

Figure S1. Echosounder images with noise reduction applied and the CTD track and sampling locations overlain in green. **(A)** 18 kHz; **(B)** 38 kHz; **(C)** 120 kHz; and **(D)** 200 kHz. These images are for Cast 6 on 15 August 2018. Time stamps (GMT) indicate the start and end of the echograms and vertical bars are at 30 minute intervals. Note change of vertical scale for the 120 kHz (500 m) and 200 kHz (250 m) echograms.

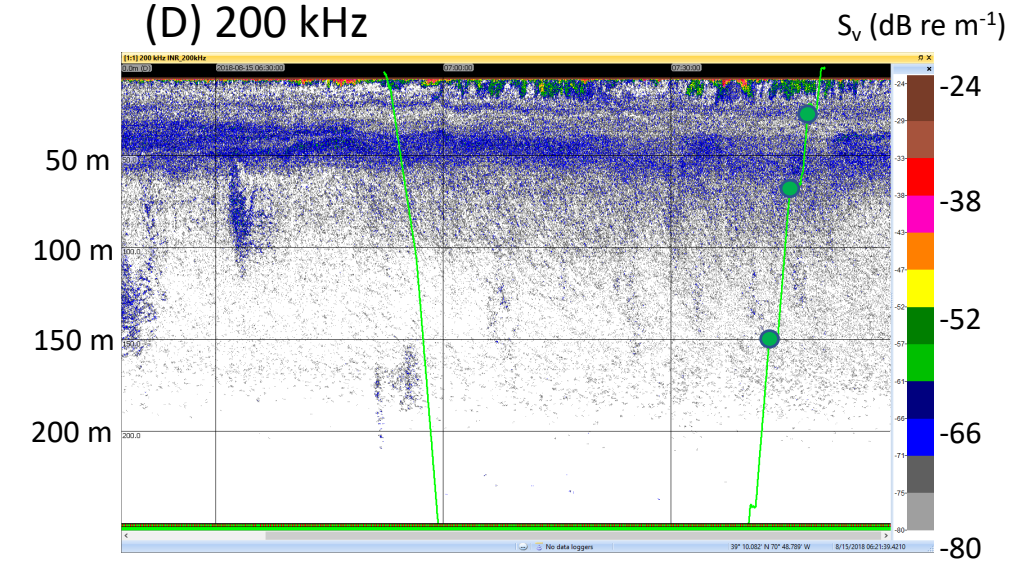
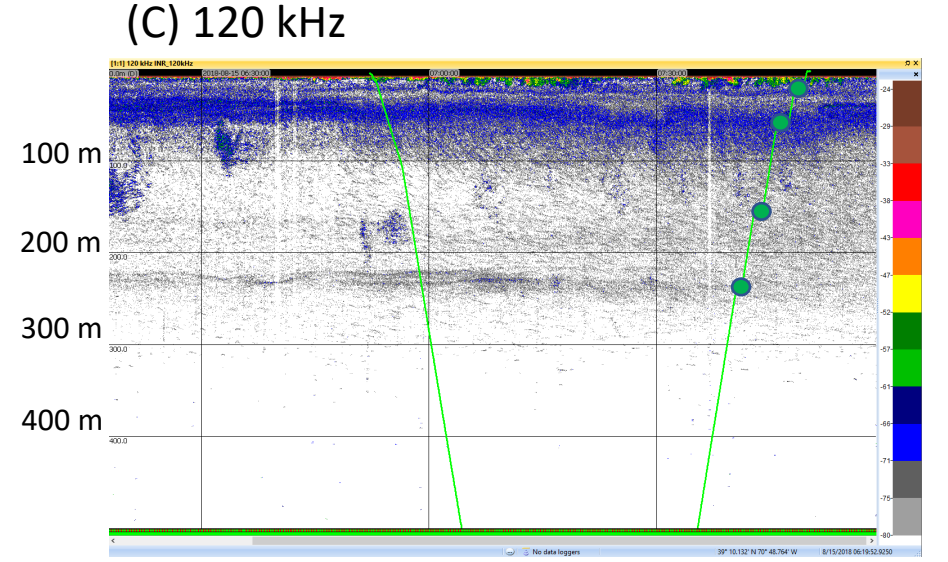
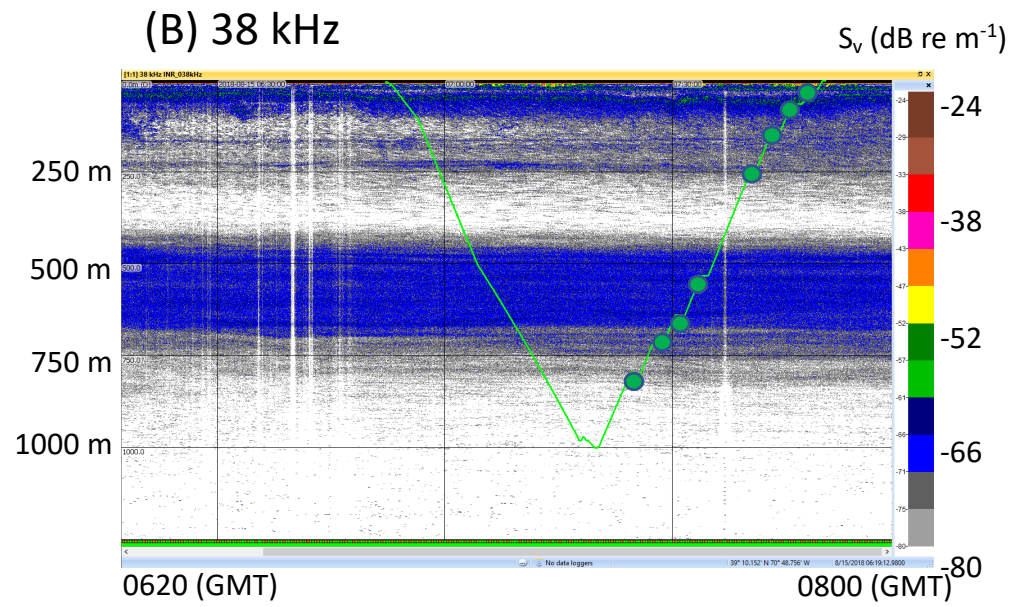
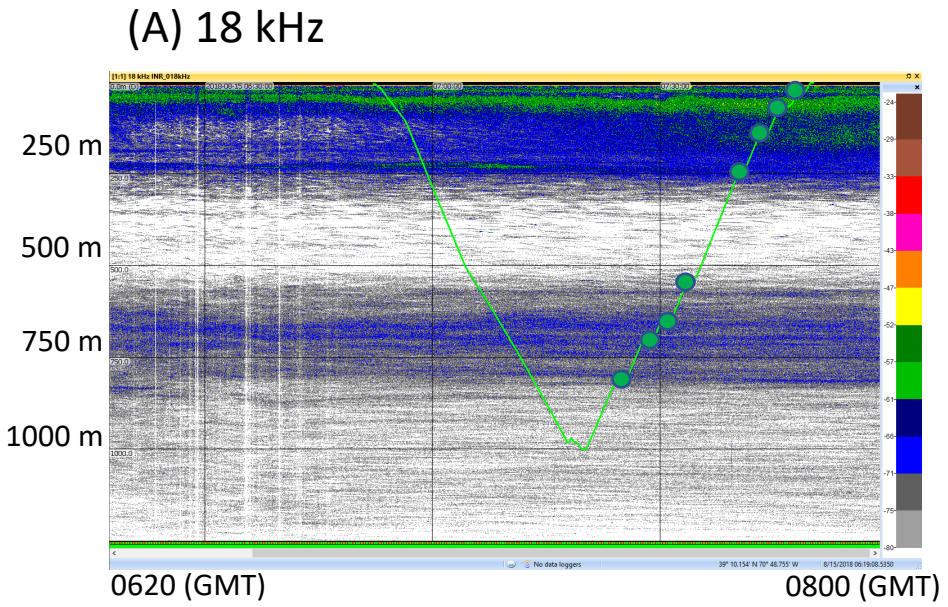


