

# Method for Measuring High Tracer Concentrations in River Mixing Studies

Filip Bojdecki, Monika Kalinowska



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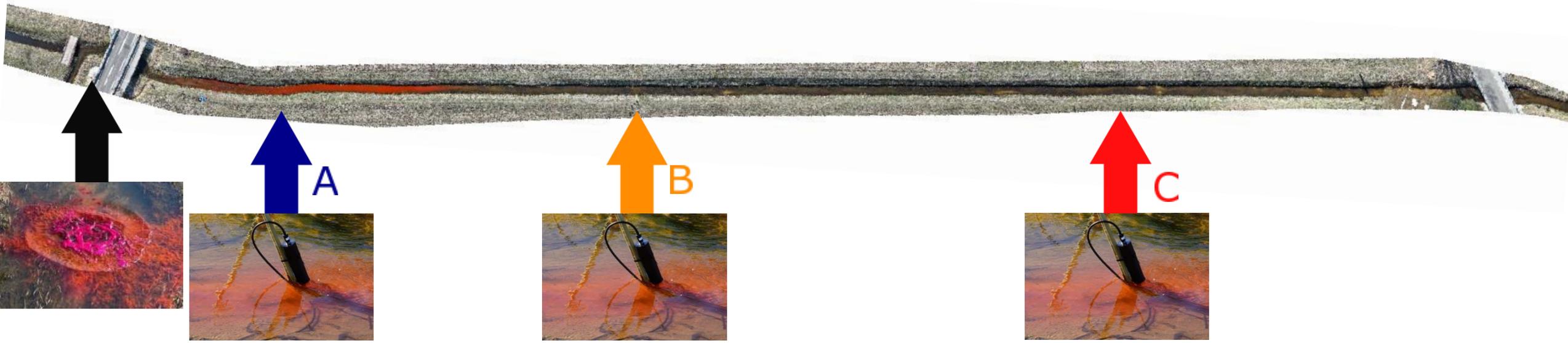
# How to study pollution spreading?

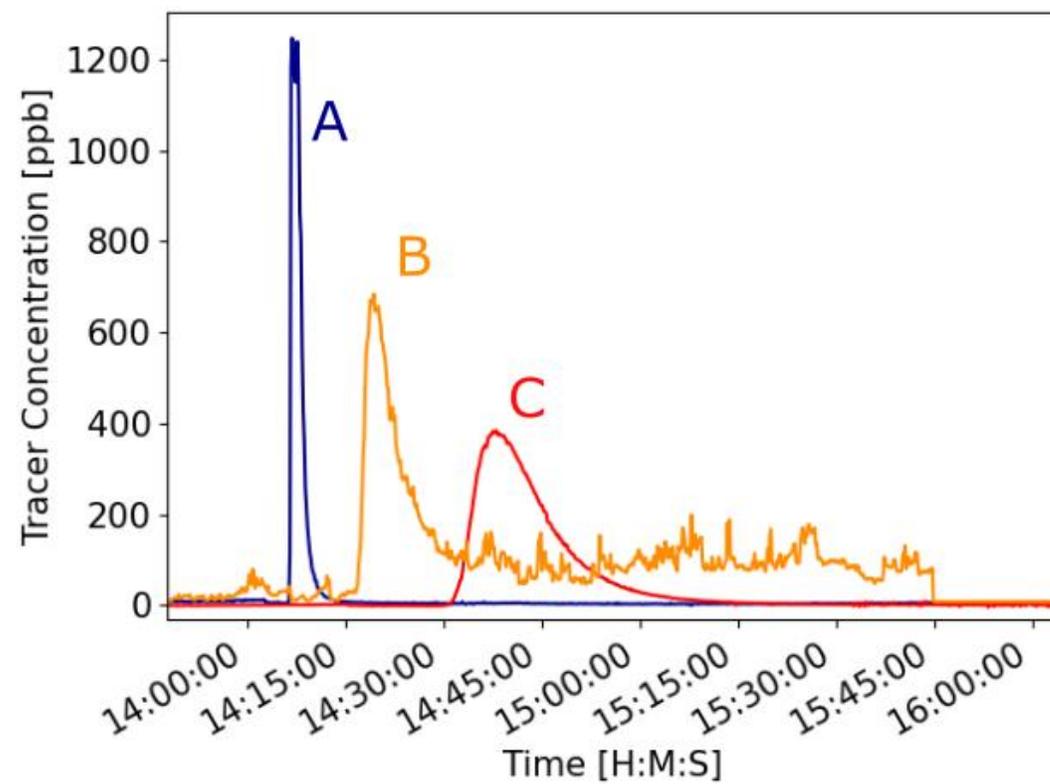
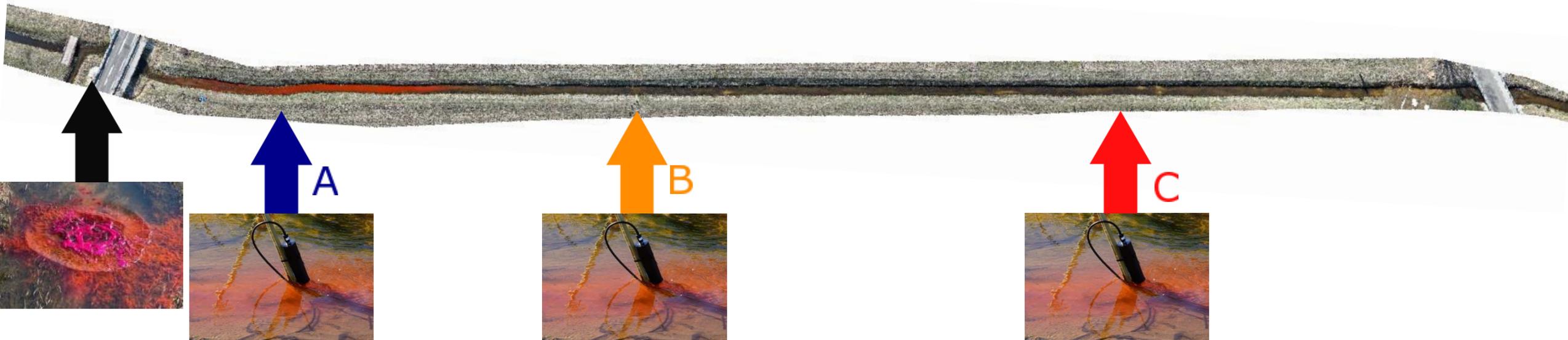


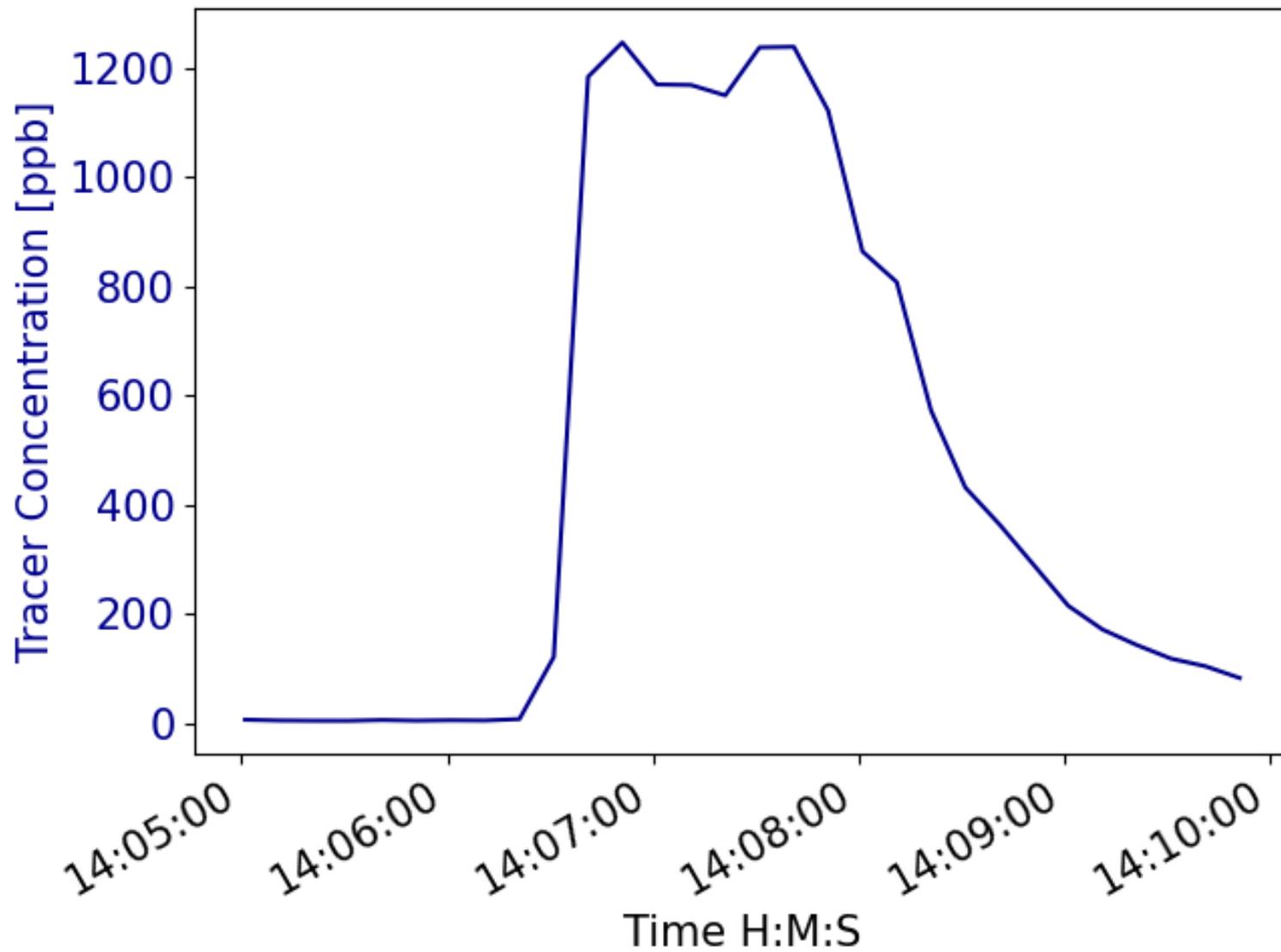
Release it on purpose!



