

**IODP EXPEDITION 306 DAILY SCIENCE REPORTS
2 March–25 April 2005**

TO: Tom Davies
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JA Daily Science Report for Expedition 306, 2–6 March 2005.

LOCATION: At Port call in Ponta Delgada, San Miguel Island, Azores.

SCIENCE UPDATE: Introductory, organizational, and laboratory usage and safety orientation meetings all have been carried out. Scientists are currently working on preparing the expedition explanatory notes and getting acquainted with their lab equipment. Working shift schedule will begin after the ship's departure from Ponta Delgada on Tuesday 8 March 2005.

JA Daily Science Report for Expedition 306, 7 March 2005.

LOCATION: At Port call in Ponta Delgada, San Miguel Island, Azores.

SCIENCE UPDATE: Lab review and preparation.

JA Daily Science Report for Expedition 306, 8 March 2005.

LOCATION: W of Island of San Miguel, Azores. Local time 09:35.

SCIENCE UPDATE: JR departed from Ponta Delgada. Last line released at 08:15 hr, underway at 11 knots for Site U1312 (IRD4A). Estimated arrival time at first site: 15:45 hr, 10 Mar 2005.

JA Daily Science Report for Expedition 306, 9 March 2005.

SCIENCE UPDATE: Underway to first coring site [U1312 (IRD4A)]. Estimated arrival time: 1700 hrs, 10 Mar 2005. We will have a Site Science Meeting at 1300 hrs followed by a sedimentology meeting. A core close-up photography meeting has been scheduled with the Marine Image Specialist for 1445 hrs. All times are local time.

JA Daily Science Report for Expedition 306, 10 March 2005.

SCIENCE UPDATE: We arrived on Site U1312 (IRD4A) early evening local time. Pre-Site and Sedimentology meetings held at 1300 hrs. Core close-up orientation meeting held at 1415 hrs with MIS.

JA Daily Science Report for Expedition 306, 11 March 2005.

SCIENCE UPDATE: Cores 306-U1312A-1H to 14H (0-138.43 mbsf; 104% recovery) are mainly composed of nannofossil ooze with varying amounts of planktonic foraminifers, and only very minor amount of siliciclastic material. Most sediment in Core 1H is characterized by brownish (10YR 8/3, 10YR 7/3, 2.5Y 7/4) sediments whereas the rest of the cores are dominantly white (N9) with greenish (5Y 6/3) intervals. The Brunhes/Matuyama boundary was identified in Core 2H.

JA Daily Science Report for Expedition 306, 12 March 2005.

LOCATION: Site U1312 (IRD4A)

SCIENCE UPDATE: Cores 306-U1312A-15H to 25H (133 to 237 mbsf; 104.5% recovery) are predominantly white (foraminiferal) nannofossil ooze of Pliocene to Miocene age, with only minor amount of siliciclastic material. Within the main lithology, occasional thin greenish and light gray laminae are present. Coring in Hole 1312A concluded at 1540 hrs after recovery of Core 25H. The base of the cored interval in Hole 1312A is assigned to nannofossil zone NN7 (~11 Ma).

The JR was repositioned about 20 m NW to initiate drilling operations in Hole 1312B. Cores U1312B-1H to 3H (0 to 23.67 mbsf; 102.8%) had been recovered by 2330 hrs.

JA Daily Science Report for Expedition 306, 13 March 2005.

LOCATION: Site U1312 (IRD4A)

SCIENCE UPDATE: Cores 306-U1312B-4H to 25H (22.9 to 231.9 mbsf) had been recovered by 23.30h. Due to bad weather conditions drilling of Hole U1312B had to stop at that depth. The base of the cored interval in Hole U1312B is assigned to nannofossil zone NN8 (~ 10.5-11 Ma). Cores 306-U1312B-1H to 4H (0 to 32.4 mbsf; Quaternary) are predominantly nannofossil silty clay, silty clay nannofossil ooze, nannofossil ooze with clay, foraminifer nannofossil ooze, and nannofossil ooze of yellowish brown (10YR 5/4), very pale brown (10YR 7/4), olive (5Y 5/3), light gray (2.5 7/1), and white (N9) colours. The changes in lithology and color probably represent glacial/interglacial cycles. The Brunhes/Matuyama boundary was identified in Core 306-U1312B-3H-3, 55 cm.

