Response n3 to Vivek Arora, editor for the manuscript

Extending MESMER-X: A spatially resolved Earth system model emulator for fire weather and soil moisture

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Dear Vivek Arora,

Thank you for your comments, we do think that they have contributed in improving this manuscript. The points 1 and 2 have been implemented as suggested, while we slightly adapted the suggestions made in the point 3.
We remain at your disposal, would there be anything else to correct.

1.
Note the suggested changes in UPPERCASE letters below.

Here, r REPRESENTS the ratio of geographical distance between points and a localization radius, and the next FEW paragraphs EXPLAIN how $\Sigma\ \nu(r)$ is obtained from the empirical covariance matrix.
The suggested changes have been implemented, thank you!

2.
Note the suggested changes in UPPERCASE letters below. I changed "scape" to "scale".

For a normal distribution, the parameters α introduced in equation (1) are the location and scale, written respectively μ and σ in Figure 1, corresponding to the mean and standard deviation of the distribution. For a GEV distribution, the parameters α are the location, SCALE, and shape, written respectively μ , σ and ξ in Figure 1.
Thanks for pointing out this typo.

3.
In the following sentence

Here, the parameters α introduced in equation (1) are the rate λ and a shift μ . The training of the distribution gains in freedom using this shift of the distribution by μ , with its mean becoming $\mu + \lambda$, while the variance remains λ

you have defined λ as both a rate and as variance. Can you please revise this

sentence? In the usual Poisson distribution the minimum value is zero, and the mean and standard deviation are λ. When you shift it by μ does the minimum value become μ?

Here's one suggestion. Not sure if this satisfies what you intended to describe. Please check.

Here, the parameters α introduced in equation (1) for the Poisson distribution are λ and a shift μ in mean . This modified form of the Poisson distribution has the same variance (λ) as the original Poisson distribution but the mean is λ+μ (as opposed to λ), and the minimum value is μ (as opposed to zero).

I acknowledge that this sentence wasn't clear enough. I have adapted your suggestion as follows:
Here, the parameters α introduced in equation (1) are the rate λ and a shift μ in the distribution. This modified form of the Poisson distribution has the same variance (λ) as the original Poisson distribution, but the mean is $\mu + \lambda$ instead of λ. This shift in the Poisson distribution allows for more flexibility in the training.