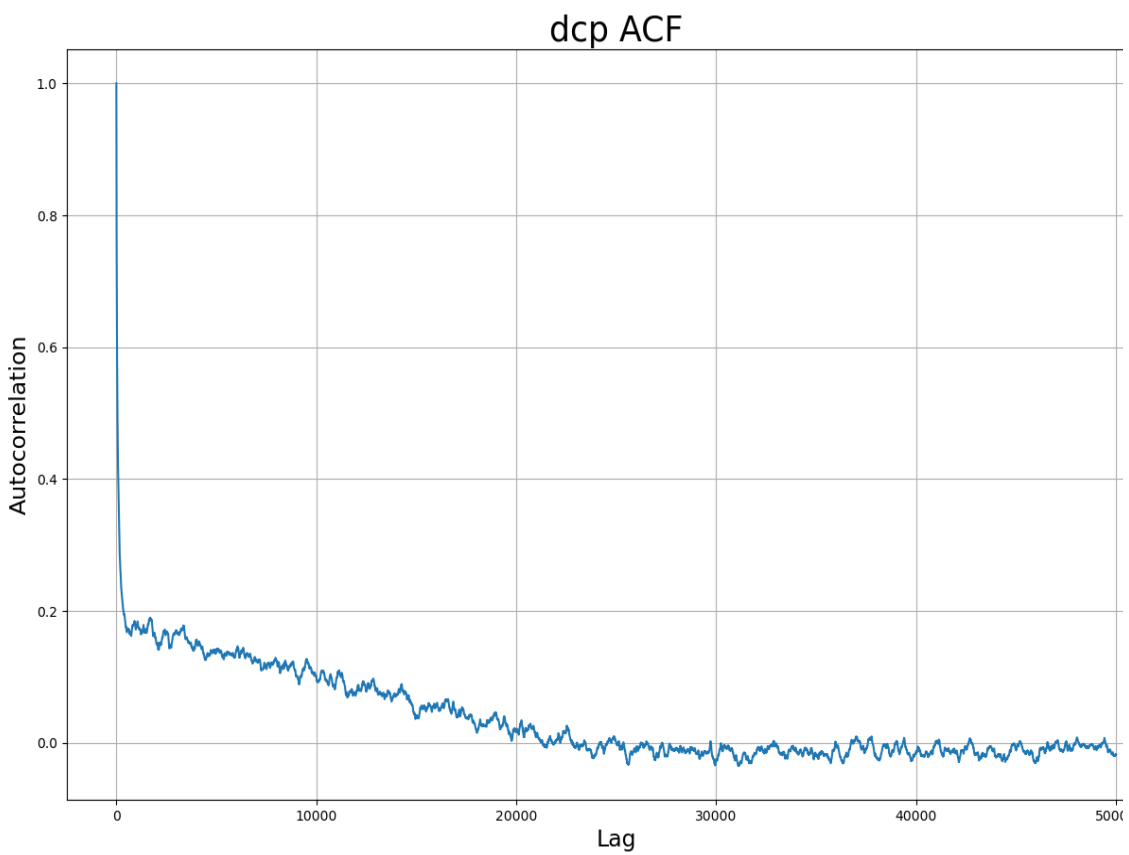
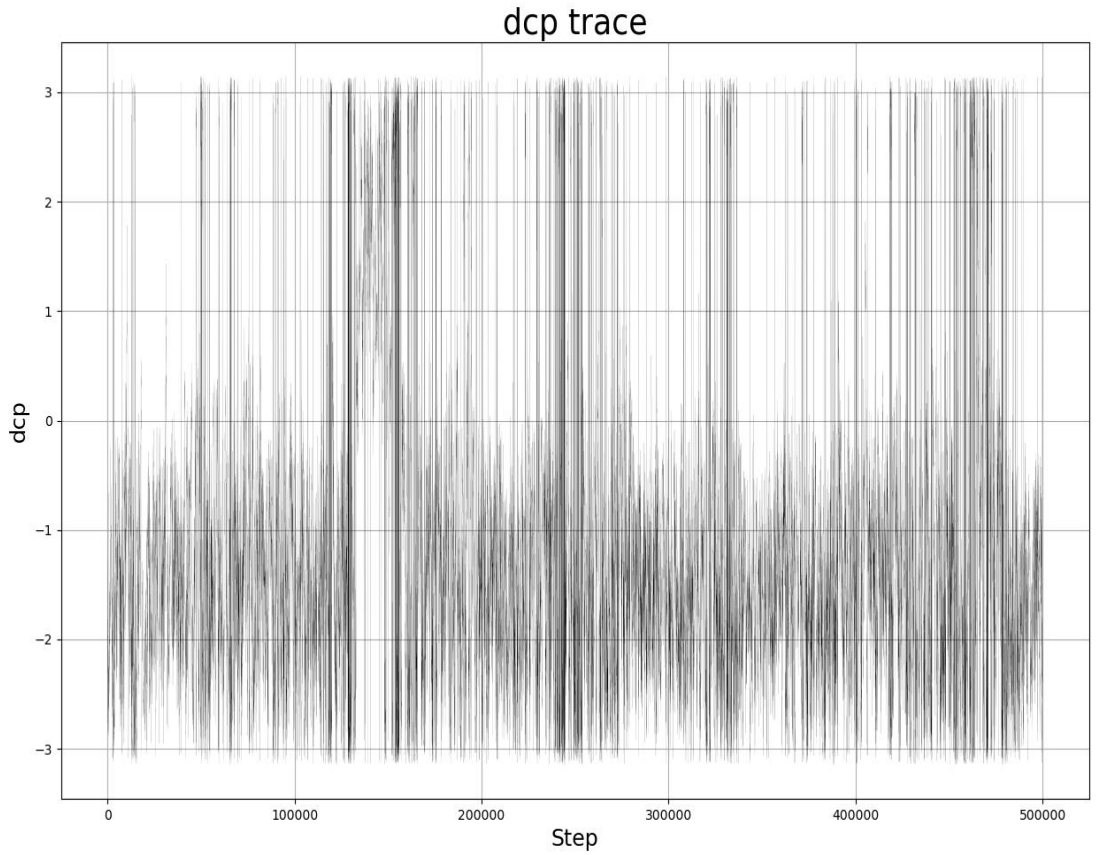
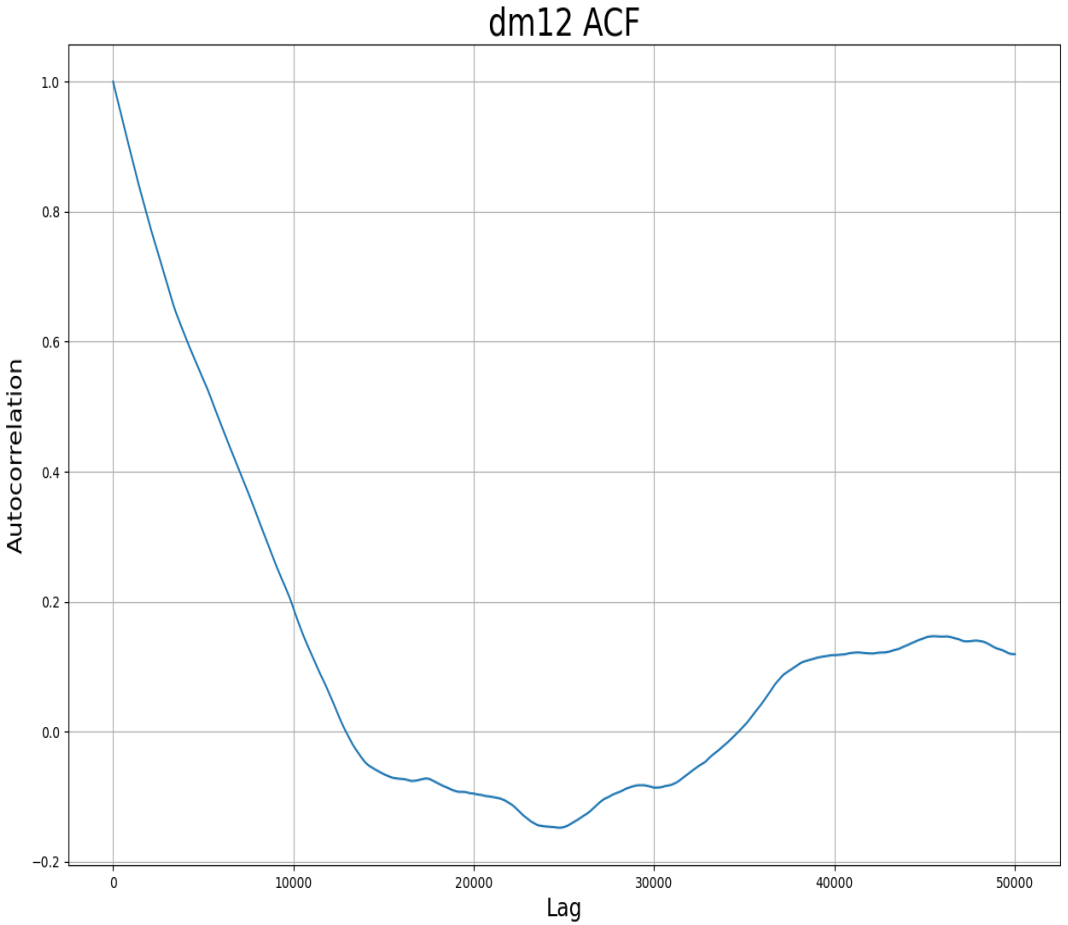
Oscillator parameters from Asimov data fit

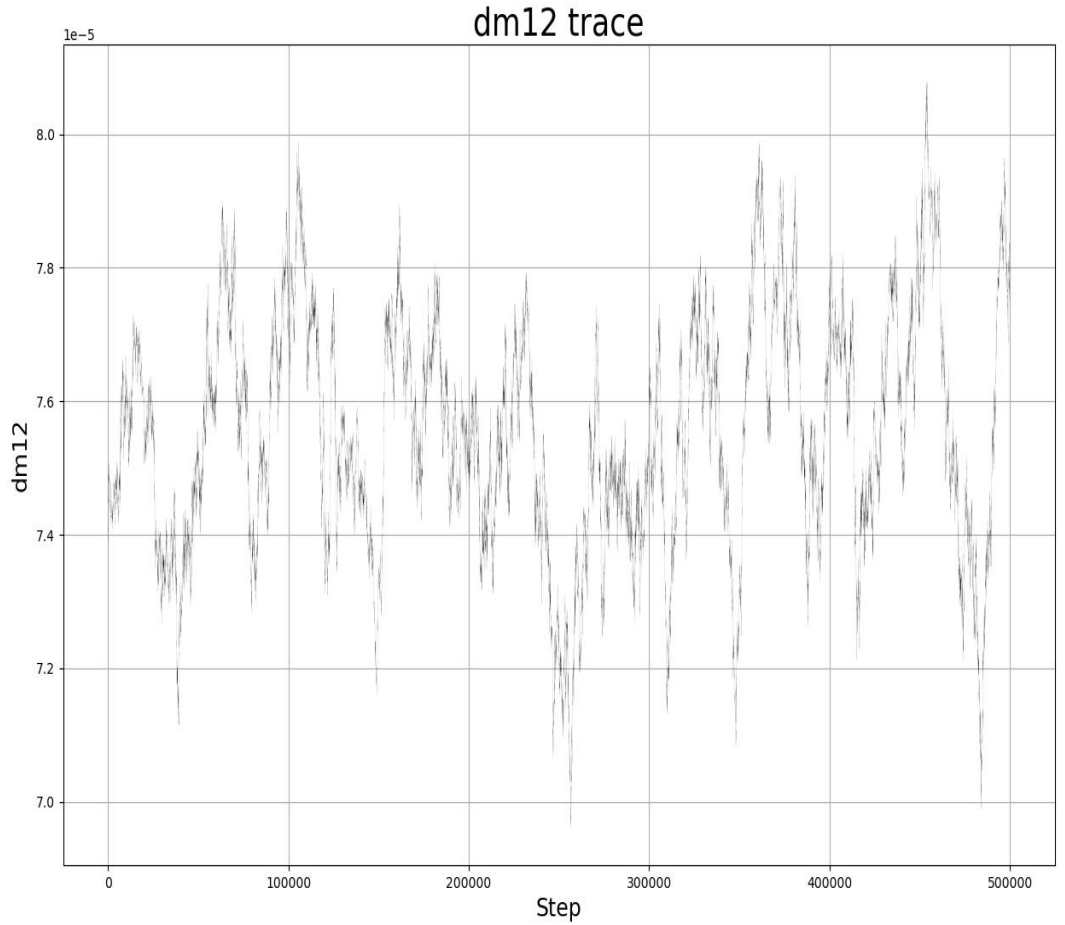




In this ACF plot, I can see autocorrelation is approaching zero at the lag of 20000. From my understanding, it's a good sign if the correlation between steps is close to zero. From this ACF graph, what other information I can gather? Does this ACF plot show the right Markov chain? Are lag and number of steps the same?

