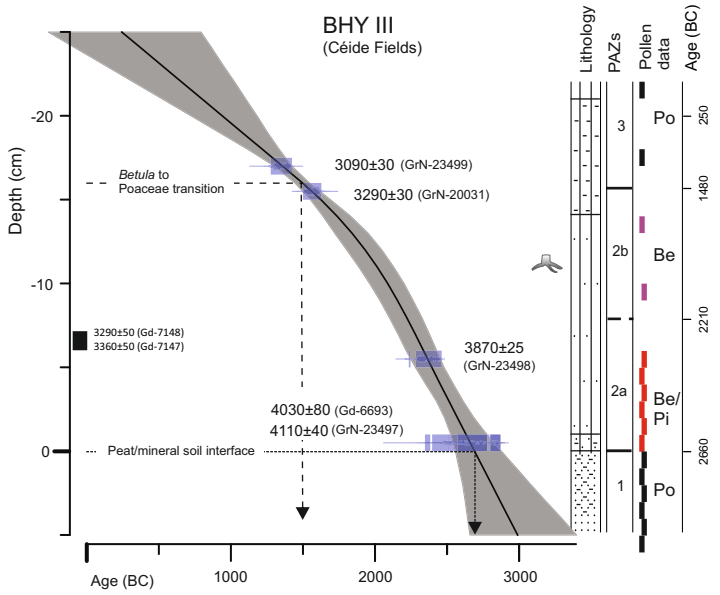
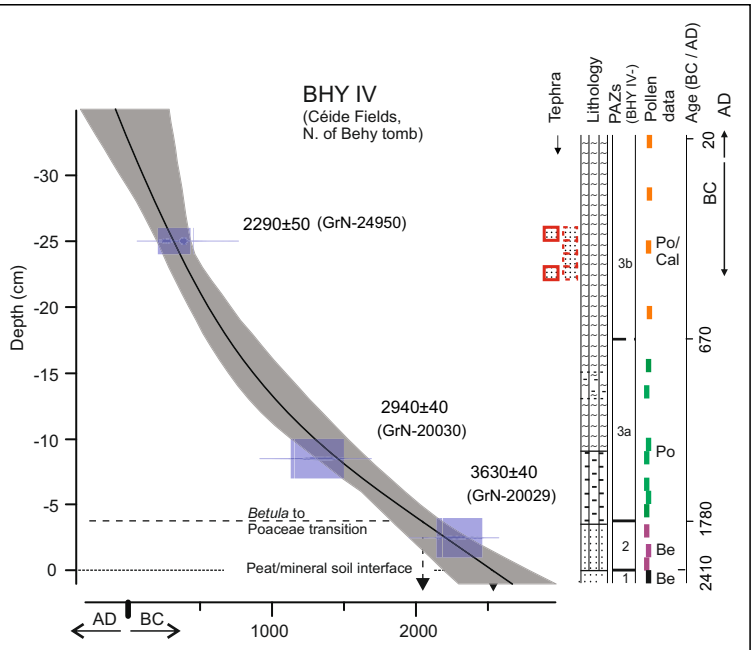
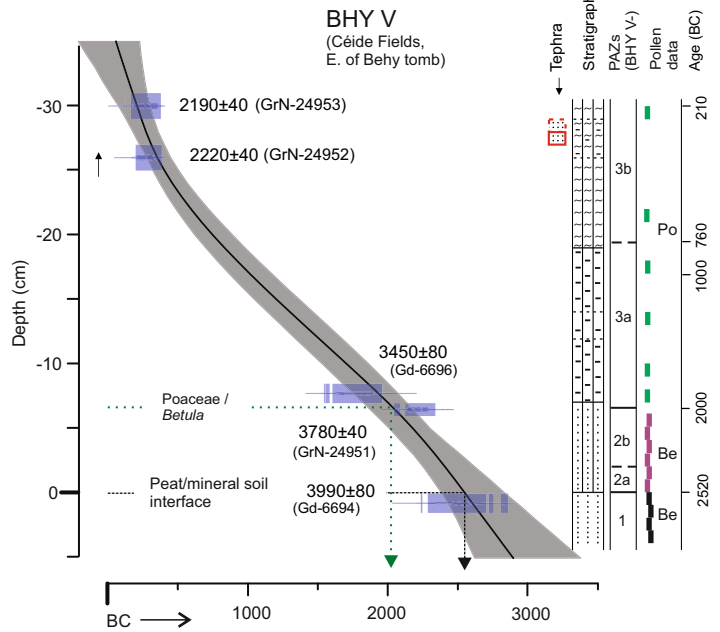
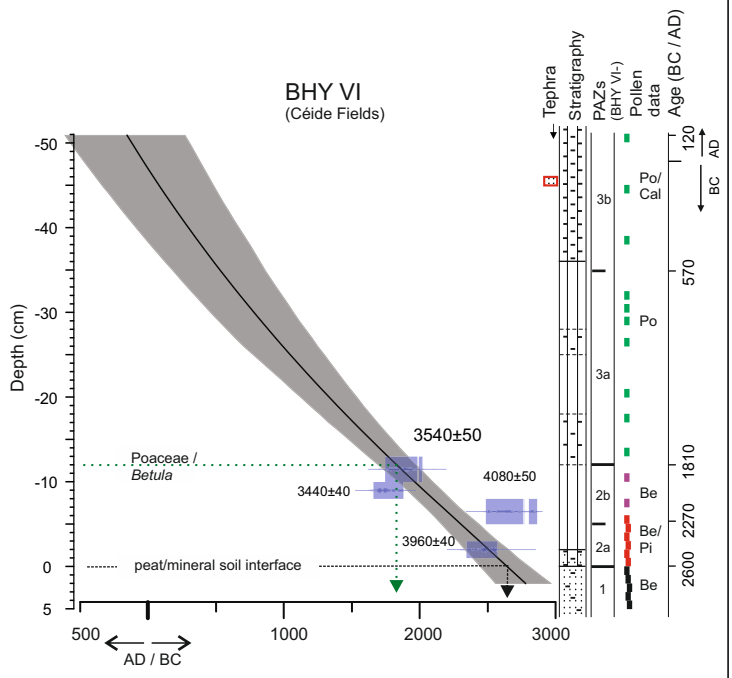








