

International Ocean Discovery Program
JOIDES Resolution Science Operator
FY25 Q1 Operations and Management Report

1 October–31 December 2024
Cooperative Agreement OCE-1326927

Submitted by the JRSO
to
The National Science Foundation
and
The *JOIDES Resolution* Facility Board

11 February 2025



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1. Introduction

This technical report reflects the activities for the first quarter (Q1) of the no-cost extension year of the National Science Foundation (NSF) award to manage and operate the *JOIDES Resolution* for the International Ocean Discovery Program (IODP). Post-IODP obligations related to expeditions conducted during IODP are funded by a separate award to the Texas A&M University Research Foundation (TAMRF). Consequently, the activity in the no-cost extension year relates to financial processing of commitments made during IODP and related tasks that are not explicitly covered by the post-IODP obligation award.

2. Financial Closeout

A range of costs that were committed in FY24 were paid during Q1, including travel, material and supplies, consultant and professional services, shipping, insurance reconciliation, and maintenance and repair. In addition, subcontractor final day rates were paid along with subcontractor cost reimbursables including travel and per diem and port call costs. The IODP General Manager's time is covered at 25% to oversee the closeout process, reduced from 90% FTE in earlier years. Finally, as agreed in their contract, ODL AS reimbursed TAMRF for the remaining fuel left on board the *JOIDES Resolution*. Parties from ODL AS and JRSO witnessed and agreed to the amount to be reimbursed.

3. Other Activity

National Science Foundation (NSF) tasked the *JOIDES Resolution* Science Operator (JRSO) to facilitate an Environmental Assessment for the IODP³–NSF Expedition 501 located offshore New England. Initial communication between NSF, the principal investigator (PI), the science operator, and the contractor to define the scope of work and assemble required documentation took place during the quarter. A purchase order (PO) will be issued in the next quarter.

Publications authored by staff

Abstracts authored by JRSO staff

Abstracts of conference presentations during this quarter authored by JRSO staff include the following. Bold type indicates JRSO staff.

American Geophysical Union Fall Meeting

- Abe, N., Dickerson, K., Deans, J.R., Lang, S.Q., McCaig, A.M., **Blum, P.**, and the IODP Expedition 399 Scientists, 2024. Quality check of measured data for different shapes of onboard physical property measurements for hard rock samples in IODP Exp 399. Presented at the American Geophysical Union Fall Meeting, American Geophysical Union Fall Meeting, 9–13 December 2024. V13C-3284
- **Acton, G.D., Childress, L.B., and Percuoco, V.**, 2024. Probing the IODP LIMS with Lithology (LILY) database for the lithologic dependence of P-wave velocity and its anisotropy. Presented at the American Geophysical Union Fall Meeting, Washington, DC, Washington, DC. PP51E-0588
- **Alvarez Zarikian, C.A.**, Huang, H.-H.M., Martez, N., Abrantes, F.F.G., Llerena, F., Dauchy-Tric, L., Kaboth-Bahr, S., Rodriguez-Tovar, F.J., and the IODP Expedition 397 Scientists, 2024. Tracking Mediterranean Overflow along the southwestern Portuguese margin during late Pleistocene glacial-interglacial transitions (MIS 12/11, 6/5, and 2/1): insights from ostracods. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41A-02

