**Supplementary Table 1.** Species list and quantitative data of benthic foraminifera from core MD13-3455G.

| Depth (cm) | 2 | 7 | 12 | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 346 | 392 | 293 | 355 | 322 | 458 | 320 | 304 | 588 | 287 | 376 | 392 | 372 | 330 | 320 | 451 | 605 | 597 |
| Split | 8 | 4 | 8 | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Total (Sum counts × Split) | 2768 | 1568 | 2344 | 1420 | 1288 | 916 | 640 | 1216 | 1176 | 1148 | 1504 | 784 | 744 | 1320 | 1280 | 1804 | 2420 | 2388 |
| Dry fraction weight (g) | 1.62 | 1.2 | 1.8 | 0.93 | 0.92 | 0.76 | 0.98 | 1.2 | 0.57 | 0.68 | 1.79 | 0.63 | 0.42 | 0.44 | 0.35 | 0.33 | 0.35 | 0.54 |
| Foraminifera/g | 1709 | 1307 | 1302 | 1527 | 1400 | 1205 | 653 | 1013 | 2063 | 1688 | 840.2 | 1244 | 1771 | 3000 | 3657 | 5467 | 6914 | 4422 |
| *Adelosina dubia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammodiscus incertus* | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammonia beccarii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| *Amphycorina scalaris* | 2 | 1 | 1 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 0 |
| *Anomalinoides globulosus* | 11 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Asterigerinata mamilla* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion antarcticus* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 1 | 1 |
| *Astrononion stelligerum* | 0 | 0 | 1 | 0 | 0 | 4 | 2 | 0 | 3 | 0 | 3 | 1 | 2 | 3 | 0 | 2 | 2 | 6 |
| *Astrononion tumidum* | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 |
| *Biloculinella globulus* | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 5 | 0 | 1 | 2 | 1 | 2 | 2 | 0 | 3 | 1 | 5 |
| *Biloculinella labiata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Bolivina alata* | 7 | 1 | 2 | 5 | 7 | 2 | 2 | 6 | 2 | 9 | 6 | 6 | 10 | 6 | 3 | 1 | 1 | 4 |
| *Bolivina difformis* | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 8 | 4 | 8 | 4 | 4 |
| *Bolivina dilatata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina pseudoplicata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina pseudopunctata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina spathulata* | 2 | 5 | 12 | 21 | 12 | 25 | 17 | 8 | 47 | 16 | 10 | 10 | 12 | 14 | 18 | 18 | 14 | 28 |
| *Bolivina striatula* | 1 | 0 | 0 | 25 | 7 | 16 | 7 | 8 | 32 | 8 | 17 | 10 | 9 | 10 | 10 | 20 | 40 | 47 |
| *Bolivina variabilis* | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina aculeata* | 10 | 8 | 2 | 12 | 16 | 9 | 7 | 7 | 33 | 6 | 6 | 7 | 7 | 2 | 5 | 6 | 8 | 16 |
| *Bulimina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina marginata* | 5 | 10 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Bulimina striata* | 6 | 10 | 7 | 2 | 4 | 0 | 0 | 7 | 21 | 5 | 6 | 13 | 5 | 5 | 7 | 29 | 61 | 14 |
| *Cassidulina carinata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cassidulina crassa* | 5 | 10 | 11 | 7 | 4 | 5 | 4 | 4 | 4 | 6 | 5 | 12 | 1 | 8 | 2 | 0 | 7 | 7 |
| *Cassidulina laevigata* | 25 | 24 | 24 | 41 | 52 | 48 | 38 | 49 | 78 | 40 | 40 | 43 | 30 | 43 | 47 | 54 | 77 | 91 |
| *Cassidulina reniforme* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| *Cassidulinoides bradyi* | 2 | 1 | 2 | 5 | 5 | 4 | 5 | 12 | 33 | 15 | 4 | 16 | 9 | 3 | 4 | 23 | 26 | 26 |
| *Chilostomella oolina* | 0 | 0 | 3 | 5 | 8 | 17 | 7 | 13 | 68 | 17 | 7 | 32 | 19 | 11 | 7 | 51 | 113 | 84 |
| *Cibicidella variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides aravaensis* | 3 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 2 to 87 cm)

| Depth (cm) | 2 | 7 | 12 | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 346 | 392 | 293 | 355 | 322 | 458 | 320 | 304 | 588 | 287 | 376 | 392 | 372 | 330 | 320 | 451 | 605 | 597 |
| Split | 8 | 4 | 8 | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Total (Sum counts × Split) | 2768 | 1568 | 2344 | 1420 | 1288 | 916 | 640 | 1216 | 1176 | 1148 | 1504 | 784 | 744 | 1320 | 1280 | 1804 | 2420 | 2388 |
| Dry fraction weight (g) | 1.62 | 1.2 | 1.8 | 0.93 | 0.92 | 0.76 | 0.98 | 1.2 | 0.57 | 0.68 | 1.79 | 0.63 | 0.42 | 0.44 | 0.35 | 0.33 | 0.35 | 0.54 |
| Foraminifera/g | 1709 | 1307 | 1302 | 1527 | 1400 | 1205 | 653 | 1013 | 2063 | 1688 | 840.2 | 1244 | 1771 | 3000 | 3657 | 5467 | 6914 | 4422 |
| *Cibicides lobatulus* | 31 | 36 | 40 | 86 | 57 | 148 | 107 | 81 | 92 | 49 | 121 | 64 | 76 | 67 | 75 | 80 | 58 | 56 |
| *Cibicides mayori* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides mundulus* | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides pachyderma* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides refulgens* | 2 | 8 | 6 | 2 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 4 | 4 | 1 | 1 | 8 | 0 | 0 |
| *Cibicides ungerianus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides wuellestorfi* | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 2 | 0 |
| *Cibicides spp.* | 2 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cornuspira involvens* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 |
| *Cycloforina stalkeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina guttifera* | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina* sp.1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina coronata* | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina japonica* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discorbinella bertheloti* | 2 | 4 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 3 | 5 | 1 | 0 | 1 | 0 |
| *Eggerella humboldti* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium advenum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| *Elphidium crispum* | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 2 | 2 | 2 | 1 | 0 | 1 |
| *Elphidium margaritaceum* | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Epistominella exigua* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Eponides repandus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina hexagona* | 1 | 3 | 1 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Favulina squamosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina annectens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crassiporosa* | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crebra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina derogata* | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 |
| *Fissurina eburnea* | 6 | 3 | 3 | 1 | 1 | 7 | 6 | 5 | 4 | 2 | 6 | 3 | 3 | 8 | 1 | 4 | 2 | 5 |
| *Fissurina fasciata* | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Fissurina lacunata* | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 2 to 87 cm)

| Depth (cm) | 2 | 7 | 12 | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 346 | 392 | 293 | 355 | 322 | 458 | 320 | 304 | 588 | 287 | 376 | 392 | 372 | 330 | 320 | 451 | 605 | 597 |
| Split | 8 | 4 | 8 | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Total (Sum counts × Split) | 2768 | 1568 | 2344 | 1420 | 1288 | 916 | 640 | 1216 | 1176 | 1148 | 1504 | 784 | 744 | 1320 | 1280 | 1804 | 2420 | 2388 |
| Dry fraction weight (g) | 1.62 | 1.2 | 1.8 | 0.93 | 0.92 | 0.76 | 0.98 | 1.2 | 0.57 | 0.68 | 1.79 | 0.63 | 0.42 | 0.44 | 0.35 | 0.33 | 0.35 | 0.54 |
| Foraminifera/g | 1709 | 1307 | 1302 | 1527 | 1400 | 1205 | 653 | 1013 | 2063 | 1688 | 840.2 | 1244 | 1771 | 3000 | 3657 | 5467 | 6914 | 4422 |
| *Fissurina longpointensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Fissurina pseudolucida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudoorbignyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina* sp.1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fursenkoina acuta* | 0 | 0 | 1 | 0 | 2 | 7 | 2 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 1 | 0 | 4 | 0 |
| *Gaudryina pseudotrochus* | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 1 | 3 | 0 | 3 | 0 | 1 | 2 | 0 | 0 |
| *Gaudryina rudis* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| *Gavelinopsis praegeri* | 18 | 10 | 15 | 19 | 8 | 8 | 10 | 10 | 21 | 7 | 14 | 7 | 10 | 11 | 14 | 6 | 9 | 8 |
| *Glabratella patelliformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Glandulina ovula* | 2 | 0 | 3 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| *Globobulimina affinis* | 1 | 0 | 1 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| *Globobulimina doliolum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina turgida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 4 | 0 |
| *Globobulimina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globocassidulina subglobosa* | 44 | 52 | 22 | 13 | 17 | 17 | 11 | 14 | 17 | 18 | 6 | 35 | 24 | 16 | 19 | 32 | 21 | 22 |
| *Gyroidina lamarckiana* | 9 | 9 | 5 | 3 | 7 | 8 | 4 | 4 | 11 | 2 | 8 | 5 | 4 | 2 | 6 | 8 | 17 | 39 |
| *Gyroidina soldanii* | 3 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hamolahedra apiopleura* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra eucostata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra williamsoni* | 0 | 0 | 2 | 2 | 4 | 2 | 1 | 1 | 2 | 0 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 2 |
| *Hanzawaia boueana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hoeglundina elegans* | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyalinea balthica* | 3 | 1 | 3 | 11 | 9 | 3 | 3 | 3 | 0 | 2 | 1 | 3 | 6 | 2 | 0 | 1 | 1 | 2 |
| *Hyalinonetrion gracillimum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyrokkin sarcophaga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lachlanella bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lagena substriata* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina gibba* | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina orbicularis* | 6 | 7 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 1 | 2 | 0 |
| *Lenticulina vortex* | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Melonis barleeanum* | 4 | 6 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 3 |
| *Melonis pompiloides* | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 2 to 87 cm)

| Depth (cm) | 2 | 7 | 12 | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 346 | 392 | 293 | 355 | 322 | 458 | 320 | 304 | 588 | 287 | 376 | 392 | 372 | 330 | 320 | 451 | 605 | 597 |
| Split | 8 | 4 | 8 | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Total (Sum counts × Split) | 2768 | 1568 | 2344 | 1420 | 1288 | 916 | 640 | 1216 | 1176 | 1148 | 1504 | 784 | 744 | 1320 | 1280 | 1804 | 2420 | 2388 |
| Dry fraction weight (g) | 1.62 | 1.2 | 1.8 | 0.93 | 0.92 | 0.76 | 0.98 | 1.2 | 0.57 | 0.68 | 1.79 | 0.63 | 0.42 | 0.44 | 0.35 | 0.33 | 0.35 | 0.54 |
| Foraminifera/g | 1709 | 1307 | 1302 | 1527 | 1400 | 1205 | 653 | 1013 | 2063 | 1688 | 840.2 | 1244 | 1771 | 3000 | 3657 | 5467 | 6914 | 4422 |
| *Miliolinella elongata* | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Miliolinella subrotunda* | 17 | 13 | 18 | 17 | 16 | 16 | 13 | 14 | 21 | 18 | 14 | 25 | 25 | 16 | 24 | 22 | 15 | 14 |
| *Miliolid fragment* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Mychostomina revertens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Neoconorbina terquemi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonion fabum* | 1 | 2 | 1 | 2 | 0 | 1 | 1 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| *Nonionella turgida* | 0 | 0 | 2 | 12 | 9 | 8 | 7 | 3 | 12 | 4 | 6 | 15 | 7 | 6 | 5 | 19 | 30 | 27 |
| *Nuttallides umbonifera* | 10 | 12 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina globosa* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina lineata* | 0 | 1 | 0 | 1 | 2 | 3 | 3 | 0 | 3 | 2 | 2 | 5 | 4 | 1 | 3 | 1 | 0 | 1 |
| *Oolina melo* | 3 | 0 | 5 | 6 | 7 | 16 | 11 | 8 | 6 | 3 | 13 | 9 | 6 | 8 | 5 | 4 | 2 | 3 |
| *Oridorsalis umbonatus* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Palliolatella semimarginata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Parafissurina lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Patellina corrugata* | 3 | 1 | 3 | 9 | 10 | 11 | 5 | 4 | 6 | 9 | 10 | 0 | 6 | 14 | 8 | 3 | 1 | 4 |
| *Planulina ariminensis* | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Planulina mediterranensis* | 1 | 2 | 1 | 0 | 0 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 4 | 2 | 1 | 1 | 0 | 2 |
| *Polymorphina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pullenia subcarinata* | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pygmaeoseistron laevis ovalis* | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Pyrgo anomala* | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo comata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo sarsi* | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo williamsoni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo* sp.1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrulina cylindroides* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Quinqueloculina bosciana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina disparilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 2 to 87 cm)

