Abstract Submitted for the DFD07 Meeting of The American Physical Society

Sediment

deposi-

tion from bouyant river plumes LUTZ LESSHAFFT, ECKART MEIBURG, University of California at Santa Barbara, BEN KNELLER, University of Aberdeen — The ground deposition patterns of sediments that are carried by a river into the ocean are studied via numerical simulation. The bouyant plume of particle-laden fresh water evolving in ambient sea water near the estuary is assumed to spread axisymmetrically. Model predictions, both for the flow field and for the sediment deposition, are derived from the shallow water approximation as well as from the boundary layer equations. Predictive capabilities of these models are assessed by comparison to results from direct numerical simulations.

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Date submitted: 12 Sep 2007

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