

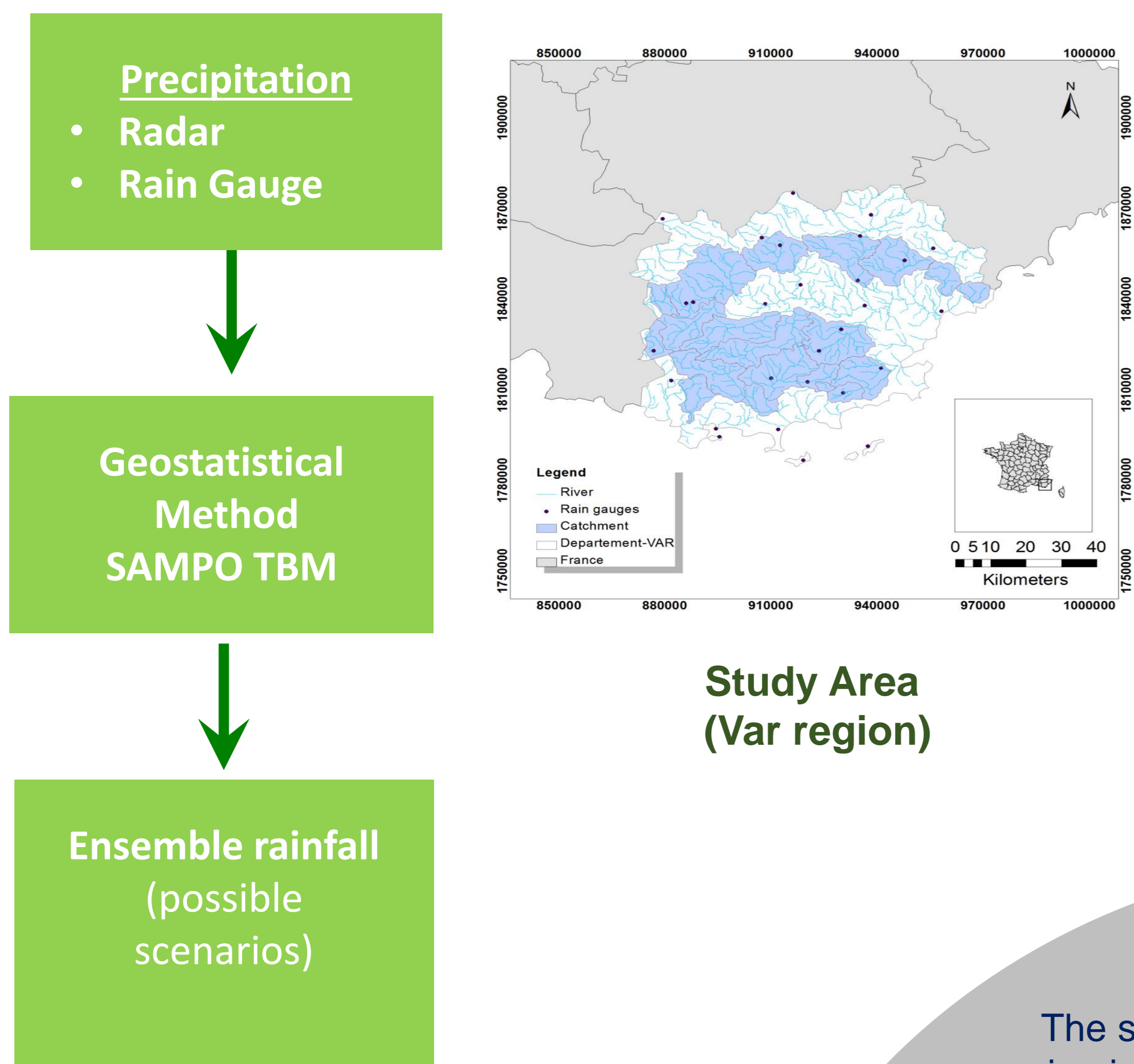
Sistema de previsão de enchente imediata por conjunto de alertas de inundação

