

RETURN MINERAL TRAYS

GEO-PARTY NEXT THURSDAY

NOON

GOOD PIZZA!!!

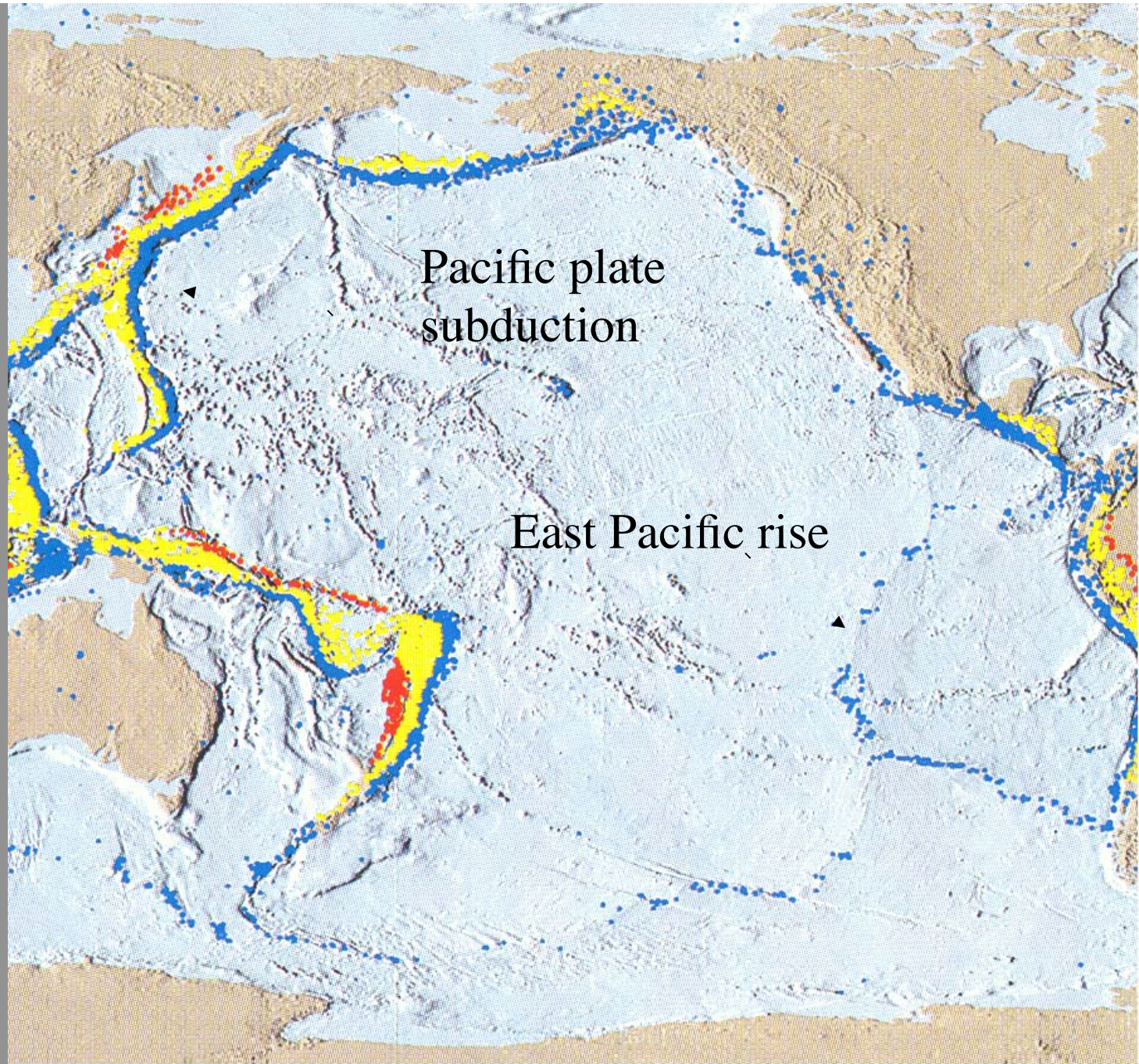
FINAL PROJECT HELP AFTERWARDS

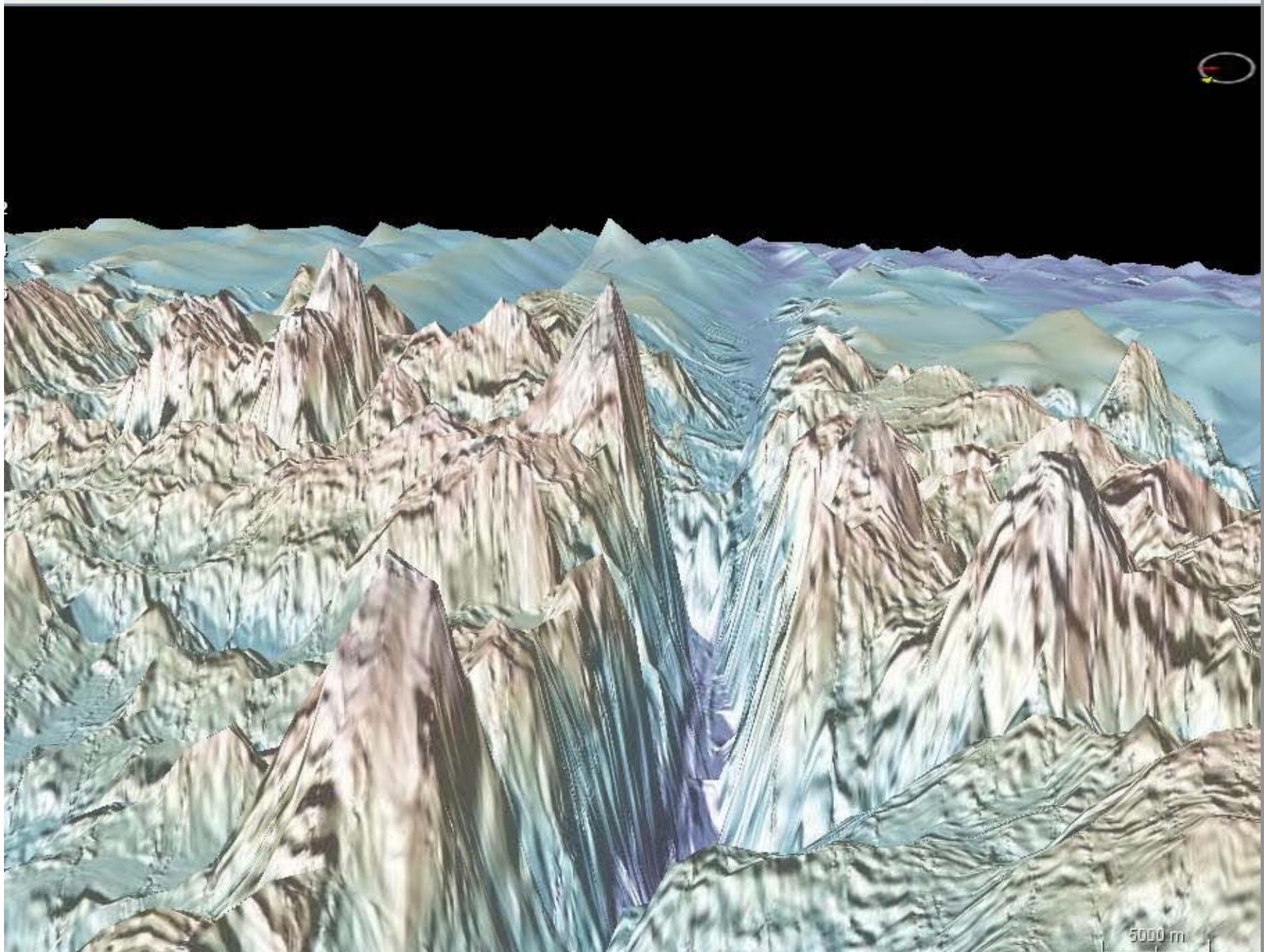
RETURN MINERAL TRAYS

**ON-LINE
COURSE/INSTRUCTOR
EVALUATIONS**

PLURAL

**FILL OUT ONE FOR PETER
AND ONE FOR DAVE**

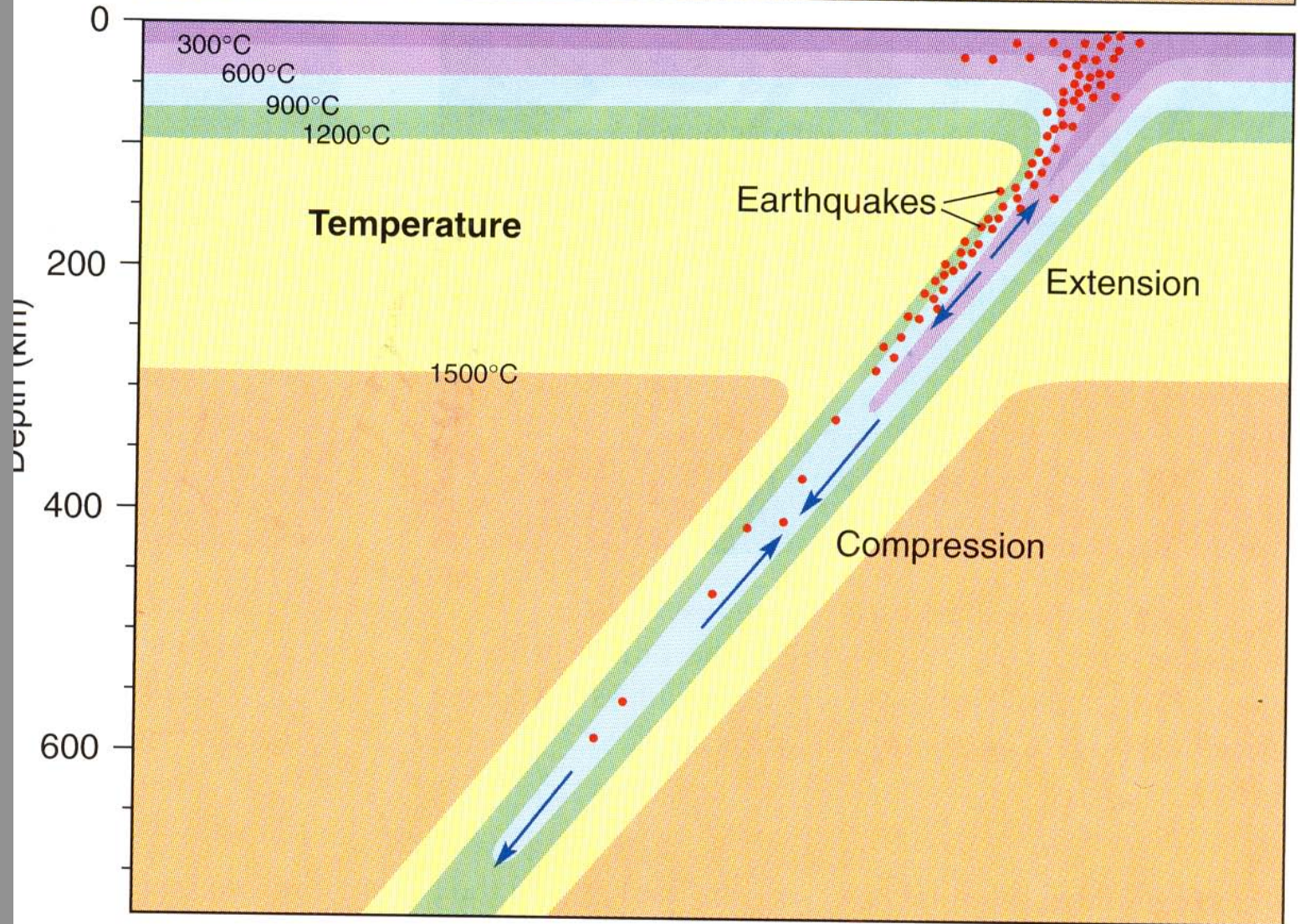


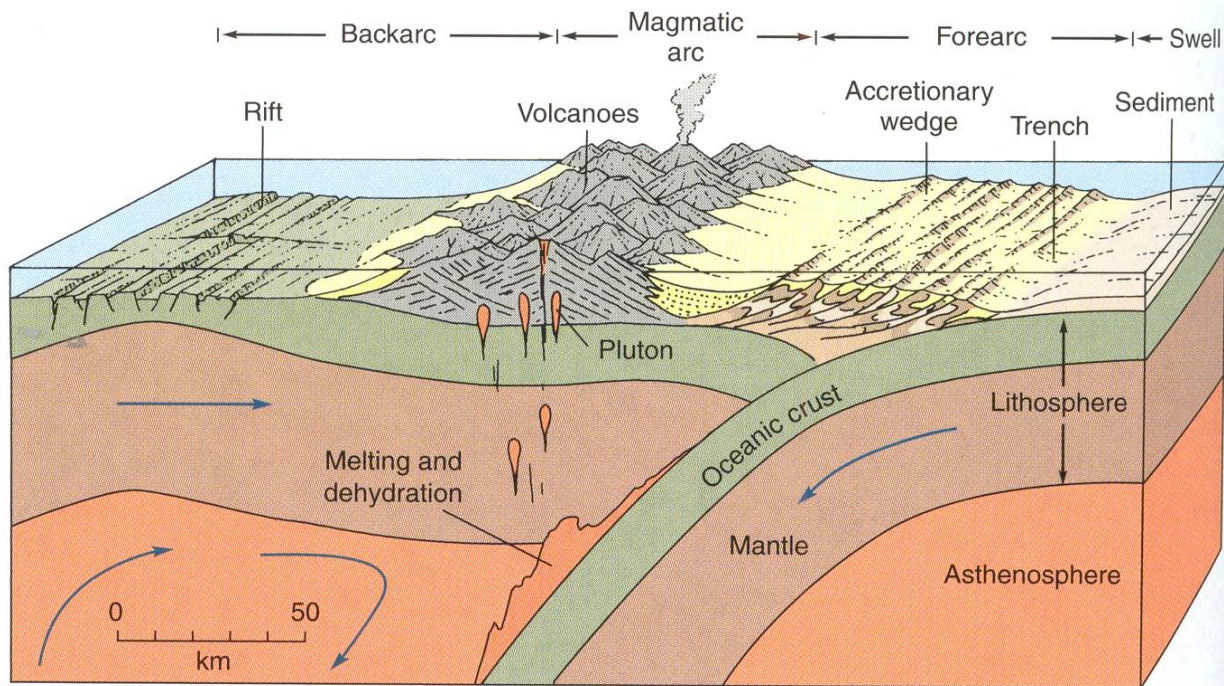


Heat flow

Backarc

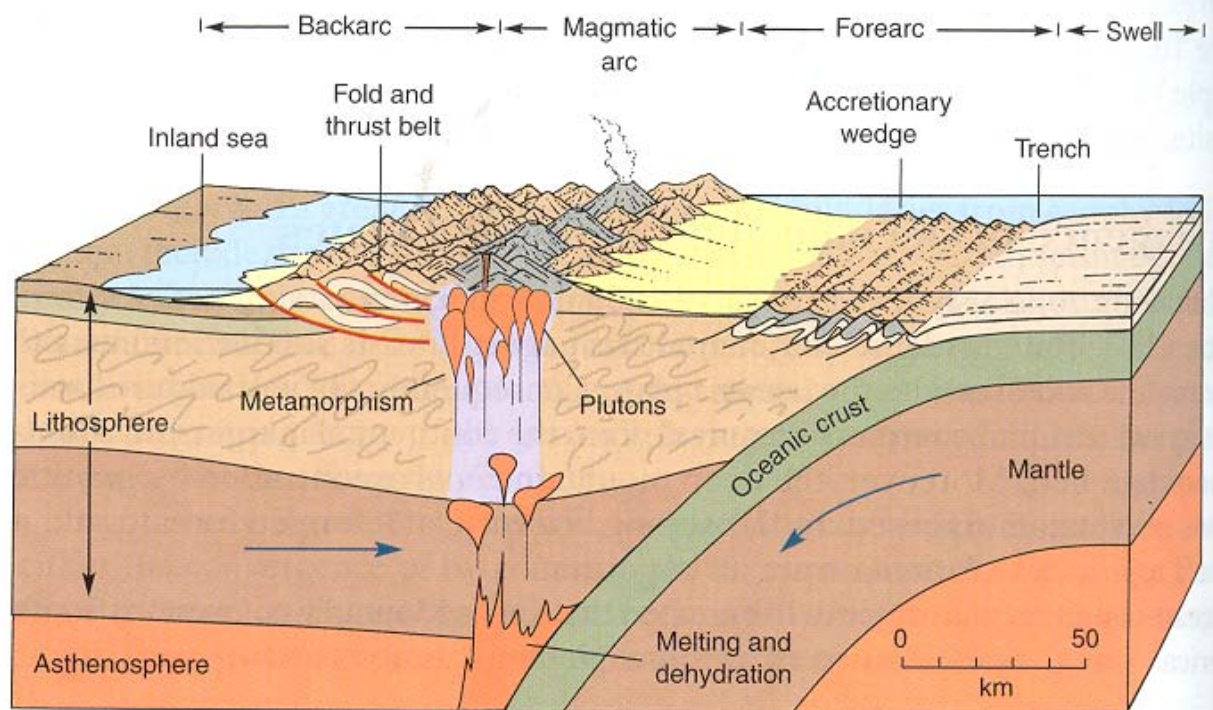
Volcanoes Trench

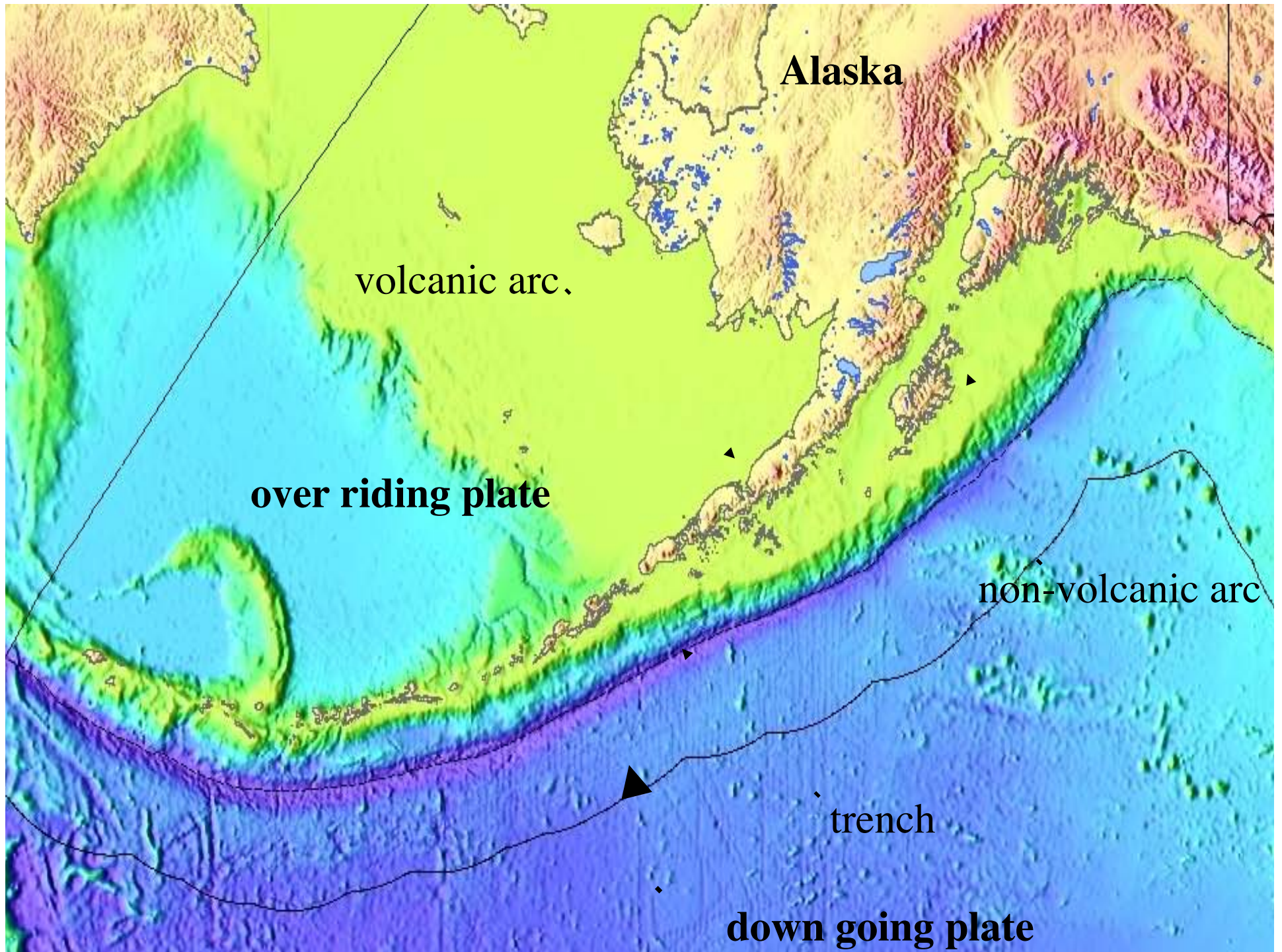




