

Daily Drilling and Scientific Report for IODP/ICDP Expedition 364  
Chicxulub Impact Crater 2016



28th Apr 00:00 - 24:00 CDT (UTC -5)

**1. Location**

Position 21 Deg 27.009' N, 89 Deg 56.962' W  
IODP-MSP borehole M0077A  
Prospectus borehole Chix-03B  
Water Depth: 19.8 m

**2. Operations Report**

Coring continued throughout the day. Excellent recovery and quality of core continued, with few breaks and maintenance of core diameter.

**3. Science Report**

Today was a day of coring through polymict breccias with angular clasts up to a couple centimeters in size and including a range of lithologies. The cores continue to be near perfect and the microbiologists were given samples every two cores given the interest in the role of these different lithologies in the subsurface biosphere. The multi-sensor core logger showed some evidence of cycles within the breccias based on magnetic susceptibility. By Core 58R we observe increasing average clast sizes.

**4. Core Recovery Details**

Hole	M0077A
Cores recovered	13
Drilled length (Coring, m)	37
Drilled length (Open hole, m)	0
Recovered length (m)	37
Recovery (%)	100
Depth at midnight (mbsf)	674

**5. Time Breakdown**

00:00 Continue coring  
01:05 Core on deck  
02:15 Core on deck  
03:45 Core on deck  
06:30 Core on deck  
08:00 Core on deck  
09:40 Core on deck  
11:10 Core on deck  
12:50 Core on deck  
14:25 Core on deck  
16:15 Core on deck  
17:40 Core on deck  
20:30 Core on deck  
22:55 Core on deck

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

In port	13.0
Transiting	3.0
Operating	444
Technical downtime	117
Weather downtime	0.0
Other downtime (specify)	0.0

**7. Weather**

Fair, sunny, good visibility, wave heights of 0.5 – 0.8 m; wind NE 15 Kts, Temperature 24-35°C.

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

Continue coring.

**9. Health and Safety and Environmental**

N/A

**10. Photo of the day**



Image CLowery@ECORD\_IODP