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Beach Sand Size Distribution Post-Hurricane Harvey

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Hurricane Harvey wreaked havoc on the Gulf Coast of the United States during late August of 2017. Soon after the landfall of Hurricane Harvey, we started an extensive field campaign to elucidate post-hurricane response and natural recovery of hurricane-impacted beaches. Our study domain is Port Aransas – Corpus Christi region in Texas Gulf Coast, where Hurricane Harvey made landfall. Our field efforts have focused on mainly beach sediment sampling and beach topography measurements at different times. We conducted our first set of field measurements and sampling during September - October of 2017. Cores of sediment samples were collected at different stations along three different cross-shore transects at each of the selected beaches within our study domain. Cross-shore transects extended from the inland boundary of the beach (e.g. dune) to the shoreline. Collected sediment cores were analyzed for the statistical characteristics of the beach sediment using both the standard sieve analysis and a laser particle sizer. These new field observations and our ongoing efforts to elucidate beach sediment characteristics in the aftermath of a hurricane impact will be discussed in this presentation. This material is based upon work supported by the National Science Foundation under Grant No. OCE-1760158 to the first author.