JA Daily Science Report for Expedition 306, 14 March 2005.

LOCATION: Site U1312 (IRD4A)

SCIENCE UPDATE: Due to bad weather conditions drilling of Hole U1312B had to stop at a depth of 231.9 mbsf, and drilling of a third hole at this site was cancelled. Scientists continue their routine laboratory work and data acquisition. Cores 306-U1312B-5H to 25H (32.4 to 231.9 mbsf, recovery 101.7%) are predominantly Pliocene to Miocene (NN16-NN8) white nannofossil ooze, with intervals of nannofossil ooze with clay and foraminiferal nannofossil ooze. A graded foraminiferal sand layer previously recorded in Hole U1312A also was found in Hole U1312B at

almost the same depth (114.11-114.45 mbsf). The Jaramillo Normal Polarity Zone was identified in Hole U1312B from 21 to 24.9 mbsf.

JA Daily Science Report for Expedition 306, 15 March 2005.

LOCATION: En route to Site IRD3A

SCIENCE UPDATE: Due to severe weather conditions, drilling at Site U1312 (IRD4A) was stopped after completion of Hole U1312B. The ship is underway to next drilling site, IRD3A. Scientists continue their laboratory work and data acquisition, and are preparing their results for the next site meeting.

JA Daily Science Report for Expedition 306, 16 March 2005.

LOCATION: En route on a course of 182 degrees for sheltered area in lee between the Azorean islands of Sao Jorge and Pico. This location is approximately a 1-1/2 day transit from Site 1313 (IRD-3A).

SCIENCE UPDATE: Discussion of results from Site U1312 and preparation of presentations for site meeting.

JA Daily Science Report for Expedition 306, 17 March 2005.

LOCATION: En route for sheltered area in lee between the Azorean islands of Sao Jorge and Terceira. This location is approximately a 1-1/2 day transit from Site 1313 (IRD-3A).

SCIENCE UPDATE: Discussion and presentation of results from Site U1312 during Science Meeting. Preparation of Site Report.

JA Daily Science Report for Expedition 306, 18 March 2005.

LOCATION: JOIDES Resolution standing by in DP mode in sheltered area in lee of the Azorean islands of Sao Jorge, Terceira, and Pico. This location is approximately a 1-1/2 day transit from Site 1313 (IRD-3A).

SCIENCE UPDATE: Presentation and discussion of results of Site U1312, and introduction of Site IRD3A during science meeting. Scientists are preparing site reports. Weather and operations meeting was scheduled for Saturday morning to discuss options.

JA Daily Science Report for Expedition 306, 19 March 2005.

LOCATION: *JOIDES Resolution* standing by in DP mode in sheltered area in lee of the Azorean islands of Sao Jorge, Terceira, and Pico until weather forecast for Site IRD3A improves.

SCIENCE UPDATE: Scientists are working on their reports from Site U1312 and turned in the first drafts at midnight. Weather and operations meeting was held to discuss options. Various workshops and presentations are being scheduled with the science party for the upcoming days until normal drilling operations are reinitiated.

JA Daily Science Report for Expedition 306, 20 March 2005.

LOCATION: *JOIDES Resolution* standing by WOW in sheltered area in lee of the Azorean islands of Sao Jorge, Terceira, and Pico.

SCIENCE UPDATE: Review of Site U1312 reports. Morning and afternoon image editing workshops were held by MIS for scientists and technical staff. Weather and operations meeting was held to discuss options. General science presentations are being scheduled with the science party for the upcoming days until normal drilling operations are reinitiated.

JA Daily Science Report for Expedition 306, 21 March 2005.

