Supplement of

Sinking fate and carbon export of zooplankton fecal pellets: insights from time-series sediment trap observation in the northern South China Sea

Hanxiao Wang et al.

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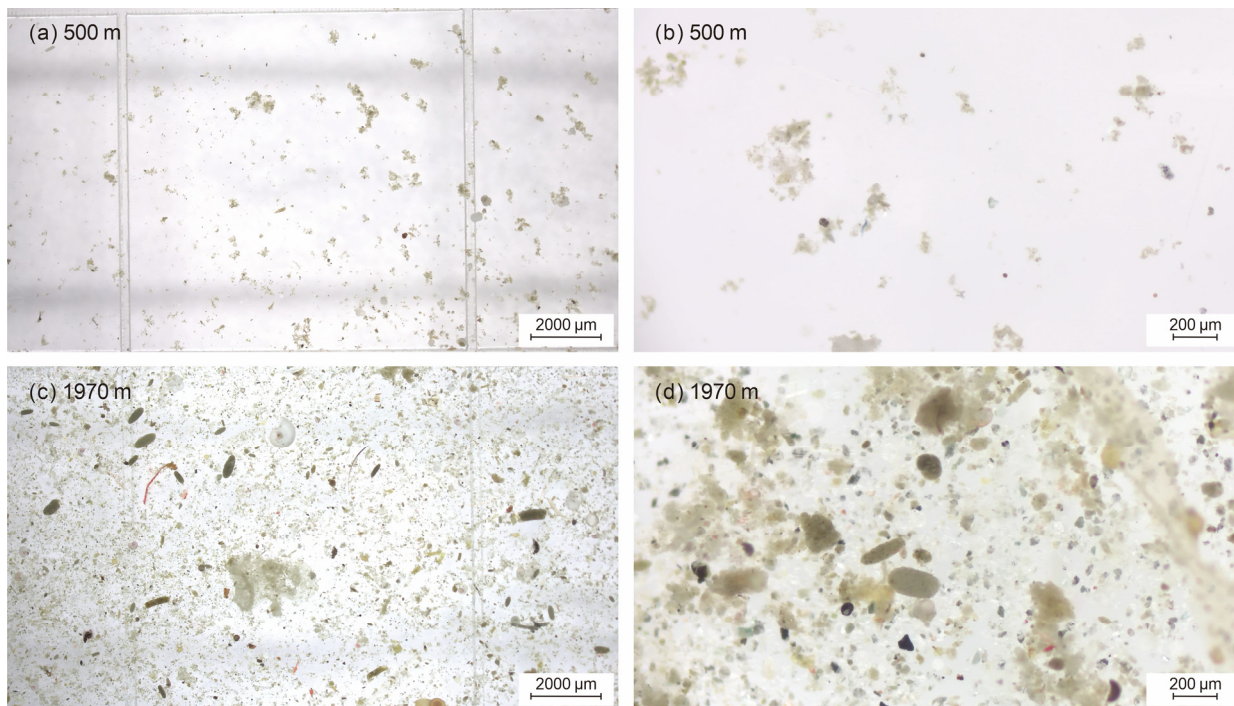
Figure S1. Zooplankton fecal pellets of Samples TJ-A1B21-UP01 and DW01 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/2; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/2.
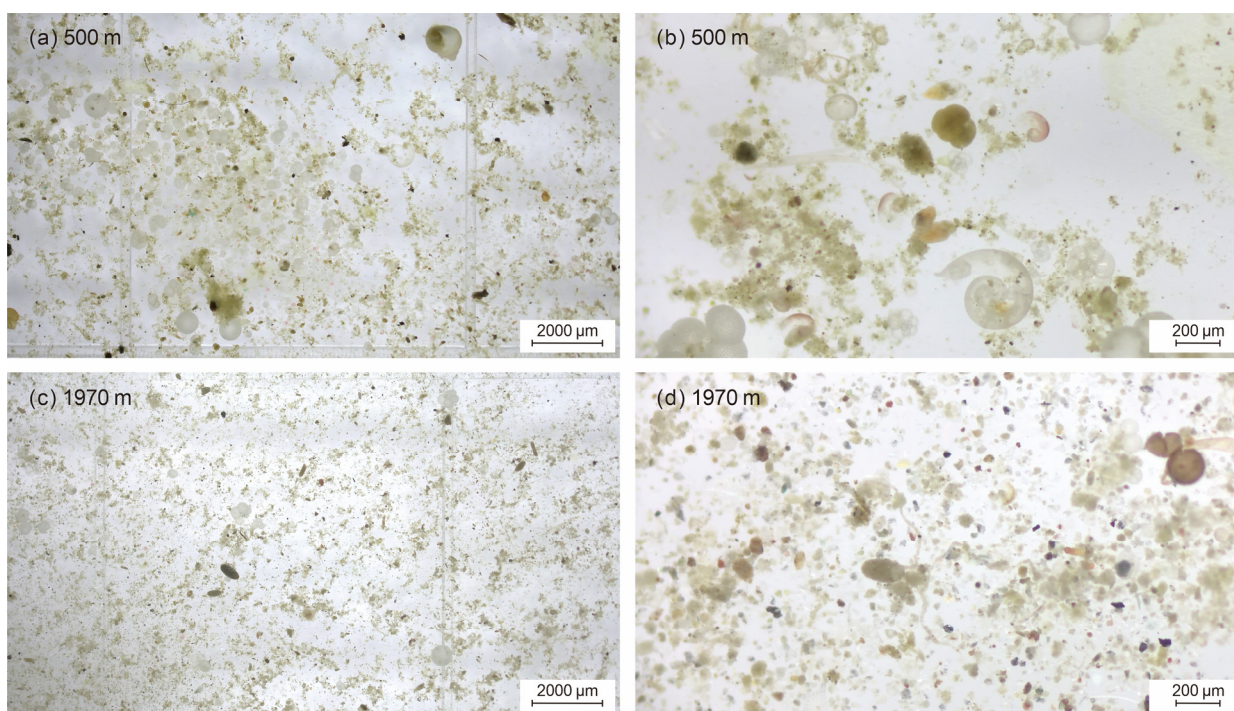
Figure S2. Zooplankton fecal pellets of Samples TJ-A1B21-UP02 and DW02 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/2; (b) pellets at 50X magnification at 500 m, sample fraction: 1/2; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