- Blattler, C.L., Tanaka, E., Flecker, R., Ducassou, E., **Williams, T.**, and the IODP Expedition 401 Scientists, 2024. A deep subsurface paleobrine derived from the Messinian salinity crisis in the Alboran Sea (western Mediterranean). Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP54A-08
- Burns, K., Frank, T., Jennings, A.E., and the IODP Expedition 400 Scientists (including **L. Childress**), 2024. Origin and Significance of Detrital Carbonate Beds in Pleistocene Strata, Northwestern Greenland Margin. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP23A-0544
- Cargill, S.K., Tauxe, L., **Roth, A.**, and the Expedition 400 Scientists (including **L. Childress**), 2024. A preliminary chronology for NW Greenland margin Sites U1603 and U1604 utilizing magnetic reversal stratigraphy and relative paleointensity. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP23A-0540
- Cooper, S.K., Leckie, R.M.M., **Childress, L.B.**, Lewis, J.C., Peart, L.W., White, L.D., and Pincus, M., 2024. School of Rock: an enduring legacy from two decades of professional development on the *JOIDES Resolution*. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0597
- Craig, P., Balestra, B., Chin, S., Amarathunga, U., Das, M., Sierro, F.J., Yousfi, M.Z., Flecker, R., Ducassou, E., **Williams, T.**, Brothers, A., and the IODP Leg 401 Scientific Team, 2024. Biogeographic distribution of living coccolithophore communities retrieved during the International Ocean Discovery Program (IODP) Expedition 401, Mediterranean–Atlantic Gateway Exchange. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP43A-0391
- Di Chiara, A., Satolli, S., Dwyer, D., Friedman, S.A., **Acton, G.D.**, Karatsolis, B.T., Pearson, P.N., Jones, T.D., Suzuki, T., Modestou, S., LeBlanc, D.E., Ibrahim, H., O’Connell, S., Jasper, C.E., Thulasi, T., Lee, S., Briaes, A., Parnell-Turner, R., **LeVay, L.**, and the Expedition 395 Science Party, 2024. Geomagnetic excursions observed in high-resolution paleomagnetic records from North Atlantic IODP Sites U1555 and U1563. Presented at the American Geophysical Union Fall Meeting, Washington, DC, Washington, DC. PP51E-0586
- Dickerson, K., Fisher, A.T., Deans, J.R., Abe, N., Lang, S.Q., McCaig, A.M., **Blum, P.**, and the IODP Expedition 399 Science Party, 2024. Characterizing primary lithology and secondary modification of a deep, mafic-ultramafic section from the Atlantis Massif, Mid-Atlantic Ridge using core and downhole data and machine learning. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. V13C-3278
- Dodd, J.P., Phillips, S., **LeVay, L.**, Cooper, S.K., and Sibert, E.C., 2024. Results from scientific ocean drilling: the interdisciplinary legacy of the *JOIDES Resolution*, part I. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D
- Dodd, J.P., Phillips, S., **LeVay, L.**, Cooper, S.K., and Sibert, E.C., 2024. Results from scientific ocean drilling: the interdisciplinary legacy of the *JOIDES Resolution*, Part II. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP44A
- Dodd, J.P., Phillips, S., **LeVay, L.**, Cooper, S.K., and Sibert, E.C., 2024. Results from scientific ocean drilling: the Interdisciplinary legacy of the *JOIDES Resolution*, part III. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E
- Dodd, J.P., Phillips, S., **LeVay, L.**, Cooper, S.K., and Sibert, E.C., 2024. Results from scientific ocean drilling: the interdisciplinary legacy of the *JOIDES Resolution*, part IV. Presented at the American Geophysical Union Fall Meeting, Washington, DC, Washington, DC. PP54A

