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TRAINING SLIDES

SubSeaGasLeak

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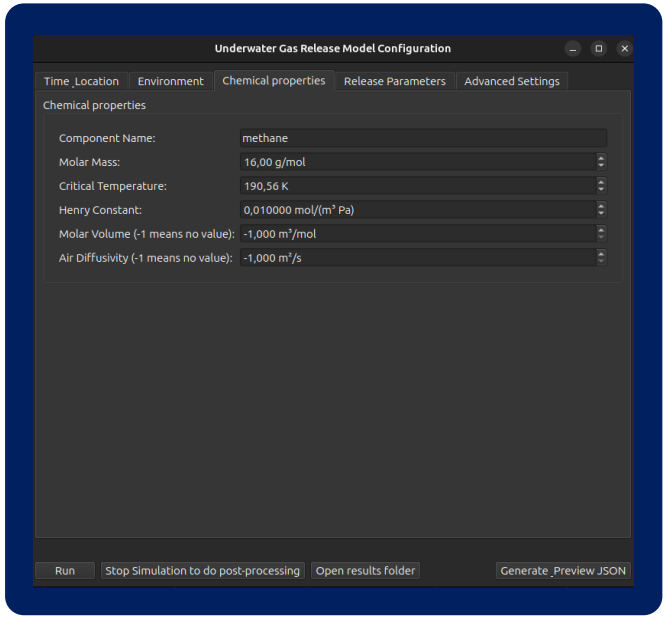
1 OVERVIEW OF THE TOOL

PROBLEM STATEMENT

In the event of an undersea release of gaseous HNS, such as from a pipeline, understanding the fate of the rising gas is crucial for responders. It is important to determine whether the gas will reach the surface or dissolve before doing so, as each scenario requires a very different response.

OBJECTIVE

The SubSeaGasLeak model simulates the rise of gases through the water column and estimates the exchange of matter between the gas bubble and the surrounding water.



DATA USED

- Environmental data (current, wind, temperature...).
- Release conditions (flow rate, depth...).
- Properties of the HNS (can be found in the HNS database).

HOW IT WORKS

Users can run the software directly on their own computers. After entering all the required information about the event to be simulated, they can start a simulation that runs for a few seconds to minutes. Once completed, various result figures become available for interpretation.

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2 HOW IT WORKS & KEY RESULTS

USE CASE

The model is used to assess the amount of gas reaching the surface in the event of an underwater release of gaseous HNS. It can also be run in advance to support preparedness.

OUTPUT EXAMPLE