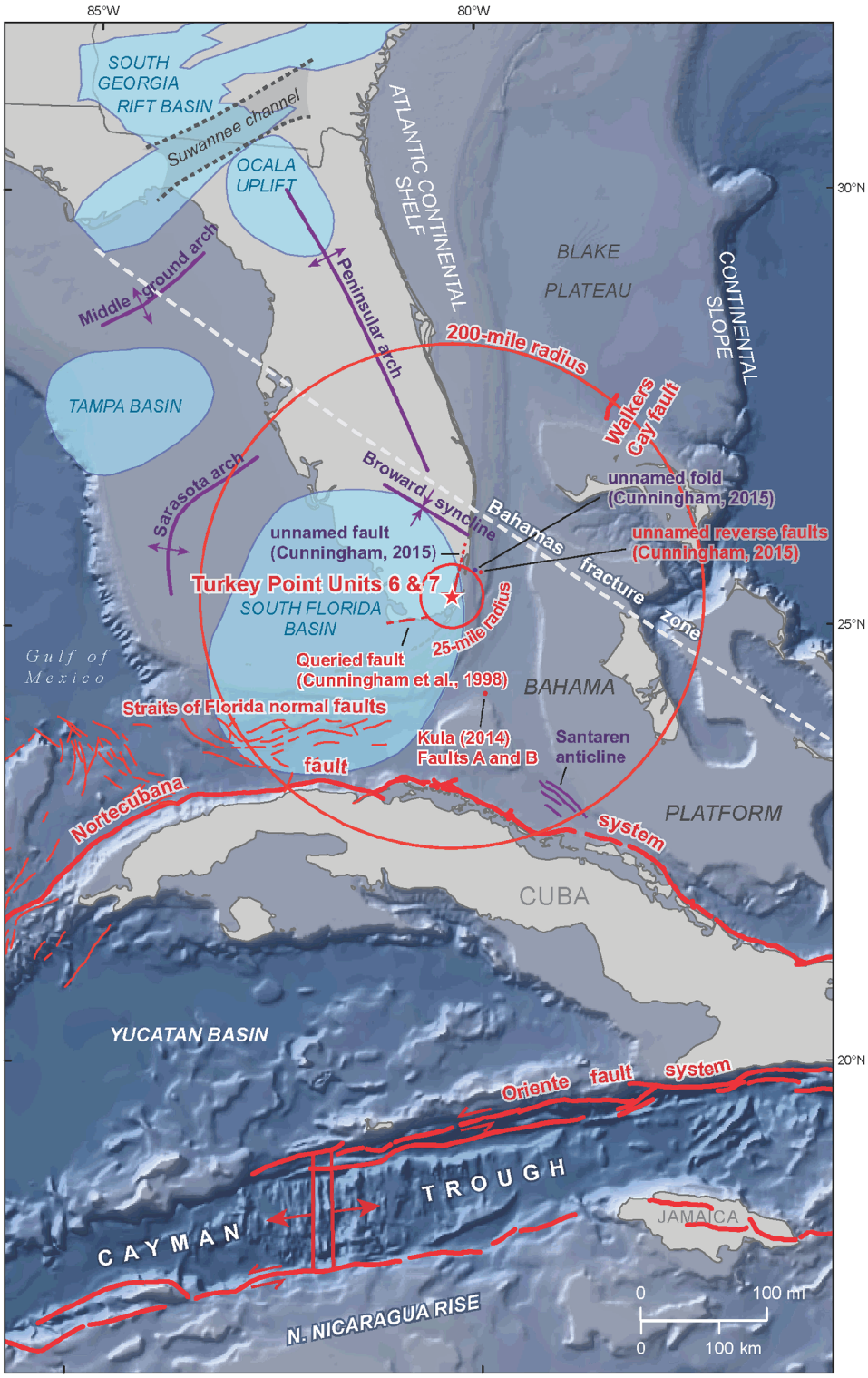
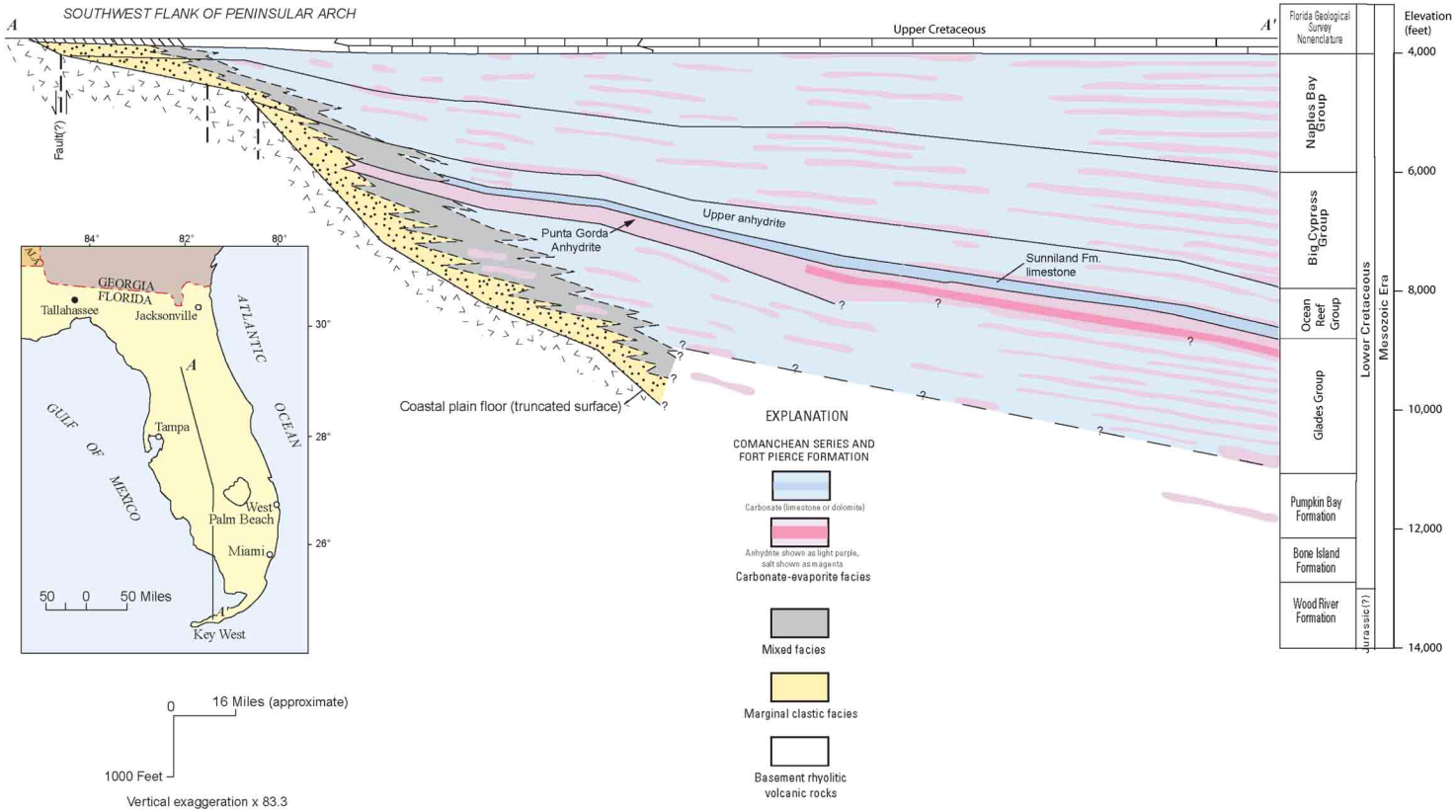


Sources: References 822, 482, 823, 457, 212, 421, 373, 999, and 1022.

