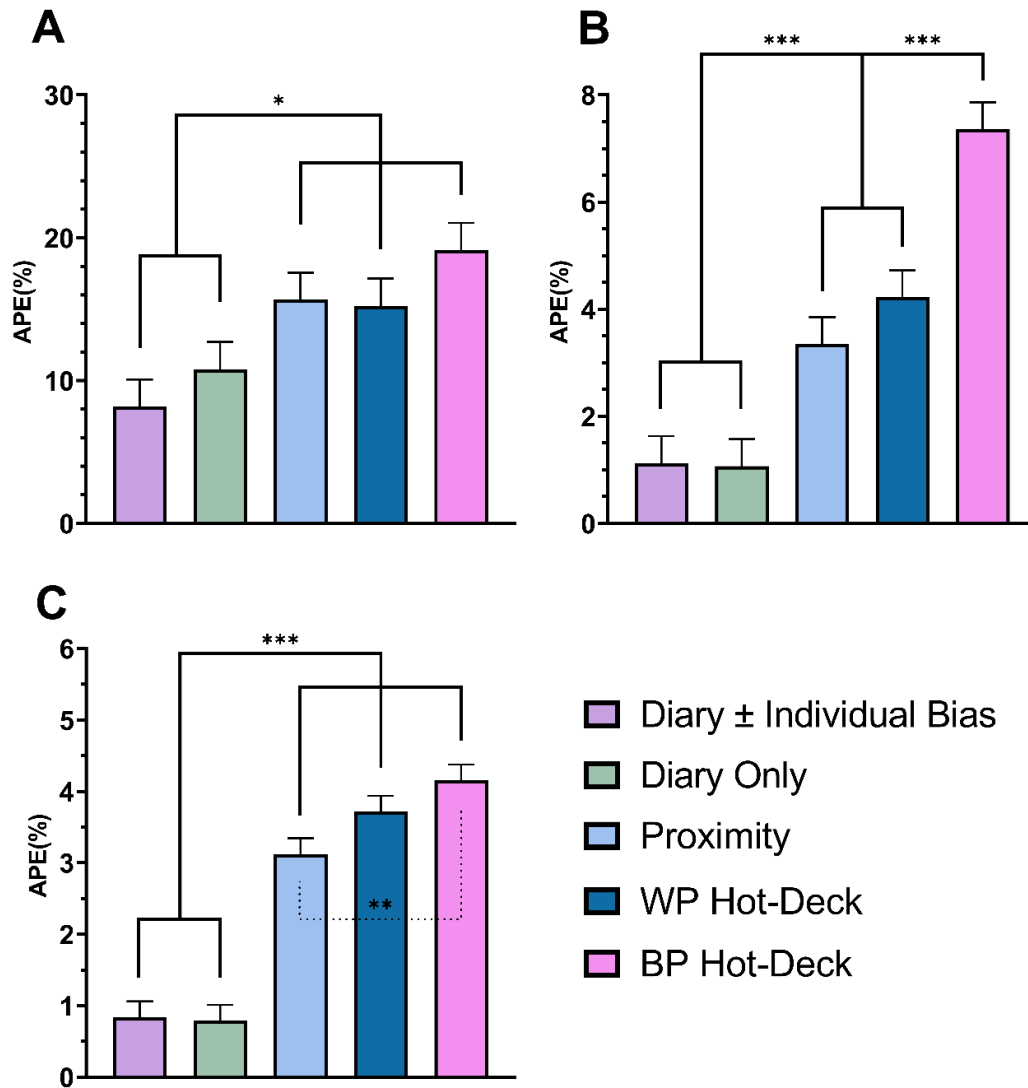
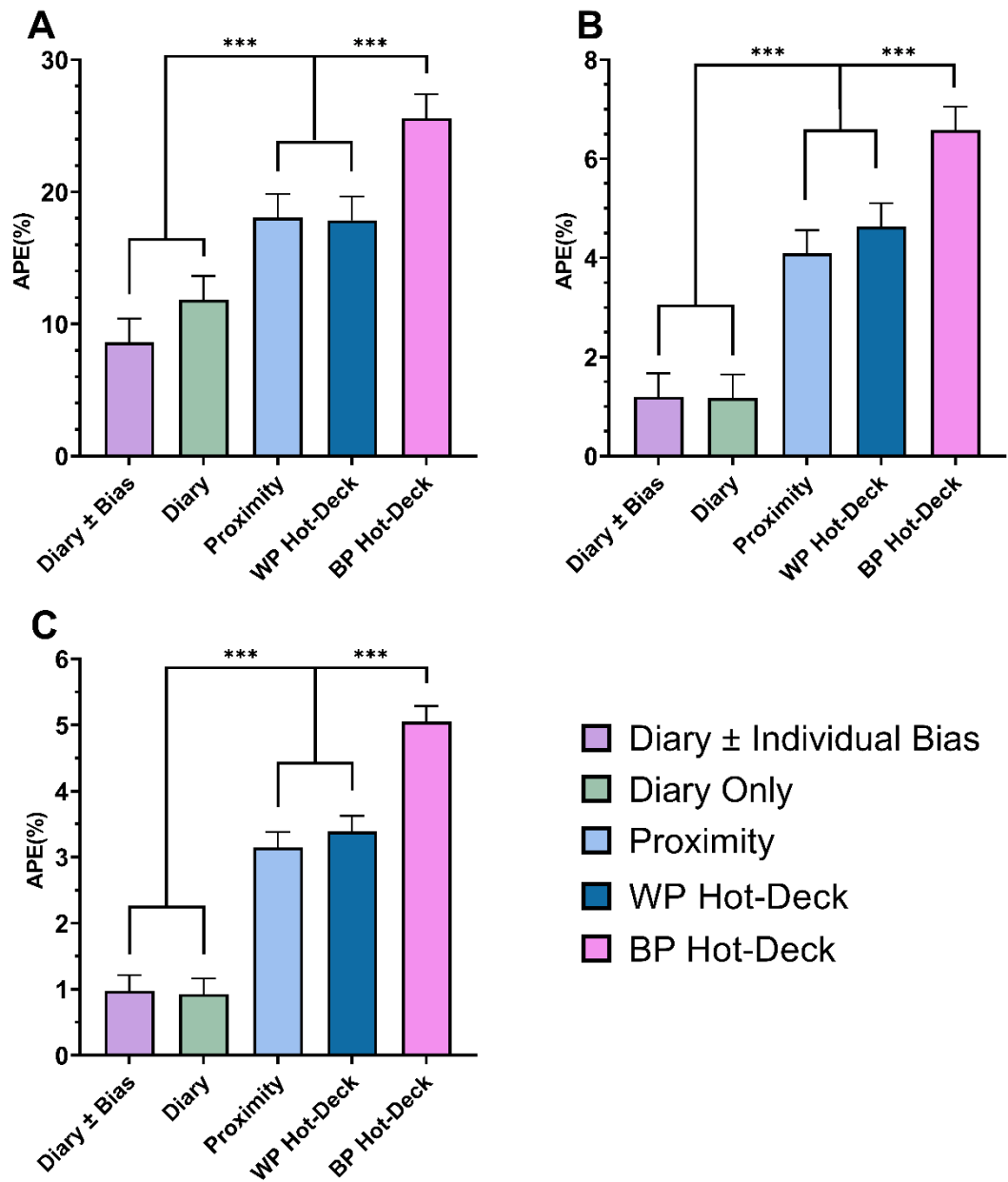


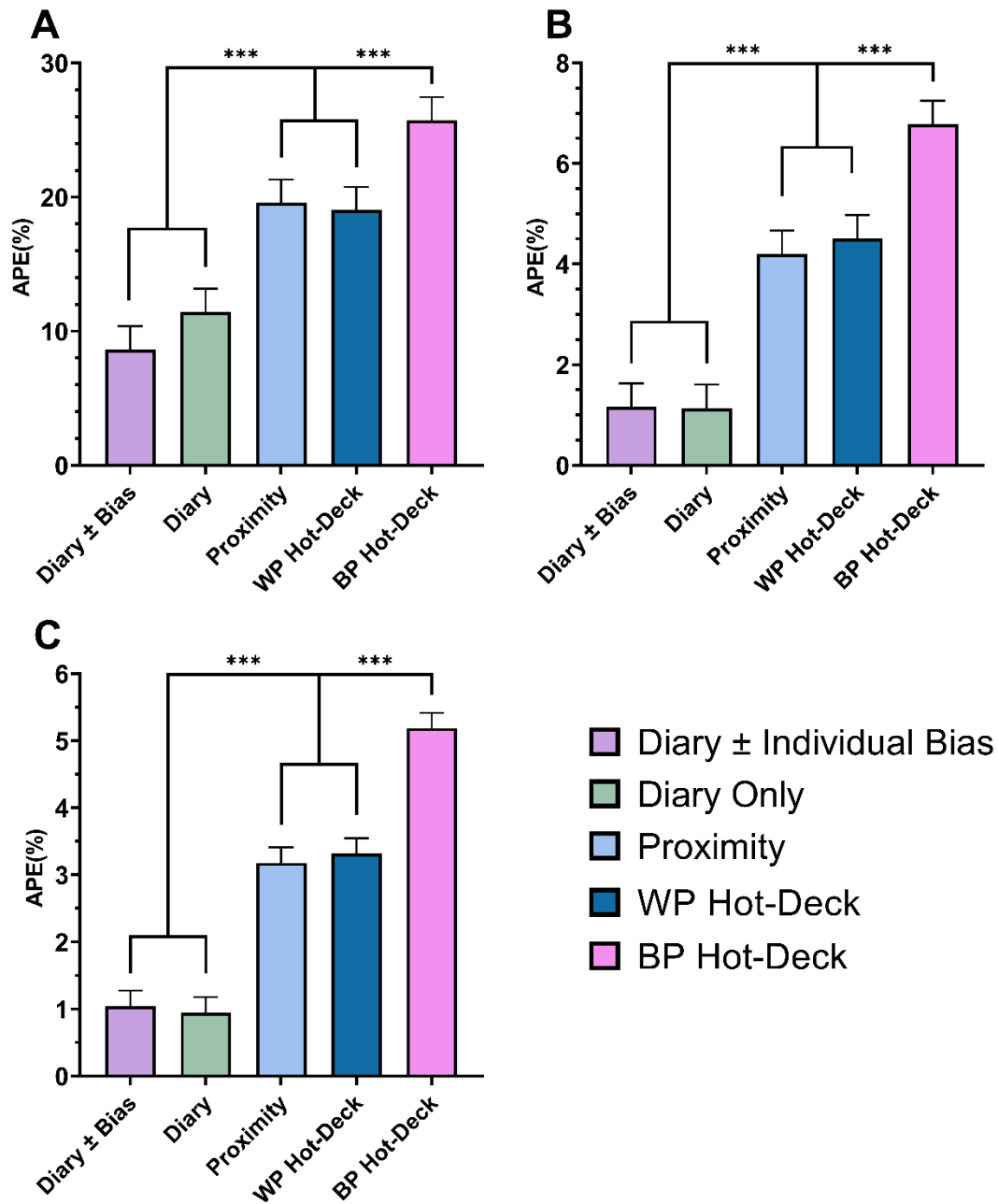
## Appendix 6.1 – APE for approaches with varying days of data available



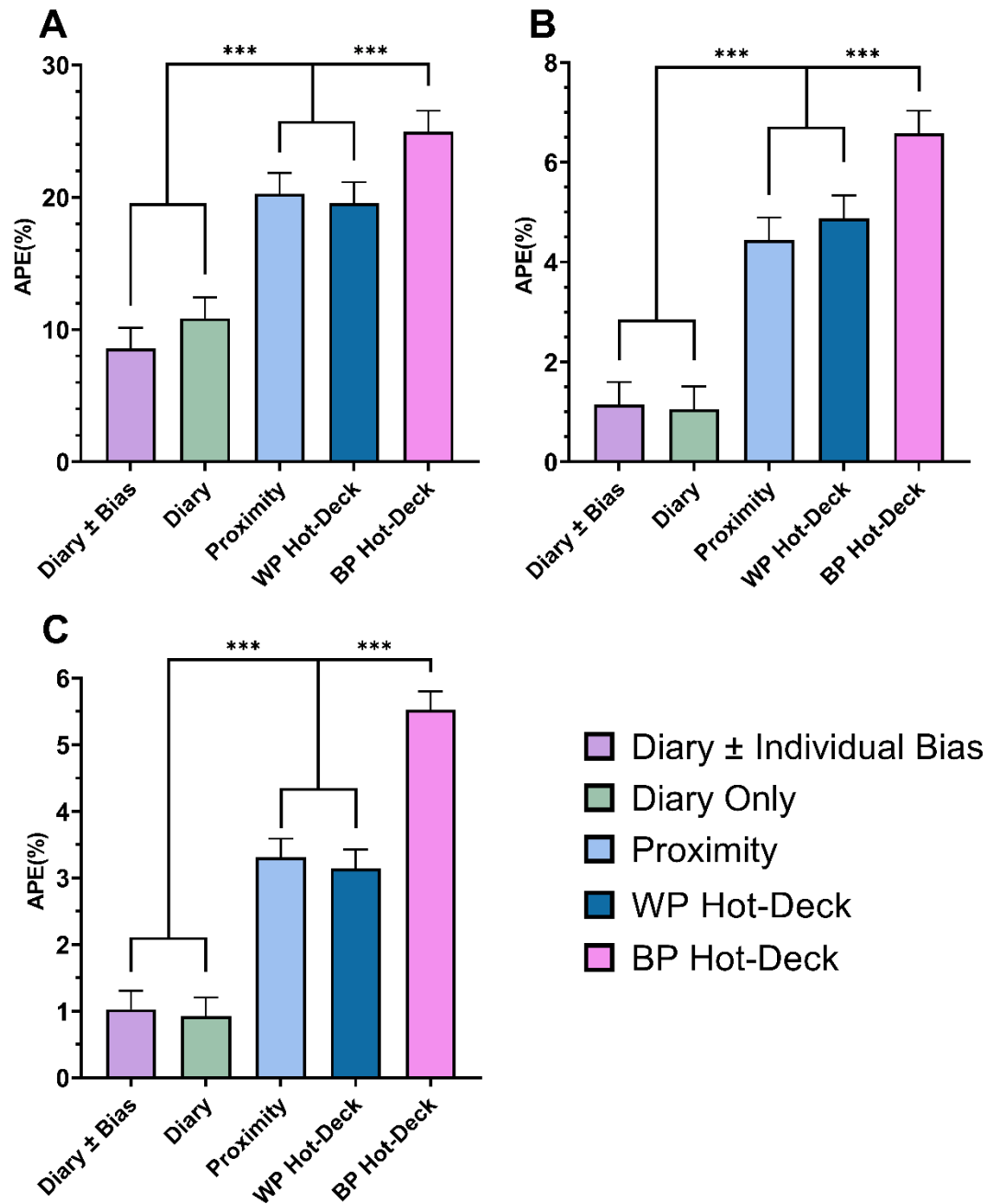
**Appendix Figure 6.1a** Column graphs depicting the mean absolute percentage error (APE) of imputed values, obtained using the five outlined imputation approaches and for when 13 days of data were available per participant, for **A.** Total Sleep Time, **B.** Time at Sleep Onset, and **C.