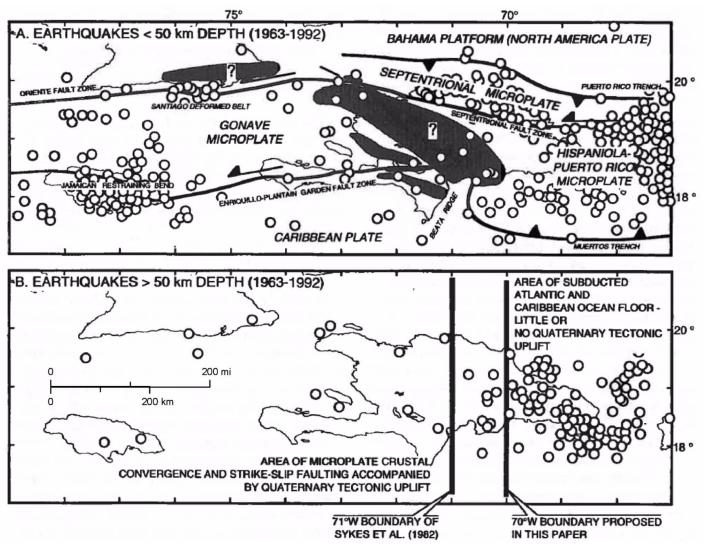
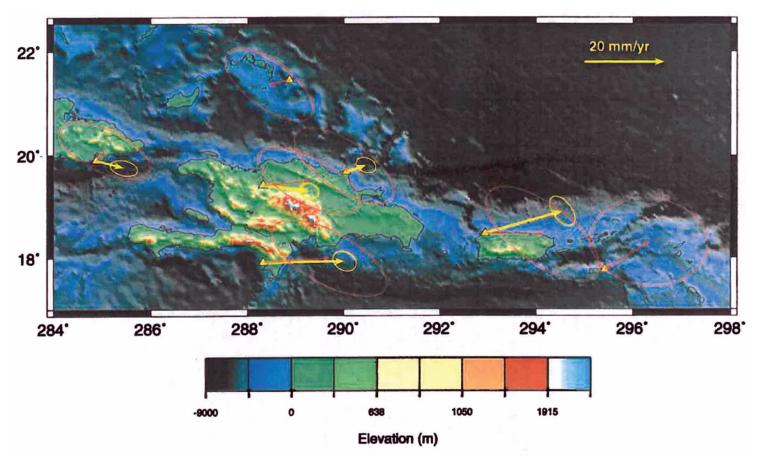
Figure 2.5.1-323 Earthquakes by Depth and Major Plate Boundary Structures in the Northeastern Area of the North America-Caribbean Plate Boundary



Source: Reference 639

Figure 2.5.1-324 GPS Site Velocities with Respect to North America

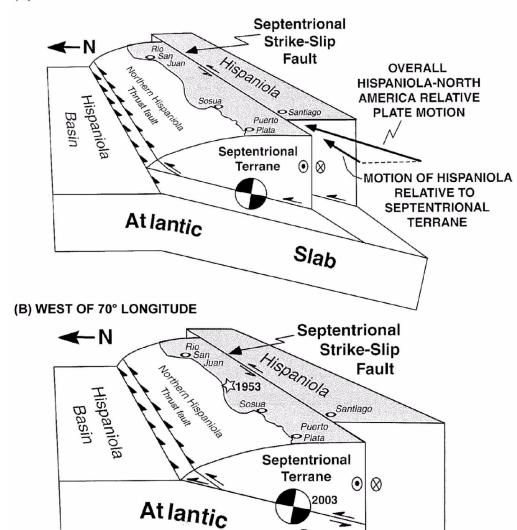


Source: Reference 780

2.5.1-444 Revision 2

Figure 2.5.1-325 Kinematic Illustrations Showing Interactions of Septentrional and Northern Hispaniola Faults at Depth