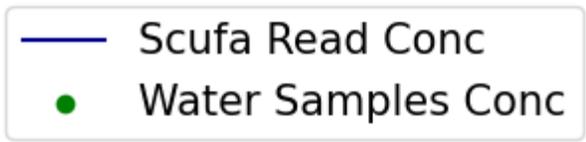
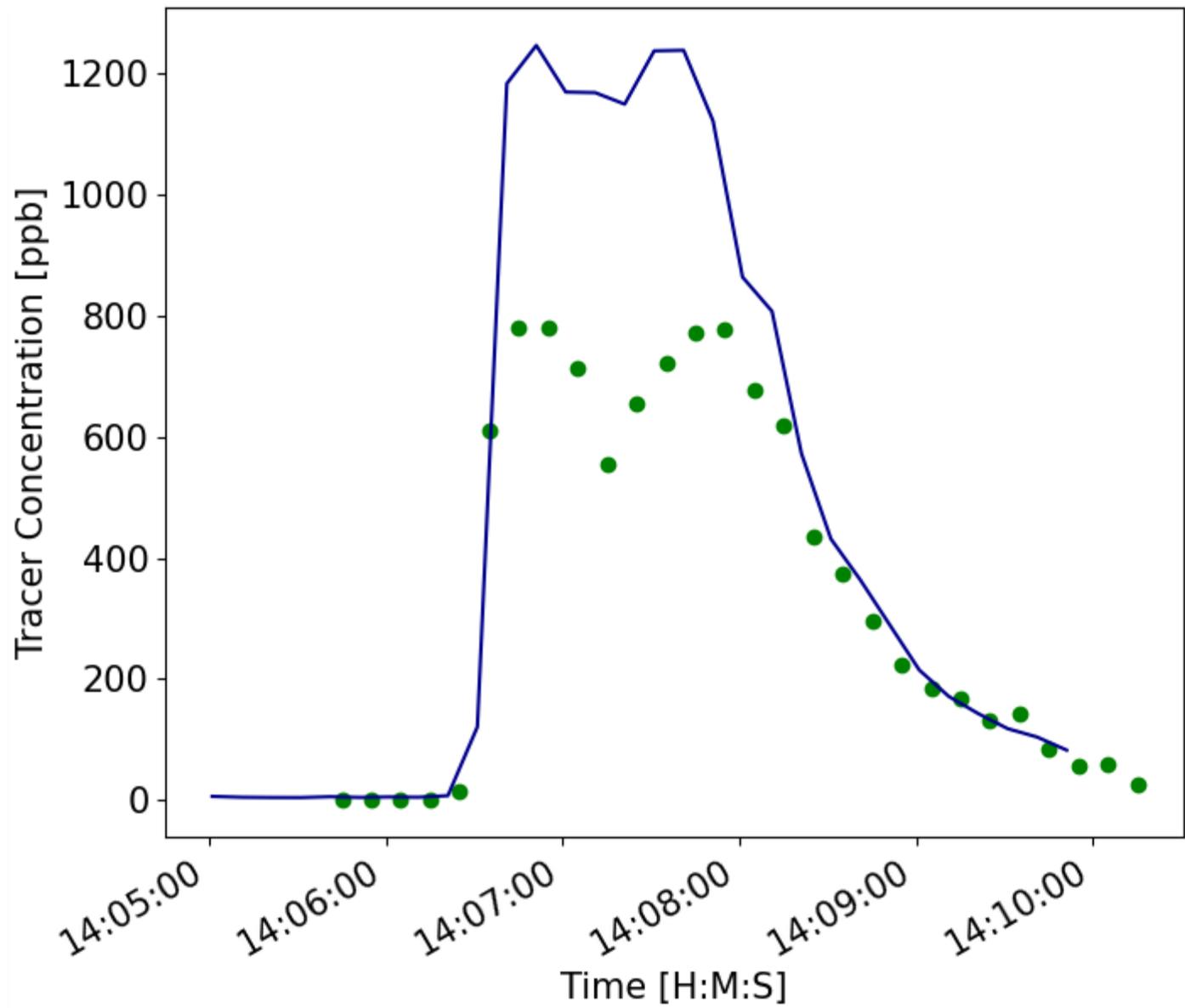
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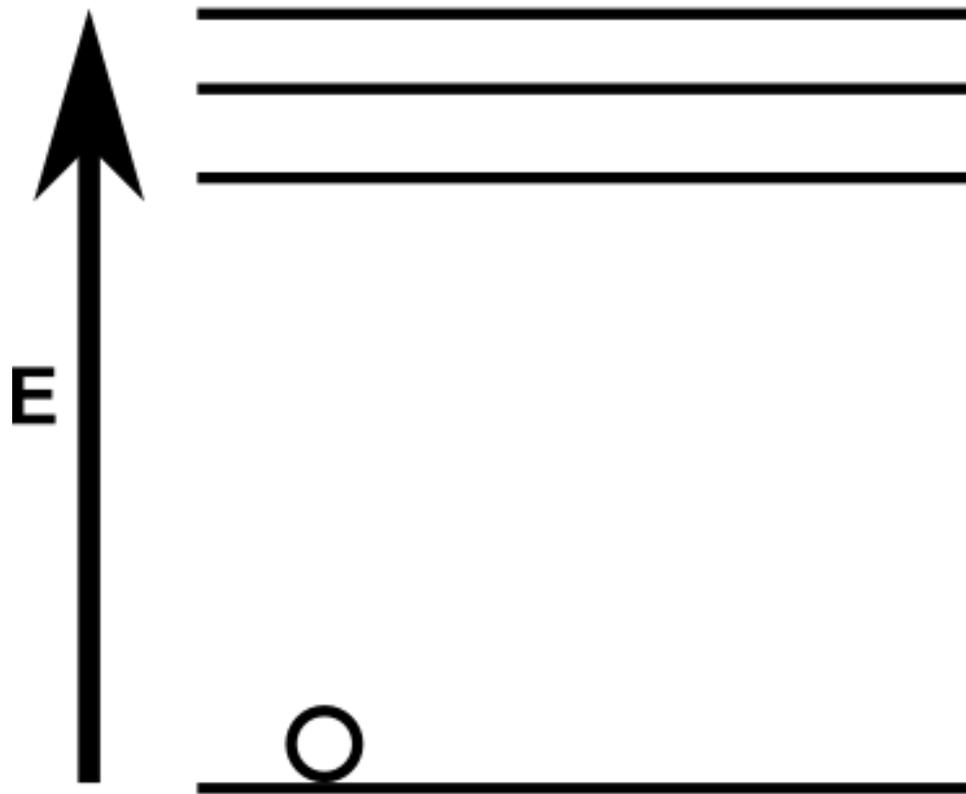
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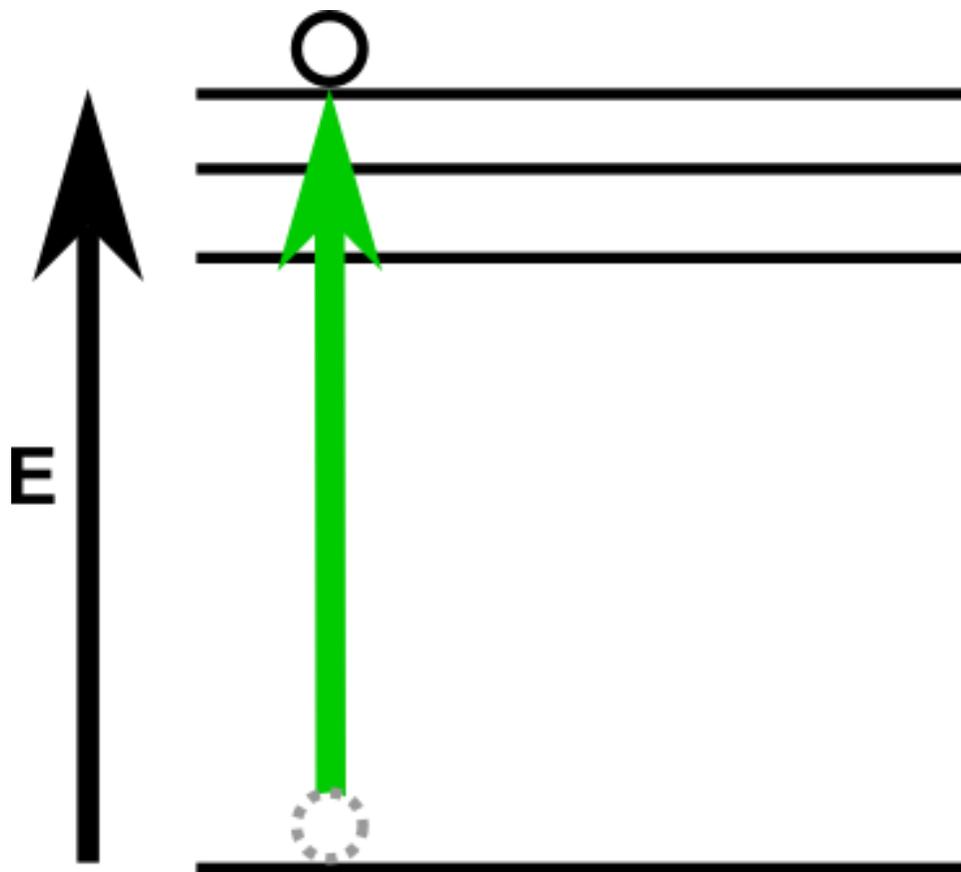
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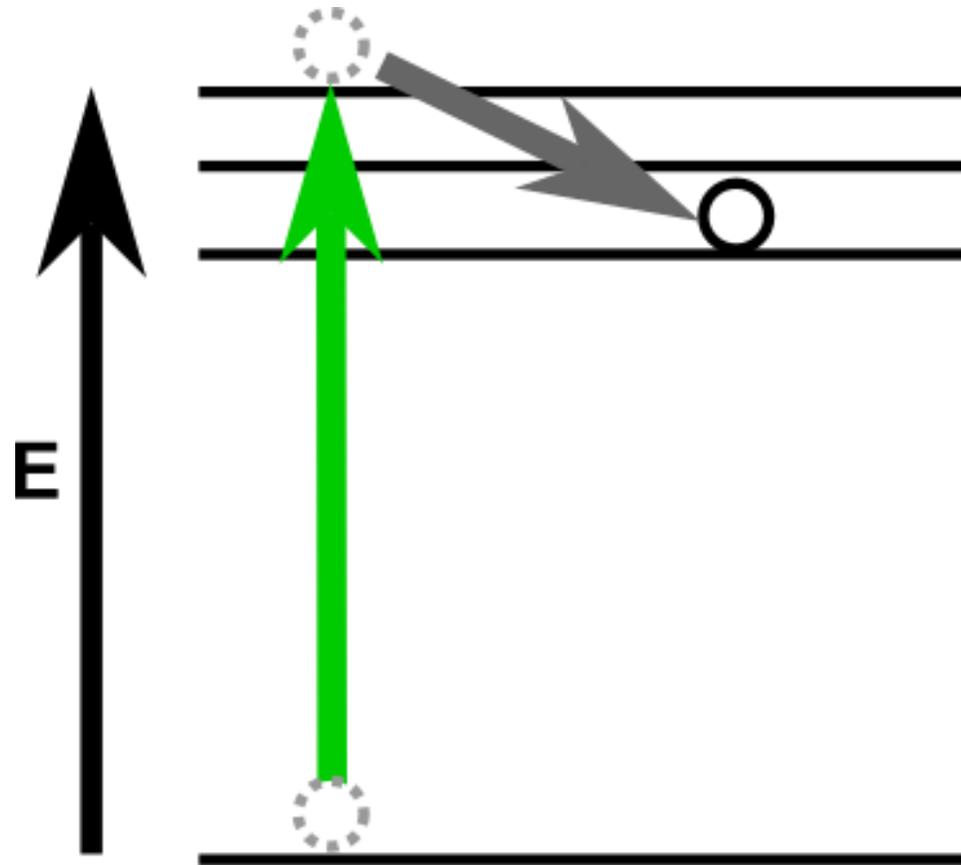
# Jabłoński Diagram



