

HOBO Data Plots

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Guide

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Page 8: KBS soil temperature over time

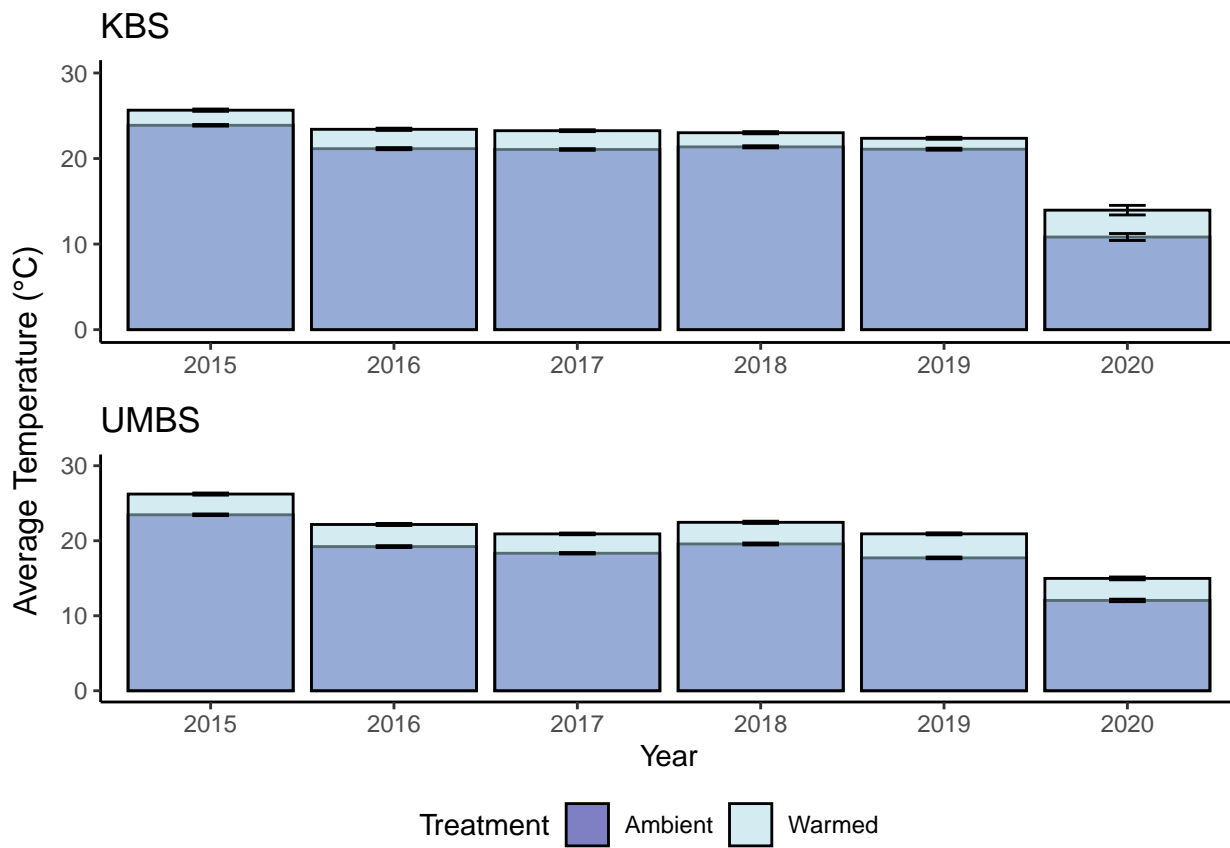
Page 9: KBS soil moisture over time

Page 10: 1H sensor average air temperature by month over all years

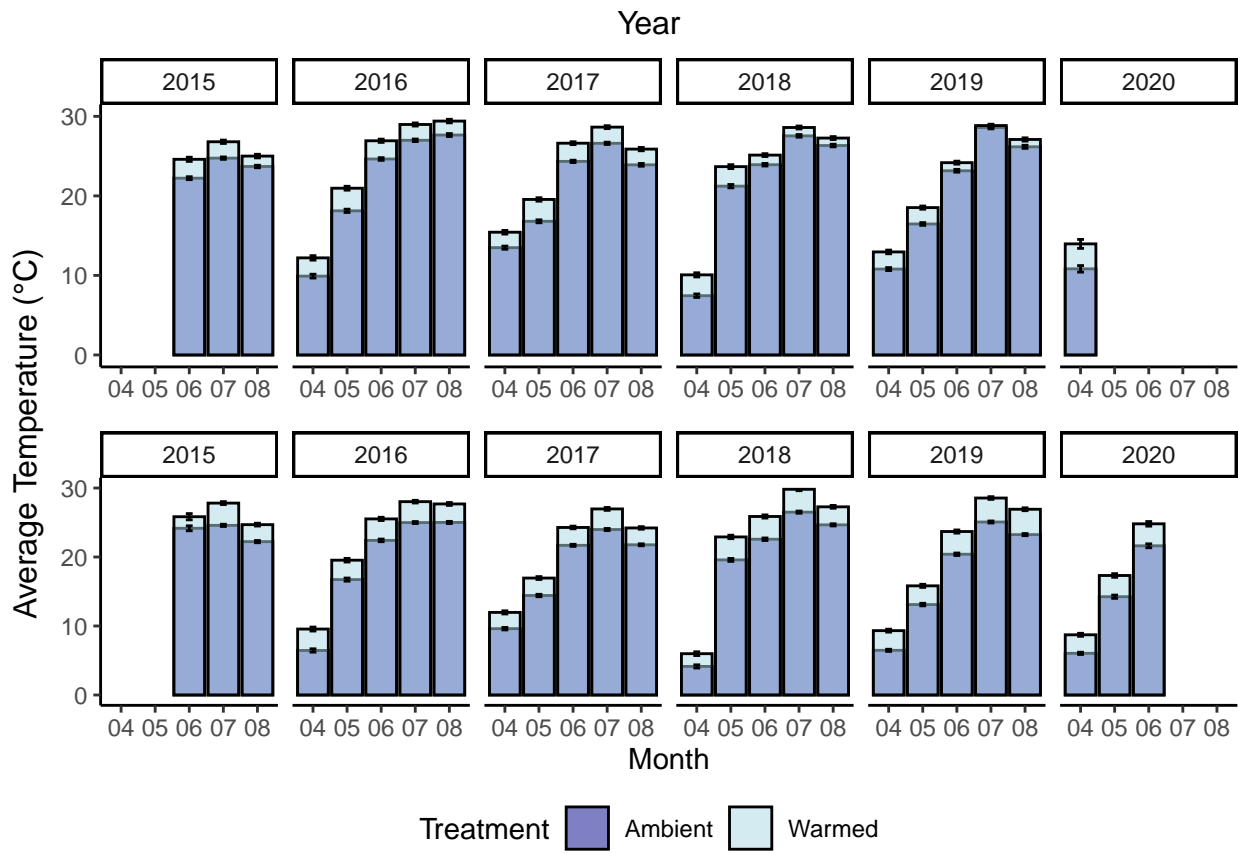