Figure S2. Echosounder images with noise reduction applied and the CTD track and sampling locations overlain in green. **(A)** 18 kHz; **(B)** 38 kHz; **(C)** 120 kHz; and **(D)** 200 kHz. These images are for Cast 7 on 15 August 2018. Time stamps (GMT) indicate the start and end of the echograms and vertical bars are at 30 minute intervals. Note change of vertical scale for the 120 kHz (500 m) and 200 kHz (250 m) echograms.

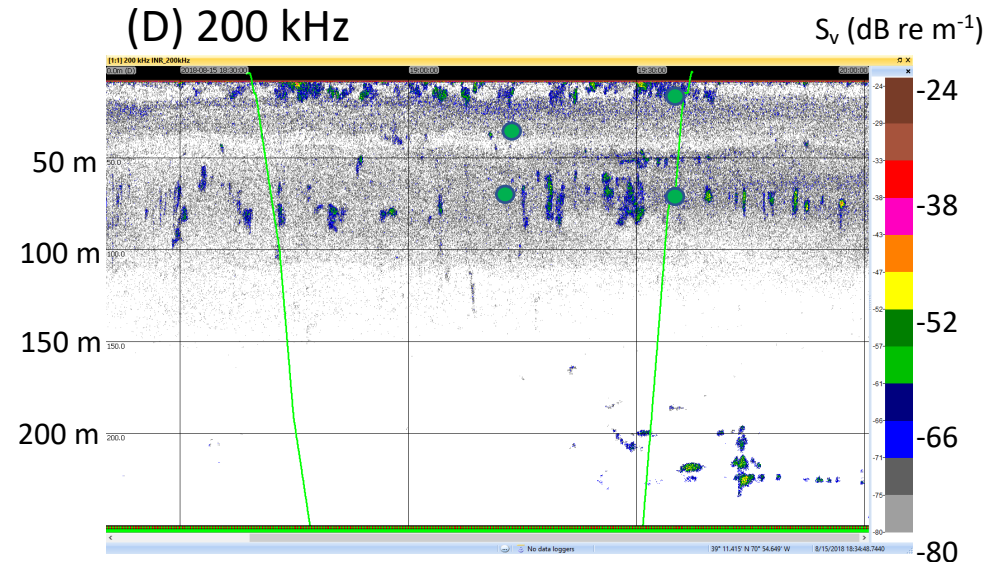
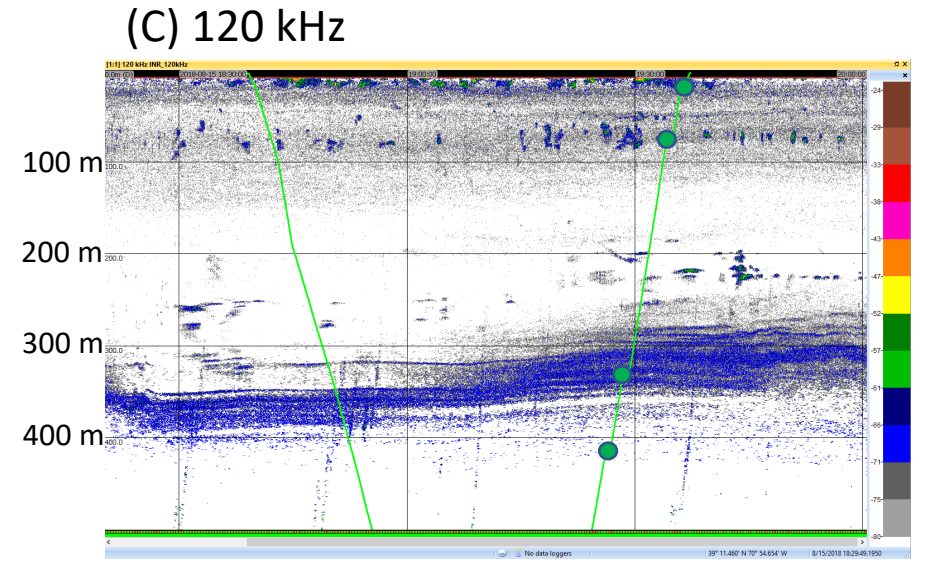