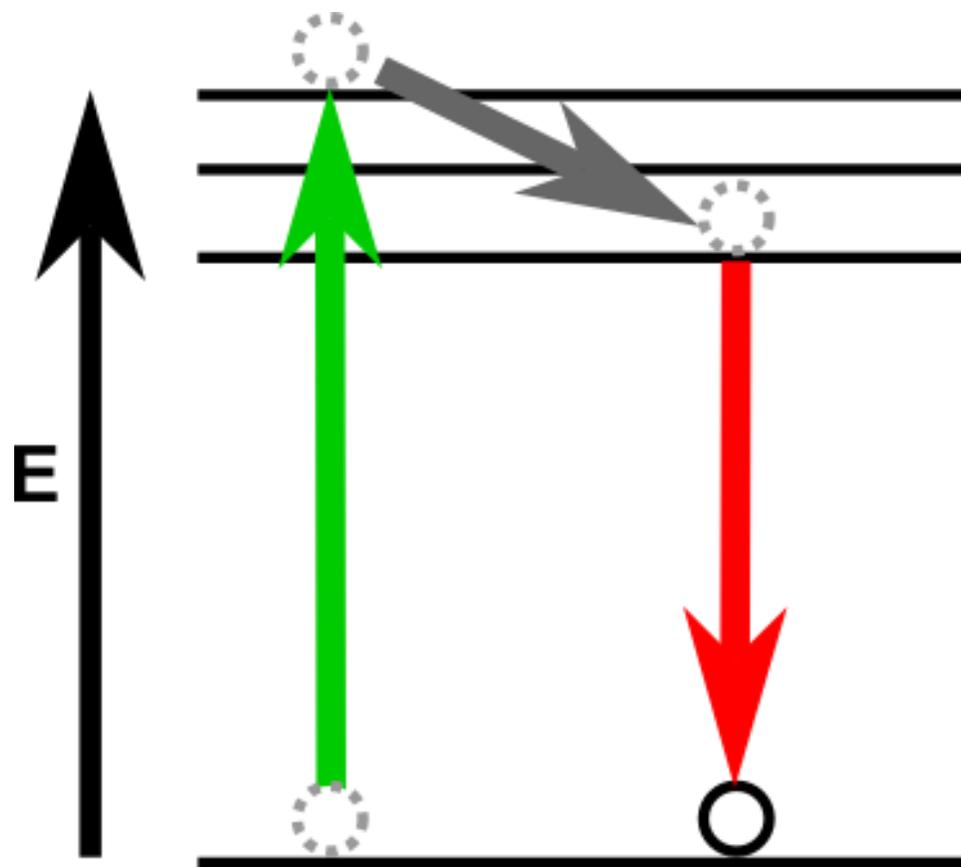
# Jabłoński Diagram



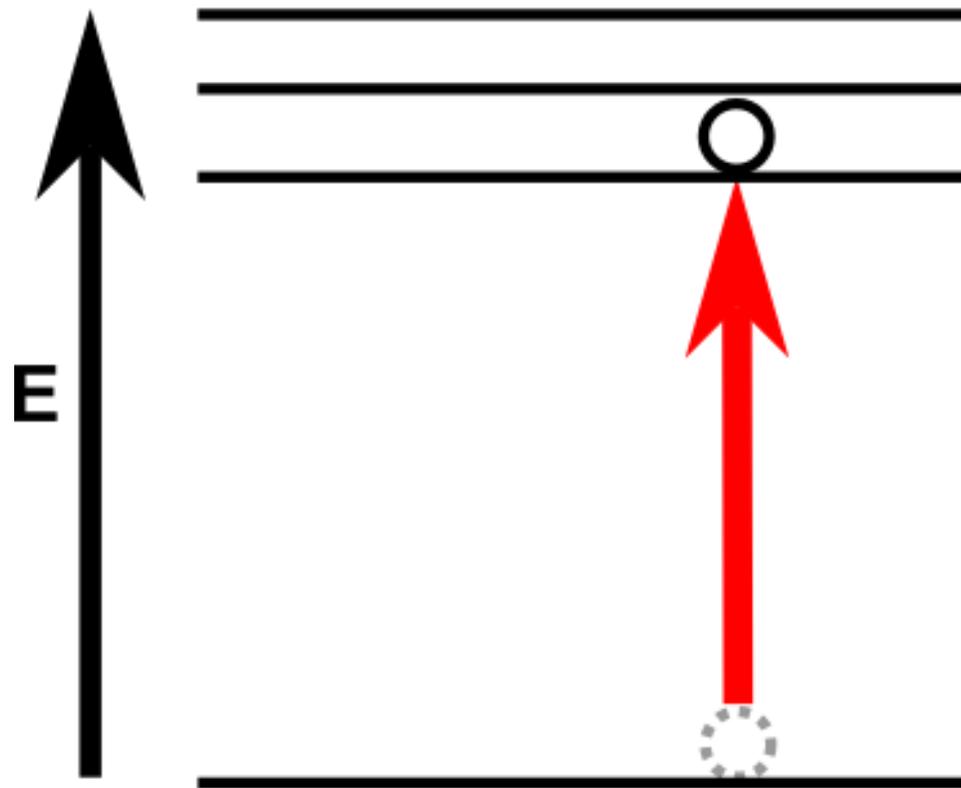
# Jabłoński Diagram

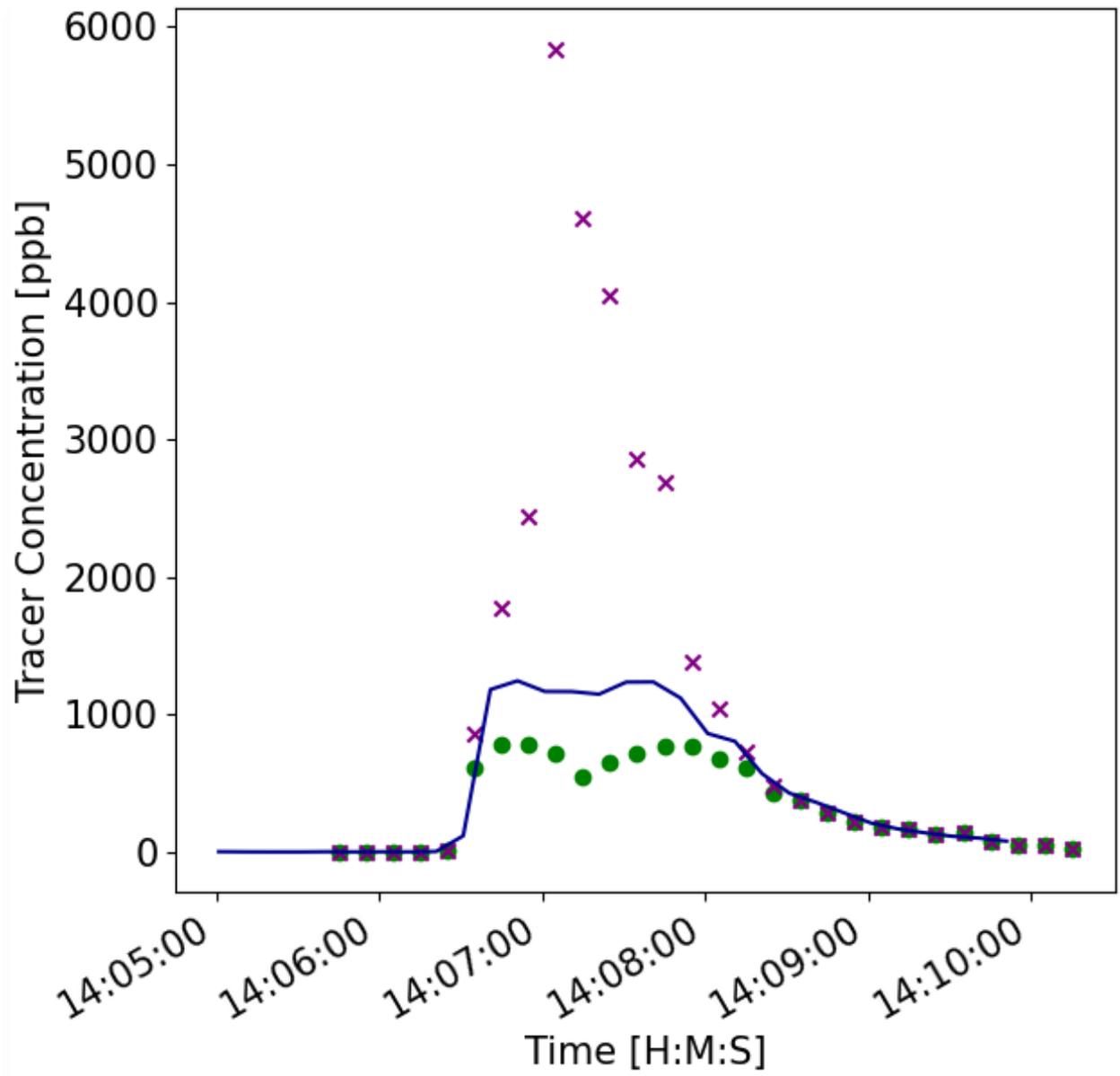