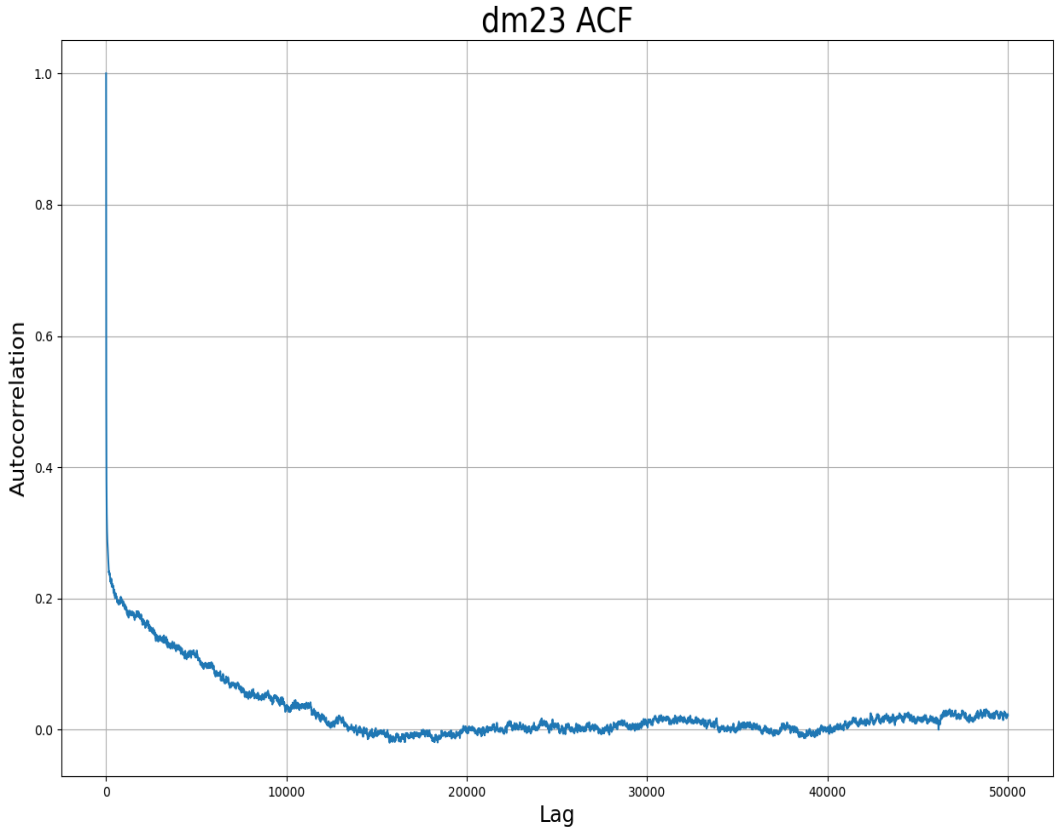
In the trace plot, I can see that the chain is exploring all the dcp parameters [-3,3] and it's a good thing. How can I say the chain is converging or not? Is this an ideal trace plot? What would an ideal trace plot look like?

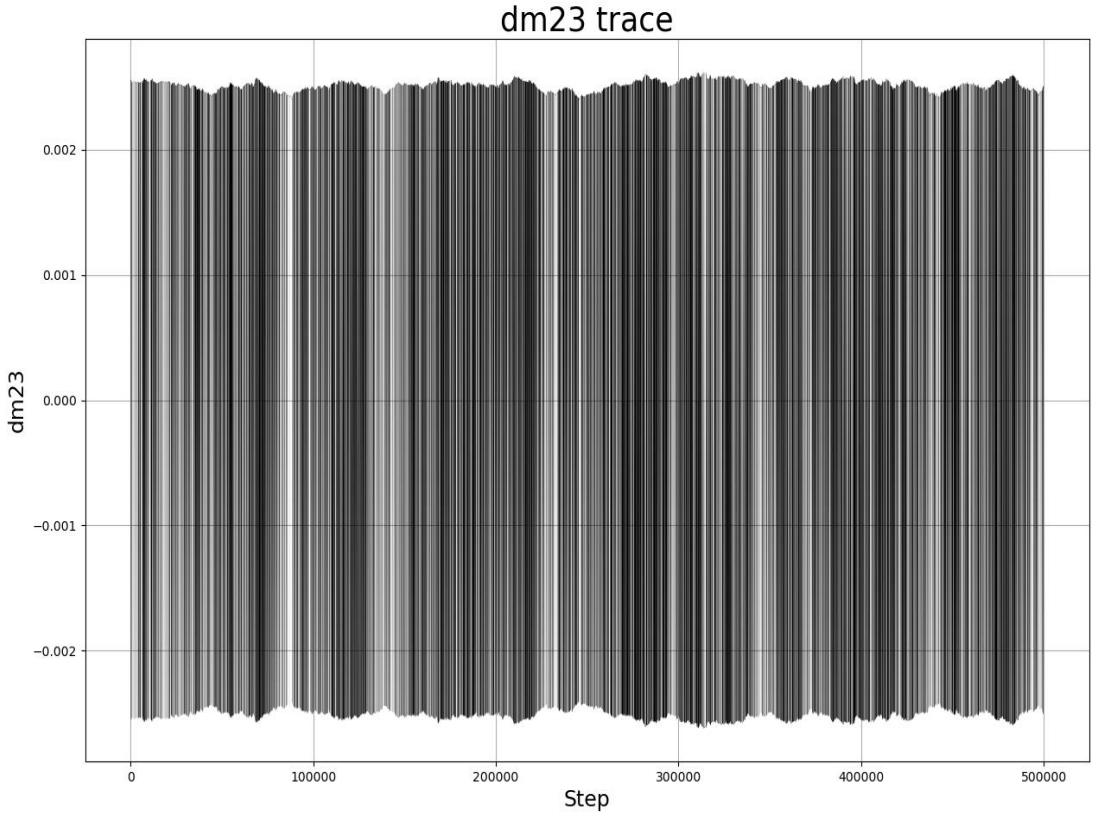




I think our Markov chain is working badly here. In the ACF plot, a strong negative correlation between 10000 and 30000 lag, the correlation is increasing. In sum, the correlation is not approaching zero (slow mixing). If such a situation happens, we have to try a different chain, right?

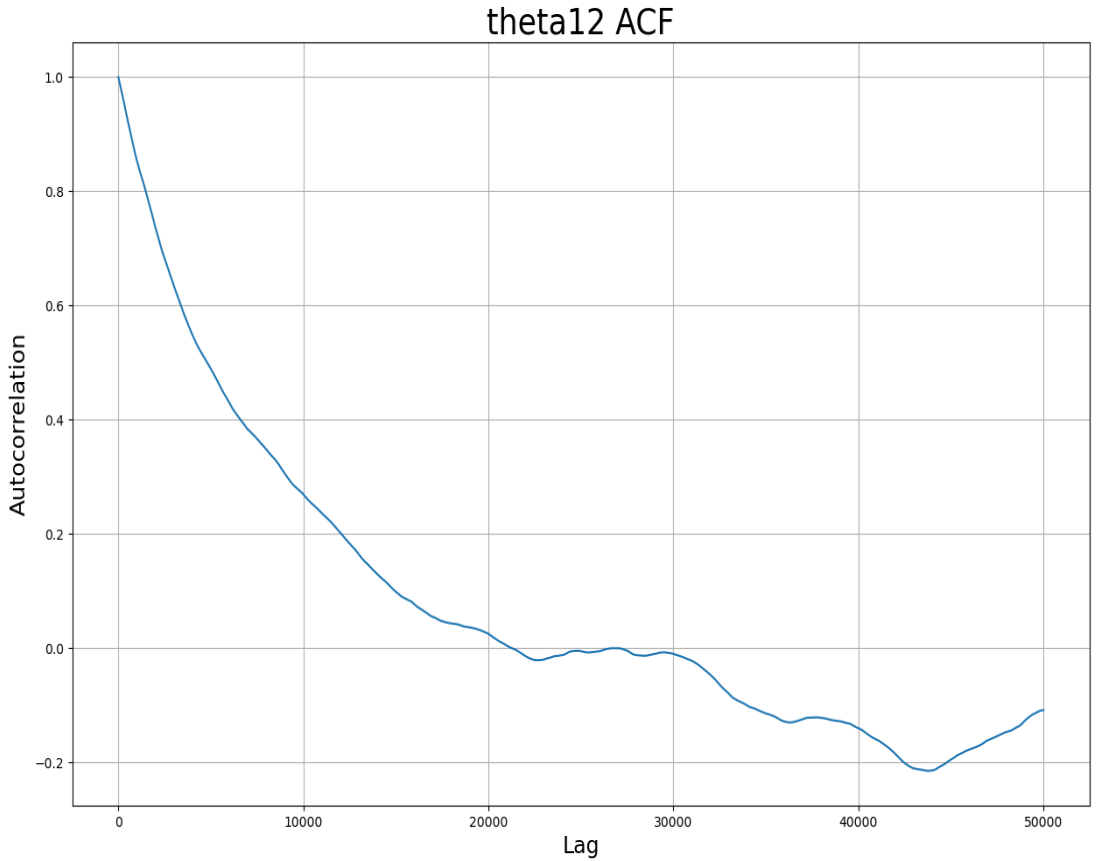
In the trace plot, I can see the slow mixing and chain is not converging. Is that right?

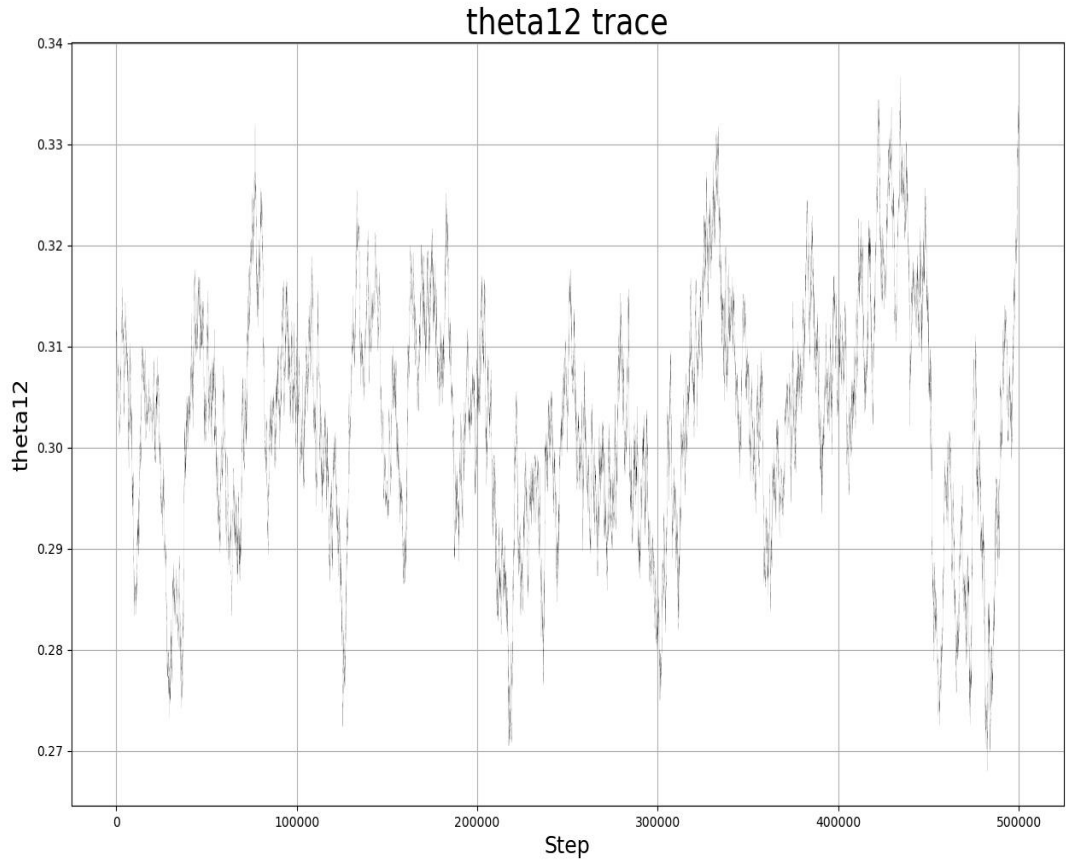




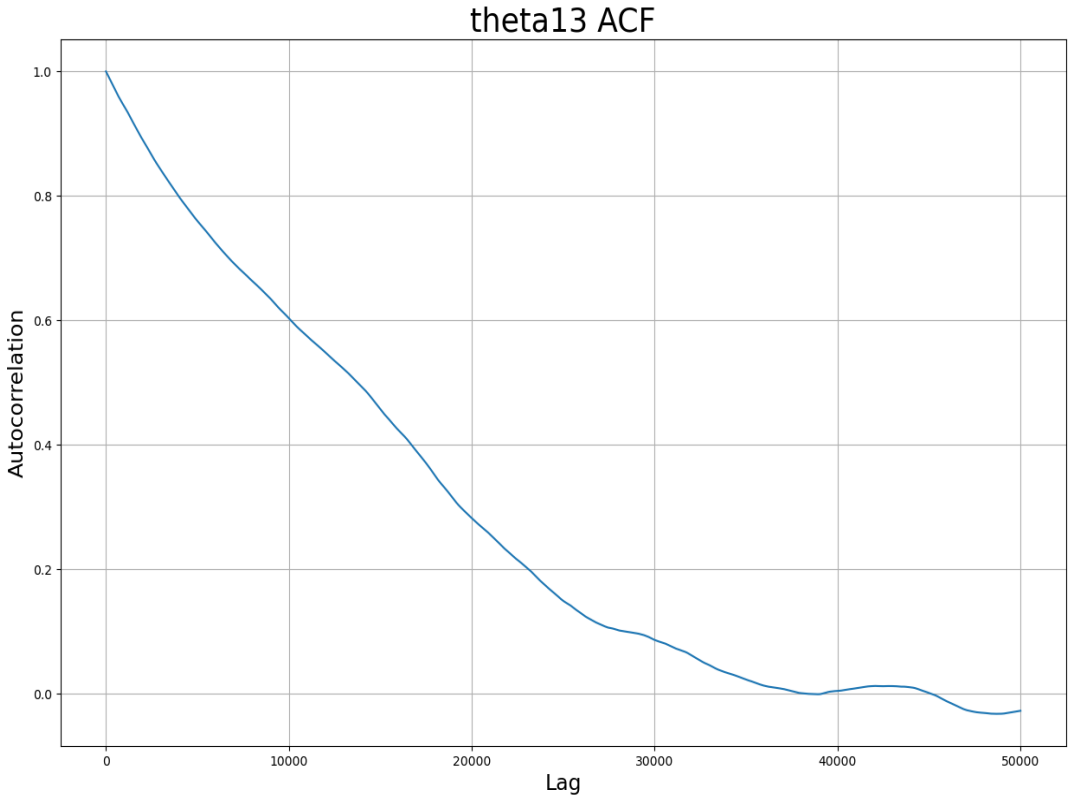
This ACF plot looks good to me. The correlation is approaching zero. Which ACF plot is better dcp (in the 1st slide) or dm23 (this slide) and why?