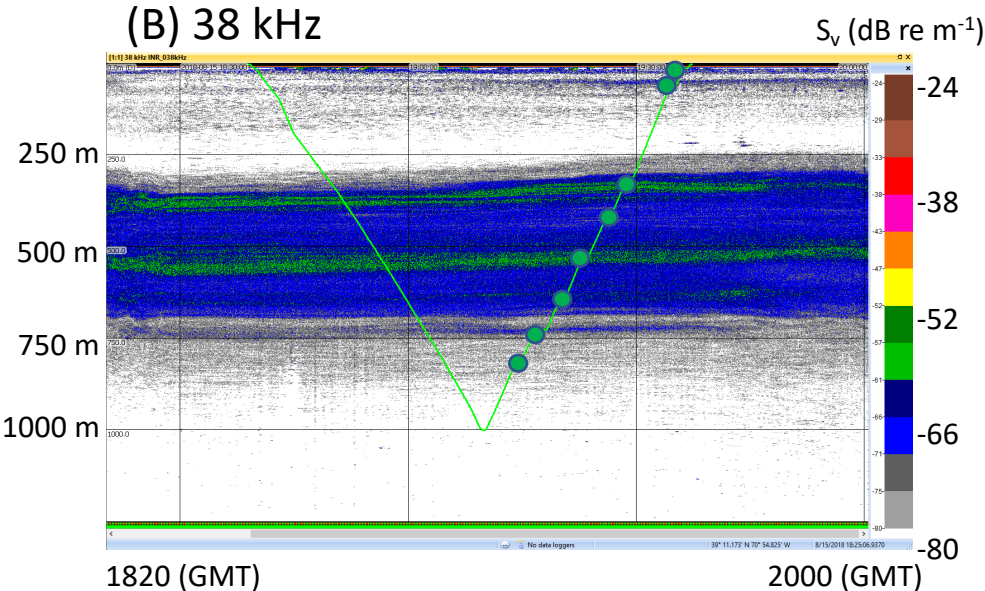
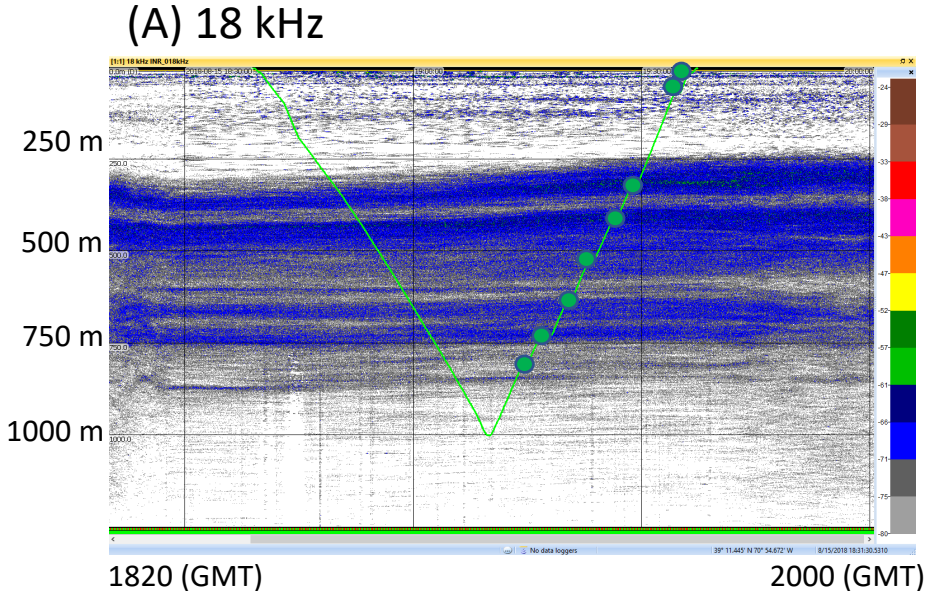


Figure S3. Echosounder images with noise reduction applied and the CTD track and sampling locations overlain in green. **(A)** 18 kHz; **(B)** 38 kHz; **(C)** 120 kHz; and **(D)** 200 kHz. These images are for Cast 9 on 16 August 2018. Time stamps (GMT) indicate the start and end of the echograms and vertical bars are at 30 minute intervals. Note change of vertical scale for the 120 kHz (500 m) and 200 kHz (250 m) echograms.

