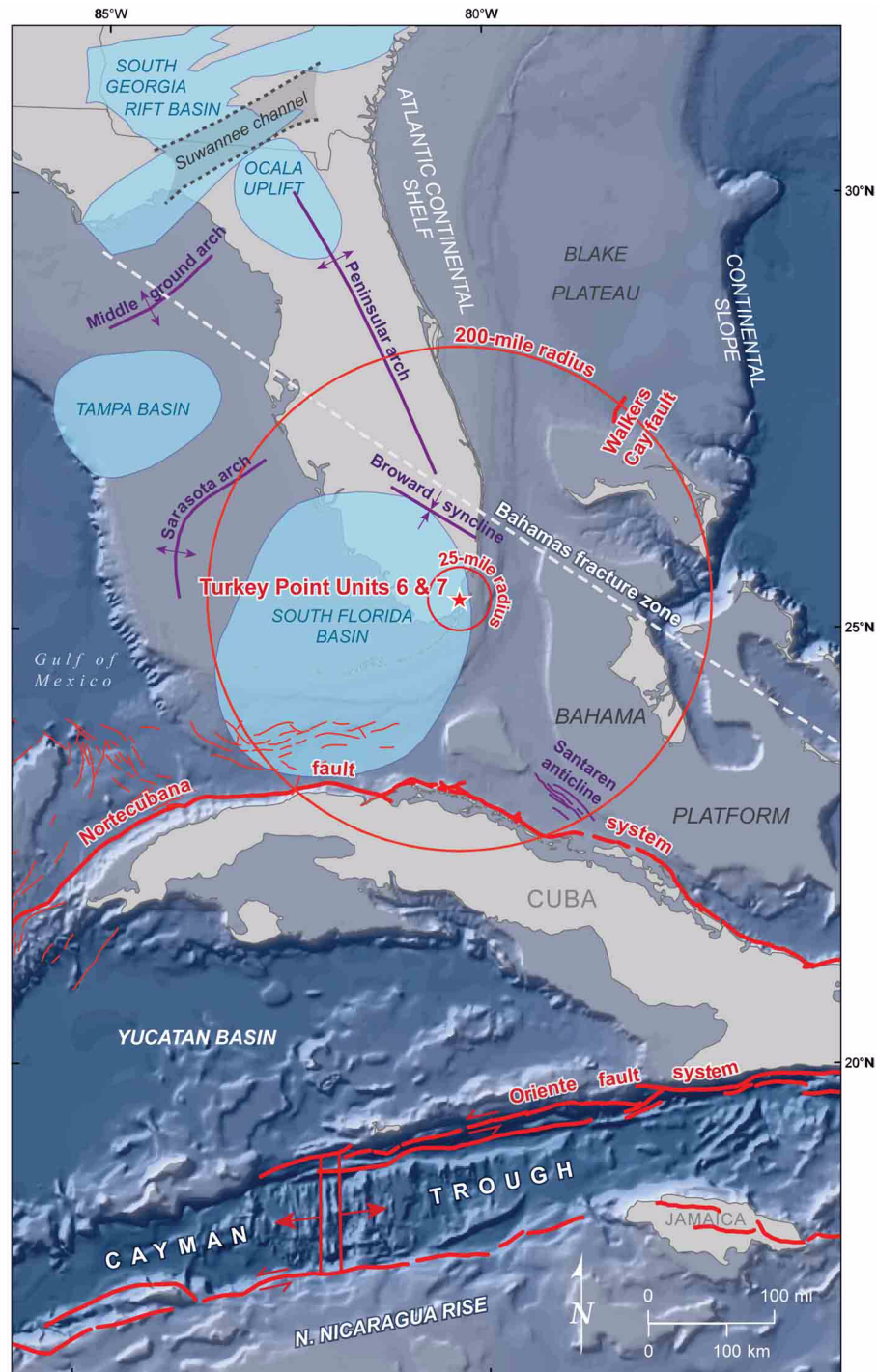


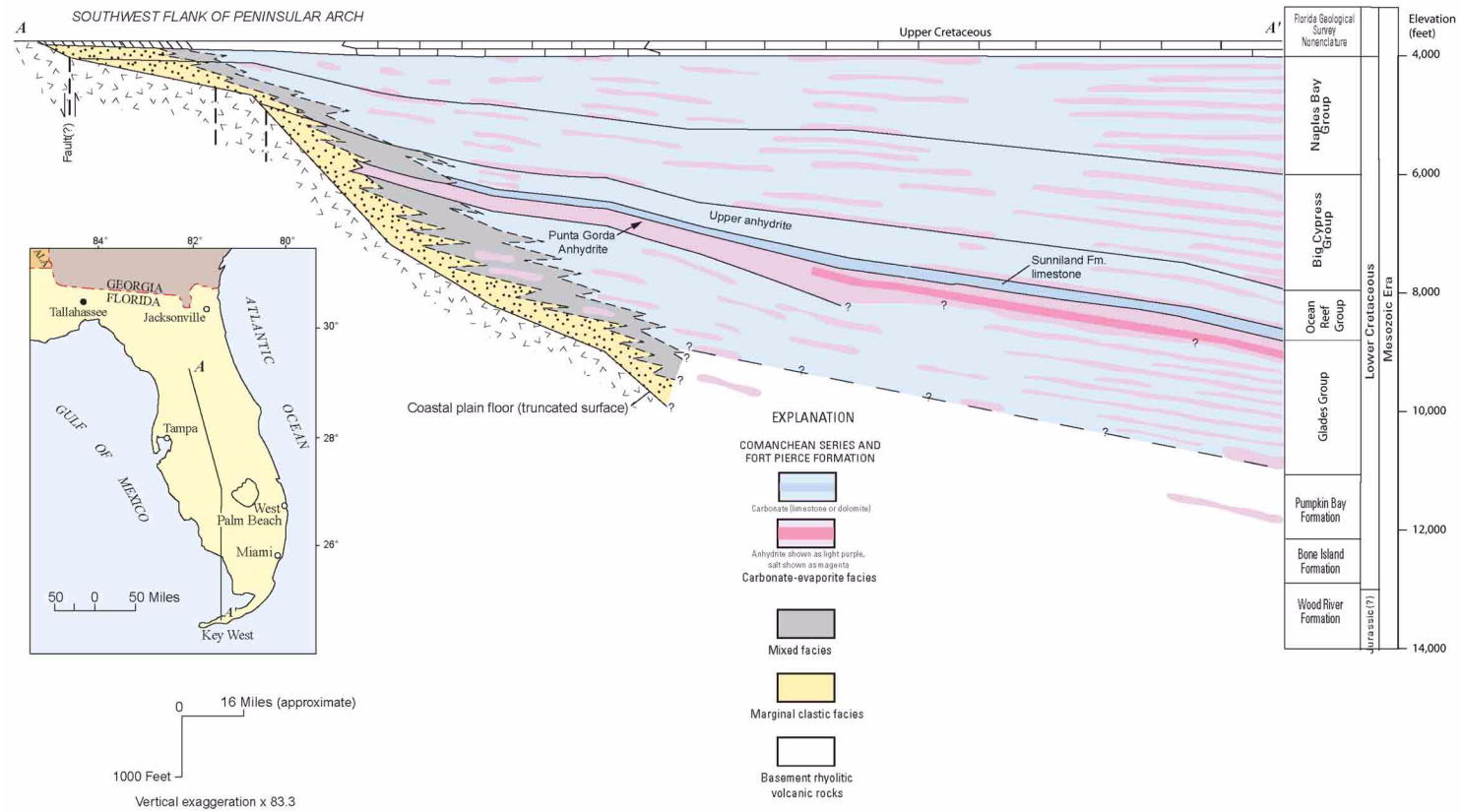
Figure 2.5.1-229 Regional Tectonic Features



Sources: References 822, 482, 823, 457, 212, and 421

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Figure 2.5.1-230 Simplified North-South Profile of Mesozoic-Age Rocks in Florida



Modified from: [Reference 366](#)

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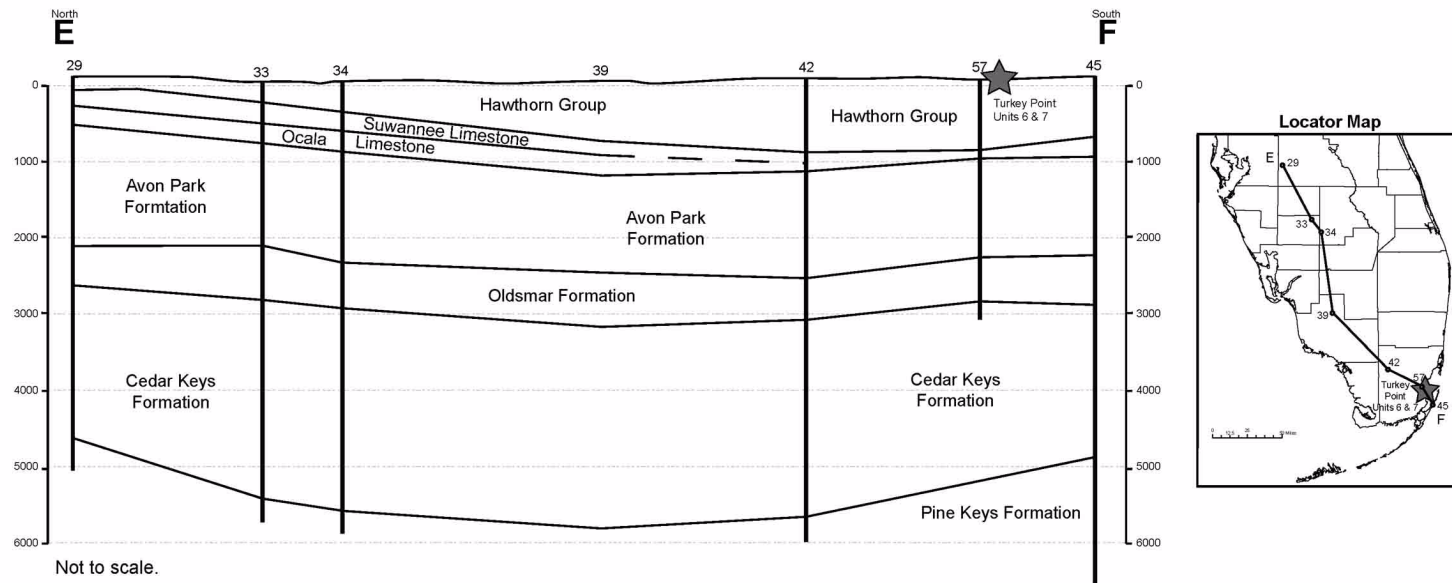
Figure 2.5.1-231 Cenozoic Stratigraphy of Southern Florida