Island arc:
oceanic
over riding
plate

Continental arc:
continental
over riding
plate



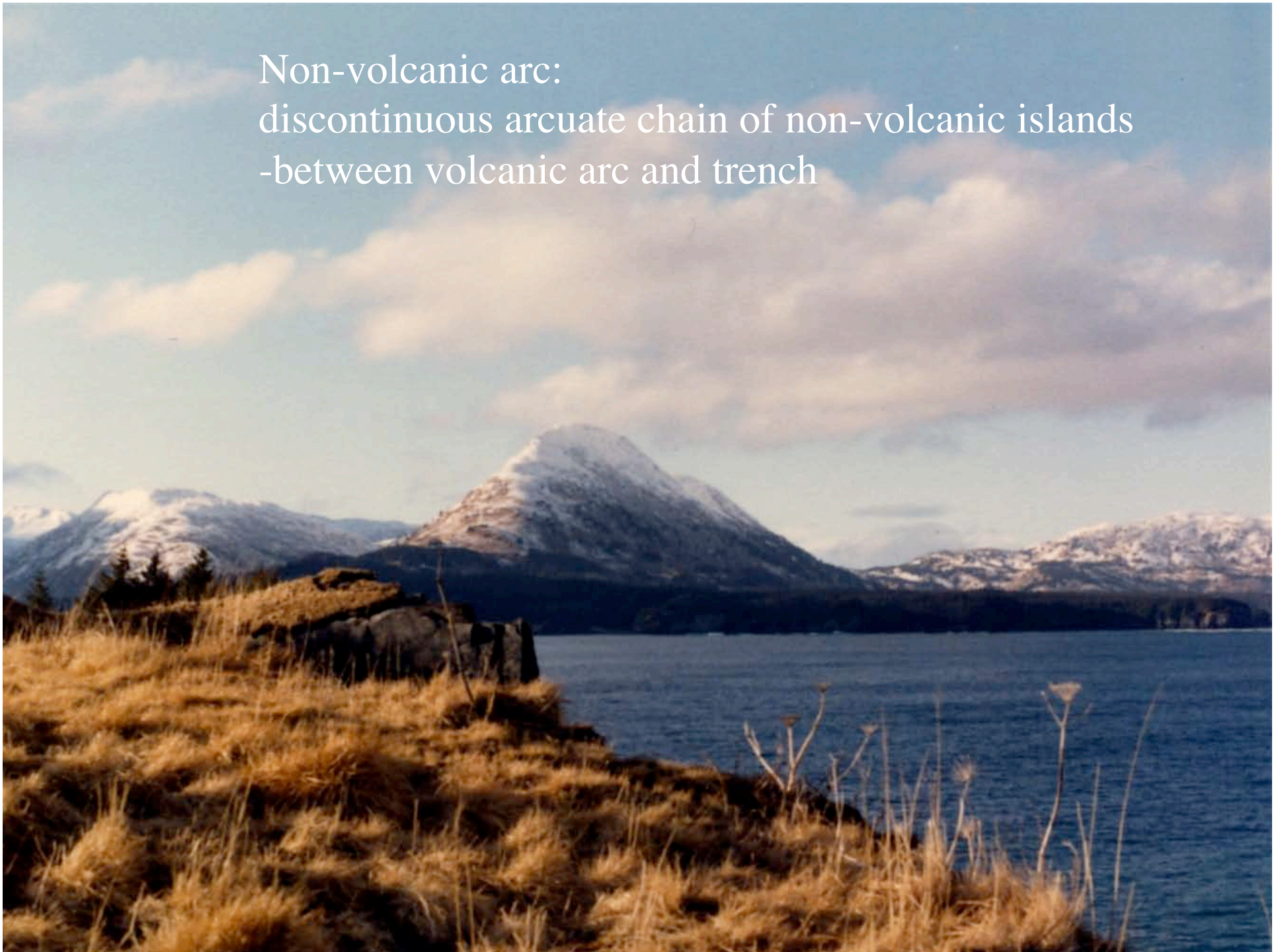


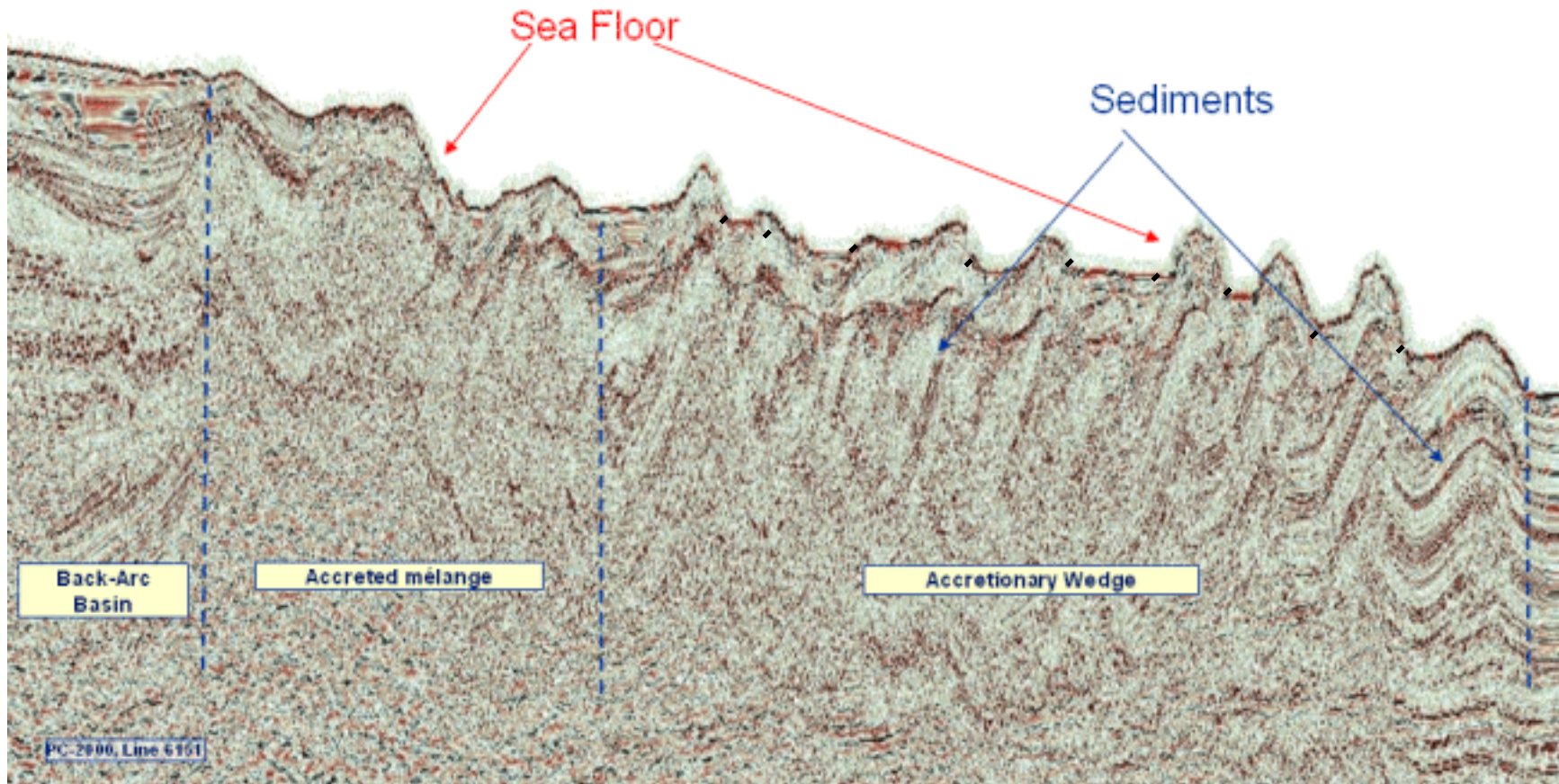
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**FILL OUT COURSE
EVALUATIONS**

RETURN MINERAL TRAYS

Non-volcanic arc:
discontinuous arcuate chain of non-volcanic islands
-between volcanic arc and trench



N**S**

Fault-bounded blocks. Away from trench:
Both faults and rocks get older
Both faults and rocks dip more steeply