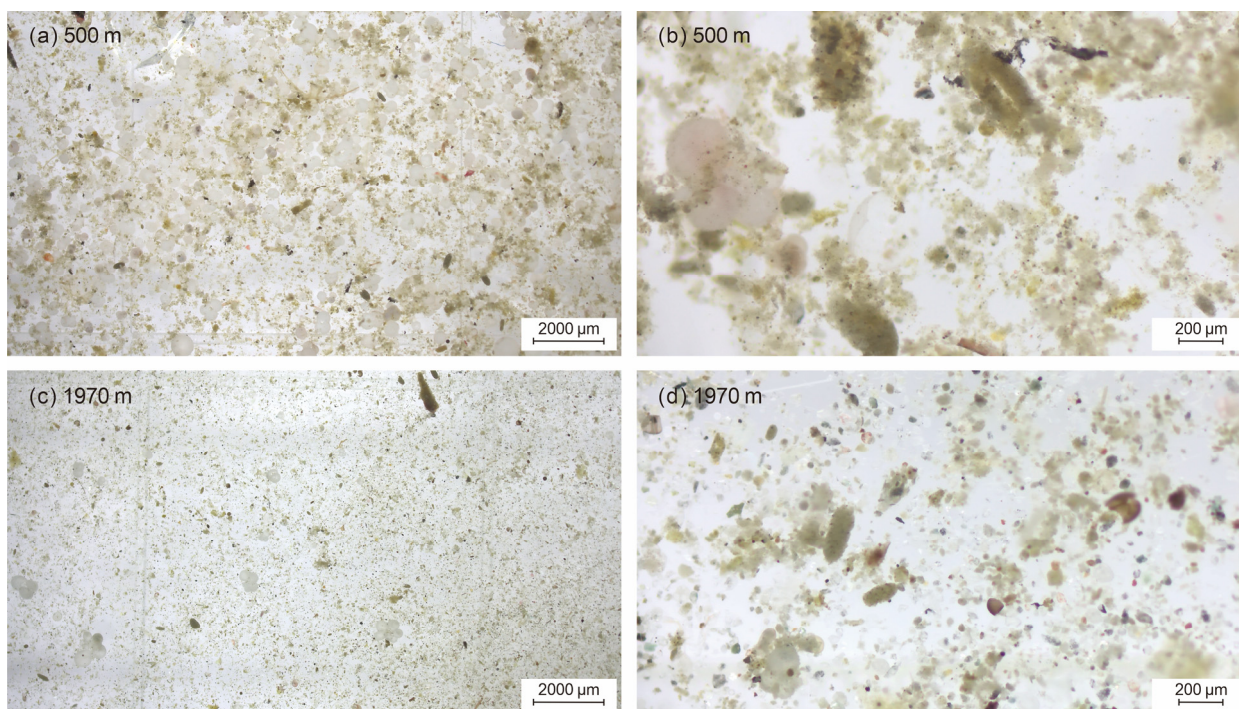
Figure S3. Zooplankton fecal pellets of Samples TJ-A1B21-UP03 and DW03 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/2; (b) pellets at 50X magnification at 500 m, sample fraction: 1/2; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
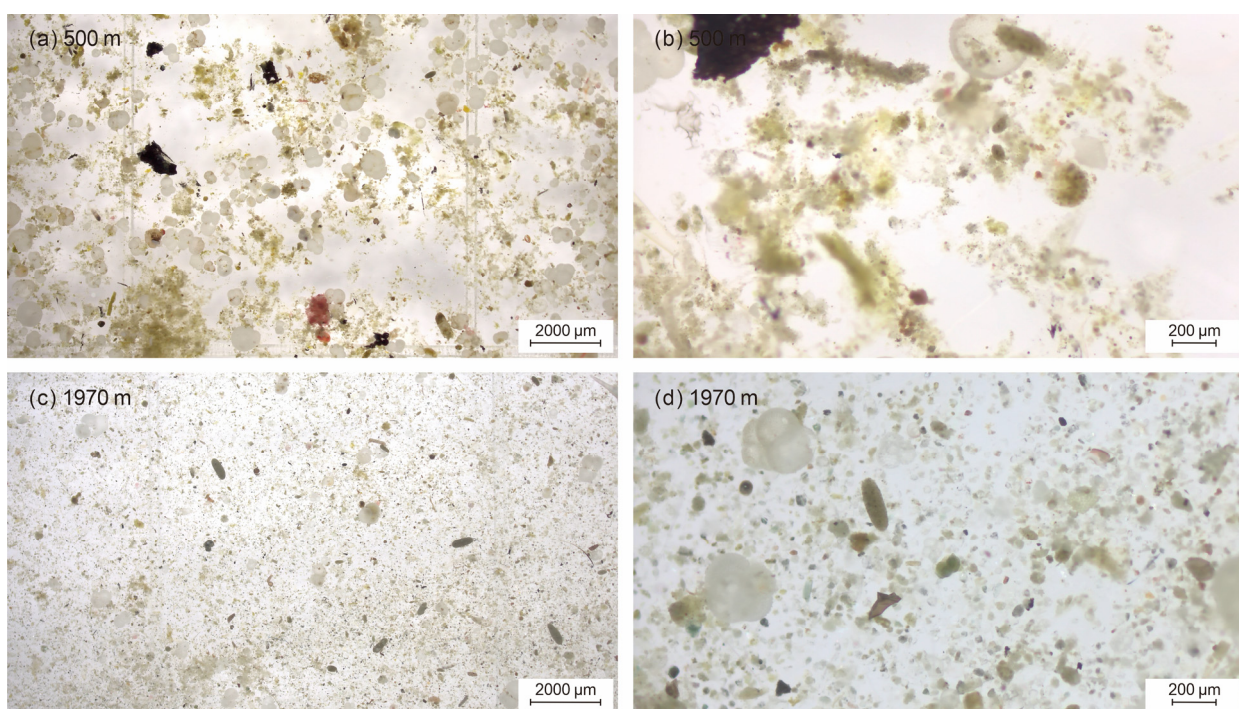
Figure S4. Zooplankton fecal pellets of Samples TJ-A1B21-UP04 and DW04 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/2; (b) pellets at 50X magnification at 500 m, sample fraction: 1/2; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/8; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/8.
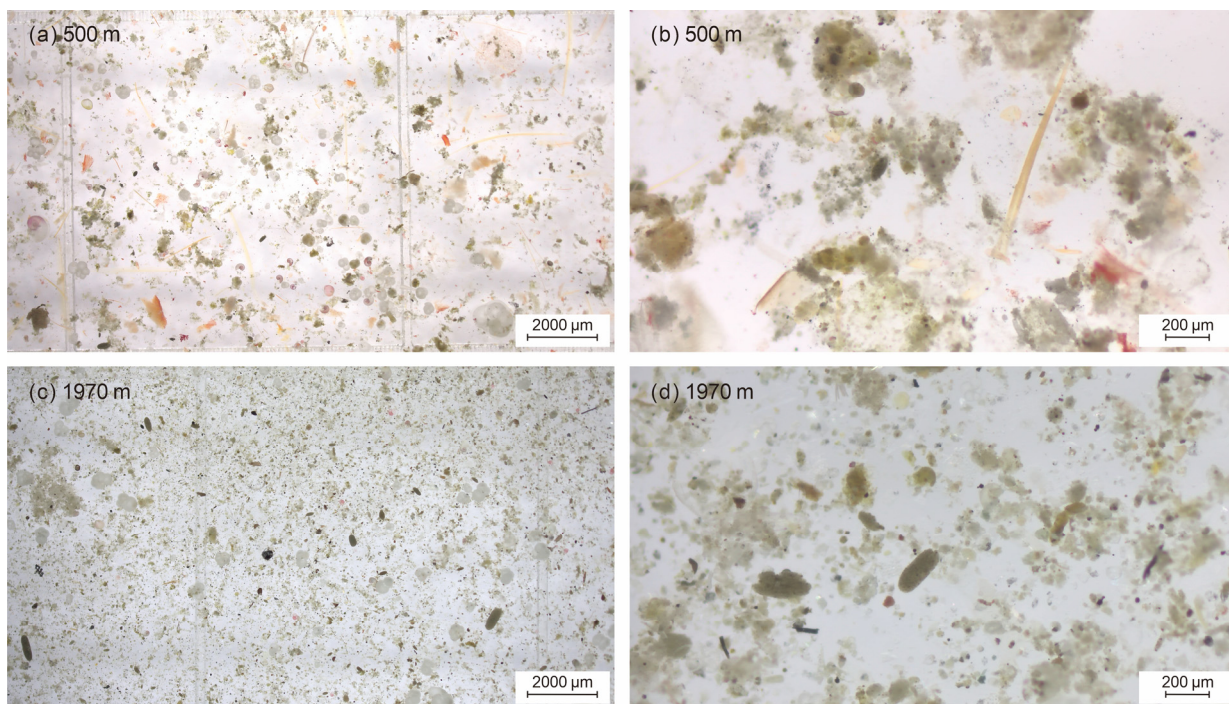