- Druitt, T.H., Metcalfe, A., Pank, K., Kutterolf, S., Preine, J., Karim, K., Huebscher, C., Koukousioura, O., Nomikou, P., Manga, M., **Ronge, T.**, Woodhouse, A., Beethe, S., Berthod, C., Chiyonobu, S., Chen, H., Clark, A., DeBarì, S.M., Gertisser, R., Johnston, R.M., Peccia, A., Yamamoto, Y., Bernard, A., Perez, T.I.F., Jones, C., Joshi, K.B., Kletetschka, G., Xiaohui, L., McCanta, M.C., McIntosh, I.M., Morris, A., Polymenakou, P., Tominaga, M., and Papanikolaou, D., 2024. Far-travelled ash megaturbidite fed by shoreline-crossing pyroclastic currents from the 161 ka Kos Plateau tuff eruption. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. V22B-06
- Eason, D.E., Murton, B.J., White, N., Jackson, R., Taylor, R., Briaìs, A., **LeVay, L.**, Parnell-Turner, R., and the IODP Expedition 395 Scientists, 2024. Temporal evolution of the Reykjanes Ridge: insights into v-shaped ridge formation from IODP Expedition 395. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. V11B-02
- **Estes, E.R.**, Borrelli, C., **Childress, L.B.**, and Sylvan, J.B., 2024. Concentration and composition of organic carbon in pelagic sediments – exploring preservation mechanisms and analytical artifacts. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0343
- Feakins, S.J., Feng, X., Liu, Z., Zhang, Y., Schubert, B., Teixeira, M., Sierro, F.J., George, S.C., Hernandez Molina, F.J., Warny, S., Noto, D., Berke, M.A., Yousfi, M.Z., Flecker, R., Ducassou, E., **Williams, T.**, and the IODP Expedition 401 Scientists, 2024. Terrigenous plant material in the Iberian Margin detects Late Miocene changes in the Mediterranean Gateway. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP43E-02
- Filina, I., Loreto, F., Shuck, B., Abe, N., Pezard, P.H., Zitellini, N., Malinverno, A., **Estes, E.R.**, Akizawa, N., Cunningham, E., Di Stefano, A., Fu, Q., Gontharet, S., Kearns, L., Koorapati, R.K., Lei, C., Magri, L., Menapace, W., Morishita, T., Pandey, A., Poulaki, E.M., Pavlovics, V., Rodriguez-Pilco, M.A., Sanfilippo, A., Vannucchi, P., and Zhao, X., 2024. Summary of physical properties of rocks collected during the IODP Expedition 402 in the back-arc Tyrrhenian Basin. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. T31E-3172
- Flecker, R., Ducassou, E., **Williams, T.**, and the IODP Expedition 401 Scientists, 2024. Evidence of Miocene Mediterranean salt giant formation in the Atlantic: initial results from IODP Expedition 401. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP33F-06
- Haygood, L., Riedinger, N., Hodell, D.A., Abrantes, F.F.G., **Alvarez Zarikian, C.A.**, Galvez, O., Redman, B., and the IODP Expedition 397 Science Party, 2024. Investigating bottom-water redox conditions at the Iberian margin. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0594
- Hemming, S.R., Alba, R.B., Chiara, A.D., Rasbury, T., Satolli, S., Dunkley Jones, T.S., Dwyer, D., Friedman, S.A., Hanson, E., Ibrahim, H., Jasper, C.E., Karatsolis, B.T., Morris, M.A., Modestou, S., O’Connell, S., Sinnesael, M., Parnell-Turner, R., Briaìs, A., **LeVay, L.J.**, and the Expedition 395 Scientists, 2024. History of terrigenous provenance variation on Bjorn Drift IODP Site U1554. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0350
- Ibrahim, H., Patterson, M.O.R., Kulhanek, D.K., Briaìs, A., Parnell-Turner, R., **LeVay, L.J.**, and the Expedition 395 Scientists, 2024. Record of the North Atlantic Current System under varying climate boundary conditions in the Plio-Pleistocene from IODP Site 1564. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0353