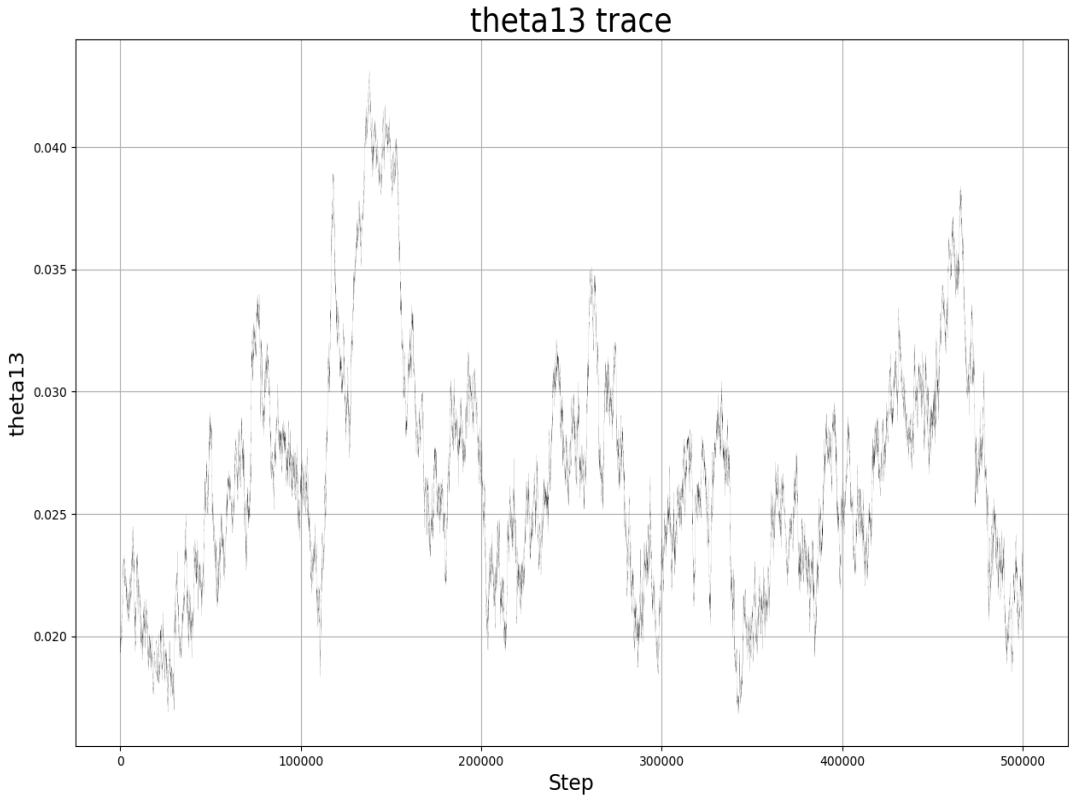
In the trace plot, I am not getting a clue here. It might be because the chain is exploring only extreme parameter values and the jump is happening between these extreme values without exploring the entire parameter space. I am not sure. Does this represent an ideal trace plot? From my understanding, I don't think so.



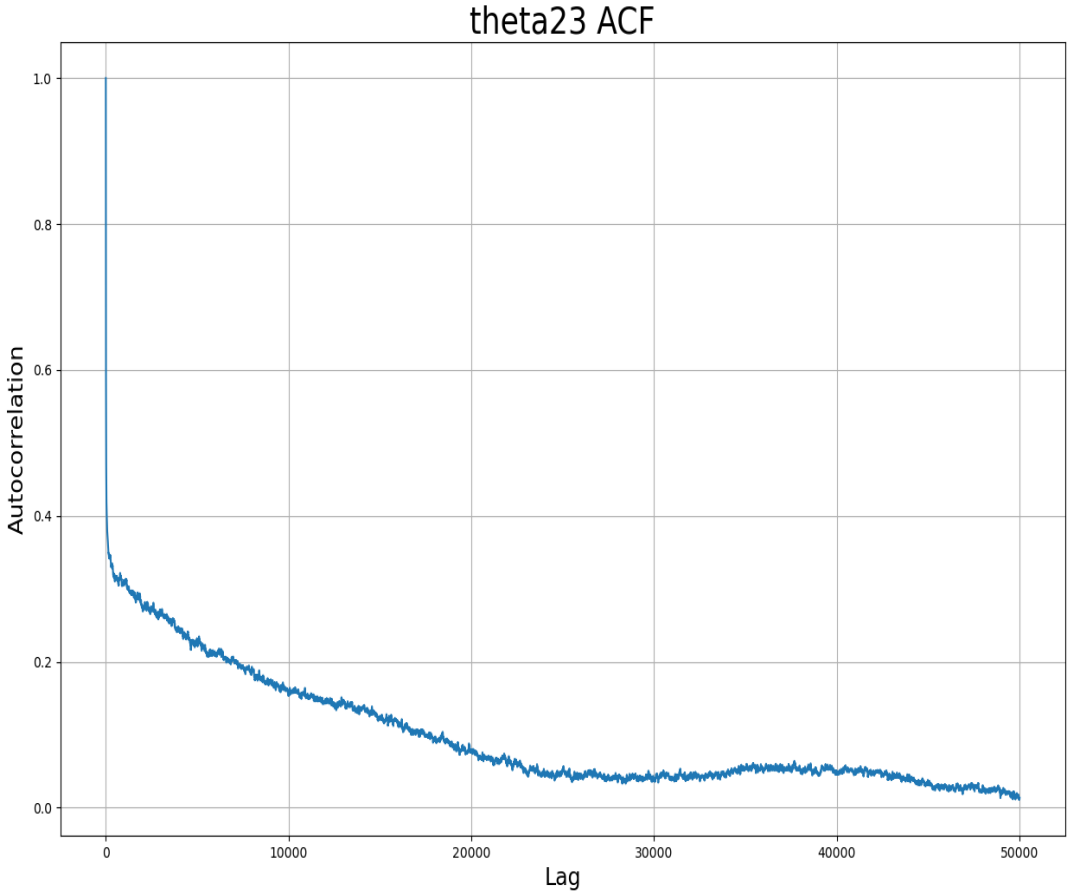


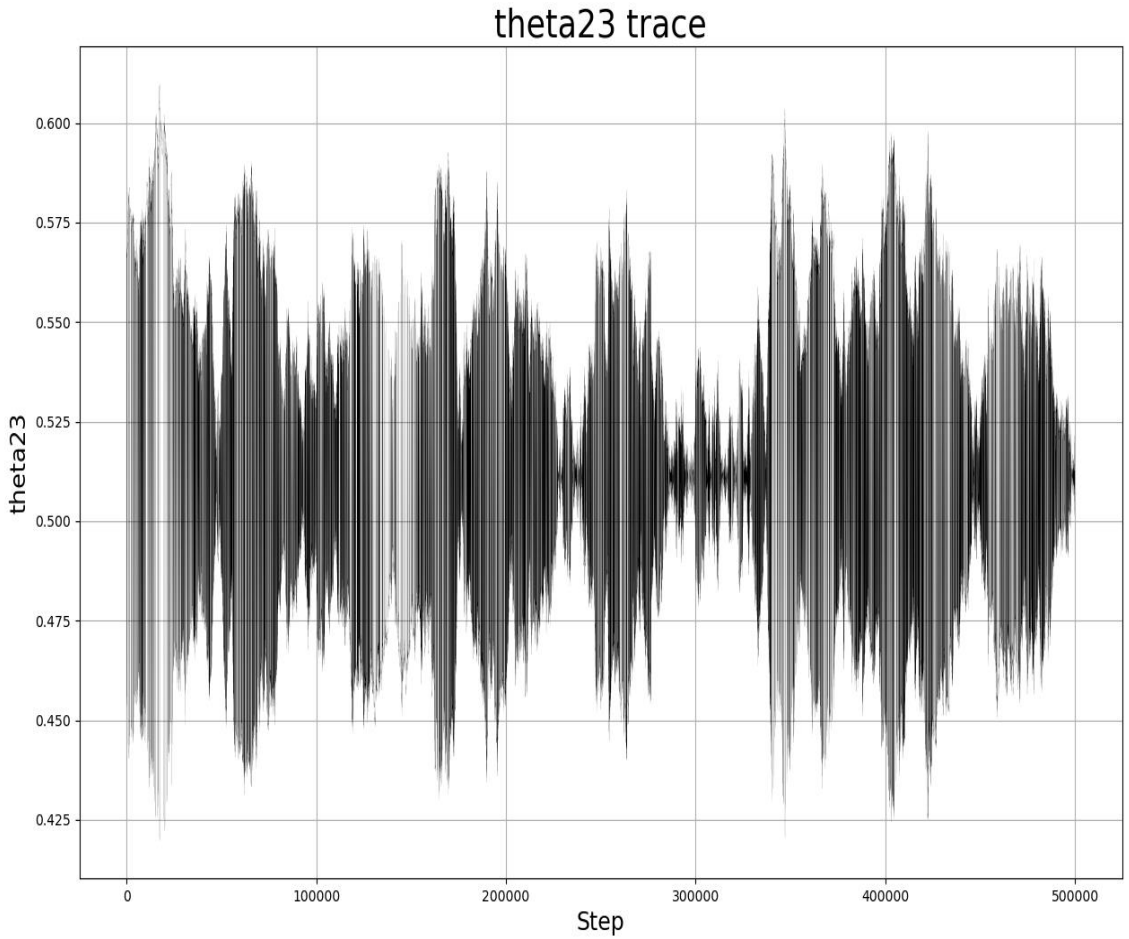
In my opinion, both the graphs are not ideal, just like in the slide2





In my opinion, both the graphs are not ideal

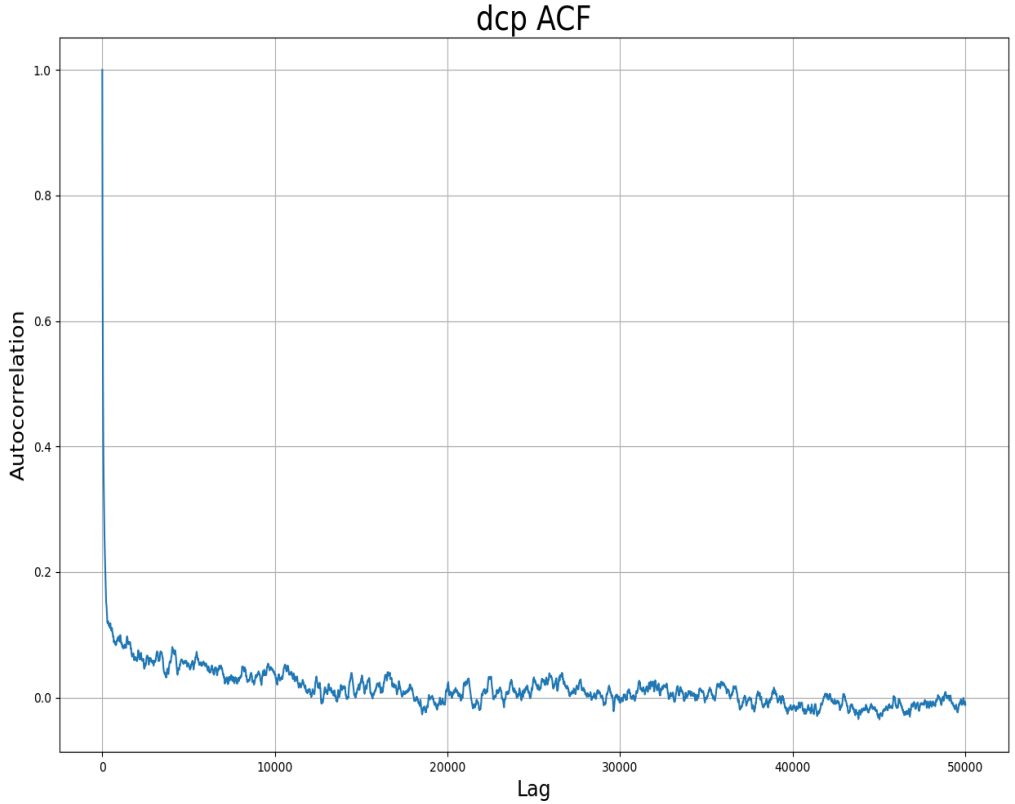


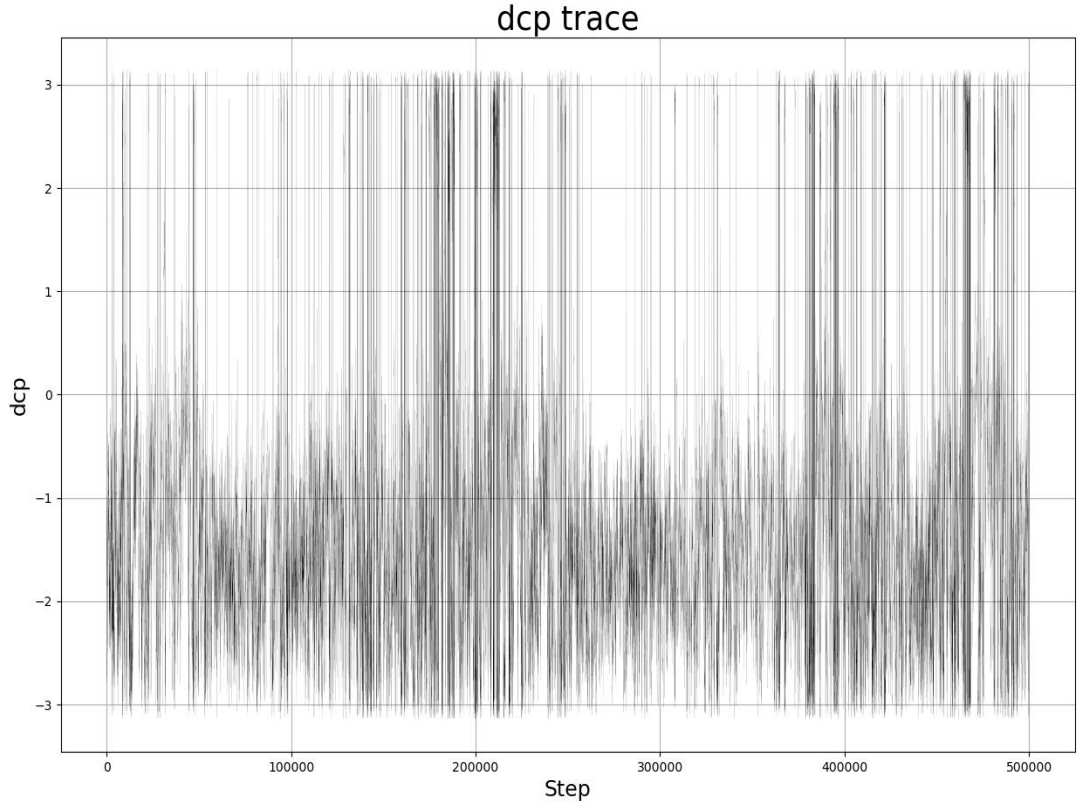


In the ACF plot, it's not approaching zero. Not a good chain in my opinion. it's approaching a constant value