Figure S5. Zooplankton fecal pellets of Samples TJ-A1B21-UP05 and DW05 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
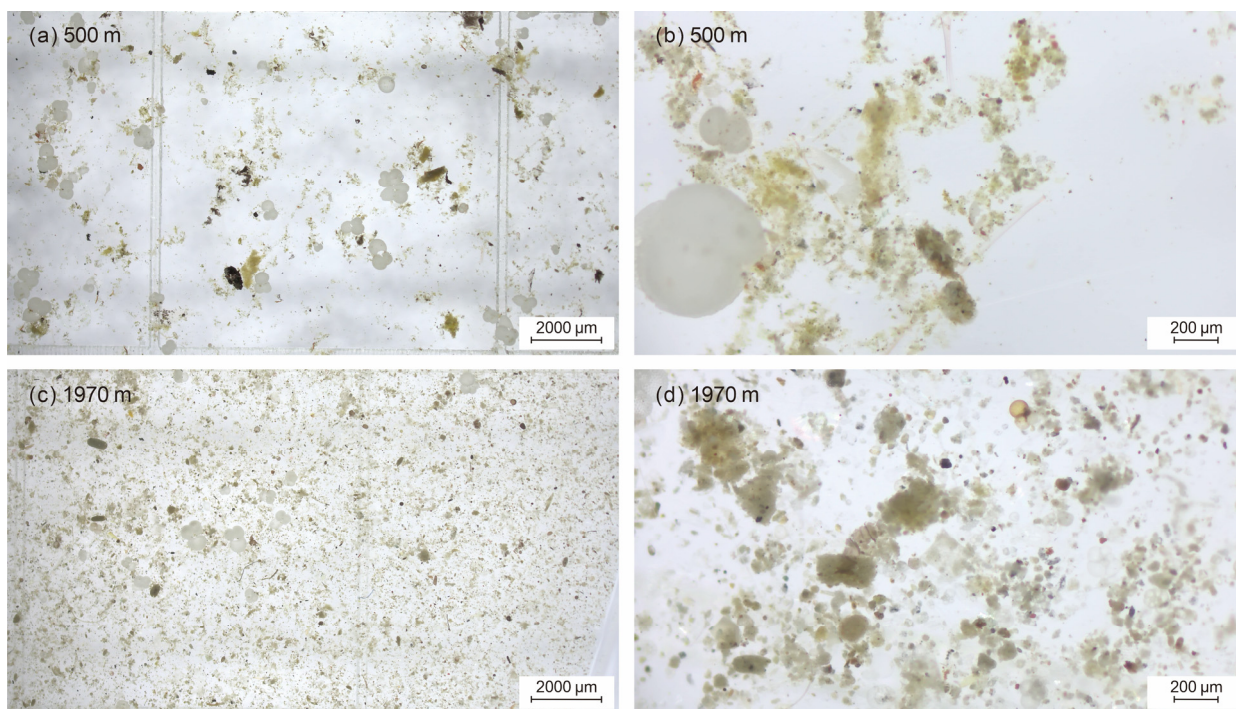
Figure S6. Zooplankton fecal pellets of Samples TJ-A1B21-UP06 and DW06 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
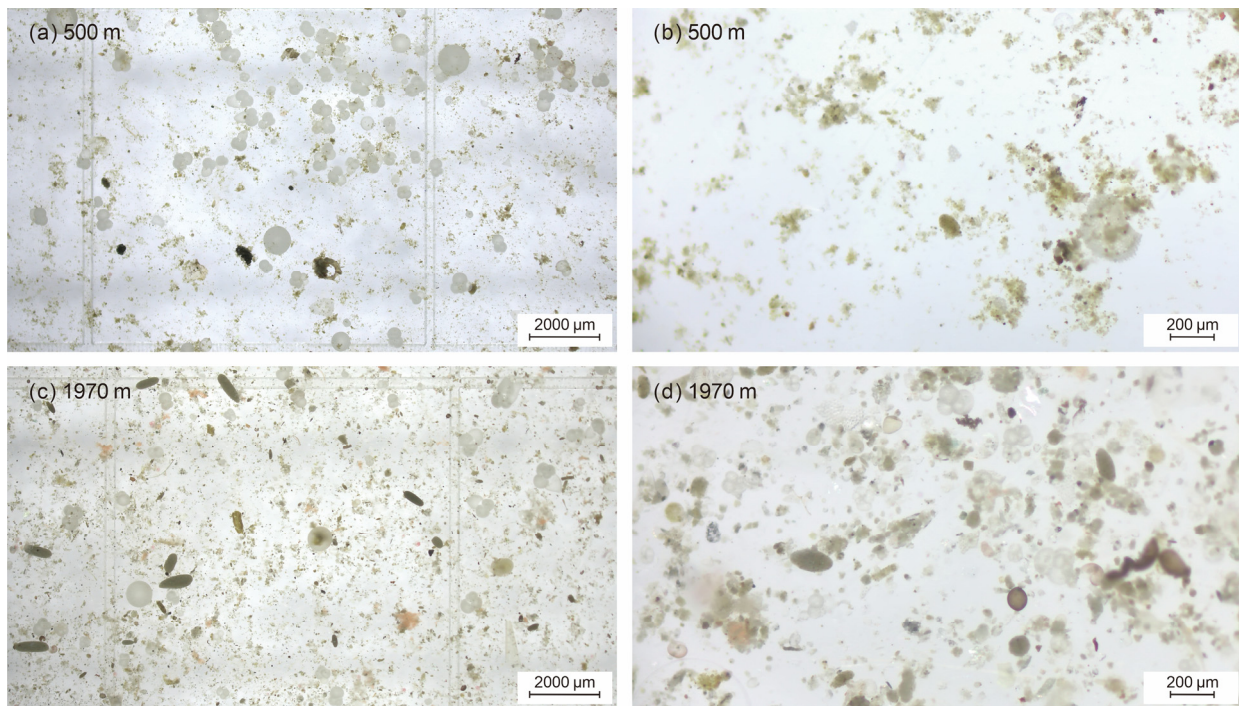
Figure S7. Zooplankton fecal pellets of Samples TJ-A1B21-UP07 and DW07 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
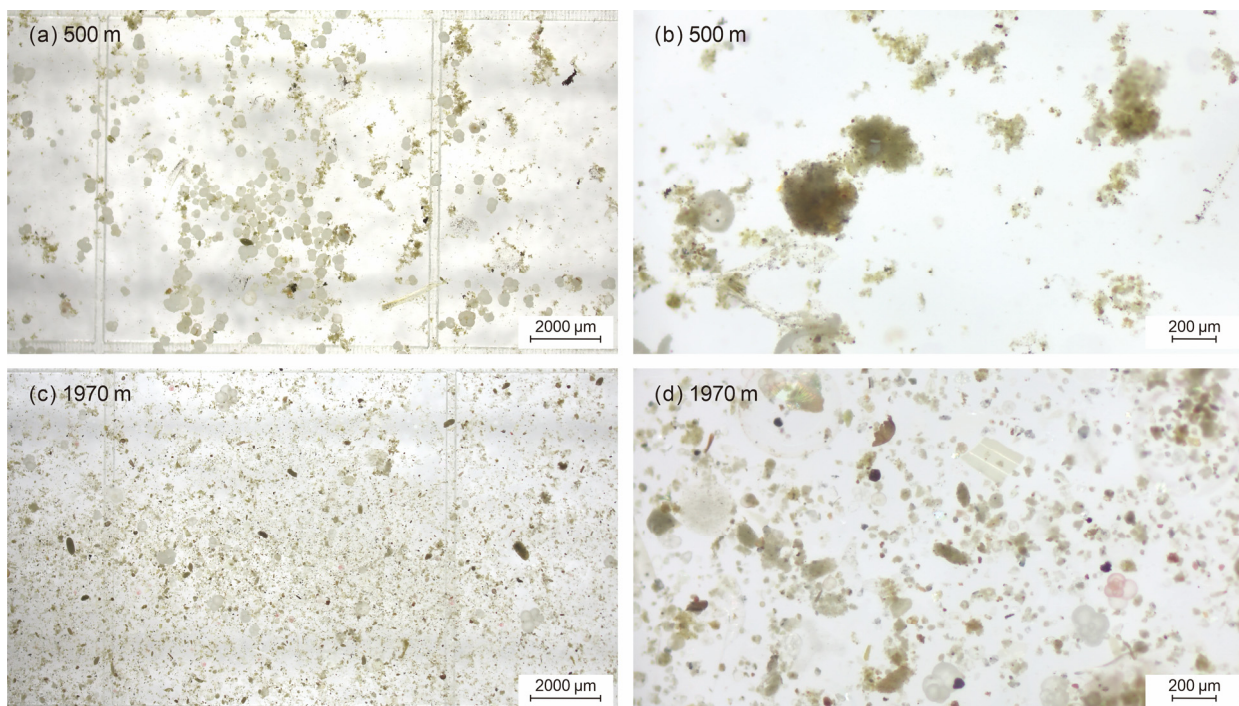
Figure S8. Zooplankton fecal pellets of Samples TJ-A1B21-UP08 and DW08 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
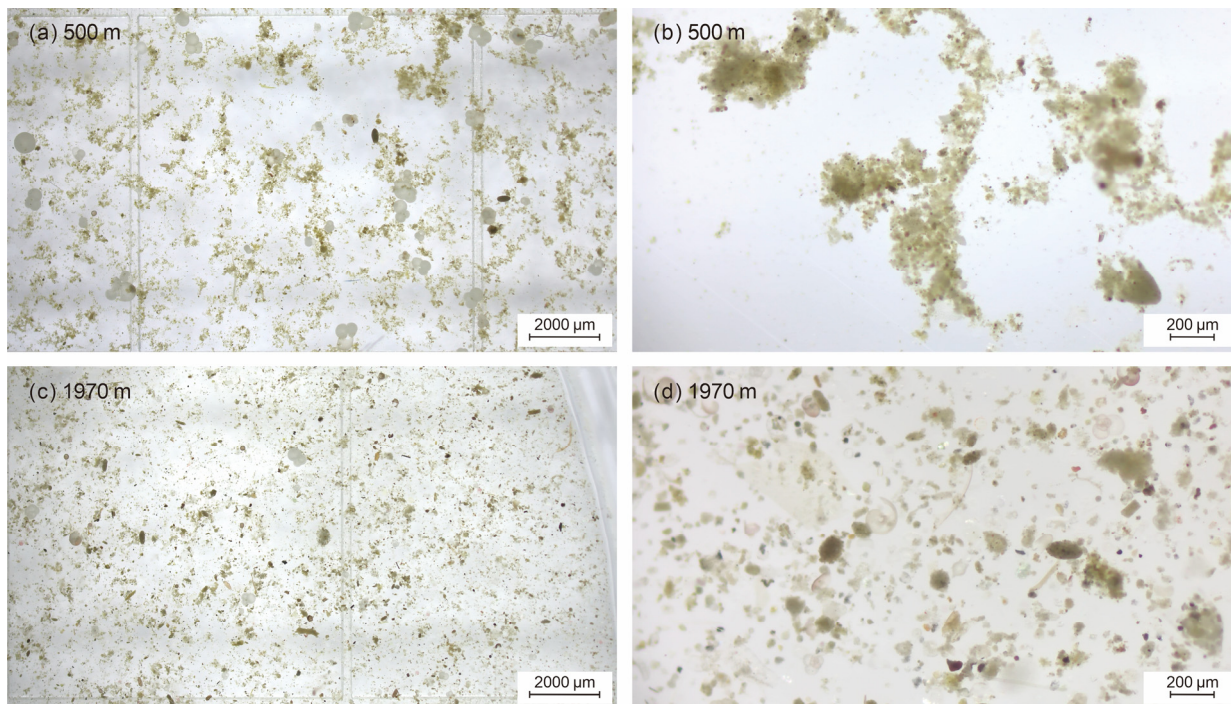
Figure S9. Zooplankton fecal pellets of Samples TJ-A1B21-UP09 and DW09 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