# Jabłoński Diagram



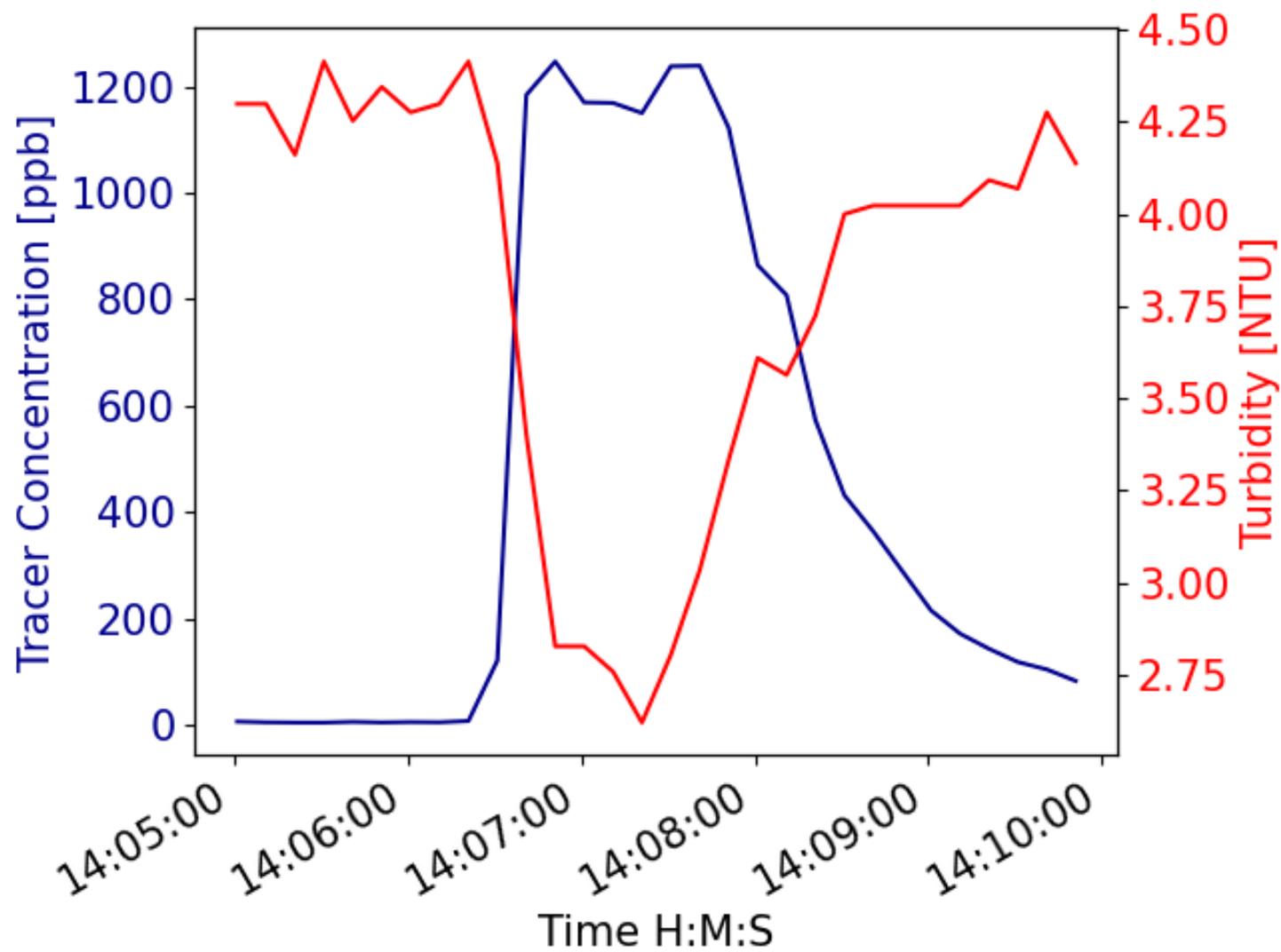
# Jabłoński Diagram





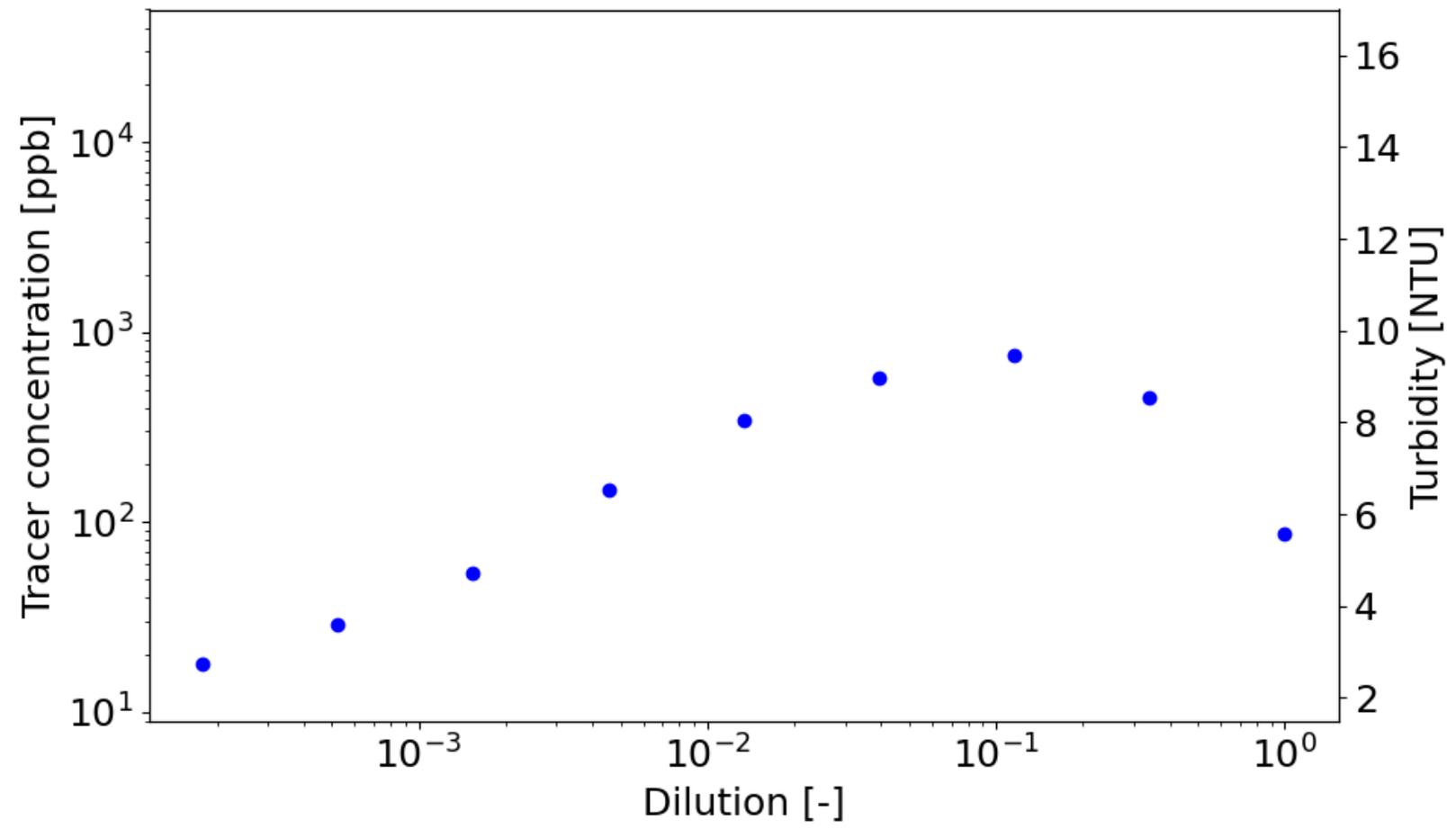
