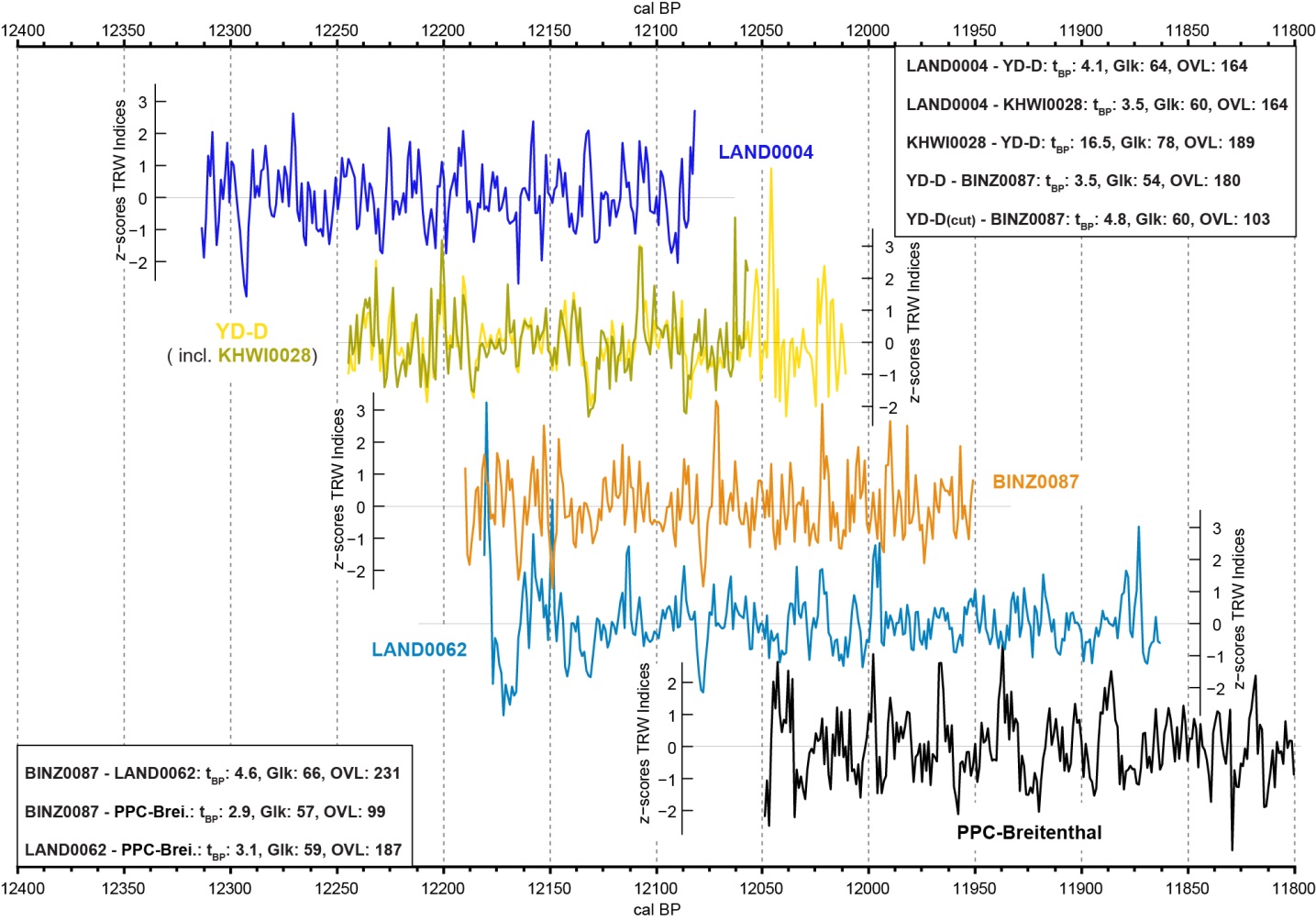
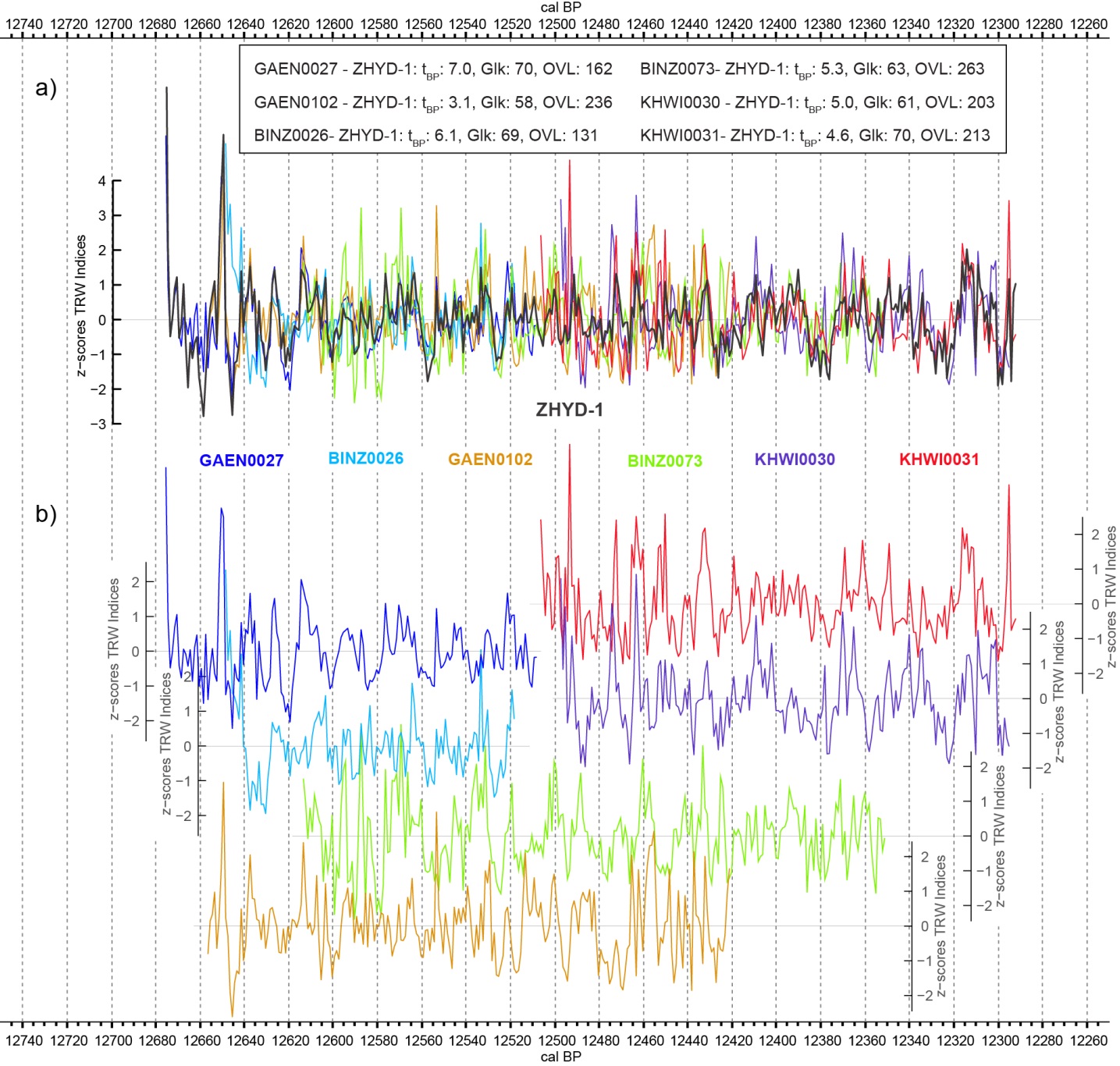
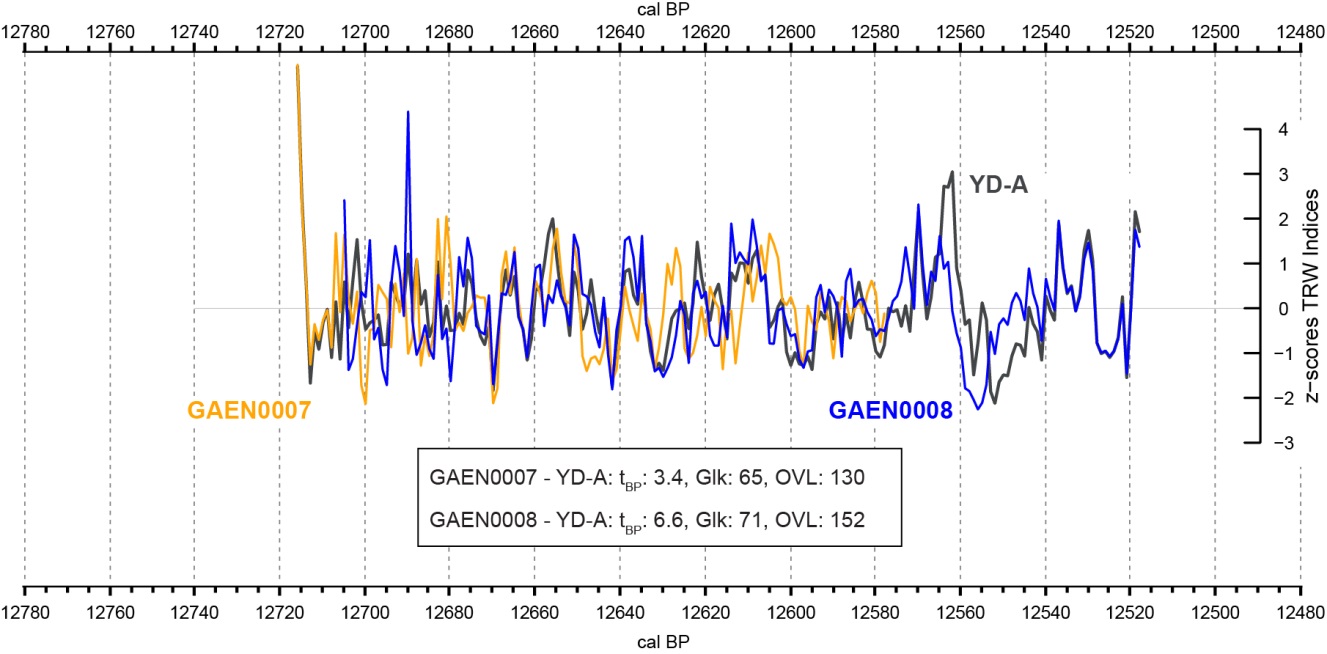
**Supplements**