| Depth (cm) | 2 | 7 | 12 | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 346 | 392 | 293 | 355 | 322 | 458 | 320 | 304 | 588 | 287 | 376 | 392 | 372 | 330 | 320 | 451 | 605 | 597 |
| Split | 8 | 4 | 8 | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Total (Sum counts × Split) | 2768 | 1568 | 2344 | 1420 | 1288 | 916 | 640 | 1216 | 1176 | 1148 | 1504 | 784 | 744 | 1320 | 1280 | 1804 | 2420 | 2388 |
| Dry fraction weight (g) | 1.62 | 1.2 | 1.8 | 0.93 | 0.92 | 0.76 | 0.98 | 1.2 | 0.57 | 0.68 | 1.79 | 0.63 | 0.42 | 0.44 | 0.35 | 0.33 | 0.35 | 0.54 |
| Foraminifera/g | 1709 | 1307 | 1302 | 1527 | 1400 | 1205 | 653 | 1013 | 2063 | 1688 | 840.2 | 1244 | 1771 | 3000 | 3657 | 5467 | 6914 | 4422 |
| *Quinqueloculina parvula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina semiluna* | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 4 | 8 | 4 | 5 | 3 | 7 | 1 | 4 | 2 | 3 | 5 |
| *Quinqueloculina stelligera* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 4 |
| *Quinqueloculina viennensis* | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 |
| *Quinqueloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Robertinoides bradyi* | 1 | 0 | 0 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 0 | 2 | 2 | 4 | 3 | 1 | 3 | 2 |
| *Rosalina bradyi* | 12 | 10 | 9 | 12 | 14 | 23 | 11 | 13 | 14 | 13 | 18 | 24 | 27 | 20 | 19 | 15 | 18 | 21 |
| *Rosalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Schackoinella spina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sigmoilopsis schlumbergeri* | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Siphouvigerina* sp.1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sphaeroidina bulloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spirillina vivipara* | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| *Spirillina wrightii* | 5 | 4 | 5 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina asperula* | 2 | 1 | 1 | 2 | 2 | 1 | 5 | 3 | 4 | 6 | 1 | 3 | 2 | 1 | 2 | 0 | 3 | 2 |
| *Spiroloculina dilatata* | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| *Spiroloculina tenuiseptata* | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina* sp.1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina expansa* | 1 | 2 | 1 | 0 | 0 | 4 | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 1 | 3 | 2 | 1 | 2 |
| *Spiroplectammina wrightii* | 9 | 13 | 6 | 2 | 5 | 1 | 1 | 1 | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 3 | 6 | 1 |
| *Spiroplectinella* sp.1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stainforthia loeblichi* | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stomatorbina concentrica* | 2 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia agglutinans* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| *Textularia bocki* | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 3 | 4 |
| *Textularia conica* | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 1 | 2 |
| *Textularia lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia truncata* | 6 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trifarina angulosa* | 0 | 2 | 4 | 6 | 3 | 9 | 6 | 2 | 6 | 3 | 5 | 3 | 13 | 10 | 1 | 5 | 2 | 5 |
| *Trifarina bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina marioni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 2 to 87 cm)

| Depth (cm) | 2 | 7 | 12 | 17 | 22 | 27 | 32 | 37 | 42 | 47 | 52 | 57 | 62 | 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 346 | 392 | 293 | 355 | 322 | 458 | 320 | 304 | 588 | 287 | 376 | 392 | 372 | 330 | 320 | 451 | 605 | 597 |
| Split | 8 | 4 | 8 | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Total (Sum counts × Split) | 2768 | 1568 | 2344 | 1420 | 1288 | 916 | 640 | 1216 | 1176 | 1148 | 1504 | 784 | 744 | 1320 | 1280 | 1804 | 2420 | 2388 |
| Dry fraction weight (g) | 1.62 | 1.2 | 1.8 | 0.93 | 0.92 | 0.76 | 0.98 | 1.2 | 0.57 | 0.68 | 1.79 | 0.63 | 0.42 | 0.44 | 0.35 | 0.33 | 0.35 | 0.54 |
| Foraminifera/g | 1709 | 1307 | 1302 | 1527 | 1400 | 1205 | 653 | 1013 | 2063 | 1688 | 840.2 | 1244 | 1771 | 3000 | 3657 | 5467 | 6914 | 4422 |
| *Triloculina oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina tricarinata* | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |
| *Triloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trochammina globigeriniformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina auberiana* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina mediterranea* | 13 | 39 | 12 | 3 | 4 | 1 | 2 | 0 | 13 | 2 | 5 | 2 | 5 | 2 | 2 | 4 | 17 | 11 |
| *Uvigerina peregrina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Valvulineria bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unknown (fragment) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 92 to 177 cm)

| Depth (cm) | 92 | 97 | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 147 | 152 | 157 | 162 | 167 | 172 | 177 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 325 | 344 | 437 | 460 | 411 | 463 | 447 | 355 | 493 | 385 | 319 | 348 | 346 | 281 | 411 | 551 | 493 | 298 |
| Split | 2 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 4 | 4 | 8 | 8 | 16 | 16 | 8 | 4 | 4 | 8 |
| Total (Sum counts × Split) | 650 | 688 | 874 | 920 | 1644 | 926 | 3576 | 2840 | 1972 | 1540 | 2552 | 2784 | 5536 | 4496 | 3288 | 2204 | 1972 | 2384 |
| Dry fraction weight (g) | 0.47 | 0.6 | 0.74 | 0.5 | 0.62 | 0.56 | 1.05 | 1.14 | 0.56 | 0.45 | 0.85 | 0.7 | 1.26 | 0.98 | 0.61 | 0.42 | 0.73 | 1.14 |
| Foraminifera/g | 1383 | 1147 | 1181 | 1840 | 2652 | 1654 | 3406 | 2491 | 3521 | 3422 | 3002 | 3977 | 4394 | 4588 | 5390 | 5248 | 2701 | 2091 |
| *Adelosina dubia* | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammodiscus incertus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammonia beccarii* | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 |
| *Amphycorina scalaris* | 0 | 0 | 1 | 3 | 0 | 3 | 1 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 1 |
| *Anomalinoides globulosus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Asterigerinata mamilla* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion antarcticus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 1 |
| *Astrononion stelligerum* | 3 | 2 | 4 | 3 | 5 | 5 | 1 | 0 | 4 | 3 | 3 | 2 | 0 | 0 | 3 | 4 | 2 | 3 |
| *Astrononion tumidum* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Biloculinella globulus* | 4 | 6 | 6 | 4 | 1 | 1 | 1 | 0 | 9 | 4 | 3 | 1 | 3 | 2 | 1 | 5 | 10 | 6 |
| *Biloculinella labiata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina alata* | 1 | 0 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

**Supplementary Table 1**. continuation (samples 92 to 177 cm)

| Depth (cm) | 92 | 97 | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 147 | 152 | 157 | 162 | 167 | 172 | 177 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 325 | 344 | 437 | 460 | 411 | 463 | 447 | 355 | 493 | 385 | 319 | 348 | 346 | 281 | 411 | 551 | 493 | 298 |
| Split | 2 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 4 | 4 | 8 | 8 | 16 | 16 | 8 | 4 | 4 | 8 |
| Total (Sum counts × Split) | 650 | 688 | 874 | 920 | 1644 | 926 | 3576 | 2840 | 1972 | 1540 | 2552 | 2784 | 5536 | 4496 | 3288 | 2204 | 1972 | 2384 |
| Dry fraction weight (g) | 0.47 | 0.6 | 0.74 | 0.5 | 0.62 | 0.56 | 1.05 | 1.14 | 0.56 | 0.45 | 0.85 | 0.7 | 1.26 | 0.98 | 0.61 | 0.42 | 0.73 | 1.14 |
| Foraminifera/g | 1383 | 1147 | 1181 | 1840 | 2652 | 1654 | 3406 | 2491 | 3521 | 3422 | 3002 | 3977 | 4394 | 4588 | 5390 | 5248 | 2701 | 2091 |
| *Bolivina difformis* | 1 | 5 | 3 | 3 | 1 | 1 | 3 | 7 | 6 | 3 | 6 | 1 | 4 | 4 | 2 | 4 | 3 | 2 |
| *Bolivina dilatata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina pseudoplicata* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Bolivina pseudopunctata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina spathulata* | 10 | 2 | 10 | 38 | 43 | 41 | 41 | 29 | 48 | 13 | 24 | 17 | 17 | 21 | 23 | 14 | 29 | 9 |
| *Bolivina striatula* | 12 | 8 | 12 | 21 | 32 | 27 | 60 | 31 | 37 | 19 | 23 | 32 | 20 | 17 | 34 | 25 | 27 | 25 |
| *Bolivina variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina aculeata* | 5 | 15 | 10 | 11 | 19 | 26 | 52 | 23 | 40 | 20 | 22 | 41 | 41 | 27 | 46 | 37 | 47 | 24 |
| *Bulimina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina marginata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 2 | 4 | 1 | 5 | 3 | 6 | 2 |
| *Bulimina striata* | 11 | 4 | 2 | 2 | 6 | 1 | 2 | 1 | 8 | 20 | 17 | 8 | 13 | 5 | 11 | 35 | 15 | 8 |
| *Cassidulina carinata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Cassidulina crassa* | 5 | 4 | 6 | 2 | 5 | 1 | 5 | 6 | 4 | 5 | 3 | 5 | 4 | 2 | 0 | 6 | 7 | 1 |
| *Cassidulina laevigata* | 57 | 39 | 44 | 53 | 57 | 63 | 60 | 62 | 89 | 52 | 45 | 60 | 72 | 47 | 71 | 98 | 86 | 40 |
| *Cassidulina reniforme* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cassidulinoides bradyi* | 10 | 7 | 11 | 7 | 6 | 15 | 25 | 9 | 9 | 28 | 16 | 17 | 11 | 3 | 8 | 7 | 12 | 0 |
| *Chilostomella oolina* | 21 | 8 | 22 | 17 | 23 | 14 | 19 | 19 | 24 | 66 | 33 | 31 | 23 | 15 | 30 | 53 | 49 | 19 |
| *Cibicidella variabilis* | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 3 | 4 | 1 | 2 | 1 | 0 | 3 | 0 | 1 | 1 | 2 |
| *Cibicides aravaensis* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides lobatulus* | 65 | 109 | 104 | 96 | 53 | 103 | 48 | 45 | 66 | 38 | 16 | 33 | 21 | 46 | 46 | 56 | 48 | 33 |
| *Cibicides mayori* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides mundulus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides pachyderma* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides refulgens* | 5 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| *Cibicides ungerianus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides wuellestorfi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides spp.* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cornuspira involvens* | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cycloforina stalkeri* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina guttifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina coronata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 92 to 177 cm)

| Depth (cm) | 92 | 97 | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 147 | 152 | 157 | 162 | 167 | 172 | 177 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 325 | 344 | 437 | 460 | 411 | 463 | 447 | 355 | 493 | 385 | 319 | 348 | 346 | 281 | 411 | 551 | 493 | 298 |
| Split | 2 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 4 | 4 | 8 | 8 | 16 | 16 | 8 | 4 | 4 | 8 |
| Total (Sum counts × Split) | 650 | 688 | 874 | 920 | 1644 | 926 | 3576 | 2840 | 1972 | 1540 | 2552 | 2784 | 5536 | 4496 | 3288 | 2204 | 1972 | 2384 |
| Dry fraction weight (g) | 0.47 | 0.6 | 0.74 | 0.5 | 0.62 | 0.56 | 1.05 | 1.14 | 0.56 | 0.45 | 0.85 | 0.7 | 1.26 | 0.98 | 0.61 | 0.42 | 0.73 | 1.14 |
| Foraminifera/g | 1383 | 1147 | 1181 | 1840 | 2652 | 1654 | 3406 | 2491 | 3521 | 3422 | 3002 | 3977 | 4394 | 4588 | 5390 | 5248 | 2701 | 2091 |
| *Discanomalina japonica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discorbinella bertheloti* | 1 | 2 | 1 | 2 | 1 | 0 | 2 | 3 | 1 | 0 | 5 | 4 | 3 | 1 | 2 | 3 | 8 | 2 |
| *Eggerella humboldti* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium advenum* | 2 | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium crispum* | 0 | 0 | 1 | 2 | 1 | 2 | 1 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| *Elphidium margaritaceum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Epistominella exigua* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Eponides repandus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina hexagona* | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina squamosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina annectens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crassiporosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crebra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina derogata* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina eburnea* | 0 | 2 | 3 | 4 | 1 | 3 | 0 | 2 | 3 | 2 | 3 | 0 | 2 | 2 | 1 | 2 | 3 | 1 |
| *Fissurina fasciata* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina lacunata* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina longpointensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudolucida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| *Fissurina pseudoorbignyana* | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fursenkoina acuta* | 1 | 3 | 12 | 19 | 15 | 20 | 6 | 2 | 0 | 1 | 1 | 2 | 2 | 2 | 5 | 6 | 8 | 4 |
| *Gaudryina pseudotrochus* | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 |
| *Gaudryina rudis* | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Gavelinopsis praegeri* | 7 | 9 | 13 | 12 | 10 | 12 | 2 | 16 | 16 | 11 | 8 | 8 | 13 | 6 | 8 | 10 | 8 | 6 |
| *Glabratella patelliformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Glandulina ovula* | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina affinis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 |
| *Globobulimina doliolum* | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina turgida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 1 | 2 | 2 | 0 | 2 | 1 | 0 |

