

Update of age models published in Waelbroeck, C., et al. (2019), Consistently dated Atlantic sediment cores over the last 40 thousand years, *Scientific Data*, 6(1), 165, doi:10.1038/s41597-019-0173-8.

- Calibration of radiocarbon dates with IntCal20.
- PS2644-5: in order to extend the age model to younger ages than the period > 29 ka dated by alignment of magnetic susc to NGRIP, radiocarbon dates are used back to 25 ka, with a surface reservoir age of  $1200 \pm 800$  y between 11.5 and 25 ka.
- ENAM93-21: addition of an alignment tie point at the beginning of HS1 based on the cooling seen in the %Np record.
- MD99-2284: the revised age model accounts for tephra horizons and new "TPin" pointers from Berben et al., *QSR* 2020 (Table 4).
- SO82-5-2: tie pt at 14.7 ka suppressed because not sufficiently well defined.
- NA87-22: revised tie points before 34 ka obtained by alignment of %Nps to NGRIP guided by reasonable reservoir ages.
- MD95-2002: radiocarbon dates used back to 18 ka, with a  $\pm 500$  y uncertainty for the surface reservoir age between 11.5 and 18 ka.
- SU90-08: the end of HS4 is now aligned with the larger SST increase.
- MD99-2331: revised tie points around 25 ka, guided by reasonable reservoir ages.
- MD03-2698: revised tie points accounting for increased resolution of the G. bulloides  $\delta^{18}O$  record.
- MD95-2037: tie point at the end of HS4 suppressed because based on Uk37 SST (overseen in the first release).
- MD04-2805Q: addition of 1 alignment tie point at the end of HS1 based on the SST increase. NB: this age model is published in Penaud et al., *Paleoceanography and Paleoclimatology*, 37(2), e2021PA004316, 2022.
- KNR31-GPC5: 1 radiocarbon date around HS4 with very large error has been discarded.
- MD09-3246: additional AMS dates taken into account, transferred from core GS07-150-17 (Freeman et al., *EPSL* 424: 237-244, 2015) by alignment of MD09-3246 to GS07-150-17 via their XRF Ti/Ca signals.
- MD08-3167: radiocarbon age at 276 cm discarded (considered as an outlier based on a comparison with core GeoB1711 at the same site).