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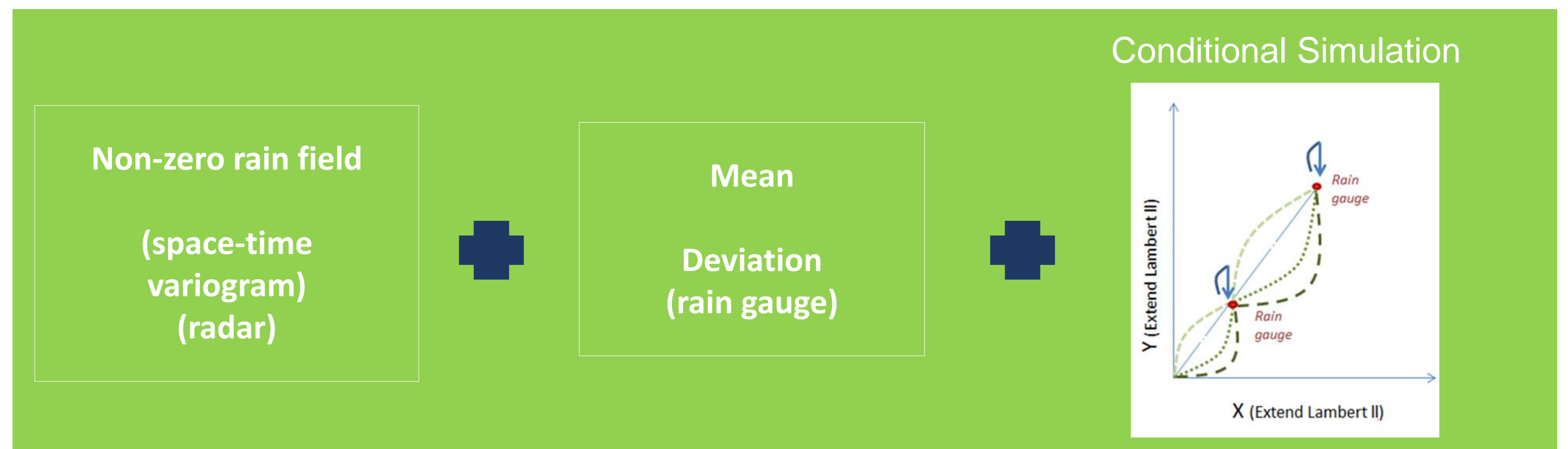
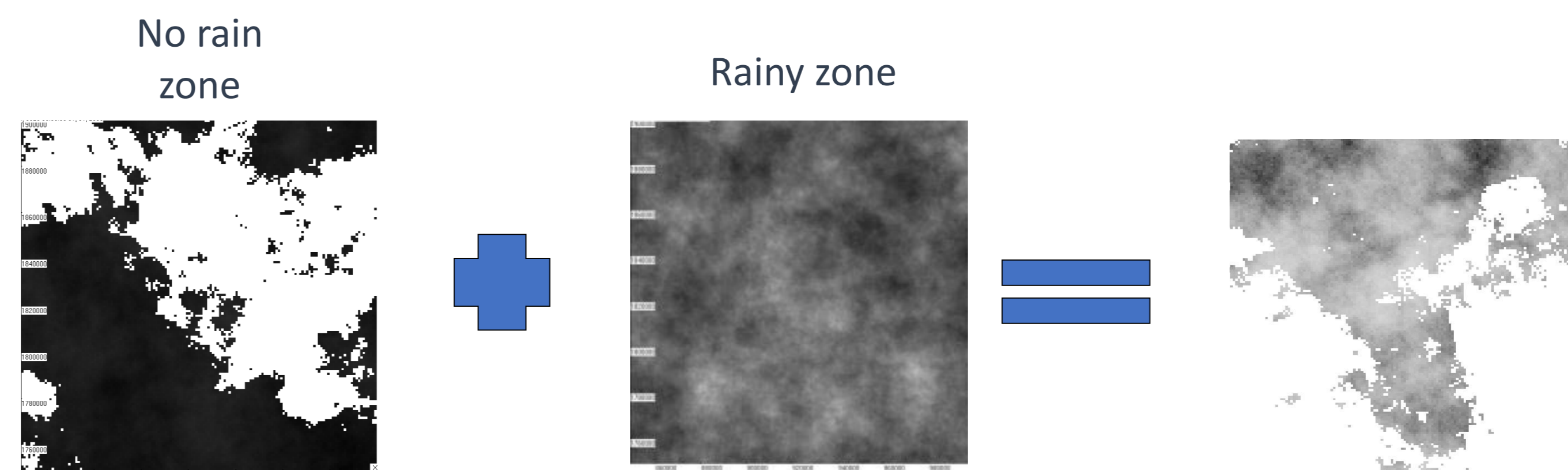
INTRODUCTION

This project aims at developing an ensemble forecasting method of rainfall fields, to be used in an hydrological model.