Turbidite: rhythmically layered
greywacke sandstone

1 5 2004



Deep-sea limestone and chert

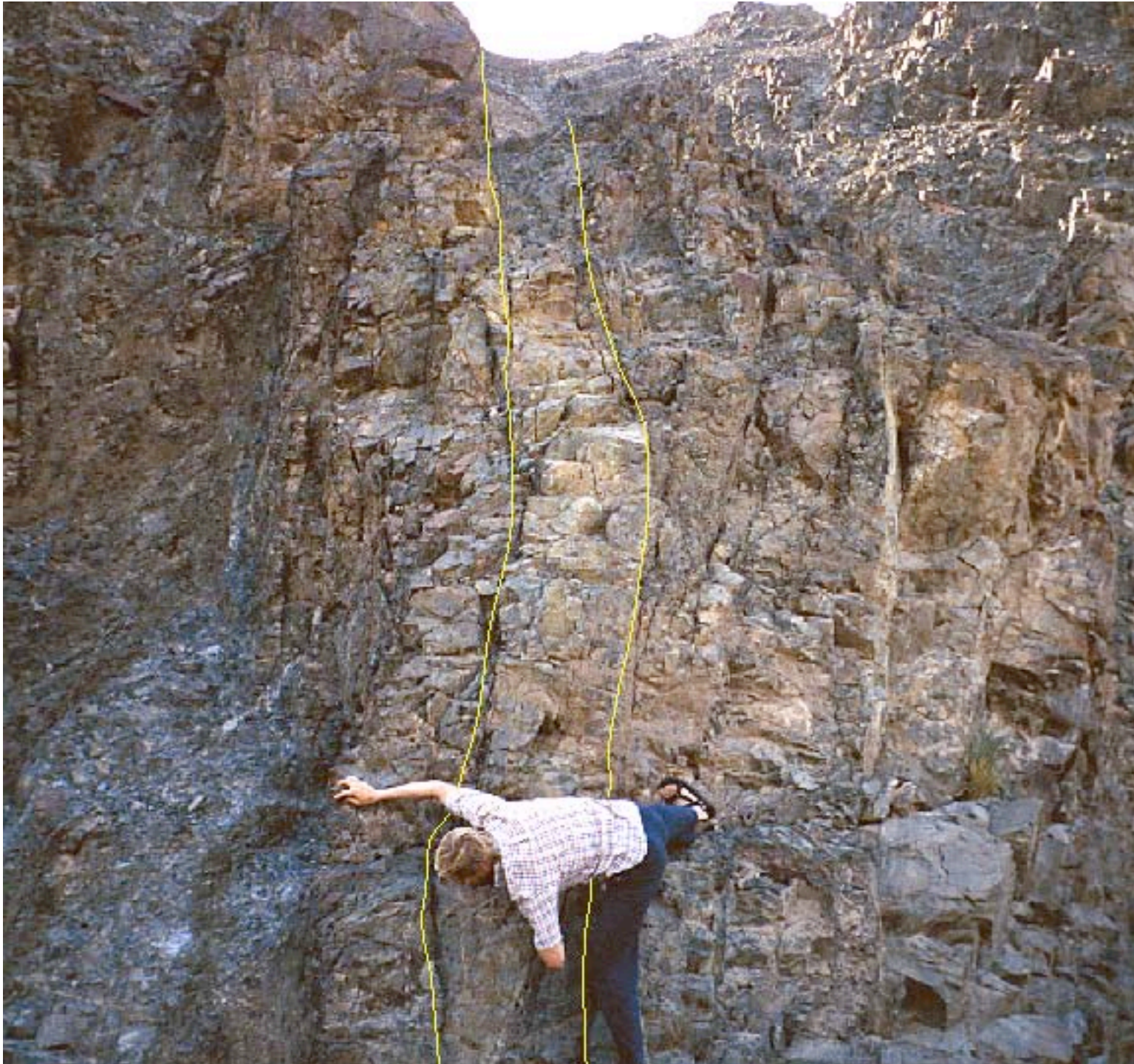


bedded chert



Ophiolite
and ophiolite
fragments

pillow basalt



Ophiolite
and
ophiolite
fragments

Sheeted
dikes

Ophiolite
and
ophiolite
fragments

layered
gabbro





Ophiolite
and
ophiolite
fragments

serpentinite
C. Nicollet



Ophiolite
and
ophiolite
fragments

serpentinite



High P Low T metamorphism
blueschist facies

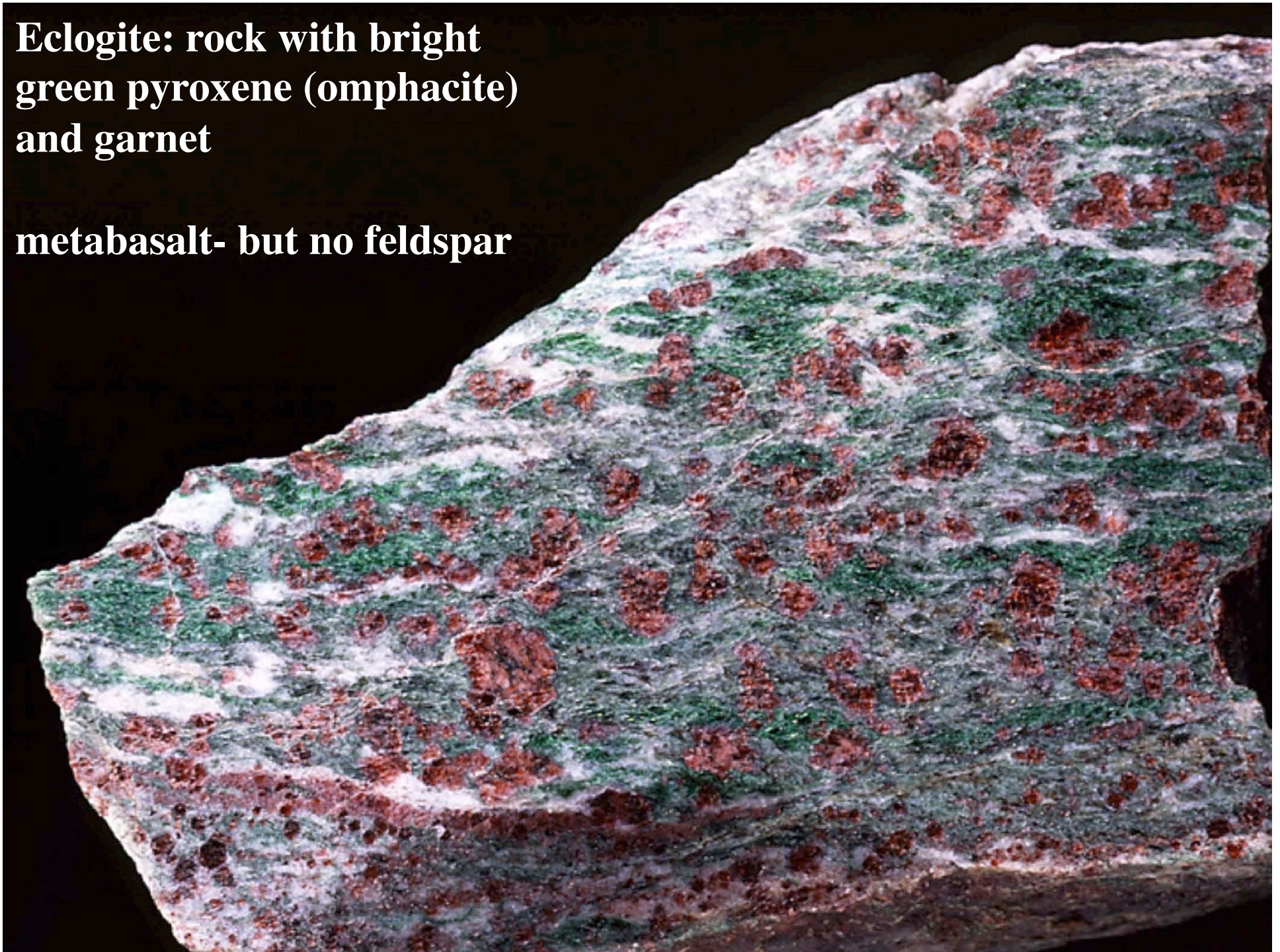


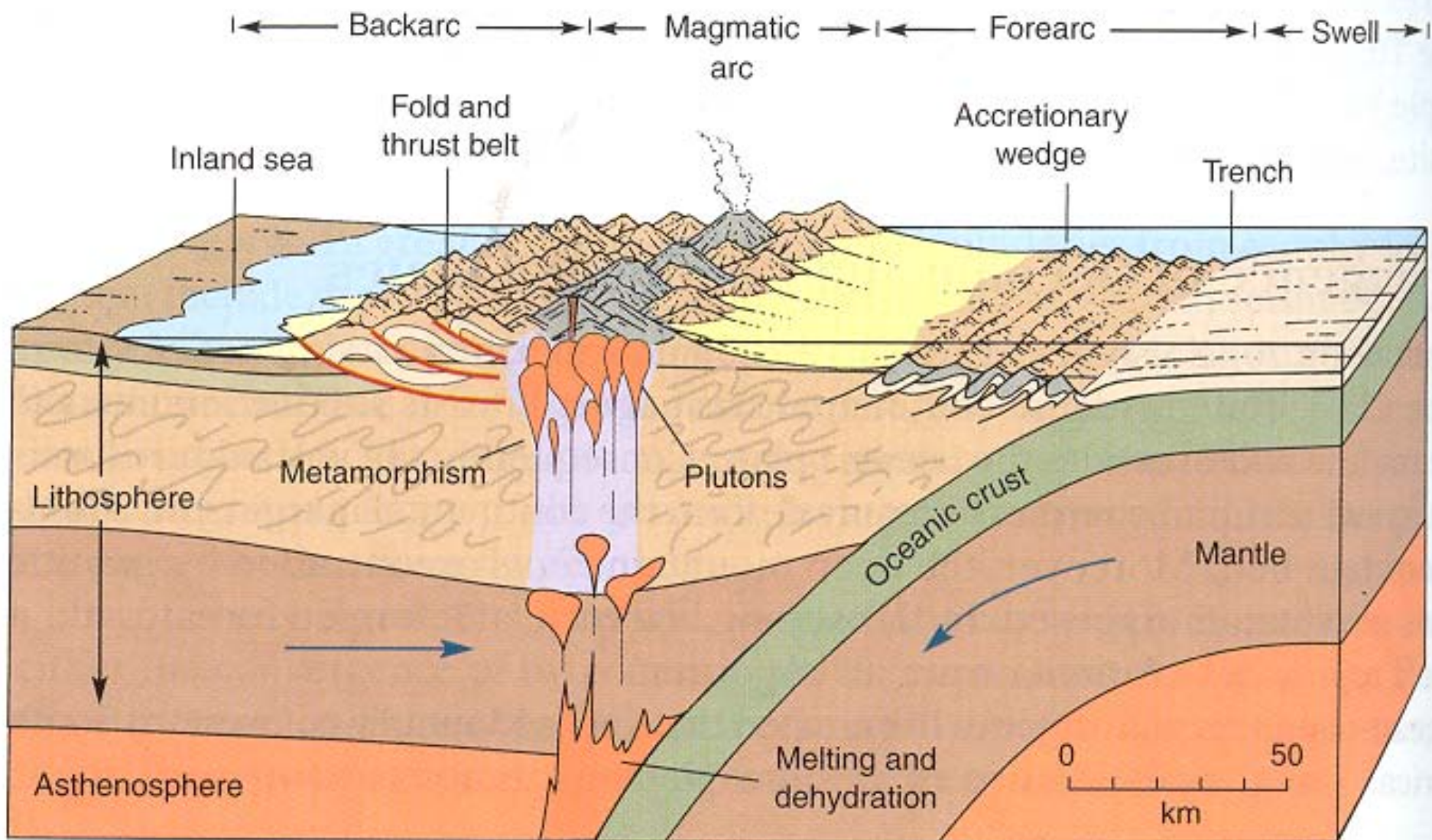
High P medium T
metamorphism
Eclogite facies