- Jasper, C.E., Wang, C., Tessler, M., Hemming, S.R., **Williams, T.**, Reilly, B., and Raymo, M.E., 2024. Cyclicity and provenance of Antarctic iceberg discharge events in Iceberg Alley during the Early-to-Mid Pleistocene. Presented at the American Geophysical Union Fall Meeting, American Geophysical Union Fall Meeting, 9–13 December 2024. PP11B-05
- Jennings, A.E., **Childress, L.B.**, Hatfield, R.G., Klotsko, S., Knutz, P.C., Reilly, B., the BADEX Science Team, and the Expedition 400 Scientists, 2024. Greenland Ice Sheet-ocean-climate interactions through space and time. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP23A-0539
- **Kars, M.A.C.**, and **Childress, L.B.**, 2024. Investigating the role of lithology and diagenesis on rock magnetic properties of diagenetically altered marine sediments. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. GP33A-3429
- Kilpatrick, A., Jasper, C.E., Hemming, S.R., Raymo, M.E., Sinnesael, M., Karatsolis, B.T., and the IODP Expedition 395 Scientists (including **L. LeVay**), 2024. Pacing of Northern Hemisphere ice sheet growth and retreat in the Early Pleistocene From Gardar Drift Site U1564. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0351
- Kletetschka, G., Morris, A., **Roth, A.**, Druitt, T.H., Kutterolf, S., **Ronge, T.**, Beethe, S., Bernard, A., Berthod, C., Chen, H., Chiyonobu, S., Clark, A., DeBari, S.M., Perez, T.I.F.F., Gertisser, R., Huebscher, C., Johnston, R., Jones, C.S., Joshi, K.B., Lin, X., Magna, M., McCanta, M.C., McIntosh, I.M., Pank, K., Peccia, A., Preine, J., Tominaga, M., Woodhouse, A., Yamamoto, Y., Koukousioura, O., Nomikou, P., Polymenakou, P., Whitlock, S.E., Schnur, S., and Ucar, H., 2024. Distinguishing detrital and chemical remanent magnetization in marine sediments: a novel magnetic efficiency approach from IODP Expedition 398, Santorini region. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. GP33A-3427
- Kletetschka, G., Morris, A., **Roth, A.**, Druitt, T.H., Kutterolf, S., **Ronge, T.**, Beethe, S., Bernard, A., Berthod, C., Chen, H., Chiyonobu, S., Clark, A., DeBari, S.M., Perez, T.I.F.F., Gertisser, R., Huebscher, C., Johnston, R., Jones, C.S., Joshi, K.B., Lin, X., Magna, M., McCanta, M.C., McIntosh, I.M., Pank, K., Peccia, A., Preine, J., Tominaga, M., Woodhouse, A., Yamamoto, Y., Koukousioura, O., Nomikou, P., Polymenakou, P., Whitlock, S.E., Schnur, S., and Ucar, H., 2024. Magnetic signatures in Santorini tephra: implications for Mars return samples and volcanic lightning volcanic tephra grains provide. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. GP33A-3428
- Koorapati, R.K., Lam, A.R., Guerin, G., Yeon, J., Kuwano, D., Teagle, D.A.H., Reece, J.S., Coggon, R.M., Sylvan, J.B., **Williams, T.**, and **Estes, E.R.**, 2024. Middle Miocene paleoenvironmental changes in the South Atlantic region—a multiproxy reconstruction. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41C-0326
- **LeVay, L.J.**, **Petronotis, K.E.**, **Childress, L.B.**, and **Malone, M.J.**, 2024. The international reach of the *JOIDES Resolution*: twenty years of science staffing and collaboration across oceans (2003–2024). Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0600
- Lindsay, M., D’Angelo, T., Dodd, J.P., Poulton, N., Stepanauskas, R., **LeVay, L.**, Parnell-Turner, R., Briaes, A., Orcutt, B., and the Expedition 395 Scientists, 2024. Using scientific ocean drilling to evaluate habitability and limits of life: how do microbes persist or subsist in the deep subsurface? Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. U32B-04

