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

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SHEET 2 OF 4

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

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

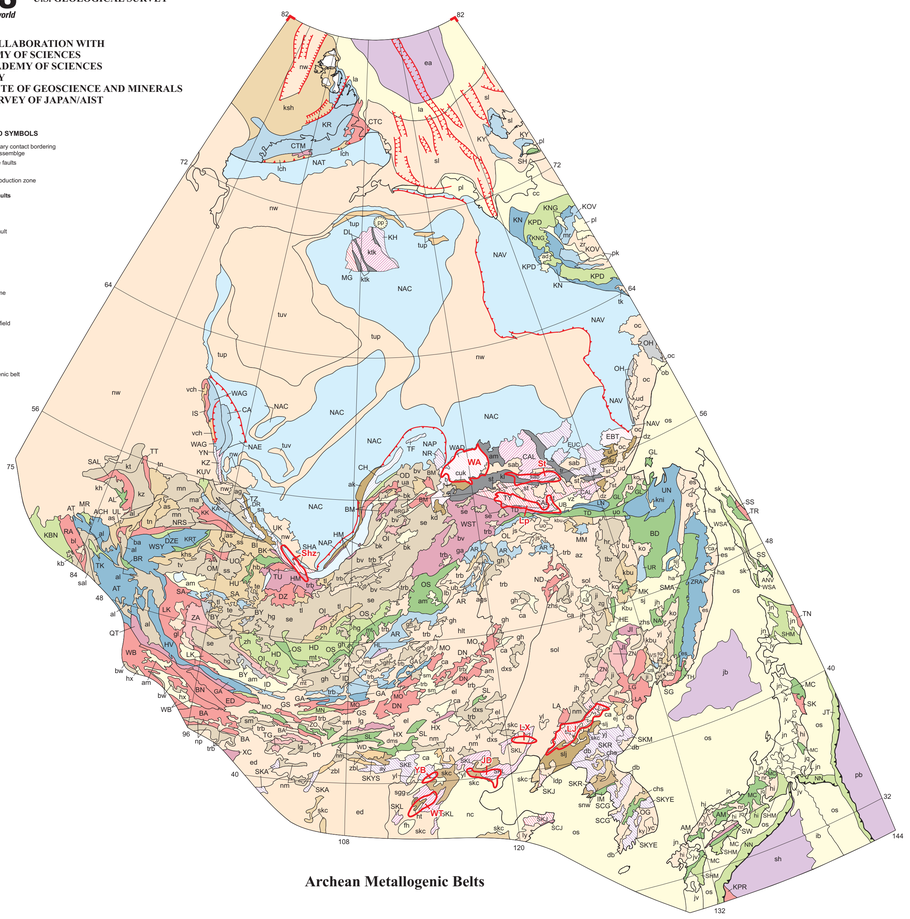
Symbols

Astroblème

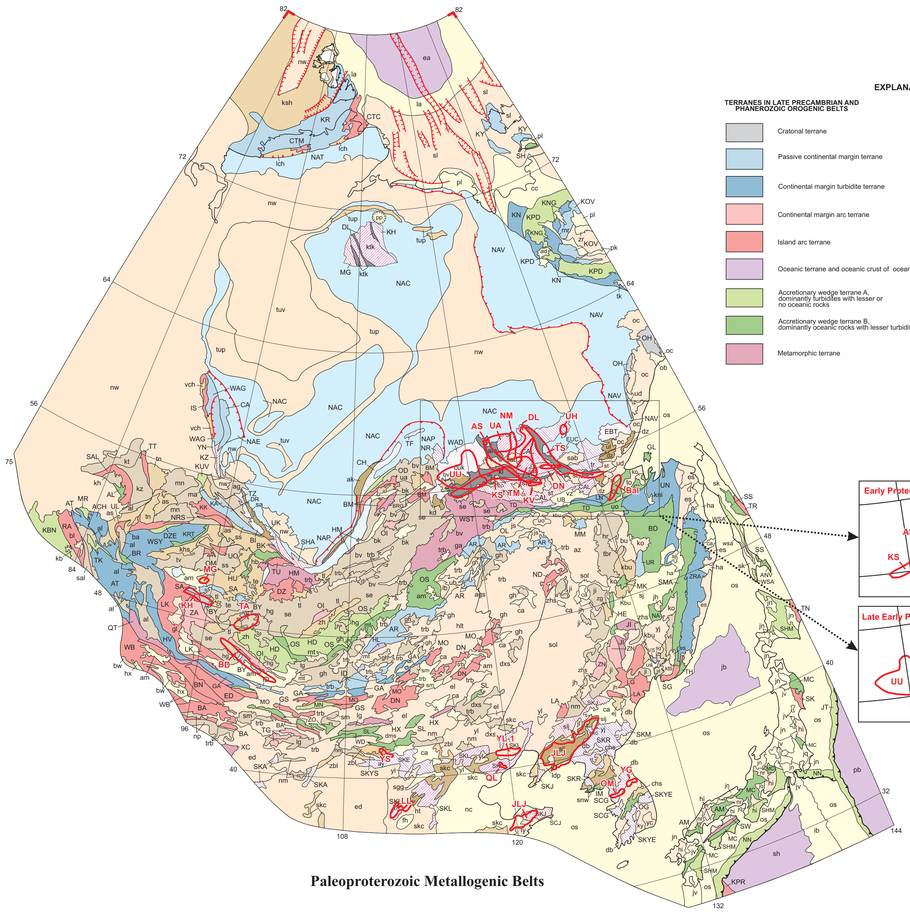
Major icefield

Lake

ED Metallogenic belt



Archean Metallogenic Belts



