

Making British Columbia

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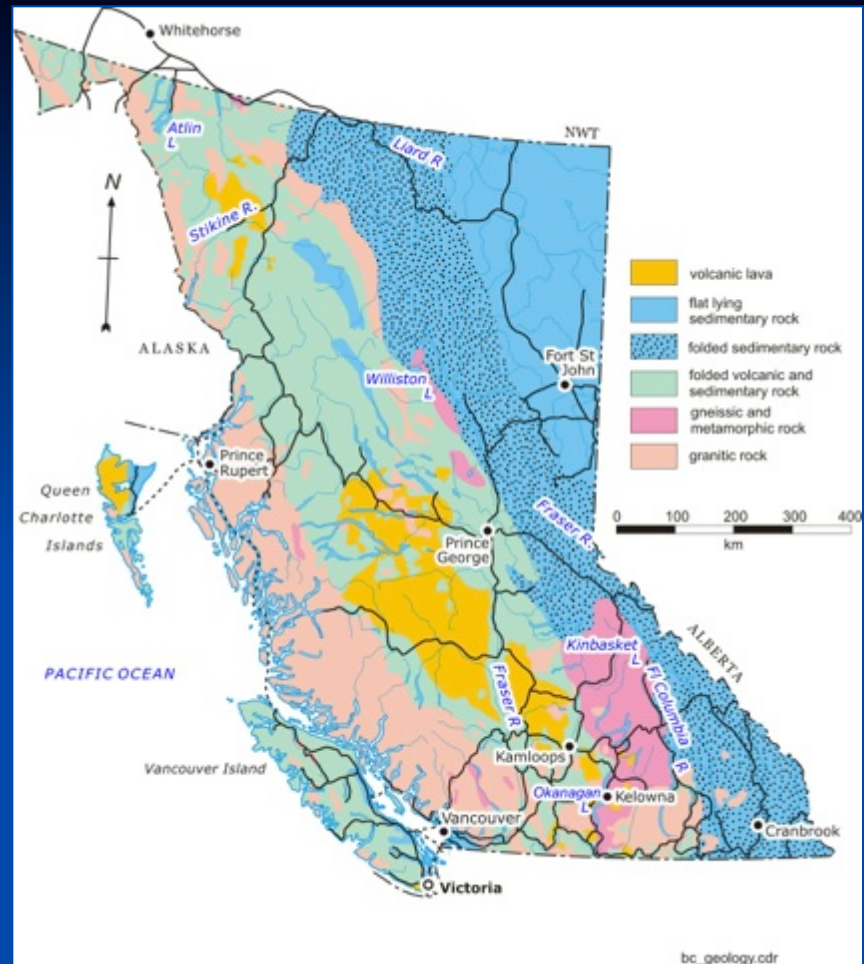
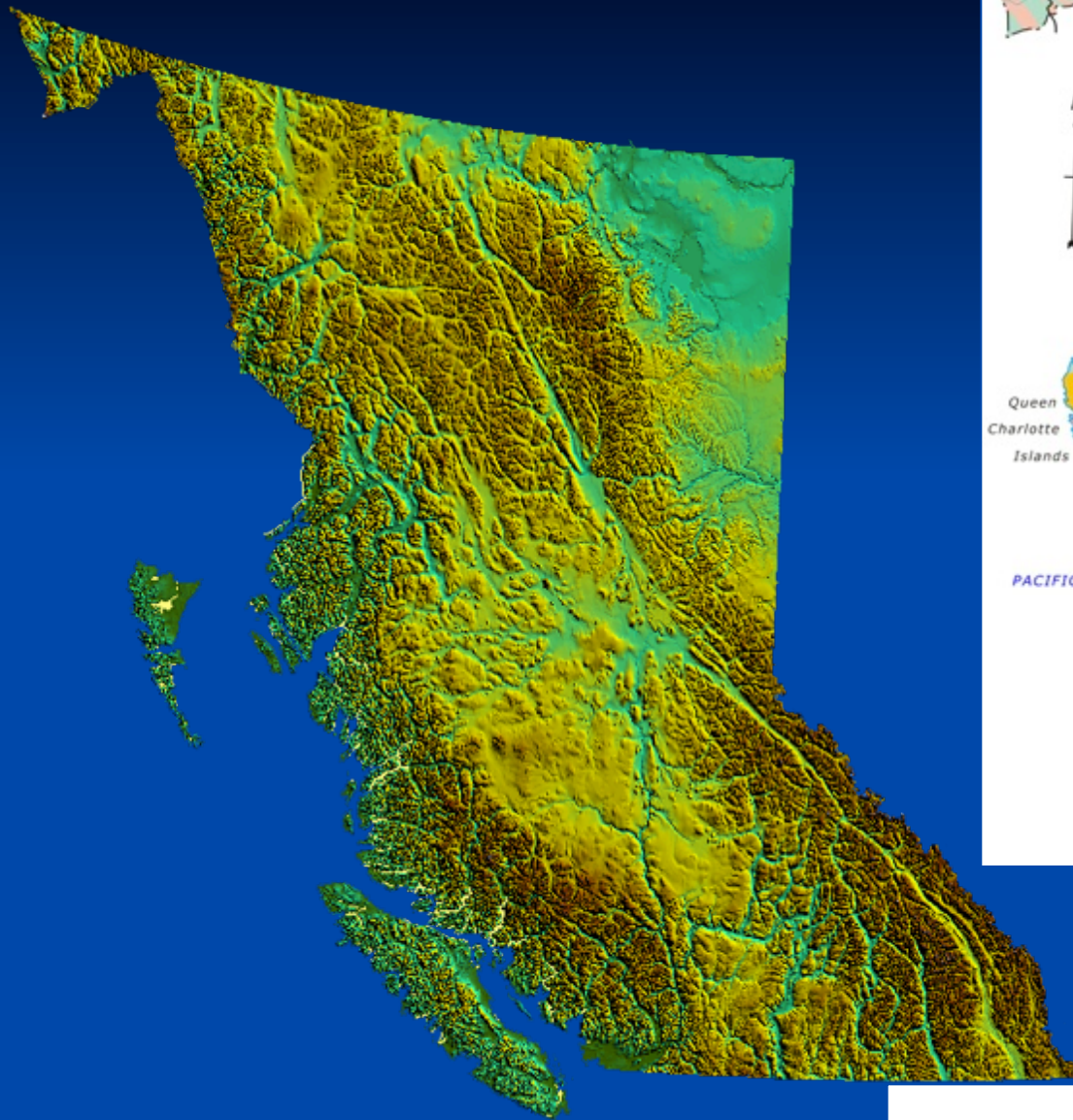


What is BC?