- Scufa Read Conc
- Water Samples Conc
- × Water Samples Diluted Conc

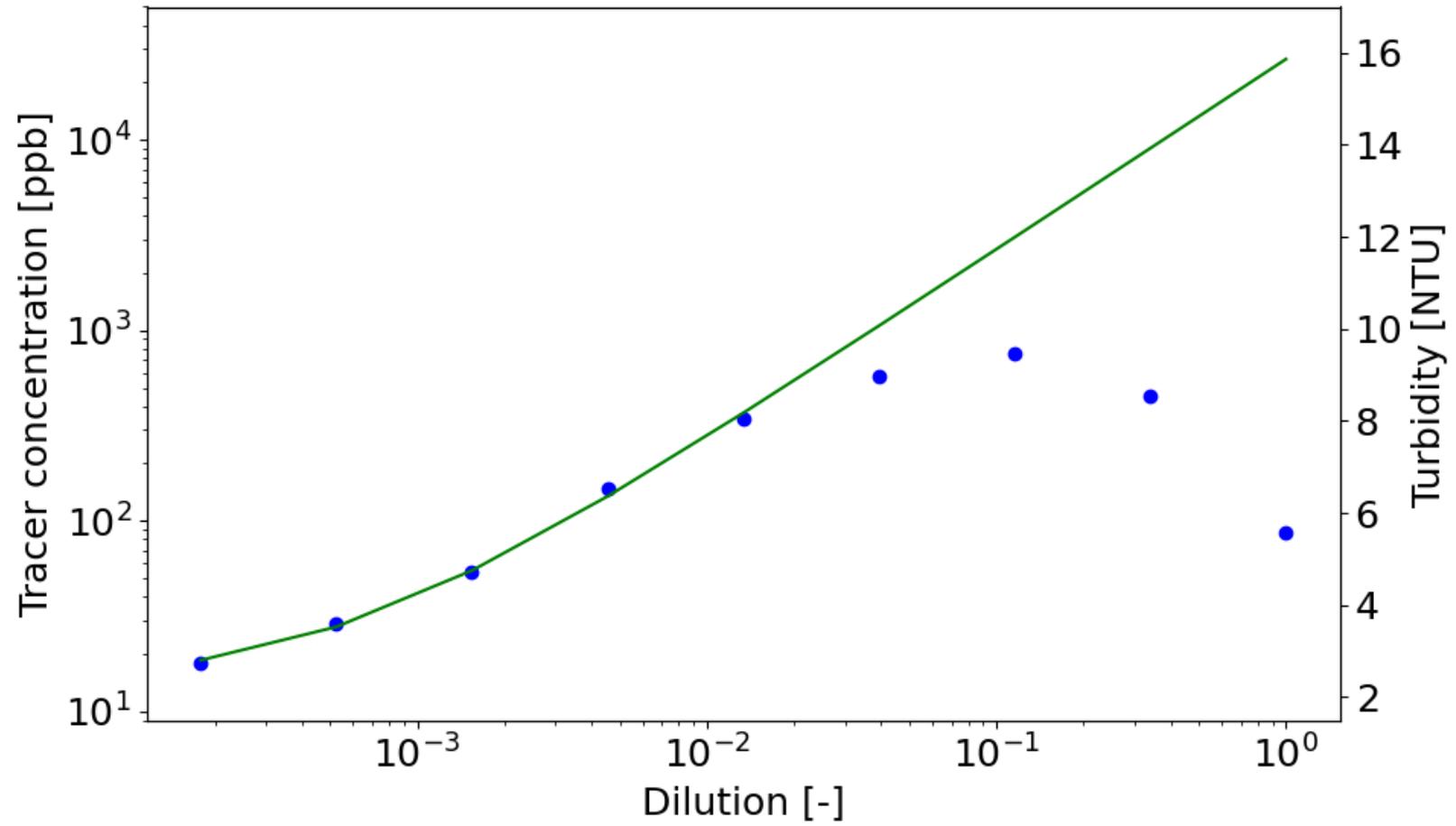
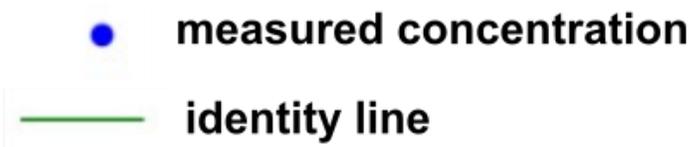




