

The sources of Baltic oak, supplementary material

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Five historical tree-ring chronologies derived from dendrochronological research on painted panels.

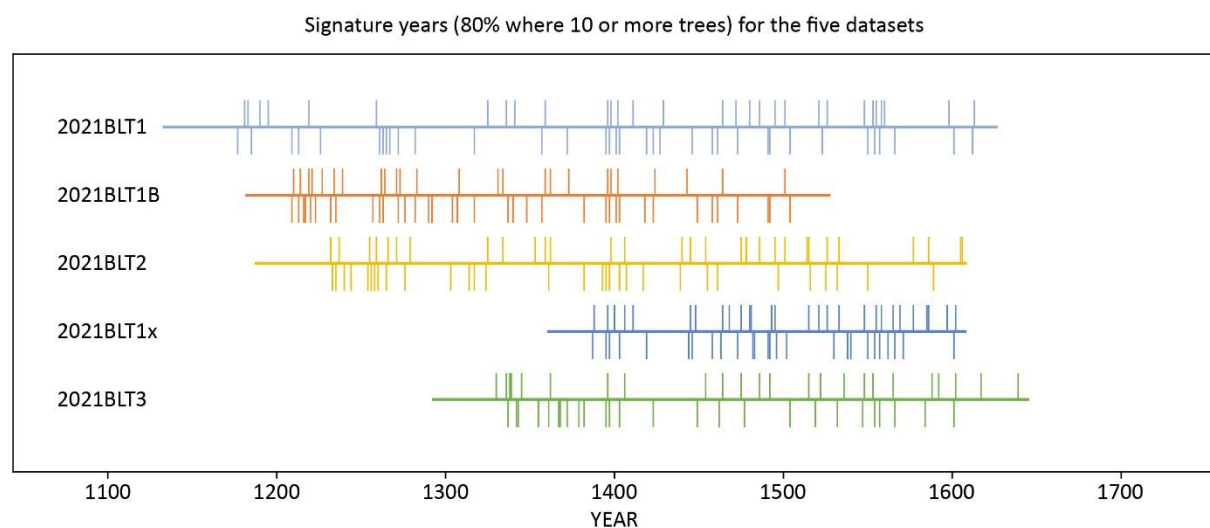
This dataset consists of five tree-ring chronologies for oak, derived from dendrochronological research of painted panels, from the 15th to 17th century. The dataset represents trees that grew in the south and east Baltic region.

For context and citation information about this dendrochronological dataset, please refer to the publication:

Daly, A. & Tyers, I., 2022. The sources of Baltic oak. *Journal of Archaeological Science* 139, 105550,
<https://doi.org/10.1016/j.jas.2022.105550>

As a supplement to the article a short summary of their signature years is presented and below, an illustration of the cross-correlation between a randomly selected subset of the data, to illustrate the groups.

Signature years



Plot of the signature years for the five new chronologies (diagram: Oisín Kiær). The years are listed below.

2021BLT1

2021 Baltic1 552 trees [Daly & Tyers 2021]

List of 80% signatures where 10 or more files

AD1177 down 9 of 11
AD1181 up 9 of 11
AD1183 up 11 of 12
AD1185 down 11 of 13
AD1190 up 13 of 15
AD1195 up 13 of 16
AD1209 down 18 of 21
AD1213 down 18 of 21
AD1219 up 18 of 22
AD1226 down 22 of 26
AD1259 up 42 of 47
AD1261 down 41 of 48
AD1263 down 42 of 50
AD1265 down 42 of 52
AD1267 down 44 of 54
AD1272 down 51 of 59
AD1282 down 63 of 76
AD1317 down 107 of 133
AD1325 up 123 of 153
AD1336 up 152 of 181
AD1341 up 158 of 194
AD1357 down 200 of 235
AD1359 up 227 of 239
AD1372 down 225 of 269
AD1395 down 297 of 346
AD1396 up 299 of 348
AD1397 down 340 of 351
AD1398 up 307 of 356
AD1401 down 296 of 368
AD1402 up 300 of 374
AD1403 down 336 of 373
AD1411 up 319 of 390
AD1419 down 352 of 403
AD1423 down 360 of 410
AD1427 down 339 of 415
AD1429 up 353 of 418
AD1446 down 366 of 436
AD1458 down 387 of 459
AD1461 down 394 of 460
AD1464 up 435 of 467
AD1472 up 394 of 470
AD1473 down 413 of 472
AD1480 up 396 of 468
AD1486 up 395 of 464
AD1491 down 421 of 458
AD1492 down 370 of 456
AD1495 up 378 of 453
AD1501 up 402 of 441
AD1504 down 345 of 431
AD1521 up 331 of 370
AD1523 down 293 of 358
AD1526 up 279 of 347
AD1548 up 223 of 266
AD1550 down 239 of 253
AD1553 up 203 of 244
AD1554 down 208 of 237
AD1555 up 206 of 233
AD1557 down 208 of 228
AD1558 up 182 of 227
AD1560 up 180 of 217
AD1566 down 174 of 203
AD1598 up 36 of 45
AD1601 down 30 of 33
AD1612 down 9 of 11
AD1613 up 10 of 11

