



**Daily Drilling and Scientific Report for  
IODP3-NSF Expedition 501  
New England Shelf Hydrogeology, 2025**



**19<sup>th</sup> July 00:00 – 19<sup>th</sup> July 24:00 East Daylight Time (UTC -4)**

**1. Location**

Position 40.618333°N, 70.136972°W @12:00 EDT 18th July  
IODP-MSP borehole M0113A  
Prospectus borehole MV-04C-A  
Water Depth: 53.9m

**2. Operations Report**

Following the washing down to the bottom of the casing and drilling through the plug there was a full day of coring using both the hydraulic piston corer (HPC) and Alien (ALN) core barrels. A total of 14 cores were recovered, 8 with the HPC and 6 with the ALN corer, with a total drilled length of 22.35 m and 20.06 m recovered.

The successful transfer of 10 ESO staff and scientists off and 9 on including two journalists from the Associated Press was also carried out between 1630 and 1800hrs.

**3. Science Report**

A total of 34 sets of samples were taken for micropaleontology, sedimentology, microbiology, physical properties and geochemistry. 8 cores were run through the MSCL, a total of 9.98 m.

**4. Core Recovery**

<b>Hole</b>	M0113A
<b>Cores recovered</b>	14
<b>Drilled length (Coring, m)</b>	22.35 m
<b>Drilled length (Open hole, m)</b>	0
<b>Recovered length (m)</b>	20.06 m
<b>Recovery (%)</b>	89.8%
<b>Depth at midnight (mbsf)</b>	105.03 m

**5. Time Breakdown**

00:00 – 08:30 Washing down to bottom of borehole, taking HPC cores to determine the end of the plug/start of new ground.  
08:30 – 24:00 Advancing the borehole using HPC & ALN corers  
16:30 – 18:00 Transfer of staff for the start of Rotation 9

**6. Hours (inc. cumulative total) – no contractual implications can be made from these figures**

<b>In port</b>	n/a
<b>Transiting</b>	n/a
<b>Operating</b>	24
<b>Technical downtime</b>	
<b>Weather downtime</b>	
<b>Other downtime (specify)</b>	

**7. Weather**

Excellent sunny weather all day with winds at 4 kts from the South at 11:00, and swell less than 1 m. Visibility good at 9.75 nm.

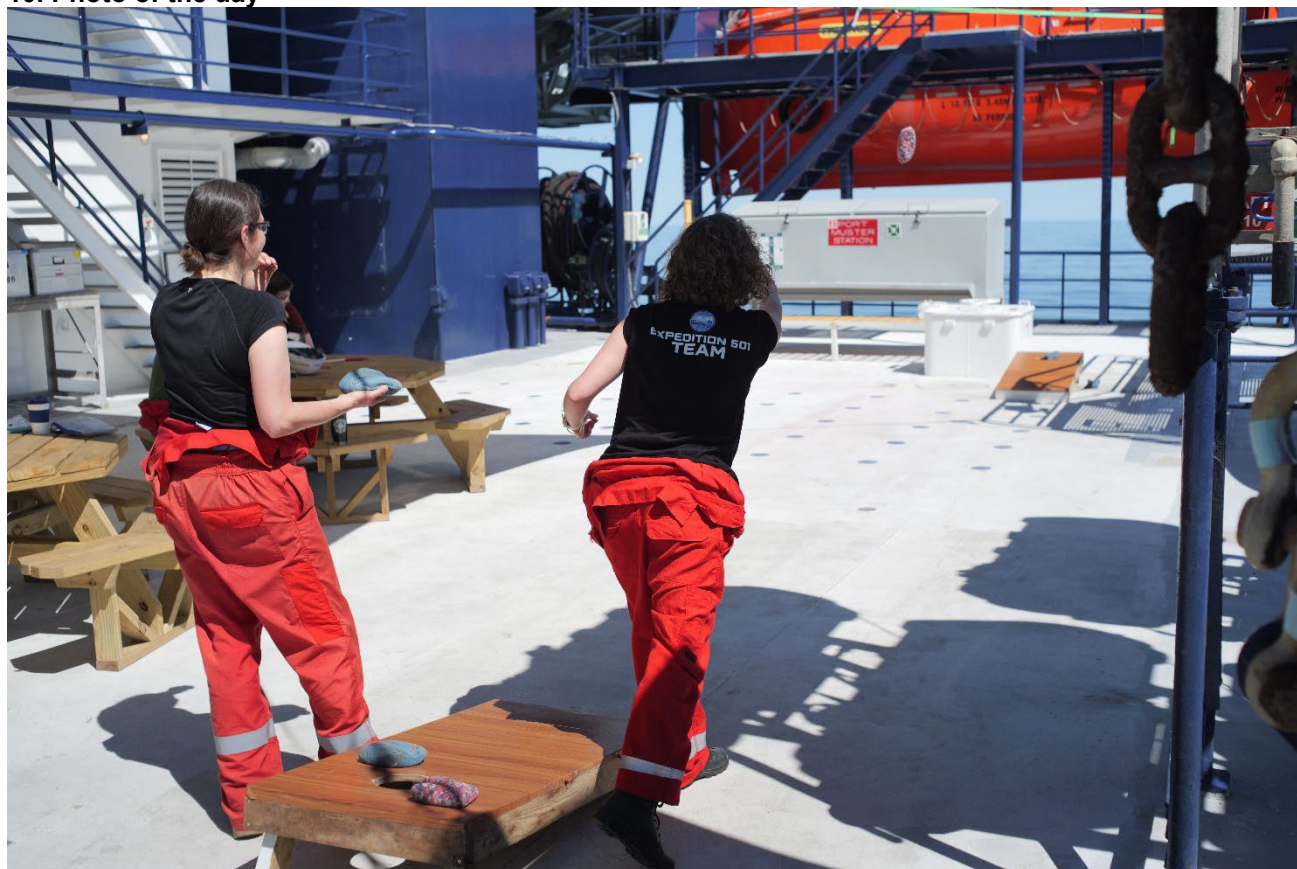
**8. Planned Activity for the next 24 hours**

Continue coring with HPC/ALN barrels.

**9. Health and Safety and Environmental**

The decks were searched for seabirds at dawn. None were found.  
The X501 team were reminded to stay hydrated and wear sunscreen in hot conditions.

## 10. Photo of the day



*Figure 1: ESO team members Rachel Bell and Margaret Stewart enjoying a break in the sun playing Cornhole on deck (photo [LEBER@ECORD\\_IODP3\\_NSF\\_cornhole](#) (2)).*