduced by heading and subheadings expresing regional (lithostratigraphic) and chronostratigraphic classification

Regional Hiearchy



REGIONAL SYSTEM

REGION

Province

Area

Regional units are unit with similar geological evolution and compositon and related to specific region

Chronostratigraphic Hiearchy

Chronostratigraphic units are bodies of rocks, layered or unlayered, that were formed during a specified interval of geologic time

ERATHEM
SYSTEM
Series
Stage

KRYSTALINIKUM A ZVRÁSNĚNÉ PALEOZOIKUM
MORAVSKOSLEZSKÁ OBLAST
moravskoslezské paleozoikum
PALEOZOIKUM
drahanský kulm
KARBON
visé

87 / 222 — $_{k}C_{m}$ — myslejovické souvrství, lulečské slepence: oligomiktní slepence s drobovou základní hmotou

vývoj Moravského krasu
DEVON-KARBON

eifel - visé

98 / 639 — $_{v}DC_{mp}$ — nerozlišené vápence moravskoslezského paleozoika

famen-visé

99 / 232 — $_{br}DC$ — líšeňské souvrství: vápencové brekcie s klasty vápenců a fosforitů

100 / 567 — $_{v}DC_{hř}$ — líšeňské souvrství, hádsko-řícké vápence: biodetritické vápence, pískitoprachovité až mikrito-extraklastové a agregátové vápence s rohovci

FLYŠOVÉ PÁSMO
krosněnsko-menilitová skupina příkrovů
ždánická jednotka
PALEOGÉN-NEOGÉN
oligocén-miocén
kiscell-eger

42 / 43 — $PG\text{-}N_{zh}$ — ždánicko-hustopečské souvrství: jíly, jílovce, prachovce, pískovce

PALEOGÉN
oligocén
kiscell

43 / 624 — PG_{m} — menilitové souvrství nerozlišené: šedé a hnědé jílovce

How to compile a geological legend?

Graphic version

- Excel
- Word
- Corel Draw
- ...
- *combined with hand writing*

12		$_{j}C_{sl}$	P 58	slánské souvrství (svrchní šedé), nerozlišené: jílovce, prachovce, pískovce
13		$_{p}C_{ot}$	P 45	slánské souvrství, otrubské vrstvy: pískovce, červenozelené prachovce
14		$_{j}C_{ml}$	P 56	slánské souvrství, malesické vrstvy: šedé jílovce a prachovce, jemnozrnné pískovce
15		$_{p}C_{jl}$	P 42	slánské souvrství, jelenické vrstvy: pískovce a slepence, zelenošedé prachovce
barruel				
16		$_{p}C_{t}$	P 37	týnecké souvrství (spodní červené):pískovce a slepence, červenohnědé prachovce

KRYSTALINIKUM A ZVRÁSNĚNÉ PALEOZOIKUM
BOHEMIKUM (středočeská oblast)
barrandienské proterozoikum
intruzivní horniny v barr

PALEOZOIKUM
devon
čistecko-jesenicko-louns

17*				
18*				
19*				

kambrium
čistecko-jesenicko-louns

20*				
21*		$^{l}_{j}\gamma_{t}$	T 5 s.	jemnozrnný, leukokrátní granitový aplit
22*		$_{j}\gamma\delta\pi_{b}$	T 6	jemnozrnný, biotitický granit/granodioritový porfyr, místy s granátem a amfibolem
23*		$^{m}_{j}\delta\pi_{a}$	T 8 s	jemnozrnný, melanokrátní amfibolický křemendioritový metaporfyr
24*		$_{s}\gamma_{b}$	T 5	středně zrnitý, biotitický granit, místy porfyrický, s granátem, cordieritem a turmalínem "jesenický typ"
25*		$^{p}_{s}\gamma_{b}$	T 5	středně zrnitý, porfyrický biotitický granit, místy mylonitizovaný "typ Blatno"
26*		$_{h}\gamma_{b}$	T 5	hrubozrnný, biotitický granit, místy slabě porfyrický a usměrněný "tiský typ"
27*		$_{s}\gamma\delta_{b}$	T 6	středně zrnitý, biotitický granodiorit, místy slabě porfyrický a usměrněný „petrohradský typ"
28*		$^{my}_{s}\gamma\delta_{b}$	T 6	středně zrnitý, mylonitizovaný biotitický granodiorit „lubenecký typ"

Legenda k základní geologické mapě list Zbytiny č. 32-122

sestavili: V. Štědrá a J. Šebesta (2012)

Kvartérní pokryv
Kenozoikum
Kvartér
Kvartér denudačních oblastí Českého masivu
holocén

1		^{ab}Q	antropogenní uloženiny: haldy
2		^{an}Q	antropogenní uloženiny: navážky
3		^{ak}Q	antropogenní uloženiny: komunální odpad
4		^{n}Qh	sedimenty vodních nádrží, vodní plochy