Paleoproterozoic Metallogenic Belts

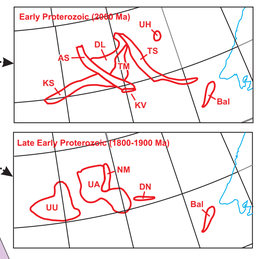
EXPLANATION

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

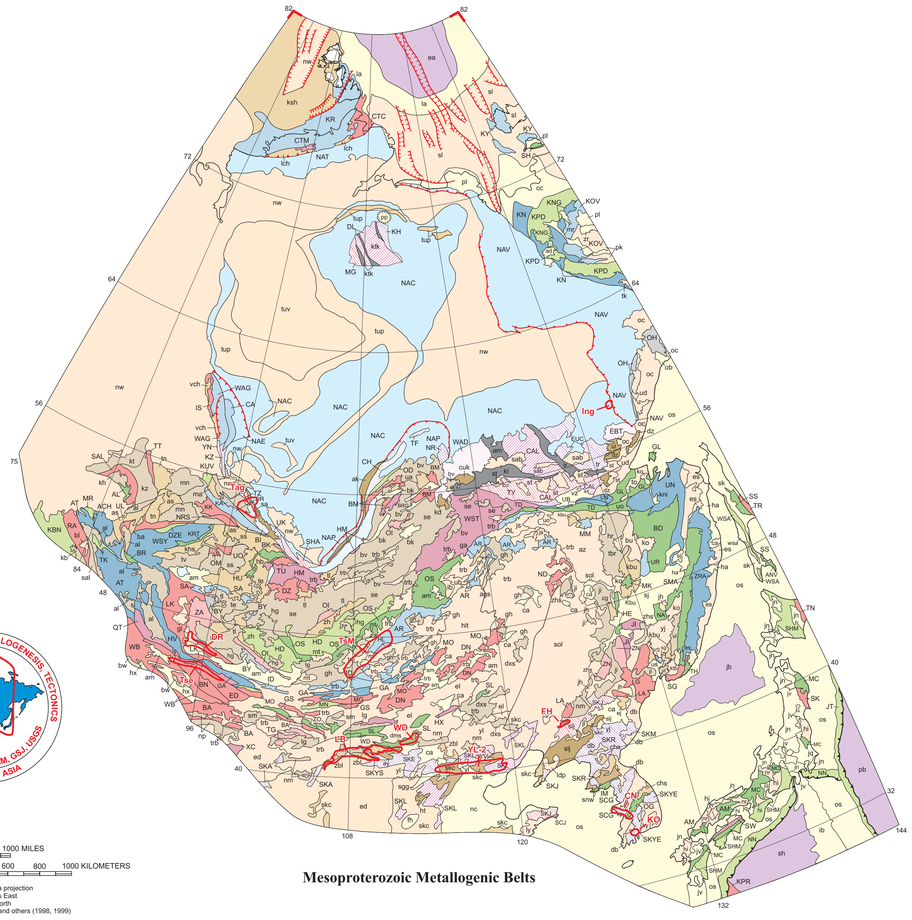
- Granite-greenstone terrane
- Tonalite-trondhjemite-gneiss terrane
- Granulite-orthogneiss terrane
- Granulite-paragneiss terrane
- Paragneiss terrane
- Greenschist terrane
- Craton with miogeoclinal overlap and craton margin
- Major melange zone



