[Online supplementary Table S1.]

Table S1   Samples used to exemplify the effect of age and level uncertainties on a sea level curve. Age uncertainties comprise for example the old wood effect and especially the marine reservoir effect. Furthermore, there are uncertainties in the relation between a sample’s level and the inferred sea level.

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| Lab code | Material and species | 14C age | Age span/ uncertainty | Level bpsl | Level span/  uncertainty |
| AAR-21521 | *Phragmites australis* (common reed), stalk, leaves, roots or rhizomes (not specified) | 4280 ± 32 | Reservoir effect between 0 and 400 years—probably little reservoir effect (Heikkinen and Äikää 1977) | –1.44 | From sea level or several meters below: can grow in water depths of up to 4 m, and the roots can grow up to 5 m deep |
| AAR-22307 | 5983 ± 28 | –3.25 |
| AAR-22308 | 5921 ± 29 | –2.33 |
| AAR-21519 | 5998 ± 28 | –2.59 |
| AAR-21531 | *Phragmites australis* roots | 5053 ± 33 | –1.15 |
| AAR 21522 | *Suaeda maritima* (sea blite) | 3864 ± 29 | Unknown reservoir effect, but probably mainly atmospheric photosynthesis | –1.40 | Probably none—the plants grow at sea level, and the seeds/plant remains were probably deposited at that level |
| AAR-21527 | 4172 ± 36 | –1.51 |
| AAR-21528 | 4522 ± 32 | –1.57 |
| AAR-21515 | Seeds of *Atriplex* and *Suaeda* | 1163 ± 27 | –0.81 |
| AAR-21518 | Seeds of *Atriplex* from an organic-rich layer in a former channel | 1903 ± 25 | –1.32 |
| AAR-21523 | *Cladium mariscus* (saw grass) | 7396 ± 35 | –13.47 | Probably none—grows on wet soil behind the reed belt, probably at or around sea level |
| AAR-21516 | Piece of wood from an organic layer | 1097 ± 25 | Probably redeposited | –0.67 | Probably redeposited |
| AAR-22067 | Root of an oak trunk | 5984 ± 33 | No old wood effect (ring 7+8 of 10-yr-old root dated) | –2.33 | Depth of root in relation to former soil surface or sea level unknown. Oaks die, before the water table reaches the roots |
| AAR-22087 | 5440 ± 26 | Old wood effect small (root 12 yr old) | –1.27 |
| AAR-21525 | *Quercus* (oak) trunk | 4954 ± 33 | No old wood effect—outer 3 rings dated | –1.17 | Oaks die, before the water table reaches the roots |
| AAR-21526 | 6019 ± 31 | –2.43 |
| AAR-21532 | 6049 ± 26 | –2.43 |
| AAR-21514 | 6115 ± 28 | –2.59 |
| AAR-22066 | *Quercus* (oak) trunk | 6036 ± 29 | Old wood effect ≥ 25 yr | –2.22 |
| AAR-21533 | *Alnus* (alder) trunk | 6321 ± 31 | No old wood effect—outer 3 rings dated | –2.86 | Alder can tolerate a very high water table |
| AAR-21044, 21045, 21046 | Charcoal from fireplace (weighted mean of three dates) | 6321 ± 17 | Probably no old wood effect— outer rings of twigs dated | –2.31 | The fireplace must have been on dry land—but how high, is unknown |
| MLF00902-II P3a | Charcoal from cooking pit | 5863 ± 31 | Possible old wood effect (although the risk and order of magnitude are expected to be low). | –1.66 | Must have been above sea level, but unknown how much |
| AAR-22281, 22282 | Burnt bones from an undisturbed activity layer (weighted mean of two dates) | 10,008 ± 32 | The carbon originates from the fuel and the bones/animal—small possibility of old wood effect. | –2.55 | Deposited on dry land; the bone fragments could have moved down through the soil |
| AAR-21529 | *Ostrea edulis* (oyster) shell | 4584 ± 28 | Reservoir age around 250–400 yr | –1.75 | Assuming the shells have not been redeposited: they typically occur in water depths of 1–10 m |
| AAR-21530 | 4616 ± 29 | –1.63 |
| AAR-21520 | 5675 ± 28 | –2.24 |
| AAR-21517 | *Nassarius reticulatus* (netted dog-whelk) shell | 4388 ± 29 | Reservoir age around 250–400 yr | –1.80 | Occurs at water depths up to 50 m; buries a few cm into the sediment (Nehring and Leuchs 2000) |
| AAR-21390 A7 | Mats (A7 and A9) of woven hazel twigs, probably from fish fence | 4188 ± 27 | None—young branches | –1.39 | The mats were found lying on the former sea floor. The sea level is expected to have been up to one or two meters above the mats |
| AAR-21394 A7 | 4233 ± 25 |  |
| AAR-21395 A9 | 4202 ± 25 | –1.62 |