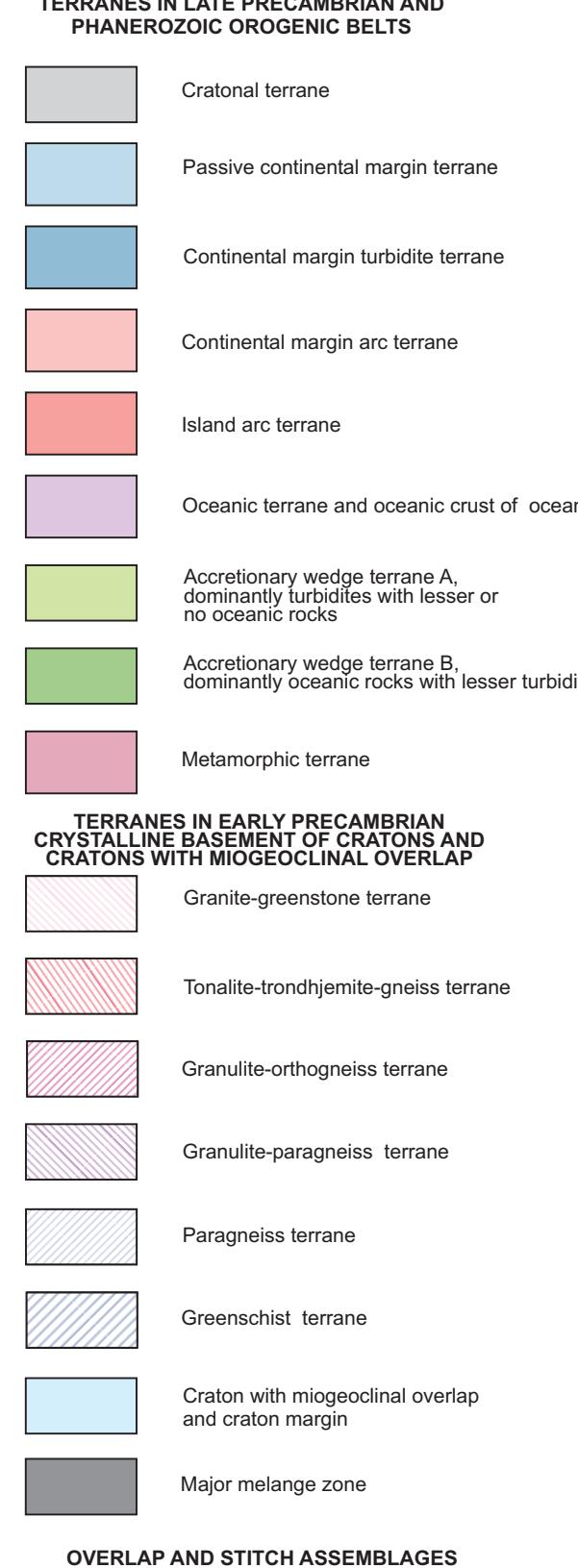
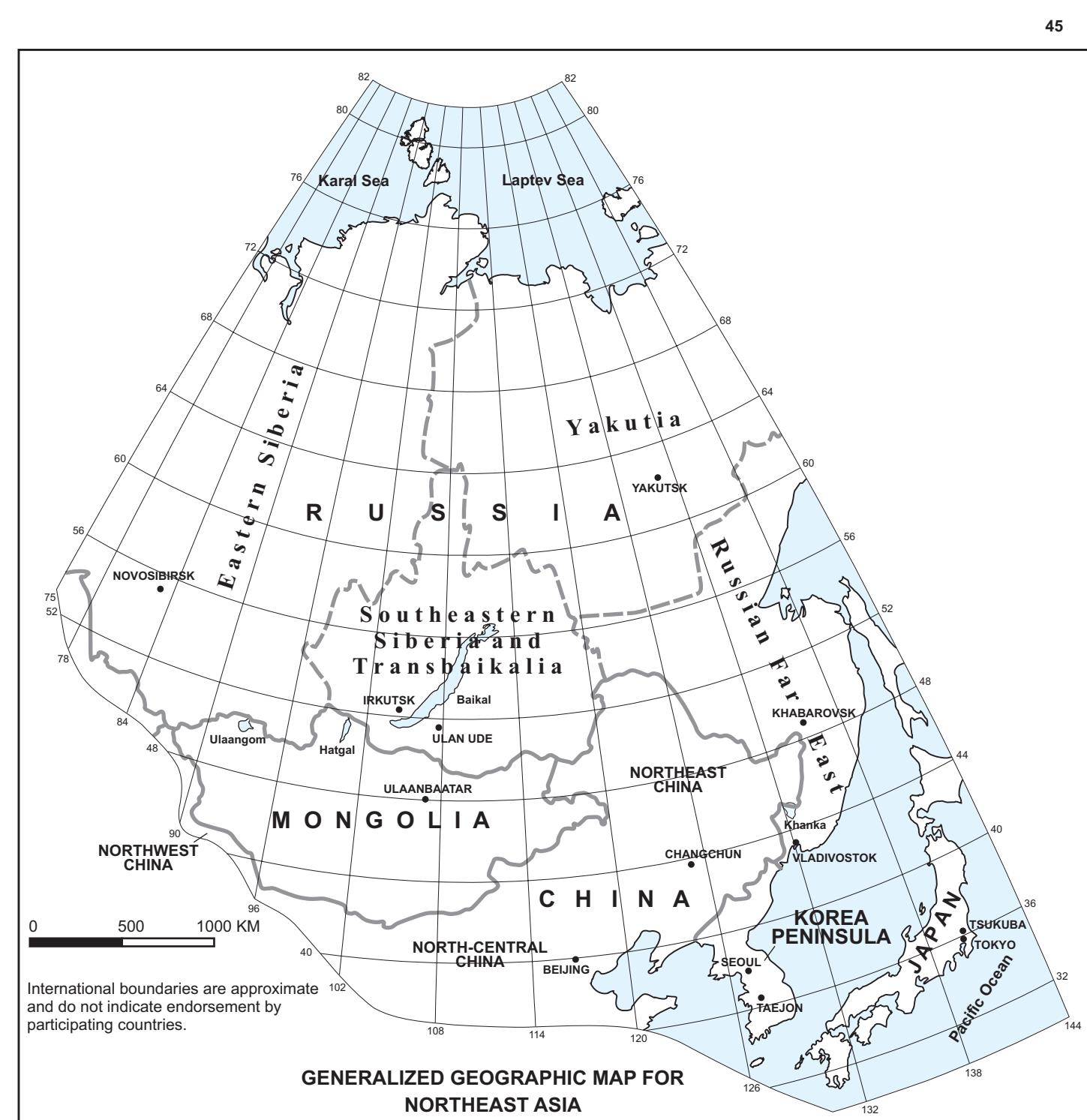