Figure 2.5.1-229 Regional Tectonic Features



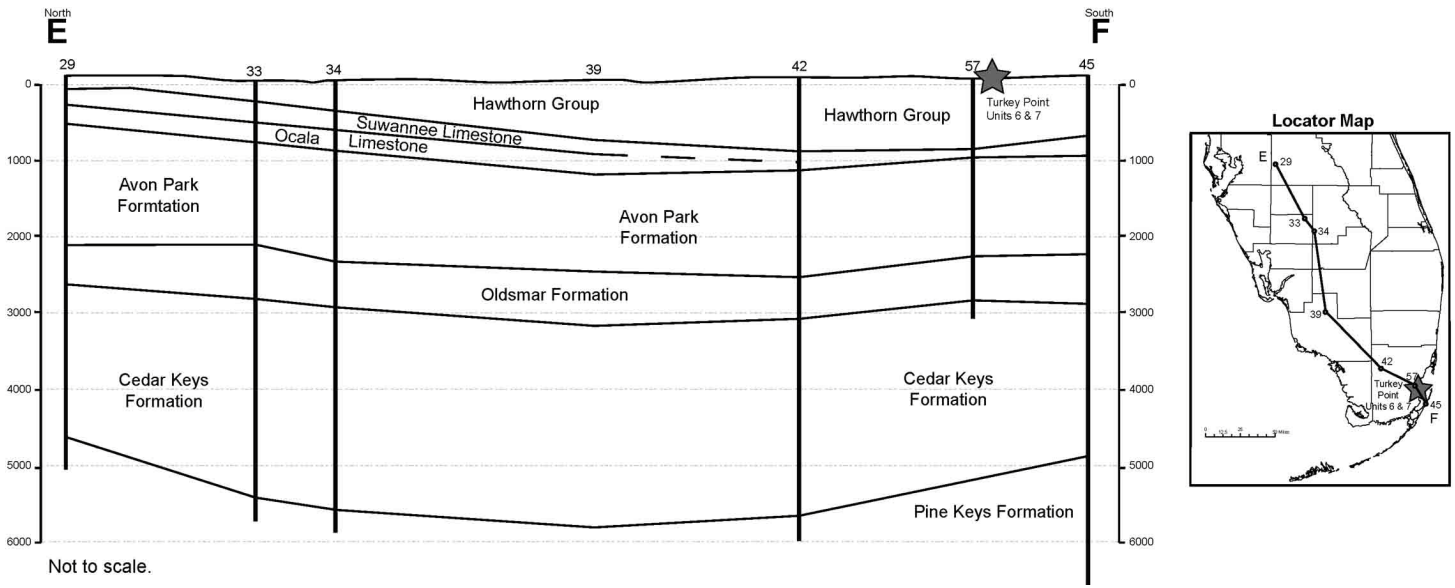
Modified from: Reference 366

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

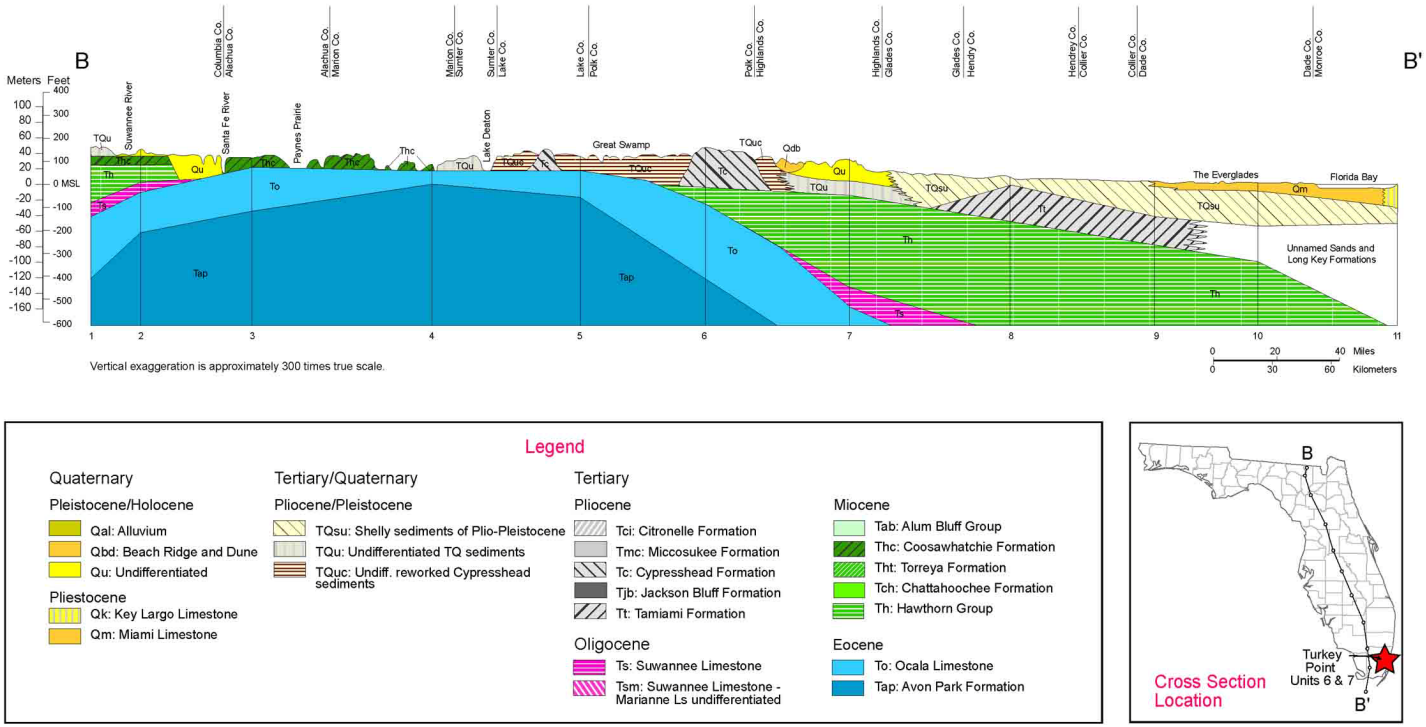
Sources: References 357, 373, 375, 376, 394, 397, 398, 399, 403, and 406