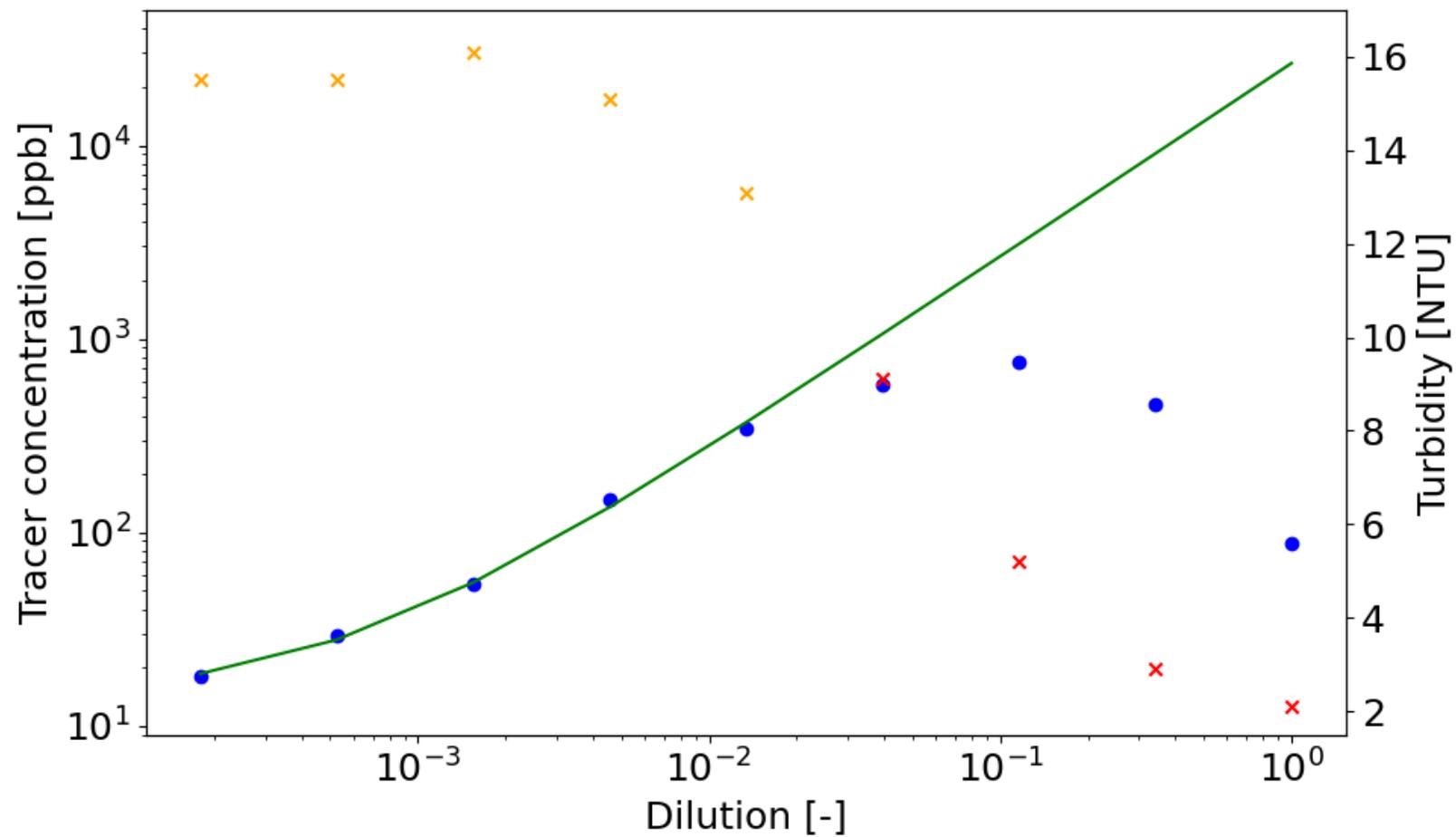


● measured concentration

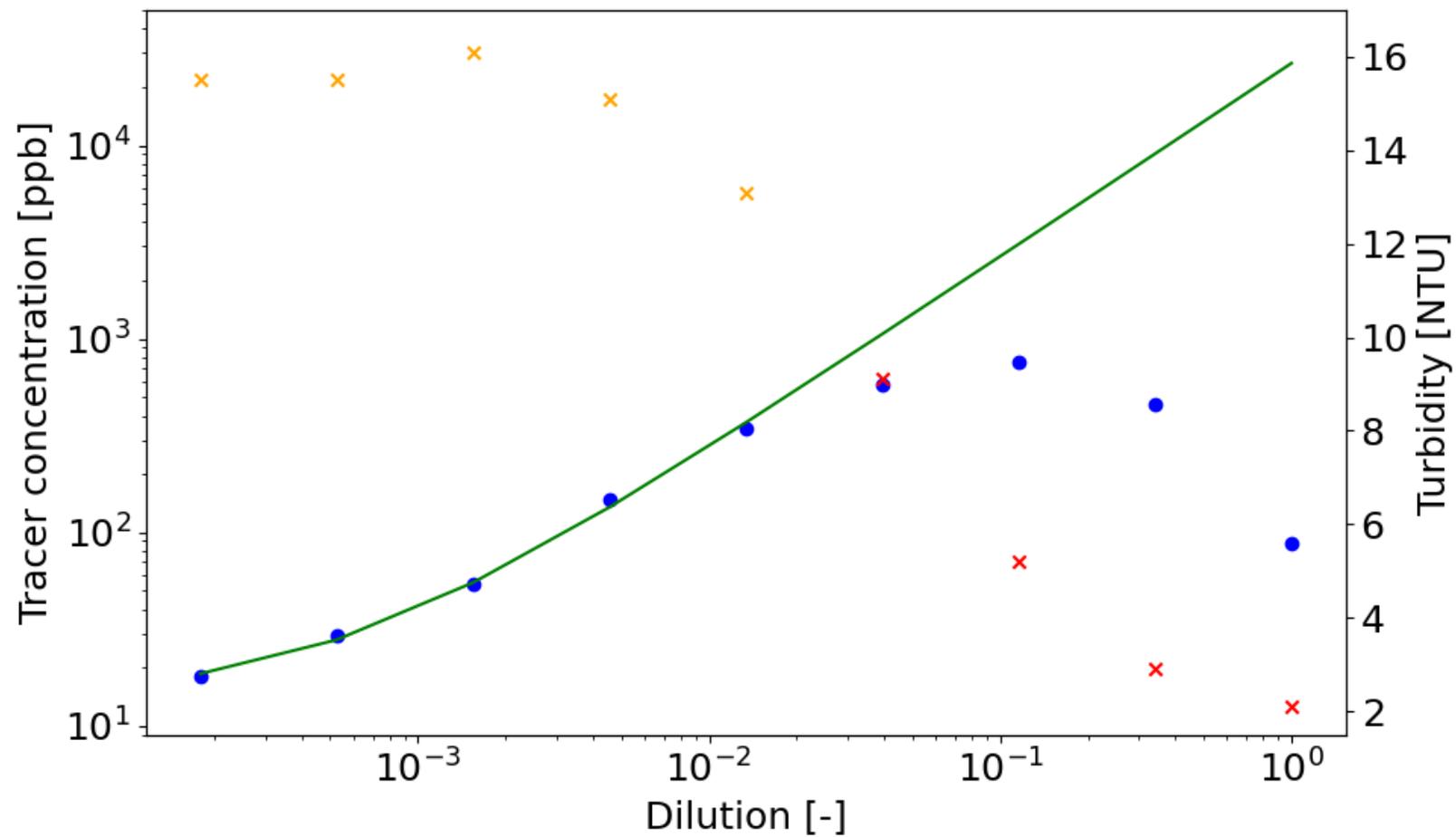




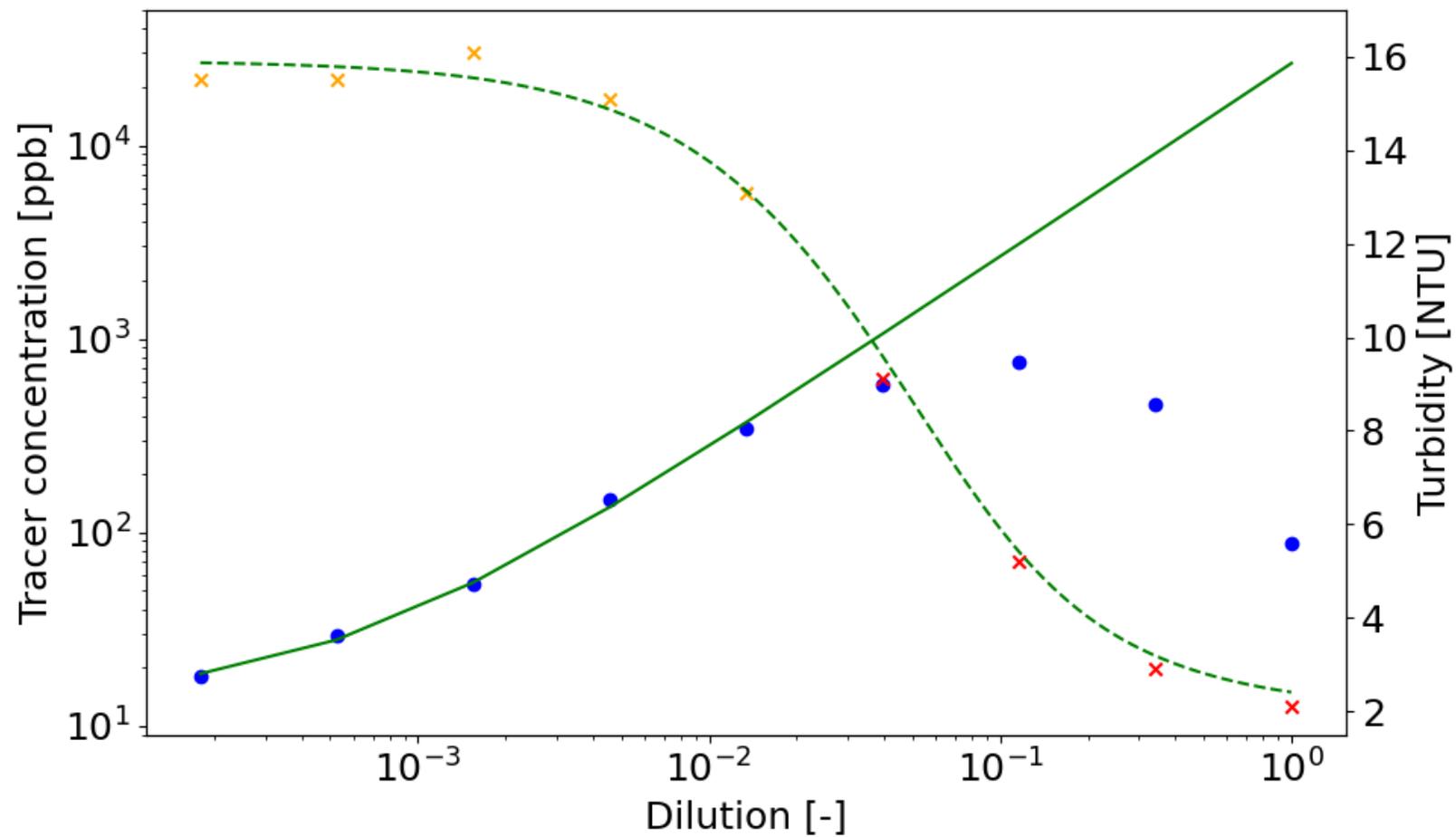
- measured concentration
- identity line