Page 11: 2H sensor average air temperature by month over all years

Page 12: 3H sensor average air temperature by month over all years

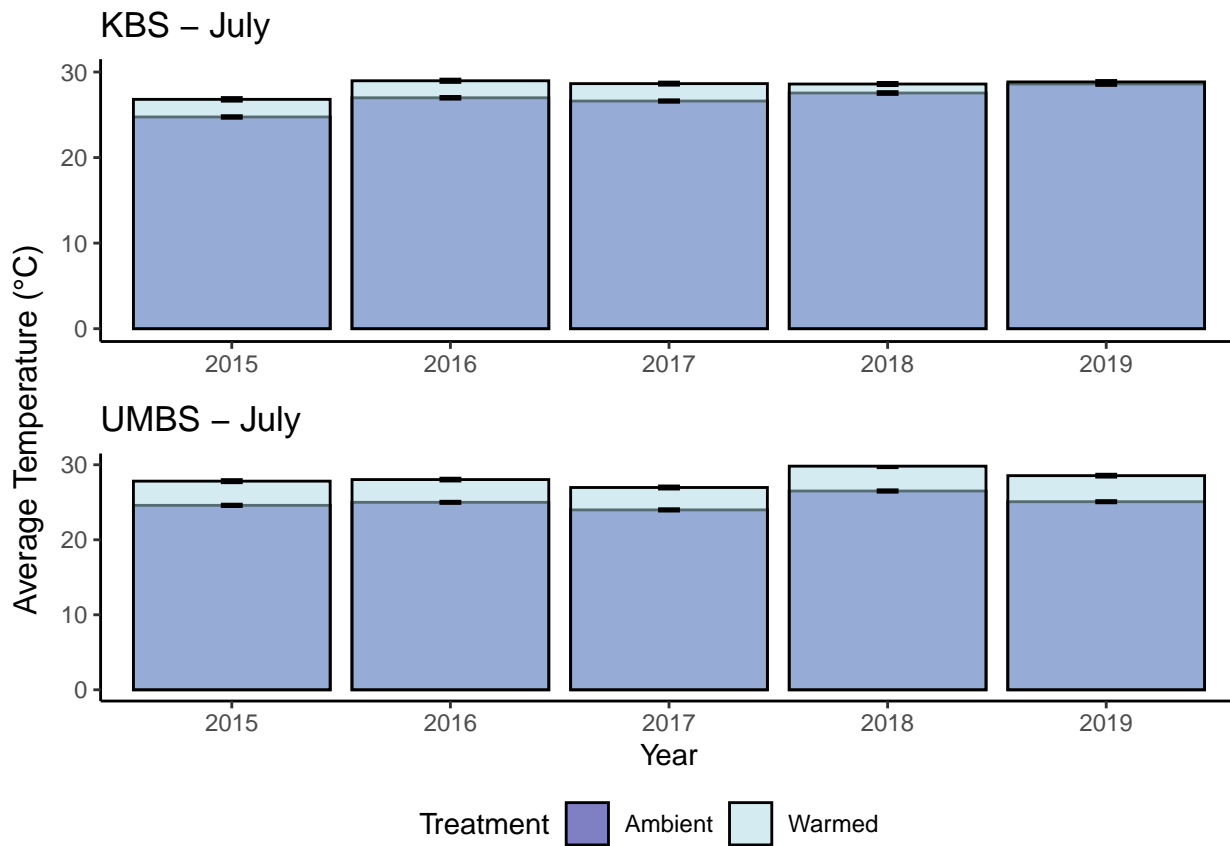
Yearly average chamber temperatures during the day for the growing season (I defined this as April-August from 7 AM - 7 PM, but this could easily be changed)