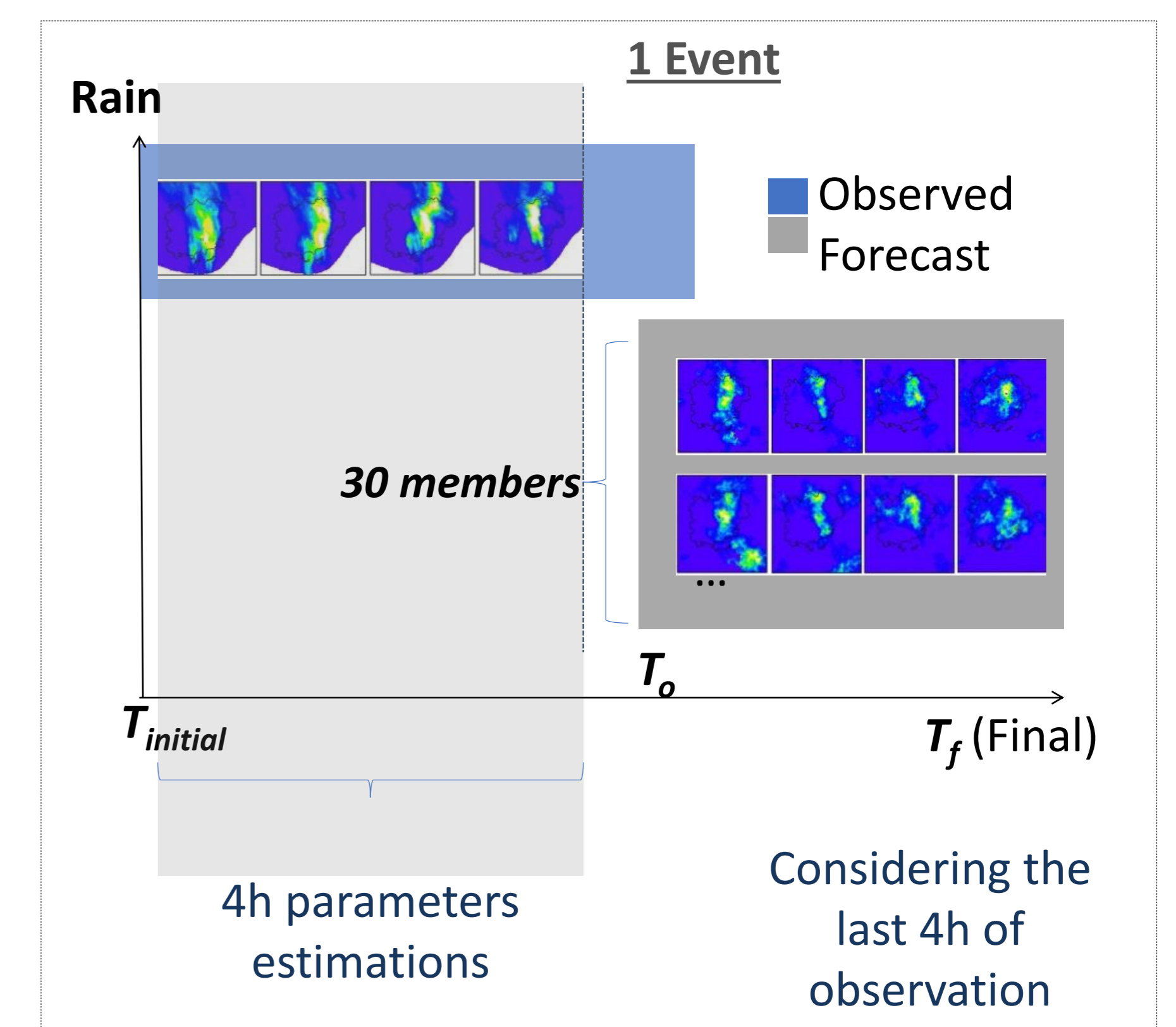


METHOD

Rainfall Generator – SAMPO TBM

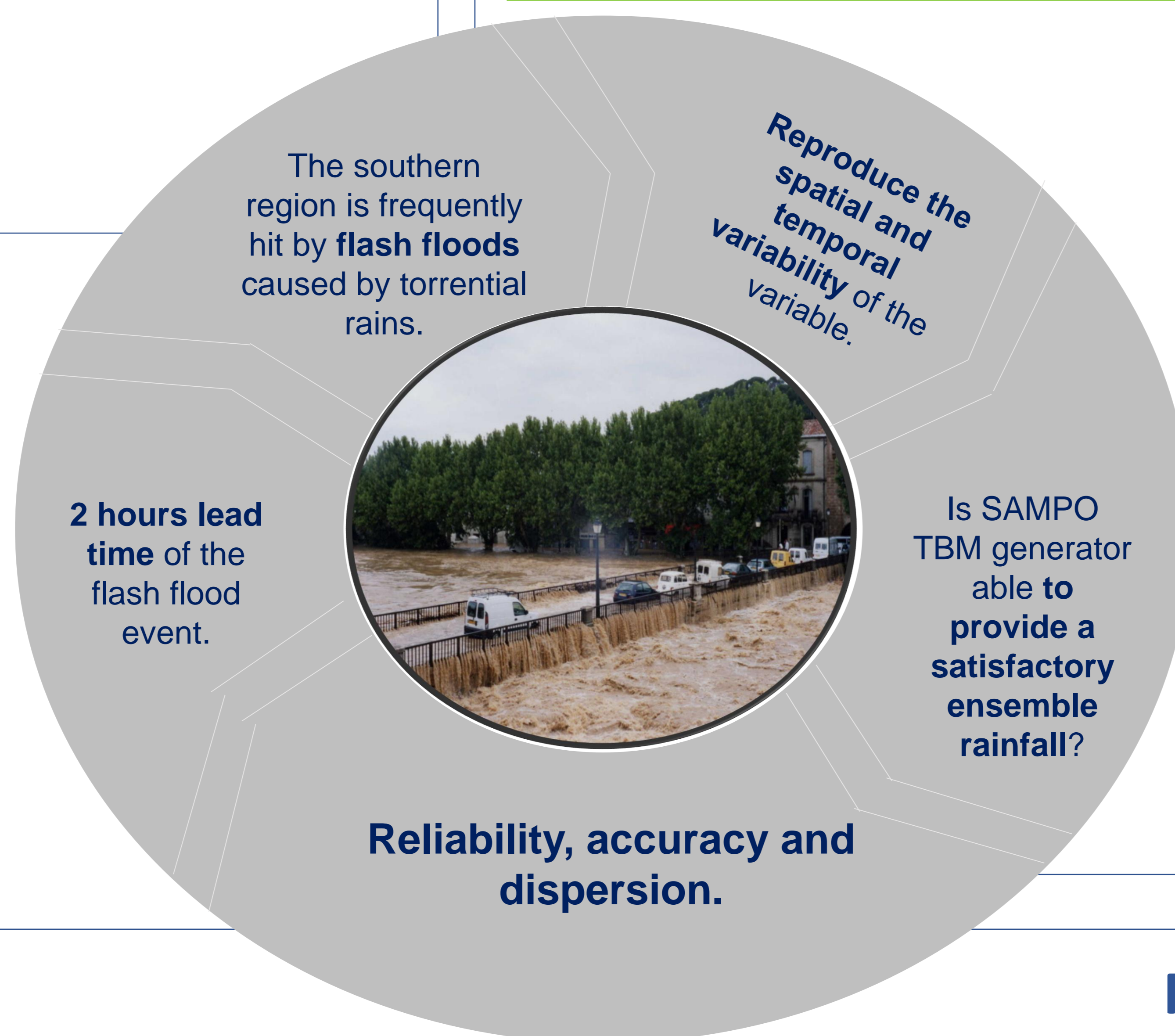
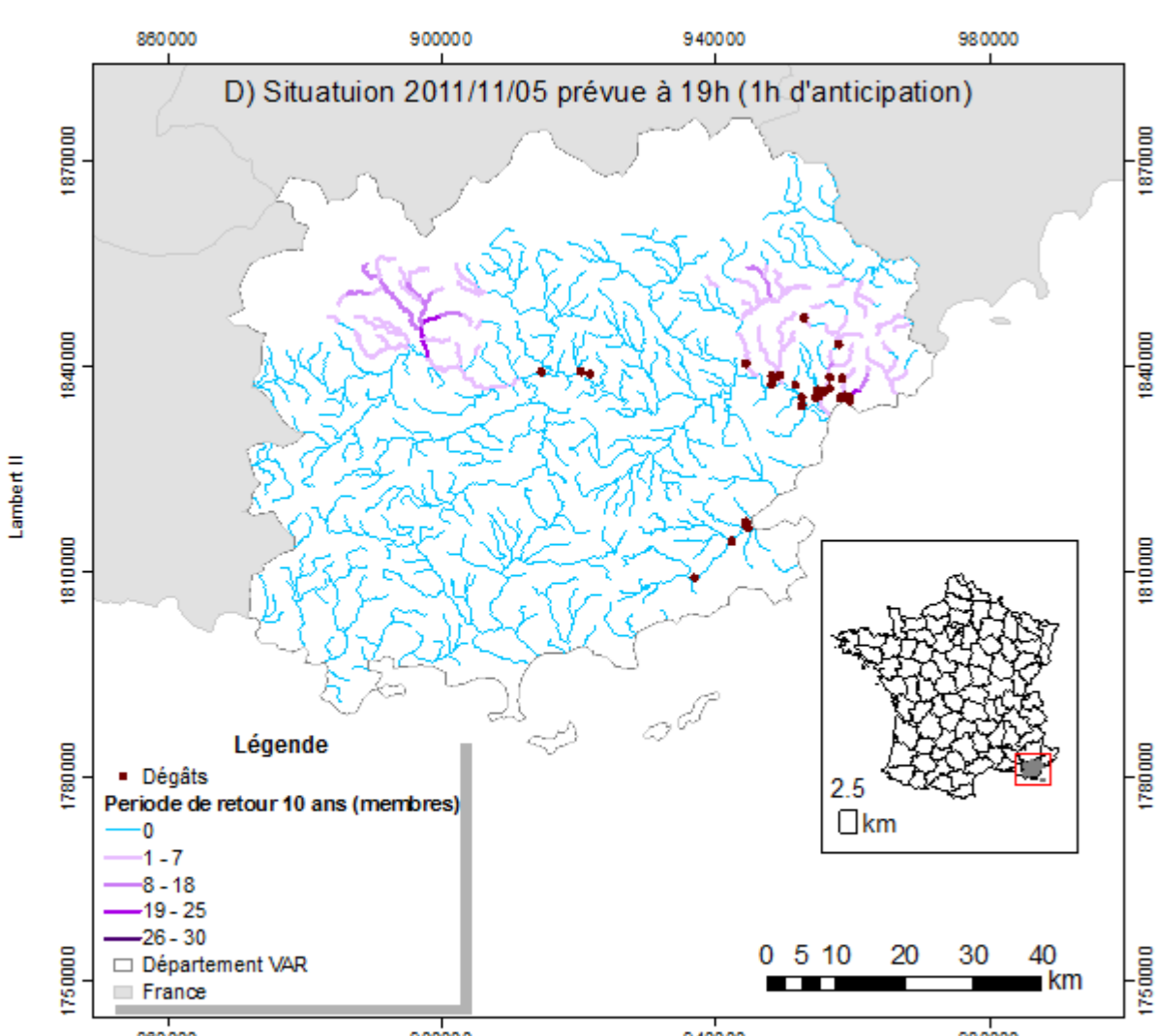


Short term Prediction



Conclusion

- The “Increasing SAMPO TBM” approach is able to simulate ensemble forecasts with, up to 2-h ahead (strong negative bias for longer lead times and $AUC < 0.5$).
- The SAMPO-TBM method seems to be an very interesting option for operational forecasting services, but work is still on-going to improve the results.
- these ensemble rainfall nowcasts with a distributed hydrological model in order to produce alerts spatial probabilistic flood maps



Results

• CRPS

This score is a statistical summary that checks the proximity of the forecast and cumulative distribution functions observed (CDF)

• ROC

A curve which gives the true positive rate as a function of the false positive rate. The area under the ROC (AUC). an AUC of 0.5 indicates a prediction with no skill. The method is compared to the ‘persistence model’ (forecast= last observation).