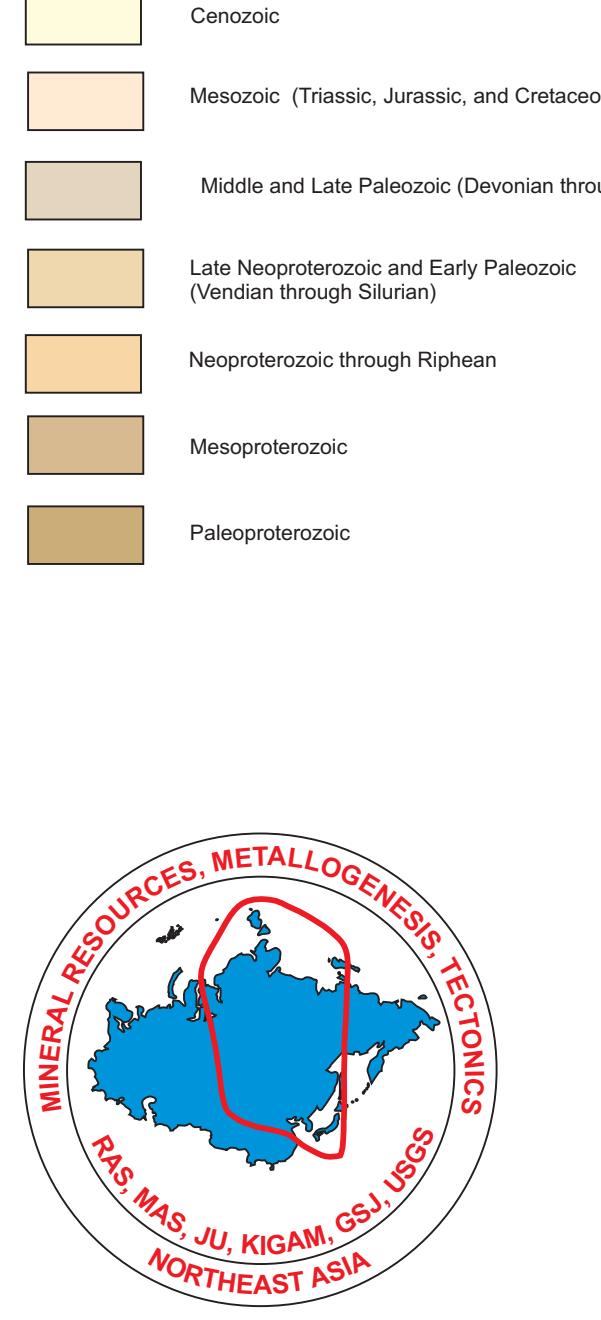