Figure 2.5.1-231 Cenozoic Stratigraphy of Southern Florida



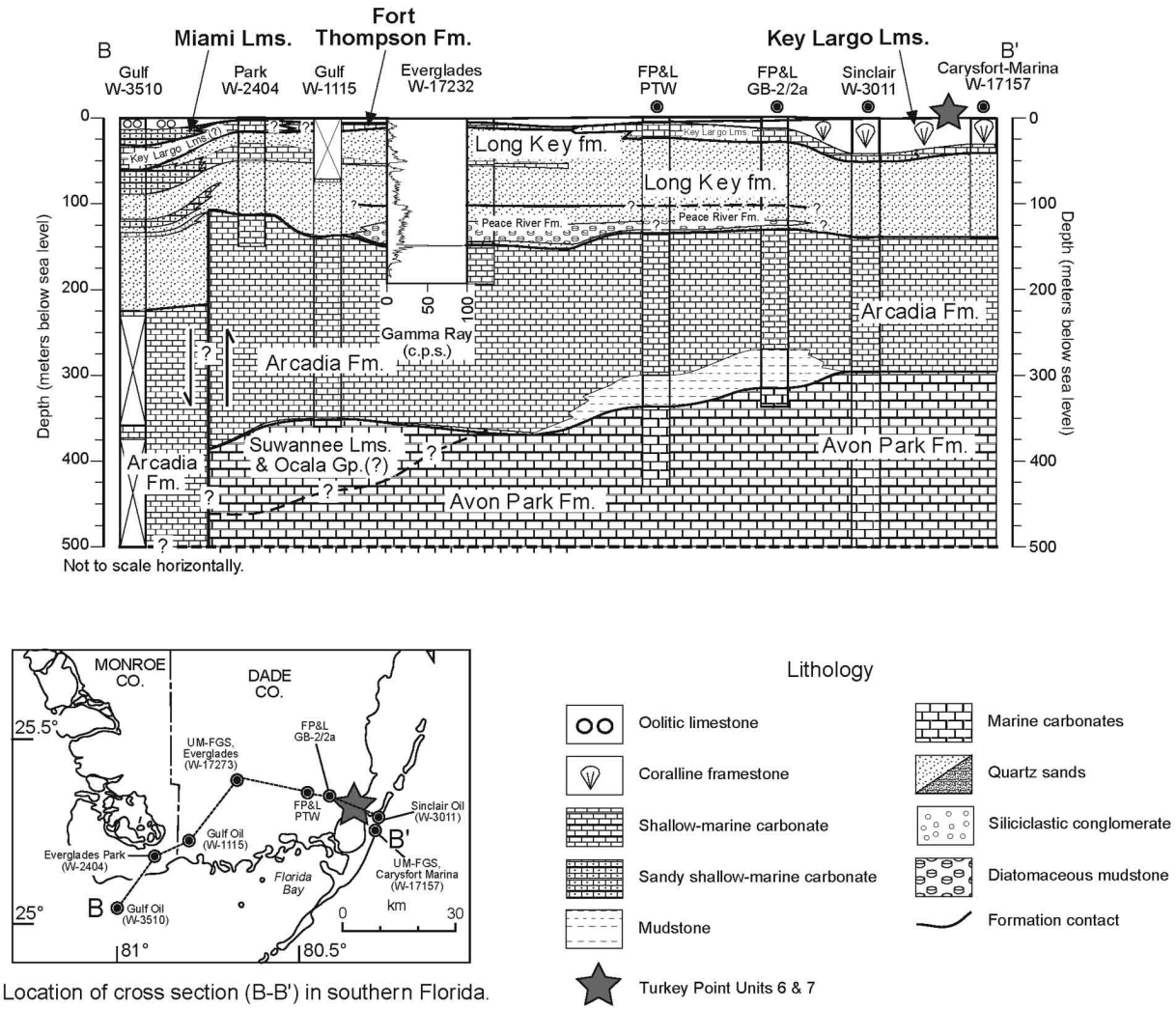
Modified from: Reference 397

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



Modified from: Reference 377

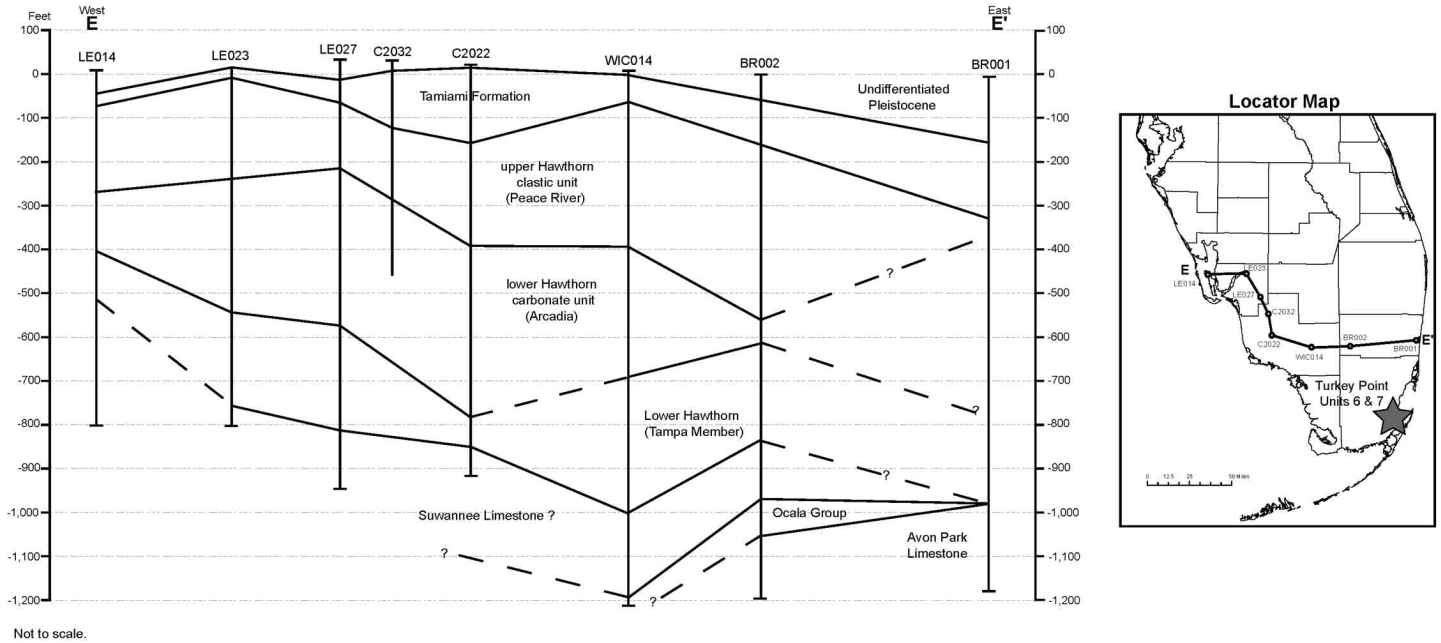
Figure 2.5.1-233 Cenozoic North-South Cross Section of Florida



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

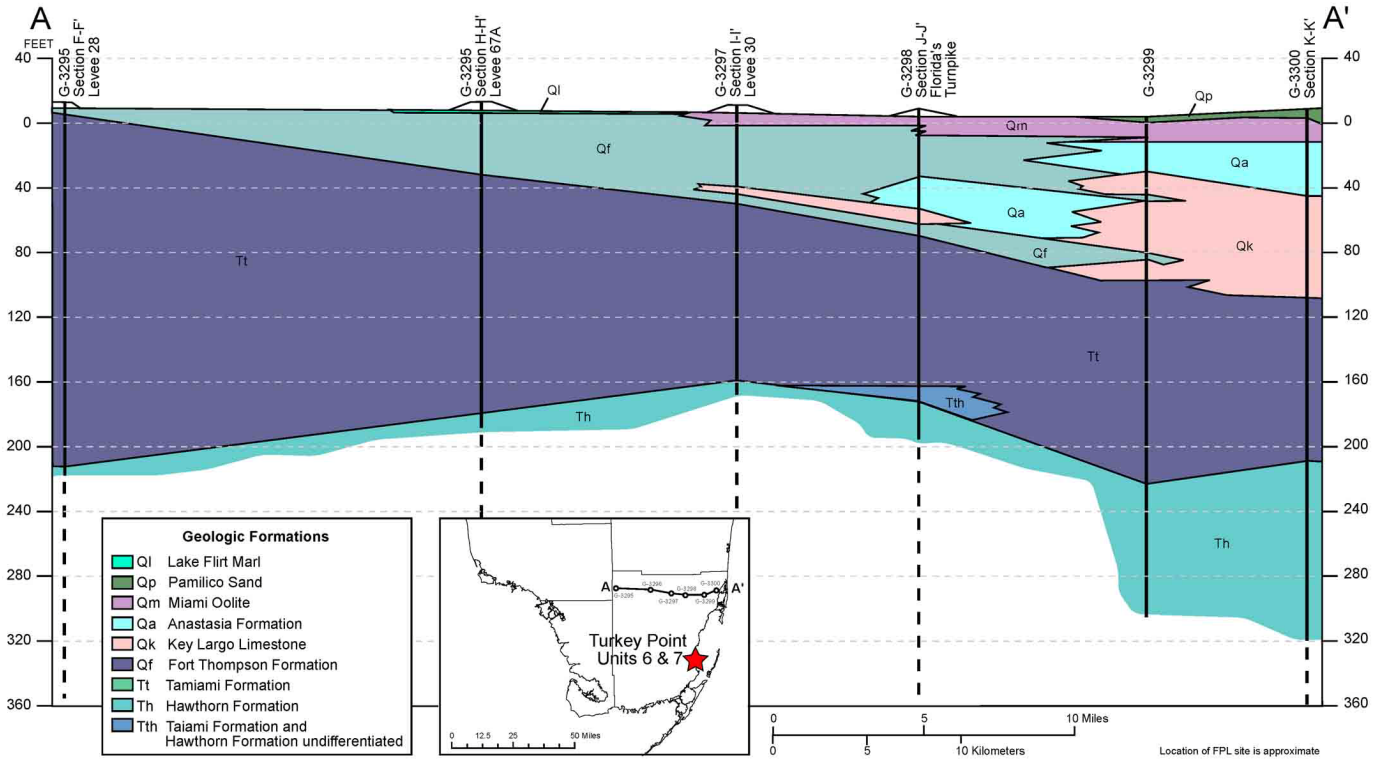
Modified from: Reference 373
Note: Primary siliclastic source - Appalachians

