

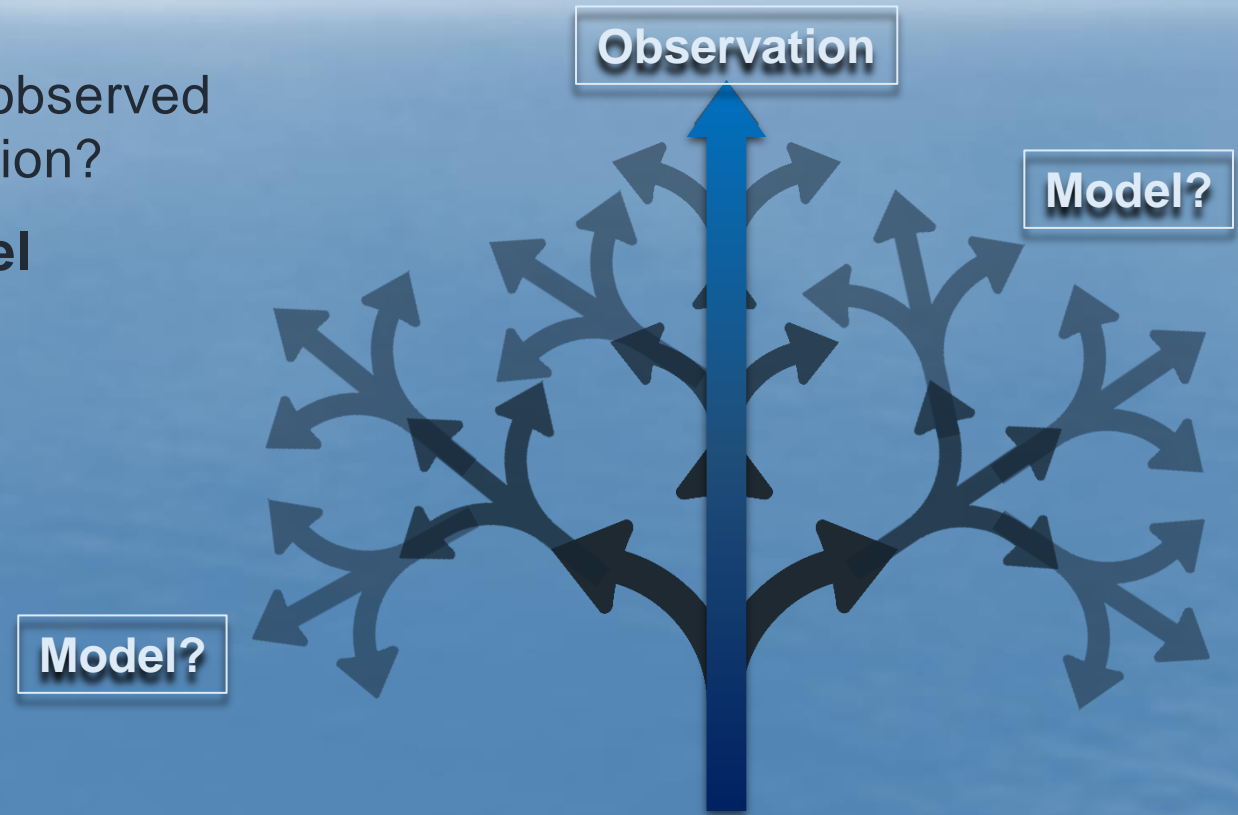
QUANTIFYING CONNECTIVITY UNCERTAINTY ARISING FROM CIRCULATION MODELLING INACCURACY.

By Elise Vissenaekens and Katell Guizien



INTRODUCTION

- What is the **deviation** between the observed circulation and the modelled circulation?
- How does this deviation affect **model connectivity**?