**PREPARED IN COLLABORATION WITH  
RUSSIAN ACADEMY OF SCIENCES  
MONGOLIAN ACADEMY OF SCIENCES  
JILIN UNIVERSITY  
KOREAN INSTITUTE OF GEOSCIENCE AND MINERALS  
GEOLOGICAL SURVEY OF JAPAN/AIST**

## EXPLANATION



(Assemblages shown by lighter hues according to age;  
for overlap assemblages with long age span,  
the color of the oldest major unit is shown.



# PRELIMINARY METALLOGENIC BELT AND MINERAL DEPOSIT MAPS FOR NORTHEAST ASIA: SHEET 1 LODE MINERAL DEPOSITS AND PLACER DISTRICTS

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**LIST OF MAP UNITS**

**Terranes**

ACh	Anuli-Chuya terrane (Continental margin turbidite) (Early to Late Paleozoic)
Al	Altai terrane (Accretionary wedge, type A) (Vendian and Cambrian)
AL	Altai terrane (Accretionary wedge, type B) (Vendian and Early Cambrian)
ANIV	Aniva terrane (Accretionary wedge, type B) (Middle Triassic through early Late Cretaceous)
AM	Akiyoshi-Maizuru terrane (Accretionary wedge, type B) (Carboniferous and Permian)
AR	Argunsky terrane (Passive continental margin) (Paleoproterozoic through late Paleozoic)
AT	Altai terrane (Continental margin turbidite) (Precambrian and Cambrian through Paleozoic)
BA	Baileysland-Alseboog terrane (Island arc) (Devonian through Carboniferous)
BD	Badzhal terrane (Accretionary wedge, type B) (Permian through Jurassic)
BI	Birusa terrane (Paragneiss) (Paleoproterozoic to Neoproterozoic)
BK	Belaya-Klyov terrane (Metamorphic) (Archean?)
BL	Bayanlig terrane (Accretionary wedge, type B) (Ordovician to Devonian)
BM	Baikal-Muya terrane (Island arc) (Neoproterozoic)
BN	Baaran terrane (Island arc) (Devonian through Early Carboniferous)
BR	Baratal terrane (Accretionary wedge, type B) (Late Neoproterozoic through Early Carboniferous)
BRG	Barguzin terrane (Metamorphic) (Late Neoproterozoic)
BY	Baydrag terrane (Cratonal) (Neoproterozoic and older)
CA	Central Angara terrane (Passive continental margin) (Neoproterozoic)
CAL	Central Alidan superterrane (Granulite-orthogneiss)
CH	Chuja terrane (Paragneiss) (Late Archean through Neoproterozoic)
CHR	Charshy terrane (Continental margin turbidite) (Cambrian through Devonian) (Northwestern Gorny Altay)
CTC	Central Taimyr superterrane - Chelyuskin terrane (Island arc) (Neoproterozoic)
CTM	Central Taimyr superterrane - Mamont terrane (Metamorphic) (Mesoproterozoic and Neoproterozoic)
DL	Daldyk terrane (Granulite-orthogneiss) (Middle Archean)
DN	Dongulimcoin-Nuhetdavaa terrane (Island arc) (Cambrian through Middle Devonian)
DR	Derba terrane (Passive continental margin) (Late Neoproterozoic)
DZ	Dzhida terrane (Island arc) (Late Neoproterozoic and Early Cambrian)
DZE	Dzhebash terrane (Accretionary wedge, type A) (Late Neoproterozoic and Early Cambrian)
EBT	East Altai superterrane - Batomga composite terrane (Granite-greenstone) (Late Archean)
ED	Edmund terrane (Island arc) (Devonian and Early Carboniferous)
