U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

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SHEET 3 OF 4

PREPARED IN COLLABORATION WITH
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MONGOLIAN ACADEMY OF SCIENCES
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GEOLOGICAL SURVEY OF JAPAN/AIST

CONTACTS, FAULTS, AND SYMBOLS

Sedimentary contact bordering overlap assemblage

All contacts between terranes are faults

Active subduction zone

Post-Accretion Faults

Thrust

Normal fault

Rift

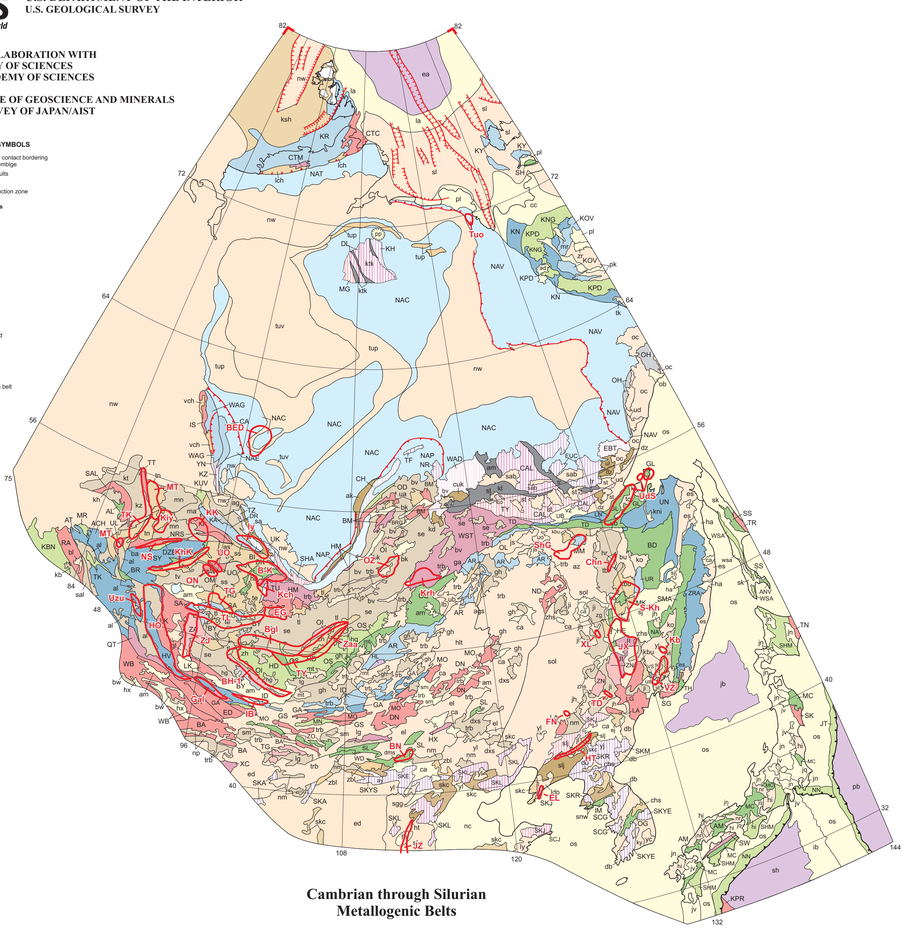
Symbols

Astrobleme

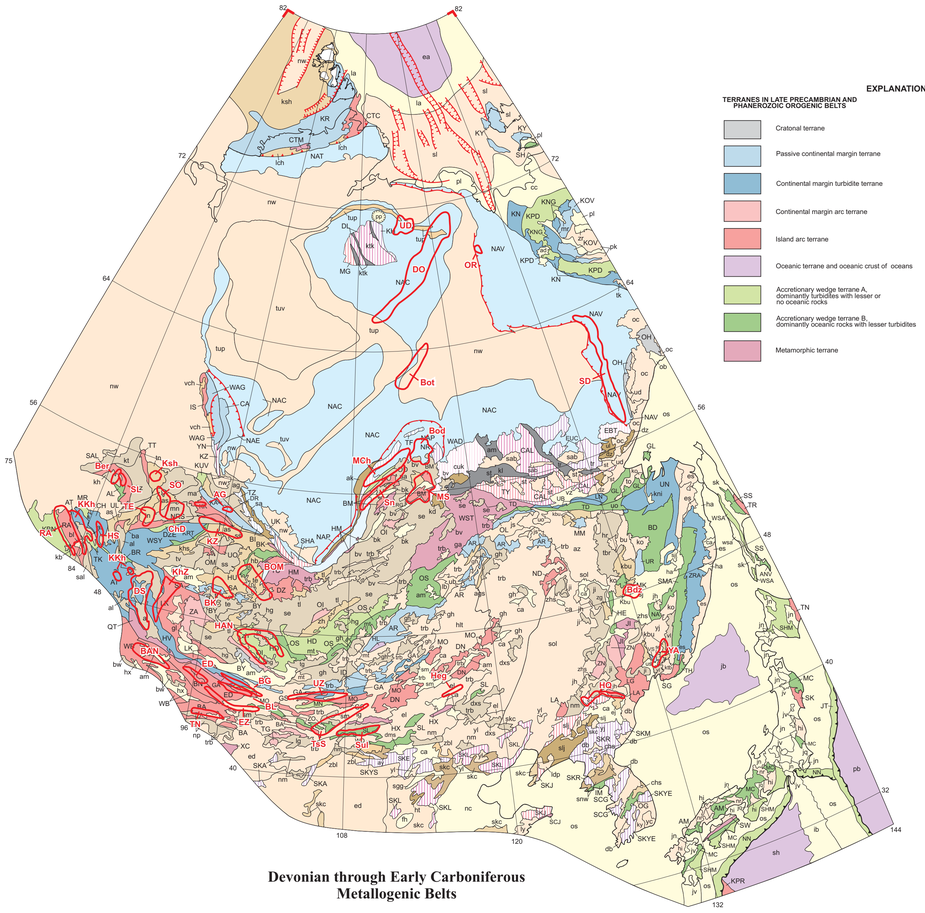
Major icefield

Lake

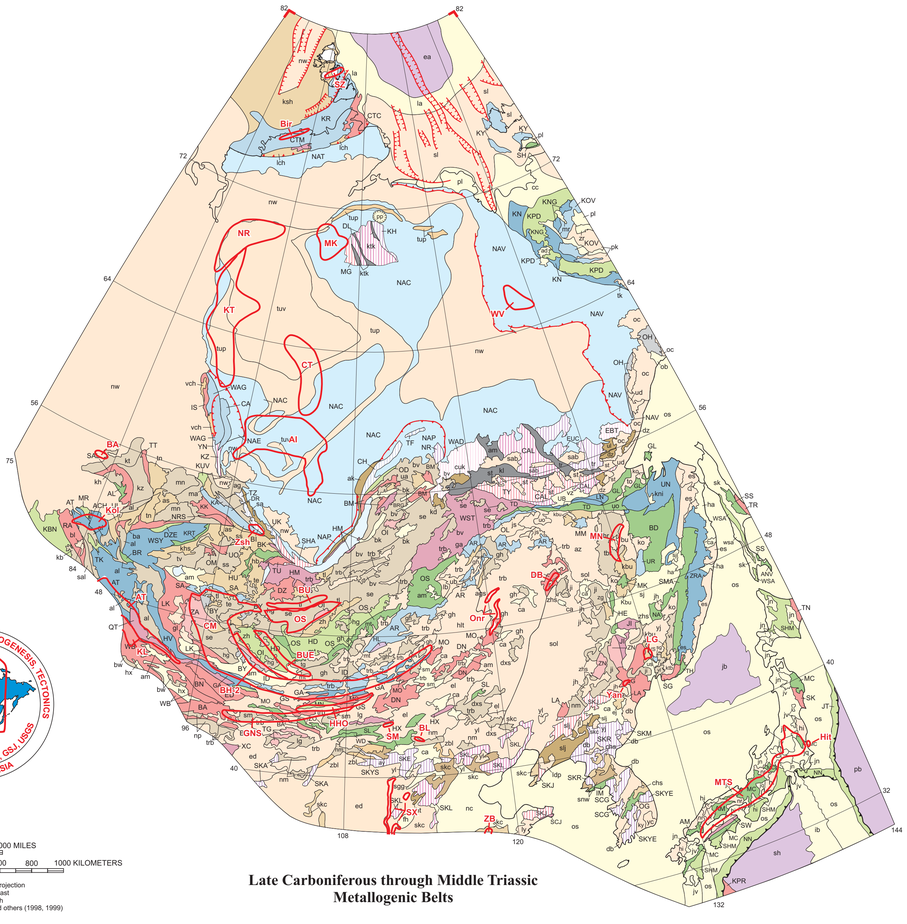
ED Metallogenic belt



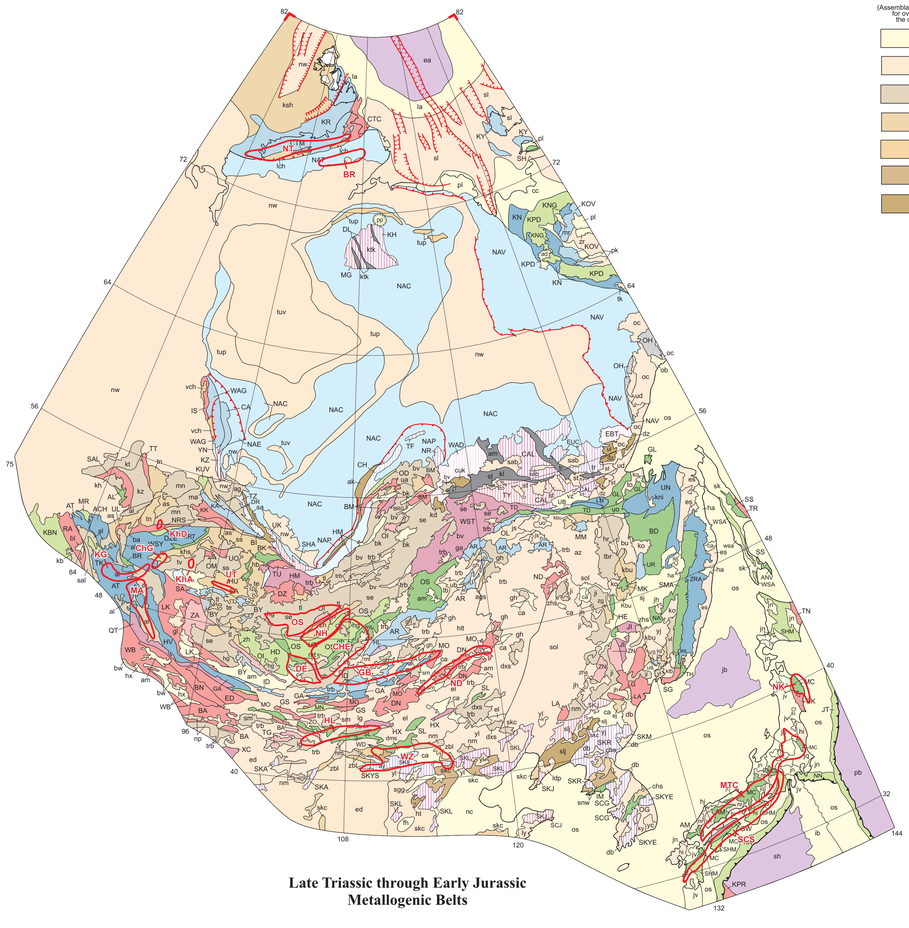
Cambrian through Silurian Metallogenic Belts



Devonian through Early Carboniferous Metallogenic Belts



Late Carboniferous through Middle Triassic Metallogenic Belts