ERA	SYSTEM	SERIES	STRATIGRAPHIC UNIT		LITHOLOGY	APPROXIMATE THICKNESS (ft)	
CENOZOIC	QUATERNARY	PLEISTOCENE	Miami Limestone / Key Largo Limestone/ Anastasia Formation		sandy, oolitic, coralline, shelly limestone	10-180	
			Caloosahatchee Formation/ Fort Thompson Formation		poor/well indurated sandy, fossiliferous limestone	50-100	
	TERTIARY	NEOGENE	PLIOCENE	Tamiami Formation/ Cypresshead Formation (Long Key Formation)		fossiliferous sand & silt with limestone	25-220
			MIOCENE	Hawthorn Group	Peace River Formation	sands, clays, & phosphatic carbonates	100-650
					Arcadia Formation	fine crystalline limestone with sand/clay, phosphatic fossiliferous limestone, & dolomite	100-700
		PALEOGENE	OLIGOCENE	Suwannee Limestone		poor/well indurated fossiliferous vuggy to moldic limestone	200-600
			EOCENE	Ocala Limestone		poor/well indurated fossiliferous limestone	200-400
	Avon Park Formation			poor/well indurated fossiliferous limestone & vuggy dolostone	400-1200		
	Oldsmar Formation			vuggy limestone & dolomite	500-1500		
		PALEOCENE	Cedar Keys Formation		dolomite, gypsum, & anhydrite	500-2000	
TOTAL THICKNESS						5000-6000	

Sources: [References 357, 373, 375, 376, 394, 397, 398, 399, 403, and 406](#)

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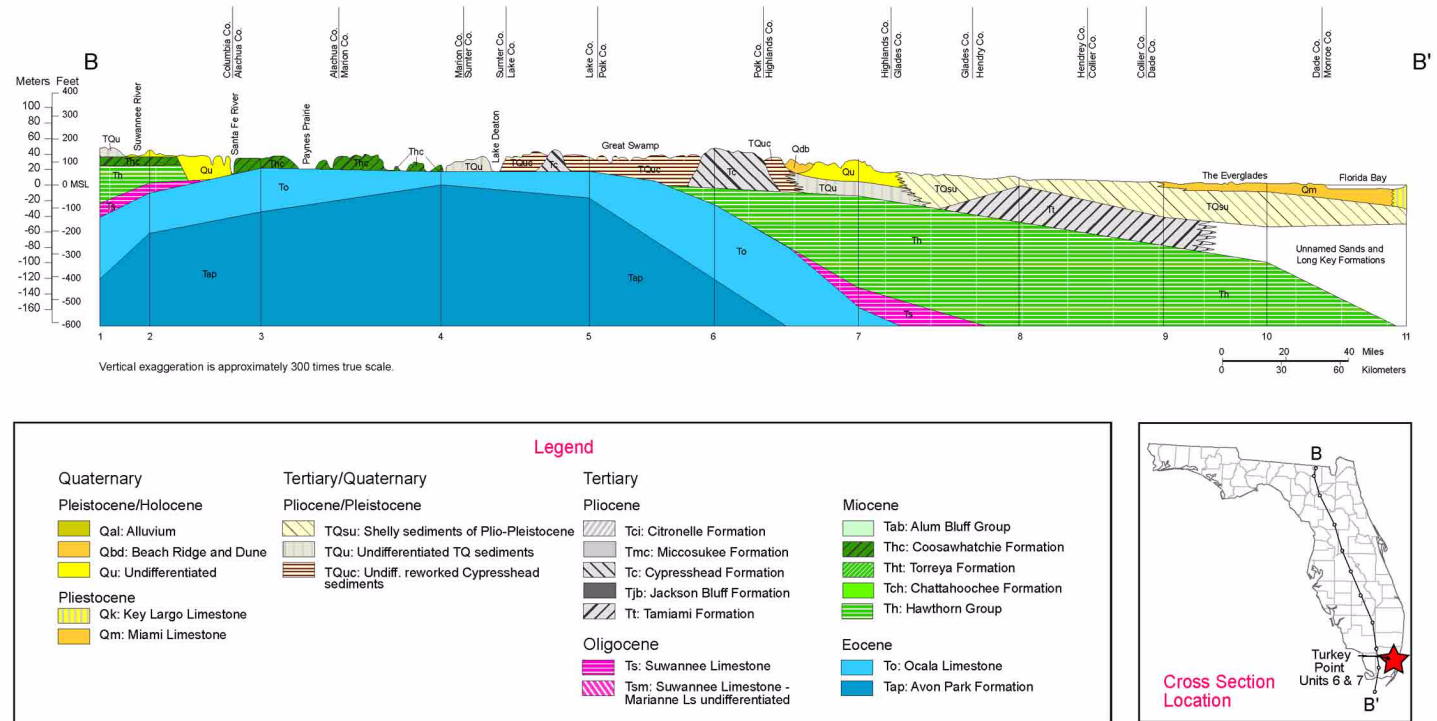
Figure 2.5.1-232 North-South Geologic Cross Section of Upper Mesozoic and Lower Cenozoic Rocks in Southern Florida



Modified from: [Reference 397](#)

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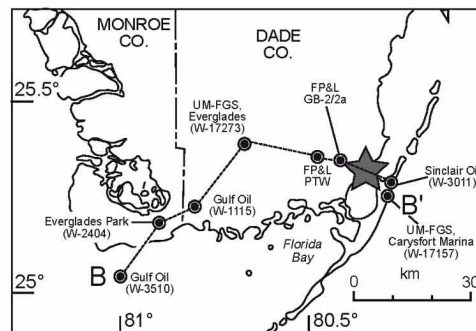
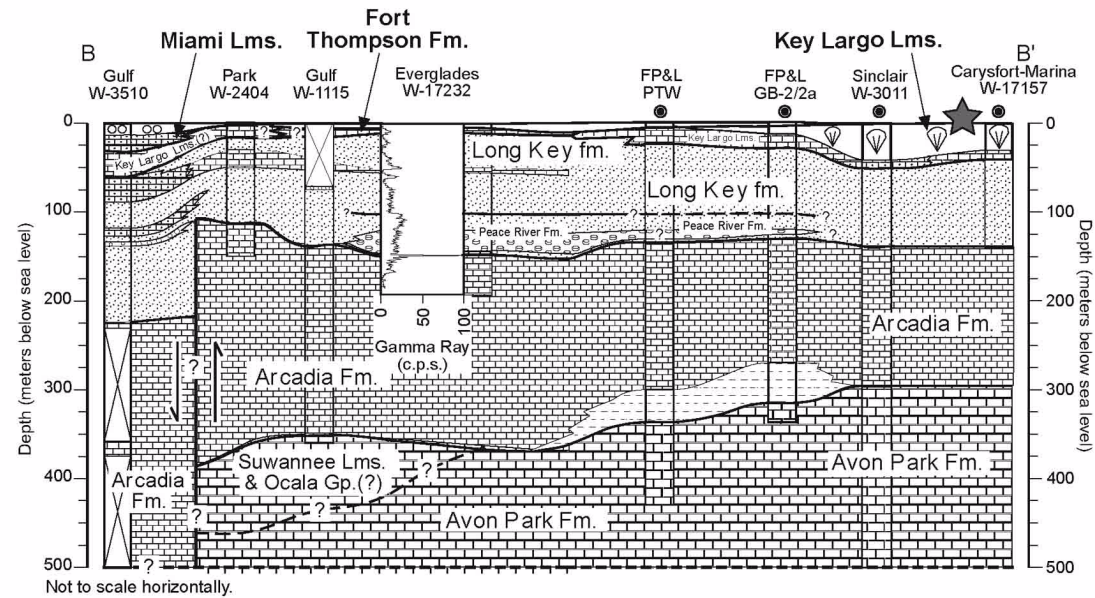
Figure 2.5.1-233 Cenozoic North-South Cross Section of Florida



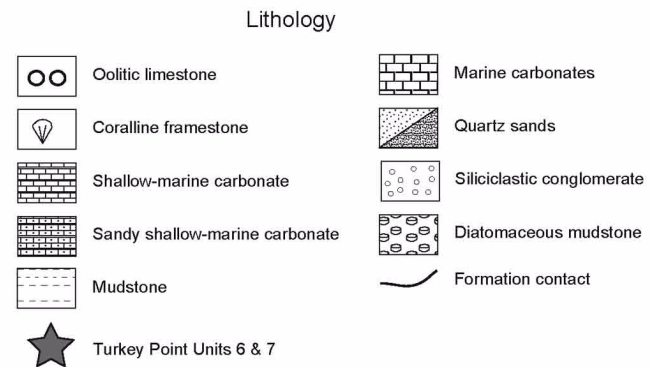
Modified from: [Reference 377](#)

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Figure 2.5.1-234 East-West Geologic Cross Section of Upper Cenozoic Age Rocks in Southern Florida



Location of cross section (B-B') in southern Florida.