**Supplementary Table 1**. continuation (samples 92 to 177 cm)

| Depth (cm) | 92 | 97 | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 147 | 152 | 157 | 162 | 167 | 172 | 177 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 325 | 344 | 437 | 460 | 411 | 463 | 447 | 355 | 493 | 385 | 319 | 348 | 346 | 281 | 411 | 551 | 493 | 298 |
| Split | 2 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 4 | 4 | 8 | 8 | 16 | 16 | 8 | 4 | 4 | 8 |
| Total (Sum counts × Split) | 650 | 688 | 874 | 920 | 1644 | 926 | 3576 | 2840 | 1972 | 1540 | 2552 | 2784 | 5536 | 4496 | 3288 | 2204 | 1972 | 2384 |
| Dry fraction weight (g) | 0.47 | 0.6 | 0.74 | 0.5 | 0.62 | 0.56 | 1.05 | 1.14 | 0.56 | 0.45 | 0.85 | 0.7 | 1.26 | 0.98 | 0.61 | 0.42 | 0.73 | 1.14 |
| Foraminifera/g | 1383 | 1147 | 1181 | 1840 | 2652 | 1654 | 3406 | 2491 | 3521 | 3422 | 3002 | 3977 | 4394 | 4588 | 5390 | 5248 | 2701 | 2091 |
| *Globobulimina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globocassidulina subglobosa* | 13 | 8 | 22 | 20 | 16 | 15 | 18 | 9 | 10 | 5 | 6 | 6 | 13 | 11 | 17 | 11 | 7 | 11 |
| *Gyroidina lamarckiana* | 8 | 2 | 14 | 5 | 10 | 12 | 5 | 5 | 7 | 13 | 10 | 23 | 15 | 10 | 10 | 20 | 14 | 7 |
| *Gyroidina soldanii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hamolahedra apiopleura* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra eucostata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra williamsoni* | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| *Hanzawaia boueana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hoeglundina elegans* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyalinea balthica* | 1 | 6 | 2 | 3 | 3 | 1 | 7 | 5 | 2 | 4 | 4 | 1 | 3 | 6 | 12 | 24 | 7 | 3 |
| *Hyalinonetrion gracillimum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyrokkin sarcophaga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lachlanella bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lagena substriata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina orbicularis* | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Lenticulina vortex* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Melonis barleeanum* | 1 | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 2 | 0 | 4 | 0 | 0 | 3 | 3 | 2 |
| *Melonis pompiloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Miliolinella elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Miliolinella subrotunda* | 16 | 18 | 29 | 33 | 21 | 9 | 8 | 4 | 11 | 8 | 10 | 6 | 5 | 11 | 9 | 17 | 11 | 18 |
| *Miliolid fragment* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Mychostomina revertens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Neoconorbina terquemi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonion fabum* | 0 | 1 | 0 | 0 | 2 | 1 | 2 | 1 | 7 | 3 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 |
| *Nonionella turgida* | 9 | 11 | 16 | 13 | 16 | 23 | 20 | 14 | 17 | 13 | 15 | 6 | 9 | 2 | 13 | 16 | 13 | 10 |
| *Nuttallides umbonifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina globosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 2 |
| *Oolina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina lineata* | 0 | 4 | 4 | 2 | 2 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 |
| *Oolina melo* | 6 | 15 | 10 | 10 | 5 | 5 | 0 | 3 | 8 | 3 | 1 | 1 | 4 | 0 | 1 | 5 | 3 | 0 |
| *Oridorsalis umbonatus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 92 to 177 cm)

| Depth (cm) | 92 | 97 | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 147 | 152 | 157 | 162 | 167 | 172 | 177 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 325 | 344 | 437 | 460 | 411 | 463 | 447 | 355 | 493 | 385 | 319 | 348 | 346 | 281 | 411 | 551 | 493 | 298 |
| Split | 2 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 4 | 4 | 8 | 8 | 16 | 16 | 8 | 4 | 4 | 8 |
| Total (Sum counts × Split) | 650 | 688 | 874 | 920 | 1644 | 926 | 3576 | 2840 | 1972 | 1540 | 2552 | 2784 | 5536 | 4496 | 3288 | 2204 | 1972 | 2384 |
| Dry fraction weight (g) | 0.47 | 0.6 | 0.74 | 0.5 | 0.62 | 0.56 | 1.05 | 1.14 | 0.56 | 0.45 | 0.85 | 0.7 | 1.26 | 0.98 | 0.61 | 0.42 | 0.73 | 1.14 |
| Foraminifera/g | 1383 | 1147 | 1181 | 1840 | 2652 | 1654 | 3406 | 2491 | 3521 | 3422 | 3002 | 3977 | 4394 | 4588 | 5390 | 5248 | 2701 | 2091 |
| *Palliolatella semimarginata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Parafissurina lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Patellina corrugata* | 9 | 11 | 13 | 22 | 4 | 6 | 6 | 5 | 3 | 1 | 4 | 3 | 2 | 1 | 2 | 3 | 6 | 7 |
| *Planulina ariminensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| *Planulina mediterranensis* | 2 | 0 | 1 | 0 | 3 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 3 | 1 | 2 | 0 | 2 |
| *Polymorphina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Pullenia subcarinata* | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pygmaeoseistron laevis ovalis* | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Pyrgo anomala* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo comata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo sarsi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo williamsoni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrulina cylindroides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina bosciana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina disparilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina laevigata* | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina parvula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina semiluna* | 6 | 3 | 7 | 5 | 2 | 5 | 5 | 3 | 5 | 1 | 2 | 0 | 3 | 3 | 5 | 4 | 3 | 6 |
| *Quinqueloculina stelligera* | 0 | 1 | 0 | 0 | 3 | 5 | 4 | 3 | 3 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 4 | 2 |
| *Quinqueloculina viennensis* | 0 | 2 | 1 | 0 | 0 | 2 | 5 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 2 |
| *Quinqueloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Robertinoides bradyi* | 0 | 2 | 4 | 3 | 3 | 1 | 3 | 1 | 2 | 1 | 0 | 3 | 1 | 1 | 2 | 4 | 2 | 2 |
| *Rosalina bradyi* | 10 | 11 | 10 | 8 | 7 | 7 | 8 | 4 | 5 | 6 | 4 | 5 | 1 | 4 | 7 | 8 | 5 | 6 |
| *Rosalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Schackoinella spina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sigmoilopsis schlumbergeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Siphouvigerina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sphaeroidina bulloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spirillina vivipara* | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 3 |

**Supplementary Table 1**. continuation (samples 92 to 177 cm)

| Depth (cm) | 92 | 97 | 102 | 107 | 112 | 117 | 122 | 127 | 132 | 137 | 142 | 147 | 152 | 157 | 162 | 167 | 172 | 177 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 325 | 344 | 437 | 460 | 411 | 463 | 447 | 355 | 493 | 385 | 319 | 348 | 346 | 281 | 411 | 551 | 493 | 298 |
| Split | 2 | 2 | 2 | 2 | 4 | 2 | 8 | 8 | 4 | 4 | 8 | 8 | 16 | 16 | 8 | 4 | 4 | 8 |
| Total (Sum counts × Split) | 650 | 688 | 874 | 920 | 1644 | 926 | 3576 | 2840 | 1972 | 1540 | 2552 | 2784 | 5536 | 4496 | 3288 | 2204 | 1972 | 2384 |
| Dry fraction weight (g) | 0.47 | 0.6 | 0.74 | 0.5 | 0.62 | 0.56 | 1.05 | 1.14 | 0.56 | 0.45 | 0.85 | 0.7 | 1.26 | 0.98 | 0.61 | 0.42 | 0.73 | 1.14 |
| Foraminifera/g | 1383 | 1147 | 1181 | 1840 | 2652 | 1654 | 3406 | 2491 | 3521 | 3422 | 3002 | 3977 | 4394 | 4588 | 5390 | 5248 | 2701 | 2091 |
| *Spirillina wrightii* | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 1 |
| *Spiroloculina asperula* | 5 | 1 | 5 | 7 | 4 | 1 | 1 | 4 | 1 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 1 |
| *Spiroloculina dilatata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 |
| *Spiroloculina tenuiseptata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina expansa* | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 4 | 2 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 |
| *Spiroplectammina wrightii* | 0 | 2 | 0 | 3 | 3 | 3 | 0 | 0 | 6 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 4 | 2 |
| *Spiroplectinella* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stainforthia loeblichi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stomatorbina concentrica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| *Textularia agglutinans* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| *Textularia bocki* | 0 | 1 | 2 | 0 | 3 | 0 | 0 | 1 | 1 | 1 | 3 | 1 | 1 | 0 | 1 | 6 | 0 | 1 |
| *Textularia conica* | 0 | 0 | 2 | 4 | 1 | 0 | 0 | 2 | 1 | 0 | 2 | 5 | 0 | 1 | 1 | 4 | 1 | 4 |
| *Textularia lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| *Textularia truncata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trifarina angulosa* | 6 | 5 | 6 | 7 | 9 | 2 | 7 | 6 | 6 | 8 | 3 | 5 | 4 | 4 | 7 | 8 | 12 | 7 |
| *Trifarina bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina marioni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina tricarinata* | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 1 |
| *Triloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trochammina globigeriniformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina auberiana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina mediterranea* | 2 | 4 | 6 | 3 | 1 | 5 | 8 | 5 | 2 | 9 | 8 | 7 | 6 | 6 | 17 | 16 | 18 | 1 |
| *Uvigerina peregrina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Valvulineria bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unknown (fragment) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 182 to 267 cm)

