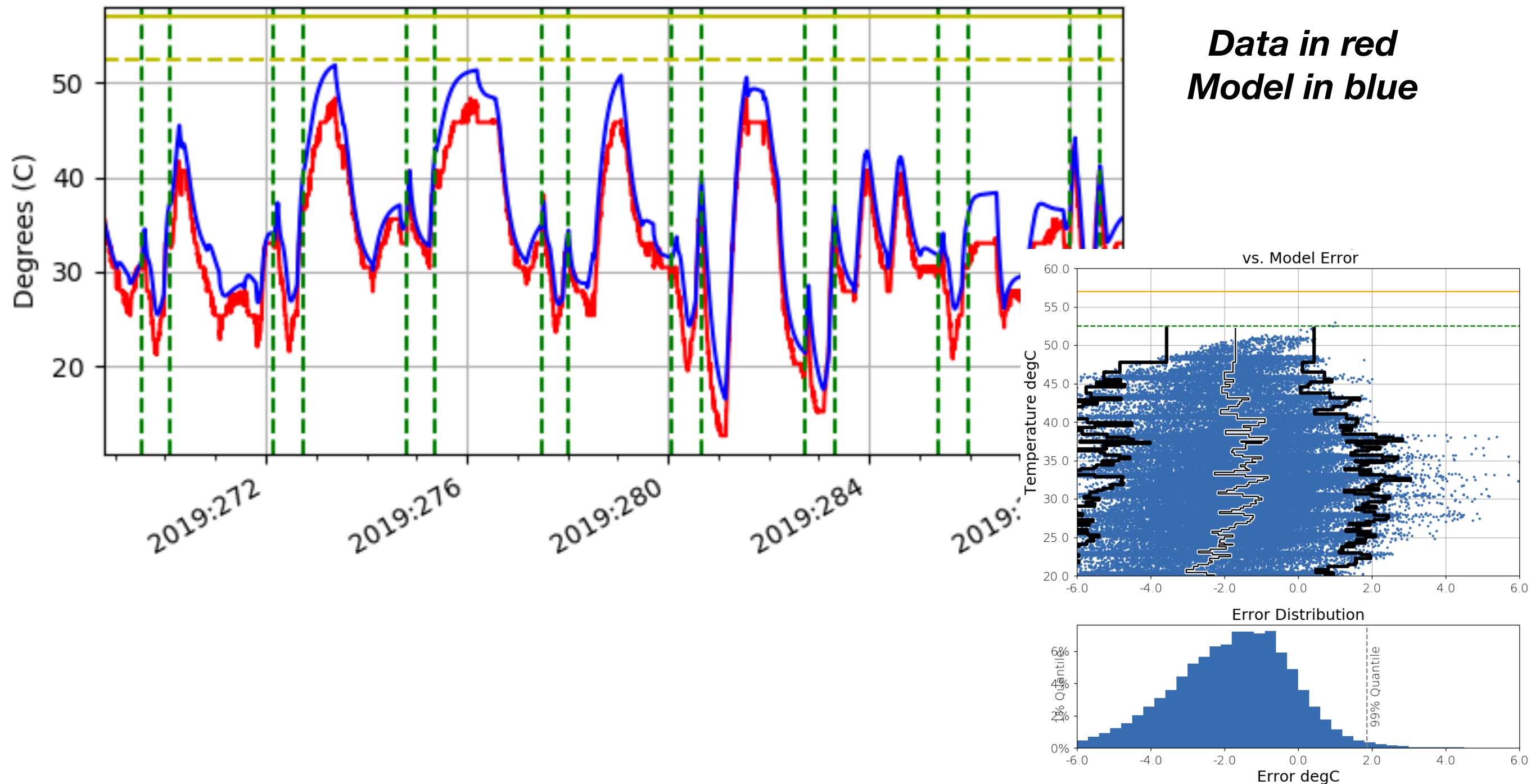


PSMC Thermal Model Update

Feb. 4, 2020
Jack Steiner

json parameter update *ONLY