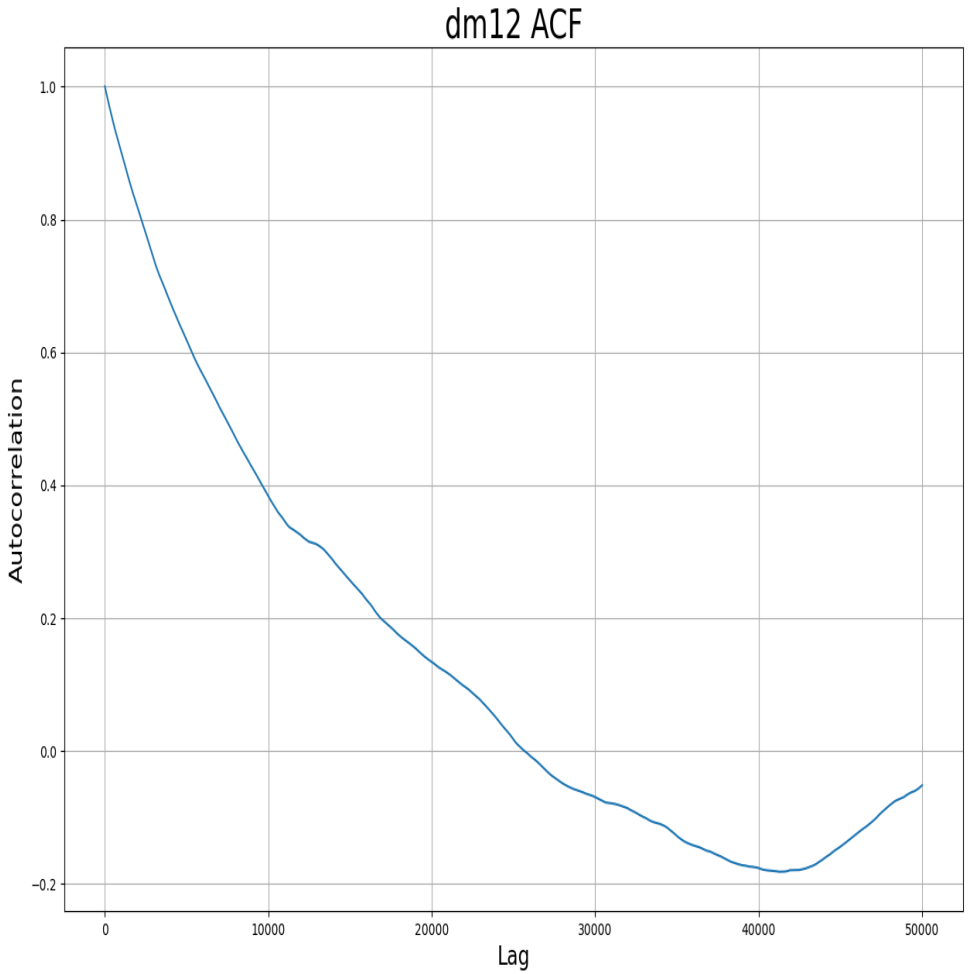
I am not sure about the trace plot. I think it's not a good chain 1) not exploring the whole space 2) not showing a pattern (no convergence). Am I right?