| Depth (cm) | 182 | 187 | 192 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 431 | 304 | 315 | 449 | 393 | 283 | 422 | 317 | 410 | 429 | 475 | 336 | 478 | 311 | 287 | 309 | 341 | 441 |
| Split | 2 | 4 | 2 | 2 | 2 | 4 | 8 | 8 | 8 | 8 | 2 | 4 | 2 | 4 | 4 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 862 | 1216 | 630 | 898 | 786 | 1132 | 3376 | 2536 | 3280 | 3432 | 950 | 1344 | 956 | 1244 | 1148 | 2472 | 2728 | 3528 |
| Dry fraction weight (g) | 0.41 | 0.71 | 0.36 | 0.85 | 0.65 | 0.77 | 0.74 | 1.22 | 1.81 | 0.69 | 0.59 | 0.97 | 0.56 | 0.41 | 0.37 | 0.5 | 0.36 | 0.48 |
| Foraminifera/g | 2102 | 1713 | 1750 | 1056 | 1209 | 1470 | 4562 | 2079 | 1812 | 4974 | 1610 | 1386 | 1707 | 3034 | 3103 | 4944 | 7578 | 7350 |
| *Adelosina dubia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammodiscus incertus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammonia beccarii* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Amphycorina scalaris* | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| *Anomalinoides globulosus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Asterigerinata mamilla* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion antarcticus* | 0 | 3 | 1 | 1 | 7 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 1 | 0 |
| *Astrononion stelligerum* | 3 | 5 | 4 | 5 | 3 | 2 | 5 | 1 | 6 | 1 | 10 | 5 | 3 | 2 | 2 | 1 | 1 | 0 |
| *Astrononion tumidum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 1 | 1 | 2 | 0 | 4 | 3 |
| *Biloculinella globulus* | 13 | 13 | 3 | 7 | 5 | 1 | 1 | 0 | 1 | 0 | 6 | 0 | 2 | 1 | 1 | 1 | 0 | 0 |
| *Biloculinella labiata* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina alata* | 3 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 2 | 2 | 1 | 0 | 2 | 1 | 4 | 3 | 6 | 6 |
| *Bolivina difformis* | 6 | 4 | 5 | 3 | 2 | 3 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| *Bolivina dilatata* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Bolivina pseudoplicata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Bolivina pseudopunctata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina spathulata* | 12 | 13 | 22 | 11 | 10 | 9 | 56 | 24 | 29 | 30 | 6 | 3 | 10 | 12 | 4 | 10 | 22 | 36 |
| *Bolivina striatula* | 13 | 5 | 6 | 7 | 7 | 14 | 11 | 12 | 16 | 18 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 7 |
| *Bolivina variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina aculeata* | 16 | 11 | 15 | 26 | 17 | 24 | 39 | 39 | 52 | 55 | 18 | 8 | 21 | 11 | 7 | 13 | 26 | 21 |
| *Bulimina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 2 | 2 | 1 | 3 | 2 | 1 |
| *Bulimina marginata* | 1 | 2 | 3 | 4 | 5 | 3 | 8 | 2 | 11 | 16 | 8 | 7 | 26 | 15 | 5 | 13 | 32 | 50 |
| *Bulimina striata* | 7 | 1 | 2 | 3 | 5 | 2 | 3 | 1 | 6 | 23 | 18 | 8 | 34 | 5 | 14 | 10 | 8 | 5 |
| *Cassidulina carinata* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cassidulina crassa* | 5 | 4 | 5 | 7 | 4 | 1 | 2 | 6 | 5 | 12 | 6 | 6 | 5 | 2 | 4 | 1 | 1 | 2 |
| *Cassidulina laevigata* | 60 | 29 | 34 | 60 | 31 | 27 | 70 | 35 | 96 | 53 | 27 | 13 | 34 | 30 | 23 | 29 | 63 | 67 |
| *Cassidulina reniforme* | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cassidulinoides bradyi* | 2 | 1 | 2 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Chilostomella oolina* | 15 | 4 | 4 | 13 | 14 | 1 | 13 | 16 | 17 | 34 | 10 | 2 | 21 | 13 | 16 | 10 | 45 | 13 |
| *Cibicidella variabilis* | 3 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 |
| *Cibicides aravaensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| *Cibicides lobatulus* | 77 | 54 | 64 | 83 | 82 | 55 | 53 | 42 | 44 | 43 | 60 | 62 | 74 | 45 | 33 | 65 | 20 | 43 |

**Supplementary Table 1**. continuation (samples 182 to 267 cm)

| Depth (cm) | 182 | 187 | 192 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 431 | 304 | 315 | 449 | 393 | 283 | 422 | 317 | 410 | 429 | 475 | 336 | 478 | 311 | 287 | 309 | 341 | 441 |
| Split | 2 | 4 | 2 | 2 | 2 | 4 | 8 | 8 | 8 | 8 | 2 | 4 | 2 | 4 | 4 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 862 | 1216 | 630 | 898 | 786 | 1132 | 3376 | 2536 | 3280 | 3432 | 950 | 1344 | 956 | 1244 | 1148 | 2472 | 2728 | 3528 |
| Dry fraction weight (g) | 0.41 | 0.71 | 0.36 | 0.85 | 0.65 | 0.77 | 0.74 | 1.22 | 1.81 | 0.69 | 0.59 | 0.97 | 0.56 | 0.41 | 0.37 | 0.5 | 0.36 | 0.48 |
| Foraminifera/g | 2102 | 1713 | 1750 | 1056 | 1209 | 1470 | 4562 | 2079 | 1812 | 4974 | 1610 | 1386 | 1707 | 3034 | 3103 | 4944 | 7578 | 7350 |
| *Cibicides mayori* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides mundulus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides pachyderma* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| *Cibicides refulgens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides ungerianus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides wuellestorfi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides spp.* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cornuspira involvens* | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 1 | 1 | 0 | 1 | 0 |
| *Cycloforina stalkeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina guttifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina coronata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina japonica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discorbinella bertheloti* | 1 | 0 | 1 | 3 | 1 | 1 | 1 | 0 | 2 | 1 | 6 | 0 | 1 | 2 | 1 | 2 | 0 | 1 |
| *Eggerella humboldti* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 11 | 10 | 10 | 3 | 0 | 0 | 0 |
| *Elphidium advenum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium crispum* | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium margaritaceum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Epistominella exigua* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Eponides repandus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina hexagona* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina squamosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina annectens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crassiporosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crebra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina derogata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina eburnea* | 3 | 4 | 6 | 3 | 5 | 4 | 5 | 3 | 2 | 4 | 2 | 1 | 4 | 2 | 3 | 2 | 1 | 1 |
| *Fissurina fasciata* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 | 10 | 1 | 1 | 1 | 0 | 1 | 2 |
| *Fissurina lacunata* | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina longpointensis* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 182 to 267 cm)

| Depth (cm) | 182 | 187 | 192 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 431 | 304 | 315 | 449 | 393 | 283 | 422 | 317 | 410 | 429 | 475 | 336 | 478 | 311 | 287 | 309 | 341 | 441 |
| Split | 2 | 4 | 2 | 2 | 2 | 4 | 8 | 8 | 8 | 8 | 2 | 4 | 2 | 4 | 4 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 862 | 1216 | 630 | 898 | 786 | 1132 | 3376 | 2536 | 3280 | 3432 | 950 | 1344 | 956 | 1244 | 1148 | 2472 | 2728 | 3528 |
| Dry fraction weight (g) | 0.41 | 0.71 | 0.36 | 0.85 | 0.65 | 0.77 | 0.74 | 1.22 | 1.81 | 0.69 | 0.59 | 0.97 | 0.56 | 0.41 | 0.37 | 0.5 | 0.36 | 0.48 |
| Foraminifera/g | 2102 | 1713 | 1750 | 1056 | 1209 | 1470 | 4562 | 2079 | 1812 | 4974 | 1610 | 1386 | 1707 | 3034 | 3103 | 4944 | 7578 | 7350 |
| *Fissurina pseudolucida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudoorbignyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fursenkoina acuta* | 19 | 4 | 2 | 3 | 4 | 4 | 4 | 3 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 2 |
| *Gaudryina pseudotrochus* | 0 | 1 | 1 | 3 | 8 | 4 | 2 | 1 | 0 | 0 | 5 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| *Gaudryina rudis* | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Gavelinopsis praegeri* | 10 | 7 | 15 | 9 | 8 | 11 | 8 | 15 | 23 | 24 | 36 | 18 | 38 | 15 | 25 | 23 | 6 | 25 |
| *Glabratella patelliformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Glandulina ovula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina affinis* | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| *Globobulimina doliolum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina turgida* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina* sp.1 | 3 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globocassidulina subglobosa* | 19 | 16 | 5 | 3 | 13 | 9 | 7 | 4 | 4 | 10 | 9 | 4 | 7 | 5 | 4 | 5 | 8 | 5 |
| *Gyroidina lamarckiana* | 10 | 2 | 2 | 2 | 4 | 0 | 4 | 5 | 4 | 0 | 7 | 11 | 21 | 6 | 4 | 13 | 13 | 13 |
| *Gyroidina soldanii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hamolahedra apiopleura* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra eucostata* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra williamsoni* | 2 | 3 | 0 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| *Hanzawaia boueana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hoeglundina elegans* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| *Hyalinea balthica* | 6 | 7 | 5 | 5 | 3 | 2 | 5 | 7 | 15 | 8 | 3 | 3 | 9 | 2 | 5 | 6 | 10 | 19 |
| *Hyalinonetrion gracillimum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyrokkin sarcophaga* | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lachlanella bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lagena substriata* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| *Lenticulina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina orbicularis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Lenticulina vortex* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Melonis barleeanum* | 1 | 0 | 1 | 0 | 3 | 0 | 1 | 1 | 1 | 1 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 2 |
| *Melonis pompiloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Miliolinella elongata* | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 6 | 1 | 0 | 2 | 1 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 182 to 267 cm)

| Depth (cm) | 182 | 187 | 192 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 431 | 304 | 315 | 449 | 393 | 283 | 422 | 317 | 410 | 429 | 475 | 336 | 478 | 311 | 287 | 309 | 341 | 441 |
| Split | 2 | 4 | 2 | 2 | 2 | 4 | 8 | 8 | 8 | 8 | 2 | 4 | 2 | 4 | 4 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 862 | 1216 | 630 | 898 | 786 | 1132 | 3376 | 2536 | 3280 | 3432 | 950 | 1344 | 956 | 1244 | 1148 | 2472 | 2728 | 3528 |
| Dry fraction weight (g) | 0.41 | 0.71 | 0.36 | 0.85 | 0.65 | 0.77 | 0.74 | 1.22 | 1.81 | 0.69 | 0.59 | 0.97 | 0.56 | 0.41 | 0.37 | 0.5 | 0.36 | 0.48 |
| Foraminifera/g | 2102 | 1713 | 1750 | 1056 | 1209 | 1470 | 4562 | 2079 | 1812 | 4974 | 1610 | 1386 | 1707 | 3034 | 3103 | 4944 | 7578 | 7350 |
| *Miliolinella subrotunda* | 33 | 19 | 16 | 40 | 36 | 30 | 34 | 17 | 12 | 13 | 62 | 30 | 24 | 36 | 33 | 29 | 14 | 29 |
| *Miliolid fragment* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Mychostomina revertens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Neoconorbina terquemi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonion fabum* | 1 | 0 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonionella turgida* | 9 | 5 | 8 | 10 | 4 | 5 | 8 | 9 | 6 | 7 | 2 | 4 | 9 | 5 | 8 | 6 | 6 | 6 |
| *Nuttallides umbonifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina globosa* | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina lineata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 |
| *Oolina melo* | 5 | 6 | 6 | 10 | 12 | 5 | 6 | 2 | 3 | 4 | 8 | 10 | 6 | 4 | 5 | 4 | 2 | 5 |
| *Oridorsalis umbonatus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Palliolatella semimarginata* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Parafissurina lateralis* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Patellina corrugata* | 11 | 12 | 15 | 15 | 13 | 1 | 6 | 6 | 7 | 7 | 14 | 11 | 14 | 8 | 4 | 7 | 3 | 1 |
| *Planulina ariminensis* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 |
| *Planulina mediterranensis* | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Polymorphina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pullenia subcarinata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pygmaeoseistron laevis ovalis* | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Pyrgo anomala* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo comata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo sarsi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo williamsoni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrulina cylindroides* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina bosciana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina disparilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina parvula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 182 to 267 cm)

| Depth (cm) | 182 | 187 | 192 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 431 | 304 | 315 | 449 | 393 | 283 | 422 | 317 | 410 | 429 | 475 | 336 | 478 | 311 | 287 | 309 | 341 | 441 |
| Split | 2 | 4 | 2 | 2 | 2 | 4 | 8 | 8 | 8 | 8 | 2 | 4 | 2 | 4 | 4 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 862 | 1216 | 630 | 898 | 786 | 1132 | 3376 | 2536 | 3280 | 3432 | 950 | 1344 | 956 | 1244 | 1148 | 2472 | 2728 | 3528 |
| Dry fraction weight (g) | 0.41 | 0.71 | 0.36 | 0.85 | 0.65 | 0.77 | 0.74 | 1.22 | 1.81 | 0.69 | 0.59 | 0.97 | 0.56 | 0.41 | 0.37 | 0.5 | 0.36 | 0.48 |
| Foraminifera/g | 2102 | 1713 | 1750 | 1056 | 1209 | 1470 | 4562 | 2079 | 1812 | 4974 | 1610 | 1386 | 1707 | 3034 | 3103 | 4944 | 7578 | 7350 |
| *Quinqueloculina semiluna* | 4 | 2 | 2 | 8 | 1 | 4 | 7 | 1 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 4 |
| *Quinqueloculina stelligera* | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 2 |
| *Quinqueloculina viennensis* | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 1 | 5 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 |
| *Quinqueloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Robertinoides bradyi* | 1 | 2 | 5 | 5 | 3 | 0 | 1 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 2 |
| *Rosalina bradyi* | 9 | 24 | 19 | 34 | 25 | 19 | 17 | 28 | 17 | 17 | 35 | 34 | 42 | 30 | 20 | 17 | 19 | 24 |
| *Rosalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Schackoinella spina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sigmoilopsis schlumbergeri* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Siphouvigerina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sphaeroidina bulloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spirillina vivipara* | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 2 | 1 | 0 |
| *Spirillina wrightii* | 3 | 1 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina asperula* | 2 | 1 | 1 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 |
| *Spiroloculina dilatata* | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina tenuiseptata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina expansa* | 2 | 3 | 2 | 0 | 6 | 1 | 1 | 0 | 1 | 2 | 0 | 3 | 1 | 0 | 4 | 3 | 1 | 7 |
| *Spiroplectammina wrightii* | 8 | 3 | 2 | 5 | 10 | 9 | 8 | 3 | 1 | 3 | 5 | 10 | 7 | 7 | 11 | 8 | 5 | 11 |
| *Spiroplectinella* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stainforthia loeblichi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stomatorbina concentrica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| *Textularia agglutinans* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 0 |
| *Textularia bocki* | 3 | 4 | 3 | 9 | 10 | 7 | 6 | 6 | 1 | 8 | 15 | 14 | 9 | 3 | 7 | 3 | 0 | 0 |
| *Textularia conica* | 5 | 4 | 3 | 14 | 4 | 5 | 6 | 2 | 3 | 6 | 15 | 12 | 8 | 5 | 6 | 5 | 0 | 7 |
| *Textularia lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 0 | 1 | 1 |
| *Textularia truncata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trifarina angulosa* | 9 | 9 | 4 | 2 | 2 | 4 | 7 | 3 | 7 | 7 | 10 | 7 | 8 | 1 | 3 | 1 | 1 | 4 |
| *Trifarina bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina marioni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 182 to 267 cm)

