

Coastal processes, Monmouth County, New Jersey. Looking south from Avon, across Shark River Inlet, toward Belmar, New Jersey, at 1245 pm, 18 Oct 94. The ocean tide is about 1.3 hr past predicted low, but the bay tide is just about at predicted low and still ebbs out the inlet. Atlantic waves on the low tide terrace between the Avon groins travel shoreward as solitons, and reflect seaward from the foreshore as higher frequency waves. The nearer inlet jetty has a gap caused during the great northeasterner of 11 Dec 92, possibly by waves converging between the rock spur and the jetty tip and overtopping into the inlet. The navigation light on the now-isolated tip of this jetty survived that storm and still operates, but the light on the opposite jetty was torn up with its concrete foundation and thrown back on Belmar beach. Net longshore transport direction is clearly toward the viewer, from south to north. This area is within the limits of planned Corps of Engineers beach fill. (Photograph by Cyril Galvin, Coastal Engineer, Box 623, Springfield, Virginia 22150, USA).