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



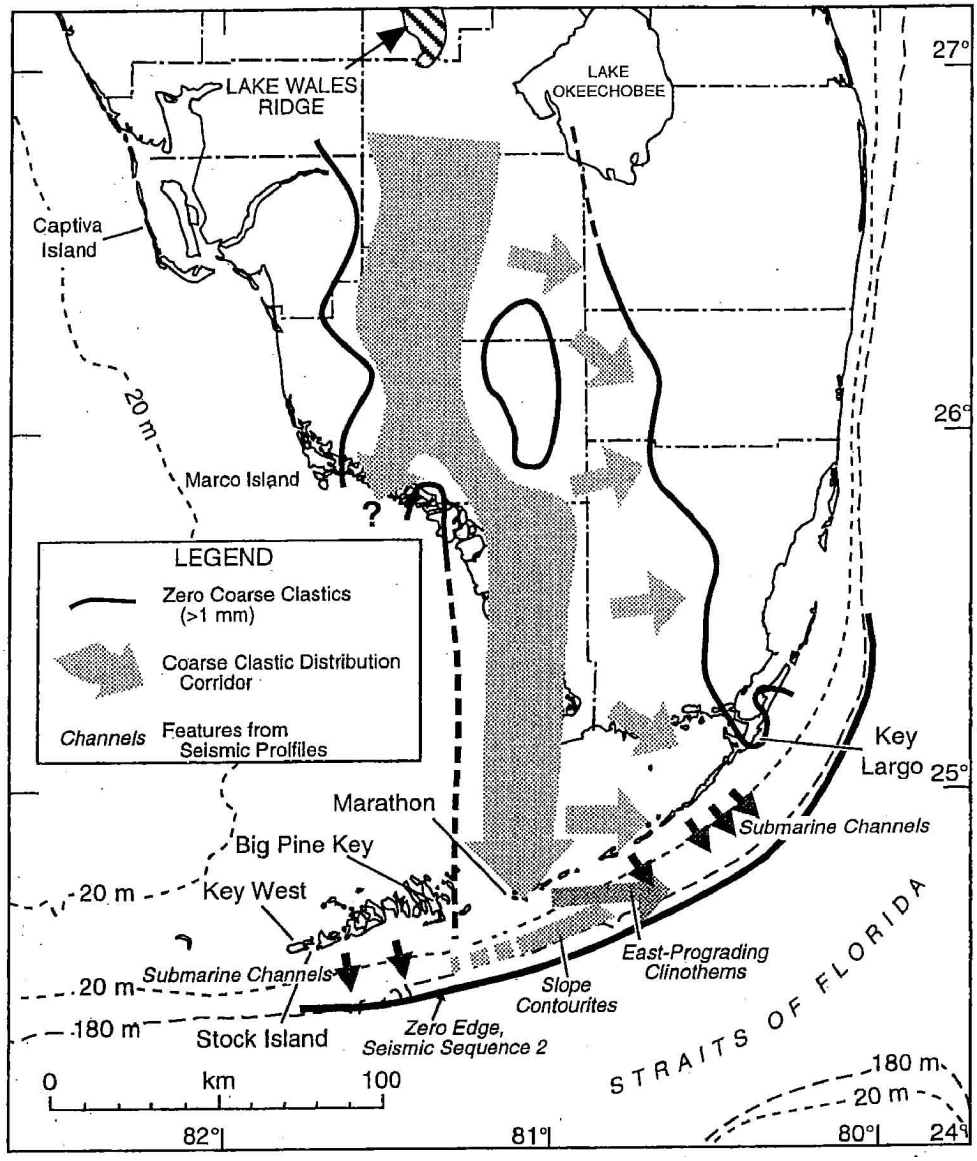
Modified from: Reference 378

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



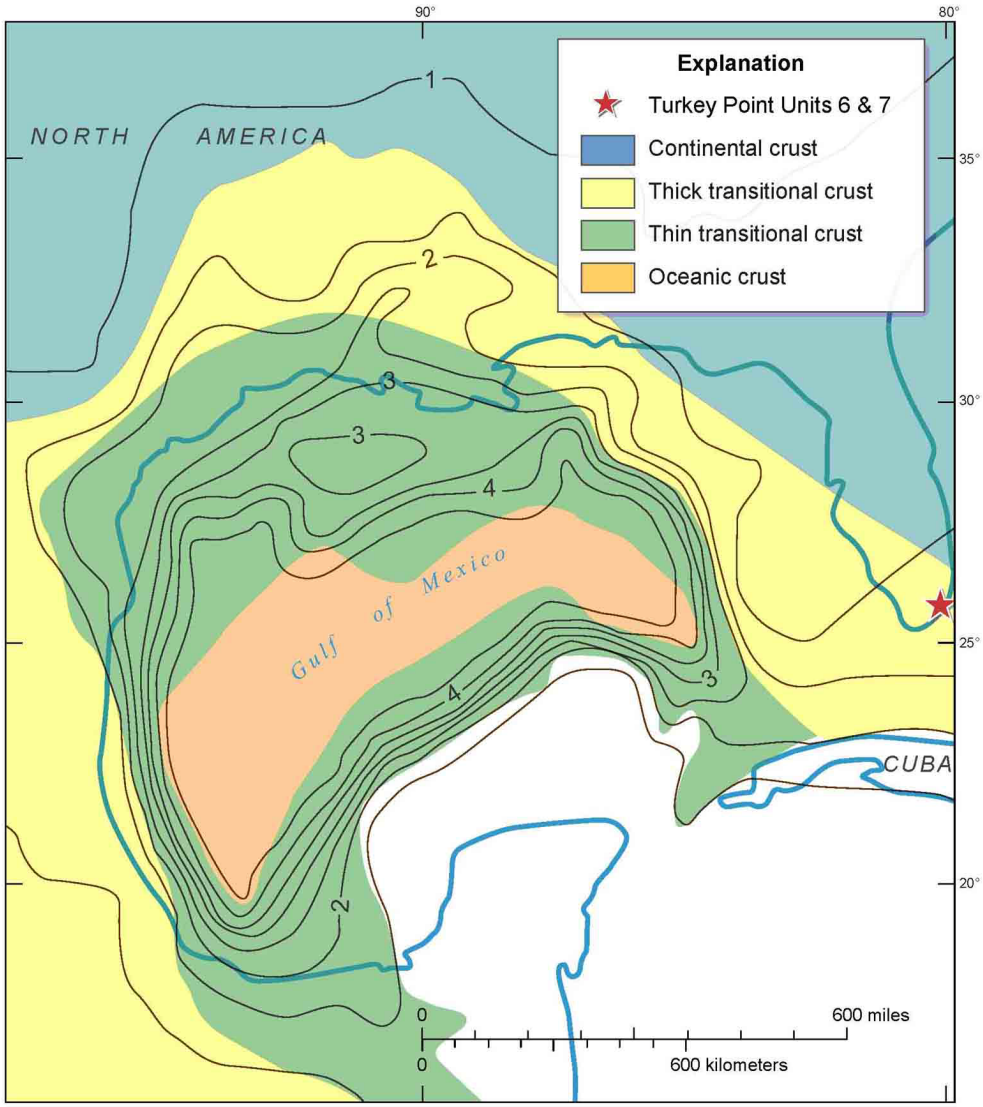
Modified from: Reference 374

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



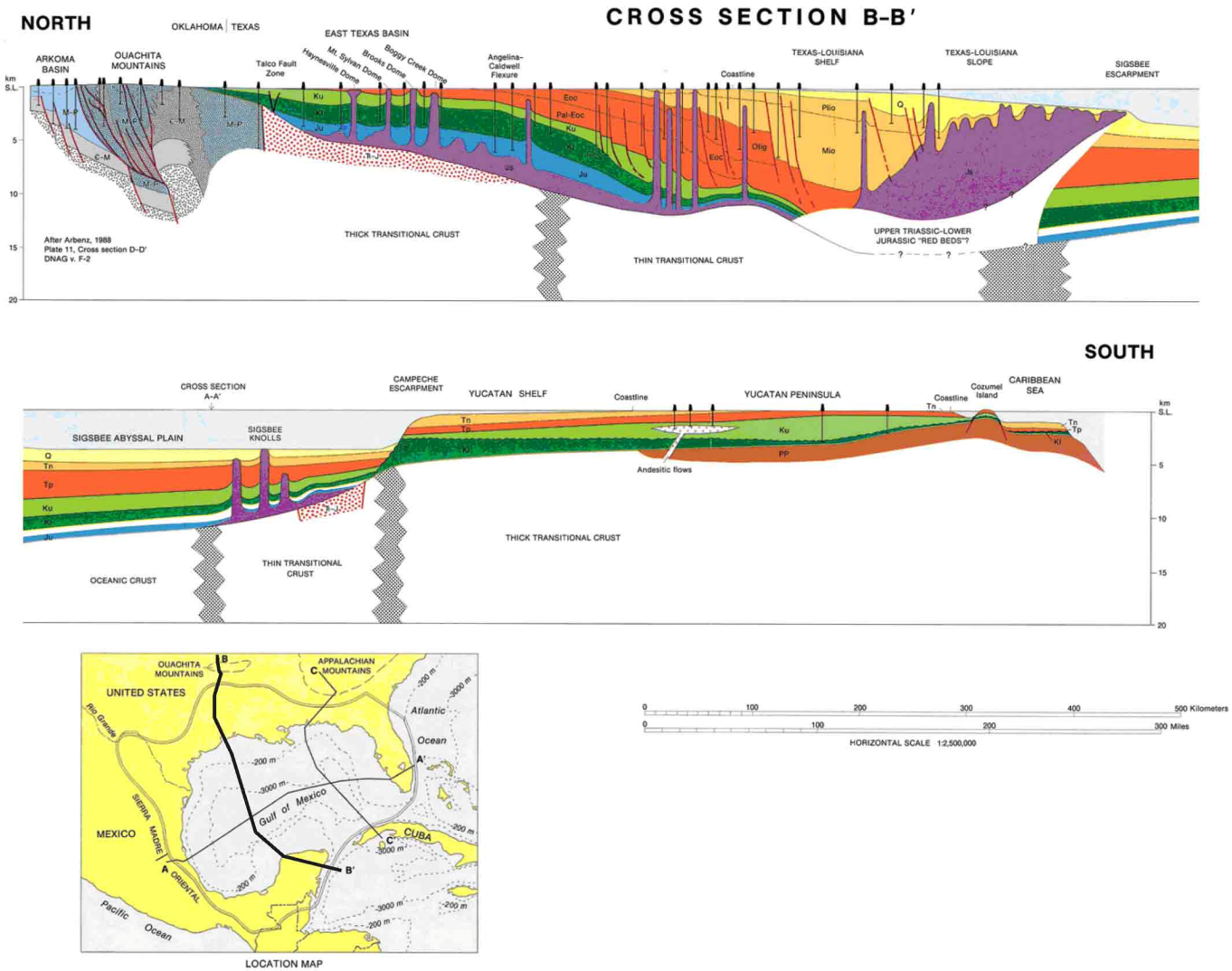
Source: Reference 393
Note: primary siliciclastics source – Appalachians