| Depth (cm) | 182 | 187 | 192 | 197 | 202 | 207 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 431 | 304 | 315 | 449 | 393 | 283 | 422 | 317 | 410 | 429 | 475 | 336 | 478 | 311 | 287 | 309 | 341 | 441 |
| Split | 2 | 4 | 2 | 2 | 2 | 4 | 8 | 8 | 8 | 8 | 2 | 4 | 2 | 4 | 4 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 862 | 1216 | 630 | 898 | 786 | 1132 | 3376 | 2536 | 3280 | 3432 | 950 | 1344 | 956 | 1244 | 1148 | 2472 | 2728 | 3528 |
| Dry fraction weight (g) | 0.41 | 0.71 | 0.36 | 0.85 | 0.65 | 0.77 | 0.74 | 1.22 | 1.81 | 0.69 | 0.59 | 0.97 | 0.56 | 0.41 | 0.37 | 0.5 | 0.36 | 0.48 |
| Foraminifera/g | 2102 | 1713 | 1750 | 1056 | 1209 | 1470 | 4562 | 2079 | 1812 | 4974 | 1610 | 1386 | 1707 | 3034 | 3103 | 4944 | 7578 | 7350 |
| *Triloculina tricarinata* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| *Triloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trochammina globigeriniformis* | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina auberiana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina mediterranea* | 2 | 3 | 2 | 3 | 4 | 2 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 6 | 1 | 4 | 4 |
| *Uvigerina peregrina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Valvulineria bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unknown (fragment) | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 272 to 352 cm)

| Depth (cm) | 272 | 277 | 282 | 287 | 292 | 297 | 302 | 307 | 312 | 317 | 322 | 327 | 332 | 337 | 342 | 347 | 352 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 377 | 298 | 311 | 311 | 435 | 305 | 297 | 839 | 616 | 307 | 311 | 299 | 370 | 290 | 330 | 400 | 302 |
| Split | 8 | 4 | 4 | 2 | 2 | 4 | 16 | 8 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |
| Total (Sum counts × Split) | 3016 | 1192 | 1244 | 622 | 870 | 1220 | 4752 | 6712 | 2464 | 1228 | 1244 | 1196 | 740 | 1160 | 1320 | 800 | 1208 |
| Dry fraction weight (g) | 0.66 | 0.98 | 1 | 0.76 | 0.69 | 0.86 | 0.45 | 1.02 | 0.78 | 1.13 | 1.33 | 1.09 | 0.37 | 0.65 | 0.73 | 0.55 | 0.6 |
| Foraminifera/g | 4570 | 1216 | 1244 | 818.4 | 1261 | 1419 | 10560 | 6580 | 3159 | 1087 | 935.3 | 1097 | 2000 | 1785 | 1808 | 1455 | 2013 |
| *Adelosina dubia* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammodiscus incertus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammonia beccarii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Amphycorina scalaris* | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| *Anomalinoides globulosus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Asterigerinata mamilla* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion antarcticus* | 1 | 1 | 6 | 4 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion stelligerum* | 3 | 8 | 5 | 6 | 3 | 3 | 1 | 8 | 7 | 5 | 4 | 3 | 8 | 9 | 7 | 8 | 8 |
| *Astrononion tumidum* | 2 | 5 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Biloculinella globulus* | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 |
| *Biloculinella labiata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina alata* | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 15 | 12 | 1 | 5 | 8 | 6 | 1 | 1 | 2 | 1 |
| *Bolivina difformis* | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 0 |
| *Bolivina dilatata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 272 to 352 cm)

| Depth (cm) | 272 | 277 | 282 | 287 | 292 | 297 | 302 | 307 | 312 | 317 | 322 | 327 | 332 | 337 | 342 | 347 | 352 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 377 | 298 | 311 | 311 | 435 | 305 | 297 | 839 | 616 | 307 | 311 | 299 | 370 | 290 | 330 | 400 | 302 |
| Split | 8 | 4 | 4 | 2 | 2 | 4 | 16 | 8 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |
| Total (Sum counts × Split) | 3016 | 1192 | 1244 | 622 | 870 | 1220 | 4752 | 6712 | 2464 | 1228 | 1244 | 1196 | 740 | 1160 | 1320 | 800 | 1208 |
| Dry fraction weight (g) | 0.66 | 0.98 | 1 | 0.76 | 0.69 | 0.86 | 0.45 | 1.02 | 0.78 | 1.13 | 1.33 | 1.09 | 0.37 | 0.65 | 0.73 | 0.55 | 0.6 |
| Foraminifera/g | 4570 | 1216 | 1244 | 818.4 | 1261 | 1419 | 10560 | 6580 | 3159 | 1087 | 935.3 | 1097 | 2000 | 1785 | 1808 | 1455 | 2013 |
| *Bolivina pseudoplicata* | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Bolivina pseudopunctata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina spathulata* | 10 | 0 | 3 | 1 | 4 | 0 | 3 | 27 | 35 | 3 | 4 | 4 | 2 | 5 | 4 | 9 | 2 |
| *Bolivina striatula* | 10 | 2 | 0 | 2 | 12 | 22 | 21 | 12 | 1 | 3 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| *Bolivina variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina aculeata* | 51 | 13 | 17 | 16 | 30 | 27 | 124 | 266 | 56 | 18 | 13 | 10 | 11 | 10 | 16 | 12 | 2 |
| *Bulimina gibba* | 4 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina marginata* | 23 | 7 | 5 | 2 | 13 | 18 | 10 | 74 | 55 | 14 | 28 | 7 | 11 | 18 | 14 | 13 | 11 |
| *Bulimina striata* | 16 | 6 | 14 | 11 | 23 | 13 | 14 | 32 | 24 | 14 | 15 | 8 | 23 | 9 | 16 | 23 | 18 |
| *Cassidulina carinata* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 0 | 0 |
| *Cassidulina crassa* | 6 | 3 | 1 | 2 | 0 | 1 | 0 | 9 | 10 | 9 | 7 | 5 | 7 | 5 | 11 | 17 | 12 |
| *Cassidulina laevigata* | 34 | 13 | 15 | 7 | 20 | 14 | 13 | 60 | 76 | 16 | 21 | 22 | 18 | 16 | 14 | 18 | 22 |
| *Cassidulina reniforme* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| *Cassidulinoides bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Chilostomella oolina* | 21 | 29 | 27 | 45 | 30 | 11 | 12 | 13 | 26 | 19 | 27 | 18 | 16 | 15 | 30 | 52 | 44 |
| *Cibicidella variabilis* | 1 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 8 | 0 | 0 |
| *Cibicides aravaensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides lobatulus* | 32 | 42 | 39 | 57 | 54 | 50 | 16 | 40 | 54 | 25 | 19 | 28 | 46 | 28 | 24 | 26 | 26 |
| *Cibicides mayori* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides mundulus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Cibicides pachyderma* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides refulgens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides ungerianus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides wuellestorfi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides spp.* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cornuspira involvens* | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cycloforina stalkeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina guttifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina coronata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina japonica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discorbinella bertheloti* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 3 | 1 | 0 | 3 | 1 | 2 | 4 | 1 |
| *Eggerella humboldti* | 0 | 4 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 1 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 272 to 352 cm)

| Depth (cm) | 272 | 277 | 282 | 287 | 292 | 297 | 302 | 307 | 312 | 317 | 322 | 327 | 332 | 337 | 342 | 347 | 352 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 377 | 298 | 311 | 311 | 435 | 305 | 297 | 839 | 616 | 307 | 311 | 299 | 370 | 290 | 330 | 400 | 302 |
| Split | 8 | 4 | 4 | 2 | 2 | 4 | 16 | 8 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |
| Total (Sum counts × Split) | 3016 | 1192 | 1244 | 622 | 870 | 1220 | 4752 | 6712 | 2464 | 1228 | 1244 | 1196 | 740 | 1160 | 1320 | 800 | 1208 |
| Dry fraction weight (g) | 0.66 | 0.98 | 1 | 0.76 | 0.69 | 0.86 | 0.45 | 1.02 | 0.78 | 1.13 | 1.33 | 1.09 | 0.37 | 0.65 | 0.73 | 0.55 | 0.6 |
| Foraminifera/g | 4570 | 1216 | 1244 | 818.4 | 1261 | 1419 | 10560 | 6580 | 3159 | 1087 | 935.3 | 1097 | 2000 | 1785 | 1808 | 1455 | 2013 |
| *Elphidium advenum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| *Elphidium crispum* | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium margaritaceum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Epistominella exigua* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Eponides repandus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina hexagona* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| *Favulina squamosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina annectens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 1 |
| *Fissurina crassiporosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crebra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina derogata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina eburnea* | 3 | 10 | 1 | 1 | 4 | 1 | 1 | 3 | 2 | 2 | 6 | 1 | 7 | 5 | 3 | 4 | 3 |
| *Fissurina fasciata* | 1 | 3 | 6 | 3 | 0 | 2 | 0 | 0 | 2 | 2 | 2 | 3 | 1 | 0 | 2 | 1 | 5 |
| *Fissurina lacunata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina longpointensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudolucida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 |
| *Fissurina pseudoorbignyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fursenkoina acuta* | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Gaudryina pseudotrochus* | 3 | 0 | 0 | 3 | 3 | 1 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Gaudryina rudis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| *Gavelinopsis praegeri* | 7 | 16 | 12 | 15 | 21 | 9 | 5 | 25 | 23 | 9 | 7 | 8 | 20 | 15 | 25 | 21 | 10 |
| *Glabratella patelliformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Glandulina ovula* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina affinis* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina doliolum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina turgida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globocassidulina subglobosa* | 3 | 15 | 4 | 2 | 3 | 1 | 4 | 5 | 8 | 4 | 7 | 11 | 7 | 7 | 10 | 13 | 6 |
| *Gyroidina lamarckiana* | 9 | 3 | 5 | 6 | 13 | 3 | 2 | 18 | 4 | 1 | 2 | 5 | 2 | 3 | 7 | 4 | 3 |
| *Gyroidina soldanii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 272 to 352 cm)