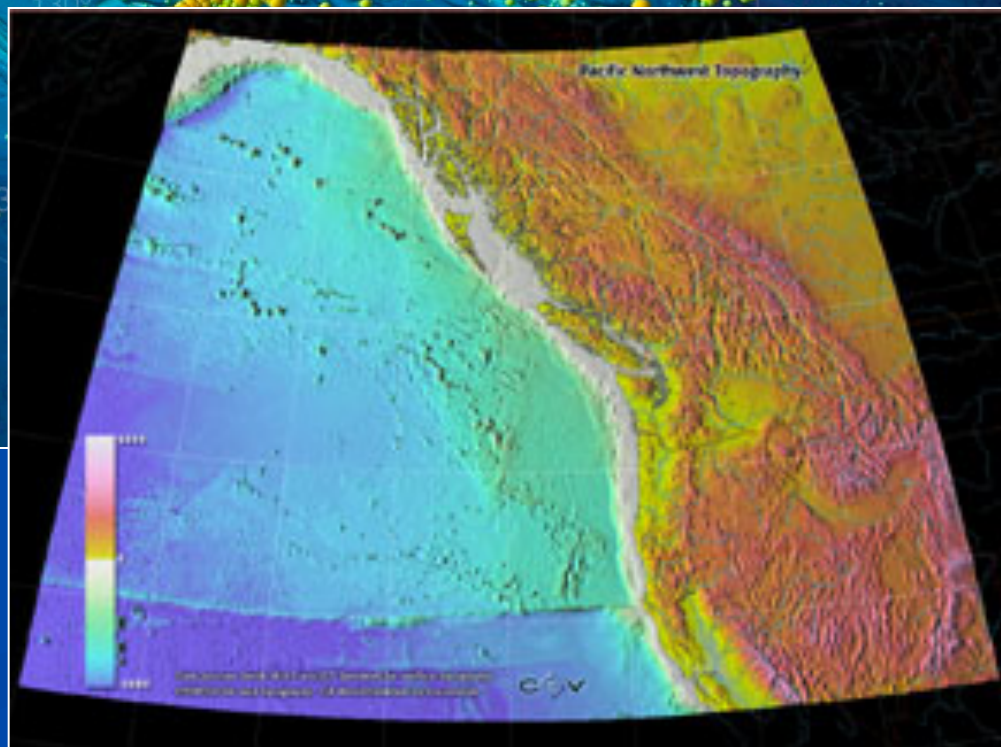
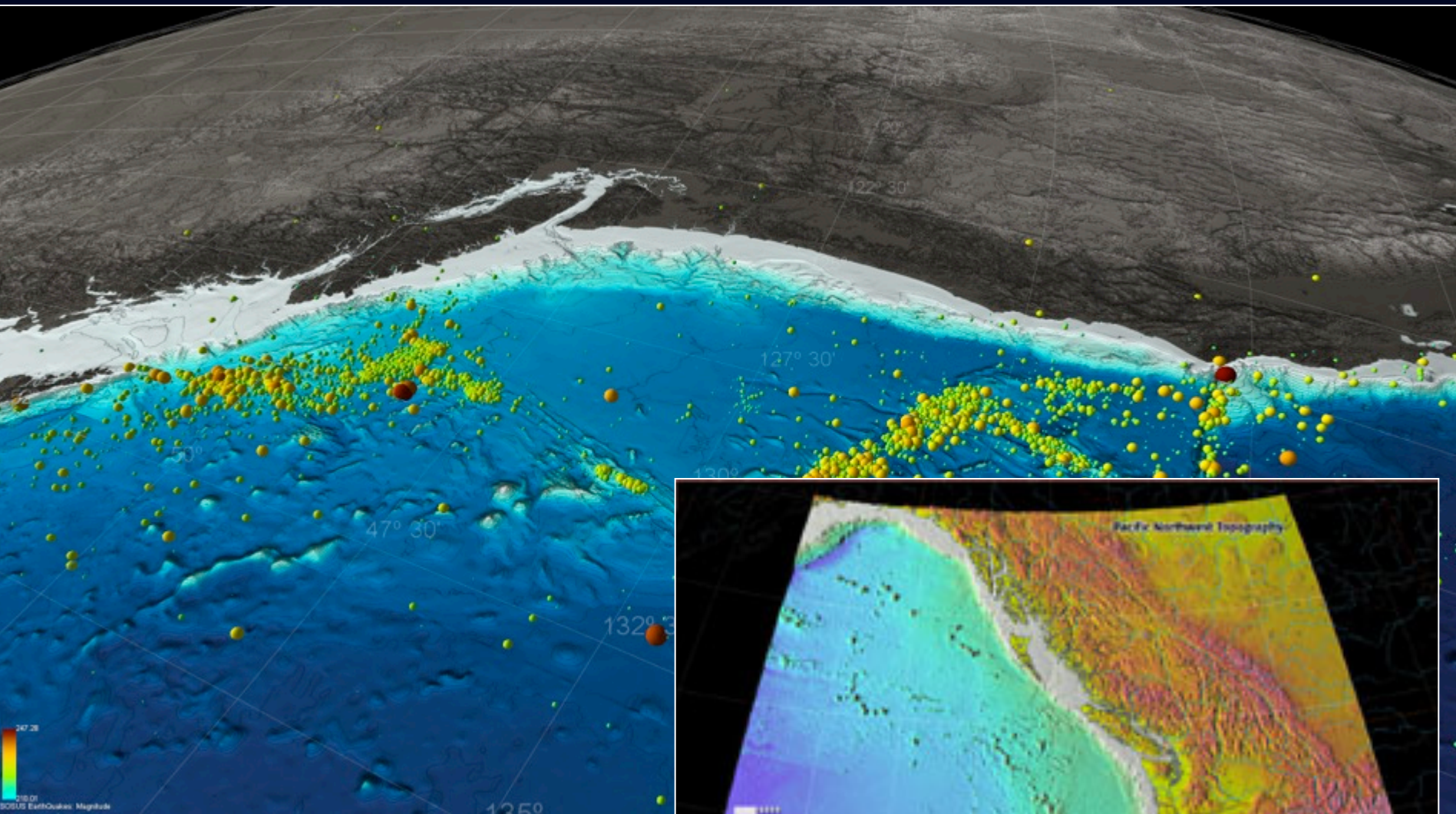