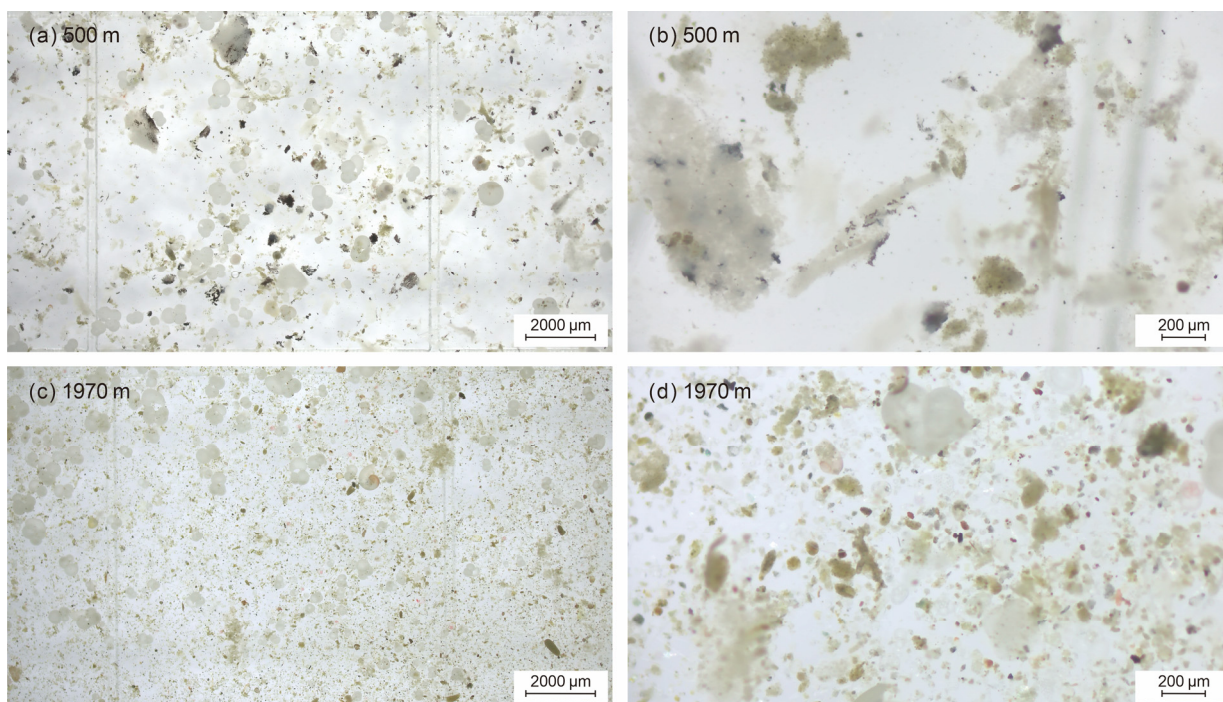
Figure S10. Zooplankton fecal pellets of Samples TJ-A1B21-UP10 and DW10 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/2; (b) pellets at 50X magnification at 500 m, sample fraction: 1/2; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/2; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/2.
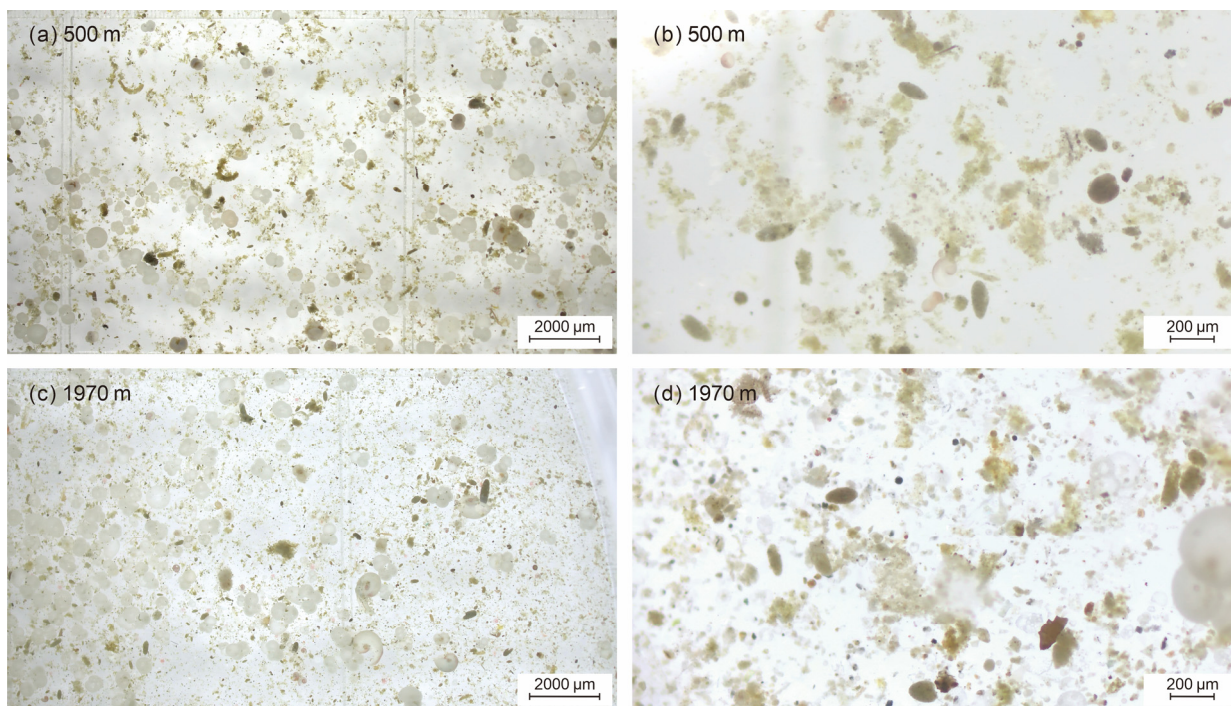
Figure S11. Zooplankton fecal pellets of Samples TJ-A1B21-UP11 and DW11 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/2; (b) pellets at 50X magnification at 500 m, sample fraction: 1/2; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/2; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/2.
