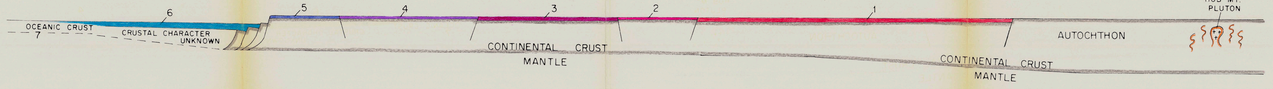
South

OCEAN BASIN FORMED IN MID-CARBONIFEROUS TIME(?)

SOUTHERN PART OF ARCTIC ALASKA BASIN

North

180 M.Y.
EARLY JURASSIC
PRE-OROGENY



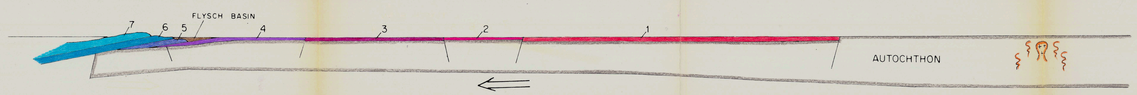
EARLY JURASSIC SHORELINE
APPROX. 400 KM TO THE NORTH
i.e. NORTH OF BARROW AREA

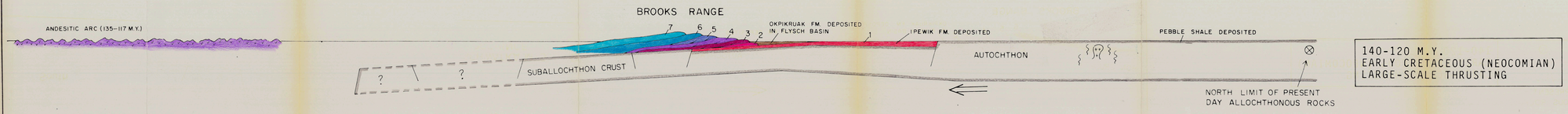
HORIZONTAL & VERTICAL SCALE

0 40 80 120 KM

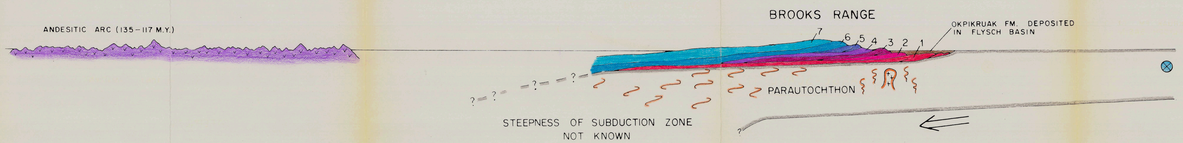
PRECAMBRIAN REGIONAL METAMORPHIC ROCKS

160-140 M.Y.
MIDDLE-LATE JURASSIC
BEGINNING OF SOUTHWARD
SUBDUCTION



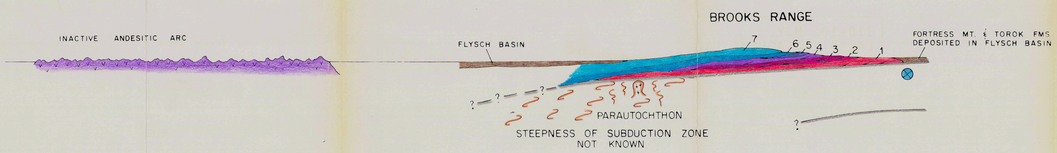


140-120 M.Y.
EARLY CRETACEOUS (NEOCOMIAN)
LARGE-SCALE THRUSTING



120-110 M.Y.
EARLY CRETACEOUS (BARREMIAN-APTIAN)
LARGE-SCALE THRUSTING

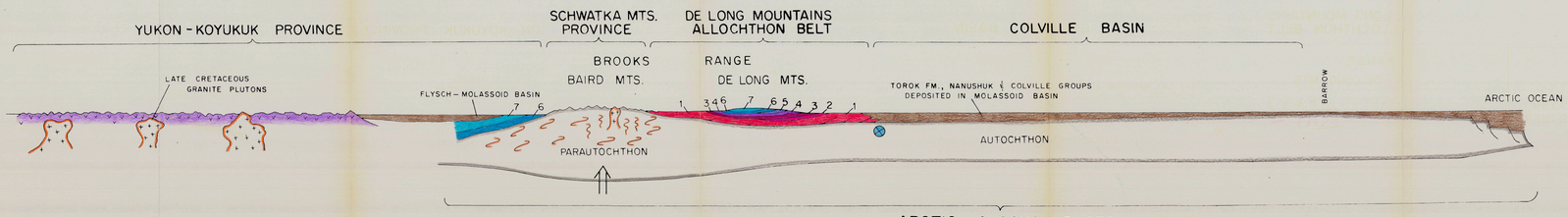
CRETACEOUS REGIONAL METAMORPHISM



110-100 M.Y.
EARLY CRETACEOUS (ALBIAN)
TERMINATION OF LARGE-SCALE THRUSTING

South

North



100-60 M.Y.
MIDDLE AND LATE CRETACEOUS
ISOSTATIC READJUSTMENT IN BAIRD MTS;
FOLDING AND RELATIVELY MINOR FAULTING
IN DE LONG & ENDICOTT MTS. AND NORTHERN
FOOTHILLS

MIDDLE JURASSIC TO LATE CRETACEOUS
PLATE TECTONIC MODEL FOR THE BROOKS RANGE OROGENY

After Mayfield, Tailleur and Ellersieck (1983)
USGS Open-File Report 83-779

Amoco Production Company
Denver Region
NORTHERN DIVISION
NO-N-BAC

BROOKS RANGE OROGENY
PLATE TECTONIC MODEL

By: Valerie Krass
Date: Sept. 1986
Scale:
Encl No. 7

CF8601472

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