** Time at Wake. \*\*\* denotes  $p < 0.001$ , \*\* denotes  $p < 0.01$ , and \* denotes  $p < 0.05$ . For **A**, the \* is in reference to the comparison with the highest p value (*Diary only vs. WP Hot Deck*), with the *Diary only vs. WP Hot Deck* comparison being significant at  $p < 0.01$  and all other comparisons being significant at  $p < 0.001$ . For **C** *Diary* approaches and other approaches were significantly different at  $p < 0.001$ . The comparison between the *Proximity approach* and *BP Hot-Deck* was also significant at  $p < 0.01$ .



**Appendix Figure 6.1b** Column graphs depicting the mean absolute percentage error (APE) of imputed values, obtained using the five outlined imputation approaches and for when 12 days of data were available per participant, for **A.** Total Sleep Time, **B.** Time at Sleep Onset, and **C.** Time at Wake. \*\*\* denotes  $p < 0.001$ , \*\* denotes  $p < 0.01$ , and \* denotes  $p < 0.05$ .



**Appendix Figure 6.1c** Column graphs depicting the mean absolute percentage error (APE) of imputed values, obtained using the five outlined imputation approaches and for when 11 days of data were available per participant, for **A.** Total Sleep Time, **B.** Time at Sleep Onset, and **C.** Time at Wake. \*\*\* denotes  $p < 0.001$ , \*\* denotes  $p < 0.01$ , and \* denotes  $p < 0.05$ .



**Appendix Figure 6.1d** Column graphs depicting the mean absolute percentage error (APE) of imputed values, obtained using the five outlined imputation approaches and for when 10 days of data were available per participant, for **A.** Total Sleep Time, **B.** Time at Sleep Onset, and **C.** Time at Wake. \*\*\* denotes  $p < 0.001$ , \*\* denotes  $p < 0.01$ , and \* denotes  $p < 0.05$ .