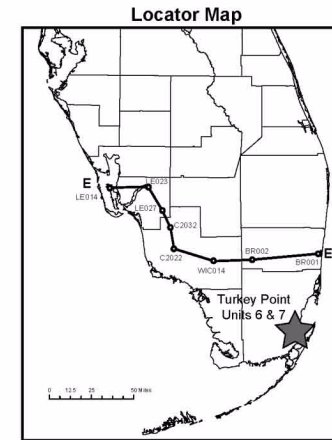
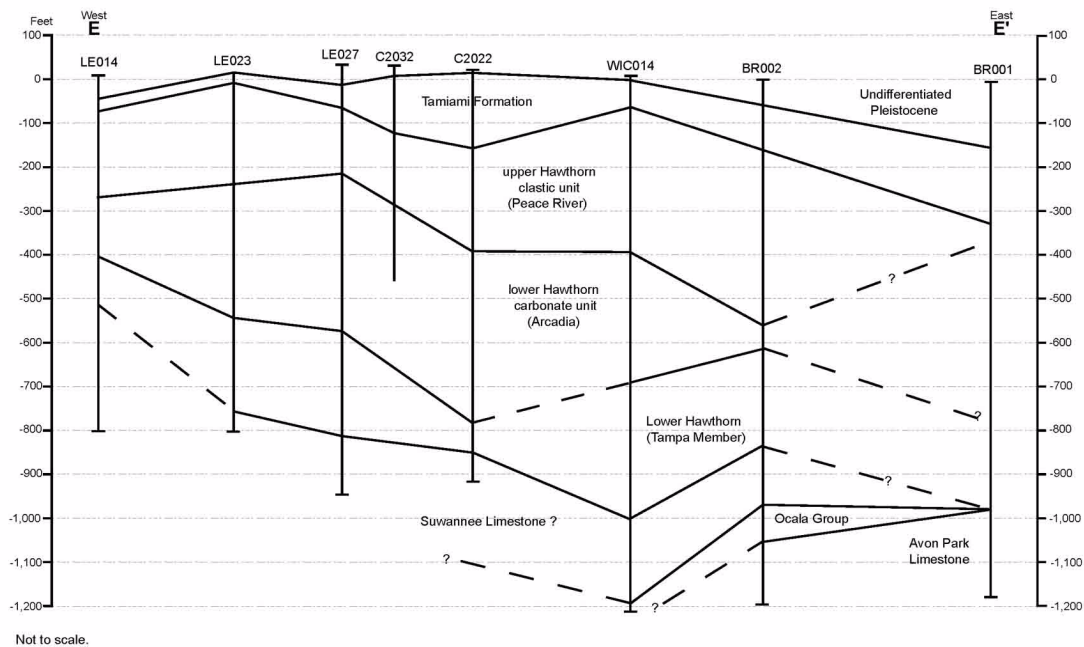


Modified from: [Reference 373](#)

Note: Primary siliclastic source - Appalachians

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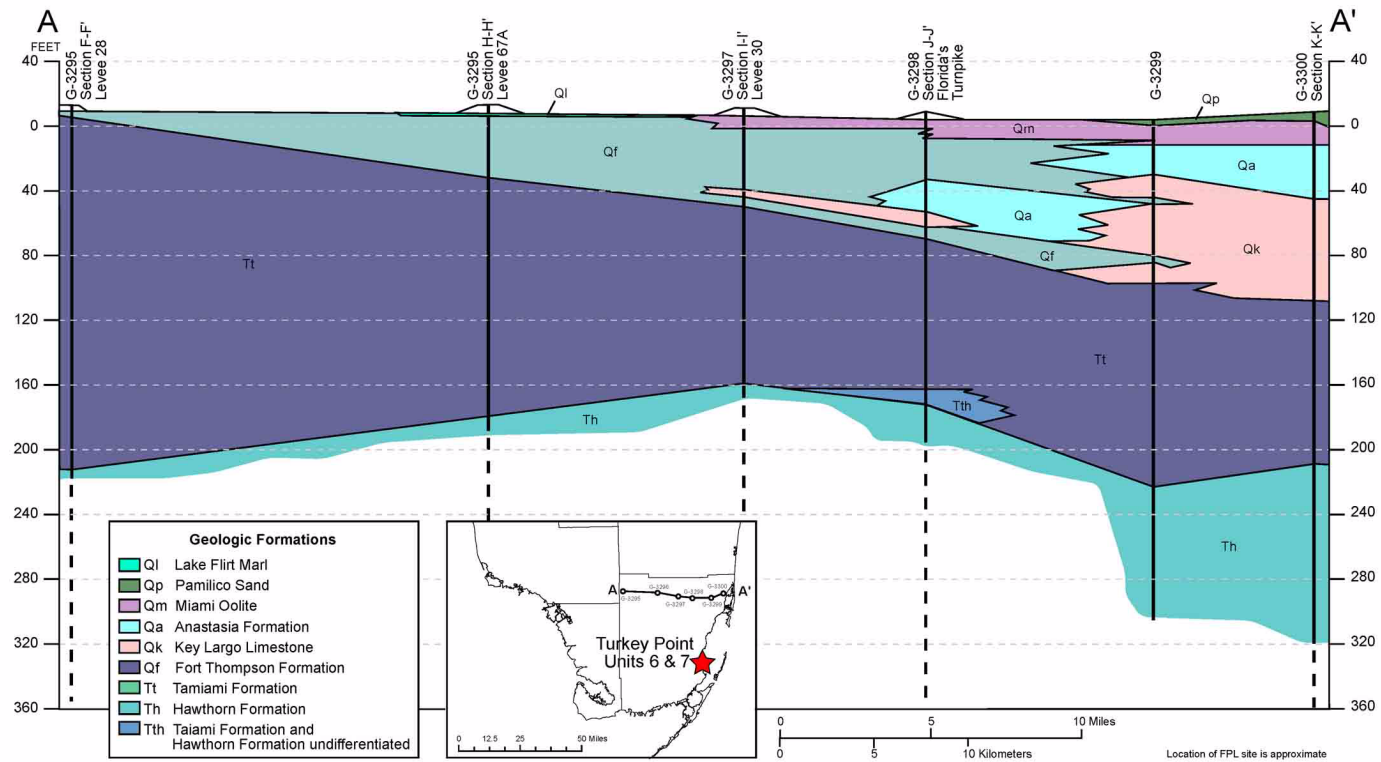
Figure 2.5.1-235 East-West Geologic Cross Section of Eocene through Pliocene-age Rocks in Southern Florida



Modified from: [Reference 378](#)

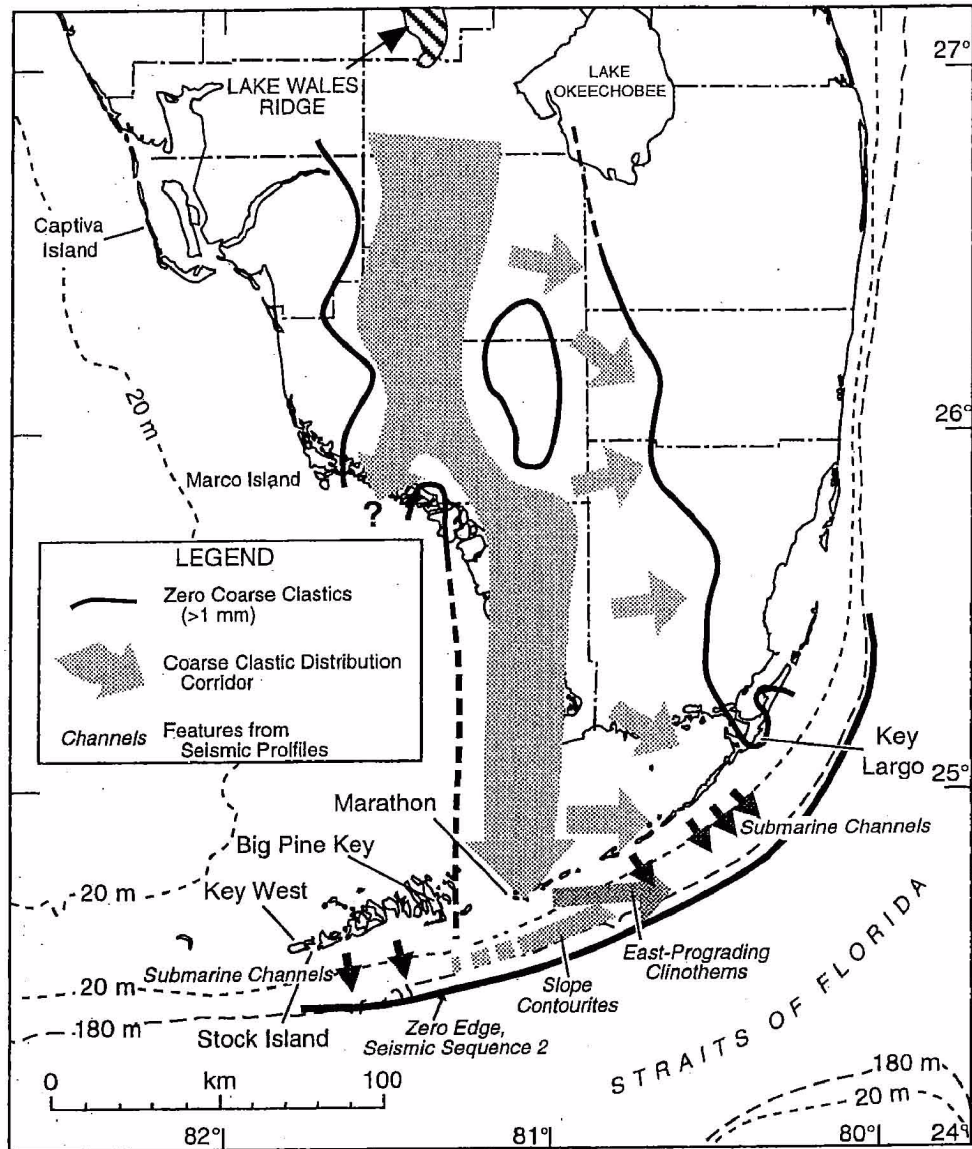
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Figure 2.5.1-236 East-West Geologic Cross Section of Miocene through Pleistocene-age Rocks in Dade County, Florida