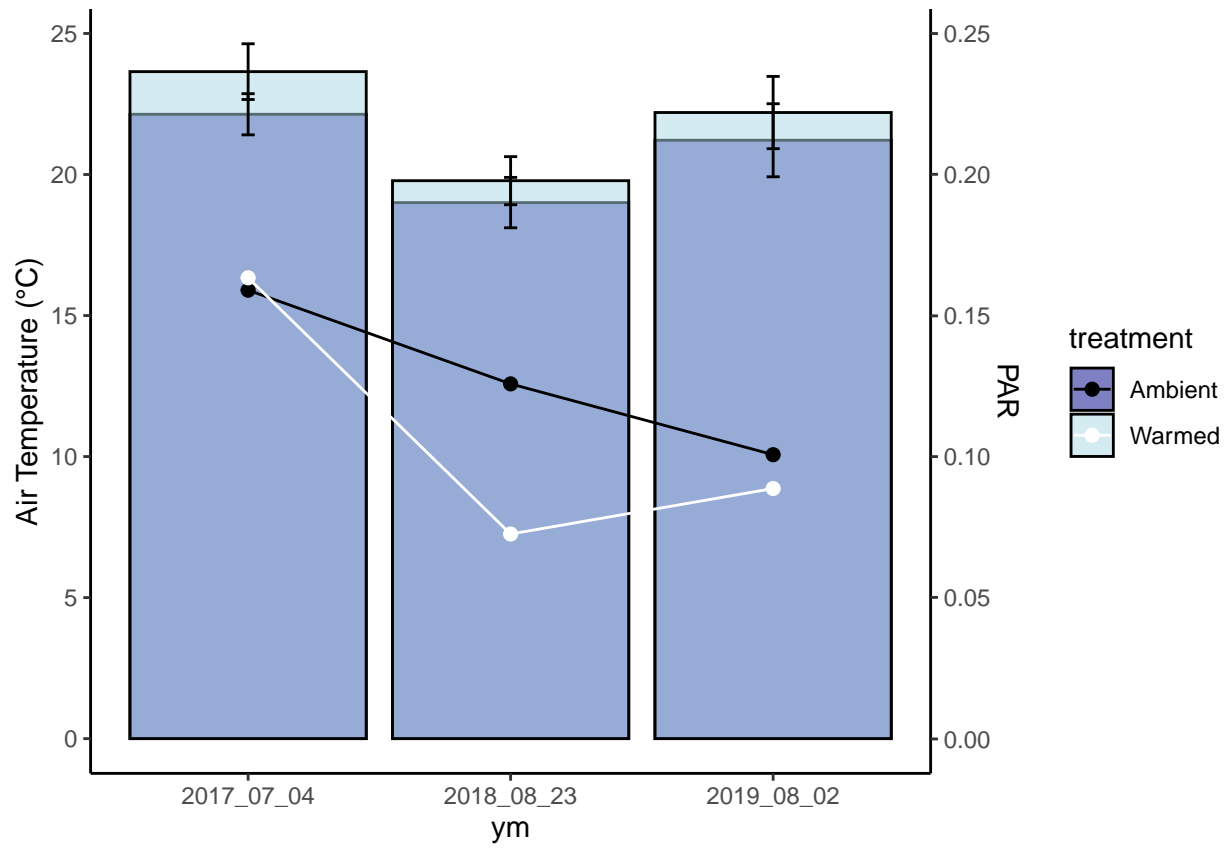
Monthly averages during the growing season, over time (KBS on top and UMBS on bottom) — these could be separated to see individual months over time (i.e. July temps over each year, as shown on the next page)