EUC	East Altai superterrane - Ukhur terrane (granulite-paragneiss) (Paleoproterozoic)
GA	Govi Altai terrane (Continental-margin turbidite) (Cambrian through Devonian)
GL	Galam terrane (Accretionary wedge, type B) (Cambrian through Early Carboniferous)
GS	Gurvanzayhan terrane (Island arc) (Silurian through Early Carboniferous)
HD	Hangay-Dauria terrane (Accretionary wedge, type A) (Silurian through Late Carboniferous)
HE	Hellongjiang terrane (Accretionary wedge, type B) (Ordovician and Silurian)
HI	Hidi terrane (Metamorphic) (Archean)
HL	Henan terrane (Oceania) (Late Neoproterozoic through Early Cambrian)
HM	Hamar-Derasa terrane (Paleoproterozoic) (Paleoproterozoic through Early Cambrian) (Mongolia and Transbaikalia)
HU	Hug terrane (Accretionary wedge, type B) (Neoproterozoic)
HV	Hovd terrane (Continental-margin turbidite) (Neoproterozoic through Silurian)
HX	Hutagul-Xilinhuo terrane (Metamorphic) (Paleoproterozoic and Neoproterozoic)
ID	Idermen terrane (Passive continental margin) (Proterozoic and Cambrian)
IM	Imjinhang terrane (Accretionary wedge, type B) (Devonian)
IS	Indochina terrane (Metamorphic) (Neoproterozoic and older)
JI	Jiamusi terrane (Metamorphic) (Neoproterozoic and older and Early Cambrian)
JT	Japan trench terrane (Accretionary wedge, type A) (late Tertiary and Quaternary)
KA	Kan terrane (Cratonal) (Paleoproterozoic)
KBN	Kabaraga terrane (Accretionary wedge, type A) (Neoproterozoic and early Paleozoic)
KH	Khaphchan terrane (Granulite-paragneiss) (Paleoproterozoic)
KK	Kizir-Kazir terrane (Island arc) (Cambrian) (Southwestern Eastern Sayan)
KN	Kanum terrane (Island arc) (Late Neoproterozoic and Early Cambrian)
KNG	Kular-talay terrane (Continental margin turbidite) (Permian through Early Jurassic)
KOV	Nagayabata terrane of Kolymsa-Omolon superterrane (Continental margin) (Carboniferous through Late Triassic)
KPD	Polousnyi-Debin terrane of Kolymsa-Omolon superterrane (Accretionary wedge, type A) (Jurassic)
KPR	Kyushu-Pala terrane (Island arc) (Paleocene)
KR	Kara terrane (Continental margin turbidite) (Late Neoproterozoic)
KRT	Kunashir terrane (Accretionary wedge, type B) (Late Neoproterozoic and Early Cambrian)
KUV	Kuvaly terrane (Accretionary wedge, type A) (Neoproterozoic)
KY	Kotelnyi migmatitic terrane (Passive continental margin) (Late Neoproterozoic through Late Triassic)
KZ	Kuzee terrane (Granulite-orthogneiss) (Paleoproterozoic)
LA	Laoling terrane (Island arc) (Late Ordovician through Silurian)
LG	Layeling-Gredok superterrane (Island arc) (Late Carboniferous and Permian)
LK	Lake terrane (Island arc) (Late Neoproterozoic and Cambrian)
LN	Lin terrane (Continental margin turbidite) (Devonian through Triassic)
MC	Ming-Mamta-Chichibu terrane (Accretionary wedge, type B) (Permian through Early Carbonaceous)
MG	Magan terrane (Tonalite-trondjemite-gneiss) (Paleoproterozoic)