Oscillator parameters from data fit





I think these 2 plots are ideal. What do you think?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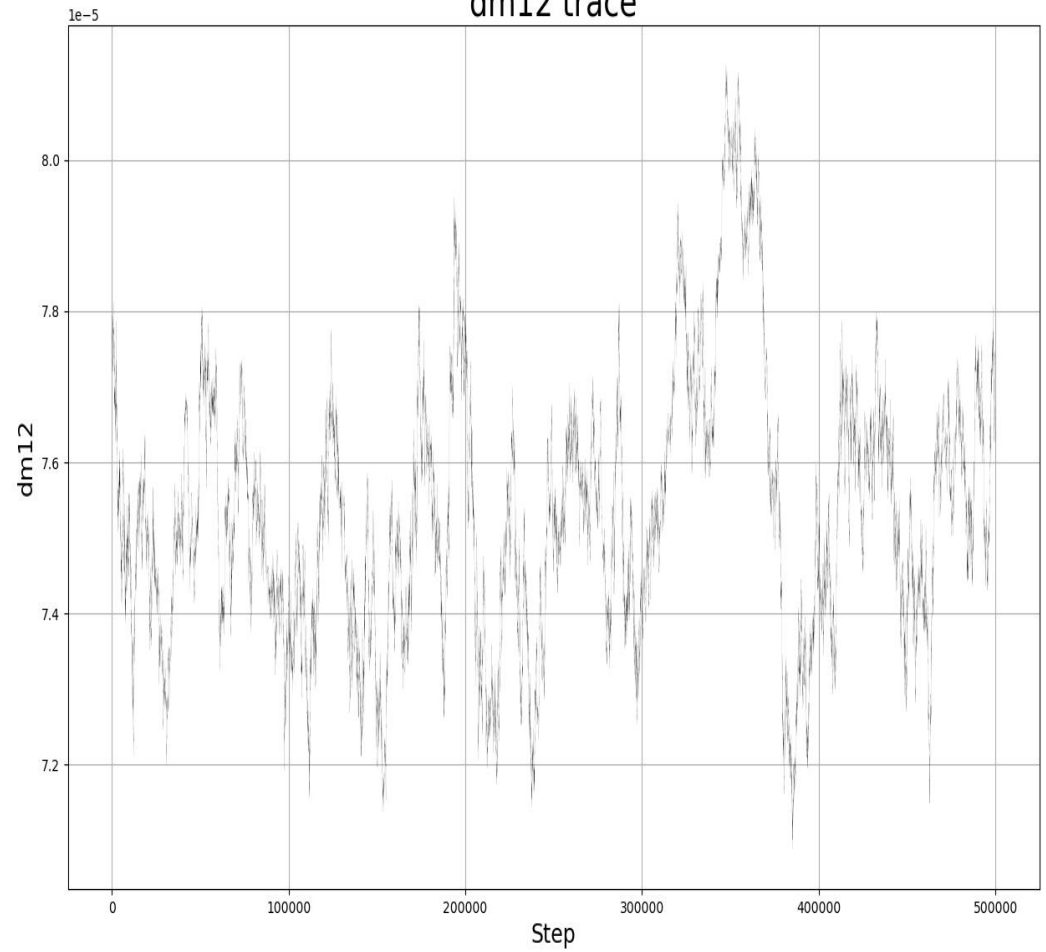
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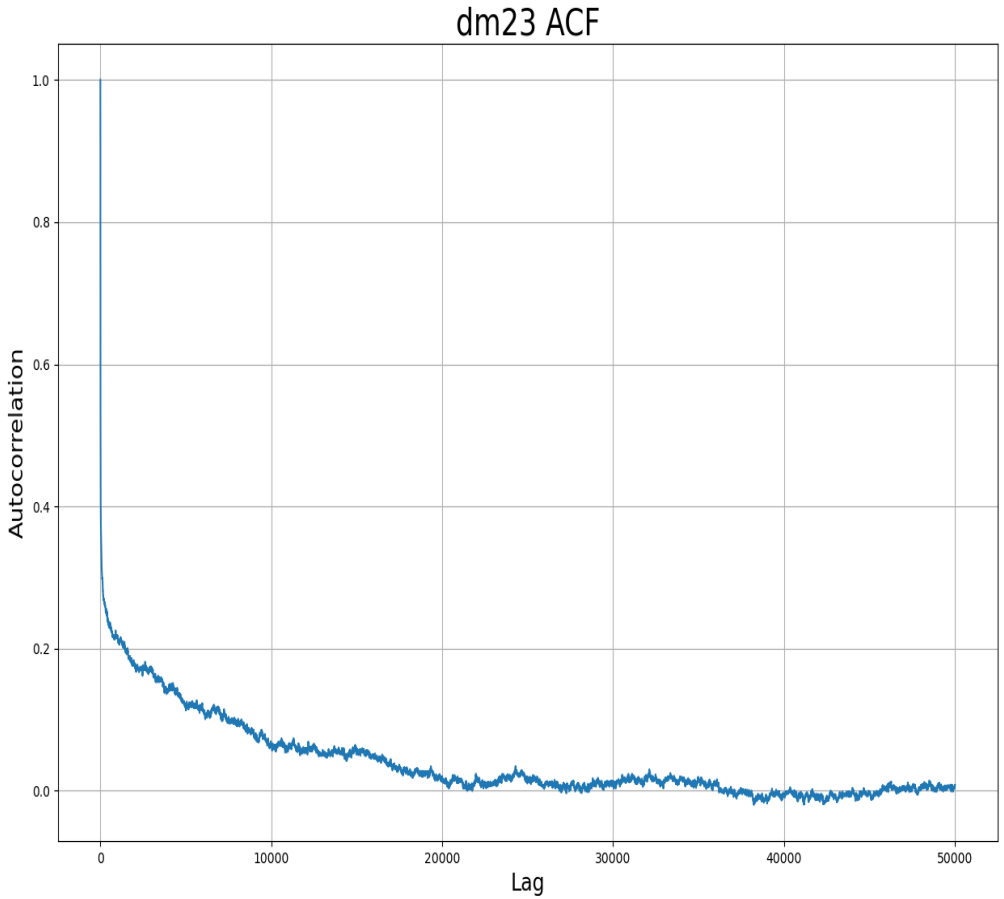
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Autocorrelation
Lag
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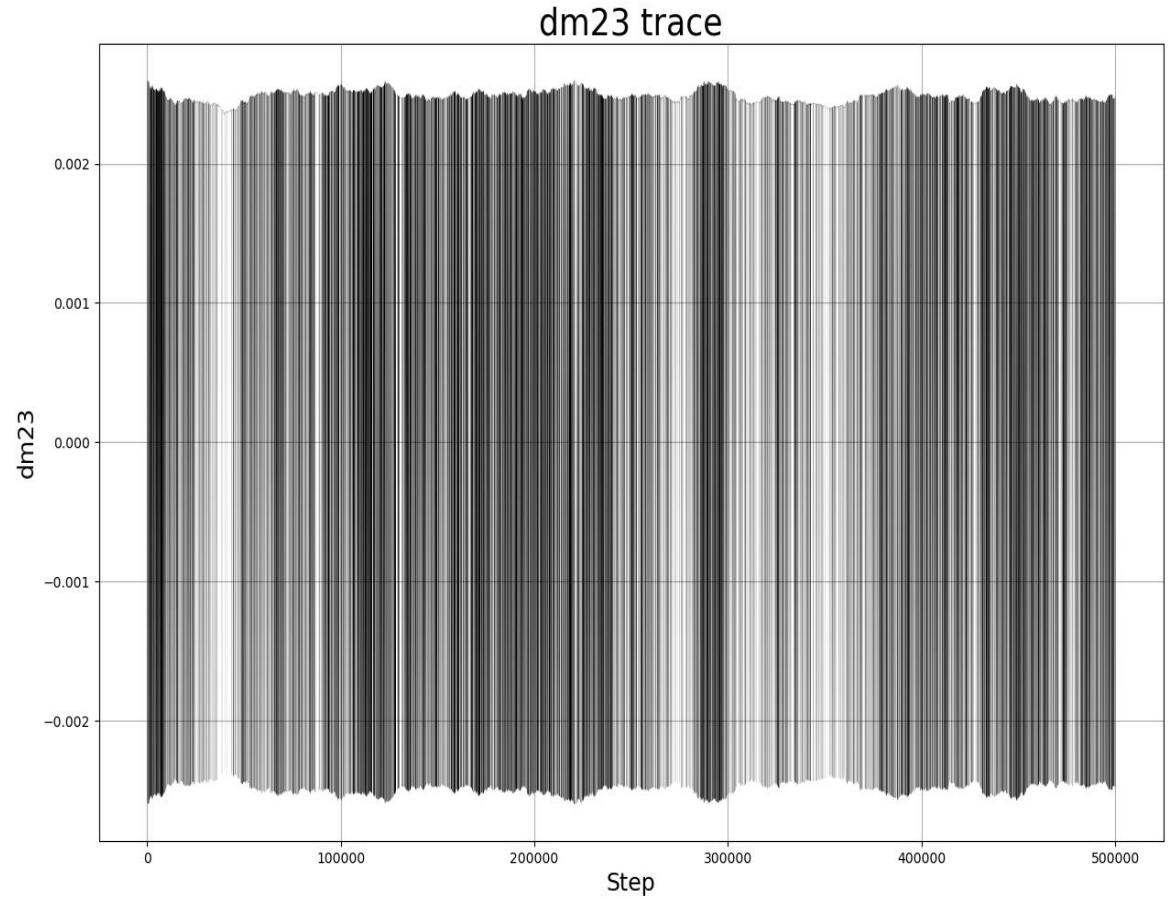
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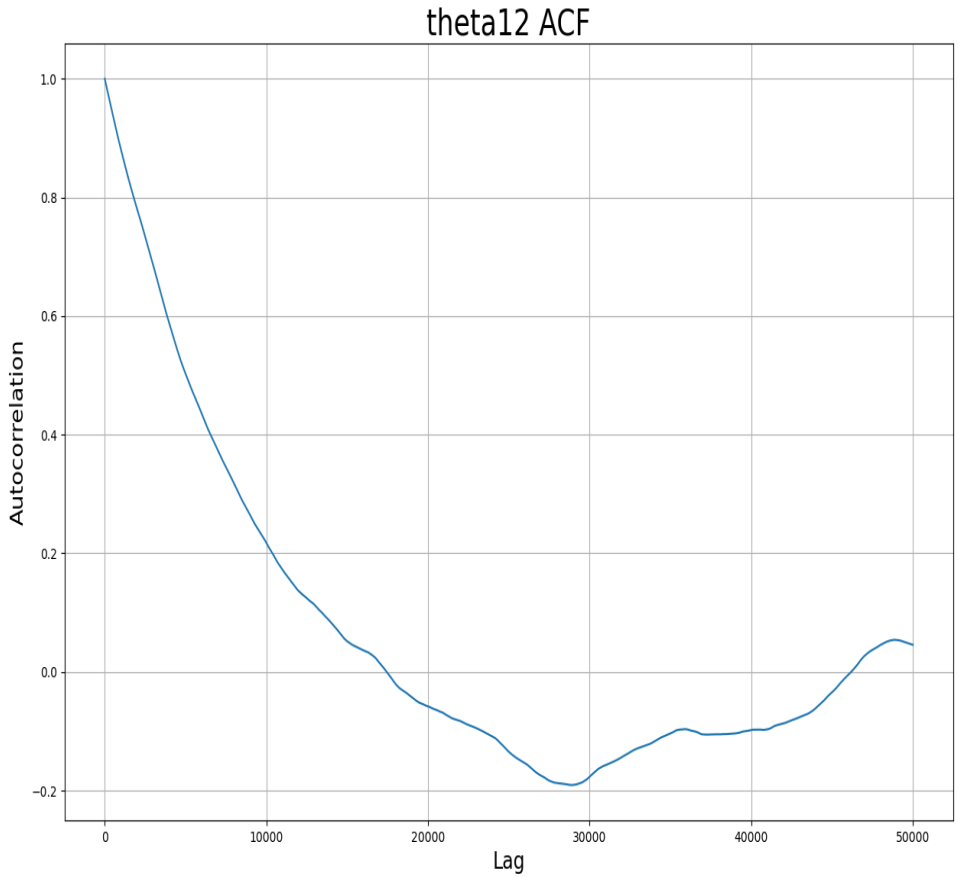
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Autocorrelation