Late Triassic through Early Jurassic Metallogenic Belts

EXPLANATION

TERRANES IN LATE PRECAMBRIAN AND PHANEROZOIC OROGENIC BELTS

- Cratonal terrane
- Passive continental margin terrane
- Continental margin turbidite terrane
- Continental margin arc terrane
- Island arc terrane
- Oceanic terrane and oceanic crust of oceans
- Accretionary wedge terrane A, dominantly turbidites with lesser or no oceanic rocks
- Accretionary wedge terrane B, dominantly oceanic rocks with lesser turbidites
- Metamorphic terrane

TERRANES IN EARLY PRECAMBRIAN CRYSTALLINE BASEMENT OF CRATONS AND CRATONS WITH MIOGEOCLINAL OVERLAP

- Granite-greenstone terrane
- Tonalite-trondhjemite-gneiss terrane
- Granulite-orthogneiss terrane
- Granulite-paragneiss terrane
- Paragneiss terrane
- Greenschist terrane
- Craton with miogeoclinal overlap and craton margin
- Major melange zone

OVERLAP AND STITCH ASSEMBLAGES

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

- Cenozoic
- Mesozoic (Triassic, Jurassic, and Cretaceous)
- Middle and Late Paleozoic (Devonian through Permian)
- Late Neoproterozoic and Early Paleozoic (Vendian through Silurian)
- Neoproterozoic through Riphean
- Mesoproterozoic
- Paleoproterozoic

MINERAL RESOURCES, METALLOGENESIS, TECTONICS
RAS, MAS, JU, KIGAM, GSJ, USGS
NORTHEAST ASIA

SCALE : 1:15,000,000

0 500 1000 MILES

0 200 400 600 800 1000 KILOMETERS

Lambert Azimuthal equal-area projection
Central longitude 110 degrees East
Central latitude 60 degrees North
Geographic base from Miller and others (1998, 1999)

PRELIMINARY METALLOGENIC BELT AND MINERAL DEPOSIT MAPS FOR NORTHEAST ASIA: SHEET 3 - CAMBRIAN THROUGH EARLY JURASSIC METALLOGENIC BELTS

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

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