LOCATION: *JOIDES Resolution* standing by WOW in sheltered area in lee of the Azorean islands of Sao Jorge, Terceira, and Pico. Storm force winds and 18-25 ft seas have prevented the ship from starting drilling operations at Site U1313 (IRD3A).

SCIENCE UPDATE: Review of Site U1312 reports. Weather meetings held in the morning and in the evening to discuss operational options. Ship tour and science presentations have been organized for the science party and marine technical personnel and are underway.

JA Daily Science Report for Expedition 306, 22 March 2005.

LOCATION: Standing by waiting on weather in sheltered area in lee of the Azorean islands of Sao Jorge, Terceira, and Pico.

SCIENCE UPDATE: Review of Site U1312 reports. Weather meetings held in the morning and in the evening to discuss operational options. Science presentations have been organized for the science party and marine technical personnel and are underway.

JA Daily Science Report for Expedition 306, 23 March 2005.

LOCATION: Standing by waiting on weather in sheltered area in lee of the Azorean islands of Sao Jorge, Terceira, and Pico.

SCIENCE UPDATE: Final Site U1312 reports have been submitted to the Co-Chiefs office. Voluntary scientific presentations by members of the science party are taking place twice a day.

A comprehensive tour of the ship was given by Mike Storms, Superintendent of Operations, to all the scientists from the Night Shift.

JA Daily Science Report for Expedition 306, 24 March 2005.

LOCATION: Standing by waiting on weather in lee of the Azorean islands of Sao Jorge, Terceira, and Pico.

SCIENCE UPDATE: Weather and operations meeting held in the morning and in the evening to discuss options.

JA Daily Science Report for Expedition 306, 25 March 2005.

LOCATION: Standing by waiting on weather in lee of the Azorean islands of Sao Jorge, Terceira, and Pico.

SCIENCE UPDATE: Weather and operations meeting held to discuss end of WOW and departure time for early morning on Saturday March 26.

JA Daily Science Report for Expedition 306, 26 March 2005.

LOCATION: Ended WOW. En route to Site 1313 (IRD3A).

JA Daily Science Report for Expedition 306, 27 March 2005.

LOCATION: On Site U1313 (IRD3A)

SCIENCE UPDATE: We arrived on Site U1313 at 1425 hr Easter Sunday. Hole U1313A was spudded at 0005 hr 28 March establishing a sea floor depth of 3423.3 mbrf.

JA Daily Science Report for Expedition 306, 28 March 2005.

LOCATION: Hole U1313A (IRD3A)

SCIENCE UPDATE: Cores 306-U1313A-1H to 24H had been recovered by 2355 hrs for a total of 223.7 m of sediment and a recovery of 104.3%. Sediments in the core catcher from Core 24H are of early Pliocene age (5.09-5.54 Ma) according to nannostratigraphy. Most sediment from Cores 1H to 5H is mainly composed of moderate to highly bioturbated nannofossil ooze, foraminifer nannofossil ooze and silty clay foraminifer nannofossil ooze. Core 1H exhibited up to 20% diatom content. The top of Core 1H was characterized by brownish (10YR 8/3, 10YR 7/3, 2.5Y 7/4) sediments while the rest of the core down to Core 5H were dominantly medium light gray (N6), with light olive gray (5Y 6/2), light gray (5Y 7/1), olive yellow (5Y 6/6), and

greenish (5Y 6/3) mm-cm thick laminae. Pyrite halos were common. The Bruhnes/Matuyama boundary was identified at the top of Core 5H (~33.9 mbsf), and the Jaramillo Normal Polarity Zone from 42.1 to 45.3 mbsf.

JA Daily Science Report for Expedition 306, 29 March 2005.