Modified from: [Reference 374](#)

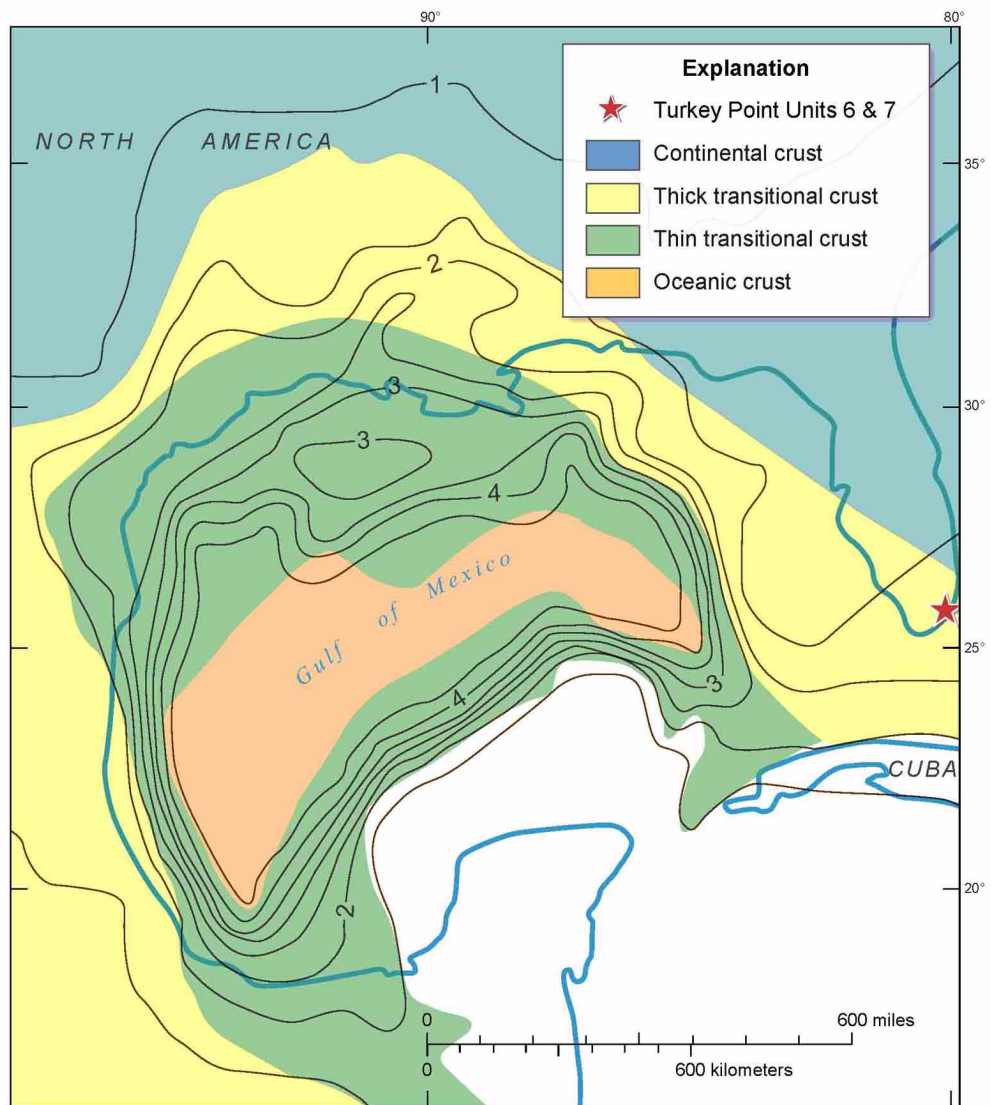
Figure 2.5.1-237 Miocene-Pliocene Siliciclastic Transport Pathways in Southern Florida



Source: [Reference 393](#)

Note: primary siliciclastics source – Appalachians

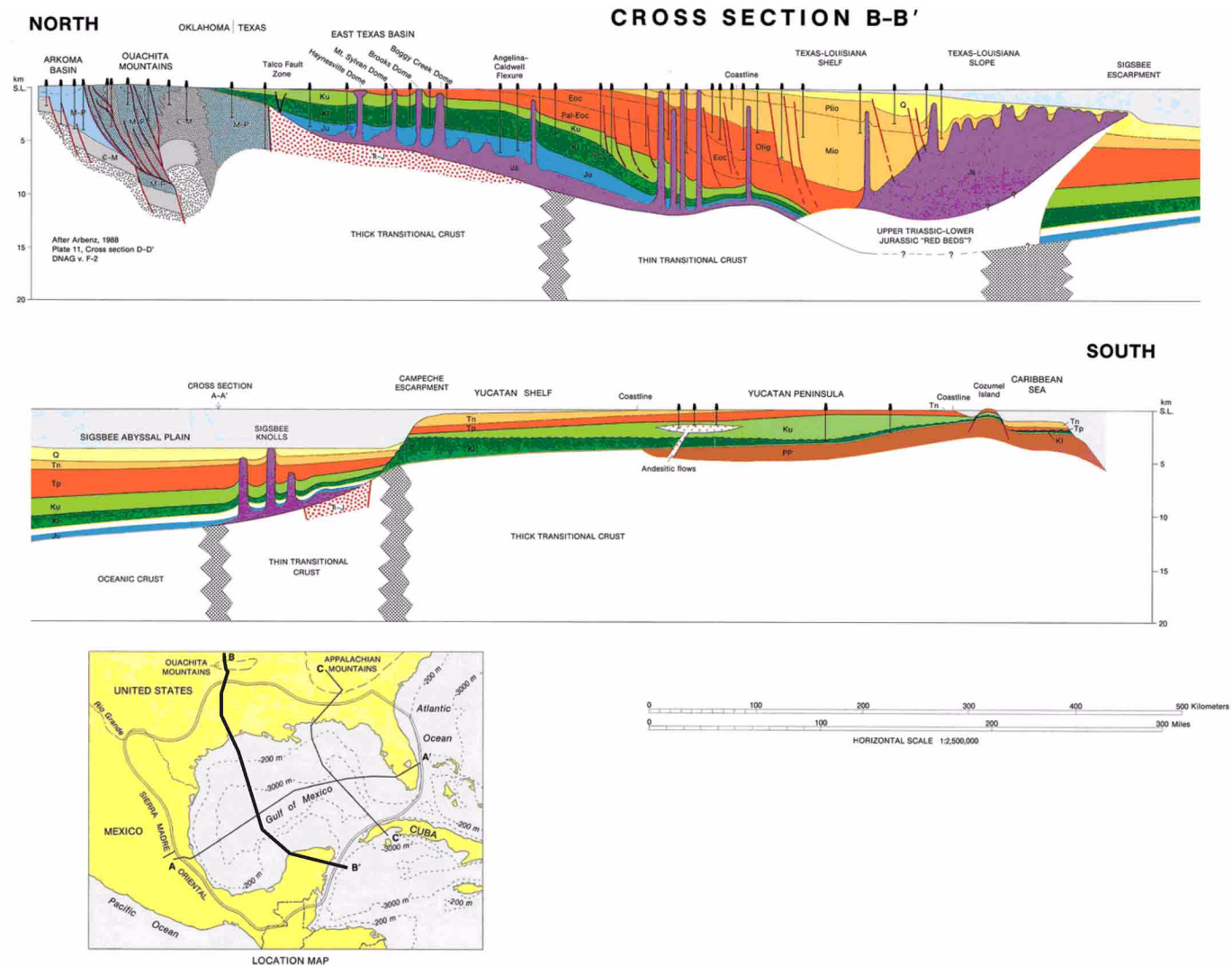
Figure 2.5.1-238 Map of Crust Types in Gulf of Mexico Region



Modified from: [Reference 410](#)