(A) EAST OF 70° LONGITUDE

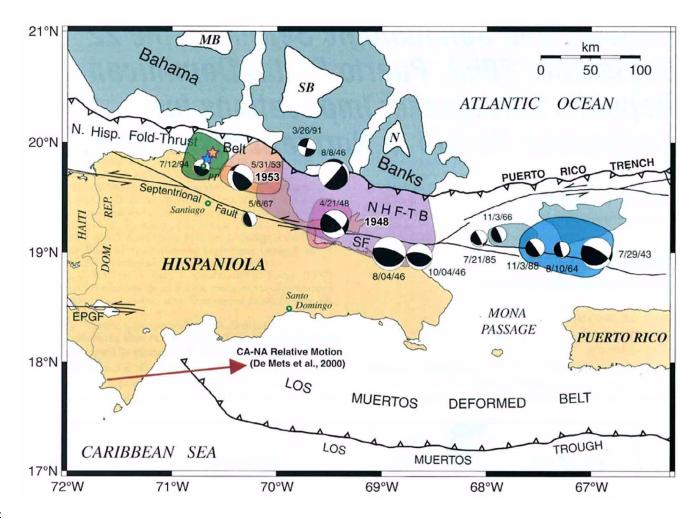


Note: Northern Hispaniola Thrust fault is equivalent to North Hispaniola Subduction Zone.

Source: Reference 638

Slab

Figure 2.5.1-326 Focal Mechanisms for Major Earthquakes in the North Hispaniola Subduction Zone



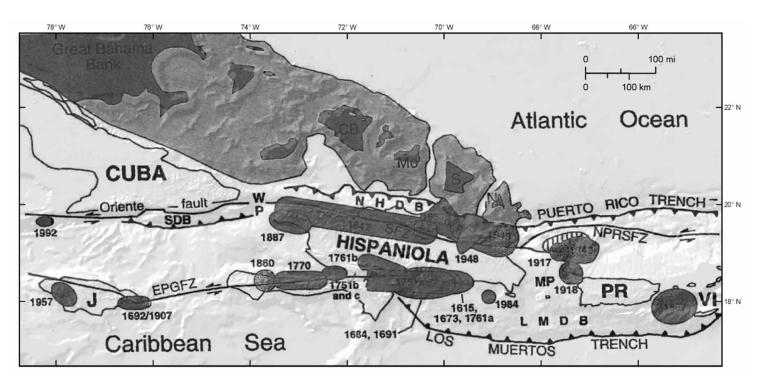
Notes:

EPGF = Enriquillo-Plantain Garden fault zone NHF-TB = Northern Hispaniola fold-thrust belt

SF = Septentrional fault

Source: Reference 638

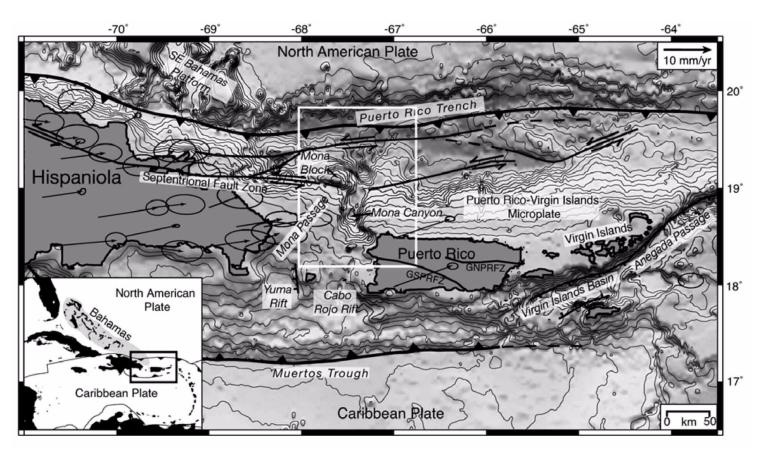
Figure 2.5.1-327 Damage Zones for Major Earthquakes in the Northeastern Caribbean, 1615-1992