| Depth (cm) | 272 | 277 | 282 | 287 | 292 | 297 | 302 | 307 | 312 | 317 | 322 | 327 | 332 | 337 | 342 | 347 | 352 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 377 | 298 | 311 | 311 | 435 | 305 | 297 | 839 | 616 | 307 | 311 | 299 | 370 | 290 | 330 | 400 | 302 |
| Split | 8 | 4 | 4 | 2 | 2 | 4 | 16 | 8 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |
| Total (Sum counts × Split) | 3016 | 1192 | 1244 | 622 | 870 | 1220 | 4752 | 6712 | 2464 | 1228 | 1244 | 1196 | 740 | 1160 | 1320 | 800 | 1208 |
| Dry fraction weight (g) | 0.66 | 0.98 | 1 | 0.76 | 0.69 | 0.86 | 0.45 | 1.02 | 0.78 | 1.13 | 1.33 | 1.09 | 0.37 | 0.65 | 0.73 | 0.55 | 0.6 |
| Foraminifera/g | 4570 | 1216 | 1244 | 818.4 | 1261 | 1419 | 10560 | 6580 | 3159 | 1087 | 935.3 | 1097 | 2000 | 1785 | 1808 | 1455 | 2013 |
| *Hamolahedra apiopleura* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra eucostata* | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 0 |
| *Homalohedra williamsoni* | 1 | 1 | 3 | 8 | 3 | 1 | 0 | 2 | 4 | 6 | 0 | 0 | 3 | 1 | 0 | 2 | 1 |
| *Hanzawaia boueana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hoeglundina elegans* | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 14 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| *Hyalinea balthica* | 10 | 1 | 0 | 1 | 2 | 4 | 9 | 12 | 10 | 5 | 2 | 3 | 2 | 0 | 2 | 1 | 2 |
| *Hyalinonetrion gracillimum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Hyrokkin sarcophaga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lachlanella bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lagena substriata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Lenticulina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina orbicularis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina vortex* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Melonis barleeanum* | 3 | 1 | 7 | 4 | 2 | 3 | 0 | 32 | 15 | 5 | 2 | 5 | 12 | 12 | 3 | 13 | 6 |
| *Melonis pompiloides* | 0 | 0 | 8 | 1 | 1 | 2 | 1 | 12 | 3 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| *Miliolinella elongata* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| *Miliolinella subrotunda* | 22 | 27 | 27 | 29 | 26 | 21 | 10 | 33 | 45 | 36 | 27 | 29 | 35 | 32 | 29 | 25 | 23 |
| *Miliolid fragment* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Mychostomina revertens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Neoconorbina terquemi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonion fabum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonionella turgida* | 11 | 4 | 1 | 0 | 5 | 1 | 4 | 6 | 2 | 1 | 2 | 3 | 2 | 1 | 4 | 0 | 3 |
| *Nuttallides umbonifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina globosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| *Oolina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina lineata* | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 |
| *Oolina melo* | 3 | 4 | 6 | 3 | 7 | 3 | 1 | 1 | 3 | 1 | 3 | 3 | 3 | 2 | 3 | 4 | 3 |
| *Oridorsalis umbonatus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Palliolatella semimarginata* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| *Parafissurina lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Patellina corrugata* | 4 | 11 | 13 | 8 | 3 | 9 | 2 | 6 | 18 | 17 | 11 | 14 | 14 | 14 | 14 | 16 | 11 |
| *Planulina ariminensis* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Planulina mediterranensis* | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 272 to 352)

| Depth (cm) | 272 | 277 | 282 | 287 | 292 | 297 | 302 | 307 | 312 | 317 | 322 | 327 | 332 | 337 | 342 | 347 | 352 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 377 | 298 | 311 | 311 | 435 | 305 | 297 | 839 | 616 | 307 | 311 | 299 | 370 | 290 | 330 | 400 | 302 |
| Split | 8 | 4 | 4 | 2 | 2 | 4 | 16 | 8 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |
| Total (Sum counts × Split) | 3016 | 1192 | 1244 | 622 | 870 | 1220 | 4752 | 6712 | 2464 | 1228 | 1244 | 1196 | 740 | 1160 | 1320 | 800 | 1208 |
| Dry fraction weight (g) | 0.66 | 0.98 | 1 | 0.76 | 0.69 | 0.86 | 0.45 | 1.02 | 0.78 | 1.13 | 1.33 | 1.09 | 0.37 | 0.65 | 0.73 | 0.55 | 0.6 |
| Foraminifera/g | 4570 | 1216 | 1244 | 818.4 | 1261 | 1419 | 10560 | 6580 | 3159 | 1087 | 935.3 | 1097 | 2000 | 1785 | 1808 | 1455 | 2013 |
| *Polymorphina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pullenia subcarinata* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 |
| *Pygmaeoseistron laevis ovalis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| *Pyrgo anomala* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| *Pyrgo comata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo sarsi* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Pyrgo williamsoni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrulina cylindroides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina bosciana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina disparilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 |
| *Quinqueloculina parvula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina semiluna* | 2 | 0 | 1 | 0 | 0 | 1 | 3 | 7 | 3 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina stelligera* | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 |
| *Quinqueloculina viennensis* | 1 | 3 | 1 | 1 | 2 | 1 | 2 | 11 | 0 | 2 | 2 | 1 | 1 | 0 | 1 | 4 | 2 |
| *Quinqueloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Robertinoides bradyi* | 1 | 5 | 0 | 2 | 2 | 1 | 0 | 1 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 1 | 0 |
| *Rosalina bradyi* | 19 | 23 | 18 | 24 | 41 | 26 | 17 | 21 | 44 | 39 | 36 | 53 | 42 | 33 | 26 | 41 | 26 |
| *Rosalina* sp.1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Schackoinella spina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Sigmoilopsis schlumbergeri* | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| *Siphouvigerina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sphaeroidina bulloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spirillina vivipara* | 1 | 0 | 3 | 0 | 3 | 2 | 1 | 2 | 2 | 1 | 0 | 1 | 4 | 1 | 3 | 2 | 0 |
| *Spirillina wrightii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina asperula* | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 3 | 0 | 1 | 1 | 1 | 3 | 0 |
| *Spiroloculina dilatata* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Spiroloculina tenuiseptata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina expansa* | 4 | 4 | 4 | 3 | 10 | 6 | 1 | 3 | 5 | 4 | 6 | 4 | 10 | 4 | 2 | 7 | 6 |

**Supplementary Table 1**. continuation (samples 272 to 352)

| Depth (cm) | 272 | 277 | 282 | 287 | 292 | 297 | 302 | 307 | 312 | 317 | 322 | 327 | 332 | 337 | 342 | 347 | 352 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 377 | 298 | 311 | 311 | 435 | 305 | 297 | 839 | 616 | 307 | 311 | 299 | 370 | 290 | 330 | 400 | 302 |
| Split | 8 | 4 | 4 | 2 | 2 | 4 | 16 | 8 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |
| Total (Sum counts × Split) | 3016 | 1192 | 1244 | 622 | 870 | 1220 | 4752 | 6712 | 2464 | 1228 | 1244 | 1196 | 740 | 1160 | 1320 | 800 | 1208 |
| Dry fraction weight (g) | 0.66 | 0.98 | 1 | 0.76 | 0.69 | 0.86 | 0.45 | 1.02 | 0.78 | 1.13 | 1.33 | 1.09 | 0.37 | 0.65 | 0.73 | 0.55 | 0.6 |
| Foraminifera/g | 4570 | 1216 | 1244 | 818.4 | 1261 | 1419 | 10560 | 6580 | 3159 | 1087 | 935.3 | 1097 | 2000 | 1785 | 1808 | 1455 | 2013 |
| *Spiroplectammina wrightii* | 17 | 15 | 29 | 8 | 18 | 20 | 3 | 10 | 12 | 12 | 11 | 10 | 12 | 9 | 7 | 14 | 16 |
| *Spiroplectinella* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stainforthia loeblichi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stomatorbina concentrica* | 0 | 4 | 2 | 2 | 7 | 1 | 0 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 3 |
| *Textularia agglutinans* | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 1 | 2 | 5 | 0 | 2 | 2 | 2 | 1 |
| *Textularia bocki* | 7 | 6 | 10 | 6 | 9 | 3 | 2 | 9 | 2 | 2 | 4 | 3 | 2 | 2 | 6 | 1 | 5 |
| *Textularia conica* | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia lateralis* | 4 | 2 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia truncata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 |
| *Textularia* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trifarina angulosa* | 5 | 3 | 1 | 0 | 1 | 2 | 0 | 6 | 7 | 7 | 7 | 7 | 6 | 0 | 6 | 8 | 3 |
| *Trifarina bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina marioni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina oblonga* | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Triloculina tricarinata* | 2 | 1 | 0 | 0 | 2 | 0 | 3 | 4 | 1 | 0 | 0 | 0 | 4 | 2 | 0 | 2 | 1 |
| *Triloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trochammina globigeriniformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina auberiana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina mediterranea* | 5 | 1 | 0 | 3 | 8 | 4 | 3 | 20 | 12 | 3 | 5 | 1 | 3 | 3 | 2 | 5 | 3 |
| *Uvigerina peregrina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Valvulineria bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Unknown (fragment) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 357 to 422 cm)

| Depth (cm) | 357 | 362 | 367 | 372 | 377 | 382 | 387 | 392 | 397 | 402 | 407 | 412 | 417 | 422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 383 | 349 | 329 | 299 | 317 | 293 | 288 | 393 | 605 | 320 | 412 | 288 | 341 | 313 |
| Split | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 4 | 8 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 1532 | 1396 | 2632 | 2392 | 2536 | 2344 | 2304 | 3144 | 2420 | 1280 | 3296 | 2304 | 2728 | 2504 |
| Dry fraction weight (g) | 0.56 | 0.72 | 1.08 | 0.91 | 0.6 | 0.79 | 0.84 | 1.38 | 0.68 | 1 | 1.64 | 1.7 | 1.6 | 1.83 |
| Foraminifera/g | 2736 | 1939 | 2437 | 2629 | 4227 | 2967 | 2743 | 2278 | 3559 | 1280 | 2010 | 1355 | 1705 | 1368 |
| *Adelosina dubia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammodiscus incertus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammonia beccarii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Amphycorina scalaris* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Anomalinoides globulosus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Asterigerinata mamilla* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion antarcticus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion stelligerum* | 5 | 6 | 8 | 5 | 3 | 7 | 11 | 10 | 10 | 11 | 12 | 5 | 4 | 6 |
| *Astrononion tumidum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Biloculinella globulus* | 1 | 0 | 2 | 2 | 1 | 0 | 1 | 2 | 1 | 2 | 4 | 2 | 0 | 0 |
| *Biloculinella labiata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Bolivina alata* | 6 | 4 | 1 | 2 | 2 | 1 | 2 | 3 | 11 | 8 | 4 | 1 | 4 | 6 |
| *Bolivina difformis* | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Bolivina dilatata* | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 1 |
| *Bolivina pseudoplicata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| *Bolivina pseudopunctata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina spathulata* | 4 | 6 | 8 | 5 | 4 | 3 | 4 | 7 | 4 | 5 | 4 | 1 | 1 | 2 |
| *Bolivina striatula* | 2 | 3 | 2 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 1 | 3 |
| *Bolivina variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina aculeata* | 16 | 20 | 29 | 14 | 14 | 11 | 14 | 39 | 50 | 11 | 16 | 9 | 9 | 7 |
| *Bulimina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina marginata* | 15 | 17 | 15 | 11 | 8 | 8 | 9 | 10 | 14 | 8 | 18 | 15 | 19 | 9 |
| *Bulimina striata* | 24 | 19 | 16 | 22 | 15 | 10 | 13 | 28 | 44 | 18 | 16 | 10 | 6 | 6 |
| *Cassidulina carinata* | 1 | 3 | 2 | 1 | 2 | 1 | 0 | 0 | 7 | 1 | 2 | 3 | 8 | 4 |
| *Cassidulina crassa* | 17 | 16 | 11 | 3 | 6 | 9 | 3 | 8 | 23 | 7 | 18 | 5 | 9 | 7 |
| *Cassidulina laevigata* | 18 | 13 | 21 | 18 | 7 | 10 | 12 | 13 | 25 | 24 | 30 | 22 | 30 | 15 |
| *Cassidulina reniforme* | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 1 |
| *Cassidulinoides bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| *Chilostomella oolina* | 38 | 26 | 17 | 15 | 11 | 17 | 39 | 15 | 32 | 29 | 14 | 8 | 9 | 12 |
| *Cibicidella variabilis* | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| *Cibicides aravaensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 4 | 1 |
| *Cibicides lobatulus* | 30 | 33 | 20 | 35 | 41 | 44 | 36 | 34 | 45 | 26 | 35 | 24 | 29 | 42 |
| *Cibicides mayori* | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 357 to 422 cm)