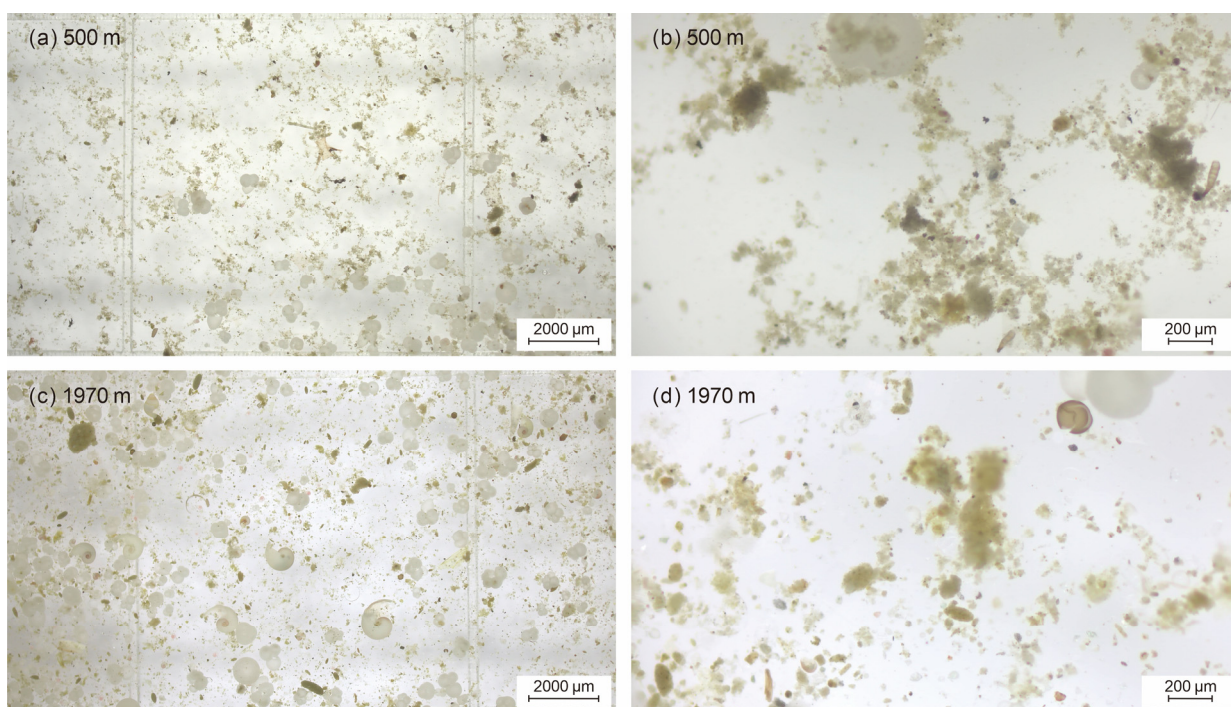
Figure S12. Zooplankton fecal pellets of Samples TJ-A1B21-UP12 and DW12 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
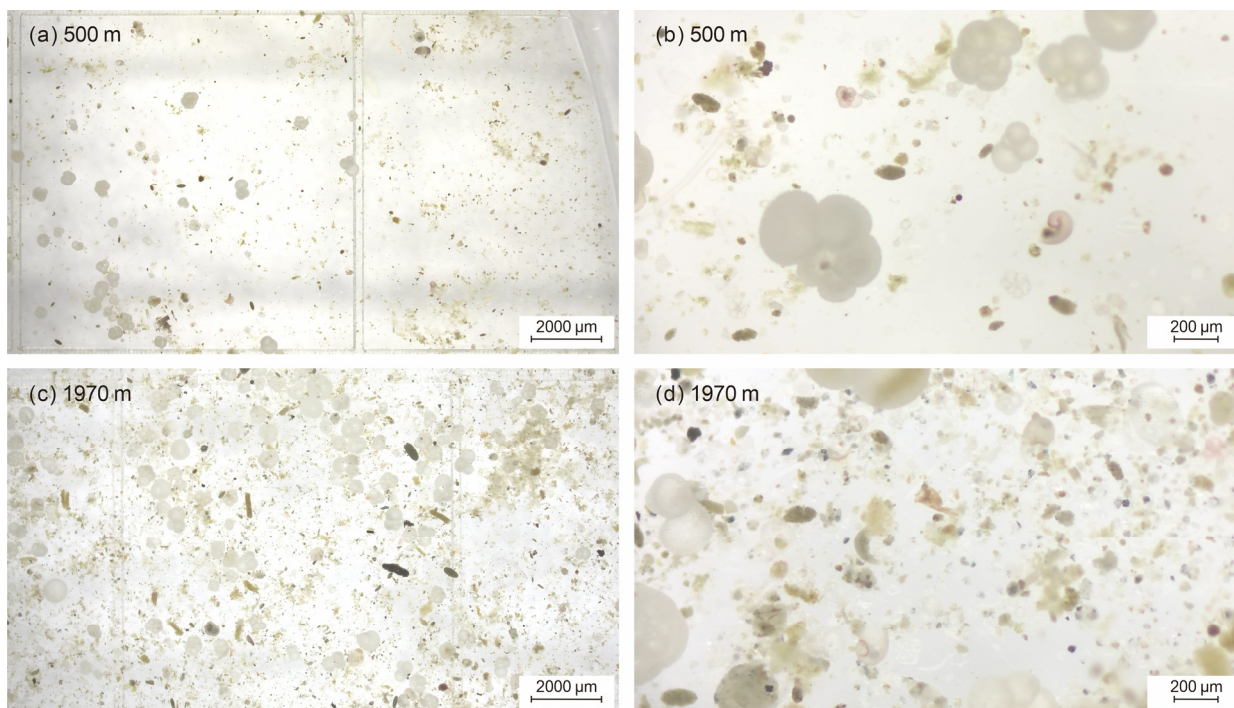
Figure S13. Zooplankton fecal pellets of Samples TJ-A1B21-UP13 and DW13 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/8; (b) pellets at 50X magnification at 500 m, sample fraction: 1/8; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
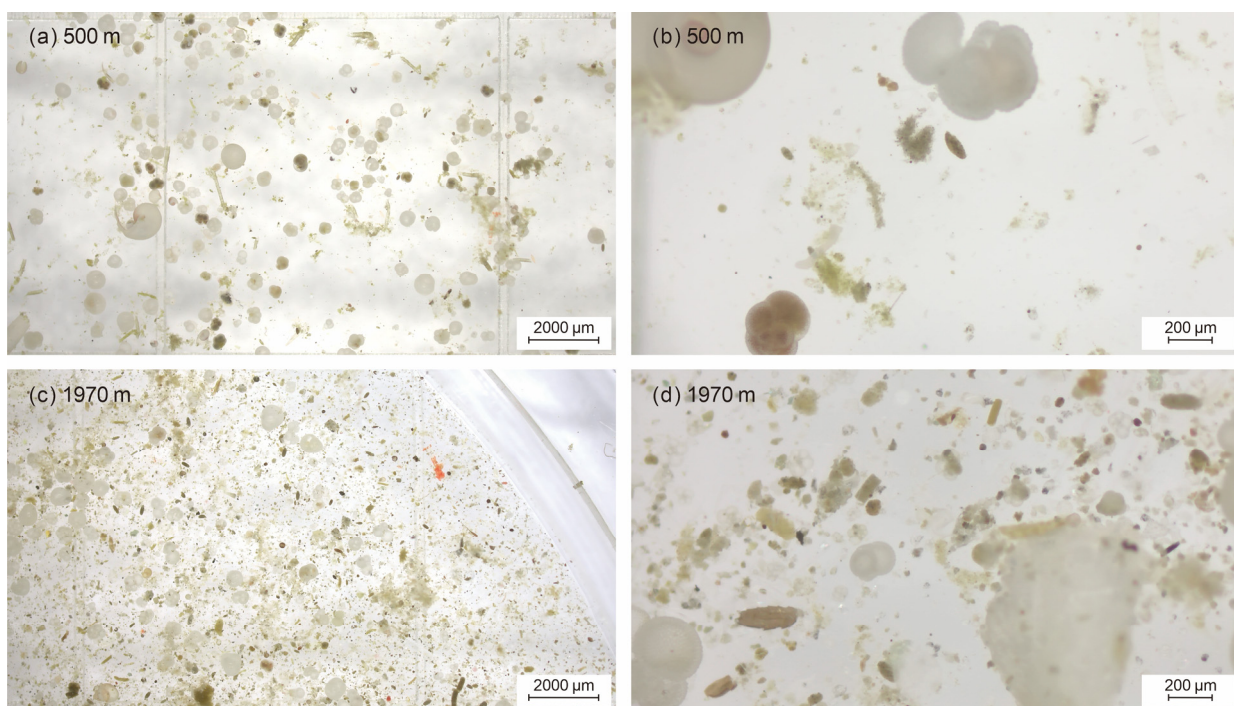
Figure S14. Zooplankton fecal pellets of Samples TJ-A1B21-UP14 and DW14 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/8; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/8.