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



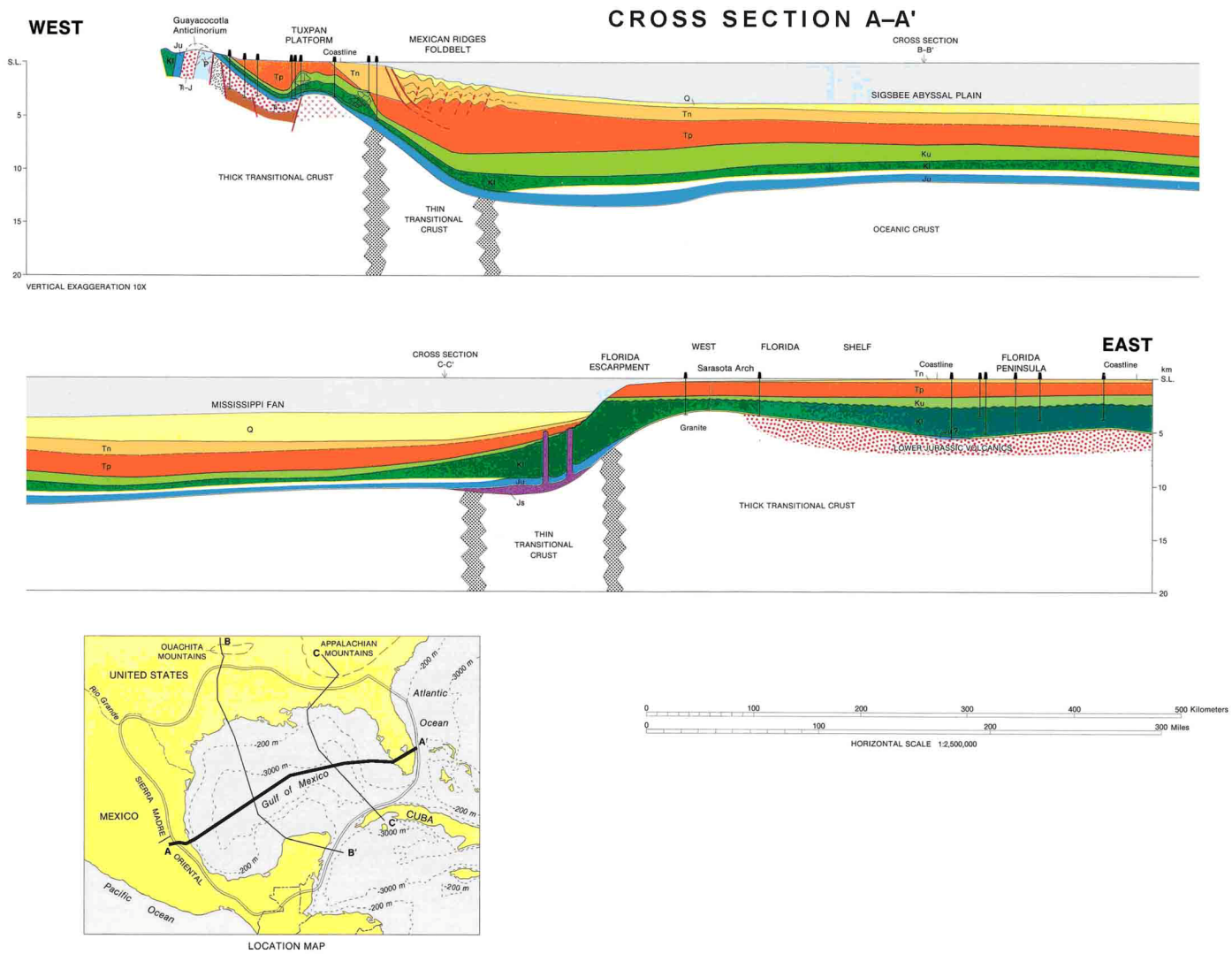
Modified from: Reference 410

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



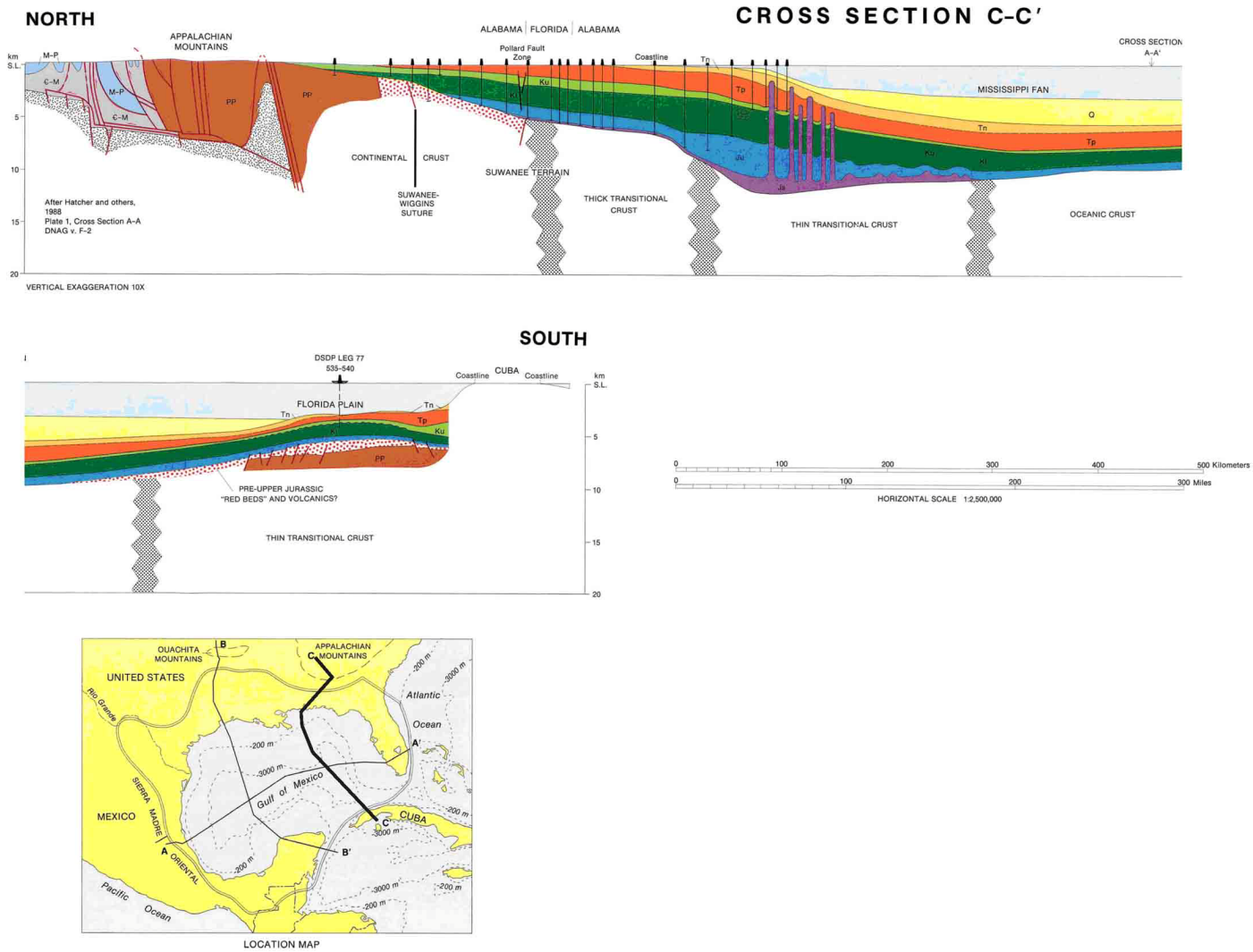
Note: Explanation in Figure 2.5.1-242
Source: Reference 839

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



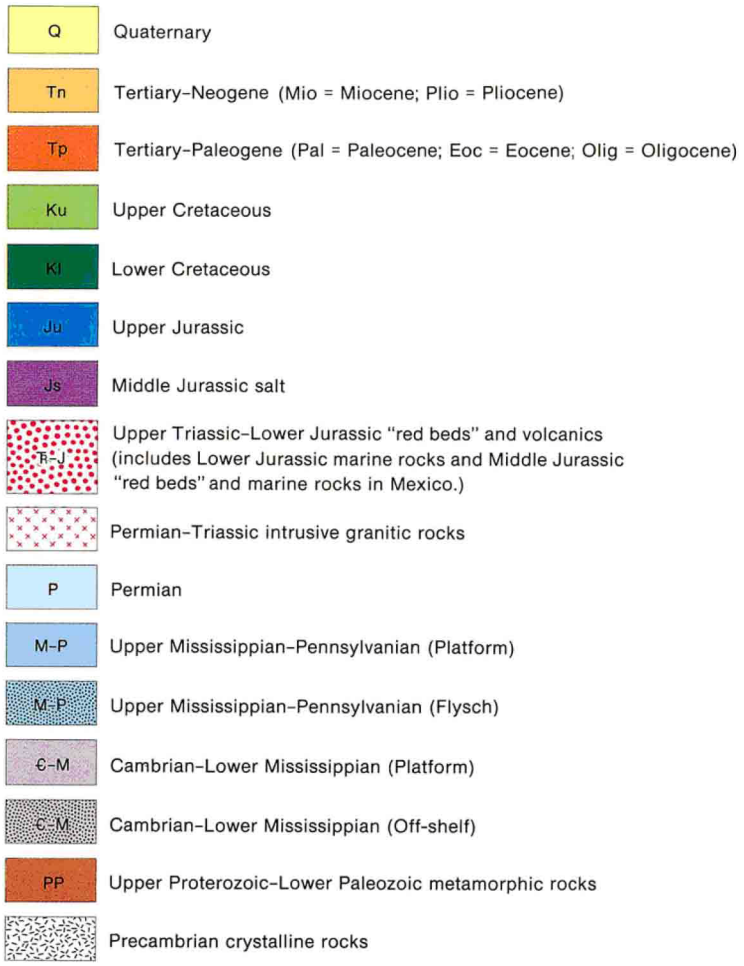
Note: Explanation in Figure 2.5.1-242
Source: Reference 839

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



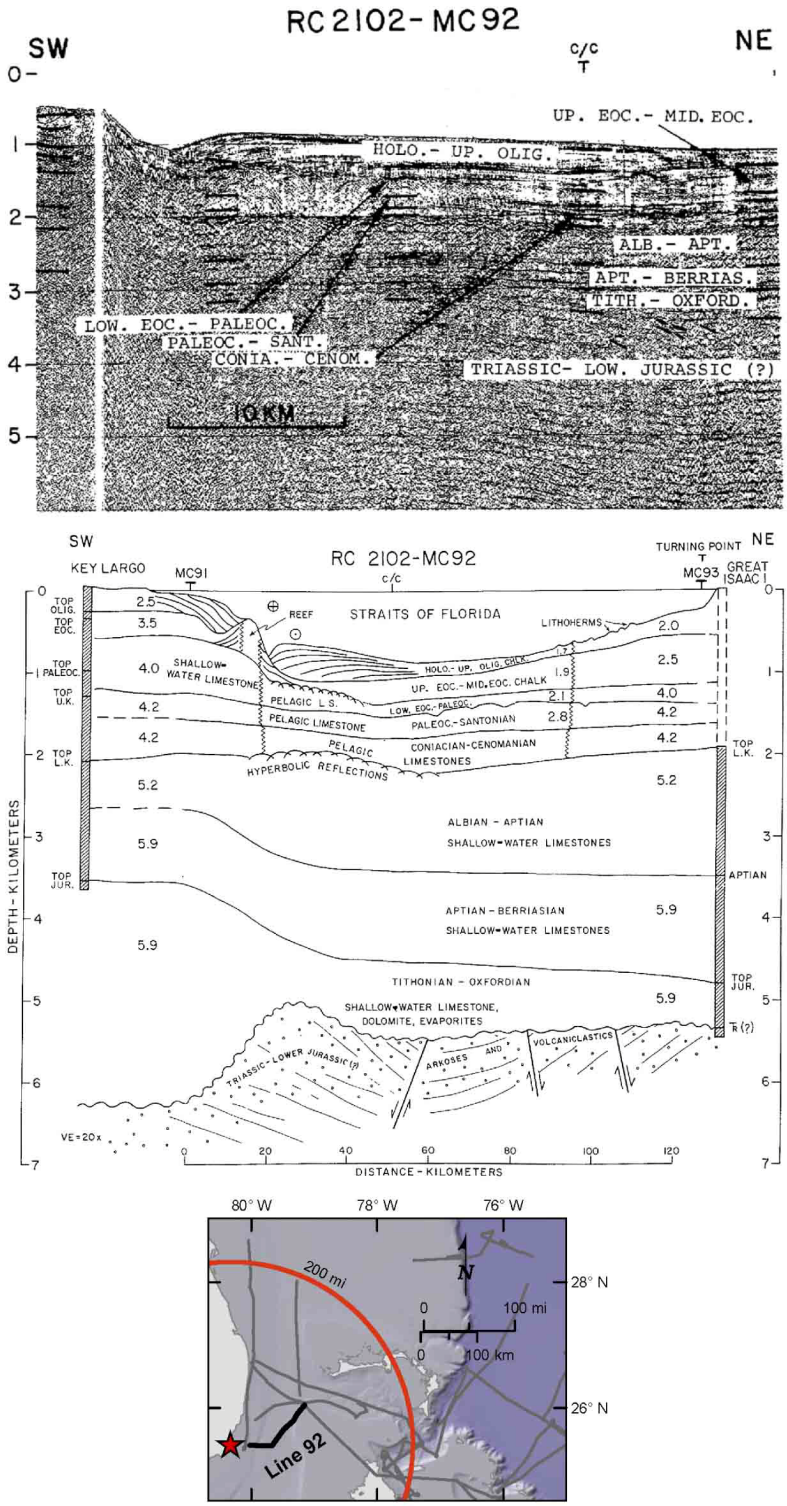
Note: Explanation in Figure 2.5.1-242
Source: Reference 839