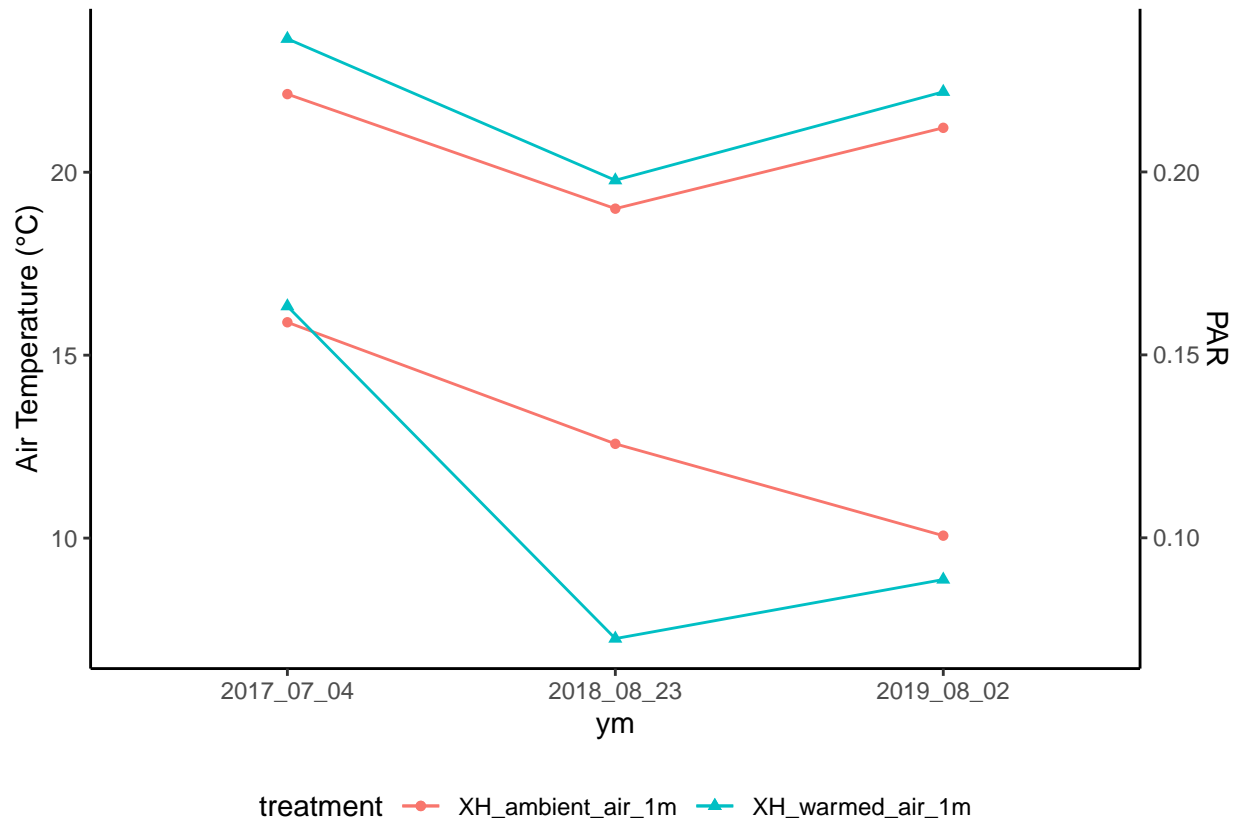
Average July temperatures during the daytime - KBS shows a smaller difference between warmed + ambient in later years than UMBS



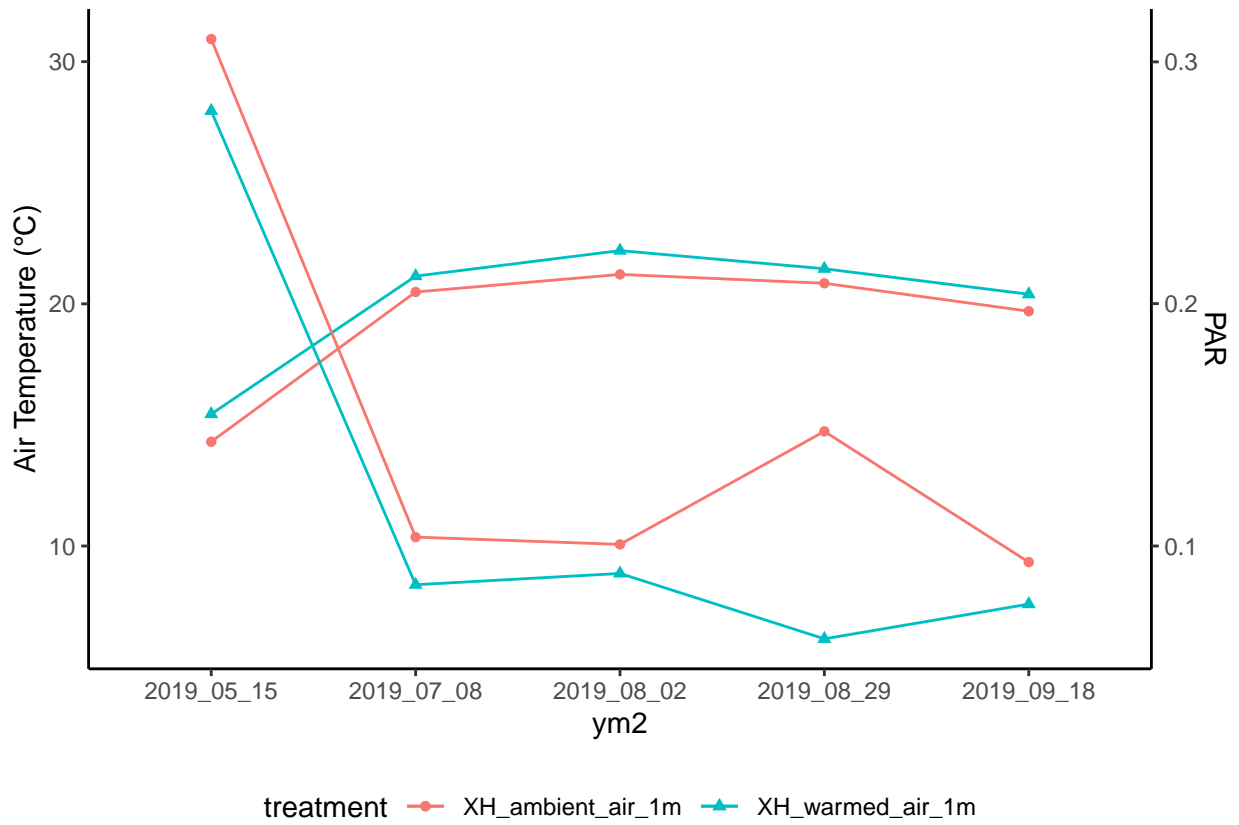
Comparing PAR to HOBO from 2017-2019; only one day is shown for each year because PAR measurements were only taken on one day at KBS for 2017 and 2018