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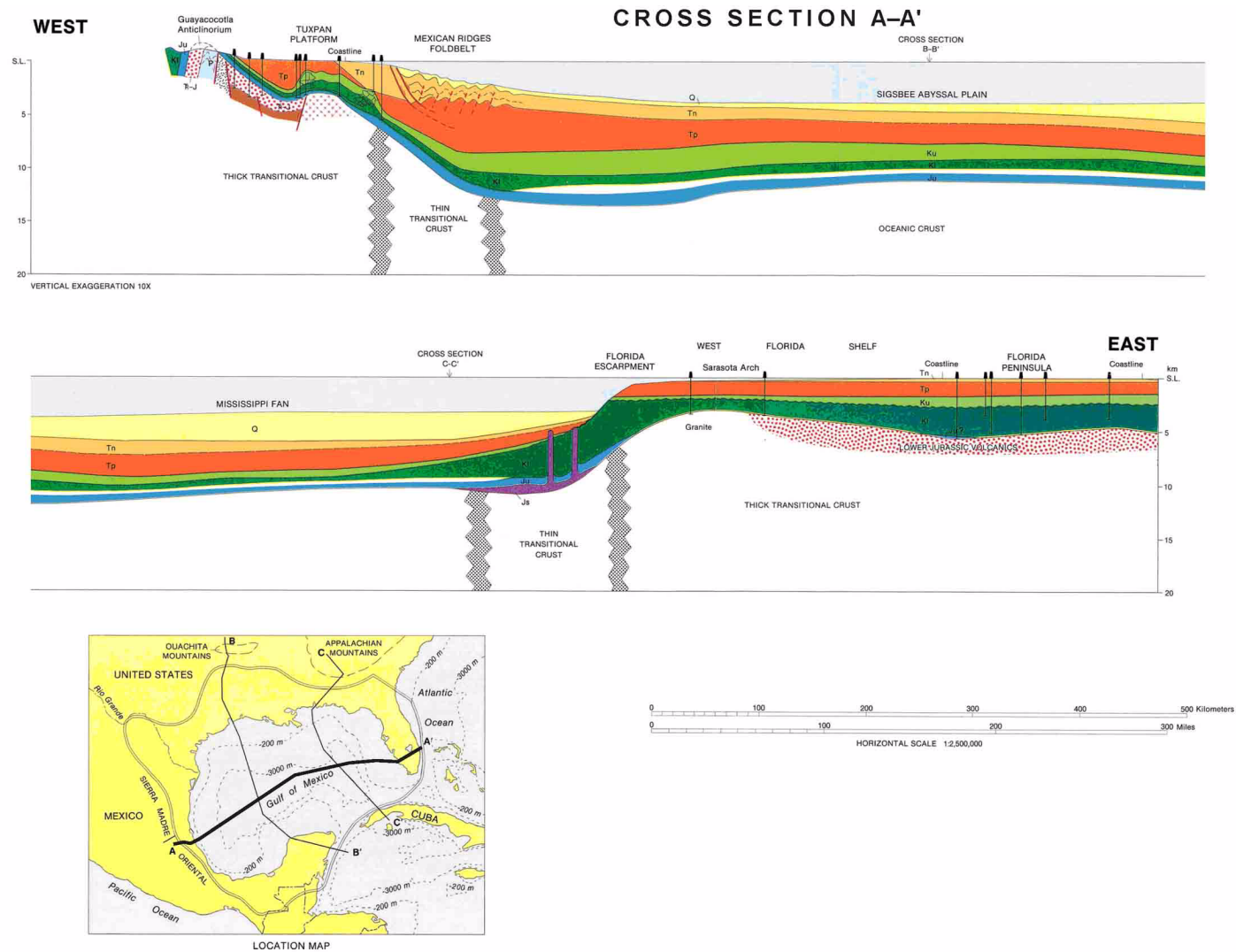
Figure 2.5.1-239 Gulf of Mexico Cross Section B-B'



Note: Explanation in Figure 2.5.1-242
Source: Reference 839

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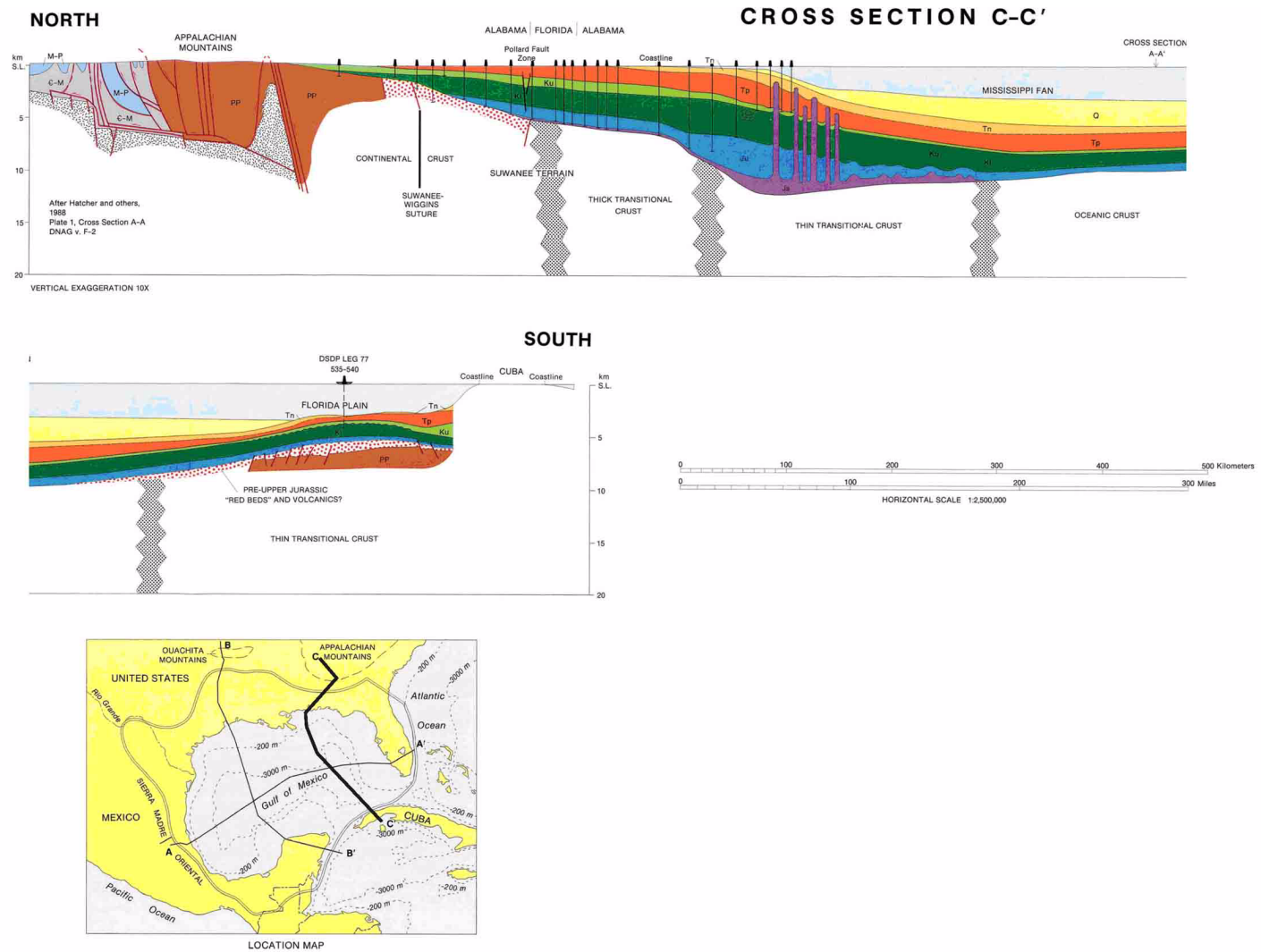
Figure 2.5.1-240 Gulf of Mexico Cross Section A-A'



Note: Explanation in Figure 2.5.1-242
Source: Reference 839

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














Figure 2.5.1-241 Gulf of Mexico Cross Section C-C'



Note: Explanation in Figure 2.5.1-242
Source: Reference 839

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Part 2 — FSAR

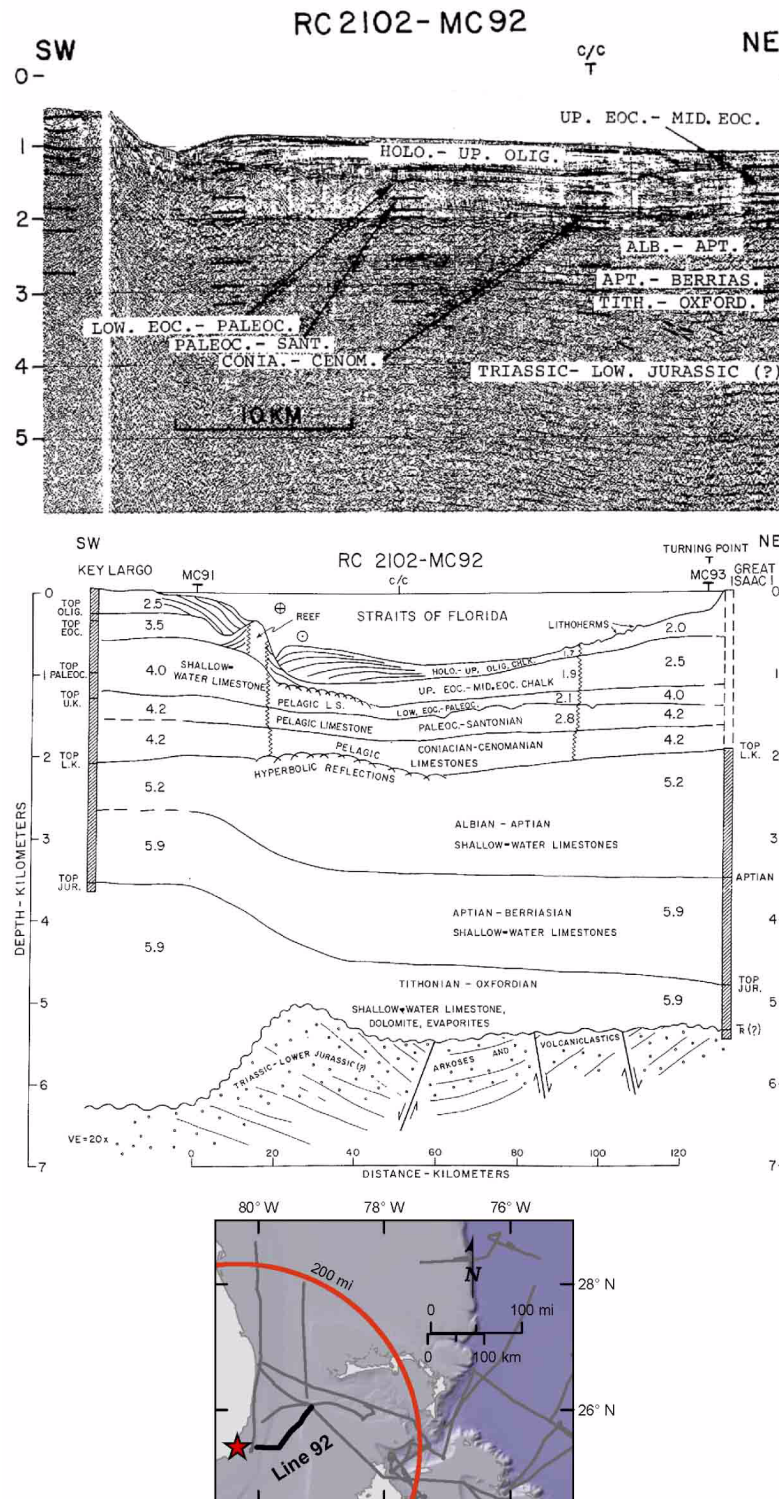
Figure 2.5.1-242 Explanation for Gulf of Mexico Cross Sections A–A', B–B', and C–C'