Source: Reference 591

2.5.1-447 Revision 2

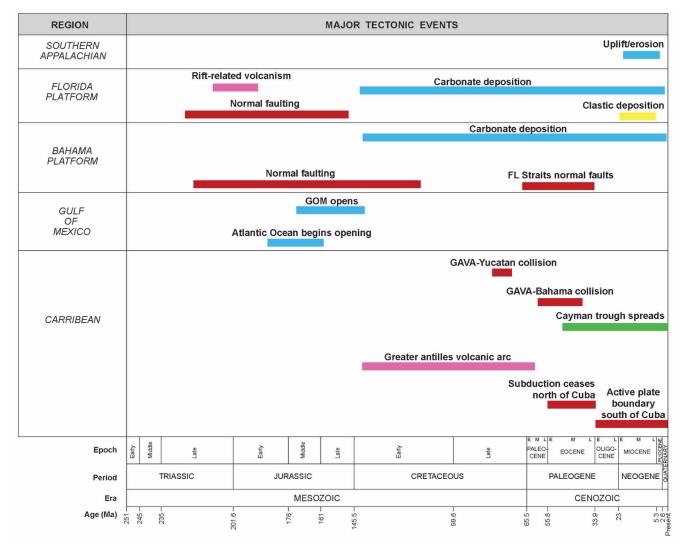
Figure 2.5.1-328 Bathymetry, Structural Features, and GPS Vectors relative to North America, Northeastern Caribbean



Source: Reference 585

2.5.1-448 Revision 2

Figure 2.5.1-329 Timeline of Regional Tectonic and Geologic Events



Sources: References 307, 368, and 639

100°W 90°W 80°W MID-PLATE STRESS PROVINCE **GULF COAST STRESS PROVINCE** 200 kilometers Turkey Point Units 6 & 7 Explanation Stress province boundary; open arrows show areas of compression, solid arrows show areas of extension World Stress Data Type Regime Well bore breakout Normal fault Strike slipThrust faulting Single focal mechanism Unknown

Figure 2.5.1-330 North America Stress Provinces

Base Source: Reference 822

Source of world stress data: Reference 731

Geologic-volcanic vent alignment

2.5.1-450 Revision 2

80.5° W -80° W Tt Qm 25.5° N Turkey Point Units 6 & 7 10 Miles 10 Kilometers Qk Explanation Holocene sediments Qh Key Largo Limestone Qk Miami Limestone Qm Tamiami Formation Tt

Figure 2.5.1-331 Site Vicinity Geologic Map

Base sources: Reference 435

Source of geologic information: Reference 827

2.5.1-451 Revision 2

Turkey Point Units 6 & 7 COL Application Part 2 — FSAR

Figure 2.5.1-332 Site Stratigraphy

ERATHEM	SYSTEM	SERIES	HYDRO- GEOLOGIC UNIT		STRATIGRAPHIC UNIT		LITHOLOGY	APPROXIMATE TOP ELEVATION (ft NAVD 88)	APPROXIMATE THICKNESS (ft)
		HOLOCENE			organic muck		organic soil and silt	0	3
CENOZOIC	QUATERNARY	PLEISTOCENE	Surficial aquifer system	Biscayne aquifer	Miami Limestone		sandy, oolitic limestone	-3	25
					Key Largo Limestone		well indurated, vuggy, coralline limestone	-28	22
					Fort Thompson Formation		poor/well indurated fossiliferous limestone	-50	65
	TERTIARY	PLIOCENE	Surficial ac	Semi-confining unit	Tamiami Formation		sand and silt with calcarenitic limestone	-115	105
		MIOCENE		Intermediate confining unit	Hawthorn Group	Peace River Formation	silty calcareous sand and silt	formation contact base signal	
				Intermedi	Hawi	Arcadia Formation	calcareous wackestone with indurated limestones, sandstone, and sand	- 4 55 drilling ended	>160

Note: see Figures 2.5.1-338, 2.5.1-339, 2.5.1-340, and 2.5.1-341 for site geologic cross sections.

