Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists
Proceedings of the International Ocean Discovery Program Volume 378
publications.iodp.org

Data report: splice adjustment for Site U1553[1]

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[1] Drury, A.J., Westerhold, T., Wilkens, R.H., and Röhl, U., 2022. Data report: splice adjustment for Site U1553. In Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists. South Pacific Paleogene Climate. Proceedings of the International Ocean Discovery Program, 378: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.378.201.2022
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Contents

Keywords
International Ocean Discovery Program, IODP, *JOIDES Resolution*, Expedition 378, South Pacific Paleogene Climate, Site U1553

MS 378-201
Received 19 February 2022
Accepted 12 April 2022
Published 30 June 2022

Abstract

Postcruise examination of the data splice for International Ocean Discovery Program Expedition 378 Site U1553, in light of new X-ray fluorescence data, revealed three cores from Hole U1553E that were misaligned. These cores have been shifted to fill in some gaps in the original splice.

1. Introduction

Postcruise examination of the data splice for International Ocean Discovery Program Expedition 378 Site U1553, in light of new X-ray fluorescence data, revealed three cores from Hole U1553E that were misaligned. These cores have been shifted to fill in some gaps in the original splice (**Röhl et al.**, 2022) where Hole U1553B cores had originally been appended.

2. Results

The offset for Core 378-U1553E-21X was shifted deeper by 4.63 m, Core 22X was shifted deeper by 4.75 m, and Core 23X was shifted deeper by 3.92 m. No other cores were shifted, so depths of samples taken from other cores need no adjustment. A comparison of the original splice to the revised splice is illustrated in Figure **F1** and overlays of the original and shifted X-ray fluorescence data are presented in Figure **F2**. The original offsets of the three cores of Hole U1553E made their inclusion in the splice problematic. Shifting the three cores allowed for a new splice to be constructed that fills some gaps in the original splice where Hole U1553B cores had been appended. These corrections create a more continuous splice in the latest Eocene around the Eocene–Oligocene transition.

Revised offsets are presented in Table **T1**, and revised splice intervals are presented in Table **T2**.

3. Acknowledgments

This research used samples and/or data provided by the International Ocean Discovery Program (IODP). Funding for this research was provided by the U.S. Science Support Program, IODP.

Reference

Röhl, U., Thomas, D.J., Childress, L.B., Anagnostou, E., Ausín, B., Borba Dias, B., Boscolo-Galazzo, F., Brzelinski, S., Dunlea, A.G., George, S.C., Haynes, L.L., Hendy, I.L., Jones, H.L., Khanolkar, S.S., Kitch, G.D., Lee, H., Raffi, I., Reis, A.J., Sheward, R.M., Sibert, E., Tanaka, E., Wilkens, R., Yasukawa, K., Yuan, W., Zhang, Q., Zhang, Y., Drury, A.J., and Hollis, C.J., 2022. Site U1553. In Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists, South Pacific Paleogene Climate. Proceedings of the International Ocean Discovery Program, 378: College Station, TX (International Ocean Discovery Program). **https://doi.org/10.14379/iodp.proc.378.103.2022**