Svrchní paleozoikum
Žilné horniny v moldanubiku

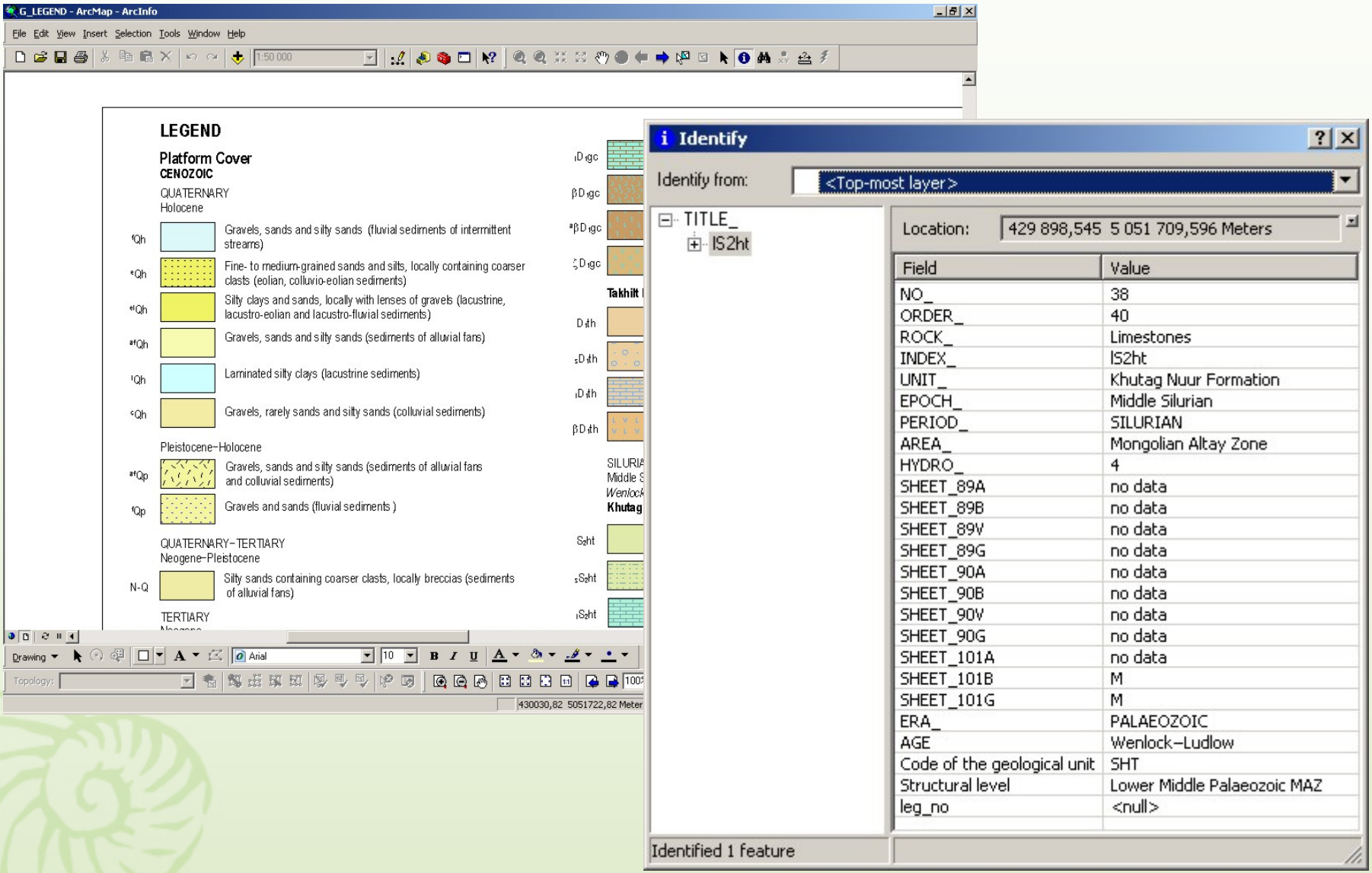
12		si_{mo}	žilný křemen
13		χ_{mo}	pegmatit
14		$^{l}gt_{mo}$	leukokratní turmalín-muskovitický granit
15		gp_{mo}	granitový porfyr
16		dp_{mo}	dioritový porfyr

Intruzivní horniny v moldanubiku

17		gb_{mo}	drobně zrnitý biotitický granit až granodiorit
18		dg_{mo}	drobně zrnitý biotit-muskovitický granit s granátem
19		Px_{mo}	flogopitický pyroxenit (příbuzný durbachitům)