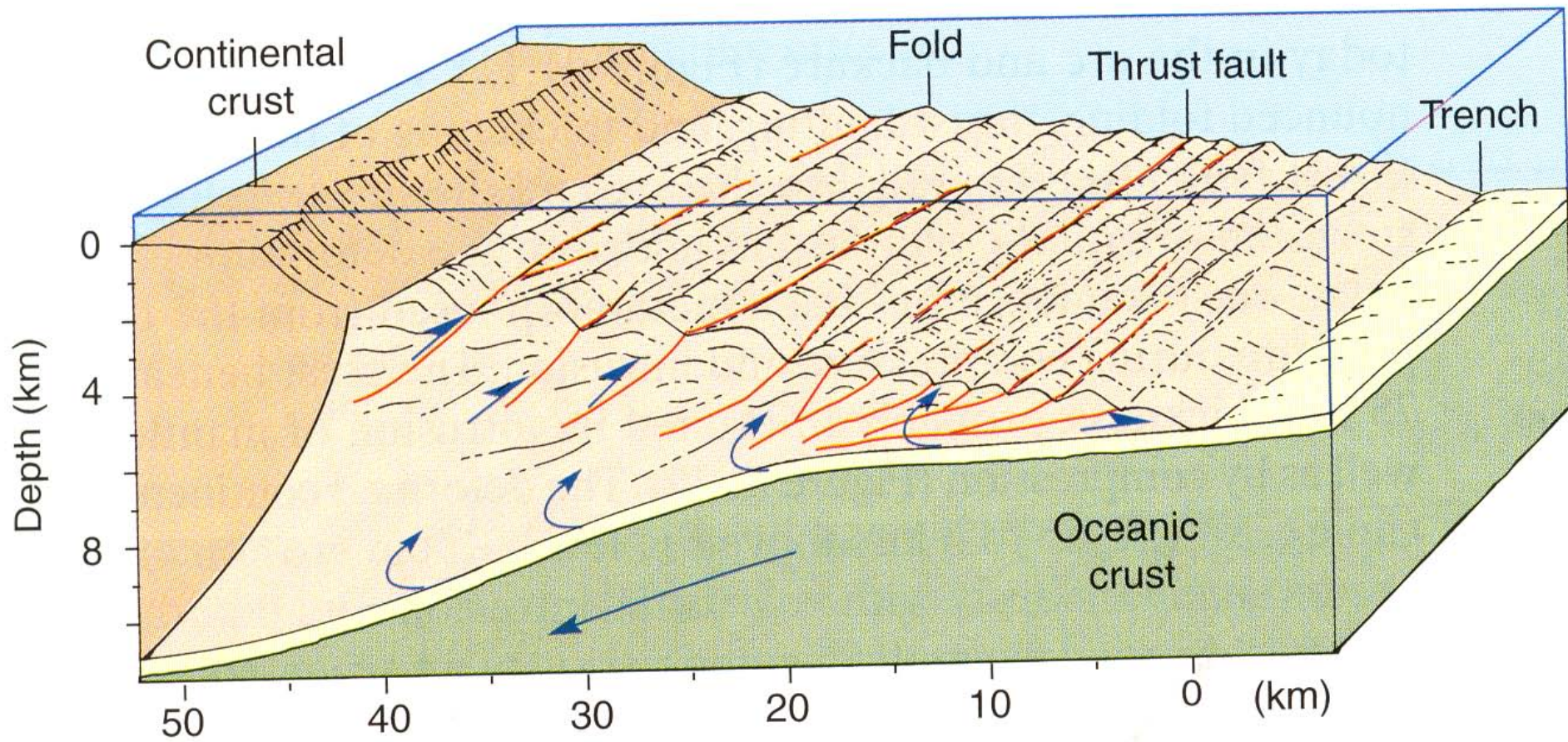


**Eclogite: rock with bright
green pyroxene (omphacite)
and garnet**

metabasalt- but no feldspar







North

South

Cascade arc

volcanic arc

Continental shelf

Continental slope

non-volcanic arc

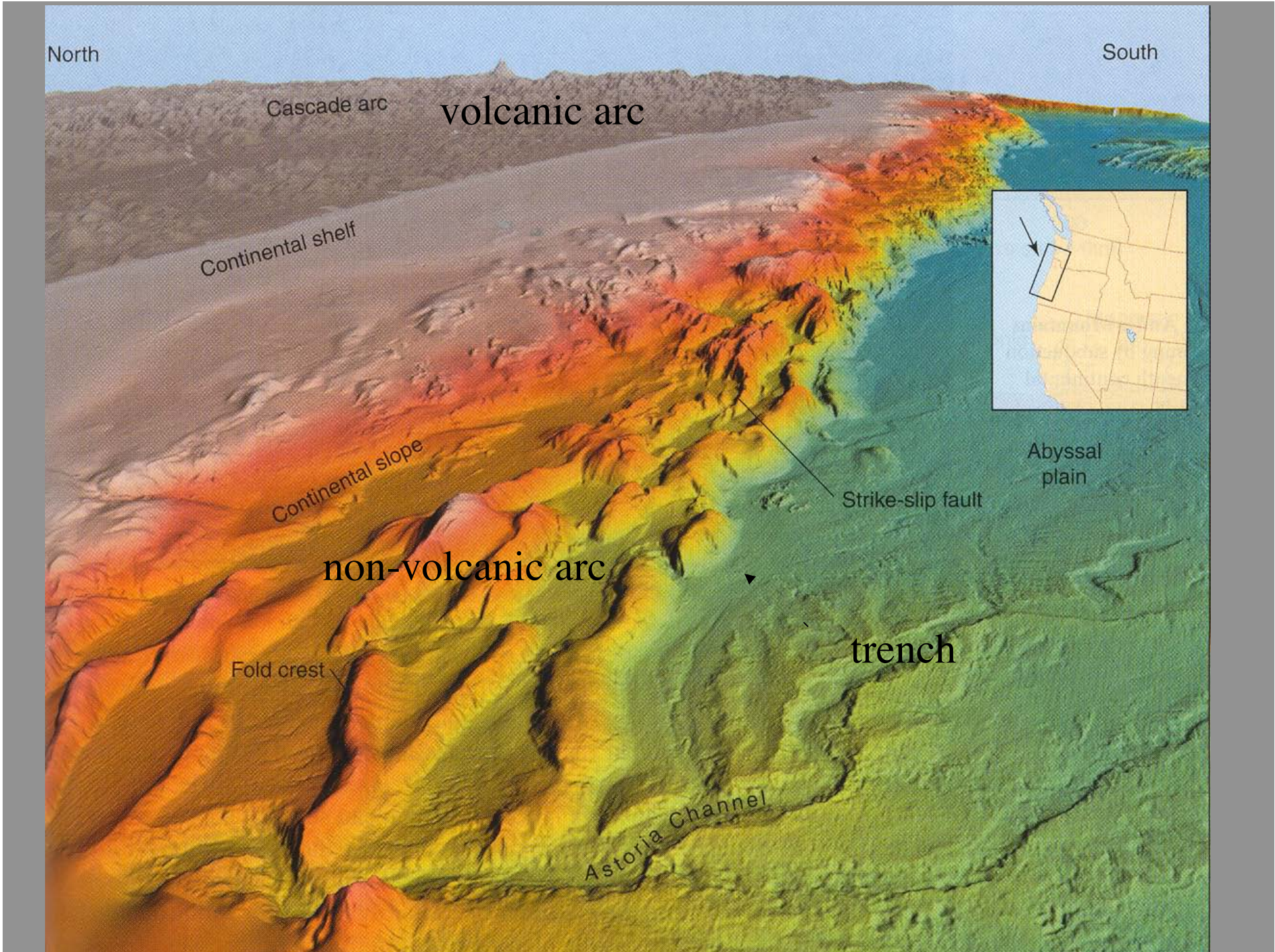
Fold crest