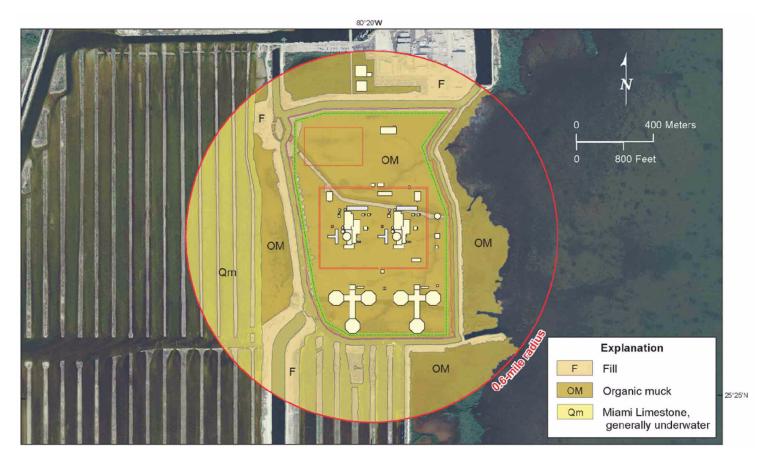
Figure 2.5.1-333 Vegetated Depressions Identified Within Site from Photographs Taken Before Construction of the Cooling Canal System



Note: Reconnaissance mapping performed using 1940s 1:40,000 scale panchromatic stereo aerial photography (Reference 386), but shown on 2004 imagery (Reference 435) of the Units 6 & 7 site for reference.

2.5.1-453 Revision 2

Figure 2.5.1-334 Site Geologic Map



Base sources: References 829, and 435
Source of geologic information: Reference 827

2.5.1-454 Revision 2

80°25'W 80°20'W 80°15′W 2 Miles 2 Kilometers urkey Point Units 6 & 7 Qm 25°25'N Explanation Qk Key Largo Limestone Miami Limestone Qm

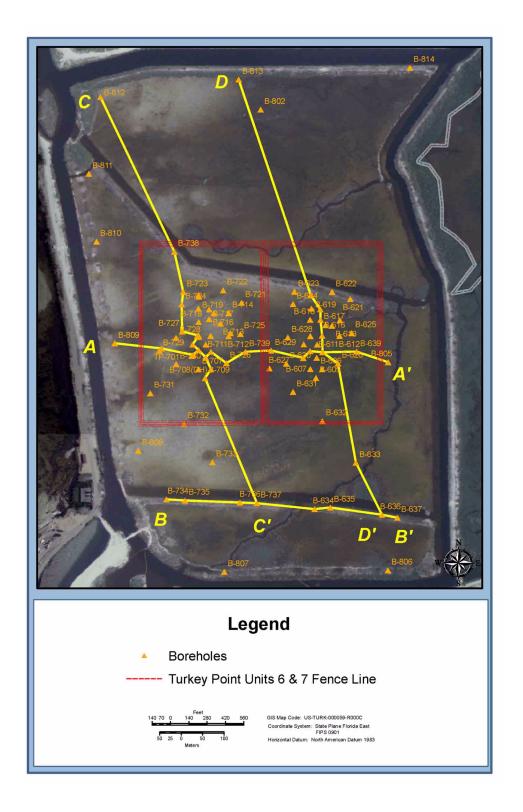
Figure 2.5.1-335 Site Area Geologic Map

Base sources: Reference 435

Source of geologic information: Reference 219

2.5.1-455 Revision 2

Figure 2.5.1-336 Locations of Geologic Cross Sections



80°30'W 80°15'W 80°W 80°45'W Turkey Point Units 6 & 7 5 Miles 5 Kilometers 25°15'N Explanation 1/6// Disturbed CM Carbonate mud M Marl MP Marl underlain by peat Mu Muck ML Thin soil over Miami Limestone Thin soil over Key Largo Limestone