2021BLT2

2021 Baltic2 449 trees [Daly & Tyers 2021]

List of 80% signatures where 10 or more files

AD1232 up 8 of 10
AD1233 down 9 of 10
AD1235 down 9 of 10
AD1237 up 8 of 10
AD1240 down 10 of 10
AD1244 down 9 of 11
AD1254 down 14 of 17
AD1255 up 15 of 17
AD1256 down 14 of 17
AD1258 down 17 of 18
AD1259 up 15 of 18
AD1260 down 16 of 20
AD1265 down 16 of 20
AD1266 up 18 of 20
AD1271 up 17 of 21
AD1276 down 23 of 26
AD1279 up 22 of 26
AD1303 down 38 of 47
AD1314 down 41 of 51
AD1317 down 44 of 54
AD1324 down 57 of 69
AD1325 up 59 of 70
AD1334 up 66 of 78
AD1353 up 92 of 111
AD1359 up 99 of 122
AD1361 down 114 of 126
AD1362 up 120 of 131
AD1382 down 160 of 195
AD1393 down 181 of 223
AD1395 down 187 of 228
AD1397 down 198 of 235
AD1398 up 194 of 236
AD1403 down 233 of 261
AD1406 up 230 of 271
AD1407 down 227 of 273
AD1417 down 241 of 291
AD1439 down 260 of 321
AD1440 up 270 of 324
AD1445 up 275 of 334
AD1454 up 306 of 355
AD1455 down 294 of 358
AD1461 down 307 of 363
AD1475 up 318 of 384
AD1478 up 320 of 386
AD1486 up 373 of 392
AD1495 up 335 of 401
AD1497 down 368 of 402
AD1501 up 341 of 402
AD1514 up 316 of 388
AD1515 up 313 of 387
AD1516 down 311 of 386
AD1525 down 321 of 368
AD1526 up 334 of 364
AD1532 down 284 of 347
AD1533 up 307 of 345
AD1550 down 227 of 281
AD1577 up 109 of 129
AD1586 up 58 of 69
AD1589 down 47 of 55
AD1605 up 13 of 16
AD1606 up 12 of 15

2021BLT3

2021 Baltic3 280 trees [Daly & Tyers 2021]

List of 80% signatures where 10 or more files

AD1330 up 8 of 10
AD1336 up 10 of 11
AD1337 down 11 of 11
AD1338 up 10 of 11
AD1339 up 10 of 12
AD1342 down 12 of 14
AD1343 down 12 of 14
AD1345 up 13 of 14
AD1355 down 15 of 17
AD1361 down 20 of 25
AD1362 up 22 of 27
AD1367 down 26 of 31
AD1368 down 28 of 32
AD1372 down 32 of 40
AD1379 down 38 of 47
AD1382 down 46 of 55
AD1395 down 67 of 74
AD1396 up 68 of 76
AD1397 down 69 of 78
AD1403 down 90 of 98
AD1406 up 88 of 103
AD1423 down 106 of 126
AD1449 down 144 of 169
AD1454 up 157 of 181
AD1462 down 172 of 193
AD1464 up 164 of 192
AD1475 up 193 of 215
AD1477 down 174 of 216
AD1486 up 205 of 231
AD1492 up 190 of 234
AD1504 down 207 of 248
AD1515 up 218 of 259
AD1519 down 210 of 259
AD1522 up 208 of 259
AD1532 down 214 of 260
AD1536 up 218 of 260
AD1547 down 213 of 261
AD1548 up 228 of 261
AD1553 up 229 of 257
AD1554 down 212 of 256
AD1557 down 240 of 254
AD1565 up 206 of 248
AD1566 down 202 of 248
AD1584 down 198 of 223
AD1588 up 184 of 215
AD1592 up 169 of 206
AD1601 down 141 of 166
AD1602 up 135 of 162
AD1617 up 89 of 107
AD1639 up 10 of 11