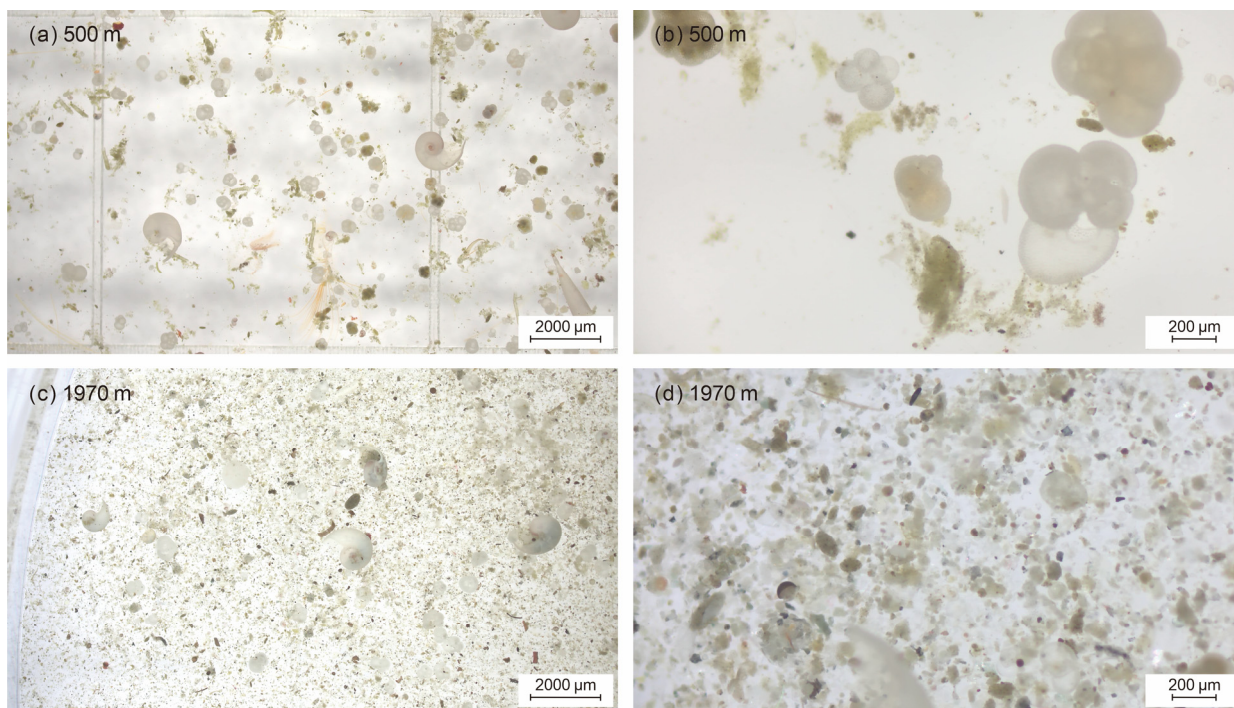
Figure S15. Zooplankton fecal pellets of Samples TJ-A1B21-UP15 and DW15 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 2/16; (d) pellets at 50X magnification at 1970 m, sample fraction: 2/16.
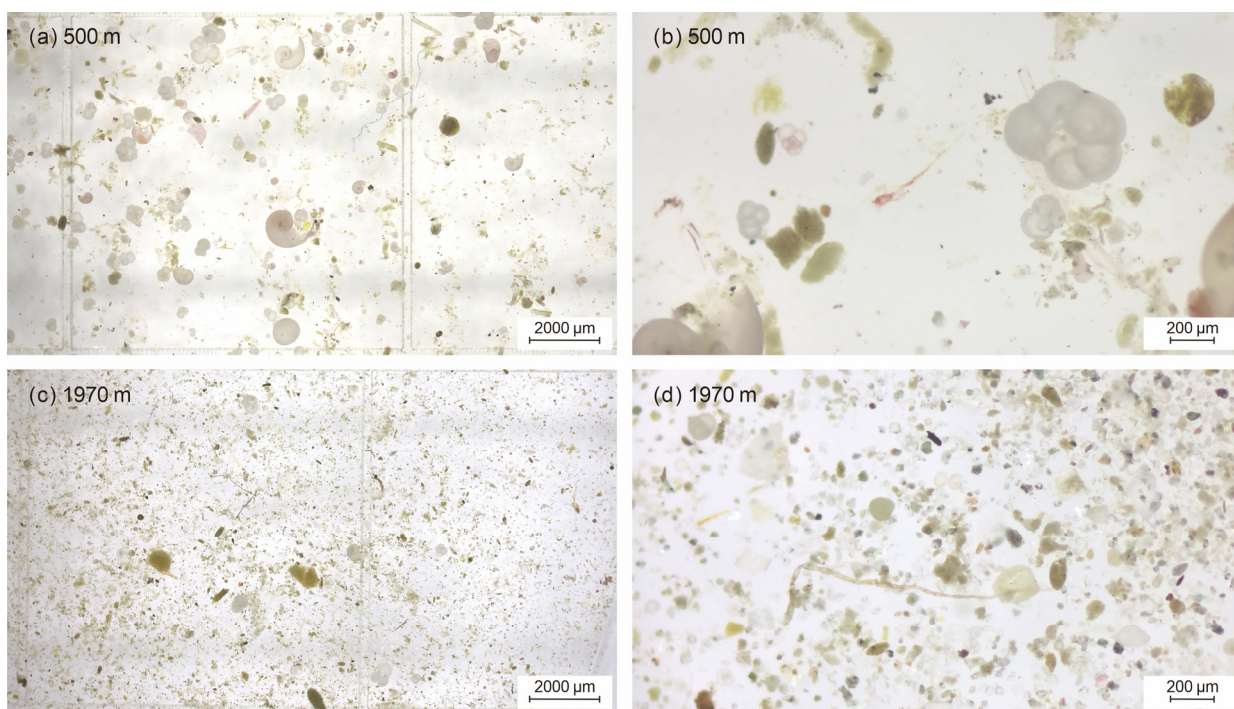
Figure S16. Zooplankton fecal pellets of Samples TJ-A1B21-UP16 and DW16 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/8; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/8.