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



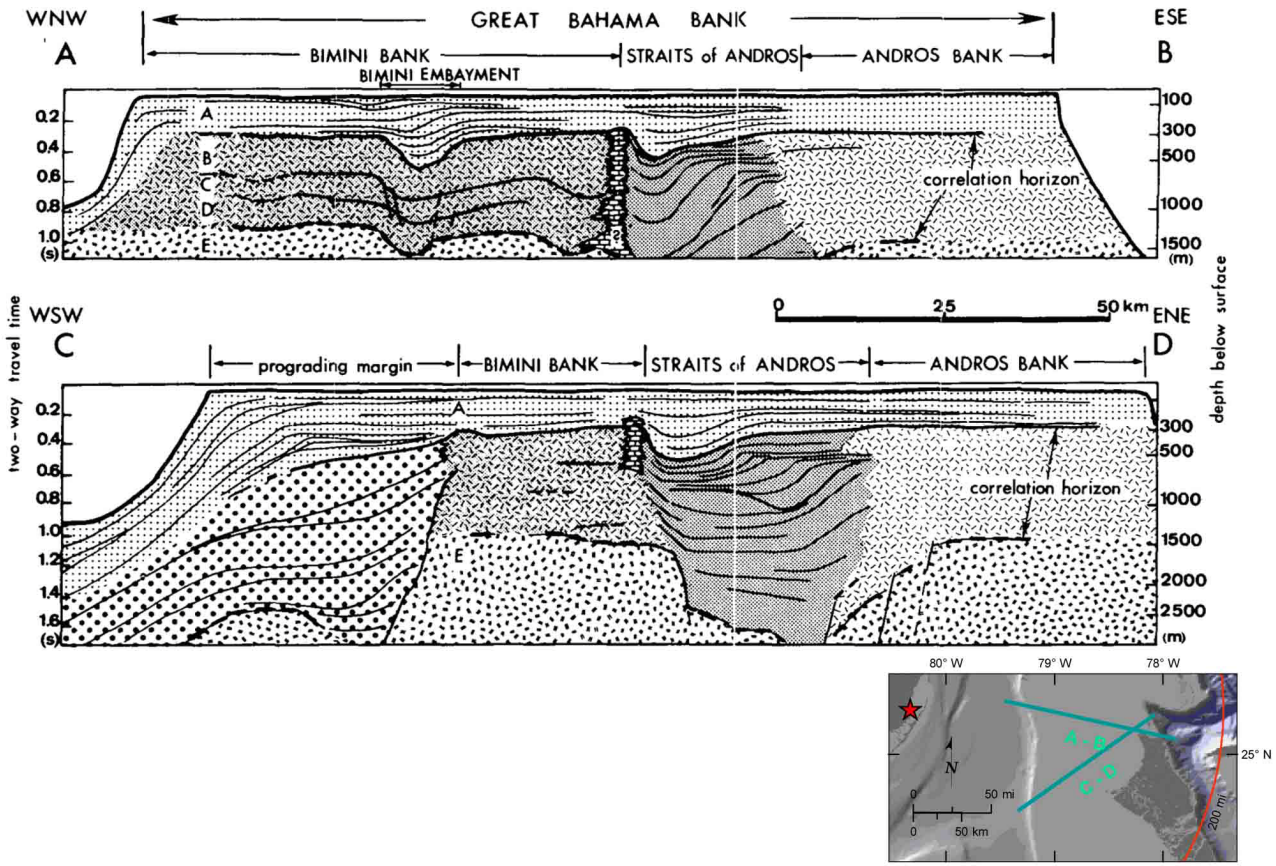
Source: Reference 839

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



Modified from: Reference 307

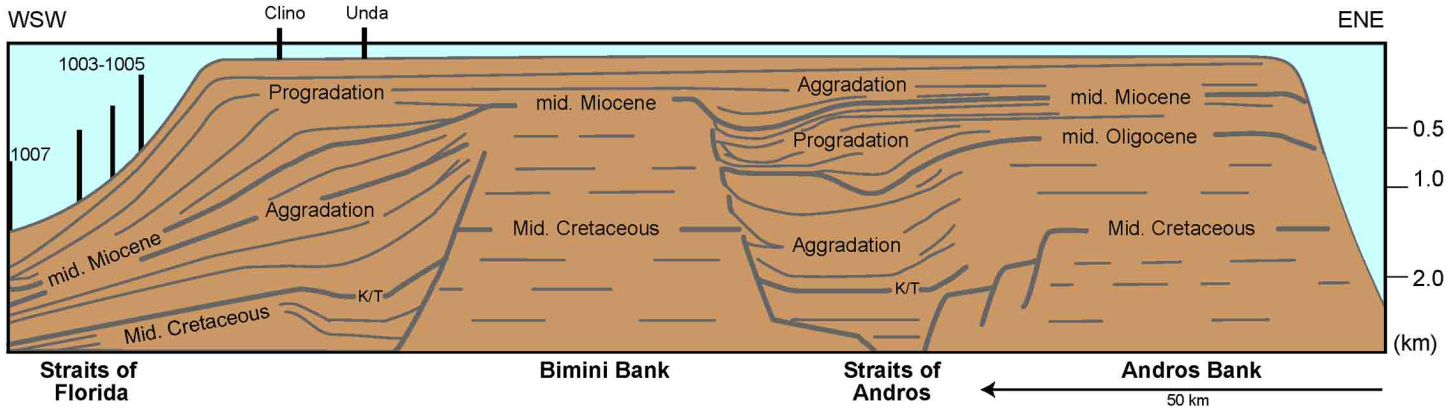
Figure 2.5.1-243 Seismic Line and Well Correlation, Florida, and Bahama Platform



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.