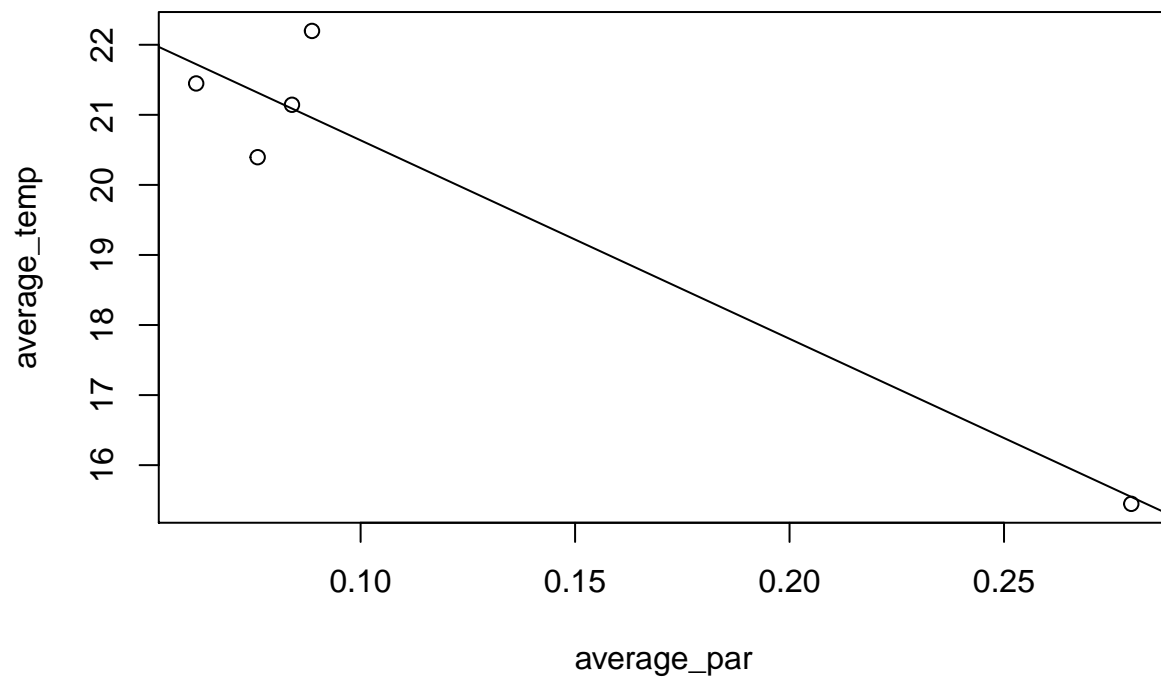
Again, comparing PAR to HOBO, this time in line format (bottom lines are PAR data, I need to change their color)