Astoria Channel

Strike-slip fault

Abyssal plain

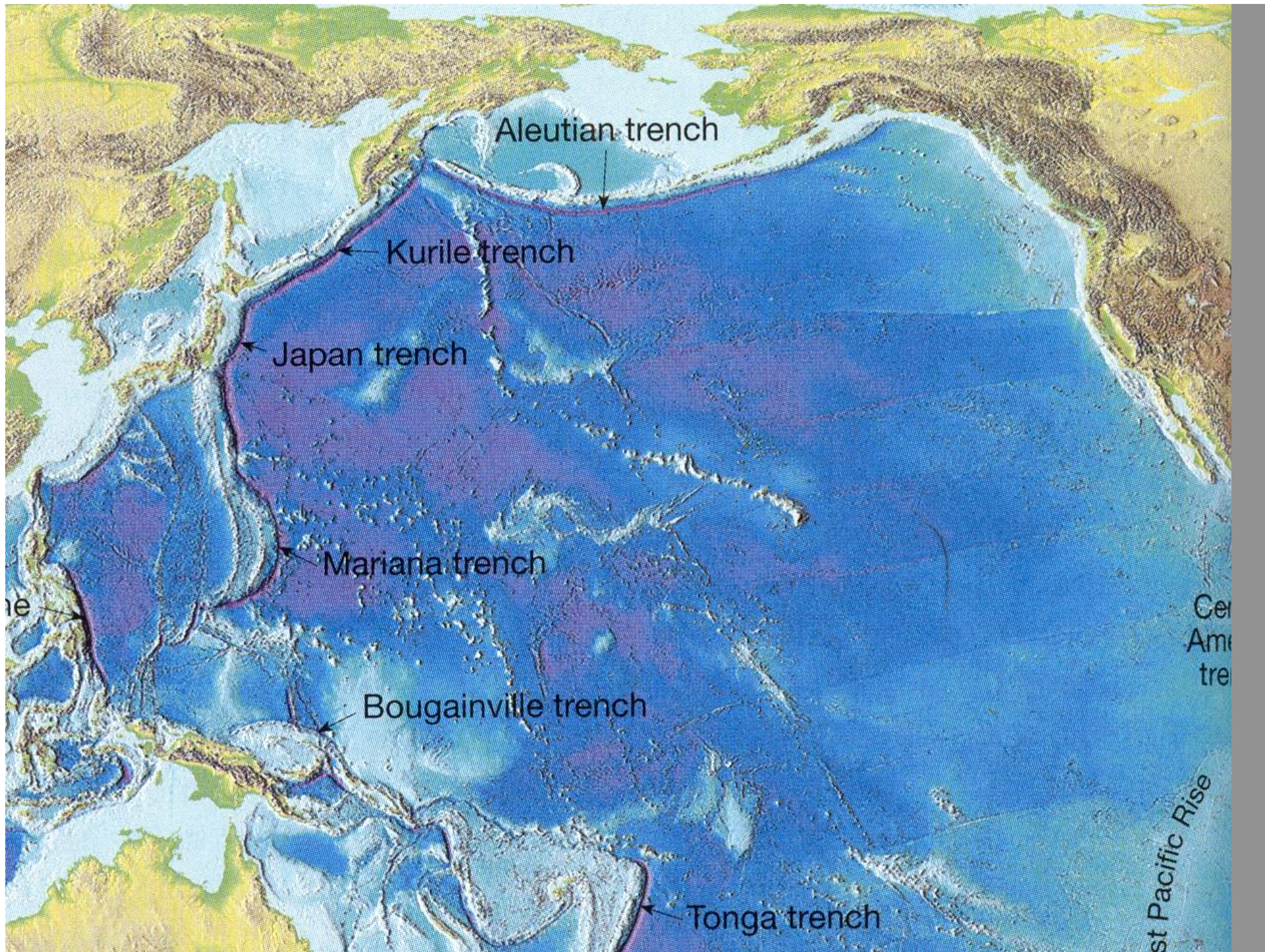
trench



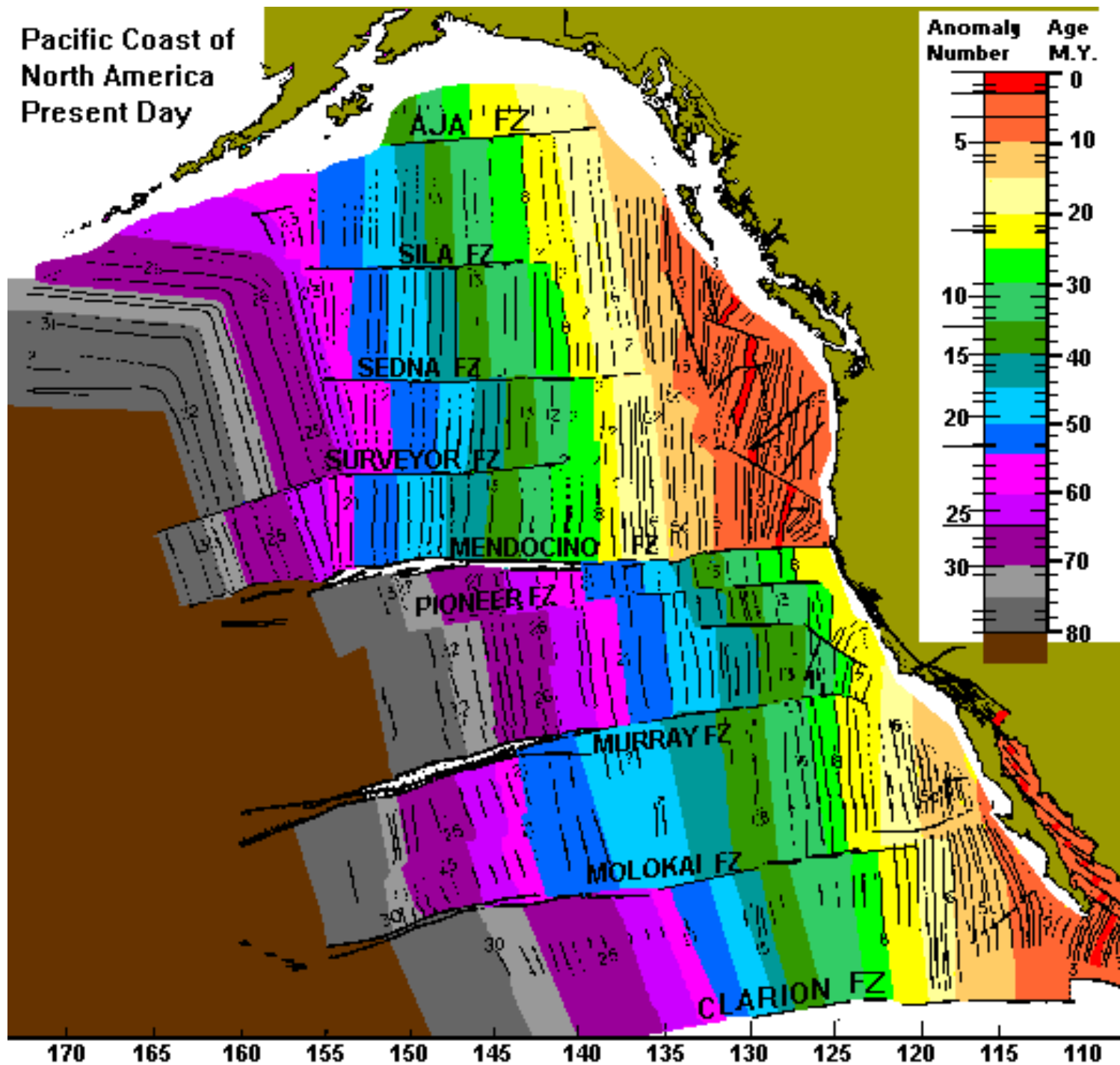
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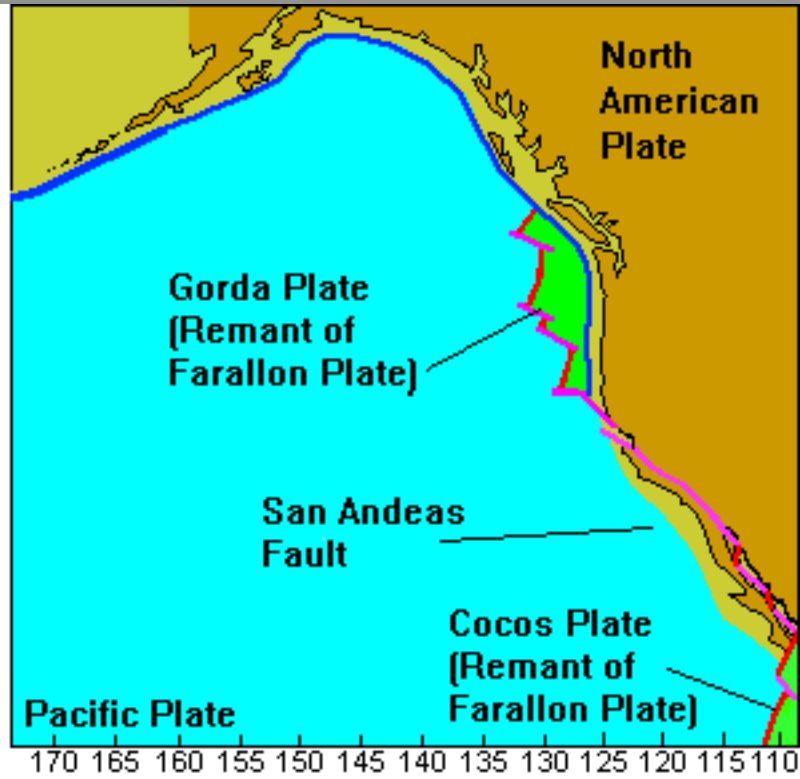
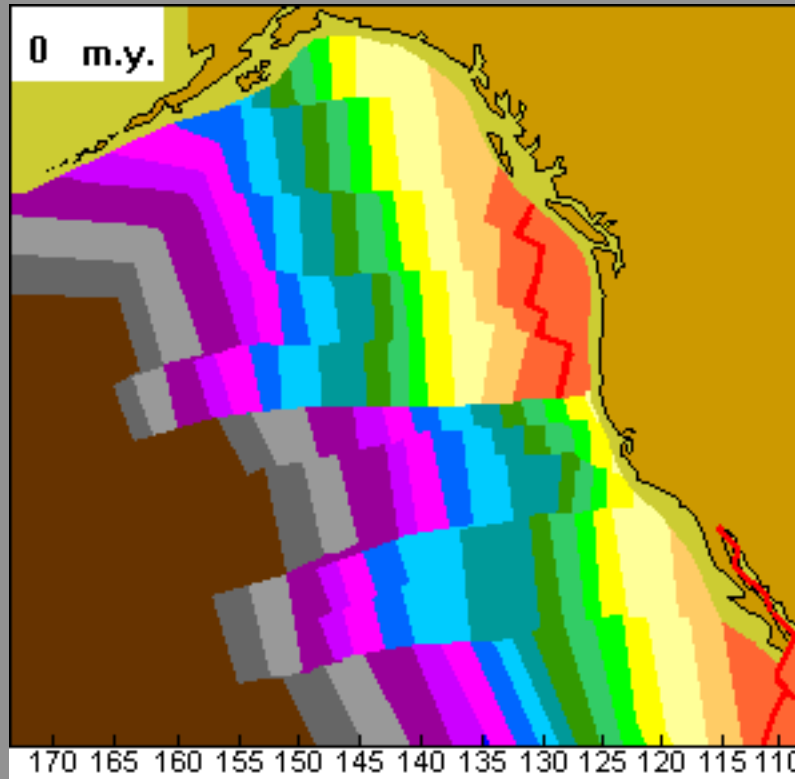
**FILL OUT COURSE
EVALUATIONS**