LOCATION: Site U1313 (IRD3A), Hole U1313A and Hole U1313B

SCIENCE UPDATE:

Coring in Hole U1313A concluded at 1045 hrs after recovery of Core 33H at a final depth of 308.2 mbsf and recovery of 103.6%. The cored interval in Hole U1313A is of late Miocene age (~6 Ma) based on nanno- and foraminifer-stratigraphy. Drilling/coring was continued at Hole U1313B, and Cores U1313B-1H to 10H had been recovered by 2325 hrs for a total of 91.4 m of sediment. Sediments in the core catcher from Core U1313B-10H are of late Pliocene age (1.97-2.38 Ma) according to nanostratigraphy.

Cores U1313A-6H to 18H (43.2-166.7 mbsf; Quaternary to early Pliocene) are mainly nannofossil ooze, nannofossil ooze with clay, foraminifer nannofossil ooze, and foraminifer nannofossil ooze with clay of very pale brown (10YR 7/4), light olive gray (5Y 6/2), light gray (2.5 7/1), and white (N9, 5Y 8/1) colors. Below Core U1313A-14H, white (N9) nannofossil ooze is predominant. Two prominent volcanic ash layers occur in Section U1313A-7H-6, 15 cm, and Section U1313A-10H-5, 122 cm, respectively. The Olduvai Normal Polarity Zone was identified in Hole U1313A from 73.7 to 82.2 mbsf.

JA Daily Science Report for Expedition 306, 30 March 2005.

LOCATION: Site U1313 (IRD3A)

SCIENCE UPDATE:

Coring in Hole U1313B concluded at 1925 hr with the retrieval of Core 32H at a final depth of 302.4 mbsf and a recovery of 102%. The final cored interval at Hole U1313B spans from the Holocene to the Late Miocene (~6 Ma) according to foraminifer and nanostratigraphy. As in Hole U1313A, Cores 1H to 3H are mainly composed of moderate to highly bioturbated nannofossil ooze, foraminifer nannofossil ooze and silty clay foraminifer nannofossil ooze. Core 1H exhibited up to 20% diatom content. The top of Core 1H was characterized by brownish (10YR 8/3, 10YR 7/3, 2.5Y 7/4) sediments while the rest of the core down to Core 3H were dominantly medium light gray (N6), with light olive gray (5Y 6/2), light gray (5Y 7/1), olive yellow (5Y 6/6), and greenish (5Y 6/3) mm-cm thick laminae.

At Hole U1313A, Cores U1313A-19H to 33H mainly consist of white (N9) nannofossil ooze. Two conspicuous foraminifer sand layers were observed in Core 12H Section 1 (0.42-0.71 m) and Core 20H Section 1 (1.24-1.33m), respectively. The Matuyama/Gauss and the Gauss/Gilbert boundaries were identified at Hole U1313A at a depth of 111 m (2.581 Ma) and 155.2 m (3.58 Ma), respectively.

JA Daily Science Report for Expedition 306, 31 March 2005.

LOCATION: Site U1313 (IRD3A), Hole U1313C

SCIENCE UPDATE:

Downhole logging of Hole U1313B using the triple combo tool string concluded at 1300 hrs, and formation density and natural gamma logs were successfully correlated. Hole U1313C was spudded at 1440 hr and by 2340 hr Cores U1313C-1H to 12H had been recovered for a total of 107.2 m of sediment and a recovery of 104.8%. Sediment in the Core U1313C-12H core catcher is of late Pliocene age (~2.41 Ma) according to foraminifer and nannostratigraphy. At Hole U1313B, Cores U1313B-4H to 32H (24.9-300.4 mbsf) are mainly nannofossil ooze, nannofossil ooze with clay, foraminifer nannofossil ooze, and foraminifer nannofossil ooze with clay of very pale brown (10YR 7/4), light olive gray (5Y 6/2), light gray (2.5 7/1), and white (N9, 5Y 8/1) colors. Below Core 14H, white (N9) nannofossil ooze is predominant. The Brunhes/Matuyama boundary was identified at 33.7 mbsf and normal polarity zones Jaramillo and Olduvai from 40.9 to 45.1 mbsf, and from 72.7 to 91.75 mbsf, respectively.

JA Daily Science Report for Expedition 306, 1 April 2005.