	Quaternary
	Tertiary–Neogene (Mio = Miocene; Plio = Pliocene)
	Tertiary–Paleogene (Pal = Paleocene; Eoc = Eocene; Olig = Oligocene)
	Upper Cretaceous
	Lower Cretaceous
	Upper Jurassic
	Middle Jurassic salt
	Upper Triassic–Lower Jurassic "red beds" and volcanics (includes Lower Jurassic marine rocks and Middle Jurassic "red beds" and marine rocks in Mexico.)
	Permian–Triassic intrusive granitic rocks
	Permian
	Upper Mississippian–Pennsylvanian (Platform)
	Upper Mississippian–Pennsylvanian (Flysch)
	Cambrian–Lower Mississippian (Platform)
	Cambrian–Lower Mississippian (Off-shelf)
	Upper Proterozoic–Lower Paleozoic metamorphic rocks
	Precambrian crystalline rocks

Source: [Reference 839](#)

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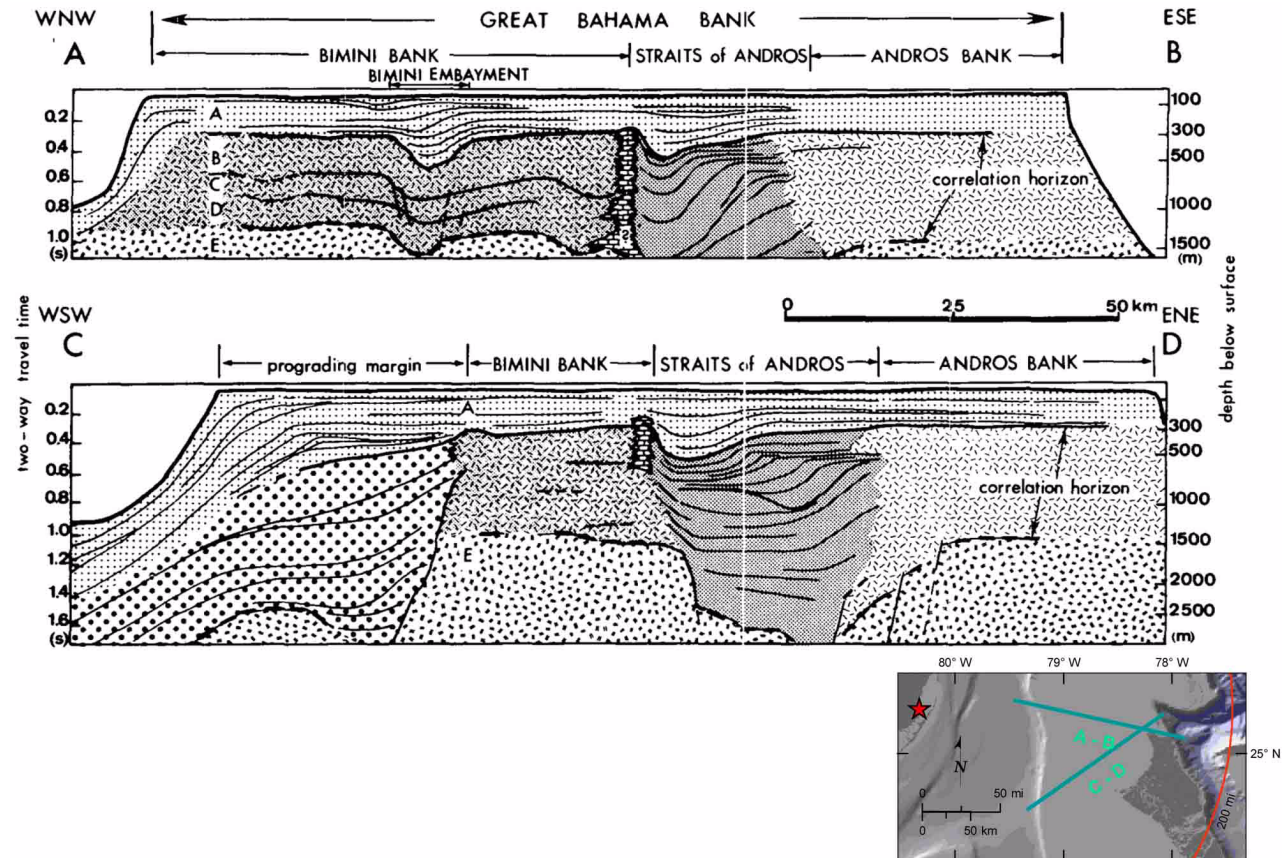
Figure 2.5.1-243 Seismic Line and Well Correlation, Florida, and Bahama Platform



Modified from: [Reference 307](#)

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Figure 2.5.1-244 Seismic Line Interpretation across Bahama Plateau



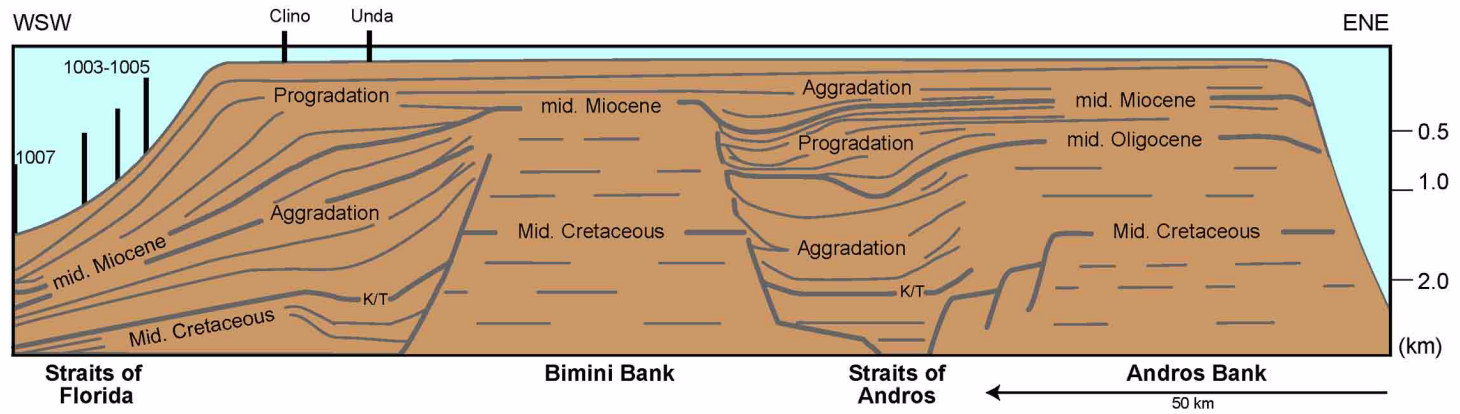
Notes:

Top: Cross section displaying two buried banks (Andros, Bimini) and two completely infilled troughs (Straits of Andros, Bimini embayment). A-E = depositional megasequences. Correlation is given by two horizons (E, B). Note difference in size and age of two troughs.
Bottom: Cross section along WESTERN documenting lateral progradation of Bimini western margin and complex filling of Straits of Andros. Compare volume of prograded part with oroducina platform.

Modified from: [Reference 475](#)

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Figure 2.5.1-245 Great Bahama Bank Geologic Environment



Modified from: [Reference 768](#)