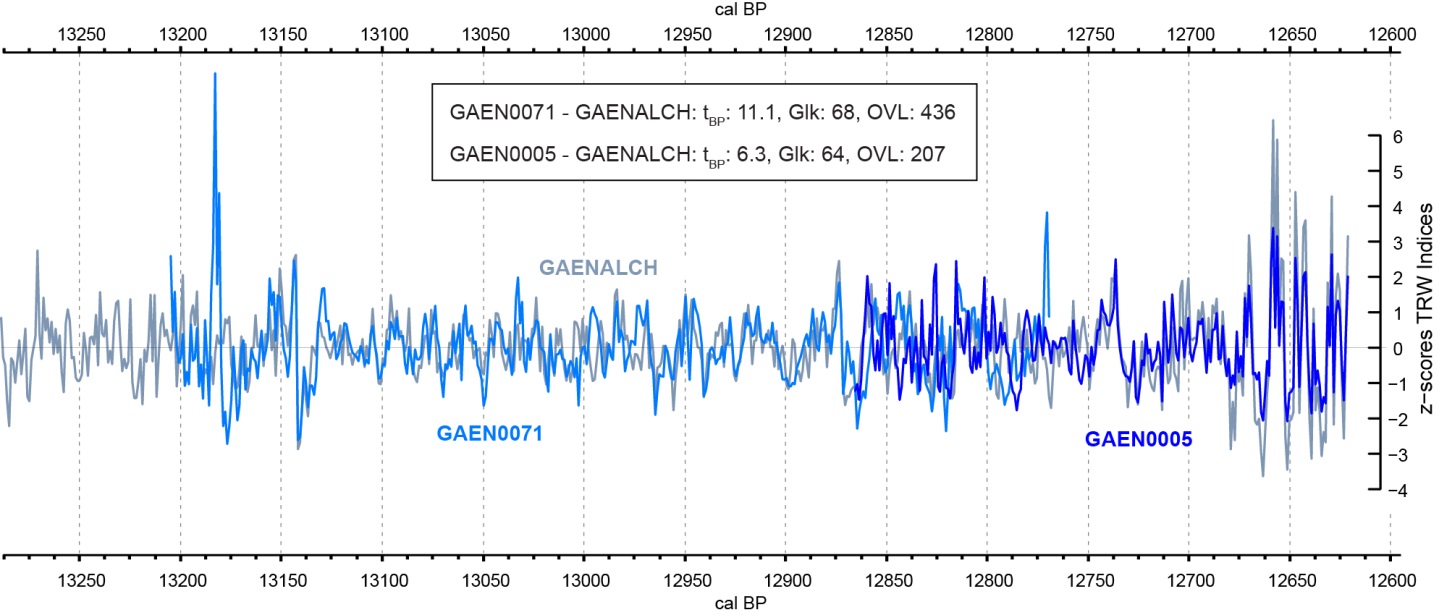
***SM 1****: Cross-dating of the tentative linked YD Swiss trees to the PPC-Breitenthal (Friedrich et al. in prep.). Single z-scored TRW curves show good visual agreement and are supported by the cross-dating results obtained in this study (tBP and Glk).*