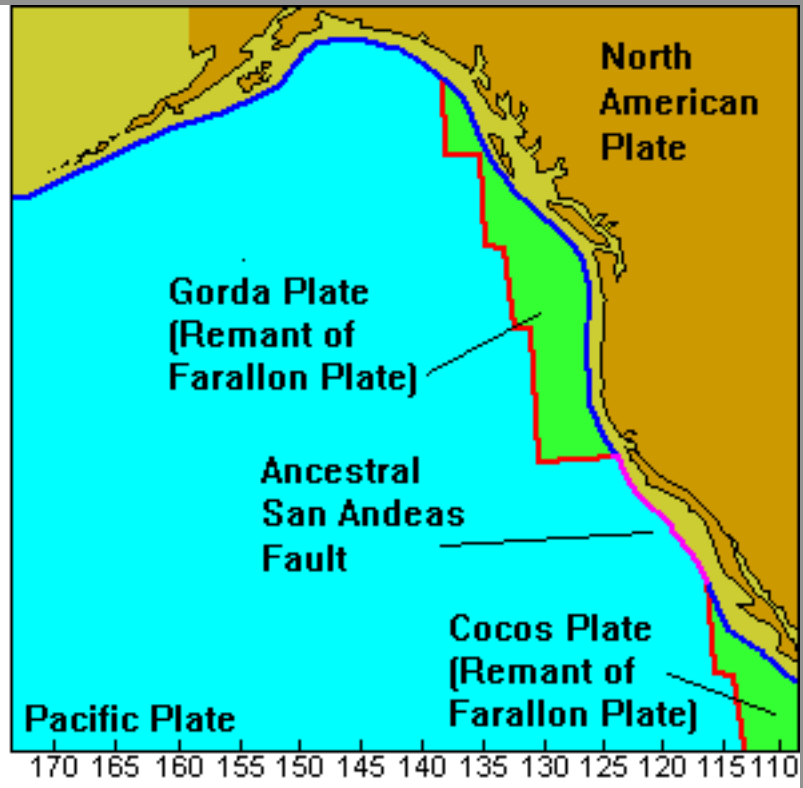
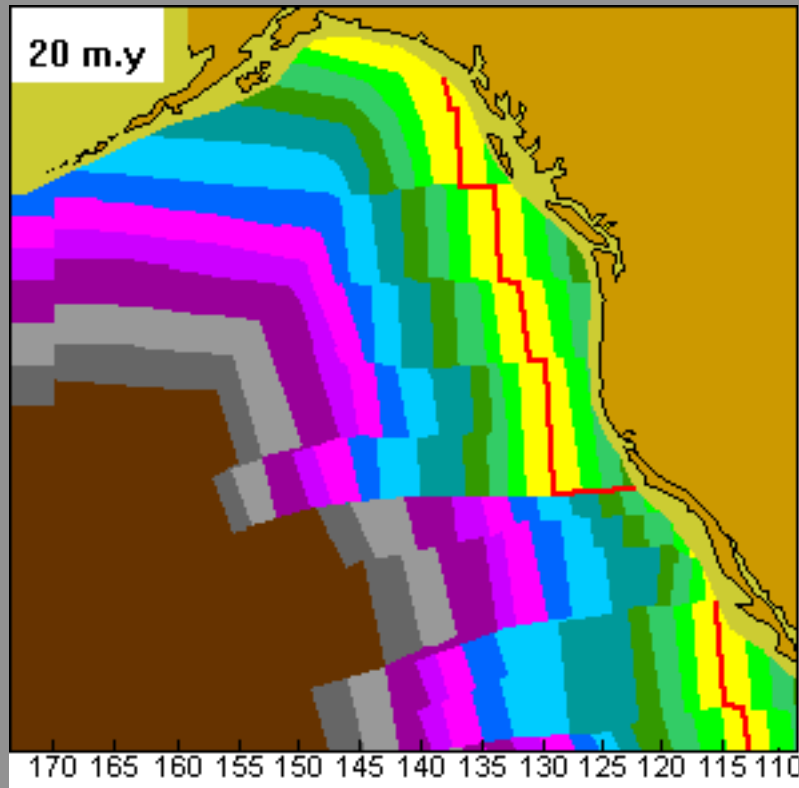
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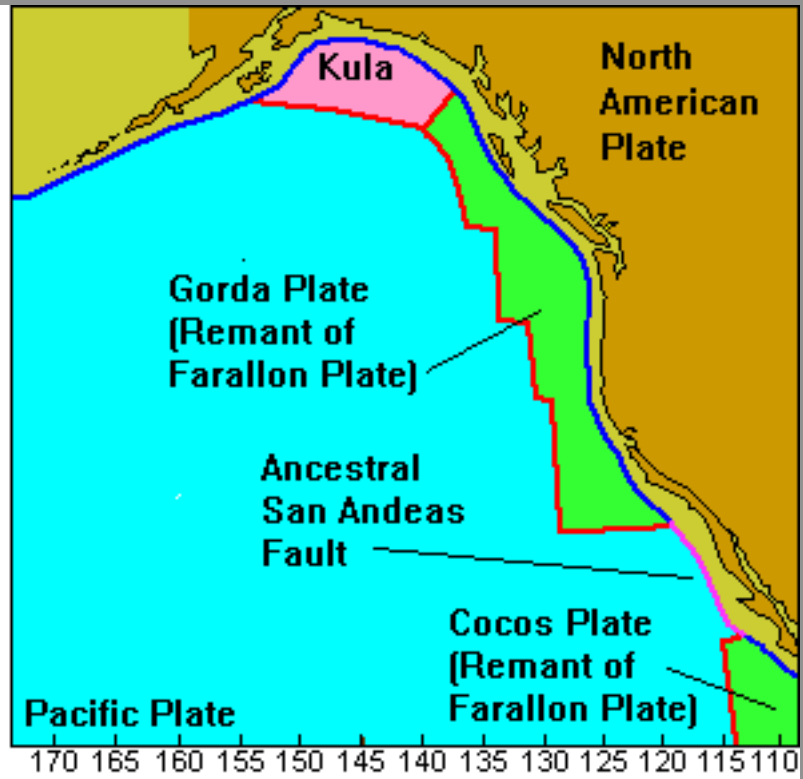
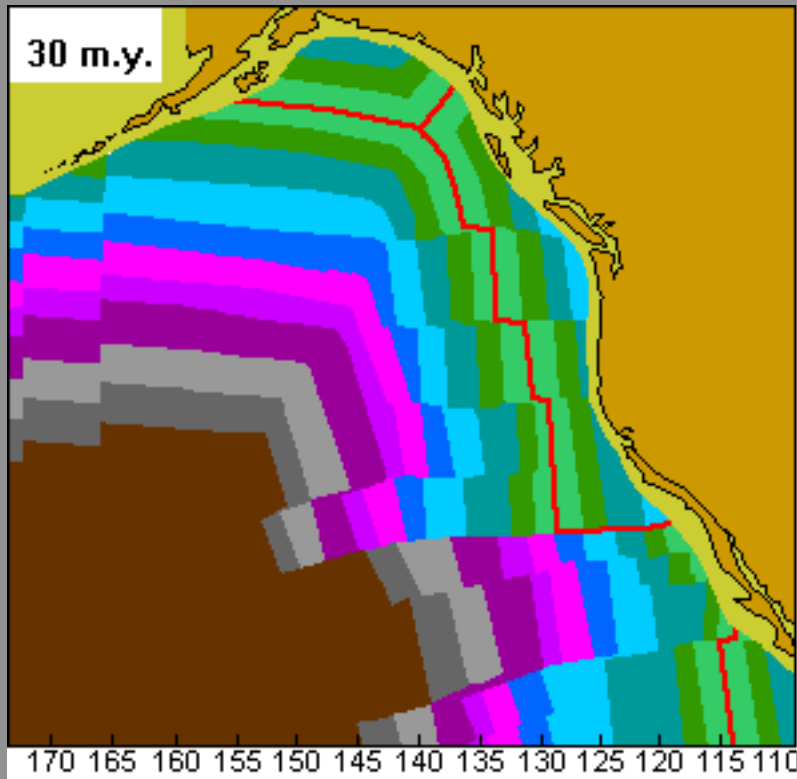