2021BLT1B

2021 Baltic1 Bowhill-Vejdyb type 81 trees [Daly & Tyers 2021]

List of 80% signatures where 10 or more files

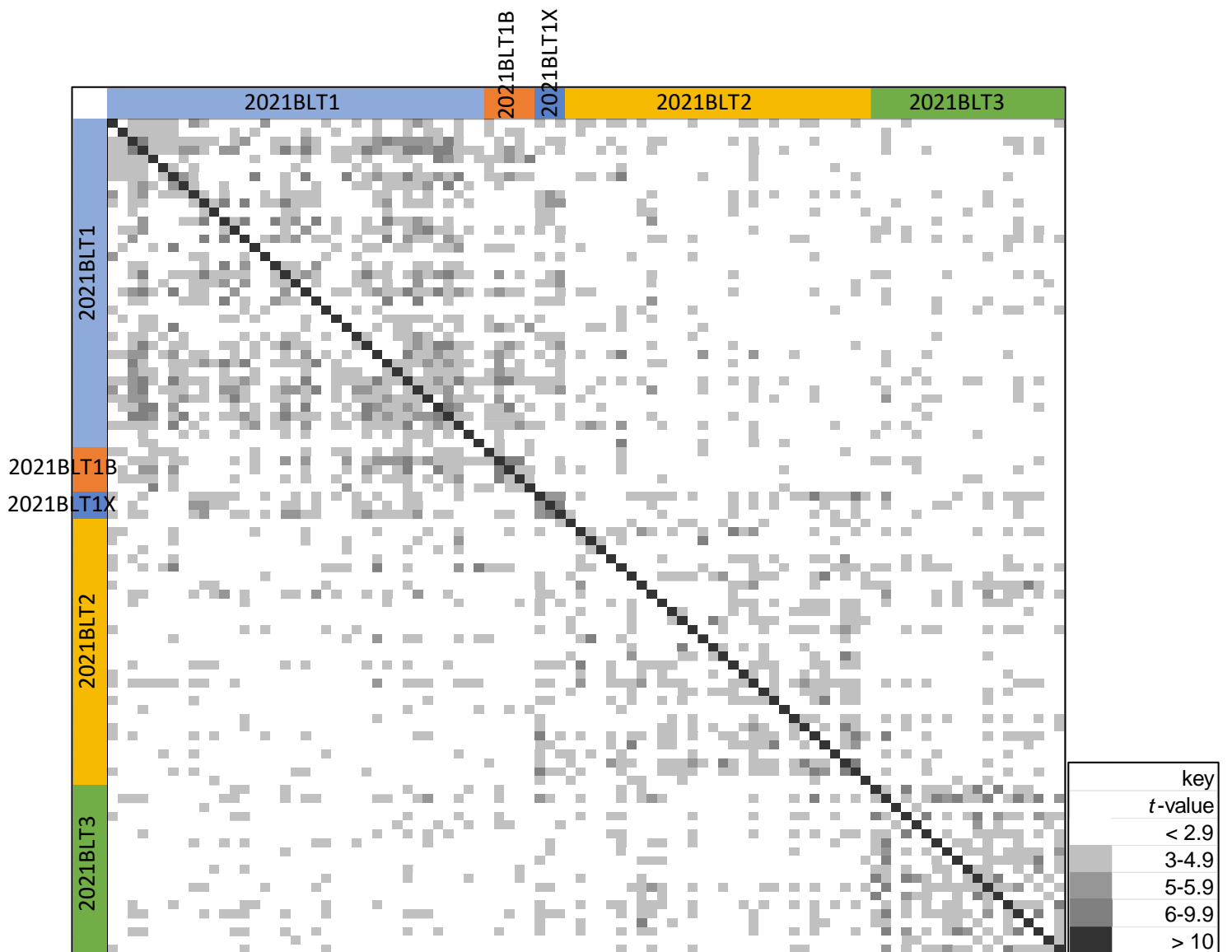
AD1209 down 11 of 12
AD1210 up 11 of 13
AD1213 down 12 of 13
AD1214 up 11 of 13
AD1216 down 11 of 13
AD1217 down 11 of 13
AD1219 up 12 of 14
AD1220 down 13 of 15
AD1221 up 12 of 15
AD1223 down 13 of 16
AD1227 up 15 of 18
AD1232 down 19 of 22
AD1234 up 18 of 22
AD1235 down 20 of 23
AD1239 up 22 of 27
AD1257 down 36 of 38
AD1261 down 36 of 39
AD1262 up 37 of 41
AD1263 down 36 of 43
AD1264 up 36 of 44
AD1271 up 42 of 47
AD1272 down 45 of 47
AD1273 up 40 of 47
AD1276 down 40 of 48
AD1282 down 44 of 49
AD1283 up 46 of 49
AD1290 down 47 of 56
AD1292 down 51 of 57
AD1304 down 53 of 63
AD1307 down 54 of 63
AD1308 up 57 of 64
AD1317 down 55 of 68
AD1331 up 60 of 71
AD1334 up 58 of 71
AD1337 down 62 of 71
AD1340 down 63 of 72
AD1348 down 67 of 72
AD1357 down 65 of 76
AD1359 up 72 of 77
AD1362 up 67 of 78
AD1373 up 66 of 79
AD1382 down 67 of 80
AD1395 down 65 of 80
AD1396 up 68 of 80
AD1397 down 80 of 80
AD1398 up 68 of 80
AD1401 down 71 of 79
AD1402 up 66 of 79
AD1403 down 69 of 79
AD1418 down 62 of 77
AD1423 down 68 of 76
AD1424 up 66 of 75
AD1443 up 58 of 71
AD1449 down 58 of 70
AD1458 down 49 of 61
AD1461 down 54 of 60
AD1464 up 52 of 58
AD1473 down 42 of 49
AD1491 down 27 of 33
AD1492 down 26 of 32
AD1501 up 19 of 21
AD1504 down 14 of 17