***SM 2****: Cross-dating results (tBP and Glk) and z-scored single TRW curves of the 14C dated trees in the ZHYD-1 chronology plotted against its mean curve (a) indicating good overall agreement. Individual visual comparison of the z-scored growth curves of each 14C dated trees outlining their temporal placement, overlap and TRW synchrony (b).*



***SM 3****: Cross-dating results (tBP and Glk) and visual comparison of 14C dated trees in the YD-A mean curve (YD-A).*



***SM 4****: Visual comparison of GAEN0005 and GAE0071 to the Zurich Geanziloo chronology (GAENALCH) and corresponding cross-dating results (TBP and Glk) in the YD transition.*

***SM 5****: Characteristics of the three described Younger Dryas periods in this study (MSL = mean segment length; AGR = average growth rate).*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period** | **Chronology** | **Nr. of trees** | **Length of period/chronology (years)** | **Start approx. BP** | **End approx. BP** | **MSL (years)** | **AGR (mm)** | **Nr. of high-resolution 14C measured trees** |
| Tentative linked to PPC | - | 6 | 451 | 12314 | 11863 | 232 | 0.80 | 4 |
| Floating YD chronologies | ZHYD-1 | 15 | 383 | 12675 | 12292 | 199 | 1.02 | 6 |
| Floating YD chronologies | YD-A | 8 | 198 | 12716 | 12518 | 135 | 0.79 | 2 |
| YD Transition | GAENALCH | 55 | 1464 | 14085 | 12621 | 265 | 0.80 | 2 |