LOCATION: Site U1313 (IRD3A), Hole U1313C

SCIENCE UPDATE:

Coring Hole U1313C concluded at 1940 hr with the recovery of Core 32H for a total of 293.4 m of sediment and a recovery of 104.1%. The sediment at the base of Hole U1313C is of late Miocene age (~6-6.8 Ma) and the lithology below Core 14H is predominantly white (N9) nannofossil ooze. Hole U1313D was spudded 25 m south of Hole U1313C at 2255 hr. Cores U1313D-1H and 2H had been recovered by midnight.

At Hole U1313B, the Matuyama/Gauss and Gauss/Gilbert boundaries were identified at 109 mbsf (2.58 Ma) and 155 mbsf (3.58 Ma), respectively.

JA Daily Science Report for Expedition 306, 2 April 2005.

LOCATION: Site U1313 (IRD3A)

SCIENCE UPDATE:

Coring Hole U1313D concluded at 1145 hr with the recovery of Core 16H for a total of 159.27 m of sediment (104.8%). At Hole U1313C, the lithology is very similar to that of Holes U1313A and B: Brownish (10YR 8/3, 10YR 7/3, 2.5Y 7/4) sediments at the top of Core 1H transitioning into dominantly medium light gray (N6), with light olive gray (5Y 6/2), light gray (5Y 7/1), olive yellow (5Y 6/6), and greenish (5Y 6/3) mm-cm thick laminae downhole to Core 14H, and predominantly white (N9) nannofossil ooze thereafter. The Brunhes/Matuyama boundary was identified at 34.1 mbsf (0.78 Ma) and the Jaramillo normal polarity zone between 42 and 47 mbsf (0.99-1.07 Ma) in Hole U1313C.

JA Daily Science Report for Expedition 306, 3 April 2005.

LOCATION: En route to Site U1314 (GAR-1B)

SCIENCE UPDATE:

The cored interval at Hole U1313D comprises late Pliocene to Holocene biogenic and terrigenous sediments. At Hole U1313C, the lithology below Core 14H is predominantly white (N9) nannofossil ooze. This hole exhibits relatively less bioturbation and fewer numbers of dropstones or ice rafted debris than Holes U1313A and B. Pyrite streaks are common. The Matuyama/Gauss and Gauss/Gilbert boundaries were identified at 110.5 and 153.8 mbsf in Hole U1313C.

JA Daily Science Report for Expedition 306, 4 April 2005.

LOCATION: En route to Site U1314 (GAR-1B)

SCIENCE UPDATE:

The lithology at Hole U1313D mirrors that of Holes A, B, and C: brownish (10YR 8/3, 10YR 7/3, 2.5Y 7/4) sediments at the top transitioning into dominantly medium light gray (N6), with light olive gray (5Y 6/2), light gray (5Y 7/1), olive yellow (5Y 6/6), greenish (5Y 6/3) mm-cm thick laminae downhole to Core 14H, and predominantly white (N9) thereafter. Sediments are primarily composed of nannofossil ooze, foraminifer nannofossil ooze, and foraminifer nannofossil ooze with clay. An ash layer was documented in the four holes at Site U1313 at about 33 mbsf. The Matuyama/Gauss boundary was recognized at 33.8 mbsf and the Jaramillo normal polarity zone between 41.2-45.8 mbsf in Hole U1313D. An excellent high resolution record was recovered from Site U1313 and two complete stratigraphic sections were composed: one to 300 mbsf, representing the last 5.5 Ma, and the other to 160 mbsf, representing the last 3.5 Ma.

JA Daily Science Report for Expedition 306, 5 April 2005.

LOCATION: En route to Site U1314 (GAR-1B)

SCIENCE UPDATE: Pre-site meeting: Introduction to Site U1314.

JA Daily Science Report for Expedition 306, 6 April 2005.

LOCATION: En route to Site U1314 (GAR-1B)

SCIENCE UPDATE: Preparation and review of site reports.