1PDEAAT validation

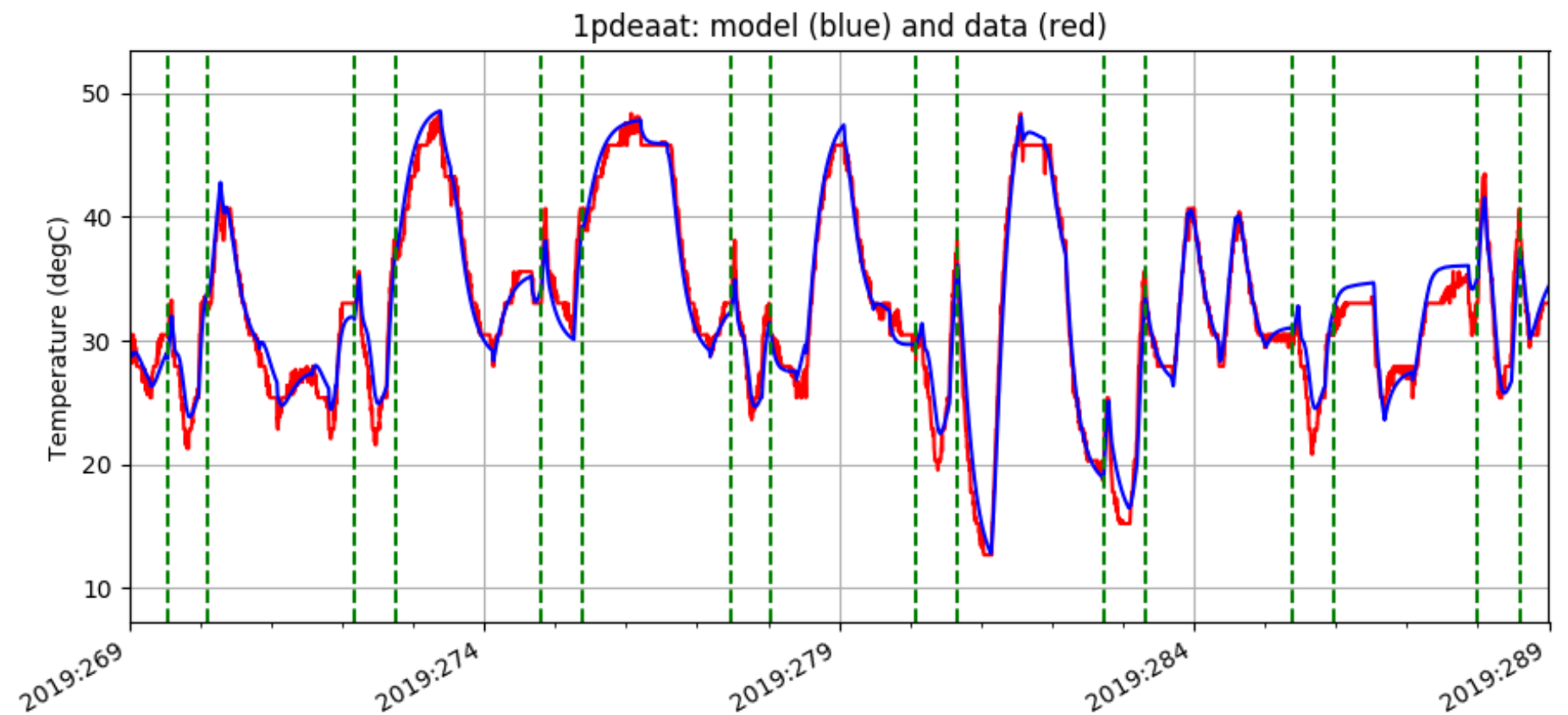
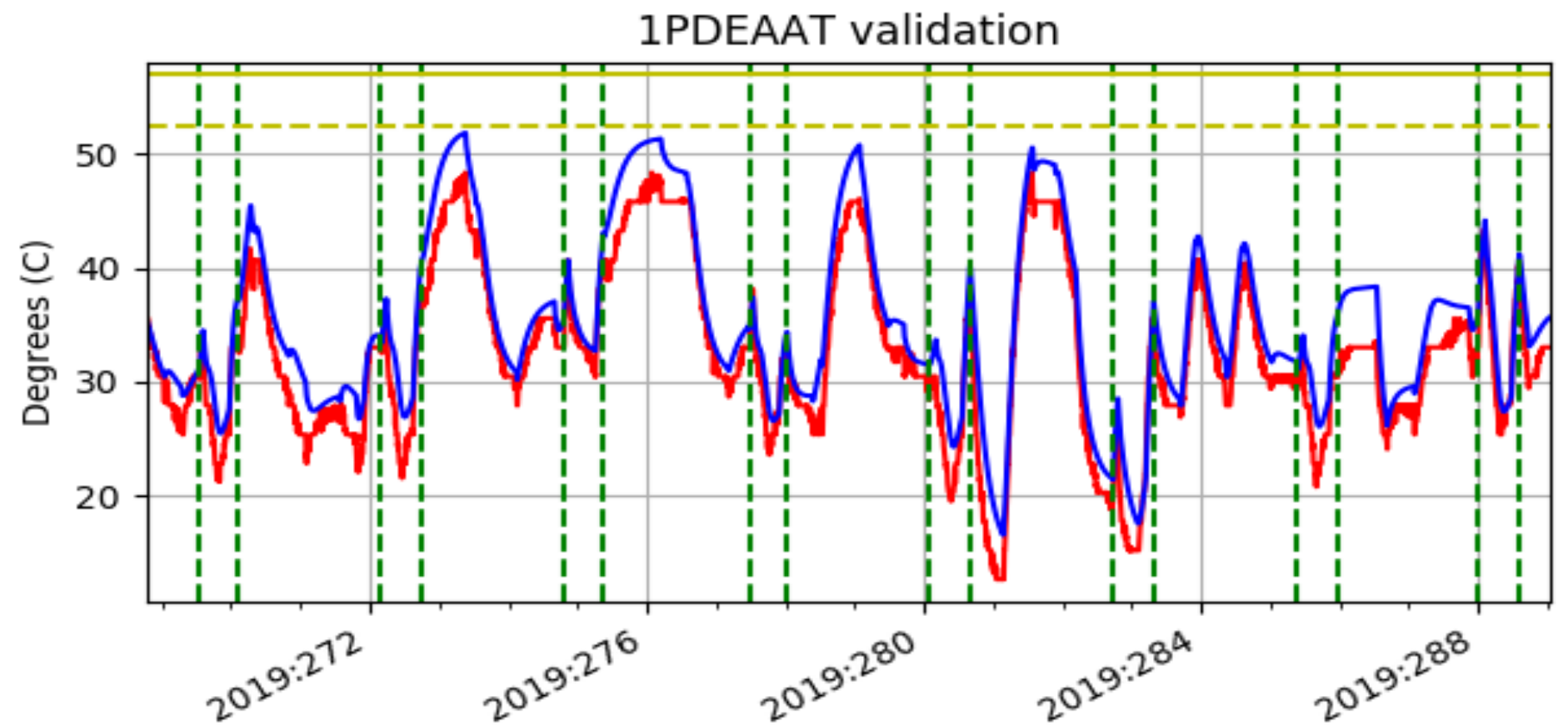


