Dear editor,

After detailed proofreading, I noticed some discrepancies and incompleteness of the following formulas. I would kindly like to ask you to review the proposed modifications and assess whether it would be possible to implement them in the paper.

Eq. 3 on page 7, line 11 is missing a minus sign. This equation expresses the exponential decay function. In case the minus sign is neglected, the correlation would be exponentially increasing instead of decreasing. The correct formula is:

$$c(x, x') = exp\left\{-\sum_{i=1}^{p}\left(\frac{d_i}{\delta_i}\right)^2\right\} + \nu I_{x=x'}$$

Connected to this equation, I would like to add a phrase (in bold) what I is on page 6, line 26, behind the sentence: "The squared exponential correlation function is chosen with the inclusion of the so-called nugget and correlation length hyperparameters (Eq. 3)." **"I is an operator that equals 1 when x=x' and equals 0 in all other cases. d_i is the distance between x and x'. "**

Formulas 4 and 5 need some extra explanation because not all variables were declared. Could this be added after formula (5) on page 7 line 5:

"Where $\hat{\beta}$ = $(\mathbf{H}^T\mathbf{A}^{-1}\mathbf{H})^{-1}\,\mathbf{H}^T\mathbf{A}^{-1}\mathbf{y}$. **y** is the model output, defined by the normal distribution N ~ ($\mathbf{H}\boldsymbol{\beta}$,$\sigma^2\mathbf{A}$), with **A**ij=$\mathbf{c}(x_i,x_j)$ **,** and **H** the design point regression matrix. $\boldsymbol{t(x_i)}$=$\mathbf{c}(\mathbf{x},\mathbf{x_i})$ and $\boldsymbol{P(x)}$=$\boldsymbol{h(x)}^T$-$\boldsymbol{t(x)}^T\mathbf{A}^{-1}\mathbf{H}$"

Formulas 6-8 (page 14, line 91-93) have the wrong sign for "given that". Could this be changed to:

$$m(x_i) \mid T_{i-1} = m(x_i) + \frac{V(x_i,x_{i-1})}{V(x_{i-1},x_{i-1})}(T_{i-1} - m(x_{i-1})),$$

$$\sigma^2(x_i) \mid T_{i-1} = V(x_i,x_i)\left(1 - \left(\frac{V(x_i,x_{i-1})^2}{V(x_i,x_i) \mid (x_{i-1},x_{i-1})}\right)\right),$$

$$T_i \sim N\,(m(x_i) \mid T_{i-1}, \sigma^2(x_i) \mid T_{i-1}),$$