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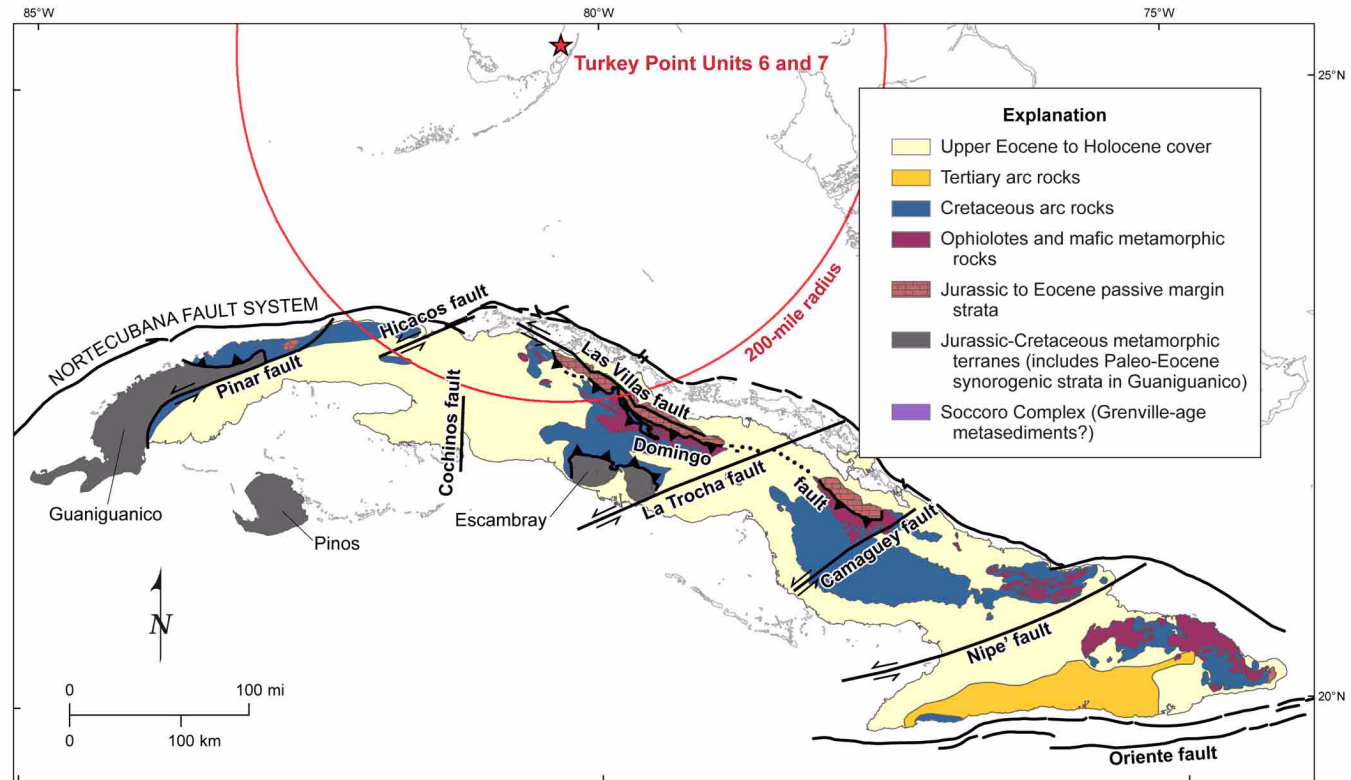
Figure 2.5.1-246 Lithostratigraphic Column for the Bahama Islands

ERA	SYSTEM	SERIES	FORMATION	
CENOZOIC	QUATERNARY	HOLOCENE	Rice Bay Formation	Hana Bay Member
				North Point Member
		PLEISTOCENE	Grotto Beach Formation	Cockburn Town Member
				French Bay Member
			Owl's Hole Formation	

Not drawn to scale
Modified from: [Reference 438](#)

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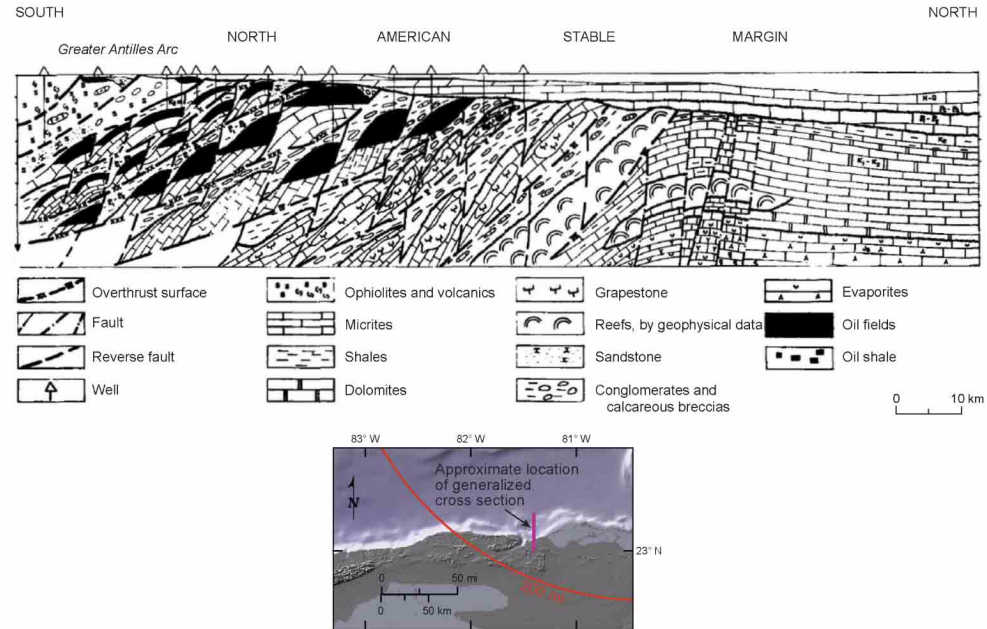
Figure 2.5.1-247 Tectonic Map of Cuba



Multiple sources were used to compile this map, including [References 443, 448, 770, and 492](#)

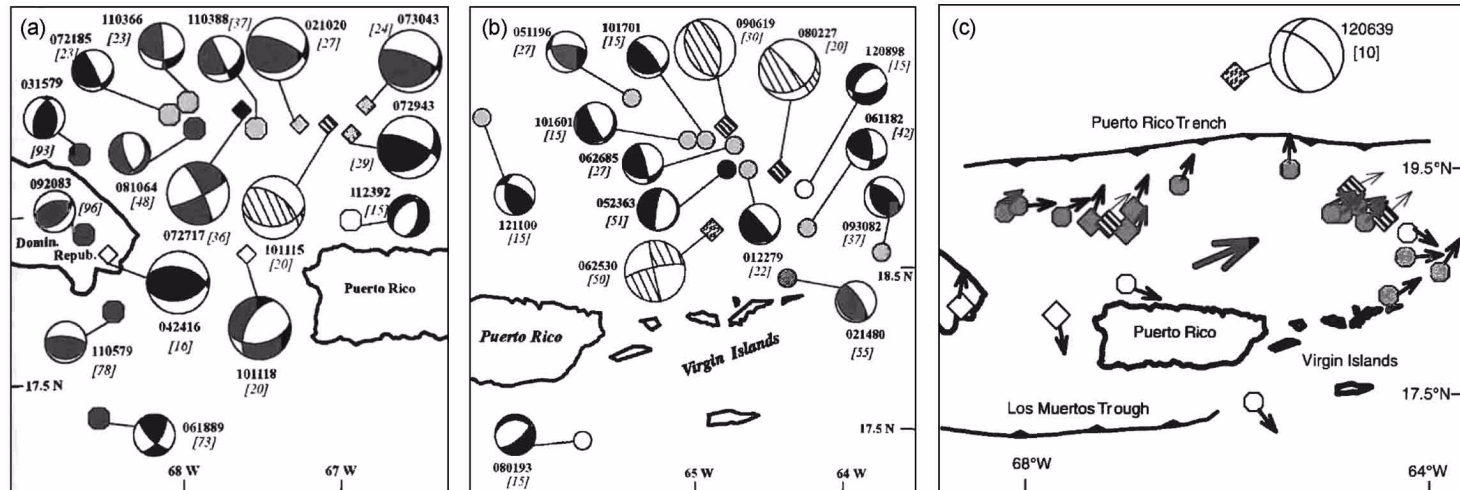
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Figure 2.5.1-248 Generalized Cross Section of Northern Cuba



Source: [Reference 497](#)

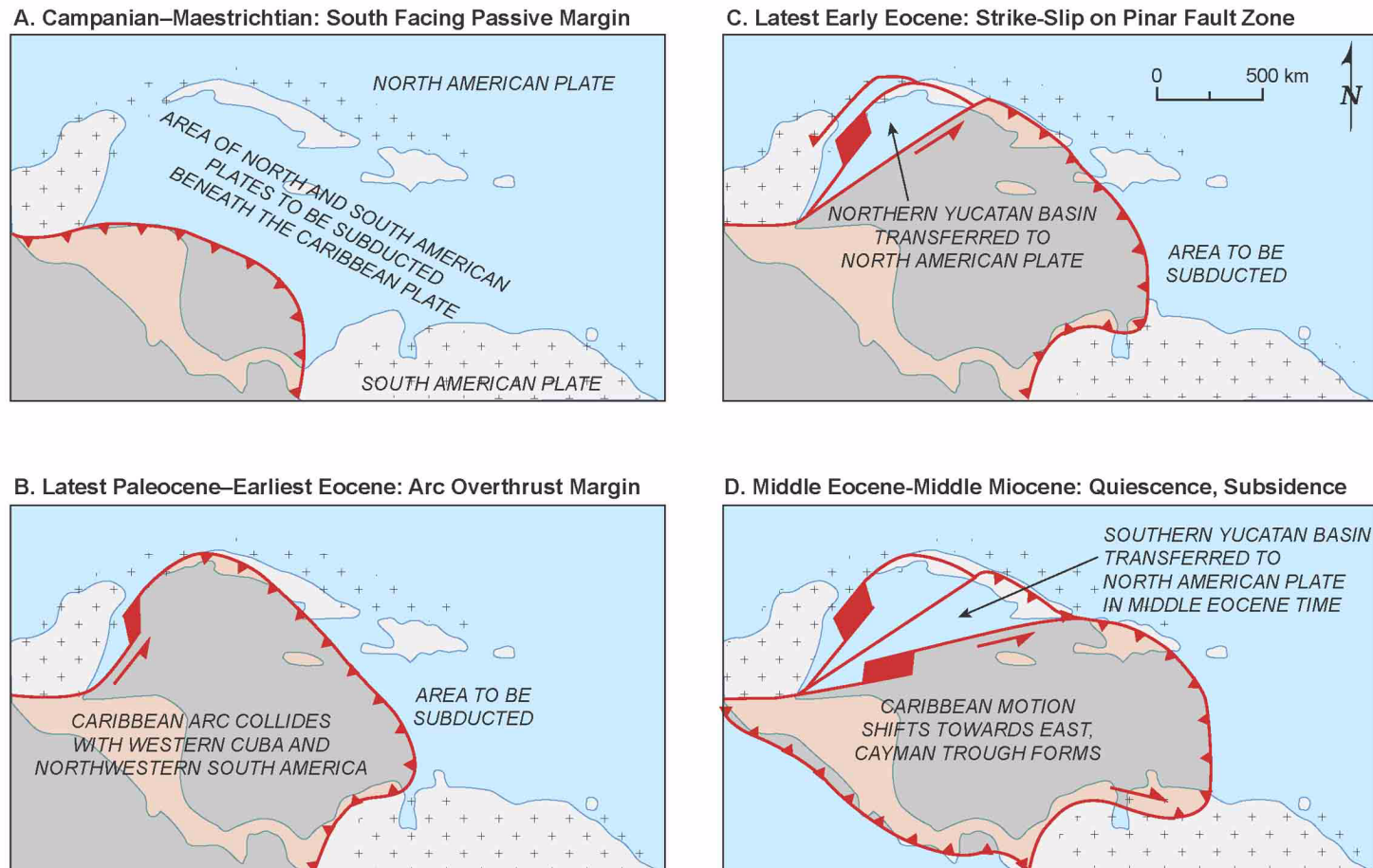
Figure 2.5.1-249 Focal Mechanisms and Slip Vectors of Northeast Caribbean Earthquakes