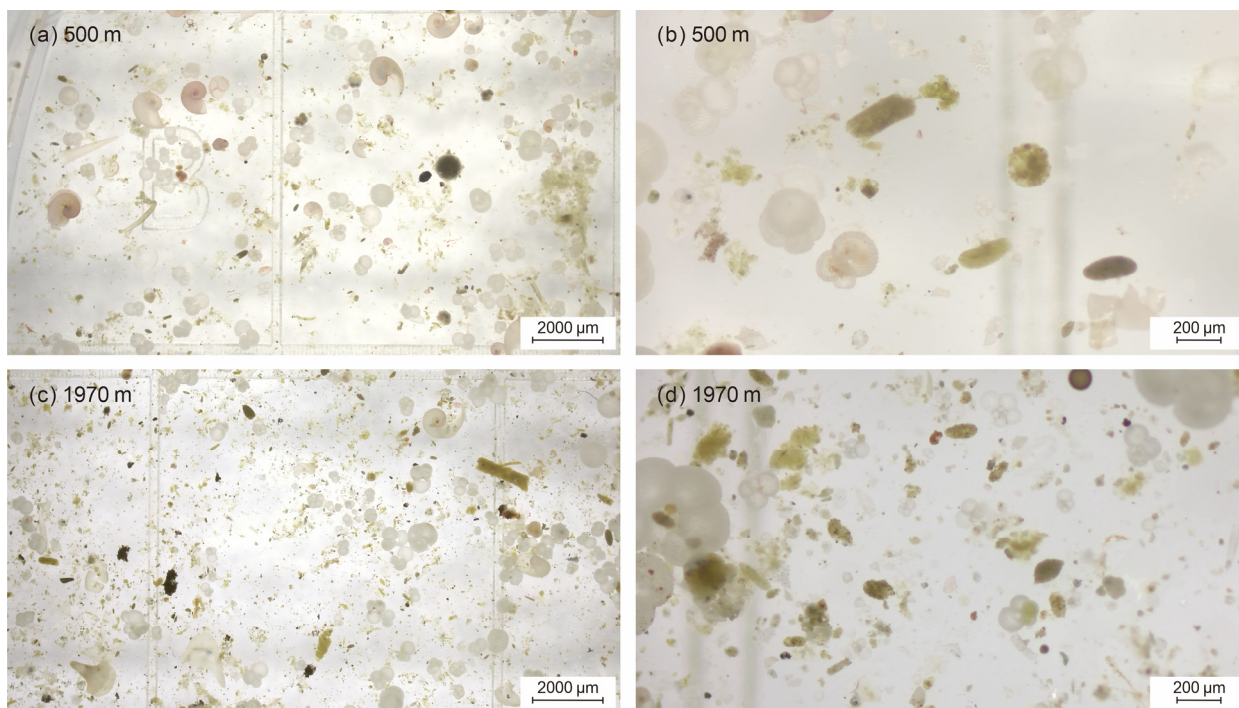
Figure S17. Zooplankton fecal pellets of Samples TJ-A1B21-UP17 and DW17 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/8; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/8.
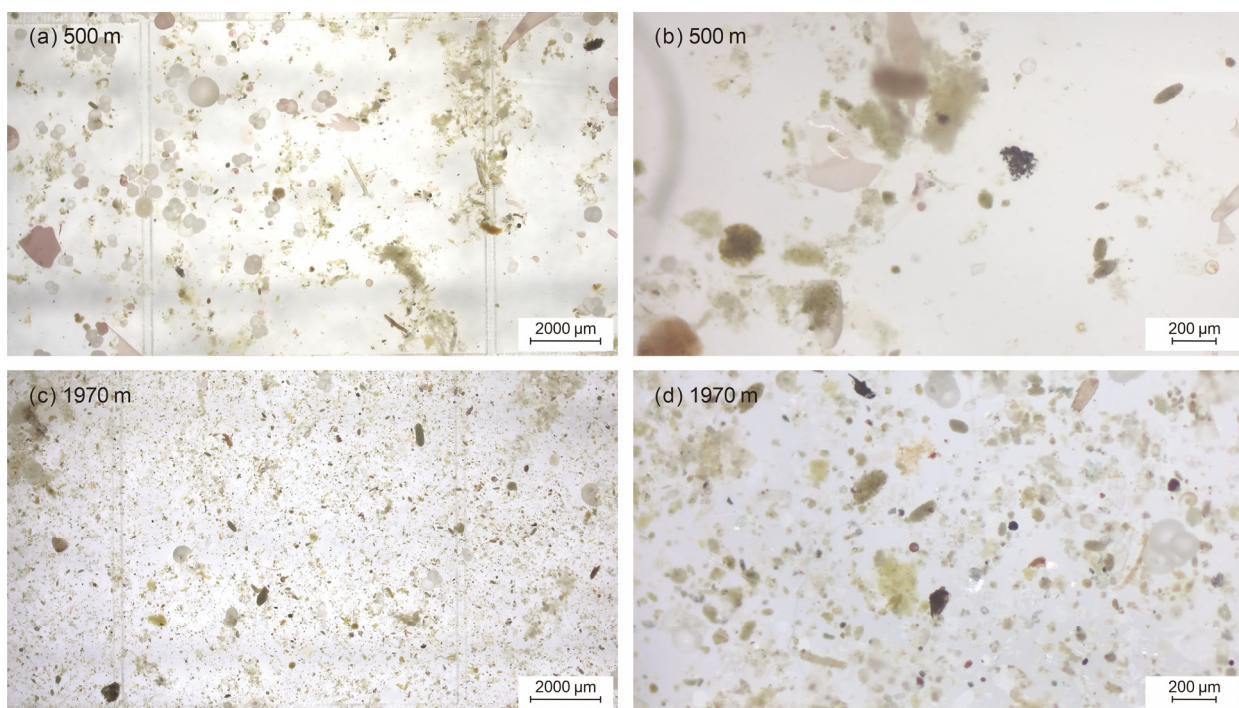
Figure S18. Zooplankton fecal pellets of Samples TJ-A1B21-UP18 and DW18 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/8; (b) pellets at 50X magnification at 500 m, sample fraction: 1/8; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.