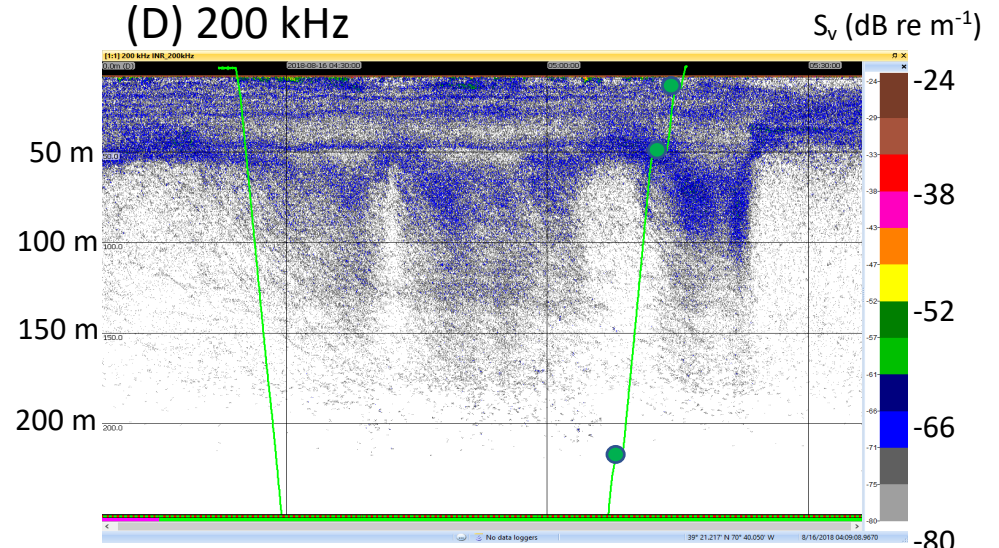
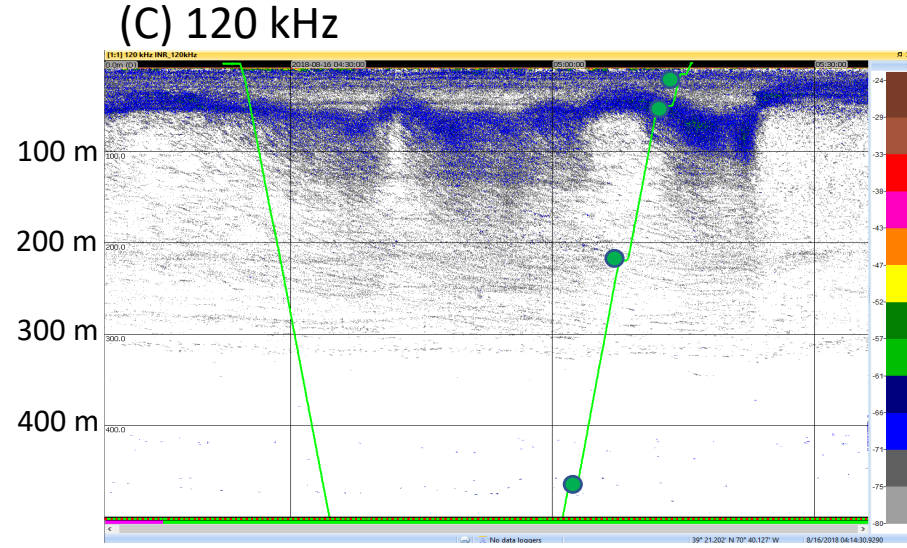
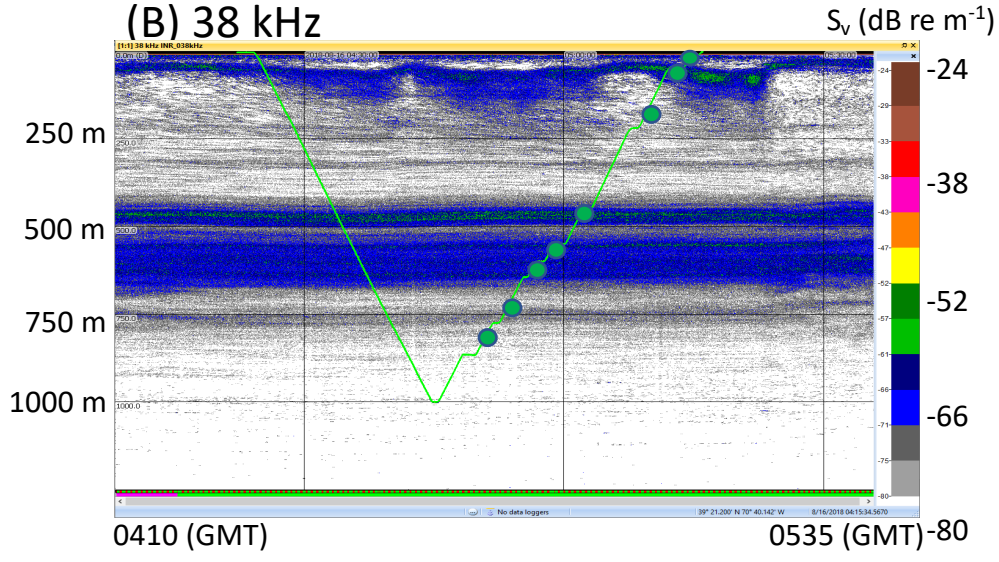
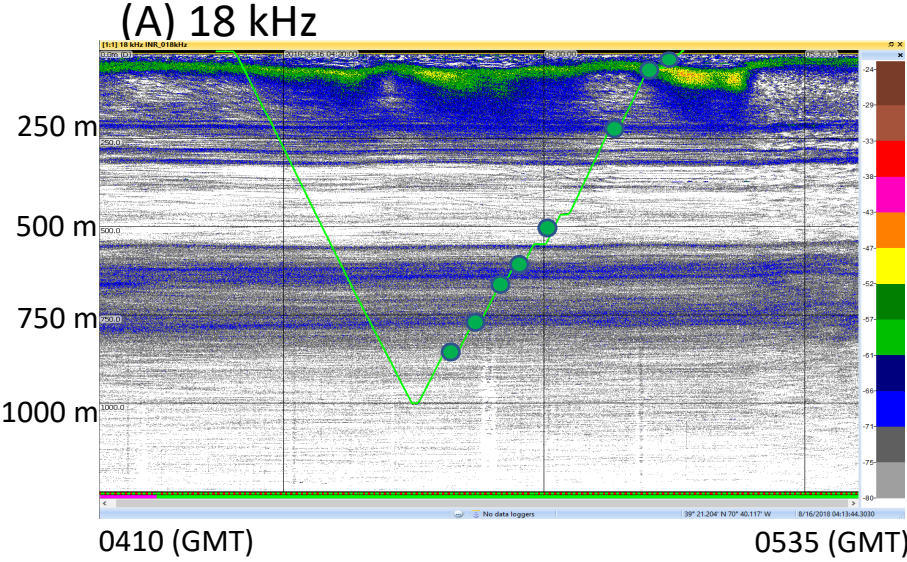