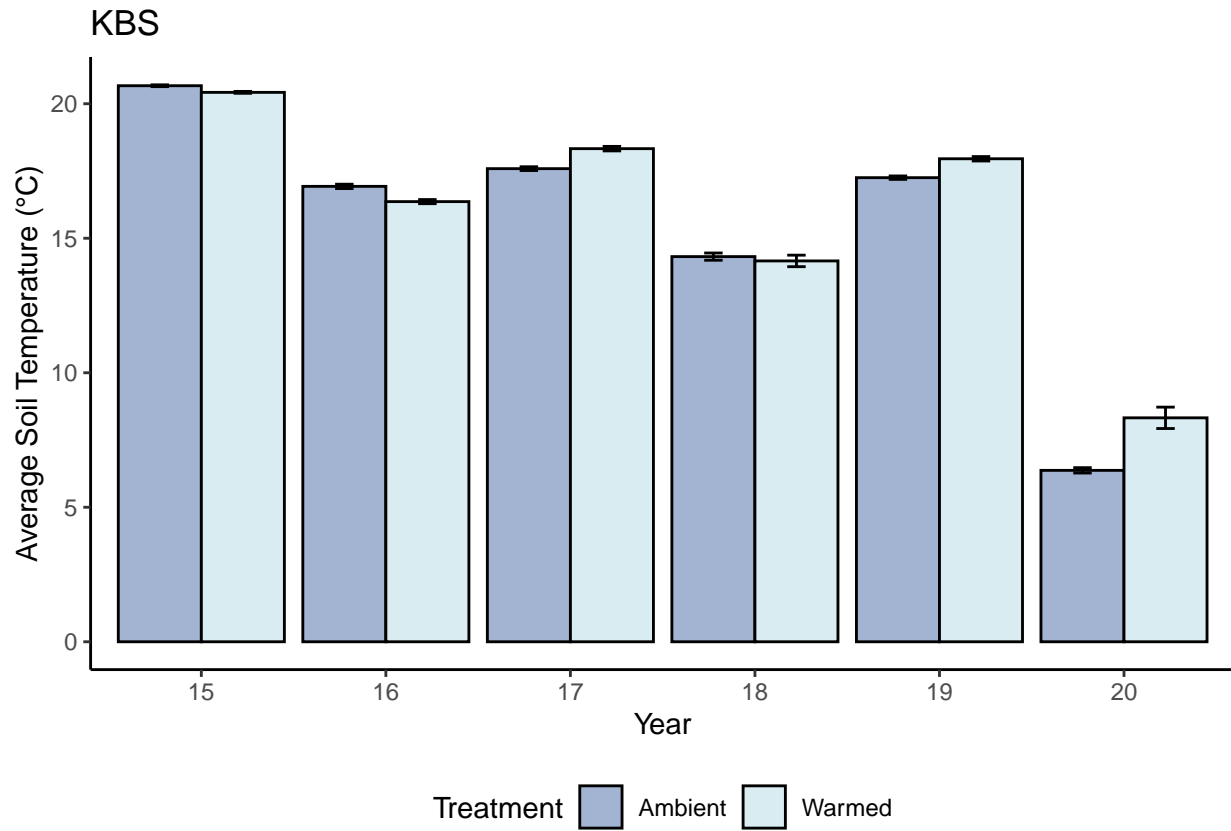
Comparing PAR to HOBO for only 2019 because multiple PAR measurements were taken that year — need to change the color for the PAR lines



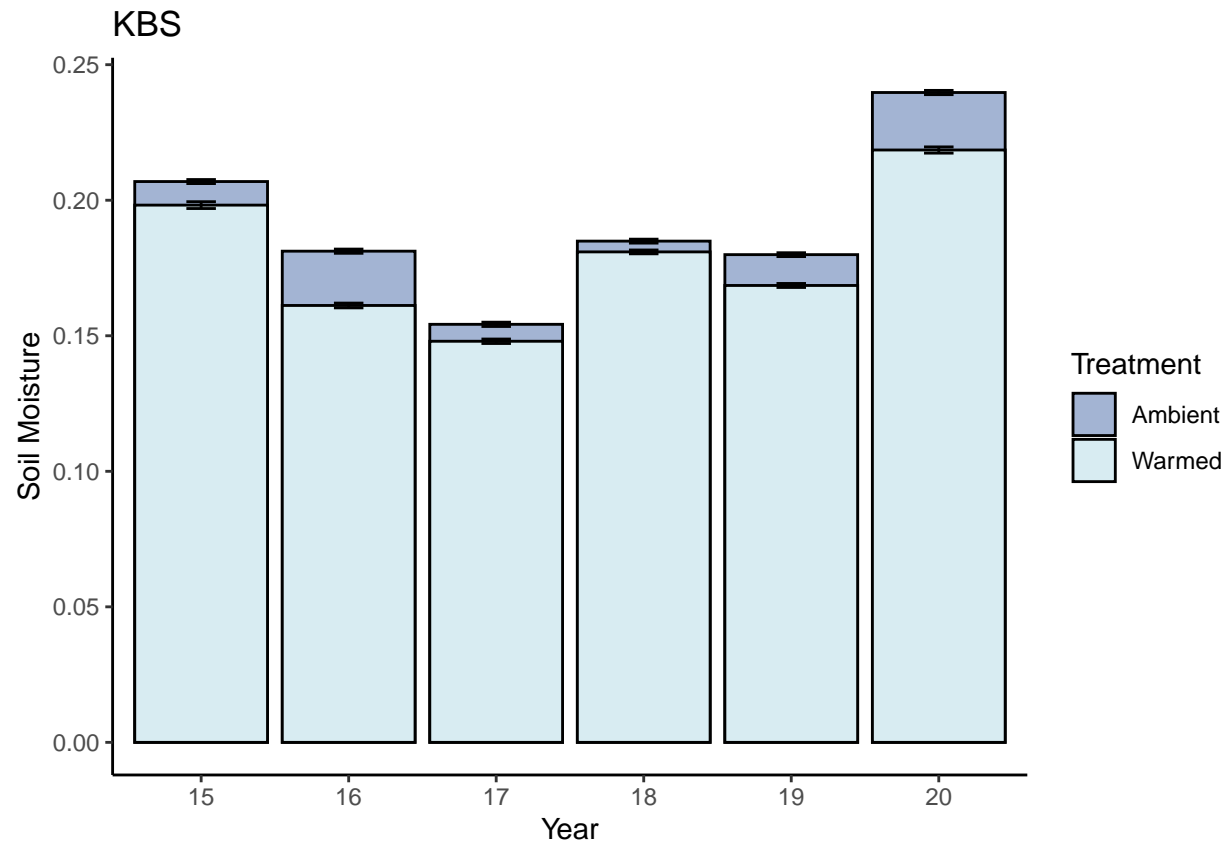
Simple linear regression between temp and par: $F(1,3) = 32.21$, $p\text{-value} = 0.011$



