

# Modelling subsea gas releases

with the computational fluid dynamics package OpenFOAM

Kasper Linnestad

Supervised by: Heinz Preisig & Lloyd's Register Consulting

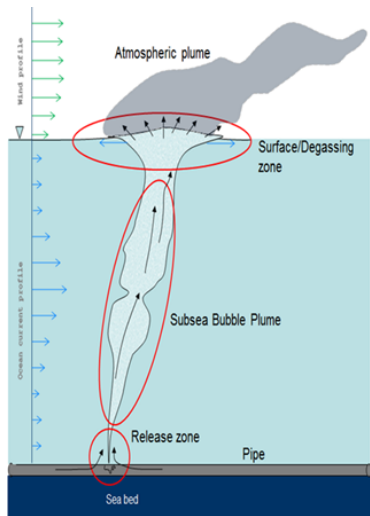


Department of Chemical Engineering

October 15, 2014

# Background

- Increased number of subsea installations
- Risk of failure
- Risk assessment
- Experiments are infeasible
- Simplified methods are inaccurate



# Objectives

- Obtain equations
- Implement equations
- Validate
- Extend the model
- Simulate

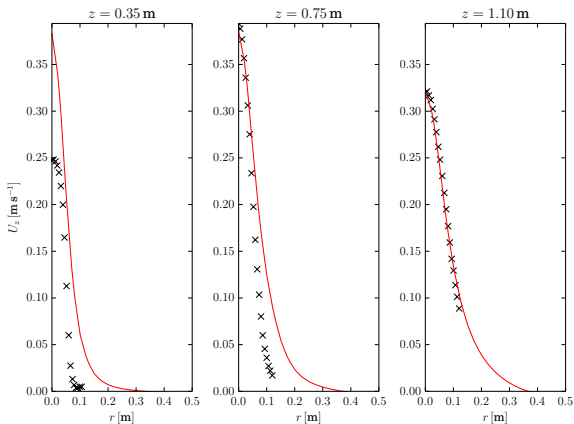


Figure: Velocity profiles at different heights