| Depth (cm) | 357 | 362 | 367 | 372 | 377 | 382 | 387 | 392 | 397 | 402 | 407 | 412 | 417 | 422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 383 | 349 | 329 | 299 | 317 | 293 | 288 | 393 | 605 | 320 | 412 | 288 | 341 | 313 |
| Split | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 4 | 8 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 1532 | 1396 | 2632 | 2392 | 2536 | 2344 | 2304 | 3144 | 2420 | 1280 | 3296 | 2304 | 2728 | 2504 |
| Dry fraction weight (g) | 0.56 | 0.72 | 1.08 | 0.91 | 0.6 | 0.79 | 0.84 | 1.38 | 0.68 | 1 | 1.64 | 1.7 | 1.6 | 1.83 |
| Foraminifera/g | 2736 | 1939 | 2437 | 2629 | 4227 | 2967 | 2743 | 2278 | 3559 | 1280 | 2010 | 1355 | 1705 | 1368 |
| *Cibicides mundulus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides pachyderma* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides refulgens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Cibicides ungerianus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Cibicides wuellestorfi* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| *Cibicides spp.* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cornuspira involvens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cycloforina stalkeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina guttifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Dentalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina coronata* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| *Discanomalina japonica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discorbinella bertheloti* | 2 | 6 | 2 | 4 | 4 | 2 | 2 | 5 | 5 | 2 | 5 | 2 | 0 | 2 |
| *Eggerella humboldti* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium advenum* | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium crispum* | 2 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 |
| *Elphidium margaritaceum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Elphidium* sp.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Epistominella exigua* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Eponides repandus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina hexagona* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina squamosa* | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina annectens* | 1 | 1 | 2 | 1 | 4 | 5 | 2 | 5 | 3 | 3 | 2 | 1 | 3 | 1 |
| *Fissurina crassiporosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crebra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina derogata* | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina eburnea* | 7 | 3 | 3 | 1 | 3 | 4 | 2 | 0 | 2 | 1 | 3 | 1 | 3 | 0 |
| *Fissurina fasciata* | 1 | 2 | 6 | 4 | 1 | 3 | 1 | 3 | 11 | 4 | 6 | 6 | 3 | 6 |
| *Fissurina lacunata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina longpointensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudolucida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudoorbignyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 357 to 422 cm)

| Depth (cm) | 357 | 362 | 367 | 372 | 377 | 382 | 387 | 392 | 397 | 402 | 407 | 412 | 417 | 422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 383 | 349 | 329 | 299 | 317 | 293 | 288 | 393 | 605 | 320 | 412 | 288 | 341 | 313 |
| Split | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 4 | 8 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 1532 | 1396 | 2632 | 2392 | 2536 | 2344 | 2304 | 3144 | 2420 | 1280 | 3296 | 2304 | 2728 | 2504 |
| Dry fraction weight (g) | 0.56 | 0.72 | 1.08 | 0.91 | 0.6 | 0.79 | 0.84 | 1.38 | 0.68 | 1 | 1.64 | 1.7 | 1.6 | 1.83 |
| Foraminifera/g | 2736 | 1939 | 2437 | 2629 | 4227 | 2967 | 2743 | 2278 | 3559 | 1280 | 2010 | 1355 | 1705 | 1368 |
| *Fissurina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fursenkoina acuta* | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| *Gaudryina pseudotrochus* | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| *Gaudryina rudis* | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| *Gavelinopsis praegeri* | 20 | 15 | 17 | 11 | 21 | 11 | 14 | 34 | 41 | 10 | 26 | 21 | 23 | 19 |
| *Glabratella patelliformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Glandulina ovula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina affinis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina doliolum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina turgida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globocassidulina subglobosa* | 10 | 6 | 7 | 6 | 3 | 6 | 1 | 9 | 22 | 8 | 25 | 8 | 35 | 19 |
| *Gyroidina lamarckiana* | 5 | 9 | 0 | 1 | 6 | 1 | 3 | 0 | 4 | 4 | 3 | 3 | 3 | 3 |
| *Gyroidina soldanii* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Hamolahedra apiopleura* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Homalohedra eucostata* | 2 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| *Homalohedra williamsoni* | 0 | 0 | 1 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 |
| *Hanzawaia boueana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hoeglundina elegans* | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyalinea balthica* | 1 | 3 | 4 | 2 | 2 | 1 | 0 | 1 | 8 | 1 | 3 | 0 | 1 | 1 |
| *Hyalinonetrion gracillimum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 |
| *Hyrokkin sarcophaga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lachlanella bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| *Lagena substriata* | 2 | 1 | 0 | 1 | 4 | 0 | 2 | 1 | 0 | 0 | 2 | 3 | 1 | 0 |
| *Lenticulina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina orbicularis* | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina vortex* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Melonis barleeanum* | 5 | 3 | 2 | 3 | 8 | 3 | 9 | 4 | 16 | 6 | 4 | 5 | 6 | 1 |
| *Melonis pompiloides* | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 6 | 3 | 1 | 0 | 0 | 0 | 0 |
| *Miliolinella elongata* | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| *Miliolinella subrotunda* | 41 | 29 | 21 | 26 | 25 | 31 | 25 | 23 | 41 | 21 | 28 | 15 | 13 | 19 |
| *Miliolid fragment* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| *Mychostomina revertens* | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 357 to 422 cm)

| Depth (cm) | 357 | 362 | 367 | 372 | 377 | 382 | 387 | 392 | 397 | 402 | 407 | 412 | 417 | 422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 383 | 349 | 329 | 299 | 317 | 293 | 288 | 393 | 605 | 320 | 412 | 288 | 341 | 313 |
| Split | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 4 | 8 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 1532 | 1396 | 2632 | 2392 | 2536 | 2344 | 2304 | 3144 | 2420 | 1280 | 3296 | 2304 | 2728 | 2504 |
| Dry fraction weight (g) | 0.56 | 0.72 | 1.08 | 0.91 | 0.6 | 0.79 | 0.84 | 1.38 | 0.68 | 1 | 1.64 | 1.7 | 1.6 | 1.83 |
| Foraminifera/g | 2736 | 1939 | 2437 | 2629 | 4227 | 2967 | 2743 | 2278 | 3559 | 1280 | 2010 | 1355 | 1705 | 1368 |
| *Neoconorbina terquemi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonion fabum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonionella turgida* | 0 | 3 | 2 | 1 | 4 | 4 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 3 |
| *Nuttallides umbonifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina globosa* | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina lineata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina melo* | 0 | 2 | 1 | 0 | 3 | 2 | 1 | 1 | 3 | 1 | 4 | 5 | 3 | 5 |
| *Oridorsalis umbonatus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Palliolatella semimarginata* | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| *Parafissurina lateralis* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Patellina corrugata* | 7 | 7 | 3 | 7 | 5 | 4 | 3 | 10 | 9 | 3 | 9 | 7 | 10 | 7 |
| *Planulina ariminensis* | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Planulina mediterranensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Polymorphina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pullenia subcarinata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Pygmaeoseistron laevis ovalis* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Pyrgo anomala* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo comata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo sarsi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo williamsoni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrulina cylindroides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina bosciana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina disparilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina laevigata* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina parvula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 2 |
| *Quinqueloculina semiluna* | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina stelligera* | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Quinqueloculina viennensis* | 3 | 6 | 9 | 5 | 8 | 4 | 4 | 6 | 6 | 0 | 5 | 0 | 2 | 1 |
| *Quinqueloculina* sp.1 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 1 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 357 to 422 cm)

| Depth (cm) | 357 | 362 | 367 | 372 | 377 | 382 | 387 | 392 | 397 | 402 | 407 | 412 | 417 | 422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 383 | 349 | 329 | 299 | 317 | 293 | 288 | 393 | 605 | 320 | 412 | 288 | 341 | 313 |
| Split | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 4 | 8 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 1532 | 1396 | 2632 | 2392 | 2536 | 2344 | 2304 | 3144 | 2420 | 1280 | 3296 | 2304 | 2728 | 2504 |
| Dry fraction weight (g) | 0.56 | 0.72 | 1.08 | 0.91 | 0.6 | 0.79 | 0.84 | 1.38 | 0.68 | 1 | 1.64 | 1.7 | 1.6 | 1.83 |
| Foraminifera/g | 2736 | 1939 | 2437 | 2629 | 4227 | 2967 | 2743 | 2278 | 3559 | 1280 | 2010 | 1355 | 1705 | 1368 |
| *Robertinoides bradyi* | 1 | 4 | 2 | 1 | 2 | 3 | 2 | 0 | 1 | 2 | 1 | 1 | 0 | 1 |
| *Rosalina bradyi* | 26 | 28 | 27 | 30 | 34 | 29 | 23 | 33 | 62 | 32 | 27 | 26 | 34 | 20 |
| *Rosalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Schackoinella spina* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 1 | 3 |
| *Sigmoilopsis schlumbergeri* | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Siphouvigerina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sphaeroidina bulloides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spirillina vivipara* | 0 | 2 | 0 | 1 | 1 | 2 | 2 | 5 | 4 | 16 | 8 | 10 | 7 | 8 |
| *Spirillina wrightii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina asperula* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 1 | 0 | 2 | 0 | 2 |
| *Spiroloculina dilatata* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| *Spiroloculina tenuiseptata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina expansa* | 6 | 15 | 7 | 8 | 15 | 10 | 10 | 11 | 18 | 7 | 9 | 10 | 2 | 6 |
| *Spiroplectammina wrightii* | 27 | 13 | 18 | 11 | 20 | 23 | 13 | 32 | 25 | 13 | 13 | 20 | 24 | 25 |
| *Spiroplectinella* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stainforthia loeblichi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stomatorbina concentrica* | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 2 | 1 |
| *Textularia agglutinans* | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia bocki* | 3 | 1 | 4 | 11 | 5 | 7 | 2 | 4 | 4 | 4 | 2 | 5 | 3 | 1 |
| *Textularia conica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia lateralis* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia truncata* | 3 | 1 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Trifarina angulosa* | 9 | 5 | 13 | 5 | 3 | 1 | 3 | 7 | 9 | 4 | 11 | 10 | 10 | 16 |
| *Trifarina bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina marioni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Triloculina oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 3 |
| *Triloculina tricarinata* | 3 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| *Triloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trochammina globigeriniformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina auberiana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina mediterranea* | 7 | 8 | 7 | 6 | 1 | 3 | 0 | 5 | 10 | 9 | 15 | 7 | 6 | 4 |

**Supplementary Table 1**. continuation (samples 357 to 422 cm)

| Depth (cm) | 357 | 362 | 367 | 372 | 377 | 382 | 387 | 392 | 397 | 402 | 407 | 412 | 417 | 422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 383 | 349 | 329 | 299 | 317 | 293 | 288 | 393 | 605 | 320 | 412 | 288 | 341 | 313 |
| Split | 4 | 4 | 8 | 8 | 8 | 8 | 8 | 8 | 4 | 4 | 8 | 8 | 8 | 8 |
| Total (Sum counts × Split) | 1532 | 1396 | 2632 | 2392 | 2536 | 2344 | 2304 | 3144 | 2420 | 1280 | 3296 | 2304 | 2728 | 2504 |
| Dry fraction weight (g) | 0.56 | 0.72 | 1.08 | 0.91 | 0.6 | 0.79 | 0.84 | 1.38 | 0.68 | 1 | 1.64 | 1.7 | 1.6 | 1.83 |
| Foraminifera/g | 2736 | 1939 | 2437 | 2629 | 4227 | 2967 | 2743 | 2278 | 3559 | 1280 | 2010 | 1355 | 1705 | 1368 |
| *Uvigerina peregrina* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Valvulineria bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Unknown (fragment) | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |

**Supplementary Table 1**. continuation (samples 427 to 482 cm)

| Depth (cm) | 427 | 432 | 437 | 442 | 447 | 452 | 457 | 462 | 467 | 472 | 477 | 482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 285 | 314 | 288 | 288 | 268 | 362 | 515 | 379 | 520 | 289 | 335 | 550 |
| Split | 8 | 8 | 8 | 4 | 8 | 16 | 32 | 64 | 16 | 32 | 32 | 16 |
| Total (Sum counts × Split) | 2280 | 2512 | 2304 | 1152 | 2144 | 5792 | 16480 | 24256 | 8320 | 9248 | 10720 | 8800 |
| Dry fraction weight (g) | 1.54 | 1.32 | 1.13 | 1.25 | 1.48 | 5.44 | 4.72 | 7.06 | 4.26 | 3.42 | 3.58 | 4.93 |
| Foraminifera/g | 1481 | 1903 | 2039 | 921.6 | 1449 | 1065 | 3492 | 3436 | 1953 | 2704 | 2994 | 1785 |
| *Adelosina dubia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammodiscus incertus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Ammonia beccarii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Amphycorina scalaris* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Anomalinoides globulosus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Asterigerinata mamilla* | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| *Astrononion antarcticus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Astrononion stelligerum* | 14 | 7 | 7 | 6 | 14 | 6 | 53 | 51 | 68 | 52 | 54 | 46 |
| *Astrononion tumidum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Biloculinella globulus* | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 2 | 0 | 0 | 0 |
| *Biloculinella labiata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina alata* | 2 | 4 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina difformis* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina dilatata* | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 1 | 0 | 1 |
| *Bolivina pseudoplicata* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Bolivina pseudopunctata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| *Bolivina spathulata* | 2 | 0 | 3 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 2 |
| *Bolivina striatula* | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 1 | 0 |
| *Bolivina variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 427 to 482 cm)