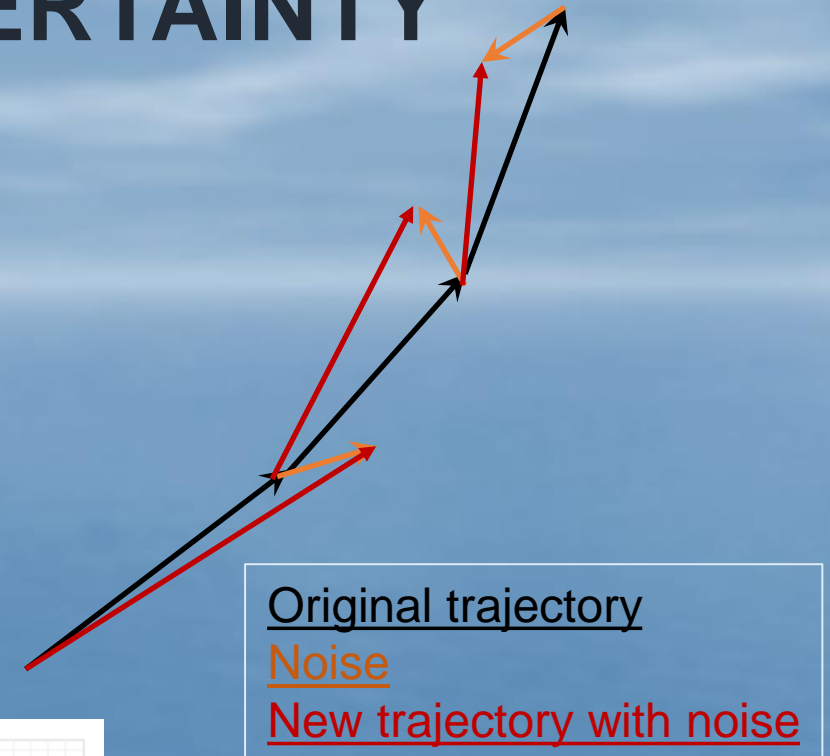
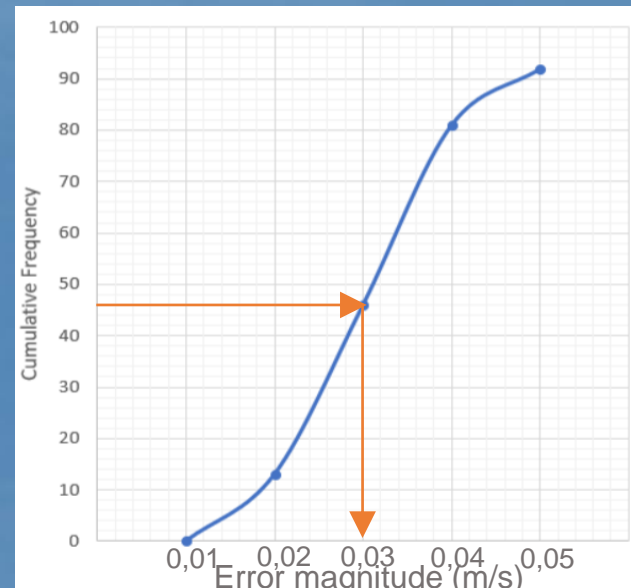