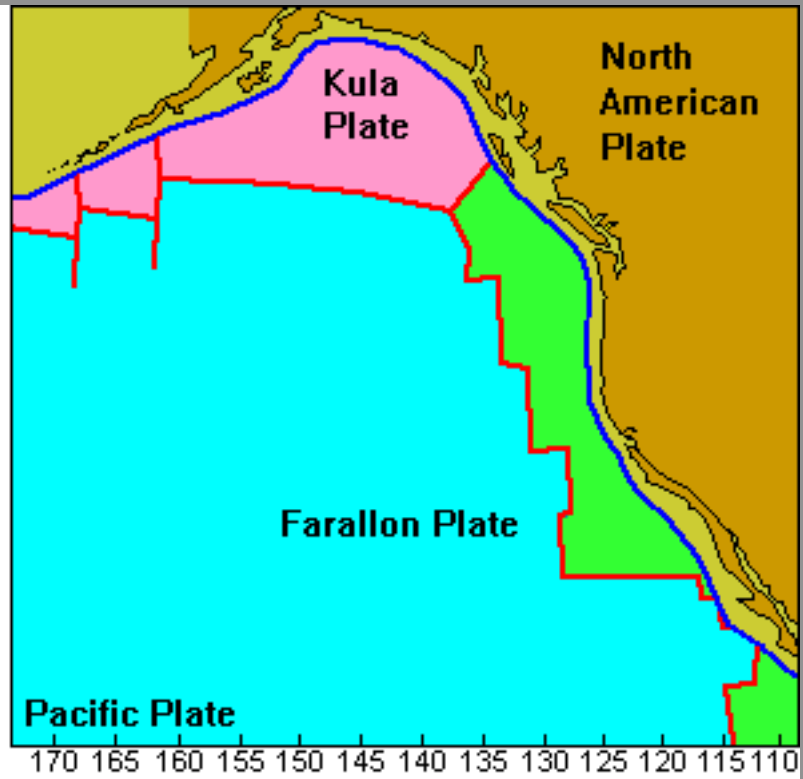
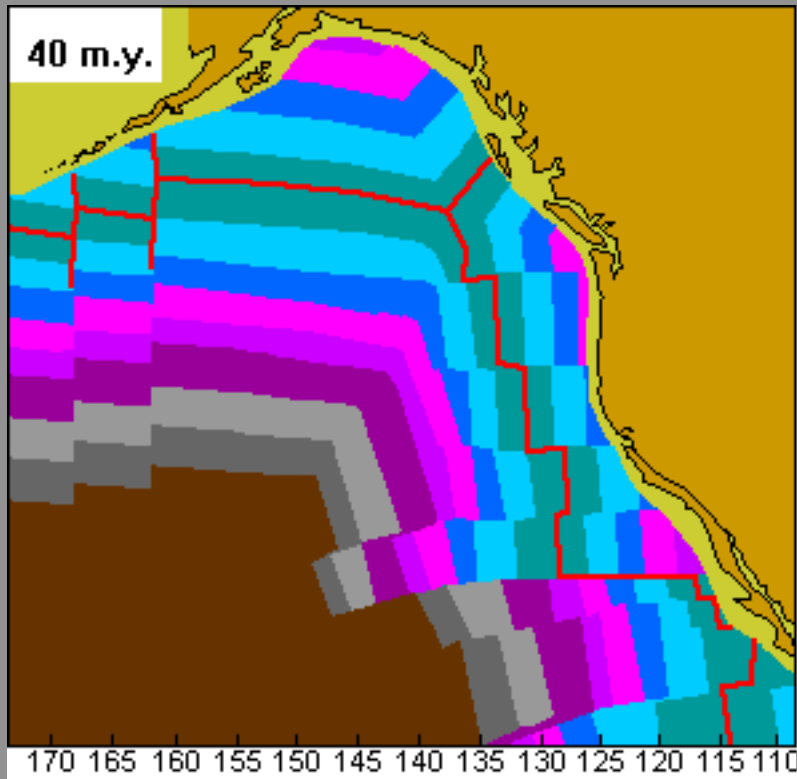
Pacific Coast of
North America
Present Day

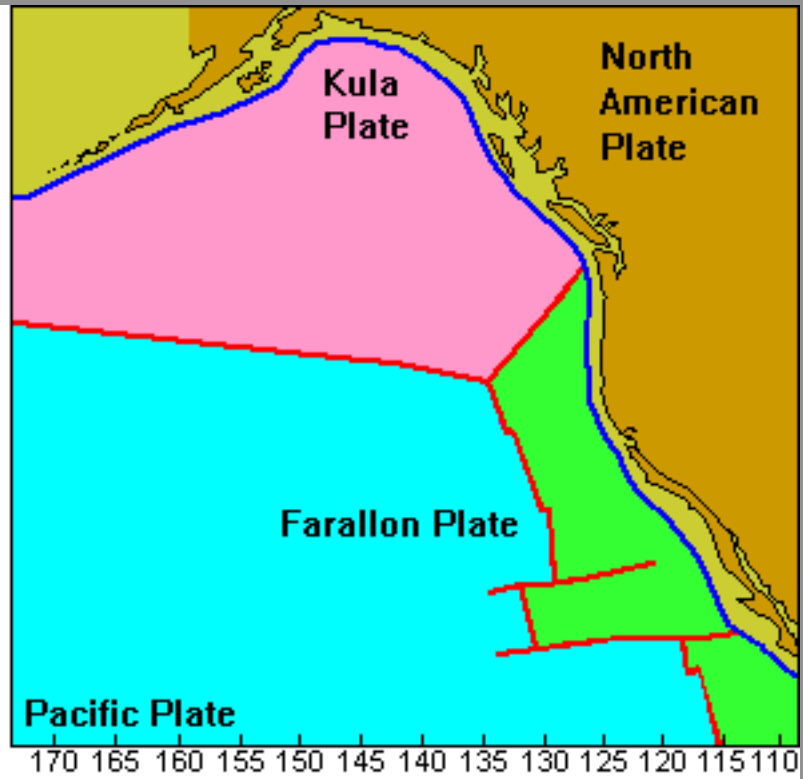
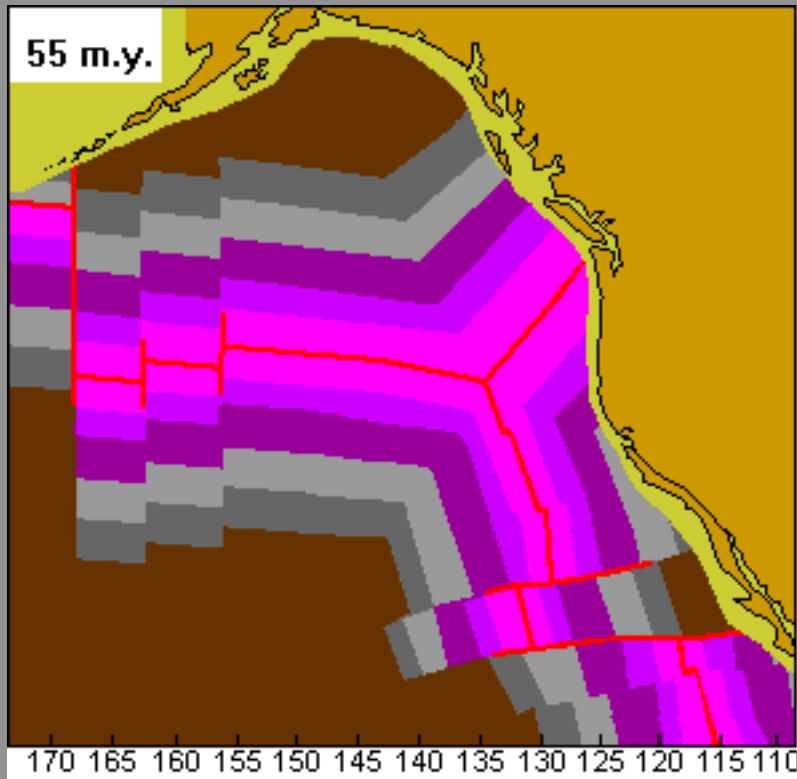


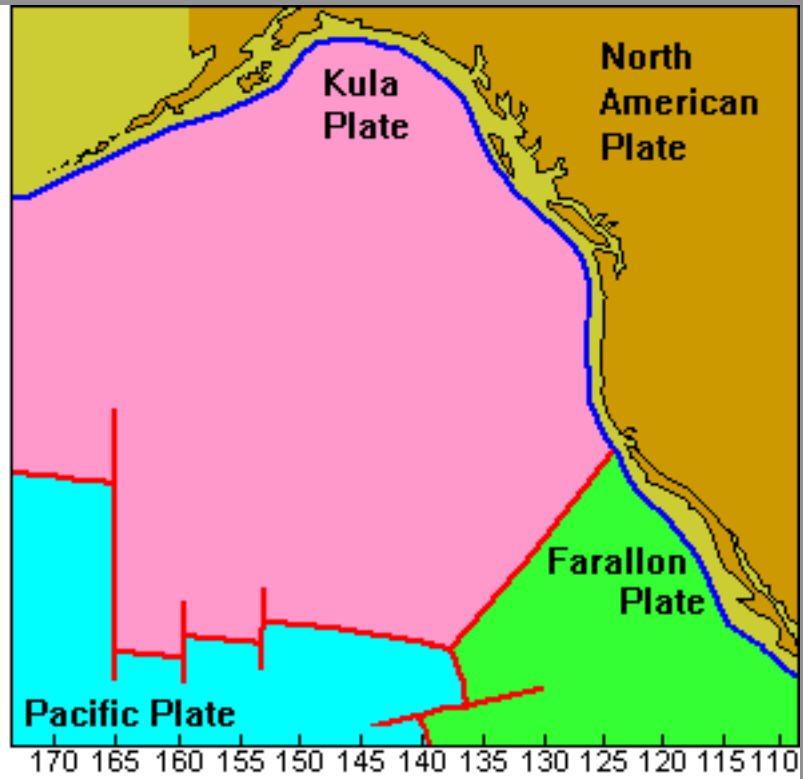
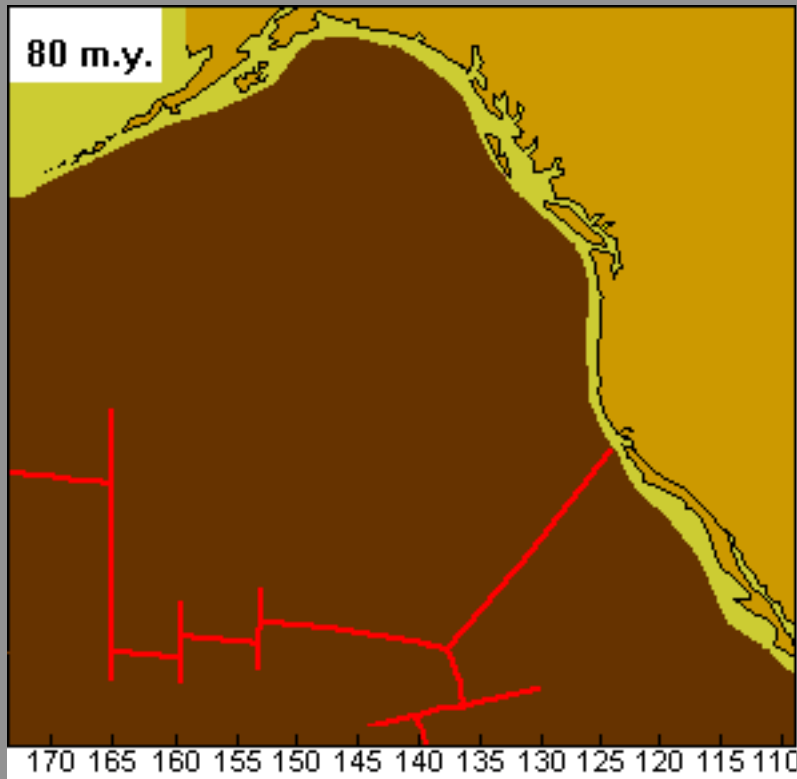