#1
Part
of a
great
mountain
belt

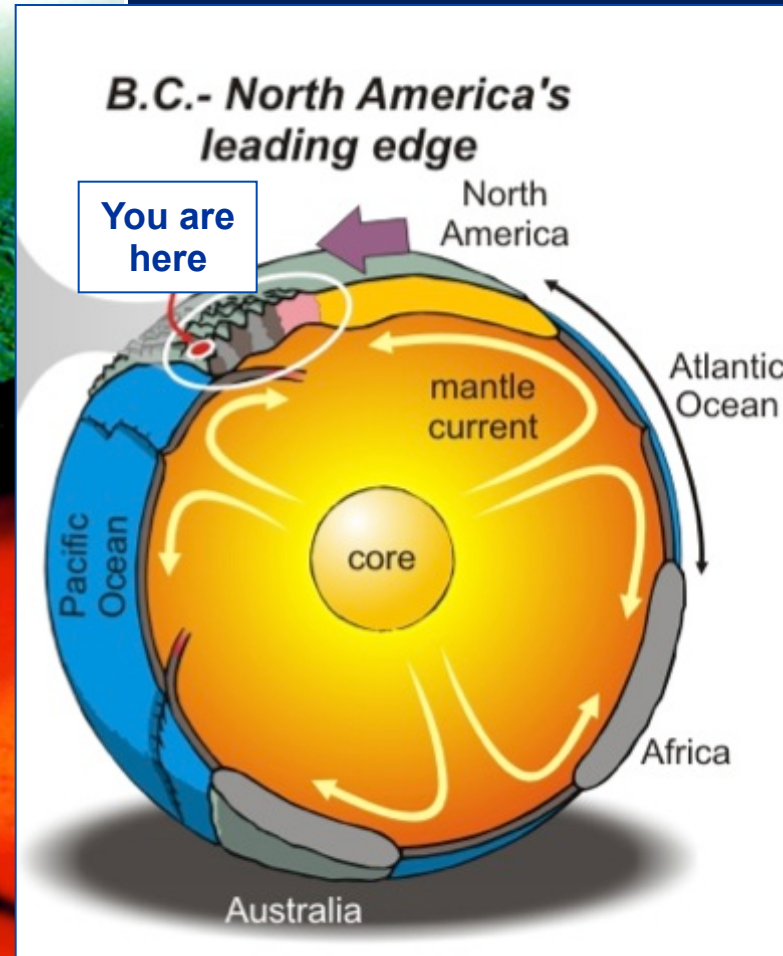
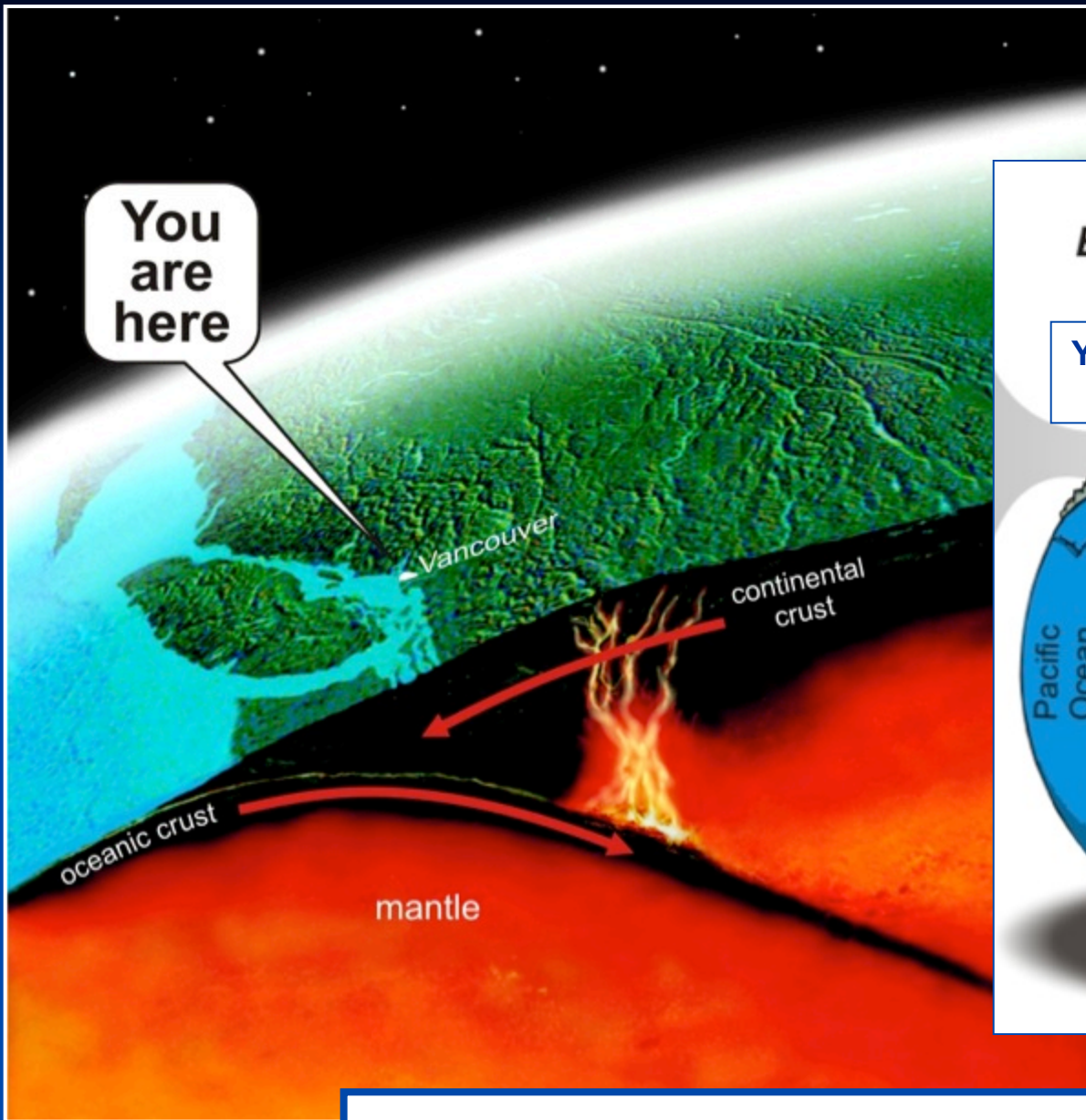