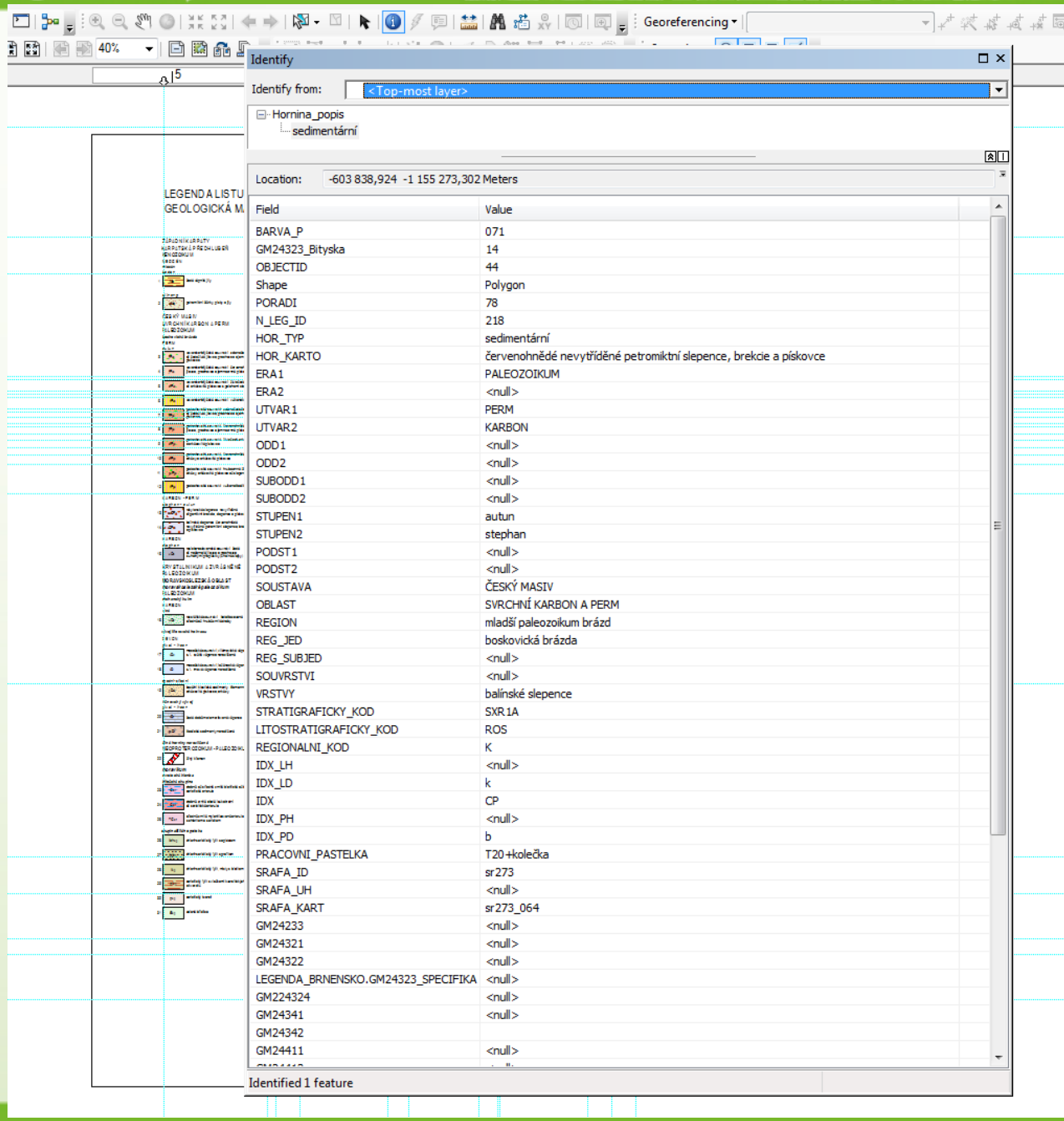
For manuscript OK, but for GIS processing insufficient

Geological Unified Legend



Parameters of legend´s feature table

- Technical parameters
- Units description
- Chronostratigraphic data
- Regional data
- Existence on map sheet



Technical parameters

Leg_ID – unique identification of legend unit, integer No, labelling of polygon in the geological map

Order No – sequence No in accordance with geology, integer No

Index – syntax of geological index in technical record

<CLR black='97'>_k</CLR>CP<CLR black='95'>_b</CLR>

Colour, hatch – number (code) from library

link to colour

link to hatch

Description of geological unit

Unit_DCSR - petrographic description of rock(s) in unified legend
(colour, grain-size, composition characteristic attribute, name of rock(s), suplemental information)

Map_Order - order (and existence) on the given map sheet

Map_spec - difference from desription in unified legend

Chronostratigraphic units – the bodies of rocks that includes all rocks formed during a specific interval of geologic time, and only those rocks formed during that time span.

Erathem

Sytem

Series

Stage

Two columns - FROM and TO - should be in legend table

http://www.stratigraphy.org/upload/bak/chron.htm

Regional Units – geological unit of simillar evolution related to some geographic region. The size and the borders of each region are defined by geologically significant boundaries and by the occurrence of simillar geologic processes.

Region

Province

Area

Lithostratigraphical Units

Group - a grouping of adjacent formations, sharing some shared lithological charactersitics or genesis.
Formation - a mappable unit with relatively homogeneous lithological characteristics which allow it to be distinguished from adjacent formations.

Member - a subdivision of a formation; these may be laterally discontinuous.
Bed - a lithologically distinct horizon or layer

Exercise – preparation of legend´s table

Link to table

Link to colours

Link to hatch

Link to legend

Questions?