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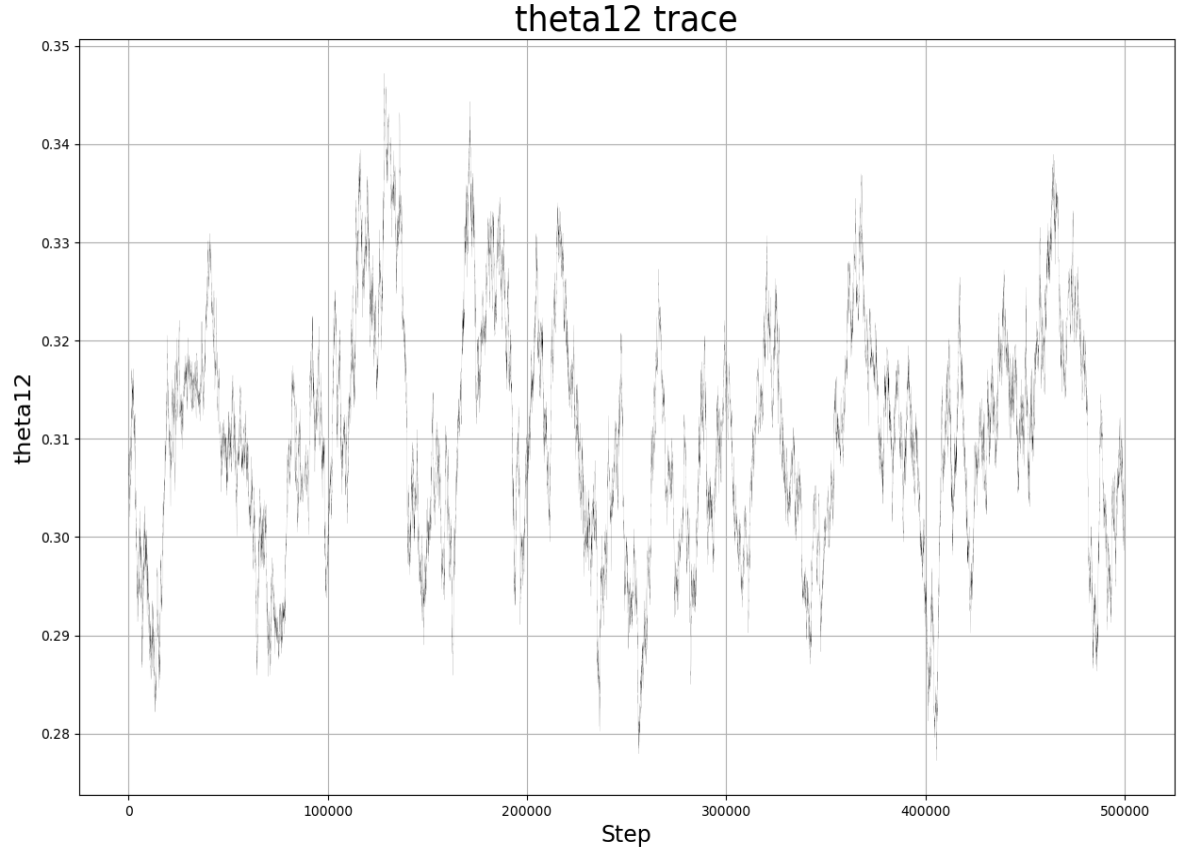
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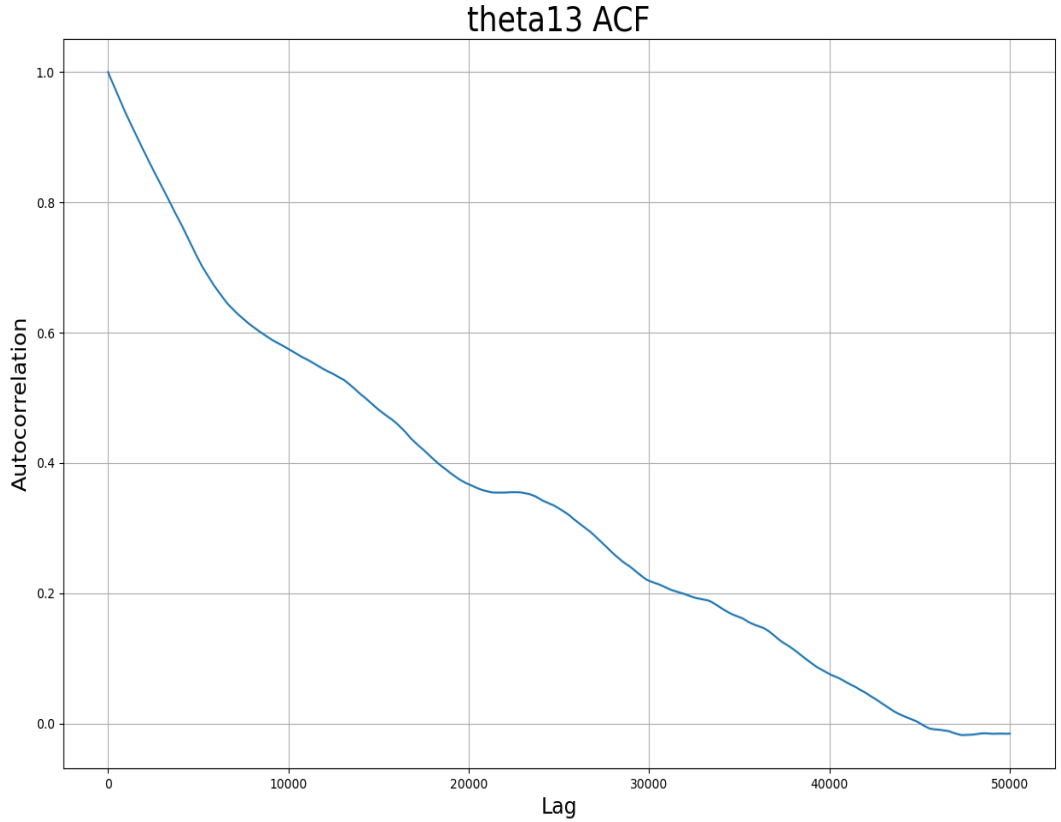
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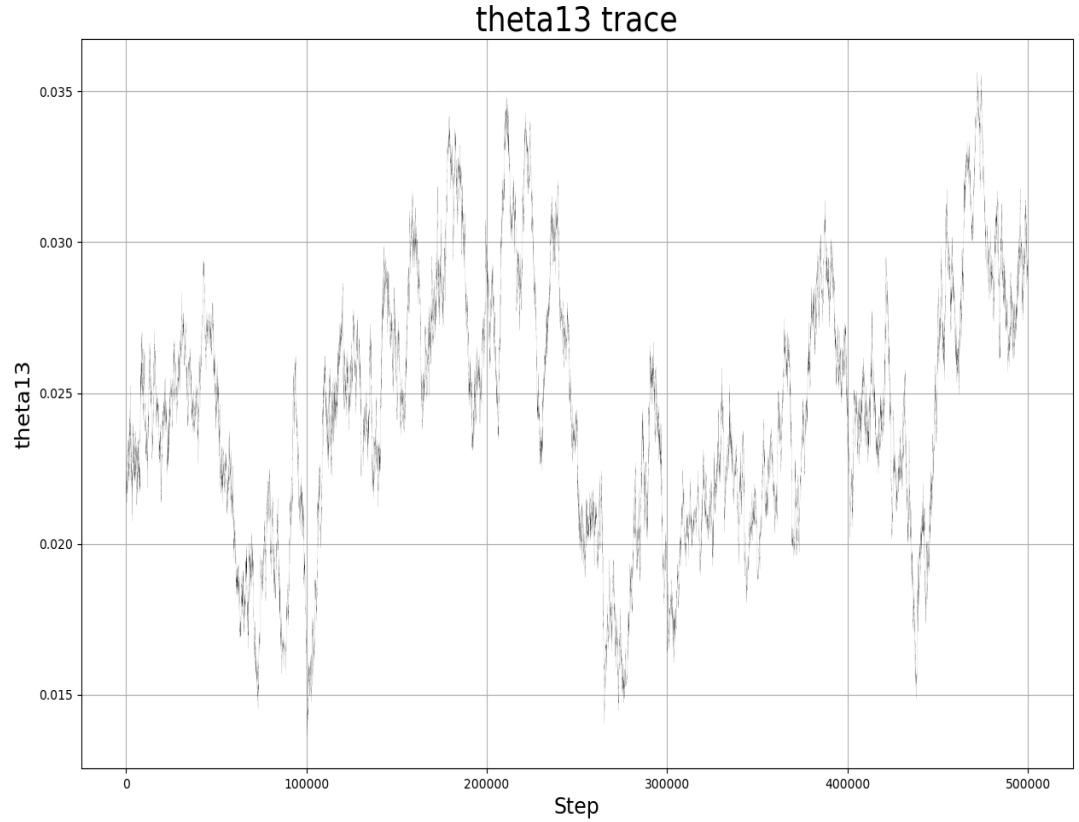
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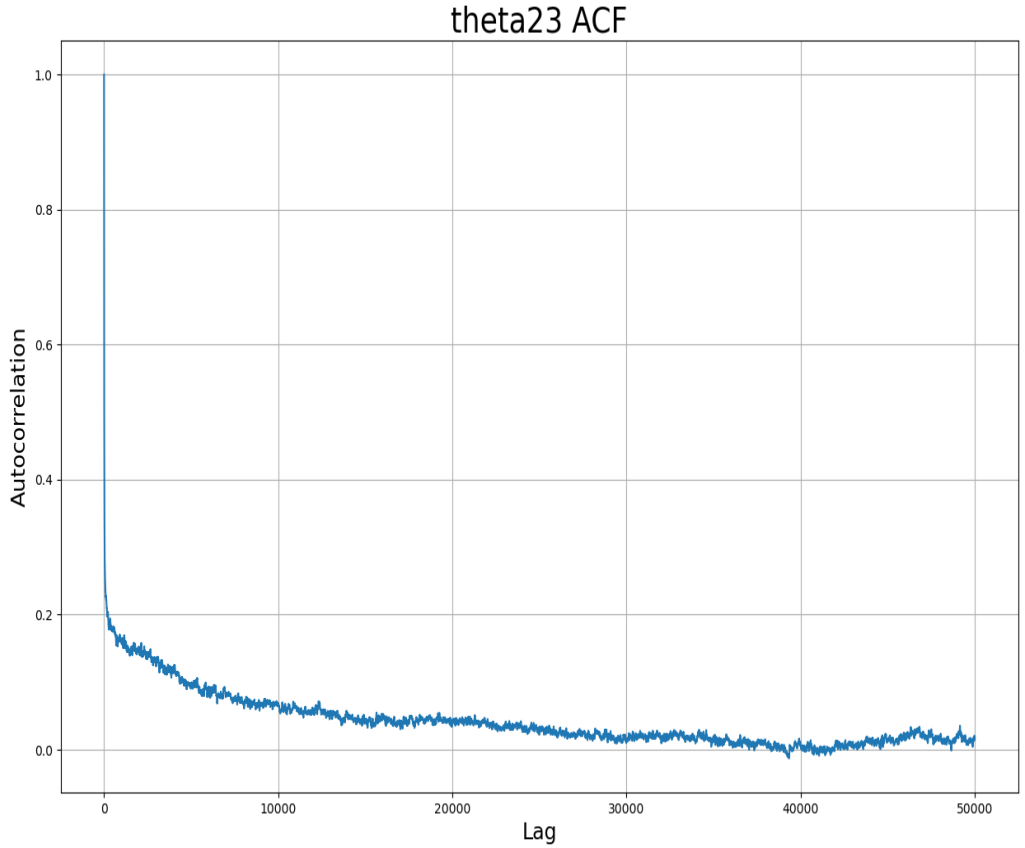
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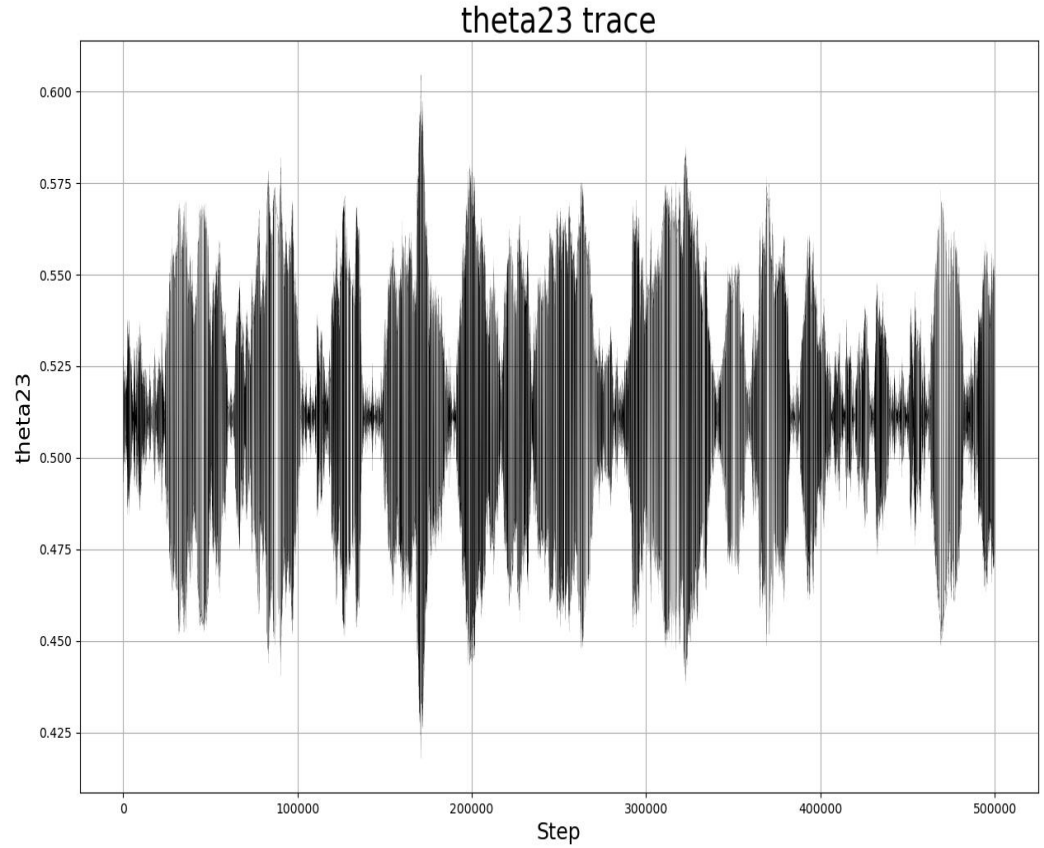
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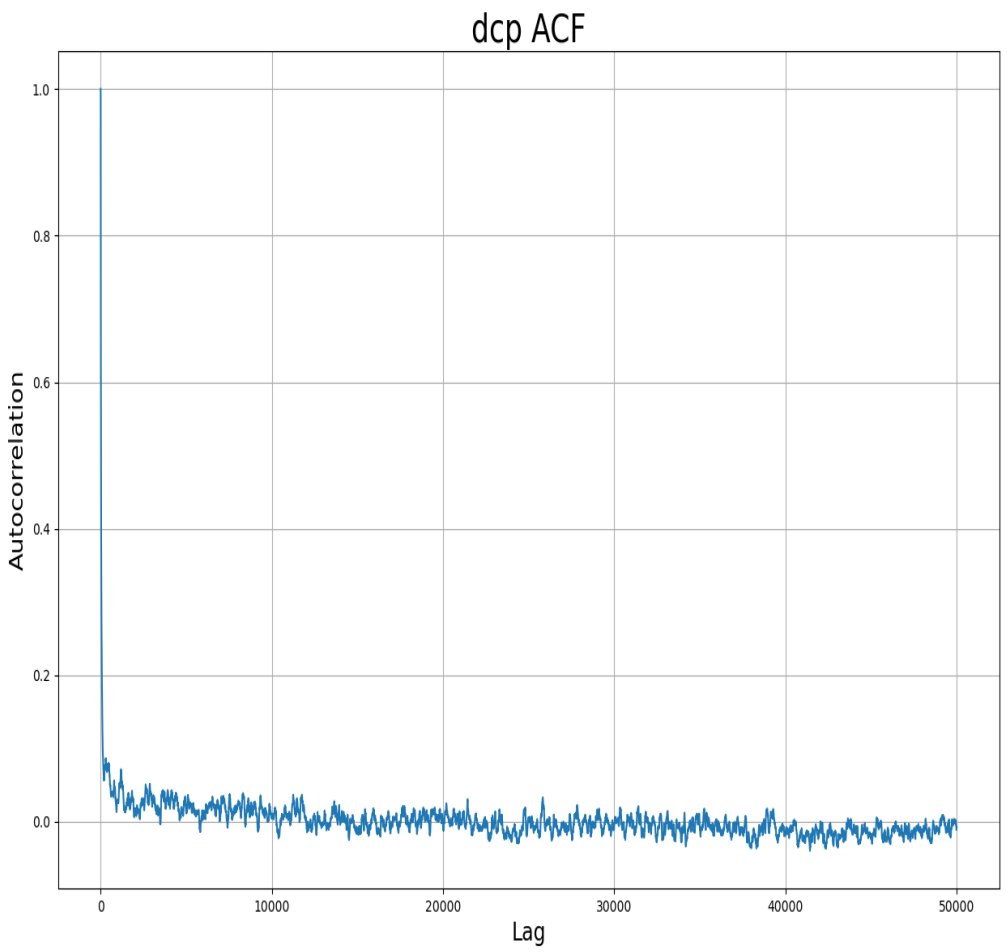
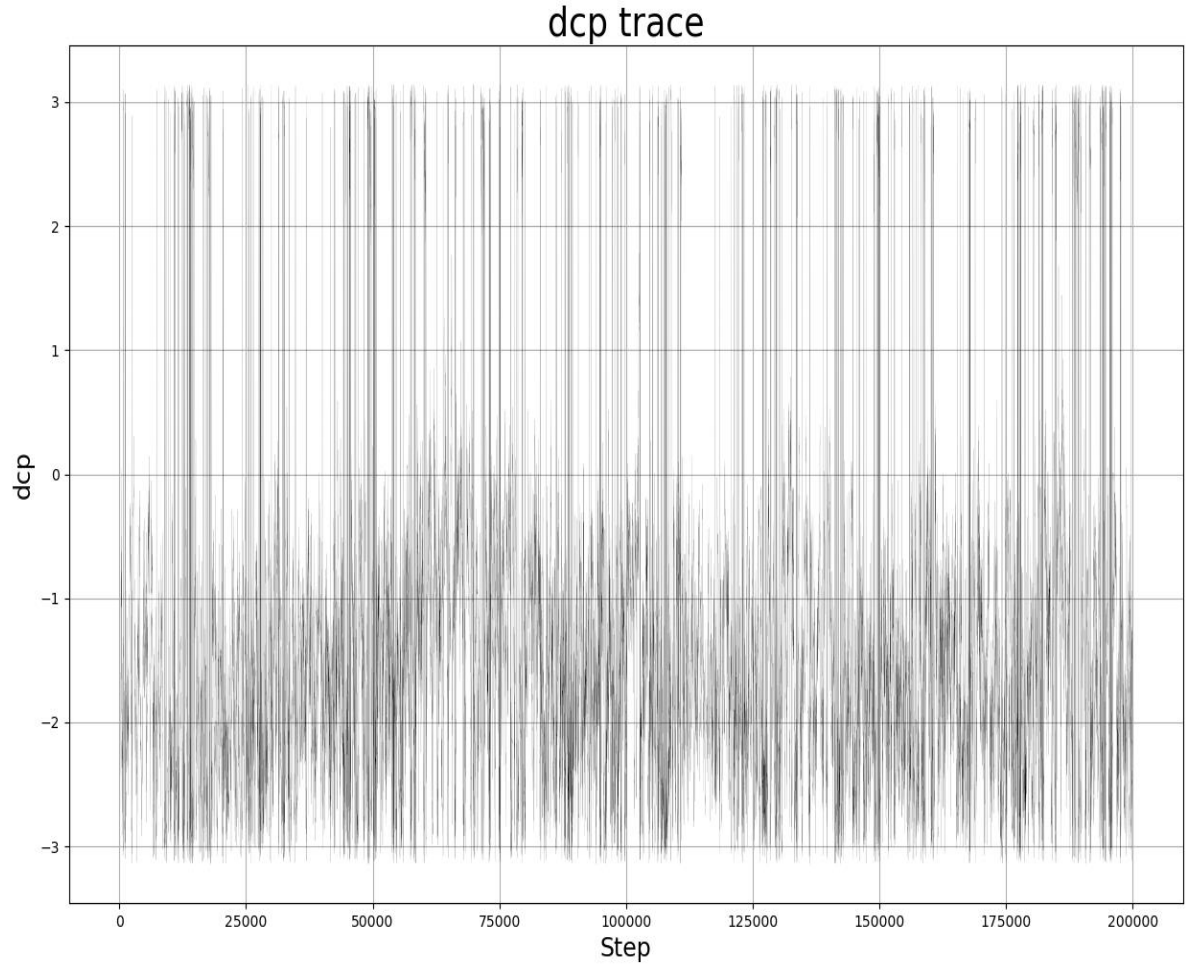
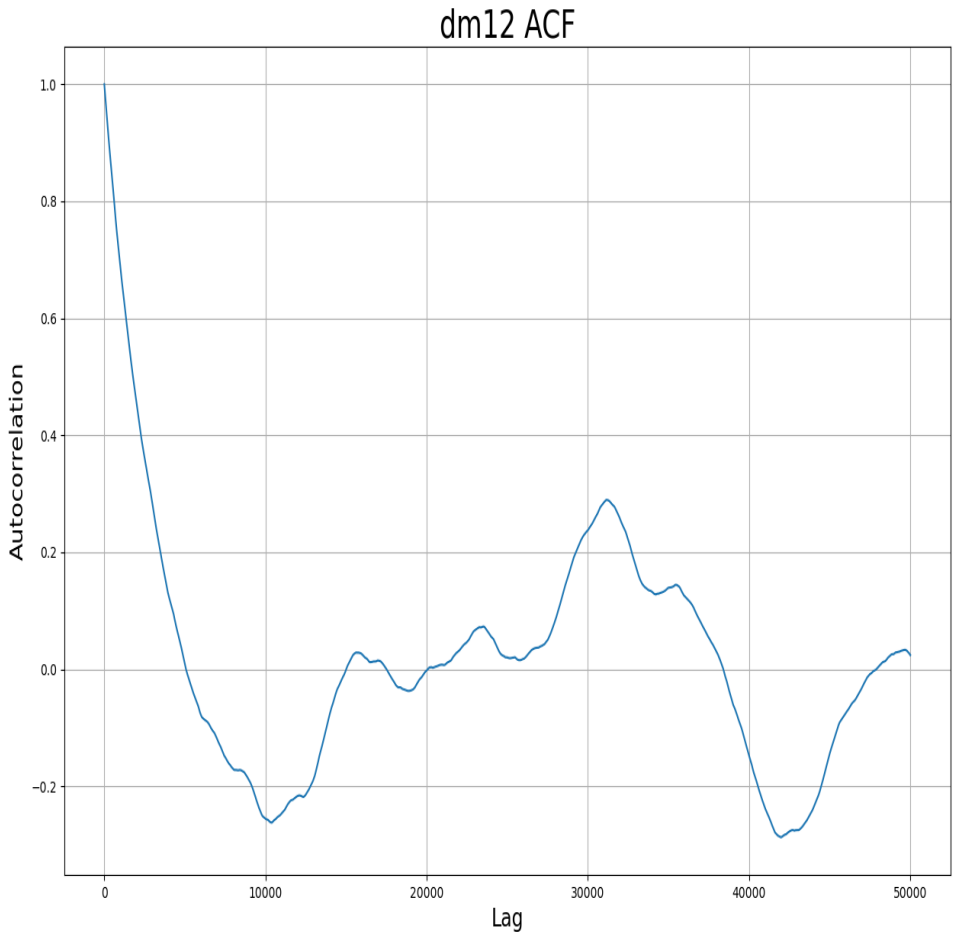
500000