JA Daily Science Report for Expedition 306, 7 April 2005.

LOCATION: Site U1314 (GAR-1B)

SCIENCE UPDATE: Preparation and review of Site U1313 reports. We arrived at Site U1314 at 03:30 hr. Hole U1314A was spudded at 09:50 hr establishing a sea floor depth of 2810.6 mbrf. Cores U1314A-1H to -19H had been recovered by midnight for a total of 180.31 m of sediment and a recovery of 104.21%. Cores U1314A-1H to -3H consist of Holocene to mid-Pleistocene

gray, greenish gray, olive gray and dark gray biosiliceous silty clay, nannofossil ooze with diatoms and nannofossil ooze, and exhibit significant flow-in and disturbance.

JA Daily Science Report for Expedition 306, 8 April 2005.

LOCATION: Site U1314 (GAR-1B)

SCIENCE UPDATE: Hole U1314A was concluded at 07:25 hr with the recovery of Core U1314A-28H. The 258.4 m (267.34 m of sediment, 103.4% recovery) cored interval for this hole spans from 0 to 2.6 Ma. Cores U1314A-4H to -17H consist of Pleistocene gray, olive, olive gray and dark gray biosiliceous silty clay, nannofossil ooze, silty clay with foraminifers and silty clay with nannofossils. The Brunhes/Matuyama boundary was identified at 57.3 m in Hole U1314A. The Jaramillo and Olduvai normal polarity zones were identified at 74.4 to 79.8 and 138.9 to 155.3 mbsf, respectively.

Hole U1314B was spudded at 12:20 hr. Core U1314B-1H recovered 4.02 m of sediment, establishing a sea floor depth of 2811.5 mbrf. Cores U1314B-1H to -16H had been recovered by midnight for a total of 147.87 m of sediment (recovery of 100.9%).

JA Daily Science Report for Expedition 306, 9 April 2005.

LOCATION: Site U1314 (GAR-1B)

SCIENCE UPDATE:

Cores U1314A-18H to -28H consist of upper Pliocene gray, olive, olive gray and dark gray biosiliceous nannofossil ooze with silty clay, silty clay nannofossil ooze with diatoms, silty clay with foraminifers and nannofossils. The Reunion normal polarity subzone was identified between 175.8 and 178.4 mbsf, and the Matuyama/Gauss boundary at 224.7 mbsf in Hole U1314A. Hole U1314B was concluded at 10:40 hr with the recovery of Core U1314B-30H. The 279.5 m cored interval (285.36 m of sediment, 102.1% recovery) at this hole spans from 0 to ~3 Ma. The drill ship was offset 25 m east of Hole U1314B and Hole U1314C was spudded at 13:20 hr. Core U1314C-1H was on deck at 13:40 hr recovering 8.22 m of sediment, establishing a sea floor depth of 2810.3 mbrf. Cores U1314C-1H to -15H had been recovered by midnight for a total of 144.31 m of sediment (recovery of 102.2%).

JA Daily Science Report for Expedition 306, 10 April 2005.

LOCATION: En route to Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: Hole U1314C was completed at 07:55 hrs with the recovery of Core 22H. The 207.7 m cored interval (212.93 m of sediment, 102.2% recovery) at this hole spans from 0 to ~2.4 Ma according to the nannostratigraphy. The completion of Hole U1314C concluded coring operations at Site U1314. At Hole U1314B, the lithology of Cores U1314B-1H to 20H consists of gray, dark gray, greenish gray, green and olive gray silty clay biosiliceous nannofossil ooze, silty clay nannofossil ooze with diatoms, and silty clay with foraminifers and nannofossils. The Brunhes/Matuyama boundary was documented at 56.6 mbsf and the Jaramillo normal polarity zone between 73.1 and 80.7 mbsf at Hole U1314B.

JA Daily Science Report for Expedition 306, 11 April 2005.

