Acoustic Velocity and Density for Gravity Cores Collected in Central Portion of the New England Mud Patch

Allen Reed

NRLSSC

2NOV 2015
Chirp Record for line 32:

- **Mud**
- **Suspected Sand**
Figure 1. Mud Patch cores were collected along a geophysical transect, line 32. Along this line, mud thickness increased from west to east.
ISOdepth Transect (Northwest to Southeast)

ISO-1

ISO-2

ISO-3
Figure 2. These cores were collected along a diagonal path that from areas of approximately equal water depth. The line extends from the upper northwest corner towards the southeastern corner of the Mud Patch box.
Figure 3. Three cores were collected along a diagonal line from MPd02-2 to MPd02-7 that extended from the southwestern portion of the Mud Patch box (MPd02-02) to the northeastern portion of the box (MPd02-6, MPd02-7).
SAMURAI Cores – Adjacent to the “Mooring”

SAM-1

SAM-2

SAM-3

Depth (cmbsf)

Sound Speed (m/s)

Density (kg/m³)

P-wave Velocity

Density

Sound Speed

P-wave Velocity

Density

Sound Speed

Density

Depth (cmbsf)

Sound Speed (m/s)

Density (kg/m³)
Figure 4. Five gravity cores were collected in a cross-shaped region of the eastern portion of the MP-box. The focal region was within the thickest mud sequences of the MP within an area with apparent “mud ridges” that might represent channels of mud deposits with south westerly trending orientation.