

Hurricane Path Modelling by Biased Sampling

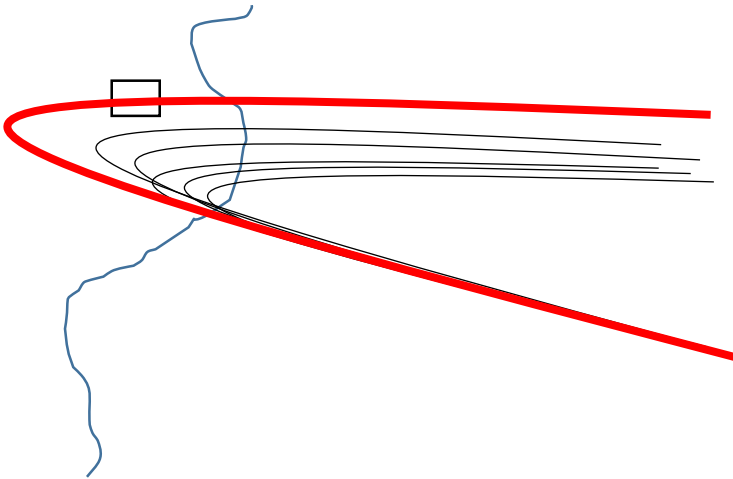
Team Tornado

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Problem

- Assign probability to hypothetical natural disasters (windstorms).



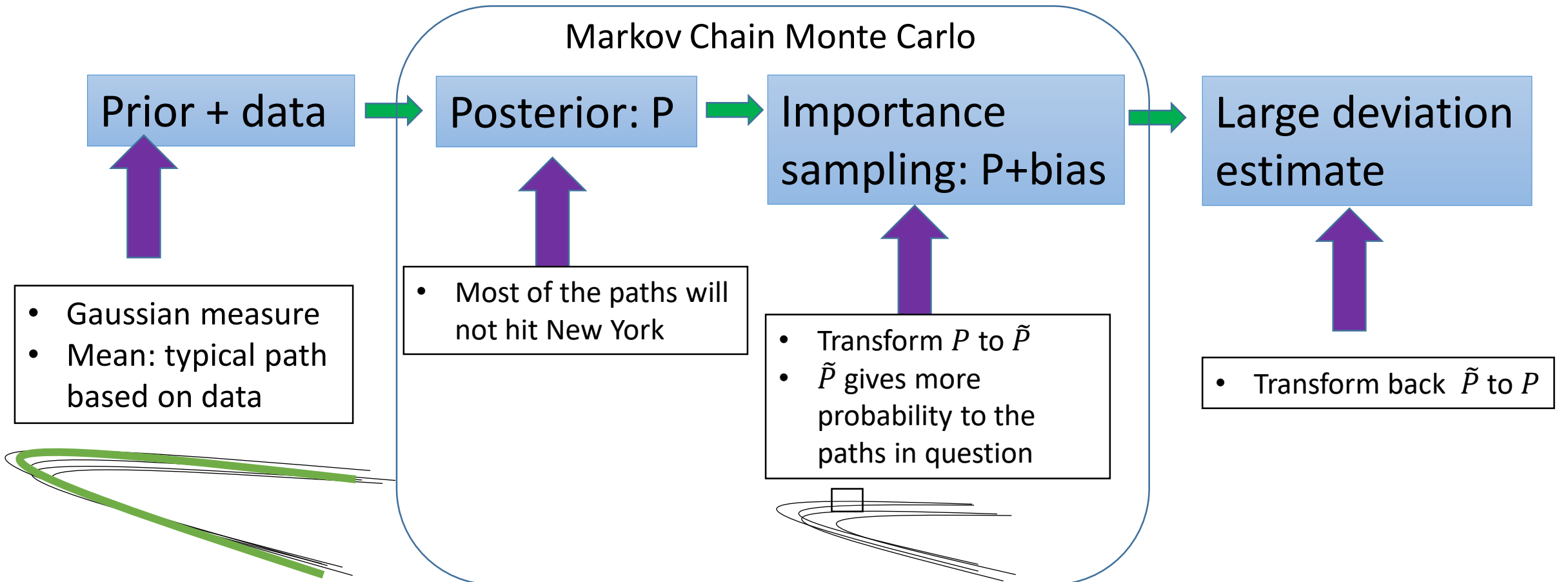
$$\text{Prob}(\text{ } \square \text{)} = ?$$

Difficulties

- No data on the events we are interested in.
- The space of paths is infinite dimensional.

Our Approach

- Bayesian inference on the probability space of paths.



References

Brewer, Tobias, et al. "Efficient characterisation of large deviations using population dynamics." *Journal of Statistical Mechanics: Theory and Experiment* 2018.5 (2018): 053204.