MK	Malokhangansk terrane (Accretionary wedge, type B) (Neoproterozoic and Cambrian)
MM	Manyn terrane (Passive continental margin) (Archean?)
MN	Mandan terrane (Accretionary wedge, type A) (Devonian)
MO	Mandalovoo-Onor terrane (Island arc) (Middle Ordovician through Early Cambrian)
MR	Mangan terrane (Accretionary wedge, type A) (Middle Devonian or older)
MS	Muya terrane (Metamorphic) (Late Archean? and Paleoproterozoic?)
NA	Nadanahada terrane (Accretionary wedge, type B) (Middle Triassic through Middle Jurassic)
NAB	Nabilsky terrane (Accretionary wedge, type B) (Late Triassic through Early Cretaceous)
ND	Nora-Sulhotin-Duobaoshan terrane (Island arc) (Neoproterozoic through Early Carboniferous)
NN	Nankai terrane (Accretionary wedge, type A) (Miocene through Quaternary)
NR	Newark terrane (Granulite-paragneiss) (Archean? and Paleoproterozoic)
NRS	North Bayan terrane (Island arc) (Neoproterozoic and Early Cambrian)
OD	Odkol-Delenurun terrane (Accretionary wedge, type A) (Paleoproterozoic through Neoproterozoic)
OG	Ogchoen terrane (Accretionary wedge, type B) (Late Paleozoic through Early Mesozoic)
OH	Orhon-Irkatsky terrane (Island arc) (Late Neoproterozoic through Silurian)
OI	Okhotsk terrane (Cratonal) (Archean through Jurassic)
OL	Older terrane (Passive continental margin) (Silurian through Early Carboniferous)
OM	Ondum terrane (Island arc) (Late Neoproterozoic through Ordovician)
OS	Onosky terrane (Accretionary wedge, type B) (Neoproterozoic? or Silurian?)
QT	Qinghe-Tsel terrane (Metamorphic) (Mesoproterozoic and Neoproterozoic)
RA	Rudny Altai terrane (Island arc) (Late Silurian through Early Carboniferous)
SA	Sangili terrane (Passive continental margin) (Paleoproterozoic or Neoproterozoic)
SAL	Salar terrane (Island arc) (Early Cambrian through Early Ordovician)
SG	Sergeevka terrane (Island arc) (Cambrian? and Ordovician?)
SH	Shardan terrane (Accretionary wedge, type B) (Permian and Triassic)
SHA	Shardan terrane (Tonalite-trondjemite-gneiss) (Archean through Paleoproterozoic)
SHM	Shiman terrane (Accretionary wedge, type A) (Early Cretaceous through Miocene)
SK	South Kitakami terrane (Island arc) (Silurian through Cretaceous)
SL	Solten terrane (Accretionary wedge, type B) (Late Carboniferous through Permian)
SMA	Samanking terrane (Accretionary wedge, type B) (Late Permian through Middle Jurassic)
SS	Sostoyaki terrane (Accretionary wedge, type B) (Jurassic through Paleogene)
ST	Streltsov terrane (Tonalite-trondjemite-gneiss) (Archean and Paleoproterozoic)
TR	Terpenyi terrane (Island arc) (Late Cretaceous)
TT	Telbes-Kitat terrane (Island-arc) (Neoproterozoic through Devonian)
TK	Tokuoro-Nemuro terrane (Island arc) (Late Cretaceous)
TN	Tokuoro-Nemuro terrane (Island arc) (Late Cretaceous through Paleogene)
TO	Tannula subterrane (Island arc) (Cambrian and older?)
TR	Terpenyi terrane (Island arc) (Late Cretaceous)
TT	Telbes-Kitat terrane (Island-arc) (Neoproterozoic through Devonian)