#2 A land with a grain



#3 At the edge
of a continent



#4 Along a plate boundary



#5 A fiordland

The **5** stages of building BC

- 1) Interior of a Supercontinent
- 2) **Break up:** becoming a continental margin
- 3) A stable **tropical** coast
- 4) Offshore **volcanic** islands
- 5) **Mountain** belt

The **5** stages of building BC

- 1) **Interior** of a Supercontinent
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- 4) Offshore **volcanic** islands
- 5) **Mountain belt**
 - a) Terrane collisions
 - b) Coast Mtns, Rocky Mtns, coal
 - c) Slivering the margin with faults
 - d) Ice Age: the Big Freeze
 - e) Scoured fiordland

Stage 1: BC in interior of Supercontinent

1.5 billion (PreCambrian) 750 million years ago (Precambrian)

850 Million Years Ago



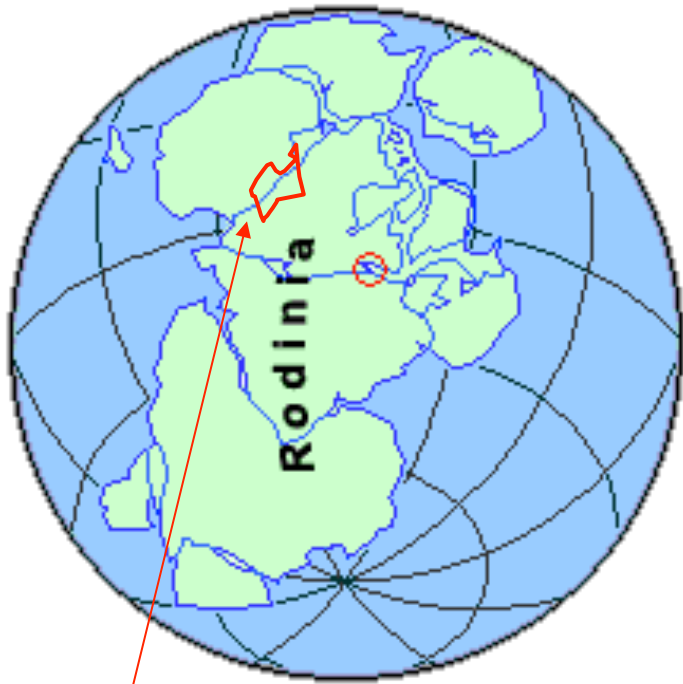
Future BC



....and BC's other half?