Figure S4. Echosounder images with noise reduction applied and the CTD track and sampling locations overlain in green. **(A)** 18 kHz; **(B)** 38 kHz; **(C)** 120 kHz; and **(D)** 200 kHz. These images are for Cast 10 on 19 August 2018. Time stamps (GMT) indicate the start and end of the echograms and vertical bars are at 30 minute intervals. Note change of vertical scale for the 120 kHz (500 m) and 200 kHz (250 m) echograms.

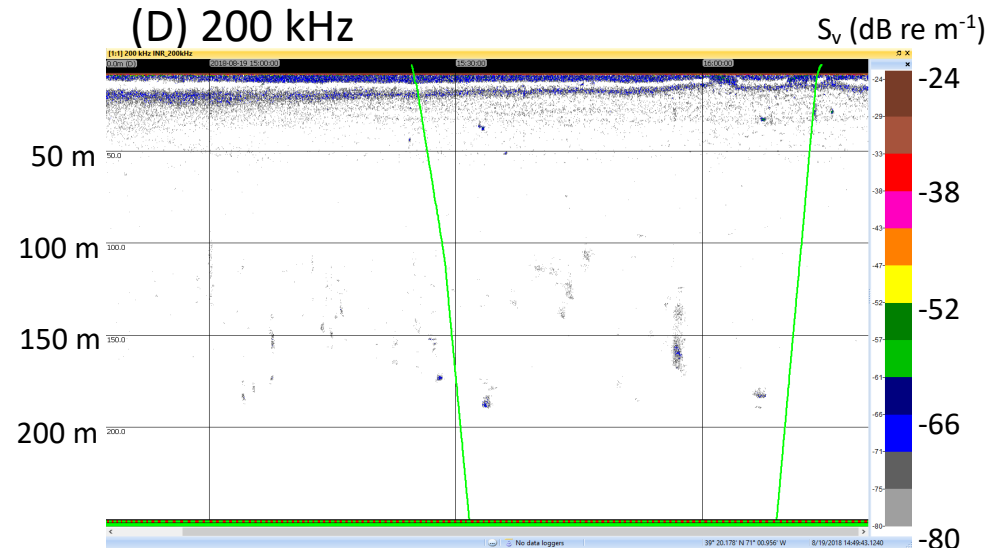
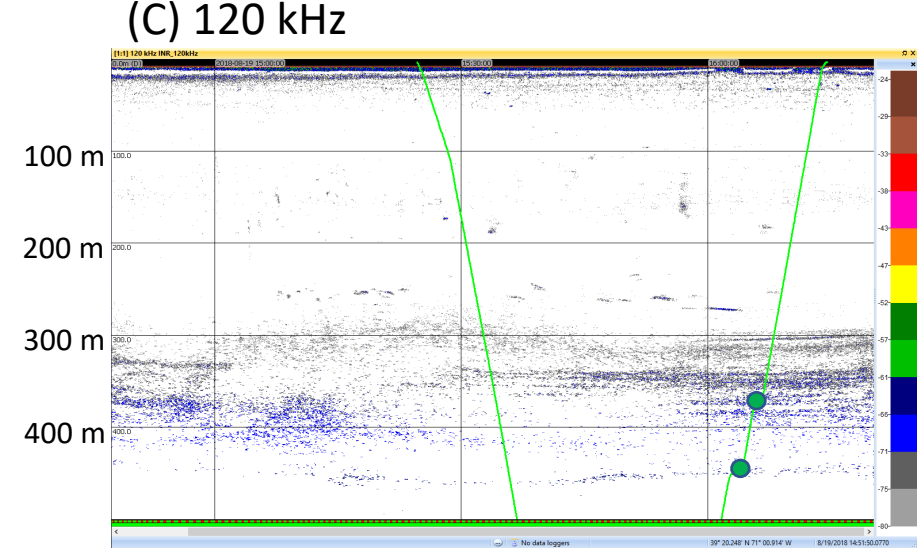
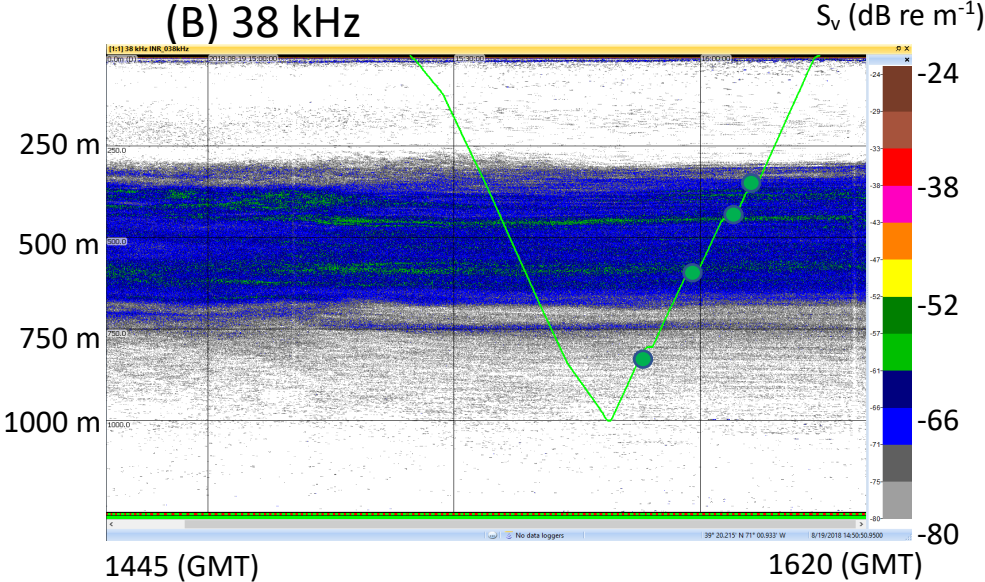
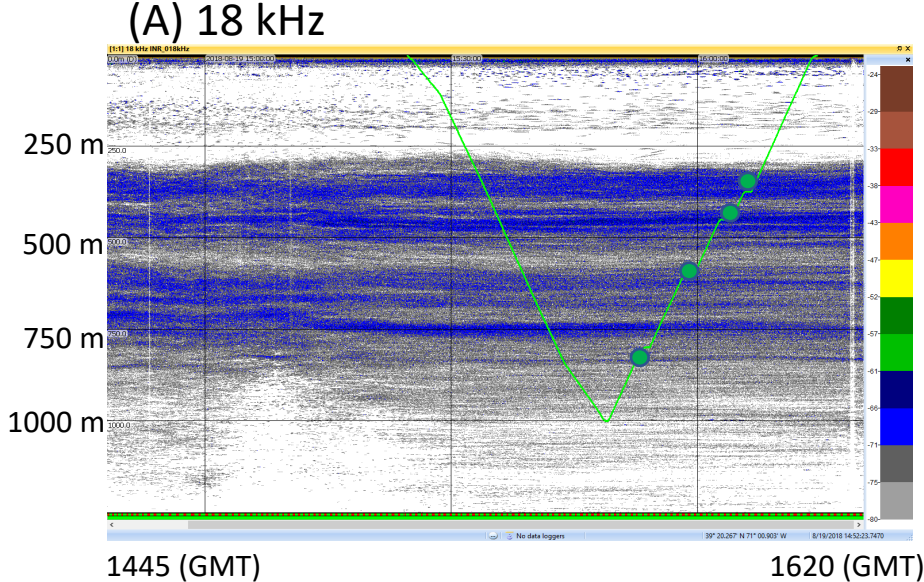