LOCATION: En route to Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: Cores U1314B-20H to 30H consist of upper Pliocene greenish gray, dark greenish gray, olive gray and gray biosiliceous nannofossil ooze with silty clay, silty clay with nannofossils, silty clay with diatoms. The Olduvai normal polarity zone was recognized between 137.5 and 155.5 mbsf, and the Matuyama/Gauss boundary at 222.6 mbsf at Hole U1314B.

JA Daily Science Report for Expedition 306, 12 April 2005.

LOCATION: En route to Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: Cores U1314C-1H to 16H consist of upper Pliocene to Holocene gray, greenish gray, olive, olive gray and dark gray biosiliceous silty clay, silty clay with nannofossils, silty clay with foraminifers, nannofossil ooze and nannofossil ooze with diatoms. The Brunhes/Matuyama boundary was documented at 57.7 mbsf and the Jaramillo normal polarity zone between 75.0 and 80.7 mbsf at Hole U1314C.

JA Daily Science Report for Expedition 306, 13 April 2005.

LOCATION: En route to Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: Cores U1314C-17H to 22H consist of upper Pliocene olive, olive gray, gray and dark gray biosiliceous nannofossil ooze with silty clay, silty clay nannofossil ooze with diatoms, silty clay with nannofossils and foraminifers. The Olduvai normal polarity zone was identified between 139.4 and 157.6 mbsf at Hole U1314C. In preparation for CORK operations at Site U1315, the thermistor string was attached to the support member and successfully tested.

JA Daily Science Report for Expedition 306, 14 April 2005.

LOCATION: En route to Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: Site U1314 (Gardar Drift) science meeting was held in the afternoon and scientists gave presentations and discussed their scientific results. The site reports are being prepared.

JA Daily Science Report for Expedition 306, 15 April 2005.

LOCATION: Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: The drill ship arrived at Site 1315 in the late morning. The beacon was deployed and preparations for CORK operations were initiated soon after. The VIT was deployed to the seafloor, visually confirming the water depth (1283 mbrf).

JA Daily Science Report for Expedition 306, 16 April 2005.

LOCATION: Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: At Site U1315, the assembly of the special elevated reentry cone was completed and lowered to the seafloor. Drilling at Hole U1315A was initiated at 21:30 hrs.

JA Daily Science Report for Expedition 306, 17 April 2005.

LOCATION: Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: We've completed drilling-in the Hole U1315A elevated reentry cone to the seafloor. Spotted cement plug at casing shoe and are currently waiting on cement to cure.

JA Daily Science Report for Expedition 306, 18 April 2005.

LOCATION: Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: At Site U1315, the CORK assembly was deployed after running in the hole and verifying that the cement had hardened.

JA Daily Science Report for Expedition 306, 19 April 2005.

LOCATION: Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: We've completed the CORK installation at Hole U1315A and initiated search for ODP Hole 642E in preparation for logging.

JA Daily Science Report for Expedition 306, 20 April 2005.

LOCATION: Site U1315 (ODP Site 642, CORK)

SCIENCE UPDATE: After locating ODP Hole 642E, the TAP tool with the Triple-Combo tool string was deployed to a total depth of ~600 mbsf (or ~227.5 m past the casing shoe into the open hole). Problems with ledges in the hole prevented the tools from going down further.

JA Daily Science Report for Expedition 306, 21 April 2005.

LOCATION: Underway to Dublin, Ireland.

SCIENCE UPDATE: Preparation of Site U1315 reports and the 306 Expedition Report. End of the cruise activities are being conducted.

JA Daily Science Report for Expedition 306, 22-24 April 2005.

LOCATION: En route to Dublin, Ireland.

JA Daily Science Report for Expedition 306, 25 April 2005.

LOCATION: Dublin, Ireland.

SCIENCE UPDATE: Under favorable weather and marine conditions, the 977 nmi transit from Site U1315 to the Dublin pilot station was completed at 9:00 hr, a full 19 hours ahead of our projected schedule. IODP Expedition 306 officially ended in Dublin, Ireland, with the first line ashore at 15:50 hr April 25, 2005.