Stage 1: BC in interior of Supercontinent

850 Million Years Ago

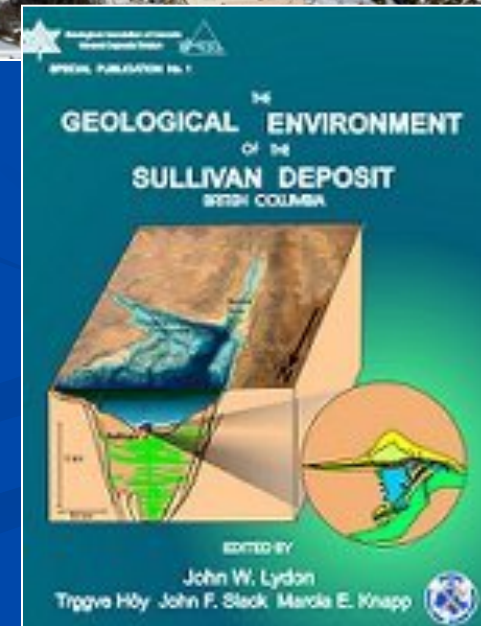


Future BC

Kimberley, East Kootenay



Fort Steele, Cranbrook

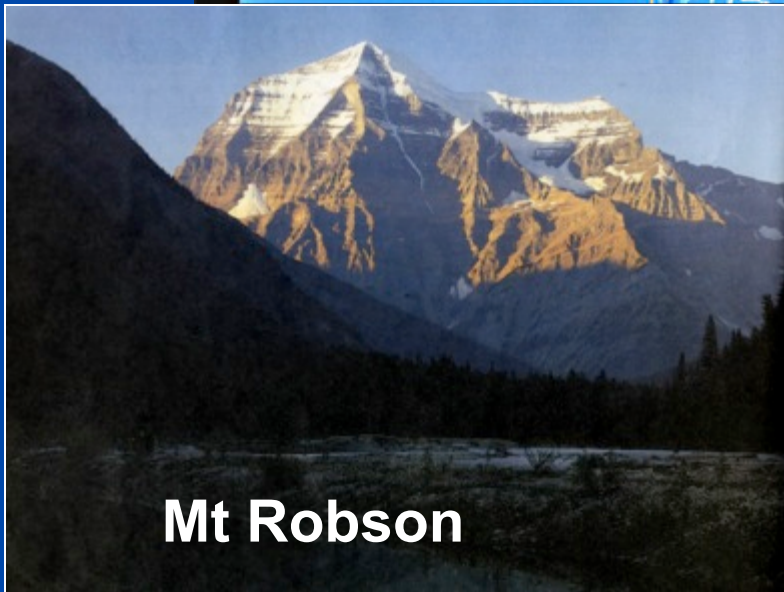
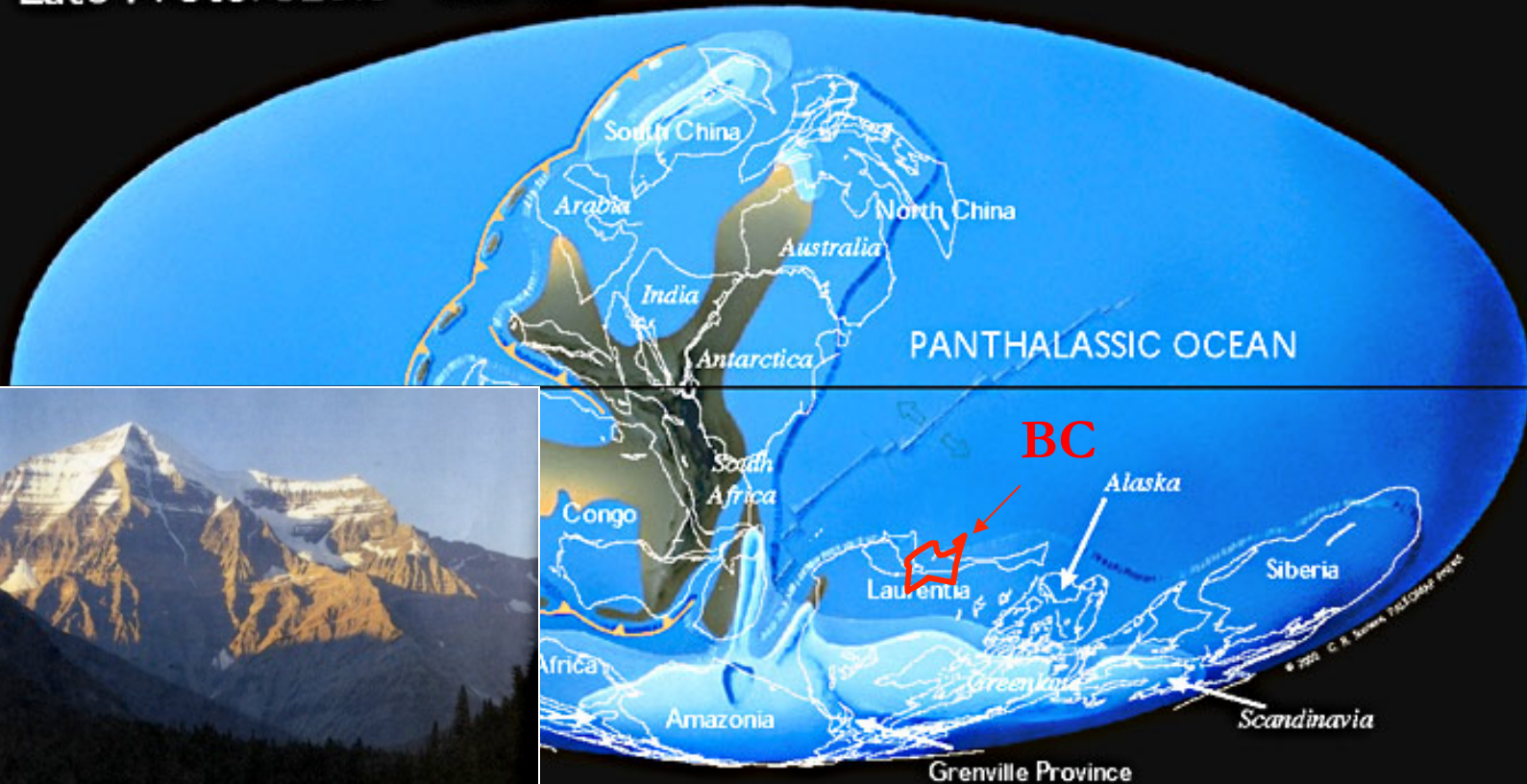


Stage 2: Break up of Supercontinent

BC becomes a continental margin

750 mya (PreCambrian) to 500 mya (Cambrian)