Figure S5. Temperature, salinity, density, and dissolved oxygen (DO) vs depth for (A) Cast 5; (B) Cast 6; (C) Cast 7; (D) Cast 9; (E) Cast 10.

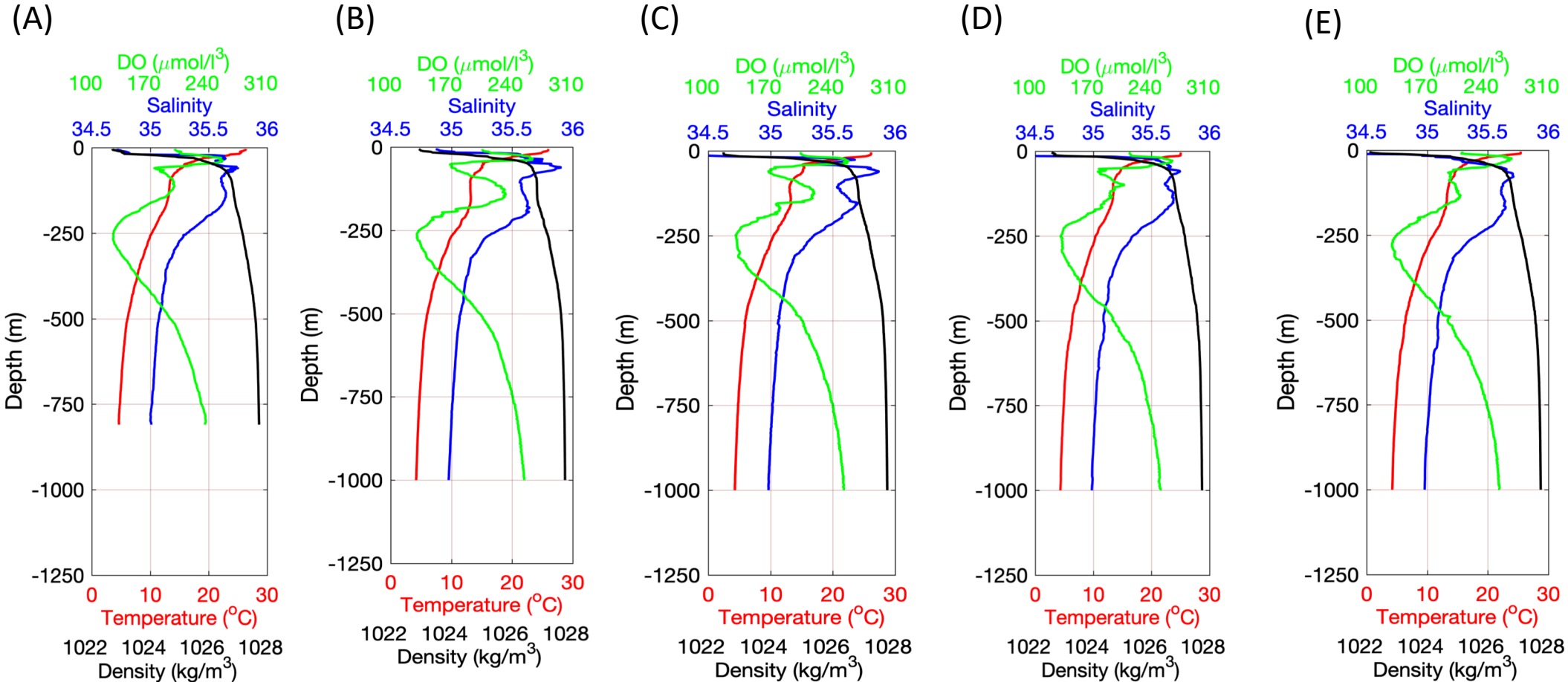