INCORPORATING MODEL UNCERTAINTY INTO PARTICLE TRACKING

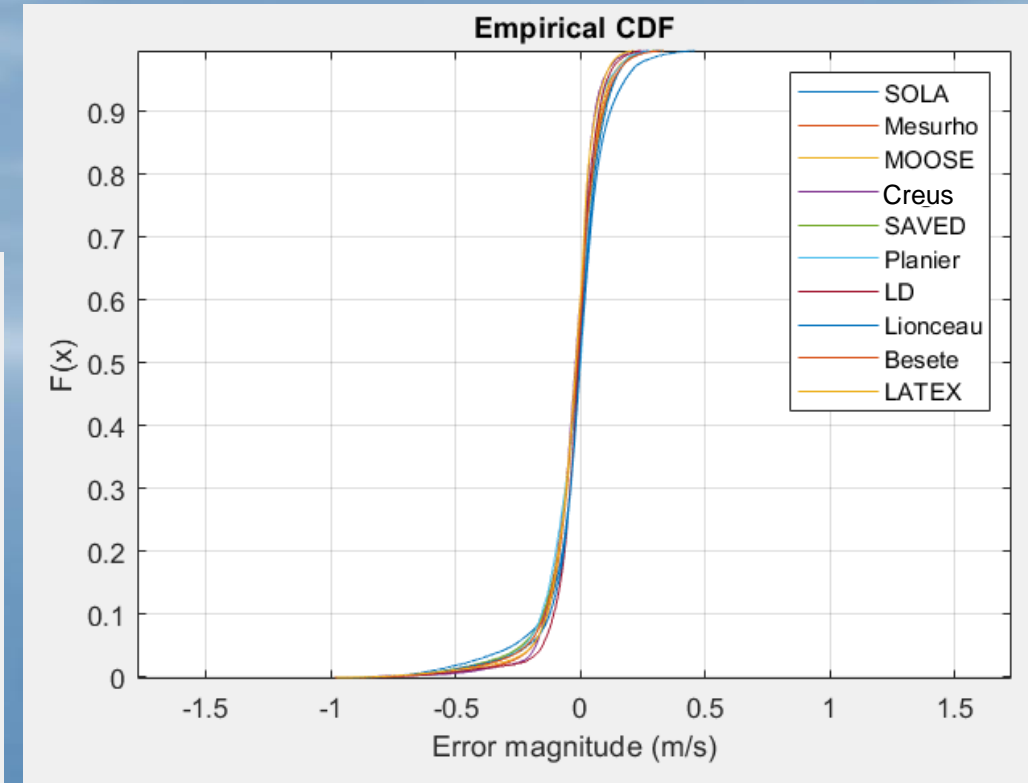
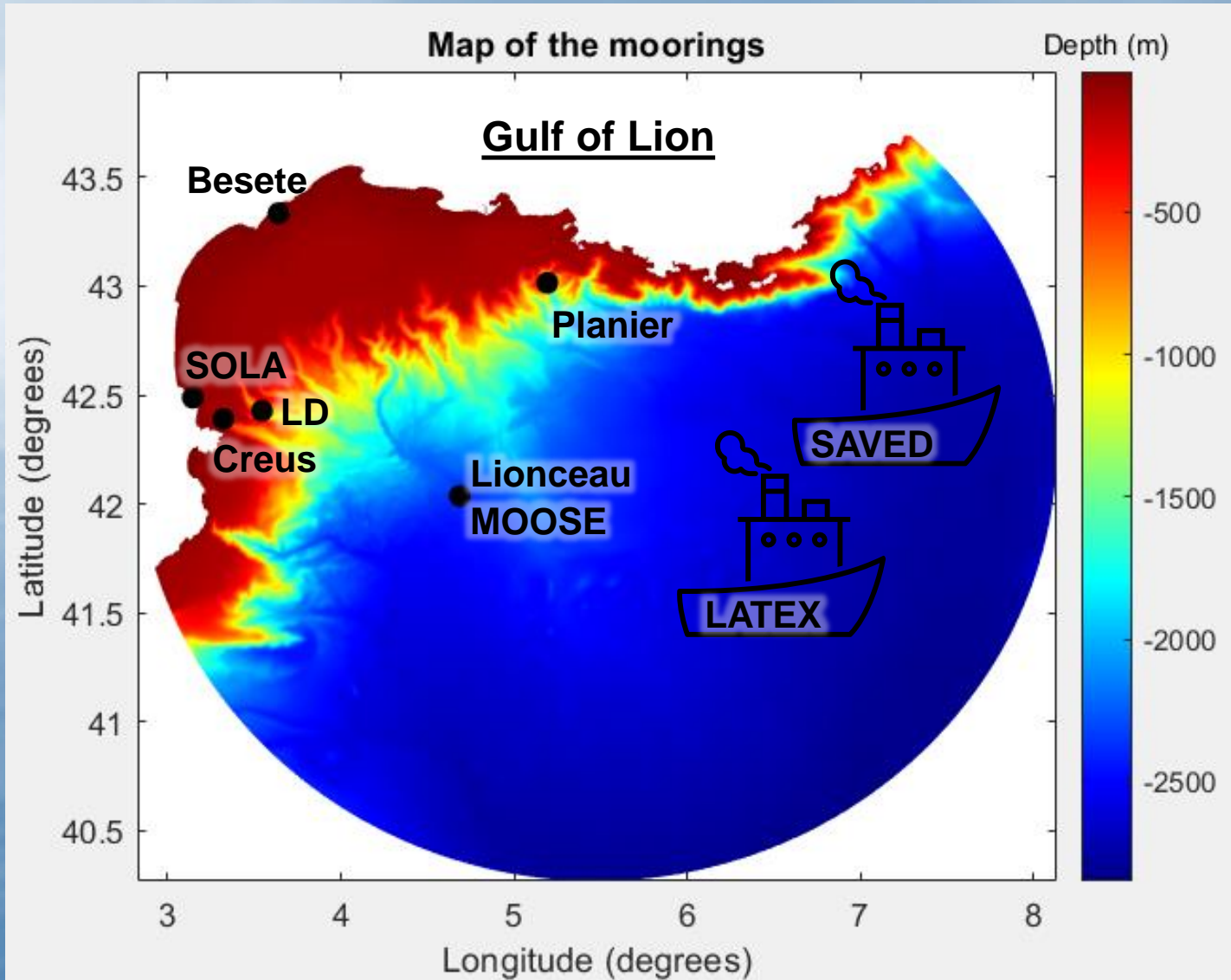
Material and methods

1. Calculate error between modelled and observed **velocity**.
2. Find parameters influencing the **frequency** distribution of the error.
3. **Incorporate** uncertainty in model tracks

A random frequency is selected from the cumulative frequency distribution and the corresponding error (noise) is added to the model.



QUANTIFYING MODEL CIRCULATION ERROR



Material and methods

- 10 current meter observations
 - Moorings
 - Vessel mounted (SAVED, LATEX)
- 2010-2013
- Different depths

FIND INFLUENCING PARAMETERS