Late Proterozoic 650 Ma

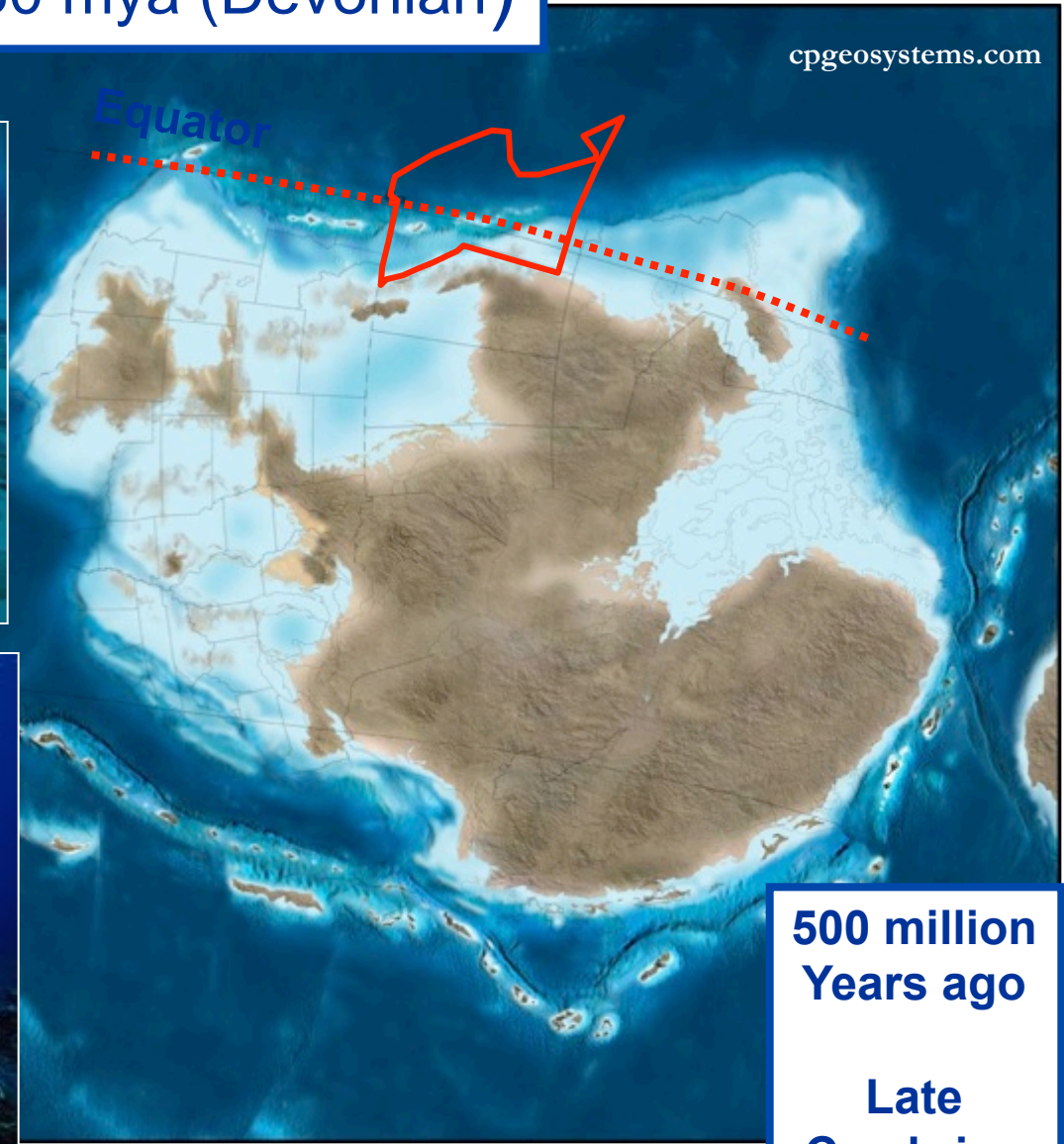


Mt Robson

Stage 3: A quiet tropical coast

500 mya (Cambrian) to 380 mya (Devonian)

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**500 million
Years ago**

**Late
Cambrian**

Stage 3: A quiet tropical coast

500 mya (Cambrian) to 380 mya (Devonian)

cpgeosystems.com

Banff



Northern Rockies, Alaska Highway



500 million
Years ago

Late
Cambrian

Stage 4: Offshore volcanic islands

380 mya (Devonian) to 180 mya (Jurassic)

