

Supplementary Material

Microfossil and geochemical evidence for the Storegga tsunami at Budle Bay, Northumberland, UK

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Supplementary Table 1 | Stratigraphic units identified in Budle Bay cores. Unit numbers are shown on Figure 2A. Sediment classification using the Troels-Smith (1955) scheme.

| Unit | Sediment description and Troels-Smith components | Troels-Smith physical properties | | | | |
|------|--|----------------------------------|-------|------|------|---------|
| | | Nig | Strat | Sicc | Elas | Lim sup |
| 1 | Black silty clay. As3 Ag1 | 4 | 0 | 3 | 1 | - |
| 2 | Orange-brown organic silty clay. Th ¹² As1 Ag1 | 2 | 0 | 3 | 0 | 2 |
| 3 | Grey-black organic clayey silt with herbaceous roots and brown mottling. Occasional sand inclusions. More organic content towards the top of the unit. Ag2 As1 Th ¹ Ga+ | 3 | 0 | 3 | 0 | 1 |
| 4 | Grey medium-coarse sand with sharp upper and lower contacts. Ga4 | 2 | 0 | 3 | 0 | 4 |
| 5 | Dark brown-grey organic sandy clay-silt. Ga2 As1 Ag1 Th ¹⁺ | 3 | 0 | 3 | 1 | 4 |
| 6 | Brown-grey silty clay with numerous shells. Sharp upper contact. As2 Ag2 | 2 | 0 | 3 | 2 | 4 |
| 7 | Grey fine-medium sand with a sharp upper contact. Ga4 | 2 | 0 | 3 | 0 | 4 |
| 8 | Consolidated grey clay with occasional thin (0.5 - 1 cm) dark brown organic clay layers. As4 Th ¹⁺ | 2 | 0 | 3 | 2 | 4 |
| 9 | Brown sandy clay. As3 Ga1 Ag+ | 2 | 0 | 3 | 1 | 0 |
| 10 | Black peat. Th ¹³ Ag1 | 4 | 0 | 1 | 0 | 1 |

Troels-Smith components: As: *Argilla steatodes* (clay); Ag: *Argilla graviosa* (silt); Ga: *Grana arenosa* (fine sand 0.2-0.6 mm); Th: *Turfa herbacea* (roots of herbaceous plants)
Troels-Smith physical properties: Nig: nigror (darkness); Strat: stratification; Sicc: siccitas (dryness); Elas: elasticity; Lim sup: limes superior (upper boundary sharpness)