- (a) Focal mechanisms of northwestern offshore Puerto Rico earthquakes. Dates are in mm/dd/yy format. Striped mechanisms are from forward modeling, and are less well constrained.
- (b) Historic and recent earthquakes of the Virgin Islands Region
- (c) Slip vectors of earthquakes occurring in Greater Antilles crust (open symbols) and along plate interface (closed symbols). Focal mechanism for 1939 normal faulting outer rise event shown at top."

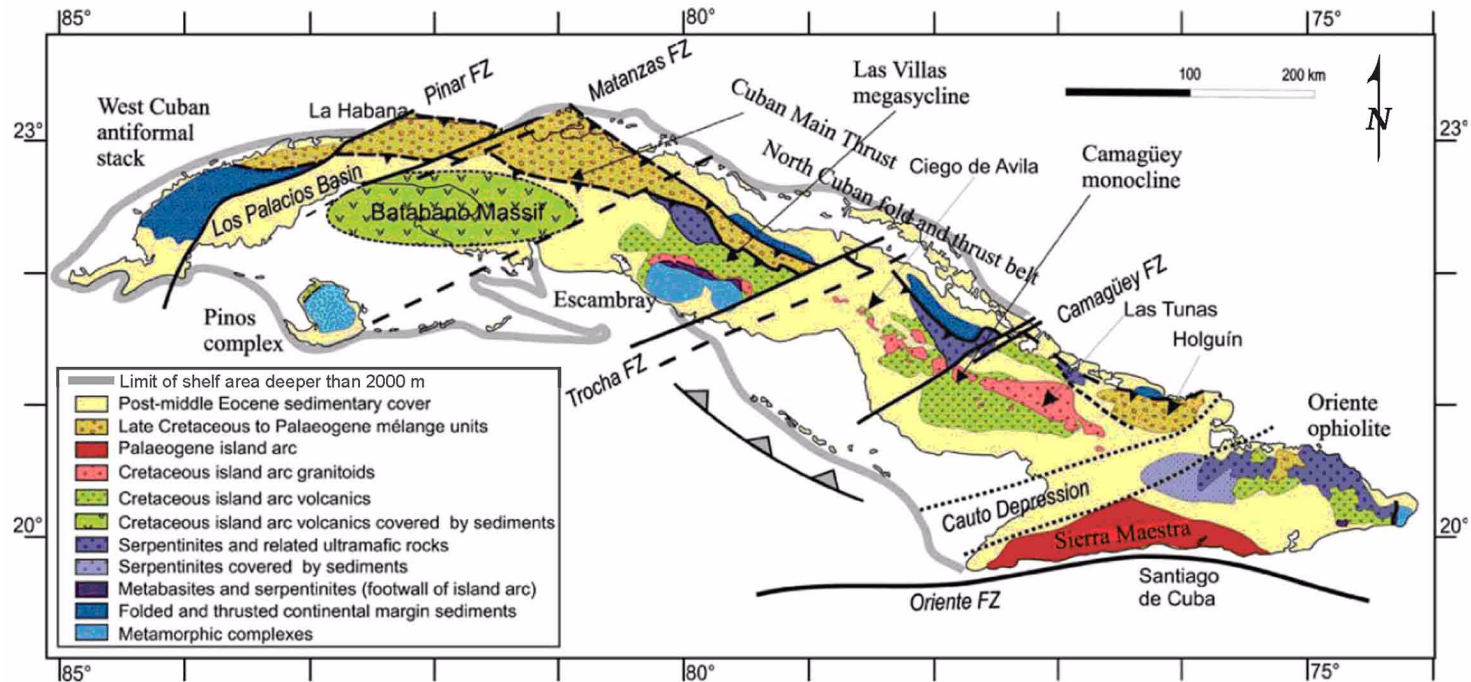
Modified from: [Reference 681](#)

Figure 2.5.1-250 Tectonic Evolution of the Greater Antilles Arc Collision



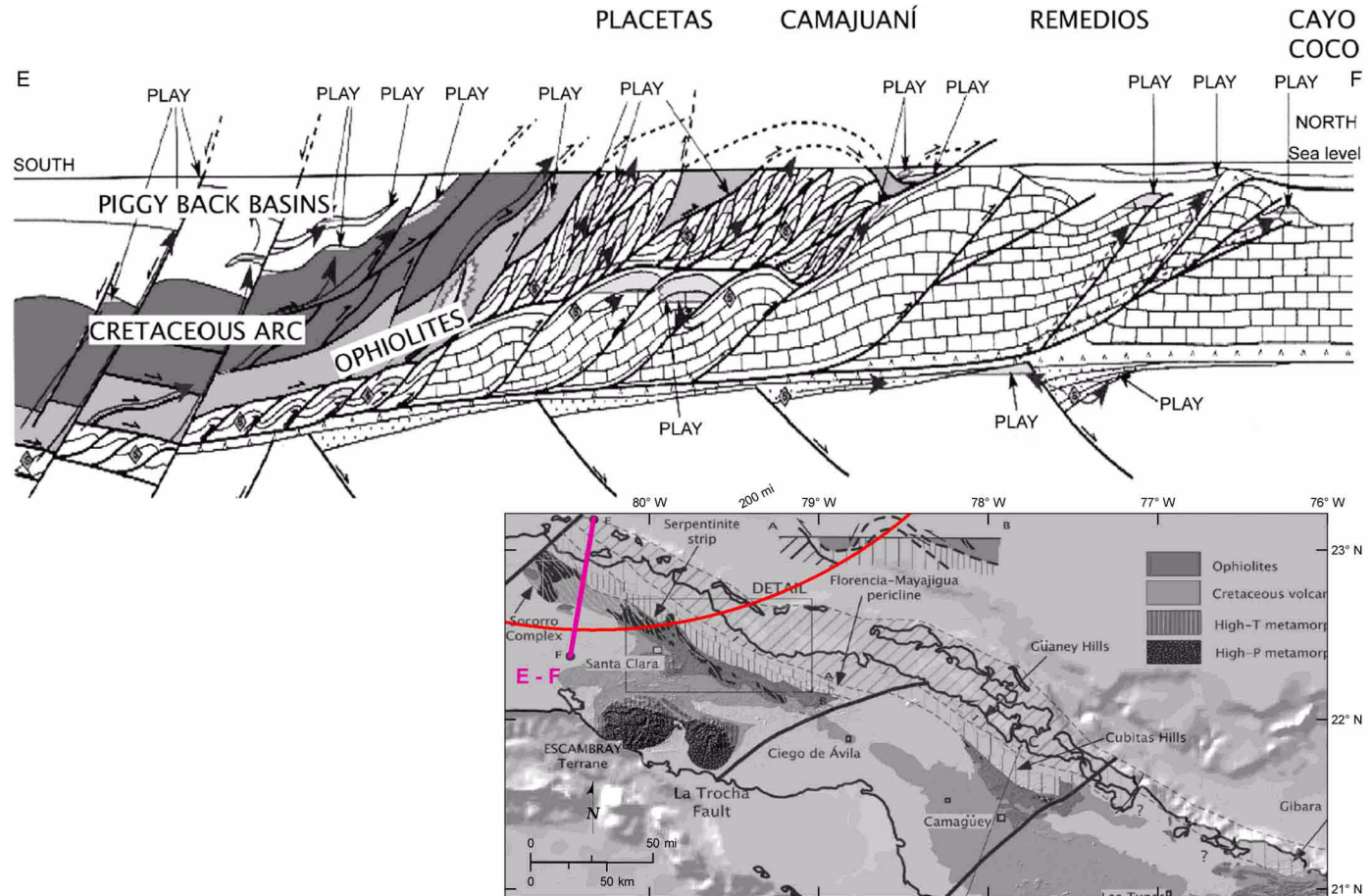
Modified from: [Reference 697](#)

Figure 2.5.1-251 Lithostratigraphic Map of Cuba



Modified from: [Reference 769](#)

Figure 2.5.1-252 Structural Cross Section across Central Cuba, Line E-F



Note: Structural cross section of the Cuban fold-and-thrust belt. This cross section illustrates the deep detachment surface and the amalgamated thrust nappes between the Bahamas platform and the allochthonous Caribbean plate (serpentinite mélange, ophiolites, and Cretaceous volcanic arc suites). The foredeep basin deposits crown the Mesozoic stratigraphic sections, and represent the seal of the petroleum systems.

Modified from: [Reference 786](#)