| Depth (cm) | 427 | 432 | 437 | 442 | 447 | 452 | 457 | 462 | 467 | 472 | 477 | 482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 285 | 314 | 288 | 288 | 268 | 362 | 515 | 379 | 520 | 289 | 335 | 550 |
| Split | 8 | 8 | 8 | 4 | 8 | 16 | 32 | 64 | 16 | 32 | 32 | 16 |
| Total (Sum counts × Split) | 2280 | 2512 | 2304 | 1152 | 2144 | 5792 | 16480 | 24256 | 8320 | 9248 | 10720 | 8800 |
| Dry fraction weight (g) | 1.54 | 1.32 | 1.13 | 1.25 | 1.48 | 5.44 | 4.72 | 7.06 | 4.26 | 3.42 | 3.58 | 4.93 |
| Foraminifera/g | 1481 | 1903 | 2039 | 921.6 | 1449 | 1065 | 3492 | 3436 | 1953 | 2704 | 2994 | 1785 |
| *Bulimina aculeata* | 8 | 3 | 4 | 3 | 6 | 12 | 0 | 2 | 0 | 1 | 1 | 3 |
| *Bulimina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina marginata* | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Bulimina striata* | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cassidulina carinata* | 5 | 2 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cassidulina crassa* | 12 | 18 | 8 | 1 | 0 | 19 | 9 | 7 | 15 | 9 | 10 | 11 |
| *Cassidulina laevigata* | 18 | 26 | 19 | 18 | 27 | 33 | 26 | 8 | 33 | 21 | 27 | 44 |
| *Cassidulina reniforme* | 3 | 2 | 2 | 3 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Cassidulinoides bradyi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Chilostomella oolina* | 14 | 15 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| *Cibicidella variabilis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides aravaensis* | 0 | 4 | 5 | 2 | 0 | 0 | 2 | 0 | 6 | 4 | 18 | 12 |
| *Cibicides lobatulus* | 26 | 45 | 47 | 64 | 59 | 76 | 271 | 209 | 211 | 46 | 32 | 69 |
| *Cibicides mayori* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides mundulus* | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| *Cibicides pachyderma* | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| *Cibicides refulgens* | 3 | 1 | 2 | 0 | 6 | 12 | 3 | 11 | 19 | 10 | 15 | 31 |
| *Cibicides ungerianus* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cibicides wuellestorfi* | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| *Cibicides spp.* | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cornuspira involvens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Cycloforina stalkeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Dentalina guttifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dentalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discanomalina coronata* | 1 | 6 | 1 | 2 | 3 | 37 | 19 | 10 | 11 | 21 | 27 | 51 |
| *Discanomalina japonica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Discorbinella bertheloti* | 7 | 4 | 4 | 2 | 15 | 9 | 16 | 7 | 7 | 7 | 15 | 16 |
| *Eggerella humboldti* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium advenum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| *Elphidium crispum* | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 1 |
| *Elphidium margaritaceum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Elphidium* sp.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 427 to 482 cm)

| Depth (cm) | 427 | 432 | 437 | 442 | 447 | 452 | 457 | 462 | 467 | 472 | 477 | 482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 285 | 314 | 288 | 288 | 268 | 362 | 515 | 379 | 520 | 289 | 335 | 550 |
| Split | 8 | 8 | 8 | 4 | 8 | 16 | 32 | 64 | 16 | 32 | 32 | 16 |
| Total (Sum counts × Split) | 2280 | 2512 | 2304 | 1152 | 2144 | 5792 | 16480 | 24256 | 8320 | 9248 | 10720 | 8800 |
| Dry fraction weight (g) | 1.54 | 1.32 | 1.13 | 1.25 | 1.48 | 5.44 | 4.72 | 7.06 | 4.26 | 3.42 | 3.58 | 4.93 |
| Foraminifera/g | 1481 | 1903 | 2039 | 921.6 | 1449 | 1065 | 3492 | 3436 | 1953 | 2704 | 2994 | 1785 |
| *Epistominella exigua* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| *Eponides repandus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| *Favulina hexagona* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Favulina squamosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina annectens* | 2 | 2 | 3 | 3 | 2 | 0 | 3 | 1 | 2 | 3 | 3 | 2 |
| *Fissurina crassiporosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina crebra* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Fissurina derogata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina eburnea* | 2 | 3 | 1 | 7 | 7 | 2 | 5 | 2 | 3 | 5 | 6 | 8 |
| *Fissurina fasciata* | 7 | 12 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Fissurina lacunata* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Fissurina longpointensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina pseudolucida* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Fissurina pseudoorbignyana* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fissurina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Fursenkoina acuta* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 0 |
| *Gaudryina pseudotrochus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Gaudryina rudis* | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Gavelinopsis praegeri* | 23 | 21 | 23 | 27 | 24 | 9 | 2 | 4 | 2 | 5 | 1 | 5 |
| *Glabratella patelliformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Glandulina ovula* | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 3 | 2 | 2 |
| *Globobulimina affinis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina doliolum* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina turgida* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globobulimina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Globocassidulina subglobosa* | 12 | 9 | 11 | 22 | 9 | 10 | 5 | 4 | 3 | 7 | 9 | 3 |
| *Gyroidina lamarckiana* | 1 | 3 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Gyroidina soldanii* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hamolahedra apiopleura* | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Homalohedra eucostata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Homalohedra williamsoni* | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Hanzawaia boueana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| *Hoeglundina elegans* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 427 to 482 cm)

| Depth (cm) | 427 | 432 | 437 | 442 | 447 | 452 | 457 | 462 | 467 | 472 | 477 | 482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 285 | 314 | 288 | 288 | 268 | 362 | 515 | 379 | 520 | 289 | 335 | 550 |
| Split | 8 | 8 | 8 | 4 | 8 | 16 | 32 | 64 | 16 | 32 | 32 | 16 |
| Total (Sum counts × Split) | 2280 | 2512 | 2304 | 1152 | 2144 | 5792 | 16480 | 24256 | 8320 | 9248 | 10720 | 8800 |
| Dry fraction weight (g) | 1.54 | 1.32 | 1.13 | 1.25 | 1.48 | 5.44 | 4.72 | 7.06 | 4.26 | 3.42 | 3.58 | 4.93 |
| Foraminifera/g | 1481 | 1903 | 2039 | 921.6 | 1449 | 1065 | 3492 | 3436 | 1953 | 2704 | 2994 | 1785 |
| *Hyalinea balthica* | 2 | 3 | 2 | 1 | 2 | 6 | 2 | 10 | 12 | 12 | 18 | 50 |
| *Hyalinonetrion gracillimum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Hyrokkin sarcophaga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lachlanella bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lagena substriata* | 1 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Lenticulina gibba* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina orbicularis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Lenticulina vortex* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Melonis barleeanum* | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 4 |
| *Melonis pompiloides* | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 2 |
| *Miliolinella elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| *Miliolinella subrotunda* | 18 | 15 | 33 | 26 | 19 | 11 | 13 | 18 | 20 | 10 | 14 | 34 |
| *Miliolid fragment* | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Mychostomina revertens* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Neoconorbina terquemi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonion fabum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Nonionella turgida* | 2 | 6 | 4 | 1 | 0 | 1 | 4 | 3 | 5 | 6 | 3 | 2 |
| *Nuttallides umbonifera* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina globosa* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Oolina laevigata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Oolina lineata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Oolina melo* | 3 | 2 | 0 | 0 | 2 | 2 | 3 | 1 | 0 | 2 | 1 | 3 |
| *Oridorsalis umbonatus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Palliolatella semimarginata* | 1 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Parafissurina lateralis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Patellina corrugata* | 8 | 8 | 5 | 2 | 1 | 0 | 0 | 0 | 2 | 1 | 4 | 1 |
| *Planulina ariminensis* | 1 | 0 | 2 | 0 | 0 | 4 | 1 | 1 | 0 | 1 | 2 | 5 |
| *Planulina mediterranensis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Polymorphina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Pullenia subcarinata* | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Pygmaeoseistron laevis ovalis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo anomala* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Pyrgo comata* | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 427 to 482 cm)

| Depth (cm) | 427 | 432 | 437 | 442 | 447 | 452 | 457 | 462 | 467 | 472 | 477 | 482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 285 | 314 | 288 | 288 | 268 | 362 | 515 | 379 | 520 | 289 | 335 | 550 |
| Split | 8 | 8 | 8 | 4 | 8 | 16 | 32 | 64 | 16 | 32 | 32 | 16 |
| Total (Sum counts × Split) | 2280 | 2512 | 2304 | 1152 | 2144 | 5792 | 16480 | 24256 | 8320 | 9248 | 10720 | 8800 |
| Dry fraction weight (g) | 1.54 | 1.32 | 1.13 | 1.25 | 1.48 | 5.44 | 4.72 | 7.06 | 4.26 | 3.42 | 3.58 | 4.93 |
| Foraminifera/g | 1481 | 1903 | 2039 | 921.6 | 1449 | 1065 | 3492 | 3436 | 1953 | 2704 | 2994 | 1785 |
| *Pyrgo elongata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo oblonga* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Pyrgo sarsi* | 0 | 0 | 1 | 0 | 0 | 12 | 4 | 2 | 6 | 7 | 5 | 26 |
| *Pyrgo williamsoni* | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Pyrgo* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| *Pyrulina cylindroides* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Quinqueloculina bosciana* | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina disparilis* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina laevigata* | 0 | 1 | 0 | 0 | 2 | 3 | 1 | 0 | 3 | 0 | 0 | 0 |
| *Quinqueloculina parvula* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Quinqueloculina semiluna* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 4 | 12 |
| *Quinqueloculina stelligera* | 0 | 2 | 0 | 3 | 4 | 0 | 1 | 0 | 4 | 0 | 0 | 0 |
| *Quinqueloculina viennensis* | 1 | 2 | 3 | 4 | 2 | 2 | 4 | 5 | 12 | 7 | 3 | 0 |
| *Quinqueloculina* sp.1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| *Robertinoides bradyi* | 0 | 1 | 0 | 2 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 |
| *Rosalina bradyi* | 16 | 17 | 17 | 25 | 6 | 3 | 1 | 1 | 0 | 0 | 0 | 0 |
| *Rosalina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Schackoinella spina* | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sigmoilopsis schlumbergeri* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Siphouvigerina* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Sphaeroidina bulloides* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spirillina vivipara* | 3 | 2 | 2 | 1 | 3 | 1 | 2 | 0 | 6 | 2 | 2 | 0 |
| *Spirillina wrightii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina asperula* | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 4 | 0 |
| *Spiroloculina dilatata* | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| *Spiroloculina tenuiseptata* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroloculina* sp.1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina expansa* | 4 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Spiroplectammina wrightii* | 21 | 27 | 30 | 27 | 15 | 14 | 0 | 0 | 0 | 1 | 0 | 0 |
| *Spiroplectinella* sp.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stainforthia loeblichi* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Stomatorbina concentrica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia agglutinans* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Supplementary Table 1**. continuation (samples 427 to 482 cm)

| Depth (cm) | 427 | 432 | 437 | 442 | 447 | 452 | 457 | 462 | 467 | 472 | 477 | 482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum counts | 285 | 314 | 288 | 288 | 268 | 362 | 515 | 379 | 520 | 289 | 335 | 550 |
| Split | 8 | 8 | 8 | 4 | 8 | 16 | 32 | 64 | 16 | 32 | 32 | 16 |
| Total (Sum counts × Split) | 2280 | 2512 | 2304 | 1152 | 2144 | 5792 | 16480 | 24256 | 8320 | 9248 | 10720 | 8800 |
| Dry fraction weight (g) | 1.54 | 1.32 | 1.13 | 1.25 | 1.48 | 5.44 | 4.72 | 7.06 | 4.26 | 3.42 | 3.58 | 4.93 |
| Foraminifera/g | 1481 | 1903 | 2039 | 921.6 | 1449 | 1065 | 3492 | 3436 | 1953 | 2704 | 2994 | 1785 |
| *Textularia bocki* | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Textularia conica* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia lateralis* | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Textularia truncata* | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |
| *Textularia* sp.1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| *Trifarina angulosa* | 6 | 3 | 7 | 2 | 18 | 31 | 49 | 16 | 45 | 20 | 36 | 66 |
| *Trifarina bradyi* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Triloculina marioni* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| *Triloculina oblonga* | 3 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| *Triloculina tricarinata* | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 |
| *Triloculina* sp.1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Trochammina globigeriniformis* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina auberiana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Uvigerina mediterranea* | 7 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 |
| *Uvigerina peregrina* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| *Valvulineria bradyana* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Unknown (fragment) | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 3 | 0 | 2 |