Oscillator parameters from adaptive data fit



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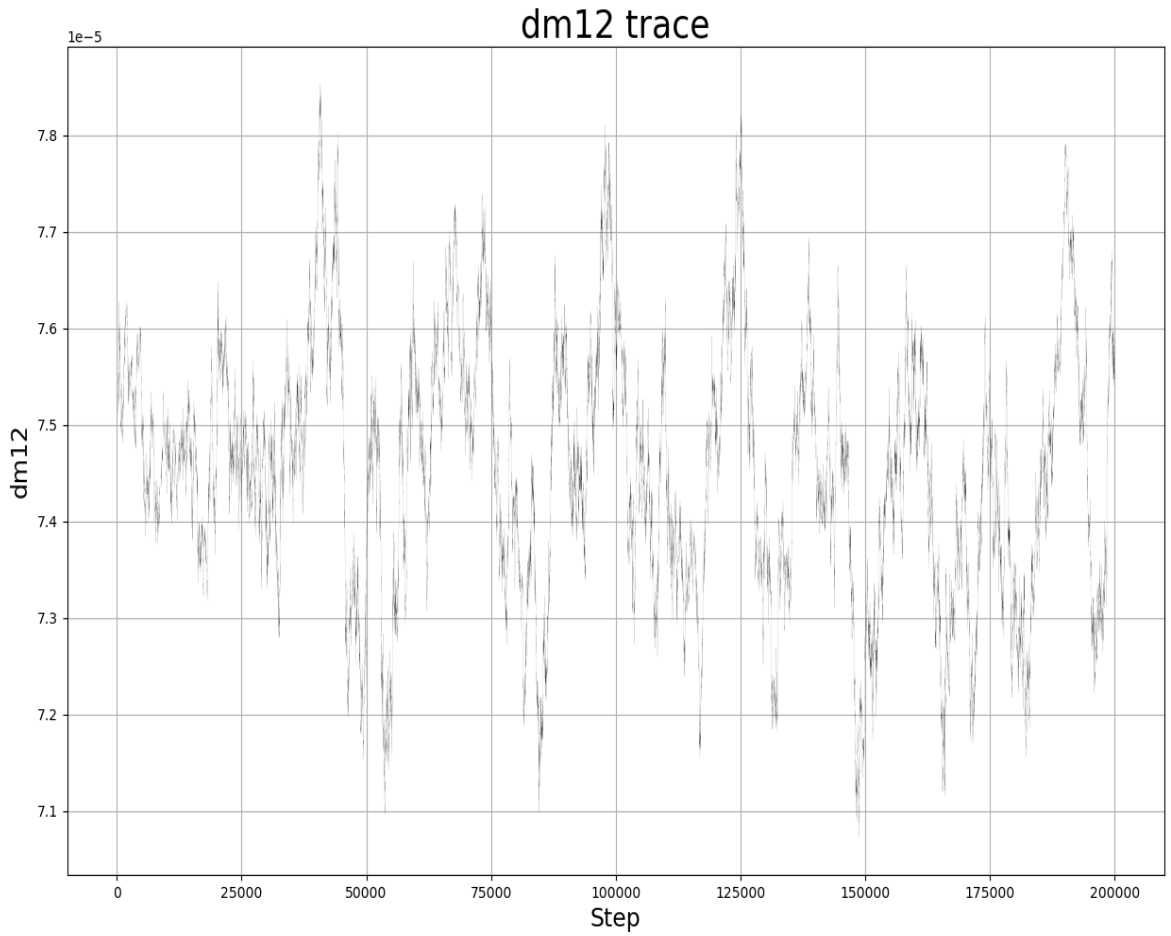
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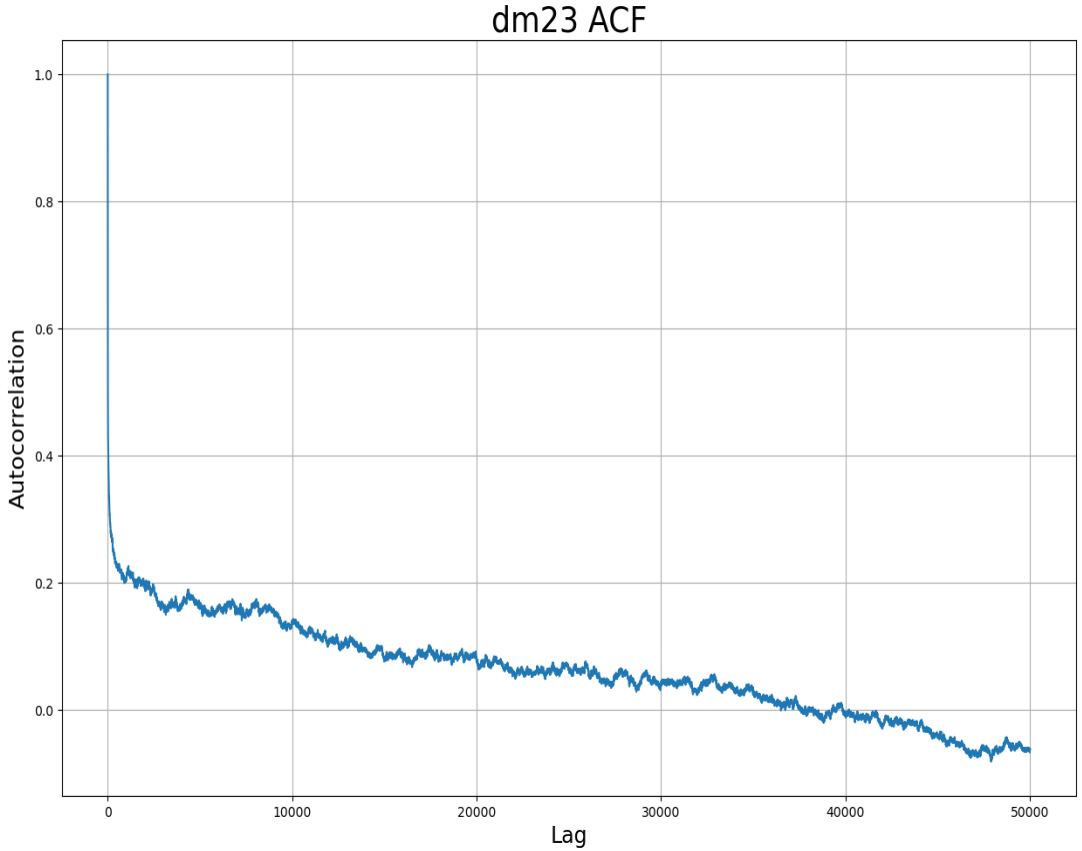
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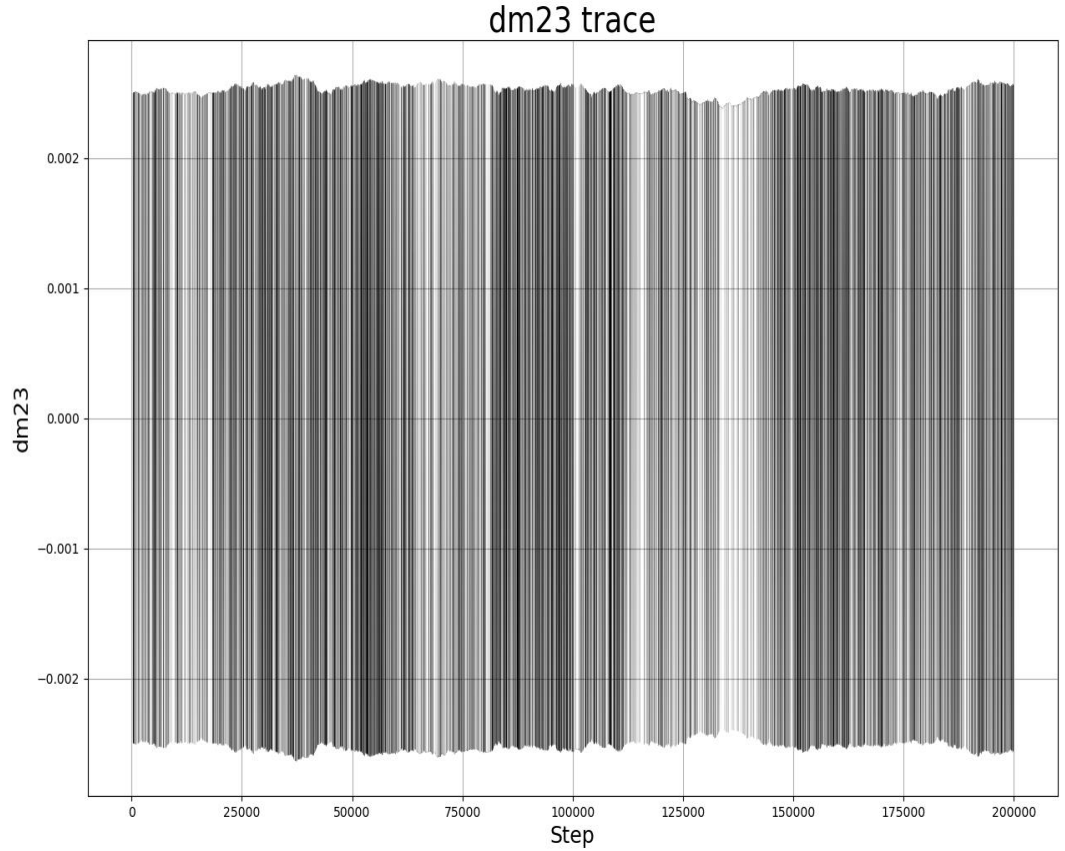
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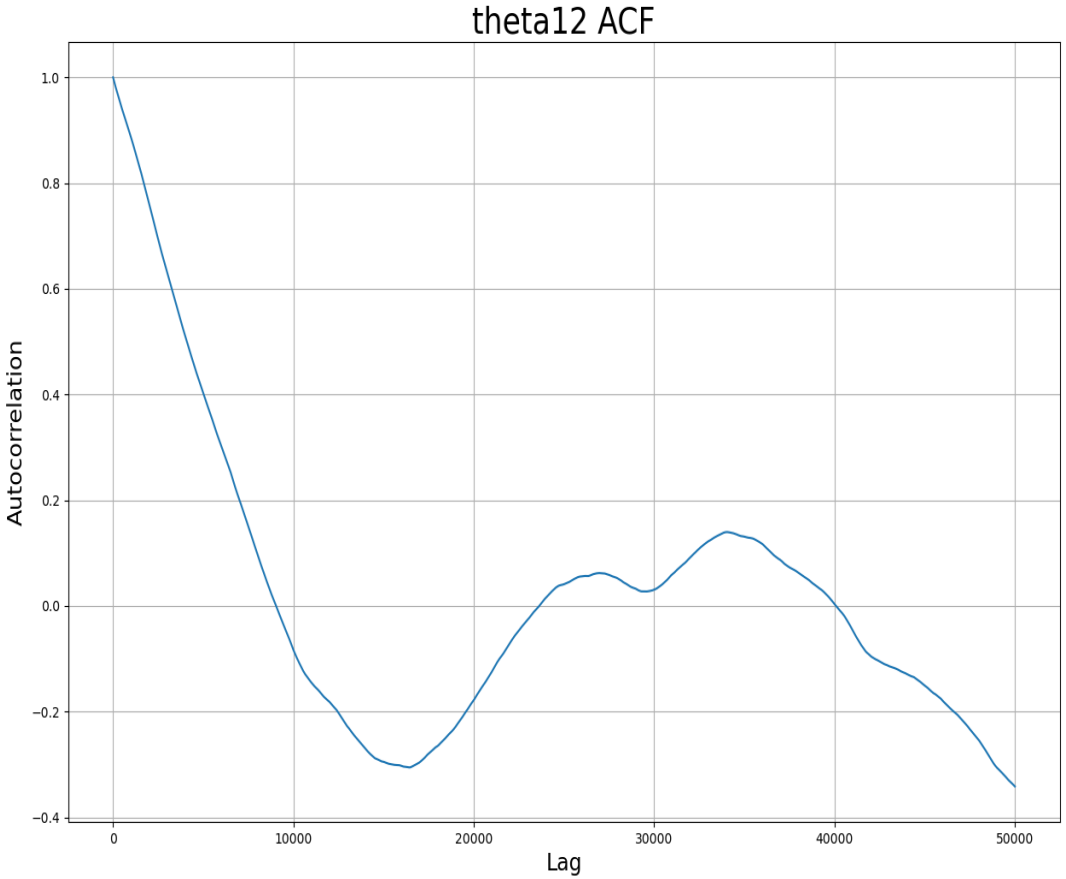
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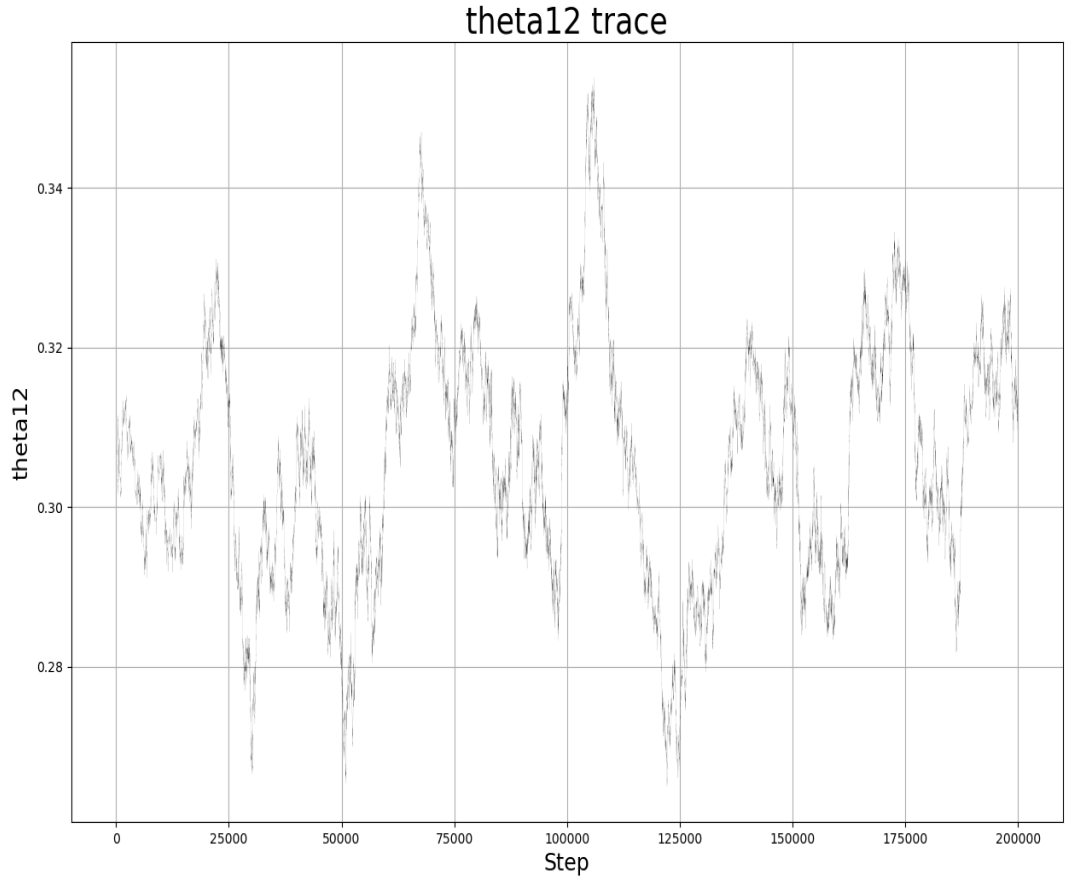