Current model performance

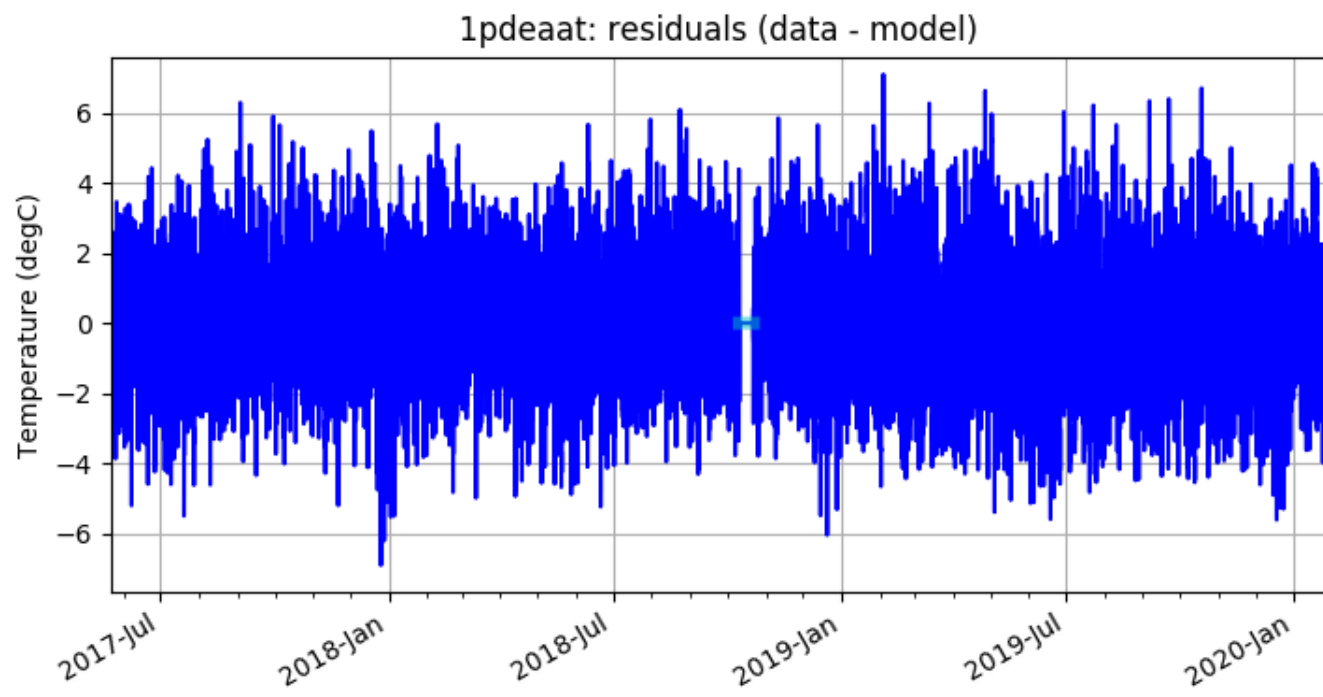
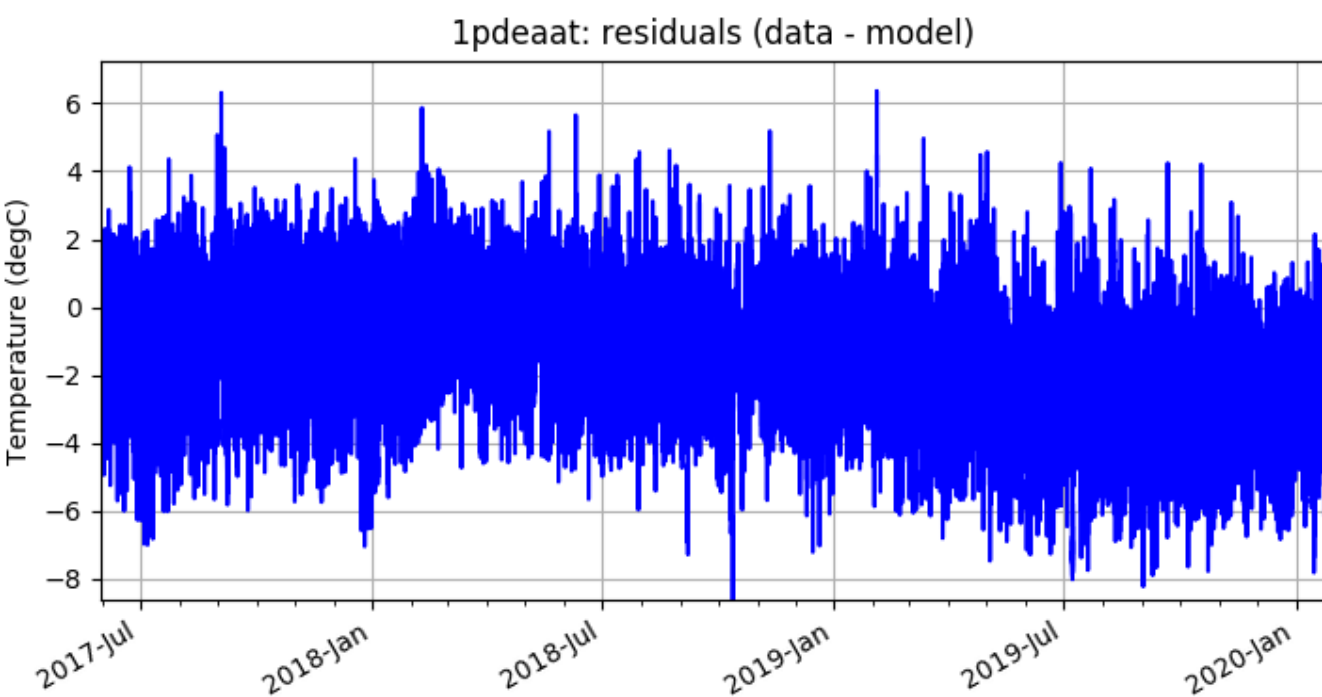