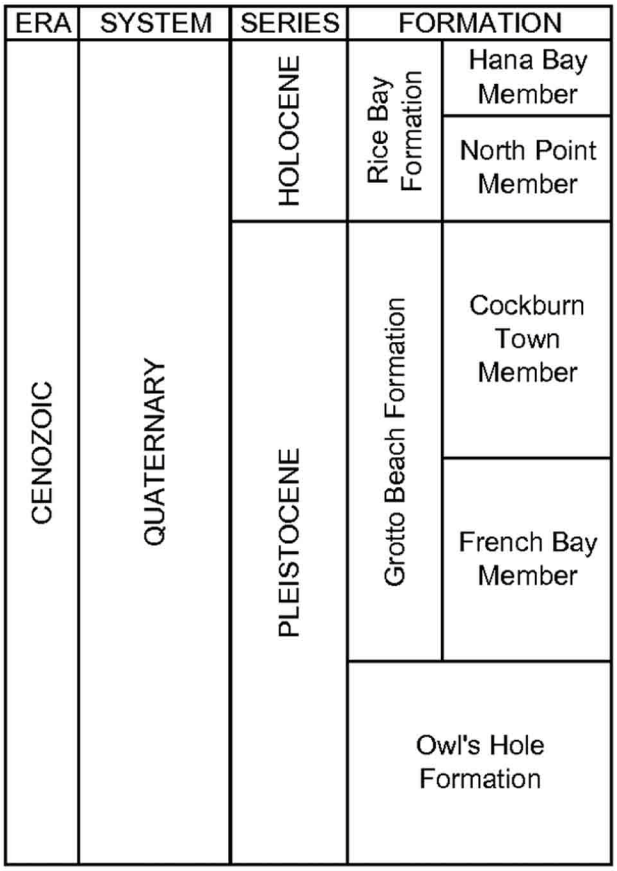
Modified from: Reference 475

Figure 2.5.1-244 Seismic Line Interpretation across Bahama Plateau



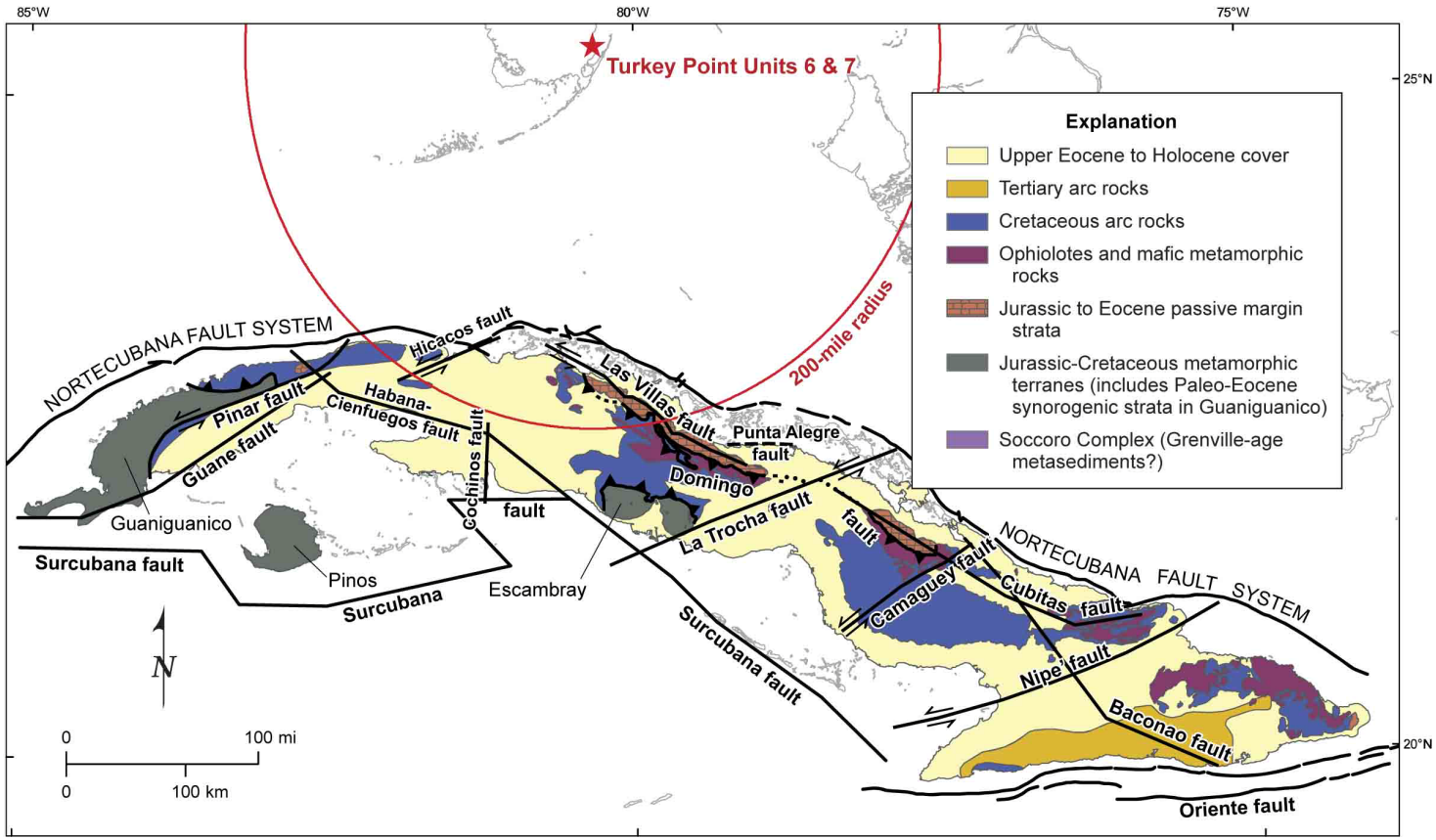
Modified from: Reference 768

Figure 2.5.1-245 Great Bahama Bank Geologic Environment



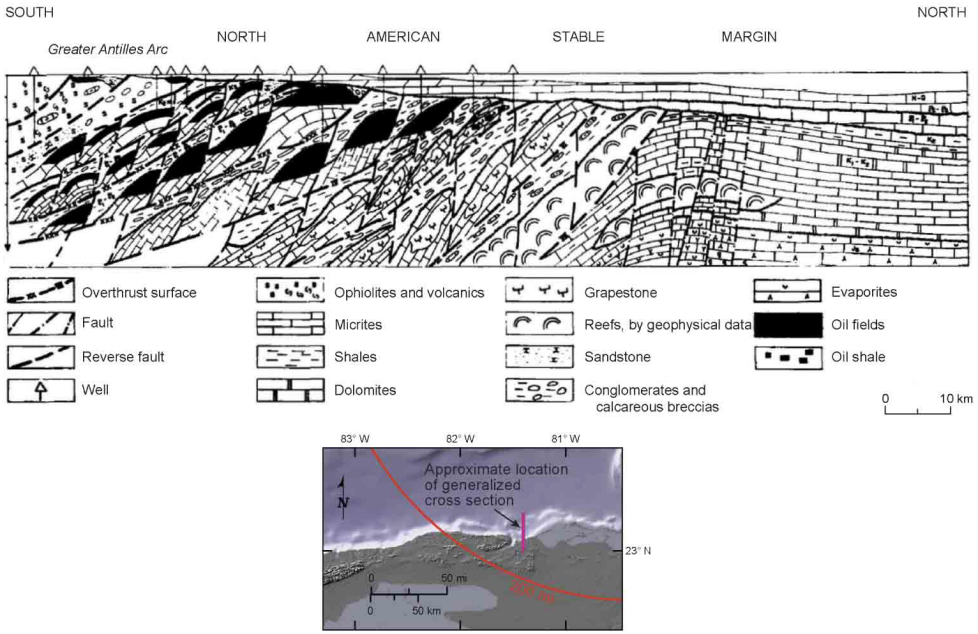
Not drawn to scale
Modified from: Reference 438

Figure 2.5.1-246 Lithostratigraphic Column for the Bahama Islands



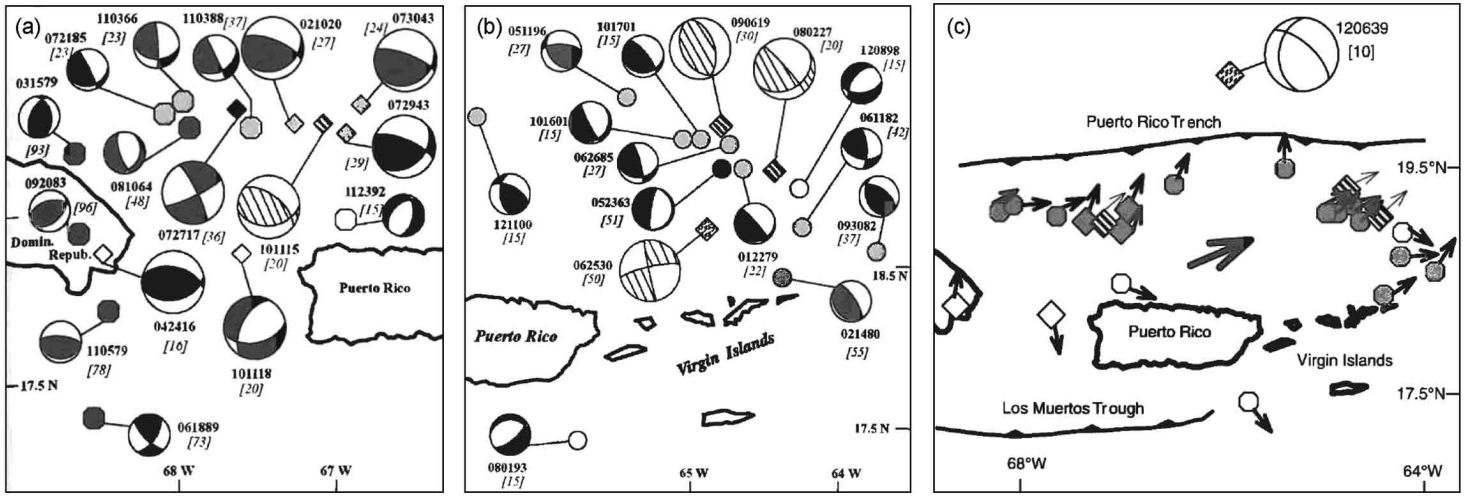
Multiple sources were used to compile this map, including References 443, 448, 439, 770, 492, and 494