Soil temperature over time - doesn't seem to be a difference between treatments

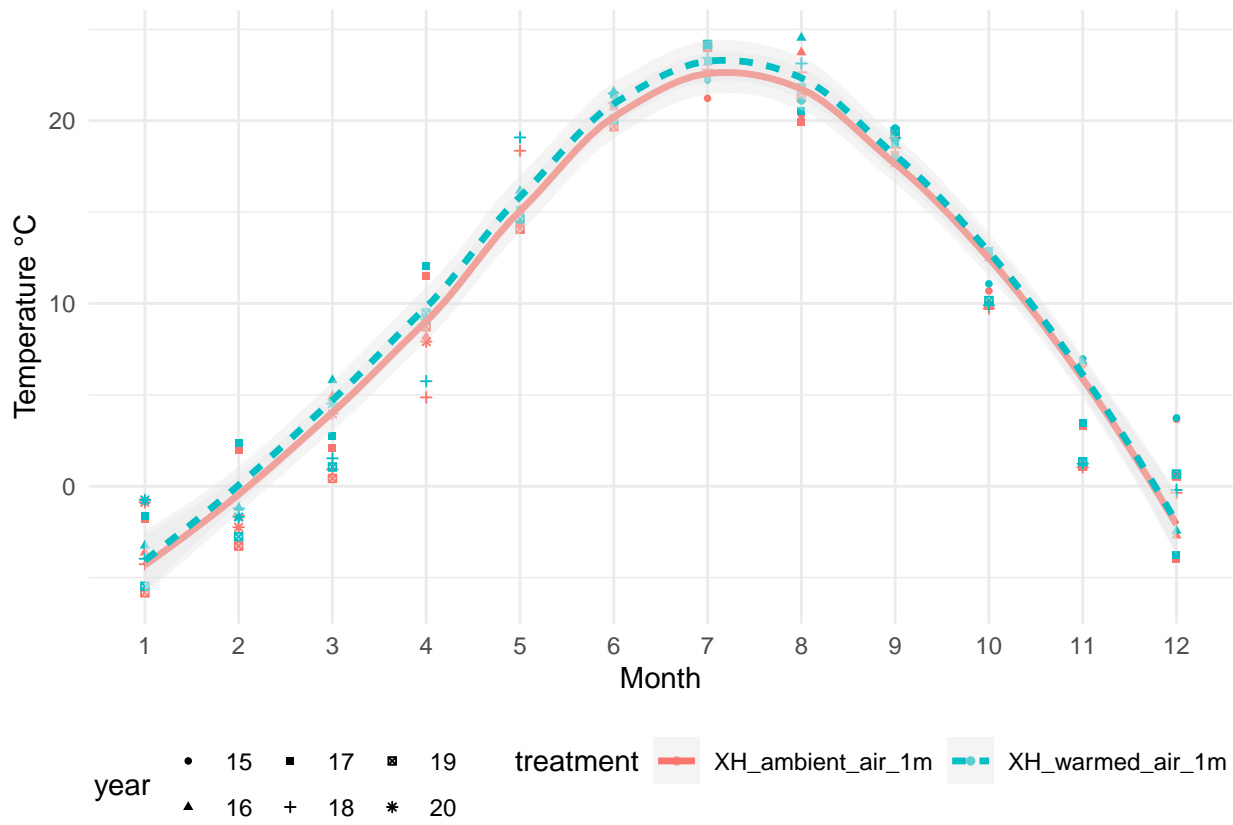


Soil moisture over time - ambient retains more moisture

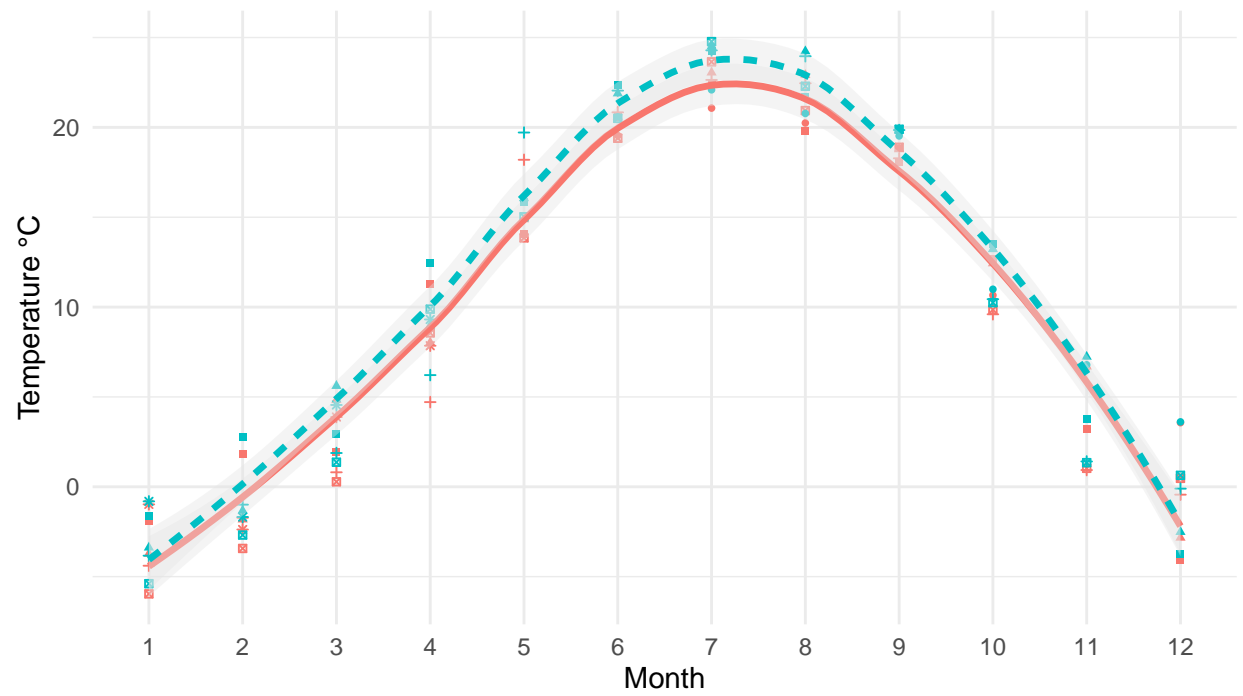


These plots average the chamber temperatures for each month over all years for each treatment