- × turbidity used for retrieval
- × turbidity used for fit



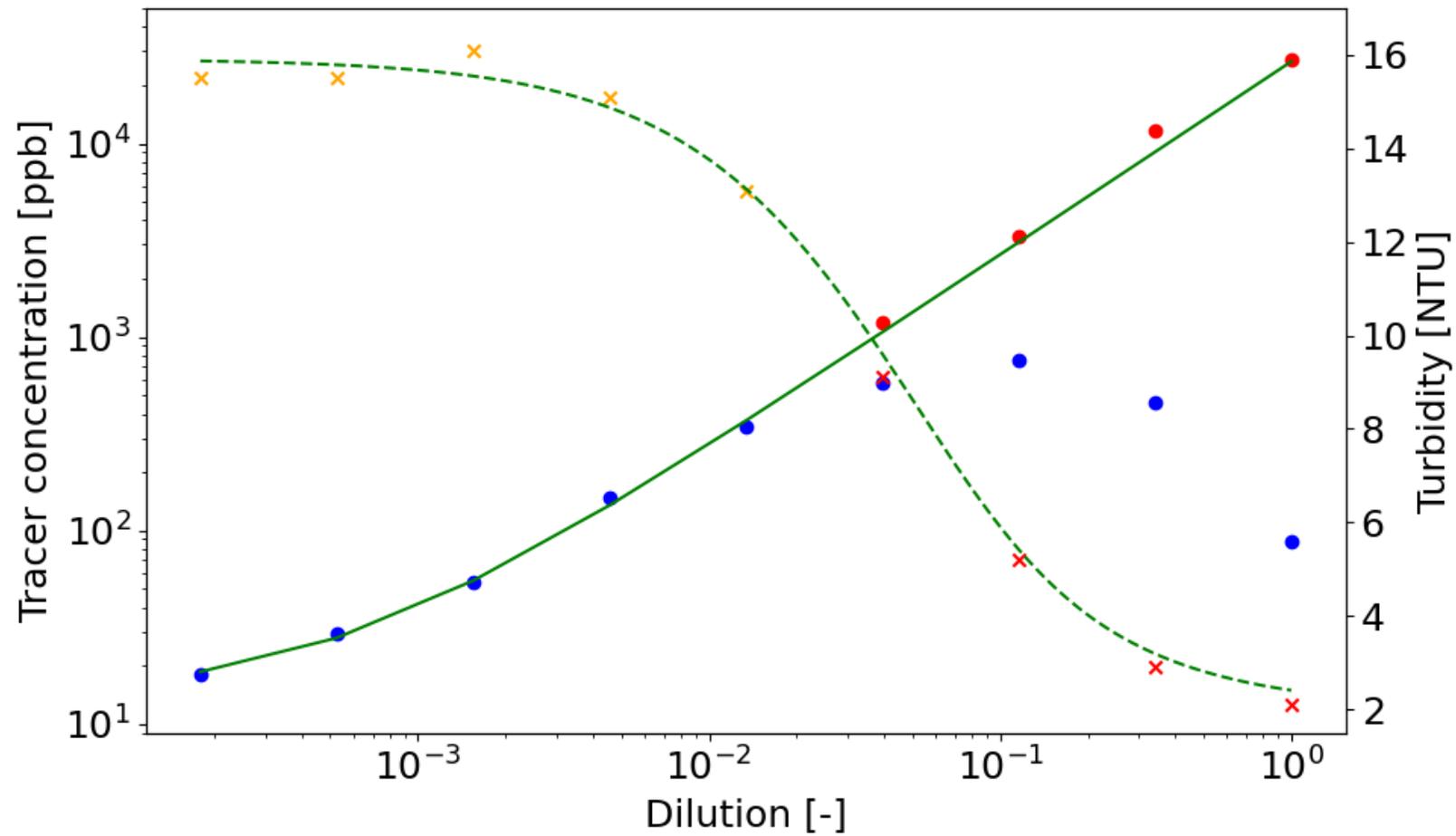
- measured concentration
- identity line
- × turbidity used for retrieval
- × turbidity used for fit