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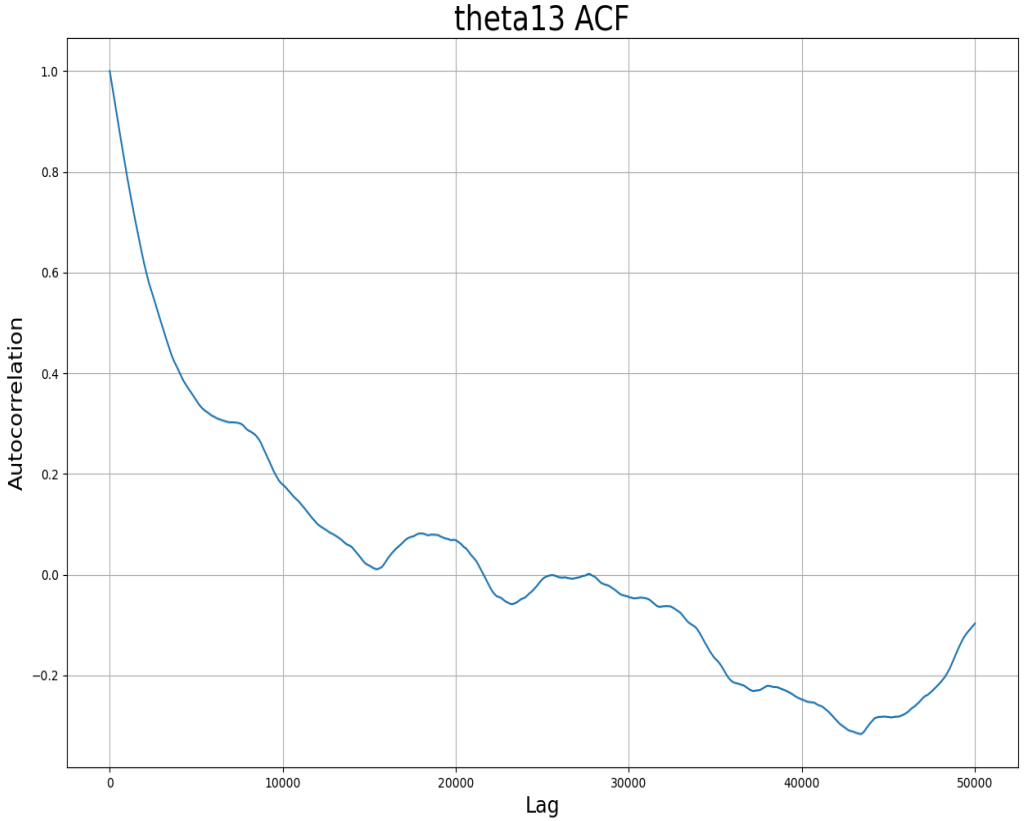
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Autocorrelation
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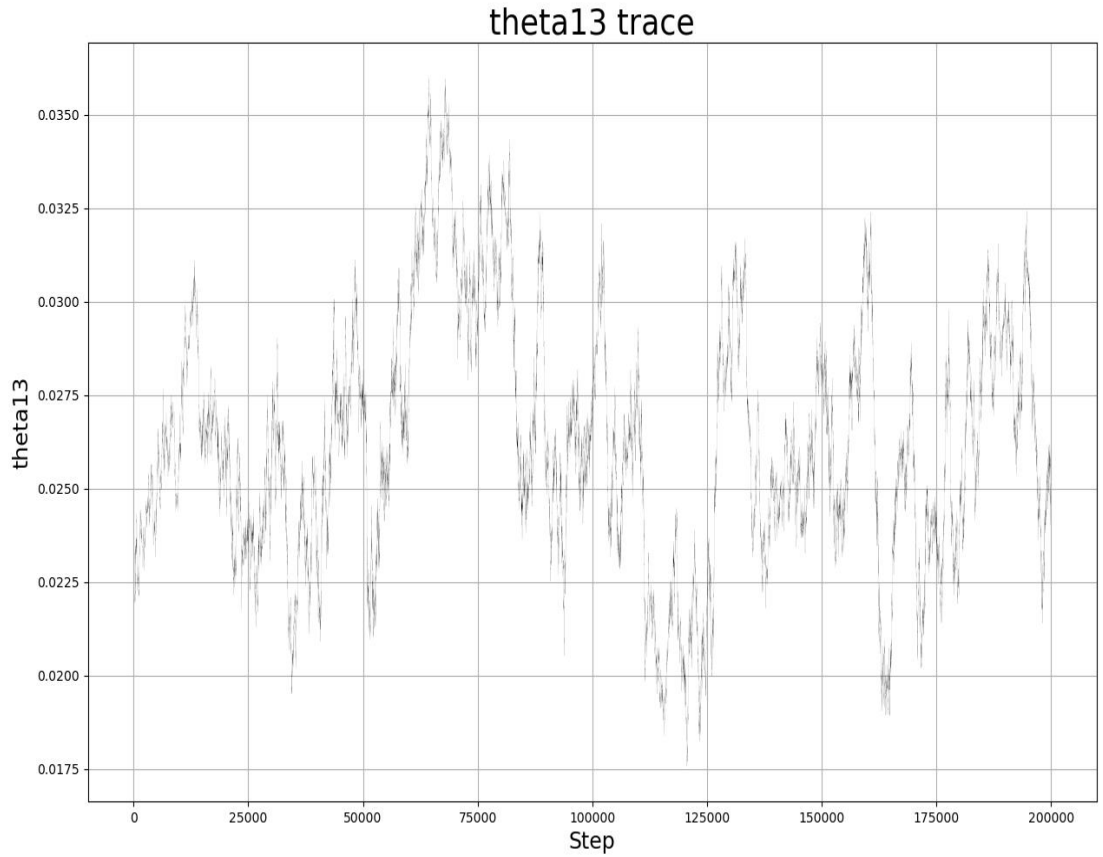
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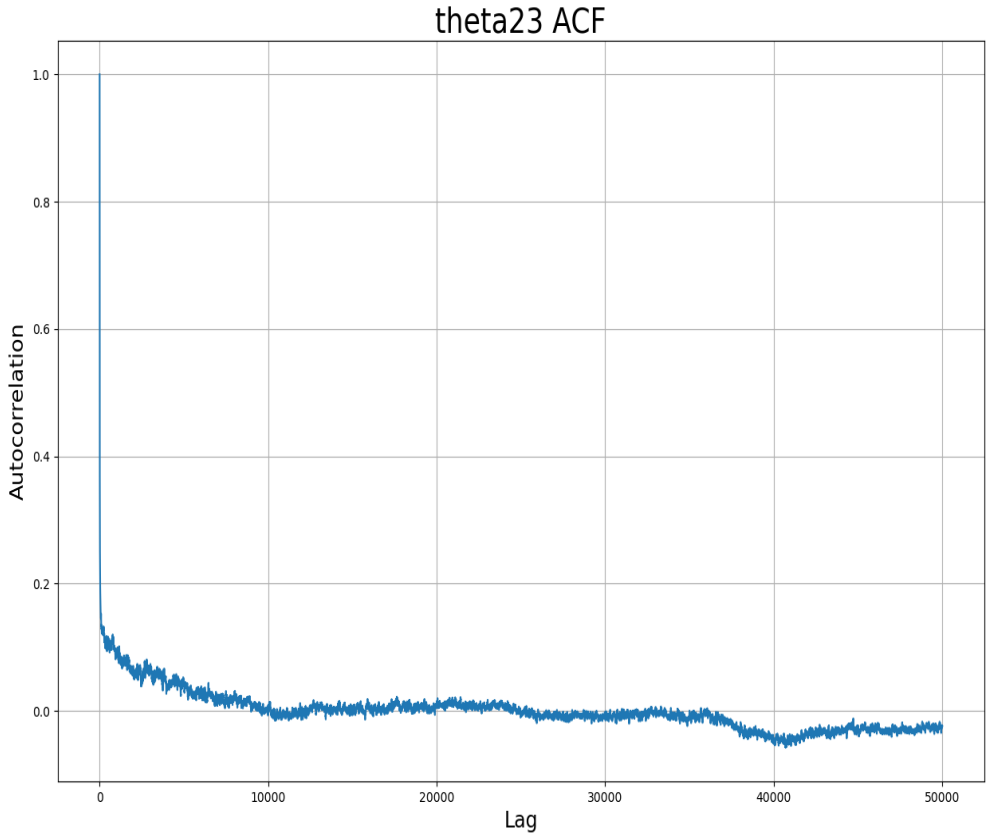
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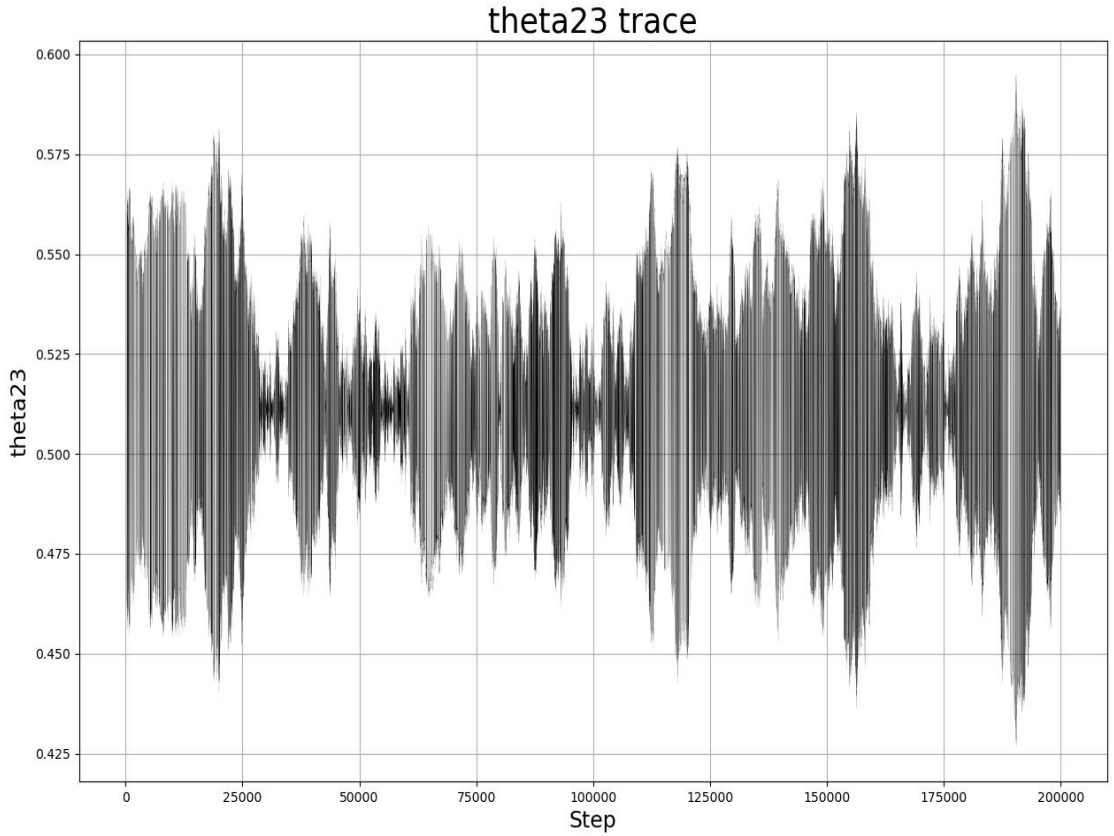
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