Figure S6. Temperature, salinity, density, and dissolved oxygen (DO) vs depth for (A) Cast 5; (B) Cast 6; (C) Cast 7; (D) Cast 9; (E) Cast 10.

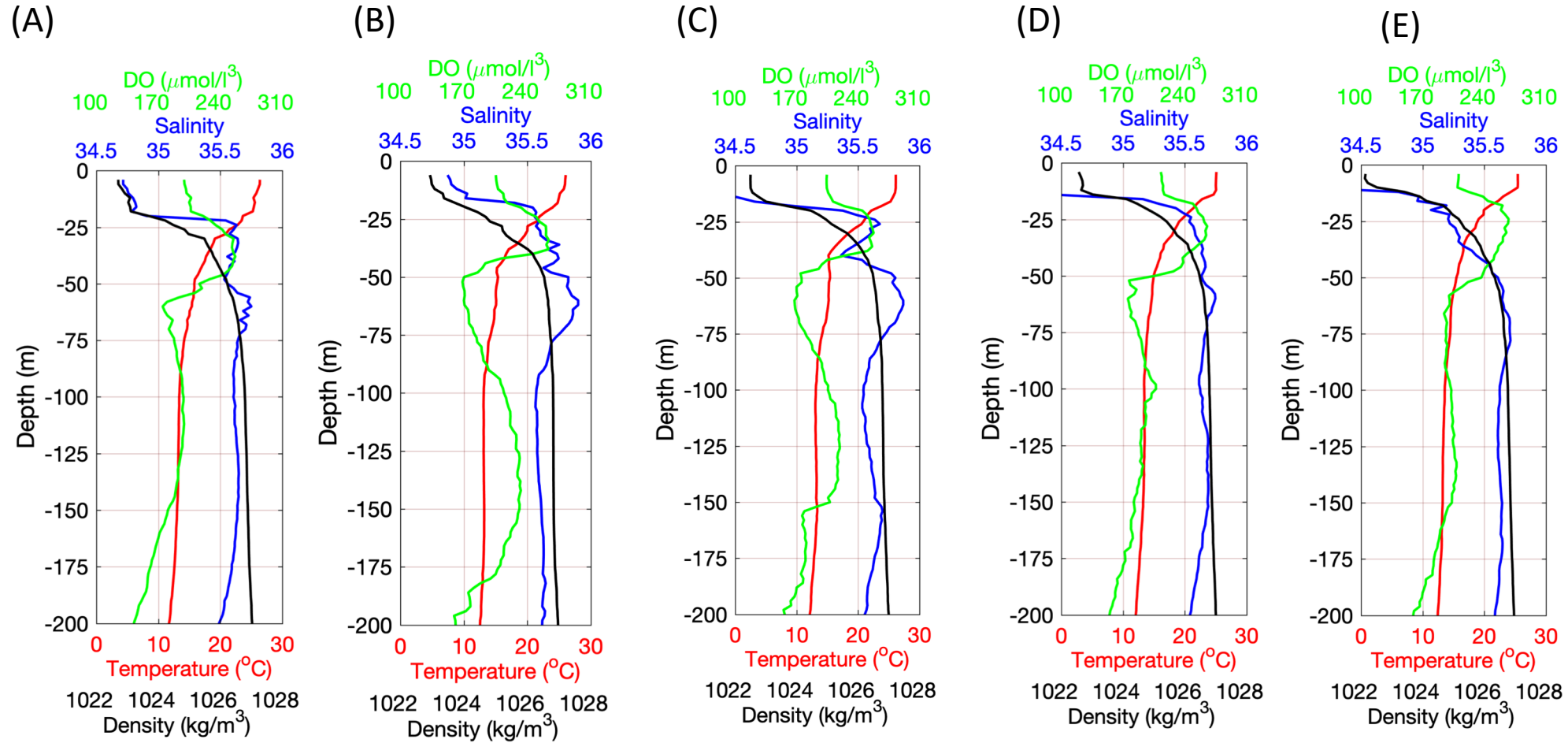
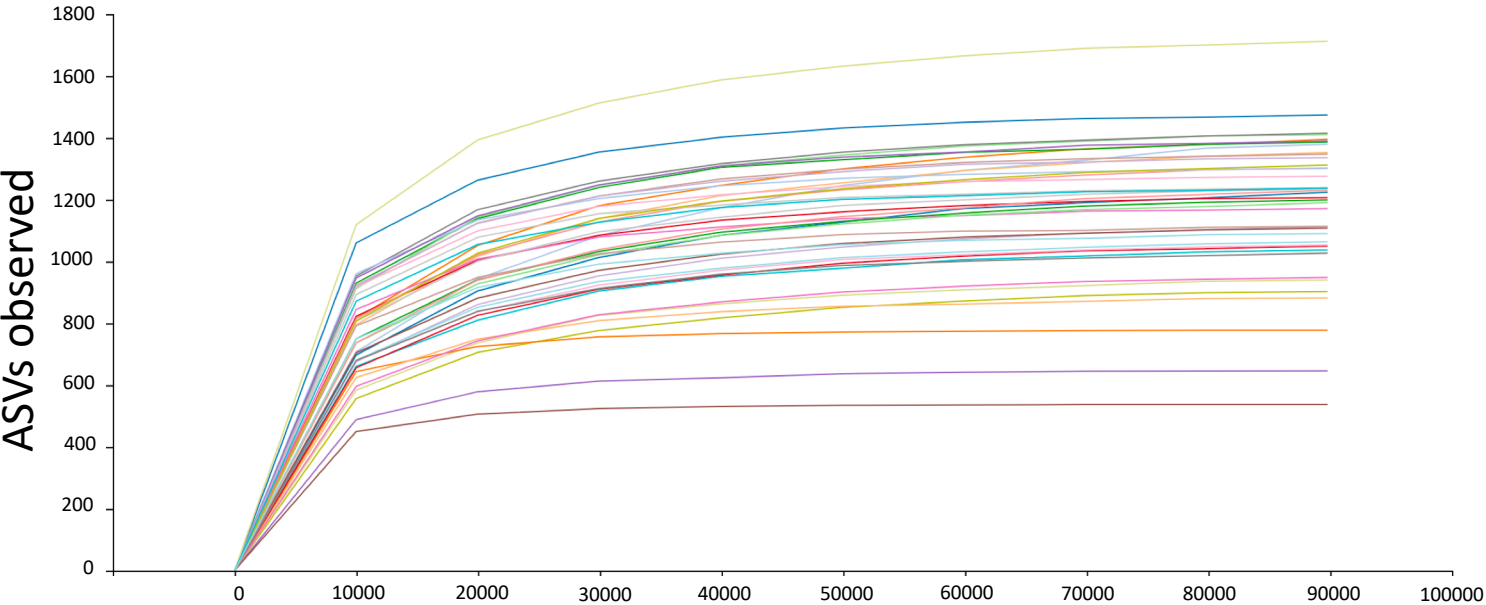