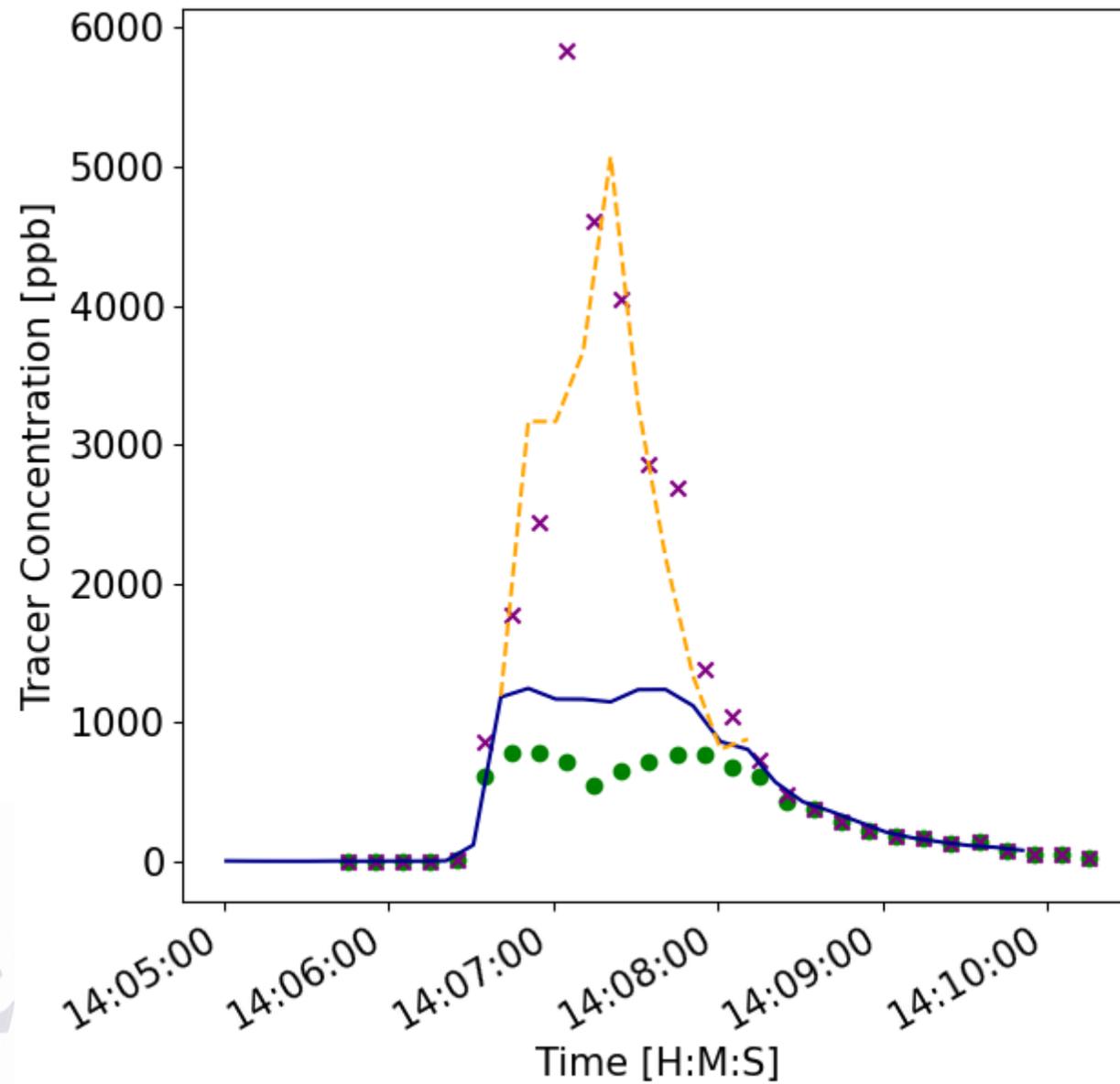


- measured concentration
- identity line
- × turbidity used for retrieval
- × turbidity used for fit
- - - fitted function line



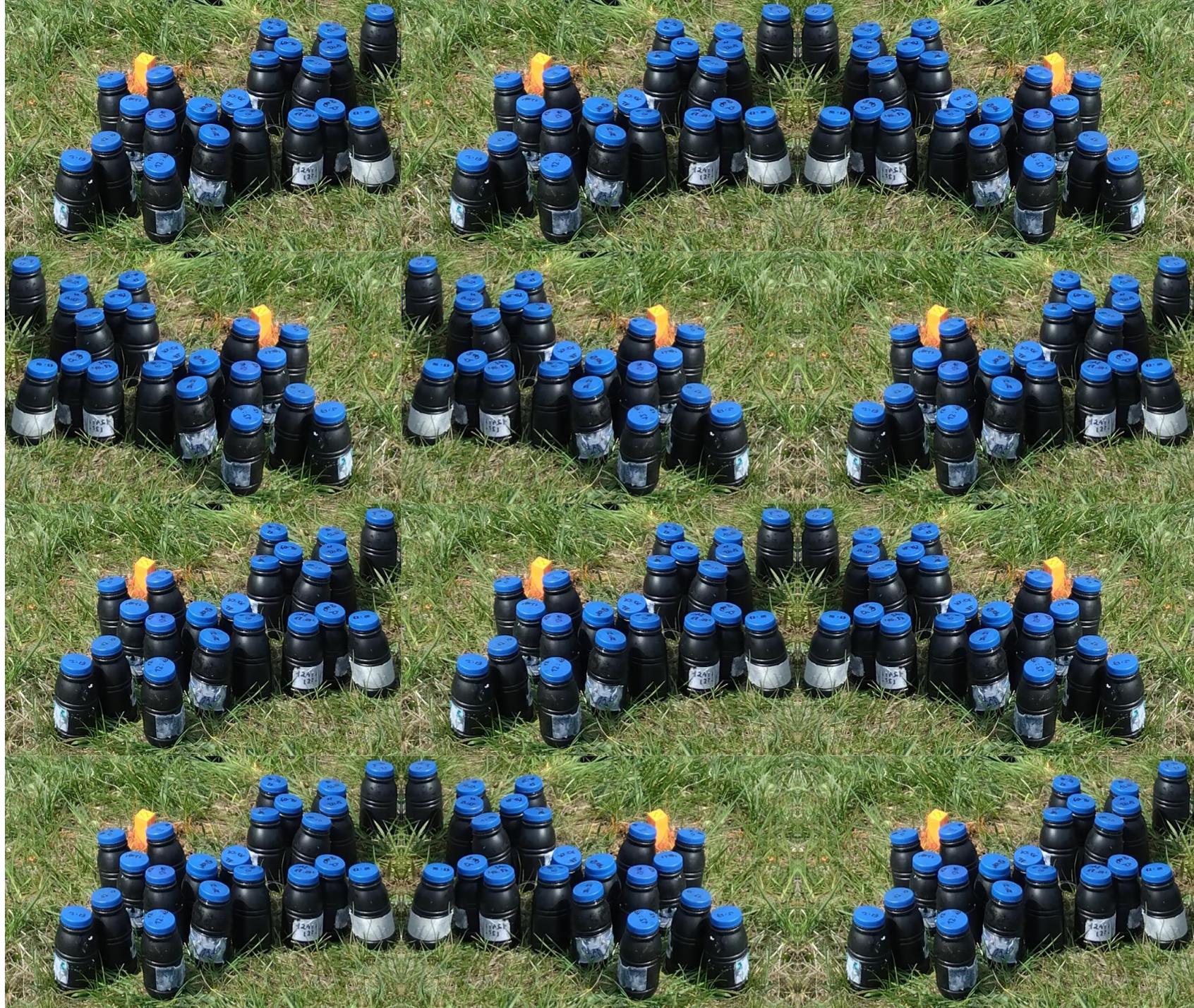
- measured concentration
- identity line
- × turbidity used for retrieval
- × turbidity used for fit
- - - fitted function line
- retrieved concentration







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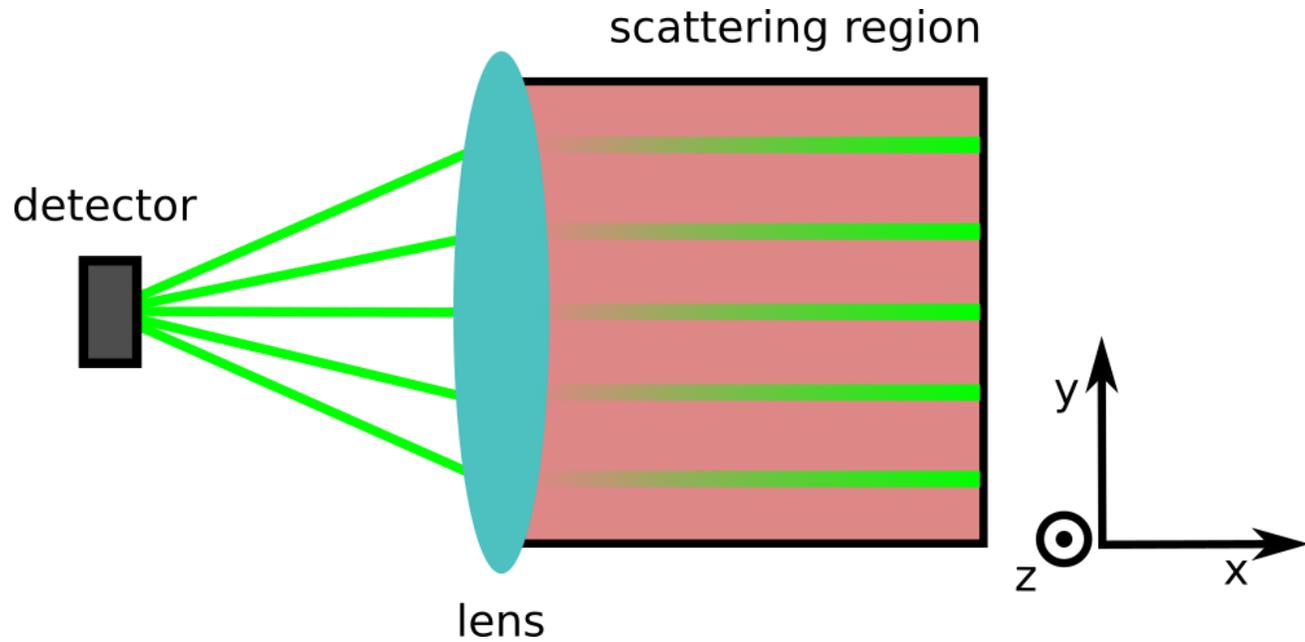


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$$I = I_0 e^{-\mu x c}$$

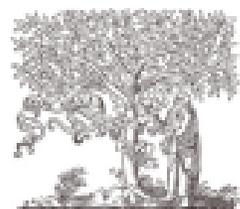
$$I = \int_V \rho dV$$

$$I = \frac{L_y L_z \rho}{\mu c} (e^{-\mu L_x c} - 1)$$

$$I = \int_V \rho e^{-\mu x c} dV$$

$$I(c) = \frac{P_1}{c} (e^{-P_2 c} - 1) + P_3$$



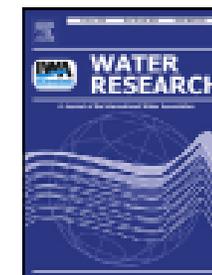


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## **Influence of Selected Fluorescent Dyes on Small Aquatic Organisms**

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