New island,
Japan



Mt. Fuji, Japan

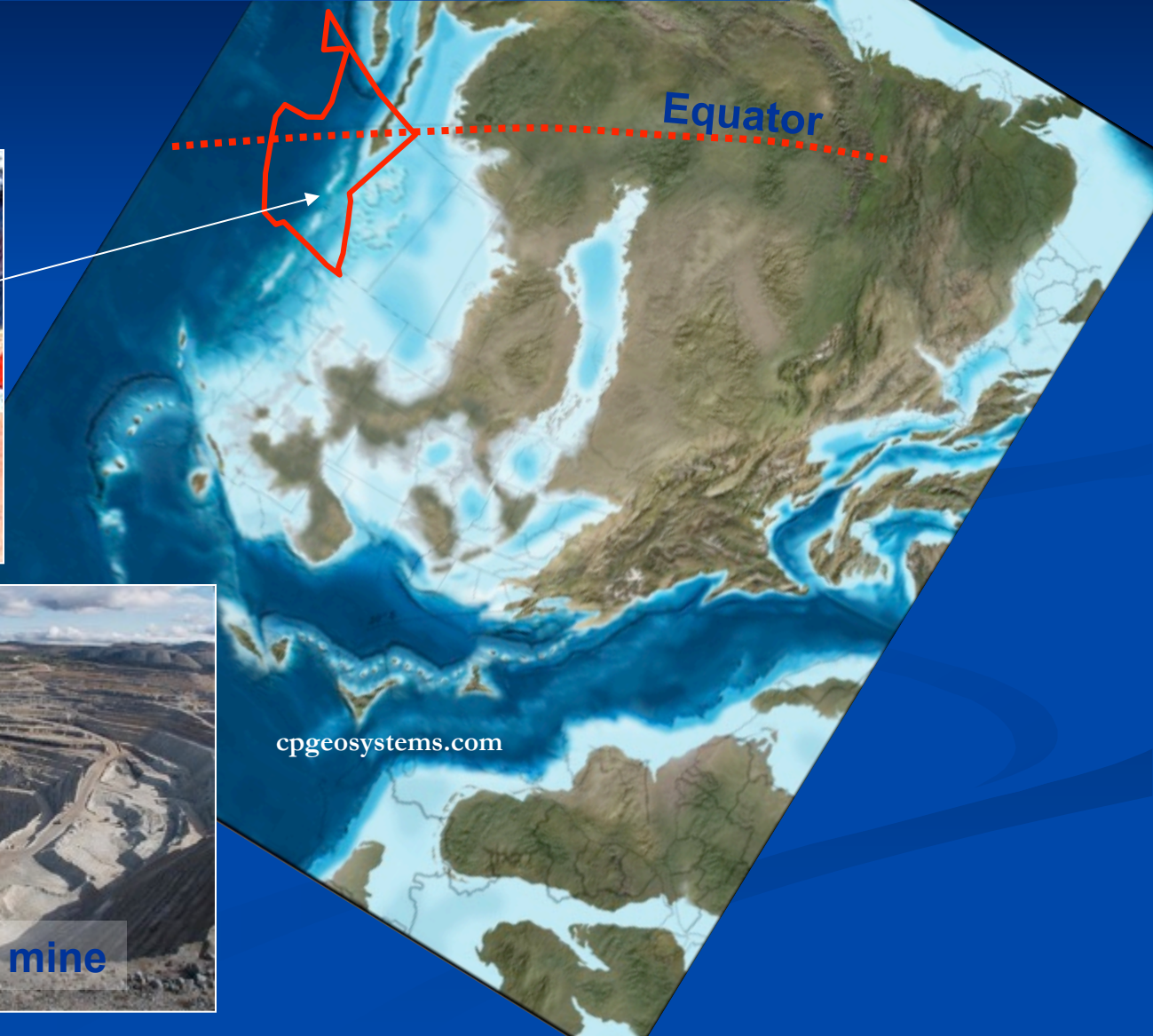


**375 million
Years ago**

**Late
Devonian**

Stage 4: Offshore volcanic islands

380 mya (Devonian) to 180 mya (Jurassic)

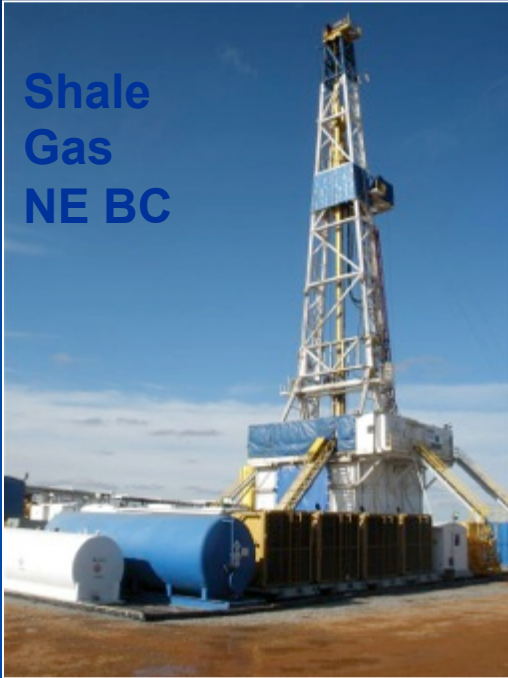


Highland Valley copper mine

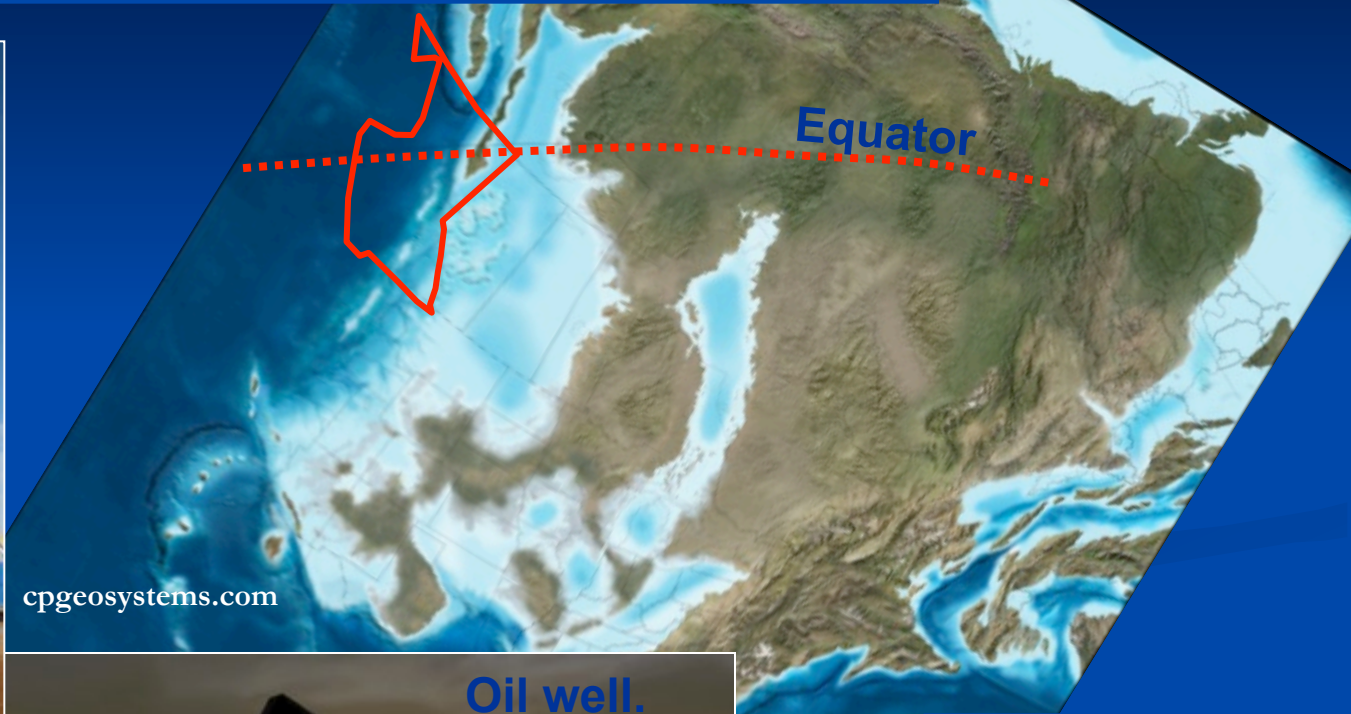
Stage 4: Offshore volcanic islands

380 mya (Devonian) to 180 mya (Jurassic)