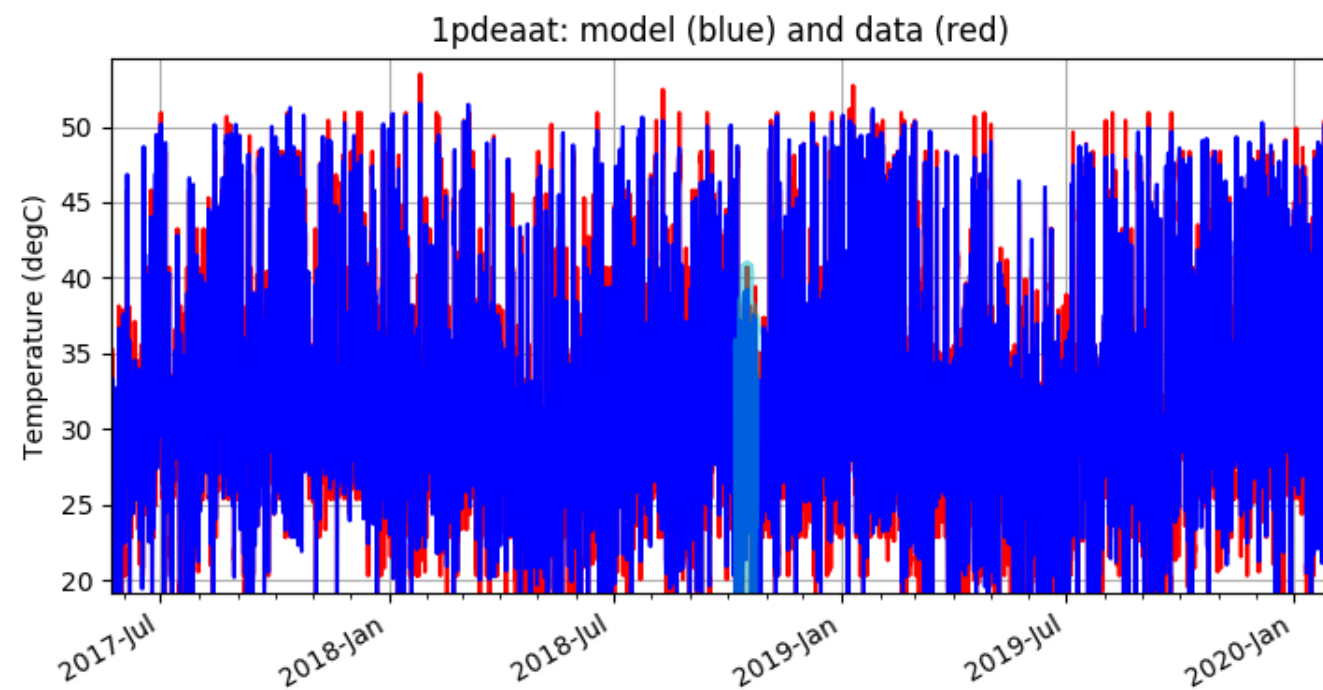
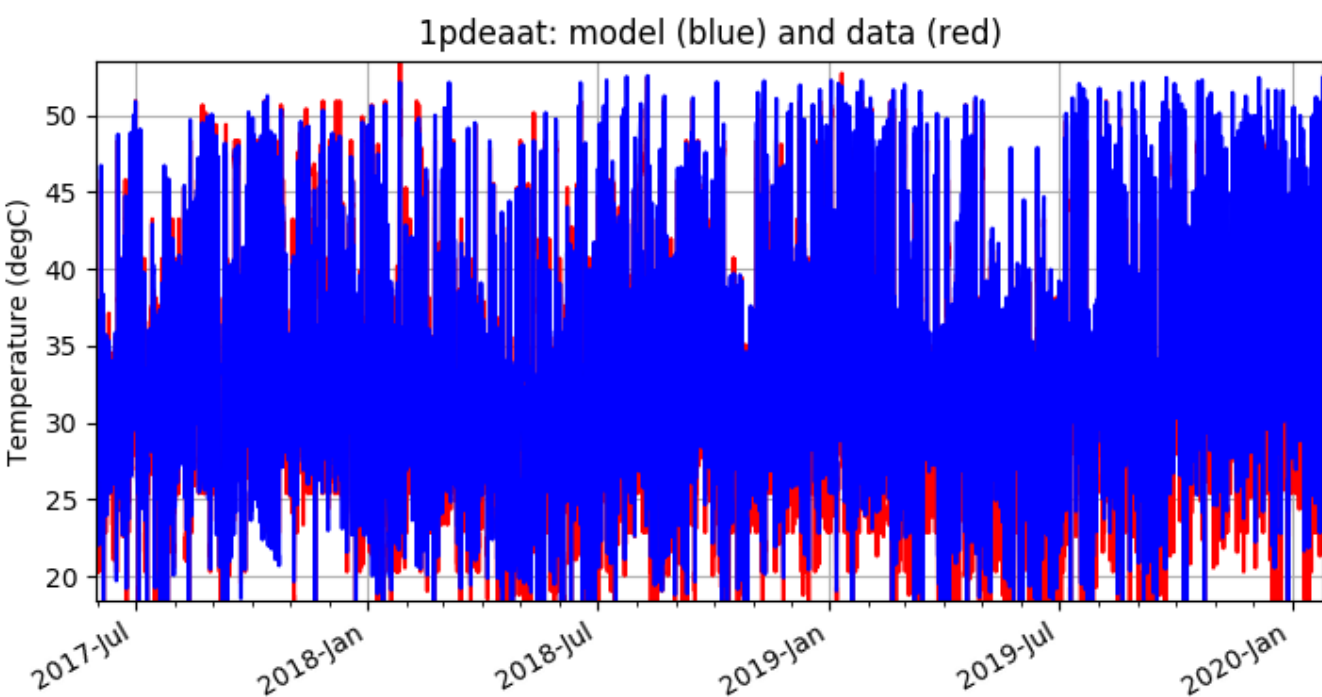
Consistent overprediction: safe, but limiting.