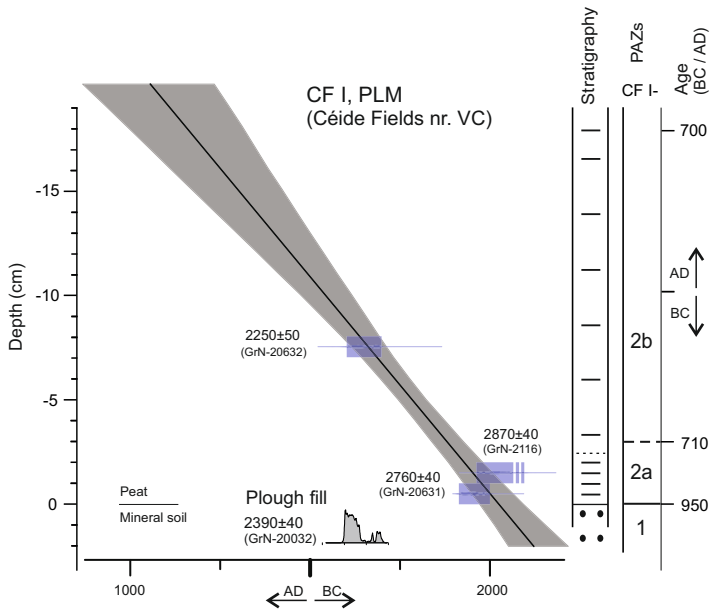


Figure S2a. Age/depth relationships, generated by CLAM, for short profiles from Céide Fields. Information shown in the figures include: ^{14}C dates used by CLAM, lithology, PAZs, and pollen data, i.e. position within the profile of the pollen spectra which are colour coded to indicate the dominant pollen taxa (Be: *Betula*; Pi: *Pinus*; Po: Poaceae; Cal: *Calluna*) and PAZ boundary ages (derived from age/depth model). Tephra layers are indicated (extracted by ashing and geochemically; the latter bounded by non-broken lines). Stratigraphy signatures are as in the relevant pollen diagram.

Age/depth curves and associated probability envelopes are as follows:

BHY III: third order polynomial regression curve constrained by available ^{14}C dates and a surface-age estimate;

BHY IV: smooth spline curve (smooth factor = 0.1), constrained by available ^{14}C dates;

BHY V: third order polynomial regression curve, constrained by available ^{14}C dates;