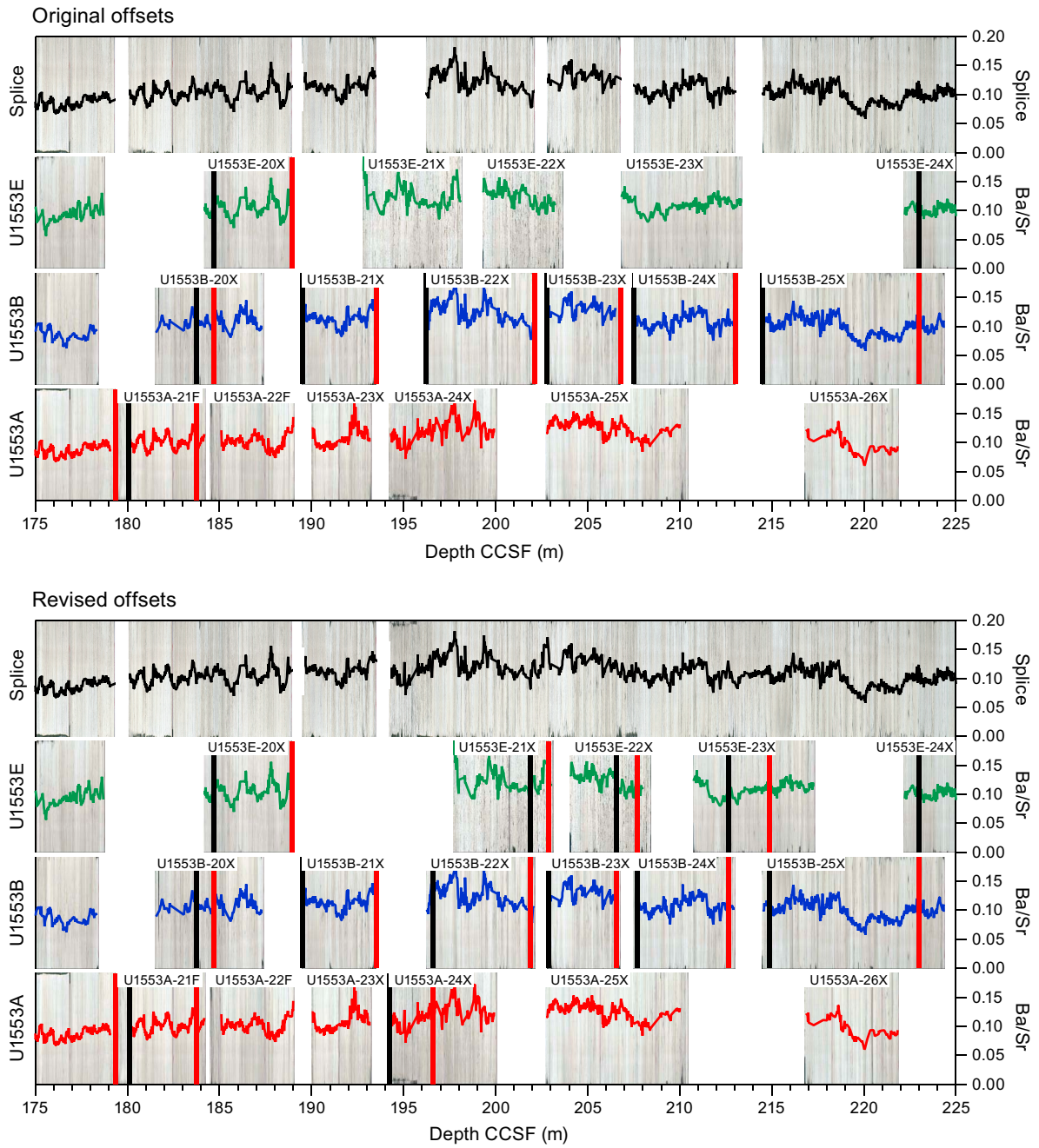

Figure F1. Original offsets versus revised offsets, Holes U1553A, U1553B, and U1553E. CCSF = core composite depth below seafloor.

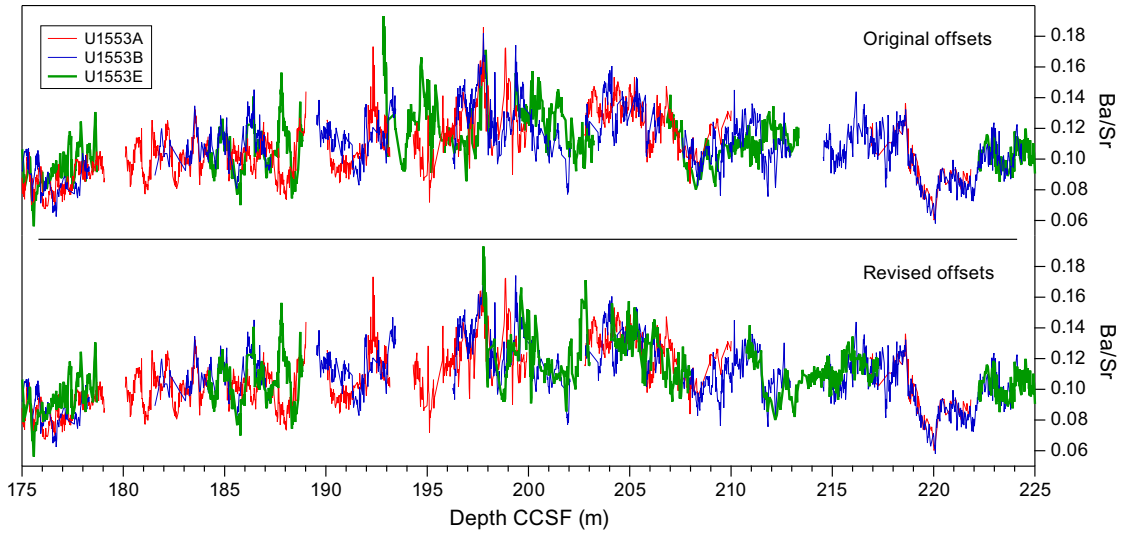

Figure F2. Shifted X-ray fluorescence data, Holes U1553A, U1553B, and U1553C. CCSF = core composite depth below seafloor.

Table T1. Revised offsets, Site U1553. **Download table in CSV format.**

Table T2. Revised splice intervals, Site U1553. **Download table in CSV format.**