

Estimation of the potential leakage of the chemical munitions based on two hydrodynamical models implemented for the Baltic Sea

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Two hydrodynamical models (Princeton Ocean Model (POM) and Parallel Ocean Program (POP)) have been implemented for the Baltic Sea area that consists of locations of the dumped chemical munitions during II War World. The models have been configured based on similar data source - bathymetry, initial conditions and external forces were implemented based on identical data. The horizontal resolutions of the models are also very similar. Several simulations with different initial conditions have been done. Comparison and analysis of the bottom currents from both models have been performed. Based on it estimating of the dangerous area and critical time have been done. Also lagrangian particle tracking and passive tracer were implemented and based on these results probability of the appearing dangerous doses and its time evolution have been presented.

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