Wave-Sediment Interaction in Muddy Environments: A Field Experiment

A. Sheremet¹, M. Allison², and A. J. Mehta¹

¹ Civil & Coastal Eng. University of Florida, Gainesville, Florida
² Tulane University, New Orleans, Louisiana
Two instrumented pods (T1 & T2) moved around.
Front of Atchafalaya Bay
Shallow area (~5 m); Flat (slope< 0.001).
Instruments:

PC-ADP: 2Hz, 17×3 cm bins.
ADCP: 10×30cm bins
Pressure: 2Hz,
OBS, conductivity, temperature
FOS, LISST.
Two 14-day data set, mid Feb – mid March.
Two fronts, some weaker perturbations.
Fluid-mud forms during storms.
Thickness ~15 cm.
Wave response significant, but not correlated with fluid mud events.
March 17-23.
Stationary fluid-mud events.
Thickness ~30 cm.
ABS shows lutocline evolution
Spring 2007 deployment plan


Available now: T1, T2, Reference wave sensor.
Additional instrumentation (2 tripods) available in February.