Figure 2.5.1-247 Tectonic Map of Cuba



Source: Reference 497

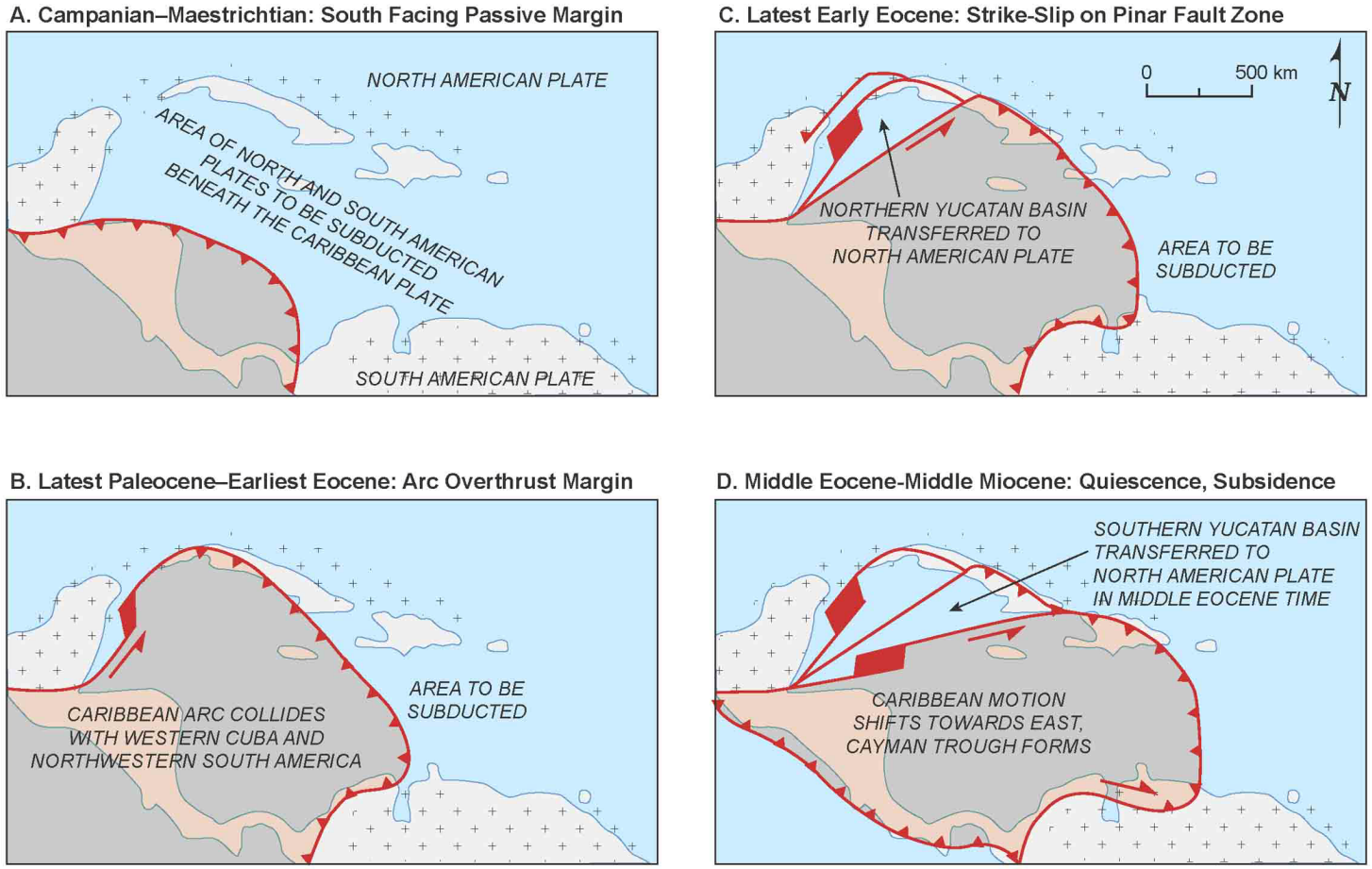
Figure 2.5.1-248 Generalized Cross Section of Northern Cuba



(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."

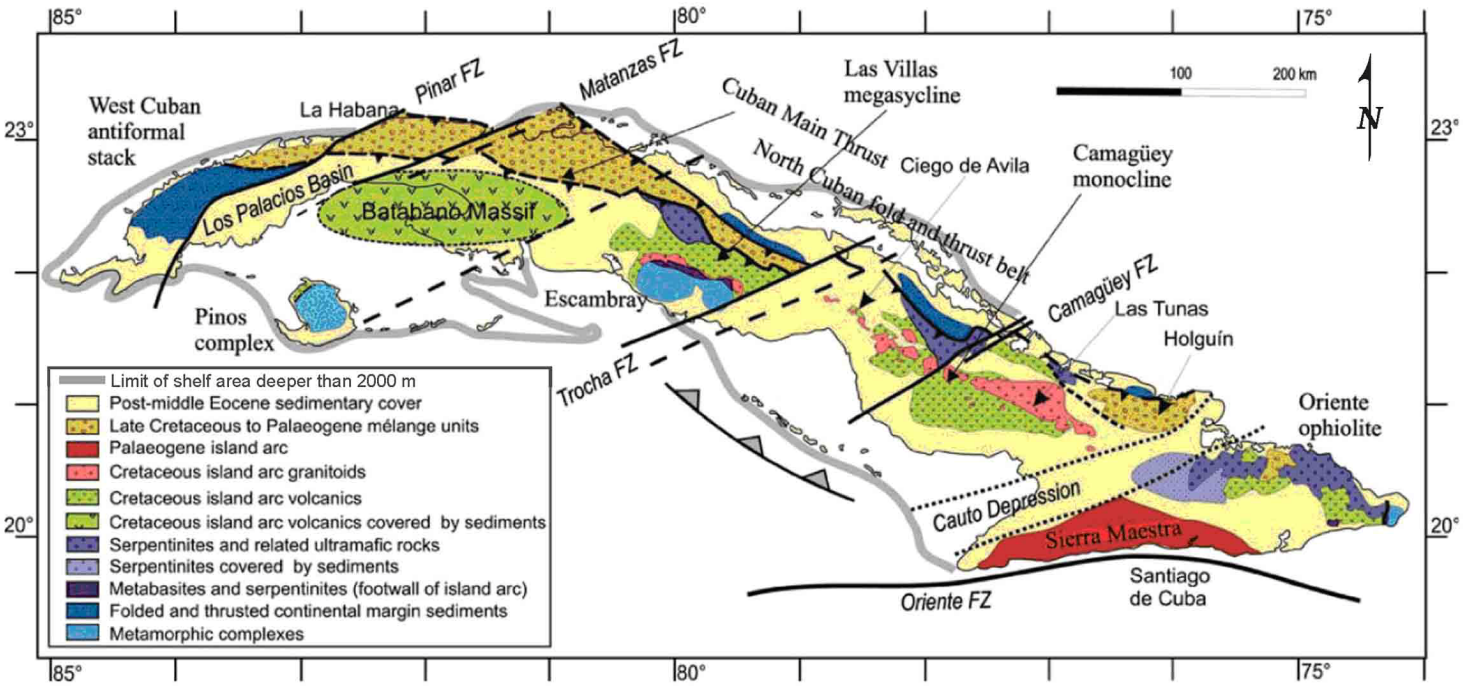
Modified from: Reference 681

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



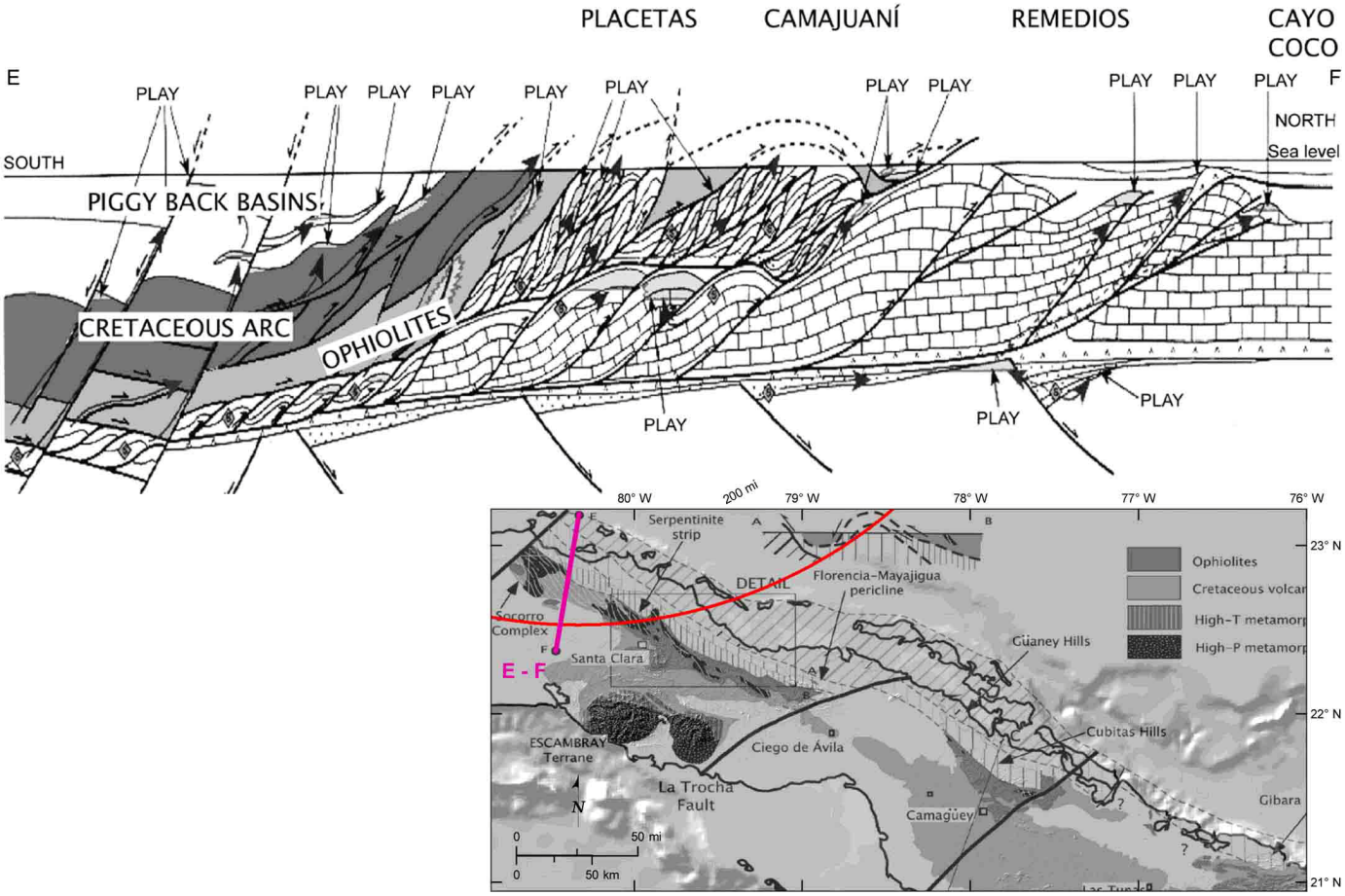
Modified from: Reference 697

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



The Matanzas fault shown here is the same structure as the Hicacos fault shown on Figure 2.5.1-247.
Modified from: Reference 769

Figure 2.5.1-251 Lithostratigraphic Map of Cuba



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

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