2021BLT1x
2021 Baltic1x subset 48 trees [Daly & Tyers 2021]

List of 80% signatures where 10 or more files

AD1387 down 12 of 12
AD1388 up 10 of 12
AD1395 down 16 of 17
AD1396 up 14 of 17
AD1397 down 17 of 17
AD1400 up 17 of 19
AD1403 down 19 of 21
AD1406 up 18 of 22
AD1411 up 22 of 24
AD1419 down 23 of 25
AD1444 down 35 of 36
AD1445 up 34 of 36
AD1446 down 33 of 37
AD1448 up 35 of 37
AD1458 down 37 of 42
AD1463 down 37 of 42
AD1464 up 39 of 43
AD1468 up 38 of 44
AD1473 down 39 of 45
AD1475 up 38 of 45
AD1480 up 44 of 47
AD1481 up 47 of 47
AD1482 down 38 of 47
AD1483 down 42 of 47
AD1491 down 45 of 48
AD1492 down 44 of 48
AD1493 up 44 of 48
AD1495 up 39 of 48
AD1496 down 41 of 48
AD1502 down 43 of 48
AD1515 up 41 of 48
AD1521 up 44 of 48
AD1526 up 48 of 48
AD1530 down 42 of 48
AD1533 up 42 of 48
AD1538 down 43 of 48
AD1540 down 42 of 48
AD1548 up 39 of 48
AD1550 down 44 of 48
AD1554 down 43 of 48
AD1555 up 46 of 48
AD1557 down 41 of 48
AD1558 up 41 of 48
AD1562 down 36 of 44
AD1565 up 35 of 43
AD1566 down 37 of 43
AD1569 up 40 of 42
AD1571 down 35 of 42
AD1577 up 33 of 41
AD1585 up 29 of 36
AD1586 up 31 of 35
AD1597 up 19 of 22
AD1601 down 9 of 10
AD1602 up 8 of 10

Matrix of correlation



The matrix shows statistical matches (TBP values) between each tree-ring curve with each other, at their cross-dated position. The colours correspond with the Baltic groups described in the main text.