1H sensor

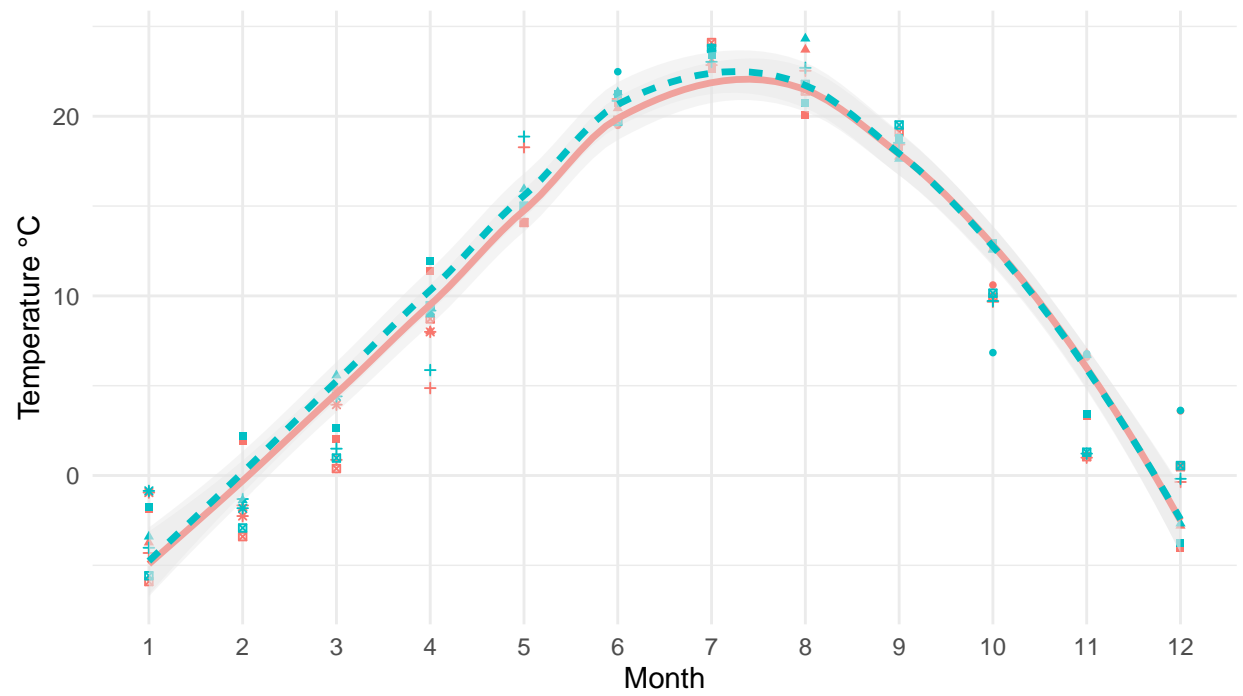


2H sensor



year • 15 ■ 17 ▣ 19 treatment — XH_ambient_air_1m - - XH_warmed_air_1m
 ▲ 16 + 18 * 20

3H sensor



year • 15 ■ 17 ▣ 19 treatment — XH_ambient_air_1m - - XH_warmed_air_1m
 ▲ 16 + 18 * 20