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Relative influence of antecedent topography and sea-level rise on barrier-island migration: Sediment Core Data

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Description

These data are sediment core data from the barrier islands and backbarrier lagoons, bays, and marshes of Brigantine Island (NJ, USA), Assateague Island (MD, USA), Cedar Island (VA, USA), and Parramore Island (VA, USA). Vibracore data from marshes and bays were collected using a vibracore system with the ability to core through a 'moonhole' on a flat bottom boat. Geoprobe cores were collected using a track-mounted 66DT Geoprobe direct-push drill rig. Select samples from the sediment cores (associated with Figure 9 of Shawler et al., 2020) were analyzed using a Beckman-Coulter Laser Diffraction Particle Size Analyzer (LS 13 320 Aqueous Liquid Module) with an applied calculation model that uses Fraunhöfer theory. Data are available as Microsoft Excel Workbooks and can be opened using Excel or numerous free and open sources products such as Google Sheets. Each spreadsheet contains a "READ ME" tab with additional detail.

Files | Description

- **AssateagueIsland_Geoprobe_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Assateague Island direct-push cores
- **AssateagueIsland_Vibracore_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Assateague Island vibracores
- **BrigantineandLittleBeachIslands_Vibracore_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Brigantine/Little Beach islands vibracores
- **BrigantineIsland_Geoprobe_CoreLog_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Brigantine Island direct-push core
- **CedarIsland_Geoprobe_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Cedar Island direct-push cores

- **CedarIsland_Vibracore_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Cedar Island vibracore
- **ParramoreIsland_Geoprobe_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Parramore Island direct-push cores
- **ParramoreIsland_Vibracore_CoreLogs_Shawleretal2020_Sedimentology**: Qualitative sediment core descriptions from Parramore Island vibracores
- **GrainSize_RawDataforFigure9_Shawleretal2020_Sedimentology**: LDPSA grain size distribution data

FILES ARE AVAILABLE AT: https://doi.org/10.25773/8wx5-zq69

Keywords

Barrier island, lagoon, sediment core, grain size, Parramore Island, Cedar Island, Brigantine Island, Little Beach Island, Assateague Island

Associated Publications

Shawler, J.L., Ciarletta, D., Connell, J., Boggs, B.Q., Lorenzo Trueba, J., and Hein, C.J., Relative influence of antecedent topography and sea-level rise on barrier-island migration, Sedimentology *IN PRESS*

Raff, J.L., Shawler, J.L., Ciarletta, D., Hein, E.A., Lorenzo-Trueba, J., and Hein, C.J., 2018, Insights into barrier island stability derived from transgressive/regressive state changes of Parramore Island, Virginia., Marine Geology, 403(1): 1-19. https://doi.org/10.1016/j.margeo.2018.04.007

Shawler, J.L., Ciarletta, D.L., Lorenzo-Trueba, J., and Hein, C.J., 2019, Drowned foredune ridges as evidence of pre-historical barrier-island state changes between migration and progradation, The Coastal Sediments Proceedings 2019, World Scientific.

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