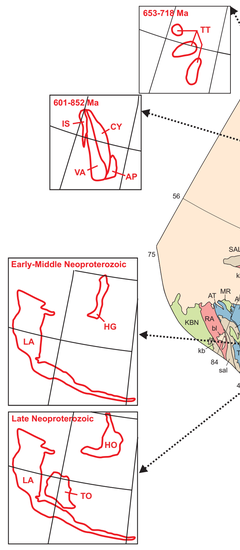
OVERLAP AND STITCH ASSEMBLAGES

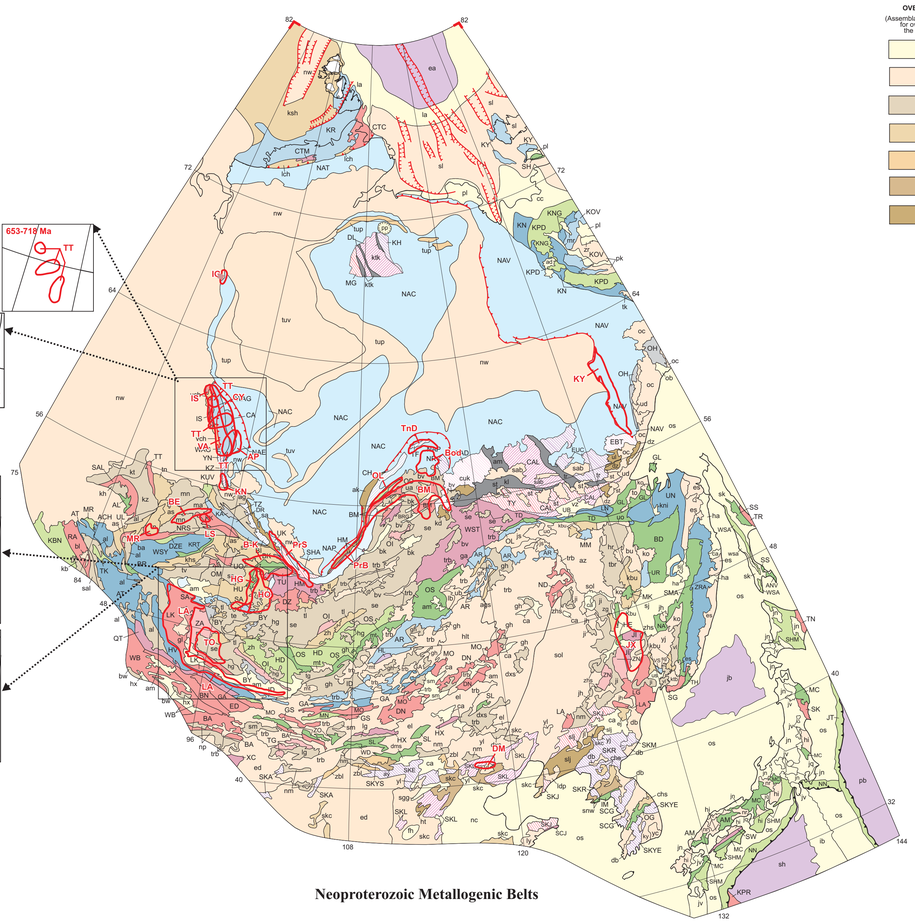
(Assemblages shown by lighter hues according to age; for overlap assemblages with long age span, the color of the oldest major unit is shown.)

- 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



Mesoproterozoic Metallogenic Belts





Neoproterozoic Metallogenic Belts

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 2 - ARCHEAN THROUGH NEOPROTEROZOIC 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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