Figure 2.5.1-337 Surficial Deposits Map

Base sources: Reference 829

Source of geologic information: References 715 and 830

2.5.1-457 Revision 2

Figure 2.5.1-338 Geologic Cross Section A-A'

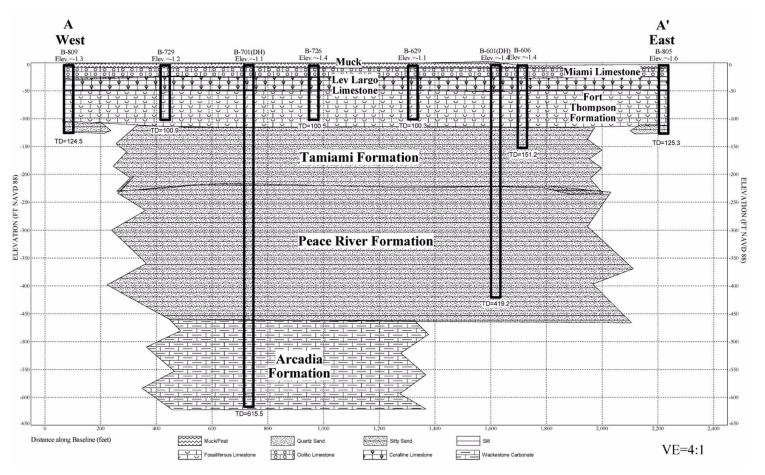
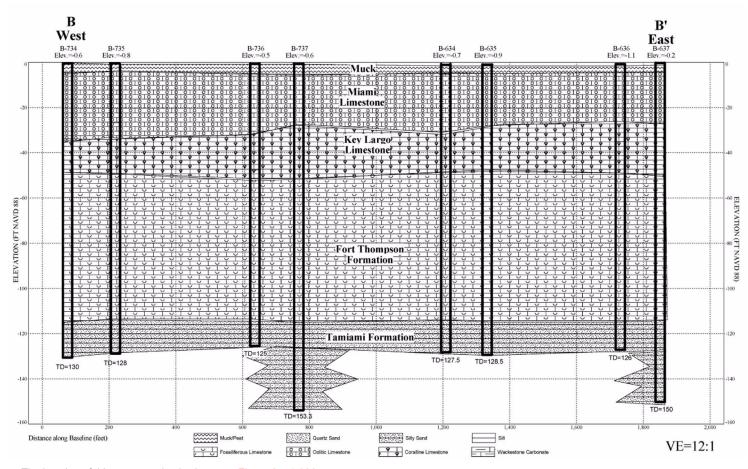


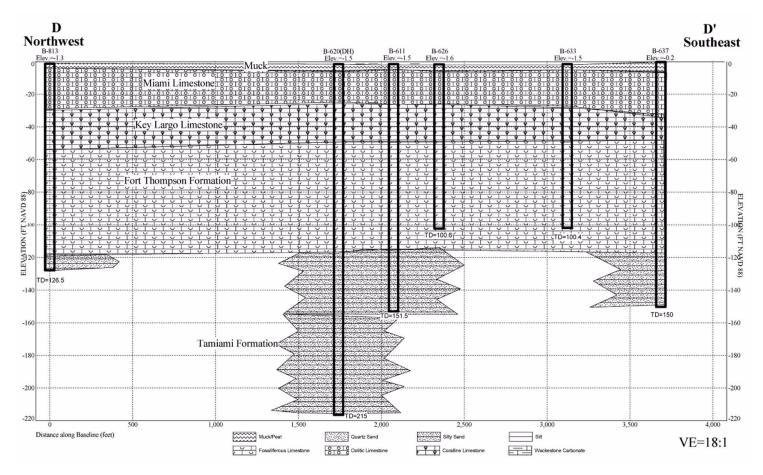
Figure 2.5.1-339 Geologic Cross Section B-B'



