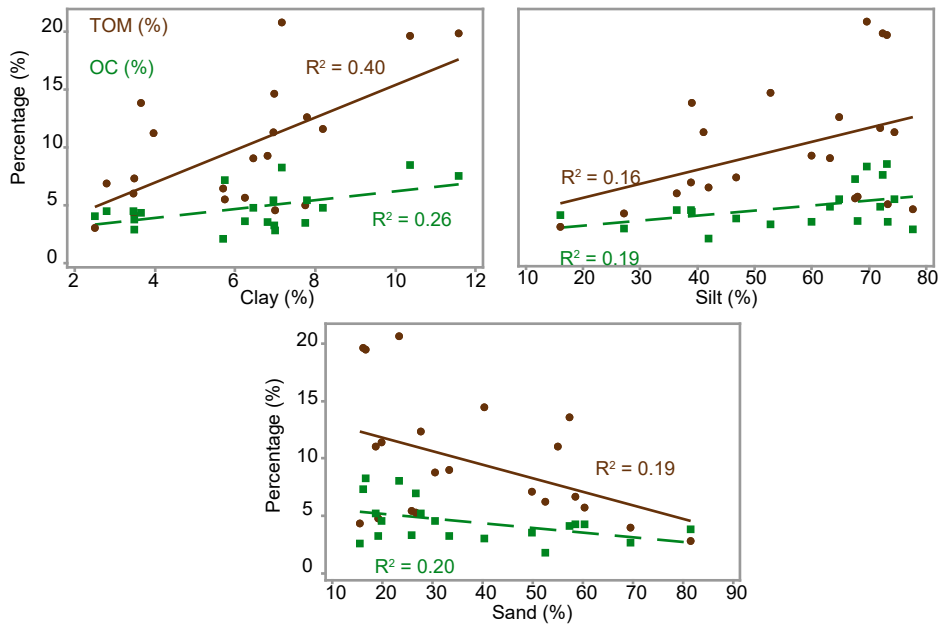


Supplementary Fig. 1



Supplementary Fig. 3

Supplementary Figure 1. Shetland soil maps. Map on the left shows soil types in Shetland, map on the right illustrates TOC content in Shetland's soils.

Supplementary Figure 2. SEM micrographs of benthic foraminifera in six voes on Shetland's west coast; scale bar = 100 µm; identification after Austin (1991) and references therein. 1 *Ammonia batavus*. 2 *Ammonia* sp. 3 *Ammoscalaria runiana*. 4 *Bolivina pseudoplicata*. 5 *Bolivina skagerrakensis*. 6 *Bolivinellina pseudopunctata*. 7 *Buccella frigida*. 8 *Buccella tenerrima*. 9 *Bulimina elongata*. 10 *Bulimina marginata*. 11 *Buliminella elegantissima*. 12 *Cassidulina laevigata*. 13 *Cassidulina obtusa*. 14 *Cibicides lobatulus*. 15 *C. lobatulus*. deformed. 16 *Connemarella rudis*. 17 *Discanomalina* sp. 18 *Eggerelloides scaber*. 19 *Elphidium aculeatum*. 20 *Elphidium albiumbelicatum*. 21 *Elphidium crispum*. 22 *Elphidium excavatum* (subsp *clavatum*). 23 *Elphidium excavatum* (subsp *selseyense*). 24 *Elphidium gerthi*. 25 *Elphidium incertum*. 26 *Elphidium margaritaceum*. 27 *Elphidium* sp. 28 *Elphidium williamsoni*. 29 *Epistominella vitrea* (*Eilohedra vitrea*). 30 *Oolina hexagona* (*Favulina hexagona*). 31 *Oolina melo* (*Favulina melo*). 32 *Fissurina* sp. 33 *Haplophragmoides* sp. 34 *Haynesina germanica*. 35 *Hyalina balthica*. 36 *Glandulina* sp. 37 *Lagena setigera*. 38 *Lagena* sp. 39 *Lagena striata*. 40 *Miliolinella subrotunda*. 41 *Nonion* sp. 42 *Nonion* sp. 43 *Nonionoides turgidus*. 44 *Oolina williamsoni* (*Homalohedra williamsoni*). 45 *Patellina corrugata*. 46 *Planorbulina distoma*. 47 *Quinqueloculina bicornis* (*Adelosina bicornis*). 48 *Quinqueloculina seminula*. 49 *Reophax fusiformis*. 50 *Quinqueloculina* sp. 51 *Rosalina anomala*. 52 *Rosalina* sp. 53 *Spirillina vivipara*. 54 *Spiroloculina rotunda*. 55 *Spiroplectinella wrightii*. 56 *Stainforthia fusiformis*. 57 *Subanomalina pauperata*. 58 *Textularia earlandi*. 59 *Trochammina* sp. 60 Indetermined. 61 Indetermined. 62 Indetermined. 63 Indetermined. 64 Etched *Ammonia* sp.

Supplementary Figure 3. Trends between particle size and organic matter and carbon content.