Figure S7. Rarefaction curves (ASVs vs sequencing depth) for eDNA samples. **(A)** all sequences, truncated at 89,792 sequences; **(B)** metazoan sequences only, truncated at 4995 sequences.

(A)



(B)

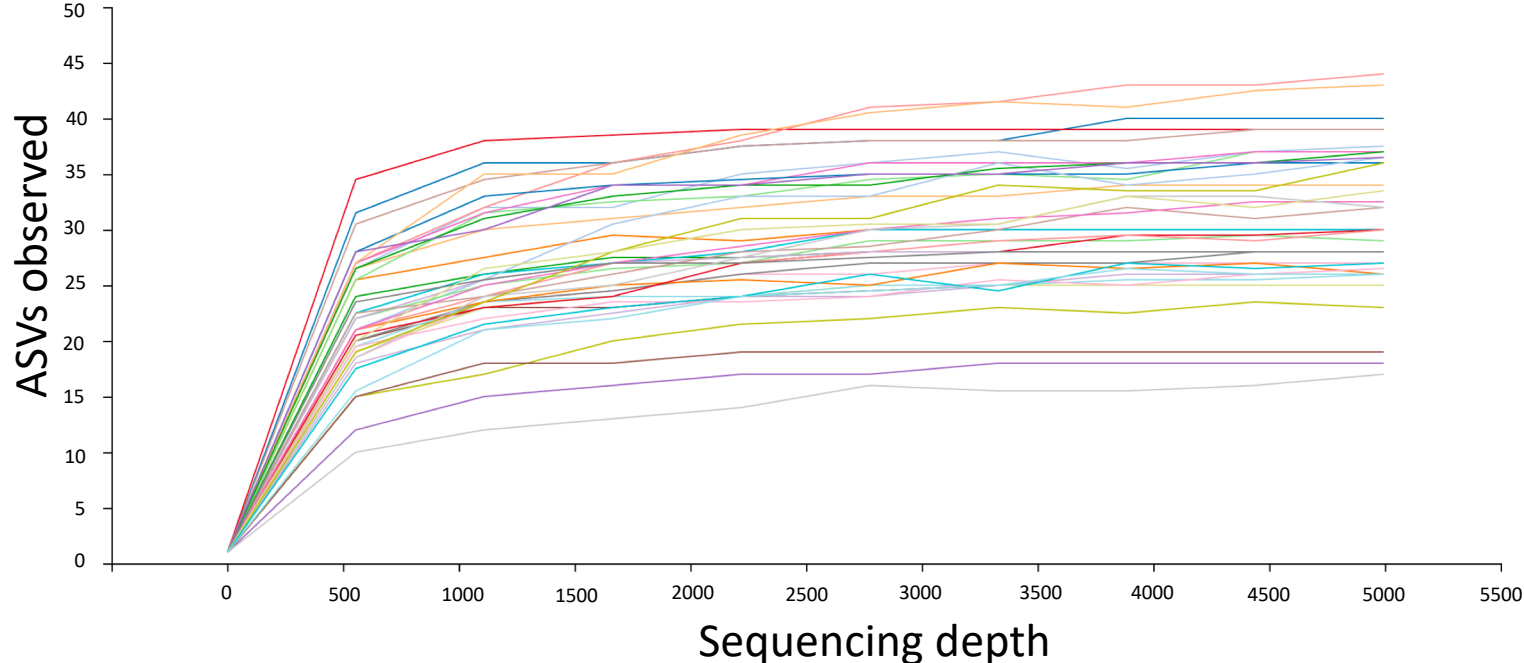


Figure S8. Rarefaction curves for MOCNESS samples. **(A)** all sequences, truncated at 151,495 sequences; **(B)** metazoan sequences only truncated at 142,296 sequences.

