

FIGURE 8 – double column (caption on next page)

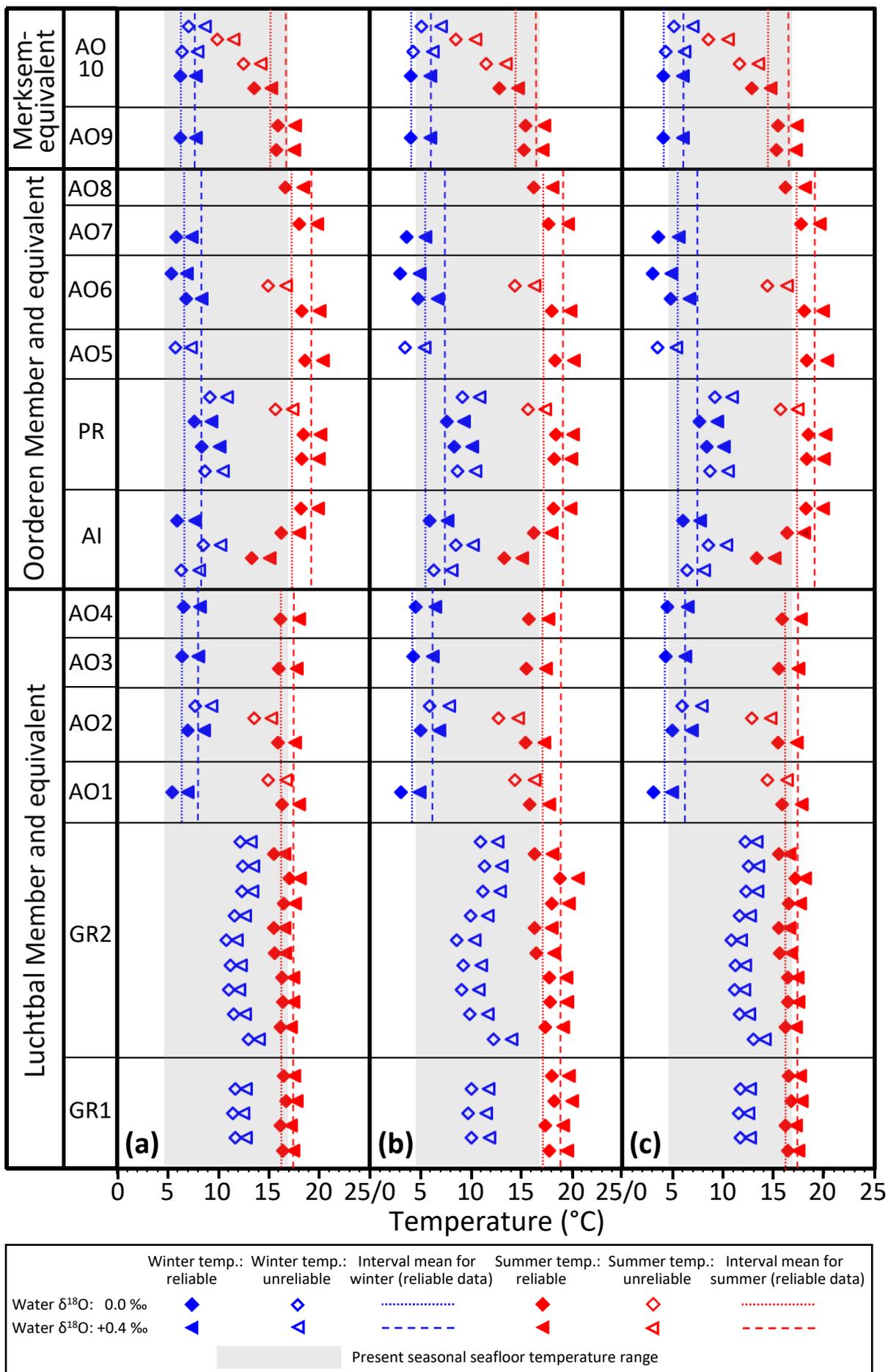


Figure 8: Winter and summer seafloor temperatures, calculated from the seasonal extreme $\delta^{18}\text{O}$ values indicated in Figs. 6 and 7, using water $\delta^{18}\text{O}$ values of 0.0 ‰ and +0.4 ‰ and various equations. **(a):** equation of Royer et al. (2013) for GR, of O’Neil et al. (1969) for AO, and of Grossman and Ku (1986) for AI and PR; **(b):** equation of Grossman and Ku (1986) for GR, AI and PR, and of Bemis et al. (1998) for AO; **(c):** equation of Royer et al. (2013) for GR, of Bemis et al. (1998) for AO, and of Grossman and Ku (1986) for AI and PR. Interval means are for reliable seasonal temperatures (see Sect. 6.1.1) from the Luchtbal Member and equivalent, Oorderen Member and equivalent, and Merksem-equivalent strata. The indicated present-day seasonal seafloor temperature range (4.7–16.9 °C) is for 25 m depth at 53° N, 03° E. Note that Pliocene ranges, as indicated by the separation of dotted or dashed lines for each interval, are broadly similar to the present-day range (see text for more detailed discussion).