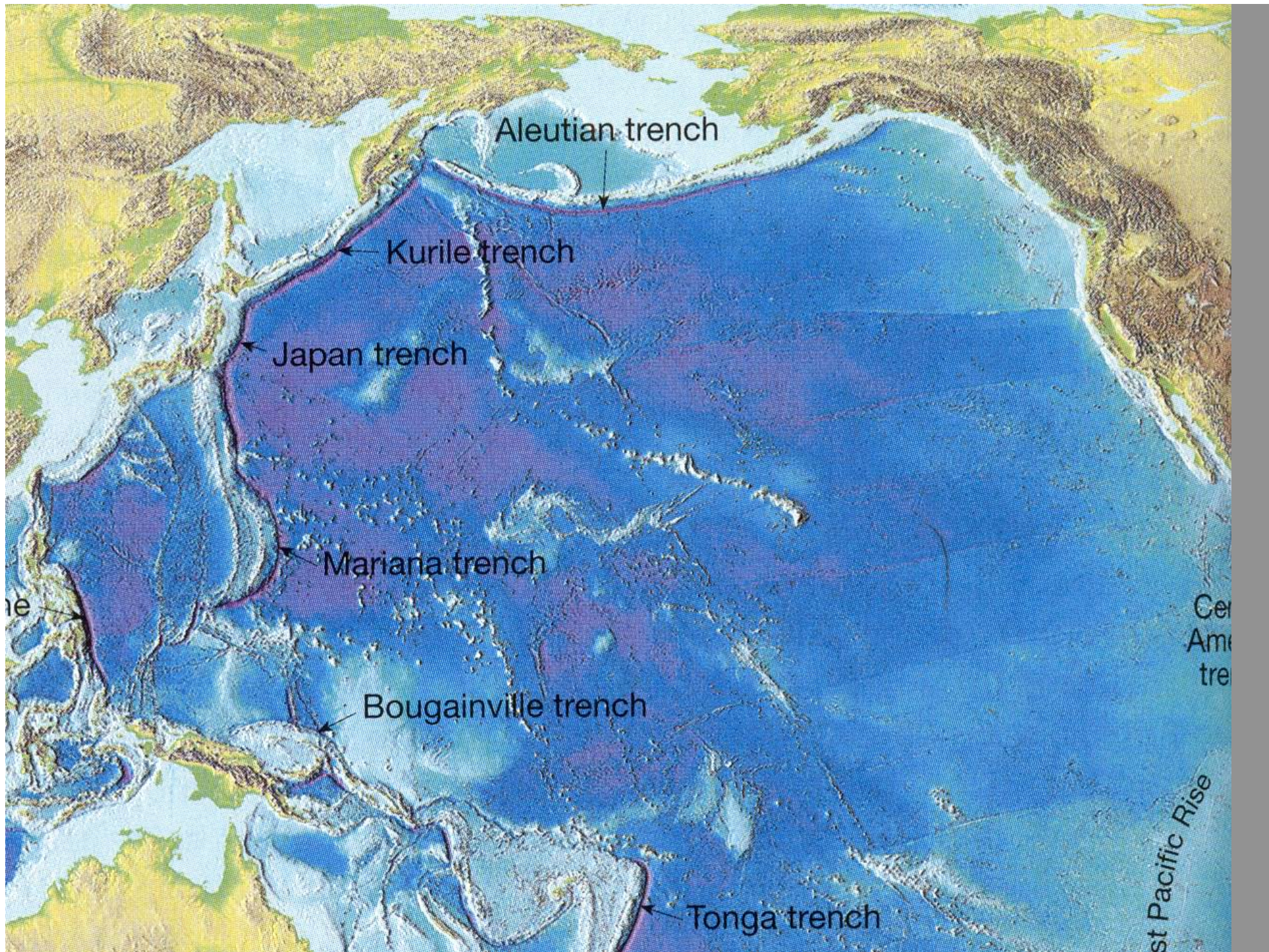














Island arc:

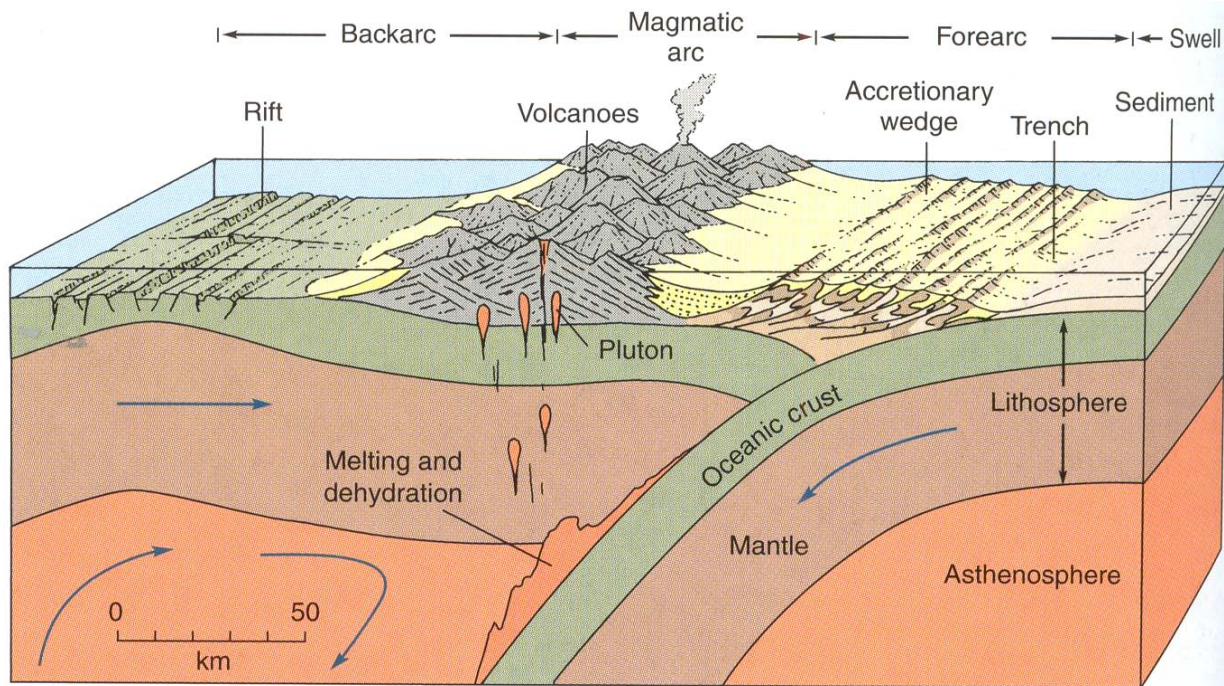
Arcuate chain of volcanic islands





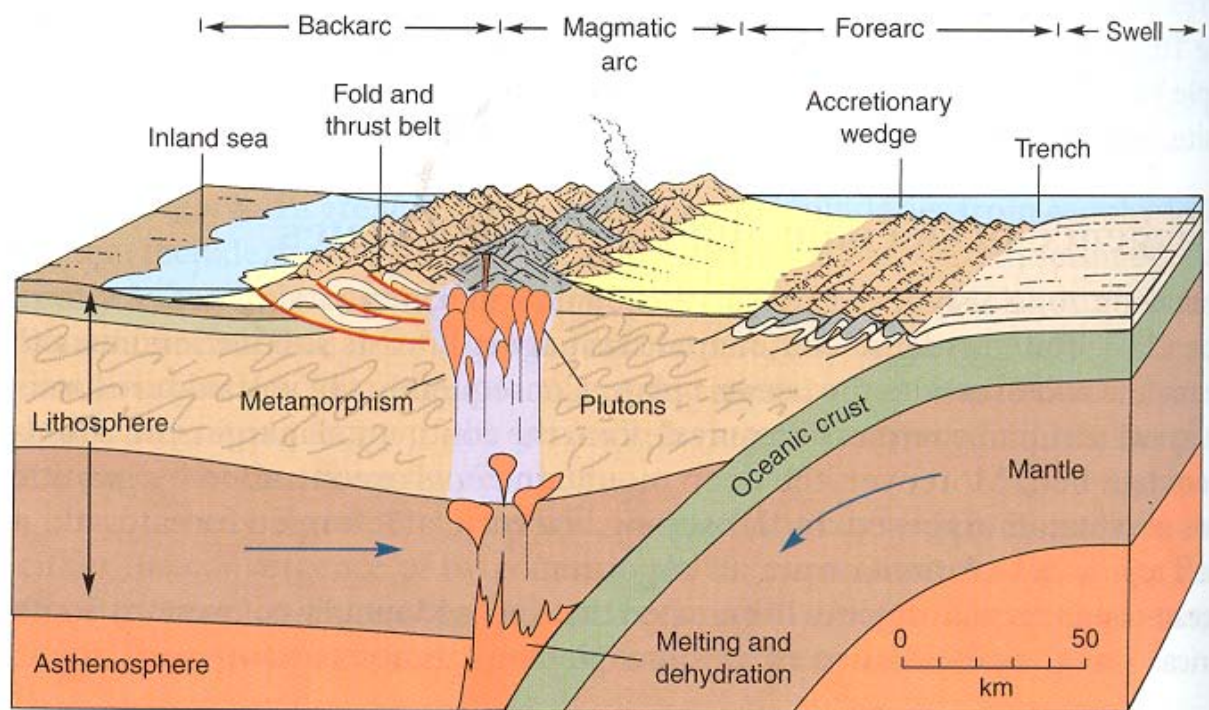


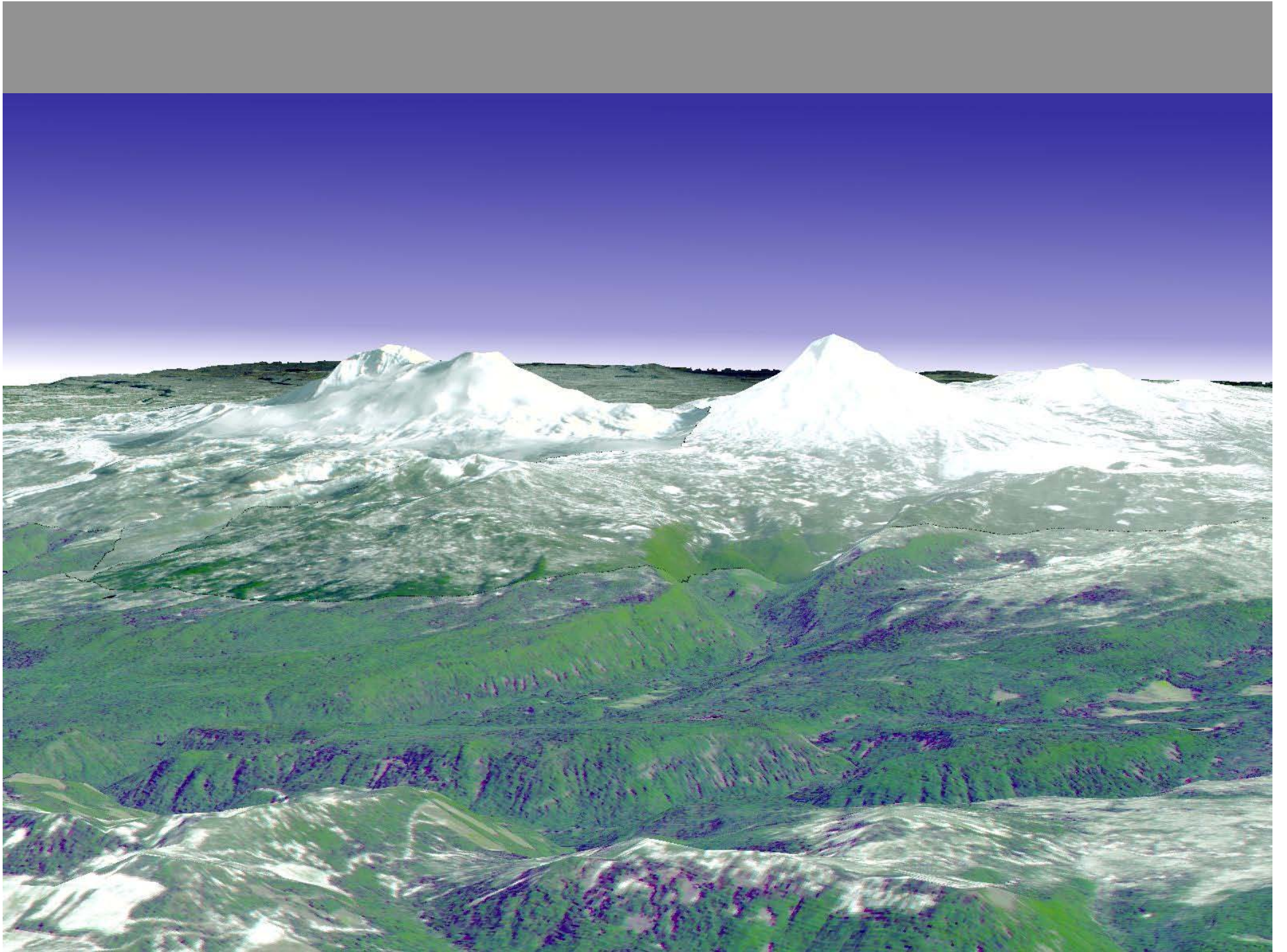




Island arc:
oceanic
over riding
plate

Continental arc:
continental
over riding
plate











USGS













Back-arc spreading center

Sea of Japan