C Northwest C' Southeast B-738 Elev,=0.1 B-724 Elev.=-0.7 B-708(DH) B-737 B-710(DH) B-701 (DH) Elev.=-1.1 -100 7550 TD=128.7 7550 TD=28.7 7550 TD=128.7 7550 TD=128.7 -150 ELEVATION (FT NAVD 88) TD=153.3 Peace River Formation -350 -400 -450 -550 1,000 3,000 3,500 4,000 Distance along Baseline (feet) Silty Sand Muck/Peat Quartz Sand VE=6:1 Fossiliferous Limestone O O O O Oolitic Limestone Coralline Limestone Wackestone Carbonate

Figure 2.5.1-340 Geologic Cross Section C-C'

Figure 2.5.1-341 Geologic Cross Section D-D'



2.5.1-461 Revision 2

Legend Interpolated Contour Approximated Contour Plant Wall Line 1,000 Feet GIS Map Code: US-TURK-000024-R000F Coordinate System: State Plane, Florida East FIPS 0901 forizontal Datum: North American Datum 1983

Figure 2.5.1-342 Isopach of the Site: Key Largo Limestone

2.5.1-462 Revision 2

Legend Boreholes Interpolated Contour Approximated Contour Plant Wall Line Contour Interval: 2 Foot 1,000 Feet GIS Map Code: US-TURK-000025-R000F Coordinate System: State Plane, Florida East FIPS 0901

Figure 2.5.1-343 Structure Contour Map: Top of Fort Thompson Formation

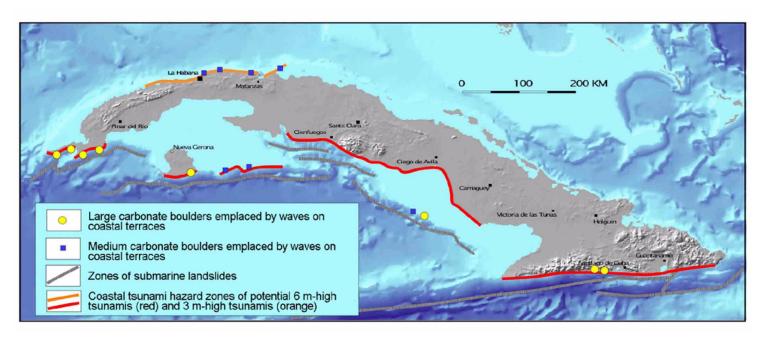
2.5.1-463 Revision 2

Legend Interpolated Contour Approximated Contour Plant Wall Line 1,000 Feet GIS Map Code: US-TURK-000031-R000F Coordinate System: State Plane, Florida East FIPS 0901 Horizontal Datum: North American Datum 1983 Vertical Datum: North American Vertical Datum of 1988, US Feet

Figure 2.5.1-344 Isopach of the Site: Fort Thompson Formation

2.5.1-464 Revision 2

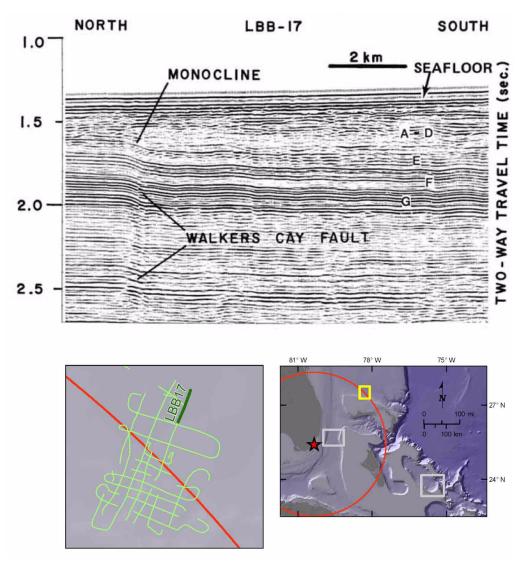
Figure 2.5.1-345 Geologic Hazards for Coastal Zones of Cuba