- Lopes, E., Ju, O., Tikoo-Schantz, S., Jung, J.-I., Burns, D.H., and the IODP Expedition 399 Scientific Team (including **P. Blum**), 2024. Magnetic characterization of borehole samples from IODP Expedition 399: Atlantis Massif, Mid-Atlantic Ridge. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0587
- Lu, W., Hess, A., Oppo, D., and the South Atlantic Transect IODP Expedition 390/393 Scientists (including **E. Estes** and **T. Williams**), 2024. Deep-sea temperature change in the South Atlantic during the last deglaciation. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP53C-0657
- **Malone, M.J., Penkrot, M., LeVay, L., Houpt, D., and Acton, G.D.**, 2024. Instrumenting the Gulf Coast Repository to facilitate the future analysis of cores from scientific ocean drilling and beyond. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0601
- McCanta, M.C., Druitt, T., Flaherty, T.T., Kutterolf, S., Metcalfe, A., Pank, K., **Ronge, T.**, and the IODP Expedition 398 Scientists, 2024. Origin of redox differences in primitive magmas of the Santorini magma storage zone. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. V43B-3195
- Metcalfe, A., Druitt, T., Pank, K., Kutterolf, S., Preine, J., Huebscher, C.P., Nomikou, P., Woodhouse, A., Koukousioura, O., Chiyonobu, S., and the IODP Expedition 398 Scientific Team (including **T. Ronge**), 2024. Role of lithospheric rifting in the initiation and modulation of explosive volcanism at the Christiana-Santorini-Kolumbo volcanic field. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. V42B-07
- Mitsunaga, B., Wu, J., Hodell, D.A., Abrantes, F.F.G., **Alvarez Zarikian, C.A.**, Herbert, T., Russell, J.M., and the IODP Expedition 397 Scientific Party, 2024. Orbital-scale variability in Miocene-Holocene sediment source, terrestrial hydrology, and ecology along the Iberian Margin – initial results from IODP Expedition 397. Presented at the American Geophysical Union Fall Meeting Washington, DC, Washington, DC. PP43E-01
- Molz, E., Pitcher, B.W., Peccia, A., Plank, T.A., Druitt, T., Kutterolf, S., **Ronge, T.**, and the IODP Expedition 398 Scientists, 2024. Using melt inclusions in the Archaeos tuff to determine magma storage and processes leading to the earliest caldera-forming eruption at Santorini. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. V51B-3088
- Morris, M.A., Parnell-Turner, R., Hochmuth, K., McNamara, D.D., Briais, A., **LeVay, L.J.**, and the Expedition 395 Scientists, 2024. Late Miocene onset of sedimentation at Eirik Drift, IODP Site U1602. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0344
- Mossell, H., **Williams, T.**, Jasper, C.E., Hemming, S.R., and Reilly, B., 2024. High resolution ice-rafted debris records across the Plio-Pleistocene from Iceberg Alley and the Antarctic peninsula. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP13C-0672
- Noto, D., Warny, S., Feakins, S.J., Flecker, R., Ducassou, E., **Williams, T.**, Amarathunga, U., Balestra, B., Berke, M.A., Blattler, C.L., Chin, S., Das, M., Egawa, K., Natacha, F., George, S.C., Hernandez Molina, F.J., Krijgsman, W., Li, Z., Liu, J., Rodriguez-Tovar, F.J., Raad, F., Sierro, F.J., Standring, P., Stine, J., Tanaka, E., Xu, X., Yin, S., Yousfi, M.Z., and the IODP Expedition 401 Scientists, 2024. Vegetation and dinoflagellate response to the Messinian Salinity Crisis determined from an Iberian

margin palynological record. Presented at the American Geophysical Union Fall Meeting, American Geophysical Union Fall Meeting, 9–13 December 2024. PP43A-0377

- Parnell-Turner, R.E., Briais, A., **LeVay, L.**, and the Expedition 395 Scientists, 2024. A basin-spanning record of sedimentation and deep-water flow in the North Atlantic Ocean since Miocene times from IODP Expedition 395. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP54A-04
- Passchier, S., and the IODP Expedition 400 Scientists (including **L. Childress**), 2024. Sedimentology of Pliocene and Pleistocene glacially influenced drift sediments from the northwest Greenland continental shelf: results from IODP Expedition 400. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP23A-0541
- **Penkrot, M.**, Kubo, Y., and Roehl, U., 2024. Polar geologic cores and data from scientific ocean drilling programs (DSDP, ODP, IODP). Presented at the American Geophysical Union Fall Meeting, Washington, DC, Washington, DC. C21C-08
- **Penkrot, M., Malone, M.J., Blum, P., Avila-Santis, A., Broyles, C., Crowder, L., Novak, B., Kowalski, J., Peng, C.**, Lang, S.Q., and McCaig, A.M., 2024. Monitoring of airborne asbestos fibers generated while processing geologic cores containing asbestiform minerals. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. GH21B-2533
- **Percuoco, V., Allen, M., Avila-Santis, A., Crowder, L., Blaisdell, T., Houpt, D., Kars, M.A.C., Kimrey, J., Liu, C., Mechler, A., Ronge, T., Menzel, R., Schulte, E., Vadman, K.J., and van Rensburg, G.**, 2024. A hyperspectral camera track system for automating diffuse color reflectance measurements of drill cores. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0591
- Perez, T.I.F.F., Tessin, A., Kutterolf, S., Druitt, T.H., **Ronge, T.**, Nomikou, P., Bernard, A., Jones, C., Joshi, K.B., McCanta, M.C., Polymenakou, P., Chiyonobu, S., Koukousioura, O., Woodhouse, A.D., Beethe, S., Berthod, C., Chen, H., Clark, A., DeBari, S.M., Gertisser, R., Huebscher, C.P., Johnston, R., Kletetschka, G., Li, X., Manga, M., McIntosh, I.M., Morris, A., Pank, K., Peccia, A., Preine, J., Tominaga, M., Yamamoto, Y., and the IODP Exp 398 Scientific Team, 2024. Impact of volcanically derived nutrients on sapropel development in the Aegean Sea. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0334
- Planke, S., Berndt, C., Huismans, R.S., Faleide, J.I., Bnz, S., Millett, J.M., Svensen, H., **Alvarez Zarikian, C.A.**, and the IODP Expedition 396 Scientific Party, 2024. Understanding volcanic rifted margins and paleoclimate implications from scientific drilling in the NE Atlantic. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP44A-02
- Poulaki, E.M., Bickert, M., Vannucchi, P., Morishita, T., Sanfilippo, A., Pandey, A., Akizawa, N., Cunningham, E., Shuck, B., Lei, C., Tribuzio, R., Barnes, J., Bernard, R.E., Abe, N., Stefano, A.D., Filina, I., Fu, Q., Gontharet, S., Kearns, L., Koorapati, R.K., Loreto, F., Magri, L., Menapace, W., Pavlovics, V., Pezard, P.H., Rodriguez-Pilco, M.A., Zhao, X., **Estes, E.R.**, Malinverno, A., and Zitellini, N., 2024. Felsic intrusions facilitate mantle exhumation along detachment faults at a continent-ocean transition drilled in the Tyrrhenian Sea. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. T24B-06
- Richter, C., **Acton, G.D.**, Sidorovskaia, N., Xuan, C., and Verosub, K.L., 2024. Paleomagnetic and rock magnetic properties of IODP Site U1389. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP51E-0585