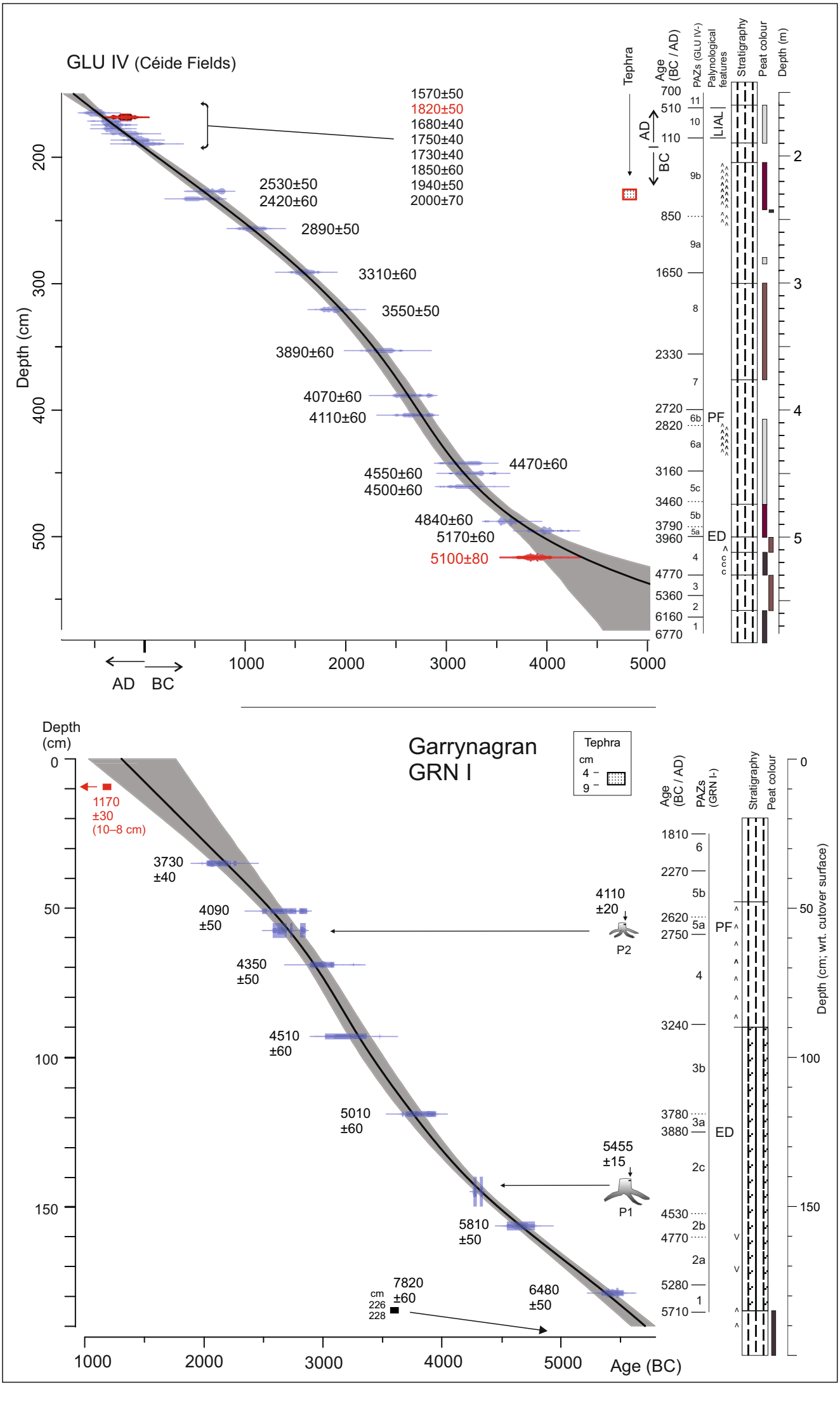
BHY VI: smooth spline curve (smooth factor = 0.3), constrained by the four available ^{14}C dates and a surface-age estimate;

CF Ib: linear regression line fitted to the available ^{14}C dates. The result of calibration (probability curve by CLAM) of the single ^{14}C date from the plough fill is also plotted.

Figure S2b. Age/depth relationship for profiles GLU IV (Glenulra) and GRN I (Garrynagran), generated by CLAM. PAZs and PAZ-boundary ages (derived from the age/depth curves) and location of tephra layers are shown. Stratigraphy signatures are as in the respective pollen diagrams. Additional details follow (see also legend for Fig. S2a).

GLU IV: fifth order polynomial regression curve. All ^{14}C dates were used but dates 1820±50 BP and 5100±80 BP (near top and at base, respectively) were specified within CLAM as outliers (shown in red). The mid-Holocene Elm Decline (ED), 'pine flush' (PF) and the Late Iron Age Lull (LIAL) are indicated but these were not used in constructing the chronology.

GRN I: smooth spline (smooth factor 0.4) fitted to the available ^{14}C dates (derived from peat pine timbers), except the uppermost ^{14}C date (in red) which was regarded as too young. This and the lowermost date are shown but these ^{14}C dates are not positioned with respect to the axes. The position of the ED and PF are indicated but are not used in constructing the chronology.


GLU IV (Céide Fields)
Depth (cm)
200
300
400
500
1570±50
1820±50
1680±40
1750±40
1730±40
1850±60
1940±50
2000±70
2530±50
2420±60
2890±50
3310±60
3550±50
3890±60
4070±60
4110±60
4470±60
4550±60
4500±60
4840±60
5170±60
5100±80
1000
2000
3000
4000
5000
AD
BC
Tephra
Age (BC / AD)
PAZs (GLU IV-)
Palynological features
Stratigraphy
Peat colour
Depth (m)
700
510
110
850
1650
2330
2720
2820
3160
3460
3790
3960
4770
5360
6160
6770
LIAL
PF
ED
Garrynagran
GRN I
Depth (cm)
0
50
100
150
1170
±30
(10–8 cm)
3730
±40
4090
±50
4350
±50
4510
±60
5010
±60
5810
±50
7820
±60
cm
226
228
6480
±50
4110
±20
P2
5455
±15
P1
Tephra
cm
4
9
Age (BC / AD)
PAZs (GRN I-)
1810
2270
2620
2750
3240
3780
3880
4530
4770
5280
5710
Depth (cm; wrt. cutover surface)
Age (BC)