Modified from: Reference 742

2.5.1-465 Revision 2

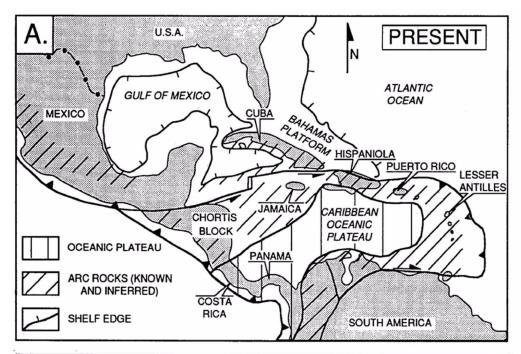
Figure 2.5.1-346 Interpreted Seismic Line across the Edge of the Little Bahama Bank

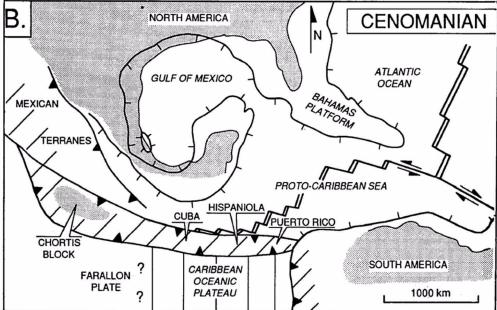


Note: Sequence G (the shallow-water carbonate platform sampled at Site 627) is offset, while sequences A-F thicken across the fault trace, suggesting syn-sedimentary movement.

Modified from: Reference 785

Figure 2.5.1-347 Initiation of the Greater Antilles Arc and Collision with the Caribbean Oceanic Plateau



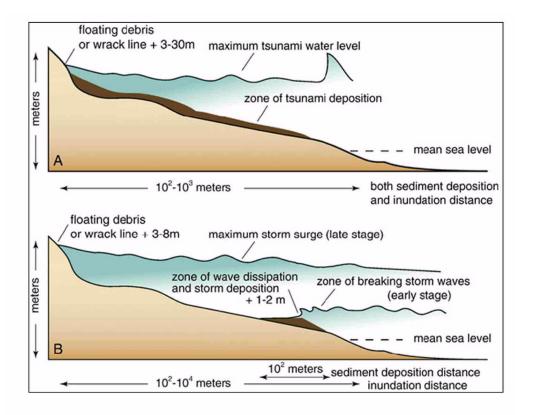


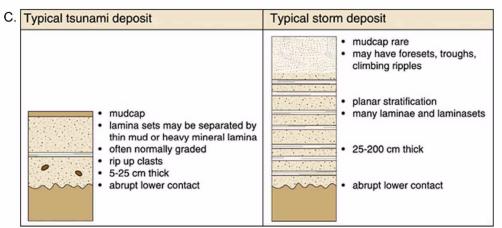
Notes:

- A. Present-day distribution of Cretaceous to Recent island arc and late Cretaceous oceanic plateau crust in the Caribbean.
- B. Mid-Cretaceous (Cenomanian) reconstruction of the Caribbean island arc and oceanic plateau

Source: Reference 833

Figure 2.5.1-348 Tsunami Sediments





Notes:

A and B. Comparison of typical inundation distances, sediment-transport distances, and maximum water levels (indicated by height of wrack line) for deposition by tsunamis (A) and coastal storms (B)

C. Composite characteristics of typical sandy tsunami and storm deposits

Source: Reference 890