Recalibrated PSMC model

Data in red
Model in blue



Better performance across the board *but* not as safe.

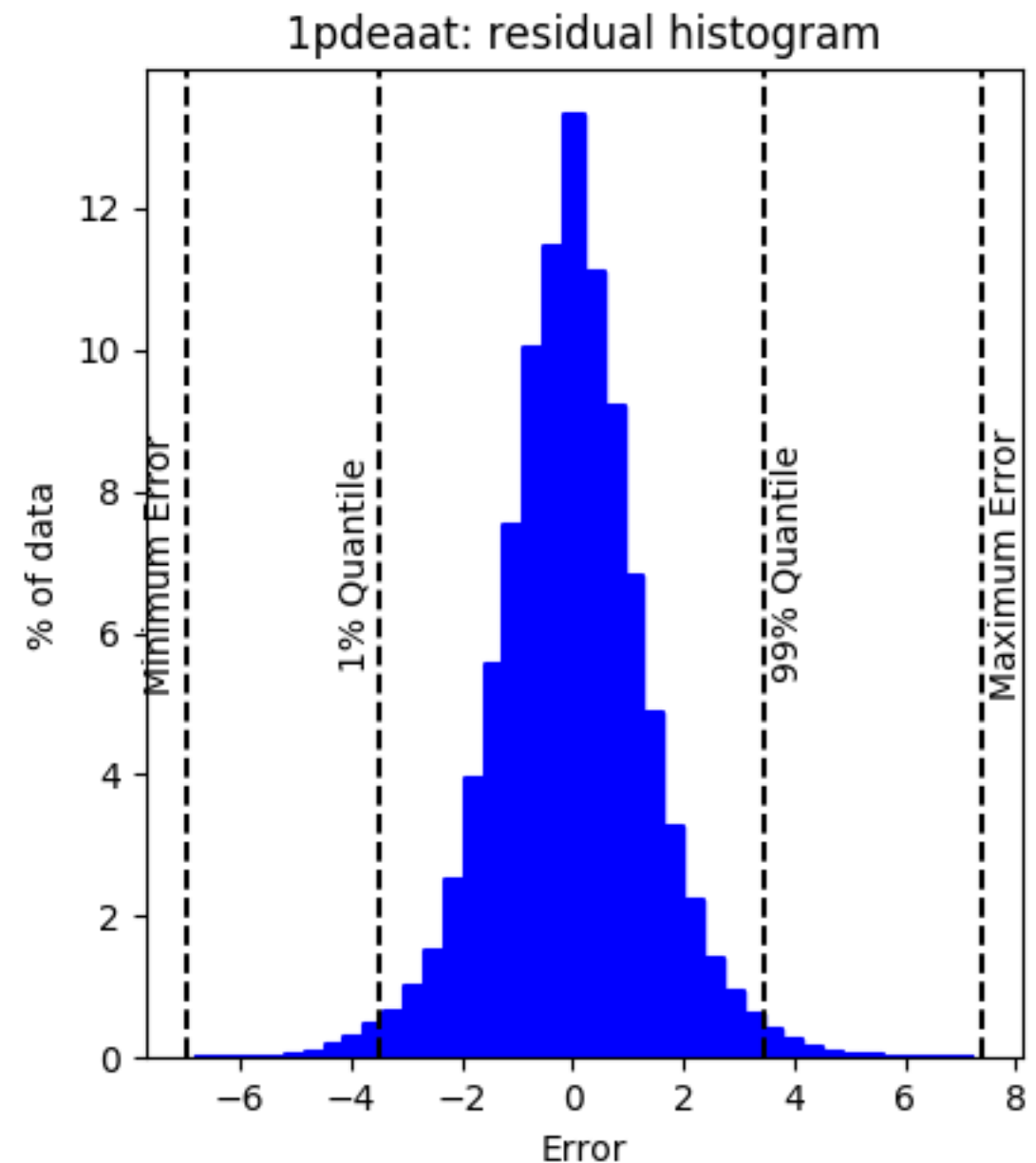
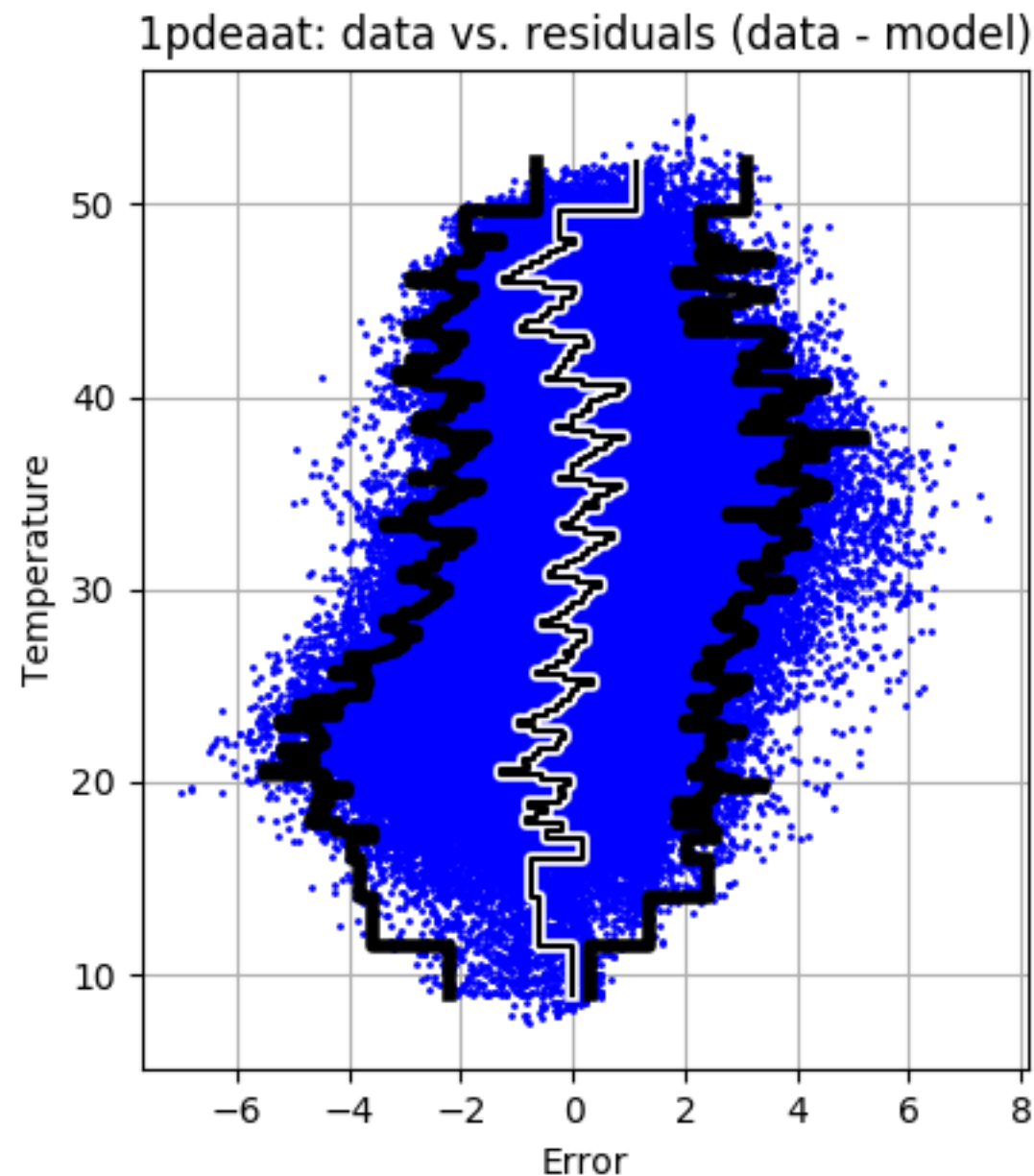