TY	Tynnda terrane (Tonalite-trondjemite-gneiss) (Archean and Paleoproterozoic)
TZ	Tymen terrane (Granulite-paragneiss) (Paleoproterozoic)
UB	Ubo-Burek terrane (Continental margin turbidite) (Late Triassic and Early Jurassic)
UC	Ulus-Cherga terrane (Island arc) (Cambrian)
UK	Urlik-lya terrane (Greenschist) (Proterozoic)
UL	Ulmen-Lobed terrane (Island arc) (Cambrian through Ordovician)
UN	Ulan terrane (Continental margin turbidite) (Late Triassic through Middle Jurassic)
UO	Ulugo terrane (Island arc) (Early Cambrian)
UR	Urti terrane (Passive continental margin) (Archean through Middle Triassic)
VZ	Vorotukha terrane (Passive continental margin) (Cambrian through Permian)
WAD	West Aldan terrane (Continental margin turbidite) (Archean)
WAG	West Angara terrane (Passive continental margin) (Neoproterozoic)
WB	Waizun-Baran terrane (Island arc) (Ordovician through Permian)
WD	Wundumiao terrane (Accretionary wedge, type B) (Mesoproterozoic through Middle Ordovician)
WSA	West Sakhalin terrane (Accretionary wedge, type A) (Cretaceous)
WST	West Stanovoy terrane (Metamorphic) (Archean through Mesoproterozoic)
WSY	West Yanan terrane (Continental margin turbidite) (Late Neoproterozoic through Devonian)
XC	Xicheng terrane (Metamorphic) (Proterozoic)
YN	Yenisei terrane (Paragneiss) (Paleoproterozoic?)
ZA	Zavhan terrane (Continental margin arc) (Late Neoproterozoic)
ZN	Zhangquangcailing superterrane (Continental margin arc) (Neoproterozoic through Devonian)
ZO	Zoolen terrane (Accretionary wedge, type B) (Ordovician(?) and Devonian)
ZRA	Zhuravlevsk-Amur River terrane (Continental margin turbidite) (Late Jurassic and Early Cretaceous)

**Overlap Assemblages**

ab	Abinsk plateau basalt (Early and Middle Triassic)
ad	Aitycha intermountain sedimentary basin (Miocene and Pliocene)
ag	Akul (Rybink) molasse basin (Middle Devonian to Early Carboniferous)
ags	Argun sedimentary basin (Early Paleozoic)

**Specific regions for these maps were compiled by the following persons.**

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Transbaikalia	Anatolii P. Kochnev, Mikhail I. Kuzmin, Sergey A. Letunov, Galina D. Malceva, Zhan V. Semenikov, Alexander V. Spiridonov, Lyudia M. Zornina
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Japan	Masatoshi Onozuka, Sadakazu Sudo, Keiji Watanabe

**Geologic base map is generalized version of Northeast Asia Geodynamics Map (Popov and others, 2003).**

**Mineral deposits and placer districts numbered within quadrants bounded by 4 degrees of latitude and 6 degrees of longitude. Refer to companion summary tables of lode deposits and placer districts for additional information. Some deposits occur on islands too small to depict on map.**

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**Geographic base from Miller and others (1998, 1999)**

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