Shale
Gas
NE BC



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Oil well.
Ft. St. John



375 million
Years ago

Late
Devonian

350 mya
Missippian Era



300 mya
Pennsylvannian Era



NA collides with Europe,
Africa forming Appalachians and Pangea Supercontinent

Stage 5: Mountain Belt

180 my (Jurassic) to present

Supercontinent breaks up

Atlantic Ocean opens

North America moves west
colliding with offshore
volcanic islands

(Quesnellia, Stikinia, Cache Creek Ocean)

Exotic
Terrane
approaching
(Wrangellia)

Offshore
volcanic
islands
collide
(Quesnellia,
Stikinia)

170 million
Years ago

Middle
Jurassic



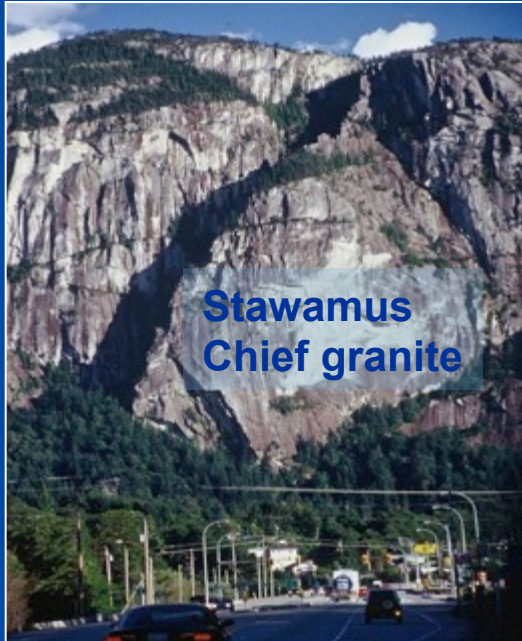
Stage 5a: Terrane collisions

Jurassic-Cretaceous



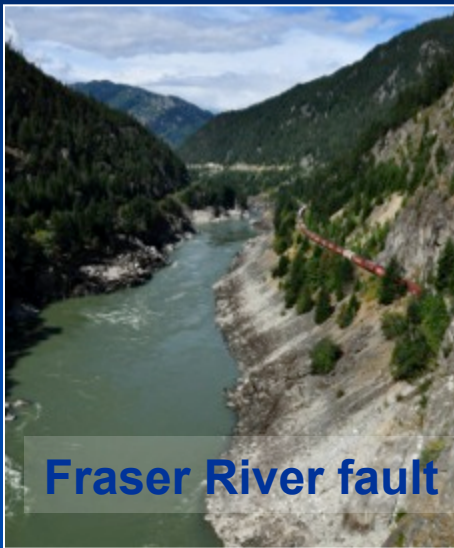
Stage 5b: Coast Mtns, Rocky Mtns, coal

Jurassic-Cretaceous



Stage 5c: Slivering the margin with faults

Large strike-slip faults shift western Cordillera northwards



Just before the Ice Ages

No

Arctic Islands,
Hudson Bay,
Great Lakes,
Abundant lakes

Or

**BC Coast
fiordland !**

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5 Million
Years Ago

Stage 5d: Scouring a Fiordland

2 million to 10,000 years ago



Stage 5e: After the Ice Age

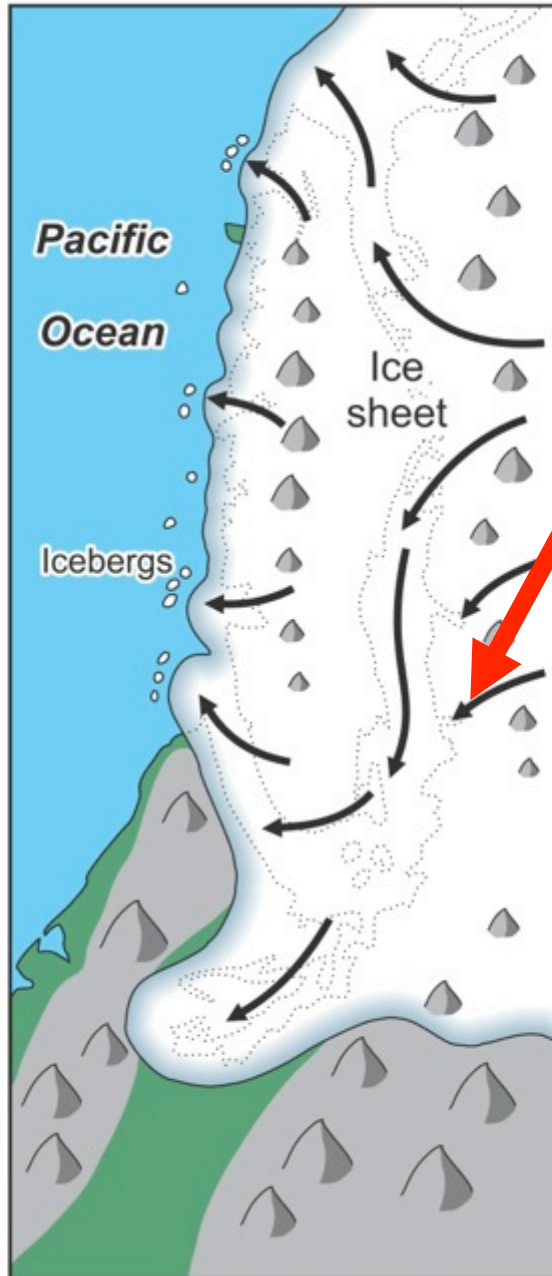
10,000 years ago to present



Before the Ice Age

The Ice Age

Today



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