CURRENT MODEL

PROPOSED MODEL

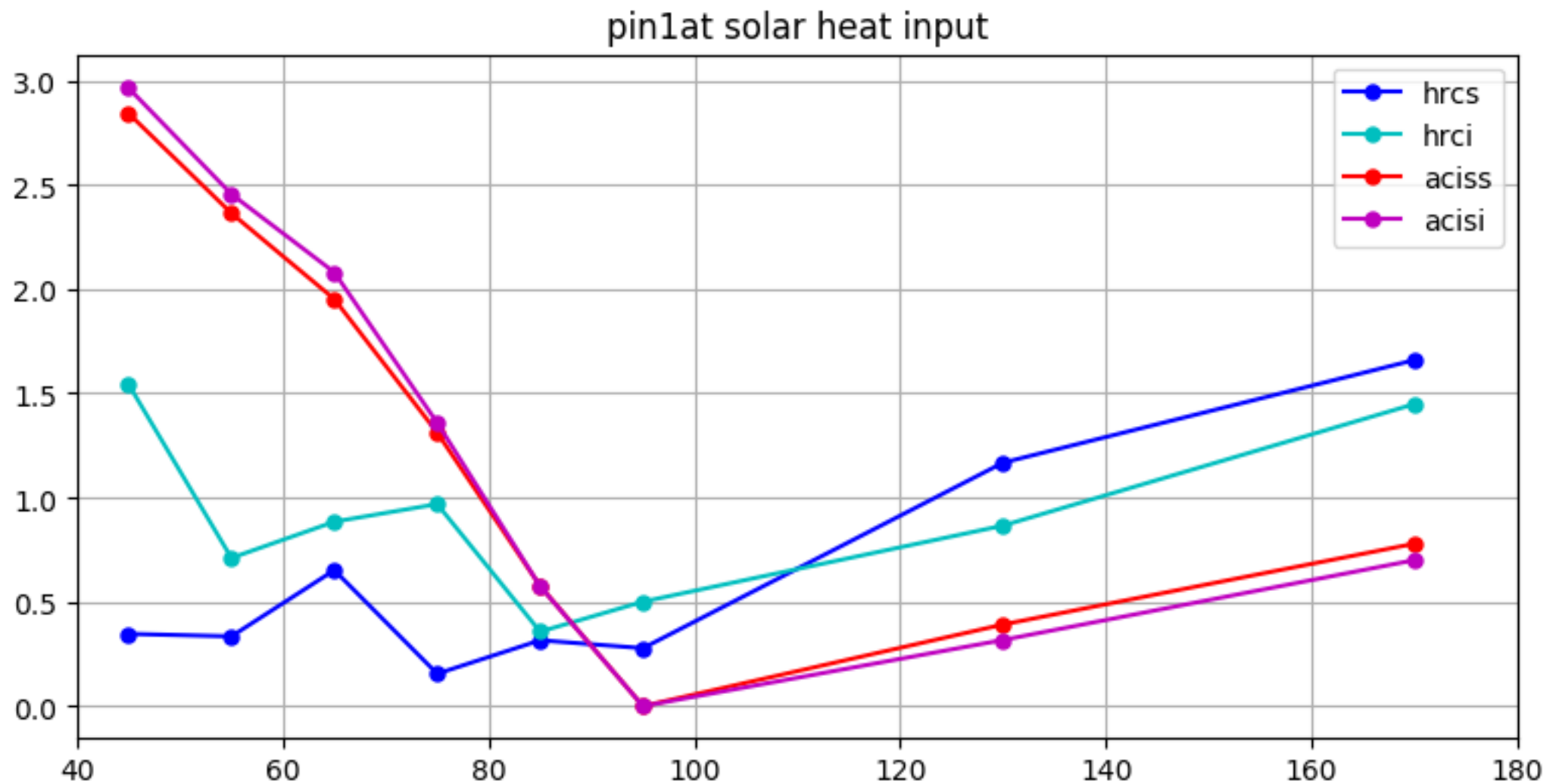
Data in red
Model in blue

Long-Term Comparison



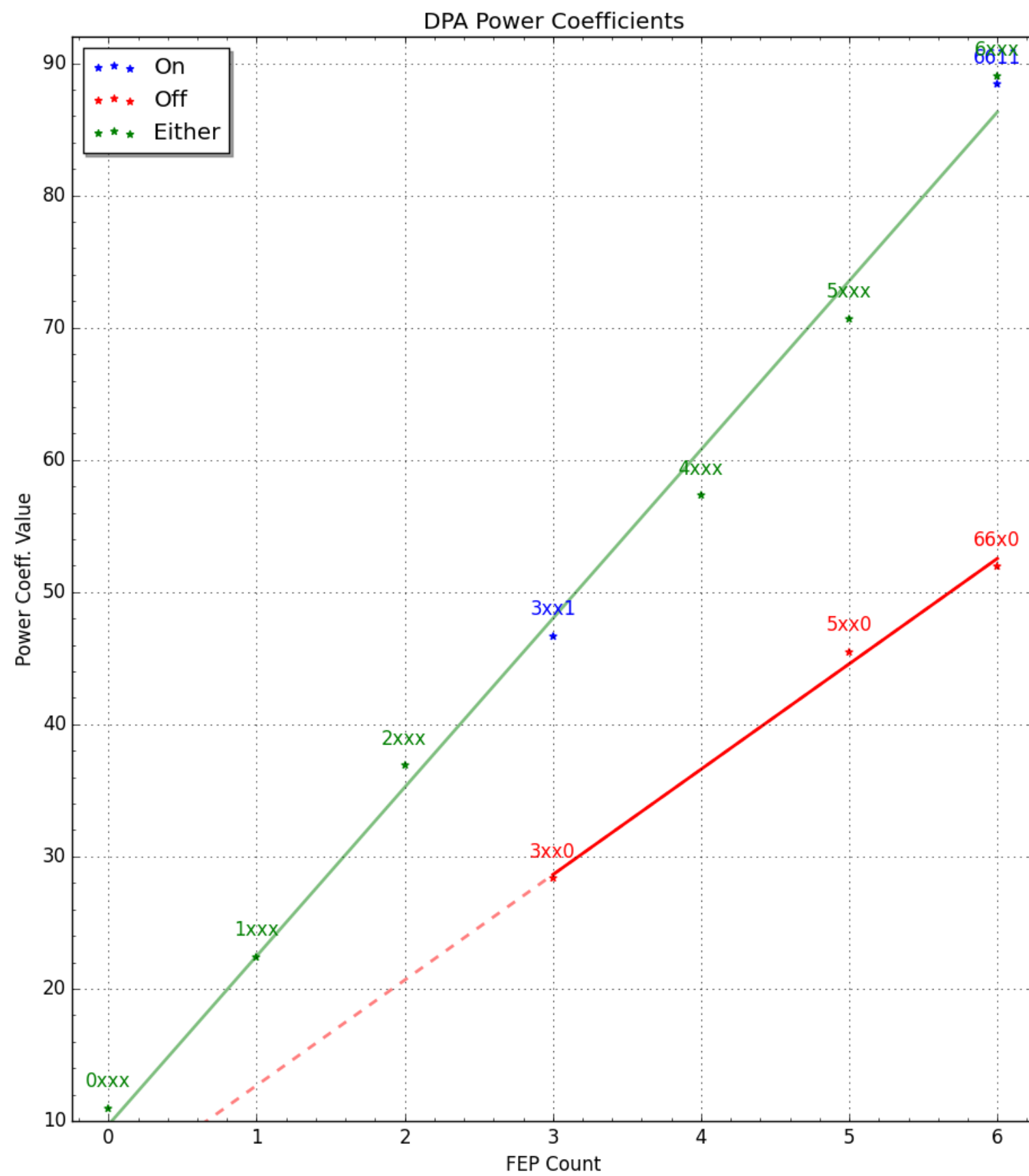
Compare vs 5 deg. Ylim-Plim gap

Only fitting data above 20 degrees to optimize for performance at higher temperatures of most interest.



Solar heating vs Pitch, sim-Z

New this version: bias set to 0, and lowest solar coefficient driven to 0



DPA FEP Coefficients