- Rocha, V.D.S., Dodd, J.P., Karatsolis, B.T., Parnell-Turner, R., Briaes, A., **LeVay, L.J.**, and the IODP Expedition 395/395C Science Party, 2024. Plio-Pleistocene variability in biogenic silica production and burial in the Björn and Eirik Drift sediments from IODP Expedition 395. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0338
- Romans, B., Varela, N., Tahirkheli, F.S., and the IODP Expedition 400 Scientists (including **L. Childress**), 2024. Value of levee-overbank turbidite archives for Arctic and Antarctic paleoceanography and ice-sheet history. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP23A-0542
- **Ronge, T.**, and Dbritto, S., 2024. XRF scanning–derived grain size analysis for rapid assessment of bottom current velocities on long IODP drill cores. Presented at the American Geophysical Union Fall Meeting, 9–13 December 2024. PP41D-0348
- Sessa, J., Hofstetter, M., Lam, A.R., **LeVay, L.J.**, McCoy, A., Peters, S.E., and Fraass, A., 2024. Building a community-led online resource for global-scale marine analyses. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP33A-0543
- Siddoway, C.S., Thomson, S.N., Hemming, S.R., Brachfeld, S.A., and the IODP Exp 379 and 382 Shipboard Science Parties (including **T. Williams**), 2024. Multichronometer dating of dropstones and ice-rafted debris (latest Miocene through Pliocene) recovered from IODP drill cores offshore West Antarctica, to extend knowledge of bedrock geology and past ice sheet extent. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. T51D-3177
- Sinnesael, M., Rhea, I., Magzoub, A., Parnell-Turner, R., Briaes, A., **LeVay, L.J.**, and the Expedition 395 Scientists, 2024. Correlation of Plio-Pleistocene glacial-interglacial variability on the North-Atlantic Bjorn and Gardar drifts. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP41D-0352
- St John, K.K., Lucchi, R., **Ronge, T.**, Maria Barcena, De Schepper, S., Duxbury, L., Gebhardt, C., Gonzalez-Lanchas, A., Goss, G., Greco, N., Gruetznier, J., Haygood, L., Husum, K., Iizuka, M., Kapuge, I., Lam, A.R., Libman-Roshal, O., Liu, Y., Monito, L., Reilly, B., Rosenthal, Y., Sakai, Y., Suganuma, Y., V, S.K.A., Zhong, Y., and the *JOIDES Resolution* Exp 403 Technical Support Team, 2024. Preliminary results from IODP Expedition 403 - Eastern Fram Strait Paleo-Archive. Presented at the American Geophysical Union Fall Meeting, Washington, DC, 9–13 December 2024. PP23A-0552
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