FIGURE 9 – double column (caption on next page)

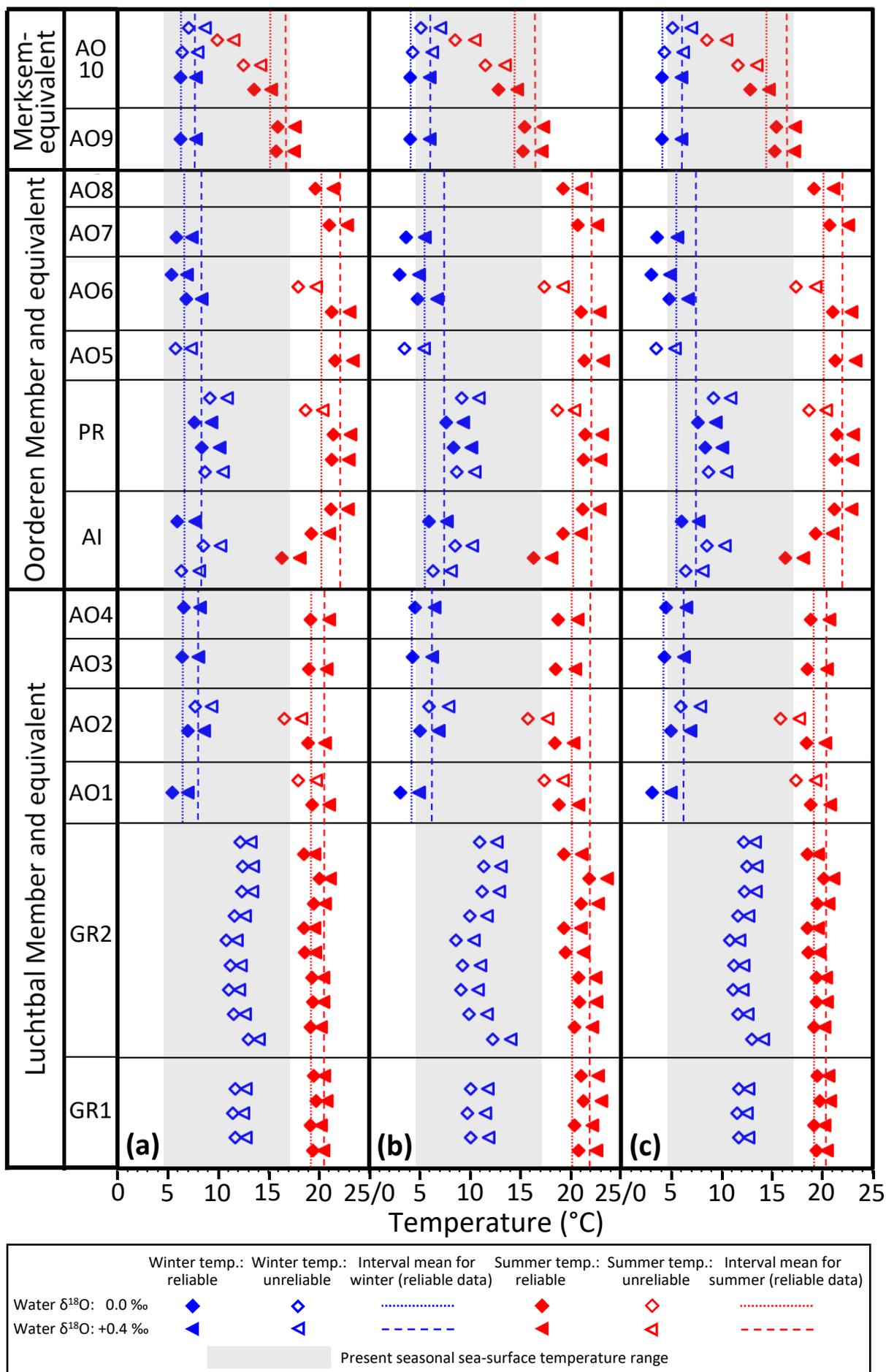


Figure 9: Winter and summer sea-surface temperatures, calculated as in Fig. 8, using the same equations for (a), (b) and (c), but with a 3 °C supplement to Luchtbal and Oorderen summer temperatures in recognition of thermal stratification (see text for explanation). Interval means calculated as in Fig. 8. The indicated present-day seasonal sea-surface temperature range (4.7–17.1 °C) is for 53° N, 03° E. Note that the Luchtbal and Oorderen ranges, as indicated by the separation of dotted or dashed lines for each interval, are larger than the present-day range (see text for more detailed discussion).