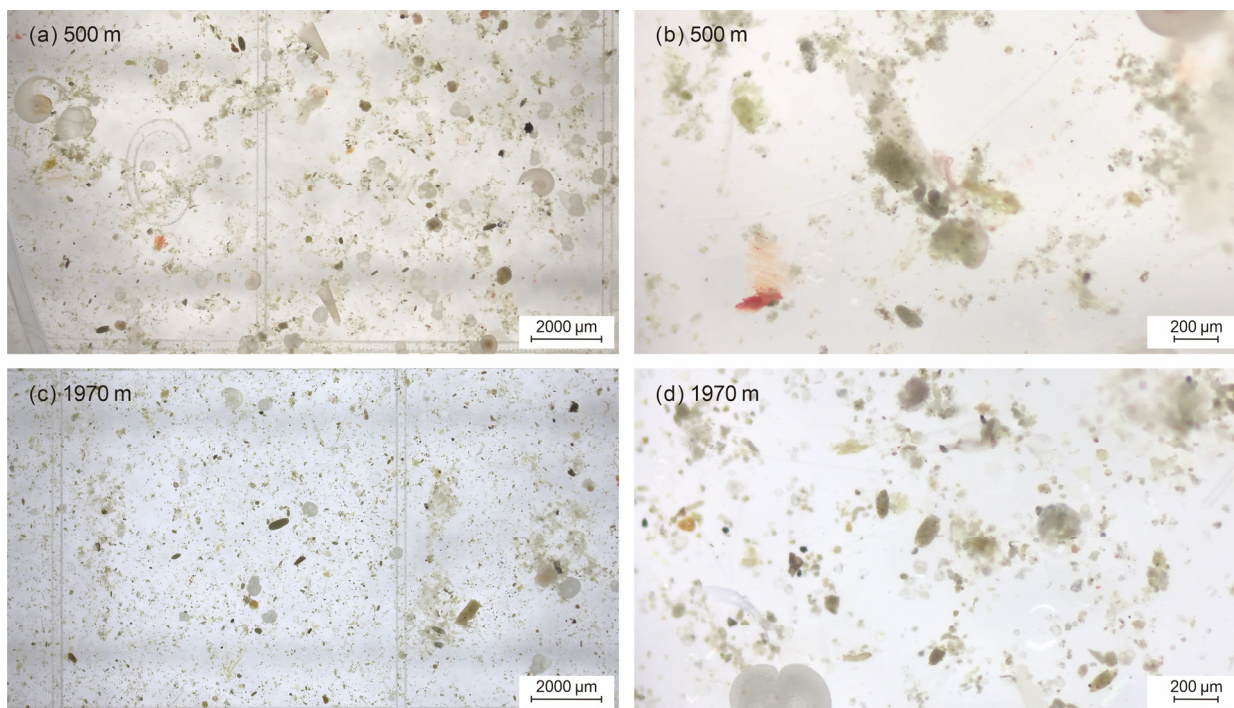
Figure S19. Zooplankton fecal pellets of Samples TJ-A1B21-UP19 and DW19 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/2; (b) pellets at 50X magnification at 500 m, sample fraction: 1/2; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/8; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/8.
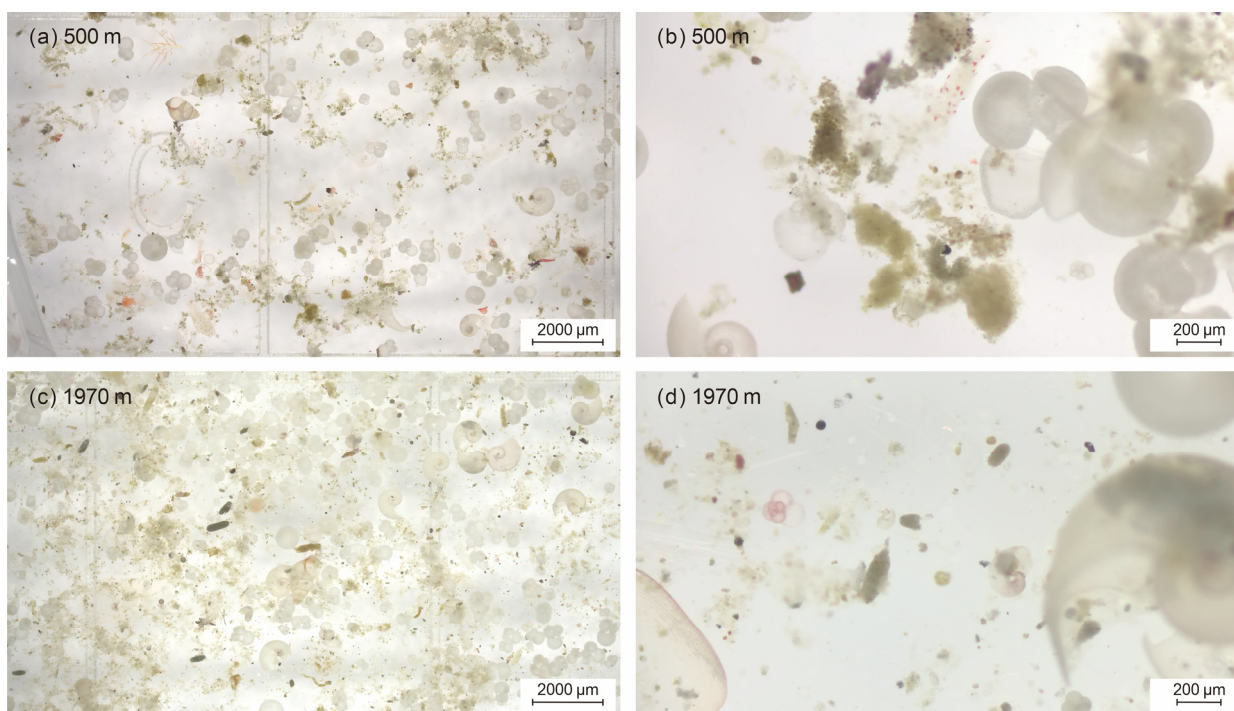
Figure S20. Zooplankton fecal pellets of Samples TJ-A1B21-UP20 and DW20 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/16; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/16.
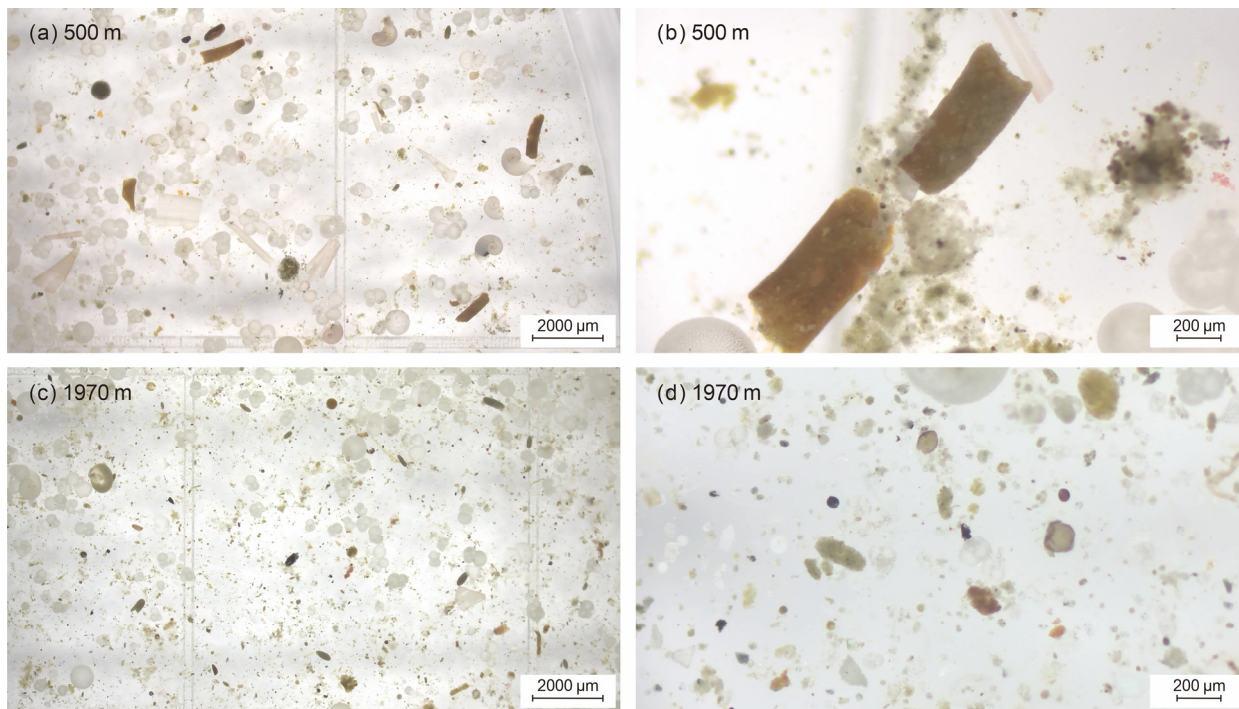
Figure S21. Zooplankton fecal pellets of Samples TJ-A1B21-UP21 and DW21 at the sediment trap mooring TJ-A1B in the northern SCS. (a) Pellets at 8X magnification at 500 m, sample fraction: 1/4; (b) pellets at 50X magnification at 500 m, sample fraction: 1/4; (c) pellets at 8X magnification at 1970 m, sample fraction: 1/4; (d) pellets at 50X magnification at 1970 m, sample fraction: 1/4.